ANALYTICAL SUMMARY REPORT

March 14, 2022

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

Work Order: B22030244 Quote ID: 5912

Project Name: CV18F0126, 60571032.02.46.01

Energy Laboratories Inc Billings MT received the following 51 samples from AECOM - Honolulu on 3/4/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Received Date	Matrix	Test
B22030244-001	ERH2607(OWDFMW08A)	02/28/22 13:45	03/04/2022	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
B22030244-002	ERH2608 (OWDFMW08A) FD	02/28/22 13:45	03/04/2022	Ground Water	DRO-Liquid-Liquid Extraction SW3520C 8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C Diesel Range Organics SW8015C
B22030244-003	ERH2606 Trip Blank-14833	02/28/22 13:45	03/04/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030244-004	ERH2606 Trip Blank-14894	02/28/22 13:45	03/04/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030244-005	ERH2606 Trip Blank-14894	02/28/22 13:45	03/04/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030244-006	ERH2606 Trip Blank-14895	02/28/22 13:45	03/04/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22030244-007	ERH2605 (OWDFMW07A)	02/28/22 17:40	03/04/2022	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
B22030244-008	ERH2604 Trip Blank-14833	02/28/22 17:40	03/04/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030244-009	ERH2604 Trip Blank-14754	02/28/22 17:40	03/04/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030244-010	ERH2604 Trip Blank-14833	02/28/22 17:40	03/04/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030244-011	ERH2604 Trip Blank-14808	02/28/22 17:40	03/04/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030244-012	ERH2574 (RHMW16A)	02/28/22 12:35	03/04/2022	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
B22030244-013	ERH2572 Trip Blank-14833	02/28/22 12:35	03/04/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030244-014	ERH2572 Trip Blank-14894	02/28/22 12:35	03/04/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030244-015	ERH2572 Trip Blank-14894	02/28/22 12:35	03/04/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030244-016	ERH2572 Trip Blank-14895	02/28/22 12:35	03/04/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22030244-017	ERH2584 (RHMW08)	02/28/22 17:35	03/04/2022	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
B22030244-018	ERH2583 Trip Blank-14833	02/28/22 17:35	03/04/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030244-019	ERH2583 Trip Blank-14653	02/28/22 17:35	03/04/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030244-020	ERH2583 Trip Blank-14833	02/28/22 17:35	03/04/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030244-021	ERH2583 Trip Blank-14808	02/28/22 17:35	03/04/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030244-022	ERH2582 (RHMW06)	02/28/22 15:15	03/04/2022	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
B22030244-023	ERH2581 Trip Blank-14833	02/28/22 15:15	03/04/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030244-024	ERH2581 Trip Blank-14754	02/28/22 15:15	03/04/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030244-025	ERH2581 Trip Blank-14833	02/28/22 15:15	03/04/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030244-026	ERH2581 Trip Blank-14732	02/28/22 15:15	03/04/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22030244-027	ERH2578 (RHMW04)	03/01/22 15:30	03/04/2022	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
B22030244-028	ERH2577 Trip Blank-14894	03/01/22 15:30	03/04/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030244-029	ERH2577 Trip Blank-14733	03/01/22 15:30	03/04/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030244-030	ERH2577 Trip Blank-14833	03/01/22 15:30	03/04/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030244-031	ERH2577 Trip Blank-14895	03/01/22 15:30	03/04/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030244-032	ERH2624 (RHMW07)	03/01/22 12:55	03/04/2022	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
B22030244-033	ERH2623 Trip Blank-14894	03/01/22 12:55	03/04/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030244-034	ERH2623 Trip Blank-14733	03/01/22 12:55	03/04/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030244-035	ERH2623 Trip Blank-14833	03/01/22 12:55	03/04/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030244-036	ERH2623 Trip Blank-14895	03/01/22 12:55	03/04/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22030244-037	ERH2588 (RHMW12A)	03/01/22 18:20	03/04/2022	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
B22030244-038	ERH2587 Trip Blank-14653	03/01/22 18:20	03/04/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030244-039	ERH2587 Trip Blank-14754	03/01/22 18:20	03/04/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030244-040	ERH2587 Trip Blank-14733	03/01/22 18:20	03/04/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030244-041	ERH2587 Trip Blank-14808	03/01/22 18:20	03/04/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030244-042	ERH2596 (RHMW16)	03/01/22 15:10	03/04/2022	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
B22030244-043	ERH2595 Trip Blank-14833	03/01/22 15:10	03/04/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030244-044	ERH2595 Trip Blank-14754	03/01/22 15:10	03/04/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030244-045	ERH2595 Trip Blank-14833	03/01/22 15:10	03/04/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030244-046	ERH2595 Trip Blank-14808	03/01/22 15:10	03/04/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22030244-047	ERH2592 (RHMW14-3)	03/01/22 14:25	03/04/2022	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
B22030244-048	ERH2591 Trip Blank-14833	03/01/22 14:25	03/04/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030244-049	ERH2591 Trip Blank-14894	03/01/22 14:25	03/04/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030244-050	ERH2591 Trip Blank-14894	03/01/22 14:25	03/04/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030244-051	ERH2591 Trip Blank-14895	03/01/22 14:25	03/04/2022	Trip Blank	Headspace Gas Analysis SW8015M

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

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

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

Report Approved By:

Quality Assurance Manager

Digitally signed by
Leigh Ann. Wise
Date: 2022.03.15 15:31:47 -06:00

CLIENT: AECOM - Honolulu
Project: CV18F0126, 60571032.02.46.01
Work Order: B22030244

Report Date: 3/14/2022

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. 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).

EPA 8260B:

ERH2583 Trip Blank-14833, B22030244-018 and ERH2582 (RHMW06), B22030244-022

The sample had a slightly high recovery for surrogate 1,2-Dichloroethane-d4. This recovery was above the QSM 5.3 recovery limits but within EPA 8260B method defined limits. Sufficient sample was not available for re-analysis.

Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202202-34NOI

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 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's.
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

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

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc. Casper

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

	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]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270SIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2606 (Trip Blank)	2/24/22	0940	8	WQ	✔	✔	✔	✔							X	B220302-004 -005 -006
2	ERH2607(OWDFMW08A)		0945	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	-001
3	ERH2608 (OWDFMW08A) FD		0945	8	GW	✔	✔				✔					X	-002
4	TB 8260 14833			3													-003
5	TB GRO 14894			1													-004
6	TB 8011 14894			2													-005
7	TB Methane 14895																-006
8	TB 3/1/22				3/1/22												
9																	

All turnaround times are standard unless marked as RUSH.

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

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Alex Edmonds	3/1/22 1000		Jones		
	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
				Taylor Borris	3/4/22 0900	

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)
				1.6 °C					

TJ 3/4/22

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 the possibility. All subcontracted data will be clearly notated on your analytical report.

ENERGY LAB
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202202-33NOI

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 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's.
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

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

The following 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]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2605 (OWDFMW07A)	2/28/22	1340	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	2202B044-007
2	ERH2604 (Trip Blank)	2/28/22	1335	8	WQ	✔	✔	✔	✔							X	
3																	
4	TB-14833 (8260)			2													008
5	TB-14754 (GRO)			2													009
6	TB-14833 (8011)	DE	3/1/22	2													010
7	TB-14808 (Methane)			2													011
8																	
9		MF 3-4-22															

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
	Diana Escobar	3/1/22 1002				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Tabitha Edwards	3-4-22 0900	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)
				1.6	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.

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202202-39NOI

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 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's.
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Gavin Mura
Sampler Phone	805987-3201
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]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI-LAB ID Laboratory Use Only
1	ERH2574 (RHMW16A)	02/28/22	0835	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	B220302447-012
2	ERH2572 (Trip Blank)	02/28/22	0825	8	WQ	✔	✔									X	
3																	
4	TB 8260 - 14833																-013
5	TB GRO - 14894																-014
6	TB 8011 - 14894																-015
7	TB Metals - 14895																-016
8	TJ 3/4/22																
9																	

3/1/22

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
	Diana Escobar	3/1/22 10:11				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Taylor Jones	3/4/22 0900	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N	C B	Intact Y N	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
					0.2 °C	(Y) N	(Y) N	CC Cash Check_____	$	3/4/22 TJ

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 # 202202-38NOI

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 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's.
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Gavin Murd
Sampler Phone	80 898 7-3201
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]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270SIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
1	ERH2584 (RHMW08)	2/28/22	1335	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	B22036244-017
2	ERH2583 (Trip Blank)	↓	1320	8	WQ	✔	✔	✔	✔							X	
3	TB 8260 14833			1													-018
4	TB GRO 14653			1													-019
5	TB 8011 14833			2													-020
6	TB Methane 14808			1													-021
7	TB 14833			1													-055
8	TB 14754			1													-056
9	TB 14663			1													-057

3/1/22

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Alex Edmond	3/1/22 1010				
	Relinquished by (print)	Date/Time	Signature	Received by laboratory (print)	Date/Time	Signature
				Stacie Cottle	3/1/22 09:00	

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	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.

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202202-36NOI

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 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's.
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	BM, NL, AC
Sampler Phone	8089873201
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)	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC (1-L AG w/H2SO4)	EPA 9060 TOC (250ml AG w/ H3PO4)	EPA 6020 Total Lead (250ml HDPE w/HNO3)	EPA 6020 Diss. Lead (250ml HDPE w/HNO3) (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2582 (RHMW06)	02/28/22	1115	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	B203024-002
2	ERH2581 (Trip Blank)	02/28/22	1105	8	WQ	✔	✔	✔	✔							X	
3	~~TB~~ 14833 8260			2													-023
4	TB 14754 GRO			2													-024
5	TB 8011 14833	03/01/2022		2													-025
6	TB Methane 14730		DE	1													-026
7	TB 14808			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
	Diana Escobar	3/1/2022				
	Relinquished by (print)	Date/Time	Signature	Received by laboratory (print)	Date/Time	Signature
					3/4/22 09:00	

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 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.

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202202-45NOI

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 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's.
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

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]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2578 (RHMW04)	3-1-22	1130	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	B203244-027
2	ERH2577 (Trip Blank)	per Catherine TH 3.4.22		8	WQ	✔	✔									X	
3																	
4	TB-14894 (8260)			3	03/04/22 BD												028
5	TB-14733 (GRO)			1													029
6	TB-14833 (8011)		3/1/22	2													030
7	TB-14895 (methane)			2													031
8	TB-14705			1													054
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 Edmonds	3/1/22 1440				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Tabitha Edwards	3-4-22 0800	

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	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.

ENERGY LAB
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202202-44NOI

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 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's.
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	MY, IVL, BF
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]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2624 (RHMW07)	03/01/22	0855	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	2203024-032
2	ERH2623 (Trip Blank)	03/01/22	0810	8	WQ	✔	✔									X	
3																	
4	TB 14924 (8260)			3													-033A
5	TB 14733 (GRO)			3													-034A
6	TB 14433 (8011)			1													-035A
7	TB 14895 (Methane)			2													-036A
8	TB 14705																-052
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	03/01/22 14:34				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					3/4/22 0900	

LABORATORY USE ONLY

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

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 # 202202-43NOI

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 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's.
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	CH, RS, JV
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

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]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1 ERH2588 (RHMW12A)	03/01/22	1420	17	GW	✓	✓	✓	✓		✓	✓	✓	✓		X	B220302440 37
2 ERH2587 (Trip Blank)	03/01/22	1300	8	WQ	✓	✓									X	-038
3																-039
4 Trip Blank KZ20 14653																-040
5 Trip Blank GRO 14754																-041
6 Trip Blank GRO 14733																
7 Trip Blank Methane 14808																
8																
9																

All turnaround times are standard unless marked as RUSH.

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

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Ryan Schmitt	3/1/22 1600				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Leslie Adams	3/4/22 0900	

LABORATORY USE ONLY

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

Laboratory samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested.

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202202-40NOI

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 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's.
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	G H, R3, JV
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]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270SIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2596 (RHMW16)	3/1/22	1110	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	B220302 44-042
2	ERH2595(Trip Blank)	3/1/22	1015	8	WQ	✔	✔									X	
3																	
4	TB 8260 - 14833																-043
5	TB GRO - 14754																-044
6	TB 8011 - 14833																-045
7	TB Methane - 14808																-046
8	TJ 3/4/22																
9																	

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Ryan Shimoto	3/1/22 1600				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Taylor Jones	3/4/22 0900	

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)
				1.5 °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 # 202202-42NOI

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 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's.
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	CB, CBZ, CW, RT
Sampler Phone	916 769 9223
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

Analysis Requested

#	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOCs (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2592 (RHMW14-3)	03/01/22	1025	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	B203044-047
2	ERH2591 (Trip Blank)	03/01/22	1016	8	WQ	✔	✔									X	-
3	TB 14833 8260			2													-048
4	TB 14894 GRO			2													-049
5	TB 14894 8011			2													-050
6	TB 14895 Methane		4 hr	2	3/1/22												-051
7	8260 5/1/22																
8																	
9																	

All turnaround times are standard unless marked as RUSH.

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

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	CLARA UN	03/01/2022 1623				
	Relinquished by (print)	Date/Time	Signature	Received by laboratory (print)	Date/Time	Signature
					3/4/22 09:00	

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)
				0.1 °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.

Work Order Receipt Checklist

AECOM - Honolulu

B22030244

Login completed by: Richard L. Shular
Date Received: 3/4/2022

Reviewed by: BL2000\gmccartney
Received by: tkj

Reviewed Date: 3/8/2022
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 Temperature Blank temperature for shipping container 1 was 1.6°C, shipping container 2 was 1.6°C, shipping container 3 was 0.2°C, shipping container 4 was 1.0°C, shipping container 5 was 0.6°C, shipping container 6 was 1.0°C, shipping container 7 was 0.6°C, shipping container 8 was 0.4°C, shipping container 9 was 1.5°C and shipping container 10 was 0.6°C.

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 following containers were not received with the bottle order labels on the containers. Preservative traceability is not available for these containers. Proceeded with the requested analyses per Shari Endy, Energy Laboratories Project Manager 3/4/2022:
ERH2607 (OWDFMW08A): sulfuric preserved VOAs
ERH2608 (OWDFMW08A) FD: hydrochloric preserved VOAs for 8260
ERH2574 (RHMW16A): sulfuric preserved VOAs

The following sample containers for sample ERH2607 (OWDFMW08A) were received without custody seals:
One of the two amber glass sulfuric preserved containers
Sulfuric preserved VOA vials

The following VOA vials were received containing headspace gas bubbles greater than 1/4 inch in diameter for sample ERH2574 (RHMW16A).There is sufficient volume to continue with analysis using the remaining vials:
Two of the three hydrochloric preserved VOA vials for Gasoline Range Organics

Two of the three hydrochloric preserved VOA vials for EDB
One of the two VOA vials for Methane

The following containers were received partially frozen:
ERH2574 (RHMW16A): two of the three hydrochloric preserved VOA vials for Gasoline Range Organics and EDB
ERH2584 (RHMW08): unfiltered nitric preserved container and one of the two sulfuric preserved VOA vials

Additional Received By:
Tabitha Edwards
Taylor K. Burris
Tyler J. Gasser
Staci R. Gottlob
Leslie S Cadreau
The shipping containers are processed by multiple sample receiving personnel. Reference each Chain of Custody for the individual received by signature.

Several of the Chain of Custody have only 8260-Volatile Organic Compounds and Gasoline Range Organics marked as Trip Blank analysis. Analyze Trip Blanks for 8260-Volatile Organic Compounds, Gasoline Range Organics, EDB in Water by ECD and Methane for all samples per Shari Endy, Energy Laboratories Project Manager.

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: ERH2607(OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-001
Collection Date: 02/28/2022 13:45
Date Received: 03/04/2022
Report Date: 03/14/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.34	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/9/2022 23:25/eli-ca	SUB-C280346 : 7	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 08:30/srh	ICPMS207-B_220308A : 60	R375855
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/9/2022 09:01/srh	ICPMS207-B_220308A : 65	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Chloroform	0.26	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2607(OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-001
Collection Date: 02/28/2022 13:45
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Surr: 1,2-Dichloroethane-d4	118.0	%REC	1		81-118				SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Surr: Toluene-d8	104.0	%REC	1		89-112				SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/7/2022 16:07/msc	VOA5975C.I_220307A : 13	R376042
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/7/2022 21:58/clt	GECD.I_220307A : 24	164256
Surr: 1,1,1,2-Tetrachloroethane	99.0	%REC	1		70-130				SW8011	03/7/2022 21:58/clt	GECD.I_220307A : 24	164256
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/8/2022 01:10/jp	VARIAN1_220307A : 20	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/8/2022 01:10/jp	VARIAN1_220307A : 20	R375789
Surr: Trifluorotoluene	72.0	%REC	1		70-130				SW8015C	03/8/2022 01:10/jp	VARIAN1_220307A : 20	R375789

- 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	03/8/2022 16:05/amn	GCFID-HP5-B_220308A : 7	164267
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/8/2022 16:05/amn	GCFID-HP5-B_220308A : 7	164267
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/8/2022 16:05/amn	GCFID-HP5-B_220308A : 7	164267
Surr: o-Terphenyl	100.0	%REC	1		56-125				SW8015C	03/8/2022 16:05/amn	GCFID-HP5-B_220308A : 7	164267
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/8/2022 16:05/amn	GCFID-HP5-B_220308A : 7	164267

- 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: B22030244-001
Client: AECOM - Honolulu
Collection Date: 02/28/2022 13:45
Client Sample ID: ERH2607(OWDFMW08A)
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 11:05/jdw	FID-HEADSPACE_220307A : 5	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2608 (OWDFMW08A) FD
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-002
Collection Date: 02/28/2022 13:45
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Chloroform	0.29	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-002
Client: AECOM - Honolulu
Collection Date: 02/28/2022 13:45
Client Sample ID: ERH2608 (OWDFMW08A) FD
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/5/2022 14:58/msc	VOA5975C.I_220305A : 6	R376041
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/8/2022 02:18/jp	VARIAN1_220307A : 21	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/8/2022 02:18/jp	VARIAN1_220307A : 21	R375789
Surr: Trifluorotoluene	72.0	%REC	1		70-130				SW8015C	03/8/2022 02:18/jp	VARIAN1_220307A : 21	R375789
- 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	03/8/2022 16:48/amn	GCFID-HP5-B_220308A : 8	164267
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/8/2022 16:48/amn	GCFID-HP5-B_220308A : 8	164267
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/8/2022 16:48/amn	GCFID-HP5-B_220308A : 8	164267
Surr: o-Terphenyl	98.0	%REC	1		56-125				SW8015C	03/8/2022 16:48/amn	GCFID-HP5-B_220308A : 8	164267
Surr: n-Triacontane	91.0	%REC	1		50-150				SW8015C	03/8/2022 16:48/amn	GCFID-HP5-B_220308A : 8	164267
- 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: ERH2606 Trip Blank-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-003
Collection Date: 02/28/2022 13:45
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Toluene	0.083	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-003
Client: AECOM - Honolulu
Collection Date: 02/28/2022 13:45
Client Sample ID: ERH2606 Trip Blank-14833
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Surr: Toluene-d8	104.0	%REC	1		89-112				SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/5/2022 18:36/msc	VOA5975C.I_220305A : 13	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-004
Client: AECOM - Honolulu
Collection Date: 02/28/2022 13:45
Client Sample ID: ERH2606 Trip Blank-14894
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 16:39/jp	VARIAN1_220307A : 6	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/7/2022 16:39/jp	VARIAN1_220307A : 6	R375789
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/7/2022 16:39/jp	VARIAN1_220307A : 6	R375789

- 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: B22030244-005
Client: AECOM - Honolulu
Collection Date: 02/28/2022 13:45
Client Sample ID: ERH2606 Trip Blank-14894
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 18:58/clt	GECD.I_220307A : 15	164256
Surr: 1,1,1,2-Tetrachloroethane	101.0	%REC	1		70-130				SW8011	03/7/2022 18:58/clt	GECD.I_220307A : 15	164256

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2606 Trip Blank-14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-006
Collection Date: 02/28/2022 13:45
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 11:11/jdw	FID-HEADSPACE_220307A : 6	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2605 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-007
Collection Date: 02/28/2022 17:40
Date Received: 03/04/2022
Report Date: 03/14/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.28	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/10/2022 00:07/eli-ca	SUB-C280346 : 8	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 09:51/srh	ICPMS207-B_220308A : 73	R375855
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/9/2022 09:57/srh	ICPMS207-B_220308A : 74	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2605 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-007
Collection Date: 02/28/2022 17:40
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Surr: 1,2-Dichloroethane-d4	115.0	%REC	1		81-118				SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/5/2022 15:25/msc	VOA5975C.I_220305A : 7	R376041
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/7/2022 19:18/clt	GECD.I_220307A : 16	164256
Surr: 1,1,1,2-Tetrachloroethane	103.0	%REC	1		70-130				SW8011	03/7/2022 19:18/clt	GECD.I_220307A : 16	164256
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/7/2022 15:08/jp	VARIAN1_220307A : 5	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/7/2022 15:08/jp	VARIAN1_220307A : 5	R375789
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/7/2022 15:08/jp	VARIAN1_220307A : 5	R375789
- 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	03/8/2022 15:23/amn	GCFID-HP5-B_220308A : 6	164267
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/8/2022 15:23/amn	GCFID-HP5-B_220308A : 6	164267
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/8/2022 15:23/amn	GCFID-HP5-B_220308A : 6	164267
Surr: o-Terphenyl	99.0	%REC	1		56-125				SW8015C	03/8/2022 15:23/amn	GCFID-HP5-B_220308A : 6	164267
Surr: n-Triacontane	91.0	%REC	1		50-150				SW8015C	03/8/2022 15:23/amn	GCFID-HP5-B_220308A : 6	164267
- 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: ERH2605 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-007
Collection Date: 02/28/2022 17:40
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 11:15/jdw	FID-HEADSPACE_220307A : 7	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2604 Trip Blank-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-008
Collection Date: 02/28/2022 17:40
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Toluene	0.11	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-008
Client: AECOM - Honolulu
Collection Date: 02/28/2022 17:40
Client Sample ID: ERH2604 Trip Blank-14833
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Surr: 1,2-Dichloroethane-d4	116.0	%REC	1		81-118				SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/5/2022 19:03/msc	VOA5975C.I_220305A : 14	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-009
Client: AECOM - Honolulu
Collection Date: 02/28/2022 17:40
Client Sample ID: ERH2604 Trip Blank-14754
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 17:13/jp	VARIAN1_220307A : 7	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/7/2022 17:13/jp	VARIAN1_220307A : 7	R375789
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/7/2022 17:13/jp	VARIAN1_220307A : 7	R375789

- 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: B22030244-010
Client: AECOM - Honolulu
Collection Date: 02/28/2022 17:40
Client Sample ID: ERH2604 Trip Blank-14833
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 19:38/clt	GECD.I_220307A : 17	164256
Surr: 1,1,1,2-Tetrachloroethane	104.0	%REC	1		70-130				SW8011	03/7/2022 19:38/clt	GECD.I_220307A : 17	164256

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2604 Trip Blank-14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-011
Collection Date: 02/28/2022 17:40
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 11:19/jdw	FID-HEADSPACE_220307A : 8	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2574 (RHMW16A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-012
Collection Date: 02/28/2022 12:35
Date Received: 03/04/2022
Report Date: 03/14/2022

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	0.44	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/10/2022 00:47/eli-ca	SUB-C280346 : 9	C_R280346
METALS, DISSOLVED												
Lead	0.00011	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/9/2022 10:04/srh	ICPMS207-B_220308A : 75	R375855
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/9/2022 10:10/srh	ICPMS207-B_220308A : 76	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2574 (RHMW16A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-012
Collection Date: 02/28/2022 12:35
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/5/2022 15:52/msc	VOA5975C.I_220305A : 8	R376041
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/7/2022 19:58/clt	GECD.I_220307A : 18	164256
Surr: 1,1,1,2-Tetrachloroethane	109.0	%REC	1		70-130				SW8011	03/7/2022 19:58/clt	GECD.I_220307A : 18	164256
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/8/2022 15:56/jp	VARIAN1_220307A : 35	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/8/2022 15:56/jp	VARIAN1_220307A : 35	R375789
Surr: Trifluorotoluene	81.0	%REC	1		70-130				SW8015C	03/8/2022 15:56/jp	VARIAN1_220307A : 35	R375789
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.097	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/8/2022 18:57/amn	GCFID-HP5-B_220308A : 10	164267
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/9/2022 22:46/amn	GCFID-HP5-B_220308B : 9	164267
Oil Range Hydrocarbons (C24 to C40)	0.13	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/8/2022 18:57/amn	GCFID-HP5-B_220308A : 10	164267
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/9/2022 22:46/amn	GCFID-HP5-B_220308B : 9	164267
Total Extractable Hydrocarbons	0.36	mg/L	1		0.30	0.14	0.071		SW8015C	03/8/2022 18:57/amn	GCFID-HP5-B_220308A : 10	164267
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/9/2022 22:46/amn	GCFID-HP5-B_220308B : 9	164267

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-012
Client: AECOM - Honolulu
Collection Date: 02/28/2022 12:35
Client Sample ID: ERH2574 (RHMW16A)
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	93.0	%REC	1		56-125				SW8015C	03/8/2022 18:57/amn	GCFID-HP5-B_220308A : 10	164267
Surr: o-Terphenyl (SGT)	91.0	%REC	1		56-125				SW8015C	03/9/2022 22:46/amn	GCFID-HP5-B_220308B : 9	164267
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/8/2022 18:57/amn	GCFID-HP5-B_220308A : 10	164267
Surr: n-Triacontane (SGT)	78.0	%REC	1		50-150				SW8015C	03/9/2022 22:46/amn	GCFID-HP5-B_220308B : 9	164267
- 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	03/7/2022 11:27/jdw	FID-HEADSPACE_220307A : 9	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2572 Trip Blank-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-013
Collection Date: 02/28/2022 12:35
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Toluene	0.087	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-013
Client: AECOM - Honolulu
Collection Date: 02/28/2022 12:35
Client Sample ID: ERH2572 Trip Blank-14833
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Surr: Toluene-d8	106.0	%REC	1		89-112				SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/5/2022 19:31/msc	VOA5975C.I_220305A : 15	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2572 Trip Blank-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-014
Collection Date: 02/28/2022 12:35
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 17:47/jp	VARIAN1_220307A : 8	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/7/2022 17:47/jp	VARIAN1_220307A : 8	R375789
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/7/2022 17:47/jp	VARIAN1_220307A : 8	R375789

