ANALYTICAL SUMMARY REPORT

March 21, 2022

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

Work Order: B22030703 Quote ID: 5912

Project Name: CV18F0126/60571032.02.46.01

Energy Laboratories Inc Billings MT received the following 51 samples from AECOM - Honolulu on 3/11/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Received Date	Matrix	Test
B22030703-001	ERH2740 (RHMW04)	03/07/22 18:10	03/11/2022	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
B22030703-002	ERH2739 (Trip Blank) 14833	03/07/22 18:10	03/11/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030703-003	ERH2739 (Trip Blank) 14754	03/07/22 18:10	03/11/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030703-004	ERH2739 (Trip Blank) 14833	03/07/22 18:10	03/11/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030703-005	ERH2739 (Trip Blank) 14732	03/07/22 18:10	03/11/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030703-006	ERH2732 (RHMW06)	03/07/22 15:45	03/11/2022	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

ANALYTICAL SUMMARY REPORT

B22030703-007	ERH2731 (Trip Blank) 14833	03/07/22 15:45	03/11/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030703-008	ERH2731 (Trip Blank) 14754	03/07/22 15:45	03/11/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030703-009	ERH2731 (Trip Blank) 14733	03/07/22 15:45	03/11/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030703-010	ERH2731 (Trip Blank) 14663	03/07/22 15:45	03/11/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030703-011	ERH2694 (OWDFMW5A)	03/07/22 16:50	03/11/2022	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
B22030703-012	ERH2693 (Trip Blank) 14833	03/07/22 16:50	03/11/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030703-013	ERH2693 (Trip Blank) 14894	03/07/22 16:50	03/11/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030703-014	ERH2693 (Trip Blank) 14576	03/07/22 16:50	03/11/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030703-015	ERH2693 (Trip Blank) 14895	03/07/22 16:50	03/11/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030703-016	ERH2705 (RHMW16)	03/08/22 12:55	03/11/2022	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
B22030703-017	ERH2704 (Trip Blank) 14754	03/08/22 12:55	03/11/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B

ANALYTICAL SUMMARY REPORT

B22030703-018	ERH2704 (Trip Blank) 14833	03/08/22 12:55	03/11/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030703-019	ERH2704 (Trip Blank) 14833	03/08/22 12:55	03/11/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030703-020	ERH2704 (Trip Blank) 14808	03/08/22 12:55	03/11/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030703-021	ERH2712 (RHMW03)	03/08/22 15:20	03/11/2022	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
B22030703-022	ERH2711 (Trip Blank) 14733	03/08/22 15:20	03/11/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030703-023	ERH2711 (Trip Blank) 14833	03/08/22 15:20	03/11/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030703-024	ERH2711 (Trip Blank) 14894	03/08/22 15:20	03/11/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030703-025	ERH2711 (Trip Blank) 14895	03/08/22 15:20	03/11/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030703-026	ERH2723 (RHMW05)	03/08/22 12:15	03/11/2022	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
B22030703-027	ERH2722 (Trip Blank) 14833	03/08/22 12:15	03/11/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030703-028	ERH2722 (Trip Blank) 14754	03/08/22 12:15	03/11/2022	Trip Blank	Gasoline Range Organics SW8015C

ANALYTICAL SUMMARY REPORT

B22030703-029	ERH2722 (Trip Blank) 14733	03/08/22 12:15	03/11/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030703-030	ERH2722 (Trip Blank) 14808	03/08/22 12:15	03/11/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030703-031	ERH2715 (RHMW02)	03/08/22 14:10	03/11/2022	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
B22030703-032	ERH2714 (Trip Blank) 14694	03/08/22 14:10	03/11/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030703-033	ERH2714 (Trip Blank) 14694	03/08/22 14:10	03/11/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030703-034	ERH2714 (Trip Blank) 14694	03/08/22 14:10	03/11/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030703-035	ERH2714 (Trip Blank) 14663	03/08/22 14:10	03/11/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030703-036	ERH2702 (RHMW14-3)	03/08/22 12:00	03/11/2022	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
B22030703-037	ERH2701 (Trip Blank) 14894	03/08/22 12:00	03/11/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030703-038	ERH2701 (Trip Blank) 14653	03/08/22 12:00	03/11/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030703-039	ERH2701 (Trip Blank) 14733	03/08/22 12:00	03/11/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction

ANALYTICAL SUMMARY REPORT

B22030703-040	ERH2701 (Trip Blank) 14895	03/08/22 12:00	03/11/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030703-041	ERH2718 (RHMW01R)	03/08/22 13:00	03/11/2022	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
B22030703-042	ERH2719 (RHMW01R)	03/08/22 13:00	03/11/2022	Ground Water	DRO-Liquid-Liquid Extraction SW3520C 8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C Diesel Range Organics SW8015C
B22030703-043	ERH2717 (Trip Blank) 14833	03/08/22 13:00	03/11/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030703-044	ERH2717 (Trip Blank) 14754	03/08/22 13:00	03/11/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030703-045	ERH2717 (Trip Blank) 14833	03/08/22 13:00	03/11/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030703-046	ERH2717 (Trip Blank) 14808	03/08/22 13:00	03/11/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030703-047	ERH2708 (RHMW12A)	03/08/22 17:26	03/11/2022	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
B22030703-048	ERH2707 (Trip Blank) 14833	03/08/22 17:26	03/11/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B

ANALYTICAL SUMMARY REPORT

B22030703-049	ERH2707 (Trip Blank) 14754	03/08/22 17:26	03/11/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030703-050	ERH2707 (Trip Blank) 14733	03/08/22 17:26	03/11/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030703-051	ERH2707 (Trip Blank) 14808	03/08/22 17:26	03/11/2022	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: Cindy Rohrer
Laboratory Manager

Digitally signed by
Cindy Rohrer
Date: 2022.03.21 10:48:36 -06:00

CLIENT: AECOM - Honolulu
Project: CV18F0126/60571032.02.46.01
Work Order: B22030703

Report Date: 3/21/2022

CASE NARRATIVE

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. 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 # 202203-24NOI

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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	Nicolette Lawes
Sampler Phone	916.835.6425
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	ERH2740 (RHMW04)	3/7/22	1410	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B22030703 -001
2	ERH2739 (Trip Blank)	3/7/22	1345	8	WQ	✔	✔	✔	✔							X	-002, 003, 004, 005, 006
3	TB8260 - 14833			2													-002
4	TB GRO - M754			3													-003
5	TB 8011 - 14833			1													-004
6	TB methane - 14732 MN	3/8/22		2													-005
7	TB - 8011 HH 14705			1													-006
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
	Maggie Nutter	3/8/22 0830				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard SLL	3/11/22 09:20	

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)
				0.7 °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.

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Chain of Custody & Analytical Request Record

COC # 202203-23NOI

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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	MY, NL
Sampler Phone	303.349.4738
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	ERH2732 (RHMW06)	3/7/22	1145	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B22030703 -006
2	ERH2731 (Trip Blank)	3/7/22	1115	8	WQ	✔	✔	✔	✔							X	-007,008,009,010
3	TB 8260 - 14833			2													-007
4	TB GRO - 14754			2													-008
5	TB 8011 - 14733			2				MN									-009
6	TB Methane - 14803			2						3/8/22							-010
7	TJ 3/11/22																
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
	Maggie Nutter	3/3/22 0830	Maggie Nutter			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard Shiu	3/11/22 0915	

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)*
				0.1					

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 # 202203-22NOI

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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	Lyn Shimoto
Sampler Phone	803.393.6607
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

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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	ERH2694 (OWDFMW5A)	3/7/22	1250	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	2203703-011
2	ERH2693 (Trip Blank)	3/7/22	1320	8	WQ	✔	✔	✔	✔							X	-012, 013, 014, 015
3																	
4																	
5	TB 8260 14833			2 3													-012
6	TB GRO 14894			2													-012 -013
7	TB ~~SOIL 14844~~ 14576			1													-013 -014
8	TB Methane 14895			2						MN							015
9	~~TB 14576~~			1							3/8/22						

3/11/22

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
	Maggie Notter	3/8/22 0830				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard Shultz	3/11/22 09:20	

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)
				1.0 °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.

ENERGY LABORATORIES
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Chain of Custody & Analytical Request Record

COC # 202203-26NOI

www.energylab.com

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 SHINMOTO
Sampler Phone	(808) 393-6607
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	ERH2705 (RHMW16)	3/8/22	0855	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B22030703-016
2	ERH2704 (Trip Blank)	3/8/22	0830	8	WQ	✔	✔	✔	✔							X	-017, 018, 019, 020
3																	
4	TB 8260 14754			2													-017
5	TB GRO 14833			2						MN		3/8/22					-018
6	TB 8011 14833			2													-019
7	TB Methane 14806			2													-020
8	TB 3/11/22																
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
	Maggie Nutter	3/8/22 1240	Maggie Nutter			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard SLV	3/11/22 0920	

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)
				1.0					

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 # 202203-28NOI

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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	Kevin Lee
Sampler Phone	808 636 3319
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	ERH2712 (RHMW03)	3/8/22	1120	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B220307 03-021
2	ERH2711 (Trip Blank)	3/8/22	1111	8	WQ	✔	✔	✔	✔							X	-022, 023, 024, 025
3																	
4	TB 8260 - 14733			2													~~022~~ 022
5	TB GRO - 14833			1													~~023~~ 023
6	TB 8011 - 14894			3													~~024~~ 024
7	TMethane - 14895			2													~~025~~ 025
8	TJ 3/11/22																
9																	

3/8/22

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
	Alex Edmonds	3/8/22 1330				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard SLV	3/11/22 09:20	

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	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.

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Chain of Custody & Analytical Request Record

COC # 202203-31NOI

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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	Kevin Lee
Sampler Phone	808 636 3319
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	ERH2723 (RHMW05)	03/08/22	0815	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B220307 03-026
2	ERH2722 (Trip Blank)	03/03/22	0805	8	WQ	✔	✔	✔	✔							X	-027, 028, 029, 030
3	TB 82600 - 14833 3																-027
4	TBGRO - 14754 2																-028
5	TB8011 - 14733 1	3/8/2022 DE															-029
6	TB Methane - 14808 2																-030
7	IJ 3/11/22																
8																	
9																	BOL # 1600390

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
	Dicky Escobar	3/8/22 1:55				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard Shelo	3/11/22 09:20	

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)
				0.3 °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.

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Chain of Custody & Analytical Request Record

COC # 202203-29NOI

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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	Kevin Lee
Sampler Phone	808 636 3315
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	ERH2715 (RHMW02)	03/08/22	1010	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B220307 03-031
2	ERH2714 (Trip Blank)	03/08/22	1000	8	WQ	✔	✔	✔	✔							X	-032, 033, 034, 035, 054, 055
3																	
4																	
5	TB 14694 8260			2													-032
6	TB 14694 GRO			1													-033
7	TB 14694 8011			1													-034
8	TB 14663 03/08 TW Methane			2													-035
9	TB 14576 ~~HCl~~ 8011 HCl	3/11/22		1	2	TB 14705 8011 HCl			1		J.C. 3/11/22					J.C. 3/11/22	~~-034~~ / 055

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	03/08 13:30				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Rachael Shirley	3/11/22 09:20	

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)
				1.5					

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 # 202203-25NOI

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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 Welter
Sampler Phone	478-973-0578
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	ERH2702 (RHMW14-3)	3/9/22	0800	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	L22030703-036
2	ERH2701 (Trip Blank)	3/8/22	0745	8	WQ	✔	✔	✔	✔							X	-037,038,039,040
3	~~TB 8260 14894~~			~~3~~ 4													-037
4	TB GRO 14653			1													-038
5	TB 8011 ~~14894~~ 14733			~~2~~ 1	JL 3/11/22												-039
6	TB Methane 14895 JL			2													-040
7	~~TB — 14733~~	3/21/22		~~1~~													
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 Diermier	3.8.22/1219	Zoe Diermier			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard Sluiter	3/11/22 09:20	

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)
				0.8 °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.

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-30NOI

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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	Kevin Lee
Sampler Phone	808-636-3319
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	ERH2718 (RHMW01R)	3/8/22	0900	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B28030703-041
2	ERH2717 (Trip Blank)	3/8/22	0855	8	WQ	✔	✔	✔	✔							X	-043→046, 052, 053
3	ERH2719 (RHMW01R)	3/8/22	0900	8	W	✔	✔			✔						X	-042
4	TB8260 - 14833			2													-043
5	TBGRO - 14754			2													-044
6	TB8011 - 14833			1													-045
7	TB Methane - 14808			1													-046
8	TB 14708 ~~14~~			1													-052
9	TB - 14663 TJ 3/11/22			1													-053

MD 3/8/22

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
	Maggie Nutter	3/8/22 1420				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard SLL	3/11/22 09:2	

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)
				0.5 °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.

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-27NOI

www.energylab.com

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.

Date/time per container J.L. 3/11/22

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Ryan Shinnato
Sampler Phone	808.393.6607
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	ERH2708 (RHMW12A)	3/8/22	13:26	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B22030703-047
2	ERH2707 (Trip Blank)	↓	↓	8	WQ	✔	✔	✔	✔							X	-048,049,050,051
3	TB 8260-14833		J.L. 3/11/22	2													-048
4	TB GRO-14754			2													-049
5	TB 8011-14733			2													-050
6	TB Methane-14808			2													-051
7	TJ 3/11/22																
8			03/08 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	03/08 14:30				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard Shultz	3/11/22 09:20	

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)
				1.0 °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.

Work Order Receipt Checklist

AECOM - Honolulu

B22030703

Login completed by: Leslie S. Cadreau
Date Received: 3/11/2022

Reviewed by: BL2000\tjones
Received by: rs4

Reviewed Date: 3/14/2022
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 0.4°C, shipping container 2 was 0.8°C, shipping container 3 was 1.0°C, shipping container 4 was 1.0°C, shipping container 5 was 0.7°C, shipping container 6 was 0.5°C, shipping container 7 was 1.0°C, shipping container 8 was 1.5°C, shipping container 9 was 0.3°C and shipping container 10 was 0.1°C.

The containers for Methane for sample ERH2712 were received without preservative traceability. Proceed with analysis per Shari Endy, Energy Laboratories Project Manager, 03/11/22.

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: ERH2740 (RHMW04)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-001
Collection Date: 03/07/2022 18:10
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/16/2022 18:03/eli-ca	SUB-C280612 : 4	C_R280612
METALS, DISSOLVED												
Lead	0.00007	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/15/2022 15:01/srh	ICPMS207-B_220315A : 35	R376266
METALS, TOTAL												
Lead	0.00032	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/15/2022 15:32/srh	ICPMS207-B_220315A : 40	164468
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2740 (RHMW04)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-001
Collection Date: 03/07/2022 18:10
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Surr: 1,2-Dichloroethane-d4	117.0	%REC	1		81-118				SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
Surr: p-Bromofluorobenzene	113.0	%REC	1		85-114				SW8260B	03/14/2022 12:41/msc	VOA5975C.I_220314A : 6	R376400
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/14/2022 22:20/clt	GECD.I_220314A : 17	164488
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/14/2022 22:20/clt	GECD.I_220314A : 17	164488
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/12/2022 02:41/jp	VARIAN1_220311A : 23	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 02:41/jp	VARIAN1_220311A : 23	R376037
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	03/12/2022 02:41/jp	VARIAN1_220311A : 23	R376037

- 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	0.14	0.037		SW8015C	03/14/2022 20:08/amn	GCFID-HP5-B_220314A : 12	164471
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/14/2022 20:08/amn	GCFID-HP5-B_220314A : 12	164471
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/14/2022 20:08/amn	GCFID-HP5-B_220314A : 12	164471
Surr: o-Terphenyl	88.0	%REC	1		56-125				SW8015C	03/14/2022 20:08/amn	GCFID-HP5-B_220314A : 12	164471
Surr: n-Triacontane	88.0	%REC	1		50-150				SW8015C	03/14/2022 20:08/amn	GCFID-HP5-B_220314A : 12	164471

- 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: B22030703-001
Client: AECOM - Honolulu
Collection Date: 03/07/2022 18:10
Client Sample ID: ERH2740 (RHMW04)
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Ground Water

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	03/12/2022 09:55/jdw	FID-HEADSPACE_220312A : 5	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2739 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-002
Collection Date: 03/07/2022 18:10
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Toluene	0.17	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-002
Collection Date: 03/07/2022 18:10
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2739 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Surr: 1,2-Dichloroethane-d4	113.0	%REC	1		81-118				SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/14/2022 16:48/msc	VOA5975C.I_220314A : 15	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-003
Client: AECOM - Honolulu
Collection Date: 03/07/2022 18:10
Client Sample ID: ERH2739 (Trip Blank) 14754
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

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	03/12/2022 07:16/jp	VARIAN1_220311A : 27	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 07:16/jp	VARIAN1_220311A : 27	R376037
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	03/12/2022 07:16/jp	VARIAN1_220311A : 27	R376037

- 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: B22030703-004
Collection Date: 03/07/2022 18:10
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2739 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/14/2022 22:40/clt	GECD.I_220314A : 18	164488
Surr: 1,1,1,2-Tetrachloroethane	95.0	%REC	1		70-130				SW8011	03/14/2022 22:40/clt	GECD.I_220314A : 18	164488

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2739 (Trip Blank) 14732
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-005
Collection Date: 03/07/2022 18:10
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/12/2022 10:00/jdw	FID-HEADSPACE_220312A : 6	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2732 (RHMW06)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-006
Collection Date: 03/07/2022 15:45
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/16/2022 20:06/eli-ca	SUB-C280612 : 7	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 16:22/srh	ICPMS207-B_220315A : 48	R376266
METALS, TOTAL												
Lead	0.00007	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/15/2022 16:28/srh	ICPMS207-B_220315A : 49	164468
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2732 (RHMW06)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-006
Collection Date: 03/07/2022 15:45
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Surr: Toluene-d8	98.0	%REC	1		89-112				SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
Surr: p-Bromofluorobenzene	112.0	%REC	1		85-114				SW8260B	03/14/2022 13:09/msc	VOA5975C.I_220314A : 7	R376400
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/14/2022 23:00/clt	GECD.I_220314A : 19	164488
Surr: 1,1,1,2-Tetrachloroethane	94.0	%REC	1		70-130				SW8011	03/14/2022 23:00/clt	GECD.I_220314A : 19	164488
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/12/2022 03:50/jp	VARIAN1_220311A : 24	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 03:50/jp	VARIAN1_220311A : 24	R376037
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	03/12/2022 03:50/jp	VARIAN1_220311A : 24	R376037
- 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	0.14	0.037		SW8015C	03/14/2022 15:52/amn	GCFID-HP5-B_220314A : 7	164471
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/14/2022 15:52/amn	GCFID-HP5-B_220314A : 7	164471
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/14/2022 15:52/amn	GCFID-HP5-B_220314A : 7	164471
Surr: o-Terphenyl	87.0	%REC	1		56-125				SW8015C	03/14/2022 15:52/amn	GCFID-HP5-B_220314A : 7	164471
Surr: n-Triacontane	85.0	%REC	1		50-150				SW8015C	03/14/2022 15:52/amn	GCFID-HP5-B_220314A : 7	164471
- 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: B22030703-006
Client: AECOM - Honolulu
Collection Date: 03/07/2022 15:45
Client Sample ID: ERH2732 (RHMW06)
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Ground Water

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	03/12/2022 10:06/jdw	FID-HEADSPACE_220312A : 7	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2731 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-007
Collection Date: 03/07/2022 15:45
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Toluene	0.082	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-007
Collection Date: 03/07/2022 15:45
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2731 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Surr: Dibromofluoromethane	105.0	%REC	1		80-119				SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/14/2022 17:15/msc	VOA5975C.I_220314A : 16	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-008
Client: AECOM - Honolulu
Collection Date: 03/07/2022 15:45
Client Sample ID: ERH2731 (Trip Blank) 14754
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

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	03/12/2022 12:24/jp	VARIAN1_220311A : 34	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 12:24/jp	VARIAN1_220311A : 34	R376037
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/12/2022 12:24/jp	VARIAN1_220311A : 34	R376037

- 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: B22030703-009
Collection Date: 03/07/2022 15:45
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2731 (Trip Blank) 14733
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/15/2022 01:17/clt	GECD.I_220314A : 24	164488
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	03/15/2022 01:17/clt	GECD.I_220314A : 24	164488

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2731 (Trip Blank) 14663
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-010
Collection Date: 03/07/2022 15:45
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/12/2022 10:10/jdw	FID-HEADSPACE_220312A : 8	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2694 (OWDFMW5A)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-011
Collection Date: 03/07/2022 16:50
Date Received: 03/11/2022
Report Date: 03/21/2022

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	0.47	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/16/2022 20:49/eli-ca	SUB-C280612 : 8	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 16:34/srh	ICPMS207-B_220315A : 50	R376266
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/15/2022 16:41/srh	ICPMS207-B_220315A : 51	164468
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-011
Collection Date: 03/07/2022 16:50
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2694 (OWDFMW5A)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

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	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/14/2022 13:36/msc	VOA5975C.I_220314A : 8	R376400
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 01:38/clt	GECD.I_220314A : 25	164488
Surr: 1,1,1,2-Tetrachloroethane	93.0	%REC	1		70-130				SW8011	03/15/2022 01:38/clt	GECD.I_220314A : 25	164488
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/12/2022 04:59/jp	VARIAN1_220311A : 25	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 04:59/jp	VARIAN1_220311A : 25	R376037
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/12/2022 04:59/jp	VARIAN1_220311A : 25	R376037
- 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	0.14	0.037		SW8015C	03/14/2022 15:10/amn	GCFID-HP5-B_220314A : 6	164471
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/14/2022 15:10/amn	GCFID-HP5-B_220314A : 6	164471
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/14/2022 15:10/amn	GCFID-HP5-B_220314A : 6	164471
Surr: o-Terphenyl	85.0	%REC	1		56-125				SW8015C	03/14/2022 15:10/amn	GCFID-HP5-B_220314A : 6	164471
Surr: n-Triacontane	81.0	%REC	1		50-150				SW8015C	03/14/2022 15:10/amn	GCFID-HP5-B_220314A : 6	164471
- 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: B22030703-011
Client: AECOM - Honolulu
Collection Date: 03/07/2022 16:50
Client Sample ID: ERH2694 (OWDFMW5A)
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	0.0048	mg/L	1		0.0020	0.0012	0.00070		SW8015M	03/12/2022 10:17/jdw	FID-HEADSPACE_220312A : 9	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2693 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-012
Collection Date: 03/07/2022 16:50
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-012
Collection Date: 03/07/2022 16:50
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2693 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/14/2022 17:42/msc	VOA5975C.I_220314A : 17	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-013
Client: AECOM - Honolulu
Collection Date: 03/07/2022 16:50
Client Sample ID: ERH2693 (Trip Blank) 14894
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

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	03/12/2022 12:58/jp	VARIAN1_220311A : 35	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 12:58/jp	VARIAN1_220311A : 35	R376037
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/12/2022 12:58/jp	VARIAN1_220311A : 35	R376037

- 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: B22030703-014
Collection Date: 03/07/2022 16:50
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2693 (Trip Blank) 14576
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/15/2022 01:57/clt	GECD.I_220314A : 26	164488
Surr: 1,1,1,2-Tetrachloroethane	91.0	%REC	1		70-130				SW8011	03/15/2022 01:57/clt	GECD.I_220314A : 26	164488

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2693 (Trip Blank) 14895
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-015
Collection Date: 03/07/2022 16:50
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/12/2022 10:39/jdw	FID-HEADSPACE_220312A : 11	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2705 (RHMW16)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-016
Collection Date: 03/08/2022 12:55
Date Received: 03/11/2022
Report Date: 03/21/2022

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	0.28	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/16/2022 21:30/eli-ca	SUB-C280612 : 9	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 16:47/srh	ICPMS207-B_220315A : 52	R376266
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/15/2022 16:53/srh	ICPMS207-B_220315A : 53	164468
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2705 (RHMW16)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-016
Collection Date: 03/08/2022 12:55
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Surr: Dibromofluoromethane	105.0	%REC	1		80-119				SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/14/2022 14:03/msc	VOA5975C.I_220314A : 9	R376400
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 02:17/clt	GECD.I_220314A : 27	164488
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	03/15/2022 02:17/clt	GECD.I_220314A : 27	164488
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	UT	20	8.7	2.0		SW8015C	03/12/2022 06:07/jp	VARIAN1_220311A : 26	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 06:07/jp	VARIAN1_220311A : 26	R376037
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	03/12/2022 06:07/jp	VARIAN1_220311A : 26	R376037
- 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)	0.041	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/14/2022 16:35/amn	GCFID-HP5-B_220314A : 8	164471
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/15/2022 22:20/amn	GCFID-HP5-B_220315A : 6	164471
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/14/2022 16:35/amn	GCFID-HP5-B_220314A : 8	164471
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/15/2022 22:20/amn	GCFID-HP5-B_220315A : 6	164471
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/14/2022 16:35/amn	GCFID-HP5-B_220314A : 8	164471
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/15/2022 22:20/amn	GCFID-HP5-B_220315A : 6	164471

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-016
Client: AECOM - Honolulu
Collection Date: 03/08/2022 12:55
Client Sample ID: ERH2705 (RHMW16)
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	99.0	%REC	1		56-125				SW8015C	03/14/2022 16:35/amn	GCFID-HP5-B_220314A : 8	164471
Surr: o-Terphenyl (SGT)	93.0	%REC	1		56-125				SW8015C	03/15/2022 22:20/amn	GCFID-HP5-B_220315A : 6	164471
Surr: n-Triacontane	93.0	%REC	1		50-150				SW8015C	03/14/2022 16:35/amn	GCFID-HP5-B_220314A : 8	164471
Surr: n-Triacontane (SGT)	86.0	%REC	1		50-150				SW8015C	03/15/2022 22:20/amn	GCFID-HP5-B_220315A : 6	164471
- 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	03/12/2022 10:43/jdw	FID-HEADSPACE_220312A : 12	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2704 (Trip Blank) 14754
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-017
Collection Date: 03/08/2022 12:55
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Toluene	0.17	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-017
Collection Date: 03/08/2022 12:55
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2704 (Trip Blank) 14754
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Surr: Dibromofluoromethane	105.0	%REC	1		80-119				SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/14/2022 18:09/msc	VOA5975C.I_220314A : 18	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-018
Client: AECOM - Honolulu
Collection Date: 03/08/2022 12:55
Client Sample ID: ERH2704 (Trip Blank) 14833
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	2.2	ug/L	1	J	20	8.7	2.0		SW8015C	03/12/2022 13:33/jp	VARIAN1_220311A : 36	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 13:33/jp	VARIAN1_220311A : 36	R376037
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/12/2022 13:33/jp	VARIAN1_220311A : 36	R376037

- 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: B22030703-019
Collection Date: 03/08/2022 12:55
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2704 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/15/2022 02:37/clt	GECD.I_220314A : 28	164488
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/15/2022 02:37/clt	GECD.I_220314A : 28	164488

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-020
Collection Date: 03/08/2022 12:55
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2704 (Trip Blank) 14808
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/12/2022 10:48/jdw	FID-HEADSPACE_220312A : 13	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2712 (RHMW03)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-021
Collection Date: 03/08/2022 15:20
Date Received: 03/11/2022
Report Date: 03/21/2022

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 1.8 to 1.9	1.8	mg/L	1		0.50	0.50	0.17		SW9060A	03/16/2022 22:10/eli-ca	SUB-C280612 : 10	C_R280612
METALS, DISSOLVED												
Lead	0.00005	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/15/2022 16:59/srh	ICPMS207-B_220315A : 54	R376266
METALS, TOTAL												
Lead	0.001	mg/L	1		0.001	0.0001	0.00005		SW6020	03/15/2022 17:18/srh	ICPMS207-B_220315A : 57	164468
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2712 (RHMW03)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-021
Collection Date: 03/08/2022 15:20
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/14/2022 14:31/msc	VOA5975C.I_220314A : 10	R376400
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/15/2022 02:56/clt	GECD.I_220314A : 29	164488
Surr: 1,1,1,2-Tetrachloroethane	96.0	%REC	1		70-130				SW8011	03/15/2022 02:56/clt	GECD.I_220314A : 29	164488
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/12/2022 10:41/jp	VARIAN1_220311A : 32	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 10:41/jp	VARIAN1_220311A : 32	R376037
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	03/12/2022 10:41/jp	VARIAN1_220311A : 32	R376037
- 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)	0.25	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/15/2022 01:51/amn	GCFID-HP5-B_220314A : 17	164471
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/16/2022 01:12/amn	GCFID-HP5-B_220315A : 9	164471
Oil Range Hydrocarbons (C24 to C40)	0.37	mg/L	1		0.30	0.14	0.084		SW8015C	03/15/2022 01:51/amn	GCFID-HP5-B_220314A : 17	164471
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/16/2022 01:12/amn	GCFID-HP5-B_220315A : 9	164471
Total Extractable Hydrocarbons	0.62	mg/L	1		0.30	0.14	0.071		SW8015C	03/15/2022 01:51/amn	GCFID-HP5-B_220314A : 17	164471
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/16/2022 01:12/amn	GCFID-HP5-B_220315A : 9	164471

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-021
Client: AECOM - Honolulu
Collection Date: 03/08/2022 15:20
Client Sample ID: ERH2712 (RHMW03)
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Ground Water

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	03/15/2022 01:51/amn	GCFID-HP5-B_220314A : 17	164471
Surr: o-Terphenyl (SGT)	91.0	%REC	1		56-125				SW8015C	03/16/2022 01:12/amn	GCFID-HP5-B_220315A : 9	164471
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/15/2022 01:51/amn	GCFID-HP5-B_220314A : 17	164471
Surr: n-Triacontane (SGT)	82.0	%REC	1		50-150				SW8015C	03/16/2022 01:12/amn	GCFID-HP5-B_220315A : 9	164471
- 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	03/12/2022 10:53/jdw	FID-HEADSPACE_220312A : 14	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2711 (Trip Blank) 14733
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-022
Collection Date: 03/08/2022 15:20
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Toluene	0.26	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-022
Collection Date: 03/08/2022 15:20
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2711 (Trip Blank) 14733
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Surr: 1,2-Dichloroethane-d4	111.0	%REC	1		81-118				SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/14/2022 18:37/msc	VOA5975C.I_220314A : 19	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-023
Client: AECOM - Honolulu
Collection Date: 03/08/2022 15:20
Client Sample ID: ERH2711 (Trip Blank) 14833
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

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	03/12/2022 14:07/jp	VARIAN1_220311A : 37	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 14:07/jp	VARIAN1_220311A : 37	R376037
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/12/2022 14:07/jp	VARIAN1_220311A : 37	R376037

- 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: B22030703-024
Collection Date: 03/08/2022 15:20
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2711 (Trip Blank) 14894
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/15/2022 03:16/clt	GECD.I_220314A : 30	164488
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	03/15/2022 03:16/clt	GECD.I_220314A : 30	164488

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2711 (Trip Blank) 14895
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-025
Collection Date: 03/08/2022 15:20
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/12/2022 10:58/jdw	FID-HEADSPACE_220312A : 15	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2723 (RHMW05)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-026
Collection Date: 03/08/2022 12:15
Date Received: 03/11/2022
Report Date: 03/21/2022

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 0.5	0.47	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/16/2022 22:51/eli-ca	SUB-C280612 : 11	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 17:24/srh	ICPMS207-B_220315A : 58	R376266
METALS, TOTAL												
Lead	0.00012	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/15/2022 17:30/srh	ICPMS207-B_220315A : 59	164468
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2723 (RHMW05)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-026
Collection Date: 03/08/2022 12:15
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Surr: 1,2-Dichloroethane-d4	113.0	%REC	1		81-118				SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Surr: Toluene-d8	98.0	%REC	1		89-112				SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/14/2022 14:58/msc	VOA5975C.I_220314A : 11	R376400
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 03:36/clt	GECD.I_220314A : 31	164488
Surr: 1,1,1,2-Tetrachloroethane	92.0	%REC	1		70-130				SW8011	03/15/2022 03:36/clt	GECD.I_220314A : 31	164488
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/12/2022 22:42/jp	VARIAN1_220311A : 49	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 22:42/jp	VARIAN1_220311A : 49	R376037
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/12/2022 22:42/jp	VARIAN1_220311A : 49	R376037
- 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)	0.079	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/14/2022 18:43/amn	GCFID-HP5-B_220314A : 10	164471
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/15/2022 23:03/amn	GCFID-HP5-B_220315A : 7	164471
Oil Range Hydrocarbons (C24 to C40)	0.14	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/14/2022 18:43/amn	GCFID-HP5-B_220314A : 10	164471
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/15/2022 23:03/amn	GCFID-HP5-B_220315A : 7	164471
Total Extractable Hydrocarbons	0.23	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/14/2022 18:43/amn	GCFID-HP5-B_220314A : 10	164471
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/15/2022 23:03/amn	GCFID-HP5-B_220315A : 7	164471

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-026
Client: AECOM - Honolulu
Collection Date: 03/08/2022 12:15
Client Sample ID: ERH2723 (RHMW05)
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	93.0	%REC	1		56-125				SW8015C	03/14/2022 18:43/amn	GCFID-HP5-B_220314A : 10	164471
Surr: o-Terphenyl (SGT)	90.0	%REC	1		56-125				SW8015C	03/15/2022 23:03/amn	GCFID-HP5-B_220315A : 7	164471
Surr: n-Triacontane	98.0	%REC	1		50-150				SW8015C	03/14/2022 18:43/amn	GCFID-HP5-B_220314A : 10	164471
Surr: n-Triacontane (SGT)	90.0	%REC	1		50-150				SW8015C	03/15/2022 23:03/amn	GCFID-HP5-B_220315A : 7	164471
- 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	03/12/2022 11:02/jdw	FID-HEADSPACE_220312A : 16	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2722 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-027
Collection Date: 03/08/2022 12:15
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Toluene	0.074	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-027
Client: AECOM - Honolulu
Collection Date: 03/08/2022 12:15
Client Sample ID: ERH2722 (Trip Blank) 14833
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

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	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/14/2022 19:04/msc	VOA5975C.I_220314A : 20	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-028
Client: AECOM - Honolulu
Collection Date: 03/08/2022 12:15
Client Sample ID: ERH2722 (Trip Blank) 14754
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

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	03/12/2022 14:41/jp	VARIAN1_220311A : 38	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 14:41/jp	VARIAN1_220311A : 38	R376037
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/12/2022 14:41/jp	VARIAN1_220311A : 38	R376037

- 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: B22030703-029
Collection Date: 03/08/2022 12:15
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2722 (Trip Blank) 14733
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/15/2022 03:56/clt	GECD.I_220314A : 32	164488
Surr: 1,1,1,2-Tetrachloroethane	94.0	%REC	1		70-130				SW8011	03/15/2022 03:56/clt	GECD.I_220314A : 32	164488

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2722 (Trip Blank) 14808
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-030
Collection Date: 03/08/2022 12:15
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/12/2022 11:07/jdw	FID-HEADSPACE_220312A : 17	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2715 (RHMW02)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-031
Collection Date: 03/08/2022 14:10
Date Received: 03/11/2022
Report Date: 03/21/2022

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 5.7 to 5.8	5.8	mg/L	1		0.50	0.50	0.17		SW9060A	03/16/2022 23:32/eli-ca	SUB-C280612 : 12	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 17:37/srh	ICPMS207-B_220315A : 60	R376266
METALS, TOTAL												
Lead	0.00007	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/15/2022 17:43/srh	ICPMS207-B_220315A : 61	164468
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Ethylbenzene	0.15	ug/L	1	J	1.0	0.20	0.084		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2715 (RHMW02)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-031
Collection Date: 03/08/2022 14:10
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
o-Xylene	0.19	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Xylenes, Total	0.19	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Surr: Dibromofluoromethane	105.0	%REC	1		80-119				SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/14/2022 15:26/msc	VOA5975C.I_220314A : 12	R376400
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 04:15/clt	GECD.I_220314A : 33	164488
Surr: 1,1,1,2-Tetrachloroethane	94.0	%REC	1		70-130				SW8011	03/15/2022 04:15/clt	GECD.I_220314A : 33	164488
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	38	ug/L	1	T	20	8.7	2.0		SW8015C	03/12/2022 23:50/jp	VARIAN1_220311A : 50	R376037
Total Purgeable Hydrocarbons	794	ug/L	1	T	20	10	3.1		SW8015C	03/12/2022 23:50/jp	VARIAN1_220311A : 50	R376037
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/12/2022 23:50/jp	VARIAN1_220311A : 50	R376037
- 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)	3.2	mg/L	1		0.30	0.14	0.037		SW8015C	03/15/2022 01:08/amn	GCFID-HP5-B_220314A : 16	164471
Diesel Range Organics (SGT-C10 to C24)	0.49	mg/L	1		0.30	0.11	0.027		SW8015C	03/16/2022 01:55/amn	GCFID-HP5-B_220315A : 10	164471
Oil Range Hydrocarbons (C24 to C40)	0.41	mg/L	1		0.30	0.14	0.084		SW8015C	03/15/2022 01:08/amn	GCFID-HP5-B_220314A : 16	164471
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/16/2022 01:55/amn	GCFID-HP5-B_220315A : 10	164471
Total Extractable Hydrocarbons	3.6	mg/L	1		0.30	0.14	0.071		SW8015C	03/15/2022 01:08/amn	GCFID-HP5-B_220314A : 16	164471
Total Extractable Hydrocarbons (SGT)	0.51	mg/L	1		0.30	0.11	0.034		SW8015C	03/16/2022 01:55/amn	GCFID-HP5-B_220315A : 10	164471

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-031
Client: AECOM - Honolulu
Collection Date: 03/08/2022 14:10
Client Sample ID: ERH2715 (RHMW02)
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	80.0	%REC	1		56-125				SW8015C	03/15/2022 01:08/amn	GCFID-HP5-B_220314A : 16	164471
Surr: o-Terphenyl (SGT)	78.0	%REC	1		56-125				SW8015C	03/16/2022 01:55/amn	GCFID-HP5-B_220315A : 10	164471
Surr: n-Triacontane	91.0	%REC	1		50-150				SW8015C	03/15/2022 01:08/amn	GCFID-HP5-B_220314A : 16	164471
Surr: n-Triacontane (SGT)	84.0	%REC	1		50-150				SW8015C	03/16/2022 01:55/amn	GCFID-HP5-B_220315A : 10	164471
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	3.4	mg/L	78		0.16	0.090	0.055		SW8015M	03/12/2022 11:21/jdw	FID-HEADSPACE_220312A : 18	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2714 (Trip Blank) 14694
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-032
Collection Date: 03/08/2022 14:10
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Toluene	0.092	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-032
Collection Date: 03/08/2022 14:10
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2714 (Trip Blank) 14694
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/14/2022 19:31/msc	VOA5975C.I_220314A : 21	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-033
Client: AECOM - Honolulu
Collection Date: 03/08/2022 14:10
Client Sample ID: ERH2714 (Trip Blank) 14694
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	2.4	ug/L	1	J	20	8.7	2.0		SW8015C	03/12/2022 15:16/jp	VARIAN1_220311A : 39	R376037
Total Purgeable Hydrocarbons	3.6	ug/L	1	J	20	10	3.1		SW8015C	03/12/2022 15:16/jp	VARIAN1_220311A : 39	R376037
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	03/12/2022 15:16/jp	VARIAN1_220311A : 39	R376037

- 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: B22030703-034
Client: AECOM - Honolulu
Collection Date: 03/08/2022 14:10
Client Sample ID: ERH2714 (Trip Blank) 14694
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

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	03/15/2022 05:35/clt	GECD.I_220314A : 35	164488
Surr: 1,1,1,2-Tetrachloroethane	89.0	%REC	1		70-130				SW8011	03/15/2022 05:35/clt	GECD.I_220314A : 35	164488

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2714 (Trip Blank) 14663
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-035
Collection Date: 03/08/2022 14:10
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/12/2022 11:28/jdw	FID-HEADSPACE_220312A : 19	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2702 (RHMW14-3)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-036
Collection Date: 03/08/2022 12:00
Date Received: 03/11/2022
Report Date: 03/21/2022

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 0.3	0.25	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/17/2022 00:13/eli-ca	SUB-C280612 : 13	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 17:49/srh	ICPMS207-B_220315A : 62	R376266
METALS, TOTAL												
Lead	0.00013	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/15/2022 17:55/srh	ICPMS207-B_220315A : 63	164468
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2702 (RHMW14-3)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-036
Collection Date: 03/08/2022 12:00
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/14/2022 15:53/msc	VOA5975C.I_220314A : 13	R376400
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 05:54/clt	GECD.I_220314A : 36	164488
Surr: 1,1,1,2-Tetrachloroethane	93.0	%REC	1		70-130				SW8011	03/15/2022 05:54/clt	GECD.I_220314A : 36	164488
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	UT	20	8.7	2.0		SW8015C	03/13/2022 00:58/jp	VARIAN1_220311A : 51	R376037
Total Purgeable Hydrocarbons	3.4	ug/L	1	JT	20	10	3.1		SW8015C	03/13/2022 00:58/jp	VARIAN1_220311A : 51	R376037
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/13/2022 00:58/jp	VARIAN1_220311A : 51	R376037
- 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	0.14	0.037		SW8015C	03/14/2022 18:00/amn	GCFID-HP5-B_220314A : 9	164471
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/14/2022 18:00/amn	GCFID-HP5-B_220314A : 9	164471
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/14/2022 18:00/amn	GCFID-HP5-B_220314A : 9	164471
Surr: o-Terphenyl	93.0	%REC	1		56-125				SW8015C	03/14/2022 18:00/amn	GCFID-HP5-B_220314A : 9	164471
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/14/2022 18:00/amn	GCFID-HP5-B_220314A : 9	164471
- 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: B22030703-036
Client: AECOM - Honolulu
Collection Date: 03/08/2022 12:00
Client Sample ID: ERH2702 (RHMW14-3)
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Ground Water

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	03/12/2022 11:33/jdw	FID-HEADSPACE_220312A : 20	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2701 (Trip Blank) 14894
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-037
Collection Date: 03/08/2022 12:00
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Toluene	0.077	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-037
Collection Date: 03/08/2022 12:00
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2701 (Trip Blank) 14894
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/14/2022 16:20/msc	VOA5975C.I_220314A : 14	R376400

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-038
Client: AECOM - Honolulu
Collection Date: 03/08/2022 12:00
Client Sample ID: ERH2701 (Trip Blank) 14653
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

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	03/12/2022 15:50/jp	VARIAN1_220311A : 40	R376037
Total Purgeable Hydrocarbons	3.5	ug/L	1	J	20	10	3.1		SW8015C	03/12/2022 15:50/jp	VARIAN1_220311A : 40	R376037
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	03/12/2022 15:50/jp	VARIAN1_220311A : 40	R376037

- 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: B22030703-039
Client: AECOM - Honolulu
Collection Date: 03/08/2022 12:00
Client Sample ID: ERH2701 (Trip Blank) 14733
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

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	03/15/2022 06:14/clt	GECD.I_220314A : 37	164488
Surr: 1,1,1,2-Tetrachloroethane	89.0	%REC	1		70-130				SW8011	03/15/2022 06:14/clt	GECD.I_220314A : 37	164488

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2701 (Trip Blank) 14895
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-040
Collection Date: 03/08/2022 12:00
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/12/2022 11:37/jdw	FID-HEADSPACE_220312A : 21	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2718 (RHMW01R)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-041
Collection Date: 03/08/2022 13:00
Date Received: 03/11/2022
Report Date: 03/21/2022

