ANALYTICAL SUMMARY REPORT

March 21, 2022

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

Work Order: B22030912 Quote ID: 5912

Project Name: CV18F0126, 60571032.02.46.01

Energy Laboratories Inc Billings MT received the following 51 samples from AECOM - Honolulu on 3/12/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Received Date	Matrix	Test
B22030912-001	ERH2758 (RHMW13-5)	03/10/22 13:15	03/12/2022	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
B22030912-002	ERH2742 (Trip Blank) 14894	03/10/22 13:15	03/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030912-003	ERH2742 (Trip Blank) 14894	03/10/22 13:15	03/12/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030912-004	ERH2742 (Trip Blank) 14833	03/10/22 13:15	03/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030912-005	ERH2742 (Trip Blank) 14895	03/10/22 13:15	03/12/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030912-006	ERH2691 (OWDFMW01)	03/10/22 14:05	03/12/2022	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

B22030912-007	ERH2690 (Trip Blank) 14894	03/10/22 14:05	03/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030912-008	ERH2690 (Trip Blank) 14894	03/10/22 14:05	03/12/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030912-009	ERH2690 (Trip Blank) 14833	03/10/22 14:05	03/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030912-010	ERH2690 (Trip Blank) 14895	03/10/22 14:05	03/12/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030912-011	ERH2770 (RHMW11-5)	03/09/22 14:00	03/12/2022	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
B22030912-012	ERH2769 (Trip Blank) 14754	03/09/22 14:00	03/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030912-013	ERH2769 (Trip Blank) 14833	03/09/22 14:00	03/12/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030912-014	ERH2769 (Trip Blank) 14733	03/09/22 14:00	03/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030912-015	ERH2769 (Trip Blank) 14808	03/09/22 14:00	03/12/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030912-016	ERH2752 (OWDFMW07A)	03/09/22 13:15	03/12/2022	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
B22030912-017	ERH2751 (Trip Blank) 14754	03/09/22 13:15	03/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B

ANALYTICAL SUMMARY REPORT

B22030912-018	ERH2751 (Trip Blank) 14833	03/09/22 13:15	03/12/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030912-019	ERH2751 (Trip Blank) 14733	03/09/22 13:15	03/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030912-020	ERH2751 (Trip Blank) 14663	03/09/22 13:15	03/12/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030912-021	ERH2747 (OWDFMW04A)	03/09/22 16:10	03/12/2022	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
B22030912-022	ERH2748 (OWDFMW04A FD)	03/09/22 16:10	03/12/2022	Ground Water	DRO-Liquid-Liquid Extraction SW3520C 8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C Diesel Range Organics SW8015C
B22030912-023	ERH2746 (Trip Blank) 14833	03/09/22 16:10	03/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030912-024	ERH2746 (Trip Blank) 14754	03/09/22 16:10	03/12/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030912-025	ERH2746 (Trip Blank) 14733	03/09/22 16:10	03/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030912-026	ERH2746 (Trip Blank) 14808	03/09/22 16:10	03/12/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22030912-027	ERH2688 (RHMW2254-01, Low Flow)	03/09/22 18:00	03/12/2022	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
B22030912-028	ERH2687 (Trip Blank) 14833	03/09/22 18:00	03/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030912-029	ERH2687 (Trip Blank) 14754	03/09/22 18:00	03/12/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030912-030	ERH2687 (Trip Blank) 14733	03/09/22 18:00	03/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030912-031	ERH2687 (Trip Blank) 14808	03/09/22 18:00	03/12/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030912-032	ERH2760 (RHMW19)	03/09/22 12:45	03/12/2022	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
B22030912-033	ERH2759 (Trip Blank) 14653	03/09/22 12:45	03/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030912-034	ERH2759 (Trip Blank) 14894	03/09/22 12:45	03/12/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030912-035	ERH2759 (Trip Blank) 14894	03/09/22 12:45	03/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030912-036	ERH2759 (Trip Blank) 14895	03/09/22 12:45	03/12/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22030912-037	ERH2685 (RHMW2254-01, Bailer)	03/09/22 17:20	03/12/2022	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
B22030912-038	ERH2684 (Trip Blank) 14894	03/09/22 17:20	03/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030912-039	ERH2684 (Trip Blank) 14894	03/09/22 17:20	03/12/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030912-040	ERH2684 (Trip Blank) 14833	03/09/22 17:20	03/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030912-041	ERH2684 (Trip Blank) 14895	03/09/22 17:20	03/12/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030912-042	ERH2755 (RHMW08)	03/09/22 15:50	03/12/2022	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
B22030912-043	ERH2754 (Trip Blank) 14833	03/09/22 15:50	03/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030912-044	ERH2754 (Trip Blank) 14754	03/09/22 15:50	03/12/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030912-045	ERH2754 (Trip Blank) 14733	03/09/22 15:50	03/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030912-046	ERH2754 (Trip Blank) 14732	03/09/22 15:50	03/12/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22030912-047	ERH2763 (Adit 3 Sump)	03/09/22 15:45	03/12/2022	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
B22030912-048	ERH2762 (Trip Blank) 14833	03/09/22 15:45	03/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030912-049	ERH2762 (Trip Blank) 14754	03/09/22 15:45	03/12/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030912-050	ERH2762 (Trip Blank) 14733	03/09/22 15:45	03/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030912-051	ERH2762 (Trip Blank) 14808	03/09/22 15:45	03/12/2022	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:

Digitally signed by
Leigh Ann. Wise
Date: 2022.03.21 17:00:56 -06:00

CLIENT: AECOM - Honolulu
Project: CV18F0126, 60571032.02.46.01
Work Order: B22030912

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.

EPA 8015C DRO:

LCSD-164531-RRO SGT - The recovery for TEH(Oil Range) SGT was above the control limit. Re-analysis produced similar results. Both the original and re-analysis results are included in the Quality Assurance Report.

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Chain of Custody & Analytical Request Record

COC # 202203-32NOI

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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 Walter
Sampler Phone	480-973-0578
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	ERH2758 (RHMW13-5)	3/10/22	0915	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B220398-001
2	ERH2742 (Trip Blank)	3/10/22	0900	8	WQ	✔	✔	✔	✔							X	002, 003, 004, 005, 054
3	TB 8260 14894			2													-002
4	TB GRO 14894			2													-003
5	TB 8011 14833			1				3/10/22									-004
6	TB Methane 14896			2													-005
7	TB HCl 14053			1													-054
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
	Alex Edwards	3/10/22 1435				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Jie Robinson	3/12/22 1040	Jie Robinson

LABORATORY USE ONLY

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

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

Chain of Custody & Analytical Request Record

COC # 202203-20NOI

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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 Lawler
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	ERH2691 (OWDFMW01)	3/10/22	10:05	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B220309 12 -006
2	ERH2690 (Trip Blank)	3/10/22	8:20	8	WQ	✔	✔	✔	✔							X	-007, 008, 009, 010, 052
3	TB 8260 14894			2													-007
4	TB GRO 14894			2													-008
5	TB 8011 14833 MN			1													-009
6	TB methane H895 3/10/22			2													-010
7	TB HCL 14525			1													-052
8																	
9																	

JL 3/12/22

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	3/10/22 1330				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Jie Robinson	3/12/22 1040	Jie Robinson

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)
				0.6	Y	Y			

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

ELI-COC-01/21 v.4

Chain of Custody & Analytical Request Record

COC # 202203-38NOI

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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	CB, CW, TN, SW
Sampler Phone	916 769323
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	ERH2770 (RHMW11-5)	03/09/22	1000	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B220309 12-011
2	ERH2769 (Trip Blank)	03/9/22	0950	8	WQ	✔	✔	✔	✔							X	-012, 013, 014, 015, 053
3	TB 8260 14754			2													-012
4	TB GRO 14833			2													-013
5	TB 8011 14733			1													-014
6	TB Methane 14808			2													-015
7	TB HCl 14705			1													-053
8																	
9																	

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Clara Lin	03/10/22 1010				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Jie Robinson	3/12/22 1041	Jie Robinson

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 # 202203-34NOI

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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	JV, RS, LP
Sampler Phone	8083936607
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	ERH2752 (OWDFMW07A)	03/09	09:15	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B220309 12 -016
2	ERH2751 (Trip Blank)	03/09	08:30	8	WQ	✔	✔	✔	✔							X	-017, 018, 019, 020
3	Trip Blank 8260 14754	2															-017
4	Trip Blank GRO 14833	2															-018
5	Trip Blank 8011 14733	2															-019
6	Trip Blank methane 14603	2															-020
7																	
8																	
9																	

LC 3/12/22

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
	Clara Lin	03/10/22 0950				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Joe Robinson	3/12/22 1040	Joe Robinson

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	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 # 202203-33NOI

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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	JV, RS, LP
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	ERH2747 (OWDFMW04A)	03/09	12:10	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	L2203912-021
2	ERH2746 (Trip Blank)	03/09	11:15	8	WQ	✔	✔	✔	✔							X	023,024,025,026
3	ERH2748 (OWDFMW04A FD)	03/09	12:10	8	GW	✔	✔			✔						X	-022
4	TB 8260 14833			2													-023
5	TB GRO 14754			2													-024
6	TB 8011 14733			2													-025
7	TB Methane 14800	03/09	TW	2													-026
8																	+ 2L.
9																	3/12/22

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
	Cristian Perez	3/10/22 0945				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Jie Robinson	3/12/22 1040	Jie Robinson

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.

ELI-COC-01/21 v.4

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Chain of Custody & Analytical Request Record

COC # 202203-19NOI

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DoD Samples Page 1 of 1

Account Information *(Billing information)*

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

Report Information *(if different than Account Information)*

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

Comments

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

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Gavin Muran
Sampler Phone	808.987.3201
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

All turnaround times are standard unless marked as RUSH.

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
1	ERH2688 (RHMW2254-01, Low Flow)	3/9/22	1400	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B220392-027
2	ERH2687 (Trip Blank)	3/9/22	1315	8	WQ	✔	✔	✔	✔							X	-028,029,030,031
3	TB 8260 14833			2													-028
4	TB GRO 14754			2													-029
5	TB 8011 14733			2													-030
6	TB Methane 14808			2													-031
7																	
8																	
9																	

MN 3/10/22

3/12/22

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	3/10/22 0930				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Jie Robinson	3/12/22 1040	Jie Robinson

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)*
				1.8 °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 # 202203-36rev1NOI

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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.

Revised COC 3/12/22 yl.

Project Information

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

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as 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	ERH2760 (RHMW19)	03/09/2022	8:45 am	17	GW	✓	✓	✓	✓	✓	✓	✓	✓			X	B22030912-032
2	ERH2759 (Trip Blank)	03/09/2022	8:20 am	8	WQ	✓	✓	✓	✓							X	-033, 034, 035, 036
3	Trip Blank 8260 14893			2													-033
4	Trip Blank GRO 14894			2													-034
5	TB 8011 14894			2													-035
6	TB Methane 14895			2													-036
7	03/12/22																
8	SC																
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
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Lisa Cochran	3/12/22 11:45	Lisa Cochran

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)
				2.6 °C	(Y) N	(Y) N			

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

ELI-COC-01/21 v.4

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Chain of Custody & Analytical Request Record

COC # 202203-36NOI

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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 Lawler | 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	ERH2762 (RHMW19)	3/9/22	08:45	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B22030912 -032
2	ERH2761 (Trip Blank)	3/9/22	08:20	8	WQ	✔	✔	✔	✔							X	-033, 034, 035, 036
3																	
4																	
5																	
6																	
7																	
8																	
9																	

CA 03/10/22

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
	Clara Lin	03/10/22 0910				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Jie Robinson	3/12/22 1040	Jie Robinson

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 2.4 °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check_____	Amount $	Receipt Number (cash/check only)
					(Y)	(Y)			

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

Chain of Custody & Analytical Request Record

COC # 202203-18NOI

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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	Matt Given
Sampler Phone	808.349.4733
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	ERH2685 (RHMW2254-01, Bailer)	3/9/22	1320	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	L22030912-037
2	ERH2684 (Trip Blank)	3/9/22	1315	8	WQ	✔	✔	✔	✔							X	-038, 039, 040, 041
3	TB 8260 14894			2													-038
4	TB GRO 14894			2													-039
5	TB EDB 14833			2													-040
6	TB Methane 14893			2													-041
7																	
8																	
9																	

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

Custody Record MUST be signed						
Relinquished by (print)	Jonathan Perez	Date/Time	3/10/22 0915	Signature		
Relinquished by (print)		Date/Time		Signature		
Received by (print)		Date/Time		Signature		
Received by Laboratory (print)	Joe Robinson	Date/Time	3/12/22 1040	Signature	Joe Robinson	

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 # 202203-35NOI

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	Nicollette Lawler
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	ERH2755 (RHMW08)	3/9/22	11:50	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B2203092-042
2	ERH2754 (Trip Blank)	3/9/22	11:40	8	WQ	✔	✔	✔	✔							X	043, 044, 045, 046
3	TB 8260 14833			2													-043
4	TB GRO 14754 3/12/22			2													-044
5	TB 8011 14733			2													-045
6	TB Methane 03/10/22 14732			2													-046
7																	
8																	
9																	

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Clara Un	03/10/22 0915				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Jie Robinson	3/12/22 1040	Jie Robinson

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	Y N	Y N			

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

ELI-COC-01/21 v.4

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-37NOI

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	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	ERH2763 (ADIT 3 SUMP)	3/9/22	1145	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B22030912-047
2	ERH2762 (Trip Blank)	3/9/22	1115	8	WQ	✔	✔	✔	✔							X	-048, 049, 050, 051
3	Trip Blank 8260 14833			3													-048
4	Trip Blank 620 14754	C. 3/12/22		2													-049
5	Trip Blank 8011 14733	3/10/22		1													-050
6	Trip Blank methane 14809			2													-051
7																	
8																	
9																	

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Maggie Nutter	3/10/22 1000				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Jie Robinson	3/12/22 1040	Jie Robinson

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)
				0.6	Y	Y			

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

ELI-COC-01/21 v.4

Work Order Receipt Checklist

AECOM - Honolulu

B22030912

Login completed by:	Leslie S. Cadreau	Date Received:	3/12/2022
Reviewed by:	BL2000\rshular	Received by:	jlr
Reviewed Date:	3/19/2022	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 0.8°C, shipping container 2 was 2.6°C, shipping container 3 was 0.6°C, shipping container 5 was 0.6°C, shipping container 6 was 0.5°C, shipping container 7 was 0.4°C, shipping container 8 was 1.0°C, shipping container 9 was 0.5°C and shipping container 10 was 0.2°C. The temperature of the sample(s) for shipping container 4 was 1.8°C.

The identification for sample ERH2762 RHMW19 was changed to ERH2760 RHMW19 and the identification for sample ERH2761 Trip Blank was changed to ERH2759 Trip Blank per email from Aletha Ramos on 3/12/22.

The containers for samples ERH2691, ERH2688, ERH2762, ERH2685 and ERH2758 for Methane were received without preservative traceability. Proceed with analysis without preservative traceability per email form Cathy Larson on 03/18/22.

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: ERH2758 (RHMW13-5)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-001
Collection Date: 03/10/2022 13:15
Date Received: 03/12/2022
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	0.40	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/17/2022 04:52/eli-ca	SUB-C280612 : 23	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 18:39/srh	ICPMS207-B_220315A : 70	R376266
METALS, TOTAL												
Lead	0.00006	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/15/2022 19:10/srh	ICPMS207-B_220315A : 75	164501
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2758 (RHMW13-5)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-001
Collection Date: 03/10/2022 13:15
Date Received: 03/12/2022
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 03:16/msc	VOA5975C.I_220314B : 9	R376406
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/15/2022 03:16/msc	VOA5975C.I_220314B : 9	R376406
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/15/2022 12:50/clt	GECD.I_220314A : 55	164489
Surr: 1,1,1,2-Tetrachloroethane	93.0	%REC	1		70-130				SW8011	03/15/2022 12:50/clt	GECD.I_220314A : 55	164489
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/15/2022 12:24/jp	VARIAN1_220315A : 5	R376291
Total Purgeable Hydrocarbons	5.2	ug/L	1	J	20	10	3.1		SW8015C	03/15/2022 12:24/jp	VARIAN1_220315A : 5	R376291
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/15/2022 12:24/jp	VARIAN1_220315A : 5	R376291
- 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)	0.040	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/17/2022 02:55/amn	GCFID-HP5-B_220316A : 11	164531
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/17/2022 21:02/amn	GCFID-HP5-B_220316B : 6	164531
Oil Range Hydrocarbons (C24 to C40)	0.13	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/17/2022 02:55/amn	GCFID-HP5-B_220316A : 11	164531
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/17/2022 21:02/amn	GCFID-HP5-B_220316B : 6	164531
Total Extractable Hydrocarbons	0.19	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/17/2022 02:55/amn	GCFID-HP5-B_220316A : 11	164531
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/17/2022 21:02/amn	GCFID-HP5-B_220316B : 6	164531

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-001
Client: AECOM - Honolulu
Collection Date: 03/10/2022 13:15
Client Sample ID: ERH2758 (RHMW13-5)
Date Received: 03/12/2022
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	97.0	%REC	1		56-125				SW8015C	03/17/2022 02:55/amn	GCFID-HP5-B_220316A : 11	164531
Surr: o-Terphenyl (SGT)	89.0	%REC	1		56-125				SW8015C	03/17/2022 21:02/amn	GCFID-HP5-B_220316B : 6	164531
Surr: n-Triacontane	92.0	%REC	1		50-150				SW8015C	03/17/2022 02:55/amn	GCFID-HP5-B_220316A : 11	164531
Surr: n-Triacontane (SGT)	81.0	%REC	1		50-150				SW8015C	03/17/2022 21:02/amn	GCFID-HP5-B_220316B : 6	164531
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.00082	mg/L	1	J	0.0020	0.0012	0.00070		SW8015M	03/14/2022 08:45/jdw	FID-HEADSPACE_220314A : 5	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2742 (Trip Blank) 14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-002
Collection Date: 03/10/2022 13:15
Date Received: 03/12/2022
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 17:38/msc	VOA5975C.I_220315A : 12	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-002
Client: AECOM - Honolulu
Collection Date: 03/10/2022 13:15
Client Sample ID: ERH2742 (Trip Blank) 14894
Date Received: 03/12/2022
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	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/15/2022 17:38/msc	VOA5975C.I_220315A : 12	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-003
Client: AECOM - Honolulu
Collection Date: 03/10/2022 13:15
Client Sample ID: ERH2742 (Trip Blank) 14894
Date Received: 03/12/2022
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	03/15/2022 14:07/jp	VARIAN1_220315A : 6	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/15/2022 14:07/jp	VARIAN1_220315A : 6	R376291
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/15/2022 14:07/jp	VARIAN1_220315A : 6	R376291

- 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: B22030912-004
Client: AECOM - Honolulu
Collection Date: 03/10/2022 13:15
Client Sample ID: ERH2742 (Trip Blank) 14833
Date Received: 03/12/2022
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 09:52/clt	GECD.I_220314A : 46	164489
Surr: 1,1,1,2-Tetrachloroethane	87.0	%REC	1		70-130				SW8011	03/15/2022 09:52/clt	GECD.I_220314A : 46	164489

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2742 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-005
Collection Date: 03/10/2022 13:15
Date Received: 03/12/2022
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	03/14/2022 08:50/jdw	FID-HEADSPACE_220314A : 6	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2691 (OWDFMW01)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-006
Collection Date: 03/10/2022 14:05
Date Received: 03/12/2022
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	0.34	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/17/2022 05:33/eli-ca	SUB-C280612 : 24	C_R280612
METALS, DISSOLVED												
Lead	0.00074	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/15/2022 20:00/srh	ICPMS207-B_220315A : 83	R376266
METALS, TOTAL												
Lead	0.00015	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/15/2022 20:06/srh	ICPMS207-B_220315A : 84	164501
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Chloroform	0.18	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-006
Collection Date: 03/10/2022 14:05
Date Received: 03/12/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2691 (OWDFMW01)
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	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Surr: 1,2-Dichloroethane-d4	111.0	%REC	1		81-118				SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/15/2022 03:43/msc	VOA5975C.I_220314B : 10	R376406
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 10:11/clt	GECD.I_220314A : 47	164489
Surr: 1,1,1,2-Tetrachloroethane	93.0	%REC	1		70-130				SW8011	03/15/2022 10:11/clt	GECD.I_220314A : 47	164489
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/16/2022 00:21/jp	VARIAN1_220315A : 22	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/16/2022 00:21/jp	VARIAN1_220315A : 22	R376291
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/16/2022 00:21/jp	VARIAN1_220315A : 22	R376291

- 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	03/16/2022 22:37/amn	GCFID-HP5-B_220316A : 6	164531
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/16/2022 22:37/amn	GCFID-HP5-B_220316A : 6	164531
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/16/2022 22:37/amn	GCFID-HP5-B_220316A : 6	164531
Surr: o-Terphenyl	95.0	%REC	1		56-125				SW8015C	03/16/2022 22:37/amn	GCFID-HP5-B_220316A : 6	164531
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/16/2022 22:37/amn	GCFID-HP5-B_220316A : 6	164531

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

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2691 (OWDFMW01)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-006
Collection Date: 03/10/2022 14:05
Date Received: 03/12/2022
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	03/14/2022 08:53/jdw	FID-HEADSPACE_220314A : 7	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2690 (Trip Blank) 14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-007
Collection Date: 03/10/2022 14:05
Date Received: 03/12/2022
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 18:06/msc	VOA5975C.I_220315A : 13	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-007
Client: AECOM - Honolulu
Collection Date: 03/10/2022 14:05
Client Sample ID: ERH2690 (Trip Blank) 14894
Date Received: 03/12/2022
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	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Surr: 1,2-Dichloroethane-d4	106.0	%REC	1		81-118				SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/15/2022 18:06/msc	VOA5975C.I_220315A : 13	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-008
Client: AECOM - Honolulu
Collection Date: 03/10/2022 14:05
Client Sample ID: ERH2690 (Trip Blank) 14894
Date Received: 03/12/2022
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	03/15/2022 14:41/jp	VARIAN1_220315A : 7	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/15/2022 14:41/jp	VARIAN1_220315A : 7	R376291
Surr: Trifluorotoluene	81.0	%REC	1		70-130				SW8015C	03/15/2022 14:41/jp	VARIAN1_220315A : 7	R376291

- 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: B22030912-009
Client: AECOM - Honolulu
Collection Date: 03/10/2022 14:05
Client Sample ID: ERH2690 (Trip Blank) 14833
Date Received: 03/12/2022
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 10:31/clt	GECD.I_220314A : 48	164489
Surr: 1,1,1,2-Tetrachloroethane	93.0	%REC	1		70-130				SW8011	03/15/2022 10:31/clt	GECD.I_220314A : 48	164489

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2690 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-010
Collection Date: 03/10/2022 14:05
Date Received: 03/12/2022
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	03/14/2022 08:58/jdw	FID-HEADSPACE_220314A : 8	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2770 (RHMW11-5)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-011
Collection Date: 03/09/2022 14:00
Date Received: 03/12/2022
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	0.37	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/17/2022 06:17/eli-ca	SUB-C280612 : 25	C_R280612
METALS, DISSOLVED												
Lead	0.00004	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/15/2022 20:12/srh	ICPMS207-B_220315A : 85	R376266
METALS, TOTAL												
Lead	0.00011	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/15/2022 20:19/srh	ICPMS207-B_220315A : 86	164501
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2770 (RHMW11-5)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-011
Collection Date: 03/09/2022 14:00
Date Received: 03/12/2022
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 04:10/msc	VOA5975C.I_220314B : 11	R376406
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/15/2022 04:10/msc	VOA5975C.I_220314B : 11	R376406
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	03/15/2022 10:51/clt	GECD.I_220314A : 49	164489
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	03/15/2022 10:51/clt	GECD.I_220314A : 49	164489
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/16/2022 01:29/jp	VARIAN1_220315A : 23	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/16/2022 01:29/jp	VARIAN1_220315A : 23	R376291
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/16/2022 01:29/jp	VARIAN1_220315A : 23	R376291
- 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	03/17/2022 03:38/amn	GCFID-HP5-B_220316A : 12	164531
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/17/2022 21:45/amn	GCFID-HP5-B_220316B : 7	164531
Oil Range Hydrocarbons (C24 to C40)	0.11	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/17/2022 03:38/amn	GCFID-HP5-B_220316A : 12	164531
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/17/2022 21:45/amn	GCFID-HP5-B_220316B : 7	164531
Total Extractable Hydrocarbons	0.16	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/17/2022 03:38/amn	GCFID-HP5-B_220316A : 12	164531
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/17/2022 21:45/amn	GCFID-HP5-B_220316B : 7	164531

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-011
Client: AECOM - Honolulu
Collection Date: 03/09/2022 14:00
Client Sample ID: ERH2770 (RHMW11-5)
Date Received: 03/12/2022
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	03/17/2022 03:38/amn	GCFID-HP5-B_220316A : 12	164531
Surr: o-Terphenyl (SGT)	88.0	%REC	1		56-125				SW8015C	03/17/2022 21:45/amn	GCFID-HP5-B_220316B : 7	164531
Surr: n-Triacontane	88.0	%REC	1		50-150				SW8015C	03/17/2022 03:38/amn	GCFID-HP5-B_220316A : 12	164531
Surr: n-Triacontane (SGT)	81.0	%REC	1		50-150				SW8015C	03/17/2022 21:45/amn	GCFID-HP5-B_220316B : 7	164531
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.0018	mg/L	1	J	0.0020	0.0012	0.00070		SW8015M	03/14/2022 09:02/jdw	FID-HEADSPACE_220314A : 9	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2769 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-012
Collection Date: 03/09/2022 14:00
Date Received: 03/12/2022
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 18:33/msc	VOA5975C.I_220315A : 14	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Toluene	0.14	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-012
Client: AECOM - Honolulu
Collection Date: 03/09/2022 14:00
Client Sample ID: ERH2769 (Trip Blank) 14754
Date Received: 03/12/2022
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	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/15/2022 18:33/msc	VOA5975C.I_220315A : 14	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-013
Client: AECOM - Honolulu
Collection Date: 03/09/2022 14:00
Client Sample ID: ERH2769 (Trip Blank) 14833
Date Received: 03/12/2022
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	03/15/2022 15:15/jp	VARIAN1_220315A : 8	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/15/2022 15:15/jp	VARIAN1_220315A : 8	R376291
Surr: Trifluorotoluene	82.0	%REC	1		70-130				SW8015C	03/15/2022 15:15/jp	VARIAN1_220315A : 8	R376291

- 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

Client: AECOM - Honolulu
Client Sample ID: ERH2769 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-014
Collection Date: 03/09/2022 14:00
Date Received: 03/12/2022
Report Date: 03/21/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 11:10/clt	GECD.I_220314A : 50	164489
Surr: 1,1,1,2-Tetrachloroethane	89.0	%REC	1		70-130				SW8011	03/15/2022 11:10/clt	GECD.I_220314A : 50	164489

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2769 (Trip Blank) 14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-015
Collection Date: 03/09/2022 14:00
Date Received: 03/12/2022
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	03/14/2022 09:15/jdw	FID-HEADSPACE_220314A : 11	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2752 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-016
Collection Date: 03/09/2022 13:15
Date Received: 03/12/2022
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	0.31	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/17/2022 06:56/eli-ca	SUB-C280612 : 26	C_R280612
METALS, DISSOLVED												
Lead	0.00004	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/15/2022 20:25/srh	ICPMS207-B_220315A : 87	R376266
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/15/2022 20:31/srh	ICPMS207-B_220315A : 88	164501
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-016
Collection Date: 03/09/2022 13:15
Date Received: 03/12/2022
Report Date: 03/21/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2752 (OWDFMW07A)
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	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/15/2022 04:38/msc	VOA5975C.I_220314B : 12	R376406
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 11:30/clt	GECD.I_220314A : 51	164489
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/15/2022 11:30/clt	GECD.I_220314A : 51	164489
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/16/2022 02:38/jp	VARIAN1_220315A : 24	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/16/2022 02:38/jp	VARIAN1_220315A : 24	R376291
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/16/2022 02:38/jp	VARIAN1_220315A : 24	R376291

- 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	03/16/2022 23:20/amn	GCFID-HP5-B_220316A : 7	164531
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/16/2022 23:20/amn	GCFID-HP5-B_220316A : 7	164531
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/16/2022 23:20/amn	GCFID-HP5-B_220316A : 7	164531
Surr: o-Terphenyl	91.0	%REC	1		56-125				SW8015C	03/16/2022 23:20/amn	GCFID-HP5-B_220316A : 7	164531
Surr: n-Triacontane	86.0	%REC	1		50-150				SW8015C	03/16/2022 23:20/amn	GCFID-HP5-B_220316A : 7	164531

- 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: B22030912-016
Client: AECOM - Honolulu
Collection Date: 03/09/2022 13:15
Client Sample ID: ERH2752 (OWDFMW07A)
Date Received: 03/12/2022
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	03/14/2022 09:18/jdw	FID-HEADSPACE_220314A : 12	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2751 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-017
Collection Date: 03/09/2022 13:15
Date Received: 03/12/2022
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 19:00/msc	VOA5975C.I_220315A : 15	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-017
Client: AECOM - Honolulu
Collection Date: 03/09/2022 13:15
Client Sample ID: ERH2751 (Trip Blank) 14754
Date Received: 03/12/2022
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	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/15/2022 19:00/msc	VOA5975C.I_220315A : 15	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-018
Client: AECOM - Honolulu
Collection Date: 03/09/2022 13:15
Client Sample ID: ERH2751 (Trip Blank) 14833
Date Received: 03/12/2022
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	03/15/2022 15:49/jp	VARIAN1_220315A : 9	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/15/2022 15:49/jp	VARIAN1_220315A : 9	R376291
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/15/2022 15:49/jp	VARIAN1_220315A : 9	R376291

- 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: B22030912-019
Client: AECOM - Honolulu
Collection Date: 03/09/2022 13:15
Client Sample ID: ERH2751 (Trip Blank) 14733
Date Received: 03/12/2022
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 11:50/clt	GECD.I_220314A : 52	164489
Surr: 1,1,1,2-Tetrachloroethane	87.0	%REC	1		70-130				SW8011	03/15/2022 11:50/clt	GECD.I_220314A : 52	164489

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2751 (Trip Blank) 14663
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-020
Collection Date: 03/09/2022 13:15
Date Received: 03/12/2022
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	03/14/2022 09:24/jdw	FID-HEADSPACE_220314A : 13	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2747 (OWDFMW04A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-021
Collection Date: 03/09/2022 16:10
Date Received: 03/12/2022
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 0.9 to 0.9	0.89	mg/L	1		0.50	0.50	0.17		SW9060A	03/17/2022 07:36/eli-ca	SUB-C280612 : 27	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 20:37/srh	ICPMS207-B_220315A : 89	R376266
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/15/2022 20:44/srh	ICPMS207-B_220315A : 90	164501
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Chloroform	2.6	ug/L	1		1.0	0.20	0.079		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-021
Client: AECOM - Honolulu
Collection Date: 03/09/2022 16:10
Client Sample ID: ERH2747 (OWDFMW04A)
Date Received: 03/12/2022
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												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/15/2022 05:05/msc	VOA5975C.I_220314B : 13	R376406
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 12:10/clt	GECD.I_220314A : 53	164489
Surr: 1,1,1,2-Tetrachloroethane	95.0	%REC	1		70-130				SW8011	03/15/2022 12:10/clt	GECD.I_220314A : 53	164489
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/16/2022 03:46/jp	VARIAN1_220315A : 25	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/16/2022 03:46/jp	VARIAN1_220315A : 25	R376291
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/16/2022 03:46/jp	VARIAN1_220315A : 25	R376291
- 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	03/17/2022 00:03/amn	GCFID-HP5-B_220316A : 8	164531
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/17/2022 00:03/amn	GCFID-HP5-B_220316A : 8	164531
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/17/2022 00:03/amn	GCFID-HP5-B_220316A : 8	164531
Surr: o-Terphenyl	92.0	%REC	1		56-125				SW8015C	03/17/2022 00:03/amn	GCFID-HP5-B_220316A : 8	164531
Surr: n-Triacontane	87.0	%REC	1		50-150				SW8015C	03/17/2022 00:03/amn	GCFID-HP5-B_220316A : 8	164531
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
- Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2747 (OWDFMW04A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-021
Collection Date: 03/09/2022 16:10
Date Received: 03/12/2022
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	03/14/2022 09:43/jdw	FID-HEADSPACE_220314A : 14	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2748 (OWDFMW04A FD)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-022
Collection Date: 03/09/2022 16:10
Date Received: 03/12/2022
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 14:54/msc	VOA5975C.I_220315A : 6	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Chloroform	2.6	ug/L	1		1.0	0.20	0.079		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-022
Client: AECOM - Honolulu
Collection Date: 03/09/2022 16:10
Client Sample ID: ERH2748 (OWDFMW04A FD)
Date Received: 03/12/2022
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 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Surr: 1,2-Dichloroethane-d4	111.0	%REC	1		81-118				SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
Surr: p-Bromofluorobenzene	111.0	%REC	1		85-114				SW8260B	03/15/2022 14:54/msc	VOA5975C.I_220315A : 6	R376454
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/16/2022 04:54/jp	VARIAN1_220315A : 26	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/16/2022 04:54/jp	VARIAN1_220315A : 26	R376291
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/16/2022 04:54/jp	VARIAN1_220315A : 26	R376291
- 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	03/17/2022 00:46/amn	GCFID-HP5-B_220316A : 9	164531
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/17/2022 00:46/amn	GCFID-HP5-B_220316A : 9	164531
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/17/2022 00:46/amn	GCFID-HP5-B_220316A : 9	164531
Surr: o-Terphenyl	91.0	%REC	1		56-125				SW8015C	03/17/2022 00:46/amn	GCFID-HP5-B_220316A : 9	164531
Surr: n-Triacontane	87.0	%REC	1		50-150				SW8015C	03/17/2022 00:46/amn	GCFID-HP5-B_220316A : 9	164531
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
- Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2746 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-023
Collection Date: 03/09/2022 16:10
Date Received: 03/12/2022
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 19:28/msc	VOA5975C.I_220315A : 16	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-023
Client: AECOM - Honolulu
Collection Date: 03/09/2022 16:10
Client Sample ID: ERH2746 (Trip Blank) 14833
Date Received: 03/12/2022
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	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/15/2022 19:28/msc	VOA5975C.I_220315A : 16	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-024
Client: AECOM - Honolulu
Collection Date: 03/09/2022 16:10
Client Sample ID: ERH2746 (Trip Blank) 14754
Date Received: 03/12/2022
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	03/15/2022 16:23/jp	VARIAN1_220315A : 10	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/15/2022 16:23/jp	VARIAN1_220315A : 10	R376291
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/15/2022 16:23/jp	VARIAN1_220315A : 10	R376291

- 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

Client: AECOM - Honolulu
Client Sample ID: ERH2746 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-025
Collection Date: 03/09/2022 16:10
Date Received: 03/12/2022
Report Date: 03/21/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	03/15/2022 12:30/clt	GECD.I_220314A : 54	164489
Surr: 1,1,1,2-Tetrachloroethane	91.0	%REC	1		70-130				SW8011	03/15/2022 12:30/clt	GECD.I_220314A : 54	164489

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2746 (Trip Blank) 14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-026
Collection Date: 03/09/2022 16:10
Date Received: 03/12/2022
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	03/14/2022 09:46/jdw	FID-HEADSPACE_220314A : 15	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2688 (RHMW2254-01, Low Flow)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-027
Collection Date: 03/09/2022 18:00
Date Received: 03/12/2022
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	0.27	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/17/2022 08:19/eli-ca	SUB-C280612 : 28	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 20:50/srh	ICPMS207-B_220315A : 91	R376266
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/15/2022 20:56/srh	ICPMS207-B_220315A : 92	164501
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-027
Client: AECOM - Honolulu
Collection Date: 03/09/2022 18:00
Client Sample ID: ERH2688 (RHMW2254-01, Low Flow)
Date Received: 03/12/2022
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												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Surr: 1,2-Dichloroethane-d4	106.0	%REC	1		81-118				SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/15/2022 15:22/msc	VOA5975C.I_220315A : 7	R376454
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 14:49/clt	GECD.I_220314A : 59	164489
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/15/2022 14:49/clt	GECD.I_220314A : 59	164489
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/16/2022 06:02/jp	VARIAN1_220315A : 27	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/16/2022 06:02/jp	VARIAN1_220315A : 27	R376291
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/16/2022 06:02/jp	VARIAN1_220315A : 27	R376291
- 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	03/17/2022 02:12/amn	GCFID-HP5-B_220316A : 10	164531
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/17/2022 02:12/amn	GCFID-HP5-B_220316A : 10	164531
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/17/2022 02:12/amn	GCFID-HP5-B_220316A : 10	164531
Surr: o-Terphenyl	95.0	%REC	1		56-125				SW8015C	03/17/2022 02:12/amn	GCFID-HP5-B_220316A : 10	164531
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/17/2022 02:12/amn	GCFID-HP5-B_220316A : 10	164531
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
- Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2688 (RHMW2254-01, Low Flow)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-027
Collection Date: 03/09/2022 18:00
Date Received: 03/12/2022
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	03/14/2022 09:54/jdw	FID-HEADSPACE_220314A : 16	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2687 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-028
Collection Date: 03/09/2022 18:00
Date Received: 03/12/2022
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 19:55/msc	VOA5975C.I_220315A : 17	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Toluene	0.13	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-028
Client: AECOM - Honolulu
Collection Date: 03/09/2022 18:00
Client Sample ID: ERH2687 (Trip Blank) 14833
Date Received: 03/12/2022
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	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/15/2022 19:55/msc	VOA5975C.I_220315A : 17	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-029
Client: AECOM - Honolulu
Collection Date: 03/09/2022 18:00
Client Sample ID: ERH2687 (Trip Blank) 14754
Date Received: 03/12/2022
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	03/15/2022 16:57/jp	VARIAN1_220315A : 11	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/15/2022 16:57/jp	VARIAN1_220315A : 11	R376291
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/15/2022 16:57/jp	VARIAN1_220315A : 11	R376291

- 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: B22030912-030
Client: AECOM - Honolulu
Collection Date: 03/09/2022 18:00
Client Sample ID: ERH2687 (Trip Blank) 14733
Date Received: 03/12/2022
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	0.0050	0.0026		SW8011	03/15/2022 15:08/clt	GECD.I_220314A : 60	164489
Surr: 1,1,1,2-Tetrachloroethane	89.0	%REC	1		70-130				SW8011	03/15/2022 15:08/clt	GECD.I_220314A : 60	164489

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2687 (Trip Blank) 14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-031
Collection Date: 03/09/2022 18:00
Date Received: 03/12/2022
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	03/14/2022 09:58/jdw	FID-HEADSPACE_220314A : 17	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2760 (RHMW19)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-032
Collection Date: 03/09/2022 12:45
Date Received: 03/12/2022
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 0.2	0.24	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/17/2022 08:59/eli-ca	SUB-C280612 : 29	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 21:15/srh	ICPMS207-B_220315A : 95	R376266
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/15/2022 21:21/srh	ICPMS207-B_220315A : 96	164501
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2760 (RHMW19)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-032
Collection Date: 03/09/2022 12:45
Date Received: 03/12/2022
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 15:49/msc	VOA5975C.I_220315A : 8	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Surr: Toluene-d8	98.0	%REC	1		89-112				SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/15/2022 15:49/msc	VOA5975C.I_220315A : 8	R376454
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 15:28/clt	GECD.I_220314A : 61	164489
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	03/15/2022 15:28/clt	GECD.I_220314A : 61	164489
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/16/2022 07:11/jp	VARIAN1_220315A : 28	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/16/2022 07:11/jp	VARIAN1_220315A : 28	R376291
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/16/2022 07:11/jp	VARIAN1_220315A : 28	R376291
- 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	03/17/2022 11:12/amn	GCFID-HP5-B_220316A : 18	164531
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/18/2022 00:38/amn	GCFID-HP5-B_220316B : 10	164531
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/17/2022 11:12/amn	GCFID-HP5-B_220316A : 18	164531
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/18/2022 00:38/amn	GCFID-HP5-B_220316B : 10	164531
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/17/2022 11:12/amn	GCFID-HP5-B_220316A : 18	164531
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/18/2022 00:38/amn	GCFID-HP5-B_220316B : 10	164531