- 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: B22030244-015
Client: AECOM - Honolulu
Collection Date: 02/28/2022 12:35
Client Sample ID: ERH2572 Trip Blank-14894
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 20:18/clt	GECD.I_220307A : 19	164256
Surr: 1,1,1,2-Tetrachloroethane	104.0	%REC	1		70-130				SW8011	03/7/2022 20:18/clt	GECD.I_220307A : 19	164256

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2572 Trip Blank-14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-016
Collection Date: 02/28/2022 12:35
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 11:32/jdw	FID-HEADSPACE_220307A : 10	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2584 (RHMW08)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-017
Collection Date: 02/28/2022 17:35
Date Received: 03/04/2022
Report Date: 03/14/2022

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 0.7 to 0.7	0.73	mg/L	1		0.50	0.50	0.17		SW9060A	03/10/2022 01:28/eli-ca	SUB-C280346 : 10	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 10:16/srh	ICPMS207-B_220308A : 77	R375855
METALS, TOTAL												
Lead	0.00041	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/9/2022 10:22/srh	ICPMS207-B_220308A : 78	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,2-Dichloroethane	ND	ug/L	1	J	1.0	0.25	0.12		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2584 (RHMW08)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-017
Collection Date: 02/28/2022 17:35
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Surr: 1,2-Dichloroethane-d4	116.0	%REC	1		81-118				SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
Surr: p-Bromofluorobenzene	105.0	%REC	1		85-114				SW8260B	03/5/2022 16:19/msc	VOA5975C.I_220305A : 9	R376041
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/7/2022 20:38/clt	GECD.I_220307A : 20	164256
Surr: 1,1,1,2-Tetrachloroethane	107.0	%REC	1		70-130				SW8011	03/7/2022 20:38/clt	GECD.I_220307A : 20	164256
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	UT	20	8.7	2.0		SW8015C	03/8/2022 03:27/jp	VARIAN1_220307A : 22	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	UT	20	10	3.1		SW8015C	03/8/2022 03:27/jp	VARIAN1_220307A : 22	R375789
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/8/2022 03:27/jp	VARIAN1_220307A : 22	R375789
- 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	03/9/2022 04:56/amn	GCFID-HP5-B_220308A : 17	164267
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/9/2022 04:56/amn	GCFID-HP5-B_220308A : 17	164267
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/9/2022 04:56/amn	GCFID-HP5-B_220308A : 17	164267
Surr: o-Terphenyl	93.0	%REC	1		56-125				SW8015C	03/9/2022 04:56/amn	GCFID-HP5-B_220308A : 17	164267
Surr: n-Triacontane	88.0	%REC	1		50-150				SW8015C	03/9/2022 04:56/amn	GCFID-HP5-B_220308A : 17	164267
- 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: B22030244-017
Client: AECOM - Honolulu
Collection Date: 02/28/2022 17:35
Client Sample ID: ERH2584 (RHMW08)
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 11:38/jdw	FID-HEADSPACE_220307A : 11	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2583 Trip Blank-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-018
Collection Date: 02/28/2022 17:35
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Toluene	0.11	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-018
Client: AECOM - Honolulu
Collection Date: 02/28/2022 17:35
Client Sample ID: ERH2583 Trip Blank-14833
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Surr: Dibromofluoromethane	115.0	%REC	1		80-119				SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Surr: 1,2-Dichloroethane-d4	119.0	%REC	1	S	81-118				SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Surr: Toluene-d8	104.0	%REC	1		89-112				SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/5/2022 19:58/msc	VOA5975C.I_220305A : 16	R376041

- The sample had a slightly high recovery for surrogate 1,2-Dichloroethane-d4. This recovery was above the QSM 5.3 recovery limits but within EPA 8260B method defined limits. Re-analysis was not possible due to limited sample volume.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-019
Client: AECOM - Honolulu
Collection Date: 02/28/2022 17:35
Client Sample ID: ERH2583 Trip Blank-14653
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	2.4	ug/L	1	J	20	8.7	2.0		SW8015C	03/7/2022 18:21/jp	VARIAN1_220307A : 9	R375789
Total Purgeable Hydrocarbons	3.6	ug/L	1	J	20	10	3.1		SW8015C	03/7/2022 18:21/jp	VARIAN1_220307A : 9	R375789
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	03/7/2022 18:21/jp	VARIAN1_220307A : 9	R375789

- 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: B22030244-020
Client: AECOM - Honolulu
Collection Date: 02/28/2022 17:35
Client Sample ID: ERH2583 Trip Blank-14833
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 20:58/clt	GECD.I_220307A : 21	164256
Surr: 1,1,1,2-Tetrachloroethane	107.0	%REC	1		70-130				SW8011	03/7/2022 20:58/clt	GECD.I_220307A : 21	164256

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2583 Trip Blank-14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-021
Collection Date: 02/28/2022 17:35
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 11:45/jdw	FID-HEADSPACE_220307A : 12	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2582 (RHMW06)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-022
Collection Date: 02/28/2022 15:15
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/10/2022 02:11/eli-ca	SUB-C280346 : 11	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 10:29/srh	ICPMS207-B_220308A : 79	R375855
METALS, TOTAL												
Lead	0.00008	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/9/2022 10:35/srh	ICPMS207-B_220308A : 80	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2582 (RHMW06)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-022
Collection Date: 02/28/2022 15:15
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Surr: 1,2-Dichloroethane-d4	119.0	%REC	1	S	81-118				SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/7/2022 16:34/msc	VOA5975C.I_220307A : 14	R376042
- The sample had a slightly high recovery for surrogate 1,2-Dichloroethane-d4. This recovery was above the QSM 5.3 recovery limits but within EPA 8260B method defined limits. Re-analysis of a second vial produced similar results.												
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	03/7/2022 21:18/clt	GECD.I_220307A : 22	164256
Surr: 1,1,1,2-Tetrachloroethane	111.0	%REC	1		70-130				SW8011	03/7/2022 21:18/clt	GECD.I_220307A : 22	164256
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/8/2022 04:35/jp	VARIAN1_220307A : 23	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/8/2022 04:35/jp	VARIAN1_220307A : 23	R375789
Surr: Trifluorotoluene	70.0	%REC	1		70-130				SW8015C	03/8/2022 04:35/jp	VARIAN1_220307A : 23	R375789
- 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	03/8/2022 23:56/amn	GCFID-HP5-B_220308A : 13	164267
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/9/2022 20:38/amn	GCFID-HP5-B_220308B : 7	164267
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/8/2022 23:56/amn	GCFID-HP5-B_220308A : 13	164267
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/9/2022 20:38/amn	GCFID-HP5-B_220308B : 7	164267
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/8/2022 23:56/amn	GCFID-HP5-B_220308A : 13	164267

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-022
Client: AECOM - Honolulu
Collection Date: 02/28/2022 15:15
Client Sample ID: ERH2582 (RHMW06)
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/9/2022 20:38/amn	GCFID-HP5-B_220308B : 7	164267
Surr: o-Terphenyl	90.0	%REC	1		56-125				SW8015C	03/8/2022 23:56/amn	GCFID-HP5-B_220308A : 13	164267
Surr: o-Terphenyl (SGT)	93.0	%REC	1		56-125				SW8015C	03/9/2022 20:38/amn	GCFID-HP5-B_220308B : 7	164267
Surr: n-Triacontane	83.0	%REC	1		50-150				SW8015C	03/8/2022 23:56/amn	GCFID-HP5-B_220308A : 13	164267
Surr: n-Triacontane (SGT)	80.0	%REC	1		50-150				SW8015C	03/9/2022 20:38/amn	GCFID-HP5-B_220308B : 7	164267
- 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	03/7/2022 11:55/jdw	FID-HEADSPACE_220307A : 13	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2581 Trip Blank-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-023
Collection Date: 02/28/2022 15:15
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Toluene	0.092	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-023
Client: AECOM - Honolulu
Collection Date: 02/28/2022 15:15
Client Sample ID: ERH2581 Trip Blank-14833
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Surr: Toluene-d8	103.0	%REC	1		89-112				SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/7/2022 17:01/msc	VOA5975C.I_220307A : 15	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-024
Client: AECOM - Honolulu
Collection Date: 02/28/2022 15:15
Client Sample ID: ERH2581 Trip Blank-14754
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 18:55/jp	VARIAN1_220307A : 10	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/7/2022 18:55/jp	VARIAN1_220307A : 10	R375789
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/7/2022 18:55/jp	VARIAN1_220307A : 10	R375789

- 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: B22030244-025
Client: AECOM - Honolulu
Collection Date: 02/28/2022 15:15
Client Sample ID: ERH2581 Trip Blank-14833
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 21:38/clt	GECD.I_220307A : 23	164256
Surr: 1,1,1,2-Tetrachloroethane	103.0	%REC	1		70-130				SW8011	03/7/2022 21:38/clt	GECD.I_220307A : 23	164256

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-026
Client: AECOM - Honolulu
Collection Date: 02/28/2022 15:15
Client Sample ID: ERH2581 Trip Blank-14732
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/7/2022 12:02/jdw	FID-HEADSPACE_220307A : 14	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2578 (RHMW04)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-027
Collection Date: 03/01/2022 15:30
Date Received: 03/04/2022
Report Date: 03/14/2022

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	0.42	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/10/2022 02:54/eli-ca	SUB-C280346 : 12	C_R280346
METALS, DISSOLVED												
Lead	0.00013	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/9/2022 10:41/srh	ICPMS207-B_220308A : 81	R375855
METALS, TOTAL												
Lead	0.00065	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/9/2022 11:00/srh	ICPMS207-B_220308A : 84	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2578 (RHMW04)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-027
Collection Date: 03/01/2022 15:30
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Surr: 1,2-Dichloroethane-d4	117.0	%REC	1		81-118				SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Surr: Toluene-d8	104.0	%REC	1		89-112				SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/5/2022 17:14/msc	VOA5975C.I_220305A : 11	R376041
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	03/7/2022 23:57/clt	GECD.I_220307A : 28	164256
Surr: 1,1,1,2-Tetrachloroethane	107.0	%REC	1		70-130				SW8011	03/7/2022 23:57/clt	GECD.I_220307A : 28	164256
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	UT	20	8.7	2.0		SW8015C	03/8/2022 05:43/jp	VARIAN1_220307A : 24	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/8/2022 05:43/jp	VARIAN1_220307A : 24	R375789
Surr: Trifluorotoluene	72.0	%REC	1		70-130				SW8015C	03/8/2022 05:43/jp	VARIAN1_220307A : 24	R375789
- 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	03/9/2022 03:31/amn	GCFID-HP5-B_220308A : 16	164267
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/9/2022 19:55/amn	GCFID-HP5-B_220308B : 6	164267
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/9/2022 03:31/amn	GCFID-HP5-B_220308A : 16	164267
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/9/2022 19:55/amn	GCFID-HP5-B_220308B : 6	164267
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/9/2022 03:31/amn	GCFID-HP5-B_220308A : 16	164267
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/9/2022 19:55/amn	GCFID-HP5-B_220308B : 6	164267

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-027
Client: AECOM - Honolulu
Collection Date: 03/01/2022 15:30
Client Sample ID: ERH2578 (RHMW04)
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	93.0	%REC	1		56-125				SW8015C	03/9/2022 03:31/amn	GCFID-HP5-B_220308A : 16	164267
Surr: o-Terphenyl (SGT)	93.0	%REC	1		56-125				SW8015C	03/9/2022 19:55/amn	GCFID-HP5-B_220308B : 6	164267
Surr: n-Triacontane	85.0	%REC	1		50-150				SW8015C	03/9/2022 03:31/amn	GCFID-HP5-B_220308A : 16	164267
Surr: n-Triacontane (SGT)	79.0	%REC	1		50-150				SW8015C	03/9/2022 19:55/amn	GCFID-HP5-B_220308B : 6	164267
- 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	03/7/2022 12:06/jdw	FID-HEADSPACE_220307A : 15	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2577 Trip Blank-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-028
Collection Date: 03/01/2022 15:30
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Toluene	0.12	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-028
Client: AECOM - Honolulu
Collection Date: 03/01/2022 15:30
Client Sample ID: ERH2577 Trip Blank-14894
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Surr: 1,2-Dichloroethane-d4	118.0	%REC	1		81-118				SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Surr: Toluene-d8	104.0	%REC	1		89-112				SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/5/2022 20:53/msc	VOA5975C.I_220305A : 18	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-029
Client: AECOM - Honolulu
Collection Date: 03/01/2022 15:30
Client Sample ID: ERH2577 Trip Blank-14733
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	2.1	ug/L	1	J	20	8.7	2.0		SW8015C	03/7/2022 19:29/jp	VARIAN1_220307A : 11	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/7/2022 19:29/jp	VARIAN1_220307A : 11	R375789
Surr: Trifluorotoluene	72.0	%REC	1		70-130				SW8015C	03/7/2022 19:29/jp	VARIAN1_220307A : 11	R375789

- 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: ERH2577 Trip Blank-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-030
Collection Date: 03/01/2022 15:30
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/8/2022 00:16/clt	GECD.I_220307A : 29	164256
Surr: 1,1,1,2-Tetrachloroethane	102.0	%REC	1		70-130				SW8011	03/8/2022 00:16/clt	GECD.I_220307A : 29	164256

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2577 Trip Blank-14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-031
Collection Date: 03/01/2022 15:30
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 12:17/jdw	FID-HEADSPACE_220307A : 16	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2624 (RHMW07)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-032
Collection Date: 03/01/2022 12:55
Date Received: 03/04/2022
Report Date: 03/14/2022

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 0.8 to 0.8	0.80	mg/L	1		0.50	0.50	0.17		SW9060A	03/10/2022 03:36/eli-ca	SUB-C280346 : 13	C_R280346
METALS, DISSOLVED												
Lead	0.00005	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/9/2022 11:06/srh	ICPMS207-B_220308A : 85	R375855
METALS, TOTAL												
Lead	0.00021	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/9/2022 11:13/srh	ICPMS207-B_220308A : 86	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2624 (RHMW07)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-032
Collection Date: 03/01/2022 12:55
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Surr: 1,2-Dichloroethane-d4	117.0	%REC	1		81-118				SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/7/2022 12:28/msc	VOA5975C.I_220307A : 5	R376042
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/8/2022 00:36/clt	GECD.I_220307A : 30	164256
Surr: 1,1,1,2-Tetrachloroethane	107.0	%REC	1		70-130				SW8011	03/8/2022 00:36/clt	GECD.I_220307A : 30	164256
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/8/2022 06:51/jp	VARIAN1_220307A : 25	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/8/2022 06:51/jp	VARIAN1_220307A : 25	R375789
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/8/2022 06:51/jp	VARIAN1_220307A : 25	R375789
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.29	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/9/2022 02:05/amn	GCFID-HP5-B_220308A : 15	164267
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/10/2022 00:12/amn	GCFID-HP5-B_220308B : 11	164267
Oil Range Hydrocarbons (C24 to C40)	0.47	mg/L	1		0.30	0.14	0.084		SW8015C	03/9/2022 02:05/amn	GCFID-HP5-B_220308A : 15	164267
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/10/2022 00:12/amn	GCFID-HP5-B_220308B : 11	164267
Total Extractable Hydrocarbons	0.76	mg/L	1		0.30	0.14	0.071		SW8015C	03/9/2022 02:05/amn	GCFID-HP5-B_220308A : 15	164267
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/10/2022 00:12/amn	GCFID-HP5-B_220308B : 11	164267

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-032
Client: AECOM - Honolulu
Collection Date: 03/01/2022 12:55
Client Sample ID: ERH2624 (RHMW07)
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	102.0	%REC	1		56-125				SW8015C	03/9/2022 02:05/amn	GCFID-HP5-B_220308A : 15	164267
Surr: o-Terphenyl (SGT)	95.0	%REC	1		56-125				SW8015C	03/10/2022 00:12/amn	GCFID-HP5-B_220308B : 11	164267
Surr: n-Triacontane	96.0	%REC	1		50-150				SW8015C	03/9/2022 02:05/amn	GCFID-HP5-B_220308A : 15	164267
Surr: n-Triacontane (SGT)	80.0	%REC	1		50-150				SW8015C	03/10/2022 00:12/amn	GCFID-HP5-B_220308B : 11	164267
- 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	03/7/2022 12:23/jdw	FID-HEADSPACE_220307A : 17	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2623 Trip Blank-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-033
Collection Date: 03/01/2022 12:55
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-033
Client: AECOM - Honolulu
Collection Date: 03/01/2022 12:55
Client Sample ID: ERH2623 Trip Blank-14894
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Surr: 1,2-Dichloroethane-d4	116.0	%REC	1		81-118				SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Surr: Toluene-d8	106.0	%REC	1		89-112				SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041
Surr: p-Bromofluorobenzene	105.0	%REC	1		85-114				SW8260B	03/5/2022 21:20/msc	VOA5975C.I_220305A : 19	R376041

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2623 Trip Blank-14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-034
Collection Date: 03/01/2022 12:55
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 20:03/jp	VARIAN1_220307A : 12	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/7/2022 20:03/jp	VARIAN1_220307A : 12	R375789
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	03/7/2022 20:03/jp	VARIAN1_220307A : 12	R375789

- 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: B22030244-035
Client: AECOM - Honolulu
Collection Date: 03/01/2022 12:55
Client Sample ID: ERH2623 Trip Blank-14833
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/8/2022 00:56/clt	GECD.I_220307A : 31	164256
Surr: 1,1,1,2-Tetrachloroethane	104.0	%REC	1		70-130				SW8011	03/8/2022 00:56/clt	GECD.I_220307A : 31	164256

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2623 Trip Blank-14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-036
Collection Date: 03/01/2022 12:55
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 12:28/jdw	FID-HEADSPACE_220307A : 18	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2588 (RHMW12A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-037
Collection Date: 03/01/2022 18:20
Date Received: 03/04/2022
Report Date: 03/14/2022

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	0.32	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/10/2022 04:22/eli-ca	SUB-C280346 : 14	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 11:19/srh	ICPMS207-B_220308A : 87	R375855
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/9/2022 11:25/srh	ICPMS207-B_220308A : 88	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2588 (RHMW12A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-037
Collection Date: 03/01/2022 18:20
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Surr: Toluene-d8	103.0	%REC	1		89-112				SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/7/2022 12:56/msc	VOA5975C.I_220307A : 6	R376042
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	03/8/2022 01:16/clt	GECD.I_220307A : 32	164256
Surr: 1,1,1,2-Tetrachloroethane	105.0	%REC	1		70-130				SW8011	03/8/2022 01:16/clt	GECD.I_220307A : 32	164256
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/8/2022 12:32/jp	VARIAN1_220307A : 32	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/8/2022 12:32/jp	VARIAN1_220307A : 32	R375789
Surr: Trifluorotoluene	81.0	%REC	1		70-130				SW8015C	03/8/2022 12:32/jp	VARIAN1_220307A : 32	R375789
- 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)	0.049	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/9/2022 11:22/amn	GCFID-HP5-B_220308A : 22	164267
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/9/2022 23:29/amn	GCFID-HP5-B_220308B : 10	164267
Oil Range Hydrocarbons (C24 to C40)	0.14	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/9/2022 11:22/amn	GCFID-HP5-B_220308A : 22	164267
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/9/2022 23:29/amn	GCFID-HP5-B_220308B : 10	164267
Total Extractable Hydrocarbons	0.22	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/9/2022 11:22/amn	GCFID-HP5-B_220308A : 22	164267
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/9/2022 23:29/amn	GCFID-HP5-B_220308B : 10	164267

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-037
Client: AECOM - Honolulu
Collection Date: 03/01/2022 18:20
Client Sample ID: ERH2588 (RHMW12A)
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/9/2022 11:22/amn	GCFID-HP5-B_220308A : 22	164267
Surr: o-Terphenyl (SGT)	81.0	%REC	1		56-125				SW8015C	03/9/2022 23:29/amn	GCFID-HP5-B_220308B : 10	164267
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/9/2022 11:22/amn	GCFID-HP5-B_220308A : 22	164267
Surr: n-Triacontane (SGT)	74.0	%REC	1		50-150				SW8015C	03/9/2022 23:29/amn	GCFID-HP5-B_220308B : 10	164267
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.00072	mg/L	1	J	0.0020	0.0012	0.00070		SW8015M	03/7/2022 12:37/jdw	FID-HEADSPACE_220307A : 19	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2587 Trip Blank-14653
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-038
Collection Date: 03/01/2022 18:20
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Toluene	0.19	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-038
Client: AECOM - Honolulu
Collection Date: 03/01/2022 18:20
Client Sample ID: ERH2587 Trip Blank-14653
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Surr: 1,2-Dichloroethane-d4	116.0	%REC	1		81-118				SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Surr: Toluene-d8	107.0	%REC	1		89-112				SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/7/2022 17:28/msc	VOA5975C.I_220307A : 16	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-039
Client: AECOM - Honolulu
Collection Date: 03/01/2022 18:20
Client Sample ID: ERH2587 Trip Blank-14754
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 23:28/jp	VARIAN1_220307A : 17	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/7/2022 23:28/jp	VARIAN1_220307A : 17	R375789
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	03/7/2022 23:28/jp	VARIAN1_220307A : 17	R375789

- 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: B22030244-040
Client: AECOM - Honolulu
Collection Date: 03/01/2022 18:20
Client Sample ID: ERH2587 Trip Blank-14733
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/8/2022 01:36/clt	GECD.I_220307A : 33	164256
Surr: 1,1,1,2-Tetrachloroethane	104.0	%REC	1		70-130				SW8011	03/8/2022 01:36/clt	GECD.I_220307A : 33	164256

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2587 Trip Blank-14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-041
Collection Date: 03/01/2022 18:20
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 12:59/jdw	FID-HEADSPACE_220307A : 21	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2596 (RHMW16)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-042
Collection Date: 03/01/2022 15:10
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/10/2022 08:29/eli-ca	SUB-C280346 : 17	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 11:31/srh	ICPMS207-B_220308A : 89	R375855
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/9/2022 11:38/srh	ICPMS207-B_220308A : 90	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2596 (RHMW16)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-042
Collection Date: 03/01/2022 15:10
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Surr: 1,2-Dichloroethane-d4	118.0	%REC	1		81-118				SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Surr: Toluene-d8	104.0	%REC	1		89-112				SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/7/2022 13:23/msc	VOA5975C.I_220307A : 7	R376042
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	03/8/2022 01:56/clt	GECD.I_220307A : 34	164256
Surr: 1,1,1,2-Tetrachloroethane	103.0	%REC	1		70-130				SW8011	03/8/2022 01:56/clt	GECD.I_220307A : 34	164256
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	UT	20	8.7	2.0		SW8015C	03/8/2022 13:40/jp	VARIAN1_220307A : 33	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	UT	20	10	3.1		SW8015C	03/8/2022 13:40/jp	VARIAN1_220307A : 33	R375789
Surr: Trifluorotoluene	83.0	%REC	1		70-130				SW8015C	03/8/2022 13:40/jp	VARIAN1_220307A : 33	R375789
- 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	03/8/2022 18:14/amn	GCFID-HP5-B_220308A : 9	164267
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/8/2022 18:14/amn	GCFID-HP5-B_220308A : 9	164267
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/8/2022 18:14/amn	GCFID-HP5-B_220308A : 9	164267
Surr: o-Terphenyl	95.0	%REC	1		56-125				SW8015C	03/8/2022 18:14/amn	GCFID-HP5-B_220308A : 9	164267
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/8/2022 18:14/amn	GCFID-HP5-B_220308A : 9	164267
- 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: B22030244-042
Client: AECOM - Honolulu
Collection Date: 03/01/2022 15:10
Client Sample ID: ERH2596 (RHMW16)
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 13:05/jdw	FID-HEADSPACE_220307A : 22	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2595 Trip Blank-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-043
Collection Date: 03/01/2022 15:10
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Toluene	0.091	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-043
Client: AECOM - Honolulu
Collection Date: 03/01/2022 15:10
Client Sample ID: ERH2595 Trip Blank-14833
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Surr: 1,2-Dichloroethane-d4	116.0	%REC	1		81-118				SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Surr: Toluene-d8	92.0	%REC	1		89-112				SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/7/2022 17:56/msc	VOA5975C.I_220307A : 17	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-044
Client: AECOM - Honolulu
Collection Date: 03/01/2022 15:10
Client Sample ID: ERH2595 Trip Blank-14754
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	2.3	ug/L	1	J	20	8.7	2.0		SW8015C	03/8/2022 00:02/jp	VARIAN1_220307A : 18	R375789
Total Purgeable Hydrocarbons	3.1	ug/L	1	J	20	10	3.1		SW8015C	03/8/2022 00:02/jp	VARIAN1_220307A : 18	R375789
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/8/2022 00:02/jp	VARIAN1_220307A : 18	R375789

- 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: ERH2595 Trip Blank-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-045
Collection Date: 03/01/2022 15:10
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/8/2022 02:15/clt	GECD.I_220307A : 35	164256
Surr: 1,1,1,2-Tetrachloroethane	101.0	%REC	1		70-130				SW8011	03/8/2022 02:15/clt	GECD.I_220307A : 35	164256