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 1.0 to 1.0	1.0	mg/L	1		0.50	0.50	0.17		SW9060A	03/17/2022 02:10/eli-ca	SUB-C280612 : 15	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 18:02/srh	ICPMS207-B_220315A : 64	R376266
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/15/2022 18:08/srh	ICPMS207-B_220315A : 65	164468
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2718 (RHMW01R)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-041
Collection Date: 03/08/2022 13:00
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/15/2022 01:54/msc	VOA5975C.I_220314B : 6	R376406
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 06:34/clt	GECD.I_220314A : 38	164488
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	03/15/2022 06:34/clt	GECD.I_220314A : 38	164488
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	3.4	ug/L	1	J	20	8.7	2.0		SW8015C	03/13/2022 03:07/jp	VARIAN1_220311A : 52	R376037
Total Purgeable Hydrocarbons	51	ug/L	1		20	10	3.1		SW8015C	03/13/2022 03:07/jp	VARIAN1_220311A : 52	R376037
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/13/2022 03:07/jp	VARIAN1_220311A : 52	R376037
- 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)	0.29	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/15/2022 03:16/amn	GCFID-HP5-B_220314A : 18	164471
Diesel Range Organics (SGT-C10 to C24)	0.037	mg/L	1	J	0.30	0.11	0.027		SW8015C	03/16/2022 02:38/amn	GCFID-HP5-B_220315A : 11	164471
Oil Range Hydrocarbons (C24 to C40)	0.10	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/15/2022 03:16/amn	GCFID-HP5-B_220314A : 18	164471
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/16/2022 02:38/amn	GCFID-HP5-B_220315A : 11	164471
Total Extractable Hydrocarbons	0.40	mg/L	1		0.30	0.14	0.071		SW8015C	03/15/2022 03:16/amn	GCFID-HP5-B_220314A : 18	164471
Total Extractable Hydrocarbons (SGT)	0.043	mg/L	1	J	0.30	0.11	0.034		SW8015C	03/16/2022 02:38/amn	GCFID-HP5-B_220315A : 11	164471

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-041
Client: AECOM - Honolulu
Collection Date: 03/08/2022 13:00
Client Sample ID: ERH2718 (RHMW01R)
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	82.0	%REC	1		56-125				SW8015C	03/15/2022 03:16/amn	GCFID-HP5-B_220314A : 18	164471
Surr: o-Terphenyl (SGT)	81.0	%REC	1		56-125				SW8015C	03/16/2022 02:38/amn	GCFID-HP5-B_220315A : 11	164471
Surr: n-Triacontane	86.0	%REC	1		50-150				SW8015C	03/15/2022 03:16/amn	GCFID-HP5-B_220314A : 18	164471
Surr: n-Triacontane (SGT)	81.0	%REC	1		50-150				SW8015C	03/16/2022 02:38/amn	GCFID-HP5-B_220315A : 11	164471
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.56	mg/L	78		0.16	0.090	0.055		SW8015M	03/12/2022 11:56/jdw	FID-HEADSPACE_220312A : 22	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-042
Collection Date: 03/08/2022 13:00
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2719 (RHMW01R)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

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	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-042
Client: AECOM - Honolulu
Collection Date: 03/08/2022 13:00
Client Sample ID: ERH2719 (RHMW01R)
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Ground Water

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	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Surr: 1,2-Dichloroethane-d4	111.0	%REC	1		81-118				SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/15/2022 02:21/msc	VOA5975C.I_220314B : 7	R376406
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	3.4	ug/L	1	J	20	8.7	2.0		SW8015C	03/13/2022 04:15/jp	VARIAN1_220311A : 53	R376037
Total Purgeable Hydrocarbons	51	ug/L	1		20	10	3.1		SW8015C	03/13/2022 04:15/jp	VARIAN1_220311A : 53	R376037
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	03/13/2022 04:15/jp	VARIAN1_220311A : 53	R376037
- 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)	0.31	mg/L	1		0.30	0.14	0.037		SW8015C	03/15/2022 06:07/amn	GCFID-HP5-B_220314A : 20	164471
Diesel Range Organics (SGT-C10 to C24)	0.047	mg/L	1	J	0.30	0.11	0.027		SW8015C	03/16/2022 07:39/amn	GCFID-HP5-B_220315A : 15	164471
Oil Range Hydrocarbons (C24 to C40)	0.098	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/15/2022 06:07/amn	GCFID-HP5-B_220314A : 20	164471
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/16/2022 07:39/amn	GCFID-HP5-B_220315A : 15	164471
Total Extractable Hydrocarbons	0.41	mg/L	1		0.30	0.14	0.071		SW8015C	03/15/2022 06:07/amn	GCFID-HP5-B_220314A : 20	164471
Total Extractable Hydrocarbons (SGT)	0.052	mg/L	1	J	0.30	0.11	0.034		SW8015C	03/16/2022 07:39/amn	GCFID-HP5-B_220315A : 15	164471
Surr: o-Terphenyl	85.0	%REC	1		56-125				SW8015C	03/15/2022 06:07/amn	GCFID-HP5-B_220314A : 20	164471
Surr: o-Terphenyl (SGT)	83.0	%REC	1		56-125				SW8015C	03/16/2022 07:39/amn	GCFID-HP5-B_220315A : 15	164471
Surr: n-Triacontane	83.0	%REC	1		50-150				SW8015C	03/15/2022 06:07/amn	GCFID-HP5-B_220314A : 20	164471
Surr: n-Triacontane (SGT)	76.0	%REC	1		50-150				SW8015C	03/16/2022 07:39/amn	GCFID-HP5-B_220315A : 15	164471
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2717 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-043
Collection Date: 03/08/2022 13:00
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Toluene	0.071	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-043
Collection Date: 03/08/2022 13:00
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2717 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Surr: Toluene-d8	98.0	%REC	1		89-112				SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406
Surr: p-Bromofluorobenzene	105.0	%REC	1		85-114				SW8260B	03/15/2022 08:25/msc	VOA5975C.I_220314B : 14	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-044
Client: AECOM - Honolulu
Collection Date: 03/08/2022 13:00
Client Sample ID: ERH2717 (Trip Blank) 14754
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

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	03/12/2022 16:24/jp	VARIAN1_220311A : 41	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/12/2022 16:24/jp	VARIAN1_220311A : 41	R376037
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	03/12/2022 16:24/jp	VARIAN1_220311A : 41	R376037

- 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: B22030703-045
Collection Date: 03/08/2022 13:00
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2717 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/15/2022 06:53/clt	GECD.I_220314A : 39	164488
Surr: 1,1,1,2-Tetrachloroethane	91.0	%REC	1		70-130				SW8011	03/15/2022 06:53/clt	GECD.I_220314A : 39	164488

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2717 (Trip Blank) 14808
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-046
Collection Date: 03/08/2022 13:00
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/12/2022 12:03/jdw	FID-HEADSPACE_220312A : 23	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2708 (RHMW12A)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-047
Collection Date: 03/08/2022 17:26
Date Received: 03/11/2022
Report Date: 03/21/2022

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 0.4	0.37	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/17/2022 04:12/eli-ca	SUB-C280612 : 18	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 18:14/srh	ICPMS207-B_220315A : 66	R376266
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/15/2022 18:33/srh	ICPMS207-B_220315A : 69	164468
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2708 (RHMW12A)
Project: CV18F0126/60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030703-047
Collection Date: 03/08/2022 17:26
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/15/2022 02:48/msc	VOA5975C.I_220314B : 8	R376406
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 07:13/clt	GECD.I_220314A : 40	164488
Surr: 1,1,1,2-Tetrachloroethane	87.0	%REC	1		70-130				SW8011	03/15/2022 07:13/clt	GECD.I_220314A : 40	164488
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/13/2022 05:23/jp	VARIAN1_220311A : 54	R376037
Total Purgeable Hydrocarbons	ND	ug/L	1	UT	20	10	3.1		SW8015C	03/13/2022 05:23/jp	VARIAN1_220311A : 54	R376037
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/13/2022 05:23/jp	VARIAN1_220311A : 54	R376037
- 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)	0.097	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/14/2022 19:25/amn	GCFID-HP5-B_220314A : 11	164471
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/15/2022 23:46/amn	GCFID-HP5-B_220315A : 8	164471
Oil Range Hydrocarbons (C24 to C40)	0.14	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/14/2022 19:25/amn	GCFID-HP5-B_220314A : 11	164471
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/15/2022 23:46/amn	GCFID-HP5-B_220315A : 8	164471
Total Extractable Hydrocarbons	0.27	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/14/2022 19:25/amn	GCFID-HP5-B_220314A : 11	164471
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/15/2022 23:46/amn	GCFID-HP5-B_220315A : 8	164471

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-047
Client: AECOM - Honolulu
Collection Date: 03/08/2022 17:26
Client Sample ID: ERH2708 (RHMW12A)
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Ground Water

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	03/14/2022 19:25/amn	GCFID-HP5-B_220314A : 11	164471
Surr: o-Terphenyl (SGT)	89.0	%REC	1		56-125				SW8015C	03/15/2022 23:46/amn	GCFID-HP5-B_220315A : 8	164471
Surr: n-Triacontane	91.0	%REC	1		50-150				SW8015C	03/14/2022 19:25/amn	GCFID-HP5-B_220314A : 11	164471
Surr: n-Triacontane (SGT)	81.0	%REC	1		50-150				SW8015C	03/15/2022 23:46/amn	GCFID-HP5-B_220315A : 8	164471
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.00072	mg/L	1	J	0.0020	0.0012	0.00070		SW8015M	03/12/2022 12:08/jdw	FID-HEADSPACE_220312A : 24	R376033

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2707 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-048
Collection Date: 03/08/2022 17:26
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Toluene	0.13	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-048
Collection Date: 03/08/2022 17:26
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2707 (Trip Blank) 14833
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Surr: Toluene-d8	98.0	%REC	1		89-112				SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406
Surr: p-Bromofluorobenzene	111.0	%REC	1		85-114				SW8260B	03/15/2022 08:53/msc	VOA5975C.I_220314B : 15	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030703-049
Client: AECOM - Honolulu
Collection Date: 03/08/2022 17:26
Client Sample ID: ERH2707 (Trip Blank) 14754
Date Received: 03/11/2022
Project: CV18F0126/60571032.02.46.01
Report Date: 03/21/2022
Matrix: Trip Blank

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	03/12/2022 22:07/jp	VARIAN1_220311A : 48	R376037
Total Purgeable Hydrocarbons	3.2	ug/L	1	J	20	10	3.1		SW8015C	03/12/2022 22:07/jp	VARIAN1_220311A : 48	R376037
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/12/2022 22:07/jp	VARIAN1_220311A : 48	R376037

- 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: B22030703-050
Collection Date: 03/08/2022 17:26
Date Received: 03/11/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2707 (Trip Blank) 14733
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

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	03/15/2022 07:33/clt	GECD.I_220314A : 41	164488
Surr: 1,1,1,2-Tetrachloroethane	89.0	%REC	1		70-130				SW8011	03/15/2022 07:33/clt	GECD.I_220314A : 41	164488

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2707 (Trip Blank) 14808
Project: CV18F0126/60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030703-051
Collection Date: 03/08/2022 17:26
Date Received: 03/11/2022
Report Date: 03/21/2022

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	03/12/2022 12:15/jdw	FID-HEADSPACE_220312A : 25	R376033

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: SUB-C280612: 2 **SampType:** Method Blank **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/16/2022 15:08 **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: **B22030703-001D, B22030703-006D, B22030703-011D, B22030703-016D, B22030703-021D, B22030703-026D, B22030703-031D, B22030703-036D, B22030703-041D, B22030703-047D**

- TOC Range is 0.0 to 0.0

Run ID: Run Order: SUB-C280612: 1 **SampType:** Laboratory Control Sample **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/16/2022 14:28 **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)	4.8	0.50	5.0		96.0	91	111				

Associated Samples: **B22030703-001D, B22030703-006D, B22030703-011D, B22030703-016D, B22030703-021D, B22030703-026D, B22030703-031D, B22030703-036D, B22030703-041D, B22030703-047D**

- TOC Range is 4.8 to 4.8

Run ID: Run Order: SUB-C280612: 5 **SampType:** Sample Matrix Spike **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/16/2022 18:43 **Prep Date:**
Lab ID: C22030503-001DMS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.2	0.50	5.0	0.39	96.0	91	111				

Associated Samples: **B22030703-001D, B22030703-006D, B22030703-011D, B22030703-016D, B22030703-021D, B22030703-026D, B22030703-031D, B22030703-036D, B22030703-041D, B22030703-047D**

- TOC Range is 5.1 to 5.2

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: SUB-C280612: 6 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/16/2022 19:24 **Prep Date:**
Lab ID: C22030503-001DMSD **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.2	0.50	5.0	0.39	96.0	91	111	5.2	0.1	10.0	

Associated Samples: **B22030703-001D, B22030703-006D, B22030703-011D, B22030703-016D, B22030703-021D, B22030703-026D, B22030703-031D, B22030703-036D, B22030703-041D, B22030703-047D**

- TOC Range is 5.2 to 5.2

Run ID: Run Order: SUB-C280612: 16 **SampType:** Sample Matrix Spike **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/17/2022 02:50 **Prep Date:**
Lab ID: C22030503-041DMS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.9	0.50	5.0	1.0	97.0	91	111				

Associated Samples: **B22030703-001D, B22030703-006D, B22030703-011D, B22030703-016D, B22030703-021D, B22030703-026D, B22030703-031D, B22030703-036D, B22030703-041D, B22030703-047D**

- TOC Range is 5.8 to 5.9

Run ID: Run Order: SUB-C280612: 17 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/17/2022 03:31 **Prep Date:**
Lab ID: C22030503-041DMSD **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.9	0.50	5.0	1.0	97.0	91	111	5.9	0.2	10.0	

Associated Samples: **B22030703-001D, B22030703-006D, B22030703-011D, B22030703-016D, B22030703-021D, B22030703-026D, B22030703-031D, B22030703-036D, B22030703-041D, B22030703-047D**

- TOC Range is 5.8 to 5.9

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: SUB-C280612: 20 **SampType:** Sample Matrix Spike **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/17/2022 12:21 **Prep Date:**
Lab ID: C22030504-0042DMS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.5	0.50	5.0		110.0	91	111				

Associated Samples: **B22030703-001D, B22030703-006D, B22030703-011D, B22030703-016D, B22030703-021D, B22030703-026D, B22030703-031D, B22030703-036D, B22030703-041D, B22030703-047D**

- TOC Range is 5.5 to 5.5

Run ID: Run Order: SUB-C280612: 21 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/17/2022 13:04 **Prep Date:**
Lab ID: C22030504-0042DMSD **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.5	0.50	5.0		111.0	91	111				

Associated Samples: **B22030703-001D, B22030703-006D, B22030703-011D, B22030703-016D, B22030703-021D, B22030703-026D, B22030703-031D, B22030703-036D, B22030703-041D, B22030703-047D**

- TOC Range is 5.5 to 5.6

Run ID: Run Order: SUB-C280612: 3 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/16/2022 15:46 **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: **B22030703-001D, B22030703-006D, B22030703-011D, B22030703-016D, B22030703-021D, B22030703-026D, B22030703-031D, B22030703-036D, B22030703-041D, B22030703-047D**

- TOC Range is 4.8 to 4.8

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: SUB-C280612: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/17/2022 00:52 **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: **B22030703-001D, B22030703-006D, B22030703-011D, B22030703-016D, B22030703-021D, B22030703-026D, B22030703-031D, B22030703-036D, B22030703-041D, B22030703-047D**

- TOC Range is 4.8 to 4.8

Run ID: Run Order: SUB-C280612: 19 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/17/2022 10:20 **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: **B22030703-001D, B22030703-006D, B22030703-011D, B22030703-016D, B22030703-021D, B22030703-026D, B22030703-031D, B22030703-036D, B22030703-041D, B22030703-047D**

- TOC Range is 4.7 to 4.9

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: ICPMS207-B_220315A: 23 **SampType:** Laboratory Fortified Blank **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 13:46 **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		98.0	88	115				

Associated Samples: **B22030703-001A, B22030703-006A, B22030703-011A, B22030703-016A, B22030703-021A, B22030703-026A, B22030703-031A, B22030703-036A, B22030703-041A, B22030703-047A**

Run ID: Run Order: ICPMS207-B_220315A: 22 **SampType:** Method Blank **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 13:40 **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: **B22030703-001A, B22030703-006A, B22030703-011A, B22030703-016A, B22030703-021A, B22030703-026A, B22030703-031A, B22030703-036A, B22030703-041A, B22030703-047A**

Run ID: Run Order: ICPMS207-B_220315A: 37 **SampType:** Sample Matrix Spike **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 15:13 **Prep Date:**
Lab ID: B22030703-001AMS **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	99.0	88	115				

Associated Samples: **B22030703-001A, B22030703-006A, B22030703-011A, B22030703-016A, B22030703-021A, B22030703-026A, B22030703-031A, B22030703-036A, B22030703-041A, B22030703-047A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: ICPMS207-B_220315A: 38 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 15:20 **Prep Date:**
Lab ID: B22030703-001AMSD **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	99.0	88	115	0.050	0.4	20.0	

Associated Samples: **B22030703-001A, B22030703-006A, B22030703-011A, B22030703-016A, B22030703-021A, B22030703-026A, B22030703-031A, B22030703-036A, B22030703-041A, B22030703-047A**

Run ID: Run Order: ICPMS207-B_220315A: 72 **SampType:** Sample Matrix Spike **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 18:51 **Prep Date:**
Lab ID: B22030912-001AMS **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: **B22030703-001A, B22030703-006A, B22030703-011A, B22030703-016A, B22030703-021A, B22030703-026A, B22030703-031A, B22030703-036A, B22030703-041A, B22030703-047A**

Run ID: Run Order: ICPMS207-B_220315A: 73 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 18:58 **Prep Date:**
Lab ID: B22030912-001AMSD **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	0.00	97.0	88	115	0.047	2.8	20.0	

Associated Samples: **B22030703-001A, B22030703-006A, B22030703-011A, B22030703-016A, B22030703-021A, B22030703-026A, B22030703-031A, B22030703-036A, B22030703-041A, B22030703-047A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: ICPMS207-B_220315A: 36 **SampType:** Serial Dilution **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 15:07 **Prep Date:**
Lab ID: B22030703-001ADIL **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		10.0	N

Associated Samples: **B22030703-001A, B22030703-006A, B22030703-011A, B22030703-016A, B22030703-021A, B22030703-026A, B22030703-031A, B22030703-036A, B22030703-041A, B22030703-047A**

Run ID: Run Order: ICPMS207-B_220315A: 71 **SampType:** Serial Dilution **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 18:45 **Prep Date:**
Lab ID: B22030912-001ADIL **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: **B22030703-001A, B22030703-006A, B22030703-011A, B22030703-016A, B22030703-021A, B22030703-026A, B22030703-031A, B22030703-036A, B22030703-041A, B22030703-047A**

Run ID: Run Order: ICPMS207-B_220315A: 32 **SampType:** Laboratory Control Sample **Batch ID:** 164468
Method: SW6020 **Analysis Date:** 03/15/2022 14:42 **Prep Date:** 03/11/2022 18:00
Lab ID: LCS4-164468 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.097	0.001	0.100		97.0	88	115				

Associated Samples: **B22030703-001B, B22030703-006B, B22030703-011B, B22030703-016B, B22030703-021B, B22030703-026B, B22030703-031B, B22030703-036B, B22030703-041B, B22030703-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: ICPMS207-B_220315A: 44 **SampType:** Post Digestion/Distillation Spike **Batch ID:** 164468
Method: SW6020 **Analysis Date:** 03/15/2022 15:57 **Prep Date:** 03/11/2022 18:02
Lab ID: B22030703-001BPDS1 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.049	0.001	0.052	0	94.0	80	120				

Associated Samples: **B22030703-001B, B22030703-006B, B22030703-011B, B22030703-016B, B22030703-021B, B22030703-026B, B22030703-031B, B22030703-036B, B22030703-041B, B22030703-047B**

Run ID: Run Order: ICPMS207-B_220315A: 45 **SampType:** Matrix Spike **Batch ID:** 164468
Method: SW6020 **Analysis Date:** 03/15/2022 16:03 **Prep Date:** 03/11/2022 18:02
Lab ID: B22030703-001BMS4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.095	0.001	0.100	0	95.0	88	115				

Associated Samples: **B22030703-001B, B22030703-006B, B22030703-011B, B22030703-016B, B22030703-021B, B22030703-026B, B22030703-031B, B22030703-036B, B22030703-041B, B22030703-047B**

Run ID: Run Order: ICPMS207-B_220315A: 46 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164468
Method: SW6020 **Analysis Date:** 03/15/2022 16:09 **Prep Date:** 03/11/2022 18:02
Lab ID: B22030703-001BMSD4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.094	0.001	0.100	0	94.0	88	115	0.095	0.7	20.0	

Associated Samples: **B22030703-001B, B22030703-006B, B22030703-011B, B22030703-016B, B22030703-021B, B22030703-026B, B22030703-031B, B22030703-036B, B22030703-041B, B22030703-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: ICPMS207-B_220315A: 30 **SampType:** Method Blank **Batch ID:** 164468
Method: SW6020 **Analysis Date:** 03/15/2022 14:30 **Prep Date:** 03/11/2022 18:00
Lab ID: MB-164468 **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: **B22030703-001B, B22030703-006B, B22030703-011B, B22030703-016B, B22030703-021B, B22030703-026B, B22030703-031B, B22030703-036B, B22030703-041B, B22030703-047B**

Run ID: Run Order: ICPMS207-B_220315A: 41 **SampType:** Serial Dilution **Batch ID:** 164468
Method: SW6020 **Analysis Date:** 03/15/2022 15:38 **Prep Date:** 03/11/2022 18:02
Lab ID: B22030703-001BDIL **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		10.0	N

Associated Samples: **B22030703-001B, B22030703-006B, B22030703-011B, B22030703-016B, B22030703-021B, B22030703-026B, B22030703-031B, B22030703-036B, B22030703-041B, B22030703-047B**

Run ID: Run Order: ICPMS207-B_220315A: 28 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 14:17 **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		94.0	90	110				

Associated Samples: **B22030703-001A, B22030703-001B, B22030703-006A, B22030703-006B, B22030703-011A, B22030703-011B, B22030703-016A, B22030703-016B, B22030703-021A, B22030703-021B, B22030703-026A, B22030703-026B, B22030703-031A, B22030703-031B, B22030703-036A, B22030703-036B, B22030703-041A, B22030703-041B, B22030703-047A, B22030703-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: ICPMS207-B_220315A: 42 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 15:45 **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: **B22030703-001A, B22030703-001B, B22030703-006A, B22030703-006B, B22030703-011A, B22030703-011B, B22030703-016A, B22030703-016B, B22030703-021A, B22030703-021B, B22030703-026A, B22030703-026B, B22030703-031A, B22030703-031B, B22030703-036A, B22030703-036B, B22030703-041A, B22030703-041B, B22030703-047A, B22030703-047B**

Run ID: Run Order: ICPMS207-B_220315A: 55 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 17:06 **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: **B22030703-001A, B22030703-001B, B22030703-006A, B22030703-006B, B22030703-011A, B22030703-011B, B22030703-016A, B22030703-016B, B22030703-021A, B22030703-021B, B22030703-026A, B22030703-026B, B22030703-031A, B22030703-031B, B22030703-036A, B22030703-036B, B22030703-041A, B22030703-041B, B22030703-047A, B22030703-047B**

Run ID: Run Order: ICPMS207-B_220315A: 67 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 18:20 **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		94.0	90	110				

Associated Samples: **B22030703-001A, B22030703-001B, B22030703-006A, B22030703-006B, B22030703-011A, B22030703-011B, B22030703-016A, B22030703-016B, B22030703-021A, B22030703-021B, B22030703-026A, B22030703-026B, B22030703-031A, B22030703-031B, B22030703-036A, B22030703-036B, B22030703-041A, B22030703-041B, B22030703-047A, B22030703-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: ICPMS207-B_220315A: 80 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 19:41 **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: **B22030703-001A, B22030703-001B, B22030703-006A, B22030703-006B, B22030703-011A, B22030703-011B, B22030703-016A, B22030703-016B, B22030703-021A, B22030703-021B, B22030703-026A, B22030703-026B, B22030703-031A, B22030703-031B, B22030703-036A, B22030703-036B, B22030703-041A, B22030703-041B, B22030703-047A, B22030703-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 4 **SampType:** Method Blank **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 12:13 **Prep Date:**
Lab ID: MBLK031422_ **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: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 4 **SampType:** Method Blank **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 12:13 **Prep Date:**
Lab ID: MBLK031422_ **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		106.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		106.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		110.0	85	114				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 4 **SampType:** Method Blank **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 12:13 **Prep Date:**
Lab ID: MBLK031422_ **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	89	112				

Associated Samples: **B22030703-001E, B22030703-002A, B22030703-006E, B22030703-007A, B22030703-011E, B22030703-012A, B22030703-016E, B22030703-017A, B22030703-021E, B22030703-022A, B22030703-026E, B22030703-027A, B22030703-031E, B22030703-032A, B22030703-036E, B22030703-037A**

Run ID: Run Order: VOA5975C.I_220314A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 11:19 **Prep Date:**
Lab ID: LCS031422_ **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	5.4	0.50	5.0		108.0	80	120				
Bromochloromethane	5.0	0.50	5.0		100.0	78	123				
Bromodichloromethane	5.5	0.50	5.0		111.0	79	125				
Bromoform	5.6	0.50	5.0		111.0	66	130				
Carbon tetrachloride	4.6	0.50	5.0		93.0	72	136				
Chlorobenzene	5.3	0.50	5.0		106.0	82	118				
Chlorodibromomethane	5.3	0.50	5.0		106.0	74	126				
Chloroethane	4.9	0.50	5.0		99.0	60	138				
Chloroform	5.0	0.50	5.0		100.0	79	124				
Chloromethane	4.8	0.50	5.0		95.0	50	139				
1,2-Dibromoethane	5.3	0.50	5.0		107.0	78	122				
2-Chlorotoluene	5.3	0.50	5.0		107.0	79	122				
Dibromomethane	5.3	0.50	5.0		105.0	79	123				
1,2-Dichlorobenzene	5.3	0.50	5.0		106.0	80	119				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 11:19 **Prep Date:**
Lab ID: LCS031422_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.6	0.50	5.0		112.0	78	122				
1,3-Dichlorobenzene	5.6	0.50	5.0		113.0	80	119				
1,4-Dichlorobenzene	5.3	0.50	5.0		107.0	79	118				
Dichlorodifluoromethane	4.3	0.50	5.0		86.0	32	152				
1,1-Dichloroethane	5.1	0.50	5.0		103.0	77	125				
1,2-Dichloroethane	5.4	0.50	5.0		107.0	73	128				
1,1-Dichloroethene	4.9	0.50	5.0		99.0	71	131				
cis-1,2-Dichloroethene	5.1	0.50	5.0		101.0	78	123				
trans-1,2-Dichloroethene	5.0	0.50	5.0		101.0	75	124				
1,2-Dichloropropane	5.4	0.50	5.0		108.0	78	122				
1,3-Dichloropropane	5.3	0.50	5.0		106.0	80	119				
2,2-Dichloropropane	5.2	0.50	5.0		104.0	60	139				
1,1-Dichloropropene	4.6	0.50	5.0		93.0	79	125				
cis-1,3-Dichloropropene	5.0	0.50	5.0		101.0	75	124				
trans-1,3-Dichloropropene	5.6	0.50	5.0		113.0	73	127				
Ethylbenzene	5.1	0.50	5.0		102.0	79	121				
Methyl tert-butyl ether (MTBE)	5.1	0.50	5.0		103.0	71	124				
Methyl ethyl ketone	59	10	50		117.0	56	143				
Methylene chloride	4.9	0.50	5.0		98.0	74	124				
Styrene	5.3	0.50	5.0		105.0	78	123				
1,1,1,2-Tetrachloroethane	5.3	0.50	5.0		106.0	78	124				
1,1,2,2-Tetrachloroethane	5.6	0.50	5.0		113.0	71	121				
Tetrachloroethene	4.8	0.50	5.0		95.0	74	129				
Toluene	5.5	0.50	5.0		110.0	80	121				
1,1,1-Trichloroethane	4.8	0.50	5.0		97.0	74	131				
1,1,2-Trichloroethane	5.5	0.50	5.0		110.0	80	119				
Trichloroethene	5.0	0.50	5.0		101.0	79	123				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 11:19 **Prep Date:**
Lab ID: LCS031422_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	4.6	0.50	5.0		93.0	65	141				
1,2,3-Trichloropropane	5.3	0.50	5.0		107.0	73	125				
Vinyl chloride	4.8	0.50	5.0		96.0	58	137				
m+p-Xylenes	10	0.50	10		102.0	80	121				
o-Xylene	5.1	0.50	5.0		103.0	78	122				
Xylenes, Total	15	0.50	15		102.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		102.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		102.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	85	114				
Surr: Toluene-d8	10	0.50	10		102.0	89	112				

Associated Samples: **B22030703-001E, B22030703-002A, B22030703-006E, B22030703-007A, B22030703-011E, B22030703-012A, B22030703-016E, B22030703-017A, B22030703-021E, B22030703-022A, B22030703-026E, B22030703-027A, B22030703-031E, B22030703-032A, B22030703-036E, B22030703-037A**

Run ID: Run Order: VOA5975C.I_220314A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 19:59 **Prep Date:**
Lab ID: B22030703-001EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	4.8	0.50	5.0	0.0	96.0	79	120				
Bromobenzene	5.1	0.50	5.0	0.0	102.0	80	120				
Bromochloromethane	4.8	0.50	5.0	0.0	95.0	78	123				
Bromodichloromethane	4.9	0.50	5.0	0.0	99.0	79	125				
Bromoform	5.1	0.50	5.0	0.0	101.0	66	130				
Carbon tetrachloride	4.3	0.50	5.0	0.0	86.0	72	136				
Chlorobenzene	4.9	0.50	5.0	0.0	98.0	82	118				
Chlorodibromomethane	4.9	0.50	5.0	0.0	97.0	74	126				
Chloroethane	4.8	0.50	5.0	0.0	96.0	60	138				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 19:59 **Prep Date:**
Lab ID: B22030703-001EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Chloroform	4.6	0.50	5.0	0.0	92.0	79	124				
Chloromethane	4.6	0.50	5.0	0.0	92.0	50	139				
1,2-Dibromoethane	4.7	0.50	5.0	0.0	93.0	78	122				
2-Chlorotoluene	5.2	0.50	5.0	0.0	103.0	79	122				
Dibromomethane	4.8	0.50	5.0	0.0	96.0	79	123				
1,2-Dichlorobenzene	4.9	0.50	5.0	0.0	98.0	80	119				
4-Chlorotoluene	5.2	0.50	5.0	0.0	105.0	78	122				
1,3-Dichlorobenzene	5.1	0.50	5.0	0.0	102.0	80	119				
1,4-Dichlorobenzene	4.9	0.50	5.0	0.0	97.0	79	118				
Dichlorodifluoromethane	4.3	0.50	5.0	0.0	86.0	32	152				
1,1-Dichloroethane	4.8	0.50	5.0	0.0	95.0	77	125				
1,2-Dichloroethane	4.4	0.50	5.0	0.0	89.0	73	128				
1,1-Dichloroethene	4.5	0.50	5.0	0.0	89.0	71	131				
cis-1,2-Dichloroethene	4.6	0.50	5.0	0.0	91.0	78	123				
trans-1,2-Dichloroethene	4.5	0.50	5.0	0.0	91.0	75	124				
1,2-Dichloropropane	4.9	0.50	5.0	0.0	98.0	78	122				
1,3-Dichloropropane	4.7	0.50	5.0	0.0	94.0	80	119				
2,2-Dichloropropane	4.5	0.50	5.0	0.0	90.0	60	139				
1,1-Dichloropropene	4.2	0.50	5.0	0.0	83.0	79	125				
cis-1,3-Dichloropropene	4.5	0.50	5.0	0.0	90.0	75	124				
trans-1,3-Dichloropropene	5.0	0.50	5.0	0.0	99.0	73	127				
Ethylbenzene	4.7	0.50	5.0	0.0	93.0	79	121				
Methyl tert-butyl ether (MTBE)	5.0	0.50	5.0	0.0	99.0	71	124				
Methyl ethyl ketone	55	10	50	0.0	110.0	56	143				
Methylene chloride	4.5	0.50	5.0	0.0	90.0	74	124				
Styrene	4.7	0.50	5.0	0.0	93.0	78	123				
1,1,1,2-Tetrachloroethane	4.7	0.50	5.0	0.0	94.0	78	124				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 19:59 **Prep Date:**
Lab ID: B22030703-001EMS **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	5.2	0.50	5.0	0.0	104.0	71	121				
Tetrachloroethene	4.5	0.50	5.0	0.0	91.0	74	129				
Toluene	5.0	0.50	5.0	0.0	101.0	80	121				
1,1,1-Trichloroethane	4.5	0.50	5.0	0.0	89.0	74	131				
1,1,2-Trichloroethane	4.8	0.50	5.0	0.0	95.0	80	119				
Trichloroethene	4.7	0.50	5.0	0.0	95.0	79	123				
Trichlorofluoromethane	4.7	0.50	5.0	0.0	94.0	65	141				
1,2,3-Trichloropropane	5.1	0.50	5.0	0.0	101.0	73	125				
Vinyl chloride	4.6	0.50	5.0	0.0	92.0	58	137				
m+p-Xylenes	9.2	0.50	10	0.0	92.0	80	121				
o-Xylene	4.7	0.50	5.0	0.0	95.0	78	122				
Xylenes, Total	14	0.50	15	0.0	93.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10	0.0	103.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10	0.0	102.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	110.0	85	114				
Surr: Toluene-d8	10	0.50	10	0.0	102.0	89	112				

Associated Samples: **B22030703-001E, B22030703-002A, B22030703-006E, B22030703-007A, B22030703-011E, B22030703-012A, B22030703-016E, B22030703-017A, B22030703-021E, B22030703-022A, B22030703-026E, B22030703-027A, B22030703-031E, B22030703-032A, B22030703-036E, B22030703-037A**

Run ID: Run Order: VOA5975C.I_220314A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 20:26 **Prep Date:**
Lab ID: B22030703-001EMSD **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	97.0	79	120	4.8	1.0	20.0	
Bromobenzene	5.3	0.50	5.0	0.0	105.0	80	120	5.1	2.8	20.0	
Bromochloromethane	4.7	0.50	5.0	0.0	93.0	78	123	4.8	2.3	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 20:26 **Prep Date:**
Lab ID: B22030703-001EMSD **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	0.0	101.0	79	125	4.9	2.1	20.0	
Bromoform	5.1	0.50	5.0	0.0	103.0	66	130	5.1	1.7	20.0	
Carbon tetrachloride	4.5	0.50	5.0	0.0	89.0	72	136	4.3	4.1	20.0	
Chlorobenzene	5.0	0.50	5.0	0.0	100.0	82	118	4.9	2.3	20.0	
Chlorodibromomethane	4.8	0.50	5.0	0.0	97.0	74	126	4.9	0.5	20.0	
Chloroethane	4.9	0.50	5.0	0.0	98.0	60	138	4.8	2.0	20.0	
Chloroform	4.6	0.50	5.0	0.0	93.0	79	124	4.6	0.7	20.0	
Chloromethane	4.8	0.50	5.0	0.0	96.0	50	139	4.6	3.9	20.0	
1,2-Dibromoethane	4.7	0.50	5.0	0.0	95.0	78	122	4.7	1.4	20.0	
2-Chlorotoluene	5.2	0.50	5.0	0.0	103.0	79	122	5.2	0.3	20.0	
Dibromomethane	4.9	0.50	5.0	0.0	97.0	79	123	4.8	1.9	20.0	
1,2-Dichlorobenzene	5.1	0.50	5.0	0.0	102.0	80	119	4.9	3.8	20.0	
4-Chlorotoluene	5.5	0.50	5.0	0.0	109.0	78	122	5.2	4.1	20.0	
1,3-Dichlorobenzene	5.4	0.50	5.0	0.0	107.0	80	119	5.1	5.3	20.0	
1,4-Dichlorobenzene	5.1	0.50	5.0	0.0	102.0	79	118	4.9	4.7	20.0	
Dichlorodifluoromethane	4.4	0.50	5.0	0.0	89.0	32	152	4.3	3.8	20.0	
1,1-Dichloroethane	4.9	0.50	5.0	0.0	98.0	77	125	4.8	3.0	20.0	
1,2-Dichloroethane	4.8	0.50	5.0	0.0	95.0	73	128	4.4	6.6	20.0	
1,1-Dichloroethene	4.8	0.50	5.0	0.0	95.0	71	131	4.5	6.2	20.0	
cis-1,2-Dichloroethene	4.8	0.50	5.0	0.0	96.0	78	123	4.6	5.5	20.0	
trans-1,2-Dichloroethene	4.6	0.50	5.0	0.0	91.0	75	124	4.5	0.6	20.0	
1,2-Dichloropropane	5.0	0.50	5.0	0.0	100.0	78	122	4.9	1.8	20.0	
1,3-Dichloropropane	4.7	0.50	5.0	0.0	94.0	80	119	4.7	0.0	20.0	
2,2-Dichloropropane	4.7	0.50	5.0	0.0	94.0	60	139	4.5	4.4	20.0	
1,1-Dichloropropene	4.5	0.50	5.0	0.0	91.0	79	125	4.2	8.9	20.0	
cis-1,3-Dichloropropene	4.6	0.50	5.0	0.0	92.0	75	124	4.5	2.6	20.0	
trans-1,3-Dichloropropene	5.0	0.50	5.0	0.0	100.0	73	127	5.0	0.6	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 20:26 **Prep Date:**
Lab ID: B22030703-001EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Ethylbenzene	4.8	0.50	5.0	0.0	96.0	79	121	4.7	3.4	20.0	
Methyl tert-butyl ether (MTBE)	5.0	0.50	5.0	0.0	100.0	71	124	5.0	1.1	20.0	
Methyl ethyl ketone	56	10	50	0.0	112.0	56	143	55	1.3	20.0	
Methylene chloride	4.4	0.50	5.0	0.0	89.0	74	124	4.5	1.0	20.0	
Styrene	4.8	0.50	5.0	0.0	97.0	78	123	4.7	3.8	20.0	
1,1,1,2-Tetrachloroethane	4.8	0.50	5.0	0.0	97.0	78	124	4.7	3.2	20.0	
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0	0.0	107.0	71	121	5.2	2.9	20.0	
Tetrachloroethene	4.8	0.50	5.0	0.0	95.0	74	129	4.5	5.1	20.0	
Toluene	5.2	0.50	5.0	0.0	104.0	80	121	5.0	2.6	20.0	
1,1,1-Trichloroethane	4.7	0.50	5.0	0.0	94.0	74	131	4.5	4.7	20.0	
1,1,2-Trichloroethane	5.0	0.50	5.0	0.0	99.0	80	119	4.8	4.0	20.0	
Trichloroethene	4.9	0.50	5.0	0.0	98.0	79	123	4.7	3.5	20.0	
Trichlorofluoromethane	4.9	0.50	5.0	0.0	98.0	65	141	4.7	4.5	20.0	
1,2,3-Trichloropropane	5.0	0.50	5.0	0.0	100.0	73	125	5.1	1.6	20.0	
Vinyl chloride	4.8	0.50	5.0	0.0	96.0	58	137	4.6	4.3	20.0	
m+p-Xylenes	9.6	0.50	10	0.0	96.0	80	121	9.2	3.9	20.0	
o-Xylene	4.9	0.50	5.0	0.0	98.0	78	122	4.7	3.8	20.0	
Xylenes, Total	14	0.50	15	0.0	97.0	79	121	14	3.9	20.0	
Surr: 1,2-Dichloroethane-d4	10	0.50	10	0.0	103.0	81	118	0.0			
Surr: Dibromofluoromethane	10	0.50	10	0.0	102.0	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	102.0	89	112	0.0			

Associated Samples: **B22030703-001E, B22030703-002A, B22030703-006E, B22030703-007A, B22030703-011E, B22030703-012A, B22030703-016E, B22030703-017A, B22030703-021E, B22030703-022A, B22030703-026E, B22030703-027A, B22030703-031E, B22030703-032A, B22030703-036E, B22030703-037A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 4 **SampType:** Method Blank **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 01:27 **Prep Date:**
Lab ID: MBLK031422a **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: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 4 **SampType:** Method Blank **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 01:27 **Prep Date:**
Lab ID: MBLK031422a **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		107.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		106.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		109.0	85	114				
Surr: Toluene-d8	9.7	0.50	10		97.0	89	112				

Associated Samples: **B22030703-041E, B22030703-042B, B22030703-043A, B22030703-047E, B22030703-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 00:32 **Prep Date:**
Lab ID: LCS031422a **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.0	0.50	5.0		101.0	79	120				
Bromobenzene	5.5	0.50	5.0		109.0	80	120				
Bromochloromethane	5.2	0.50	5.0		104.0	78	123				
Bromodichloromethane	5.2	0.50	5.0		104.0	79	125				
Bromoform	5.4	0.50	5.0		108.0	66	130				
Carbon tetrachloride	4.8	0.50	5.0		96.0	72	136				
Chlorobenzene	5.3	0.50	5.0		105.0	82	118				
Chlorodibromomethane	5.1	0.50	5.0		102.0	74	126				
Chloroethane	4.9	0.50	5.0		98.0	60	138				
Chloroform	4.7	0.50	5.0		94.0	79	124				
Chloromethane	4.9	0.50	5.0		98.0	50	139				
1,2-Dibromoethane	5.1	0.50	5.0		101.0	78	122				
2-Chlorotoluene	5.5	0.50	5.0		109.0	79	122				
Dibromomethane	5.1	0.50	5.0		102.0	79	123				
1,2-Dichlorobenzene	5.3	0.50	5.0		107.0	80	119				
4-Chlorotoluene	5.6	0.50	5.0		112.0	78	122				
1,3-Dichlorobenzene	5.5	0.50	5.0		111.0	80	119				
1,4-Dichlorobenzene	5.3	0.50	5.0		106.0	79	118				
Dichlorodifluoromethane	4.5	0.50	5.0		91.0	32	152				
1,1-Dichloroethane	5.1	0.50	5.0		102.0	77	125				
1,2-Dichloroethane	5.1	0.50	5.0		102.0	73	128				
1,1-Dichloroethene	5.0	0.50	5.0		100.0	71	131				
cis-1,2-Dichloroethene	5.1	0.50	5.0		101.0	78	123				
trans-1,2-Dichloroethene	4.8	0.50	5.0		96.0	75	124				
1,2-Dichloropropane	4.9	0.50	5.0		98.0	78	122				
1,3-Dichloropropane	4.9	0.50	5.0		99.0	80	119				
2,2-Dichloropropane	4.6	0.50	5.0		91.0	60	139				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 00:32 **Prep Date:**
Lab ID: LCS031422a **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		93.0	79	125				
cis-1,3-Dichloropropene	4.7	0.50	5.0		94.0	75	124				
trans-1,3-Dichloropropene	5.3	0.50	5.0		107.0	73	127				
Ethylbenzene	5.0	0.50	5.0		100.0	79	121				
Methyl tert-butyl ether (MTBE)	5.0	0.50	5.0		100.0	71	124				
Methyl ethyl ketone	58	10	50		116.0	56	143				
Methylene chloride	4.8	0.50	5.0		96.0	74	124				
Styrene	5.1	0.50	5.0		102.0	78	123				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0		102.0	78	124				
1,1,2,2-Tetrachloroethane	5.6	0.50	5.0		111.0	71	121				
Tetrachloroethene	4.9	0.50	5.0		97.0	74	129				
Toluene	5.4	0.50	5.0		109.0	80	121				
1,1,1-Trichloroethane	4.8	0.50	5.0		96.0	74	131				
1,1,2-Trichloroethane	5.2	0.50	5.0		105.0	80	119				
Trichloroethene	5.2	0.50	5.0		104.0	79	123				
Trichlorofluoromethane	4.9	0.50	5.0		97.0	65	141				
1,2,3-Trichloropropane	5.1	0.50	5.0		103.0	73	125				
Vinyl chloride	5.0	0.50	5.0		101.0	58	137				
m+p-Xylenes	9.9	0.50	10		99.0	80	121				
o-Xylene	5.2	0.50	5.0		103.0	78	122				
Xylenes, Total	15	0.50	15		100.0	79	121				
Surr: 1,2-Dichloroethane-d4	9.8	0.50	10		98.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		100.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		108.0	85	114				
Surr: Toluene-d8	10	0.50	10		102.0	89	112				