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-032
Client: AECOM - Honolulu
Collection Date: 03/09/2022 12:45
Client Sample ID: ERH2760 (RHMW19)
Date Received: 03/12/2022
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	89.0	%REC	1		56-125				SW8015C	03/17/2022 11:12/amn	GCFID-HP5-B_220316A : 18	164531
Surr: o-Terphenyl (SGT)	87.0	%REC	1		56-125				SW8015C	03/18/2022 00:38/amn	GCFID-HP5-B_220316B : 10	164531
Surr: n-Triacontane	88.0	%REC	1		50-150				SW8015C	03/17/2022 11:12/amn	GCFID-HP5-B_220316A : 18	164531
Surr: n-Triacontane (SGT)	83.0	%REC	1		50-150				SW8015C	03/18/2022 00:38/amn	GCFID-HP5-B_220316B : 10	164531
- 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	03/14/2022 10:02/jdw	FID-HEADSPACE_220314A : 18	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2759 (Trip Blank) 14653
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-033
Collection Date: 03/09/2022 12:45
Date Received: 03/12/2022
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 20:22/msc	VOA5975C.I_220315A : 18	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Toluene	0.18	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-033
Client: AECOM - Honolulu
Collection Date: 03/09/2022 12:45
Client Sample ID: ERH2759 (Trip Blank) 14653
Date Received: 03/12/2022
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	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Surr: Toluene-d8	98.0	%REC	1		89-112				SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/15/2022 20:22/msc	VOA5975C.I_220315A : 18	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-034
Client: AECOM - Honolulu
Collection Date: 03/09/2022 12:45
Client Sample ID: ERH2759 (Trip Blank) 14894
Date Received: 03/12/2022
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	03/15/2022 17:31/jp	VARIAN1_220315A : 12	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/15/2022 17:31/jp	VARIAN1_220315A : 12	R376291
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/15/2022 17:31/jp	VARIAN1_220315A : 12	R376291

- 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

Client: AECOM - Honolulu
Client Sample ID: ERH2759 (Trip Blank) 14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-035
Collection Date: 03/09/2022 12:45
Date Received: 03/12/2022
Report Date: 03/21/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 15:48/clt	GECD.I_220314A : 62	164489
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/15/2022 15:48/clt	GECD.I_220314A : 62	164489

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2759 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-036
Collection Date: 03/09/2022 12:45
Date Received: 03/12/2022
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	03/14/2022 10:08/jdw	FID-HEADSPACE_220314A : 19	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2685 (RHMW2254-01, Bailer)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-037
Collection Date: 03/09/2022 17:20
Date Received: 03/12/2022
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	03/17/2022 09:39/eli-ca	SUB-C280612 : 30	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 21:27/srh	ICPMS207-B_220315A : 97	R376266
METALS, TOTAL												
Lead	0.00008	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/15/2022 21:33/srh	ICPMS207-B_220315A : 98	164501
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2685 (RHMW2254-01, Bailer)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-037
Collection Date: 03/09/2022 17:20
Date Received: 03/12/2022
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 16:16/msc	VOA5975C.I_220315A : 9	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
Surr: p-Bromofluorobenzene	111.0	%REC	1		85-114				SW8260B	03/15/2022 16:16/msc	VOA5975C.I_220315A : 9	R376454
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/15/2022 16:08/clt	GECD.I_220314A : 63	164489
Surr: 1,1,1,2-Tetrachloroethane	92.0	%REC	1		70-130				SW8011	03/15/2022 16:08/clt	GECD.I_220314A : 63	164489
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/16/2022 11:09/jp	VARIAN1_220315A : 33	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/16/2022 11:09/jp	VARIAN1_220315A : 33	R376291
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/16/2022 11:09/jp	VARIAN1_220315A : 33	R376291
- 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)	0.16	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/17/2022 07:55/amn	GCFID-HP5-B_220316A : 15	164531
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/17/2022 23:12/amn	GCFID-HP5-B_220316B : 9	164531
Oil Range Hydrocarbons (C24 to C40)	0.30	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/17/2022 07:55/amn	GCFID-HP5-B_220316A : 15	164531
Oil Range Hydrocarbons (SGT-C24 to C40)	0.15	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/17/2022 23:12/amn	GCFID-HP5-B_220316B : 9	164531
Total Extractable Hydrocarbons	0.48	mg/L	1		0.30	0.14	0.071		SW8015C	03/17/2022 07:55/amn	GCFID-HP5-B_220316A : 15	164531
Total Extractable Hydrocarbons (SGT)	0.19	mg/L	1	J	0.30	0.11	0.034		SW8015C	03/17/2022 23:12/amn	GCFID-HP5-B_220316B : 9	164531

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-037
Client: AECOM - Honolulu
Collection Date: 03/09/2022 17:20
Client Sample ID: ERH2685 (RHMW2254-01, Bailer)
Date Received: 03/12/2022
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	95.0	%REC	1		56-125				SW8015C	03/17/2022 07:55/amn	GCFID-HP5-B_220316A : 15	164531
Surr: o-Terphenyl (SGT)	92.0	%REC	1		56-125				SW8015C	03/17/2022 23:12/amn	GCFID-HP5-B_220316B : 9	164531
Surr: n-Triacontane	91.0	%REC	1		50-150				SW8015C	03/17/2022 07:55/amn	GCFID-HP5-B_220316A : 15	164531
Surr: n-Triacontane (SGT)	82.0	%REC	1		50-150				SW8015C	03/17/2022 23:12/amn	GCFID-HP5-B_220316B : 9	164531
- 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	03/14/2022 10:12/jdw	FID-HEADSPACE_220314A : 20	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2684 (Trip Blank) 14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-038
Collection Date: 03/09/2022 17:20
Date Received: 03/12/2022
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 20:50/msc	VOA5975C.I_220315A : 19	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-038
Client: AECOM - Honolulu
Collection Date: 03/09/2022 17:20
Client Sample ID: ERH2684 (Trip Blank) 14894
Date Received: 03/12/2022
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	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/15/2022 20:50/msc	VOA5975C.I_220315A : 19	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2684 (Trip Blank) 14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-039
Collection Date: 03/09/2022 17:20
Date Received: 03/12/2022
Report Date: 03/21/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/15/2022 18:06/jp	VARIAN1_220315A : 13	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/15/2022 18:06/jp	VARIAN1_220315A : 13	R376291
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	03/15/2022 18:06/jp	VARIAN1_220315A : 13	R376291

- 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

Client: AECOM - Honolulu
Client Sample ID: ERH2684 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-040
Collection Date: 03/09/2022 17:20
Date Received: 03/12/2022
Report Date: 03/21/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 16:28/clt	GECD.I_220314A : 64	164489
Surr: 1,1,1,2-Tetrachloroethane	91.0	%REC	1		70-130				SW8011	03/15/2022 16:28/clt	GECD.I_220314A : 64	164489

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2684 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-041
Collection Date: 03/09/2022 17:20
Date Received: 03/12/2022
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	03/14/2022 10:21/jdw	FID-HEADSPACE_220314A : 21	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2755 (RHMW08)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-042
Collection Date: 03/09/2022 15:50
Date Received: 03/12/2022
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 0.6 to 0.6	0.63	mg/L	1		0.50	0.50	0.17		SW9060A	03/17/2022 11:39/eli-ca	SUB-C280612 : 31	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 21:40/srh	ICPMS207-B_220315A : 99	R376266
METALS, TOTAL												
Lead	0.00023	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/15/2022 21:46/srh	ICPMS207-B_220315A : 100	164501
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2755 (RHMW08)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-042
Collection Date: 03/09/2022 15:50
Date Received: 03/12/2022
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 16:44/msc	VOA5975C.I_220315A : 10	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Surr: 1,2-Dichloroethane-d4	105.0	%REC	1		81-118				SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/15/2022 16:44/msc	VOA5975C.I_220315A : 10	R376454
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 16:48/clt	GECD.I_220314A : 65	164489
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/15/2022 16:48/clt	GECD.I_220314A : 65	164489
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/16/2022 12:17/jp	VARIAN1_220315A : 34	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/16/2022 12:17/jp	VARIAN1_220315A : 34	R376291
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/16/2022 12:17/jp	VARIAN1_220315A : 34	R376291
- 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	03/17/2022 11:55/amn	GCFID-HP5-B_220316A : 19	164531
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/18/2022 01:21/amn	GCFID-HP5-B_220316B : 11	164531
Oil Range Hydrocarbons (C24 to C40)	0.10	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/17/2022 11:55/amn	GCFID-HP5-B_220316A : 19	164531
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/18/2022 01:21/amn	GCFID-HP5-B_220316B : 11	164531
Total Extractable Hydrocarbons	0.12	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/17/2022 11:55/amn	GCFID-HP5-B_220316A : 19	164531
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/18/2022 01:21/amn	GCFID-HP5-B_220316B : 11	164531

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-042
Client: AECOM - Honolulu
Collection Date: 03/09/2022 15:50
Client Sample ID: ERH2755 (RHMW08)
Date Received: 03/12/2022
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	90.0	%REC	1		56-125				SW8015C	03/17/2022 11:55/amn	GCFID-HP5-B_220316A : 19	164531
Surr: o-Terphenyl (SGT)	88.0	%REC	1		56-125				SW8015C	03/18/2022 01:21/amn	GCFID-HP5-B_220316B : 11	164531
Surr: n-Triacontane	87.0	%REC	1		50-150				SW8015C	03/17/2022 11:55/amn	GCFID-HP5-B_220316A : 19	164531
Surr: n-Triacontane (SGT)	81.0	%REC	1		50-150				SW8015C	03/18/2022 01:21/amn	GCFID-HP5-B_220316B : 11	164531
- 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	03/14/2022 10:25/jdw	FID-HEADSPACE_220314A : 22	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2754 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-043
Collection Date: 03/09/2022 15:50
Date Received: 03/12/2022
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 21:17/msc	VOA5975C.I_220315A : 20	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-043
Client: AECOM - Honolulu
Collection Date: 03/09/2022 15:50
Client Sample ID: ERH2754 (Trip Blank) 14833
Date Received: 03/12/2022
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	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/15/2022 21:17/msc	VOA5975C.I_220315A : 20	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-044
Client: AECOM - Honolulu
Collection Date: 03/09/2022 15:50
Client Sample ID: ERH2754 (Trip Blank) 14754
Date Received: 03/12/2022
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	03/15/2022 18:40/jp	VARIAN1_220315A : 14	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/15/2022 18:40/jp	VARIAN1_220315A : 14	R376291
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/15/2022 18:40/jp	VARIAN1_220315A : 14	R376291

- 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

Client: AECOM - Honolulu
Client Sample ID: ERH2754 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-045
Collection Date: 03/09/2022 15:50
Date Received: 03/12/2022
Report Date: 03/21/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 17:08/clt	GECD.I_220314A : 66	164489
Surr: 1,1,1,2-Tetrachloroethane	84.0	%REC	1		70-130				SW8011	03/15/2022 17:08/clt	GECD.I_220314A : 66	164489

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2754 (Trip Blank) 14732
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-046
Collection Date: 03/09/2022 15:50
Date Received: 03/12/2022
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	03/14/2022 10:30/jdw	FID-HEADSPACE_220314A : 23	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2763 (Adit 3 Sump)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-047
Collection Date: 03/09/2022 15:45
Date Received: 03/12/2022
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	0.46	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/17/2022 13:46/eli-ca	SUB-C280612 : 32	C_R280612
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/15/2022 21:52/srh	ICPMS207-B_220315A : 101	R376266
METALS, TOTAL												
Lead	0.00065	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/15/2022 21:58/srh	ICPMS207-B_220315A : 102	164501
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Chloroform	0.099	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2763 (Adit 3 Sump)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030912-047
Collection Date: 03/09/2022 15:45
Date Received: 03/12/2022
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 17:11/msc	VOA5975C.I_220315A : 11	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/15/2022 17:11/msc	VOA5975C.I_220315A : 11	R376454
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 17:27/clt	GECD.I_220314A : 67	164489
Surr: 1,1,1,2-Tetrachloroethane	92.0	%REC	1		70-130				SW8011	03/15/2022 17:27/clt	GECD.I_220314A : 67	164489
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	4.0	ug/L	1	J	20	8.7	2.0		SW8015C	03/16/2022 13:26/jp	VARIAN1_220315A : 35	R376291
Total Purgeable Hydrocarbons	55	ug/L	1		20	10	3.1		SW8015C	03/16/2022 13:26/jp	VARIAN1_220315A : 35	R376291
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/16/2022 13:26/jp	VARIAN1_220315A : 35	R376291
- 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)	0.11	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/17/2022 08:38/amn	GCFID-HP5-B_220316A : 16	164531
Diesel Range Organics (SGT-C10 to C24)	0.061	mg/L	1	J	0.30	0.12	0.027		SW8015C	03/17/2022 22:28/amn	GCFID-HP5-B_220316B : 8	164531
Oil Range Hydrocarbons (C24 to C40)	0.13	mg/L	1	J	0.30	0.14	0.085		SW8015C	03/17/2022 08:38/amn	GCFID-HP5-B_220316A : 16	164531
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.085		SW8015C	03/17/2022 22:28/amn	GCFID-HP5-B_220316B : 8	164531
Total Extractable Hydrocarbons	0.27	mg/L	1	J	0.30	0.14	0.072		SW8015C	03/17/2022 08:38/amn	GCFID-HP5-B_220316A : 16	164531
Total Extractable Hydrocarbons (SGT)	0.075	mg/L	1	J	0.30	0.12	0.034		SW8015C	03/17/2022 22:28/amn	GCFID-HP5-B_220316B : 8	164531

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-047
Client: AECOM - Honolulu
Collection Date: 03/09/2022 15:45
Client Sample ID: ERH2763 (Adit 3 Sump)
Date Received: 03/12/2022
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	03/17/2022 08:38/amn	GCFID-HP5-B_220316A : 16	164531
Surr: o-Terphenyl (SGT)	90.0	%REC	1		56-125				SW8015C	03/17/2022 22:28/amn	GCFID-HP5-B_220316B : 8	164531
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/17/2022 08:38/amn	GCFID-HP5-B_220316A : 16	164531
Surr: n-Triacontane (SGT)	79.0	%REC	1		50-150				SW8015C	03/17/2022 22:28/amn	GCFID-HP5-B_220316B : 8	164531
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.0017	mg/L	1	J	0.0020	0.0012	0.00070		SW8015M	03/14/2022 10:36/jdw	FID-HEADSPACE_220314A : 24	R376214

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2762 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-048
Collection Date: 03/09/2022 15:45
Date Received: 03/12/2022
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 21:44/msc	VOA5975C.I_220315A : 21	R376454
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-048
Client: AECOM - Honolulu
Collection Date: 03/09/2022 15:45
Client Sample ID: ERH2762 (Trip Blank) 14833
Date Received: 03/12/2022
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	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Surr: Toluene-d8	98.0	%REC	1		89-112				SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/15/2022 21:44/msc	VOA5975C.I_220315A : 21	R376454

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030912-049
Client: AECOM - Honolulu
Collection Date: 03/09/2022 15:45
Client Sample ID: ERH2762 (Trip Blank) 14754
Date Received: 03/12/2022
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	03/15/2022 23:47/jp	VARIAN1_220315A : 21	R376291
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/15/2022 23:47/jp	VARIAN1_220315A : 21	R376291
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	03/15/2022 23:47/jp	VARIAN1_220315A : 21	R376291

- 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

Client: AECOM - Honolulu
Client Sample ID: ERH2762 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-050
Collection Date: 03/09/2022 15:45
Date Received: 03/12/2022
Report Date: 03/21/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/15/2022 17:48/clt	GECD.I_220314A : 68	164489
Surr: 1,1,1,2-Tetrachloroethane	91.0	%REC	1		70-130				SW8011	03/15/2022 17:48/clt	GECD.I_220314A : 68	164489

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2762 (Trip Blank) 14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030912-051
Collection Date: 03/09/2022 15:45
Date Received: 03/12/2022
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	03/14/2022 10:41/jdw	FID-HEADSPACE_220314A : 25	R376214

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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: **B22030912-001D, B22030912-006D, B22030912-011D, B22030912-016D, B22030912-021D, B22030912-027D, B22030912-032D, B22030912-037D, B22030912-042D, B22030912-047D**

- 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: **B22030912-001D, B22030912-006D, B22030912-011D, B22030912-016D, B22030912-021D, B22030912-027D, B22030912-032D, B22030912-037D, B22030912-042D, B22030912-047D**

- 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: **B22030912-001D, B22030912-006D, B22030912-011D, B22030912-016D, B22030912-021D, B22030912-027D, B22030912-032D, B22030912-037D, B22030912-042D, B22030912-047D**

- TOC Range is 5.1 to 5.2

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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: **B22030912-001D, B22030912-006D, B22030912-011D, B22030912-016D, B22030912-021D, B22030912-027D, B22030912-032D, B22030912-037D, B22030912-042D, B22030912-047D**

- 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: **B22030912-001D, B22030912-006D, B22030912-011D, B22030912-016D, B22030912-021D, B22030912-027D, B22030912-032D, B22030912-037D, B22030912-042D, B22030912-047D**

- 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: **B22030912-001D, B22030912-006D, B22030912-011D, B22030912-016D, B22030912-021D, B22030912-027D, B22030912-032D, B22030912-037D, B22030912-042D, B22030912-047D**

- TOC Range is 5.8 to 5.9

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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	0.63	98.0	91	111	5.5			

Associated Samples: **B22030912-001D, B22030912-006D, B22030912-011D, B22030912-016D, B22030912-021D, B22030912-027D, B22030912-032D, B22030912-037D, B22030912-042D, B22030912-047D**

- 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	0.63	98.0	91	111	5.5	0.6	10.0	

Associated Samples: **B22030912-001D, B22030912-006D, B22030912-011D, B22030912-016D, B22030912-021D, B22030912-027D, B22030912-032D, B22030912-037D, B22030912-042D, B22030912-047D**

- TOC Range is 5.5 to 5.6

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: **B22030912-001D, B22030912-006D, B22030912-011D, B22030912-016D, B22030912-021D, B22030912-027D, B22030912-032D, B22030912-037D, B22030912-042D, B22030912-047D**

- TOC Range is 4.7 to 4.9

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: SUB-C280612: 22 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280612
Method: SW9060A **Analysis Date:** 03/17/2022 14:27 **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		97.0	90	110				

Associated Samples: **B22030912-001D, B22030912-006D, B22030912-011D, B22030912-016D, B22030912-021D, B22030912-027D, B22030912-032D, B22030912-037D, B22030912-042D, B22030912-047D**

- TOC Range is 4.8 to 4.9

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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: **B22030912-001A, B22030912-006A, B22030912-011A, B22030912-016A, B22030912-021A, B22030912-027A, B22030912-032A, B22030912-037A, B22030912-042A, B22030912-047A**

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: **B22030912-001A, B22030912-006A, B22030912-011A, B22030912-016A, B22030912-021A, B22030912-027A, B22030912-032A, B22030912-037A, B22030912-042A, B22030912-047A**

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: **B22030912-001A, B22030912-006A, B22030912-011A, B22030912-016A, B22030912-021A, B22030912-027A, B22030912-032A, B22030912-037A, B22030912-042A, B22030912-047A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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: **B22030912-001A, B22030912-006A, B22030912-011A, B22030912-016A, B22030912-021A, B22030912-027A, B22030912-032A, B22030912-037A, B22030912-042A, B22030912-047A**

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: **B22030912-001A, B22030912-006A, B22030912-011A, B22030912-016A, B22030912-021A, B22030912-027A, B22030912-032A, B22030912-037A, B22030912-042A, B22030912-047A**

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: **B22030912-001A, B22030912-006A, B22030912-011A, B22030912-016A, B22030912-021A, B22030912-027A, B22030912-032A, B22030912-037A, B22030912-042A, B22030912-047A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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: **B22030912-001A, B22030912-006A, B22030912-011A, B22030912-016A, B22030912-021A, B22030912-027A, B22030912-032A, B22030912-037A, B22030912-042A, B22030912-047A**

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: **B22030912-001A, B22030912-006A, B22030912-011A, B22030912-016A, B22030912-021A, B22030912-027A, B22030912-032A, B22030912-037A, B22030912-042A, B22030912-047A**

Run ID: Run Order: ICPMS207-B_220315A: 33 **SampType:** Laboratory Control Sample **Batch ID:** 164501
Method: SW6020 **Analysis Date:** 03/15/2022 14:48 **Prep Date:** 03/14/2022 14:52
Lab ID: LCS4-164501 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.098	0.001	0.100		98.0	88	115				

Associated Samples: **B22030912-001B, B22030912-006B, B22030912-011B, B22030912-016B, B22030912-021B, B22030912-027B, B22030912-032B, B22030912-037B, B22030912-042B, B22030912-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: ICPMS207-B_220315A: 77 **SampType:** Post Digestion/Distillation Spike **Batch ID:** 164501
Method: SW6020 **Analysis Date:** 03/15/2022 19:23 **Prep Date:** 03/14/2022 14:56
Lab ID: B22030912-001BPDS1 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.046	0.001	0.052	0	90.0	80	120				

Associated Samples: **B22030912-001B, B22030912-006B, B22030912-011B, B22030912-016B, B22030912-021B, B22030912-027B, B22030912-032B, B22030912-037B, B22030912-042B, B22030912-047B**

Run ID: Run Order: ICPMS207-B_220315A: 78 **SampType:** Matrix Spike **Batch ID:** 164501
Method: SW6020 **Analysis Date:** 03/15/2022 19:29 **Prep Date:** 03/14/2022 14:56
Lab ID: B22030912-001BMS4 **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				

Associated Samples: **B22030912-001B, B22030912-006B, B22030912-011B, B22030912-016B, B22030912-021B, B22030912-027B, B22030912-032B, B22030912-037B, B22030912-042B, B22030912-047B**

Run ID: Run Order: ICPMS207-B_220315A: 79 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164501
Method: SW6020 **Analysis Date:** 03/15/2022 19:35 **Prep Date:** 03/14/2022 14:56
Lab ID: B22030912-001BMSD4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.093	0.001	0.100	0	93.0	88	115	0.094	1.3	20.0	

Associated Samples: **B22030912-001B, B22030912-006B, B22030912-011B, B22030912-016B, B22030912-021B, B22030912-027B, B22030912-032B, B22030912-037B, B22030912-042B, B22030912-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: ICPMS207-B_220315A: 31 **SampType:** Method Blank **Batch ID:** 164501
Method: SW6020 **Analysis Date:** 03/15/2022 14:36 **Prep Date:** 03/14/2022 14:52
Lab ID: MB-164501 **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: **B22030912-001B, B22030912-006B, B22030912-011B, B22030912-016B, B22030912-021B, B22030912-027B, B22030912-032B, B22030912-037B, B22030912-042B, B22030912-047B**

Run ID: Run Order: ICPMS207-B_220315A: 76 **SampType:** Serial Dilution **Batch ID:** 164501
Method: SW6020 **Analysis Date:** 03/15/2022 19:16 **Prep Date:** 03/14/2022 14:56
Lab ID: B22030912-001BDIL **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	

Associated Samples: **B22030912-001B, B22030912-006B, B22030912-011B, B22030912-016B, B22030912-021B, B22030912-027B, B22030912-032B, B22030912-037B, B22030912-042B, B22030912-047B**

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: **B22030912-001A, B22030912-001B, B22030912-006A, B22030912-006B, B22030912-011A, B22030912-011B, B22030912-016A, B22030912-016B, B22030912-021A, B22030912-021B, B22030912-027A, B22030912-027B, B22030912-032A, B22030912-032B, B22030912-037A, B22030912-037B, B22030912-042A, B22030912-042B, B22030912-047A, B22030912-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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: **B22030912-001A, B22030912-001B, B22030912-006A, B22030912-006B, B22030912-011A, B22030912-011B, B22030912-016A, B22030912-016B, B22030912-021A, B22030912-021B, B22030912-027A, B22030912-027B, B22030912-032A, B22030912-032B, B22030912-037A, B22030912-037B, B22030912-042A, B22030912-042B, B22030912-047A, B22030912-047B**

Run ID: Run Order: ICPMS207-B_220315A: 93 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 21:02 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.046	0.001	0.050		92.0	90	110				

Associated Samples: **B22030912-001A, B22030912-001B, B22030912-006A, B22030912-006B, B22030912-011A, B22030912-011B, B22030912-016A, B22030912-016B, B22030912-021A, B22030912-021B, B22030912-027A, B22030912-027B, B22030912-032A, B22030912-032B, B22030912-037A, B22030912-037B, B22030912-042A, B22030912-042B, B22030912-047A, B22030912-047B**

Run ID: Run Order: ICPMS207-B_220315A: 103 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376266
Method: SW6020 **Analysis Date:** 03/15/2022 22:05 **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	0.045	0.001	0.050		90.0	90	110				

Associated Samples: **B22030912-001A, B22030912-001B, B22030912-006A, B22030912-006B, B22030912-011A, B22030912-011B, B22030912-016A, B22030912-016B, B22030912-021A, B22030912-021B, B22030912-027A, B22030912-027B, B22030912-032A, B22030912-032B, B22030912-037A, B22030912-037B, B22030912-042A, B22030912-042B, B22030912-047A, B22030912-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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: B22030912
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: **B22030912-001E, B22030912-006E, B22030912-011E, B22030912-016E, B22030912-021E**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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: B22030912
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: **B22030912-001E, B22030912-006E, B22030912-011E, B22030912-016E, B22030912-021E**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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: B22030912
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: **B22030912-001E, B22030912-006E, B22030912-011E, B22030912-016E, B22030912-021E**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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: B22030912
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: **B22030912-001E, B22030912-006E, B22030912-011E, B22030912-016E, B22030912-021E**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 4 **SampType:** Method Blank **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 14:27 **Prep Date:**
Lab ID: MBLK031522_ **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: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 4 **SampType:** Method Blank **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 14:27 **Prep Date:**
Lab ID: MBLK031522_ **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		111.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		109.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	85	114				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 4 **SampType:** Method Blank **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 14:27 **Prep Date:**
Lab ID: MBLK031522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	9.6	0.50	10		96.0	89	112				

Associated Samples: **B22030912-002A, B22030912-007A, B22030912-012A, B22030912-017A, B22030912-022B, B22030912-023A, B22030912-027E, B22030912-028A, B22030912-032E, B22030912-033A, B22030912-037E, B22030912-038A, B22030912-042E, B22030912-043A, B22030912-047E, B22030912-048A**

Run ID: Run Order: VOA5975C.I_220315A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 13:32 **Prep Date:**
Lab ID: LCS031522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	4.7	0.50	5.0		95.0	79	120				
Bromobenzene	5.0	0.50	5.0		101.0	80	120				
Bromochloromethane	4.8	0.50	5.0		95.0	78	123				
Bromodichloromethane	5.0	0.50	5.0		100.0	79	125				
Bromoform	5.1	0.50	5.0		102.0	66	130				
Carbon tetrachloride	4.2	0.50	5.0		84.0	72	136				
Chlorobenzene	4.8	0.50	5.0		97.0	82	118				
Chlorodibromomethane	4.5	0.50	5.0		91.0	74	126				
Chloroethane	4.9	0.50	5.0		97.0	60	138				
Chloroform	4.6	0.50	5.0		92.0	79	124				
Chloromethane	4.6	0.50	5.0		93.0	50	139				
1,2-Dibromoethane	4.9	0.50	5.0		98.0	78	122				
2-Chlorotoluene	5.0	0.50	5.0		99.0	79	122				
Dibromomethane	4.9	0.50	5.0		97.0	79	123				
1,2-Dichlorobenzene	5.0	0.50	5.0		100.0	80	119				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 13:32 **Prep Date:**
Lab ID: LCS031522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.1	0.50	5.0		102.0	78	122				
1,3-Dichlorobenzene	5.1	0.50	5.0		103.0	80	119				
1,4-Dichlorobenzene	4.9	0.50	5.0		98.0	79	118				
Dichlorodifluoromethane	4.2	0.50	5.0		83.0	32	152				
1,1-Dichloroethane	4.8	0.50	5.0		97.0	77	125				
1,2-Dichloroethane	4.8	0.50	5.0		97.0	73	128				
1,1-Dichloroethene	4.4	0.50	5.0		87.0	71	131				
cis-1,2-Dichloroethene	4.7	0.50	5.0		94.0	78	123				
trans-1,2-Dichloroethene	4.6	0.50	5.0		92.0	75	124				
1,2-Dichloropropane	4.7	0.50	5.0		95.0	78	122				
1,3-Dichloropropane	4.7	0.50	5.0		95.0	80	119				
2,2-Dichloropropane	4.5	0.50	5.0		91.0	60	139				
1,1-Dichloropropene	4.2	0.50	5.0		83.0	79	125				
cis-1,3-Dichloropropene	4.6	0.50	5.0		92.0	75	124				
trans-1,3-Dichloropropene	5.0	0.50	5.0		100.0	73	127				
Ethylbenzene	4.5	0.50	5.0		91.0	79	121				
Methyl tert-butyl ether (MTBE)	5.2	0.50	5.0		104.0	71	124				
Methyl ethyl ketone	60	10	50		121.0	56	143				
Methylene chloride	4.5	0.50	5.0		90.0	74	124				
Styrene	4.7	0.50	5.0		94.0	78	123				
1,1,1,2-Tetrachloroethane	4.6	0.50	5.0		92.0	78	124				
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0		105.0	71	121				
Tetrachloroethene	4.4	0.50	5.0		88.0	74	129				
Toluene	4.9	0.50	5.0		98.0	80	121				
1,1,1-Trichloroethane	4.4	0.50	5.0		87.0	74	131				
1,1,2-Trichloroethane	5.0	0.50	5.0		100.0	80	119				
Trichloroethene	4.6	0.50	5.0		92.0	79	123				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 13:32 **Prep Date:**
Lab ID: LCS031522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	4.5	0.50	5.0		90.0	65	141				
1,2,3-Trichloropropane	5.0	0.50	5.0		100.0	73	125				
Vinyl chloride	4.7	0.50	5.0		94.0	58	137				
m+p-Xylenes	9.0	0.50	10		90.0	80	121				
o-Xylene	4.7	0.50	5.0		93.0	78	122				
Xylenes, Total	14	0.50	15		91.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		107.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		104.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		108.0	85	114				
Surr: Toluene-d8	10	0.50	10		101.0	89	112				

Associated Samples: **B22030912-002A, B22030912-007A, B22030912-012A, B22030912-017A, B22030912-022B, B22030912-023A, B22030912-027E, B22030912-028A, B22030912-032E, B22030912-033A, B22030912-037E, B22030912-038A, B22030912-042E, B22030912-043A, B22030912-047E, B22030912-048A**

Run ID: Run Order: VOA5975C.I_220315A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 22:12 **Prep Date:**
Lab ID: B22030912-022BMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	4.6	0.50	5.0	0.0	93.0	79	120				
Bromobenzene	4.8	0.50	5.0	0.0	96.0	80	120				
Bromochloromethane	4.7	0.50	5.0	0.0	95.0	78	123				
Bromodichloromethane	4.9	0.50	5.0	0.0	97.0	79	125				
Bromoform	5.0	0.50	5.0	0.0	99.0	66	130				
Carbon tetrachloride	4.5	0.50	5.0	0.0	89.0	72	136				
Chlorobenzene	4.7	0.50	5.0	0.0	95.0	82	118				
Chlorodibromomethane	4.7	0.50	5.0	0.0	93.0	74	126				
Chloroethane	4.6	0.50	5.0	0.0	91.0	60	138				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 22:12 **Prep Date:**
Lab ID: B22030912-022BMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Chloroform	7.2	0.50	5.0	2.6	91.0	79	124				
Chloromethane	4.6	0.50	5.0	0.0	92.0	50	139				
1,2-Dibromoethane	4.6	0.50	5.0	0.0	93.0	78	122				
2-Chlorotoluene	5.0	0.50	5.0	0.0	100.0	79	122				
Dibromomethane	4.7	0.50	5.0	0.0	94.0	79	123				
1,2-Dichlorobenzene	4.9	0.50	5.0	0.0	97.0	80	119				
4-Chlorotoluene	5.1	0.50	5.0	0.0	102.0	78	122				
1,3-Dichlorobenzene	5.0	0.50	5.0	0.0	100.0	80	119				
1,4-Dichlorobenzene	4.9	0.50	5.0	0.0	97.0	79	118				
Dichlorodifluoromethane	4.2	0.50	5.0	0.0	84.0	32	152				
1,1-Dichloroethane	4.7	0.50	5.0	0.0	93.0	77	125				
1,2-Dichloroethane	4.6	0.50	5.0	0.0	92.0	73	128				
1,1-Dichloroethene	4.3	0.50	5.0	0.0	86.0	71	131				
cis-1,2-Dichloroethene	4.5	0.50	5.0	0.0	91.0	78	123				
trans-1,2-Dichloroethene	4.4	0.50	5.0	0.0	88.0	75	124				
1,2-Dichloropropane	4.6	0.50	5.0	0.0	92.0	78	122				
1,3-Dichloropropane	4.5	0.50	5.0	0.0	90.0	80	119				
2,2-Dichloropropane	4.4	0.50	5.0	0.0	87.0	60	139				
1,1-Dichloropropene	4.3	0.50	5.0	0.0	85.0	79	125				
cis-1,3-Dichloropropene	4.2	0.50	5.0	0.0	85.0	75	124				
trans-1,3-Dichloropropene	4.9	0.50	5.0	0.0	97.0	73	127				
Ethylbenzene	4.6	0.50	5.0	0.0	91.0	79	121				
Methyl tert-butyl ether (MTBE)	4.6	0.50	5.0	0.0	93.0	71	124				
Methyl ethyl ketone	53	10	50	0.0	106.0	56	143				
Methylene chloride	4.3	0.50	5.0	0.0	86.0	74	124				
Styrene	3.1	0.50	5.0	0.0	62.0	78	123				S
1,1,1,2-Tetrachloroethane	4.6	0.50	5.0	0.0	92.0	78	124				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 22:12 **Prep Date:**
Lab ID: B22030912-022BMS **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	0.0	102.0	71	121				
Tetrachloroethene	4.6	0.50	5.0	0.0	93.0	74	129				
Toluene	4.9	0.50	5.0	0.0	98.0	80	121				
1,1,1-Trichloroethane	4.5	0.50	5.0	0.0	90.0	74	131				
1,1,2-Trichloroethane	4.7	0.50	5.0	0.0	95.0	80	119				
Trichloroethene	4.6	0.50	5.0	0.0	92.0	79	123				
Trichlorofluoromethane	4.7	0.50	5.0	0.0	93.0	65	141				
1,2,3-Trichloropropane	4.7	0.50	5.0	0.0	94.0	73	125				
Vinyl chloride	4.6	0.50	5.0	0.0	93.0	58	137				
m+p-Xylenes	9.2	0.50	10	0.0	92.0	80	121				
o-Xylene	4.6	0.50	5.0	0.0	93.0	78	122				
Xylenes, Total	14	0.50	15	0.0	92.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10	0.0	101.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10	0.0	104.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	108.0	85	114				
Surr: Toluene-d8	10	0.50	10	0.0	102.0	89	112				

Associated Samples: **B22030912-002A, B22030912-007A, B22030912-012A, B22030912-017A, B22030912-022B, B22030912-023A, B22030912-027E, B22030912-028A, B22030912-032E, B22030912-033A, B22030912-037E, B22030912-038A, B22030912-042E, B22030912-043A, B22030912-047E, B22030912-048A**

Run ID: Run Order: VOA5975C.I_220315A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 22:39 **Prep Date:**
Lab ID: B22030912-022BMSD **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	0.0	100.0	79	120	4.6	7.8	20.0	
Bromobenzene	5.2	0.50	5.0	0.0	104.0	80	120	4.8	7.9	20.0	
Bromochloromethane	4.8	0.50	5.0	0.0	96.0	78	123	4.7	1.1	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 22:39 **Prep Date:**
Lab ID: B22030912-022BMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	5.3	0.50	5.0	0.0	106.0	79	125	4.9	9.0	20.0	
Bromoform	5.3	0.50	5.0	0.0	106.0	66	130	5.0	6.5	20.0	
Carbon tetrachloride	4.7	0.50	5.0	0.0	94.0	72	136	4.5	5.5	20.0	
Chlorobenzene	5.2	0.50	5.0	0.0	104.0	82	118	4.7	9.1	20.0	
Chlorodibromomethane	5.0	0.50	5.0	0.0	101.0	74	126	4.7	7.8	20.0	
Chloroethane	5.1	0.50	5.0	0.0	101.0	60	138	4.6	10.0	20.0	
Chloroform	7.4	0.50	5.0	2.6	94.0	79	124	7.2	2.5	20.0	
Chloromethane	5.0	0.50	5.0	0.0	101.0	50	139	4.6	9.1	20.0	
1,2-Dibromoethane	5.1	0.50	5.0	0.0	102.0	78	122	4.6	9.9	20.0	
2-Chlorotoluene	5.3	0.50	5.0	0.0	106.0	79	122	5.0	5.5	20.0	
Dibromomethane	5.0	0.50	5.0	0.0	100.0	79	123	4.7	6.4	20.0	
1,2-Dichlorobenzene	5.2	0.50	5.0	0.0	104.0	80	119	4.9	7.2	20.0	
4-Chlorotoluene	5.5	0.50	5.0	0.0	109.0	78	122	5.1	6.9	20.0	
1,3-Dichlorobenzene	5.3	0.50	5.0	0.0	106.0	80	119	5.0	5.7	20.0	
1,4-Dichlorobenzene	5.0	0.50	5.0	0.0	101.0	79	118	4.9	4.0	20.0	
Dichlorodifluoromethane	4.8	0.50	5.0	0.0	95.0	32	152	4.2	13.0	20.0	
1,1-Dichloroethane	5.0	0.50	5.0	0.0	100.0	77	125	4.7	6.8	20.0	
1,2-Dichloroethane	5.0	0.50	5.0	0.0	99.0	73	128	4.6	7.2	20.0	
1,1-Dichloroethene	4.6	0.50	5.0	0.0	92.0	71	131	4.3	6.9	20.0	
cis-1,2-Dichloroethene	4.9	0.50	5.0	0.0	99.0	78	123	4.5	8.8	20.0	
trans-1,2-Dichloroethene	4.6	0.50	5.0	0.0	91.0	75	124	4.4	4.0	20.0	
1,2-Dichloropropane	5.0	0.50	5.0	0.0	101.0	78	122	4.6	8.7	20.0	
1,3-Dichloropropane	5.1	0.50	5.0	0.0	101.0	80	119	4.5	11.0	20.0	
2,2-Dichloropropane	4.5	0.50	5.0	0.0	90.0	60	139	4.4	2.9	20.0	
1,1-Dichloropropene	4.5	0.50	5.0	0.0	90.0	79	125	4.3	4.8	20.0	
cis-1,3-Dichloropropene	4.7	0.50	5.0	0.0	95.0	75	124	4.2	11.0	20.0	
trans-1,3-Dichloropropene	5.2	0.50	5.0	0.0	104.0	73	127	4.9	6.8	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 22:39 **Prep Date:**
Lab ID: B22030912-022BMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Ethylbenzene	5.1	0.50	5.0	0.0	101.0	79	121	4.6	10.0	20.0	
Methyl tert-butyl ether (MTBE)	5.2	0.50	5.0	0.0	103.0	71	124	4.6	11.0	20.0	
Methyl ethyl ketone	58	10	50	0.0	116.0	56	143	53	8.5	20.0	
Methylene chloride	4.7	0.50	5.0	0.0	93.0	74	124	4.3	7.7	20.0	
Styrene	3.1	0.50	5.0	0.0	61.0	78	123	3.1	0.8	20.0	S
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0	0.0	102.0	78	124	4.6	10.0	20.0	
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0	0.0	107.0	71	121	5.1	5.5	20.0	
Tetrachloroethene	4.8	0.50	5.0	0.0	97.0	74	129	4.6	4.2	20.0	
Toluene	5.3	0.50	5.0	0.0	107.0	80	121	4.9	9.1	20.0	
1,1,1-Trichloroethane	4.7	0.50	5.0	0.0	95.0	74	131	4.5	5.9	20.0	
1,1,2-Trichloroethane	5.3	0.50	5.0	0.0	106.0	80	119	4.7	11.0	20.0	
Trichloroethene	5.1	0.50	5.0	0.0	103.0	79	123	4.6	11.0	20.0	
Trichlorofluoromethane	5.2	0.50	5.0	0.0	103.0	65	141	4.7	10.0	20.0	
1,2,3-Trichloropropane	5.3	0.50	5.0	0.0	106.0	73	125	4.7	11.0	20.0	
Vinyl chloride	5.2	0.50	5.0	0.0	103.0	58	137	4.6	11.0	20.0	
m+p-Xylenes	9.8	0.50	10	0.0	98.0	80	121	9.2	6.9	20.0	
o-Xylene	5.0	0.50	5.0	0.0	101.0	78	122	4.6	8.0	20.0	
Xylenes, Total	15	0.50	15	0.0	99.0	79	121	14	7.3	20.0	
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	107.0	81	118	0.0			
Surr: Dibromofluoromethane	10	0.50	10	0.0	103.0	80	119	0.0			
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	106.0	85	114	0.0			
Surr: Toluene-d8	10	0.50	10	0.0	103.0	89	112	0.0			