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2595 Trip Blank-14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-046
Collection Date: 03/01/2022 15:10
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 13:12/jdw	FID-HEADSPACE_220307A : 23	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2592 (RHMW14-3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030244-047
Collection Date: 03/01/2022 14:25
Date Received: 03/04/2022
Report Date: 03/14/2022

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	0.32	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/10/2022 10:33/eli-ca	SUB-C280346 : 20	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 11:44/srh	ICPMS207-B_220308A : 91	R375855
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/9/2022 11:50/srh	ICPMS207-B_220308A : 92	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-047
Client: AECOM - Honolulu
Collection Date: 03/01/2022 14:25
Client Sample ID: ERH2592 (RHMW14-3)
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Surr: 1,2-Dichloroethane-d4	117.0	%REC	1		81-118				SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Surr: Toluene-d8	106.0	%REC	1		89-112				SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/7/2022 13:50/msc	VOA5975C.I_220307A : 8	R376042
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/8/2022 02:35/clt	GECD.I_220307A : 36	164256
Surr: 1,1,1,2-Tetrachloroethane	104.0	%REC	1		70-130				SW8011	03/8/2022 02:35/clt	GECD.I_220307A : 36	164256
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/8/2022 14:48/jp	VARIAN1_220307A : 34	R375789
Total Purgeable Hydrocarbons	10	ug/L	1	J	20	10	3.1		SW8015C	03/8/2022 14:48/jp	VARIAN1_220307A : 34	R375789
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/8/2022 14:48/jp	VARIAN1_220307A : 34	R375789
- 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	03/9/2022 10:39/amn	GCFID-HP5-B_220308A : 21	164267
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/9/2022 10:39/amn	GCFID-HP5-B_220308A : 21	164267
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/9/2022 10:39/amn	GCFID-HP5-B_220308A : 21	164267
Surr: o-Terphenyl	97.0	%REC	1		56-125				SW8015C	03/9/2022 10:39/amn	GCFID-HP5-B_220308A : 21	164267
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/9/2022 10:39/amn	GCFID-HP5-B_220308A : 21	164267
- 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: B22030244-047
Client: AECOM - Honolulu
Collection Date: 03/01/2022 14:25
Client Sample ID: ERH2592 (RHMW14-3)
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 13:18/jdw	FID-HEADSPACE_220307A : 24	R375734

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2591 Trip Blank-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-048
Collection Date: 03/01/2022 14:25
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Toluene	0.17	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-048
Client: AECOM - Honolulu
Collection Date: 03/01/2022 14:25
Client Sample ID: ERH2591 Trip Blank-14833
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Surr: 1,2-Dichloroethane-d4	115.0	%REC	1		81-118				SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Surr: Toluene-d8	106.0	%REC	1		89-112				SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/7/2022 18:23/msc	VOA5975C.I_220307A : 18	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030244-049
Client: AECOM - Honolulu
Collection Date: 03/01/2022 14:25
Client Sample ID: ERH2591 Trip Blank-14894
Date Received: 03/04/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/14/2022
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	03/8/2022 00:36/jp	VARIAN1_220307A : 19	R375789
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/8/2022 00:36/jp	VARIAN1_220307A : 19	R375789
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	03/8/2022 00:36/jp	VARIAN1_220307A : 19	R375789

- 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: ERH2591 Trip Blank-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-050
Collection Date: 03/01/2022 14:25
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/8/2022 02:55/clt	GECD.I_220307A : 37	164256
Surr: 1,1,1,2-Tetrachloroethane	105.0	%REC	1		70-130				SW8011	03/8/2022 02:55/clt	GECD.I_220307A : 37	164256

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2591 Trip Blank-14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030244-051
Collection Date: 03/01/2022 14:25
Date Received: 03/04/2022
Report Date: 03/14/2022

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	03/7/2022 13:29/jdw	FID-HEADSPACE_220307A : 25	R375734

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: SUB-C280346: 2 **SampType:** Method Blank **Batch ID:** C_R280346
Method: SW9060A **Analysis Date:** 03/09/2022 12:09 **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: **B22030244-001D, B22030244-007D, B22030244-012D, B22030244-017D, B22030244-022D, B22030244-027D, B22030244-032E, B22030244-037D, B22030244-042D, B22030244-047D**

- TOC Range is 0.1 to 0.1

Run ID: Run Order: SUB-C280346: 1 **SampType:** Laboratory Control Sample **Batch ID:** C_R280346
Method: SW9060A **Analysis Date:** 03/09/2022 11:29 **Prep Date:**
Lab ID: LCS **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22030244-001D, B22030244-007D, B22030244-012D, B22030244-017D, B22030244-022D, B22030244-027D, B22030244-032E, B22030244-037D, B22030244-042D, B22030244-047D**

- TOC Range is 4.9 to 5.0

Run ID: Run Order: SUB-C280346: 4 **SampType:** Sample Matrix Spike **Batch ID:** C_R280346
Method: SW9060A **Analysis Date:** 03/09/2022 14:12 **Prep Date:**
Lab ID: B22030433-001D **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.3	0.50	5.0	0.44	97.0	91	111				

Associated Samples: **B22030244-001D, B22030244-007D, B22030244-012D, B22030244-017D, B22030244-022D, B22030244-027D, B22030244-032E, B22030244-037D, B22030244-042D, B22030244-047D**

- TOC Range is 5.3 to 5.3

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: SUB-C280346: 5 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** C_R280346
Method: SW9060A **Analysis Date:** 03/09/2022 15:05 **Prep Date:**
Lab ID: B22030433-001D **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.3	0.50	5.0	0.44	96.0	91	111	5.3	1.0	10.0	

Associated Samples: **B22030244-001D, B22030244-007D, B22030244-012D, B22030244-017D, B22030244-022D, B22030244-027D, B22030244-032E, B22030244-037D, B22030244-042D, B22030244-047D**

- TOC Range is 5.2 to 5.3

Run ID: Run Order: SUB-C280346: 6 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280346
Method: SW9060A **Analysis Date:** 03/09/2022 22:06 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22030244-001D, B22030244-007D, B22030244-012D, B22030244-017D, B22030244-022D, B22030244-027D, B22030244-032E, B22030244-037D, B22030244-042D, B22030244-047D**

- TOC Range is 4.8 to 4.8

Run ID: Run Order: SUB-C280346: 15 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280346
Method: SW9060A **Analysis Date:** 03/10/2022 06:28 **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)	5.0	0.50	5.0		100.0	90	110				

Associated Samples: **B22030244-001D, B22030244-007D, B22030244-012D, B22030244-017D, B22030244-022D, B22030244-027D, B22030244-032E, B22030244-037D, B22030244-042D, B22030244-047D**

- TOC Range is 4.9 to 5.1

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: SUB-C280346: 21 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280346
Method: SW9060A **Analysis Date:** 03/10/2022 11:13 **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)	5.0	0.50	5.0		99.0	90	110				

Associated Samples: **B22030244-001D, B22030244-007D, B22030244-012D, B22030244-017D, B22030244-022D, B22030244-027D, B22030244-032E, B22030244-037D, B22030244-042D, B22030244-047D**

- TOC Range is 4.9 to 5.0

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: ICPMS207-B_220308A: 49 **SampType:** Laboratory Fortified Blank **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/08/2022 17:24 **Prep Date:**
Lab ID: LFB **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22030244-001A, B22030244-007A, B22030244-012A, B22030244-017A, B22030244-022A, B22030244-027A, B22030244-032A, B22030244-037A, B22030244-042A, B22030244-047A**

Run ID: Run Order: ICPMS207-B_220308A: 48 **SampType:** Method Blank **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/08/2022 17:18 **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: **B22030244-001A, B22030244-007A, B22030244-012A, B22030244-017A, B22030244-022A, B22030244-027A, B22030244-032A, B22030244-037A, B22030244-042A, B22030244-047A**

Run ID: Run Order: ICPMS207-B_220308A: 62 **SampType:** Sample Matrix Spike **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 08:42 **Prep Date:**
Lab ID: B22030244-001AMS **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	0.00	99.0	88	115				

Associated Samples: **B22030244-001A, B22030244-007A, B22030244-012A, B22030244-017A, B22030244-022A, B22030244-027A, B22030244-032A, B22030244-037A, B22030244-042A, B22030244-047A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: ICPMS207-B_220308A: 63 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 08:49 **Prep Date:**
Lab ID: B22030244-001AMSD **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.051	0.001	0.050	0.00	101.0	88	115	0.050	1.7	20.0	

Associated Samples: **B22030244-001A, B22030244-007A, B22030244-012A, B22030244-017A, B22030244-022A, B22030244-027A, B22030244-032A, B22030244-037A, B22030244-042A, B22030244-047A**

Run ID: Run Order: ICPMS207-B_220308A: 97 **SampType:** Sample Matrix Spike **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 12:21 **Prep Date:**
Lab ID: B22030433-001AMS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.049	0.001	0.050	0.00	98.0	88	115				

Associated Samples: **B22030244-001A, B22030244-007A, B22030244-012A, B22030244-017A, B22030244-022A, B22030244-027A, B22030244-032A, B22030244-037A, B22030244-042A, B22030244-047A**

Run ID: Run Order: ICPMS207-B_220308A: 98 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 12:28 **Prep Date:**
Lab ID: B22030433-001AMSD **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	0.00	101.0	88	115	0.049	2.3	20.0	

Associated Samples: **B22030244-001A, B22030244-007A, B22030244-012A, B22030244-017A, B22030244-022A, B22030244-027A, B22030244-032A, B22030244-037A, B22030244-042A, B22030244-047A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: ICPMS207-B_220308A: 61 **SampType:** Serial Dilution **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 08:36 **Prep Date:**
Lab ID: B22030244-001ADIL **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: **B22030244-001A, B22030244-007A, B22030244-012A, B22030244-017A, B22030244-022A, B22030244-027A, B22030244-032A, B22030244-037A, B22030244-042A, B22030244-047A**

Run ID: Run Order: ICPMS207-B_220308A: 96 **SampType:** Serial Dilution **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 12:15 **Prep Date:**
Lab ID: B22030433-001ADIL **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	N

Associated Samples: **B22030244-001A, B22030244-007A, B22030244-012A, B22030244-017A, B22030244-022A, B22030244-027A, B22030244-032A, B22030244-037A, B22030244-042A, B22030244-047A**

Run ID: Run Order: ICPMS207-B_220308A: 58 **SampType:** Laboratory Control Sample **Batch ID:** 164289
Method: SW6020 **Analysis Date:** 03/09/2022 08:17 **Prep Date:** 03/07/2022 16:29
Lab ID: LCS4-164289 **Units:** mg/L **Prep Method:** SW3010A

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

Associated Samples: **B22030244-001B, B22030244-007B, B22030244-012B, B22030244-017B, B22030244-022B, B22030244-027B, B22030244-032B, B22030244-037B, B22030244-042B, B22030244-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: ICPMS207-B_220308A: 67 **SampType:** Post Digestion/Distillation Spike **Batch ID:** 164289
Method: SW6020 **Analysis Date:** 03/09/2022 09:14 **Prep Date:** 03/07/2022 16:31
Lab ID: B22030244-001BPDS1 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.050	0.001	0.052	0.00	96.0	80	120				

Associated Samples: **B22030244-001B, B22030244-007B, B22030244-012B, B22030244-017B, B22030244-022B, B22030244-027B, B22030244-032B, B22030244-037B, B22030244-042B, B22030244-047B**

Run ID: Run Order: ICPMS207-B_220308A: 68 **SampType:** Matrix Spike **Batch ID:** 164289
Method: SW6020 **Analysis Date:** 03/09/2022 09:20 **Prep Date:** 03/07/2022 16:31
Lab ID: B22030244-001BMS4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.101	0.001	0.100	0.00	101.0	88	115				

Associated Samples: **B22030244-001B, B22030244-007B, B22030244-012B, B22030244-017B, B22030244-022B, B22030244-027B, B22030244-032B, B22030244-037B, B22030244-042B, B22030244-047B**

Run ID: Run Order: ICPMS207-B_220308A: 71 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164289
Method: SW6020 **Analysis Date:** 03/09/2022 09:39 **Prep Date:** 03/07/2022 16:31
Lab ID: B22030244-001BMSD4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.100	0.001	0.100	0.00	100.0	88	115	0.101	0.6	20.0	

Associated Samples: **B22030244-001B, B22030244-007B, B22030244-012B, B22030244-017B, B22030244-022B, B22030244-027B, B22030244-032B, B22030244-037B, B22030244-042B, B22030244-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: ICPMS207-B_220308A: 102 **SampType:** Post Digestion/Distillation Spike **Batch ID:** 164289
Method: SW6020 **Analysis Date:** 03/09/2022 12:53 **Prep Date:** 03/07/2022 16:31
Lab ID: B22030433-001BPDS1 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.050	0.001	0.052	0.00	96.0	80	120				

Associated Samples: **B22030244-001B, B22030244-007B, B22030244-012B, B22030244-017B, B22030244-022B, B22030244-027B, B22030244-032B, B22030244-037B, B22030244-042B, B22030244-047B**

Run ID: Run Order: ICPMS207-B_220308A: 103 **SampType:** Matrix Spike **Batch ID:** 164289
Method: SW6020 **Analysis Date:** 03/09/2022 12:59 **Prep Date:** 03/07/2022 16:31
Lab ID: B22030433-001BMS4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.100	0.001	0.100	0.00	100.0	88	115				

Associated Samples: **B22030244-001B, B22030244-007B, B22030244-012B, B22030244-017B, B22030244-022B, B22030244-027B, B22030244-032B, B22030244-037B, B22030244-042B, B22030244-047B**

Run ID: Run Order: ICPMS207-B_220308A: 104 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164289
Method: SW6020 **Analysis Date:** 03/09/2022 13:05 **Prep Date:** 03/07/2022 16:31
Lab ID: B22030433-001BMSD4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.102	0.001	0.100	0.00	101.0	88	115	0.100	1.7	20.0	

Associated Samples: **B22030244-001B, B22030244-007B, B22030244-012B, B22030244-017B, B22030244-022B, B22030244-027B, B22030244-032B, B22030244-037B, B22030244-042B, B22030244-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: ICPMS207-B_220308A: 57 **SampType:** Method Blank **Batch ID:** 164289
Method: SW6020 **Analysis Date:** 03/09/2022 08:11 **Prep Date:** 03/07/2022 16:29
Lab ID: MB-164289 **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: **B22030244-001B, B22030244-007B, B22030244-012B, B22030244-017B, B22030244-022B, B22030244-027B, B22030244-032B, B22030244-037B, B22030244-042B, B22030244-047B**

Run ID: Run Order: ICPMS207-B_220308A: 66 **SampType:** Serial Dilution **Batch ID:** 164289
Method: SW6020 **Analysis Date:** 03/09/2022 09:07 **Prep Date:** 03/07/2022 16:31
Lab ID: B22030244-001BDIL **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						0.00		10.0	

Associated Samples: **B22030244-001B, B22030244-007B, B22030244-012B, B22030244-017B, B22030244-022B, B22030244-027B, B22030244-032B, B22030244-037B, B22030244-042B, B22030244-047B**

Run ID: Run Order: ICPMS207-B_220308A: 101 **SampType:** Serial Dilution **Batch ID:** 164289
Method: SW6020 **Analysis Date:** 03/09/2022 12:46 **Prep Date:** 03/07/2022 16:31
Lab ID: B22030433-001BDIL **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						0.00		10.0	

Associated Samples: **B22030244-001B, B22030244-007B, B22030244-012B, B22030244-017B, B22030244-022B, B22030244-027B, B22030244-032B, B22030244-037B, B22030244-042B, B22030244-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: ICPMS207-B_220308A: 54 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/08/2022 17:56 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.048	0.001	0.050		95.0	90	110				

Associated Samples: **B22030244-001A, B22030244-001B, B22030244-007A, B22030244-007B, B22030244-012A, B22030244-012B, B22030244-017A, B22030244-017B, B22030244-022A, B22030244-022B, B22030244-027A, B22030244-027B, B22030244-032A, B22030244-032B, B22030244-037A, B22030244-037B, B22030244-042A, B22030244-042B, B22030244-047A, B22030244-047B**

Run ID: Run Order: ICPMS207-B_220308A: 69 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 09:26 **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	0.050	0.001	0.050		100.0	90	110				

Associated Samples: **B22030244-001A, B22030244-001B, B22030244-007A, B22030244-007B, B22030244-012A, B22030244-012B, B22030244-017A, B22030244-017B, B22030244-022A, B22030244-022B, B22030244-027A, B22030244-027B, B22030244-032A, B22030244-032B, B22030244-037A, B22030244-037B, B22030244-042A, B22030244-042B, B22030244-047A, B22030244-047B**

Run ID: Run Order: ICPMS207-B_220308A: 82 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 10:47 **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	0.050	0.001	0.050		99.0	90	110				

Associated Samples: **B22030244-001A, B22030244-001B, B22030244-007A, B22030244-007B, B22030244-012A, B22030244-012B, B22030244-017A, B22030244-017B, B22030244-022A, B22030244-022B, B22030244-027A, B22030244-027B, B22030244-032A, B22030244-032B, B22030244-037A, B22030244-037B, B22030244-042A, B22030244-042B, B22030244-047A, B22030244-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: ICPMS207-B_220308A: 94 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 12:03 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.050	0.001	0.050		99.0	90	110				

Associated Samples: **B22030244-001A, B22030244-001B, B22030244-007A, B22030244-007B, B22030244-012A, B22030244-012B, B22030244-017A, B22030244-017B, B22030244-022A, B22030244-022B, B22030244-027A, B22030244-027B, B22030244-032A, B22030244-032B, B22030244-037A, B22030244-037B, B22030244-042A, B22030244-042B, B22030244-047A, B22030244-047B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 4 **SampType:** Method Blank **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 14:03 **Prep Date:**
Lab ID: MBLK030522_ **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: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 4 **SampType:** Method Blank **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 14:03 **Prep Date:**
Lab ID: MBLK030522_ **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		114.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		111.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		106.0	85	114				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 4 **SampType:** Method Blank **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 14:03 **Prep Date:**
Lab ID: MBLK030522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	10	0.50	10		104.0	89	112				

Associated Samples: **B22030244-001E, B22030244-002B, B22030244-003A, B22030244-007E, B22030244-008A, B22030244-012E, B22030244-013A, B22030244-017E, B22030244-018A, B22030244-022E, B22030244-023A, B22030244-027E, B22030244-028A, B22030244-032F, B22030244-033A**

Run ID: Run Order: VOA5975C.I_220305A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 13:09 **Prep Date:**
Lab ID: LCS030522_ **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		103.0	79	120				
Bromobenzene	5.3	0.50	5.0		106.0	80	120				
Bromochloromethane	4.8	0.50	5.0		97.0	78	123				
Bromodichloromethane	5.3	0.50	5.0		106.0	79	125				
Bromoform	5.1	0.50	5.0		101.0	66	130				
Carbon tetrachloride	4.8	0.50	5.0		96.0	72	136				
Chlorobenzene	5.2	0.50	5.0		105.0	82	118				
Chlorodibromomethane	5.0	0.50	5.0		100.0	74	126				
Chloroethane	5.5	0.50	5.0		109.0	60	138				
Chloroform	4.8	0.50	5.0		96.0	79	124				
Chloromethane	4.6	0.50	5.0		93.0	50	139				
1,2-Dibromoethane	5.2	0.50	5.0		104.0	78	122				
2-Chlorotoluene	5.3	0.50	5.0		106.0	79	122				
Dibromomethane	5.1	0.50	5.0		102.0	79	123				
1,2-Dichlorobenzene	5.2	0.50	5.0		104.0	80	119				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 13:09 **Prep Date:**
Lab ID: LCS030522_ **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		111.0	78	122				
1,3-Dichlorobenzene	5.2	0.50	5.0		105.0	80	119				
1,4-Dichlorobenzene	5.1	0.50	5.0		103.0	79	118				
Dichlorodifluoromethane	4.5	0.50	5.0		90.0	32	152				
1,1-Dichloroethane	5.3	0.50	5.0		105.0	77	125				
1,2-Dichloroethane	5.1	0.50	5.0		101.0	73	128				
1,1-Dichloroethene	5.0	0.50	5.0		99.0	71	131				
cis-1,2-Dichloroethene	5.1	0.50	5.0		102.0	78	123				
trans-1,2-Dichloroethene	5.0	0.50	5.0		99.0	75	124				
1,2-Dichloropropane	5.1	0.50	5.0		103.0	78	122				
1,3-Dichloropropane	5.0	0.50	5.0		100.0	80	119				
2,2-Dichloropropane	5.2	0.50	5.0		103.0	60	139				
1,1-Dichloropropene	4.9	0.50	5.0		97.0	79	125				
cis-1,3-Dichloropropene	4.9	0.50	5.0		98.0	75	124				
trans-1,3-Dichloropropene	5.4	0.50	5.0		107.0	73	127				
Ethylbenzene	5.1	0.50	5.0		103.0	79	121				
Methyl tert-butyl ether (MTBE)	5.5	0.50	5.0		109.0	71	124				
Methyl ethyl ketone	54	10	50		108.0	56	143				
Methylene chloride	4.9	0.50	5.0		99.0	74	124				
Styrene	5.3	0.50	5.0		105.0	78	123				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0		102.0	78	124				
1,1,2,2-Tetrachloroethane	5.2	0.50	5.0		105.0	71	121				
Tetrachloroethene	4.9	0.50	5.0		99.0	74	129				
Toluene	5.2	0.50	5.0		104.0	80	121				
1,1,1-Trichloroethane	5.0	0.50	5.0		101.0	74	131				
1,1,2-Trichloroethane	5.1	0.50	5.0		103.0	80	119				
Trichloroethene	5.1	0.50	5.0		101.0	79	123				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 13:09 **Prep Date:**
Lab ID: LCS030522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	5.2	0.50	5.0		104.0	65	141				
1,2,3-Trichloropropane	5.0	0.50	5.0		100.0	73	125				
Vinyl chloride	4.8	0.50	5.0		96.0	58	137				
m+p-Xylenes	10	0.50	10		100.0	80	121				
o-Xylene	5.1	0.50	5.0		101.0	78	122				
Xylenes, Total	15	0.50	15		100.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		110.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		108.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		106.0	85	114				
Surr: Toluene-d8	11	0.50	10		110.0	89	112				

Associated Samples: **B22030244-001E, B22030244-002B, B22030244-003A, B22030244-007E, B22030244-008A, B22030244-012E, B22030244-013A, B22030244-017E, B22030244-018A, B22030244-022E, B22030244-023A, B22030244-027E, B22030244-028A, B22030244-032F, B22030244-033A**

Run ID: Run Order: VOA5975C.I_220305A: 21 **SampType:** Sample Matrix Spike **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 21:47 **Prep Date:**
Lab ID: B22030244-002BMS **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	0.0	108.0	79	120				
Bromobenzene	5.4	0.50	5.0	0.0	108.0	80	120				
Bromochloromethane	5.0	0.50	5.0	0.0	99.0	78	123				
Bromodichloromethane	5.5	0.50	5.0	0.0	111.0	79	125				
Bromoform	5.3	0.50	5.0	0.0	107.0	66	130				
Carbon tetrachloride	5.5	0.50	5.0	0.0	110.0	72	136				
Chlorobenzene	5.5	0.50	5.0	0.0	110.0	82	118				
Chlorodibromomethane	5.3	0.50	5.0	0.0	106.0	74	126				
Chloroethane	5.6	0.50	5.0	0.0	113.0	60	138				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 21 **SampType:** Sample Matrix Spike **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 21:47 **Prep Date:**
Lab ID: B22030244-002BMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Chloroform	5.4	0.50	5.0	0.29	102.0	79	124				
Chloromethane	4.8	0.50	5.0	0.0	96.0	50	139				
1,2-Dibromoethane	5.4	0.50	5.0	0.0	108.0	78	122				
2-Chlorotoluene	5.5	0.50	5.0	0.0	109.0	79	122				
Dibromomethane	5.5	0.50	5.0	0.0	110.0	79	123				
1,2-Dichlorobenzene	5.4	0.50	5.0	0.0	108.0	80	119				
4-Chlorotoluene	5.8	0.50	5.0	0.0	116.0	78	122				
1,3-Dichlorobenzene	5.6	0.50	5.0	0.0	111.0	80	119				
1,4-Dichlorobenzene	5.5	0.50	5.0	0.0	109.0	79	118				
Dichlorodifluoromethane	4.6	0.50	5.0	0.0	92.0	32	152				
1,1-Dichloroethane	5.6	0.50	5.0	0.0	111.0	77	125				
1,2-Dichloroethane	5.1	0.50	5.0	0.0	101.0	73	128				
1,1-Dichloroethene	5.4	0.50	5.0	0.0	109.0	71	131				
cis-1,2-Dichloroethene	5.2	0.50	5.0	0.0	104.0	78	123				
trans-1,2-Dichloroethene	5.2	0.50	5.0	0.0	104.0	75	124				
1,2-Dichloropropane	5.2	0.50	5.0	0.0	104.0	78	122				
1,3-Dichloropropane	5.3	0.50	5.0	0.0	106.0	80	119				
2,2-Dichloropropane	5.1	0.50	5.0	0.0	102.0	60	139				
1,1-Dichloropropene	5.1	0.50	5.0	0.0	102.0	79	125				
cis-1,3-Dichloropropene	5.1	0.50	5.0	0.0	102.0	75	124				
trans-1,3-Dichloropropene	5.5	0.50	5.0	0.0	111.0	73	127				
Ethylbenzene	5.4	0.50	5.0	0.0	107.0	79	121				
Methyl tert-butyl ether (MTBE)	5.0	0.50	5.0	0.0	99.0	71	124				
Methyl ethyl ketone	46	10	50	0.0	92.0	56	143				
Methylene chloride	5.1	0.50	5.0	0.0	102.0	74	124				
Styrene	4.3	0.50	5.0	0.0	85.0	78	123				
1,1,1,2-Tetrachloroethane	5.5	0.50	5.0	0.0	111.0	78	124				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 21 **SampType:** Sample Matrix Spike **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 21:47 **Prep Date:**
Lab ID: B22030244-002BMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0	0.0	108.0	71	121				
Tetrachloroethene	5.4	0.50	5.0	0.0	109.0	74	129				
Toluene	5.6	0.50	5.0	0.0	112.0	80	121				
1,1,1-Trichloroethane	5.5	0.50	5.0	0.0	110.0	74	131				
1,1,2-Trichloroethane	5.5	0.50	5.0	0.0	110.0	80	119				
Trichloroethene	5.3	0.50	5.0	0.0	107.0	79	123				
Trichlorofluoromethane	5.2	0.50	5.0	0.0	104.0	65	141				
1,2,3-Trichloropropane	4.9	0.50	5.0	0.0	98.0	73	125				
Vinyl chloride	5.0	0.50	5.0	0.0	100.0	58	137				
m+p-Xylenes	11	0.50	10	0.0	106.0	80	121				
o-Xylene	5.4	0.50	5.0	0.0	107.0	78	122				
Xylenes, Total	16	0.50	15	0.0	106.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	112.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10	0.0	107.0	80	119				
Surr: p-Bromofluorobenzene	10	0.50	10	0.0	104.0	85	114				
Surr: Toluene-d8	11	0.50	10	0.0	112.0	89	112				