Associated Samples: **B22030703-041E, B22030703-042B, B22030703-043A, B22030703-047E, B22030703-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 16 **SampType:** Sample Matrix Spike **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 09:20 **Prep Date:**
Lab ID: B22030703-041EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	4.8	0.50	5.0	0.0	97.0	79	120				
Bromobenzene	5.2	0.50	5.0	0.0	104.0	80	120				
Bromochloromethane	5.0	0.50	5.0	0.0	100.0	78	123				
Bromodichloromethane	5.1	0.50	5.0	0.0	102.0	79	125				
Bromoform	5.2	0.50	5.0	0.0	104.0	66	130				
Carbon tetrachloride	4.5	0.50	5.0	0.0	90.0	72	136				
Chlorobenzene	5.0	0.50	5.0	0.0	99.0	82	118				
Chlorodibromomethane	5.0	0.50	5.0	0.0	101.0	74	126				
Chloroethane	4.8	0.50	5.0	0.0	95.0	60	138				
Chloroform	4.6	0.50	5.0	0.0	93.0	79	124				
Chloromethane	4.7	0.50	5.0	0.0	94.0	50	139				
1,2-Dibromoethane	5.0	0.50	5.0	0.0	100.0	78	122				
2-Chlorotoluene	5.2	0.50	5.0	0.0	104.0	79	122				
Dibromomethane	5.0	0.50	5.0	0.0	99.0	79	123				
1,2-Dichlorobenzene	5.1	0.50	5.0	0.0	103.0	80	119				
4-Chlorotoluene	5.3	0.50	5.0	0.0	106.0	78	122				
1,3-Dichlorobenzene	5.2	0.50	5.0	0.0	105.0	80	119				
1,4-Dichlorobenzene	5.0	0.50	5.0	0.0	100.0	79	118				
Dichlorodifluoromethane	4.4	0.50	5.0	0.0	89.0	32	152				
1,1-Dichloroethane	4.9	0.50	5.0	0.0	98.0	77	125				
1,2-Dichloroethane	4.9	0.50	5.0	0.0	98.0	73	128				
1,1-Dichloroethene	4.8	0.50	5.0	0.0	96.0	71	131				
cis-1,2-Dichloroethene	4.8	0.50	5.0	0.0	95.0	78	123				
trans-1,2-Dichloroethene	4.8	0.50	5.0	0.0	95.0	75	124				
1,2-Dichloropropane	4.9	0.50	5.0	0.0	99.0	78	122				
1,3-Dichloropropane	4.8	0.50	5.0	0.0	97.0	80	119				
2,2-Dichloropropane	4.8	0.50	5.0	0.0	95.0	60	139				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 16 **SampType:** Sample Matrix Spike **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 09:20 **Prep Date:**
Lab ID: B22030703-041EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	4.4	0.50	5.0	0.0	89.0	79	125				
cis-1,3-Dichloropropene	4.5	0.50	5.0	0.0	91.0	75	124				
trans-1,3-Dichloropropene	5.2	0.50	5.0	0.0	103.0	73	127				
Ethylbenzene	4.8	0.50	5.0	0.0	95.0	79	121				
Methyl tert-butyl ether (MTBE)	4.9	0.50	5.0	0.0	99.0	71	124				
Methyl ethyl ketone	58	10	50	0.0	115.0	56	143				
Methylene chloride	4.7	0.50	5.0	0.0	93.0	74	124				
Styrene	4.9	0.50	5.0	0.0	98.0	78	123				
1,1,1,2-Tetrachloroethane	4.9	0.50	5.0	0.0	98.0	78	124				
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0	0.0	107.0	71	121				
Tetrachloroethene	4.7	0.50	5.0	0.0	93.0	74	129				
Toluene	5.1	0.50	5.0	0.0	103.0	80	121				
1,1,1-Trichloroethane	4.7	0.50	5.0	0.0	94.0	74	131				
1,1,2-Trichloroethane	5.1	0.50	5.0	0.0	102.0	80	119				
Trichloroethene	4.9	0.50	5.0	0.0	98.0	79	123				
Trichlorofluoromethane	4.6	0.50	5.0	0.0	92.0	65	141				
1,2,3-Trichloropropane	5.2	0.50	5.0	0.0	103.0	73	125				
Vinyl chloride	4.8	0.50	5.0	0.0	96.0	58	137				
m+p-Xylenes	9.4	0.50	10	0.0	94.0	80	121				
o-Xylene	4.8	0.50	5.0	0.0	97.0	78	122				
Xylenes, Total	14	0.50	15	0.0	95.0	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	103.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	109.0	85	114				
Surr: Toluene-d8	10	0.50	10	0.0	102.0	89	112				

Associated Samples: **B22030703-041E, B22030703-042B, B22030703-043A, B22030703-047E, B22030703-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 17 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 09:47 **Prep Date:**
Lab ID: B22030703-041EMSD **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	99.0	79	120	4.8	1.7	20.0	
Bromobenzene	5.3	0.50	5.0	0.0	106.0	80	120	5.2	2.2	20.0	
Bromochloromethane	4.9	0.50	5.0	0.0	98.0	78	123	5.0	2.1	20.0	
Bromodichloromethane	5.3	0.50	5.0	0.0	105.0	79	125	5.1	3.2	20.0	
Bromoform	5.5	0.50	5.0	0.0	109.0	66	130	5.2	4.9	20.0	
Carbon tetrachloride	4.5	0.50	5.0	0.0	91.0	72	136	4.5	0.9	20.0	
Chlorobenzene	5.1	0.50	5.0	0.0	101.0	82	118	5.0	2.2	20.0	
Chlorodibromomethane	5.0	0.50	5.0	0.0	101.0	74	126	5.0	0.3	20.0	
Chloroethane	5.0	0.50	5.0	0.0	101.0	60	138	4.8	5.8	20.0	
Chloroform	4.8	0.50	5.0	0.0	96.0	79	124	4.6	3.1	20.0	
Chloromethane	5.0	0.50	5.0	0.0	99.0	50	139	4.7	5.8	20.0	
1,2-Dibromoethane	5.1	0.50	5.0	0.0	102.0	78	122	5.0	2.0	20.0	
2-Chlorotoluene	5.5	0.50	5.0	0.0	110.0	79	122	5.2	5.3	20.0	
Dibromomethane	5.1	0.50	5.0	0.0	101.0	79	123	5.0	2.2	20.0	
1,2-Dichlorobenzene	5.4	0.50	5.0	0.0	108.0	80	119	5.1	5.5	20.0	
4-Chlorotoluene	5.6	0.50	5.0	0.0	111.0	78	122	5.3	4.6	20.0	
1,3-Dichlorobenzene	5.5	0.50	5.0	0.0	109.0	80	119	5.2	4.1	20.0	
1,4-Dichlorobenzene	5.2	0.50	5.0	0.0	104.0	79	118	5.0	3.8	20.0	
Dichlorodifluoromethane	4.6	0.50	5.0	0.0	92.0	32	152	4.4	3.1	20.0	
1,1-Dichloroethane	5.1	0.50	5.0	0.0	101.0	77	125	4.9	3.1	20.0	
1,2-Dichloroethane	5.1	0.50	5.0	0.0	101.0	73	128	4.9	3.3	20.0	
1,1-Dichloroethene	4.6	0.50	5.0	0.0	91.0	71	131	4.8	5.0	20.0	
cis-1,2-Dichloroethene	4.9	0.50	5.0	0.0	98.0	78	123	4.8	2.6	20.0	
trans-1,2-Dichloroethene	4.7	0.50	5.0	0.0	94.0	75	124	4.8	1.1	20.0	
1,2-Dichloropropane	5.1	0.50	5.0	0.0	101.0	78	122	4.9	2.5	20.0	
1,3-Dichloropropane	5.0	0.50	5.0	0.0	99.0	80	119	4.8	2.2	20.0	
2,2-Dichloropropane	4.9	0.50	5.0	0.0	97.0	60	139	4.8	1.9	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 17 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 09:47 **Prep Date:**
Lab ID: B22030703-041EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	4.5	0.50	5.0	0.0	90.0	79	125	4.4	1.1	20.0	
cis-1,3-Dichloropropene	4.9	0.50	5.0	0.0	97.0	75	124	4.5	7.0	20.0	
trans-1,3-Dichloropropene	5.3	0.50	5.0	0.0	106.0	73	127	5.2	2.3	20.0	
Ethylbenzene	5.0	0.50	5.0	0.0	99.0	79	121	4.8	4.3	20.0	
Methyl tert-butyl ether (MTBE)	5.1	0.50	5.0	0.0	103.0	71	124	4.9	4.0	20.0	
Methyl ethyl ketone	60	10	50	0.0	121.0	56	143	58	4.6	20.0	
Methylene chloride	4.6	0.50	5.0	0.0	92.0	74	124	4.7	1.1	20.0	
Styrene	5.0	0.50	5.0	0.0	100.0	78	123	4.9	2.0	20.0	
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0	0.0	101.0	78	124	4.9	3.8	20.0	
1,1,2,2-Tetrachloroethane	5.7	0.50	5.0	0.0	115.0	71	121	5.4	6.7	20.0	
Tetrachloroethene	4.8	0.50	5.0	0.0	95.0	74	129	4.7	1.8	20.0	
Toluene	5.3	0.50	5.0	0.0	105.0	80	121	5.1	2.7	20.0	
1,1,1-Trichloroethane	4.7	0.50	5.0	0.0	95.0	74	131	4.7	0.4	20.0	
1,1,2-Trichloroethane	5.2	0.50	5.0	0.0	104.0	80	119	5.1	1.3	20.0	
Trichloroethene	5.0	0.50	5.0	0.0	100.0	79	123	4.9	2.1	20.0	
Trichlorofluoromethane	4.6	0.50	5.0	0.0	92.0	65	141	4.6	0.1	20.0	
1,2,3-Trichloropropane	5.2	0.50	5.0	0.0	105.0	73	125	5.2	1.5	20.0	
Vinyl chloride	5.0	0.50	5.0	0.0	100.0	58	137	4.8	4.0	20.0	
m+p-Xylenes	9.8	0.50	10	0.0	98.0	80	121	9.4	4.8	20.0	
o-Xylene	5.0	0.50	5.0	0.0	100.0	78	122	4.8	3.0	20.0	
Xylenes, Total	15	0.50	15	0.0	99.0	79	121	14	4.2	20.0	
Surr: 1,2-Dichloroethane-d4	10	0.50	10	0.0	103.0	81	118	0.0			
Surr: Dibromofluoromethane	10	0.50	10	0.0	104.0	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: **B22030703-041E, B22030703-042B, B22030703-043A, B22030703-047E, B22030703-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 10:36 **Prep Date:**
Lab ID: CCV031422_ **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	80	120				
Bromobenzene	5.1	0.50	5.0		103.0	80	120				
Bromochloromethane	5.0	0.50	5.0		100.0	80	120				
Bromodichloromethane	5.1	0.50	5.0		102.0	80	120				
Bromoform	5.0	0.50	5.0		101.0	80	120				
Carbon tetrachloride	4.5	0.50	5.0		90.0	80	120				
Chlorobenzene	4.9	0.50	5.0		98.0	80	120				
Chlorodibromomethane	5.0	0.50	5.0		99.0	80	120				
Chloroethane	4.9	0.50	5.0		98.0	80	120				
Chloroform	4.9	0.50	5.0		98.0	80	120				
Chloromethane	4.9	0.50	5.0		98.0	80	120				
1,2-Dibromoethane	5.1	0.50	5.0		102.0	80	120				
2-Chlorotoluene	4.9	0.50	5.0		99.0	80	120				
Dibromomethane	5.0	0.50	5.0		101.0	80	120				
1,2-Dichlorobenzene	4.9	0.50	5.0		98.0	80	120				
4-Chlorotoluene	5.2	0.50	5.0		104.0	80	120				
1,3-Dichlorobenzene	5.0	0.50	5.0		100.0	80	120				
1,4-Dichlorobenzene	4.8	0.50	5.0		96.0	80	120				
Dichlorodifluoromethane	4.7	0.50	5.0		94.0	80	120				
1,1-Dichloroethane	5.0	0.50	5.0		100.0	80	120				
1,2-Dichloroethane	5.1	0.50	5.0		101.0	80	120				
1,1-Dichloroethene	4.8	0.50	5.0		96.0	80	120				
cis-1,2-Dichloroethene	4.9	0.50	5.0		98.0	80	120				
trans-1,2-Dichloroethene	4.9	0.50	5.0		97.0	80	120				
1,2-Dichloropropane	5.2	0.50	5.0		103.0	80	120				
1,3-Dichloropropane	5.1	0.50	5.0		102.0	80	120				
2,2-Dichloropropane	5.1	0.50	5.0		101.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 10:36 **Prep Date:**
Lab ID: CCV031422_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	4.7	0.50	5.0		94.0	80	120				
cis-1,3-Dichloropropene	5.0	0.50	5.0		100.0	80	120				
trans-1,3-Dichloropropene	5.2	0.50	5.0		104.0	80	120				
Ethylbenzene	4.7	0.50	5.0		94.0	80	120				
Methyl tert-butyl ether (MTBE)	5.2	0.50	5.0		103.0	80	120				
Methyl ethyl ketone	46	10	50		92.0	80	120				
Methylene chloride	5.0	0.50	5.0		100.0	80	120				
Styrene	4.8	0.50	5.0		96.0	80	120				
1,1,1,2-Tetrachloroethane	4.8	0.50	5.0		96.0	80	120				
1,1,2,2-Tetrachloroethane	5.2	0.50	5.0		103.0	80	120				
Tetrachloroethene	4.5	0.50	5.0		90.0	80	120				
Toluene	5.2	0.50	5.0		103.0	80	120				
1,1,1-Trichloroethane	4.6	0.50	5.0		93.0	80	120				
1,1,2-Trichloroethane	5.0	0.50	5.0		100.0	80	120				
Trichloroethene	5.0	0.50	5.0		100.0	80	120				
Trichlorofluoromethane	4.5	0.50	5.0		91.0	80	120				
1,2,3-Trichloropropane	5.3	0.50	5.0		106.0	80	120				
Vinyl chloride	4.7	0.50	5.0		95.0	80	120				
m+p-Xylenes	9.4	0.50	10		94.0	80	120				
o-Xylene	4.6	0.50	5.0		93.0	80	120				
Xylenes, Total	14	0.50	15		94.0	80	120				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		109.0	80	120				
Surr: Dibromofluoromethane	10	0.50	10		105.0	80	120				
Surr: p-Bromofluorobenzene	11	0.50	10		109.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 10:36 **Prep Date:**
Lab ID: CCV031422_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	10	0.50	10		101.0	80	120				

Associated Samples: **B22030703-001E, B22030703-002A, B22030703-006E, B22030703-007A, B22030703-011E, B22030703-012A, B22030703-016E, B22030703-017A, B22030703-021E, B22030703-022A, B22030703-026E, B22030703-027A, B22030703-031E, B22030703-032A, B22030703-036E, B22030703-037A**

Run ID: Run Order: VOA5975C.I_220314A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 21:21 **Prep Date:**
Lab ID: CCV031422_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		108.0	50	150				
Bromobenzene	5.2	0.50	5.0		104.0	50	150				
Bromochloromethane	5.3	0.50	5.0		106.0	50	150				
Bromodichloromethane	5.2	0.50	5.0		104.0	50	150				
Bromoform	5.0	0.50	5.0		101.0	50	150				
Carbon tetrachloride	5.2	0.50	5.0		105.0	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	5.2	0.50	5.0		105.0	50	150				
Chloroform	5.2	0.50	5.0		105.0	50	150				
Chloromethane	5.2	0.50	5.0		105.0	50	150				
1,2-Dibromoethane	4.9	0.50	5.0		98.0	50	150				
2-Chlorotoluene	5.4	0.50	5.0		107.0	50	150				
Dibromomethane	5.1	0.50	5.0		101.0	50	150				
1,2-Dichlorobenzene	5.1	0.50	5.0		103.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 21:21 **Prep Date:**
Lab ID: CCV031422_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	5.1	0.50	5.0		102.0	50	150				
1,4-Dichlorobenzene	5.1	0.50	5.0		102.0	50	150				
Dichlorodifluoromethane	5.2	0.50	5.0		105.0	50	150				
1,1-Dichloroethane	5.2	0.50	5.0		104.0	50	150				
1,2-Dichloroethane	5.3	0.50	5.0		107.0	50	150				
1,1-Dichloroethene	5.3	0.50	5.0		106.0	50	150				
cis-1,2-Dichloroethene	5.2	0.50	5.0		104.0	50	150				
trans-1,2-Dichloroethene	5.1	0.50	5.0		101.0	50	150				
1,2-Dichloropropane	5.2	0.50	5.0		103.0	50	150				
1,3-Dichloropropane	4.9	0.50	5.0		97.0	50	150				
2,2-Dichloropropane	5.1	0.50	5.0		103.0	50	150				
1,1-Dichloropropene	5.1	0.50	5.0		103.0	50	150				
cis-1,3-Dichloropropene	5.0	0.50	5.0		101.0	50	150				
trans-1,3-Dichloropropene	5.2	0.50	5.0		104.0	50	150				
Ethylbenzene	5.0	0.50	5.0		100.0	50	150				
Methyl tert-butyl ether (MTBE)	5.0	0.50	5.0		100.0	50	150				
Methyl ethyl ketone	49	10	50		98.0	50	150				
Methylene chloride	5.1	0.50	5.0		102.0	50	150				
Styrene	5.1	0.50	5.0		102.0	50	150				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0		101.0	50	150				
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0		107.0	50	150				
Tetrachloroethene	4.9	0.50	5.0		99.0	50	150				
Toluene	5.4	0.50	5.0		108.0	50	150				
1,1,1-Trichloroethane	5.1	0.50	5.0		102.0	50	150				
1,1,2-Trichloroethane	5.4	0.50	5.0		107.0	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: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376400
Method: SW8260B **Analysis Date:** 03/14/2022 21:21 **Prep Date:**
Lab ID: CCV031422_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	4.9	0.50	5.0		97.0	50	150				
1,2,3-Trichloropropane	5.2	0.50	5.0		104.0	50	150				
Vinyl chloride	5.2	0.50	5.0		104.0	50	150				
m+p-Xylenes	10	0.50	10		101.0	50	150				
o-Xylene	4.9	0.50	5.0		99.0	50	150				
Xylenes, Total	15	0.50	15		100.0	50	150				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		103.0	50	150				
Surr: Dibromofluoromethane	10	0.50	10		103.0	50	150				
Surr: p-Bromofluorobenzene	11	0.50	10		105.0	50	150				
Surr: Toluene-d8	10	0.50	10		101.0	50	150				

Associated Samples: **B22030703-001E, B22030703-002A, B22030703-006E, B22030703-007A, B22030703-011E, B22030703-012A, B22030703-016E, B22030703-017A, B22030703-021E, B22030703-022A, B22030703-026E, B22030703-027A, B22030703-031E, B22030703-032A, B22030703-036E, B22030703-037A**

Run ID: Run Order: VOA5975C.I_220314B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 00:05 **Prep Date:**
Lab ID: CCV031422a **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	80	120				
Bromobenzene	4.9	0.50	5.0		99.0	80	120				
Bromochloromethane	4.9	0.50	5.0		99.0	80	120				
Bromodichloromethane	5.1	0.50	5.0		102.0	80	120				
Bromoform	4.9	0.50	5.0		99.0	80	120				
Carbon tetrachloride	4.7	0.50	5.0		94.0	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	4.9	0.50	5.0		98.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 00:05 **Prep Date:**
Lab ID: CCV031422a **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		97.0	80	120				
Chloromethane	4.9	0.50	5.0		98.0	80	120				
1,2-Dibromoethane	5.0	0.50	5.0		99.0	80	120				
2-Chlorotoluene	4.9	0.50	5.0		98.0	80	120				
Dibromomethane	4.9	0.50	5.0		97.0	80	120				
1,2-Dichlorobenzene	4.8	0.50	5.0		97.0	80	120				
4-Chlorotoluene	5.1	0.50	5.0		103.0	80	120				
1,3-Dichlorobenzene	4.8	0.50	5.0		97.0	80	120				
1,4-Dichlorobenzene	4.7	0.50	5.0		95.0	80	120				
Dichlorodifluoromethane	4.8	0.50	5.0		96.0	80	120				
1,1-Dichloroethane	5.0	0.50	5.0		101.0	80	120				
1,2-Dichloroethane	5.0	0.50	5.0		101.0	80	120				
1,1-Dichloroethene	5.0	0.50	5.0		99.0	80	120				
cis-1,2-Dichloroethene	5.0	0.50	5.0		100.0	80	120				
trans-1,2-Dichloroethene	4.6	0.50	5.0		92.0	80	120				
1,2-Dichloropropane	5.2	0.50	5.0		104.0	80	120				
1,3-Dichloropropane	5.0	0.50	5.0		101.0	80	120				
2,2-Dichloropropane	4.6	0.50	5.0		92.0	80	120				
1,1-Dichloropropene	4.7	0.50	5.0		95.0	80	120				
cis-1,3-Dichloropropene	4.9	0.50	5.0		98.0	80	120				
trans-1,3-Dichloropropene	5.2	0.50	5.0		103.0	80	120				
Ethylbenzene	4.8	0.50	5.0		97.0	80	120				
Methyl tert-butyl ether (MTBE)	4.5	0.50	5.0		89.0	80	120				
Methyl ethyl ketone	46	10	50		92.0	80	120				
Methylene chloride	4.8	0.50	5.0		96.0	80	120				
Styrene	4.9	0.50	5.0		97.0	80	120				
1,1,1,2-Tetrachloroethane	4.9	0.50	5.0		99.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 00:05 **Prep Date:**
Lab ID: CCV031422a **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	5.1	0.50	5.0		102.0	80	120				
Tetrachloroethene	4.8	0.50	5.0		95.0	80	120				
Toluene	5.2	0.50	5.0		104.0	80	120				
1,1,1-Trichloroethane	4.8	0.50	5.0		96.0	80	120				
1,1,2-Trichloroethane	5.1	0.50	5.0		102.0	80	120				
Trichloroethene	5.0	0.50	5.0		99.0	80	120				
Trichlorofluoromethane	4.8	0.50	5.0		96.0	80	120				
1,2,3-Trichloropropane	5.0	0.50	5.0		100.0	80	120				
Vinyl chloride	4.8	0.50	5.0		96.0	80	120				
m+p-Xylenes	9.7	0.50	10		97.0	80	120				
o-Xylene	4.8	0.50	5.0		96.0	80	120				
Xylenes, Total	15	0.50	15		97.0	80	120				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		103.0	80	120				
Surr: Dibromofluoromethane	10	0.50	10		102.0	80	120				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	80	120				
Surr: Toluene-d8	10	0.50	10		103.0	80	120				

Associated Samples: **B22030703-041E, B22030703-042B, B22030703-043A, B22030703-047E, B22030703-048A**

Run ID: Run Order: VOA5975C.I_220314B: 18 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 10:42 **Prep Date:**
Lab ID: CCV031422a_Closing **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		98.0	50	150				
Bromobenzene	4.8	0.50	5.0		97.0	50	150				
Bromochloromethane	4.7	0.50	5.0		95.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 18 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 10:42 **Prep Date:**
Lab ID: CCV031422a_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	4.8	0.50	5.0		96.0	50	150				
Bromoform	4.6	0.50	5.0		92.0	50	150				
Carbon tetrachloride	4.6	0.50	5.0		92.0	50	150				
Chlorobenzene	4.7	0.50	5.0		95.0	50	150				
Chlorodibromomethane	4.6	0.50	5.0		92.0	50	150				
Chloroethane	4.9	0.50	5.0		98.0	50	150				
Chloroform	4.7	0.50	5.0		94.0	50	150				
Chloromethane	5.0	0.50	5.0		100.0	50	150				
1,2-Dibromoethane	4.6	0.50	5.0		93.0	50	150				
2-Chlorotoluene	4.9	0.50	5.0		99.0	50	150				
Dibromomethane	4.5	0.50	5.0		90.0	50	150				
1,2-Dichlorobenzene	4.8	0.50	5.0		96.0	50	150				
4-Chlorotoluene	5.0	0.50	5.0		101.0	50	150				
1,3-Dichlorobenzene	4.8	0.50	5.0		95.0	50	150				
1,4-Dichlorobenzene	4.7	0.50	5.0		95.0	50	150				
Dichlorodifluoromethane	4.9	0.50	5.0		97.0	50	150				
1,1-Dichloroethane	4.8	0.50	5.0		96.0	50	150				
1,2-Dichloroethane	4.7	0.50	5.0		94.0	50	150				
1,1-Dichloroethene	5.0	0.50	5.0		100.0	50	150				
cis-1,2-Dichloroethene	4.6	0.50	5.0		92.0	50	150				
trans-1,2-Dichloroethene	4.7	0.50	5.0		95.0	50	150				
1,2-Dichloropropane	4.8	0.50	5.0		96.0	50	150				
1,3-Dichloropropane	4.8	0.50	5.0		95.0	50	150				
2,2-Dichloropropane	4.8	0.50	5.0		96.0	50	150				
1,1-Dichloropropene	4.8	0.50	5.0		95.0	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		97.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220314B: 18 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376406
Method: SW8260B **Analysis Date:** 03/15/2022 10:42 **Prep Date:**
Lab ID: CCV031422a_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Ethylbenzene	4.7	0.50	5.0		94.0	50	150				
Methyl tert-butyl ether (MTBE)	4.5	0.50	5.0		90.0	50	150				
Methyl ethyl ketone	45	10	50		90.0	50	150				
Methylene chloride	4.6	0.50	5.0		93.0	50	150				
Styrene	4.7	0.50	5.0		94.0	50	150				
1,1,1,2-Tetrachloroethane	4.5	0.50	5.0		91.0	50	150				
1,1,2,2-Tetrachloroethane	4.9	0.50	5.0		98.0	50	150				
Tetrachloroethene	4.7	0.50	5.0		94.0	50	150				
Toluene	5.0	0.50	5.0		100.0	50	150				
1,1,1-Trichloroethane	4.6	0.50	5.0		92.0	50	150				
1,1,2-Trichloroethane	4.8	0.50	5.0		97.0	50	150				
Trichloroethene	4.9	0.50	5.0		99.0	50	150				
Trichlorofluoromethane	4.9	0.50	5.0		97.0	50	150				
1,2,3-Trichloropropane	4.7	0.50	5.0		94.0	50	150				
Vinyl chloride	4.8	0.50	5.0		96.0	50	150				
m+p-Xylenes	9.5	0.50	10		95.0	50	150				
o-Xylene	4.7	0.50	5.0		95.0	50	150				
Xylenes, Total	14	0.50	15		95.0	50	150				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		103.0	50	150				
Surr: Dibromofluoromethane	10	0.50	10		104.0	50	150				
Surr: p-Bromofluorobenzene	11	0.50	10		108.0	50	150				
Surr: Toluene-d8	10	0.50	10		102.0	50	150				

Associated Samples: **B22030703-041E, B22030703-042B, B22030703-043A, B22030703-047E, B22030703-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GECD.I_220314A: 10 **SampType:** Method Blank **Batch ID:** 164488
Method: SW8011 **Analysis Date:** 03/14/2022 19:42 **Prep Date:** 03/14/2022 10:10
Lab ID: MB-164488 **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	0.092	0.020	0.10		92.0	70	130				

Associated Samples: **B22030703-001G, B22030703-004A, B22030703-006G, B22030703-009A, B22030703-011G, B22030703-014A, B22030703-016G, B22030703-019A, B22030703-021G, B22030703-024A, B22030703-026G, B22030703-029A, B22030703-031G, B22030703-034A, B22030703-036G, B22030703-039A, B22030703-041G, B22030703-045A, B22030703-047G, B22030703-050A**

Run ID: Run Order: GECD.I_220314A: 11 **SampType:** Laboratory Control Sample **Batch ID:** 164488
Method: SW8011 **Analysis Date:** 03/14/2022 20:02 **Prep Date:** 03/14/2022 10:10
Lab ID: LCS-164488 **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		92.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.089	0.020	0.10		89.0	70	130				

Associated Samples: **B22030703-001G, B22030703-004A, B22030703-006G, B22030703-009A, B22030703-011G, B22030703-014A, B22030703-016G, B22030703-019A, B22030703-021G, B22030703-024A, B22030703-026G, B22030703-029A, B22030703-031G, B22030703-034A, B22030703-036G, B22030703-039A, B22030703-041G, B22030703-045A, B22030703-047G, B22030703-050A**

Run ID: Run Order: GECD.I_220314A: 12 **SampType:** Laboratory Control Sample **Batch ID:** 164488
Method: SW8011 **Analysis Date:** 03/14/2022 20:22 **Prep Date:** 03/14/2022 10:15
Lab ID: LCS1-164488 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.096	0.010	0.10		96.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.087	0.020	0.10		87.0	70	130				

Associated Samples: **B22030703-001G, B22030703-004A, B22030703-006G, B22030703-009A, B22030703-011G, B22030703-014A, B22030703-016G, B22030703-019A, B22030703-021G, B22030703-024A, B22030703-026G, B22030703-029A, B22030703-031G, B22030703-034A, B22030703-036G, B22030703-039A, B22030703-041G, B22030703-045A, B22030703-047G, B22030703-050A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GECD.I_220314A: 21 **SampType:** Sample Matrix Spike **Batch ID:** 164488
Method: SW8011 **Analysis Date:** 03/14/2022 23:39 **Prep Date:** 03/14/2022 10:15
Lab ID: B22030586-001GMS **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	0.25	0.0	90.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.091	0.020	0.099	0.0	92.0	70	130				

Associated Samples: **B22030703-001G, B22030703-004A, B22030703-006G, B22030703-009A, B22030703-011G, B22030703-014A, B22030703-016G, B22030703-019A, B22030703-021G, B22030703-024A, B22030703-026G, B22030703-029A, B22030703-031G, B22030703-034A, B22030703-036G, B22030703-039A, B22030703-041G, B22030703-045A, B22030703-047G, B22030703-050A**

Run ID: Run Order: GECD.I_220314A: 22 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164488
Method: SW8011 **Analysis Date:** 03/14/2022 23:59 **Prep Date:** 03/14/2022 10:15
Lab ID: B22030586-001GMSD **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.23	0.010	0.25	0.0	91.0	60	140	0.22	0.6	20.0	
Surr: 1,1,1,2-Tetrachloroethane	0.086	0.020	0.099	0.0	87.0	70	130	0.0			

Associated Samples: **B22030703-001G, B22030703-004A, B22030703-006G, B22030703-009A, B22030703-011G, B22030703-014A, B22030703-016G, B22030703-019A, B22030703-021G, B22030703-024A, B22030703-026G, B22030703-029A, B22030703-031G, B22030703-034A, B22030703-036G, B22030703-039A, B22030703-041G, B22030703-045A, B22030703-047G, B22030703-050A**

Run ID: Run Order: GECD.I_220314A: 9 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164488
Method: SW8011 **Analysis Date:** 03/14/2022 19:23 **Prep Date:** 03/14/2022 10:15
Lab ID: CK3-164488 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.10	0.010	0.10		103.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.091	0.020	0.10		91.0	80	120				

Associated Samples: **B22030703-001G, B22030703-004A, B22030703-006G, B22030703-009A, B22030703-011G, B22030703-014A, B22030703-016G, B22030703-019A, B22030703-021G, B22030703-024A, B22030703-026G, B22030703-029A, B22030703-031G, B22030703-034A, B22030703-036G, B22030703-039A, B22030703-041G, B22030703-045A, B22030703-047G, B22030703-050A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GECD.I_220314A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164488
Method: SW8011 **Analysis Date:** 03/15/2022 00:38 **Prep Date:** 03/14/2022 10:15
Lab ID: CK5-164488 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.40	0.010	0.40		101.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.43	0.020	0.40		106.0	80	120				

Associated Samples: **B22030703-001G, B22030703-004A, B22030703-006G, B22030703-009A, B22030703-011G, B22030703-014A, B22030703-016G, B22030703-019A, B22030703-021G, B22030703-024A, B22030703-026G, B22030703-029A, B22030703-031G, B22030703-034A, B22030703-036G, B22030703-039A, B22030703-041G, B22030703-045A, B22030703-047G, B22030703-050A**

Run ID: Run Order: GECD.I_220314A: 34 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164488
Method: SW8011 **Analysis Date:** 03/15/2022 04:55 **Prep Date:** 03/14/2022 10:15
Lab ID: CK3-164488 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.10	0.010	0.10		103.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.090	0.020	0.10		90.0	80	120				

Associated Samples: **B22030703-001G, B22030703-004A, B22030703-006G, B22030703-009A, B22030703-011G, B22030703-014A, B22030703-016G, B22030703-019A, B22030703-021G, B22030703-024A, B22030703-026G, B22030703-029A, B22030703-031G, B22030703-034A, B22030703-036G, B22030703-039A, B22030703-041G, B22030703-045A, B22030703-047G, B22030703-050A**

Run ID: Run Order: GECD.I_220314A: 42 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164489
Method: SW8011 **Analysis Date:** 03/15/2022 08:13 **Prep Date:** 03/14/2022 10:18
Lab ID: CK5-164489 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.40	0.010	0.40		100.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.42	0.020	0.40		104.0	80	120				

Associated Samples: **B22030703-001G, B22030703-004A, B22030703-006G, B22030703-009A, B22030703-011G, B22030703-014A, B22030703-016G, B22030703-019A, B22030703-021G, B22030703-024A, B22030703-026G, B22030703-029A, B22030703-031G, B22030703-034A, B22030703-036G, B22030703-039A, B22030703-041G, B22030703-045A, B22030703-047G, B22030703-050A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220311A: 4 **SampType:** Method Blank **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/11/2022 11:17 **Prep Date:**
Lab ID: MBLK_0311VAR07r **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		78.0	70	130				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Run ID: Run Order: VARIAN1_220311A: 19 **SampType:** Method Blank **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/11/2022 22:41 **Prep Date:**
Lab ID: MBLK_0311VAR27r **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		76.0	70	130				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220311A: 31 **SampType:** Method Blank **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/12/2022 10:07 **Prep Date:**
Lab ID: MBLK_0311VAR47r **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		77.0	70	130				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Run ID: Run Order: VARIAN1_220311A: 47 **SampType:** Method Blank **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/12/2022 21:33 **Prep Date:**
Lab ID: MBLK_0311VAR67r **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		76.0	70	130				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220311A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/11/2022 10:09 **Prep Date:**
Lab ID: LCS_0311VAR05r **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	170		98.0	78	122				
Total Purgeable Hydrocarbons	201	20	200		100.0	70	130				
Surr: Trifluorotoluene	22	1.0	25		89.0	70	130				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Run ID: Run Order: VARIAN1_220311A: 18 **SampType:** Laboratory Control Sample **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/11/2022 21:32 **Prep Date:**
Lab ID: LCS_0311VAR25r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	164	20	170		97.0	78	122				
Total Purgeable Hydrocarbons	196	20	200		98.0	70	130				
Surr: Trifluorotoluene	22	1.0	25		88.0	70	130				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220311A: 30 **SampType:** Laboratory Control Sample **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/12/2022 08:59 **Prep Date:**
Lab ID: LCS_0311VAR45r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	159	20	170		93.0	78	122				
Total Purgeable Hydrocarbons	190	20	200		95.0	70	130				
Surr: Trifluorotoluene	22	1.0	25		87.0	70	130				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Run ID: Run Order: VARIAN1_220311A: 46 **SampType:** Laboratory Control Sample **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/12/2022 20:25 **Prep Date:**
Lab ID: LCS_0311VAR65r **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	170		98.0	78	122				
Total Purgeable Hydrocarbons	198	20	200		99.0	70	130				
Surr: Trifluorotoluene	21	1.0	25		85.0	70	130				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220311A: 14 **SampType:** Sample Matrix Spike **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/11/2022 19:15 **Prep Date:**
Lab ID: B22030502-016FMS **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	170	0.0	98.0	78	122				
Total Purgeable Hydrocarbons	201	20	200	0.0	101.0	70	130				
Surr: Trifluorotoluene	22	1.0	25	0.0	89.0	70	130				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Run ID: Run Order: VARIAN1_220311A: 15 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/11/2022 19:49 **Prep Date:**
Lab ID: B22030502-016FMSD **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	170	0.0	98.0	78	122	167	0.0	20.0	
Total Purgeable Hydrocarbons	201	20	200	0.0	101.0	70	130	201	0.0	20.0	
Surr: Trifluorotoluene	22	1.0	25	0.0	88.0	70	130	0.0			

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220311A: 42 **SampType:** Sample Matrix Spike **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/12/2022 17:33 **Prep Date:**
Lab ID: B22030703-021FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	164	20	170	0.0	97.0	78	122				
Total Purgeable Hydrocarbons	197	20	200	0.0	99.0	70	130				
Surr: Trifluorotoluene	21	1.0	25	0.0	86.0	70	130				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Run ID: Run Order: VARIAN1_220311A: 43 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/12/2022 18:07 **Prep Date:**
Lab ID: B22030703-021FMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	168	20	170	0.0	99.0	78	122	164	2.3	20.0	
Total Purgeable Hydrocarbons	202	20	200	0.0	101.0	70	130	197	2.5	20.0	
Surr: Trifluorotoluene	22	1.0	25	0.0	87.0	70	130	0.0			

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220314A: 5 **SampType:** Method Blank **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/14/2022 14:27 **Prep Date:** 03/13/2022 12:34
Lab ID: MB-164471 **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	0.18	0.0020	0.20		89.0	56	125				
Surr: n-Triacontane	0.085	0.0020	0.10		85.0	50	150				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220315A: 5 **SampType:** Method Blank **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/15/2022 21:37 **Prep Date:** 03/13/2022 12:34
Lab ID: MB-164471 **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)	0.16	0.0020	0.20		81.0	56	125				
Surr: n-Triacontane (SGT)	0.073	0.0020	0.10		73.0	50	150				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220314A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/14/2022 13:02 **Prep Date:** 03/13/2022 12:34
Lab ID: LCS-164471 **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)	13	0.30	15		89.0	36	132				
Total Extractable Hydrocarbons	14	0.30	15		95.0	60	132				
Surr: o-Terphenyl	0.20	0.0020	0.20		99.0	56	125				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220314A: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/14/2022 13:45 **Prep Date:** 03/13/2022 12:34
Lab ID: LCSD-164471 **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)	13	0.30	15		88.0	36	132	13	1.5	20.0	
Total Extractable Hydrocarbons	14	0.30	15		94.0	60	132	14	1.6	20.0	
Surr: o-Terphenyl	0.20	0.0020	0.20		98.0	56	125	0.0			

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220314A: 24 **SampType:** Laboratory Control Sample **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/15/2022 11:06 **Prep Date:** 03/13/2022 12:35
Lab ID: LCS-164471-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)	4.9	0.30	5.0		98.0	41	113				
Surr: n-Triacontane	0.081	0.0020	0.10		81.0	50	150				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220314A: 25 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/15/2022 12:31 **Prep Date:** 03/13/2022 12:34
Lab ID: LCSD-164471-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)	5.0	0.30	5.0		101.0	41	113	4.9	2.6	20.0	
Surr: n-Triacontane	0.086	0.0020	0.10		86.0	50	150	0.0			

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220315A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/15/2022 20:10 **Prep Date:** 03/13/2022 12:34
Lab ID: LCS-164471 **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	15		76.0	36	132				
Total Extractable Hydrocarbons (SGT)	12	0.30	15		81.0	60	132				
Surr: o-Terphenyl (SGT)	0.18	0.0020	0.20		89.0	56	125				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220315A: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/15/2022 20:53 **Prep Date:** 03/13/2022 12:34
Lab ID: LCSD-164471 **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	15		74.0	36	132	11	2.7	20.0	
Total Extractable Hydrocarbons (SGT)	12	0.30	15		79.0	60	132	12	2.7	20.0	
Surr: o-Terphenyl (SGT)	0.17	0.0020	0.20		87.0	56	125	0.0			

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220315A: 17 **SampType:** Laboratory Control Sample **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/16/2022 10:41 **Prep Date:** 03/13/2022 12:35
Lab ID: LCS-164471-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)	5.2	0.30	5.0		104.0	41	113				
Surr: n-Triacontane (SGT)	0.081	0.0020	0.10		81.0	50	150				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220315A: 18 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/16/2022 12:07 **Prep Date:** 03/13/2022 12:34
Lab ID: LCSD-164471-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		108.0	41	113	5.2	3.5	20.0	
Surr: n-Triacontane (SGT)	0.085	0.0020	0.10		85.0	50	150	0.0			

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220314A: 19 **SampType:** Sample Matrix Spike **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/15/2022 03:59 **Prep Date:** 03/13/2022 12:35
Lab ID: B22030703-041CMS **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	0.29	85.0	36	132				
Total Extractable Hydrocarbons	13	0.30	14	0.40	91.0	60	132				
Surr: o-Terphenyl	0.18	0.0020	0.19	0.0	94.0	56	125				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220314A: 21 **SampType:** Sample Matrix Spike **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/15/2022 07:33 **Prep Date:** 03/13/2022 12:35
Lab ID: B22030703-042AMS-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)	4.9	0.30	4.8	0.17	99.0	41	113				
Surr: n-Triacontane	0.079	0.0020	0.095	0.0	83.0	50	150				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220315A: 12 **SampType:** Sample Matrix Spike **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/16/2022 03:21 **Prep Date:** 03/13/2022 12:35
Lab ID: B22030703-041CMS **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	14	0.037	82.0	36	132				
Total Extractable Hydrocarbons (SGT)	12	0.30	14	0.043	86.0	60	132				
Surr: o-Terphenyl (SGT)	0.18	0.0020	0.19	0.0	96.0	56	125				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220315A: 16 **SampType:** Sample Matrix Spike **Batch ID:** 164471
Method: SW8015C **Analysis Date:** 03/16/2022 09:16 **Prep Date:** 03/13/2022 12:35
Lab ID: B22030703-042AMS-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)	4.7	0.30	4.8	0.0	100.0	41	113				
Surr: n-Triacontane (SGT)	0.072	0.0020	0.095	0.0	76.0	50	150				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220311A: 17 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/11/2022 20:58 **Prep Date:**
Lab ID: CCV_0311VAR24r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	181	20	168		108.0	80	120				
Total Purgeable Hydrocarbons	218	20	200		109.0	80	120				
Surr: Trifluorotoluene	23	1.0	25		90.0	80	120				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Run ID: Run Order: VARIAN1_220311A: 29 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/12/2022 08:24 **Prep Date:**
Lab ID: CCV_0311VAR44r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	168	20	168		100.0	80	120				
Total Purgeable Hydrocarbons	202	20	200		101.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		88.0	80	120				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220311A: 45 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/12/2022 19:50 **Prep Date:**
Lab ID: CCV_0311VAR64r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	183	20	168		109.0	80	120				
Total Purgeable Hydrocarbons	220	20	200		110.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		88.0	80	120				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Run ID: Run Order: VARIAN1_220311A: 56 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376037
Method: SW8015C **Analysis Date:** 03/13/2022 07:06 **Prep Date:**
Lab ID: CCV_0311VAR82r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	171	20	168		102.0	80	120				
Total Purgeable Hydrocarbons	207	20	200		103.0	80	120				
Surr: Trifluorotoluene	21	1.0	25		86.0	80	120				

Associated Samples: **B22030703-001F, B22030703-003A, B22030703-006F, B22030703-008A, B22030703-011F, B22030703-013A, B22030703-016F, B22030703-018A, B22030703-021F, B22030703-023A, B22030703-026F, B22030703-028A, B22030703-031F, B22030703-033A, B22030703-036F, B22030703-038A, B22030703-041F, B22030703-042C, B22030703-044A, B22030703-047F, B22030703-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220314A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376137
Method: SW8015C **Analysis Date:** 03/14/2022 09:54 **Prep Date:**
Lab ID: CCV_0314HP504r-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		96.0	80	120				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220314A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376137
Method: SW8015C **Analysis Date:** 03/14/2022 10:37 **Prep Date:**
Lab ID: CCV_0314HP505r **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		93.0	80	120				
Total Extractable Hydrocarbons	14	0.30	15		97.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		99.0	80	120				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220314A: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376137
Method: SW8015C **Analysis Date:** 03/14/2022 21:33 **Prep Date:**
Lab ID: CCV_0314HP520r-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		95.0	80	120				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220314A: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376137
Method: SW8015C **Analysis Date:** 03/14/2022 22:16 **Prep Date:**
Lab ID: CCV_0314HP521r **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		98.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		101.0	80	120				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220314A: 22 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376137
Method: SW8015C **Analysis Date:** 03/15/2022 08:58 **Prep Date:**
Lab ID: CCV_0314HP536r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.4	0.30	5.0		107.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		97.0	80	120				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220314A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376137
Method: SW8015C **Analysis Date:** 03/15/2022 09:41 **Prep Date:**
Lab ID: CCV_0314HP537r **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	0.20	0.0020	0.20		101.0	80	120				