Associated Samples: **B22030912-002A, B22030912-007A, B22030912-012A, B22030912-017A, B22030912-022B, B22030912-023A, B22030912-027E, B22030912-028A, B22030912-032E, B22030912-033A, B22030912-037E, B22030912-038A, B22030912-042E, B22030912-043A, B22030912-047E, B22030912-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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
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				
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				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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-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				
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: **B22030912-001E, B22030912-006E, B22030912-011E, B22030912-016E, B22030912-021E**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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
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				
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				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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
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				
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: **B22030912-001E, B22030912-006E, B22030912-011E, B22030912-016E, B22030912-021E**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 12:47 **Prep Date:**
Lab ID: CCV031522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.4	0.50	5.0		107.0	80	120				
Bromobenzene	5.4	0.50	5.0		108.0	80	120				
Bromochloromethane	5.2	0.50	5.0		105.0	80	120				
Bromodichloromethane	5.2	0.50	5.0		105.0	80	120				
Bromoform	5.2	0.50	5.0		105.0	80	120				
Carbon tetrachloride	4.7	0.50	5.0		94.0	80	120				
Chlorobenzene	5.1	0.50	5.0		101.0	80	120				
Chlorodibromomethane	5.2	0.50	5.0		103.0	80	120				
Chloroethane	4.9	0.50	5.0		98.0	80	120				
Chloroform	5.2	0.50	5.0		104.0	80	120				
Chloromethane	4.9	0.50	5.0		98.0	80	120				
1,2-Dibromoethane	5.0	0.50	5.0		101.0	80	120				
2-Chlorotoluene	5.4	0.50	5.0		108.0	80	120				
Dibromomethane	5.4	0.50	5.0		108.0	80	120				
1,2-Dichlorobenzene	5.2	0.50	5.0		105.0	80	120				
4-Chlorotoluene	5.5	0.50	5.0		110.0	80	120				
1,3-Dichlorobenzene	5.2	0.50	5.0		105.0	80	120				
1,4-Dichlorobenzene	5.2	0.50	5.0		103.0	80	120				
Dichlorodifluoromethane	4.7	0.50	5.0		95.0	80	120				
1,1-Dichloroethane	5.3	0.50	5.0		106.0	80	120				
1,2-Dichloroethane	5.4	0.50	5.0		107.0	80	120				
1,1-Dichloroethene	5.1	0.50	5.0		103.0	80	120				
cis-1,2-Dichloroethene	5.2	0.50	5.0		104.0	80	120				
trans-1,2-Dichloroethene	5.1	0.50	5.0		103.0	80	120				
1,2-Dichloropropane	5.3	0.50	5.0		106.0	80	120				
1,3-Dichloropropane	5.2	0.50	5.0		104.0	80	120				
2,2-Dichloropropane	5.1	0.50	5.0		103.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 12:47 **Prep Date:**
Lab ID: CCV031522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.0	0.50	5.0		100.0	80	120				
cis-1,3-Dichloropropene	5.2	0.50	5.0		105.0	80	120				
trans-1,3-Dichloropropene	5.4	0.50	5.0		108.0	80	120				
Ethylbenzene	4.9	0.50	5.0		99.0	80	120				
Methyl tert-butyl ether (MTBE)	4.8	0.50	5.0		96.0	80	120				
Methyl ethyl ketone	46	10	50		92.0	80	120				
Methylene chloride	5.3	0.50	5.0		105.0	80	120				
Styrene	5.1	0.50	5.0		101.0	80	120				
1,1,1,2-Tetrachloroethane	5.2	0.50	5.0		104.0	80	120				
1,1,2,2-Tetrachloroethane	5.7	0.50	5.0		114.0	80	120				
Tetrachloroethene	5.0	0.50	5.0		99.0	80	120				
Toluene	5.4	0.50	5.0		109.0	80	120				
1,1,1-Trichloroethane	5.0	0.50	5.0		100.0	80	120				
1,1,2-Trichloroethane	5.3	0.50	5.0		107.0	80	120				
Trichloroethene	5.1	0.50	5.0		103.0	80	120				
Trichlorofluoromethane	4.7	0.50	5.0		94.0	80	120				
1,2,3-Trichloropropane	5.2	0.50	5.0		104.0	80	120				
Vinyl chloride	4.8	0.50	5.0		96.0	80	120				
m+p-Xylenes	10	0.50	10		101.0	80	120				
o-Xylene	5.0	0.50	5.0		100.0	80	120				
Xylenes, Total	15	0.50	15		101.0	80	120				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		102.0	80	120				
Surr: Dibromofluoromethane	10	0.50	10		103.0	80	120				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 12:47 **Prep Date:**
Lab ID: CCV031522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	9.9	0.50	10		99.0	80	120				

Associated Samples: **B22030912-002A, B22030912-007A, B22030912-012A, B22030912-017A, B22030912-022B, B22030912-023A, B22030912-027E, B22030912-028A, B22030912-032E, B22030912-033A, B22030912-037E, B22030912-038A, B22030912-042E, B22030912-043A, B22030912-047E, B22030912-048A**

Run ID: Run Order: VOA5975C.I_220315A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 23:34 **Prep Date:**
Lab ID: CCV031522_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.3	0.50	5.0		105.0	50	150				
Bromobenzene	5.1	0.50	5.0		102.0	50	150				
Bromochloromethane	5.2	0.50	5.0		104.0	50	150				
Bromodichloromethane	5.4	0.50	5.0		109.0	50	150				
Bromoform	5.0	0.50	5.0		101.0	50	150				
Carbon tetrachloride	5.1	0.50	5.0		102.0	50	150				
Chlorobenzene	5.1	0.50	5.0		102.0	50	150				
Chlorodibromomethane	5.2	0.50	5.0		103.0	50	150				
Chloroethane	5.2	0.50	5.0		103.0	50	150				
Chloroform	5.0	0.50	5.0		100.0	50	150				
Chloromethane	5.0	0.50	5.0		100.0	50	150				
1,2-Dibromoethane	5.1	0.50	5.0		101.0	50	150				
2-Chlorotoluene	5.2	0.50	5.0		104.0	50	150				
Dibromomethane	5.2	0.50	5.0		105.0	50	150				
1,2-Dichlorobenzene	5.1	0.50	5.0		101.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 23:34 **Prep Date:**
Lab ID: CCV031522_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.5	0.50	5.0		109.0	50	150				
1,3-Dichlorobenzene	5.1	0.50	5.0		102.0	50	150				
1,4-Dichlorobenzene	5.0	0.50	5.0		101.0	50	150				
Dichlorodifluoromethane	5.0	0.50	5.0		99.0	50	150				
1,1-Dichloroethane	5.3	0.50	5.0		105.0	50	150				
1,2-Dichloroethane	5.1	0.50	5.0		102.0	50	150				
1,1-Dichloroethene	5.1	0.50	5.0		103.0	50	150				
cis-1,2-Dichloroethene	5.2	0.50	5.0		103.0	50	150				
trans-1,2-Dichloroethene	5.0	0.50	5.0		99.0	50	150				
1,2-Dichloropropane	5.5	0.50	5.0		109.0	50	150				
1,3-Dichloropropane	5.2	0.50	5.0		104.0	50	150				
2,2-Dichloropropane	4.8	0.50	5.0		96.0	50	150				
1,1-Dichloropropene	5.0	0.50	5.0		100.0	50	150				
cis-1,3-Dichloropropene	5.1	0.50	5.0		103.0	50	150				
trans-1,3-Dichloropropene	5.4	0.50	5.0		107.0	50	150				
Ethylbenzene	5.1	0.50	5.0		101.0	50	150				
Methyl tert-butyl ether (MTBE)	4.5	0.50	5.0		91.0	50	150				
Methyl ethyl ketone	46	10	50		91.0	50	150				
Methylene chloride	4.9	0.50	5.0		98.0	50	150				
Styrene	5.0	0.50	5.0		100.0	50	150				
1,1,1,2-Tetrachloroethane	5.0	0.50	5.0		101.0	50	150				
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0		107.0	50	150				
Tetrachloroethene	5.0	0.50	5.0		99.0	50	150				
Toluene	5.5	0.50	5.0		110.0	50	150				
1,1,1-Trichloroethane	5.1	0.50	5.0		102.0	50	150				
1,1,2-Trichloroethane	5.2	0.50	5.0		104.0	50	150				
Trichloroethene	5.3	0.50	5.0		106.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VOA5975C.I_220315A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376454
Method: SW8260B **Analysis Date:** 03/15/2022 23:34 **Prep Date:**
Lab ID: CCV031522_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	5.0	0.50	5.0		101.0	50	150				
1,2,3-Trichloropropane	5.0	0.50	5.0		100.0	50	150				
Vinyl chloride	4.9	0.50	5.0		99.0	50	150				
m+p-Xylenes	10	0.50	10		103.0	50	150				
o-Xylene	5.0	0.50	5.0		100.0	50	150				
Xylenes, Total	15	0.50	15		102.0	50	150				
Surr: 1,2-Dichloroethane-d4	9.9	0.50	10		99.0	50	150				
Surr: Dibromofluoromethane	10	0.50	10		103.0	50	150				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	50	150				
Surr: Toluene-d8	10	0.50	10		101.0	50	150				

Associated Samples: **B22030912-002A, B22030912-007A, B22030912-012A, B22030912-017A, B22030912-022B, B22030912-023A, B22030912-027E, B22030912-028A, B22030912-032E, B22030912-033A, B22030912-037E, B22030912-038A, B22030912-042E, B22030912-043A, B22030912-047E, B22030912-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GECD.I_220314A: 43 **SampType:** Method Blank **Batch ID:** 164489
Method: SW8011 **Analysis Date:** 03/15/2022 08:33 **Prep Date:** 03/14/2022 10:17
Lab ID: MB-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	ND	0.0050									
Surr: 1,1,1,2-Tetrachloroethane	0.093	0.020	0.10		93.0	70	130				

Associated Samples: **B22030912-001G, B22030912-004A, B22030912-006G, B22030912-009A, B22030912-011G, B22030912-014A, B22030912-016G, B22030912-019A, B22030912-021G, B22030912-025A, B22030912-027G, B22030912-030A, B22030912-032G, B22030912-035A, B22030912-037G, B22030912-040A, B22030912-042G, B22030912-045A, B22030912-047G, B22030912-050A**

Run ID: Run Order: GECD.I_220314A: 44 **SampType:** Laboratory Control Sample **Batch ID:** 164489
Method: SW8011 **Analysis Date:** 03/15/2022 08:52 **Prep Date:** 03/14/2022 10:17
Lab ID: LCS-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	0.23	0.010	0.25		93.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.091	0.020	0.10		91.0	70	130				

Associated Samples: **B22030912-001G, B22030912-004A, B22030912-006G, B22030912-009A, B22030912-011G, B22030912-014A, B22030912-016G, B22030912-019A, B22030912-021G, B22030912-025A, B22030912-027G, B22030912-030A, B22030912-032G, B22030912-035A, B22030912-037G, B22030912-040A, B22030912-042G, B22030912-045A, B22030912-047G, B22030912-050A**

Run ID: Run Order: GECD.I_220314A: 45 **SampType:** Laboratory Control Sample **Batch ID:** 164489
Method: SW8011 **Analysis Date:** 03/15/2022 09:12 **Prep Date:** 03/14/2022 10:17
Lab ID: LCS1-164489 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.097	0.010	0.10		97.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.091	0.020	0.10		91.0	70	130				

Associated Samples: **B22030912-001G, B22030912-004A, B22030912-006G, B22030912-009A, B22030912-011G, B22030912-014A, B22030912-016G, B22030912-019A, B22030912-021G, B22030912-025A, B22030912-027G, B22030912-030A, B22030912-032G, B22030912-035A, B22030912-037G, B22030912-040A, B22030912-042G, B22030912-045A, B22030912-047G, B22030912-050A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GECD.I_220314A: 56 **SampType:** Sample Matrix Spike **Batch ID:** 164489
Method: SW8011 **Analysis Date:** 03/15/2022 13:09 **Prep Date:** 03/14/2022 10:18
Lab ID: B22030912-001GMS **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.23	0.010	0.24	0.0	93.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.090	0.020	0.098	0.0	92.0	70	130				

Associated Samples: **B22030912-001G, B22030912-004A, B22030912-006G, B22030912-009A, B22030912-011G, B22030912-014A, B22030912-016G, B22030912-019A, B22030912-021G, B22030912-025A, B22030912-027G, B22030912-030A, B22030912-032G, B22030912-035A, B22030912-037G, B22030912-040A, B22030912-042G, B22030912-045A, B22030912-047G, B22030912-050A**

Run ID: Run Order: GECD.I_220314A: 57 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164489
Method: SW8011 **Analysis Date:** 03/15/2022 13:29 **Prep Date:** 03/14/2022 10:18
Lab ID: B22030912-001GMSD **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	0.23	1.1	20.0	
Surr: 1,1,1,2-Tetrachloroethane	0.091	0.020	0.099	0.0	92.0	70	130	0.0			

Associated Samples: **B22030912-001G, B22030912-004A, B22030912-006G, B22030912-009A, B22030912-011G, B22030912-014A, B22030912-016G, B22030912-019A, B22030912-021G, B22030912-025A, B22030912-027G, B22030912-030A, B22030912-032G, B22030912-035A, B22030912-037G, B22030912-040A, B22030912-042G, B22030912-045A, B22030912-047G, B22030912-050A**

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: **B22030912-001G, B22030912-004A, B22030912-006G, B22030912-009A, B22030912-011G, B22030912-014A, B22030912-016G, B22030912-019A, B22030912-021G, B22030912-025A, B22030912-027G, B22030912-030A, B22030912-032G, B22030912-035A, B22030912-037G, B22030912-040A, B22030912-042G, B22030912-045A, B22030912-047G, B22030912-050A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

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: **B22030912-001G, B22030912-004A, B22030912-006G, B22030912-009A, B22030912-011G, B22030912-014A, B22030912-016G, B22030912-019A, B22030912-021G, B22030912-025A, B22030912-027G, B22030912-030A, B22030912-032G, B22030912-035A, B22030912-037G, B22030912-040A, B22030912-042G, B22030912-045A, B22030912-047G, B22030912-050A**

Run ID: Run Order: GECD.I_220314A: 58 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164489
Method: SW8011 **Analysis Date:** 03/15/2022 14:09 **Prep Date:** 03/14/2022 10:17
Lab ID: CK3-164489 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.10	0.010	0.10		101.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.092	0.020	0.10		92.0	80	120				

Associated Samples: **B22030912-001G, B22030912-004A, B22030912-006G, B22030912-009A, B22030912-011G, B22030912-014A, B22030912-016G, B22030912-019A, B22030912-021G, B22030912-025A, B22030912-027G, B22030912-030A, B22030912-032G, B22030912-035A, B22030912-037G, B22030912-040A, B22030912-042G, B22030912-045A, B22030912-047G, B22030912-050A**

Run ID: Run Order: GECD.I_220314A: 69 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164489
Method: SW8011 **Analysis Date:** 03/15/2022 18:27 **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	0.39	0.010	0.40		99.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.42	0.020	0.40		104.0	80	120				

Associated Samples: **B22030912-001G, B22030912-004A, B22030912-006G, B22030912-009A, B22030912-011G, B22030912-014A, B22030912-016G, B22030912-019A, B22030912-021G, B22030912-025A, B22030912-027G, B22030912-030A, B22030912-032G, B22030912-035A, B22030912-037G, B22030912-040A, B22030912-042G, B22030912-045A, B22030912-047G, B22030912-050A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220315A: 4 **SampType:** Method Blank **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/15/2022 11:50 **Prep Date:**
Lab ID: MBLK_0315VAR08r **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	21	1.0	25		85.0	70	130				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Run ID: Run Order: VARIAN1_220315A: 20 **SampType:** Method Blank **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/15/2022 23:13 **Prep Date:**
Lab ID: MBLK_0315VAR28r **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	18	1.0	25		72.0	70	130				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220315A: 32 **SampType:** Method Blank **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/16/2022 10:35 **Prep Date:**
Lab ID: MBLK_0315VAR48r **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	20	1.0	25		82.0	70	130				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Run ID: Run Order: VARIAN1_220315A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/15/2022 10:42 **Prep Date:**
Lab ID: LCS_0315VAR06r **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	199	20	200		100.0	70	130				
Surr: Trifluorotoluene	23	1.0	25		92.0	70	130				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220315A: 19 **SampType:** Laboratory Control Sample **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/15/2022 22:05 **Prep Date:**
Lab ID: LCS_0315VAR26r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	140	20	170		82.0	78	122				
Total Purgeable Hydrocarbons	167	20	200		83.0	70	130				
Surr: Trifluorotoluene	20	1.0	25		82.0	70	130				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Run ID: Run Order: VARIAN1_220315A: 31 **SampType:** Laboratory Control Sample **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/16/2022 09:27 **Prep Date:**
Lab ID: LCS_0315VAR46r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	161	20	170		95.0	78	122				
Total Purgeable Hydrocarbons	192	20	200		96.0	70	130				
Surr: Trifluorotoluene	22	1.0	25		87.0	70	130				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220315A: 15 **SampType:** Sample Matrix Spike **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/15/2022 19:14 **Prep Date:**
Lab ID: B22030912-001FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	157	20	170	0.0	92.0	78	122				
Total Purgeable Hydrocarbons	190	20	200	5.2	92.0	70	130				
Surr: Trifluorotoluene	22	1.0	25	0.0	89.0	70	130				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Run ID: Run Order: VARIAN1_220315A: 16 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/15/2022 19:48 **Prep Date:**
Lab ID: B22030912-001FMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	163	20	170	0.0	96.0	78	122	157	3.9	20.0	
Total Purgeable Hydrocarbons	200	20	200	5.2	97.0	70	130	190	5.0	20.0	
Surr: Trifluorotoluene	23	1.0	25	0.0	91.0	70	130	0.0			

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220315A: 36 **SampType:** Sample Matrix Spike **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/16/2022 14:34 **Prep Date:**
Lab ID: B22030912-047FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	163	20	170	4.0	94.0	78	122				
Total Purgeable Hydrocarbons	235	20	200	55	90.0	70	130				
Surr: Trifluorotoluene	22	1.0	25	0.0	88.0	70	130				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Run ID: Run Order: VARIAN1_220315A: 37 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/16/2022 15:08 **Prep Date:**
Lab ID: B22030912-047FMSD **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	4.0	96.0	78	122	163	2.5	20.0	
Total Purgeable Hydrocarbons	239	20	200	55	92.0	70	130	235	1.9	20.0	
Surr: Trifluorotoluene	23	1.0	25	0.0	90.0	70	130	0.0			

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220316A: 5 **SampType:** Method Blank **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/16/2022 21:54 **Prep Date:** 03/15/2022 12:43
Lab ID: MB-164531 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	ND	0.15									
Oil Range Hydrocarbons (C24 to C40)	ND	0.15									
Total Extractable Hydrocarbons	ND	0.15									
Surr: o-Terphenyl	0.19	0.0020	0.20		96.0	56	125				
Surr: n-Triacontane	0.093	0.0020	0.10		93.0	50	150				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316B: 5 **SampType:** Method Blank **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/17/2022 20:19 **Prep Date:** 03/15/2022 12:43
Lab ID: MB-164531 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	ND	0.15									
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	0.15									
Total Extractable Hydrocarbons (SGT)	ND	0.15									
Surr: o-Terphenyl (SGT)	0.17	0.0020	0.20		87.0	56	125				
Surr: n-Triacontane (SGT)	0.083	0.0020	0.10		83.0	50	150				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220316A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/16/2022 20:28 **Prep Date:** 03/15/2022 12:43
Lab ID: LCS-164531 **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		85.0	36	132				
Total Extractable Hydrocarbons	14	0.30	15		90.0	60	132				
Surr: o-Terphenyl	0.19	0.0020	0.20		96.0	56	125				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316A: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/16/2022 21:11 **Prep Date:** 03/15/2022 12:44
Lab ID: LCSD-164531 **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		87.0	36	132	13	2.8	20.0	
Total Extractable Hydrocarbons	14	0.30	15		93.0	60	132	14	2.7	20.0	
Surr: o-Terphenyl	0.20	0.0020	0.20		98.0	56	125	0.0			

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220316A: 22 **SampType:** Laboratory Control Sample **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/17/2022 14:02 **Prep Date:** 03/15/2022 12:44
Lab ID: LCS-164531-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)	5.4	0.30	5.0		108.0	41	113				
Surr: n-Triacontane	0.083	0.0020	0.10		83.0	50	150				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316A: 23 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/17/2022 14:45 **Prep Date:** 03/15/2022 12:44
Lab ID: LCSD-164531-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)	5.6	0.30	5.0		113.0	41	113	5.4	4.2	20.0	
Surr: n-Triacontane	0.086	0.0020	0.10		86.0	50	150	0.0			

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316B: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/17/2022 18:53 **Prep Date:** 03/15/2022 12:43
Lab ID: LCS-164531 **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		80.0	60	132				
Surr: o-Terphenyl (SGT)	0.18	0.0020	0.20		92.0	56	125				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220316B: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/17/2022 19:35 **Prep Date:** 03/15/2022 12:44
Lab ID: LCSD-164531 **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		73.0	36	132	11	4.1	20.0	
Total Extractable Hydrocarbons (SGT)	12	0.30	15		77.0	60	132	12	4.3	20.0	
Surr: o-Terphenyl (SGT)	0.18	0.0020	0.20		90.0	56	125	0.0			

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316B: 16 **SampType:** Laboratory Control Sample **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/18/2022 07:05 **Prep Date:** 03/15/2022 12:44
Lab ID: LCS-164531-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)	5.6	0.30	5.0		112.0	41	113				
Surr: n-Triacontane (SGT)	0.085	0.0020	0.10		85.0	50	150				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316B: 17 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/18/2022 08:30 **Prep Date:** 03/15/2022 12:44
Lab ID: LCSD-164531-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)	5.8	0.30	5.0		117.0	41	113	5.6	3.7	20.0	S
Surr: n-Triacontane (SGT)	0.087	0.0020	0.10		87.0	50	150	0.0			

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220316B: 18 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/18/2022 09:56 **Prep Date:** 03/15/2022 12:44
Lab ID: LCSD-164531-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)	5.7	0.30	5.0		113.0	41	113	5.6	0.7	20.0	
Surr: n-Triacontane (SGT)	0.084	0.0020	0.10		84.0	50	150	0.0			

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316A: 20 **SampType:** Sample Matrix Spike **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/17/2022 12:37 **Prep Date:** 03/15/2022 12:44
Lab ID: B22030912-032CMS **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	14	0.0	89.0	36	132				
Total Extractable Hydrocarbons	14	0.30	14	0.0	95.0	60	132				
Surr: o-Terphenyl	0.19	0.0020	0.19	0.0	99.0	56	125				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316A: 21 **SampType:** Sample Matrix Spike **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/17/2022 13:20 **Prep Date:** 03/15/2022 12:45
Lab ID: B22030912-042CMS-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)	5.4	0.30	4.8	0.14	110.0	41	113				
Surr: n-Triacontane	0.084	0.0020	0.095	0.0	88.0	50	150				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220316B: 12 **SampType:** Sample Matrix Spike **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/18/2022 02:04 **Prep Date:** 03/15/2022 12:44
Lab ID: B22030912-032CMS **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	0.0	87.0	36	132				
Total Extractable Hydrocarbons (SGT)	13	0.30	14	0.0	92.0	60	132				
Surr: o-Terphenyl (SGT)	0.19	0.0020	0.19	0.0	101.0	56	125				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316B: 15 **SampType:** Sample Matrix Spike **Batch ID:** 164531
Method: SW8015C **Analysis Date:** 03/18/2022 05:39 **Prep Date:** 03/15/2022 12:45
Lab ID: B22030912-042CMS-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	4.8	0.0	109.0	41	113				
Surr: n-Triacontane (SGT)	0.076	0.0020	0.095	0.0	80.0	50	150				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220315A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/15/2022 10:08 **Prep Date:**
Lab ID: CCV_0315VAR05r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	178	20	168		106.0	80	120				
Total Purgeable Hydrocarbons	214	20	200		107.0	80	120				
Surr: Trifluorotoluene	23	1.0	25		94.0	80	120				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Run ID: Run Order: VARIAN1_220315A: 18 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/15/2022 21:31 **Prep Date:**
Lab ID: CCV_0315VAR25r **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	217	20	200		109.0	80	120				
Surr: Trifluorotoluene	23	1.0	25		94.0	80	120				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: VARIAN1_220315A: 30 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/16/2022 08:53 **Prep Date:**
Lab ID: CCV_0315VAR45r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	169	20	168		100.0	80	120				
Total Purgeable Hydrocarbons	204	20	200		102.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		89.0	80	120				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Run ID: Run Order: VARIAN1_220315A: 38 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376291
Method: SW8015C **Analysis Date:** 03/16/2022 16:16 **Prep Date:**
Lab ID: CCV_0315VAR58r **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	221	20	200		111.0	80	120				
Surr: Trifluorotoluene	23	1.0	25		93.0	80	120				

Associated Samples: **B22030912-001F, B22030912-003A, B22030912-006F, B22030912-008A, B22030912-011F, B22030912-013A, B22030912-016F, B22030912-018A, B22030912-021F, B22030912-022C, B22030912-024A, B22030912-027F, B22030912-029A, B22030912-032F, B22030912-034A, B22030912-037F, B22030912-039A, B22030912-042F, B22030912-044A, B22030912-047F, B22030912-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220316A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376330
Method: SW8015C **Analysis Date:** 03/16/2022 17:35 **Prep Date:**
Lab ID: CCV_0316HP504r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.2	0.30	5.0		104.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		95.0	80	120				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376330
Method: SW8015C **Analysis Date:** 03/16/2022 18:18 **Prep Date:**
Lab ID: CCV_0316HP505r **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		99.0	80	120				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316A: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376330
Method: SW8015C **Analysis Date:** 03/17/2022 05:03 **Prep Date:**
Lab ID: CCV_0316HP520r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.2	0.30	5.0		105.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220316A: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376330
Method: SW8015C **Analysis Date:** 03/17/2022 05:46 **Prep Date:**
Lab ID: CCV_0316HP521r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	14	0.30	15		95.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		99.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		100.0	80	120				

Associated Samples: **B22030912-001C, B22030912-006C, B22030912-011C, B22030912-016C, B22030912-021C, B22030912-022A, B22030912-027C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316B: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376443
Method: SW8015C **Analysis Date:** 03/17/2022 16:02 **Prep Date:**
Lab ID: CCV_0316HP535r **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		94.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		97.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		95.0	80	120				

Associated Samples: **B22030912-001C, B22030912-011C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376443
Method: SW8015C **Analysis Date:** 03/17/2022 16:45 **Prep Date:**
Lab ID: CCV_0316HP536r-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	0.20	0.0020	0.20		98.0	80	120				

Associated Samples: **B22030912-001C, B22030912-011C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: GCFID-HP5-B_220316B: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376443
Method: SW8015C **Analysis Date:** 03/18/2022 03:30 **Prep Date:**
Lab ID: CCV_0316HP551r **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		102.0	80	120				
Total Extractable Hydrocarbons	16	0.30	15		106.0	80	120				
Surr: o-Terphenyl	0.21	0.0020	0.20		107.0	80	120				

Associated Samples: **B22030912-001C, B22030912-011C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Run ID: Run Order: GCFID-HP5-B_220316B: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376443
Method: SW8015C **Analysis Date:** 03/18/2022 04:13 **Prep Date:**
Lab ID: CCV_0316HP552r-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		97.0	80	120				

Associated Samples: **B22030912-001C, B22030912-011C, B22030912-032C, B22030912-037C, B22030912-042C, B22030912-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: FID-HEADSPACE_220314A: 4 **SampType:** Method Blank **Batch ID:** R376214
Method: SW8015M **Analysis Date:** 03/14/2022 08:39 **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: **B22030912-001H, B22030912-005A, B22030912-006H, B22030912-010A, B22030912-011H, B22030912-015A, B22030912-016H, B22030912-020A, B22030912-021H, B22030912-026A, B22030912-027H, B22030912-031A, B22030912-032H, B22030912-036A, B22030912-037H, B22030912-041A, B22030912-042H, B22030912-046A, B22030912-047H, B22030912-051A**

Run ID: Run Order: FID-HEADSPACE_220314A: 2 **SampType:** Laboratory Control Sample **Batch ID:** R376214
Method: SW8015M **Analysis Date:** 03/14/2022 07:32 **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	100	2.0	100		101.0	85	115				

Associated Samples: **B22030912-001H, B22030912-005A, B22030912-006H, B22030912-010A, B22030912-011H, B22030912-015A, B22030912-016H, B22030912-020A, B22030912-021H, B22030912-026A, B22030912-027H, B22030912-031A, B22030912-032H, B22030912-036A, B22030912-037H, B22030912-041A, B22030912-042H, B22030912-046A, B22030912-047H, B22030912-051A**

Run ID: Run Order: FID-HEADSPACE_220314A: 3 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** R376214
Method: SW8015M **Analysis Date:** 03/14/2022 07:36 **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	95	2.0	100		95.0	85	115	100	6.9	20.0	

Associated Samples: **B22030912-001H, B22030912-005A, B22030912-006H, B22030912-010A, B22030912-011H, B22030912-015A, B22030912-016H, B22030912-020A, B22030912-021H, B22030912-026A, B22030912-027H, B22030912-031A, B22030912-032H, B22030912-036A, B22030912-037H, B22030912-041A, B22030912-042H, B22030912-046A, B22030912-047H, B22030912-051A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/21/2022

Run ID: Run Order: FID-HEADSPACE_220314A: 10 **SampType:** Sample Duplicate **Batch ID:** R376214
Method: SW8015M **Analysis Date:** 03/14/2022 09:08 **Prep Date:**
Lab ID: B22030912-011HDUP **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	ND	0.0020			0.0			0.0018		20.0	

Associated Samples: **B22030912-001H, B22030912-005A, B22030912-006H, B22030912-010A, B22030912-011H, B22030912-015A, B22030912-016H, B22030912-020A, B22030912-021H, B22030912-026A, B22030912-027H, B22030912-031A, B22030912-032H, B22030912-036A, B22030912-037H, B22030912-041A, B22030912-042H, B22030912-046A, B22030912-047H, B22030912-051A**

Run ID: Run Order: FID-HEADSPACE_220314A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376214
Method: SW8015M **Analysis Date:** 03/14/2022 07:22 **Prep Date:**
Lab ID: CCV **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	99	2.0	100		99.0	85	115				

Associated Samples: **B22030912-001H, B22030912-005A, B22030912-006H, B22030912-010A, B22030912-011H, B22030912-015A, B22030912-016H, B22030912-020A, B22030912-021H, B22030912-026A, B22030912-027H, B22030912-031A, B22030912-032H, B22030912-036A, B22030912-037H, B22030912-041A, B22030912-042H, B22030912-046A, B22030912-047H, B22030912-051A**

Run ID: Run Order: FID-HEADSPACE_220314A: 26 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376214
Method: SW8015M **Analysis Date:** 03/14/2022 10:48 **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	98	2.0	100		98.0	85	115				

Associated Samples: **B22030912-001H, B22030912-005A, B22030912-006H, B22030912-010A, B22030912-011H, B22030912-015A, B22030912-016H, B22030912-020A, B22030912-021H, B22030912-026A, B22030912-027H, B22030912-031A, B22030912-032H, B22030912-036A, B22030912-037H, B22030912-041A, B22030912-042H, B22030912-046A, B22030912-047H, B22030912-051A**

Analytical QC Exceptions Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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, 027A, 032A, 037A, 042A, 047A	SD	B22030703-001ADIL	3/15/2022	15:07	Lead					10.0	N
SW8015C	Diesel Range Organics	164531	001C, 006C, 011C, 016C, 021C, 022A, 027C, 032C, 037C, 042C, 047C	LCSD-DOD	LCSD-164531-RRO	3/18/2022	08:30	TEH (SGT-Oil Range)	117.0	41	113	3.7	20.0	S
SW8260B	8260-Volatile Organic Compounds QC Samples	R376454	002A, 007A, 012A, 017A, 022B, 023A, 027E, 028A, 032E, 033A, 037E, 038A, 042E, 043A, 047E, 048A	MS-DOD	B22030912-022BMS	3/15/2022	22:12	Styrene	62.0	78	123			S
				MSD-DOD	B22030912-022BMSD	3/15/2022	22:39	Styrene	61.0	78	123	0.8	20.0	S

Preparation and Analysis Dates Report

Work Order: B22030912
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	ERH2758 (RHMW13-5)	03/10/2022 13:15	Ground Water	Metals by ICP-MS, Total		SW3010A	03/14/2022 14:56	164501	SW6020	03/15/2022 19:10
001C	ERH2758 (RHMW13-5)	03/10/2022 13:15	Ground Water	Diesel Range Organics		SW3520C	03/15/2022 12:45	164531	SW8015C	03/17/2022 02:55
						SW3520C	03/15/2022 12:45	164531	SW8015C	03/17/2022 21:02
001G	ERH2758 (RHMW13-5)	03/10/2022 13:15	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 12:50
004A	ERH2742 (Trip Blank) 14833	03/10/2022 13:15	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 09:52
006B	ERH2691 (OWDFMW01)	03/10/2022 14:05	Ground Water	Metals by ICP-MS, Total		SW3010A	03/14/2022 14:56	164501	SW6020	03/15/2022 20:06
006C	ERH2691 (OWDFMW01)	03/10/2022 14:05	Ground Water	Diesel Range Organics		SW3520C	03/15/2022 12:45	164531	SW8015C	03/16/2022 22:37
006G	ERH2691 (OWDFMW01)	03/10/2022 14:05	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 10:11
009A	ERH2690 (Trip Blank) 14833	03/10/2022 14:05	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 10:31
011B	ERH2770 (RHMW11-5)	03/09/2022 14:00	Ground Water	Metals by ICP-MS, Total		SW3010A	03/14/2022 14:56	164501	SW6020	03/15/2022 20:19
011C	ERH2770 (RHMW11-5)	03/09/2022 14:00	Ground Water	Diesel Range Organics		SW3520C	03/15/2022 12:45	164531	SW8015C	03/17/2022 03:38
						SW3520C	03/15/2022 12:45	164531	SW8015C	03/17/2022 21:45
011G	ERH2770 (RHMW11-5)	03/09/2022 14:00	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 10:51
014A	ERH2769 (Trip Blank) 14733	03/09/2022 14:00	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 11:10
016B	ERH2752 (OWDFMW07A)	03/09/2022 13:15	Ground Water	Metals by ICP-MS, Total		SW3010A	03/14/2022 14:56	164501	SW6020	03/15/2022 20:31
016C	ERH2752 (OWDFMW07A)	03/09/2022 13:15	Ground Water	Diesel Range Organics		SW3520C	03/15/2022 12:45	164531	SW8015C	03/16/2022 23:20
016G	ERH2752 (OWDFMW07A)	03/09/2022 13:15	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 11:30
019A	ERH2751 (Trip Blank) 14733	03/09/2022 13:15	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 11:50
021B	ERH2747 (OWDFMW04A)	03/09/2022 16:10	Ground Water	Metals by ICP-MS, Total		SW3010A	03/14/2022 14:56	164501	SW6020	03/15/2022 20:44
021C	ERH2747 (OWDFMW04A)	03/09/2022 16:10	Ground Water	Diesel Range Organics		SW3520C	03/15/2022 12:45	164531	SW8015C	03/17/2022 00:03
021G	ERH2747 (OWDFMW04A)	03/09/2022 16:10	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 12:10
022A	ERH2748 (OWDFMW04A FD)	03/09/2022 16:10	Ground Water	Diesel Range Organics		SW3520C	03/15/2022 12:45	164531	SW8015C	03/17/2022 00:46
025A	ERH2746 (Trip Blank) 14733	03/09/2022 16:10	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 12:30
027B	ERH2688 (RHMW2254-01, Low Flow)	03/09/2022 18:00	Ground Water	Metals by ICP-MS, Total		SW3010A	03/14/2022 14:56	164501	SW6020	03/15/2022 20:56

Preparation and Analysis Dates Report

Work Order: B22030912
Client: AECOM - Honolulu
Project Name: CV18F0126, 60571032.02.46.01
Report Date: 3/21/2022

027C	ERH2688 (RHMW2254-01, Low Flow)	03/09/2022 18:00	Ground Water	Diesel Range Organics		SW3520C	03/15/2022 12:45	164531	SW8015C	03/17/2022 02:12
027G	ERH2688 (RHMW2254-01, Low Flow)	03/09/2022 18:00	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 14:49
030A	ERH2687 (Trip Blank) 14733	03/09/2022 18:00	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 15:08
032B	ERH2760 (RHMW19)	03/09/2022 12:45	Ground Water	Metals by ICP-MS, Total		SW3010A	03/14/2022 14:56	164501	SW6020	03/15/2022 21:21
032C	ERH2760 (RHMW19)	03/09/2022 12:45	Ground Water	Diesel Range Organics		SW3520C	03/15/2022 12:44	164531	SW8015C	03/17/2022 11:12
						SW3520C	03/15/2022 12:44	164531	SW8015C	03/18/2022 00:38
032G	ERH2760 (RHMW19)	03/09/2022 12:45	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 15:28
035A	ERH2759 (Trip Blank) 14894	03/09/2022 12:45	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 15:48
037B	ERH2685 (RHMW2254-01, Bailer)	03/09/2022 17:20	Ground Water	Metals by ICP-MS, Total		SW3010A	03/14/2022 14:56	164501	SW6020	03/15/2022 21:33
037C	ERH2685 (RHMW2254-01, Bailer)	03/09/2022 17:20	Ground Water	Diesel Range Organics		SW3520C	03/15/2022 12:45	164531	SW8015C	03/17/2022 07:55
						SW3520C	03/15/2022 12:45	164531	SW8015C	03/17/2022 23:12
037G	ERH2685 (RHMW2254-01, Bailer)	03/09/2022 17:20	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 16:08
040A	ERH2684 (Trip Blank) 14833	03/09/2022 17:20	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 16:28
042B	ERH2755 (RHMW08)	03/09/2022 15:50	Ground Water	Metals by ICP-MS, Total		SW3010A	03/14/2022 14:56	164501	SW6020	03/15/2022 21:46
042C	ERH2755 (RHMW08)	03/09/2022 15:50	Ground Water	Diesel Range Organics		SW3520C	03/15/2022 12:44	164531	SW8015C	03/17/2022 11:55
						SW3520C	03/15/2022 12:44	164531	SW8015C	03/18/2022 01:21
042G	ERH2755 (RHMW08)	03/09/2022 15:50	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 16:48
045A	ERH2754 (Trip Blank) 14733	03/09/2022 15:50	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 17:08
047B	ERH2763 (Adit 3 Sump)	03/09/2022 15:45	Ground Water	Metals by ICP-MS, Total		SW3010A	03/14/2022 14:56	164501	SW6020	03/15/2022 21:58
047C	ERH2763 (Adit 3 Sump)	03/09/2022 15:45	Ground Water	Diesel Range Organics		SW3520C	03/15/2022 12:45	164531	SW8015C	03/17/2022 08:38
						SW3520C	03/15/2022 12:45	164531	SW8015C	03/17/2022 22:28
047G	ERH2763 (Adit 3 Sump)	03/09/2022 15:45	Ground Water	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 17:27
050A	ERH2762 (Trip Blank) 14733	03/09/2022 15:45	Trip Blank	EDB in Water by ECD		SW8011	03/14/2022 10:18	164489	SW8011	03/15/2022 17:48