Associated Samples: **B22030244-001E, B22030244-002B, B22030244-003A, B22030244-007E, B22030244-008A, B22030244-012E, B22030244-013A, B22030244-017E, B22030244-018A, B22030244-022E, B22030244-023A, B22030244-027E, B22030244-028A, B22030244-032F, B22030244-033A**

Run ID: Run Order: VOA5975C.I_220305A: 22 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 22:14 **Prep Date:**
Lab ID: B22030244-002BMSD **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	0.0	109.0	79	120	5.4	1.0	20.0	
Bromobenzene	5.6	0.50	5.0	0.0	111.0	80	120	5.4	3.0	20.0	
Bromochloromethane	4.6	0.50	5.0	0.0	91.0	78	123	5.0	8.0	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 22 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 22:14 **Prep Date:**
Lab ID: B22030244-002BMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	5.6	0.50	5.0	0.0	111.0	79	125	5.5	0.5	20.0	
Bromoform	5.3	0.50	5.0	0.0	107.0	66	130	5.3	0.1	20.0	
Carbon tetrachloride	5.5	0.50	5.0	0.0	111.0	72	136	5.5	1.0	20.0	
Chlorobenzene	5.7	0.50	5.0	0.0	113.0	82	118	5.5	2.6	20.0	
Chlorodibromomethane	5.4	0.50	5.0	0.0	108.0	74	126	5.3	2.3	20.0	
Chloroethane	5.8	0.50	5.0	0.0	115.0	60	138	5.6	2.3	20.0	
Chloroform	4.6	0.50	5.0	0.29	86.0	79	124	5.4	16.0	20.0	
Chloromethane	5.0	0.50	5.0	0.0	100.0	50	139	4.8	3.8	20.0	
1,2-Dibromoethane	5.5	0.50	5.0	0.0	111.0	78	122	5.4	2.6	20.0	
2-Chlorotoluene	5.8	0.50	5.0	0.0	115.0	79	122	5.5	5.2	20.0	
Dibromomethane	5.6	0.50	5.0	0.0	112.0	79	123	5.5	1.4	20.0	
1,2-Dichlorobenzene	5.5	0.50	5.0	0.0	110.0	80	119	5.4	1.6	20.0	
4-Chlorotoluene	5.9	0.50	5.0	0.0	118.0	78	122	5.8	1.7	20.0	
1,3-Dichlorobenzene	5.6	0.50	5.0	0.0	112.0	80	119	5.6	1.3	20.0	
1,4-Dichlorobenzene	5.5	0.50	5.0	0.0	111.0	79	118	5.5	1.4	20.0	
Dichlorodifluoromethane	4.8	0.50	5.0	0.0	95.0	32	152	4.6	3.0	20.0	
1,1-Dichloroethane	4.4	0.50	5.0	0.0	88.0	77	125	5.6	24.0	20.0	R
1,2-Dichloroethane	5.3	0.50	5.0	0.0	105.0	73	128	5.1	3.7	20.0	
1,1-Dichloroethene	4.2	0.50	5.0	0.0	85.0	71	131	5.4	24.0	20.0	R
cis-1,2-Dichloroethene	4.5	0.50	5.0	0.0	89.0	78	123	5.2	15.0	20.0	
trans-1,2-Dichloroethene	4.2	0.50	5.0	0.0	85.0	75	124	5.2	20.0	20.0	
1,2-Dichloropropane	5.4	0.50	5.0	0.0	109.0	78	122	5.2	4.5	20.0	
1,3-Dichloropropane	5.4	0.50	5.0	0.0	108.0	80	119	5.3	1.9	20.0	
2,2-Dichloropropane	4.5	0.50	5.0	0.0	90.0	60	139	5.1	13.0	20.0	
1,1-Dichloropropene	5.3	0.50	5.0	0.0	106.0	79	125	5.1	4.1	20.0	
cis-1,3-Dichloropropene	5.0	0.50	5.0	0.0	101.0	75	124	5.1	1.0	20.0	
trans-1,3-Dichloropropene	5.6	0.50	5.0	0.0	112.0	73	127	5.5	1.0	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 22 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 22:14 **Prep Date:**
Lab ID: B22030244-002BMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Ethylbenzene	5.5	0.50	5.0	0.0	110.0	79	121	5.4	2.2	20.0	
Methyl tert-butyl ether (MTBE)	4.4	0.50	5.0	0.0	89.0	71	124	5.0	11.0	20.0	
Methyl ethyl ketone	39	10	50	0.0	78.0	56	143	46	17.0	20.0	
Methylene chloride	4.0	0.50	5.0	0.0	80.0	74	124	5.1	24.0	20.0	R
Styrene	4.0	0.50	5.0	0.0	79.0	78	123	4.3	7.4	20.0	
1,1,1,2-Tetrachloroethane	5.5	0.50	5.0	0.0	110.0	78	124	5.5	0.3	20.0	
1,1,2,2-Tetrachloroethane	5.7	0.50	5.0	0.0	114.0	71	121	5.4	4.9	20.0	
Tetrachloroethene	5.6	0.50	5.0	0.0	112.0	74	129	5.4	2.5	20.0	
Toluene	5.7	0.50	5.0	0.0	114.0	80	121	5.6	1.6	20.0	
1,1,1-Trichloroethane	5.1	0.50	5.0	0.0	101.0	74	131	5.5	8.4	20.0	
1,1,2-Trichloroethane	5.7	0.50	5.0	0.0	114.0	80	119	5.5	3.3	20.0	
Trichloroethene	5.4	0.50	5.0	0.0	109.0	79	123	5.3	1.6	20.0	
Trichlorofluoromethane	5.2	0.50	5.0	0.0	104.0	65	141	5.2	0.3	20.0	
1,2,3-Trichloropropane	5.6	0.50	5.0	0.0	111.0	73	125	4.9	12.0	20.0	
Vinyl chloride	5.2	0.50	5.0	0.0	105.0	58	137	5.0	4.4	20.0	
m+p-Xylenes	11	0.50	10	0.0	110.0	80	121	11	3.8	20.0	
o-Xylene	5.5	0.50	5.0	0.0	110.0	78	122	5.4	2.6	20.0	
Xylenes, Total	16	0.50	15	0.0	110.0	79	121	16	3.4	20.0	
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	110.0	81	118	0.0			
Surr: Dibromofluoromethane	9.7	0.50	10	0.0	97.0	80	119	0.0			
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	106.0	85	114	0.0			
Surr: Toluene-d8	11	0.50	10	0.0	112.0	89	112	0.0			

Associated Samples: **B22030244-001E, B22030244-002B, B22030244-003A, B22030244-007E, B22030244-008A, B22030244-012E, B22030244-013A, B22030244-017E, B22030244-018A, B22030244-022E, B22030244-023A, B22030244-027E, B22030244-028A, B22030244-032F, B22030244-033A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 4 **SampType:** Method Blank **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 12:01 **Prep Date:**
Lab ID: MBLK030722_ **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: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 4 **SampType:** Method Blank **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 12:01 **Prep Date:**
Lab ID: MBLK030722_ **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		114.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		110.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		105.0	85	114				
Surr: Toluene-d8	11	0.50	10		107.0	89	112				

Associated Samples: **B22030244-001E, B22030244-022E, B22030244-023A, B22030244-032F, B22030244-037E, B22030244-038A, B22030244-042E, B22030244-043A, B22030244-047E, B22030244-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 11:06 **Prep Date:**
Lab ID: LCS030722_ **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		107.0	79	120				
Bromobenzene	5.4	0.50	5.0		109.0	80	120				
Bromochloromethane	5.1	0.50	5.0		101.0	78	123				
Bromodichloromethane	5.4	0.50	5.0		109.0	79	125				
Bromoform	5.3	0.50	5.0		106.0	66	130				
Carbon tetrachloride	5.3	0.50	5.0		105.0	72	136				
Chlorobenzene	5.4	0.50	5.0		108.0	82	118				
Chlorodibromomethane	5.3	0.50	5.0		105.0	74	126				
Chloroethane	4.9	0.50	5.0		97.0	60	138				
Chloroform	5.0	0.50	5.0		99.0	79	124				
Chloromethane	5.0	0.50	5.0		101.0	50	139				
1,2-Dibromoethane	5.3	0.50	5.0		106.0	78	122				
2-Chlorotoluene	5.6	0.50	5.0		111.0	79	122				
Dibromomethane	5.4	0.50	5.0		107.0	79	123				
1,2-Dichlorobenzene	5.5	0.50	5.0		109.0	80	119				
4-Chlorotoluene	5.8	0.50	5.0		115.0	78	122				
1,3-Dichlorobenzene	5.6	0.50	5.0		113.0	80	119				
1,4-Dichlorobenzene	5.4	0.50	5.0		108.0	79	118				
Dichlorodifluoromethane	4.8	0.50	5.0		96.0	32	152				
1,1-Dichloroethane	5.6	0.50	5.0		111.0	77	125				
1,2-Dichloroethane	5.1	0.50	5.0		102.0	73	128				
1,1-Dichloroethene	4.7	0.50	5.0		95.0	71	131				
cis-1,2-Dichloroethene	5.2	0.50	5.0		105.0	78	123				
trans-1,2-Dichloroethene	5.2	0.50	5.0		105.0	75	124				
1,2-Dichloropropane	5.3	0.50	5.0		106.0	78	122				
1,3-Dichloropropane	5.1	0.50	5.0		102.0	80	119				
2,2-Dichloropropane	5.5	0.50	5.0		110.0	60	139				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 11:06 **Prep Date:**
Lab ID: LCS030722_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.2	0.50	5.0		103.0	79	125				
cis-1,3-Dichloropropene	5.0	0.50	5.0		99.0	75	124				
trans-1,3-Dichloropropene	5.6	0.50	5.0		111.0	73	127				
Ethylbenzene	5.3	0.50	5.0		106.0	79	121				
Methyl tert-butyl ether (MTBE)	5.2	0.50	5.0		103.0	71	124				
Methyl ethyl ketone	53	10	50		105.0	56	143				
Methylene chloride	5.2	0.50	5.0		104.0	74	124				
Styrene	5.4	0.50	5.0		108.0	78	123				
1,1,1,2-Tetrachloroethane	5.4	0.50	5.0		107.0	78	124				
1,1,2,2-Tetrachloroethane	5.5	0.50	5.0		109.0	71	121				
Tetrachloroethene	5.1	0.50	5.0		102.0	74	129				
Toluene	5.4	0.50	5.0		109.0	80	121				
1,1,1-Trichloroethane	5.3	0.50	5.0		107.0	74	131				
1,1,2-Trichloroethane	5.5	0.50	5.0		109.0	80	119				
Trichloroethene	5.2	0.50	5.0		105.0	79	123				
Trichlorofluoromethane	5.0	0.50	5.0		99.0	65	141				
1,2,3-Trichloropropane	5.2	0.50	5.0		104.0	73	125				
Vinyl chloride	5.3	0.50	5.0		106.0	58	137				
m+p-Xylenes	10	0.50	10		103.0	80	121				
o-Xylene	5.3	0.50	5.0		106.0	78	122				
Xylenes, Total	16	0.50	15		104.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		109.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		110.0	80	119				
Surr: p-Bromofluorobenzene	10	0.50	10		105.0	85	114				
Surr: Toluene-d8	11	0.50	10		109.0	89	112				

Associated Samples: **B22030244-001E, B22030244-022E, B22030244-023A, B22030244-032F, B22030244-037E, B22030244-038A, B22030244-042E, B22030244-043A, B22030244-047E, B22030244-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 23 **SampType:** Sample Matrix Spike **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 20:12 **Prep Date:**
Lab ID: B22030244-037EMS **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				
Bromobenzene	5.2	0.50	5.0	0.0	104.0	80	120				
Bromochloromethane	4.6	0.50	5.0	0.0	92.0	78	123				
Bromodichloromethane	5.0	0.50	5.0	0.0	101.0	79	125				
Bromoform	5.0	0.50	5.0	0.0	101.0	66	130				
Carbon tetrachloride	5.1	0.50	5.0	0.0	102.0	72	136				
Chlorobenzene	5.2	0.50	5.0	0.0	104.0	82	118				
Chlorodibromomethane	4.9	0.50	5.0	0.0	99.0	74	126				
Chloroethane	5.6	0.50	5.0	0.0	113.0	60	138				
Chloroform	4.6	0.50	5.0	0.0	92.0	79	124				
Chloromethane	4.8	0.50	5.0	0.0	96.0	50	139				
1,2-Dibromoethane	5.0	0.50	5.0	0.0	99.0	78	122				
2-Chlorotoluene	5.3	0.50	5.0	0.0	105.0	79	122				
Dibromomethane	5.2	0.50	5.0	0.0	104.0	79	123				
1,2-Dichlorobenzene	5.0	0.50	5.0	0.0	100.0	80	119				
4-Chlorotoluene	5.4	0.50	5.0	0.0	108.0	78	122				
1,3-Dichlorobenzene	5.2	0.50	5.0	0.0	104.0	80	119				
1,4-Dichlorobenzene	5.1	0.50	5.0	0.0	103.0	79	118				
Dichlorodifluoromethane	4.7	0.50	5.0	0.0	93.0	32	152				
1,1-Dichloroethane	5.1	0.50	5.0	0.0	101.0	77	125				
1,2-Dichloroethane	4.8	0.50	5.0	0.0	97.0	73	128				
1,1-Dichloroethene	4.9	0.50	5.0	0.0	99.0	71	131				
cis-1,2-Dichloroethene	4.9	0.50	5.0	0.0	97.0	78	123				
trans-1,2-Dichloroethene	4.8	0.50	5.0	0.0	96.0	75	124				
1,2-Dichloropropane	5.0	0.50	5.0	0.0	100.0	78	122				
1,3-Dichloropropane	4.7	0.50	5.0	0.0	94.0	80	119				
2,2-Dichloropropane	5.0	0.50	5.0	0.0	100.0	60	139				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 23 **SampType:** Sample Matrix Spike **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 20:12 **Prep Date:**
Lab ID: B22030244-037EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	4.9	0.50	5.0	0.0	98.0	79	125				
cis-1,3-Dichloropropene	4.6	0.50	5.0	0.0	92.0	75	124				
trans-1,3-Dichloropropene	5.1	0.50	5.0	0.0	102.0	73	127				
Ethylbenzene	5.1	0.50	5.0	0.0	102.0	79	121				
Methyl tert-butyl ether (MTBE)	4.9	0.50	5.0	0.0	97.0	71	124				
Methyl ethyl ketone	47	10	50	0.0	94.0	56	143				
Methylene chloride	4.7	0.50	5.0	0.0	95.0	74	124				
Styrene	5.0	0.50	5.0	0.0	100.0	78	123				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0	0.0	102.0	78	124				
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0	0.0	107.0	71	121				
Tetrachloroethene	5.2	0.50	5.0	0.0	103.0	74	129				
Toluene	5.3	0.50	5.0	0.0	106.0	80	121				
1,1,1-Trichloroethane	5.0	0.50	5.0	0.0	100.0	74	131				
1,1,2-Trichloroethane	5.1	0.50	5.0	0.0	102.0	80	119				
Trichloroethene	5.1	0.50	5.0	0.0	101.0	79	123				
Trichlorofluoromethane	4.7	0.50	5.0	0.0	95.0	65	141				
1,2,3-Trichloropropane	4.9	0.50	5.0	0.0	98.0	73	125				
Vinyl chloride	4.8	0.50	5.0	0.0	96.0	58	137				
m+p-Xylenes	10	0.50	10	0.0	101.0	80	121				
o-Xylene	5.0	0.50	5.0	0.0	100.0	78	122				
Xylenes, Total	15	0.50	15	0.0	101.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	111.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10	0.0	107.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	105.0	85	114				
Surr: Toluene-d8	11	0.50	10	0.0	112.0	89	112				

Associated Samples: **B22030244-001E, B22030244-022E, B22030244-023A, B22030244-032F, B22030244-037E, B22030244-038A, B22030244-042E, B22030244-043A, B22030244-047E, B22030244-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 24 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 20:40 **Prep Date:**
Lab ID: B22030244-037EMSD **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	0.0	106.0	79	120	4.9	6.8	20.0	
Bromobenzene	5.6	0.50	5.0	0.0	112.0	80	120	5.2	7.8	20.0	
Bromochloromethane	4.6	0.50	5.0	0.0	91.0	78	123	4.6	0.7	20.0	
Bromodichloromethane	5.4	0.50	5.0	0.0	109.0	79	125	5.0	7.4	20.0	
Bromoform	5.5	0.50	5.0	0.0	110.0	66	130	5.0	8.6	20.0	
Carbon tetrachloride	5.3	0.50	5.0	0.0	107.0	72	136	5.1	4.1	20.0	
Chlorobenzene	5.6	0.50	5.0	0.0	111.0	82	118	5.2	6.5	20.0	
Chlorodibromomethane	5.3	0.50	5.0	0.0	105.0	74	126	4.9	6.6	20.0	
Chloroethane	5.8	0.50	5.0	0.0	116.0	60	138	5.6	3.2	20.0	
Chloroform	4.7	0.50	5.0	0.0	94.0	79	124	4.6	1.8	20.0	
Chloromethane	5.0	0.50	5.0	0.0	100.0	50	139	4.8	4.6	20.0	
1,2-Dibromoethane	5.3	0.50	5.0	0.0	106.0	78	122	5.0	6.8	20.0	
2-Chlorotoluene	5.7	0.50	5.0	0.0	114.0	79	122	5.3	7.9	20.0	
Dibromomethane	5.3	0.50	5.0	0.0	105.0	79	123	5.2	0.8	20.0	
1,2-Dichlorobenzene	5.5	0.50	5.0	0.0	109.0	80	119	5.0	8.8	20.0	
4-Chlorotoluene	5.9	0.50	5.0	0.0	117.0	78	122	5.4	7.9	20.0	
1,3-Dichlorobenzene	5.7	0.50	5.0	0.0	114.0	80	119	5.2	9.0	20.0	
1,4-Dichlorobenzene	5.5	0.50	5.0	0.0	111.0	79	118	5.1	7.4	20.0	
Dichlorodifluoromethane	4.9	0.50	5.0	0.0	97.0	32	152	4.7	4.5	20.0	
1,1-Dichloroethane	4.6	0.50	5.0	0.0	92.0	77	125	5.1	9.2	20.0	
1,2-Dichloroethane	4.8	0.50	5.0	0.0	96.0	73	128	4.8	0.8	20.0	
1,1-Dichloroethene	4.5	0.50	5.0	0.0	91.0	71	131	4.9	8.5	20.0	
cis-1,2-Dichloroethene	4.6	0.50	5.0	0.0	92.0	78	123	4.9	5.3	20.0	
trans-1,2-Dichloroethene	4.3	0.50	5.0	0.0	86.0	75	124	4.8	11.0	20.0	
1,2-Dichloropropane	5.3	0.50	5.0	0.0	105.0	78	122	5.0	5.3	20.0	
1,3-Dichloropropane	5.2	0.50	5.0	0.0	104.0	80	119	4.7	10.0	20.0	
2,2-Dichloropropane	4.6	0.50	5.0	0.0	92.0	60	139	5.0	7.9	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 24 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 20:40 **Prep Date:**
Lab ID: B22030244-037EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.0	0.50	5.0	0.0	101.0	79	125	4.9	3.3	20.0	
cis-1,3-Dichloropropene	5.0	0.50	5.0	0.0	99.0	75	124	4.6	7.0	20.0	
trans-1,3-Dichloropropene	5.5	0.50	5.0	0.0	109.0	73	127	5.1	6.7	20.0	
Ethylbenzene	5.4	0.50	5.0	0.0	107.0	79	121	5.1	5.3	20.0	
Methyl tert-butyl ether (MTBE)	4.6	0.50	5.0	0.0	91.0	71	124	4.9	6.3	20.0	
Methyl ethyl ketone	42	10	50	0.0	83.0	56	143	47	12.0	20.0	
Methylene chloride	4.1	0.50	5.0	0.0	82.0	74	124	4.7	14.0	20.0	
Styrene	5.4	0.50	5.0	0.0	108.0	78	123	5.0	7.3	20.0	
1,1,1,2-Tetrachloroethane	5.4	0.50	5.0	0.0	109.0	78	124	5.1	6.3	20.0	
1,1,2,2-Tetrachloroethane	5.5	0.50	5.0	0.0	111.0	71	121	5.3	3.6	20.0	
Tetrachloroethene	5.4	0.50	5.0	0.0	108.0	74	129	5.2	4.9	20.0	
Toluene	5.6	0.50	5.0	0.0	112.0	80	121	5.3	5.7	20.0	
1,1,1-Trichloroethane	5.4	0.50	5.0	0.0	107.0	74	131	5.0	6.8	20.0	
1,1,2-Trichloroethane	5.5	0.50	5.0	0.0	110.0	80	119	5.1	7.6	20.0	
Trichloroethene	5.4	0.50	5.0	0.0	108.0	79	123	5.1	6.6	20.0	
Trichlorofluoromethane	5.0	0.50	5.0	0.0	100.0	65	141	4.7	5.9	20.0	
1,2,3-Trichloropropane	4.9	0.50	5.0	0.0	98.0	73	125	4.9	0.5	20.0	
Vinyl chloride	5.3	0.50	5.0	0.0	105.0	58	137	4.8	8.8	20.0	
m+p-Xylenes	11	0.50	10	0.0	107.0	80	121	10	5.9	20.0	
o-Xylene	5.4	0.50	5.0	0.0	108.0	78	122	5.0	8.2	20.0	
Xylenes, Total	16	0.50	15	0.0	108.0	79	121	15	6.7	20.0	
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	106.0	81	118	0.0			
Surr: Dibromofluoromethane	11	0.50	10	0.0	108.0	80	119	0.0			
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	105.0	85	114	0.0			
Surr: Toluene-d8	11	0.50	10	0.0	110.0	89	112	0.0			

Associated Samples: **B22030244-001E, B22030244-022E, B22030244-023A, B22030244-032F, B22030244-037E, B22030244-038A, B22030244-042E, B22030244-043A, B22030244-047E, B22030244-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 12:33 **Prep Date:**
Lab ID: CCV030522_ **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		100.0	80	120				
Bromobenzene	5.0	0.50	5.0		100.0	80	120				
Bromochloromethane	5.0	0.50	5.0		101.0	80	120				
Bromodichloromethane	5.1	0.50	5.0		102.0	80	120				
Bromoform	4.9	0.50	5.0		98.0	80	120				
Carbon tetrachloride	4.8	0.50	5.0		96.0	80	120				
Chlorobenzene	4.9	0.50	5.0		99.0	80	120				
Chlorodibromomethane	5.0	0.50	5.0		101.0	80	120				
Chloroethane	5.6	0.50	5.0		113.0	80	120				
Chloroform	4.9	0.50	5.0		98.0	80	120				
Chloromethane	5.0	0.50	5.0		100.0	80	120				
1,2-Dibromoethane	5.1	0.50	5.0		101.0	80	120				
2-Chlorotoluene	5.1	0.50	5.0		101.0	80	120				
Dibromomethane	5.2	0.50	5.0		105.0	80	120				
1,2-Dichlorobenzene	4.9	0.50	5.0		98.0	80	120				
4-Chlorotoluene	5.2	0.50	5.0		104.0	80	120				
1,3-Dichlorobenzene	5.0	0.50	5.0		100.0	80	120				
1,4-Dichlorobenzene	5.0	0.50	5.0		101.0	80	120				
Dichlorodifluoromethane	5.0	0.50	5.0		100.0	80	120				
1,1-Dichloroethane	4.3	0.50	5.0		86.0	80	120				
1,2-Dichloroethane	5.1	0.50	5.0		103.0	80	120				
1,1-Dichloroethene	4.2	0.50	5.0		84.0	80	120				
cis-1,2-Dichloroethene	4.9	0.50	5.0		98.0	80	120				
trans-1,2-Dichloroethene	4.1	0.50	5.0		83.0	80	120				
1,2-Dichloropropane	5.1	0.50	5.0		102.0	80	120				
1,3-Dichloropropane	5.2	0.50	5.0		104.0	80	120				
2,2-Dichloropropane	5.2	0.50	5.0		104.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 12:33 **Prep Date:**
Lab ID: CCV030522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.1	0.50	5.0		103.0	80	120				
cis-1,3-Dichloropropene	5.0	0.50	5.0		100.0	80	120				
trans-1,3-Dichloropropene	5.2	0.50	5.0		104.0	80	120				
Ethylbenzene	5.0	0.50	5.0		99.0	80	120				
Methyl tert-butyl ether (MTBE)	4.3	0.50	5.0		86.0	80	120				
Methyl ethyl ketone	44	10	50		89.0	80	120				
Methylene chloride	4.0	0.50	5.0		81.0	80	120				
Styrene	5.1	0.50	5.0		102.0	80	120				
1,1,1,2-Tetrachloroethane	4.9	0.50	5.0		98.0	80	120				
1,1,2,2-Tetrachloroethane	5.1	0.50	5.0		102.0	80	120				
Tetrachloroethene	4.9	0.50	5.0		98.0	80	120				
Toluene	5.2	0.50	5.0		103.0	80	120				
1,1,1-Trichloroethane	5.0	0.50	5.0		100.0	80	120				
1,1,2-Trichloroethane	5.2	0.50	5.0		103.0	80	120				
Trichloroethene	5.0	0.50	5.0		101.0	80	120				
Trichlorofluoromethane	5.2	0.50	5.0		104.0	80	120				
1,2,3-Trichloropropane	5.1	0.50	5.0		102.0	80	120				
Vinyl chloride	4.8	0.50	5.0		96.0	80	120				
m+p-Xylenes	10	0.50	10		100.0	80	120				
o-Xylene	4.9	0.50	5.0		98.0	80	120				
Xylenes, Total	15	0.50	15		99.0	80	120				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		112.0	80	120				
Surr: Dibromofluoromethane	11	0.50	10		106.0	80	120				
Surr: p-Bromofluorobenzene	10	0.50	10		105.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 12:33 **Prep Date:**
Lab ID: CCV030522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	11	0.50	10		109.0	80	120				