Associated Samples: **B22030703-001C, B22030703-006C, B22030703-011C, B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-036C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220315A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376247
Method: SW8015C **Analysis Date:** 03/15/2022 17:18 **Prep Date:**
Lab ID: CCV_0315HP504r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.3	0.30	5.0		107.0	80	120				
Surr: n-Triacontane	0.20	0.0020	0.20		98.0	80	120				

Associated Samples: **B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220315A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376247
Method: SW8015C **Analysis Date:** 03/15/2022 18:01 **Prep Date:**
Lab ID: CCV_0315HP505r **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	0.21	0.0020	0.20		103.0	80	120				

Associated Samples: **B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-041C, B22030703-042A, B22030703-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220315A: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376247
Method: SW8015C **Analysis Date:** 03/16/2022 04:47 **Prep Date:**
Lab ID: CCV_0315HP520r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.3	0.30	5.0		105.0	80	120				
Surr: n-Triacontane	0.20	0.0020	0.20		99.0	80	120				

Associated Samples: **B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220315A: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376247
Method: SW8015C **Analysis Date:** 03/16/2022 05:30 **Prep Date:**
Lab ID: CCV_0315HP521r **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	0.20	0.0020	0.20		102.0	80	120				

Associated Samples: **B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-041C, B22030703-042A, B22030703-047C**

Run ID: Run Order: GCFID-HP5-B_220315A: 19 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376247
Method: SW8015C **Analysis Date:** 03/16/2022 13:32 **Prep Date:**
Lab ID: CCV_0315HP531r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.3	0.30	5.0		106.0	80	120				
Surr: n-Triacontane	0.20	0.0020	0.20		98.0	80	120				

Associated Samples: **B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-041C, B22030703-042A, B22030703-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220315A: 20 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376247
Method: SW8015C **Analysis Date:** 03/16/2022 14:14 **Prep Date:**
Lab ID: CCV_0315HP532r **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		98.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		102.0	80	120				
Surr: o-Terphenyl	0.21	0.0020	0.20		104.0	80	120				

Associated Samples: **B22030703-016C, B22030703-021C, B22030703-026C, B22030703-031C, B22030703-041C, B22030703-042A, B22030703-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: FID-HEADSPACE_220312A: 4 **SampType:** Method Blank **Batch ID:** R376033
Method: SW8015M **Analysis Date:** 03/12/2022 09:50 **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: **B22030703-001H, B22030703-005A, B22030703-006H, B22030703-010A, B22030703-011H, B22030703-015A, B22030703-016H, B22030703-020A, B22030703-021H, B22030703-025A, B22030703-026H, B22030703-030A, B22030703-031H, B22030703-035A, B22030703-036H, B22030703-040A, B22030703-041H, B22030703-046A, B22030703-047H, B22030703-051A**

Run ID: Run Order: FID-HEADSPACE_220312A: 2 **SampType:** Laboratory Control Sample **Batch ID:** R376033
Method: SW8015M **Analysis Date:** 03/12/2022 08:27 **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	95	2.0	100		95.0	85	115				

Associated Samples: **B22030703-001H, B22030703-005A, B22030703-006H, B22030703-010A, B22030703-011H, B22030703-015A, B22030703-016H, B22030703-020A, B22030703-021H, B22030703-025A, B22030703-026H, B22030703-030A, B22030703-031H, B22030703-035A, B22030703-036H, B22030703-040A, B22030703-041H, B22030703-046A, B22030703-047H, B22030703-051A**

Run ID: Run Order: FID-HEADSPACE_220312A: 3 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** R376033
Method: SW8015M **Analysis Date:** 03/12/2022 08:33 **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	95	2.9	20.0	

Associated Samples: **B22030703-001H, B22030703-005A, B22030703-006H, B22030703-010A, B22030703-011H, B22030703-015A, B22030703-016H, B22030703-020A, B22030703-021H, B22030703-025A, B22030703-026H, B22030703-030A, B22030703-031H, B22030703-035A, B22030703-036H, B22030703-040A, B22030703-041H, B22030703-046A, B22030703-047H, B22030703-051A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: FID-HEADSPACE_220312A: 10 **SampType:** Sample Duplicate **Batch ID:** R376033
Method: SW8015M **Analysis Date:** 03/12/2022 10:29 **Prep Date:**
Lab ID: B22030703-011HDUP **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	0.0050	0.0020			0.0			0.0048	5.5	20.0	

Associated Samples: **B22030703-001H, B22030703-005A, B22030703-006H, B22030703-010A, B22030703-011H, B22030703-015A, B22030703-016H, B22030703-020A, B22030703-021H, B22030703-025A, B22030703-026H, B22030703-030A, B22030703-031H, B22030703-035A, B22030703-036H, B22030703-040A, B22030703-041H, B22030703-046A, B22030703-047H, B22030703-051A**

Run ID: Run Order: FID-HEADSPACE_220312A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376033
Method: SW8015M **Analysis Date:** 03/12/2022 08:21 **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		101.0	85	115				

Associated Samples: **B22030703-001H, B22030703-005A, B22030703-006H, B22030703-010A, B22030703-011H, B22030703-015A, B22030703-016H, B22030703-020A, B22030703-021H, B22030703-025A, B22030703-026H, B22030703-030A, B22030703-031H, B22030703-035A, B22030703-036H, B22030703-040A, B22030703-041H, B22030703-046A, B22030703-047H, B22030703-051A**

Run ID: Run Order: FID-HEADSPACE_220312A: 26 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376033
Method: SW8015M **Analysis Date:** 03/12/2022 12:21 **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	95	2.0	100		95.0	85	115				

Associated Samples: **B22030703-001H, B22030703-005A, B22030703-006H, B22030703-010A, B22030703-011H, B22030703-015A, B22030703-016H, B22030703-020A, B22030703-021H, B22030703-025A, B22030703-026H, B22030703-030A, B22030703-031H, B22030703-035A, B22030703-036H, B22030703-040A, B22030703-041H, B22030703-046A, B22030703-047H, B22030703-051A**

Analytical QC Exceptions Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01

Report Date: 03/21/2022

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
SW6020	Metals by ICP-MS, Dissolved	R376266	001A, 006A, 011A, 016A, 021A, 026A, 031A, 036A, 041A, 047A	SD	B22030703-001ADIL	3/15/2022	15:07	Lead					10.0	N
	Metals by ICP-MS, Total	164468	001B, 006B, 011B, 016B, 021B, 026B, 031B, 036B, 041B, 047B	SD	B22030703-001BDIL	3/15/2022	15:38	Lead					10.0	N

Preparation and Analysis Dates Report

Work Order: B22030703
Client: AECOM - Honolulu
Project Name: CV18F0126/60571032.02.46.01
Report Date: 3/21/2022

Lab ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Method	Prep Date	Prep Batch	Analysis Method	Analysis Date
001B	ERH2740 (RHMW04)	03/07/2022 18:10	Ground Water	Metals by ICP-MS, Total		SW3010A	03/11/2022 18:02	164468	SW6020	03/15/2022 15:32
001C	ERH2740 (RHMW04)	03/07/2022 18:10	Ground Water	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/14/2022 20:08
001G	ERH2740 (RHMW04)	03/07/2022 18:10	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/14/2022 22:20
004A	ERH2739 (Trip Blank) 14833	03/07/2022 18:10	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/14/2022 22:40
006B	ERH2732 (RHMW06)	03/07/2022 15:45	Ground Water	Metals by ICP-MS, Total		SW3010A	03/11/2022 18:02	164468	SW6020	03/15/2022 16:28
006C	ERH2732 (RHMW06)	03/07/2022 15:45	Ground Water	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/14/2022 15:52
006G	ERH2732 (RHMW06)	03/07/2022 15:45	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/14/2022 23:00
009A	ERH2731 (Trip Blank) 14733	03/07/2022 15:45	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 01:17
011B	ERH2694 (OWDFMW5A)	03/07/2022 16:50	Ground Water	Metals by ICP-MS, Total		SW3010A	03/11/2022 18:02	164468	SW6020	03/15/2022 16:41
011C	ERH2694 (OWDFMW5A)	03/07/2022 16:50	Ground Water	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/14/2022 15:10
011G	ERH2694 (OWDFMW5A)	03/07/2022 16:50	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 01:38
014A	ERH2693 (Trip Blank) 14576	03/07/2022 16:50	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 01:57
016B	ERH2705 (RHMW16)	03/08/2022 12:55	Ground Water	Metals by ICP-MS, Total		SW3010A	03/11/2022 18:02	164468	SW6020	03/15/2022 16:53
016C	ERH2705 (RHMW16)	03/08/2022 12:55	Ground Water	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/14/2022 16:35
						SW3520C	03/13/2022 12:35	164471	SW8015C	03/15/2022 22:20
016G	ERH2705 (RHMW16)	03/08/2022 12:55	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 02:17
019A	ERH2704 (Trip Blank) 14833	03/08/2022 12:55	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 02:37
021B	ERH2712 (RHMW03)	03/08/2022 15:20	Ground Water	Metals by ICP-MS, Total		SW3010A	03/11/2022 18:02	164468	SW6020	03/15/2022 17:18
021C	ERH2712 (RHMW03)	03/08/2022 15:20	Ground Water	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/15/2022 01:51
						SW3520C	03/13/2022 12:35	164471	SW8015C	03/16/2022 01:12
021G	ERH2712 (RHMW03)	03/08/2022 15:20	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 02:56
024A	ERH2711 (Trip Blank) 14894	03/08/2022 15:20	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 03:16
026B	ERH2723 (RHMW05)	03/08/2022 12:15	Ground Water	Metals by ICP-MS, Total		SW3010A	03/11/2022 18:02	164468	SW6020	03/15/2022 17:30
026C	ERH2723 (RHMW05)	03/08/2022 12:15	Ground Water	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/14/2022 18:43

Preparation and Analysis Dates Report

Work Order: B22030703
Client: AECOM - Honolulu
Project Name: CV18F0126/60571032.02.46.01
Report Date: 3/21/2022

026C	ERH2723 (RHMW05)	03/08/2022 12:15	Ground	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/15/2022 23:03
026G	ERH2723 (RHMW05)	03/08/2022 12:15	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 03:36
029A	ERH2722 (Trip Blank) 14733	03/08/2022 12:15	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 03:56
031B	ERH2715 (RHMW02)	03/08/2022 14:10	Ground Water	Metals by ICP-MS, Total		SW3010A	03/11/2022 18:02	164468	SW6020	03/15/2022 17:43
031C	ERH2715 (RHMW02)	03/08/2022 14:10	Ground Water	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/15/2022 01:08
						SW3520C	03/13/2022 12:35	164471	SW8015C	03/16/2022 01:55
031G	ERH2715 (RHMW02)	03/08/2022 14:10	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 04:15
034A	ERH2714 (Trip Blank) 14694	03/08/2022 14:10	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 05:35
036B	ERH2702 (RHMW14-3)	03/08/2022 12:00	Ground Water	Metals by ICP-MS, Total		SW3010A	03/11/2022 18:02	164468	SW6020	03/15/2022 17:55
036C	ERH2702 (RHMW14-3)	03/08/2022 12:00	Ground Water	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/14/2022 18:00
036G	ERH2702 (RHMW14-3)	03/08/2022 12:00	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 05:54
039A	ERH2701 (Trip Blank) 14733	03/08/2022 12:00	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 06:14
041B	ERH2718 (RHMW01R)	03/08/2022 13:00	Ground Water	Metals by ICP-MS, Total		SW3010A	03/11/2022 18:02	164468	SW6020	03/15/2022 18:08
041C	ERH2718 (RHMW01R)	03/08/2022 13:00	Ground Water	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/15/2022 03:16
						SW3520C	03/13/2022 12:35	164471	SW8015C	03/16/2022 02:38
041G	ERH2718 (RHMW01R)	03/08/2022 13:00	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 06:34
042A	ERH2719 (RHMW01R)	03/08/2022 13:00	Ground Water	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/15/2022 06:07
						SW3520C	03/13/2022 12:35	164471	SW8015C	03/16/2022 07:39
045A	ERH2717 (Trip Blank) 14833	03/08/2022 13:00	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 06:53
047B	ERH2708 (RHMW12A)	03/08/2022 17:26	Ground Water	Metals by ICP-MS, Total		SW3010A	03/11/2022 18:02	164468	SW6020	03/15/2022 18:33
047C	ERH2708 (RHMW12A)	03/08/2022 17:26	Ground Water	Diesel Range Organics		SW3520C	03/13/2022 12:35	164471	SW8015C	03/14/2022 19:25
						SW3520C	03/13/2022 12:35	164471	SW8015C	03/15/2022 23:46
047G	ERH2708 (RHMW12A)	03/08/2022 17:26	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 07:13
050A	ERH2707 (Trip Blank) 14733	03/08/2022 17:26	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:16	164488	SW8011	03/15/2022 07:33

Chemical Abstracts Service (CAS) Registry Numbers

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030703
Project: CV18F0126/60571032.02.46.01 **Report Date:** 03/21/2022

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

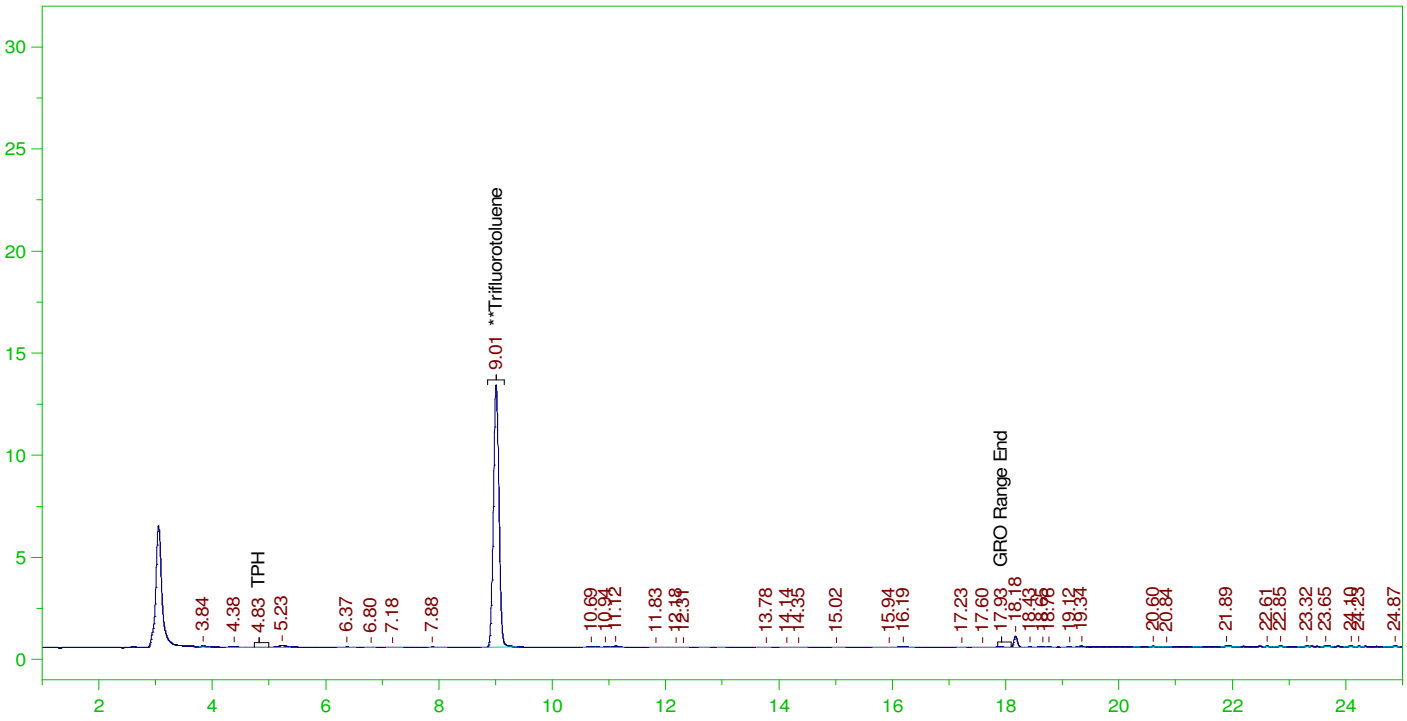
Diesel Range Organics (C10 to C24)
Diesel Range Organics (SGT-C10 to C24)
Oil Range Hydrocarbons (C24 to C40)
Oil Range Hydrocarbons (SGT-C24 to C40)
Total Extractable Hydrocarbons
Total Extractable Hydrocarbons (SGT)

ORGANIC CHARACTERISTICS

Methane	74-82-8

ERH2740 (RHMW04)

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0034.RAW B22030703-001F ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-001F ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0034.RAW
Date & Time Acquired: 3/12/2022 2:41:44 AM
Method File: G:\Org\VAR\Methods\211208G703-1DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

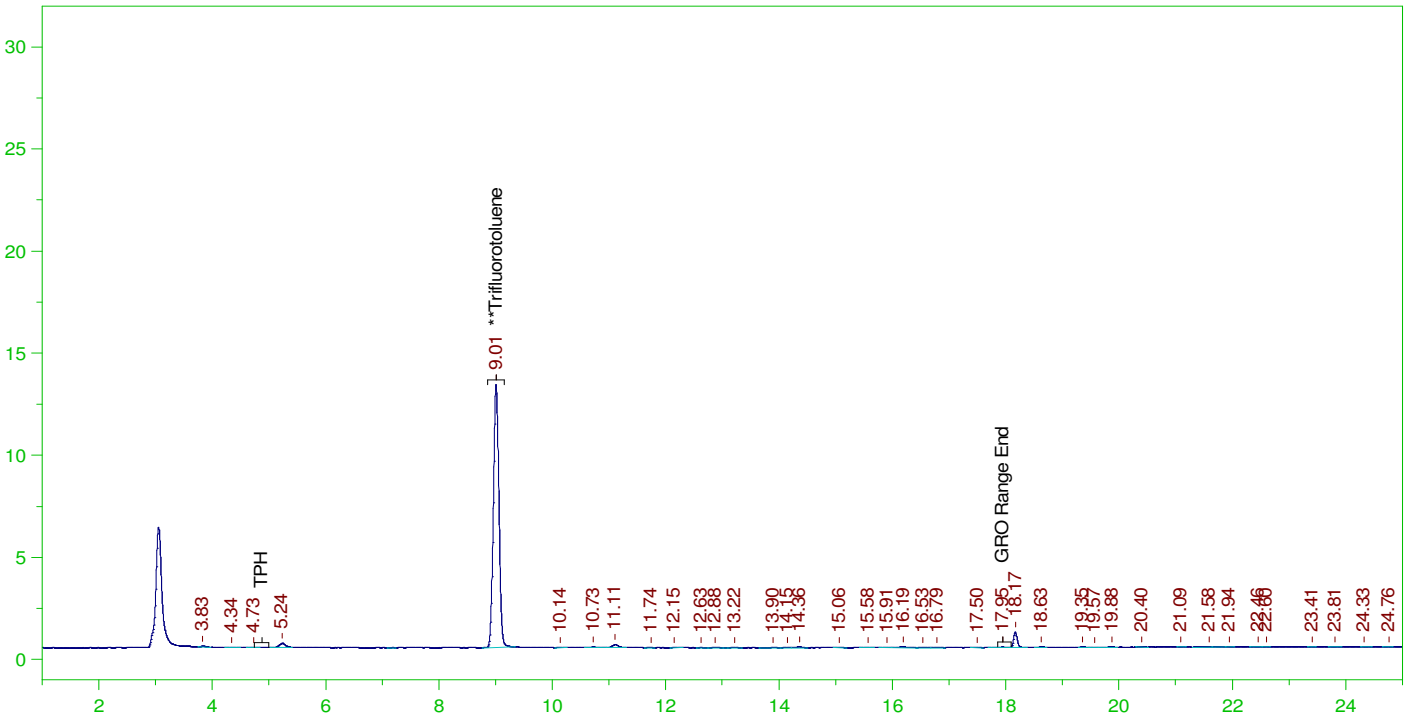
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	19.018	76.07	-

C6 to C10 Area:4009.115 C6 to C10 Amount: 0.8182044
TPH Area:8937.12 TPH Amount: 1.870327

ERH2739 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0042.RAW B22030703-003A ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-003A ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0042.RAW
Date & Time Acquired: 3/12/2022 7:16:22 AM
Method File: G:\Org\VAR\Methods\211208G703-3DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

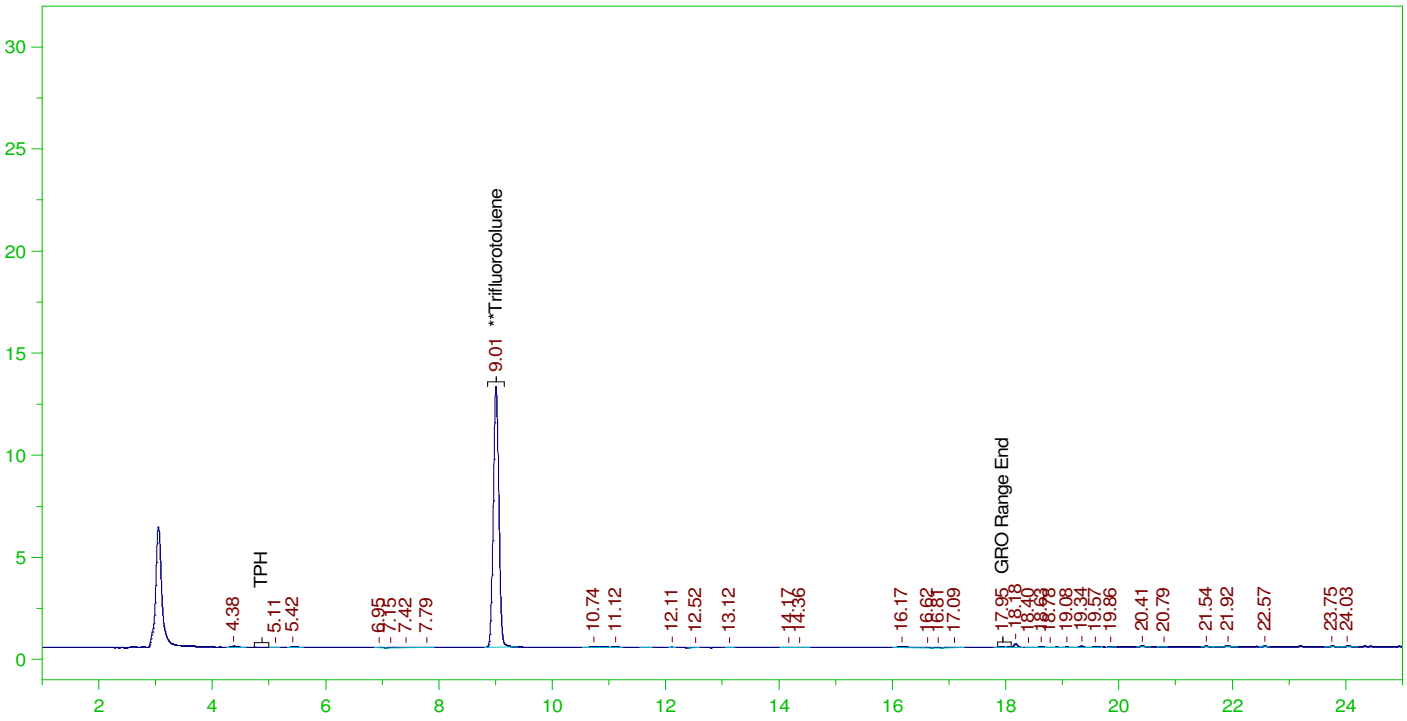
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.062	76.25	-

C6 to C10 Area:5786.042 C6 to C10 Amount: 1.180851
TPH Area:11743.15 TPH Amount: 2.457562

ERH2732 (RHMW06)

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0036.RAW B22030703-006F ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-006F ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0036.RAW
Date & Time Acquired: 3/12/2022 3:50:20 AM
Method File: G:\Org\VAR\Methods\211208G703-6DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

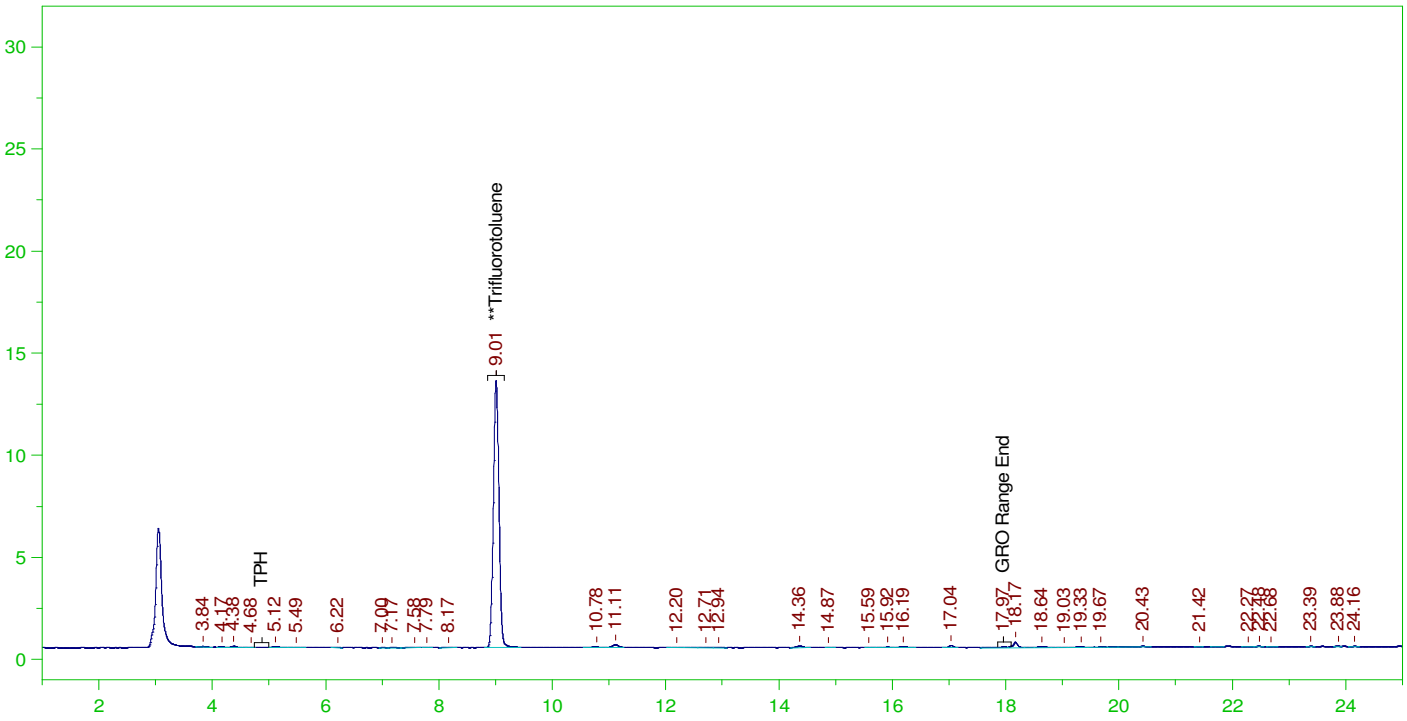
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	18.925	75.7	-

C6 to C10 Area:3092.463 C6 to C10 Amount: 0.6311284
TPH Area:6509.425 TPH Amount: 1.362268

ERH2731 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0051.RAW B22030703-008A ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-008A ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0051.RAW
Date & Time Acquired: 3/12/2022 12:24:30 PM
Method File: G:\Org\VAR\Methods\211208G703-8DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

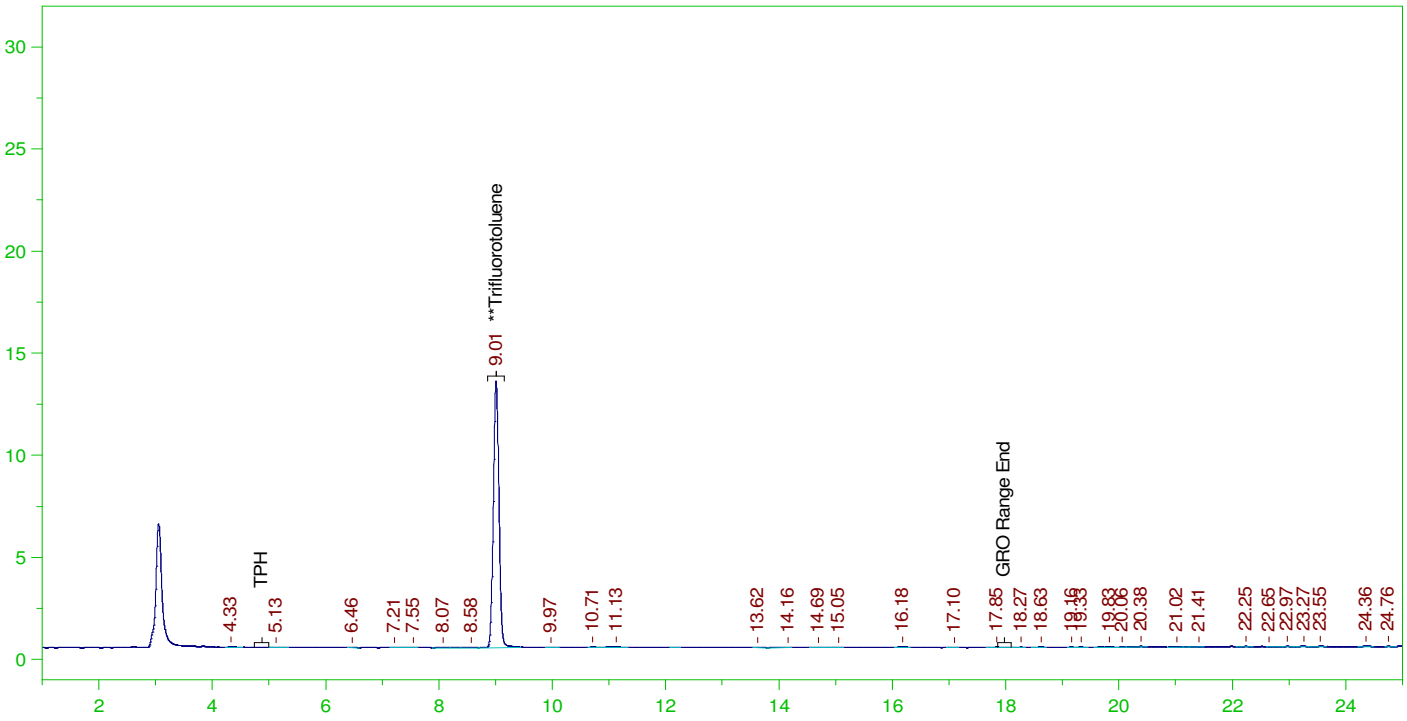
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.346	77.38	-

C6 to C10 Area:5266.625 C6 to C10 Amount: 1.074845
TPH Area:9891.389 TPH Amount: 2.070033

ERH2694 (OWDFMW5A)

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0038.RAW B22030703-011F ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-011F ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0038.RAW
Date & Time Acquired: 3/12/2022 4:59:02 AM
Method File: G:\Org\VAR\Methods\211208G703-11DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

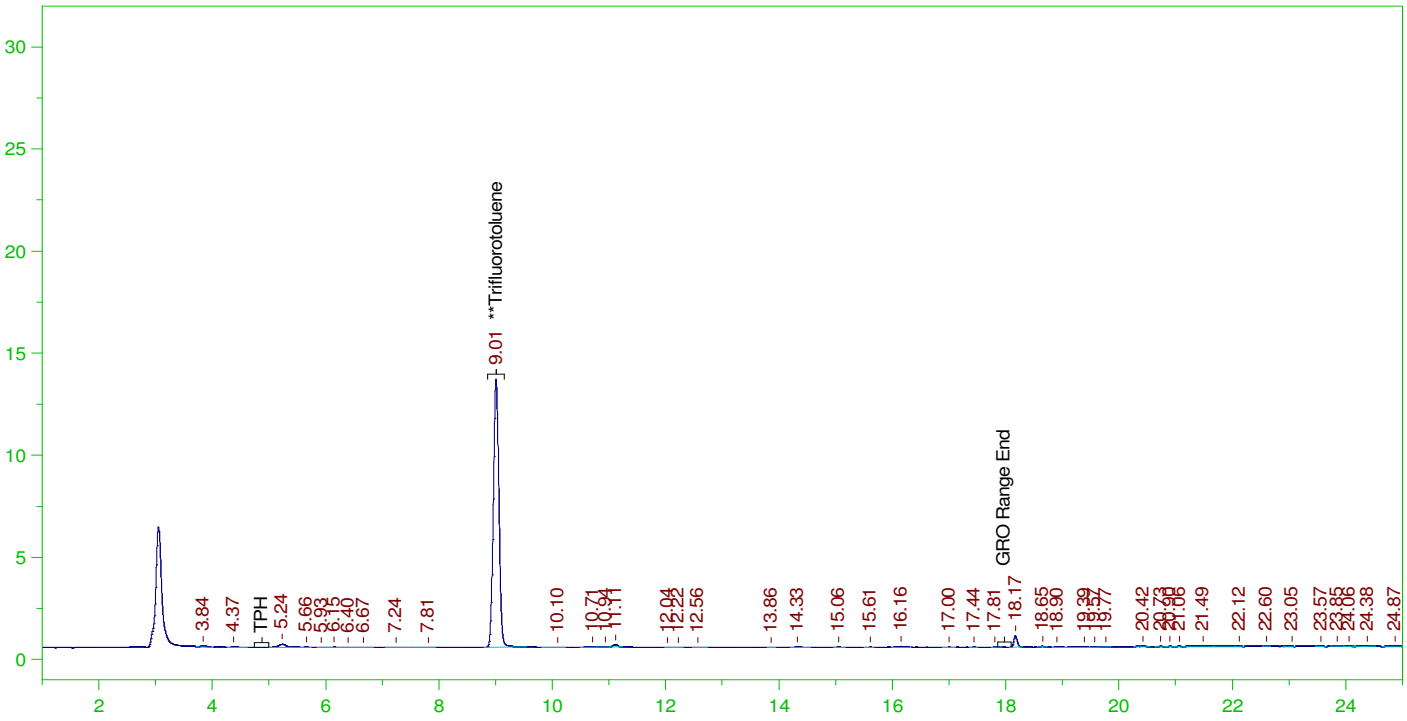
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.427	77.71	-

C6 to C10 Area:2590.04 C6 to C10 Amount: 0.528591
TPH Area:5810.07 TPH Amount: 1.21591

ERH2693 (Trip Blank) 14894

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0052.RAW B22030703-013A ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-013A ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0052.RAW
Date & Time Acquired: 3/12/2022 12:58:52 PM
Method File: G:\Org\VAR\Methods\211208G703-13DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

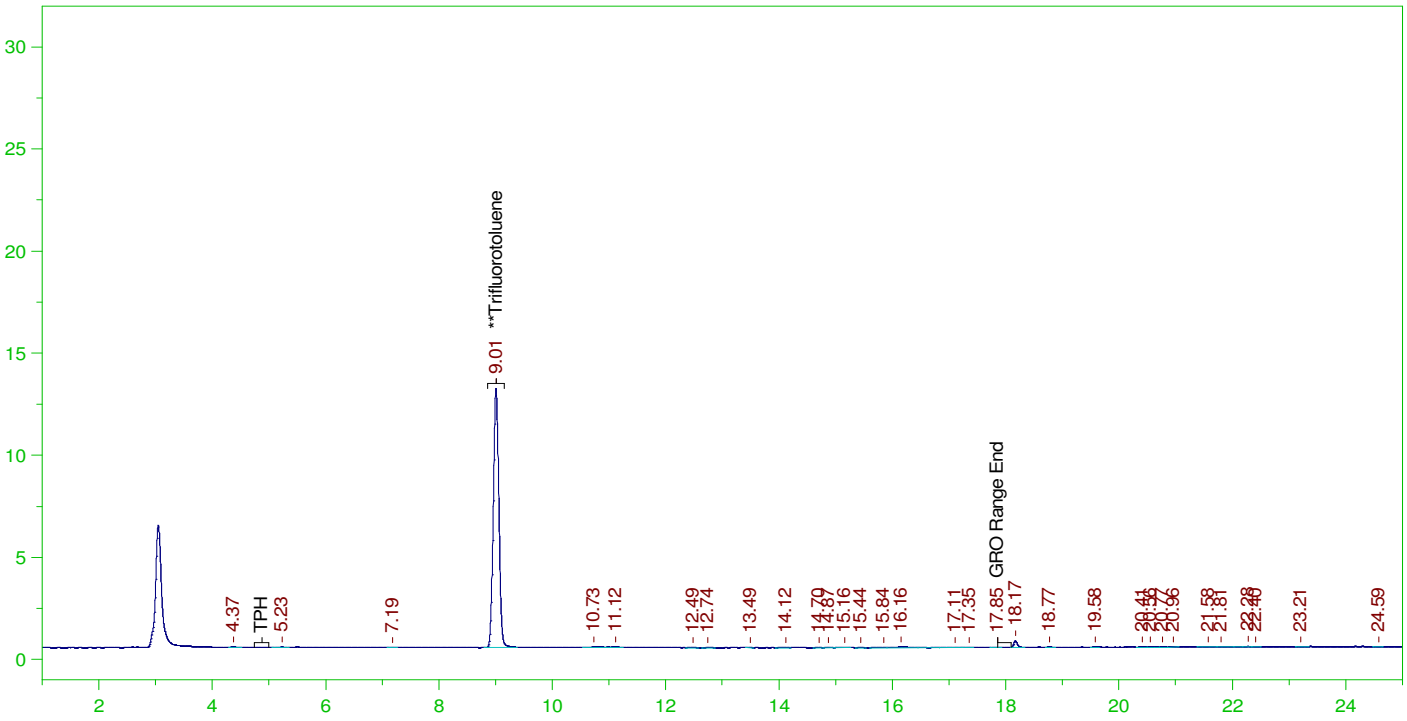
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.473	77.89	-

C6 to C10 Area:4947.198 C6 to C10 Amount: 1.009654
TPH Area:11165.16 TPH Amount: 2.336603

ERH2705 (RHMW16)

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0040.RAW B22030703-016F ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-016F ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0040.RAW
Date & Time Acquired: 3/12/2022 6:07:48 AM
Method File: G:\Org\VAR\Methods\211208G703-16DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

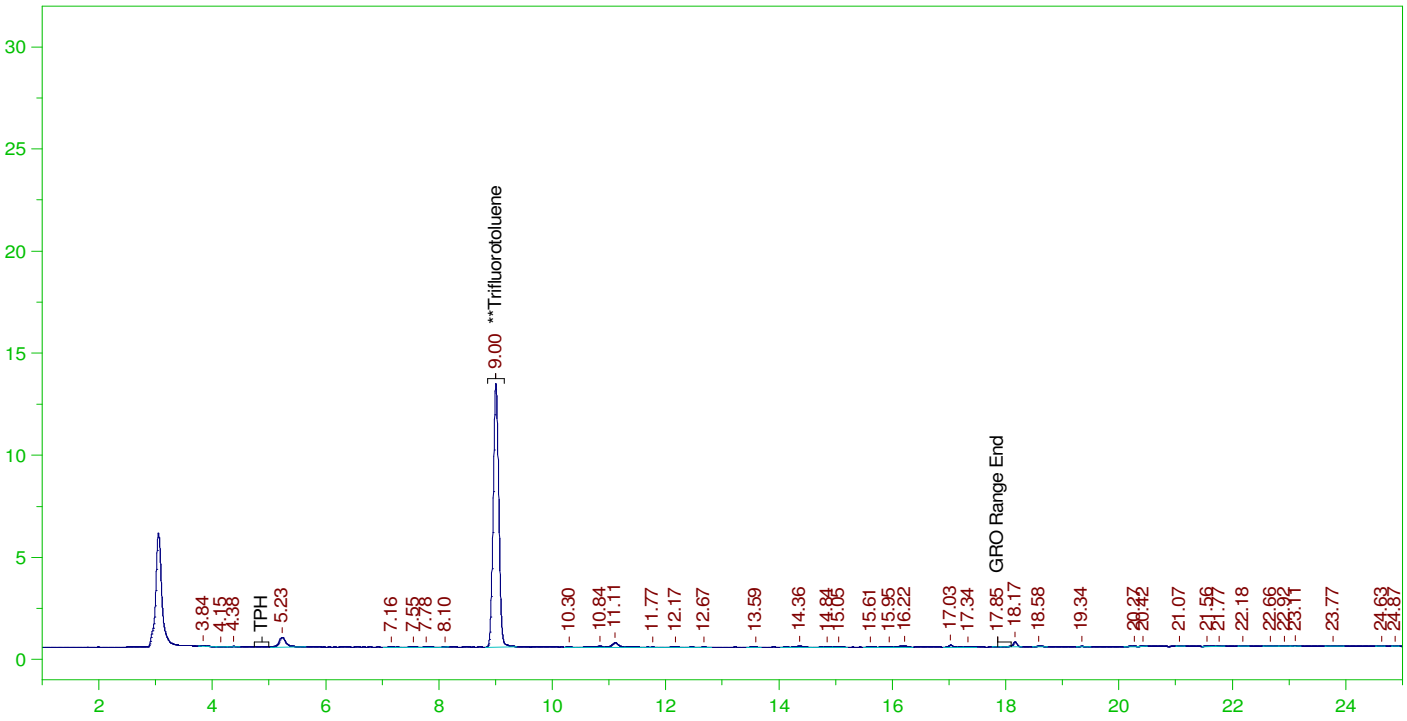
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	18.751	75.	-

C6 to C10 Area:2958.549 C6 to C10 Amount: 0.6037986
TPH Area:6238.941 TPH Amount: 1.305662

ERH2704 (Trip Blank) 14833

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0053.RAW B22030703-018A ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-018A ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0053.RAW
Date & Time Acquired: 3/12/2022 1:33:21 PM
Method File: G:\Org\VAR\Methods\211208G703-18DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.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: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.005	25.	19.161	76.64	-

C6 to C10 Area:10774.62 C6 to C10 Amount: 2.198949
TPH Area:14332.54 TPH Amount: 2.999459

ERH2712 (RHMW03)

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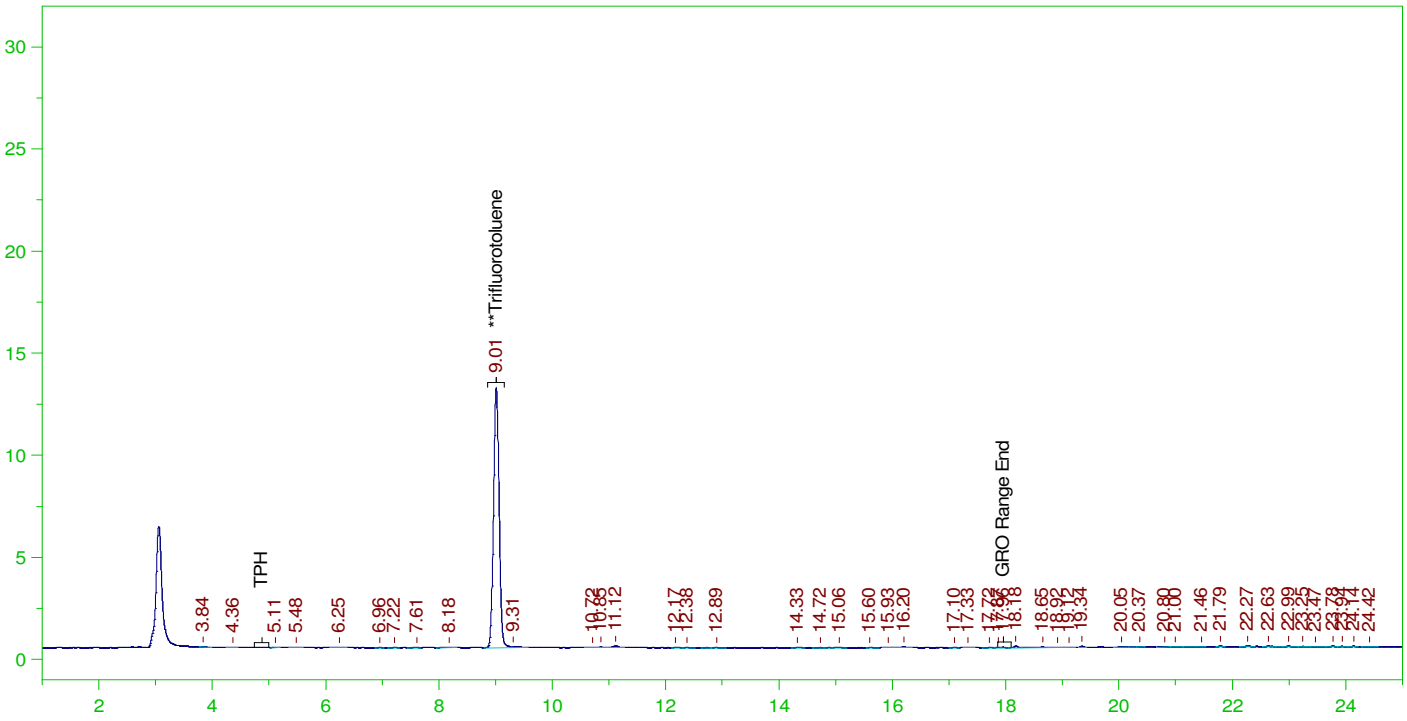


GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-021F ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0048.RAW
Date & Time Acquired: 3/12/2022 10:41:39 AM
Method File: G:\Org\VAR\Methods\211208G703-21DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

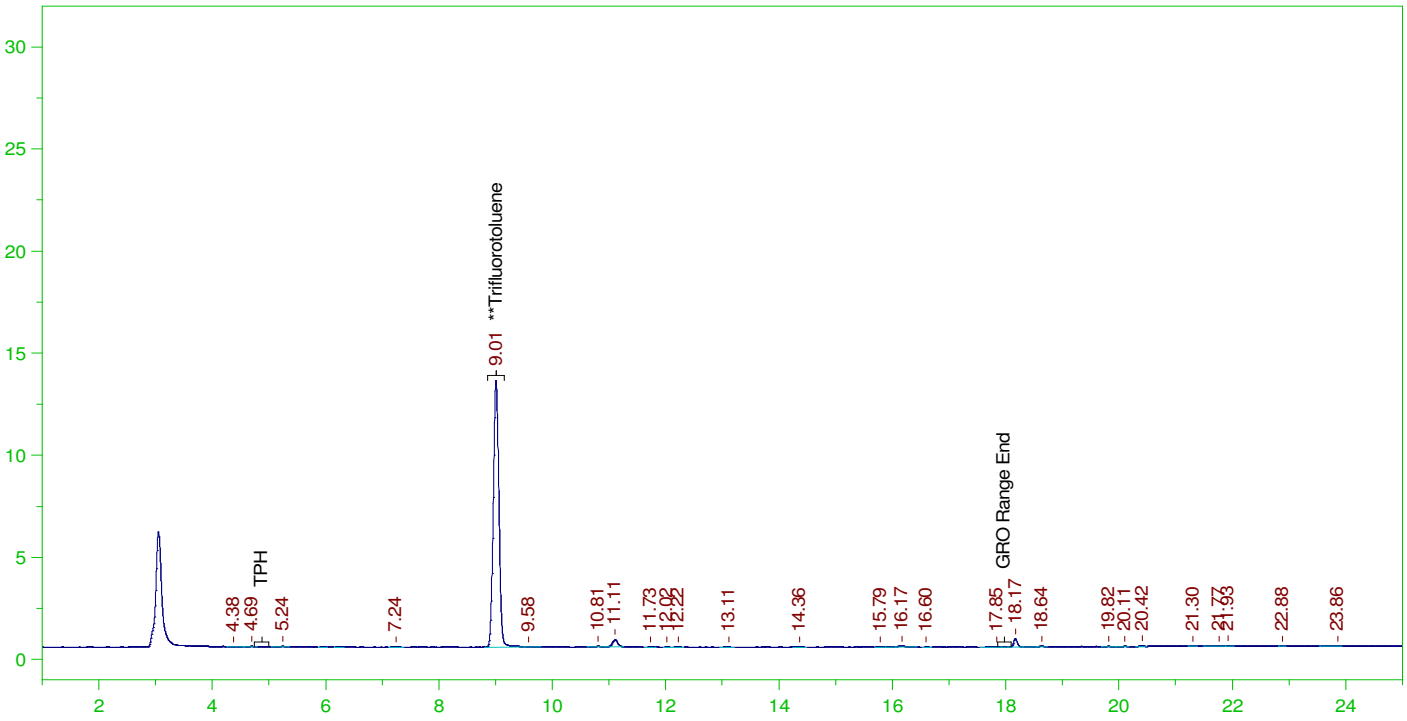
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.011	25.	18.892	75.57	-

C6 to C10 Area:3500.123 C6 to C10 Amount: 0.7143263
TPH Area:7455.897 TPH Amount: 1.560342

ERH2711 (Trip Blank) 14833

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0054.RAW B22030703-023A ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-023A ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0054.RAW
Date & Time Acquired: 3/12/2022 2:07:47 PM
Method File: G:\Org\VAR\Methods\211208G703-23DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

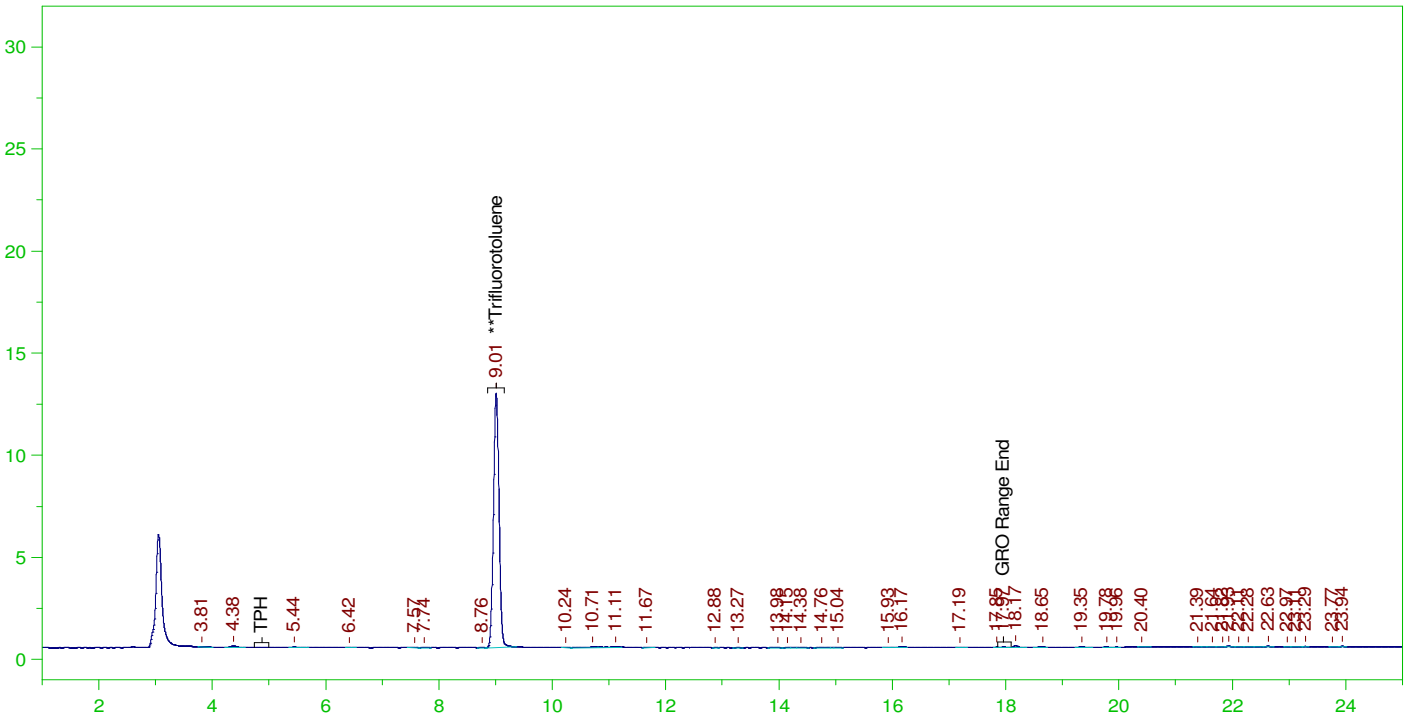
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.489	77.95	-

C6 to C10 Area:4525.299 C6 to C10 Amount: 0.9235503
TPH Area:8023.92 TPH Amount: 1.679216

ERH2723 (RHMW05)

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0069.RAW B22030703-026F ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-026F ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0069.RAW
Date & Time Acquired: 3/12/2022 10:42:12 PM
Method File: G:\Org\VAR\Methods\211208G703-26DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

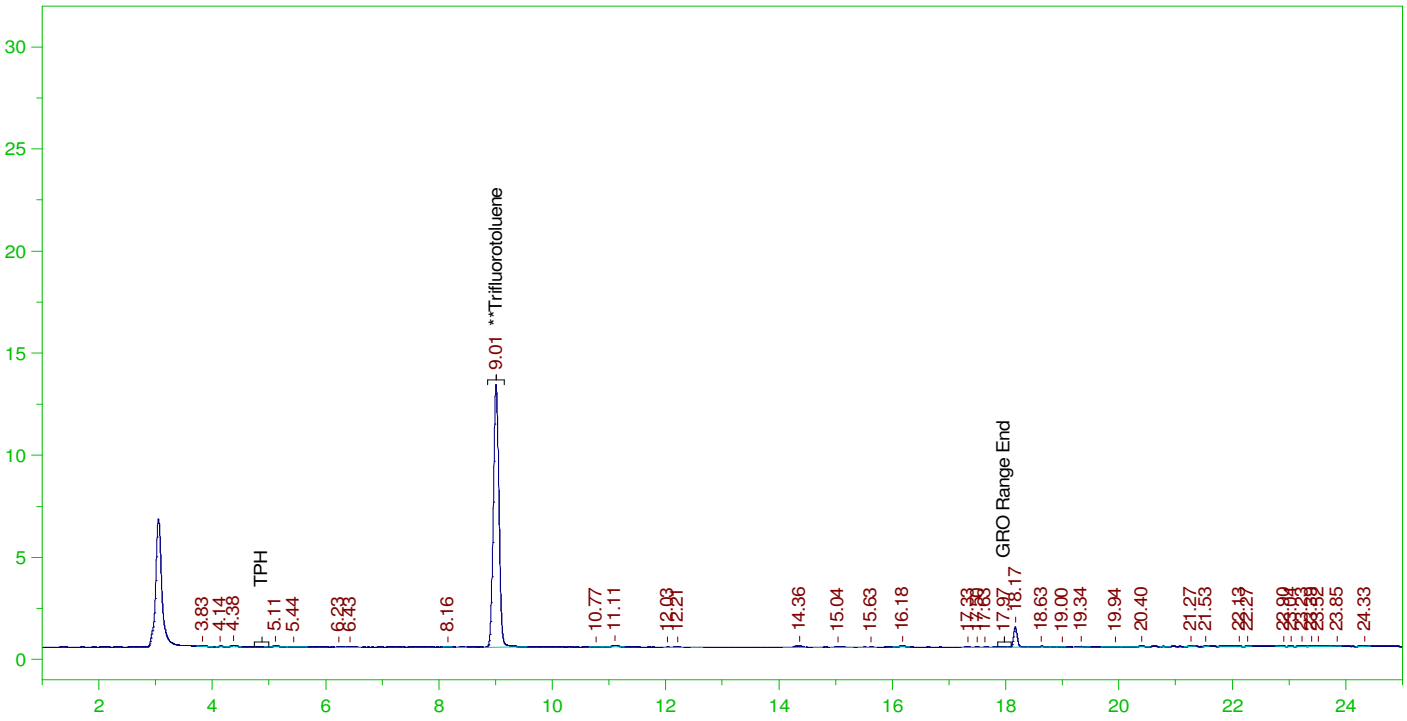
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.01	25.	18.434	73.74	-

C6 to C10 Area:2746.381 C6 to C10 Amount: 0.5604981
TPH Area:6408.494 TPH Amount: 1.341145

ERH2722 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0055.RAW B22030703-028A ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-028A ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0055.RAW
Date & Time Acquired: 3/12/2022 2:41:59 PM
Method File: G:\Org\VAR\Methods\211208G703-28DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

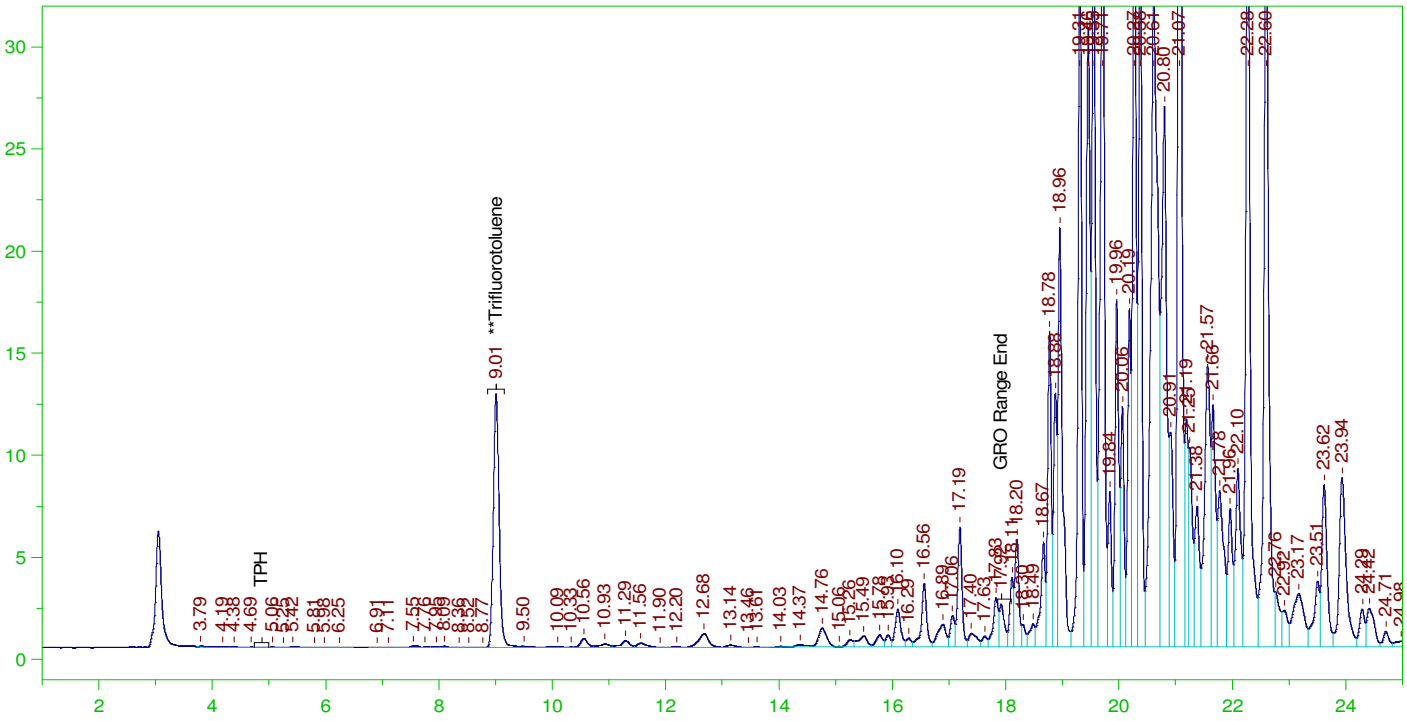
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.146	76.58	-

C6 to C10 Area:3862.071 C6 to C10 Amount: 0.7881948
TPH Area:12672.19 TPH Amount: 2.651989

ERH2715 (RHMW02)

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0071.RAW B22030703-031F ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-031F ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0071.RAW
Date & Time Acquired: 3/12/2022 11:50:37 PM
Method File: G:\Org\VAR\Methods\211208G703-31DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

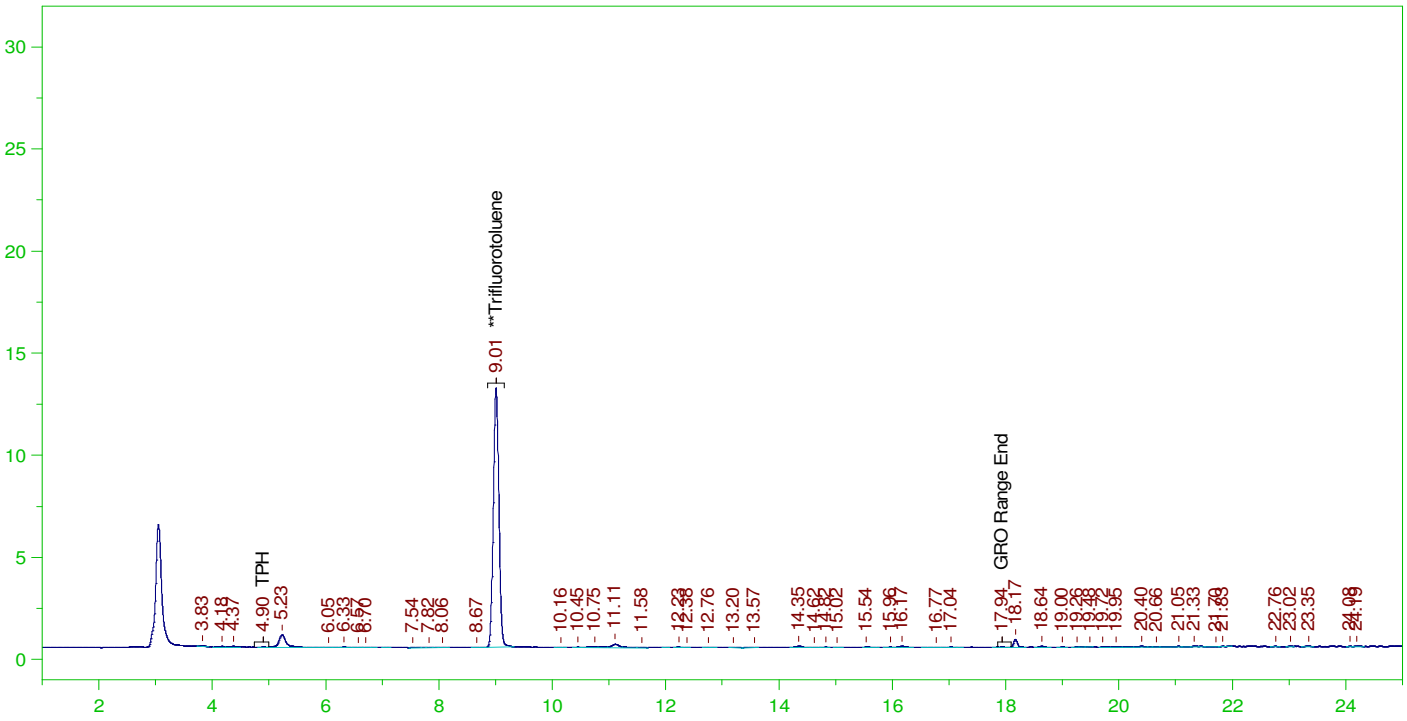
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.131	76.52	-

C6 to C10 Area:186572.8 C6 to C10 Amount: 38.0769
TPH Area:3795722 TPH Amount: 794.3543

ERH2714 (Trip Blank) 14694

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0056.RAW B22030703-033A ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-033A ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0056.RAW
Date & Time Acquired: 3/12/2022 3:16:17 PM
Method File: G:\Org\VAR\Methods\211208G703-33DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

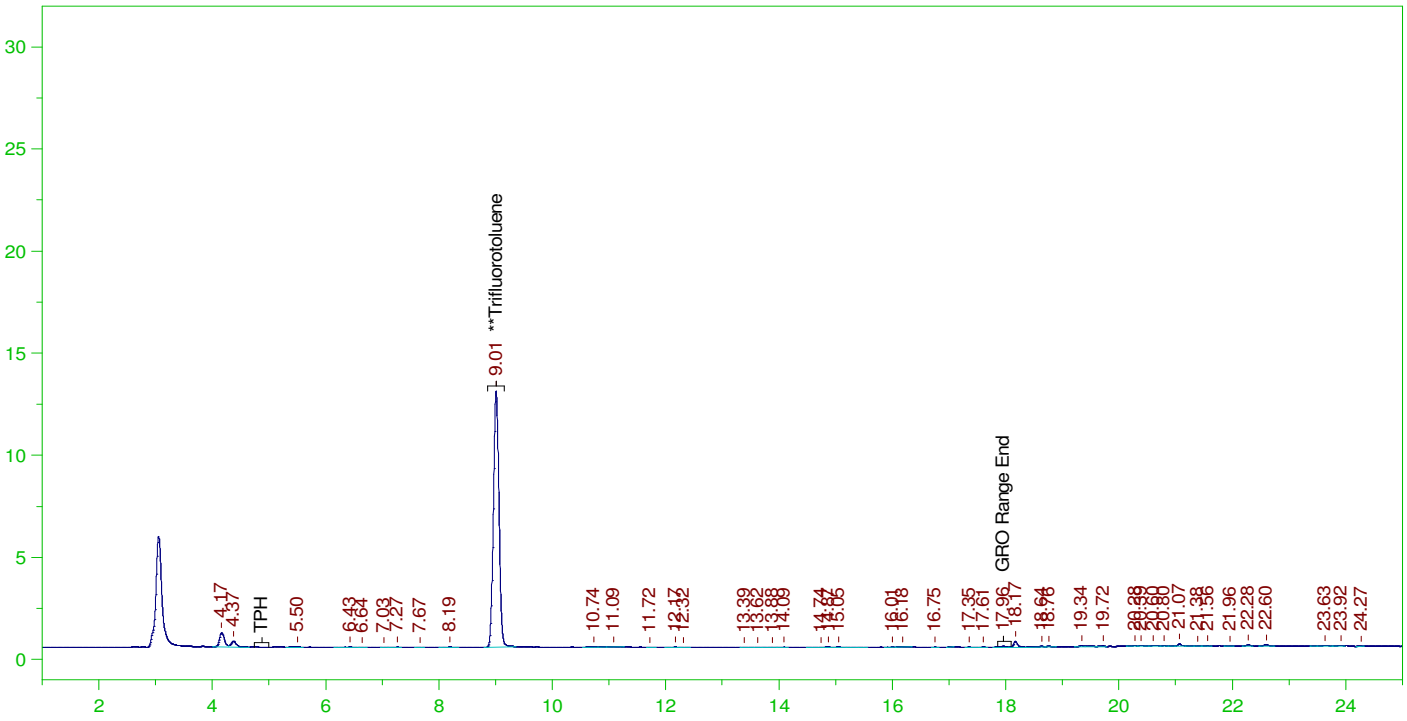
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	18.766	75.06	-

C6 to C10 Area:11779.41 C6 to C10 Amount: 2.404014
TPH Area:17049.86 TPH Amount: 3.56813

ERH2702 (RHMW14-3)

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0073.RAW B22030703-036F ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-036F ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0073.RAW
Date & Time Acquired: 3/13/2022 12:58:54 AM
Method File: G:\Org\VAR\Methods\211208G703-36DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

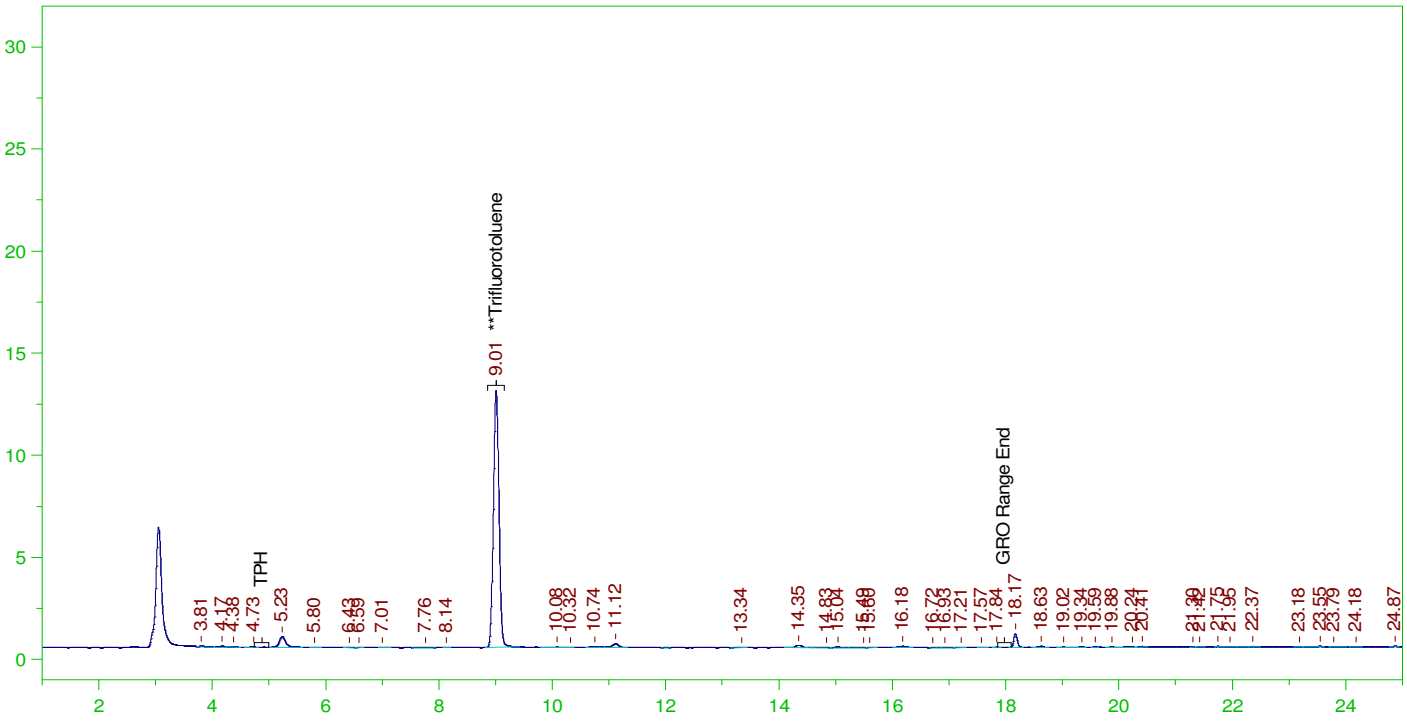
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	18.545	74.18	-

C6 to C10 Area:4155.876 C6 to C10 Amount: 0.8481563
TPH Area:16188.63 TPH Amount: 3.387895

ERH2701 (Trip Blank) 14653

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0057.RAW B22030703-038A ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-038A ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0057.RAW
Date & Time Acquired: 3/12/2022 3:50:30 PM
Method File: G:\Org\VAR\Methods\211208G703-38DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

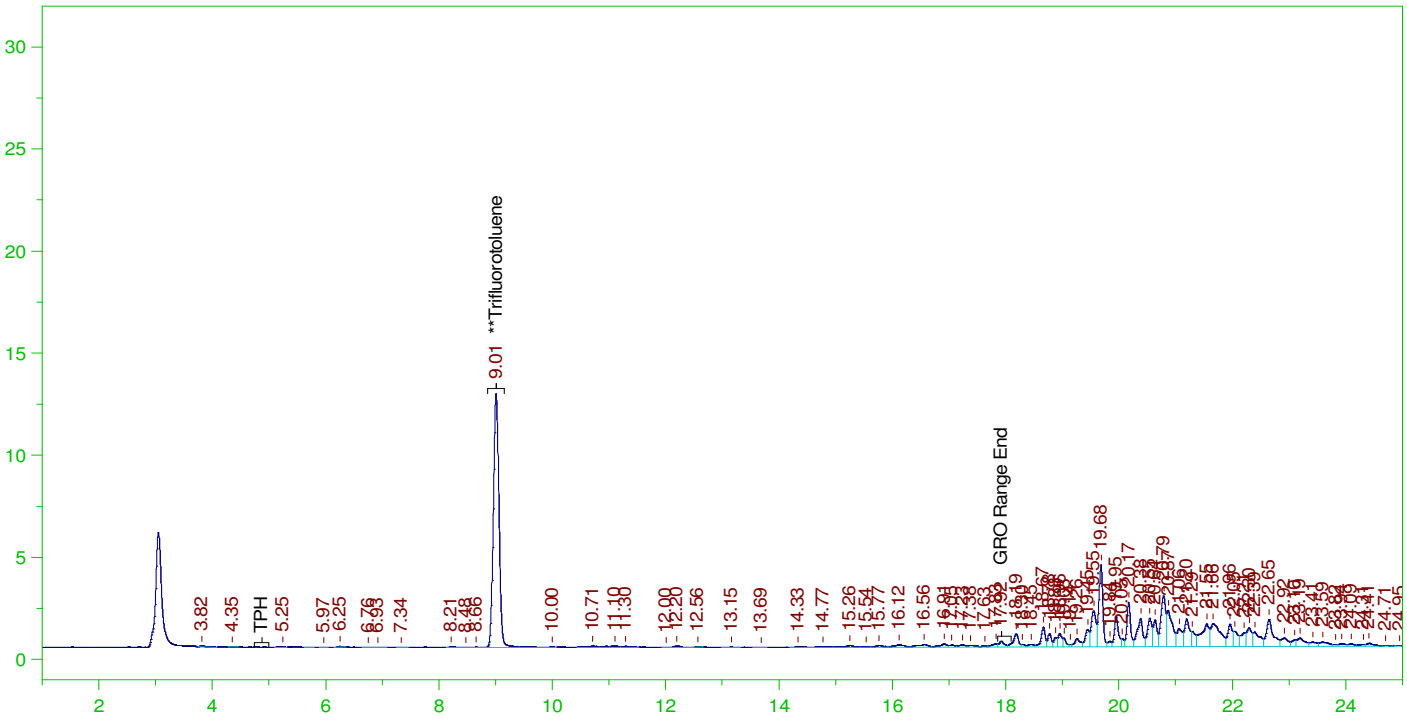
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	18.691	74.77	-

C6 to C10 Area:10363.76 C6 to C10 Amount: 2.115099
TPH Area:16814.56 TPH Amount: 3.518889

ERH2718 (RHMW01R)

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0075.RAW B22030703-041F ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-041F ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0075.RAW
Date & Time Acquired: 3/13/2022 3:07:13 AM
Method File: G:\Org\VAR\Methods\211208G703-41DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

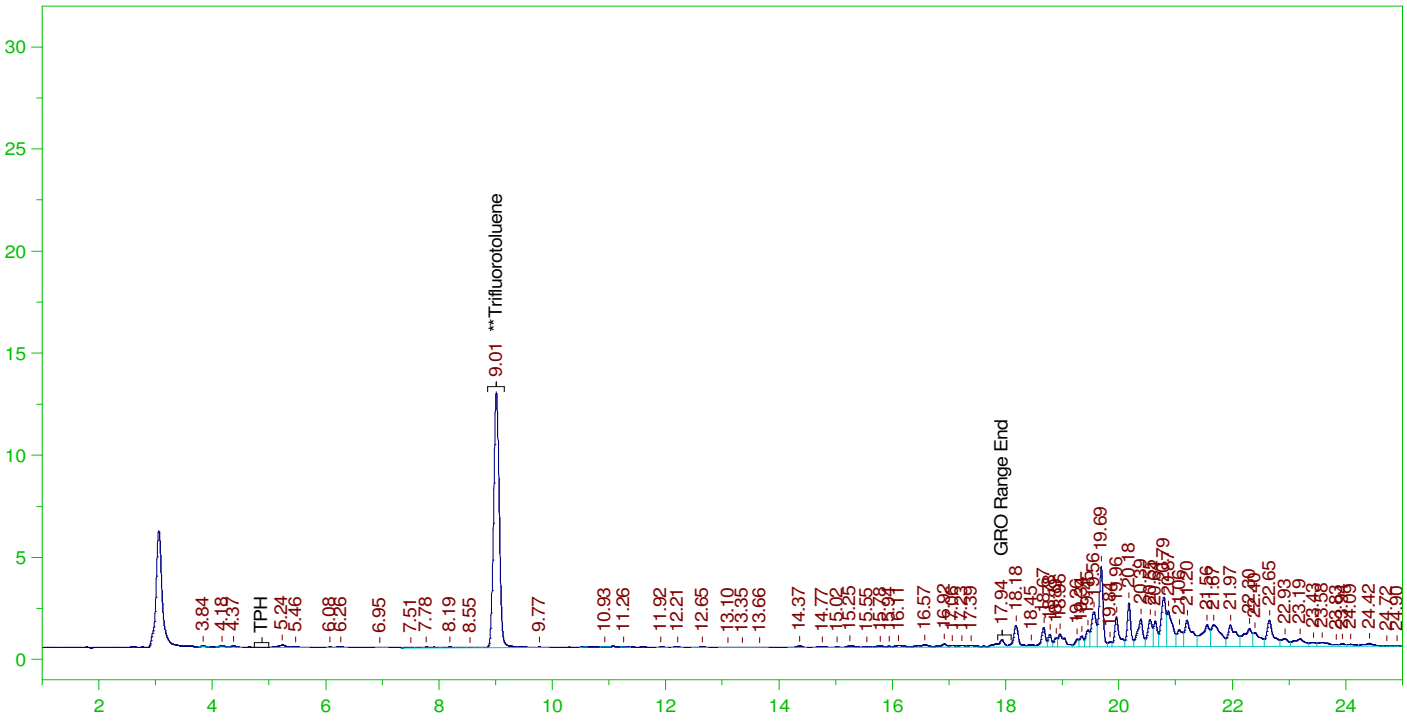
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	18.582	74.33	-

C6 to C10 Area:16631.35 C6 to C10 Amount: 3.394227
TPH Area:245230.5 TPH Amount: 51.32093

ERH2719 (RHMW01R)

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0077.RAW B22030703-042C ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-042C ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0077.RAW
Date & Time Acquired: 3/13/2022 4:15:28 AM
Method File: G:\Org\VAR\Methods\211208G703-42DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

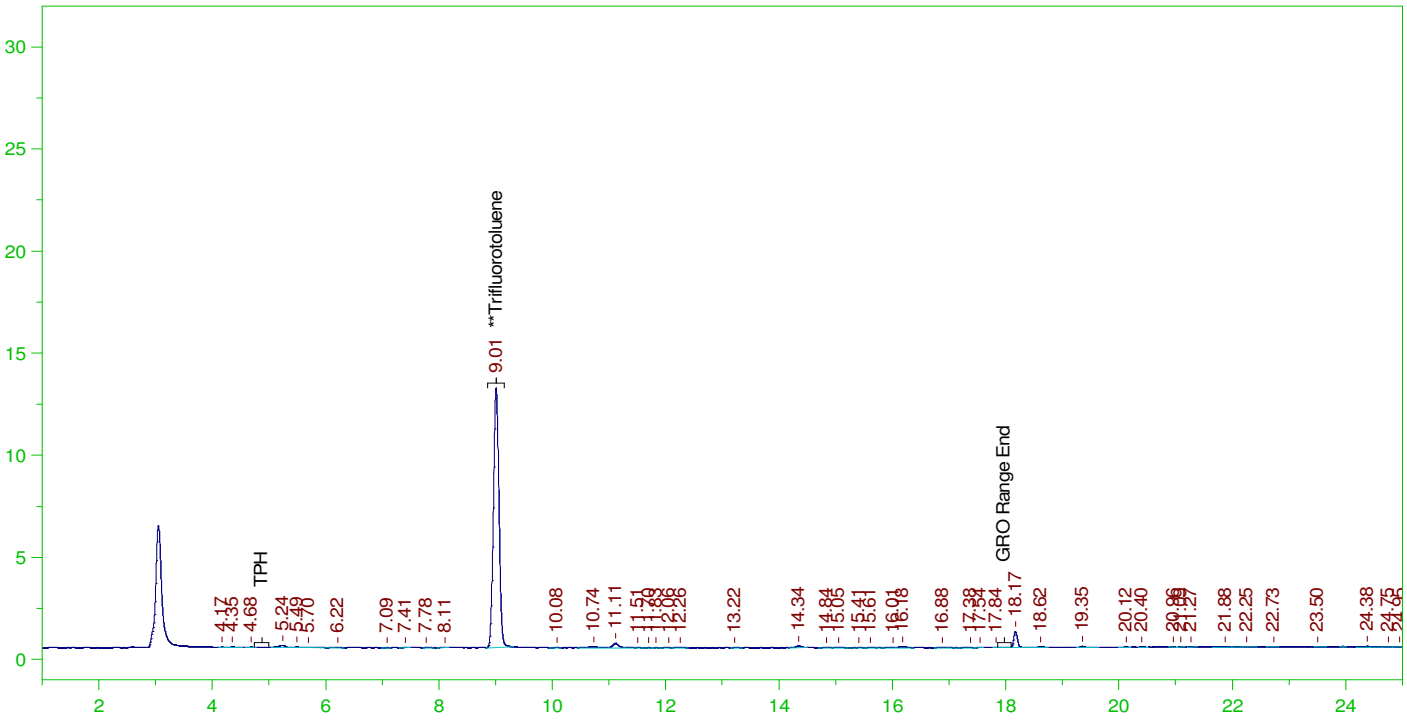
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.013	25.	18.701	74.81	-

C6 to C10 Area:16733.64 C6 to C10 Amount: 3.415103
TPH Area:242384.5 TPH Amount: 50.72533

ERH2717 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0058.RAW B22030703-044A ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-044A ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0058.RAW
Date & Time Acquired: 3/12/2022 4:24:44 PM
Method File: G:\Org\VAR\Methods\211208G703-44DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

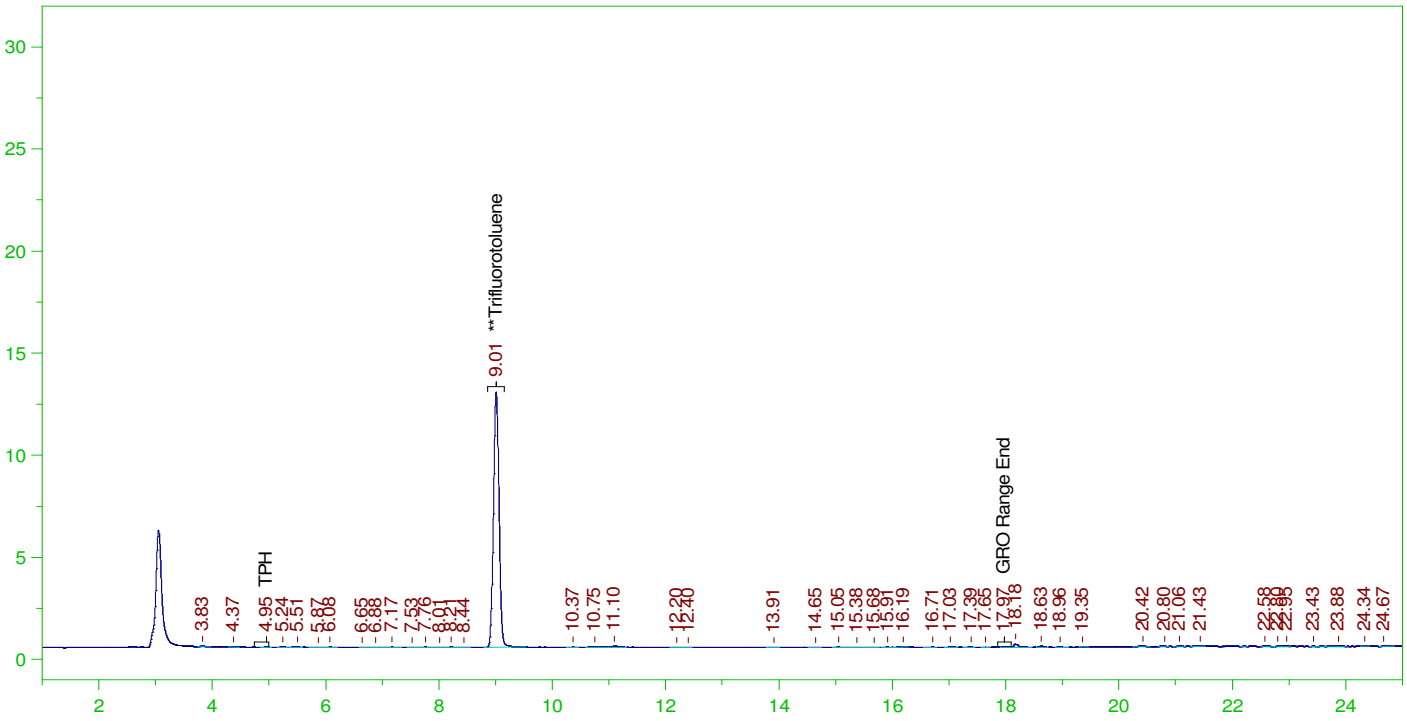
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	18.767	75.07	-

C6 to C10 Area:7925.542 C6 to C10 Amount: 1.617492
TPH Area:14541.58 TPH Amount: 3.043206

ERH2708 (RHMW12A)

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0079.RAW B22030703-047F ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-047F ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0079.RAW
Date & Time Acquired: 3/13/2022 5:23:45 AM
Method File: G:\Org\VAR\Methods\211208G703-47DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

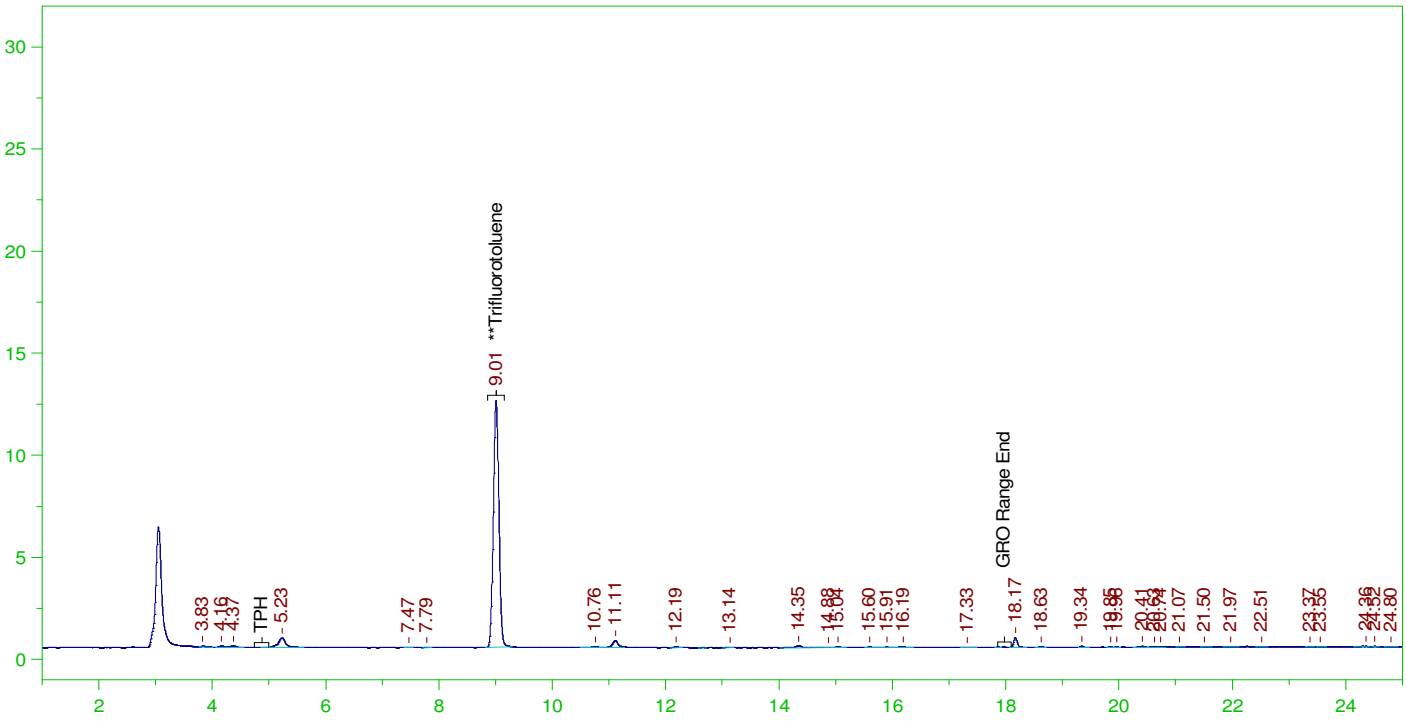
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.01	25.	18.622	74.49	-