Chemical Abstracts Service (CAS) Registry Numbers

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030912
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

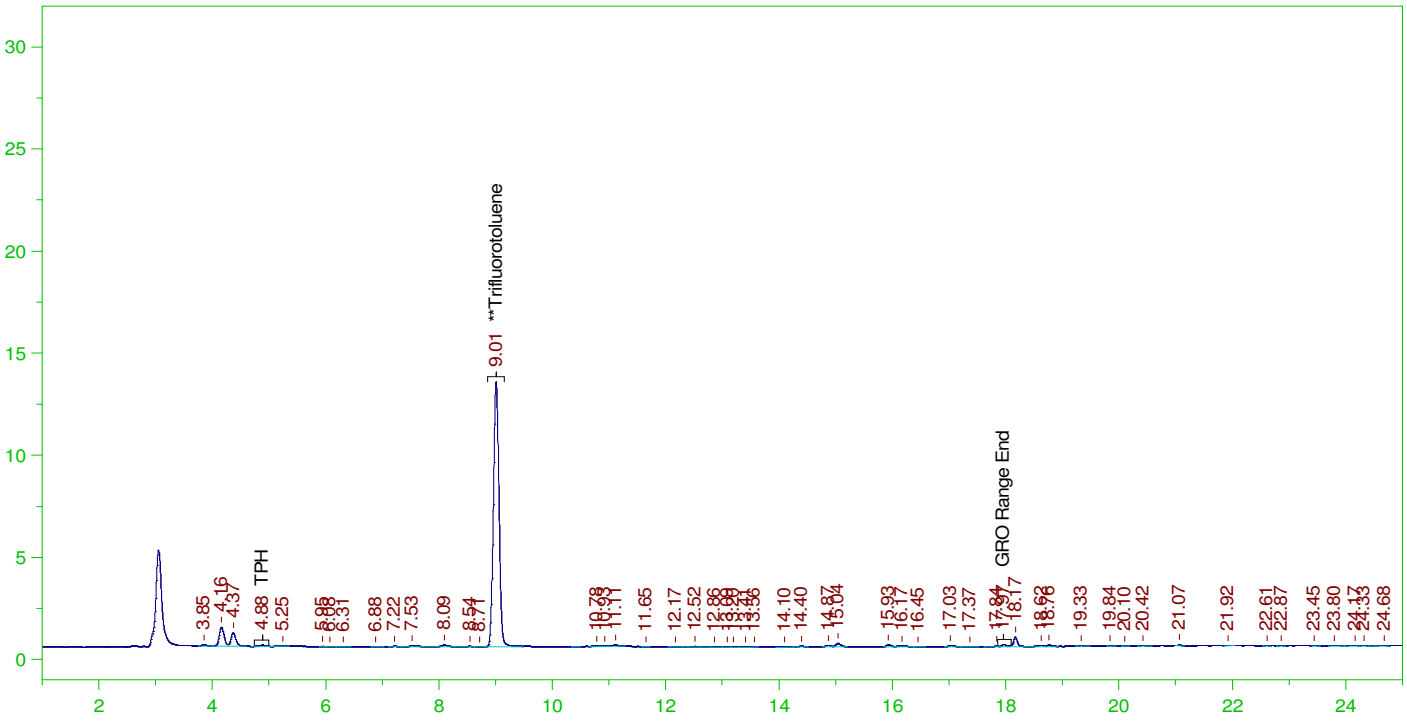
Total Extractable Hydrocarbons (SGT)

ORGANIC CHARACTERISTICS

Methane	74-82-8

ERH2758 (RHMW13-5)

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0009.RAW B22030912-001F ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-001F ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0009.RAW
Date & Time Acquired: 3/15/2022 12:24:50 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

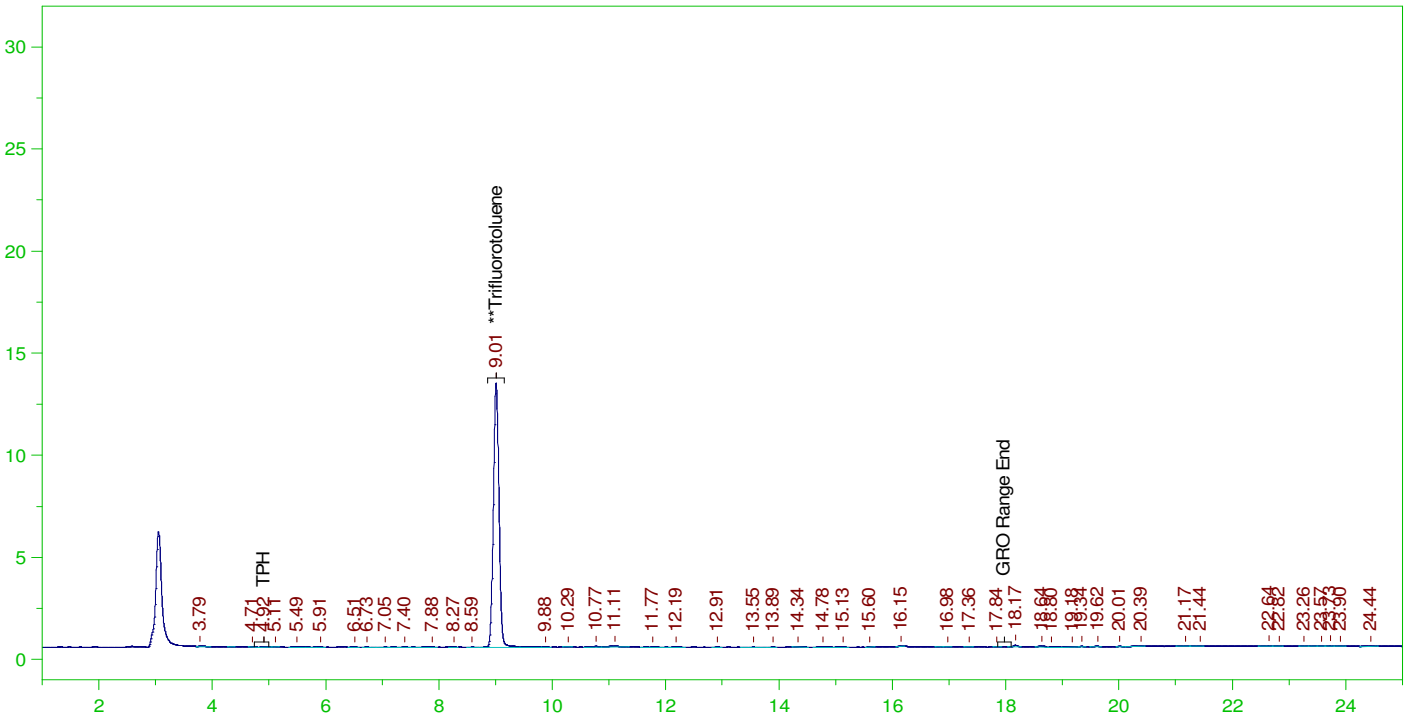
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	19.257	77.03	-

C6 to C10 Area:8903.285 C6 to C10 Amount: 1.817036
TPH Area:24906.54 TPH Amount: 5.212347

ERH2742 (Trip Blank) 14894

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0012.RAW B22030912-003A ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-003A ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0012.RAW
Date & Time Acquired: 3/15/2022 2:07:11 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

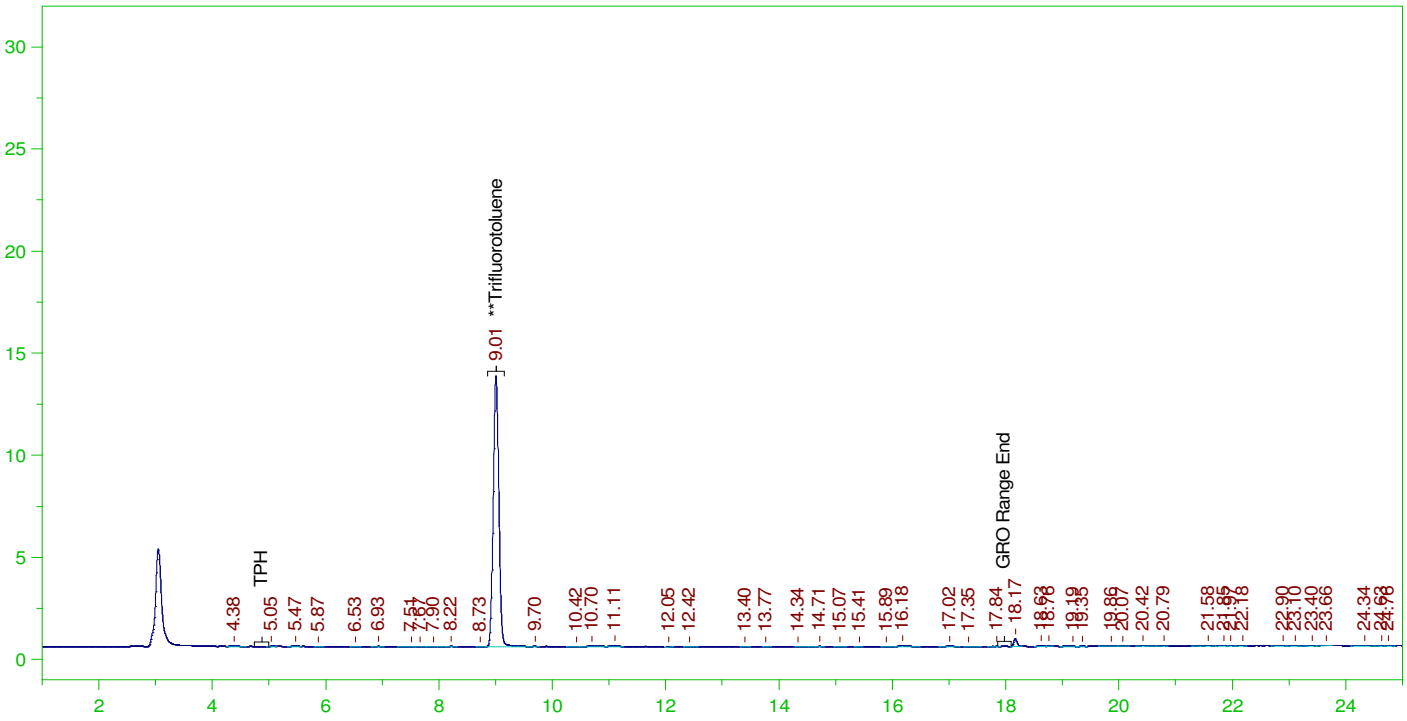
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	19.301	77.21	-

C6 to C10 Area:4834.763 C6 to C10 Amount: 0.9867076
TPH Area:8229.006 TPH Amount: 1.722135

ERH2691 (OWDFMW01)

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0030.RAW B22030912-006F ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-006F ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0030.RAW
Date & Time Acquired: 3/16/2022 12:21:43 AM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

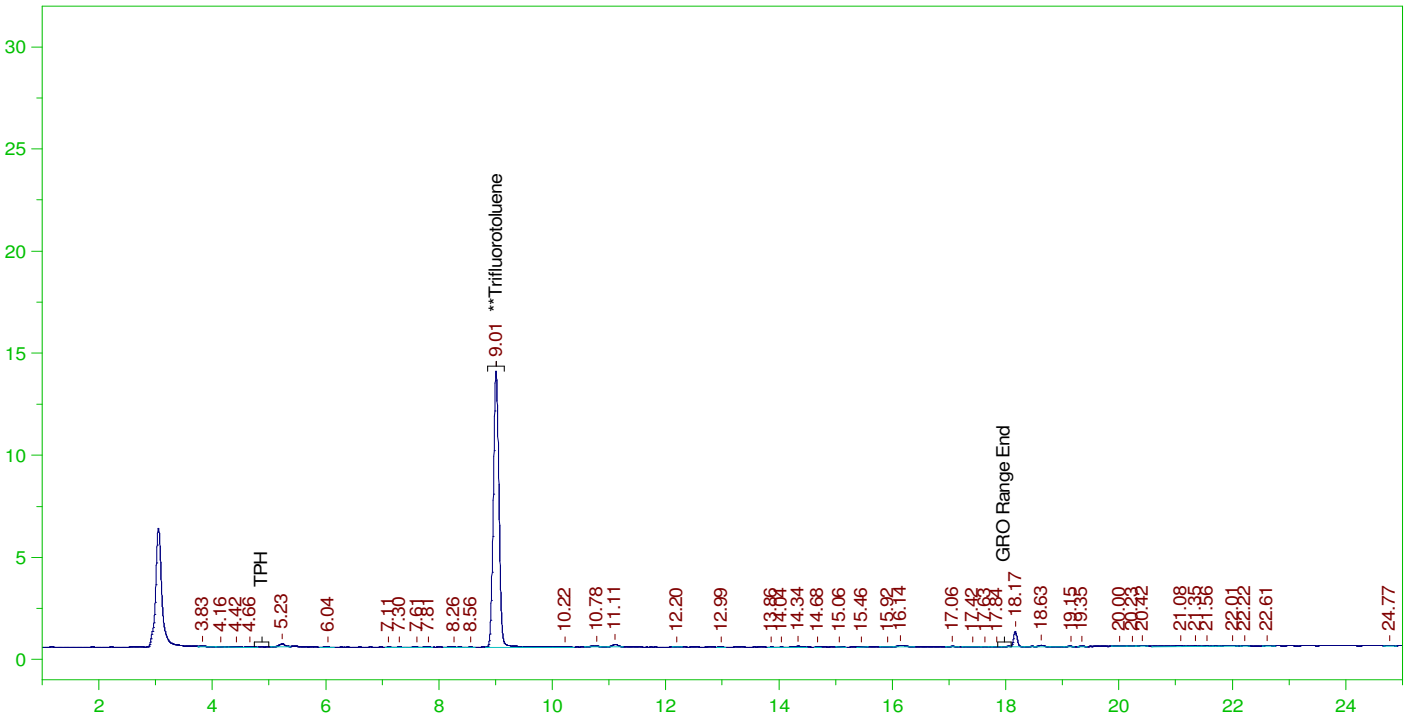
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.006	25.	19.738	78.95	-

C6 to C10 Area:4482.213 C6 to C10 Amount: 0.9147571
TPH Area:9479.521 TPH Amount: 1.983839

ERH2690 (Trip Blank) 14894

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0013.RAW B22030912-008A ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-008A ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0013.RAW
Date & Time Acquired: 3/15/2022 2:41:15 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

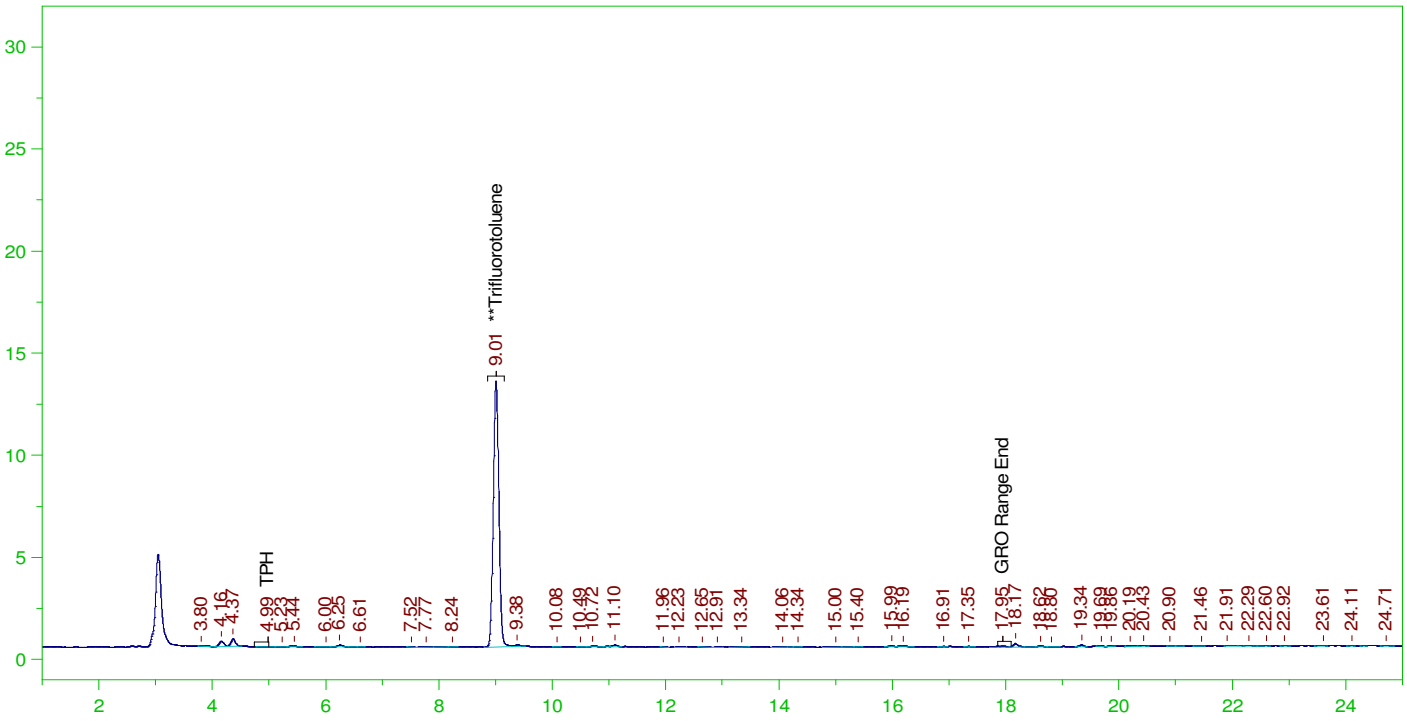
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	20.134	80.54	-

C6 to C10 Area:5644.17 C6 to C10 Amount: 1.151896
TPH Area:12654.54 TPH Amount: 2.648295

ERH2770 (RHMW11-5)

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0032.RAW B22030912-011F ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-011F ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0032.RAW
Date & Time Acquired: 3/16/2022 1:29:56 AM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

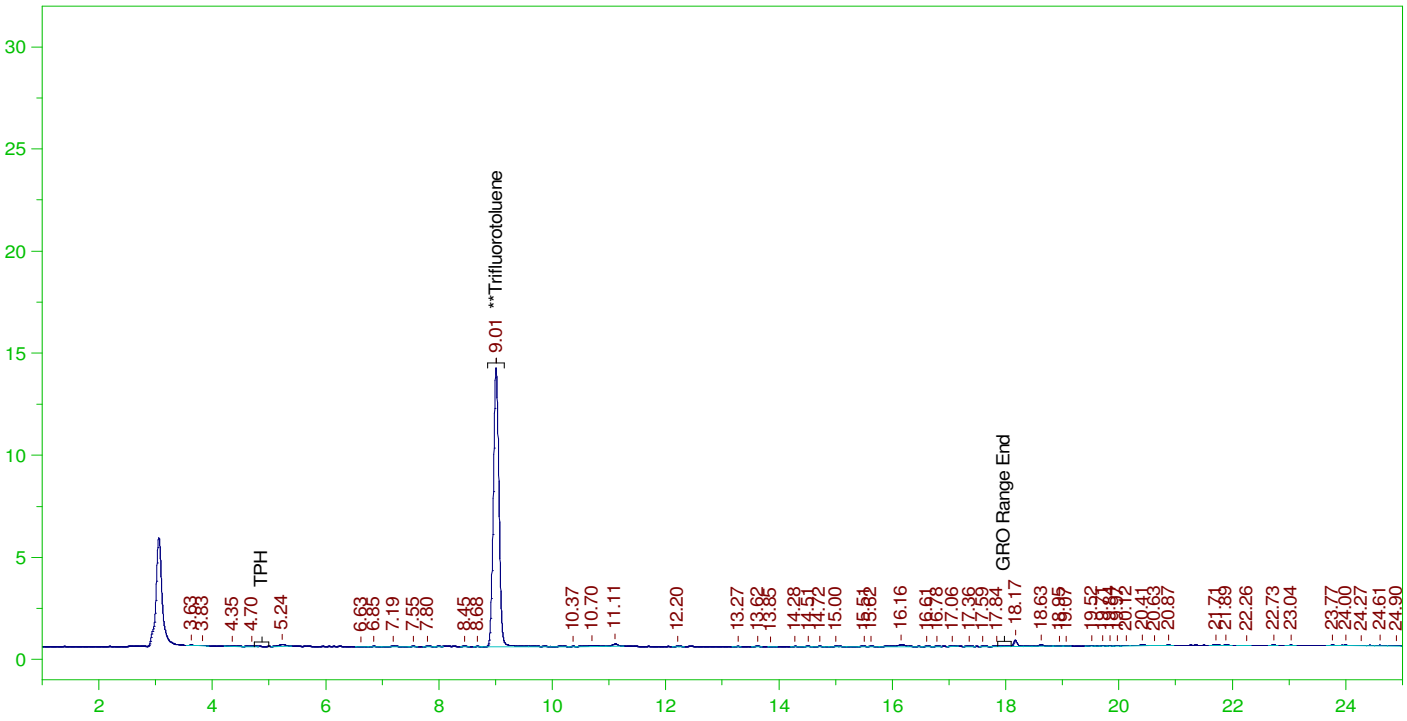
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.321	77.28	-

C6 to C10 Area:5810.214 C6 to C10 Amount: 1.185784
TPH Area:13338.99 TPH Amount: 2.791533

ERH2769 (Trip Blank) 14833

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0014.RAW B22030912-013A ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-013A ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0014.RAW
Date & Time Acquired: 3/15/2022 3:15:26 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

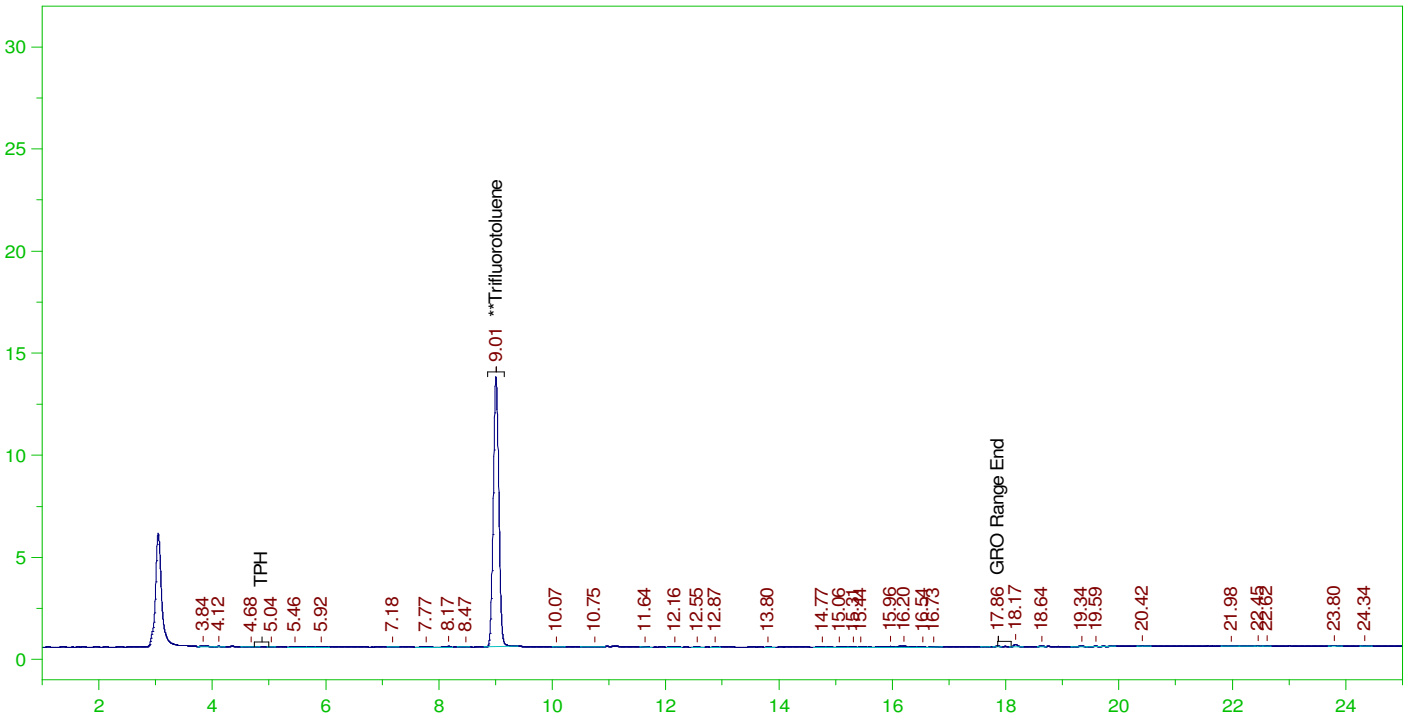
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	20.494	81.97	-

C6 to C10 Area:6931.717 C6 to C10 Amount: 1.414667
TPH Area:13176.51 TPH Amount: 2.757531

ERH2752 (OWDFMW07A)

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0034.RAW B22030912-016F ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-016F ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0034.RAW
Date & Time Acquired: 3/16/2022 2:38:11 AM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

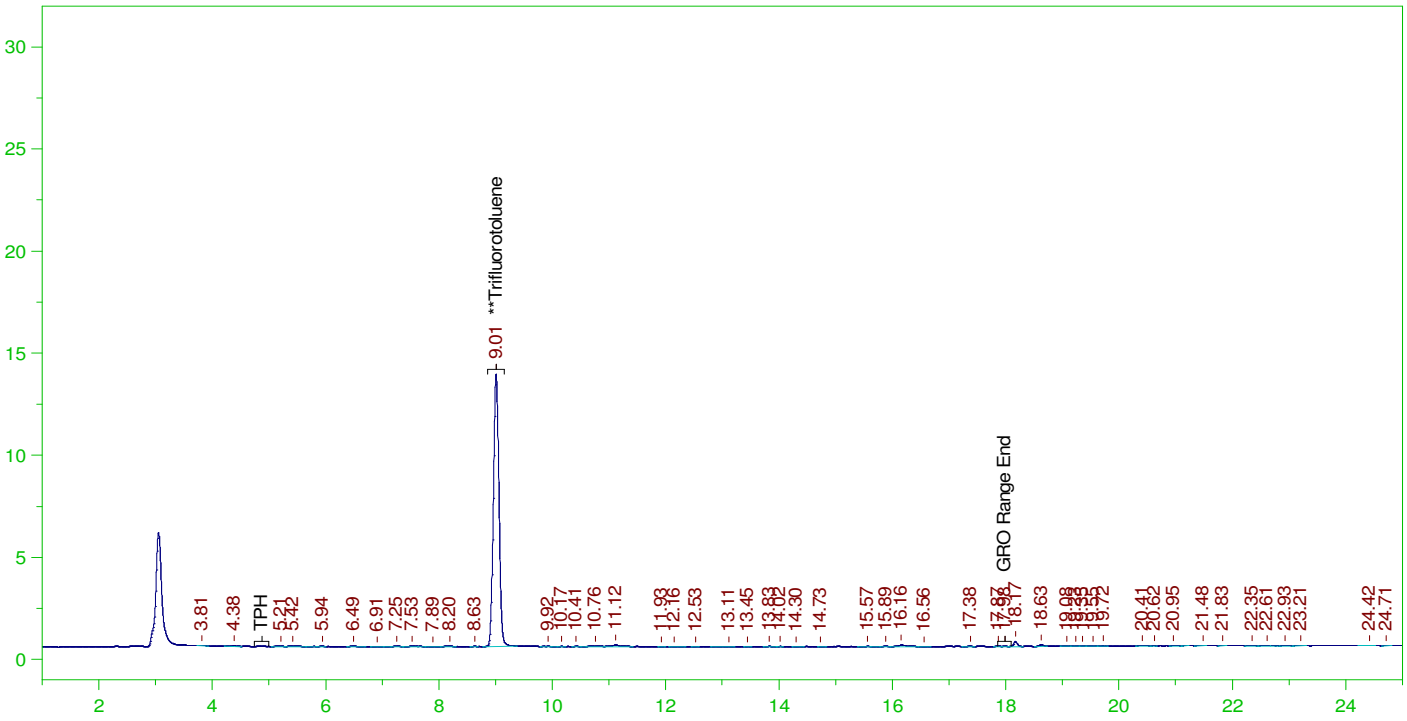
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.006	25.	19.563	78.25	-

C6 to C10 Area:4051.096 C6 to C10 Amount: 0.8267721
TPH Area:6427.28 TPH Amount: 1.345077

ERH2751 (Trip Blank) 14833

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0015.RAW B22030912-018A ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-018A ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0015.RAW
Date & Time Acquired: 3/15/2022 3:49:36 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

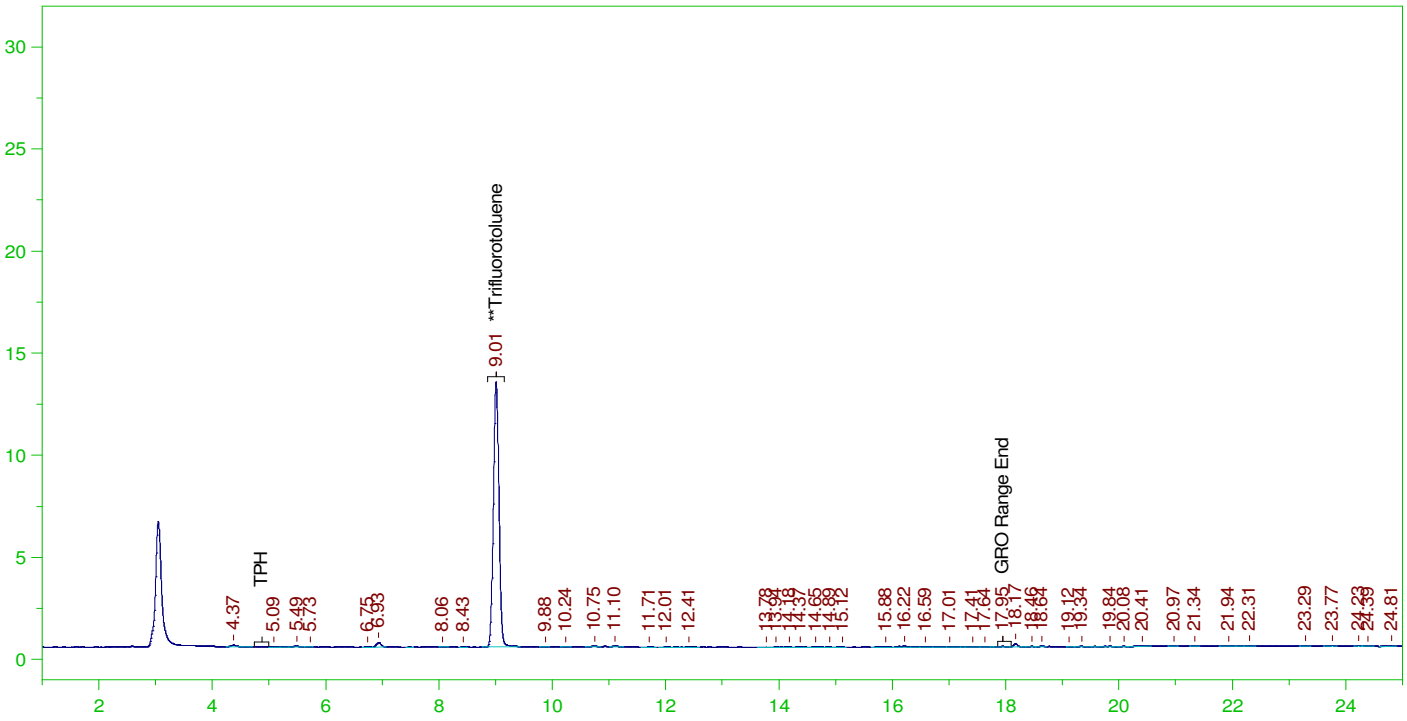
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.8	79.2	-

C6 to C10 Area:6840.218 C6 to C10 Amount: 1.395993
TPH Area:11439.9 TPH Amount: 2.3941

ERH2747 (OWDFMW04A)

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0036.RAW B22030912-021F ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-021F ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0036.RAW
Date & Time Acquired: 3/16/2022 3:46:25 AM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

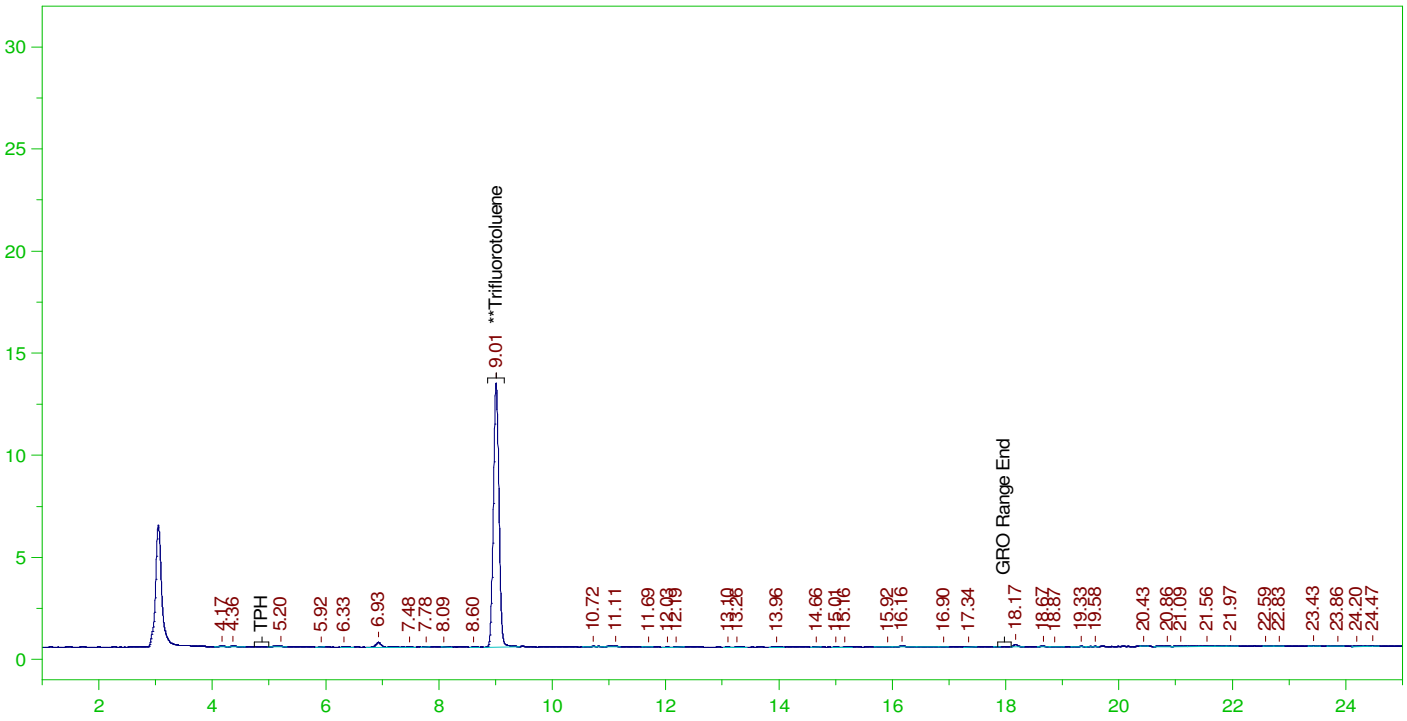
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	19.24	76.96	-

C6 to C10 Area:6236.526 C6 to C10 Amount: 1.272788
TPH Area:10338.57 TPH Amount: 2.163616

ERH2748 (OWDFMW04A FD)

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0038.RAW B22030912-022C ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-022C ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0038.RAW
Date & Time Acquired: 3/16/2022 4:54:40 AM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

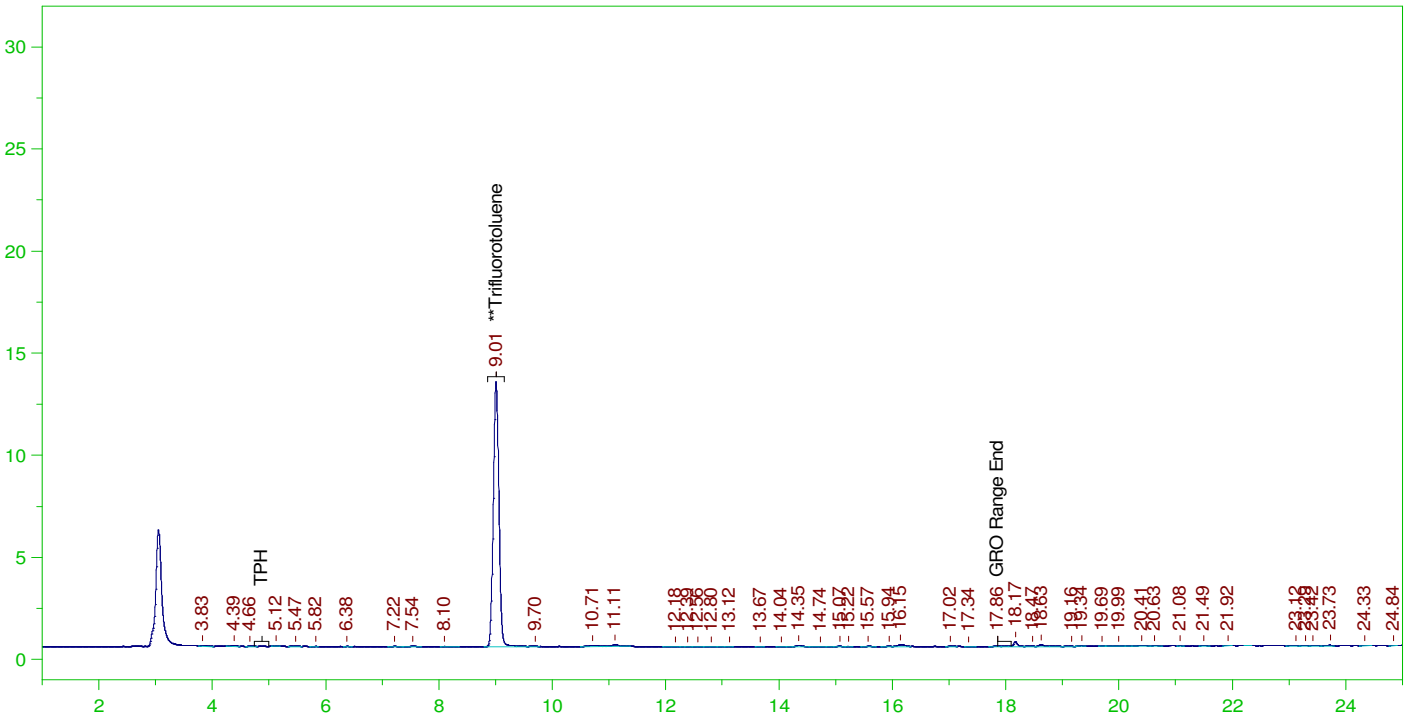
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.126	76.5	-

C6 to C10 Area:4533.396 C6 to C10 Amount: 0.925203
TPH Area:7914.911 TPH Amount: 1.656403