Associated Samples: **B22030244-001E, B22030244-002B, B22030244-003A, B22030244-007E, B22030244-008A, B22030244-012E, B22030244-013A, B22030244-017E, B22030244-018A, B22030244-022E, B22030244-023A, B22030244-027E, B22030244-028A, B22030244-032F, B22030244-033A**

Run ID: Run Order: VOA5975C.I_220305A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 23:09 **Prep Date:**
Lab ID: CCV030522_Closing **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	50	150				
Bromobenzene	5.0	0.50	5.0		100.0	50	150				
Bromochloromethane	4.9	0.50	5.0		98.0	50	150				
Bromodichloromethane	5.0	0.50	5.0		101.0	50	150				
Bromoform	4.8	0.50	5.0		95.0	50	150				
Carbon tetrachloride	5.3	0.50	5.0		106.0	50	150				
Chlorobenzene	5.1	0.50	5.0		102.0	50	150				
Chlorodibromomethane	4.9	0.50	5.0		99.0	50	150				
Chloroethane	5.6	0.50	5.0		112.0	50	150				
Chloroform	4.9	0.50	5.0		98.0	50	150				
Chloromethane	5.3	0.50	5.0		106.0	50	150				
1,2-Dibromoethane	4.9	0.50	5.0		99.0	50	150				
2-Chlorotoluene	5.1	0.50	5.0		102.0	50	150				
Dibromomethane	5.2	0.50	5.0		104.0	50	150				
1,2-Dichlorobenzene	4.9	0.50	5.0		98.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 23:09 **Prep Date:**
Lab ID: CCV030522_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.3	0.50	5.0		106.0	50	150				
1,3-Dichlorobenzene	5.0	0.50	5.0		100.0	50	150				
1,4-Dichlorobenzene	5.0	0.50	5.0		101.0	50	150				
Dichlorodifluoromethane	5.4	0.50	5.0		109.0	50	150				
1,1-Dichloroethane	5.0	0.50	5.0		101.0	50	150				
1,2-Dichloroethane	4.7	0.50	5.0		94.0	50	150				
1,1-Dichloroethene	4.3	0.50	5.0		87.0	50	150				
cis-1,2-Dichloroethene	4.8	0.50	5.0		97.0	50	150				
trans-1,2-Dichloroethene	4.3	0.50	5.0		86.0	50	150				
1,2-Dichloropropane	5.2	0.50	5.0		103.0	50	150				
1,3-Dichloropropane	5.1	0.50	5.0		103.0	50	150				
2,2-Dichloropropane	4.7	0.50	5.0		95.0	50	150				
1,1-Dichloropropene	5.3	0.50	5.0		105.0	50	150				
cis-1,3-Dichloropropene	4.9	0.50	5.0		98.0	50	150				
trans-1,3-Dichloropropene	5.1	0.50	5.0		101.0	50	150				
Ethylbenzene	5.1	0.50	5.0		103.0	50	150				
Methyl tert-butyl ether (MTBE)	4.3	0.50	5.0		86.0	50	150				
Methyl ethyl ketone	44	10	50		88.0	50	150				
Methylene chloride	4.1	0.50	5.0		81.0	50	150				
Styrene	5.1	0.50	5.0		102.0	50	150				
1,1,1,2-Tetrachloroethane	5.0	0.50	5.0		101.0	50	150				
1,1,2,2-Tetrachloroethane	4.9	0.50	5.0		98.0	50	150				
Tetrachloroethene	5.3	0.50	5.0		107.0	50	150				
Toluene	5.2	0.50	5.0		105.0	50	150				
1,1,1-Trichloroethane	5.2	0.50	5.0		104.0	50	150				
1,1,2-Trichloroethane	5.1	0.50	5.0		103.0	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: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220305A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376041
Method: SW8260B **Analysis Date:** 03/05/2022 23:09 **Prep Date:**
Lab ID: CCV030522_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	5.7	0.50	5.0		113.0	50	150				
1,2,3-Trichloropropane	5.0	0.50	5.0		99.0	50	150				
Vinyl chloride	5.2	0.50	5.0		105.0	50	150				
m+p-Xylenes	10	0.50	10		104.0	50	150				
o-Xylene	5.1	0.50	5.0		102.0	50	150				
Xylenes, Total	15	0.50	15		103.0	50	150				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		110.0	50	150				
Surr: Dibromofluoromethane	11	0.50	10		107.0	50	150				
Surr: p-Bromofluorobenzene	10	0.50	10		103.0	50	150				
Surr: Toluene-d8	11	0.50	10		111.0	50	150				

Associated Samples: **B22030244-001E, B22030244-002B, B22030244-003A, B22030244-007E, B22030244-008A, B22030244-012E, B22030244-013A, B22030244-017E, B22030244-018A, B22030244-022E, B22030244-023A, B22030244-027E, B22030244-028A, B22030244-032F, B22030244-033A**

Run ID: Run Order: VOA5975C.I_220307A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 10:31 **Prep Date:**
Lab ID: CCV030722_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.2	0.50	5.0		104.0	80	120				
Bromobenzene	5.0	0.50	5.0		100.0	80	120				
Bromochloromethane	5.1	0.50	5.0		101.0	80	120				
Bromodichloromethane	5.2	0.50	5.0		103.0	80	120				
Bromoform	5.0	0.50	5.0		101.0	80	120				
Carbon tetrachloride	5.2	0.50	5.0		104.0	80	120				
Chlorobenzene	5.2	0.50	5.0		103.0	80	120				
Chlorodibromomethane	5.2	0.50	5.0		104.0	80	120				
Chloroethane	4.9	0.50	5.0		99.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 10:31 **Prep Date:**
Lab ID: CCV030722_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Chloroform	5.1	0.50	5.0		101.0	80	120				
Chloromethane	5.2	0.50	5.0		105.0	80	120				
1,2-Dibromoethane	5.3	0.50	5.0		105.0	80	120				
2-Chlorotoluene	5.1	0.50	5.0		101.0	80	120				
Dibromomethane	5.3	0.50	5.0		105.0	80	120				
1,2-Dichlorobenzene	5.0	0.50	5.0		100.0	80	120				
4-Chlorotoluene	5.2	0.50	5.0		105.0	80	120				
1,3-Dichlorobenzene	5.0	0.50	5.0		101.0	80	120				
1,4-Dichlorobenzene	5.0	0.50	5.0		101.0	80	120				
Dichlorodifluoromethane	5.2	0.50	5.0		105.0	80	120				
1,1-Dichloroethane	5.2	0.50	5.0		104.0	80	120				
1,2-Dichloroethane	5.2	0.50	5.0		105.0	80	120				
1,1-Dichloroethene	4.6	0.50	5.0		92.0	80	120				
cis-1,2-Dichloroethene	5.1	0.50	5.0		101.0	80	120				
trans-1,2-Dichloroethene	5.1	0.50	5.0		102.0	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	5.5	0.50	5.0		110.0	80	120				
1,1-Dichloropropene	5.3	0.50	5.0		106.0	80	120				
cis-1,3-Dichloropropene	5.0	0.50	5.0		101.0	80	120				
trans-1,3-Dichloropropene	5.4	0.50	5.0		108.0	80	120				
Ethylbenzene	5.1	0.50	5.0		102.0	80	120				
Methyl tert-butyl ether (MTBE)	4.9	0.50	5.0		97.0	80	120				
Methyl ethyl ketone	44	10	50		89.0	80	120				
Methylene chloride	5.2	0.50	5.0		103.0	80	120				
Styrene	5.3	0.50	5.0		105.0	80	120				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0		101.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 10:31 **Prep Date:**
Lab ID: CCV030722_ **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	5.3	0.50	5.0		106.0	80	120				
Tetrachloroethene	5.1	0.50	5.0		101.0	80	120				
Toluene	5.2	0.50	5.0		105.0	80	120				
1,1,1-Trichloroethane	5.2	0.50	5.0		104.0	80	120				
1,1,2-Trichloroethane	5.1	0.50	5.0		102.0	80	120				
Trichloroethene	5.0	0.50	5.0		101.0	80	120				
Trichlorofluoromethane	4.9	0.50	5.0		98.0	80	120				
1,2,3-Trichloropropane	4.8	0.50	5.0		97.0	80	120				
Vinyl chloride	5.1	0.50	5.0		102.0	80	120				
m+p-Xylenes	10	0.50	10		104.0	80	120				
o-Xylene	5.1	0.50	5.0		101.0	80	120				
Xylenes, Total	15	0.50	15		103.0	80	120				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		114.0	80	120				
Surr: Dibromofluoromethane	11	0.50	10		109.0	80	120				
Surr: p-Bromofluorobenzene	10	0.50	10		101.0	80	120				
Surr: Toluene-d8	11	0.50	10		109.0	80	120				

Associated Samples: **B22030244-001E, B22030244-022E, B22030244-023A, B22030244-032F, B22030244-037E, B22030244-038A, B22030244-042E, B22030244-043A, B22030244-047E, B22030244-048A**

Run ID: Run Order: VOA5975C.I_220307A: 25 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 21:34 **Prep Date:**
Lab ID: CCV030722_Closing **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		97.0	50	150				
Bromobenzene	4.8	0.50	5.0		96.0	50	150				
Bromochloromethane	4.6	0.50	5.0		91.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 25 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 21:34 **Prep Date:**
Lab ID: CCV030722_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	4.8	0.50	5.0		95.0	50	150				
Bromoform	4.5	0.50	5.0		89.0	50	150				
Carbon tetrachloride	5.0	0.50	5.0		100.0	50	150				
Chlorobenzene	4.8	0.50	5.0		96.0	50	150				
Chlorodibromomethane	4.8	0.50	5.0		95.0	50	150				
Chloroethane	5.7	0.50	5.0		114.0	50	150				
Chloroform	4.6	0.50	5.0		93.0	50	150				
Chloromethane	5.1	0.50	5.0		102.0	50	150				
1,2-Dibromoethane	4.6	0.50	5.0		91.0	50	150				
2-Chlorotoluene	4.9	0.50	5.0		97.0	50	150				
Dibromomethane	4.7	0.50	5.0		94.0	50	150				
1,2-Dichlorobenzene	4.7	0.50	5.0		93.0	50	150				
4-Chlorotoluene	5.0	0.50	5.0		100.0	50	150				
1,3-Dichlorobenzene	4.7	0.50	5.0		94.0	50	150				
1,4-Dichlorobenzene	4.7	0.50	5.0		94.0	50	150				
Dichlorodifluoromethane	5.3	0.50	5.0		106.0	50	150				
1,1-Dichloroethane	4.8	0.50	5.0		97.0	50	150				
1,2-Dichloroethane	4.7	0.50	5.0		93.0	50	150				
1,1-Dichloroethene	4.3	0.50	5.0		86.0	50	150				
cis-1,2-Dichloroethene	4.6	0.50	5.0		92.0	50	150				
trans-1,2-Dichloroethene	4.8	0.50	5.0		95.0	50	150				
1,2-Dichloropropane	4.7	0.50	5.0		94.0	50	150				
1,3-Dichloropropane	4.7	0.50	5.0		95.0	50	150				
2,2-Dichloropropane	4.7	0.50	5.0		94.0	50	150				
1,1-Dichloropropene	5.0	0.50	5.0		99.0	50	150				
cis-1,3-Dichloropropene	4.5	0.50	5.0		91.0	50	150				
trans-1,3-Dichloropropene	4.6	0.50	5.0		92.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VOA5975C.I_220307A: 25 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376042
Method: SW8260B **Analysis Date:** 03/07/2022 21:34 **Prep Date:**
Lab ID: CCV030722_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Ethylbenzene	4.8	0.50	5.0		96.0	50	150				
Methyl tert-butyl ether (MTBE)	4.6	0.50	5.0		92.0	50	150				
Methyl ethyl ketone	42	10	50		84.0	50	150				
Methylene chloride	4.2	0.50	5.0		85.0	50	150				
Styrene	4.8	0.50	5.0		96.0	50	150				
1,1,1,2-Tetrachloroethane	4.8	0.50	5.0		96.0	50	150				
1,1,2,2-Tetrachloroethane	4.7	0.50	5.0		94.0	50	150				
Tetrachloroethene	4.8	0.50	5.0		97.0	50	150				
Toluene	4.9	0.50	5.0		98.0	50	150				
1,1,1-Trichloroethane	4.9	0.50	5.0		98.0	50	150				
1,1,2-Trichloroethane	4.7	0.50	5.0		93.0	50	150				
Trichloroethene	4.9	0.50	5.0		99.0	50	150				
Trichlorofluoromethane	5.0	0.50	5.0		100.0	50	150				
1,2,3-Trichloropropane	4.8	0.50	5.0		96.0	50	150				
Vinyl chloride	5.0	0.50	5.0		100.0	50	150				
m+p-Xylenes	9.6	0.50	10		96.0	50	150				
o-Xylene	4.7	0.50	5.0		95.0	50	150				
Xylenes, Total	14	0.50	15		96.0	50	150				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		107.0	50	150				
Surr: Dibromofluoromethane	11	0.50	10		106.0	50	150				
Surr: p-Bromofluorobenzene	10	0.50	10		105.0	50	150				
Surr: Toluene-d8	11	0.50	10		110.0	50	150				

Associated Samples: **B22030244-001E, B22030244-022E, B22030244-023A, B22030244-032F, B22030244-037E, B22030244-038A, B22030244-042E, B22030244-043A, B22030244-047E, B22030244-048A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GECD.I_220307A: 10 **SampType:** Method Blank **Batch ID:** 164256
Method: SW8011 **Analysis Date:** 03/07/2022 16:58 **Prep Date:** 03/07/2022 09:01
Lab ID: MB-164256 **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	0.098	0.020	0.10		98.0	70	130				

Associated Samples: **B22030244-001G, B22030244-005A, B22030244-007G, B22030244-010A, B22030244-012G, B22030244-015A, B22030244-017G, B22030244-020A, B22030244-022G, B22030244-025A, B22030244-027G, B22030244-030A, B22030244-032H, B22030244-035A, B22030244-037G, B22030244-040A, B22030244-042G, B22030244-045A, B22030244-047G, B22030244-050A**

Run ID: Run Order: GECD.I_220307A: 11 **SampType:** Laboratory Control Sample **Batch ID:** 164256
Method: SW8011 **Analysis Date:** 03/07/2022 17:18 **Prep Date:** 03/07/2022 09:01
Lab ID: LCS-164256 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.26	0.010	0.25		102.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.10	0.020	0.10		102.0	70	130				

Associated Samples: **B22030244-001G, B22030244-005A, B22030244-007G, B22030244-010A, B22030244-012G, B22030244-015A, B22030244-017G, B22030244-020A, B22030244-022G, B22030244-025A, B22030244-027G, B22030244-030A, B22030244-032H, B22030244-035A, B22030244-037G, B22030244-040A, B22030244-042G, B22030244-045A, B22030244-047G, B22030244-050A**

Run ID: Run Order: GECD.I_220307A: 12 **SampType:** Laboratory Control Sample **Batch ID:** 164256
Method: SW8011 **Analysis Date:** 03/07/2022 17:38 **Prep Date:** 03/07/2022 09:02
Lab ID: LCS1-164256 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.11	0.010	0.10		109.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.098	0.020	0.10		98.0	70	130				

Associated Samples: **B22030244-001G, B22030244-005A, B22030244-007G, B22030244-010A, B22030244-012G, B22030244-015A, B22030244-017G, B22030244-020A, B22030244-022G, B22030244-025A, B22030244-027G, B22030244-030A, B22030244-032H, B22030244-035A, B22030244-037G, B22030244-040A, B22030244-042G, B22030244-045A, B22030244-047G, B22030244-050A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GECD.I_220307A: 25 **SampType:** Sample Matrix Spike **Batch ID:** 164256
Method: SW8011 **Analysis Date:** 03/07/2022 22:17 **Prep Date:** 03/07/2022 09:04
Lab ID: B22030244-001GMS **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.27	0.010	0.25	0.0	108.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.11	0.020	0.099	0.0	107.0	70	130				

Associated Samples: **B22030244-001G, B22030244-005A, B22030244-007G, B22030244-010A, B22030244-012G, B22030244-015A, B22030244-017G, B22030244-020A, B22030244-022G, B22030244-025A, B22030244-027G, B22030244-030A, B22030244-032H, B22030244-035A, B22030244-037G, B22030244-040A, B22030244-042G, B22030244-045A, B22030244-047G, B22030244-050A**

Run ID: Run Order: GECD.I_220307A: 26 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164256
Method: SW8011 **Analysis Date:** 03/07/2022 22:37 **Prep Date:** 03/07/2022 09:04
Lab ID: B22030244-001GMSD **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.27	0.010	0.25	0.0	108.0	60	140	0.27	0.2	20.0	
Surr: 1,1,1,2-Tetrachloroethane	0.11	0.020	0.099	0.0	109.0	70	130	0.0			

Associated Samples: **B22030244-001G, B22030244-005A, B22030244-007G, B22030244-010A, B22030244-012G, B22030244-015A, B22030244-017G, B22030244-020A, B22030244-022G, B22030244-025A, B22030244-027G, B22030244-030A, B22030244-032H, B22030244-035A, B22030244-037G, B22030244-040A, B22030244-042G, B22030244-045A, B22030244-047G, B22030244-050A**

Run ID: Run Order: GECD.I_220307A: 9 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164256
Method: SW8011 **Analysis Date:** 03/07/2022 16:38 **Prep Date:** 03/07/2022 09:02
Lab ID: CAL3-164256 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.11	0.010	0.10		108.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.10	0.020	0.10		101.0	80	120				

Associated Samples: **B22030244-001G, B22030244-005A, B22030244-007G, B22030244-010A, B22030244-012G, B22030244-015A, B22030244-017G, B22030244-020A, B22030244-022G, B22030244-025A, B22030244-027G, B22030244-030A, B22030244-032H, B22030244-035A, B22030244-037G, B22030244-040A, B22030244-042G, B22030244-045A, B22030244-047G, B22030244-050A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GECD.I_220307A: 27 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164256
Method: SW8011 **Analysis Date:** 03/07/2022 23:17 **Prep Date:** 03/07/2022 09:02
Lab ID: CAL5-164256 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.45	0.010	0.40		113.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.47	0.020	0.40		116.0	80	120				

Associated Samples: **B22030244-001G, B22030244-005A, B22030244-007G, B22030244-010A, B22030244-012G, B22030244-015A, B22030244-017G, B22030244-020A, B22030244-022G, B22030244-025A, B22030244-027G, B22030244-030A, B22030244-032H, B22030244-035A, B22030244-037G, B22030244-040A, B22030244-042G, B22030244-045A, B22030244-047G, B22030244-050A**

Run ID: Run Order: GECD.I_220307A: 38 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164256
Method: SW8011 **Analysis Date:** 03/08/2022 03:35 **Prep Date:** 03/07/2022 09:02
Lab ID: CAL3-164256 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.12	0.010	0.10		119.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.11	0.020	0.10		107.0	80	120				

Associated Samples: **B22030244-001G, B22030244-005A, B22030244-007G, B22030244-010A, B22030244-012G, B22030244-015A, B22030244-017G, B22030244-020A, B22030244-022G, B22030244-025A, B22030244-027G, B22030244-030A, B22030244-032H, B22030244-035A, B22030244-037G, B22030244-040A, B22030244-042G, B22030244-045A, B22030244-047G, B22030244-050A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VARIAN1_220307A: 4 **SampType:** Method Blank **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/07/2022 14:00 **Prep Date:**
Lab ID: MBLK_0307VAR12r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	ND	10									
Total Purgeable Hydrocarbons	ND	10									
Surr: Trifluorotoluene	19	1.0	25		75.0	70	130				

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Run ID: Run Order: VARIAN1_220307A: 16 **SampType:** Method Blank **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/07/2022 22:54 **Prep Date:**
Lab ID: MBLK_0307VAR27r **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		74.0	70	130				

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VARIAN1_220307A: 29 **SampType:** Method Blank **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/08/2022 10:15 **Prep Date:**
Lab ID: MBLK_0307VAR47r **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: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Run ID: Run Order: VARIAN1_220307A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/07/2022 13:26 **Prep Date:**
Lab ID: LCS_0307VAR11r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	168	20	170		99.0	78	122				
Total Purgeable Hydrocarbons	203	20	200		102.0	70	130				
Surr: Trifluorotoluene	22	1.0	25		88.0	70	130				

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VARIAN1_220307A: 15 **SampType:** Laboratory Control Sample **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/07/2022 21:46 **Prep Date:**
Lab ID: LCS_0307VAR25r **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		96.0	78	122				
Total Purgeable Hydrocarbons	198	20	200		99.0	70	130				
Surr: Trifluorotoluene	21	1.0	25		83.0	70	130				

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Run ID: Run Order: VARIAN1_220307A: 28 **SampType:** Laboratory Control Sample **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/08/2022 09:07 **Prep Date:**
Lab ID: LCS_0307VAR45r **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	170		99.0	78	122				
Total Purgeable Hydrocarbons	204	20	200		102.0	70	130				
Surr: Trifluorotoluene	22	1.0	25		90.0	70	130				

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VARIAN1_220307A: 30 **SampType:** Sample Matrix Spike **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/08/2022 10:49 **Prep Date:**
Lab ID: B22030244-007FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	170	20	170	0.0	100.0	78	122				
Total Purgeable Hydrocarbons	205	20	200	0.0	102.0	70	130				
Surr: Trifluorotoluene	23	1.0	25	0.0	92.0	70	130				

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Run ID: Run Order: VARIAN1_220307A: 31 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/08/2022 11:23 **Prep Date:**
Lab ID: B22030244-007FMSD **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	170	0.0	99.0	78	122	170	0.6	20.0	
Total Purgeable Hydrocarbons	202	20	200	0.0	101.0	70	130	205	1.3	20.0	
Surr: Trifluorotoluene	23	1.0	25	0.0	92.0	70	130	0.0			

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VARIAN1_220307A: 36 **SampType:** Sample Matrix Spike **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/08/2022 17:05 **Prep Date:**
Lab ID: B22030244-042FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	165	20	170	0.0	97.0	78	122				
Total Purgeable Hydrocarbons	198	20	200	0.0	99.0	70	130				
Surr: Trifluorotoluene	23	1.0	25	0.0	91.0	70	130				

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Run ID: Run Order: VARIAN1_220307A: 37 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/08/2022 17:39 **Prep Date:**
Lab ID: B22030244-042FMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	164	20	170	0.0	97.0	78	122	165	0.4	20.0	
Total Purgeable Hydrocarbons	197	20	200	0.0	99.0	70	130	198	0.5	20.0	
Surr: Trifluorotoluene	23	1.0	25	0.0	91.0	70	130	0.0			

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GCFID-HP5-B_220308A: 5 **SampType:** Method Blank **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/08/2022 14:40 **Prep Date:** 03/07/2022 10:31
Lab ID: MB-164267 **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		93.0	56	125				
Surr: n-Triacontane	0.089	0.0020	0.10		89.0	50	150				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308B: 5 **SampType:** Method Blank **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/09/2022 19:13 **Prep Date:** 03/07/2022 10:31
Lab ID: MB-164267 **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)	0.19	0.0020	0.20		96.0	56	125				
Surr: n-Triacontane (SGT)	0.086	0.0020	0.10		86.0	50	150				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GCFID-HP5-B_220308A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/08/2022 13:12 **Prep Date:** 03/07/2022 10:31
Lab ID: LCS-164267 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	12	0.30	15		79.0	36	132				
Total Extractable Hydrocarbons	13	0.30	15		84.0	60	132				
Surr: o-Terphenyl	0.18	0.0020	0.20		89.0	56	125				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308A: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/08/2022 13:57 **Prep Date:** 03/07/2022 10:31
Lab ID: LCSD-164267 **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		86.0	36	132	12	9.1	20.0	
Total Extractable Hydrocarbons	14	0.30	15		92.0	60	132	13	9.1	20.0	
Surr: o-Terphenyl	0.19	0.0020	0.20		97.0	56	125	0.0			

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GCFID-HP5-B_220308A: 23 **SampType:** Laboratory Control Sample **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/09/2022 12:04 **Prep Date:** 03/07/2022 10:31
Lab ID: LCS-164267-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.9	0.30	5.0		98.0	41	113				
Surr: n-Triacontane	0.084	0.0020	0.10		84.0	50	150				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308A: 24 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/09/2022 13:30 **Prep Date:** 03/07/2022 10:31
Lab ID: LCSD-164267-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.9	0.30	5.0		97.0	41	113	4.9	1.1	20.0	
Surr: n-Triacontane	0.084	0.0020	0.10		84.0	50	150	0.0			