C6 to C10 Area:4100.937 C6 to C10 Amount: 0.8369439
TPH Area:7705.766 TPH Amount: 1.612634

ERH2707 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR031122_b\0311VARB.0068.RAW B22030703-049A ;0311VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-049A ;0311VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031122_b\0311VARB.0068.RAW
Date & Time Acquired: 3/12/2022 10:07:54 PM
Method File: G:\Org\VAR\Methods\211208G703-49DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

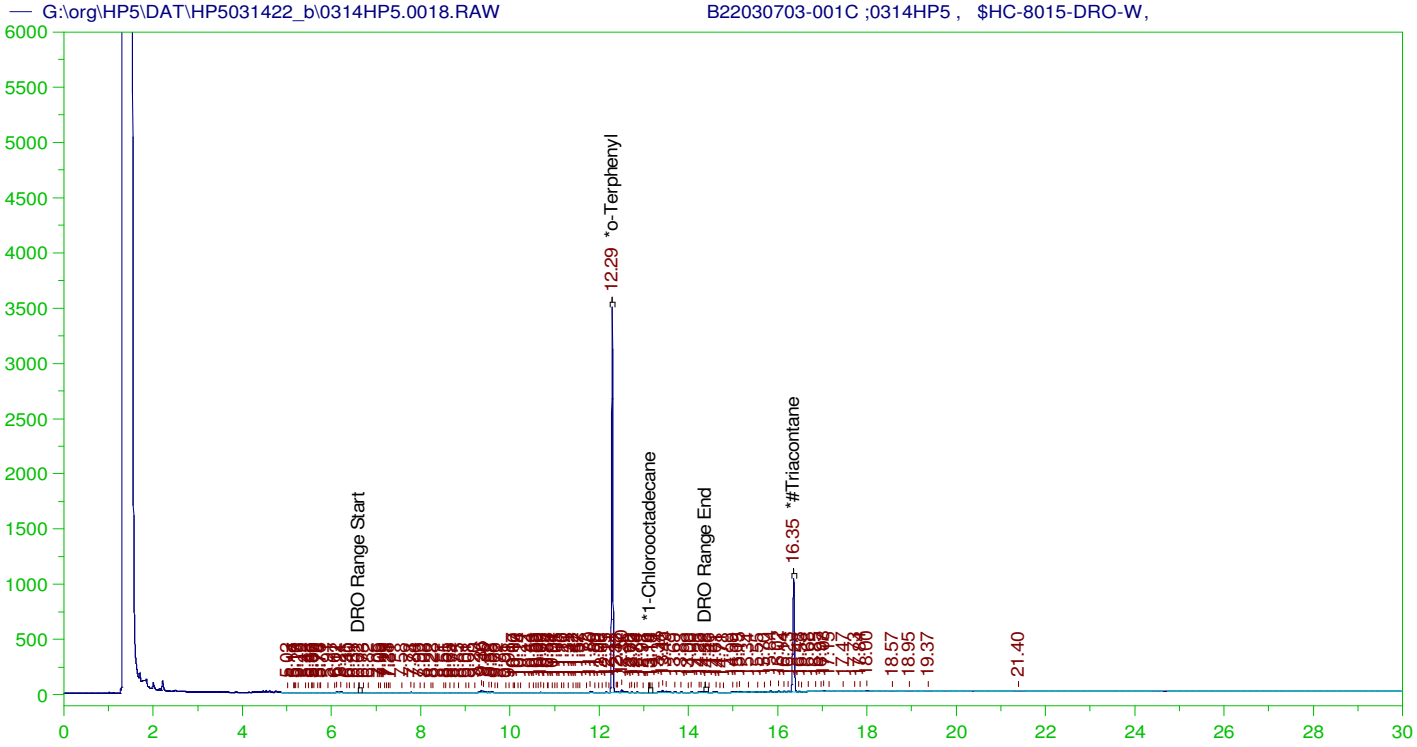
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	17.785	71.14	-

C6 to C10 Area:9715.083 C6 to C10 Amount: 1.982713
TPH Area:15088 TPH Amount: 3.157559

ERH2740 (RHMW04) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0018.RAW B22030703-001C ;0314HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-001C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0018.RAW
Date & Time Acquired: 3/14/2022 8:08:19 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

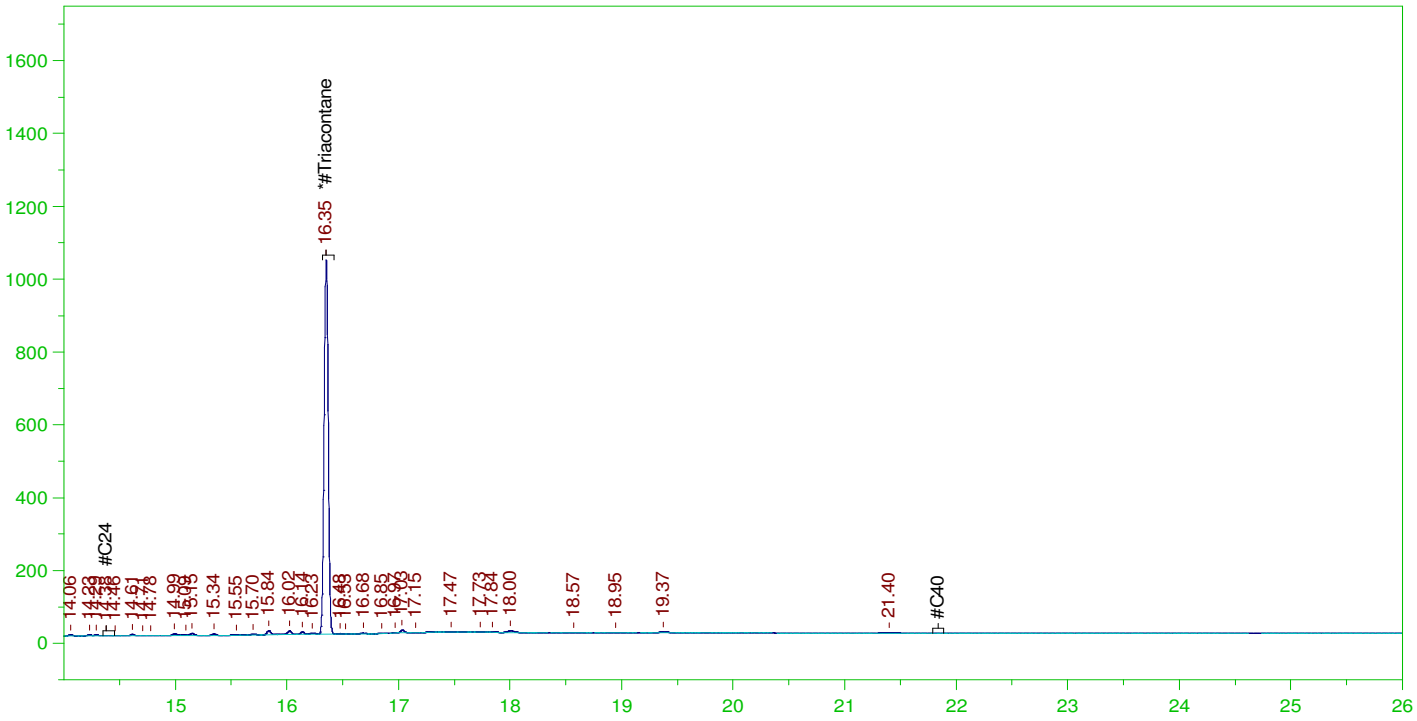
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.29	.19	.169	88.57	-
*1-Chlorooctadecane	13.139	.19	.	.01	-
*#Triacontane	16.352	.19	.085	44.44	-

DRO Area:652803.7 DRO Amount: 1.902711E-02
TEH Area:1020353 TEH Amount: 2.973999E-02

ERH2740 (RHMW04) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0018.RAW B22030703-001C ;0314HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-001C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0018.RAW
Date & Time Acquired: 3/14/2022 8:08:19 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

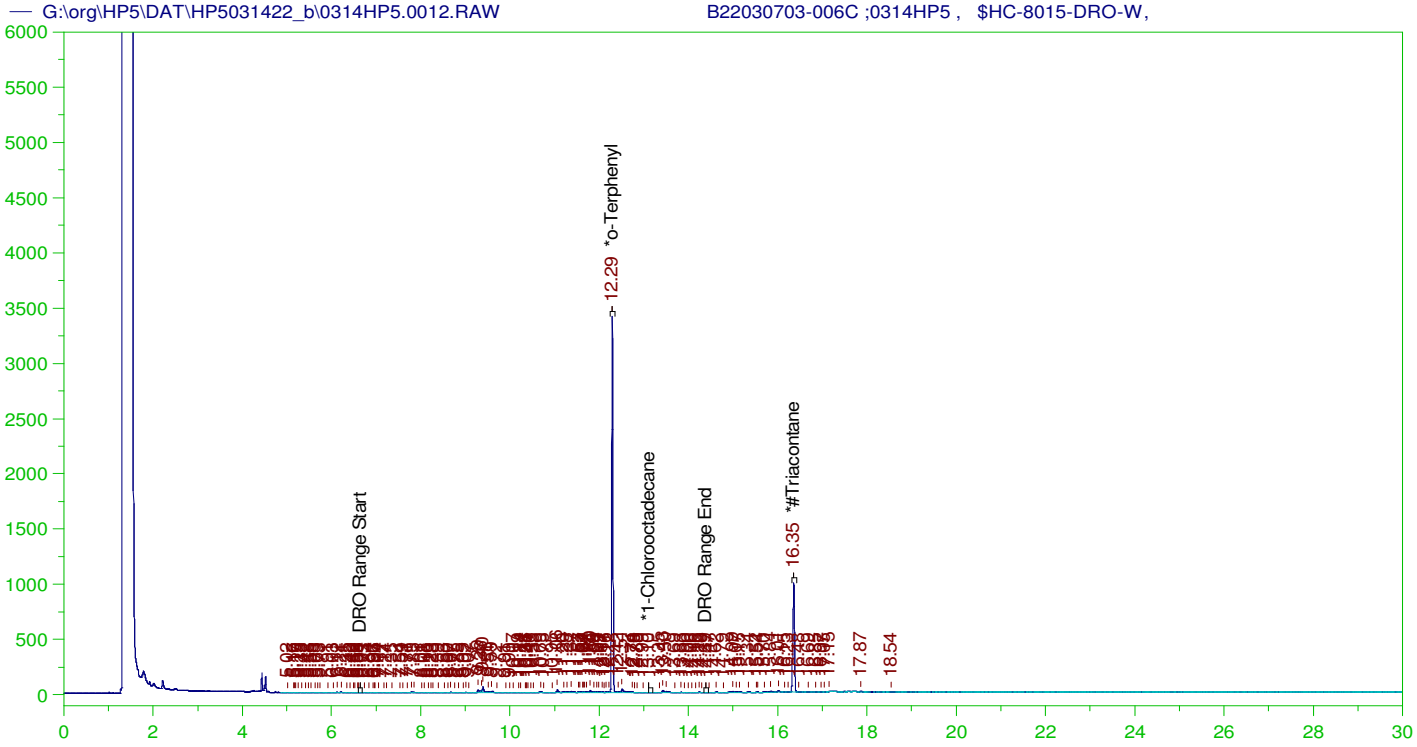
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.352	.476	.085	17.78	-

RRO Area:283389.2 RRO AMOUNT: 1.021378E-02

ERH2732 (RHMW06) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0012.RAW B22030703-006C ;0314HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-006C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0012.RAW
Date & Time Acquired: 3/14/2022 3:52:34 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

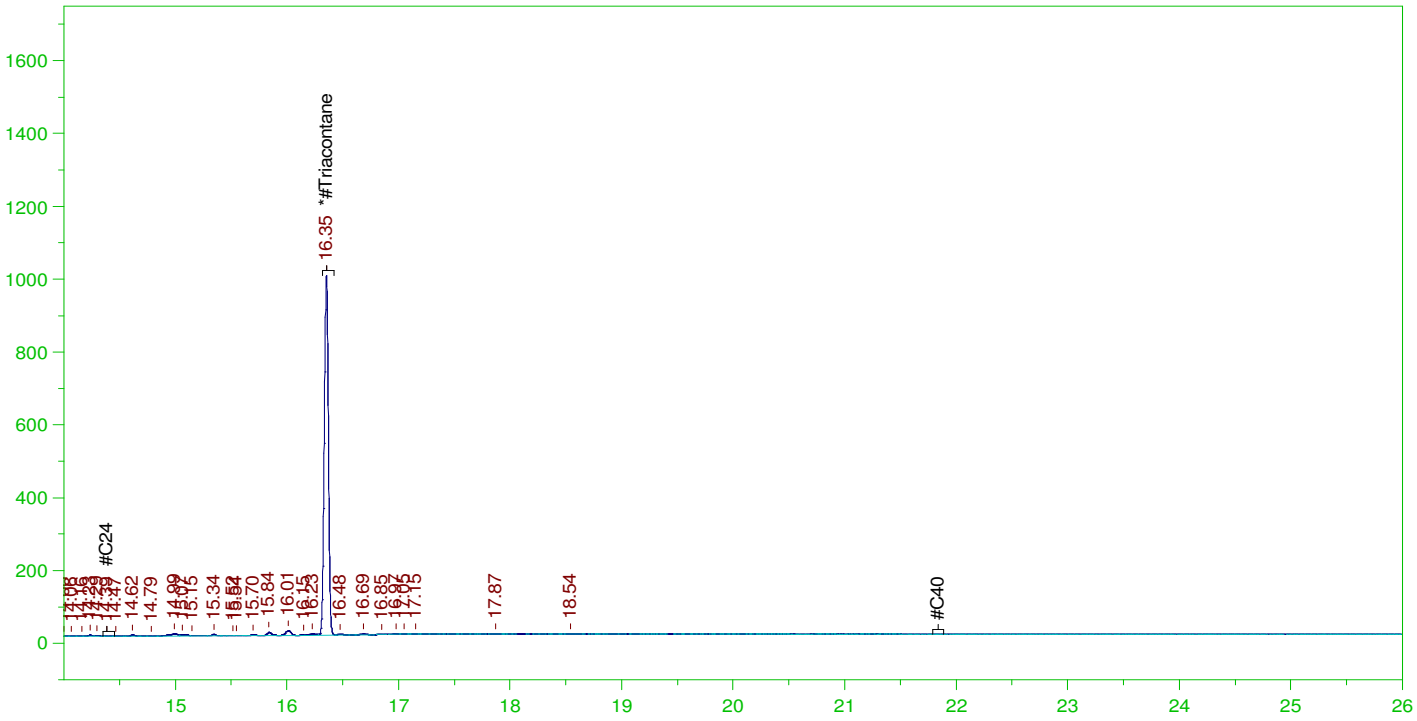
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.291	.19	.167	87.52	-
*1-Chlorooctadecane	13.103	.19	.	.07	-
*#Triacontane	16.353	.19	.081	42.61	-

DRO Area:1182486 DRO Amount: 3.446565E-02
TEH Area:1482864 TEH Amount: 4.322069E-02

ERH2732 (RHMW06) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0012.RAW B22030703-006C ;0314HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-006C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0012.RAW
Date & Time Acquired: 3/14/2022 3:52:34 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

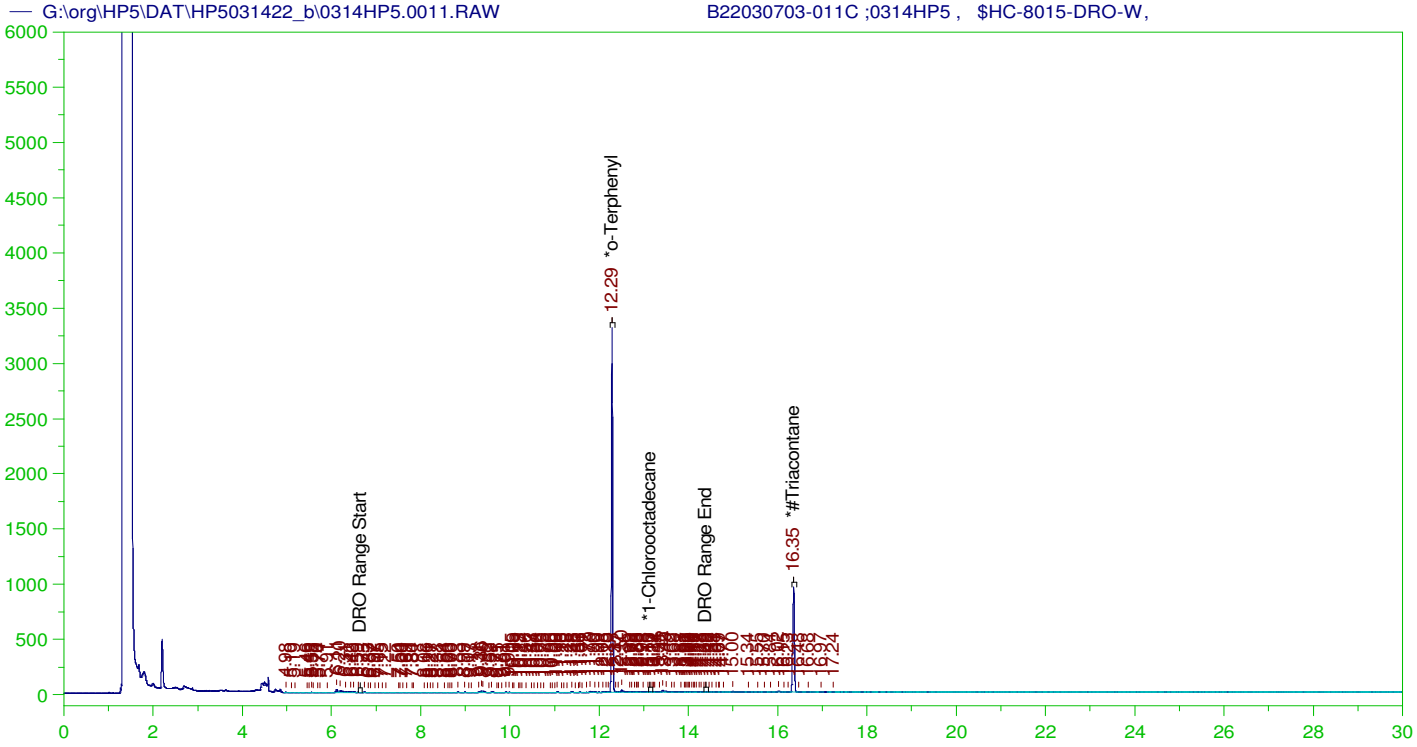
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.353	.476	.081	17.05	-

RRO Area:220784 RRO AMOUNT: 7.957391E-03

ERH2694 (OWDFMW5A) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0011.RAW B22030703-011C ;0314HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-011C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0011.RAW
Date & Time Acquired: 3/14/2022 3:10:07 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

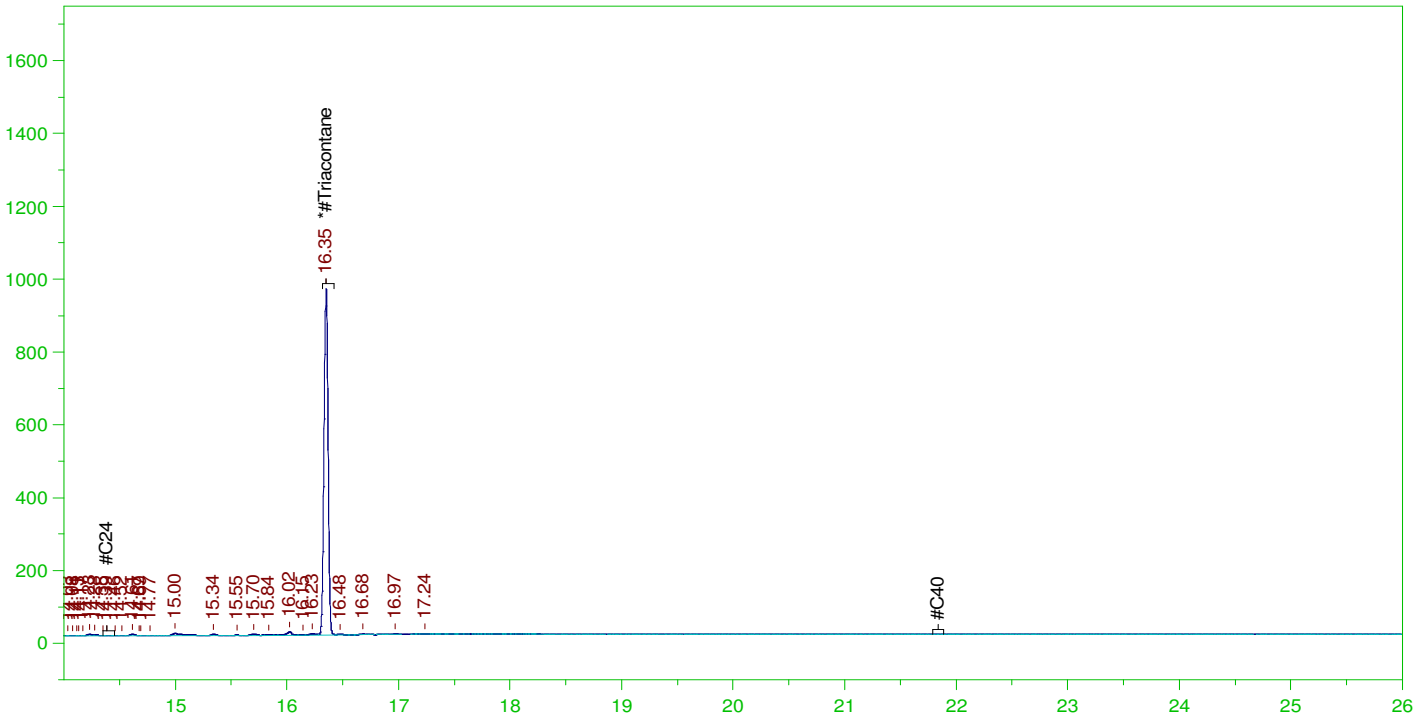
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.287	.19	.163	85.33	-
*1-Chlorooctadecane	13.132	.19	. .03		-
*#Triacontane	16.351	.19	.077	40.66	-

DRO Area:777807.2 DRO Amount: 2.267056E-02
TEH Area:1264424 TEH Amount: 3.685386E-02

ERH2694 (OWDFMW5A) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0011.RAW B22030703-011C ;0314HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-011C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0011.RAW
Date & Time Acquired: 3/14/2022 3:10:07 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

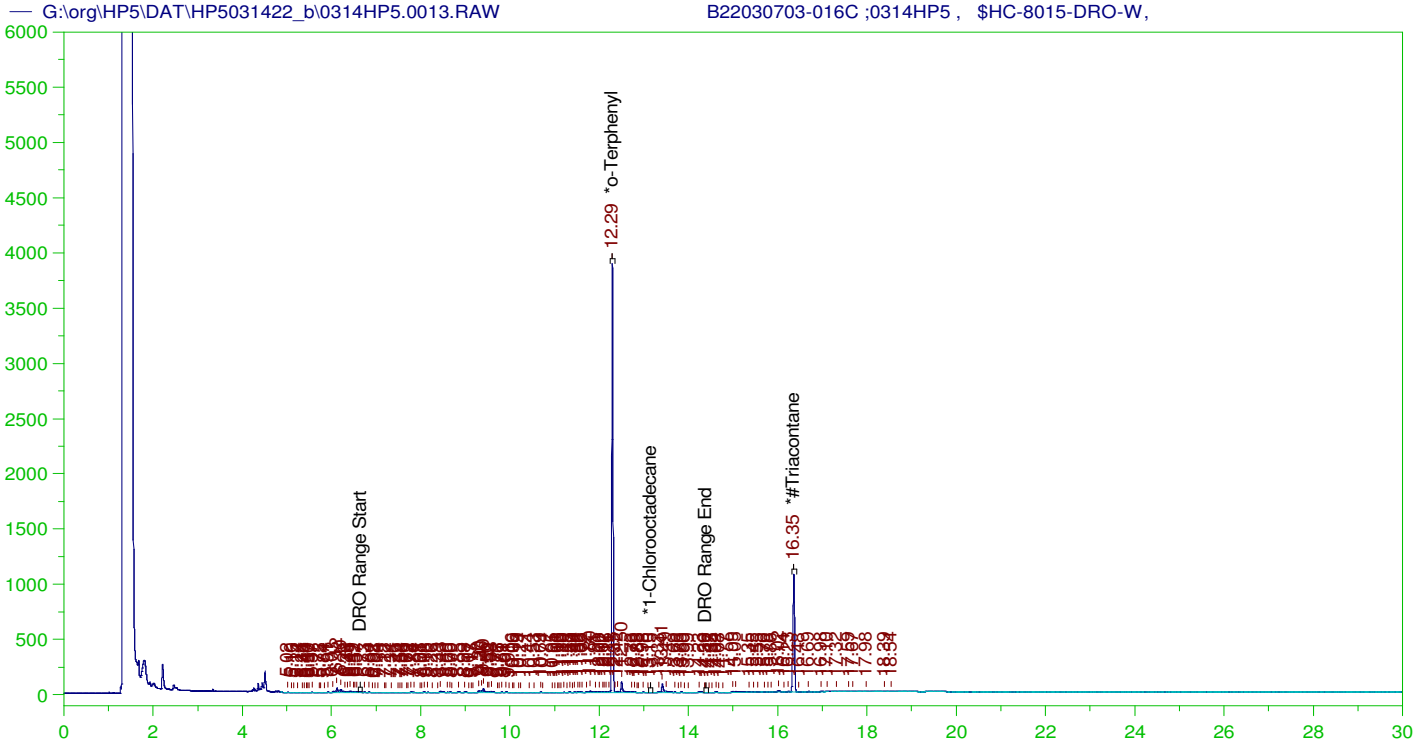
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.351	.476	.077	16.27	-

RRO Area:139697.2 RRO AMOUNT: 5.034897E-03

ERH2705 (RHMW16) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0013.RAW B22030703-016C ;0314HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-016C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0013.RAW
Date & Time Acquired: 3/14/2022 4:35:02 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

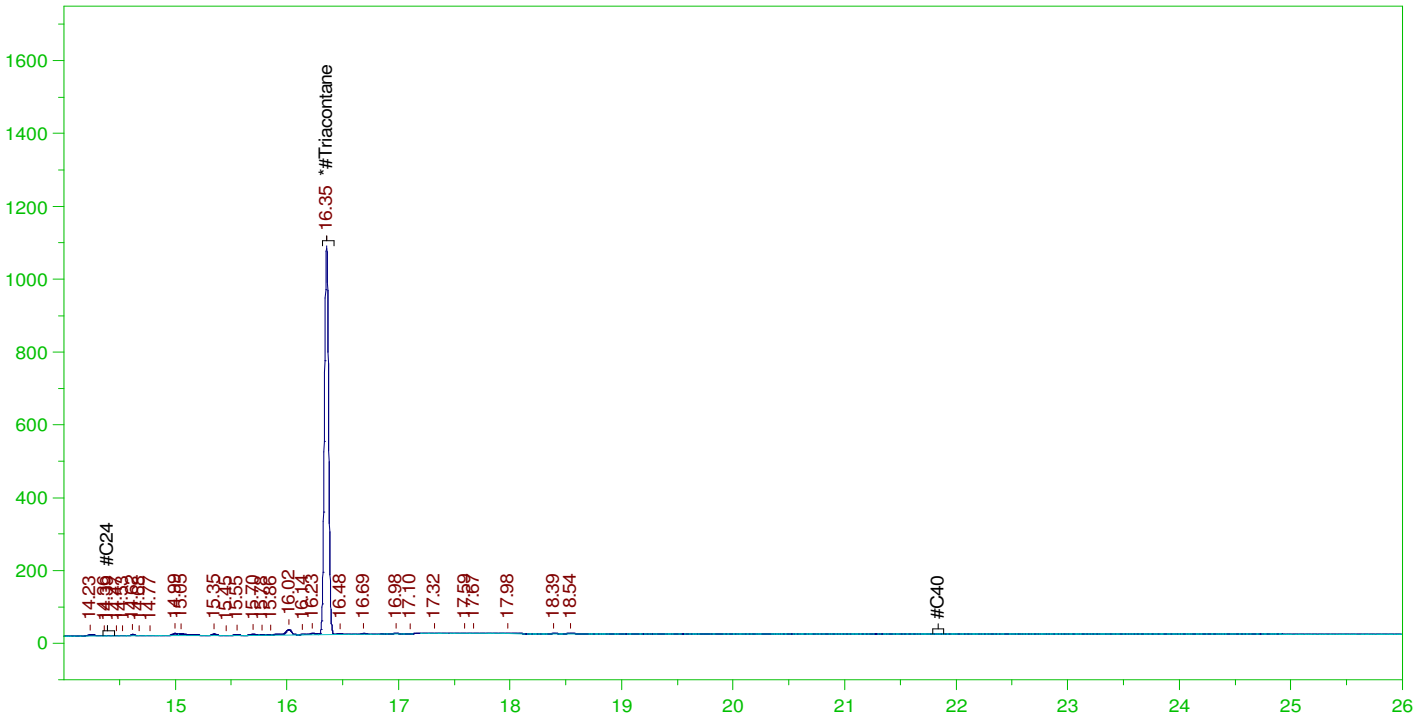
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.294	.19	.188	98.89	-
*1-Chlorooctadecane	13.145	.19	.	.03	-
*#Triacontane	16.355	.19	.09	47.11	-

DRO Area:1418842 DRO Amount: 4.135466E-02
TEH Area:2107078 TEH Amount: 0.0614145

ERH2705 (RHMW16) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0013.RAW B22030703-016C ;0314HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-016C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0013.RAW
Date & Time Acquired: 3/14/2022 4:35:02 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

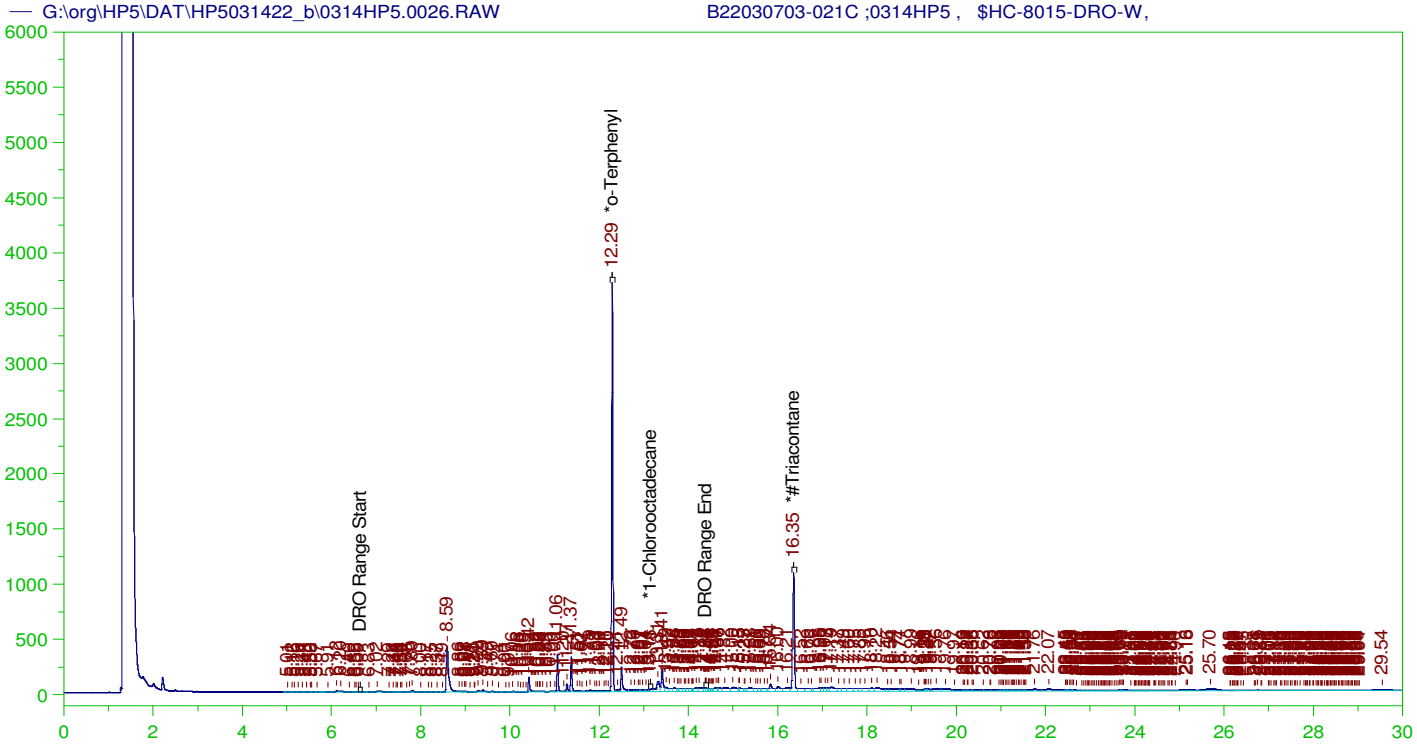
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.355	.476	.09	18.85	-

RRO Area:215248.1 RRO AMOUNT: 7.757867E-03

ERH2712 (RHMW03) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0026.RAW B22030703-021C ;0314HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-021C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0026.RAW
Date & Time Acquired: 3/15/2022 1:51:04 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

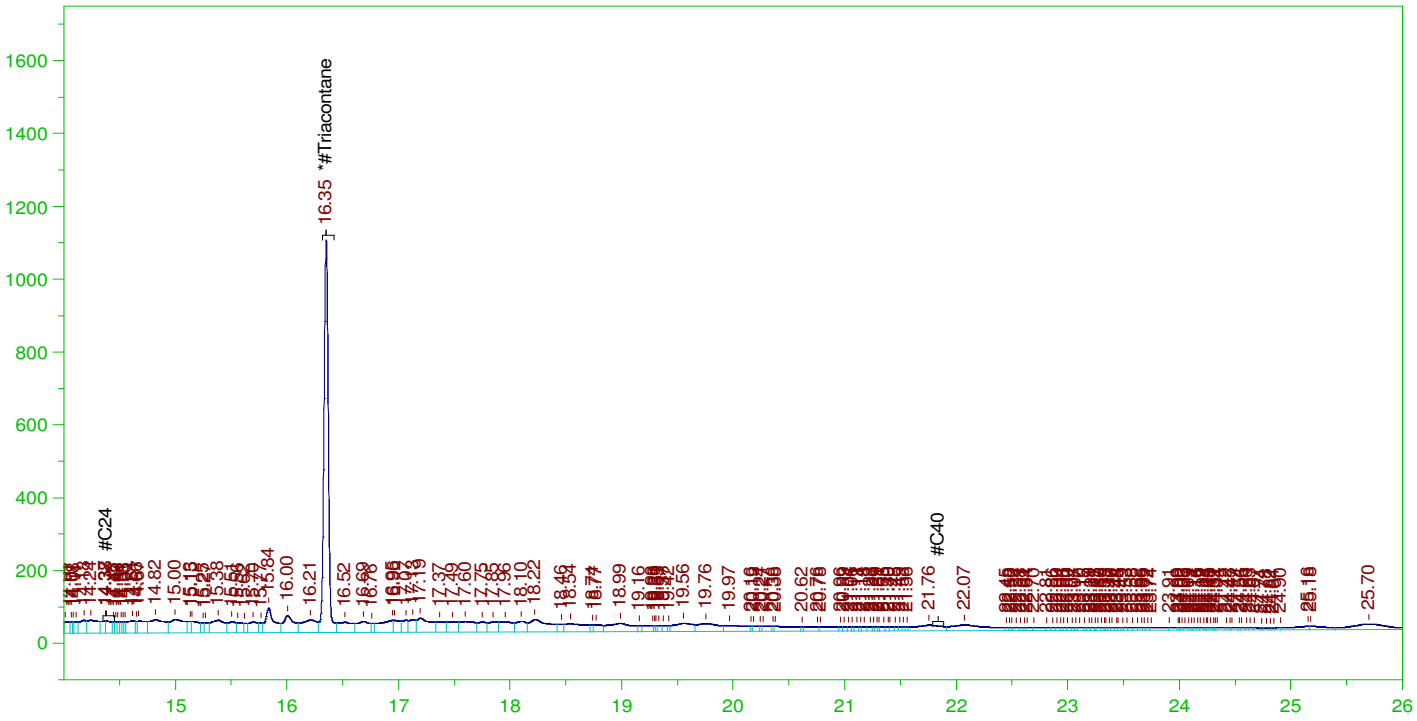
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.291	.19	.182	95.65	-
*1-Chlorooctadecane	13.158	.19	.003	1.82	-
*#Triacontane	16.351	.19	.094	49.56	-

DRO Area:8536870 DRO Amount: 0.2488221
TEH Area:2.135494E+07 TEH Amount: 0.6224273

ERH2712 (RHMW03) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0026.RAW B22030703-021C ;0314HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-021C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0026.RAW
Date & Time Acquired: 3/15/2022 1:51:04 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

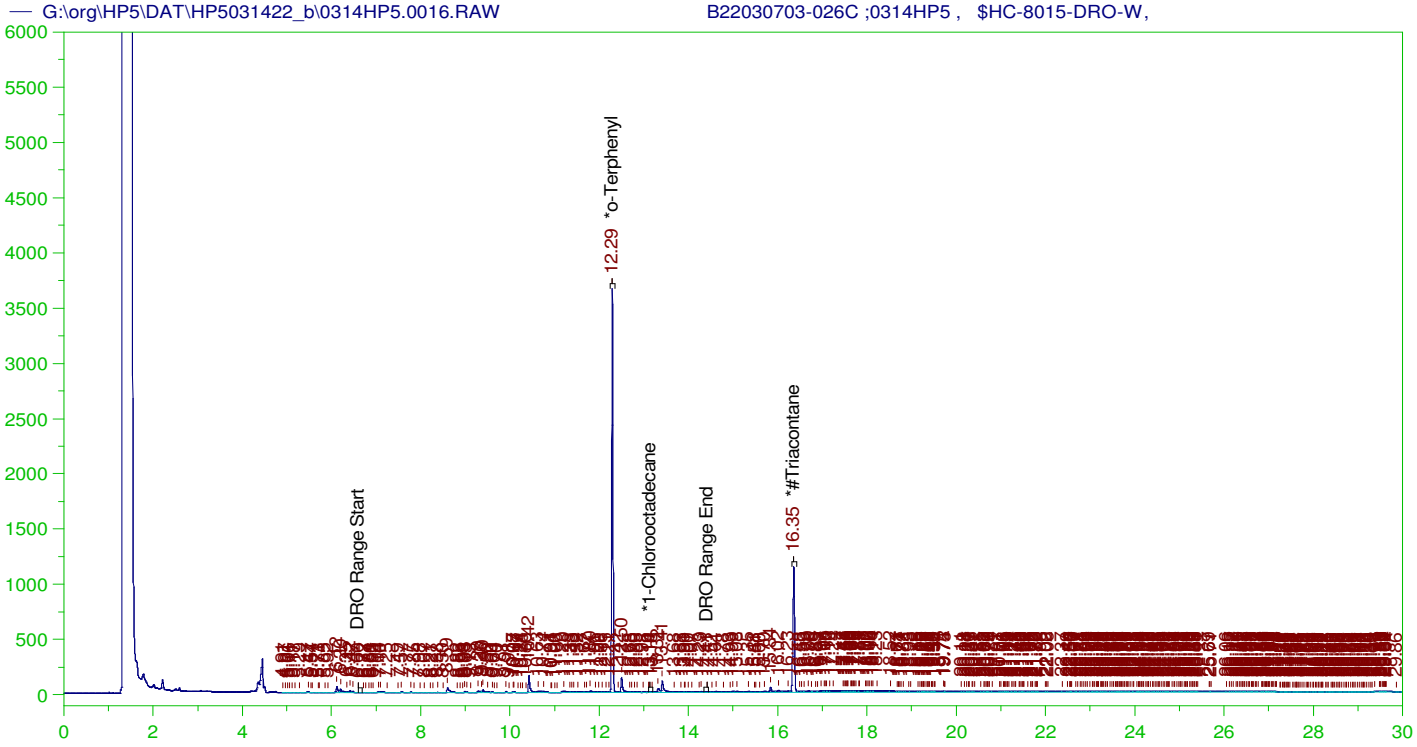
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.351	.476	.094	19.83	-

RRO Area:1.015064E+07 RRO AMOUNT: 0.3658444

ERH2723 (RHMW05) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0016.RAW B22030703-026C ;0314HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-026C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0016.RAW
Date & Time Acquired: 3/14/2022 6:43:04 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

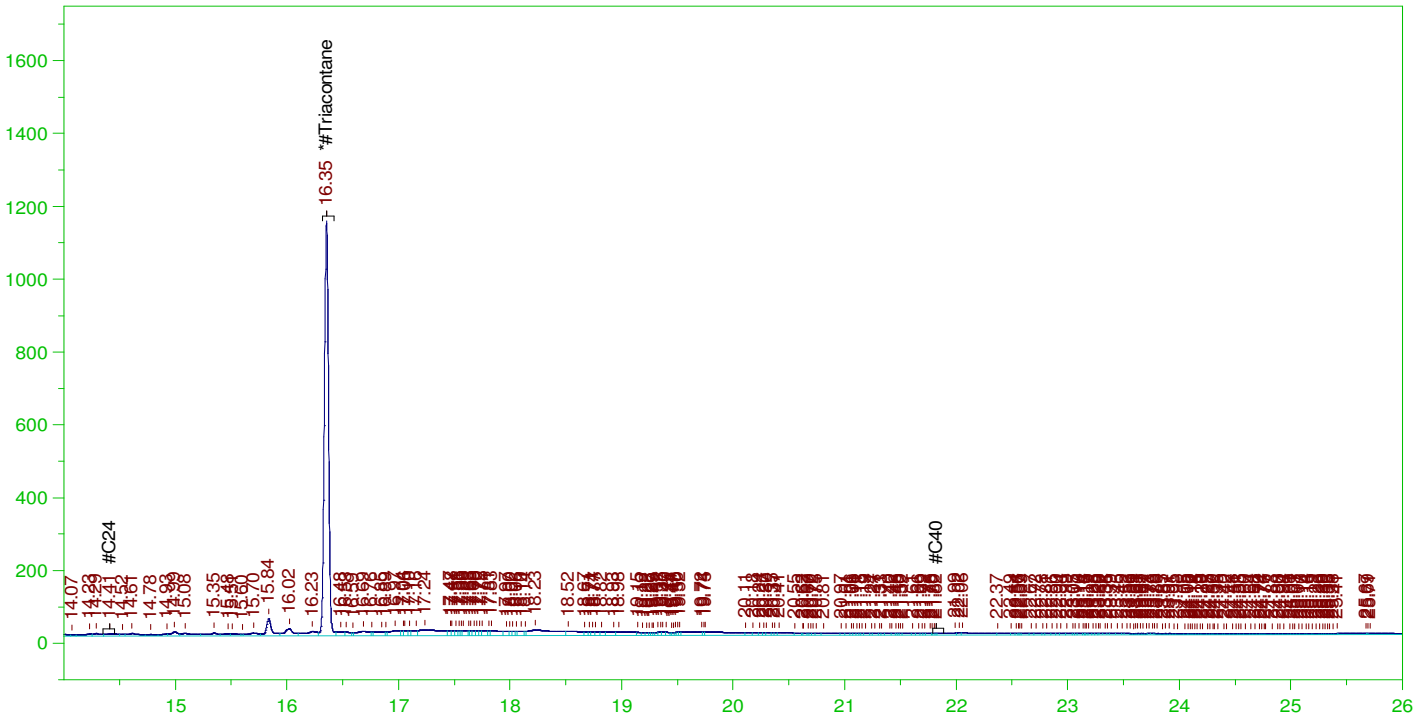
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.292	.19	.179	93.75	-
*1-Chlorooctadecane	13.14	.19	.	.05	-
*#Triacontane	16.354	.19	.095	50.11	-

DRO Area:2714249 DRO Amount: 7.911156E-02
TEH Area:7960534 TEH Amount: 0.2320238

ERH2723 (RHMW05) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0016.RAW B22030703-026C ;0314HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-026C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0016.RAW
Date & Time Acquired: 3/14/2022 6:43:04 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