ERH2746 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0016.RAW B22030912-024A ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-024A ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0016.RAW
Date & Time Acquired: 3/15/2022 4:23:42 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

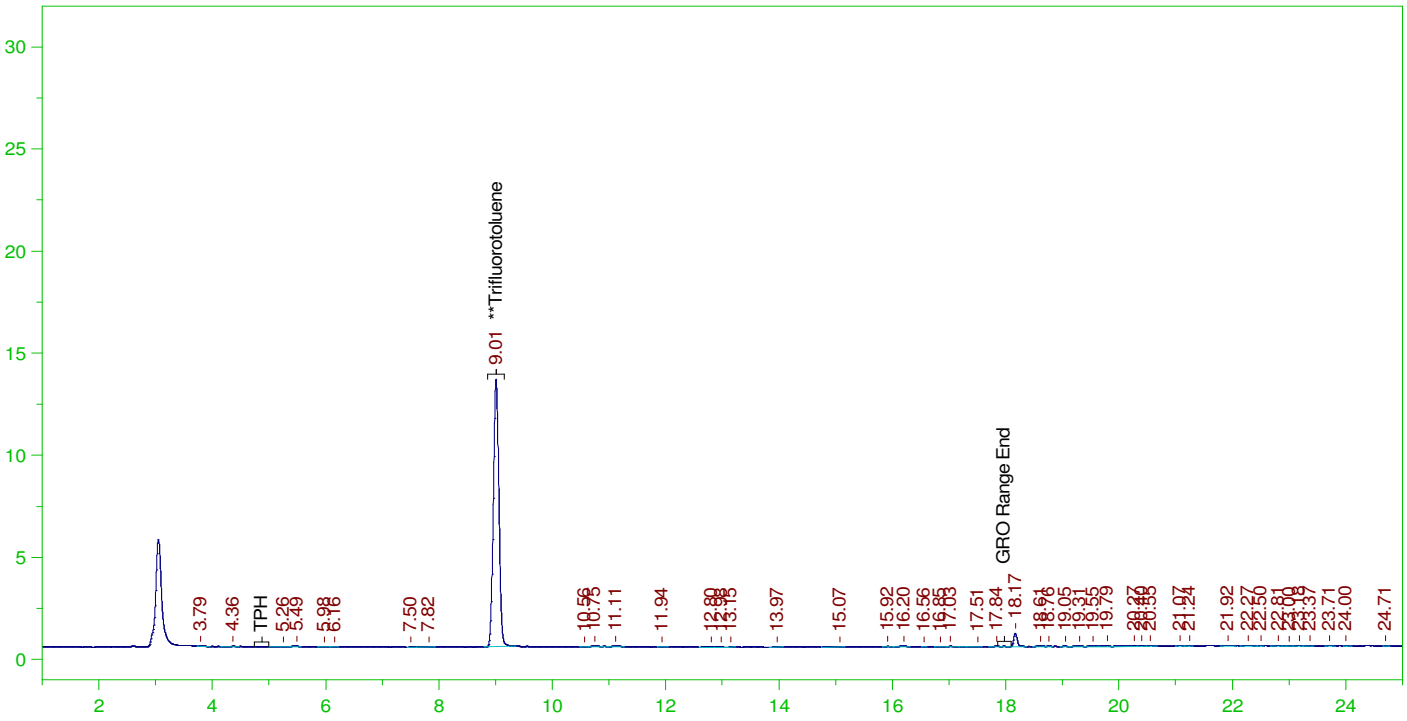
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.313	77.25	-

C6 to C10 Area:6033.617 C6 to C10 Amount: 1.231377
TPH Area:11713.43 TPH Amount: 2.451342

ERH2688 (THMW2254-01, Low Flow)

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0040.RAW B22030912-027F ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-027F ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0040.RAW
Date & Time Acquired: 3/16/2022 6:02:58 AM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

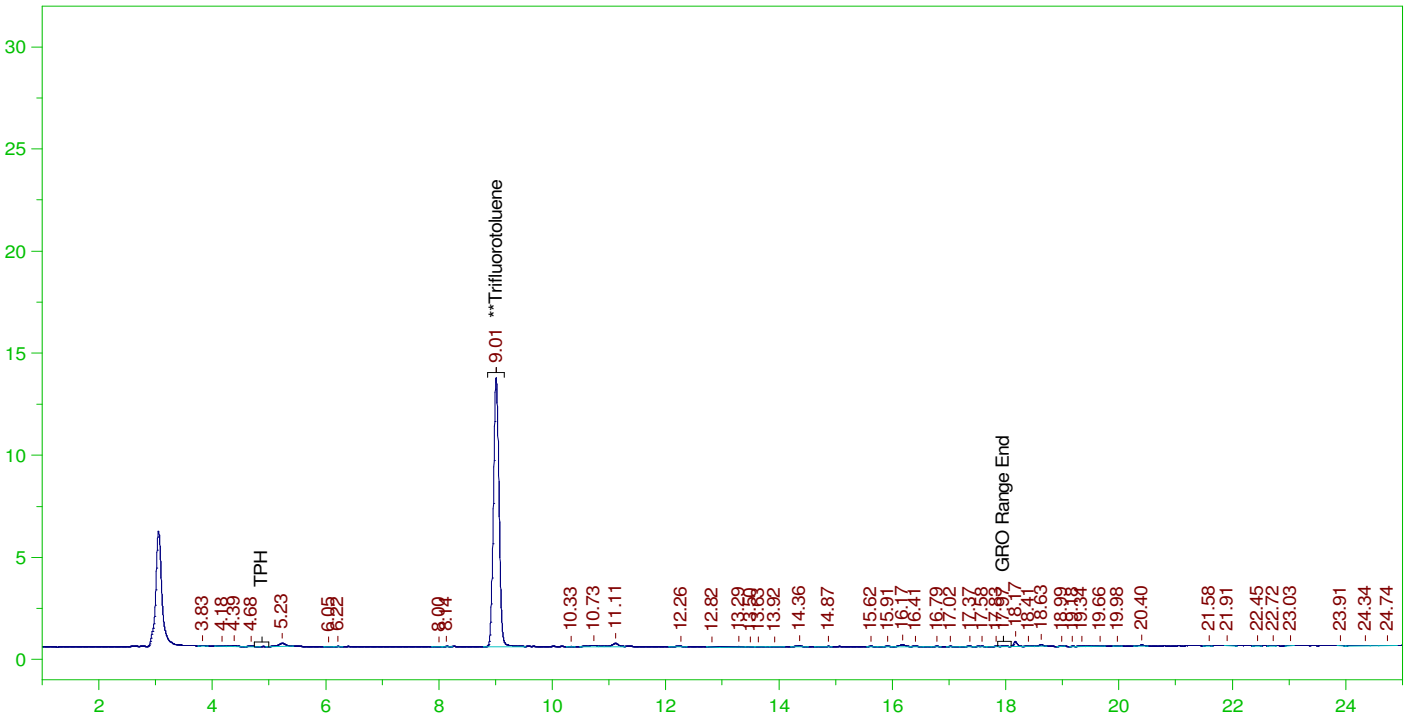
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.331	77.32	-

C6 to C10 Area:3511.173 C6 to C10 Amount: 0.7165814
TPH Area:10742.12 TPH Amount: 2.248071

ERH2687 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0017.RAW B22030912-029A ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-029A ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0017.RAW
Date & Time Acquired: 3/15/2022 4:57:51 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

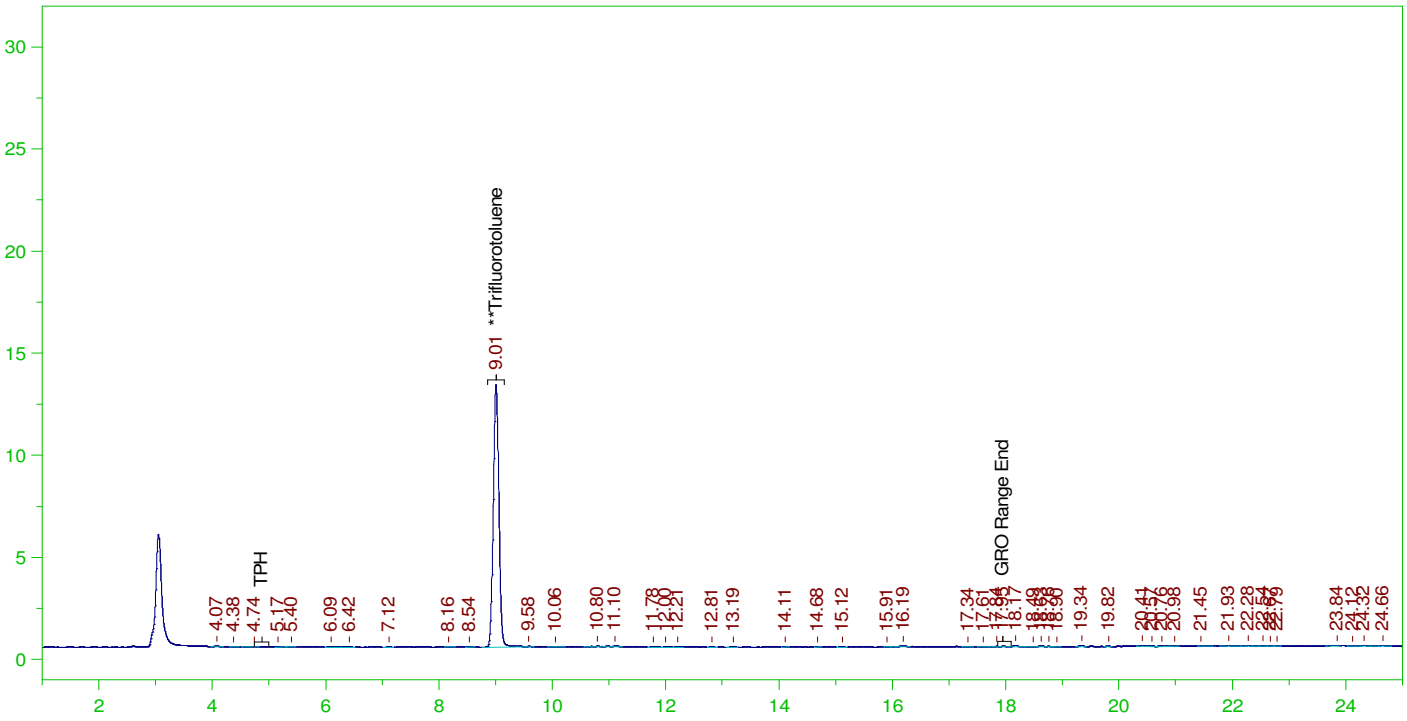
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	19.717	78.87	-

C6 to C10 Area:7938.915 C6 to C10 Amount: 1.620222
TPH Area:12727.72 TPH Amount: 2.66361

ERH2760 (RHMW19)

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0042.RAW B22030912-032F ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-032F ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0042.RAW
Date & Time Acquired: 3/16/2022 7:11:15 AM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

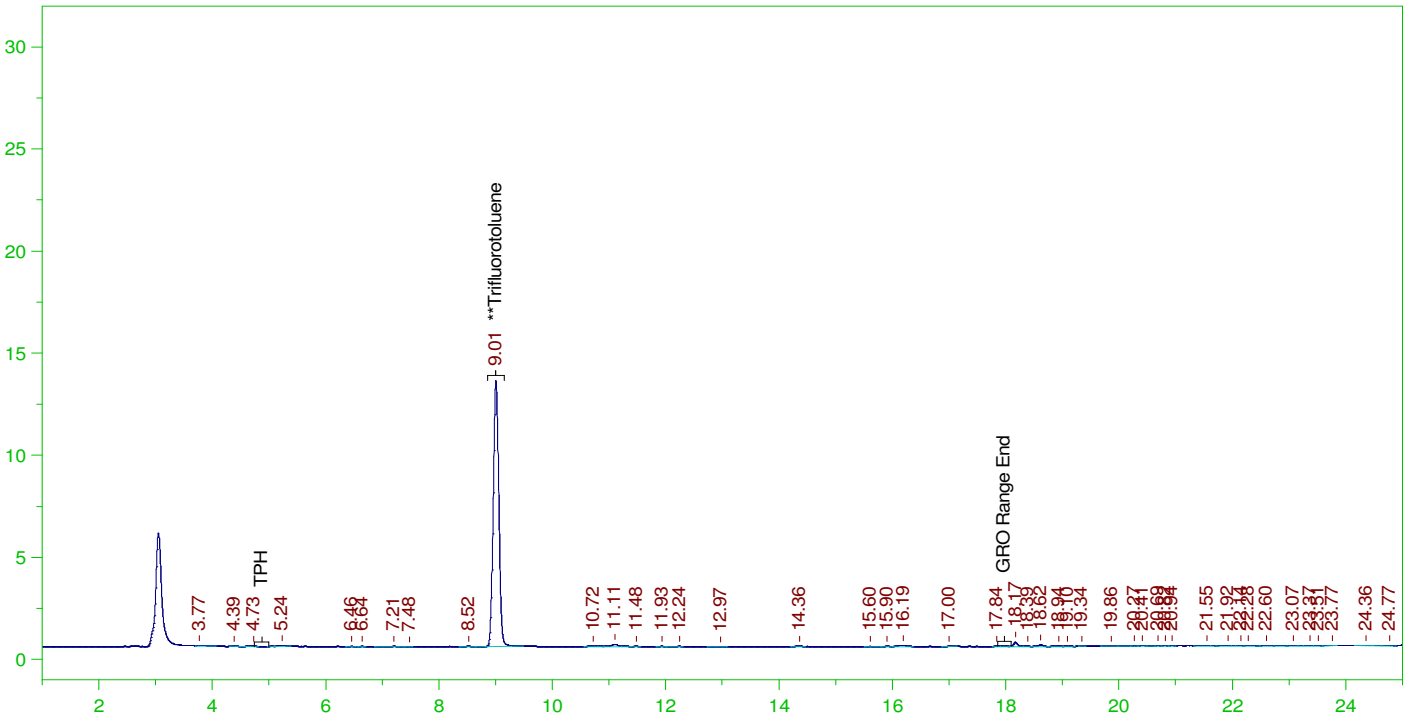
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.176	76.7	-

C6 to C10 Area:2854.083 C6 to C10 Amount: 0.5824785
TPH Area:6737.506 TPH Amount: 1.41

ERH2759 (Trip Blank) 14894

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0018.RAW B22030912-034A ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-034A ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0018.RAW
Date & Time Acquired: 3/15/2022 5:31:59 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

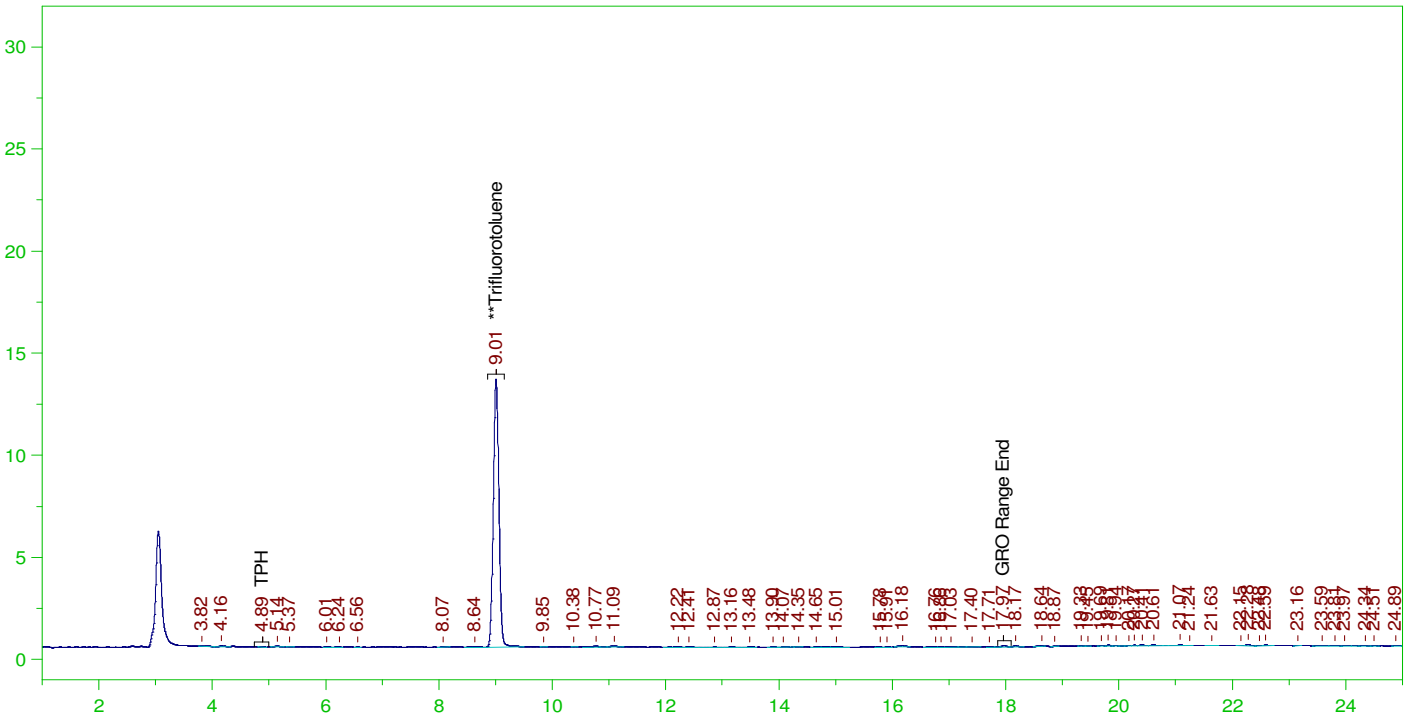
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.006	25.	19.348	77.39	-

C6 to C10 Area:4666.971 C6 to C10 Amount: 0.9524636
TPH Area:10673.94 TPH Amount: 2.233802

ERH2685 (RHMW2254-01, Bailer)

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0049.RAW B22030912-037F ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-037F ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0049.RAW
Date & Time Acquired: 3/16/2022 11:09:42 AM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

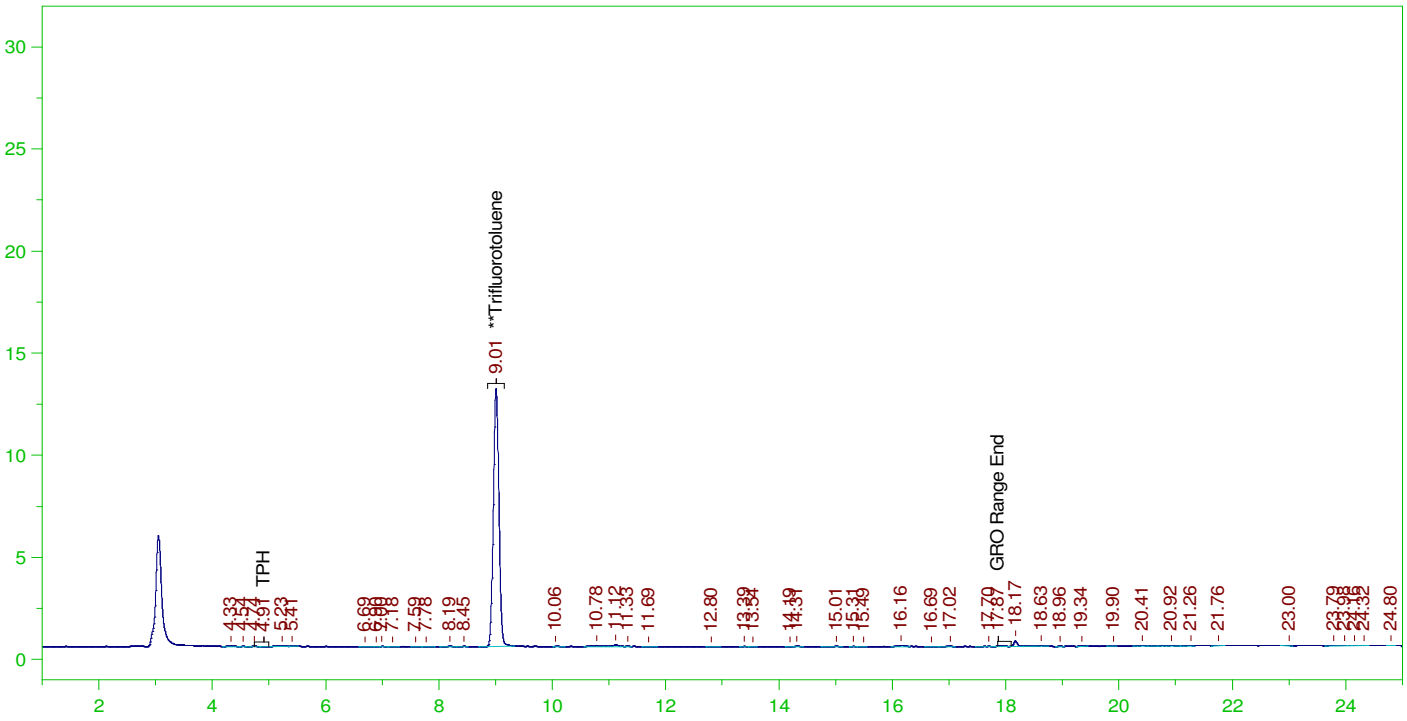
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.529	78.11	-

C6 to C10 Area:5715.524 C6 to C10 Amount: 1.166459
TPH Area:11412.29 TPH Amount: 2.388321

ERH2684 (Trip Blank) 14894

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0019.RAW B22030912-039A ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-039A ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0019.RAW
Date & Time Acquired: 3/15/2022 6:06:08 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

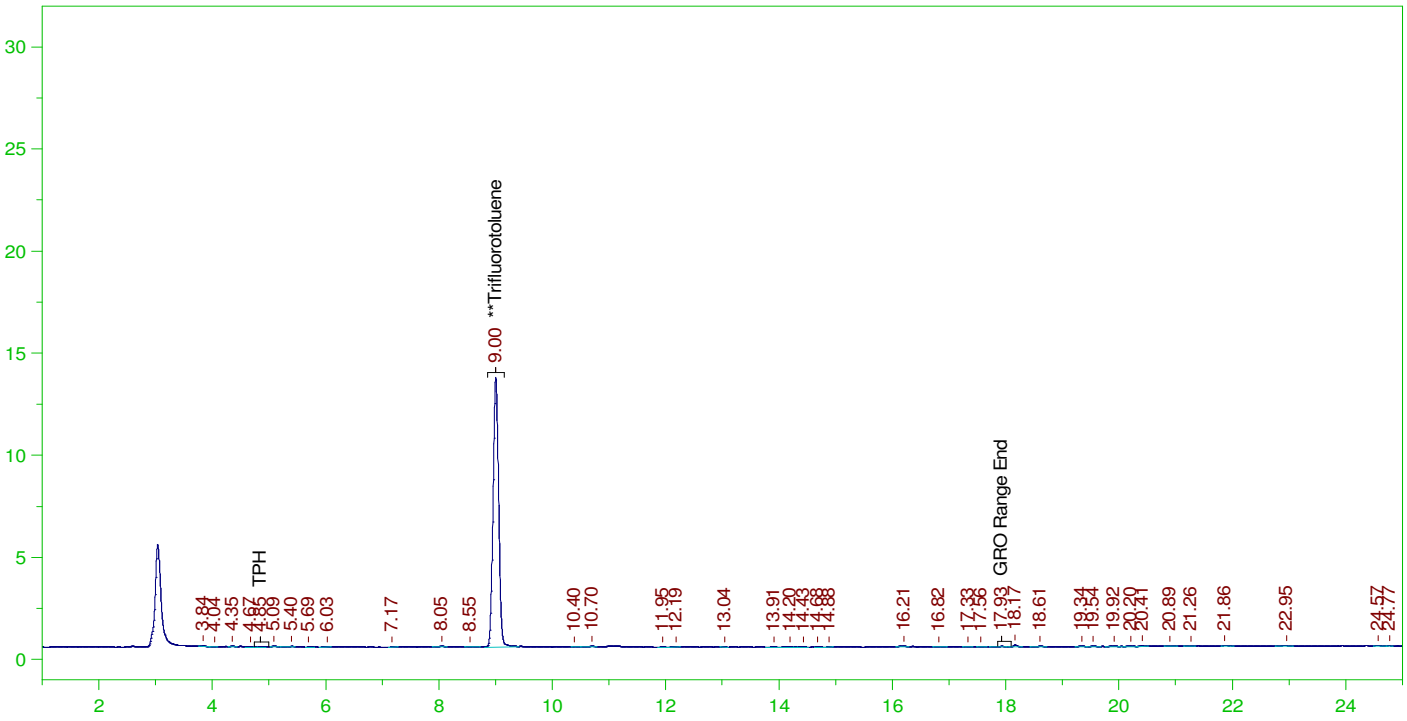
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	18.718	74.87	-

C6 to C10 Area:5156.537 C6 to C10 Amount: 1.052377
TPH Area:9259.839 TPH Amount: 1.937864

ERH2755 (RHMW08)

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0051.RAW B22030912-042F ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-042F ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0051.RAW
Date & Time Acquired: 3/16/2022 12:17:56 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

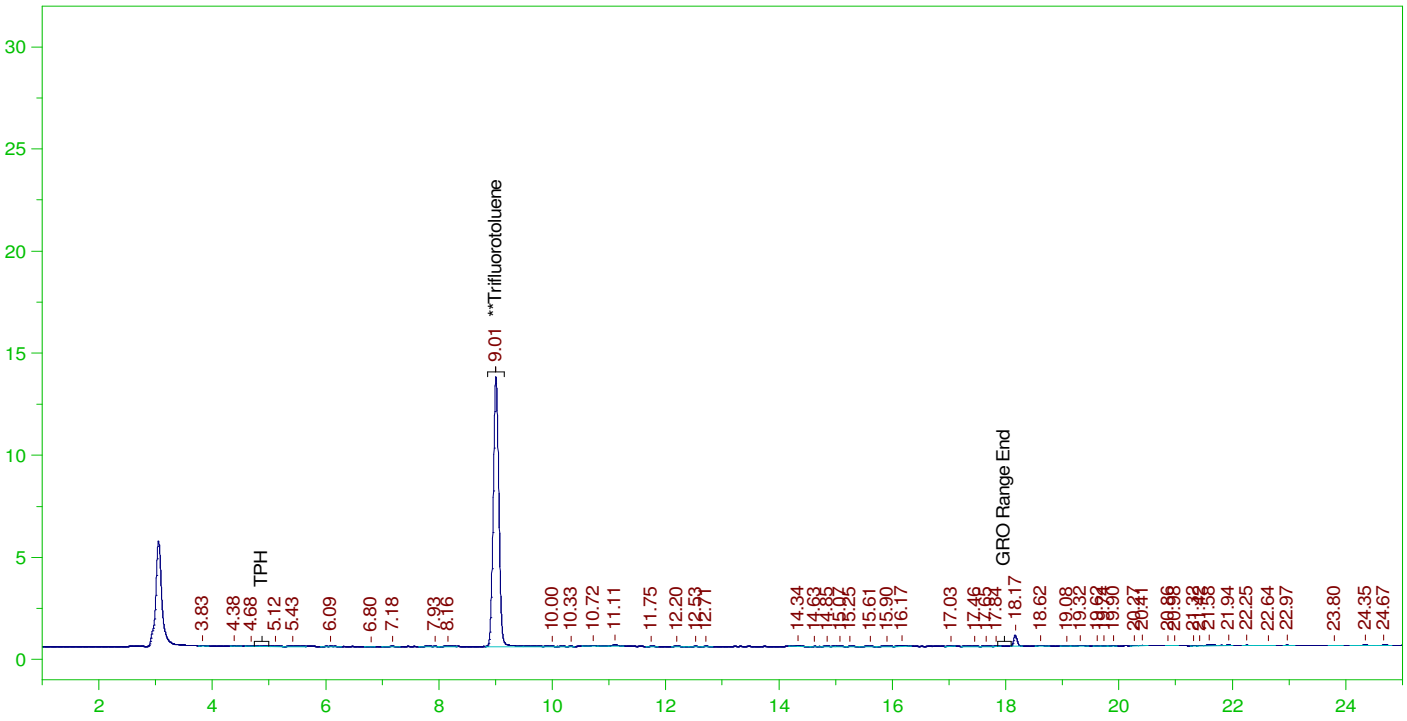
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.003	25.	19.547	78.19	-

C6 to C10 Area:3114.638 C6 to C10 Amount: 0.6356542
TPH Area:5867.029 TPH Amount: 1.22783

ERH2754 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0020.RAW B22030912-044A ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-044A ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0020.RAW
Date & Time Acquired: 3/15/2022 6:40:19 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

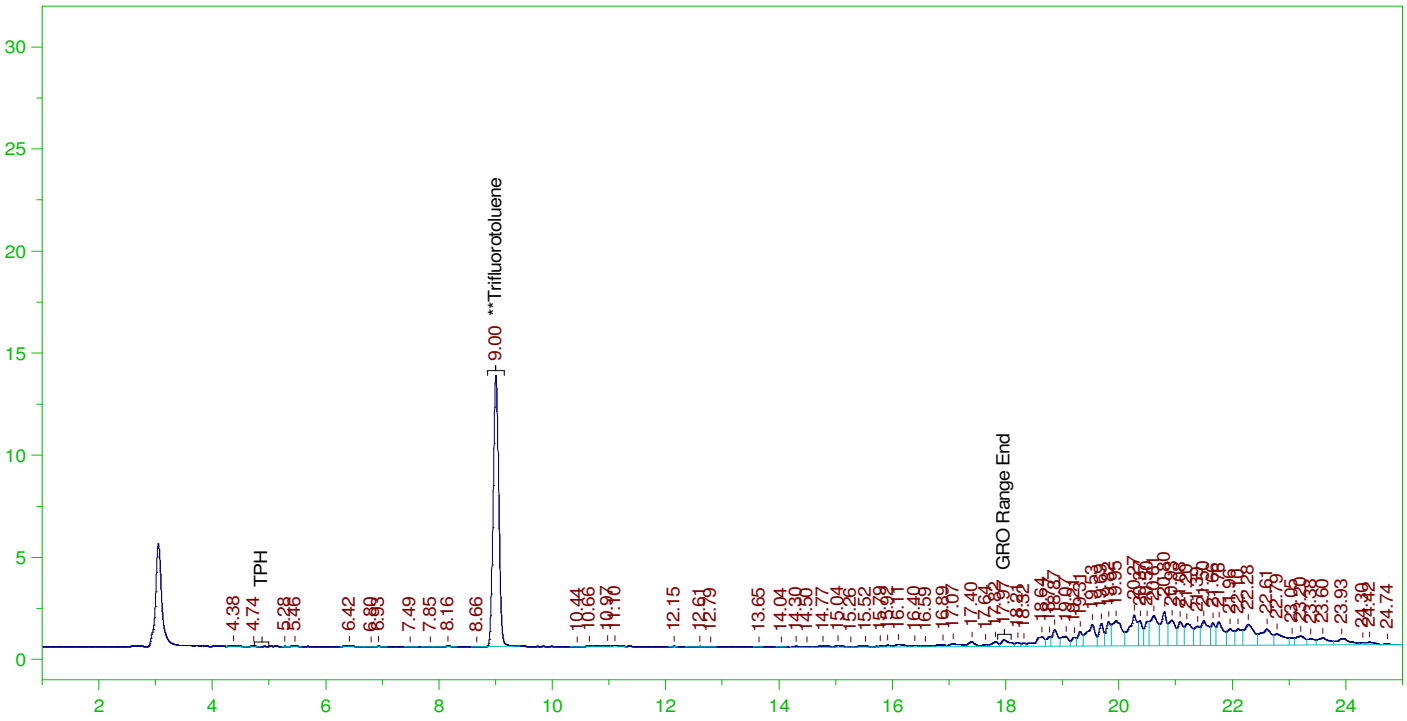
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.006	25.	19.661	78.64	-

C6 to C10 Area:5239.337 C6 to C10 Amount: 1.069276
TPH Area:11154.41 TPH Amount: 2.334352

ERH2763 (Adit 3 Sump)

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0053.RAW B22030912-047F ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-047F ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0053.RAW
Date & Time Acquired: 3/16/2022 1:26:12 PM
Method File: G:\Org\VAR\Methods\211208G912-47DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

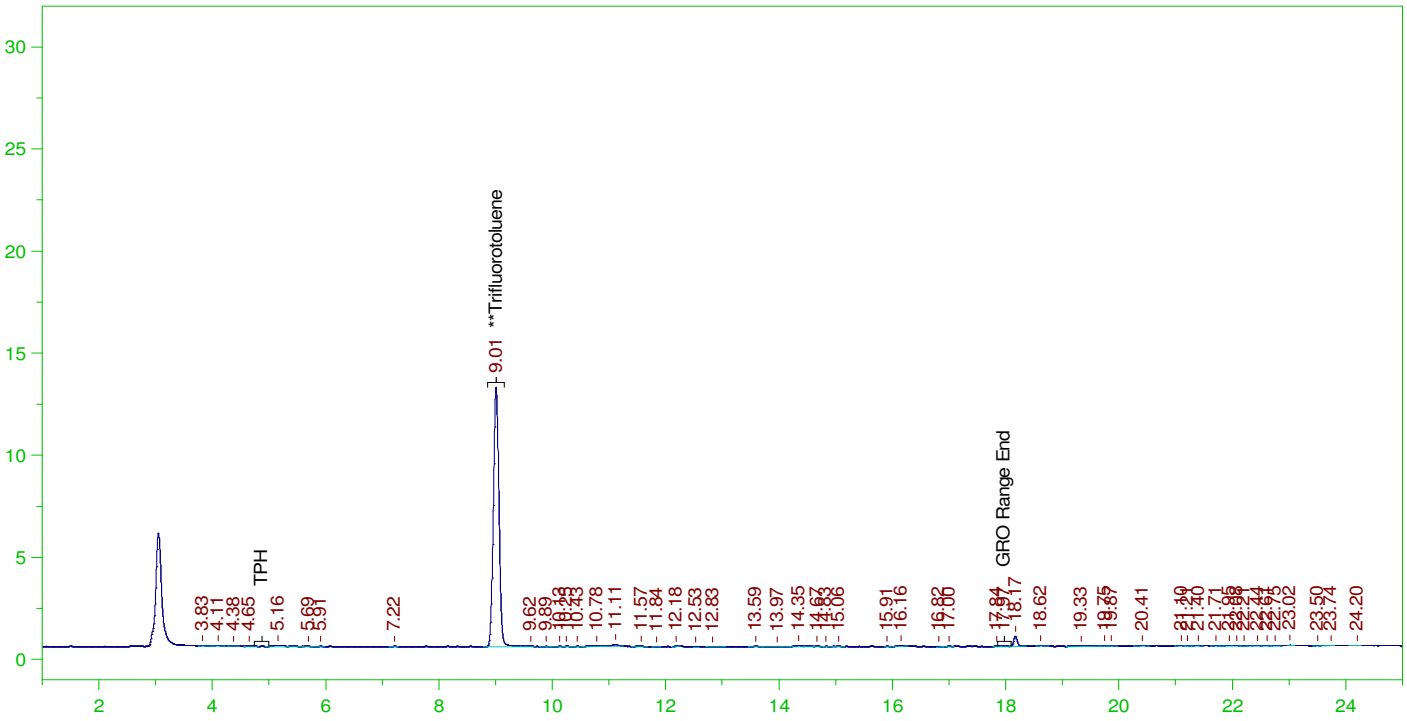
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.005	25.	19.791	79.17	-

C6 to C10 Area:19565.62 C6 to C10 Amount: 3.993069
TPH Area:264568 TPH Amount: 55.36779

ERH2762 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR031522_b\0315VARB.0029.RAW B22030912-049A ;0315VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-049A ;0315VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR031522_b\0315VARB.0029.RAW
Date & Time Acquired: 3/15/2022 11:47:35 PM
Method File: G:\Org\VAR\Methods\211208GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

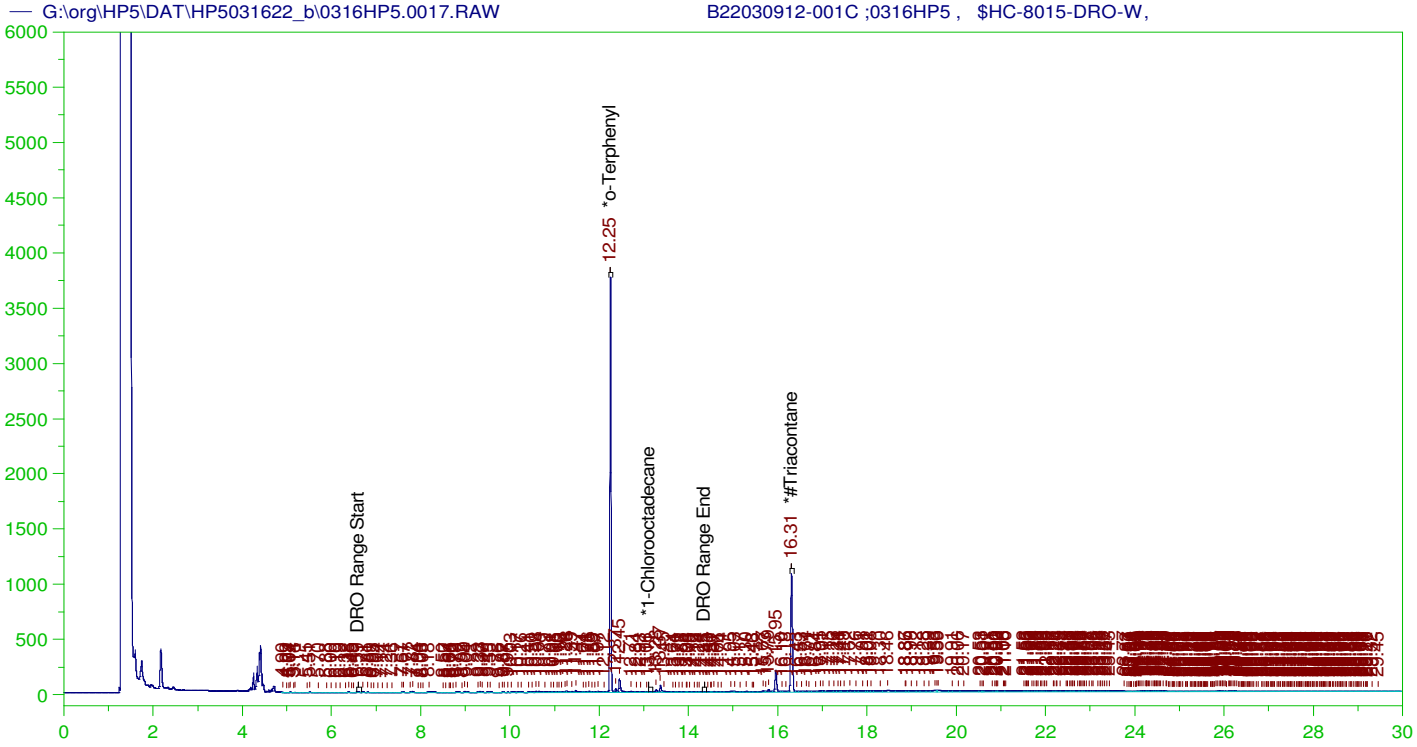
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	18.922	75.69	-

C6 to C10 Area:5950.276 C6 to C10 Amount: 1.214368
TPH Area:12108.15 TPH Amount: 2.533947

ERH2758 (RHMW13-5) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0017.RAW B22030912-001C ;0316HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-001C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0017.RAW
Date & Time Acquired: 3/17/2022 2:55:12 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