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308B: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/09/2022 17:47 **Prep Date:** 03/07/2022 10:31
Lab ID: LCS-164267 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	12	0.30	15		79.0	36	132				
Total Extractable Hydrocarbons (SGT)	13	0.30	15		84.0	60	132				
Surr: o-Terphenyl (SGT)	0.19	0.0020	0.20		93.0	56	125				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GCFID-HP5-B_220308B: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/09/2022 18:30 **Prep Date:** 03/07/2022 10:31
Lab ID: LCSD-164267 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	12	0.30	15		81.0	36	132	12	2.7	20.0	
Total Extractable Hydrocarbons (SGT)	13	0.30	15		86.0	60	132	13	2.5	20.0	
Surr: o-Terphenyl (SGT)	0.19	0.0020	0.20		95.0	56	125	0.0			

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308B: 15 **SampType:** Laboratory Control Sample **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/10/2022 04:29 **Prep Date:** 03/07/2022 10:31
Lab ID: LCS-164267-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	4.9	0.30	5.0		97.0	41	113				
Surr: n-Triacontane (SGT)	0.081	0.0020	0.10		81.0	50	150				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308B: 16 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/10/2022 05:54 **Prep Date:** 03/07/2022 10:31
Lab ID: LCSD-164267-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	4.9	0.30	5.0		97.0	41	113	4.9	0.1	20.0	
Surr: n-Triacontane (SGT)	0.083	0.0020	0.10		83.0	50	150	0.0			

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GCFID-HP5-B_220308A: 14 **SampType:** Sample Matrix Spike **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/09/2022 00:39 **Prep Date:** 03/07/2022 10:31
Lab ID: B22030244-022CMS **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	12	0.30	14	0.0	83.0	36	132				
Total Extractable Hydrocarbons	13	0.30	14	0.0	89.0	60	132				
Surr: o-Terphenyl	0.18	0.0020	0.19	0.0	93.0	56	125				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308A: 18 **SampType:** Sample Matrix Spike **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/09/2022 06:22 **Prep Date:** 03/07/2022 10:31
Lab ID: B22030244-027CMS-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)	5.2	0.30	4.8	0.0	109.0	41	113				
Surr: n-Triacontane	0.085	0.0020	0.095	0.0	89.0	50	150				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GCFID-HP5-B_220308B: 8 **SampType:** Sample Matrix Spike **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/09/2022 21:21 **Prep Date:** 03/07/2022 10:31
Lab ID: B22030244-022CMS **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	11	0.30	14	0.0	78.0	36	132				
Total Extractable Hydrocarbons (SGT)	12	0.30	14	0.0	83.0	60	132				
Surr: o-Terphenyl (SGT)	0.17	0.0020	0.19	0.0	92.0	56	125				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308B: 12 **SampType:** Sample Matrix Spike **Batch ID:** 164267
Method: SW8015C **Analysis Date:** 03/10/2022 00:55 **Prep Date:** 03/07/2022 10:31
Lab ID: B22030244-027CMS-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	4.6	0.30	4.8	0.0	96.0	41	113				
Surr: n-Triacontane (SGT)	0.071	0.0020	0.095	0.0	75.0	50	150				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VARIAN1_220307A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/07/2022 10:36 **Prep Date:**
Lab ID: CCV_0307VAR06r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	177	20	168		105.0	80	120				
Total Purgeable Hydrocarbons	212	20	200		106.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		89.0	80	120				

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Run ID: Run Order: VARIAN1_220307A: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/07/2022 21:12 **Prep Date:**
Lab ID: CCV_0307VAR24r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	179	20	168		107.0	80	120				
Total Purgeable Hydrocarbons	215	20	200		108.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		89.0	80	120				

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: VARIAN1_220307A: 27 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/08/2022 08:33 **Prep Date:**
Lab ID: CCV_0307VAR44r **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	203	20	200		102.0	80	120				
Surr: Trifluorotoluene	21	1.0	25		86.0	80	120				

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Run ID: Run Order: VARIAN1_220307A: 39 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375789
Method: SW8015C **Analysis Date:** 03/08/2022 19:55 **Prep Date:**
Lab ID: CCV_0307VAR64r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	179	20	168		107.0	80	120				
Total Purgeable Hydrocarbons	216	20	200		108.0	80	120				
Surr: Trifluorotoluene	24	1.0	25		96.0	80	120				

Associated Samples: **B22030244-001F, B22030244-002C, B22030244-004A, B22030244-007F, B22030244-009A, B22030244-012F, B22030244-014A, B22030244-017F, B22030244-019A, B22030244-022F, B22030244-024A, B22030244-027F, B22030244-029A, B22030244-032G, B22030244-034A, B22030244-037F, B22030244-039A, B22030244-042F, B22030244-044A, B22030244-047F, B22030244-049A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GCFID-HP5-B_220308A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375805
Method: SW8015C **Analysis Date:** 03/08/2022 10:21 **Prep Date:**
Lab ID: CCV_0308HP504r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.0	0.30	5.0		99.0	80	120				
Surr: n-Triacontane	0.18	0.0020	0.20		91.0	80	120				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375805
Method: SW8015C **Analysis Date:** 03/08/2022 11:04 **Prep Date:**
Lab ID: CCV_0308HP505r **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		91.0	80	120				
Total Extractable Hydrocarbons	14	0.30	15		94.0	80	120				
Surr: o-Terphenyl	0.18	0.0020	0.20		92.0	80	120				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308A: 11 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375805
Method: SW8015C **Analysis Date:** 03/08/2022 20:22 **Prep Date:**
Lab ID: CCV_0308HP518r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.0	0.30	5.0		100.0	80	120				
Surr: n-Triacontane	0.18	0.0020	0.20		91.0	80	120				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GCFID-HP5-B_220308A: 12 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375805
Method: SW8015C **Analysis Date:** 03/08/2022 21:05 **Prep Date:**
Lab ID: CCV_0308HP519r **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		91.0	80	120				
Total Extractable Hydrocarbons	14	0.30	15		94.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		93.0	80	120				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308A: 19 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375805
Method: SW8015C **Analysis Date:** 03/09/2022 07:47 **Prep Date:**
Lab ID: CCV_0308HP534r-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		93.0	80	120				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GCFID-HP5-B_220308A: 20 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375805
Method: SW8015C **Analysis Date:** 03/09/2022 08:30 **Prep Date:**
Lab ID: CCV_0308HP535r **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		91.0	80	120				
Total Extractable Hydrocarbons	14	0.30	15		94.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		93.0	80	120				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308A: 25 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375805
Method: SW8015C **Analysis Date:** 03/09/2022 14:56 **Prep Date:**
Lab ID: CCV_0308HP544r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.0	0.30	5.0		101.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		95.0	80	120				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GCFID-HP5-B_220308A: 26 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375805
Method: SW8015C **Analysis Date:** 03/09/2022 15:39 **Prep Date:**
Lab ID: CCV_0308HP545r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		98.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		101.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		100.0	80	120				

Associated Samples: **B22030244-001C, B22030244-002A, B22030244-007C, B22030244-012C, B22030244-017C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C, B22030244-042C, B22030244-047C**

Run ID: Run Order: GCFID-HP5-B_220308B: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375895
Method: SW8015C **Analysis Date:** 03/09/2022 14:56 **Prep Date:**
Lab ID: CCV_0308HP544r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.0	0.30	5.0		101.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		95.0	80	120				

Associated Samples: **B22030244-012C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C**

Run ID: Run Order: GCFID-HP5-B_220308B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375895
Method: SW8015C **Analysis Date:** 03/09/2022 15:39 **Prep Date:**
Lab ID: CCV_0308HP545r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		98.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		101.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		100.0	80	120				

Associated Samples: **B22030244-012C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: GCFID-HP5-B_220308B: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375895
Method: SW8015C **Analysis Date:** 03/10/2022 02:20 **Prep Date:**
Lab ID: CCV_0308HP560r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.3	0.30	5.0		105.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		97.0	80	120				

Associated Samples: **B22030244-012C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C**

Run ID: Run Order: GCFID-HP5-B_220308B: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375895
Method: SW8015C **Analysis Date:** 03/10/2022 03:03 **Prep Date:**
Lab ID: CCV_0308HP561r **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		99.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		102.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		100.0	80	120				

Associated Samples: **B22030244-012C, B22030244-022C, B22030244-027C, B22030244-032D, B22030244-037C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: FID-HEADSPACE_220307A: 4 **SampType:** Method Blank **Batch ID:** R375734
Method: SW8015M **Analysis Date:** 03/07/2022 11:00 **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: **B22030244-001H, B22030244-006A, B22030244-007H, B22030244-011A, B22030244-012H, B22030244-016A, B22030244-017H, B22030244-021A, B22030244-022H, B22030244-026A, B22030244-027H, B22030244-031A, B22030244-032I, B22030244-036A, B22030244-037H, B22030244-041A, B22030244-042H, B22030244-046A, B22030244-047H, B22030244-051A**

Run ID: Run Order: FID-HEADSPACE_220307A: 2 **SampType:** Laboratory Control Sample **Batch ID:** R375734
Method: SW8015M **Analysis Date:** 03/07/2022 09:29 **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		100.0	85	115				

Associated Samples: **B22030244-001H, B22030244-006A, B22030244-007H, B22030244-011A, B22030244-012H, B22030244-016A, B22030244-017H, B22030244-021A, B22030244-022H, B22030244-026A, B22030244-027H, B22030244-031A, B22030244-032I, B22030244-036A, B22030244-037H, B22030244-041A, B22030244-042H, B22030244-046A, B22030244-047H, B22030244-051A**

Run ID: Run Order: FID-HEADSPACE_220307A: 3 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** R375734
Method: SW8015M **Analysis Date:** 03/07/2022 09:29 **Prep Date:**
Lab ID: LCSD **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	97	2.0	100		97.0	85	115	100	3.3	20.0	

Associated Samples: **B22030244-001H, B22030244-006A, B22030244-007H, B22030244-011A, B22030244-012H, B22030244-016A, B22030244-017H, B22030244-021A, B22030244-022H, B22030244-026A, B22030244-027H, B22030244-031A, B22030244-032I, B22030244-036A, B22030244-037H, B22030244-041A, B22030244-042H, B22030244-046A, B22030244-047H, B22030244-051A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

Run ID: Run Order: FID-HEADSPACE_220307A: 20 **SampType:** Sample Duplicate **Batch ID:** R375734
Method: SW8015M **Analysis Date:** 03/07/2022 12:50 **Prep Date:**
Lab ID: B22030244-037HDUP **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			0.00072		20.0	

Associated Samples: **B22030244-001H, B22030244-006A, B22030244-007H, B22030244-011A, B22030244-012H, B22030244-016A, B22030244-017H, B22030244-021A, B22030244-022H, B22030244-026A, B22030244-027H, B22030244-031A, B22030244-032I, B22030244-036A, B22030244-037H, B22030244-041A, B22030244-042H, B22030244-046A, B22030244-047H, B22030244-051A**

Run ID: Run Order: FID-HEADSPACE_220307A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375734
Method: SW8015M **Analysis Date:** 03/07/2022 09:17 **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	93	2.0	100		93.0	85	115				

Associated Samples: **B22030244-001H, B22030244-006A, B22030244-007H, B22030244-011A, B22030244-012H, B22030244-016A, B22030244-017H, B22030244-021A, B22030244-022H, B22030244-026A, B22030244-027H, B22030244-031A, B22030244-032I, B22030244-036A, B22030244-037H, B22030244-041A, B22030244-042H, B22030244-046A, B22030244-047H, B22030244-051A**

Run ID: Run Order: FID-HEADSPACE_220307A: 26 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375734
Method: SW8015M **Analysis Date:** 03/07/2022 13:34 **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	97	2.0	100		97.0	85	115				

Associated Samples: **B22030244-001H, B22030244-006A, B22030244-007H, B22030244-011A, B22030244-012H, B22030244-016A, B22030244-017H, B22030244-021A, B22030244-022H, B22030244-026A, B22030244-027H, B22030244-031A, B22030244-032I, B22030244-036A, B22030244-037H, B22030244-041A, B22030244-042H, B22030244-046A, B22030244-047H, B22030244-051A**

Analytical QC Exceptions Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01

Report Date: 03/14/2022

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	R375855	001A, 007A, 012A, 017A, 022A, 027A, 032A, 037A, 042A, 047A	SD	B22030433-001ADIL	3/9/2022	12:15	Lead					10.0	N
SW8260B	8260-Volatile Organic Compounds QC Samples	R376041	001E, 002B, 003A, 007E, 008A, 012E, 013A, 017E, 018A, 022E, 023A, 027E, 028A, 032F, 033A	MSD-DOD	B22030244-002BMSD	3/5/2022	22:14	1,1-Dichloroethane	88.0	77	125	24	20.0	R
								1,1-Dichloroethene	85.0	71	131	24	20.0	R
								Methylene chloride	80.0	74	124	24	20.0	R

Preparation and Analysis Dates Report

Work Order: B22030244
Client: AECOM - Honolulu
Project Name: CV18F0126, 60571032.02.46.01
Report Date: 3/14/2022

Lab ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Method	Prep Date	Prep Batch	Analysis Method	Analysis Date
001B	ERH2607(OWDFMW08A)	02/28/2022 13:45	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 09:01
001C	ERH2607(OWDFMW08A)	02/28/2022 13:45	Ground Water	Diesel Range Organics		SW3520C	03/07/2022 10:32	164267	SW8015C	03/08/2022 16:05
001G	ERH2607(OWDFMW08A)	02/28/2022 13:45	Ground Water	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/07/2022 21:58
002A	ERH2608 (OWDFMW08A) FD	02/28/2022 13:45	Ground Water	Diesel Range Organics		SW3520C	03/07/2022 10:32	164267	SW8015C	03/08/2022 16:48
005A	ERH2606 Trip Blank-14894	02/28/2022 13:45	Trip Blank	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/07/2022 18:58
007B	ERH2605 (OWDFMW07A)	02/28/2022 17:40	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 09:57
007C	ERH2605 (OWDFMW07A)	02/28/2022 17:40	Ground Water	Diesel Range Organics		SW3520C	03/07/2022 10:32	164267	SW8015C	03/08/2022 15:23
007G	ERH2605 (OWDFMW07A)	02/28/2022 17:40	Ground Water	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/07/2022 19:18
010A	ERH2604 Trip Blank-14833	02/28/2022 17:40	Trip Blank	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/07/2022 19:38
012B	ERH2574 (RHMW16A)	02/28/2022 12:35	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 10:10
012C	ERH2574 (RHMW16A)	02/28/2022 12:35	Ground Water	Diesel Range Organics		SW3520C	03/07/2022 10:32	164267	SW8015C	03/08/2022 18:57
						SW3520C	03/07/2022 10:32	164267	SW8015C	03/09/2022 22:46
012G	ERH2574 (RHMW16A)	02/28/2022 12:35	Ground Water	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/07/2022 19:58
015A	ERH2572 Trip Blank-14894	02/28/2022 12:35	Trip Blank	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/07/2022 20:18
017B	ERH2584 (RHMW08)	02/28/2022 17:35	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 10:22
017C	ERH2584 (RHMW08)	02/28/2022 17:35	Ground Water	Diesel Range Organics		SW3520C	03/07/2022 10:32	164267	SW8015C	03/09/2022 04:56
017G	ERH2584 (RHMW08)	02/28/2022 17:35	Ground Water	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/07/2022 20:38
020A	ERH2583 Trip Blank-14833	02/28/2022 17:35	Trip Blank	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/07/2022 20:58
022B	ERH2582 (RHMW06)	02/28/2022 15:15	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 10:35
022C	ERH2582 (RHMW06)	02/28/2022 15:15	Ground Water	Diesel Range Organics		SW3520C	03/07/2022 10:31	164267	SW8015C	03/08/2022 23:56
						SW3520C	03/07/2022 10:31	164267	SW8015C	03/09/2022 20:38
022G	ERH2582 (RHMW06)	02/28/2022 15:15	Ground Water	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/07/2022 21:18
025A	ERH2581 Trip Blank-14833	02/28/2022 15:15	Trip Blank	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/07/2022 21:38
027B	ERH2578 (RHMW04)	03/01/2022 15:30	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 11:00

Preparation and Analysis Dates Report

Work Order: B22030244
Client: AECOM - Honolulu
Project Name: CV18F0126, 60571032.02.46.01
Report Date: 3/14/2022

027C	ERH2578 (RHMW04)	03/01/2022 15:30	Ground Water	Diesel Range Organics		SW3520C	03/07/2022 10:32	164267	SW8015C	03/09/2022 03:31
						SW3520C	03/07/2022 10:32	164267	SW8015C	03/09/2022 19:55
027G	ERH2578 (RHMW04)	03/01/2022 15:30	Ground Water	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/07/2022 23:57
030A	ERH2577 Trip Blank-14833	03/01/2022 15:30	Trip Blank	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/08/2022 00:16
032B	ERH2624 (RHMW07)	03/01/2022 12:55	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 11:13
032D	ERH2624 (RHMW07)	03/01/2022 12:55	Ground Water	Diesel Range Organics		SW3520C	03/07/2022 10:32	164267	SW8015C	03/09/2022 02:05
						SW3520C	03/07/2022 10:32	164267	SW8015C	03/10/2022 00:12
032H	ERH2624 (RHMW07)	03/01/2022 12:55	Ground Water	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/08/2022 00:36
035A	ERH2623 Trip Blank-14833	03/01/2022 12:55	Trip Blank	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/08/2022 00:56
037B	ERH2588 (RHMW12A)	03/01/2022 18:20	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 11:25
037C	ERH2588 (RHMW12A)	03/01/2022 18:20	Ground Water	Diesel Range Organics		SW3520C	03/07/2022 10:32	164267	SW8015C	03/09/2022 11:22
						SW3520C	03/07/2022 10:32	164267	SW8015C	03/09/2022 23:29
037G	ERH2588 (RHMW12A)	03/01/2022 18:20	Ground Water	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/08/2022 01:16
040A	ERH2587 Trip Blank-14733	03/01/2022 18:20	Trip Blank	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/08/2022 01:36
042B	ERH2596 (RHMW16)	03/01/2022 15:10	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 11:38
042C	ERH2596 (RHMW16)	03/01/2022 15:10	Ground Water	Diesel Range Organics		SW3520C	03/07/2022 10:32	164267	SW8015C	03/08/2022 18:14
042G	ERH2596 (RHMW16)	03/01/2022 15:10	Ground Water	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/08/2022 01:56
045A	ERH2595 Trip Blank-14833	03/01/2022 15:10	Trip Blank	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/08/2022 02:15
047B	ERH2592 (RHMW14-3)	03/01/2022 14:25	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 11:50
047C	ERH2592 (RHMW14-3)	03/01/2022 14:25	Ground Water	Diesel Range Organics		SW3520C	03/07/2022 10:32	164267	SW8015C	03/09/2022 10:39
047G	ERH2592 (RHMW14-3)	03/01/2022 14:25	Ground Water	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/08/2022 02:35
050A	ERH2591 Trip Blank-14894	03/01/2022 14:25	Trip Blank	EDB in Water by ECD		SW8011	03/07/2022 09:04	164256	SW8011	03/08/2022 02:55

Chemical Abstracts Service (CAS) Registry Numbers

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030244
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/14/2022

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

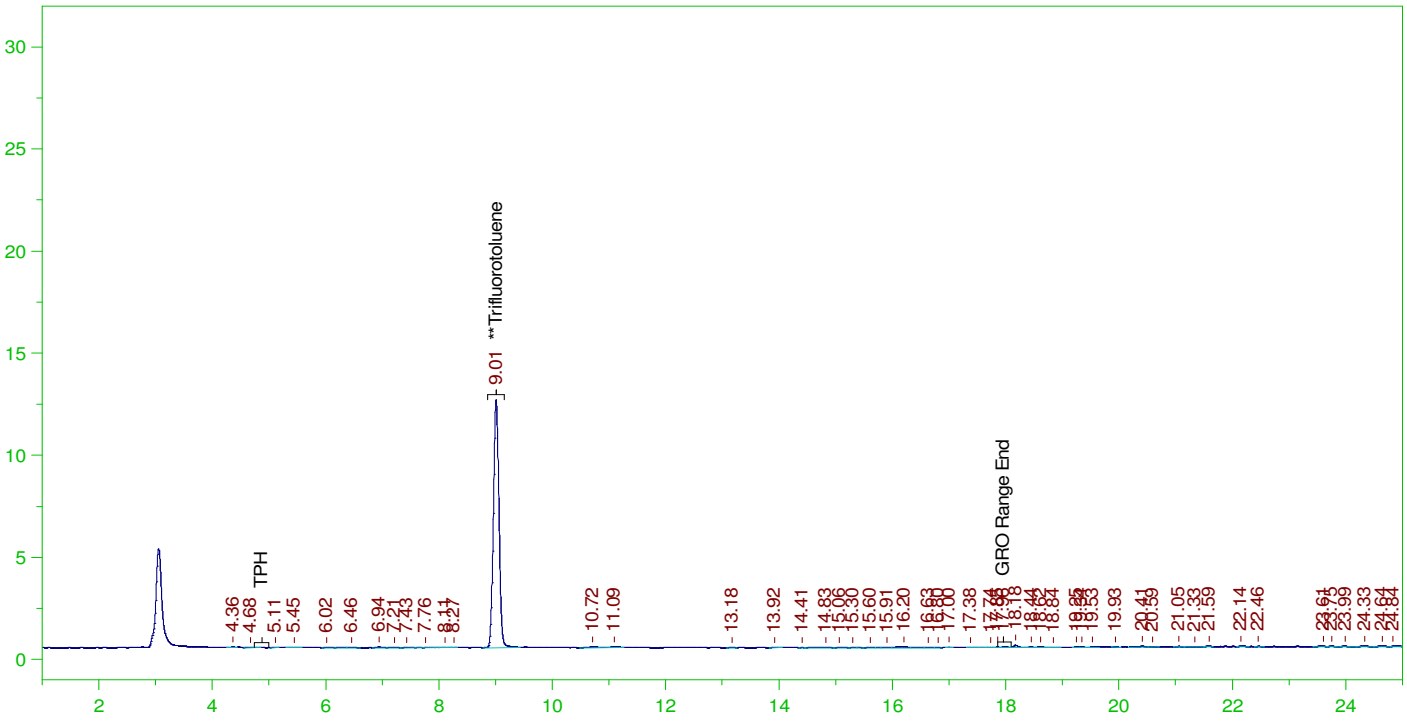
Total Extractable Hydrocarbons (SGT)

ORGANIC CHARACTERISTICS

Methane	74-82-8

ERH2607 (OWDFMW08A)

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0031.RAW B22030244-001F ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-001F ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0031.RAW
Date & Time Acquired: 3/8/2022 1:10:38 AM
Method File: G:\Org\VAR\Methods\211208G244-1DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

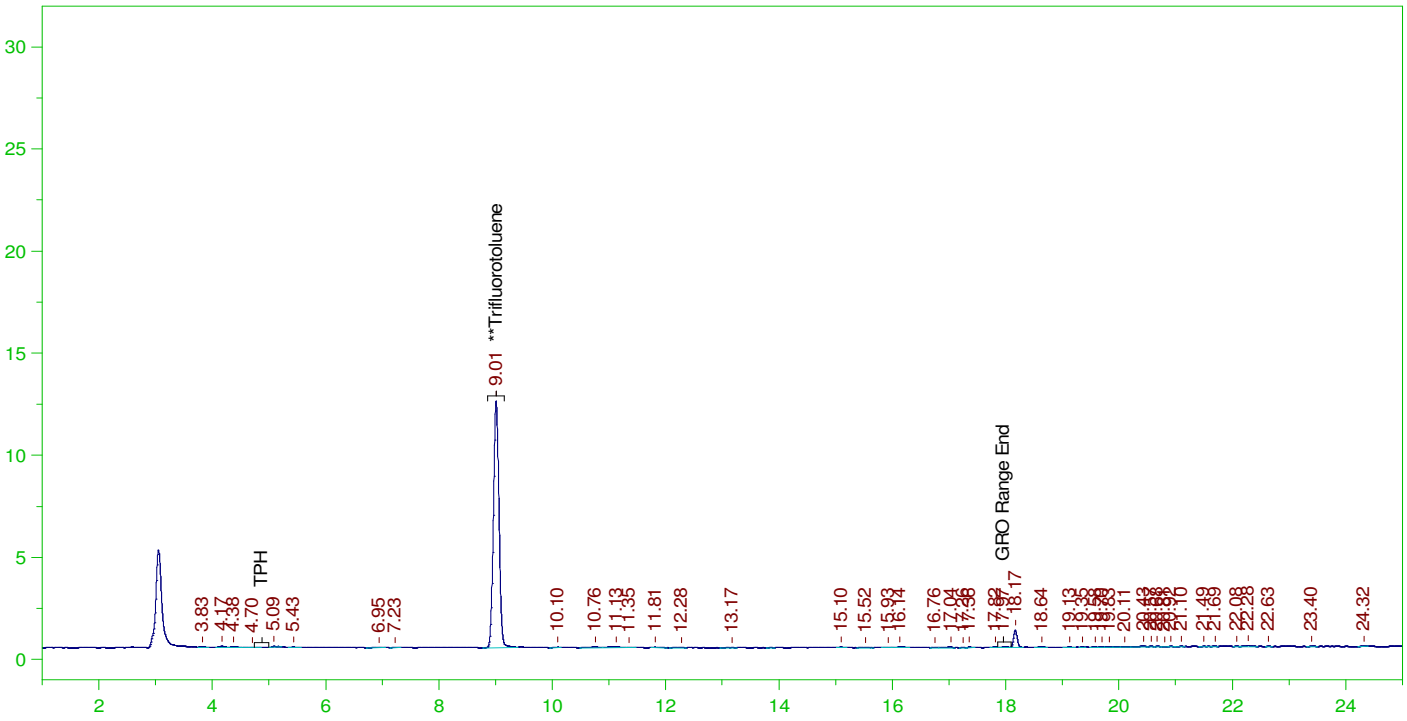
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	17.988	71.95	-