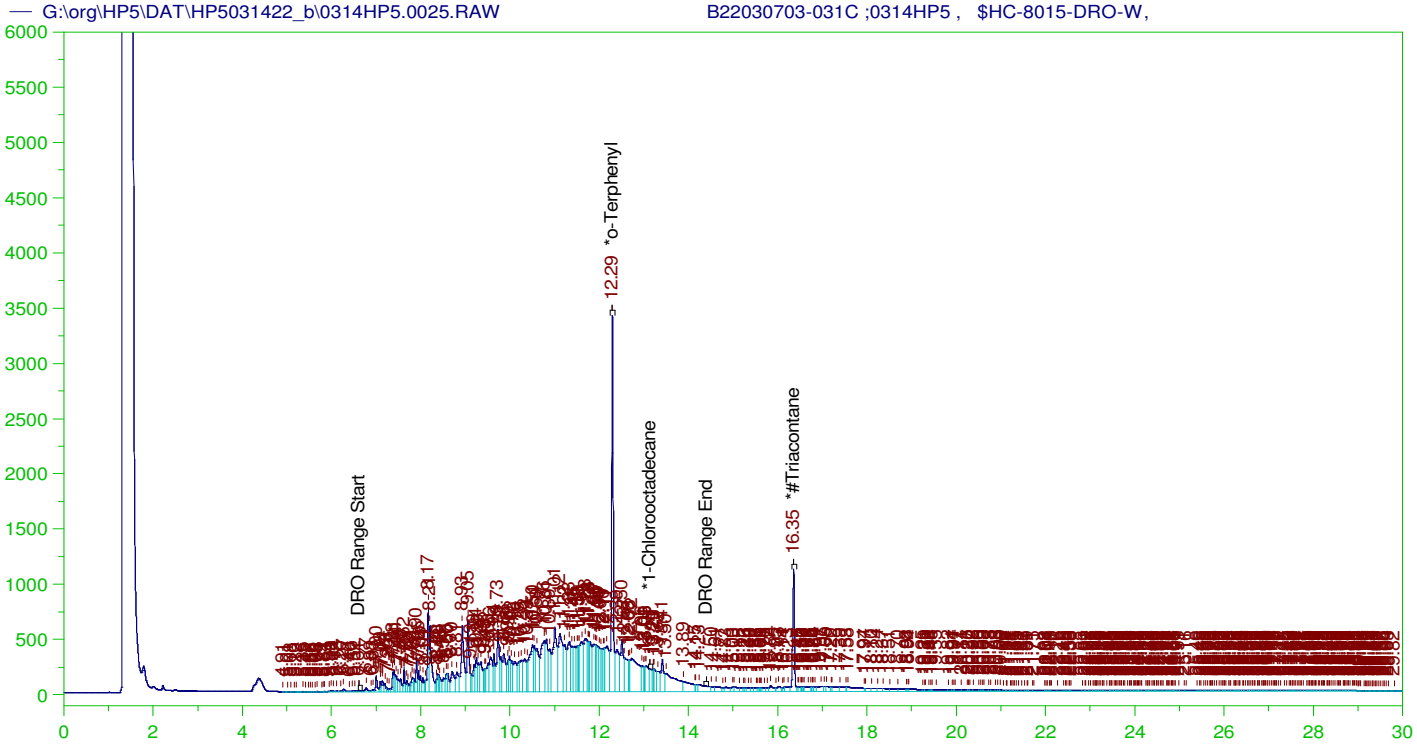
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.354	.476	.095	20.05	-

RRO Area:3764200 RRO AMOUNT: 0.1356675

ERH2715 (RHMW02) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0025.RAW B22030703-031C ;0314HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-031C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0025.RAW
Date & Time Acquired: 3/15/2022 1:08:19 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

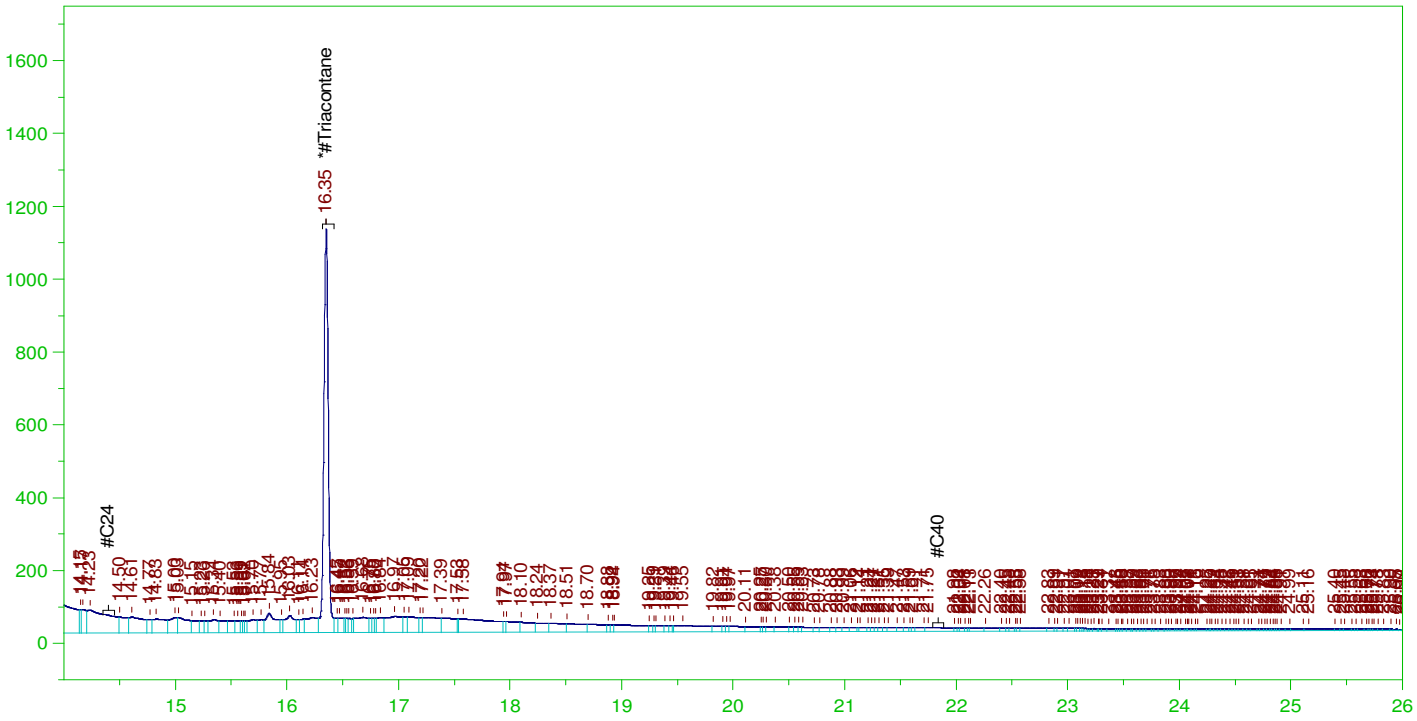
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.294	.19	.225	117.98	-
*1-Chlorooctadecane	13.133	.19	.017	9.16	-
*#Triacontane	16.351	.19	.097	51.17	-

DRO Area:1.083697E+08 DRO Amount: 3.158626
TEH Area:1.220839E+08 TEH Amount: 3.55835

ERH2715 (RHMW02) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0025.RAW B22030703-031C ;0314HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-031C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0025.RAW
Date & Time Acquired: 3/15/2022 1:08:19 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

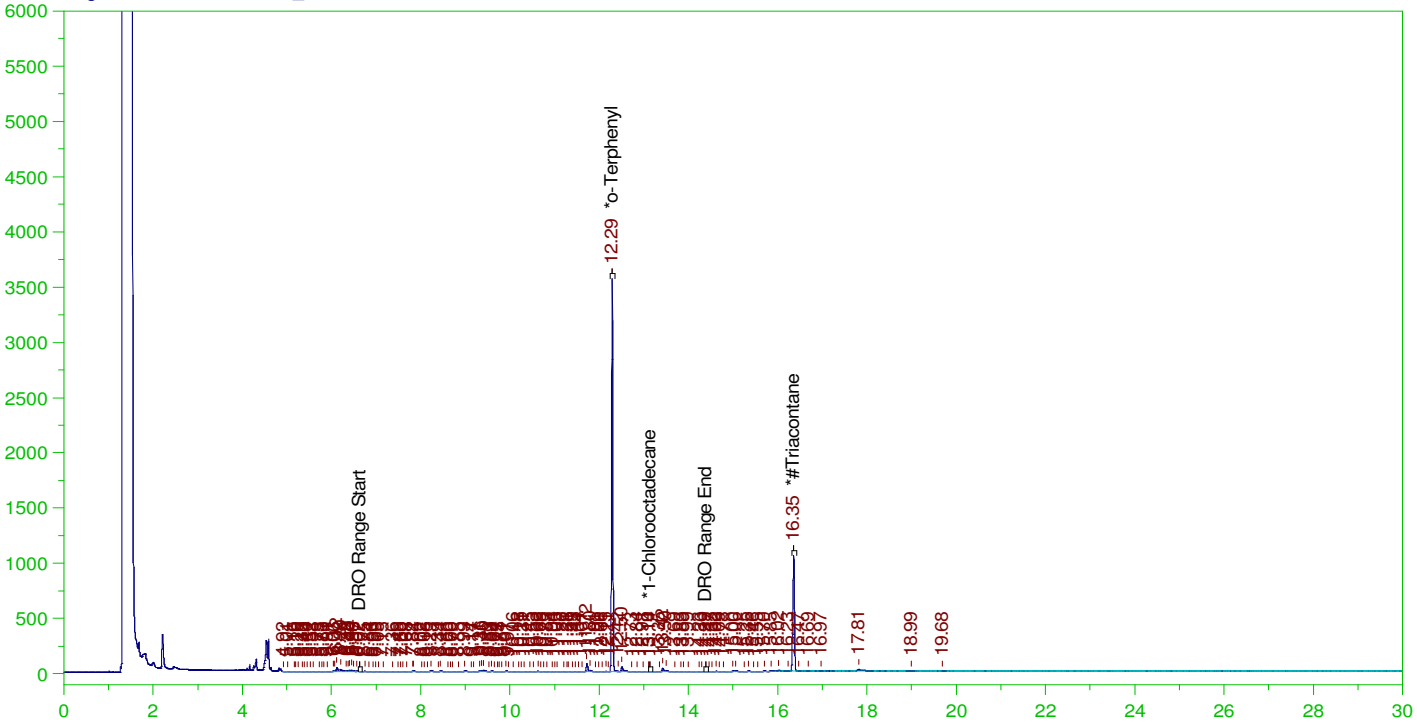
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.351	.476	.097	20.47	-

RRO Area:1.126476E+07 RRO AMOUNT: 0.4059992

ERH2702 (RHMW14-3) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0015.RAW B22030703-036C ;0314HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-036C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0015.RAW
Date & Time Acquired: 3/14/2022 6:00:24 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

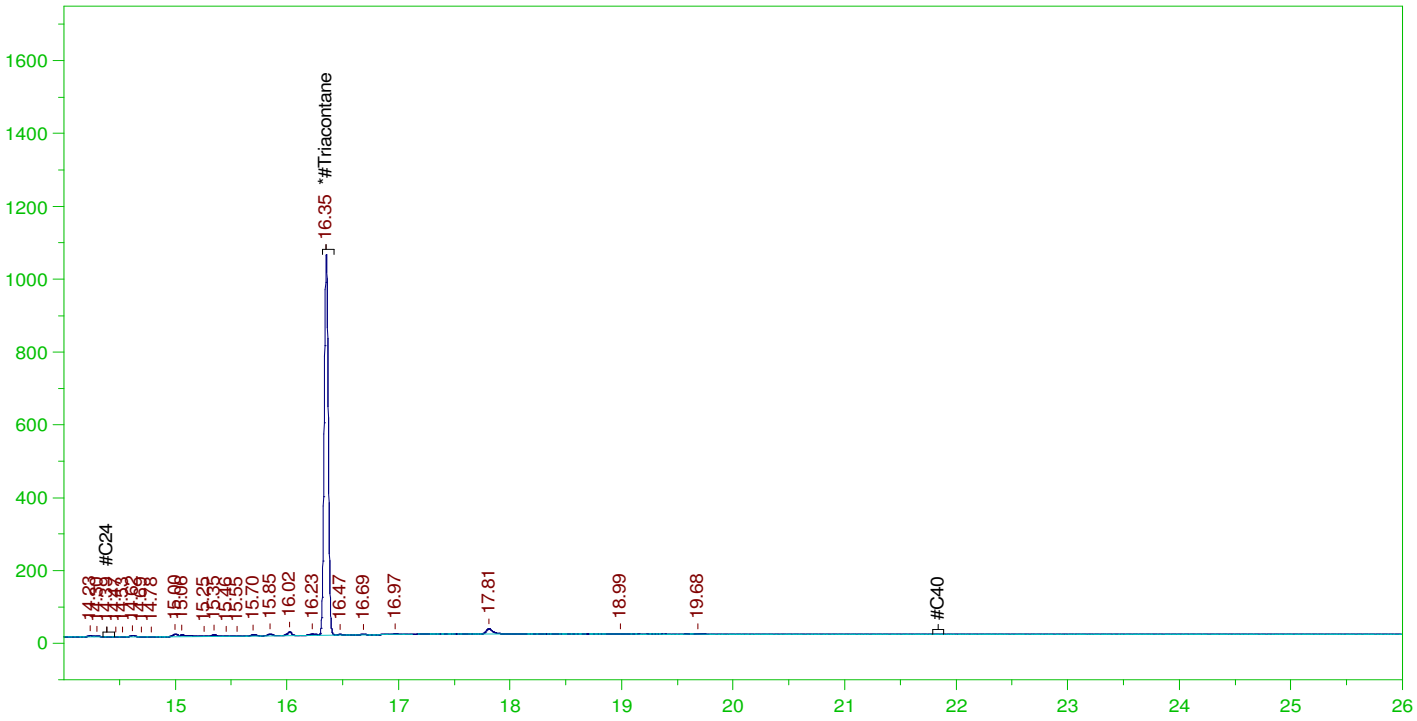
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.29	.19	.177	92.88	-
*1-Chlorooctadecane	13.136	.19	.	.01	-
*#Triacontane	16.352	.19	.085	44.71	-

DRO Area:1039206 DRO Amount: 3.028949E-02
TEH Area:1681781 TEH Amount: 4.901847E-02

ERH2702 (RHMW14-3) Batch ID: 164471

— G:\org\HP5\DAT\HP5031422_b\0314HP5.0015.RAW B22030703-036C ;0314HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-036C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0015.RAW
Date & Time Acquired: 3/14/2022 6:00:24 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

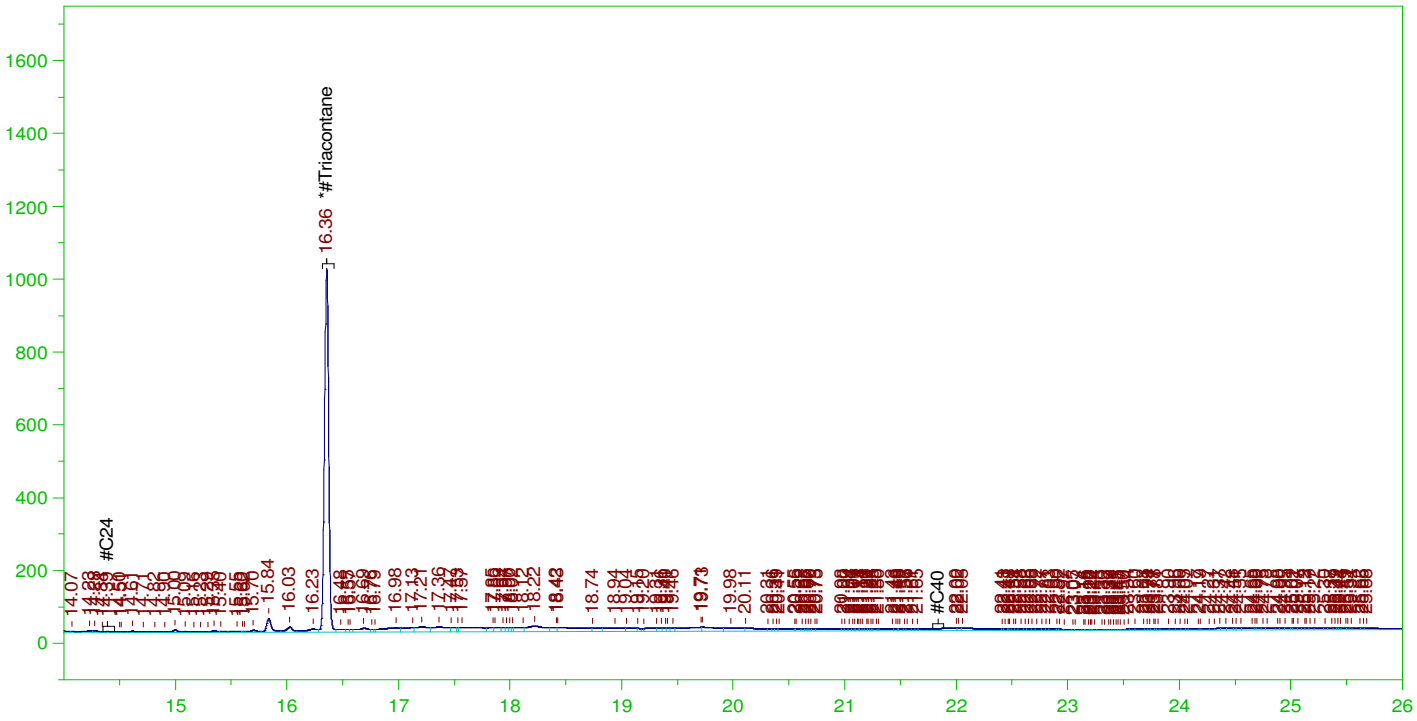
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.352	.476	.085	17.88	-

RRO Area:244169.3 RRO AMOUNT: 8.800233E-03

ERH2718 (RHMW01R) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0028.RAW B22030703-041C ;0314HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-041C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0028.RAW
Date & Time Acquired: 3/15/2022 3:16:41 AM
Method File: G:\Org\HP5\Methods\D3_OROS-031428-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

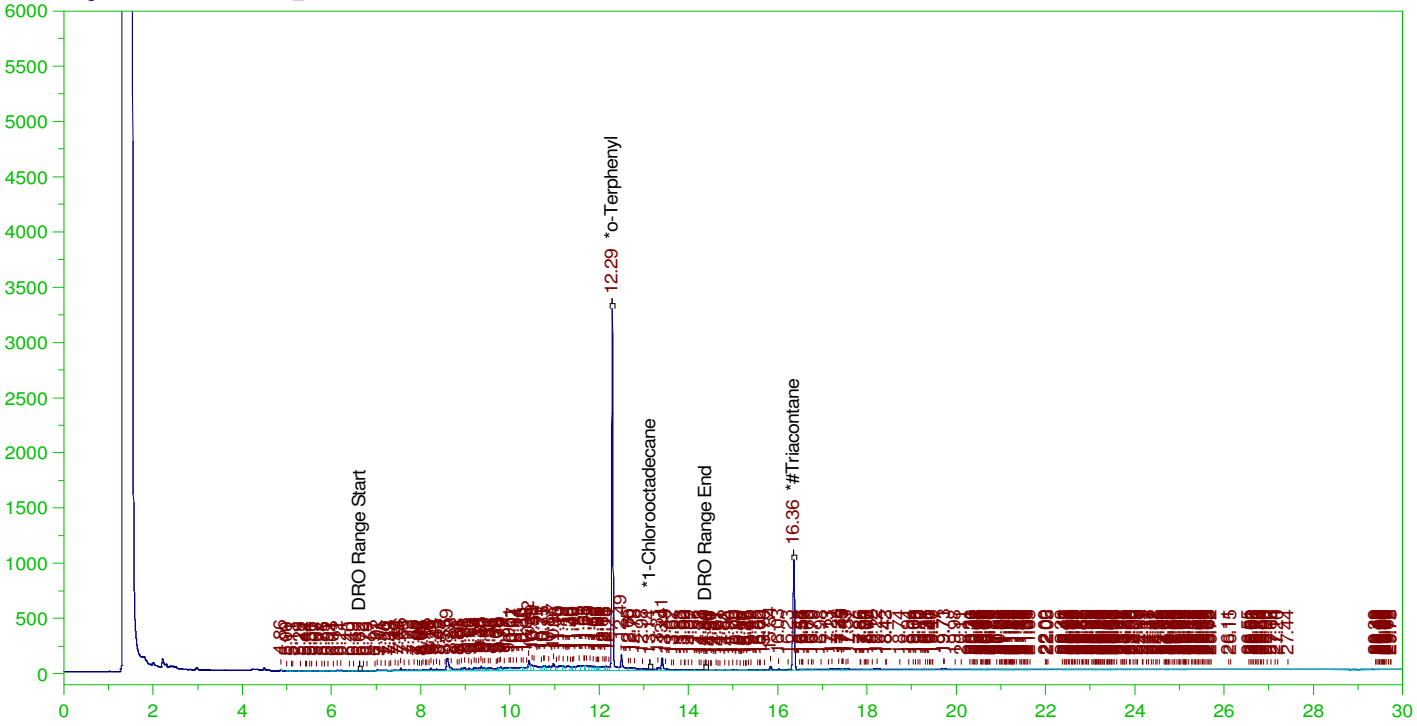
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.356	.476	.084	17.62	-

RRO Area:2911186 RRO AMOUNT: 0.1049235

ERH2718 (RHMW01R) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0028.RAW B22030703-041C ;0314HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-041C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0028.RAW
Date & Time Acquired: 3/15/2022 3:16:41 AM
Method File: G:\Org\HP5\Methods\DR_8015-031428-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

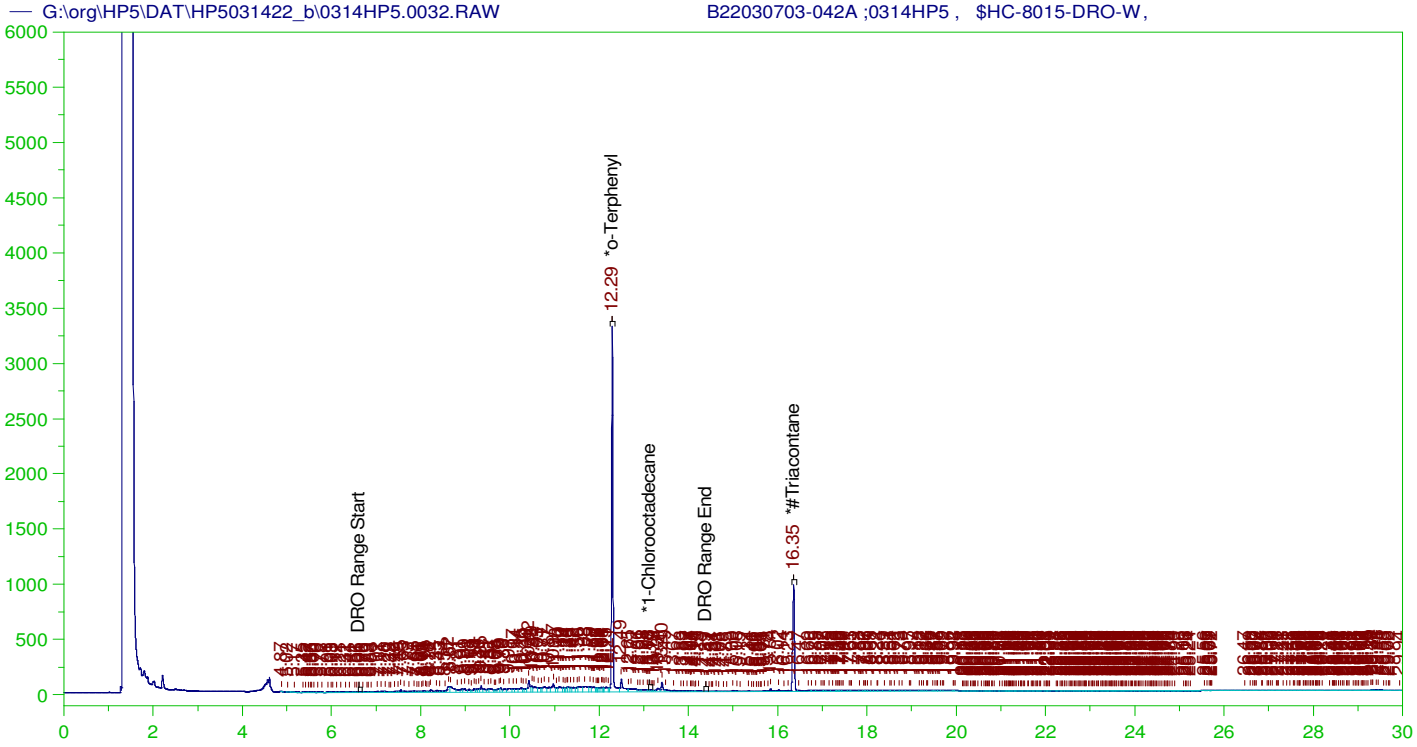
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.291	.19	.167	87.69	-
*1-Chlorooctadecane	13.137	.19	.003	1.58	-
*#Triacontane	16.356	.19	.084	44.04	-

DRO Area:9944012 DRO Amount: 0.2898358
TEH Area:1.387633E+07 TEH Amount: 0.4044501

ERH2719 (RHMW01R) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0032.RAW B22030703-042A ;0314HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-042A ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0032.RAW
Date & Time Acquired: 3/15/2022 6:07:56 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

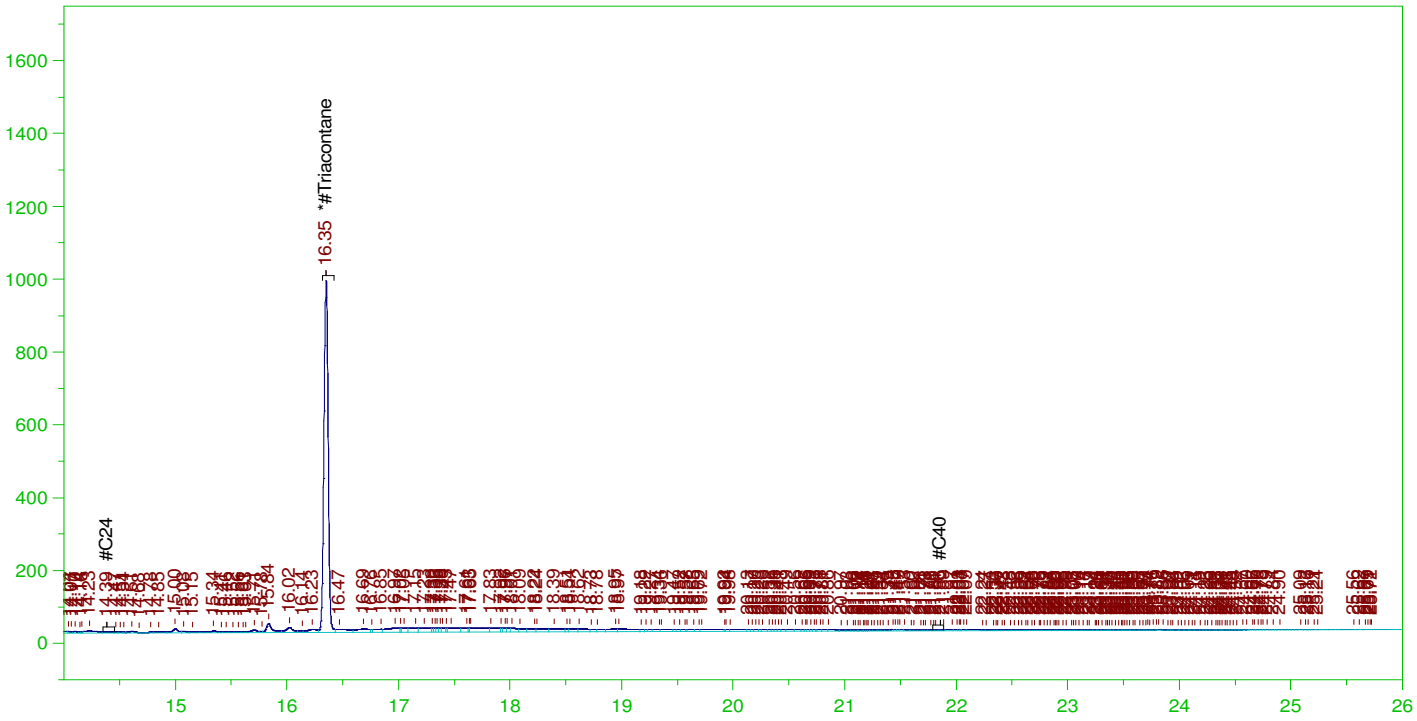
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.291	.19	.172	90.52	-
*1-Chlorooctadecane	13.127	.19	.001	.65	-
*#Triacontane	16.351	.19	.081	42.74	-

DRO Area:1.075998E+07 DRO Amount: 0.3136185
TEH Area:1.41016E+07 TEH Amount: 0.411016

ERH2719 (RHMW01R) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0032.RAW B22030703-042A ;0314HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-042A ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0032.RAW
Date & Time Acquired: 3/15/2022 6:07:56 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

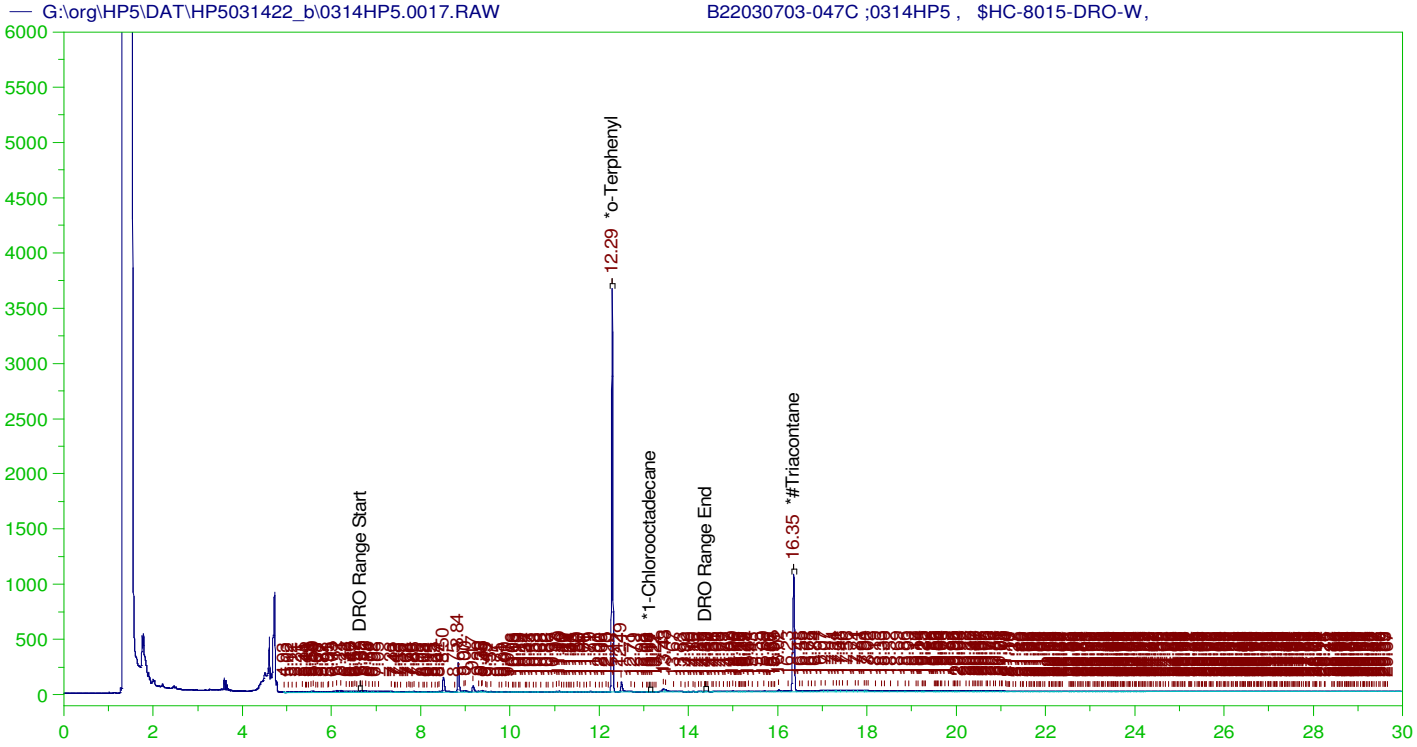
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.351	.476	.081	17.09	-

RRO Area:2725958 RRO AMOUNT: 9.824765E-02

ERH2708 (RHMW12A) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0017.RAW B22030703-047C ;0314HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-047C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0017.RAW
Date & Time Acquired: 3/14/2022 7:25:37 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

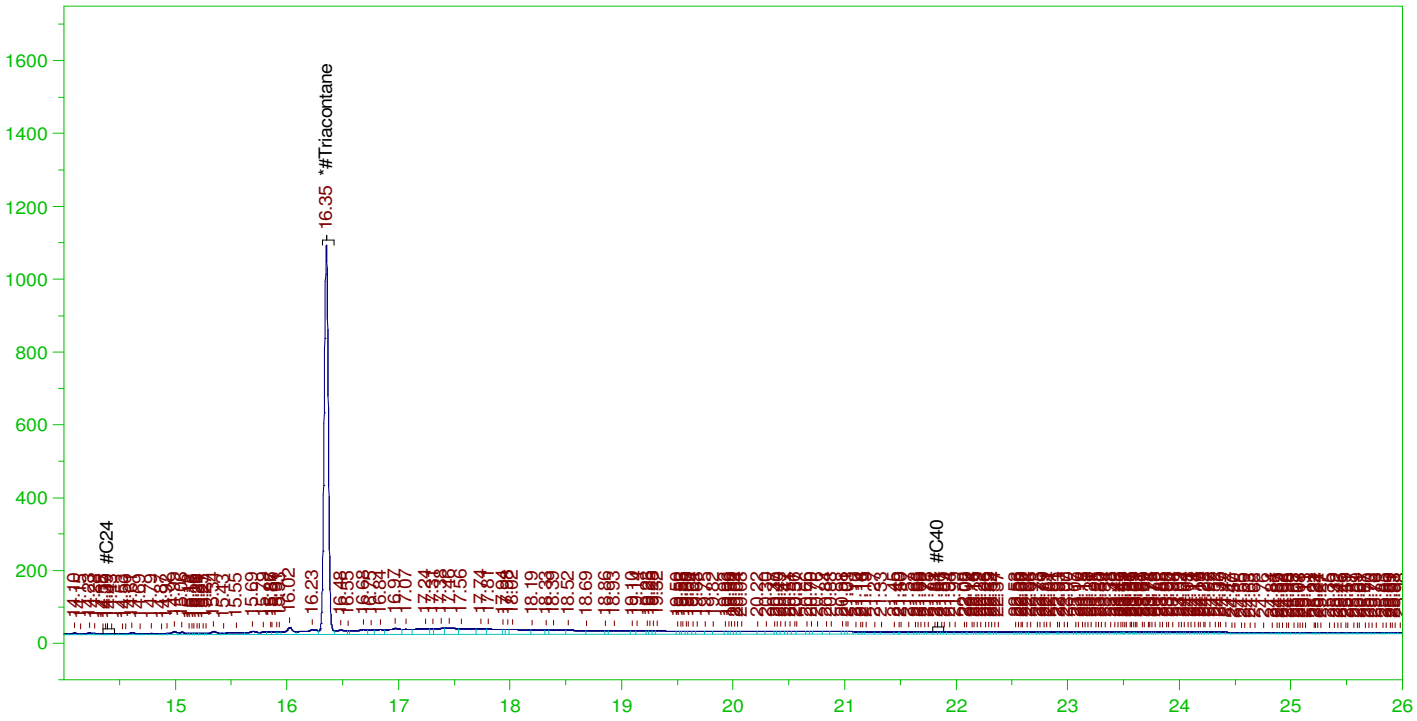
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.29	.19	.179	93.8	-
*1-Chlorooctadecane	13.14	.19	.	.09	-
*#Triacontane	16.353	.19	.09	47.03	-

DRO Area:3339161 DRO Amount: 9.732572E-02
TEH Area:9216565 TEH Amount: 0.268633

ERH2708 (RHMW12A) Batch ID: 164471

G:\org\HP5\DAT\HP5031422_b\0314HP5.0017.RAW B22030703-047C ;0314HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-047C ;0314HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031422_b\0314HP5.0017.RAW
Date & Time Acquired: 3/14/2022 7:25:37 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

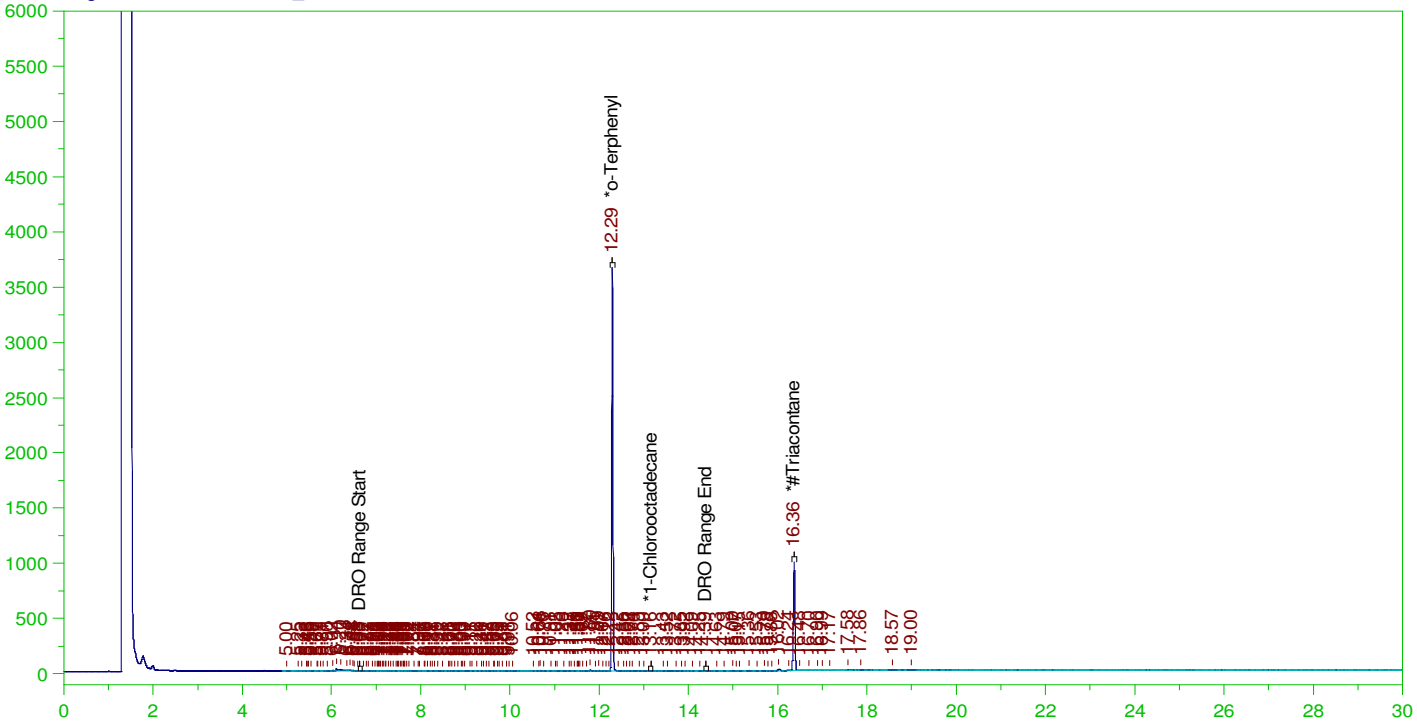
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.353	.476	.09	18.81	-

RRO Area:4006428 RRO AMOUNT: 0.1443977

ERH2705 (RHMW16) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0011.RAW
B22030703-016C ;0315HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-016C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0011.RAW
Date & Time Acquired: 3/15/2022 10:20:10 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

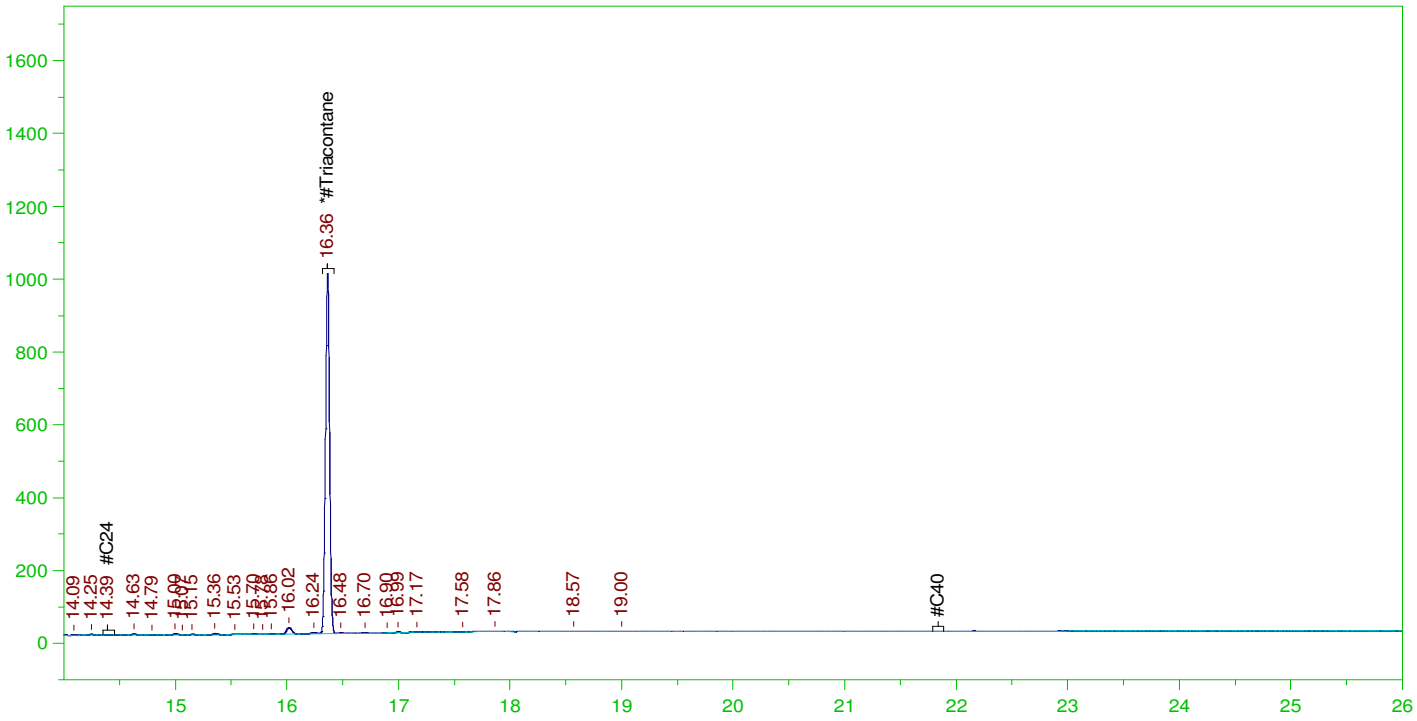
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.292	.19	.179	93.86	-
*1-Chlorooctadecane	13.159	.19	.	.03	-
*#Triacontane	16.364	.19	.082	43.14	-

DRO Area:483320.2 DRO Amount: 1.408722E-02
TEH Area:987737.8 TEH Amount: 2.878936E-02

ERH2705 (RHMW16) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0011.RAW B22030703-016C ;0315HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-016C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0011.RAW
Date & Time Acquired: 3/15/2022 10:20:10 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