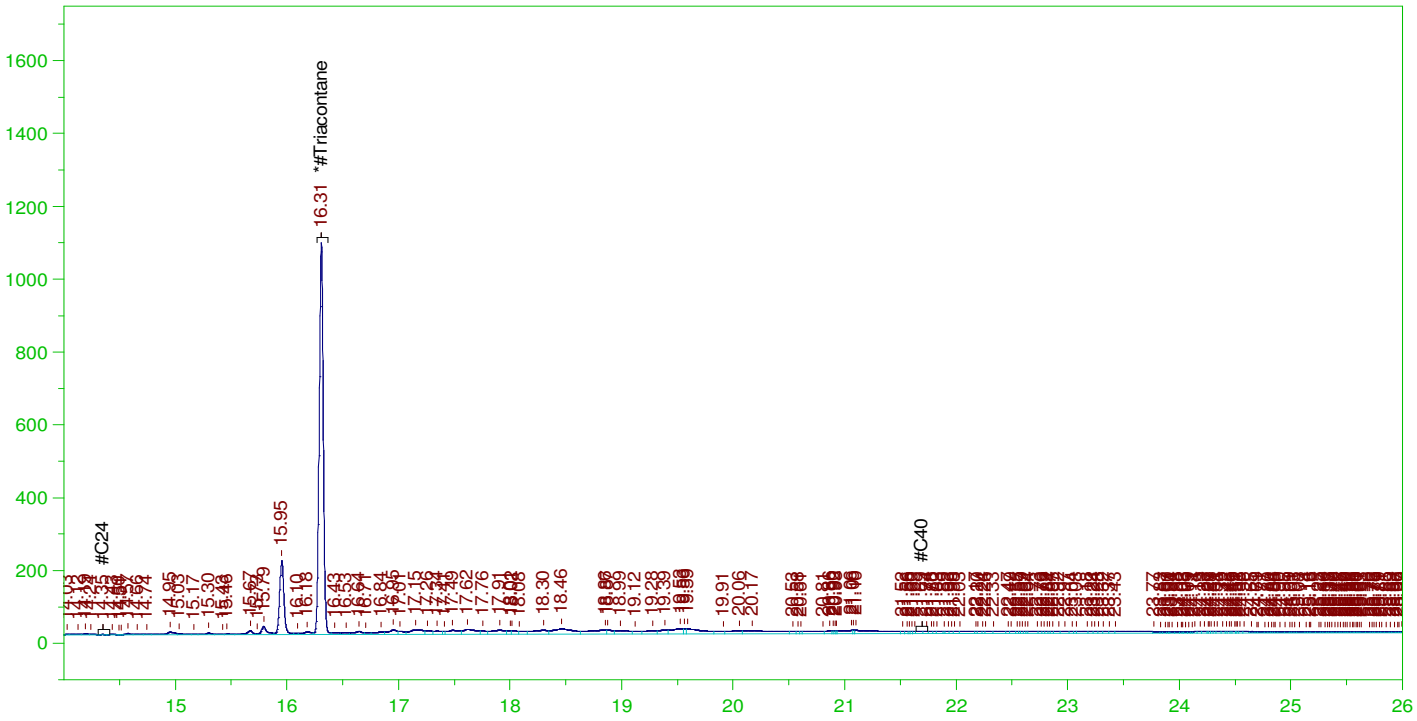
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.25	.19	.186	97.45	-
*1-Chlorooctadecane	13.112	.19	.	.12	-
*#Triacontane	16.308	.19	.09	47.11	-

DRO Area:1386511 DRO Amount: 0.0404123
TEH Area:6379555 TEH Amount: 0.1859434

ERH2758 (RHMW13-5) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0017.RAW B22030912-001C ;0316HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-001C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0017.RAW
Date & Time Acquired: 3/17/2022 2:55:12 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

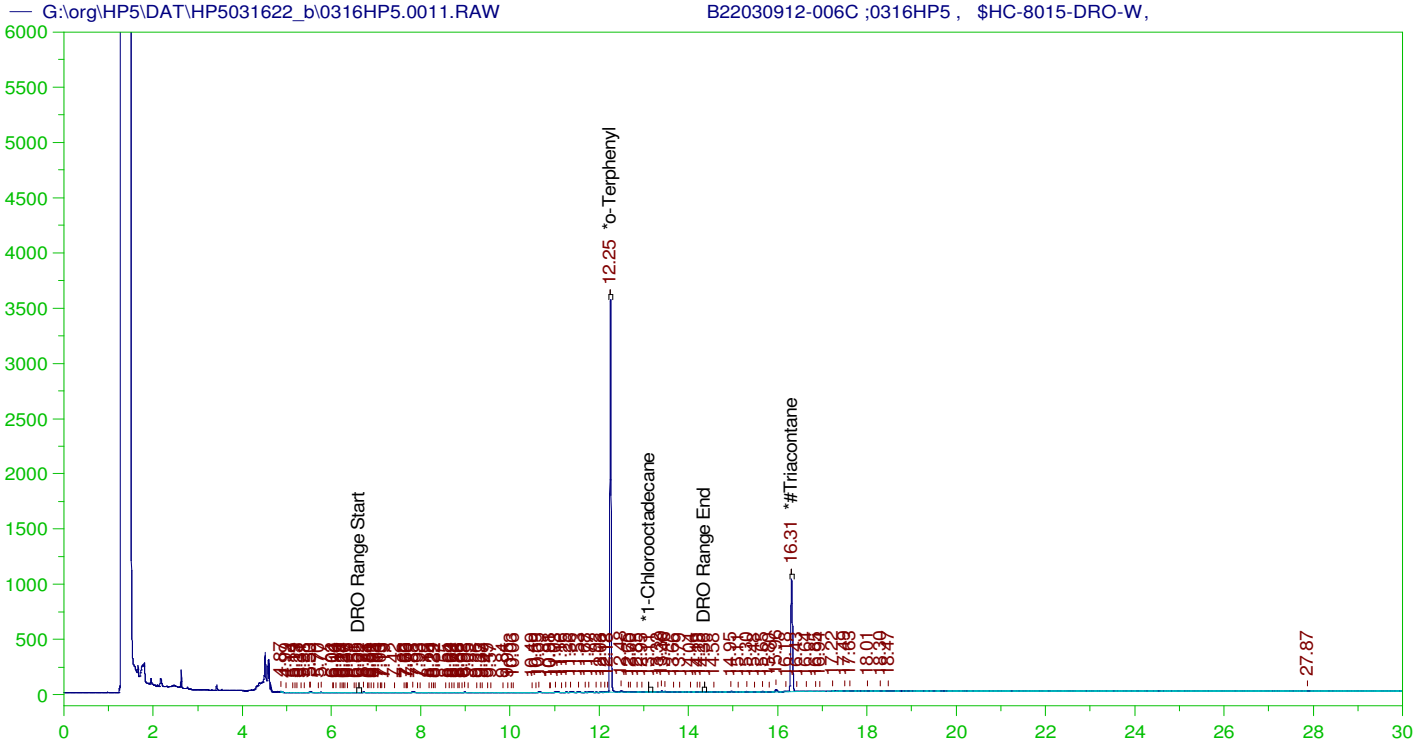
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.308	.476	.09	18.85	-

RRO Area:3610227 RRO AMOUNT: 0.130118

ERH2691 (OWDFMW01) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0011.RAW B22030912-006C ;0316HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-006C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0011.RAW
Date & Time Acquired: 3/16/2022 10:37:20 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

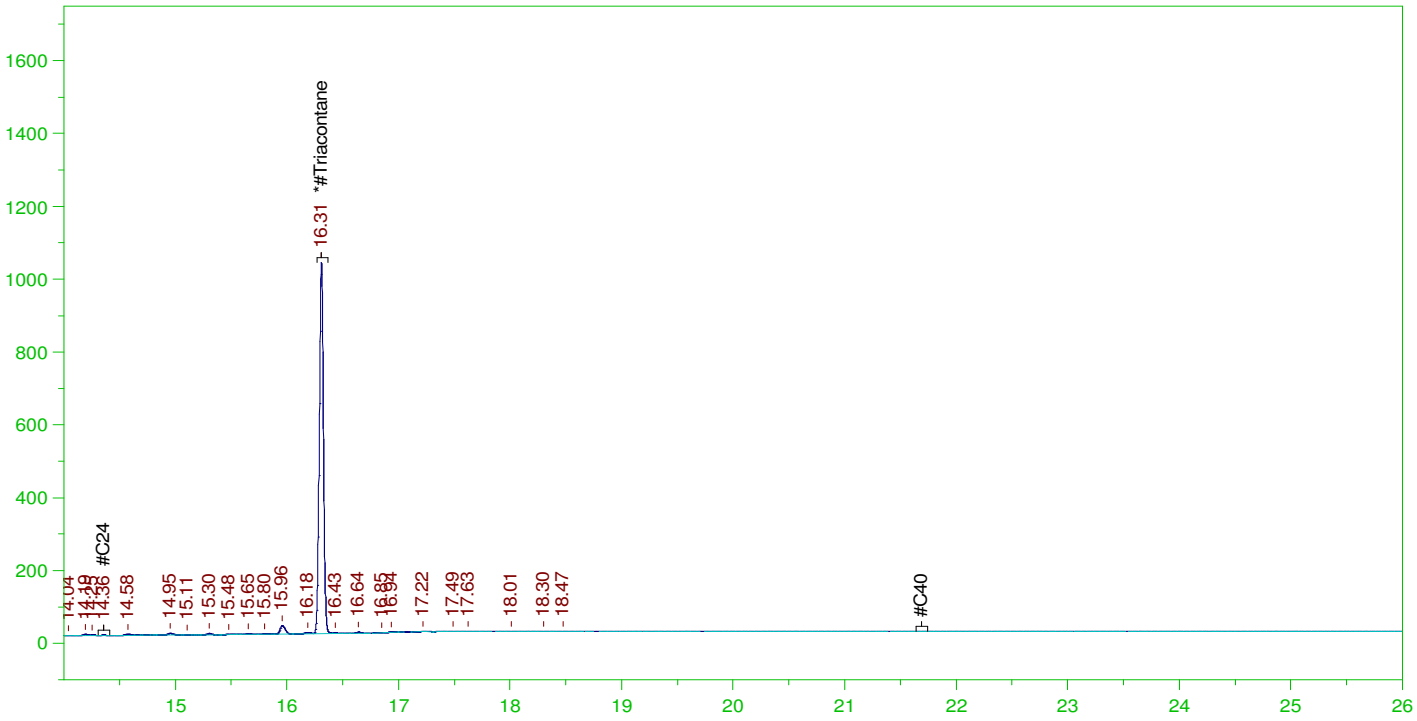
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.251	.19	.181	94.88	-
*1-Chlorooctadecane	13.107	.19	.	.01	-
*#Triacontane	16.309	.19	.086	45.09	-

DRO Area:345319.5 DRO Amount: 1.006495E-02
TEH Area:574996 TEH Amount: 1.675927E-02

ERH2691 (OWDFMW01) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0011.RAW B22030912-006C ;0316HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-006C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0011.RAW
Date & Time Acquired: 3/16/2022 10:37:20 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

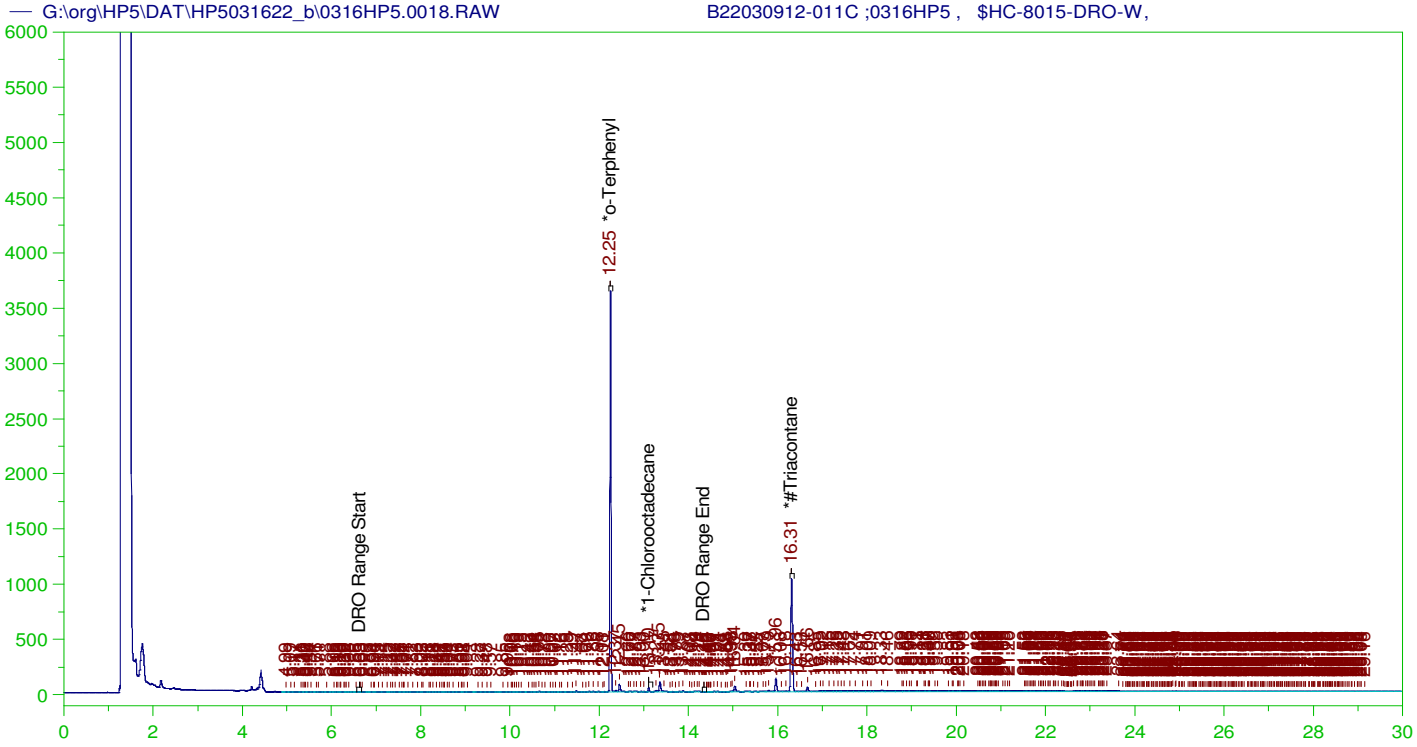
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.309	.476	.086	18.03	-

RRO Area:176335.7 RRO AMOUNT: 6.355407E-03

ERH2770 (RHMW11-5) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0018.RAW B22030912-011C ;0316HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-011C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0018.RAW
Date & Time Acquired: 3/17/2022 3:38:10 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

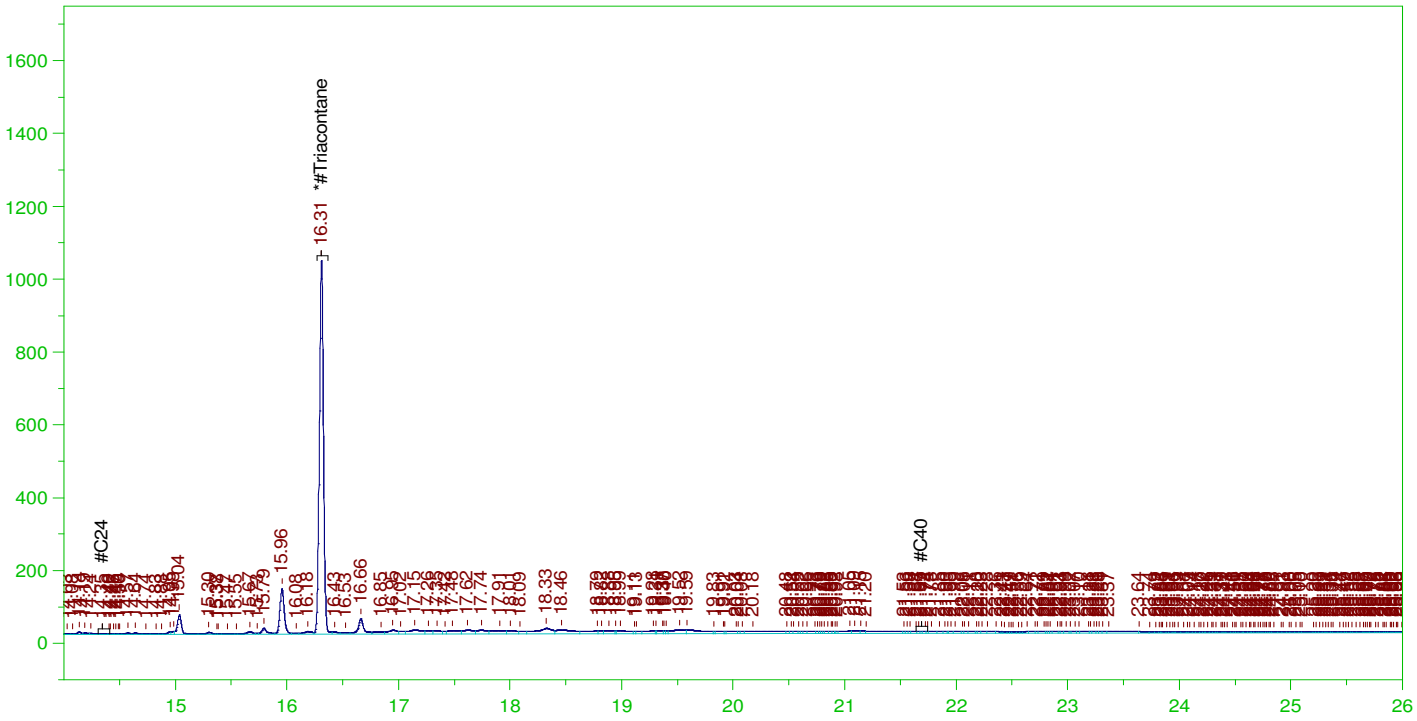
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.25	.19	.179	93.83	-
*1-Chlorooctadecane	13.103	.19	.003	1.35	-
*#Triacontane	16.31	.19	.086	45.04	-

DRO Area:1141561 DRO Amount: 0.0332728
TEH Area:5408554 TEH Amount: 0.1576418

ERH2770 (RHMW11-5) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0018.RAW B22030912-011C ;0316HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-011C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0018.RAW
Date & Time Acquired: 3/17/2022 3:38:10 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

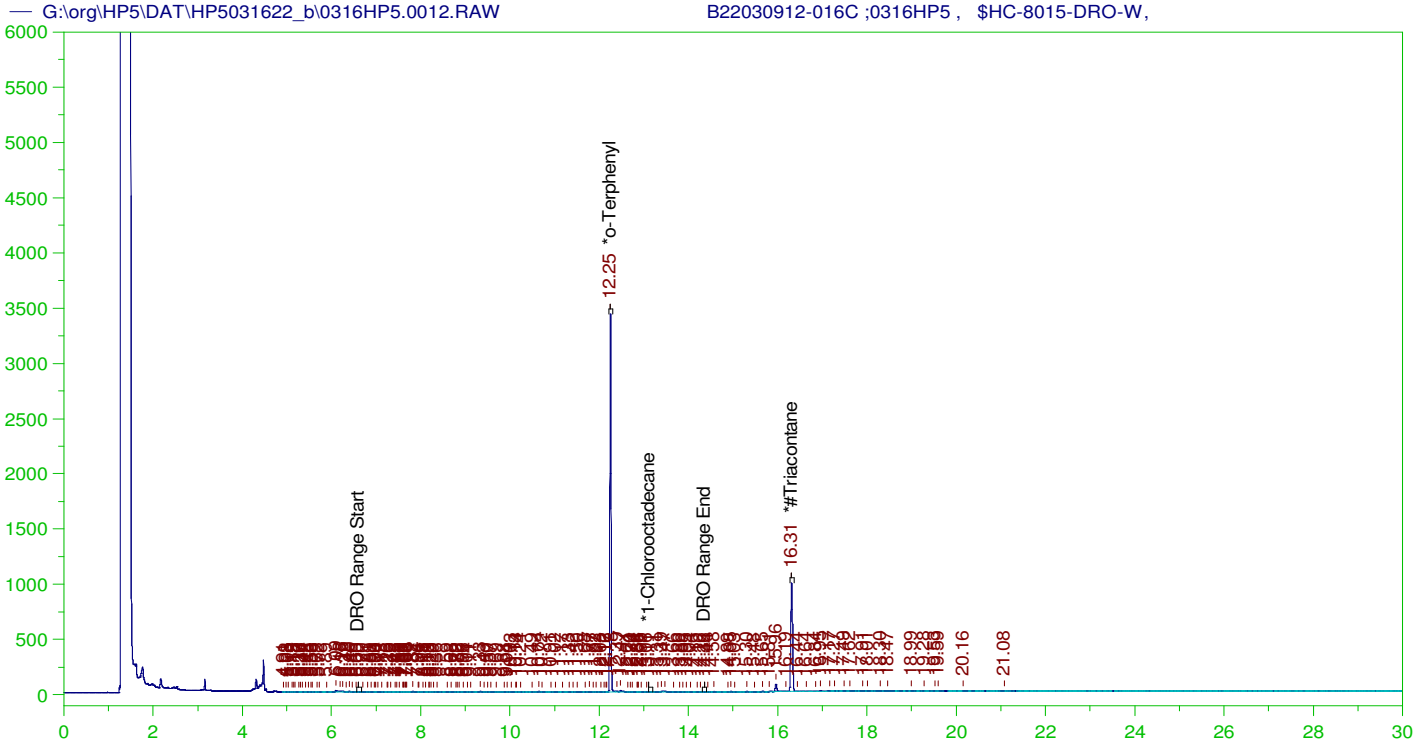
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.31	.476	.086	18.02	-

RRO Area:3109732 RRO AMOUNT: 0.1120794

ERH2752 (OWDFMW07A) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0012.RAW B22030912-016C ;0316HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-016C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0012.RAW
Date & Time Acquired: 3/16/2022 11:20:23 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

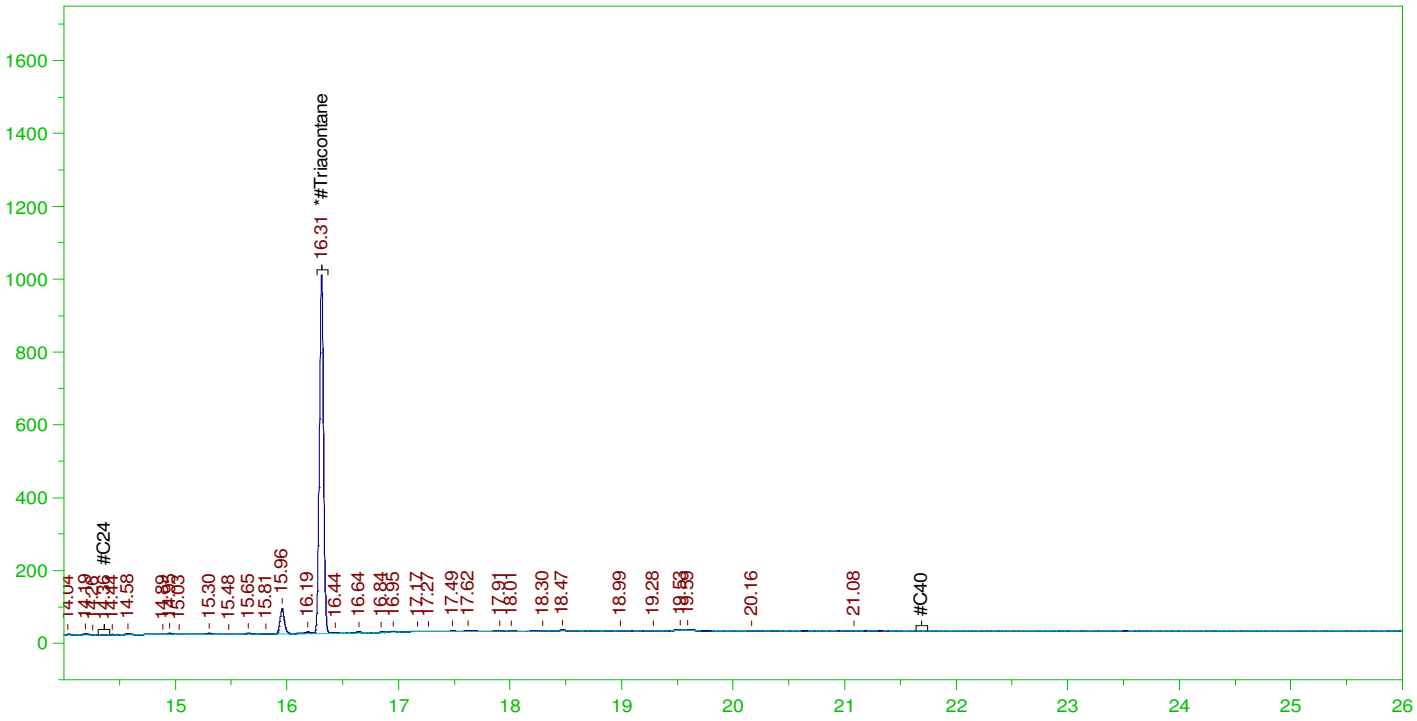
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.25	.19	.175	91.63	-
*1-Chlorooctadecane	13.105	.19	.	.03	-
*#Triacontane	16.31	.19	.083	43.49	-

DRO Area:442035.4 DRO Amount: 0.0128839
TEH Area:966089.6 TEH Amount: 2.815838E-02

ERH2752 (OWDFMW07A) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0012.RAW B22030912-016C ;0316HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-016C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0012.RAW
Date & Time Acquired: 3/16/2022 11:20:23 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

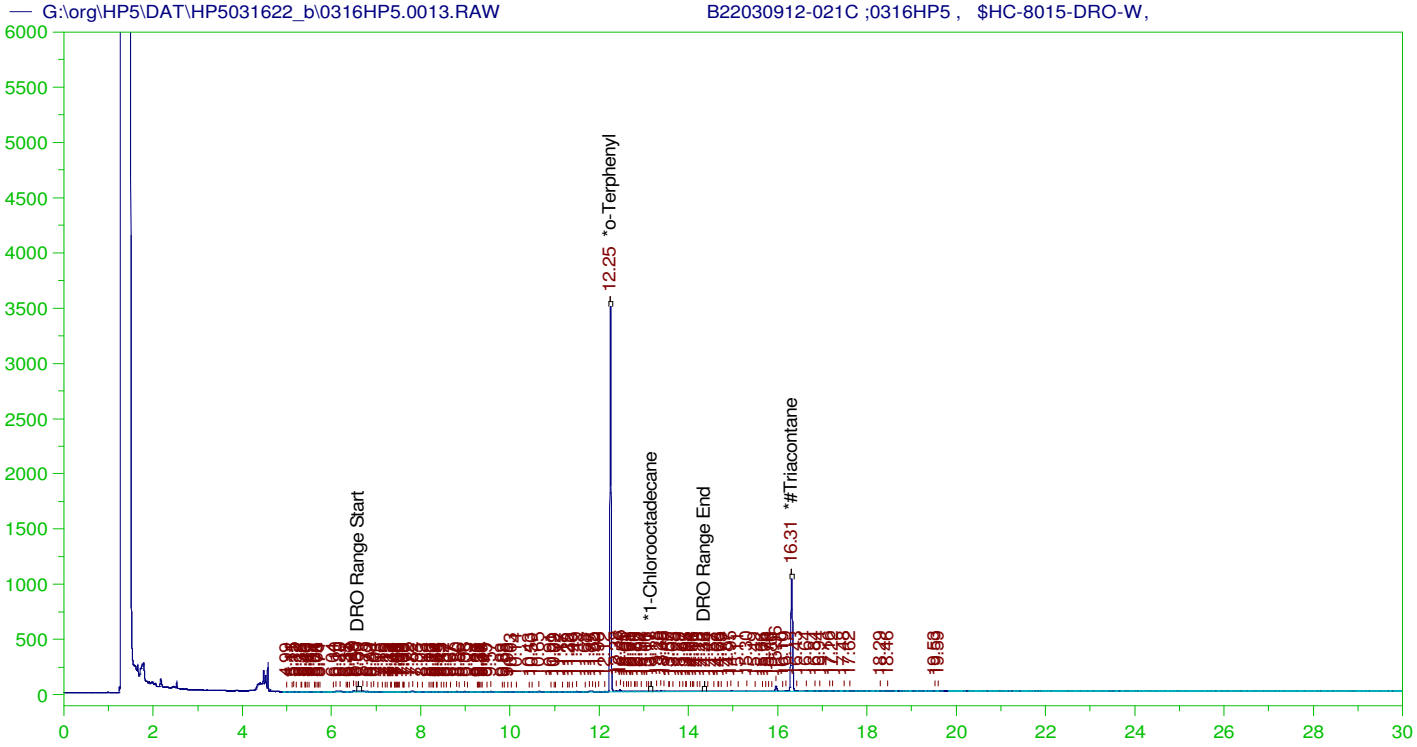
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.31	.476	.083	17.39	-

RRO Area:313013.4 RRO AMOUNT: 1.128148E-02

ERH2747 (OWDFMW04A) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0013.RAW B22030912-021C ;0316HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-021C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0013.RAW
Date & Time Acquired: 3/17/2022 12:03:18 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

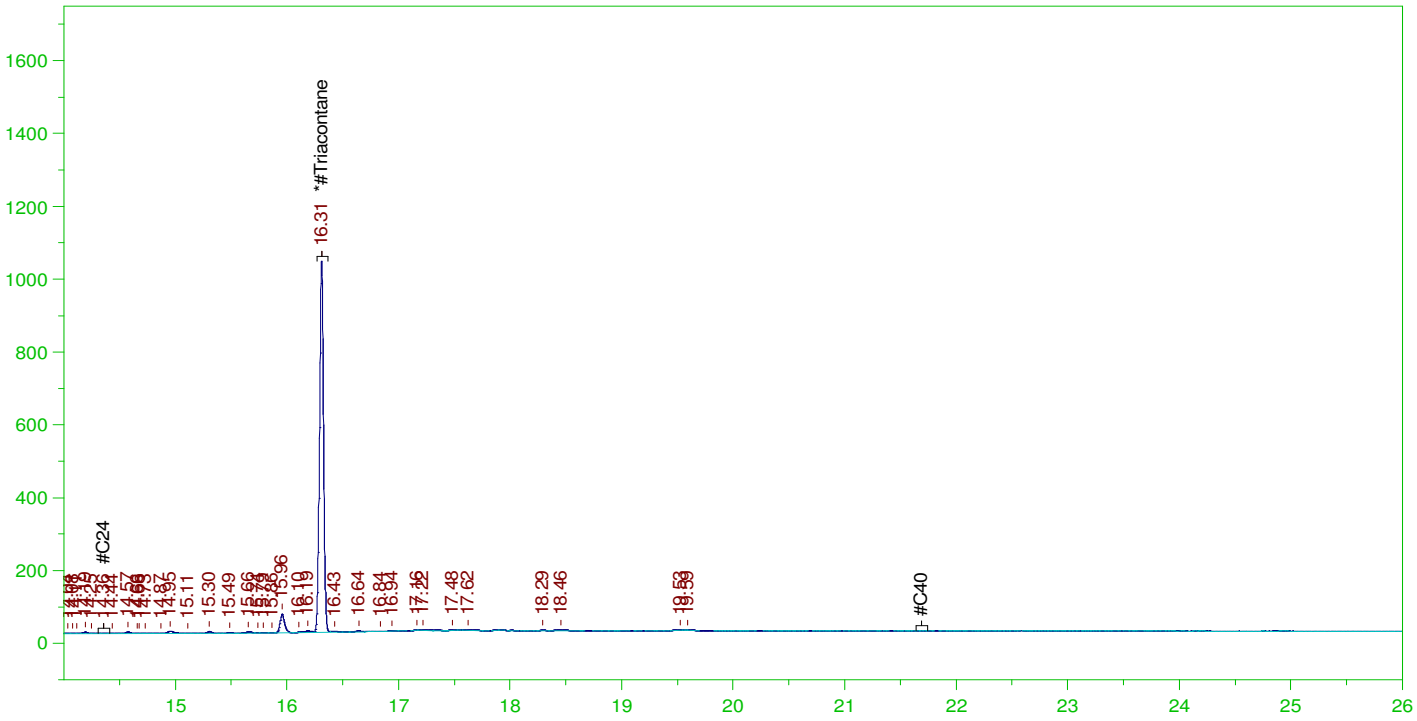
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.251	.19	.176	92.21	-
*1-Chlorooctadecane	13.168	.19	.	.02	-
*#Triacontane	16.31	.19	.084	43.94	-

DRO Area:609366.5 DRO Amount: 1.776106E-02
TEH Area:1038587 TEH Amount: 3.027146E-02

ERH2747 (OWDFMW04A) Batch ID: 164531

— G:\org\HP5\DAT\HP5031622_b\0316HP5.0013.RAW B22030912-021C ;0316HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-021C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0013.RAW
Date & Time Acquired: 3/17/2022 12:03:18 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

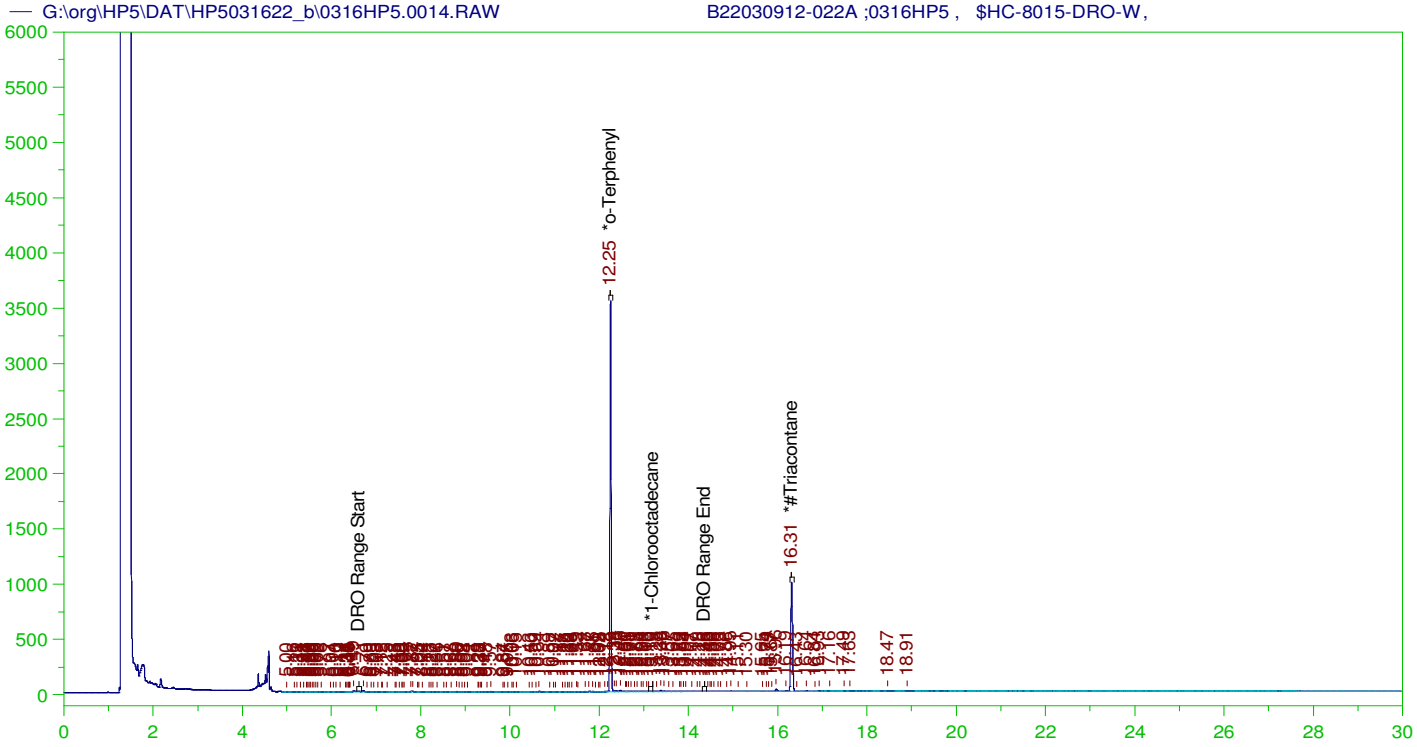
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.31	.476	.084	17.58	-

RRO Area:273956 RRO AMOUNT: 9.873791E-03

ERH2748 (OWDFMW04A FD) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0014.RAW B22030912-022A ;0316HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-022A ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0014.RAW
Date & Time Acquired: 3/17/2022 12:46:18 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

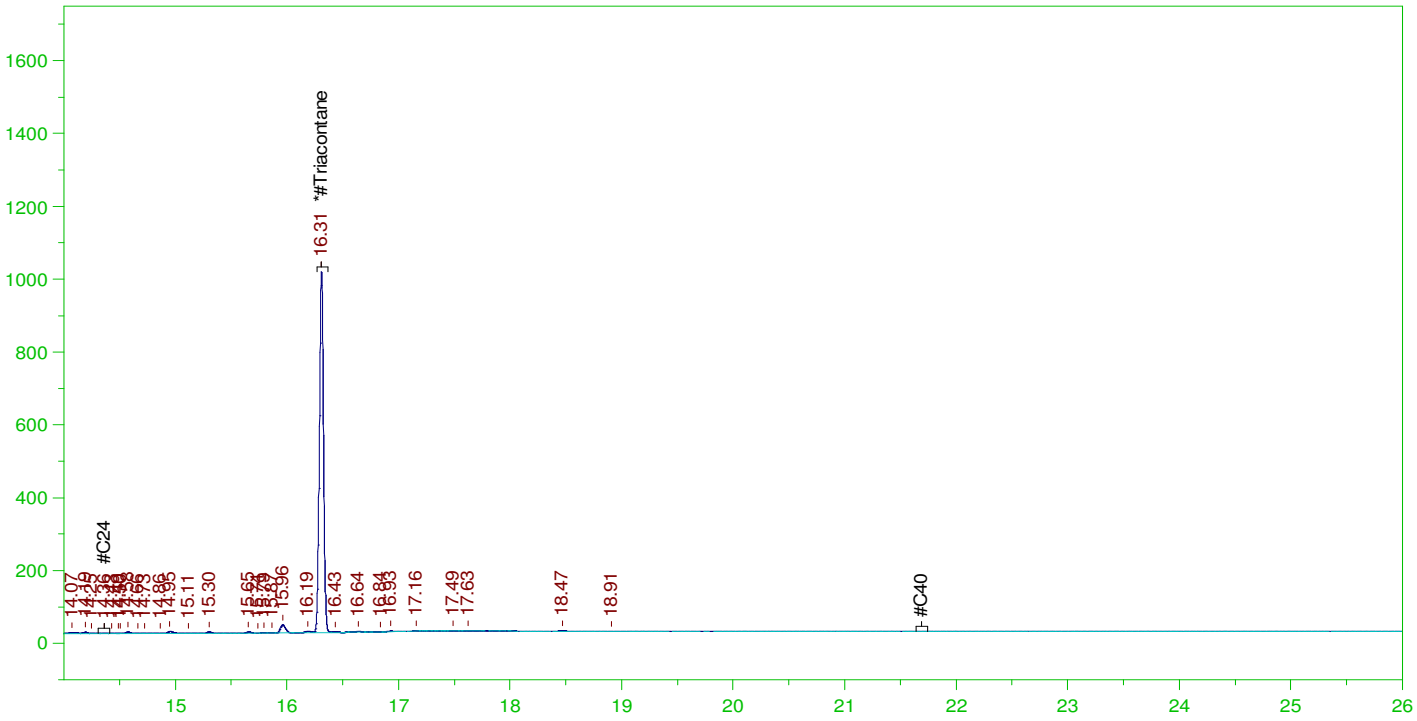
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.252	.19	.174	91.34	-
*1-Chlorooctadecane	13.195	.19	.	.01	-
*#Triacontane	16.309	.19	.083	43.82	-

DRO Area:680398.1 DRO Amount: 0.0198314
TEH Area:1016169 TEH Amount: 2.961805E-02

ERH2748 (OWDFMW04A FD) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0014.RAW B22030912-022A ;0316HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-022A ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0014.RAW
Date & Time Acquired: 3/17/2022 12:46:18 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