C6 to C10 Area:6553.208 C6 to C10 Amount: 1.337418
TPH Area:12140.87 TPH Amount: 2.540795

ERH2608 (OWDFMW08A) FD

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0033.RAW B22030244-002C ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-002C ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0033.RAW
Date & Time Acquired: 3/8/2022 2:18:51 AM
Method File: G:\Org\VAR\Methods\211208G244-2DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

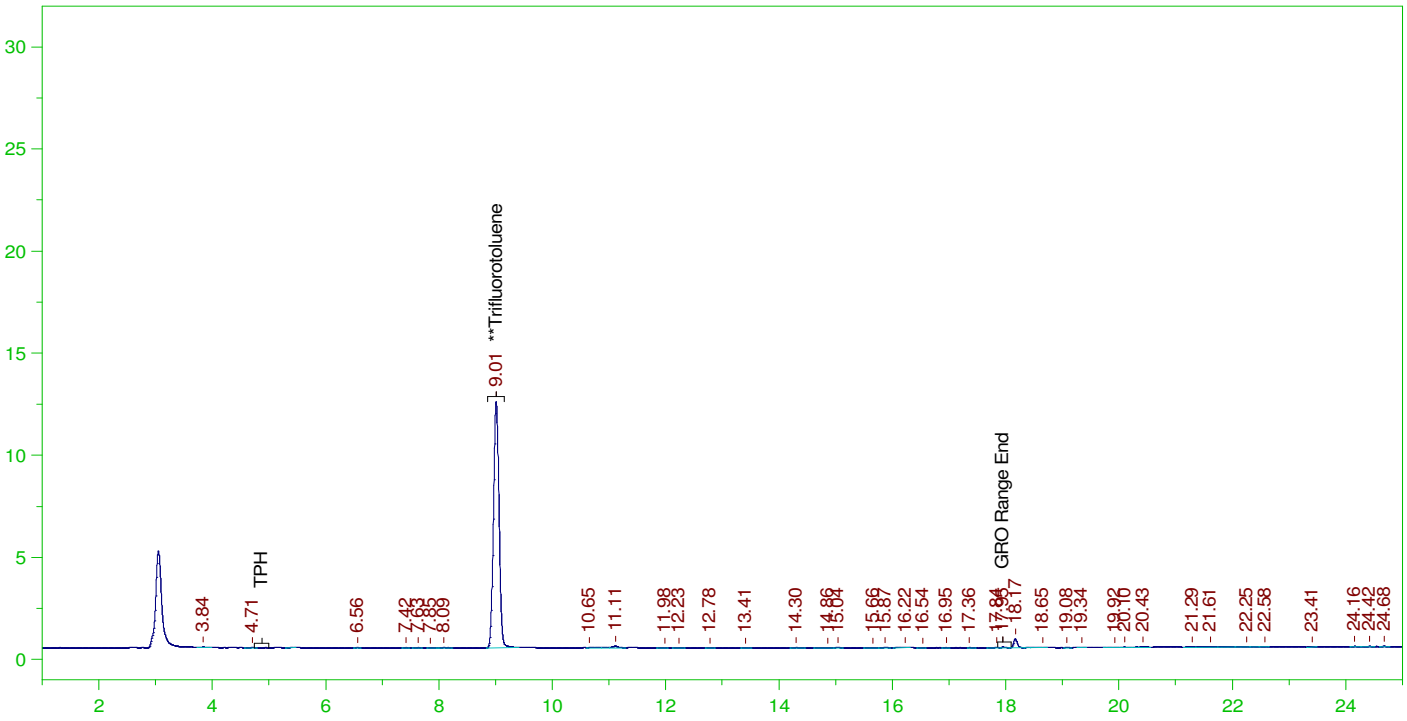
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	17.959	71.84	-

C6 to C10 Area:4451.581 C6 to C10 Amount: 0.9085056
TPH Area:13776.27 TPH Amount: 2.883045

ERH2606 Trip Blank-14894

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0016.RAW B22030244-004A ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-004A ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0016.RAW
Date & Time Acquired: 3/7/2022 4:39:36 PM
Method File: G:\Org\VAR\Methods\211208G244-4DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

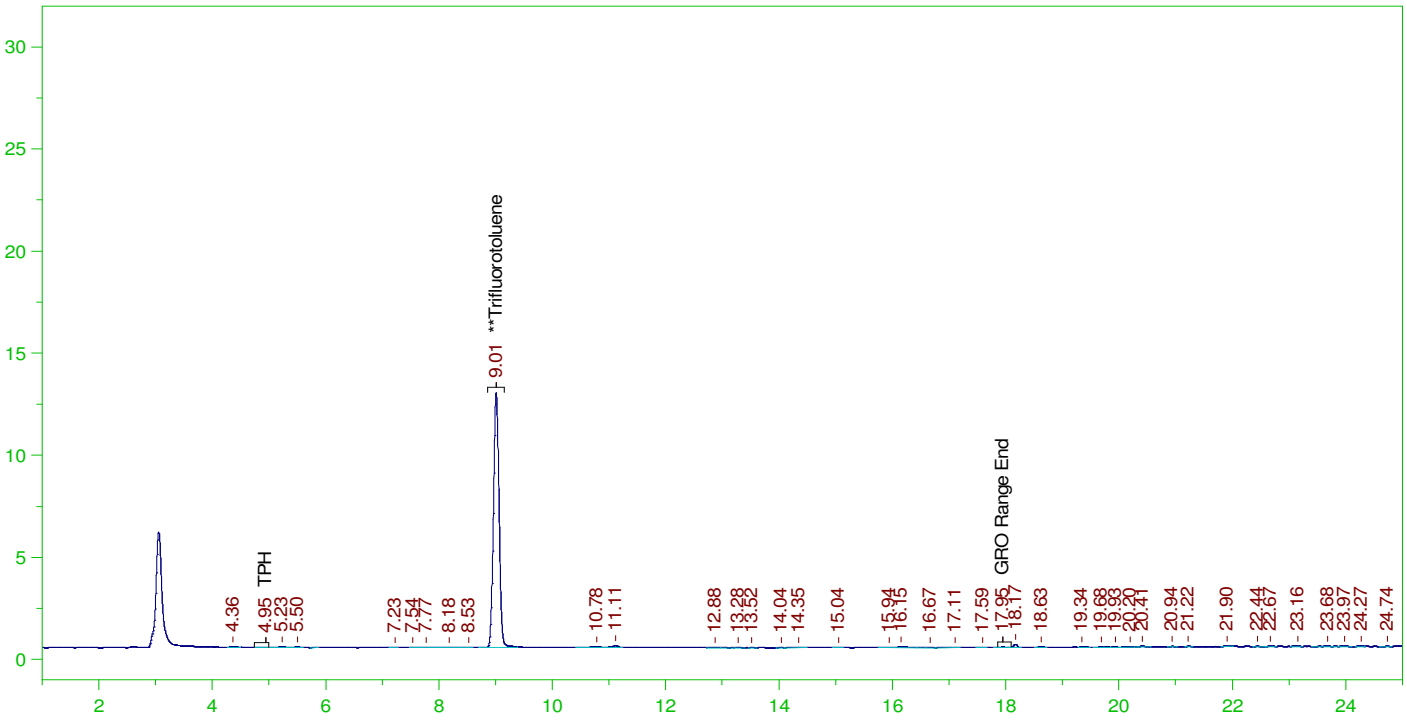
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.01	25.	17.865	71.46	-

C6 to C10 Area:3395.056 C6 to C10 Amount: 0.6928836
TPH Area:7925.915 TPH Amount: 1.658706

ERH2605 (OWDFMW07A)

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0014.RAW B22030244-007F ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-007F ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0014.RAW
Date & Time Acquired: 3/7/2022 3:08:50 PM
Method File: G:\Org\VAR\Methods\211208G244-7DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

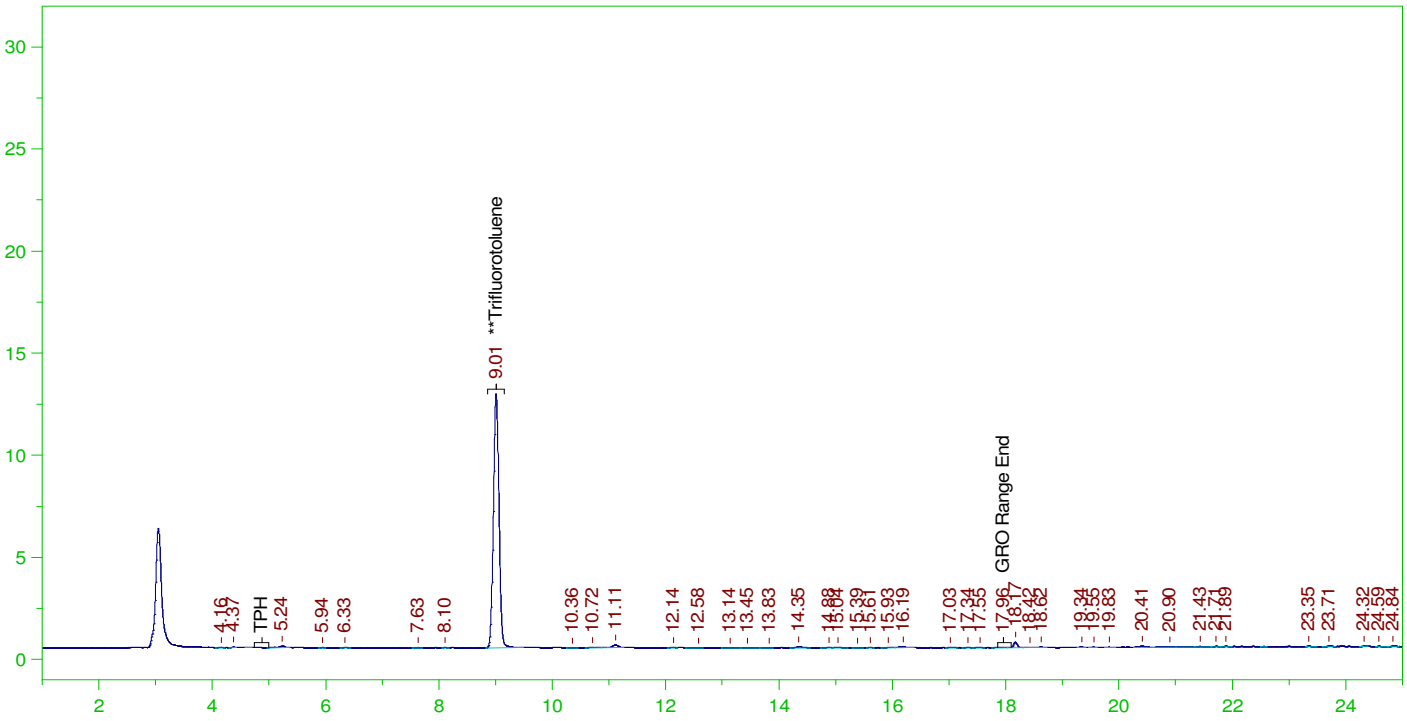
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.01	25.	18.573	74.29	-

C6 to C10 Area:4718.925 C6 to C10 Amount: 0.9630668
TPH Area:7943.231 TPH Amount: 1.66233

ERH2604 Trip Blank-14754

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0017.RAW B22030244-009A ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-009A ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0017.RAW
Date & Time Acquired: 3/7/2022 5:13:37 PM
Method File: G:\Org\VAR\Methods\211208G244-9DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

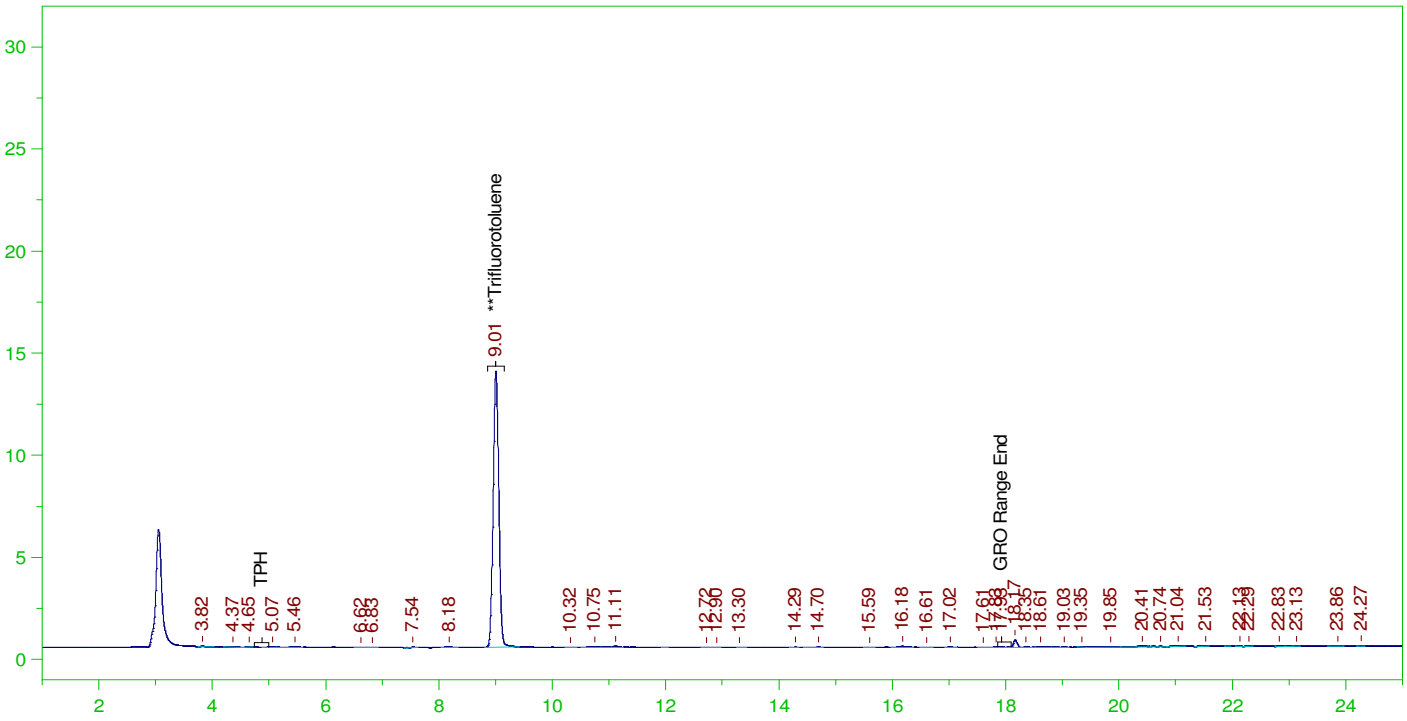
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	18.492	73.97	-

C6 to C10 Area:5075.891 C6 to C10 Amount: 1.035918
TPH Area:9177.782 TPH Amount: 1.920692

ERH2574 (RHMW16A)

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0057.RAW B22030244-012F ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-012F ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0057.RAW
Date & Time Acquired: 3/8/2022 3:56:53 PM
Method File: G:\Org\VAR\Methods\211208G244-12DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

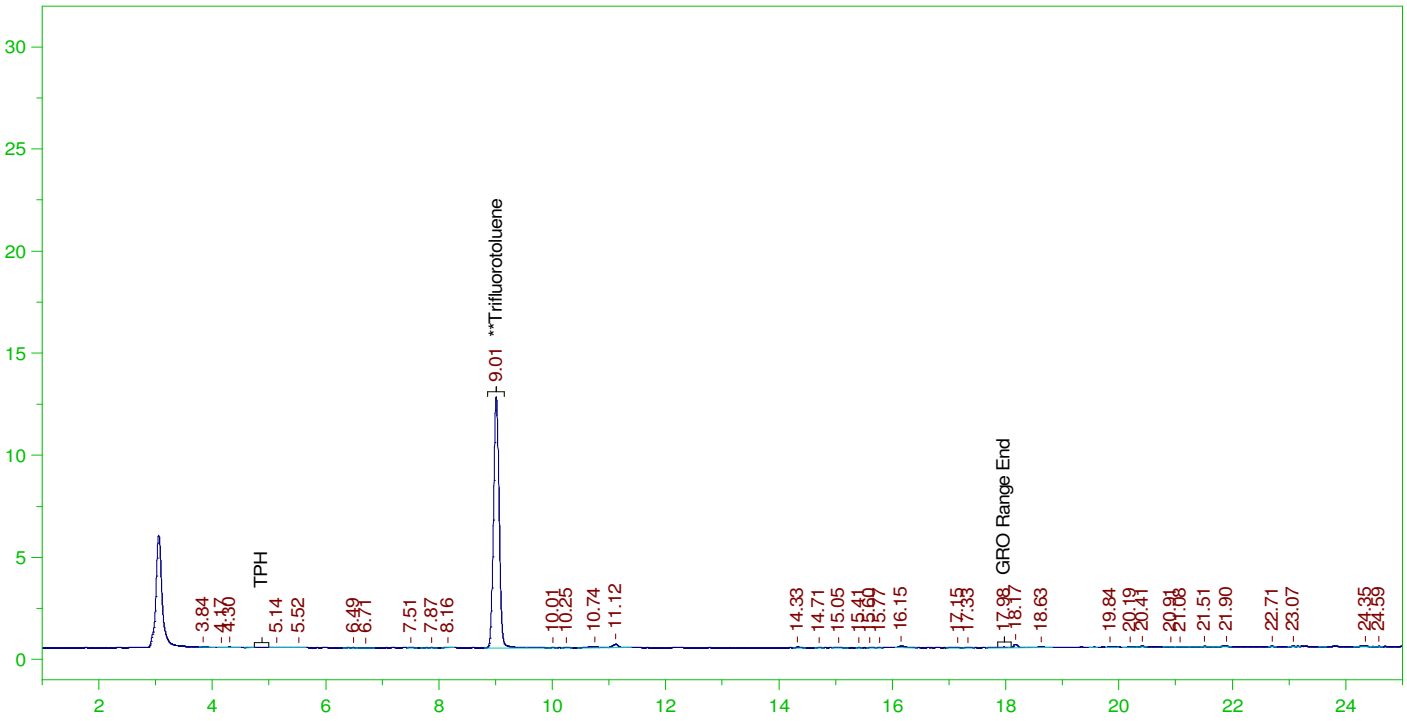
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.005	25.	20.148	80.59	-

C6 to C10 Area:3289.401 C6 to C10 Amount: 0.6713209
TPH Area:8687.529 TPH Amount: 1.818093

ERH2572 Trip Blank-14894

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0018.RAW B22030244-014A ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-014A ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0018.RAW
Date & Time Acquired: 3/7/2022 5:47:40 PM
Method File: G:\Org\VAR\Methods\211208G244-14DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

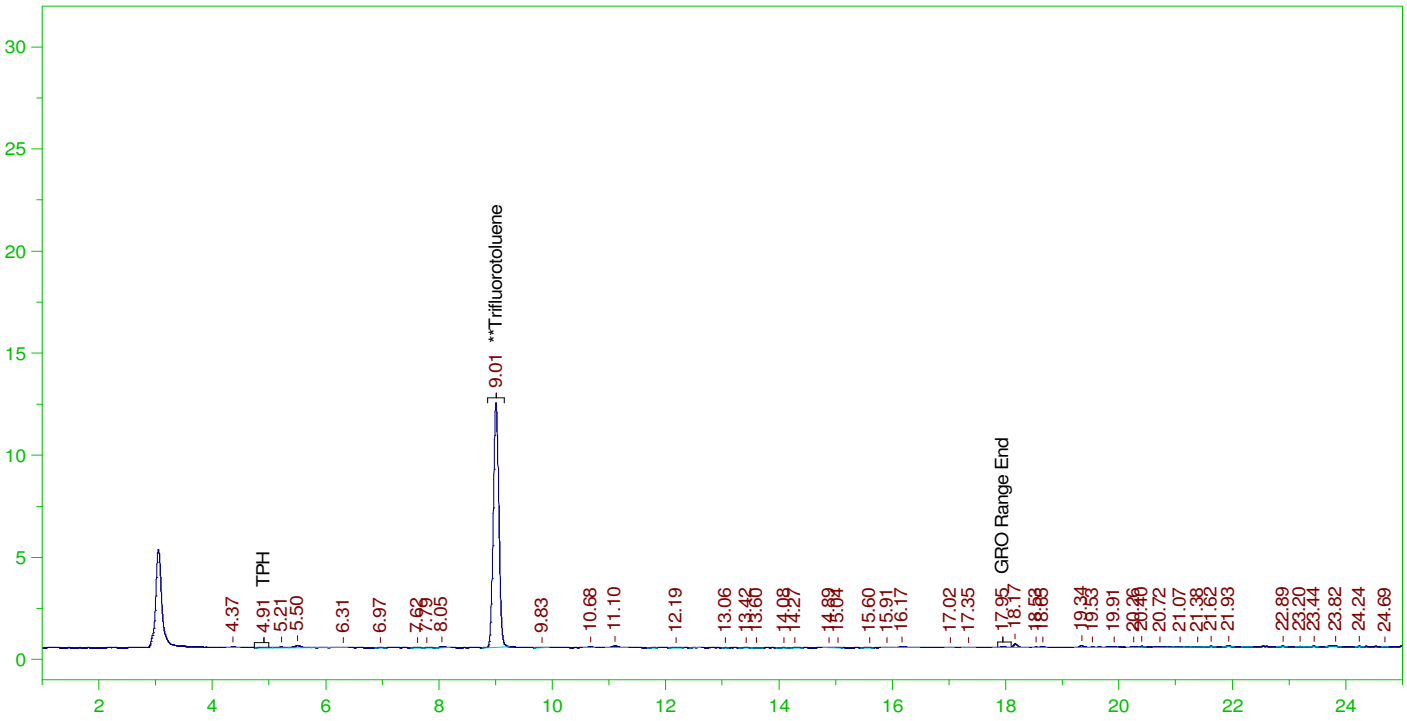
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.011	25.	18.402	73.61	-

C6 to C10 Area:4916.074 C6 to C10 Amount: 1.003302
TPH Area:8634.279 TPH Amount: 1.806949

ERH2584 (RHMW08)

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0035.RAW B22030244-017F ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-017F ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0035.RAW
Date & Time Acquired: 3/8/2022 3:27:04 AM
Method File: G:\Org\VAR\Methods\211208G244-17DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

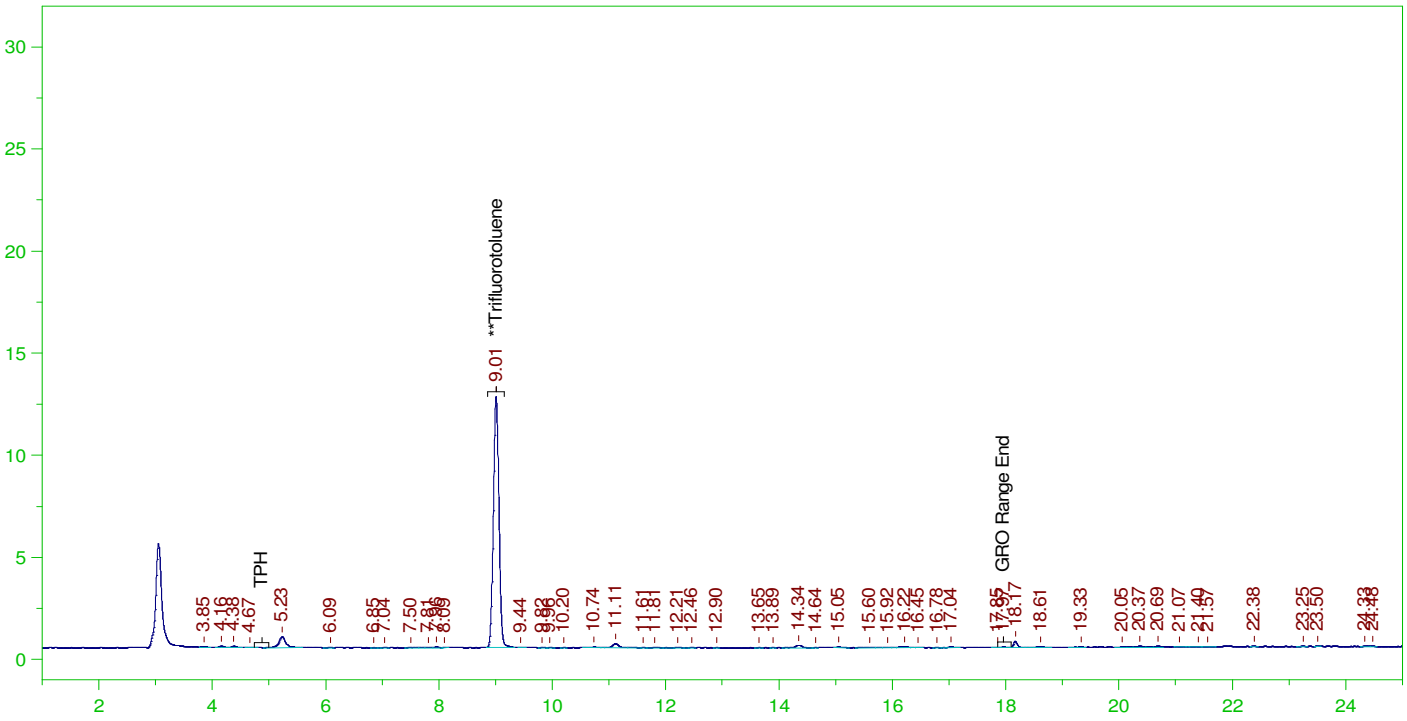
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.006	25.	17.645	70.58	-