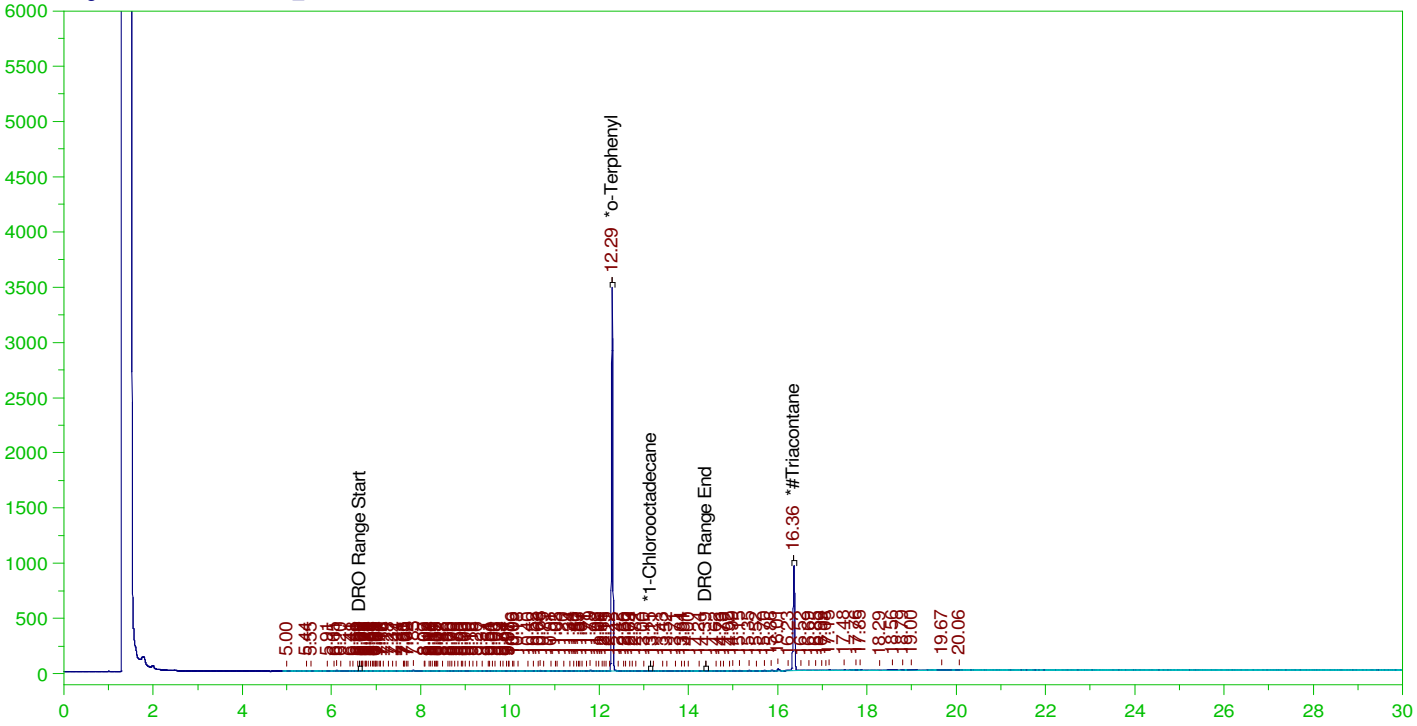
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.364	.476	.082	17.26	-

RRO Area:165382 RRO AMOUNT: 5.96062E-03

ERH2712 (RHMW03) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0015.RAW B22030703-021C ;0315HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-021C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0015.RAW
Date & Time Acquired: 3/16/2022 1:12:34 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

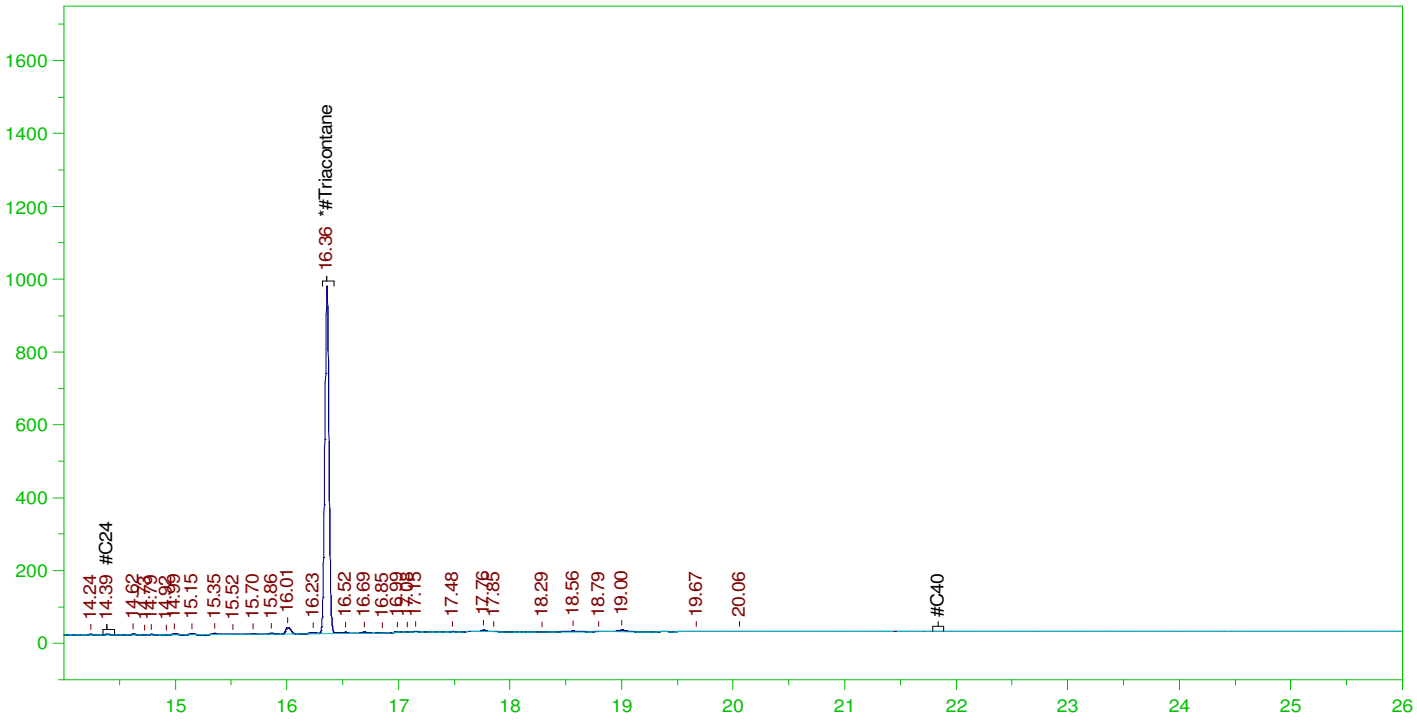
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.289	.19	.175	91.7	-
*1-Chlorooctadecane	13.15	.19	.	.04	-
*#Triacontane	16.358	.19	.078	41.21	-

DRO Area:407022.8 DRO Amount: 0.0118634
TEH Area:762385.7 TEH Amount: 2.222108E-02

ERH2712 (RHMW03) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0015.RAW B22030703-021C ;0315HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-021C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0015.RAW
Date & Time Acquired: 3/16/2022 1:12:34 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

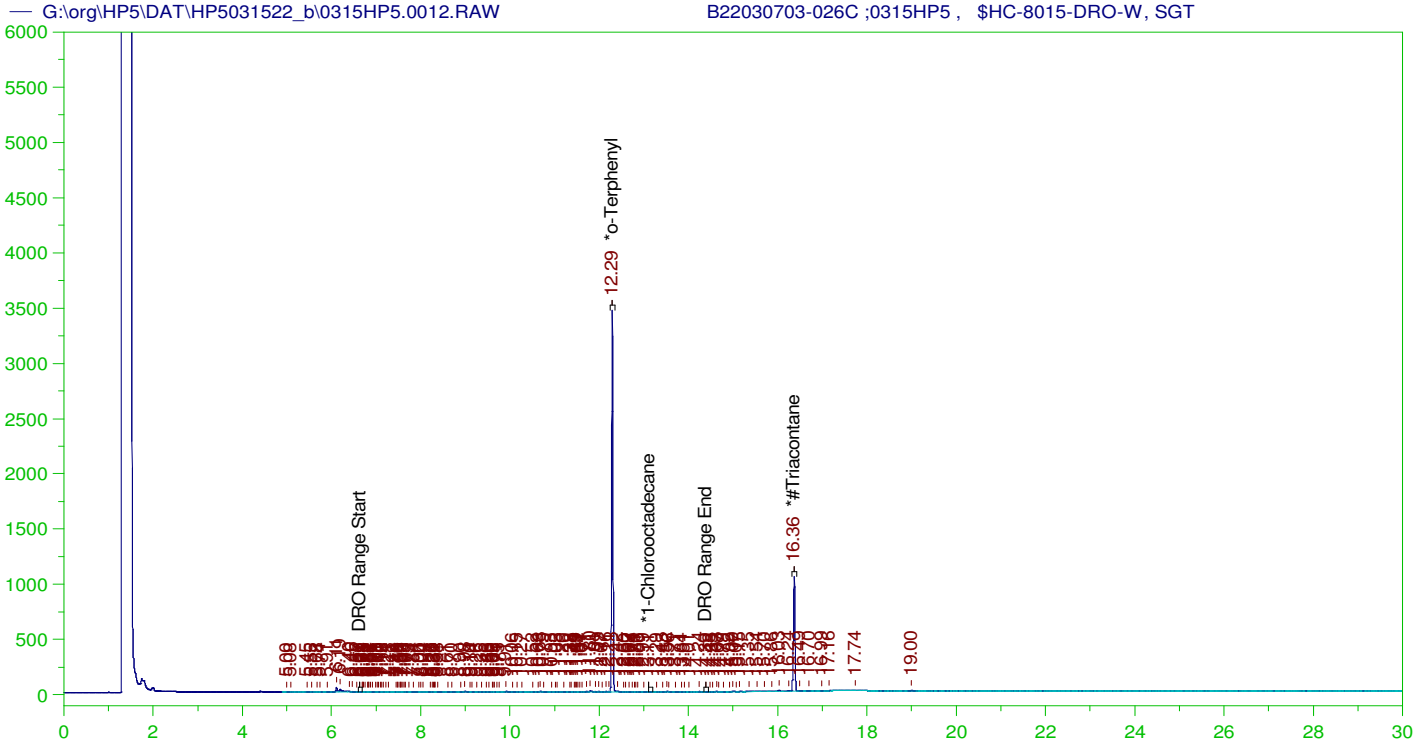
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.358	.476	.079	16.49	-

RRO Area:255401.2 RRO AMOUNT: 9.205046E-03

ERH2723 (RHMW05) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0012.RAW B22030703-026C ;0315HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-026C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0012.RAW
Date & Time Acquired: 3/15/2022 11:03:17 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

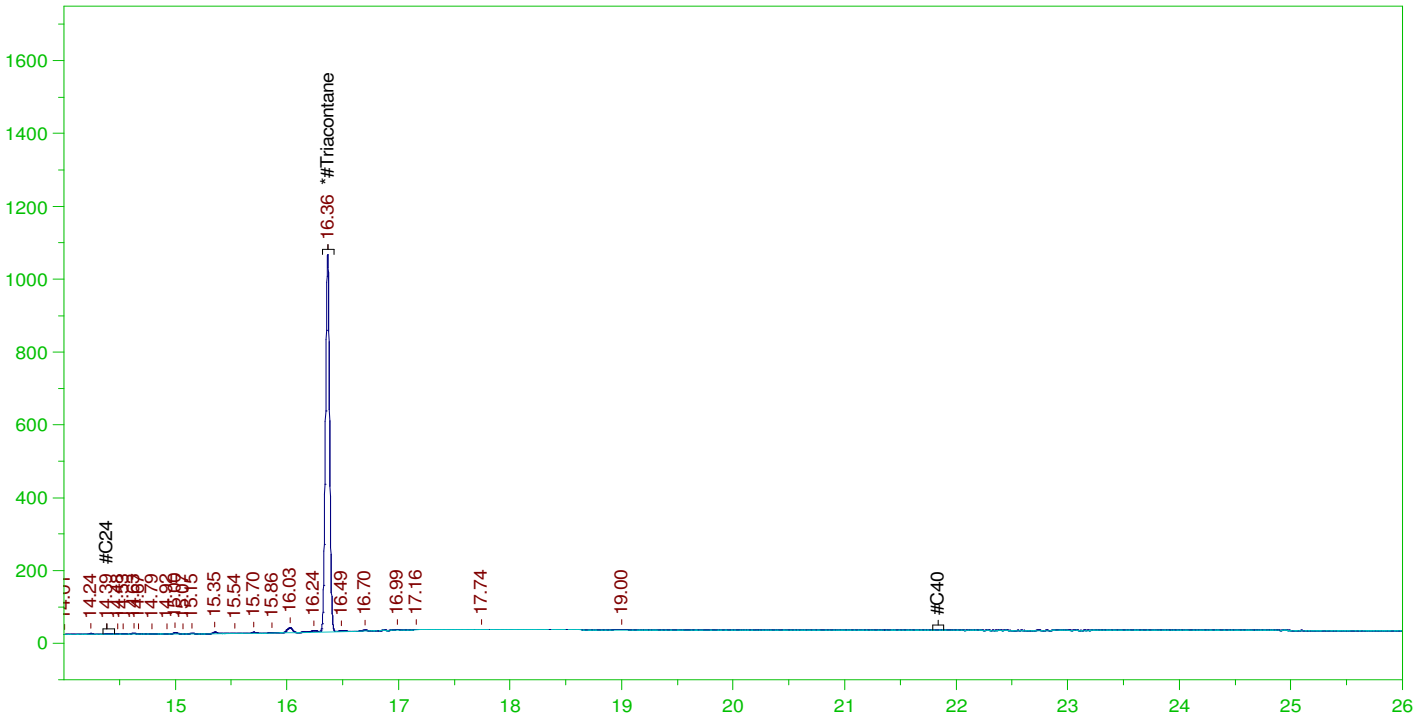
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.291	.19	.173	90.77	-
*1-Chlorooctadecane	13.112	.19	. .1		-
*#Triacontane	16.365	.19	.087	45.41	-

DRO Area:444804.8 DRO Amount: 1.296462E-02
TEH Area:943759.8 TEH Amount: 2.750754E-02

ERH2723 (RHMW05) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0012.RAW B22030703-026C ;0315HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-026C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0012.RAW
Date & Time Acquired: 3/15/2022 11:03:17 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

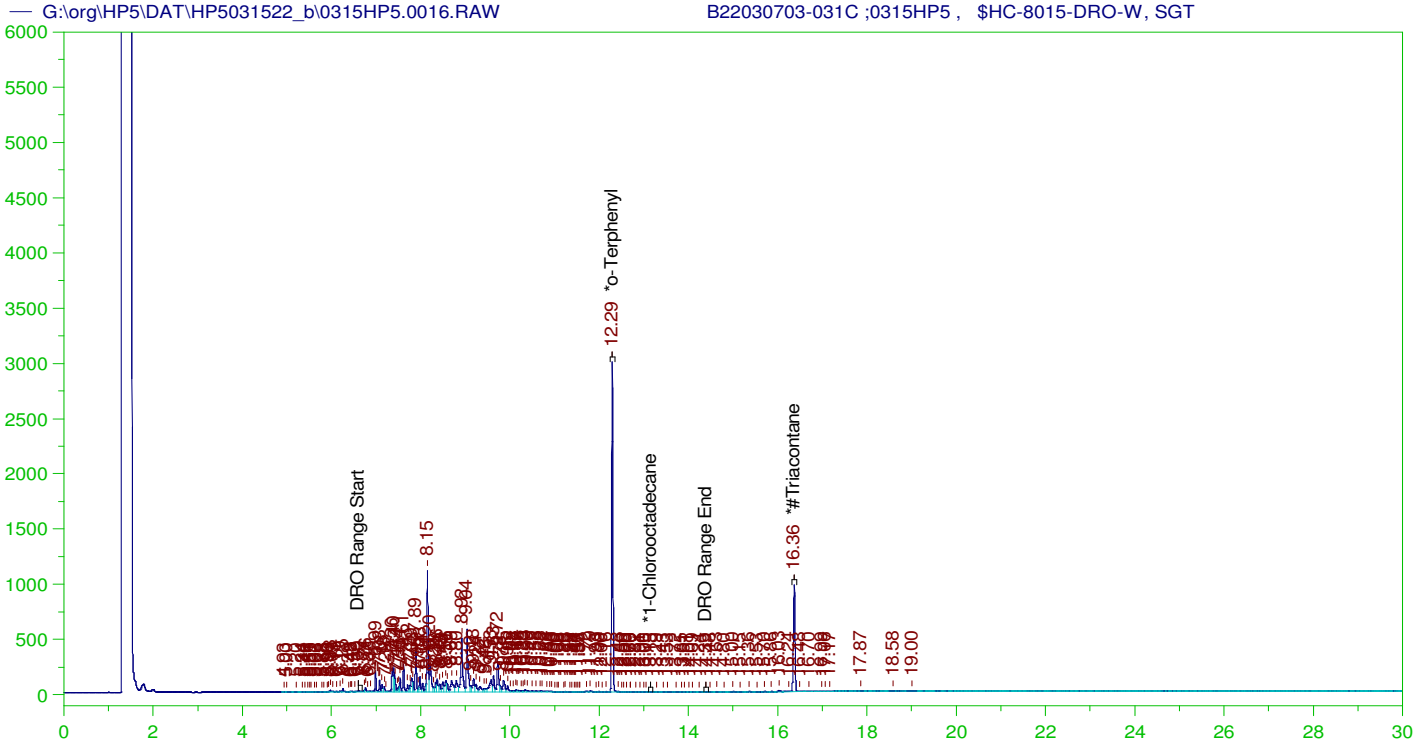
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.365	.476	.087	18.17	-

RRO Area:154807.6 RRO AMOUNT: 5.579499E-03

ERH2715 (RHMW02) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0016.RAW
B22030703-031C ;0315HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-031C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0016.RAW
Date & Time Acquired: 3/16/2022 1:55:43 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

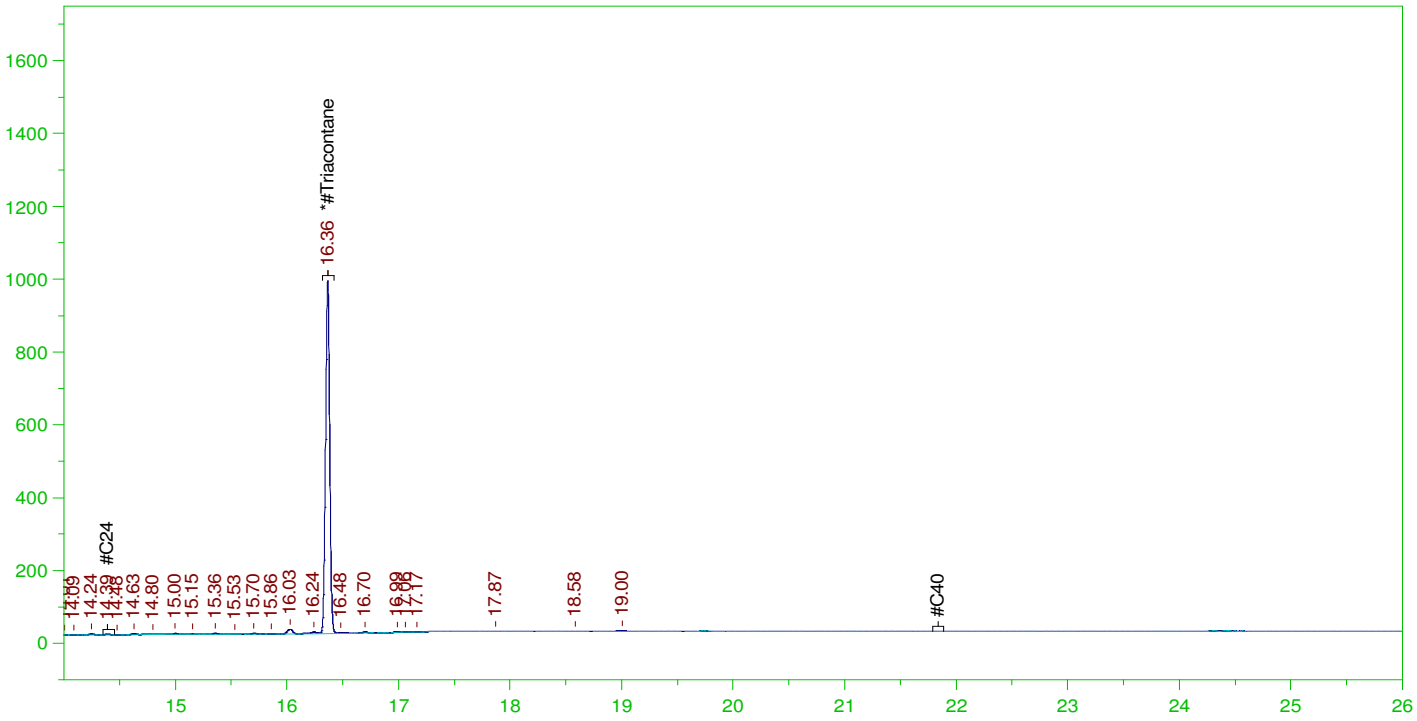
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.291	.19	.15	78.85	-
*1-Chlorooctadecane	13.154	.19	.	.04	-
*#Triacontane	16.365	.19	.081	42.5	-

DRO Area:1.688612E+07 DRO Amount: 0.4921758
TEH Area:1.734175E+07 TEH Amount: 0.5054559

ERH2715 (RHMW02) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0016.RAW B22030703-031C ;0315HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-031C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0016.RAW
Date & Time Acquired: 3/16/2022 1:55:43 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

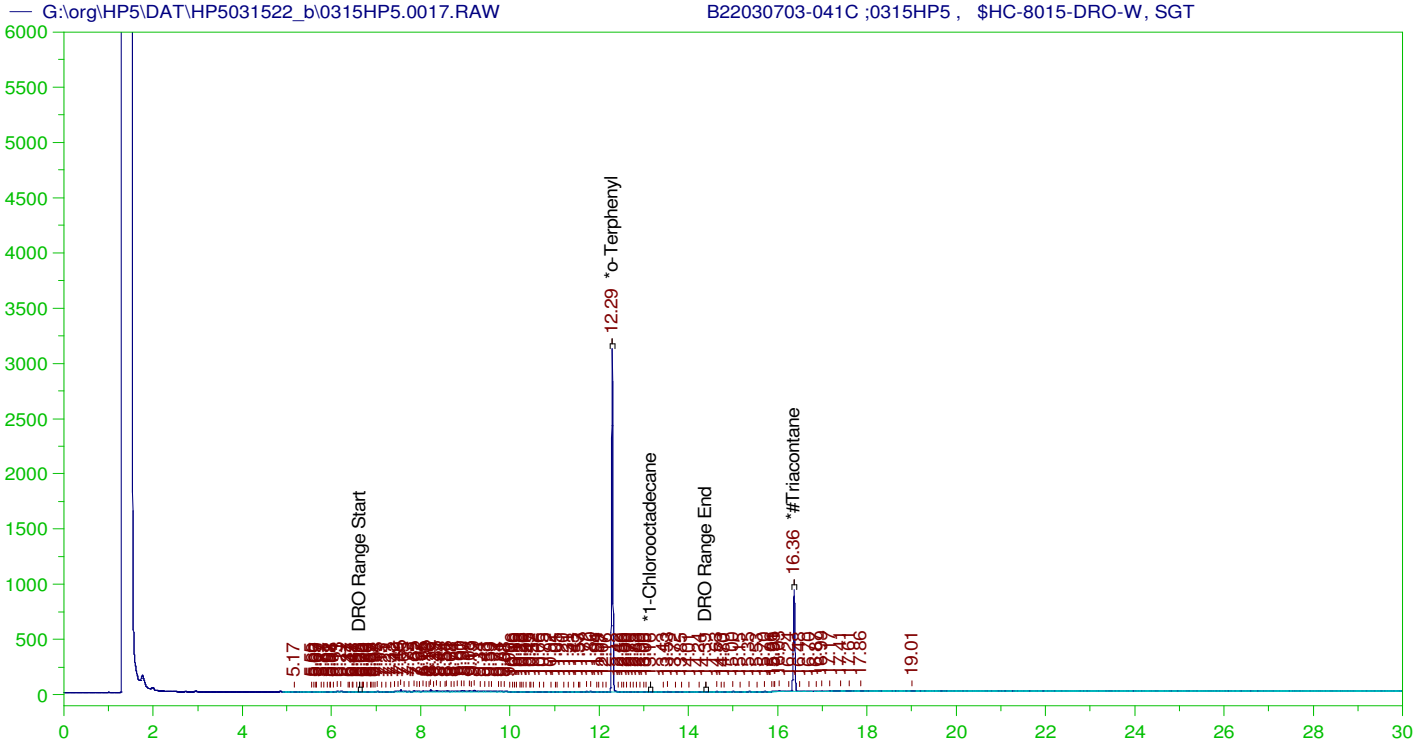
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.365	.476	.081	17.	-

RRO Area:143584.1 RRO AMOUNT: 5.17499E-03

ERH2718 (RHMW01R) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0017.RAW B22030703-041C ;0315HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-041C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0017.RAW
Date & Time Acquired: 3/16/2022 2:38:47 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

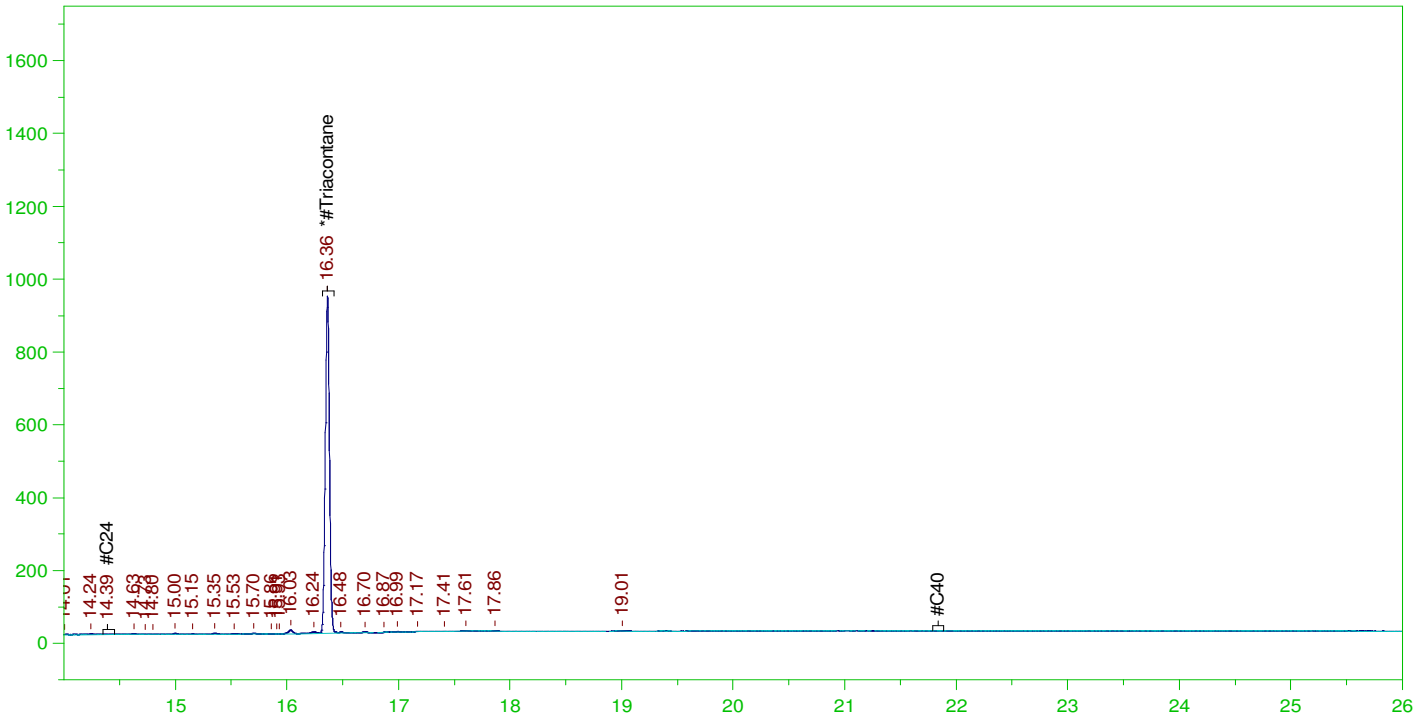
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.29	.19	.155	81.53	-
*1-Chlorooctadecane	13.155	.19	.	.04	-
*#Triacontane	16.362	.19	.077	40.61	-

DRO Area:1277578 DRO Amount: 3.723725E-02
TEH Area:1480701 TEH Amount: 4.315763E-02

ERH2718 (RHMW01R) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0017.RAW B22030703-041C ;0315HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-041C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0017.RAW
Date & Time Acquired: 3/16/2022 2:38:47 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

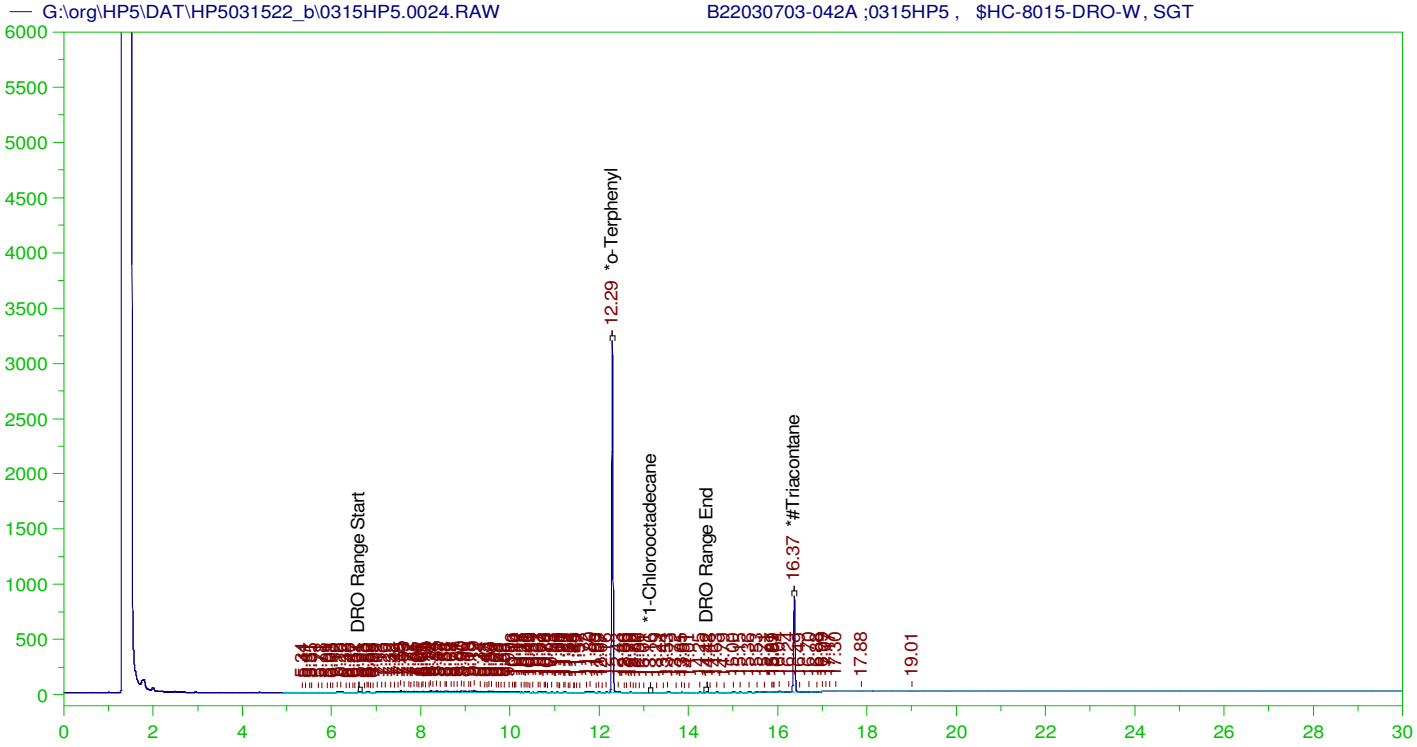
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.362	.476	.077	16.25	-

RRO Area:118425.3 RRO AMOUNT: 4.268227E-03

ERH2719 (RHMW01R) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0024.RAW B22030703-042A ;0315HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-042A ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0024.RAW
Date & Time Acquired: 3/16/2022 7:39:34 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

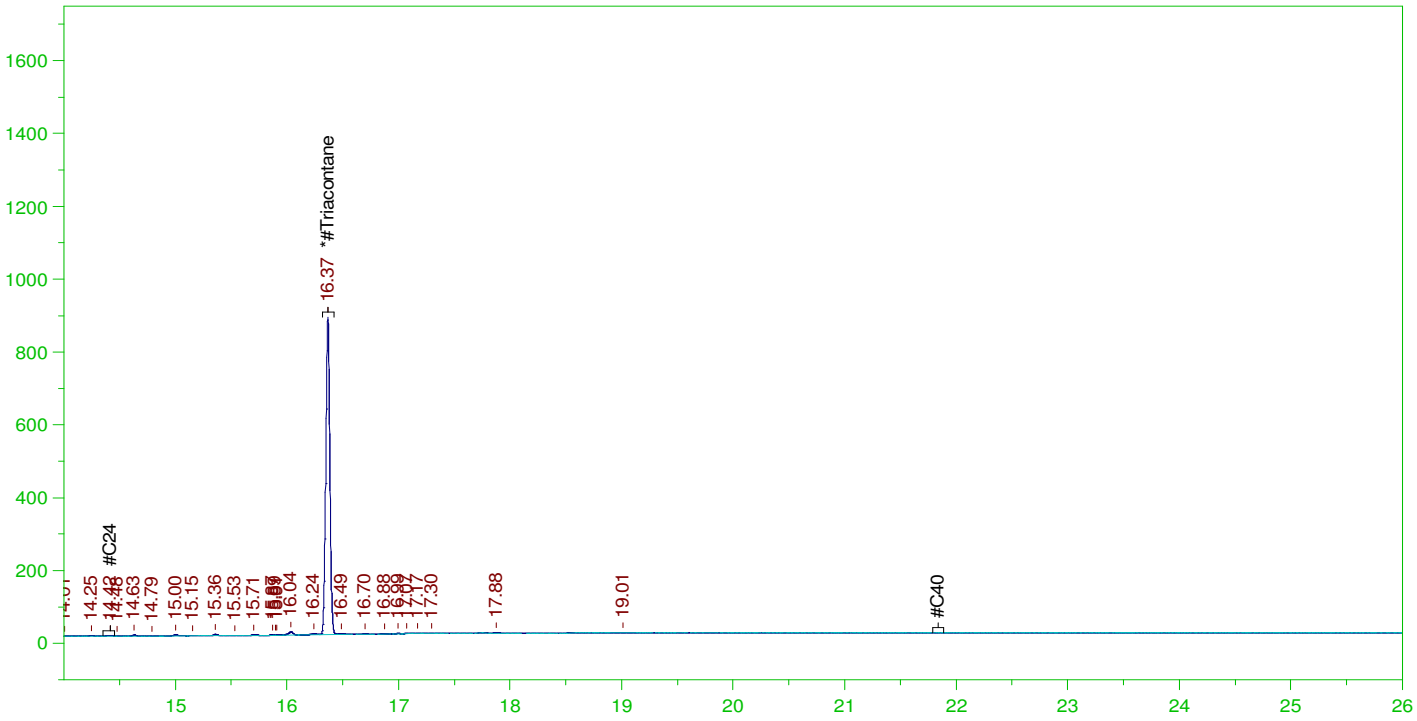
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.292	.19	.158	82.89	-
*1-Chlorooctadecane	13.156	.19	.	.04	-
*#Triacontane	16.366	.19	.072	37.8	-

DRO Area:1599828 DRO Amount: 0.0466298
TEH Area:1792737 TEH Amount: 5.225247E-02

ERH2719 (RHMW01R) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0024.RAW B22030703-042A ;0315HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-042A ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0024.RAW
Date & Time Acquired: 3/16/2022 7:39:34 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

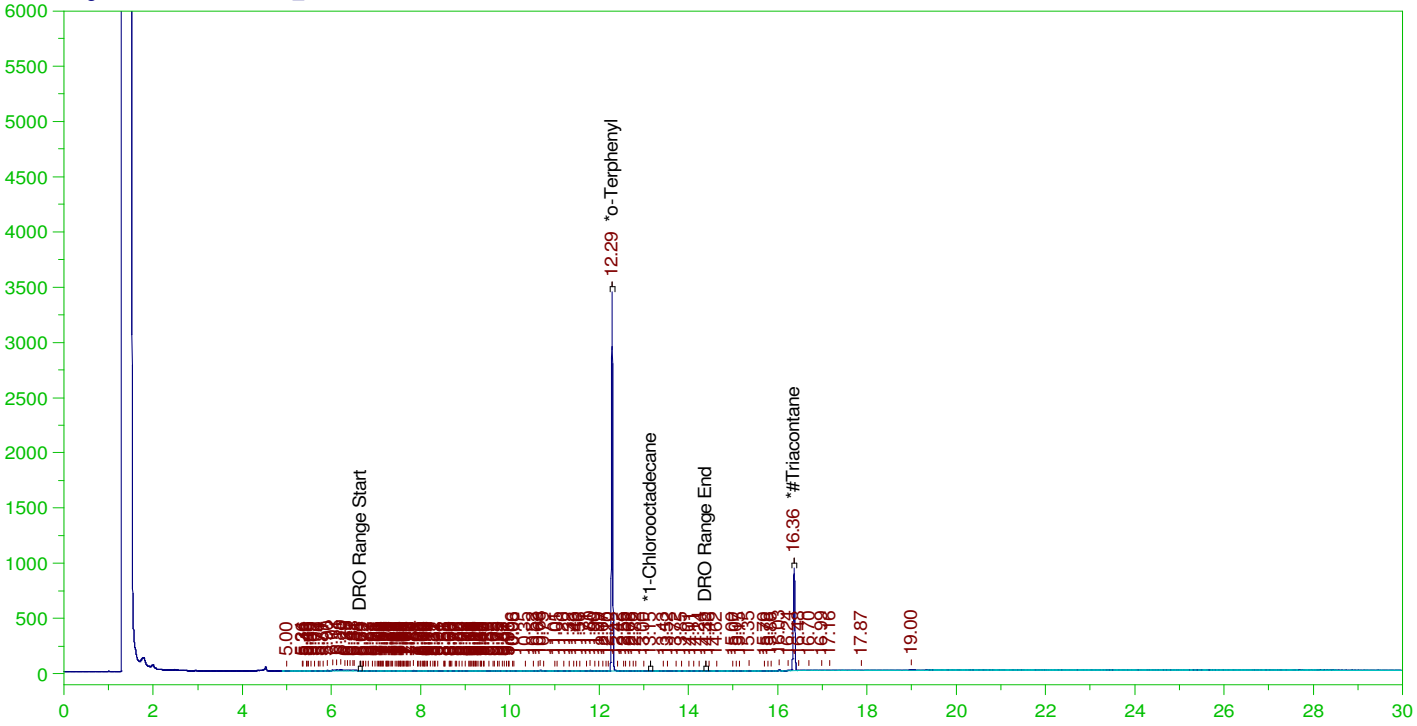
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.366	.476	.072	15.12	-

RRO Area:128335 RRO AMOUNT: 4.625389E-03

ERH2708 (RHMW12A) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0013.RAW B22030703-047C ;0315HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030703-047C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0013.RAW
Date & Time Acquired: 3/15/2022 11:46:25 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JJ-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JJ-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

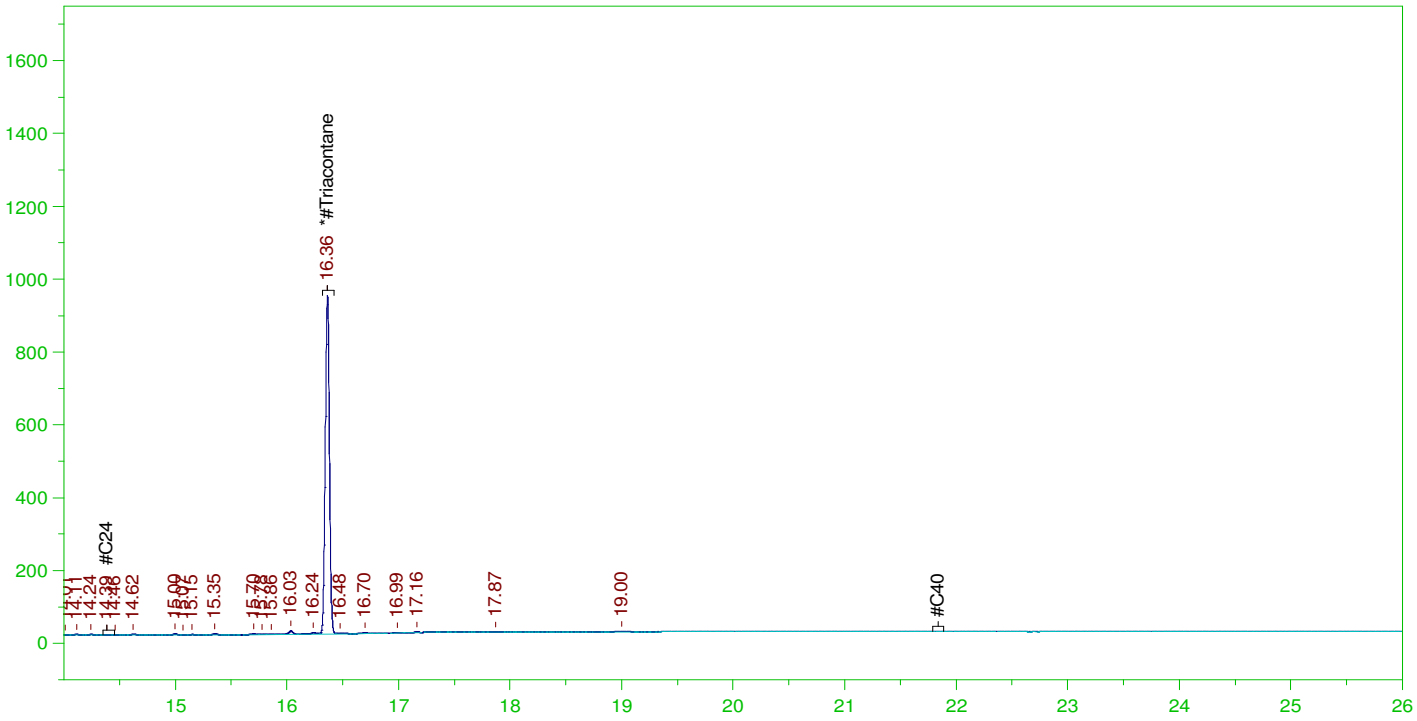
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.595 to 14.45

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.288	.19	.171	89.67	-
*1-Chlorooctadecane	13.152	.19	.	.02	-
*#Triacontane	16.363	.19	.078	40.84	-

DRO Area:405913.5 DRO Amount: 1.183106E-02
TEH Area:807802.4 TEH Amount: 2.354482E-02

ERH2708 (RHMW12A) Batch ID: 164471

G:\org\HP5\DAT\HP5031522_b\0315HP5.0013.RAW B22030703-047C ;0315HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030703-047C ;0315HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031522_b\0315HP5.0013.RAW
Date & Time Acquired: 3/15/2022 11:46:25 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BJ-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BJ_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: 14.35 to 21.89

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.363	.476	.078	16.34	-

RRO Area:118779.7 RRO AMOUNT: 0.004281

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

AECOM
1001 Bishop Street
Suite 1600
Honolulu, HI 96813, United States of America
aecom.com

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

***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
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From: Larson, Cathy <Cathy.Larson@aecom.com>
Sent: Friday, March 11, 2022 2:53 PM
To: Shari Endy; Ramos, Alethea
Subject: RE: [EXTERNAL] B22030703

Yes, please narrate.

From: Shari Endy <sendy@energylab.com>
Sent: Friday, March 11, 2022 10:23 AM
To: Ramos, Alethea <alethea.ramos@aecom.com>; Larson, Cathy <Cathy.Larson@aecom.com>
Subject: [EXTERNAL] B22030703

CUI

Good afternoon -

The methane containers for sample ERH2712 were received without preservative traceability. Can we proceed with analysis?

Energy Laboratories, Inc.
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Shari Endy | Sr. Project Manager | Billings, MT
O: 406-869-6253| sendy@energylab.com | www.energylab.com

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.*

CUI