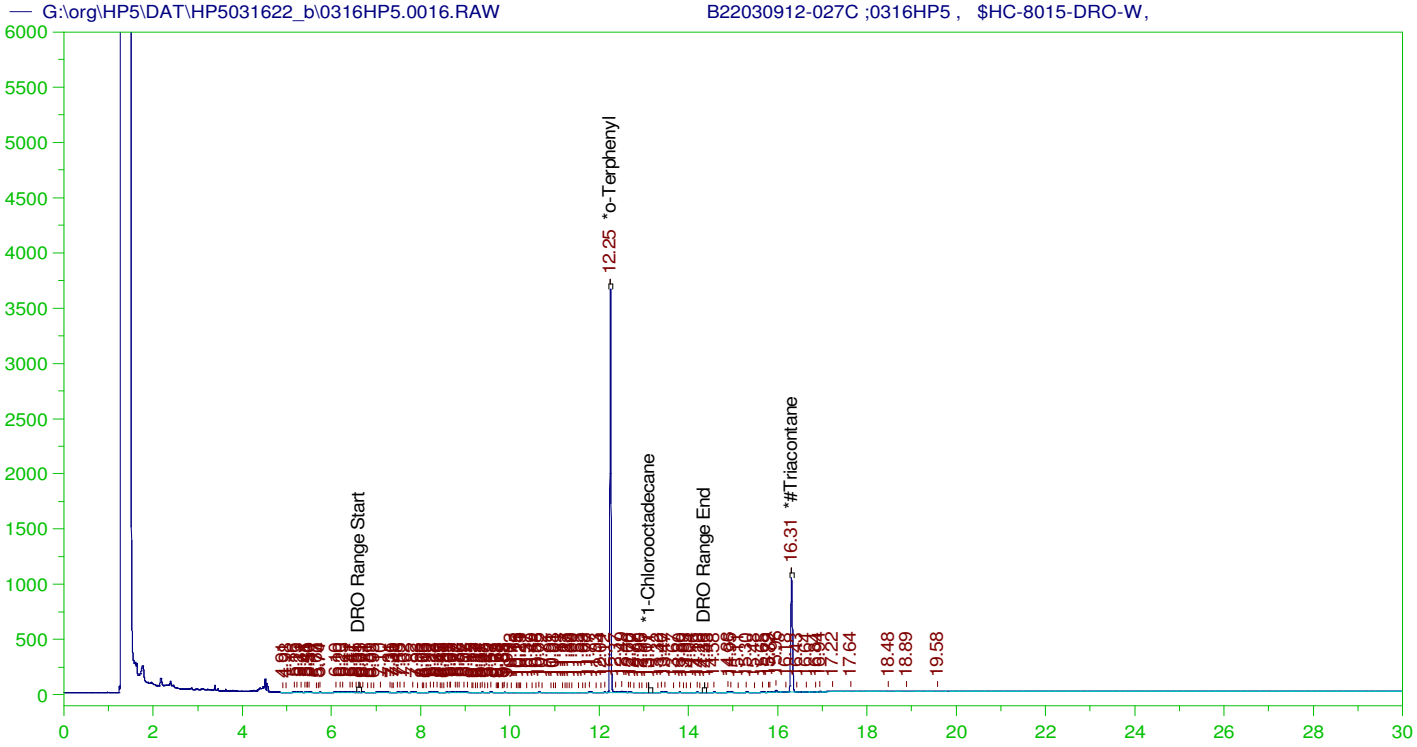
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.309	.476	.083	17.53	-

RRO Area:198508.3 RRO AMOUNT: 7.154541E-03

ERH2688 (THMW2254-01, Low Flow) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0016.RAW B22030912-027C ;0316HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-027C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0016.RAW
Date & Time Acquired: 3/17/2022 2:12:15 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

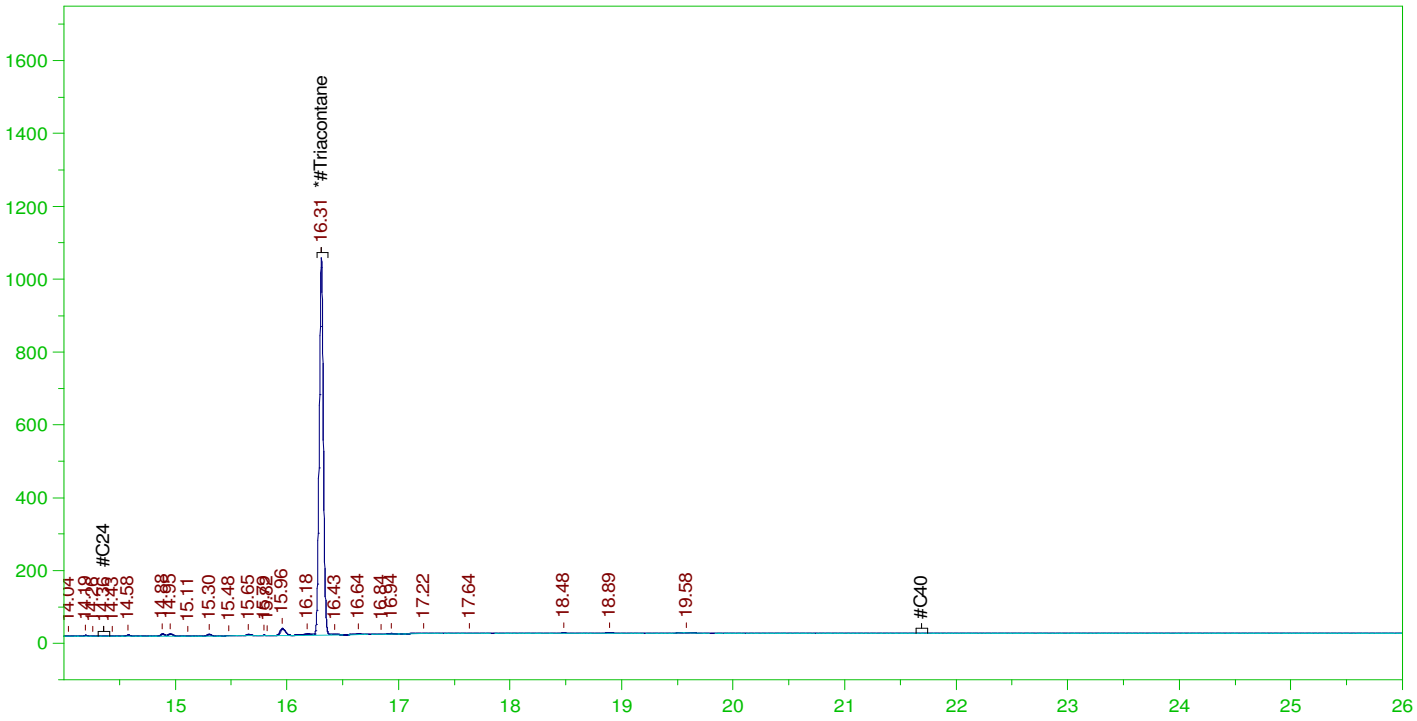
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.251	.19	.181	95.1	-
*1-Chlorooctadecane	13.109	.19	.	.03	-
*#Triacontane	16.308	.19	.086	45.21	-

DRO Area:479871.5 DRO Amount: 0.0139867
TEH Area:787422.6 TEH Amount: 2.295082E-02

ERH2688 (THMW2254-01, Low Flow) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0016.RAW B22030912-027C ;0316HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-027C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0016.RAW
Date & Time Acquired: 3/17/2022 2:12:15 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

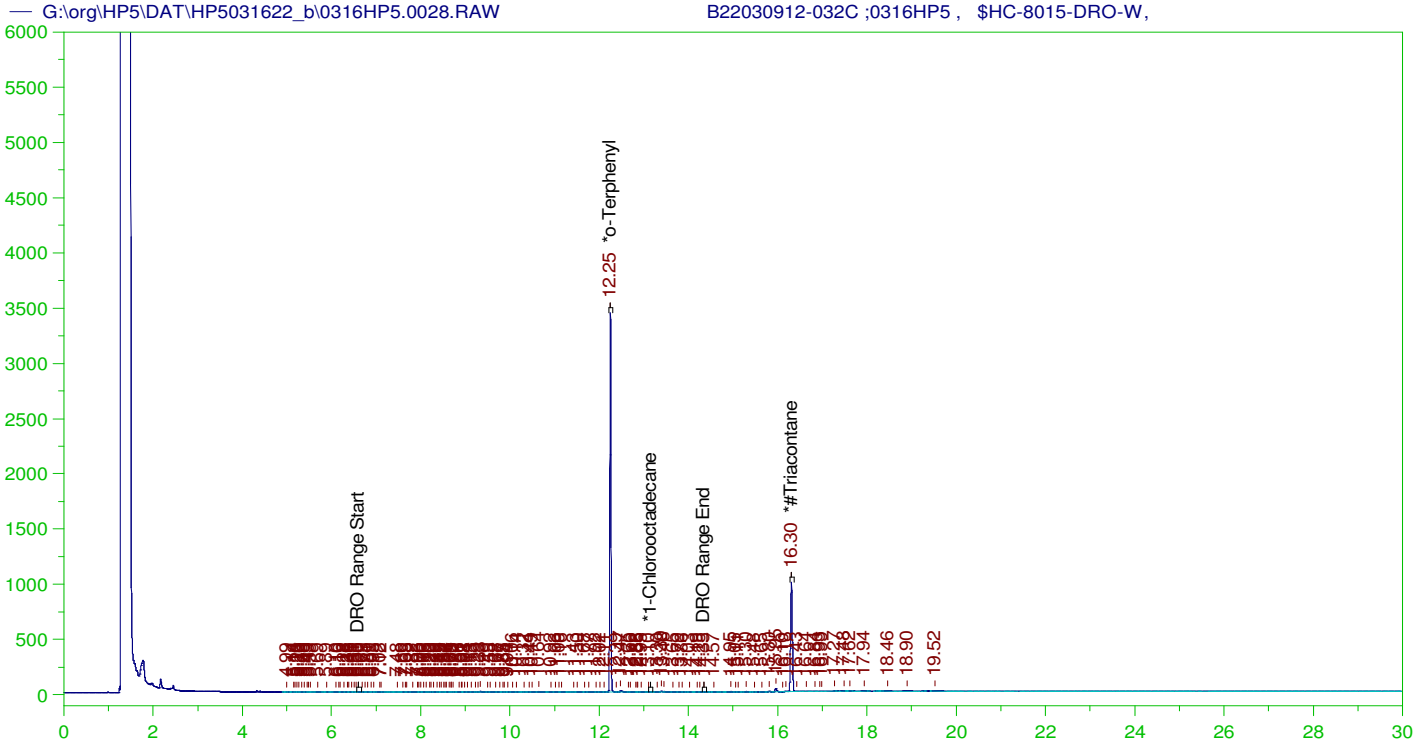
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.308	.476	.086	18.08	-

RRO Area:191394.5 RRO AMOUNT: 6.89815E-03

ERH2760 (RHMW19) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0028.RAW B22030912-032C ;0316HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-032C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0028.RAW
Date & Time Acquired: 3/17/2022 11:12:20 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

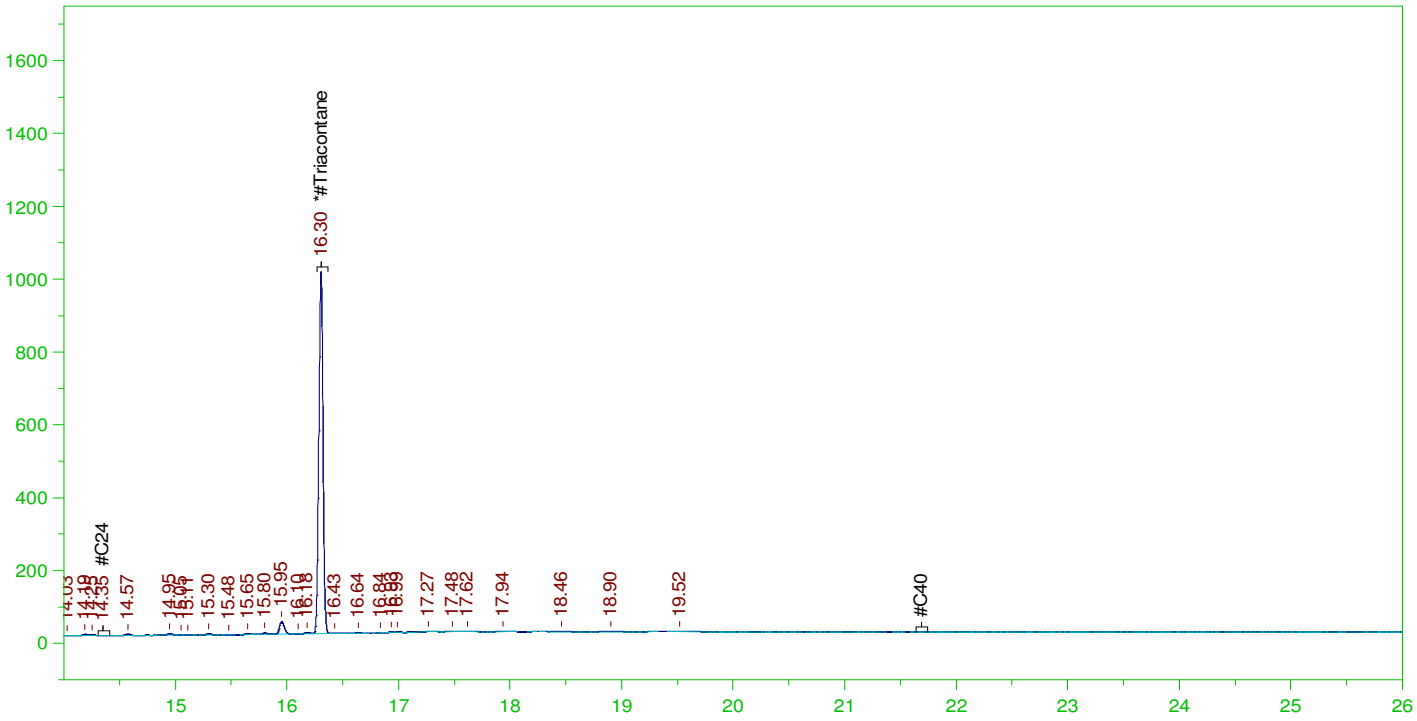
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.248	.19	.17	89.18	-
*1-Chlorooctadecane	29.971	.19	.	.	-
*#Triacontane	16.304	.19	.084	44.24	-

DRO Area:433601.3 DRO Amount: 1.263807E-02
TEH Area:731043.1 TEH Amount: 2.130754E-02

ERH2760 (RHMW19) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0028.RAW B22030912-032C ;0316HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-032C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0028.RAW
Date & Time Acquired: 3/17/2022 11:12:20 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

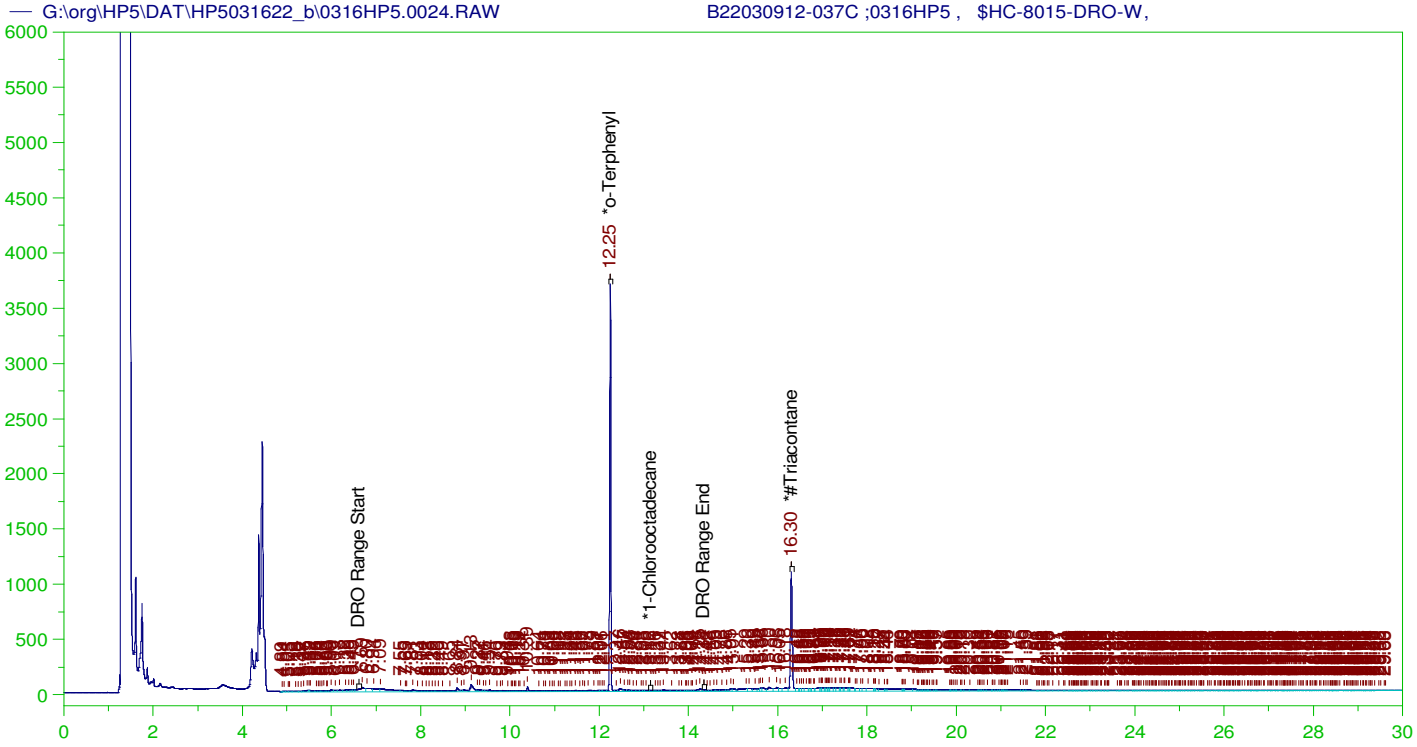
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.304	.476	.084	17.69	-

RRO Area:241807.9 RRO AMOUNT: 8.715124E-03

ERH2685 (RHMW2254-01, Bailer) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0024.RAW B22030912-037C ;0316HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-037C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0024.RAW
Date & Time Acquired: 3/17/2022 7:55:58 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

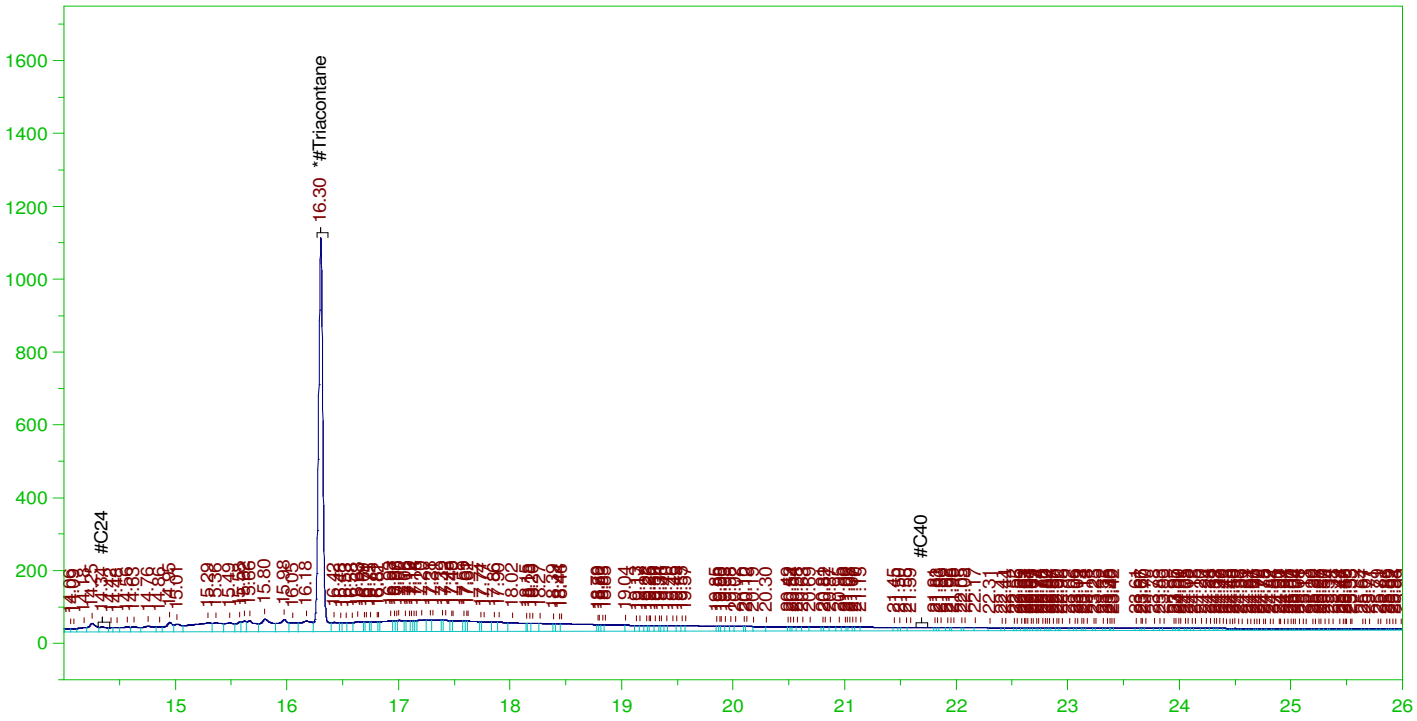
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.245	.19	.183	96.19	-
*1-Chlorooctadecane	13.156	.19	.002	.84	-
*#Triacontane	16.303	.19	.095	49.89	-

DRO Area:5364289 DRO Amount: 0.1563516
TEH Area:1.655565E+07 TEH Amount: 0.4825437

ERH2685 (RHMW2254-01, Bailer) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0024.RAW B22030912-037C ;0316HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-037C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0024.RAW
Date & Time Acquired: 3/17/2022 7:55:58 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

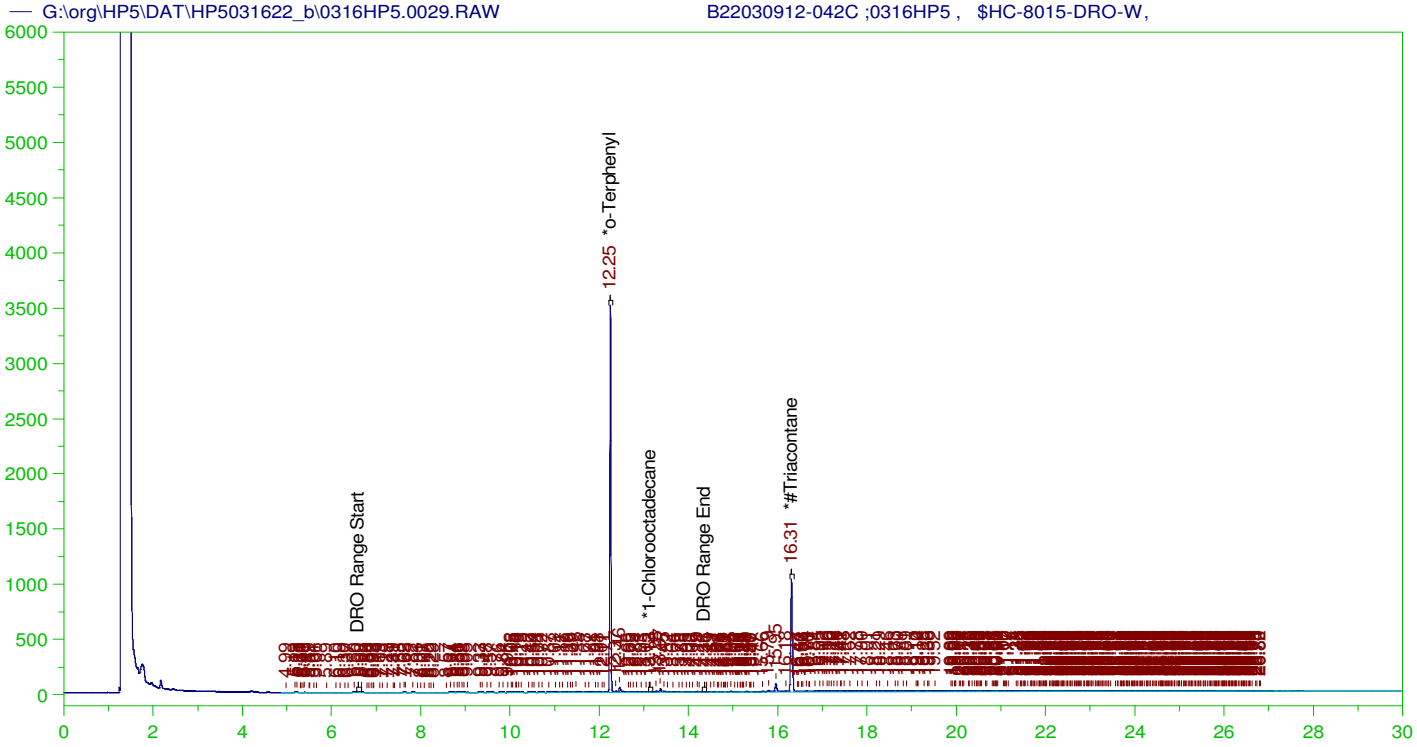
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.303	.476	.095	19.92	-

RRO Area:8216439 RRO AMOUNT: 0.2961329

ERH2755 (RHMW08) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0029.RAW B22030912-042C ;0316HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-042C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0029.RAW
Date & Time Acquired: 3/17/2022 11:55:02 AM
Method File: G:\Org\HP5\Methods\DR_8015-031629-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

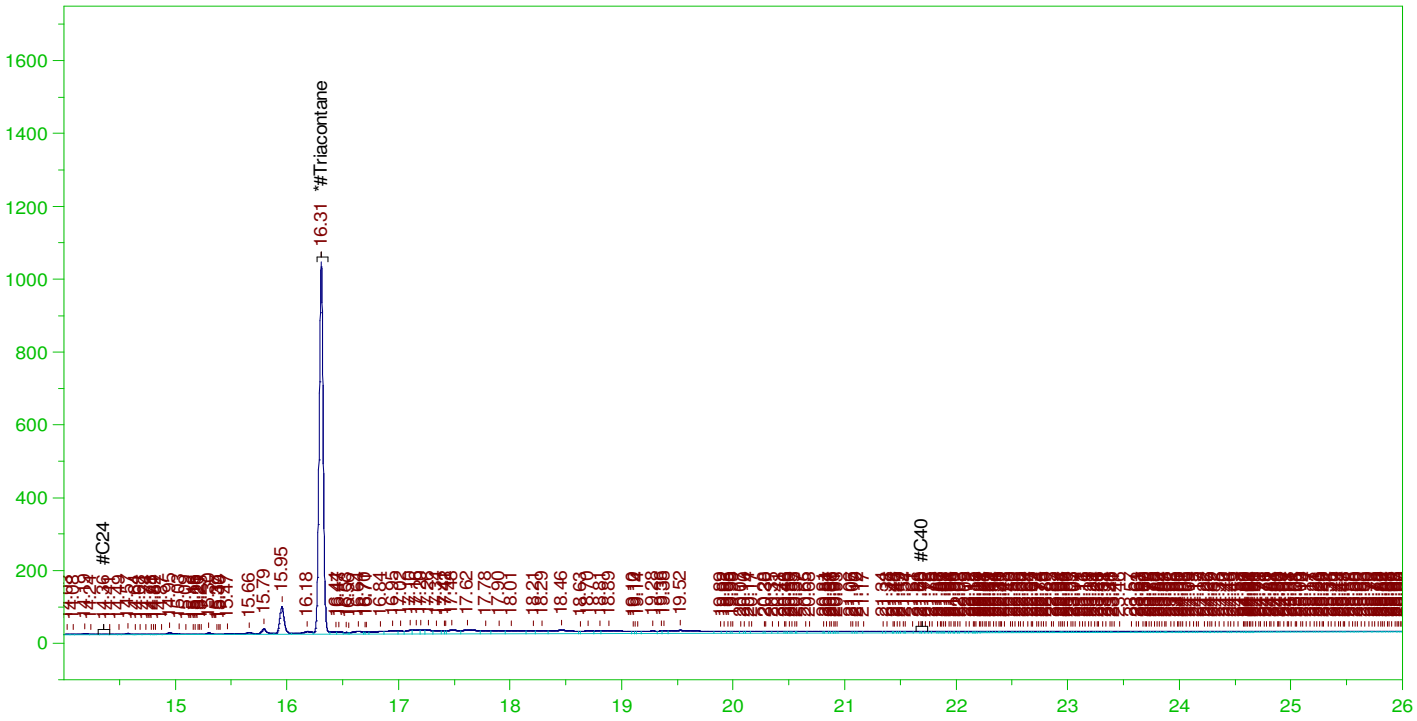
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.248	.19	.172	90.38	-
*1-Chlorooctadecane	13.13	.19	.	.05	-
*#Triacontane	16.307	.19	.085	44.44	-

DRO Area:700523.1 DRO Amount: 2.041798E-02
TEH Area:4270875 TEH Amount: 0.1244822

ERH2755 (RHMW08) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0029.RAW B22030912-042C ;0316HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-042C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0029.RAW
Date & Time Acquired: 3/17/2022 11:55:02 AM
Method File: G:\Org\HP5\Methods\DR_OROS-031629-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

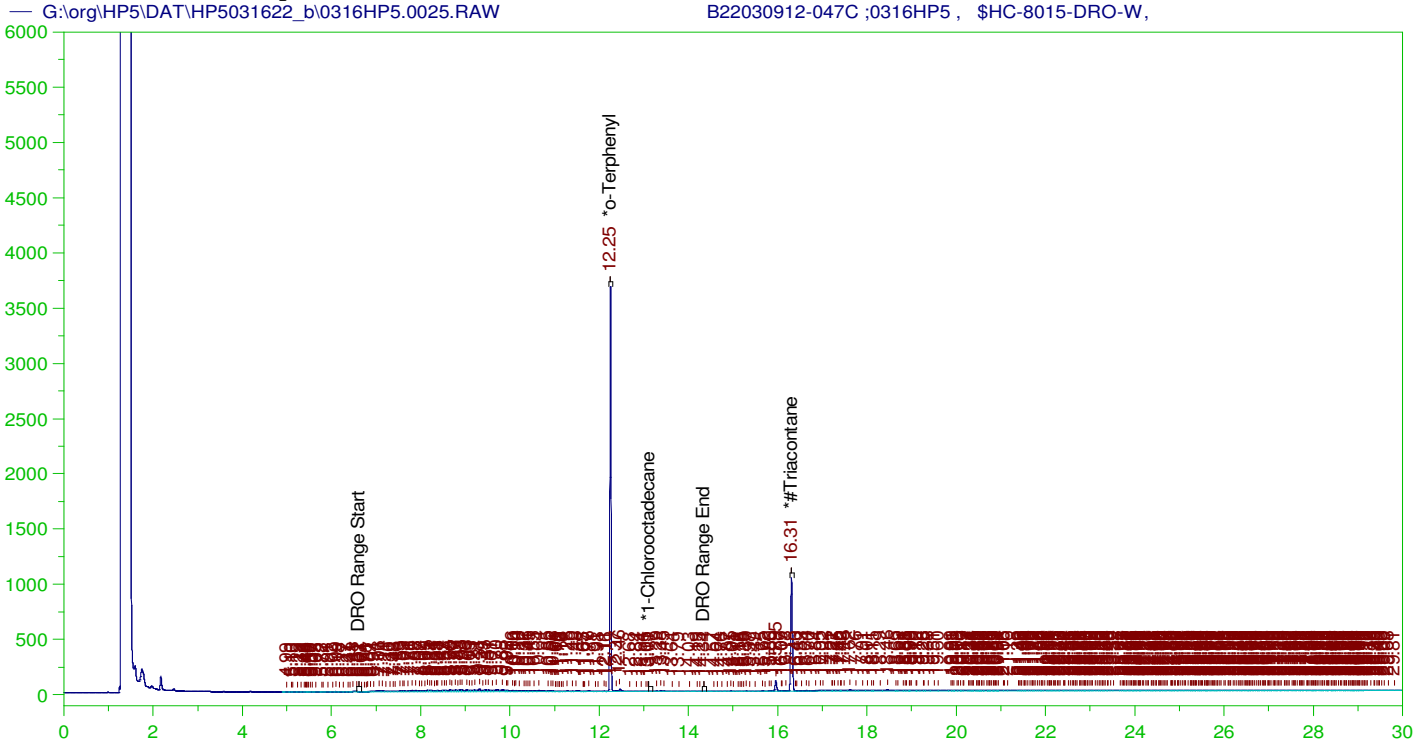
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.307	.476	.085	17.78	-

RRO Area:2809969 RRO AMOUNT: 0.1012755

ERH2763 (Adit 3 Sump) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0025.RAW B22030912-047C ;0316HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-047C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0025.RAW
Date & Time Acquired: 3/17/2022 8:38:50 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

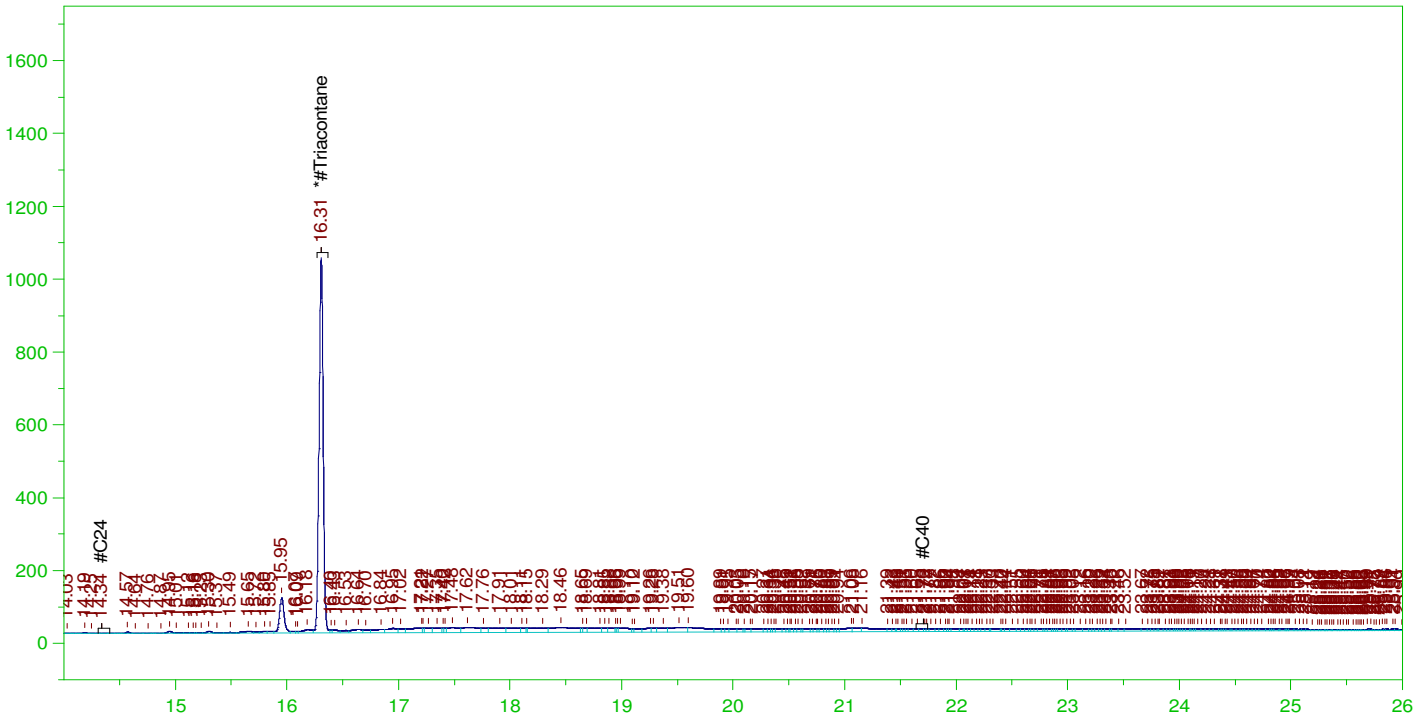
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.251	.192	.181	94.29	-
*1-Chlorooctadecane	13.108	.192	.	.08	-
*#Triacontane	16.306	.192	.088	45.63	-

DRO Area:3656972 DRO Amount: 0.1076138
TEH Area:9186832 TEH Amount: 0.2703411

ERH2763 (Adit 3 Sump) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0025.RAW B22030912-047C ;0316HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-047C ;0316HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0025.RAW
Date & Time Acquired: 3/17/2022 8:38:50 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

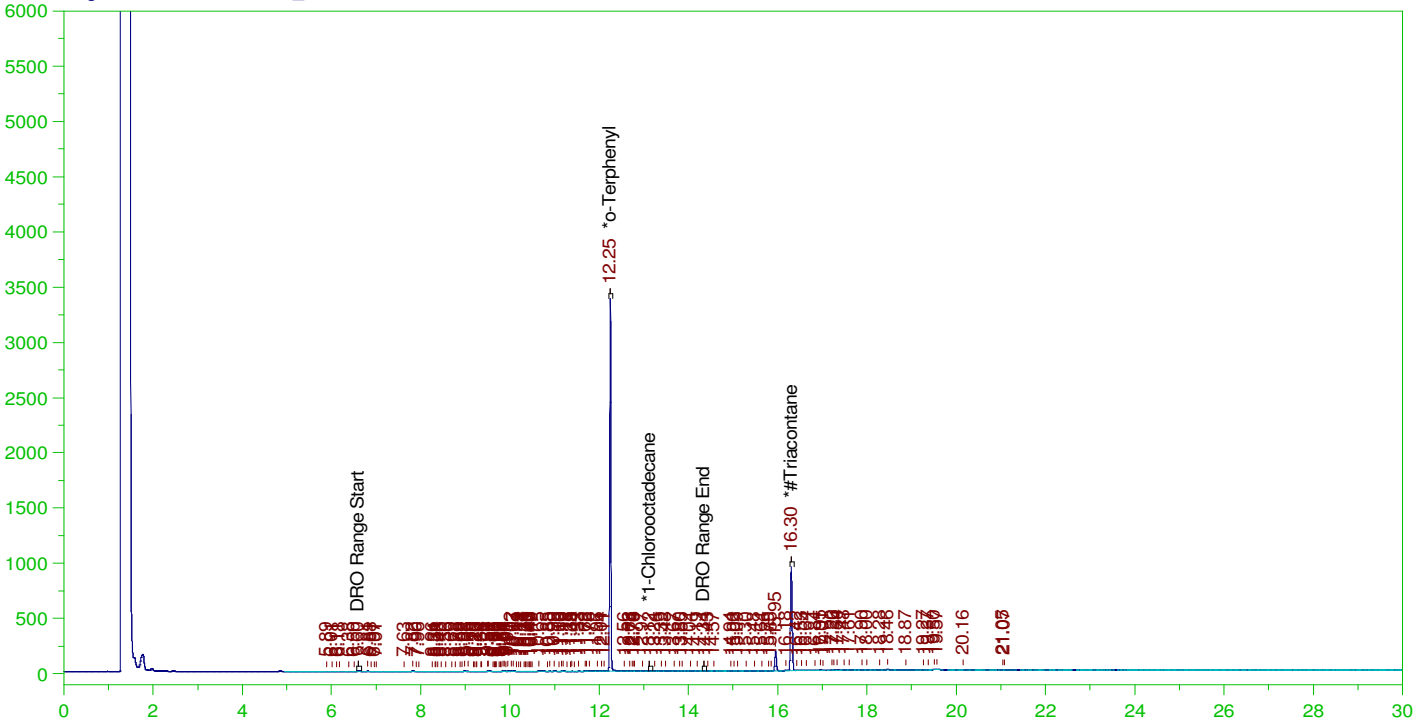
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.306	.481	.088	18.25	-

RRO Area:3680569 RRO AMOUNT: 0.1339288

ERH2758 (RHMW13-5) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0042.RAW B22030912-001C ;0316HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-001C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0042.RAW
Date & Time Acquired: 3/17/2022 9:02:24 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

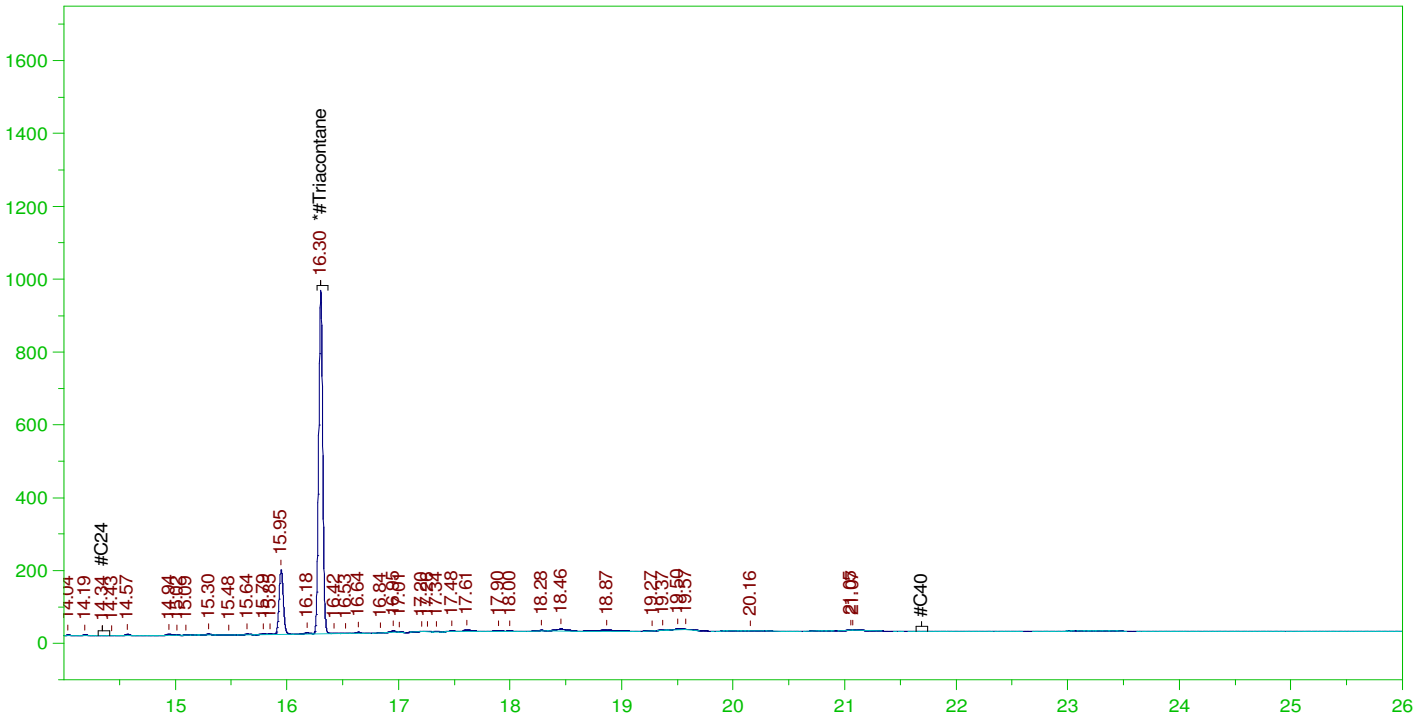
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.246	.19	.169	88.92	-
*1-Chlorooctadecane	13.121	.19	.	.04	-
*#Triacontane	16.302	.19	.077	40.53	-

DRO Area:261882.6 DRO Amount: 7.63303E-03
TEH Area:999878.8 TEH Amount: 2.914323E-02

ERH2758 (RHMW13-5) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0042.RAW B22030912-001C ;0316HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-001C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0042.RAW
Date & Time Acquired: 3/17/2022 9:02:24 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

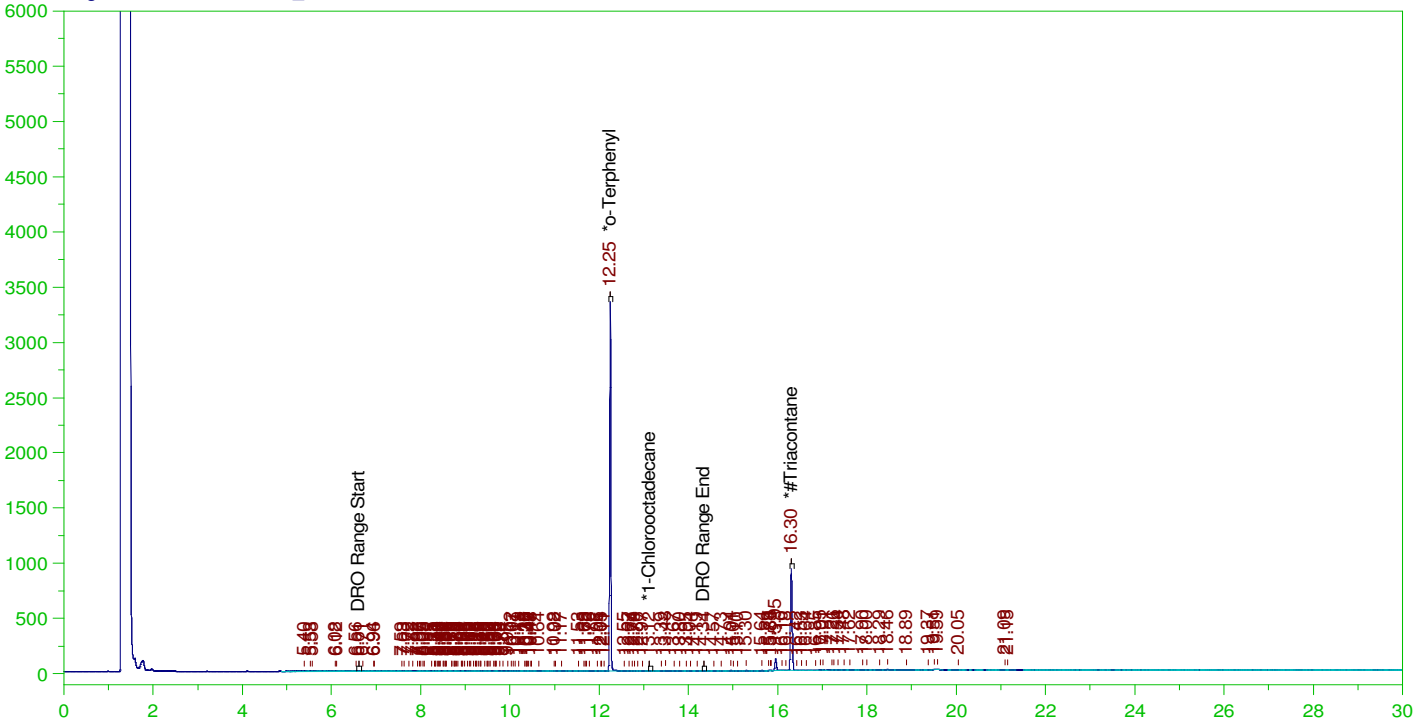
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.302	.476	.077	16.21	-

RRO Area:703471.8 RRO AMOUNT: 2.535419E-02

ERH2770 (RHMW11-5) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0043.RAW B22030912-011C ;0316HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-011C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0043.RAW
Date & Time Acquired: 3/17/2022 9:45:41 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

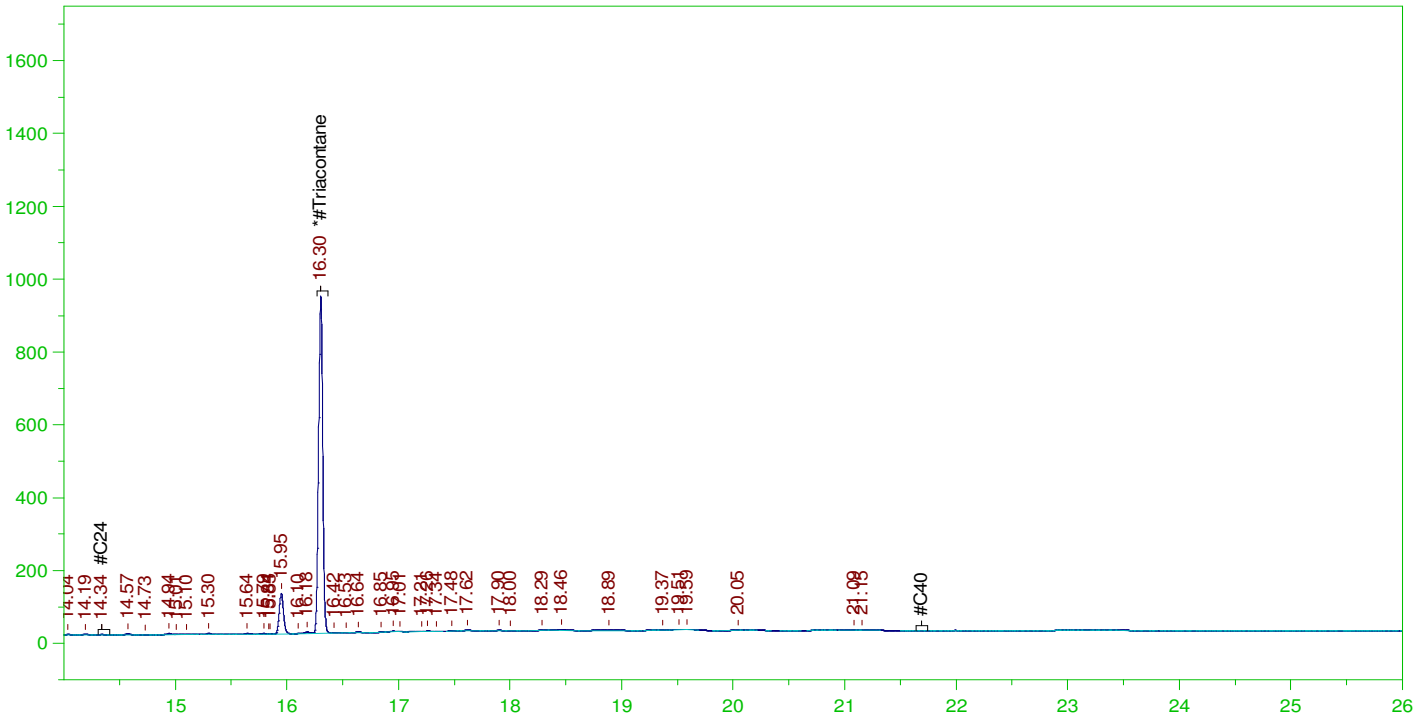
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.245	.19	.169	88.52	-
*1-Chlorooctadecane	13.119	.19	.	.02	-
*#Triacontane	16.303	.19	.078	40.82	-

DRO Area:216980.8 DRO Amount: 6.324288E-03
TEH Area:701992.4 TEH Amount: 2.046081E-02

ERH2770 (RHMW11-5) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0043.RAW B22030912-011C ;0316HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-011C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0043.RAW
Date & Time Acquired: 3/17/2022 9:45:41 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

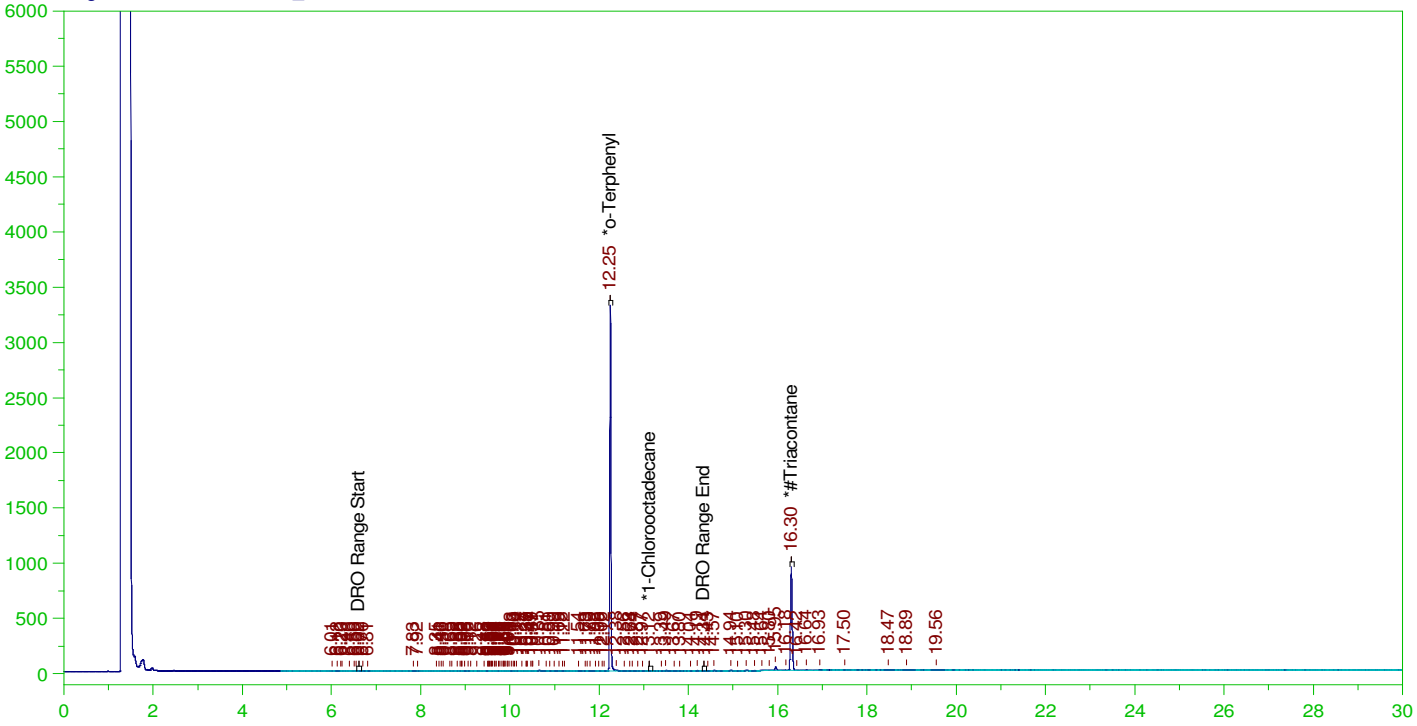
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.303	.476	.078	16.33	-

RRO Area:461604.3 RRO AMOUNT: 1.663692E-02

ERH2760 (RHMW19) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0047.RAW B22030912-032C ;0316HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-032C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0047.RAW
Date & Time Acquired: 3/18/2022 12:38:11 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

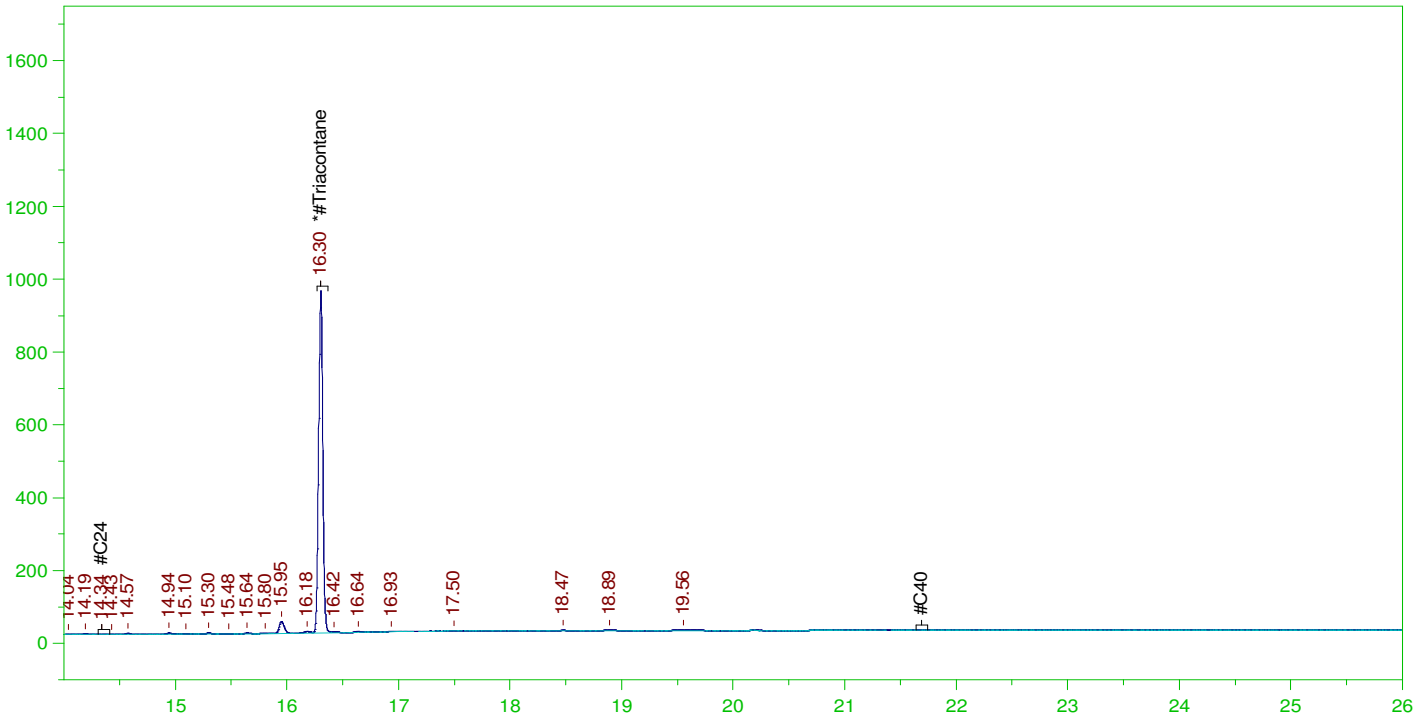
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.247	.19	.166	87.3	-
*1-Chlorooctadecane	13.123	.19	.	.02	-
*#Triacontane	16.303	.19	.079	41.52	-

DRO Area:217721.9 DRO Amount: 6.345888E-03
TEH Area:451114.3 TEH Amount: 1.314852E-02

ERH2760 (RHMW19) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0047.RAW B22030912-032C ;0316HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-032C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0047.RAW
Date & Time Acquired: 3/18/2022 12:38:11 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

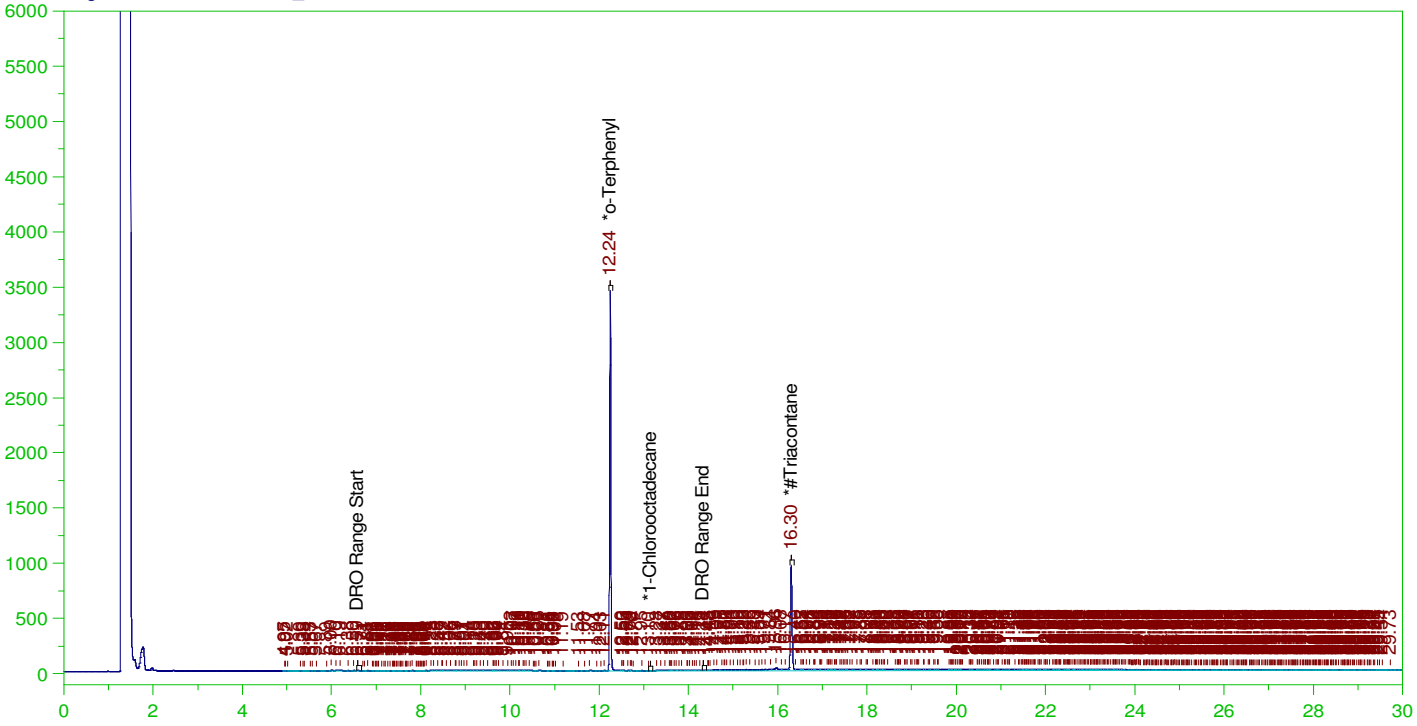
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.303	.476	.079	16.61	-

RRO Area:203178.6 RRO AMOUNT: 7.322865E-03

ERH2685 (RHMW2254-01, Bailer) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0045.RAW B22030912-037C ;0316HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-037C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0045.RAW
Date & Time Acquired: 3/17/2022 11:12:01 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

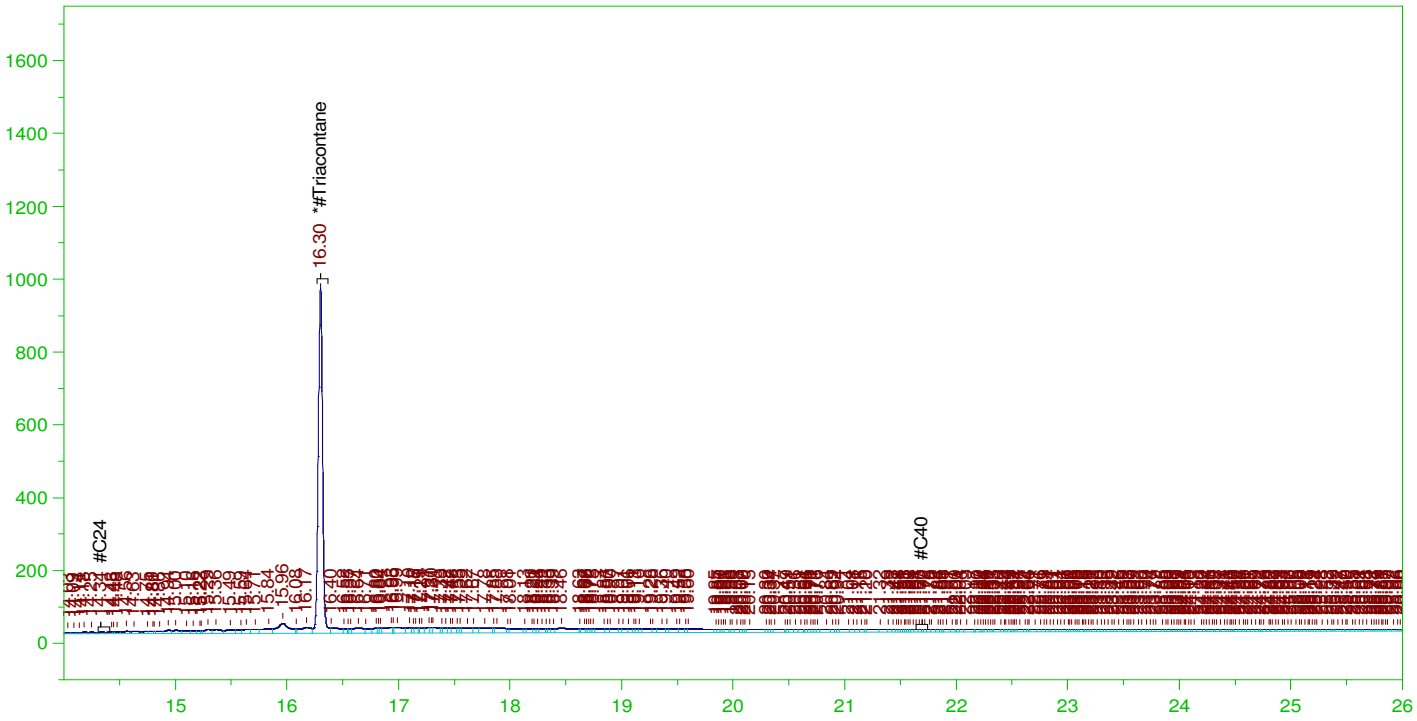
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.244	.19	.176	92.27	-
*1-Chlorooctadecane	29.982	.19	.	.	-
*#Triacontane	16.3	.19	.082	43.2	-

DRO Area:770780 DRO Amount: 2.246574E-02
TEH Area:6527468 TEH Amount: 0.1902546

ERH2685 (RHMW2254-01, Bailer) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0045.RAW B22030912-037C ;0316HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-037C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0045.RAW
Date & Time Acquired: 3/17/2022 11:12:01 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

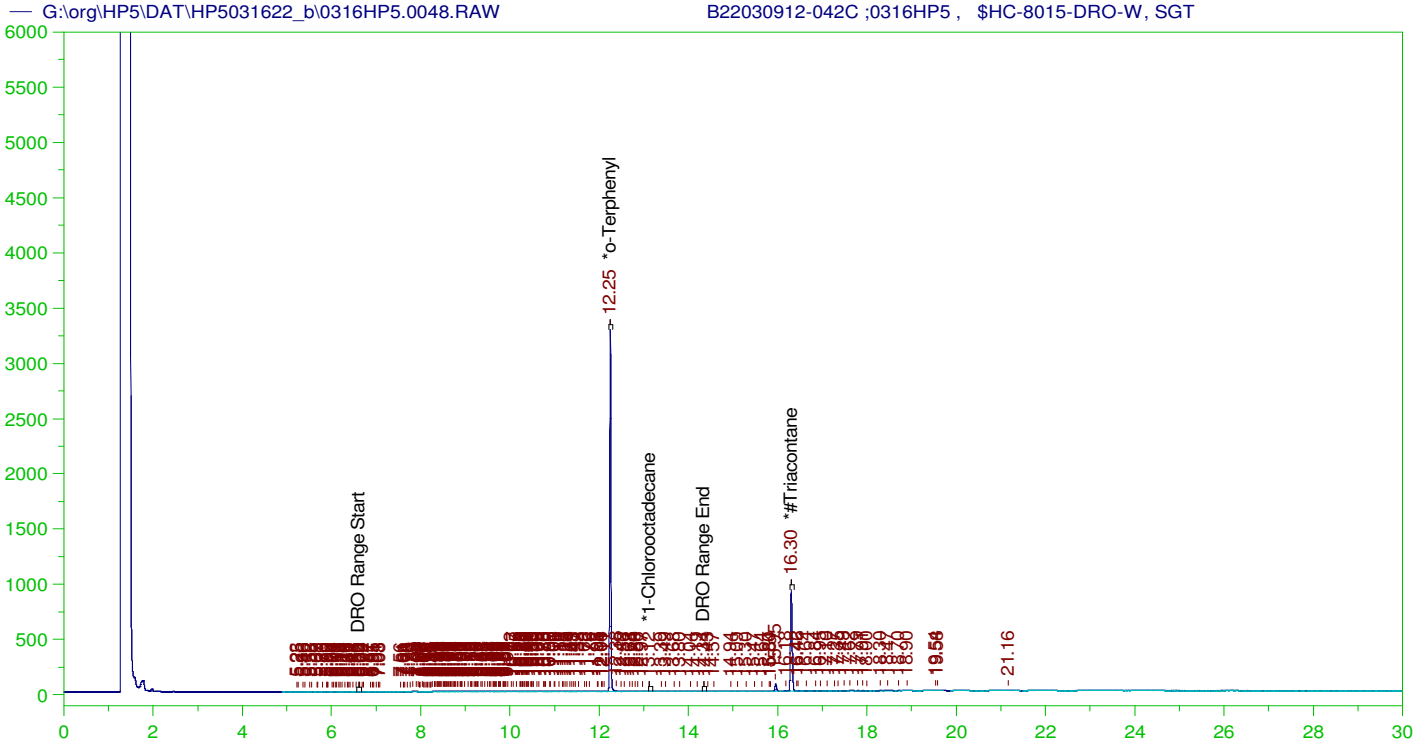
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.3	.476	.082	17.28	-

RRO Area:4131201 RRO AMOUNT: 0.1488947

ERH2755 (RHMW08) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0048.RAW B22030912-042C ;0316HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-042C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0048.RAW
Date & Time Acquired: 3/18/2022 1:21:11 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

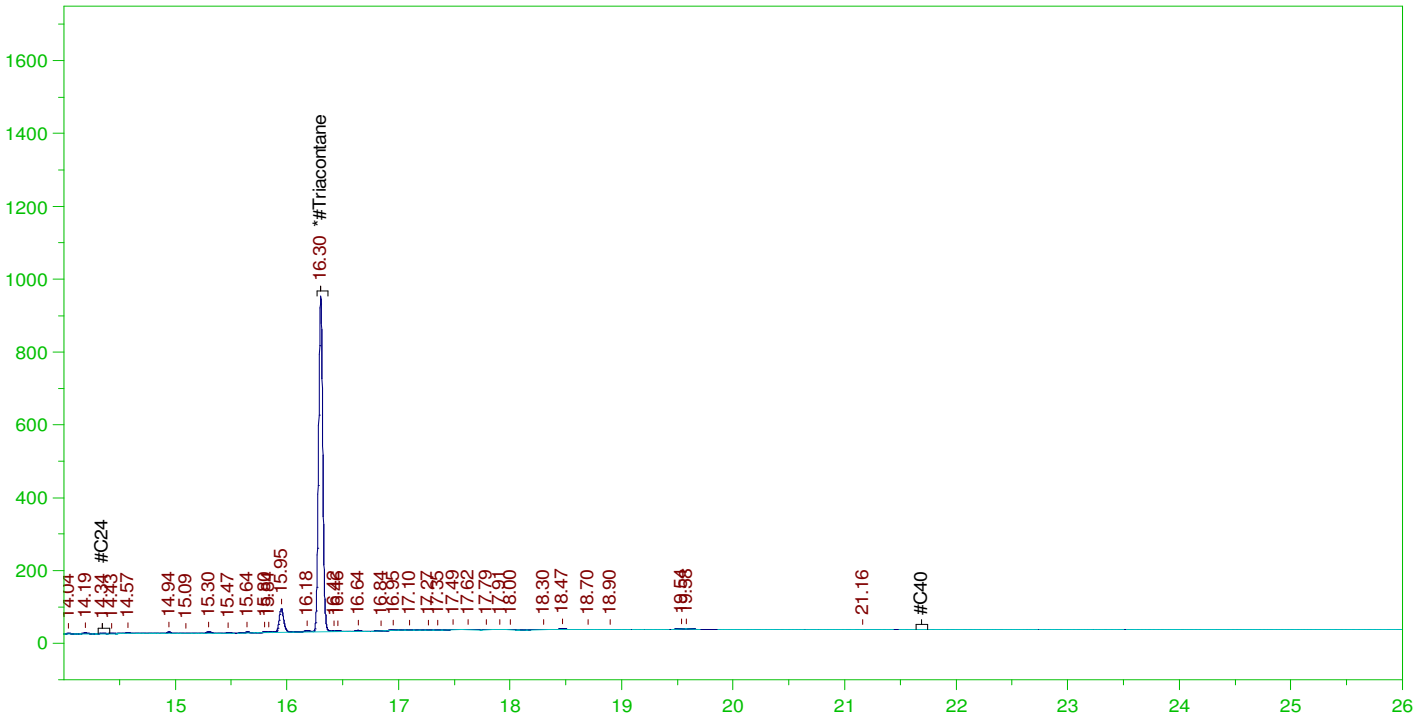
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.246	.19	.168	88.39	-
*1-Chlorooctadecane	13.123	.19	.	.02	-
*#Triacontane	16.302	.19	.078	40.83	-

DRO Area:285206.3 DRO Amount: 8.312842E-03
TEH Area:645000.9 TEH Amount: 1.879969E-02

ERH2755 (RHMW08) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0048.RAW B22030912-042C ;0316HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-042C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0048.RAW
Date & Time Acquired: 3/18/2022 1:21:11 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

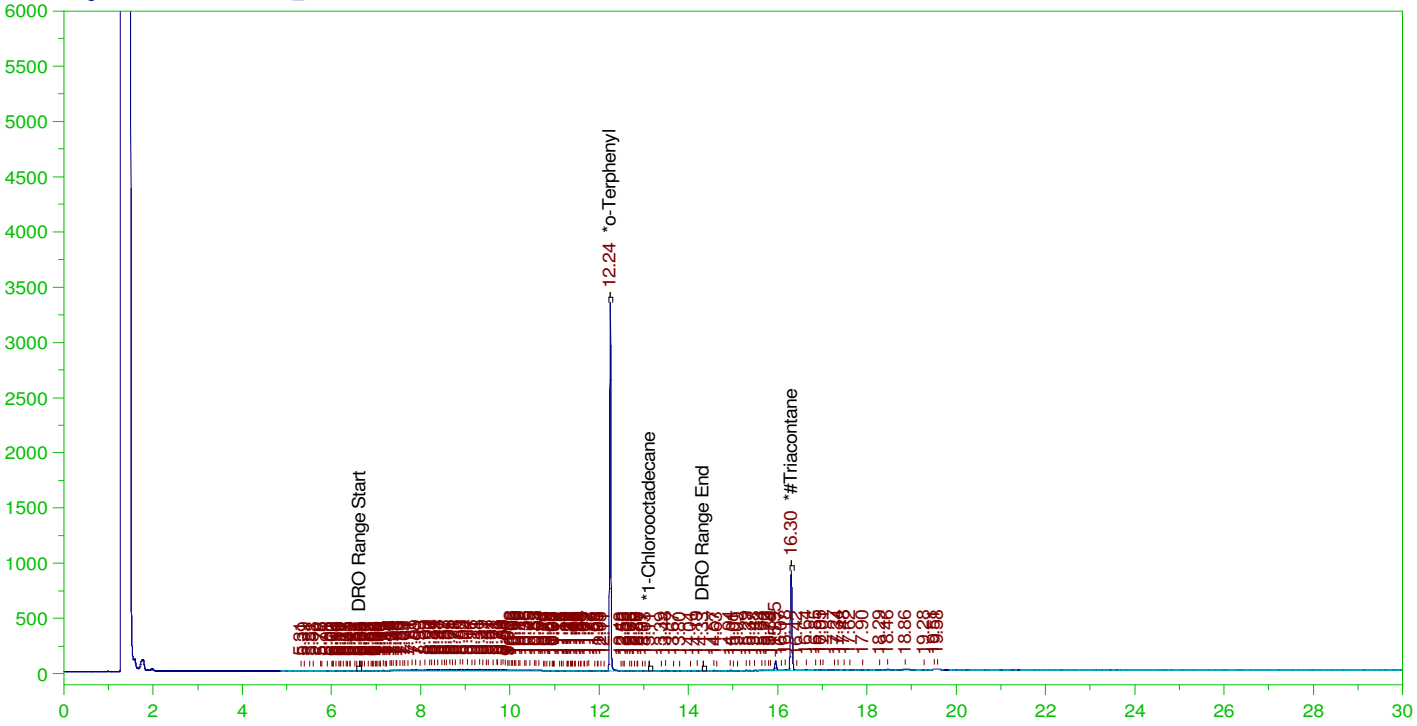
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.302	.476	.078	16.33	-

RRO Area:315366.6 RRO AMOUNT: 1.136629E-02

ERH2763 (Adit 3 Sump) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0044.RAW B22030912-047C ;0316HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030912-047C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0044.RAW
Date & Time Acquired: 3/17/2022 10:28:52 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JK-C24-T.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

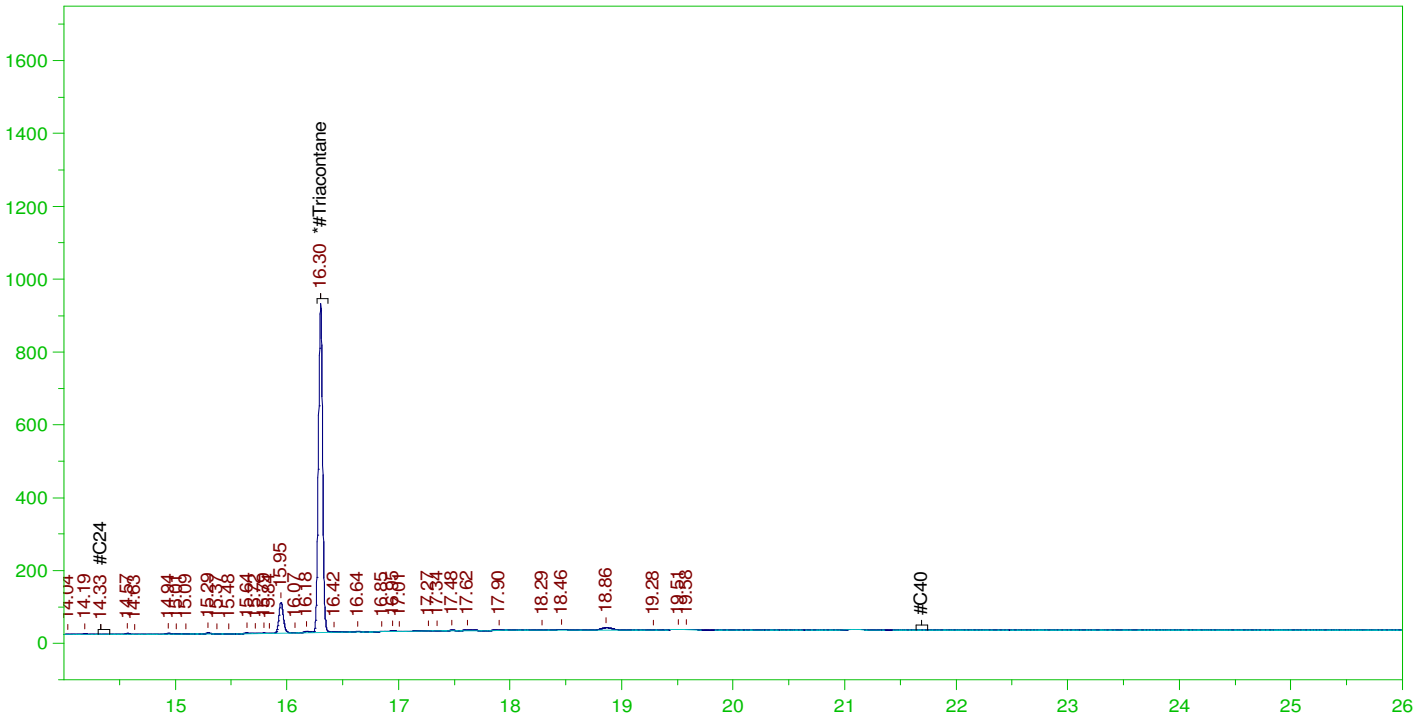
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.57 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.245	.192	.173	89.95	-
*1-Chlorooctadecane	13.113	.192	. .02		-
*#Triacontane	16.301	.192	.077	40.02	-

DRO Area:2073632 DRO Amount: 0.0610208
TEH Area:2544265 TEH Amount: 7.487015E-02

ERH2763 (Adit 3 Sump) Batch ID: 164531

G:\org\HP5\DAT\HP5031622_b\0316HP5.0044.RAW B22030912-047C ;0316HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030912-047C ;0316HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5031622_b\0316HP5.0044.RAW
Date & Time Acquired: 3/17/2022 10:28:52 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BK_SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.31 to 21.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.301	.481	.077	16.01	-

RRO Area:413852.6 RRO AMOUNT: 0.0150593

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
Environmental Scientist, Environmental Health & Science, Environment
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