C6 to C10 Area:5534.659 C6 to C10 Amount: 1.129547
TPH Area:9862.882 TPH Amount: 2.064067

ERH2583 Trip Blank-14653

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0019.RAW B22030244-019A ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-019A ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0019.RAW
Date & Time Acquired: 3/7/2022 6:21:39 PM
Method File: G:\Org\VAR\Methods\211208G244-19DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

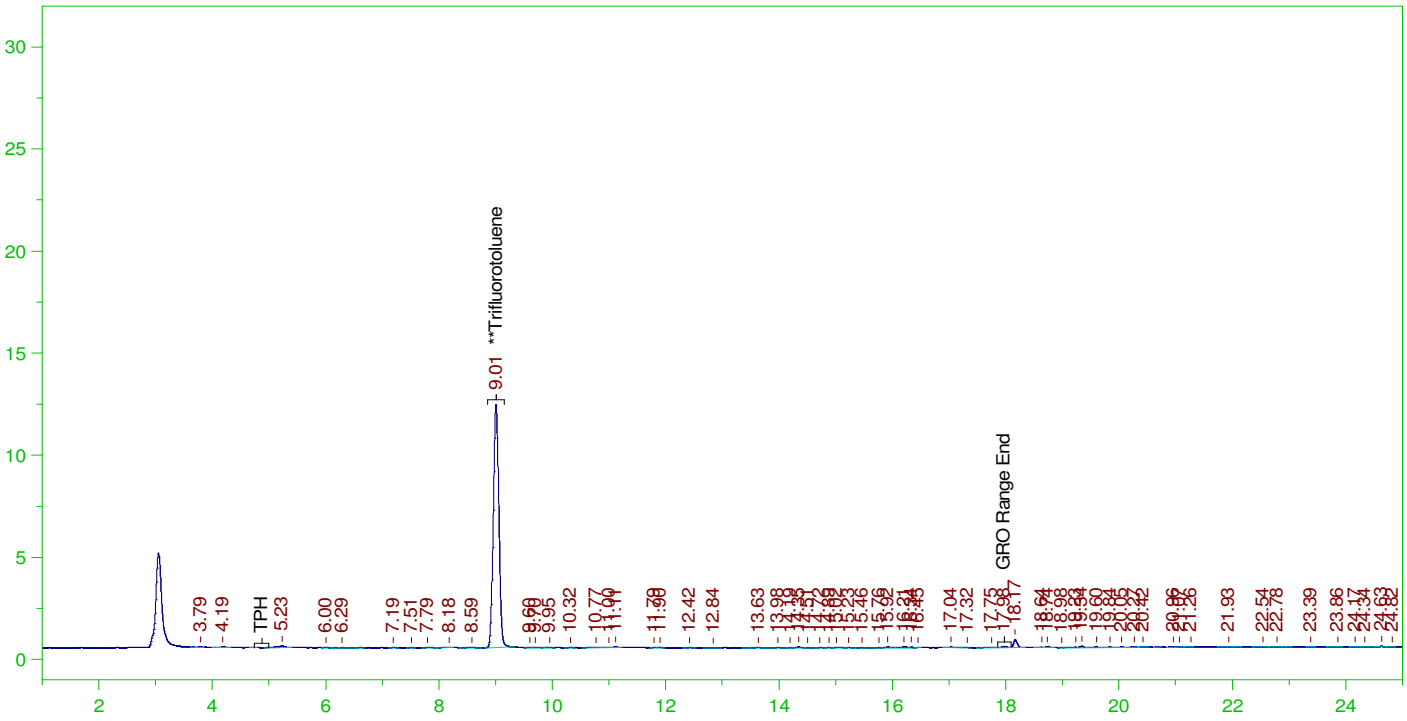
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	18.182	72.73	-

C6 to C10 Area:11948.14 C6 to C10 Amount: 2.438449
TPH Area:17107.27 TPH Amount: 3.580145

ERH2582 (RHMW06)

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0037.RAW B22030244-022F ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-022F ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0037.RAW
Date & Time Acquired: 3/8/2022 4:35:16 AM
Method File: G:\Org\VAR\Methods\211208G244-22DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

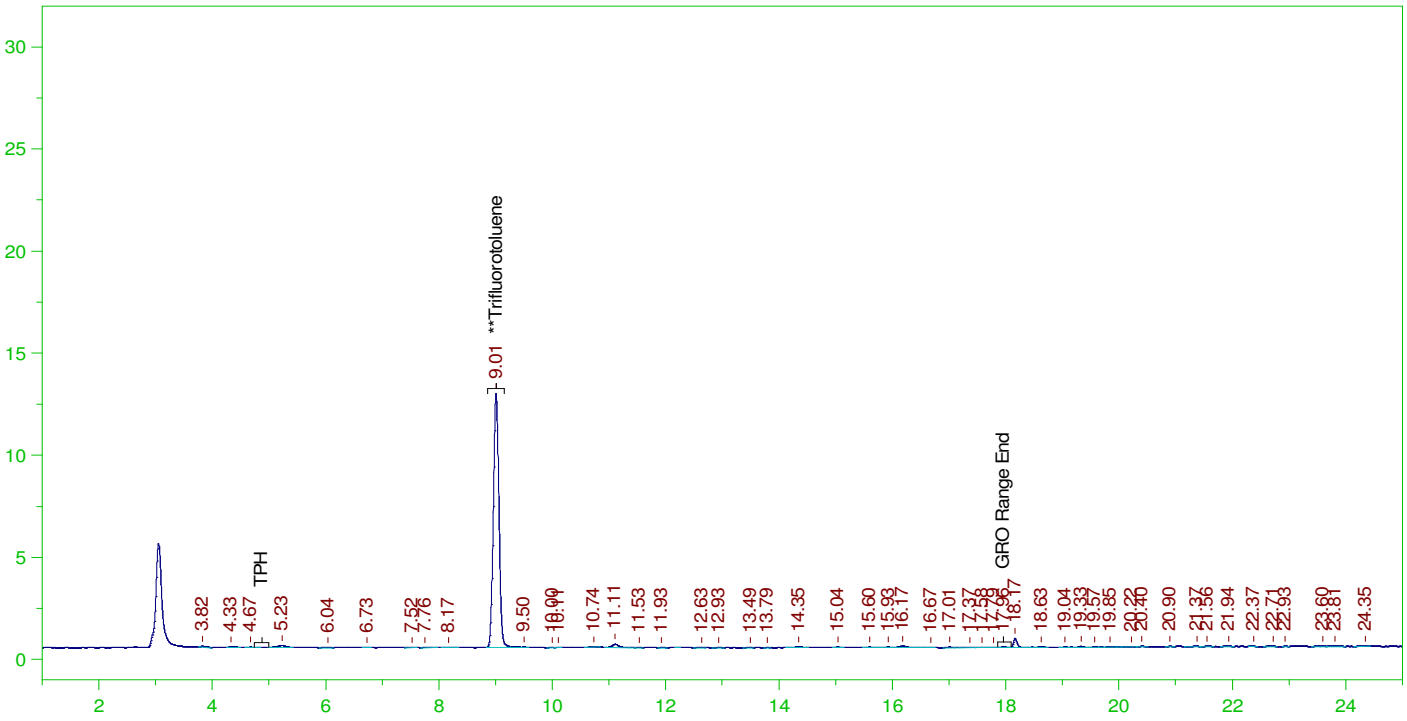
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	17.603	70.41	-

C6 to C10 Area:8085.406 C6 to C10 Amount: 1.650119
TPH Area:13942.86 TPH Amount: 2.917909

ERH2581 Trip Blank-14754

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0020.RAW B22030244-024A ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-024A ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0020.RAW
Date & Time Acquired: 3/7/2022 6:55:40 PM
Method File: G:\Org\VAR\Methods\211208G244-24DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

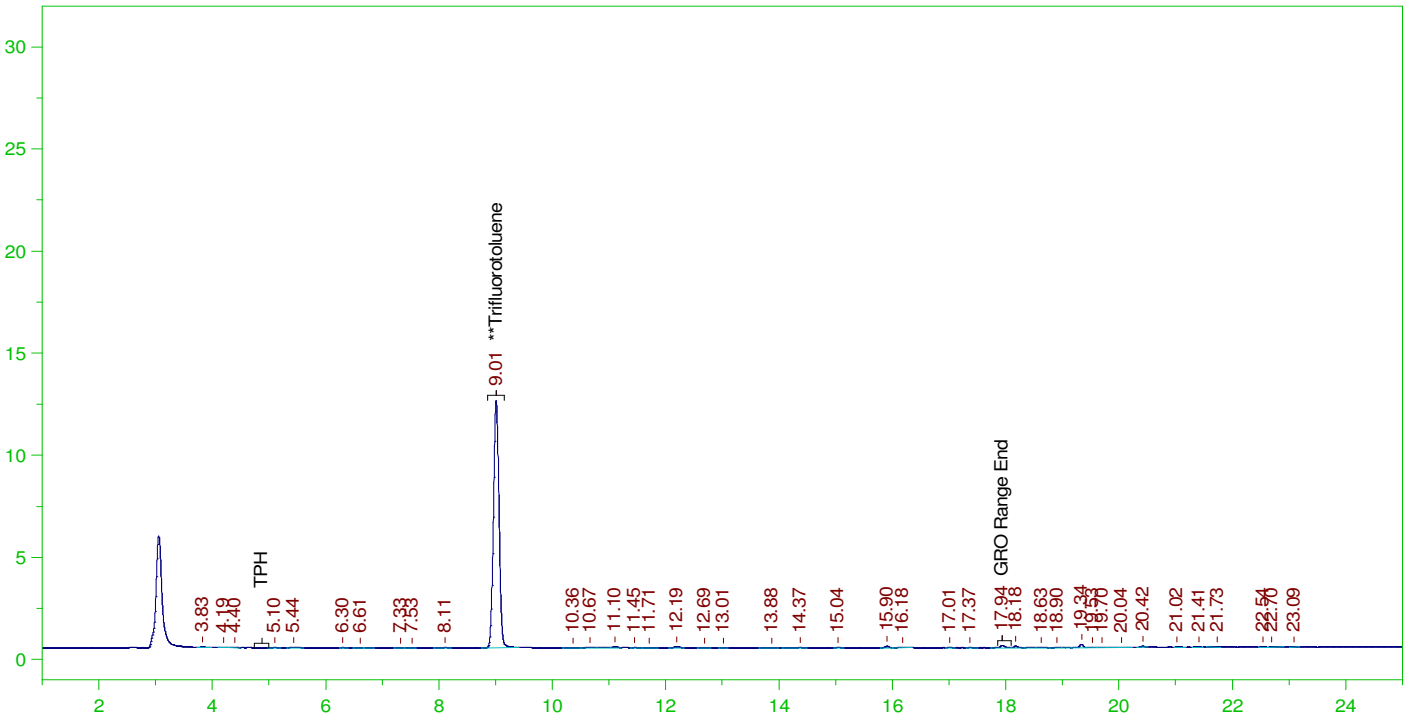
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	18.436	73.75	-

C6 to C10 Area:7214.719 C6 to C10 Amount: 1.472423
TPH Area:13068.36 TPH Amount: 2.734897

ERH2578 (RHMW04)

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0039.RAW B22030244-027F ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-027F ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0039.RAW
Date & Time Acquired: 3/8/2022 5:43:25 AM
Method File: G:\Org\VAR\Methods\211208G244-27DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

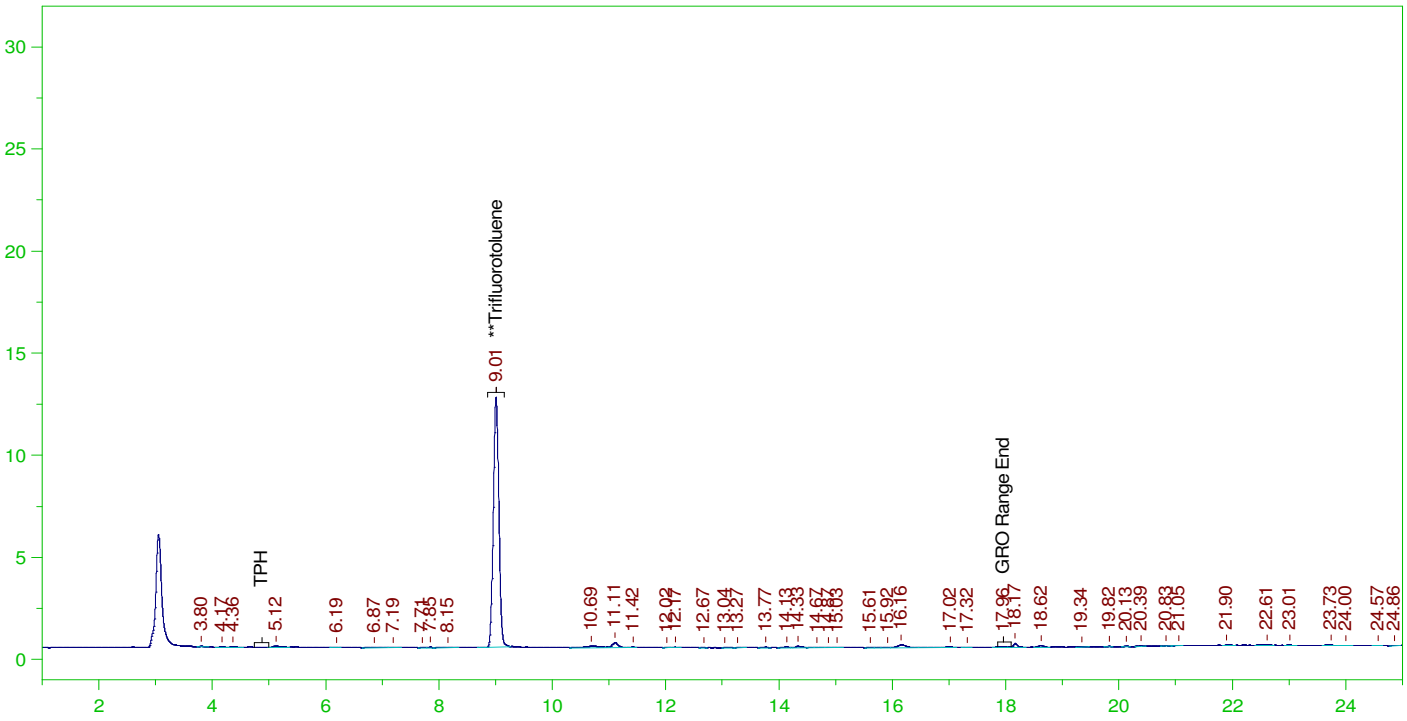
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	17.939	71.76	-

C6 to C10 Area:4754.386 C6 to C10 Amount: 0.9703038
TPH Area:8579.22 TPH Amount: 1.795427

ERH2577 Trip Blank-14733

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0021.RAW B22030244-029A ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-029A ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0021.RAW
Date & Time Acquired: 3/7/2022 7:29:45 PM
Method File: G:\Org\VAR\Methods\211208G244-29DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

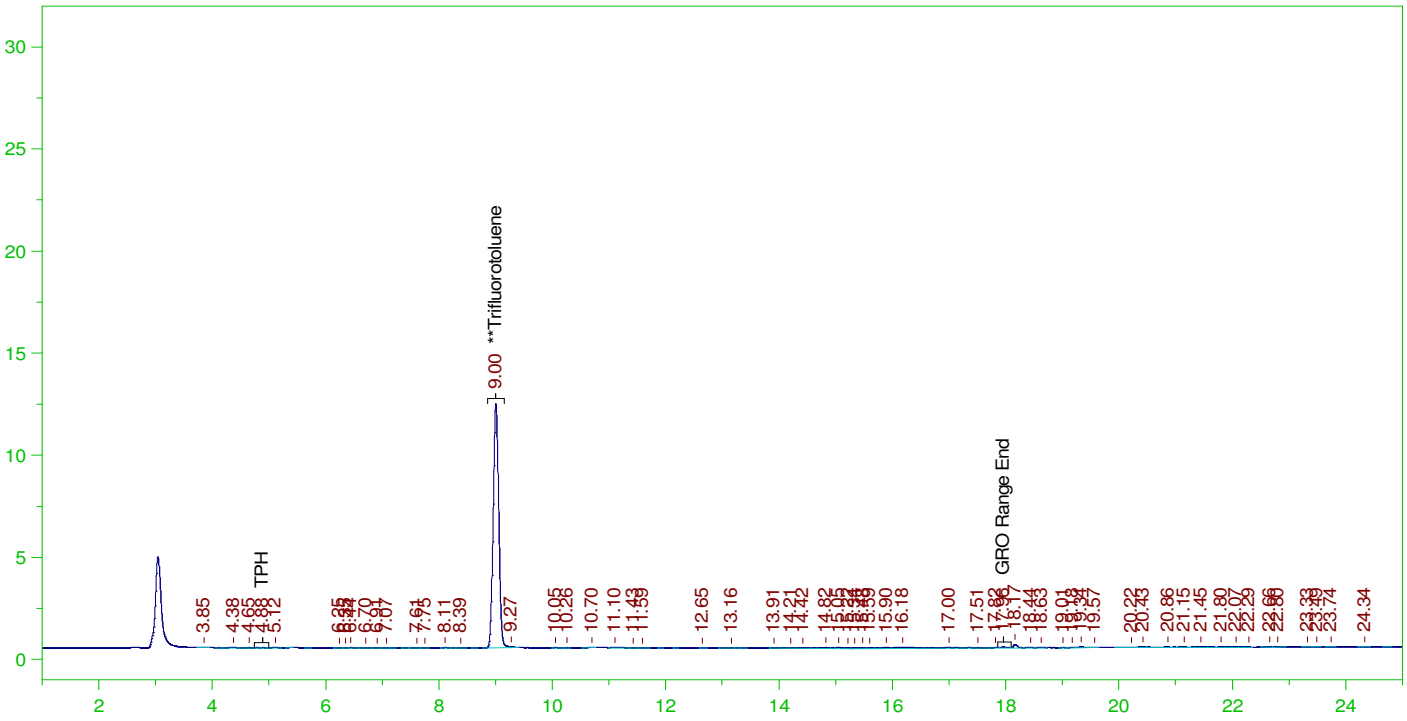
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	18.027	72.11	-

C6 to C10 Area:10201.92 C6 to C10 Amount: 2.08207
TPH Area:14200.13 TPH Amount: 2.971749

ERH2624 (RHMW07)

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0041.RAW B22030244-032G ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-032G ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0041.RAW
Date & Time Acquired: 3/8/2022 6:51:35 AM
Method File: G:\Org\VAR\Methods\211208G244-32DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

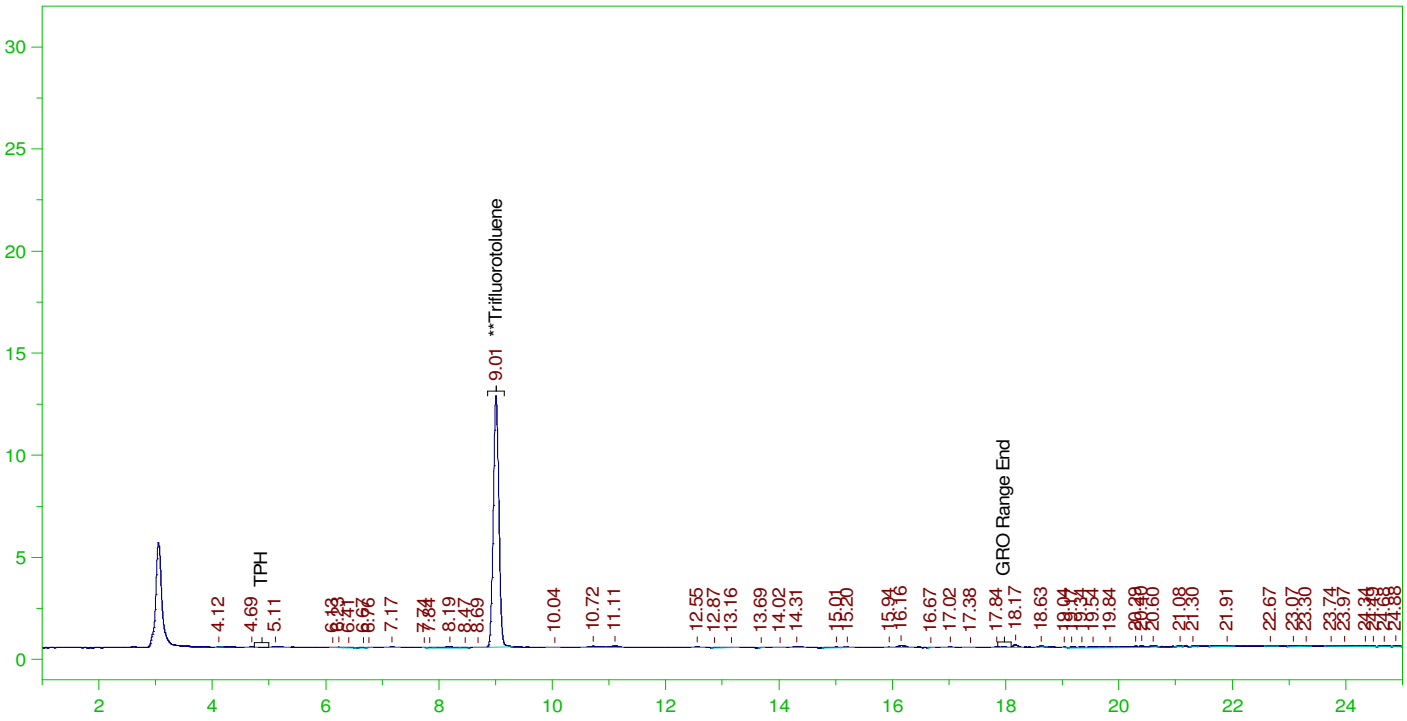
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.005	25.	17.658	70.63	-

C6 to C10 Area:7735.237 C6 to C10 Amount: 1.578654
TPH Area:12054.91 TPH Amount: 2.522807

ERH2623 Trip Blank-14733

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0022.RAW B22030244-034A ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-034A ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0022.RAW
Date & Time Acquired: 3/7/2022 8:03:48 PM
Method File: G:\Org\VAR\Methods\211208G244-34DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

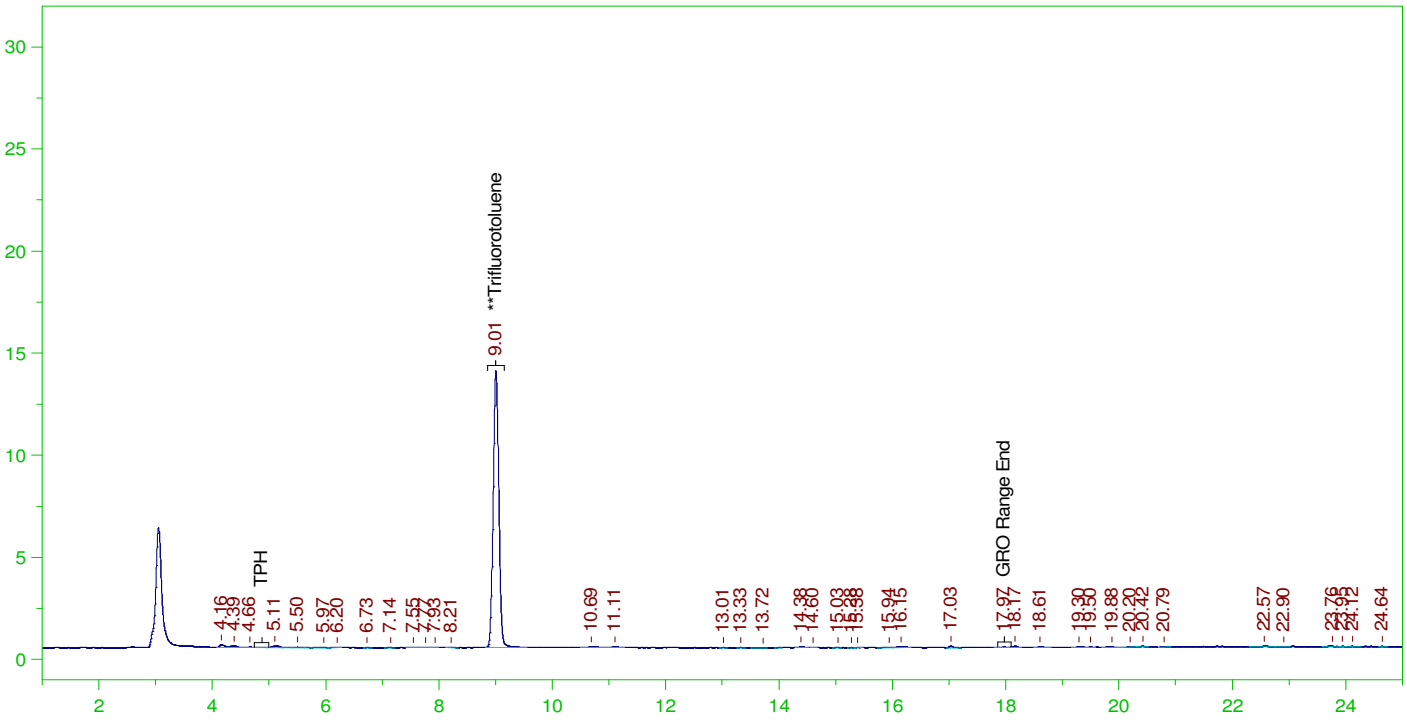
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	18.192	72.77	-

C6 to C10 Area:6574.837 C6 to C10 Amount: 1.341832
TPH Area:12750.35 TPH Amount: 2.668346

ERH2588 (RHMW12A)

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0051.RAW B22030244-037F ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-037F ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0051.RAW
Date & Time Acquired: 3/8/2022 12:32:04 PM
Method File: G:\Org\VAR\Methods\211208G244-37DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

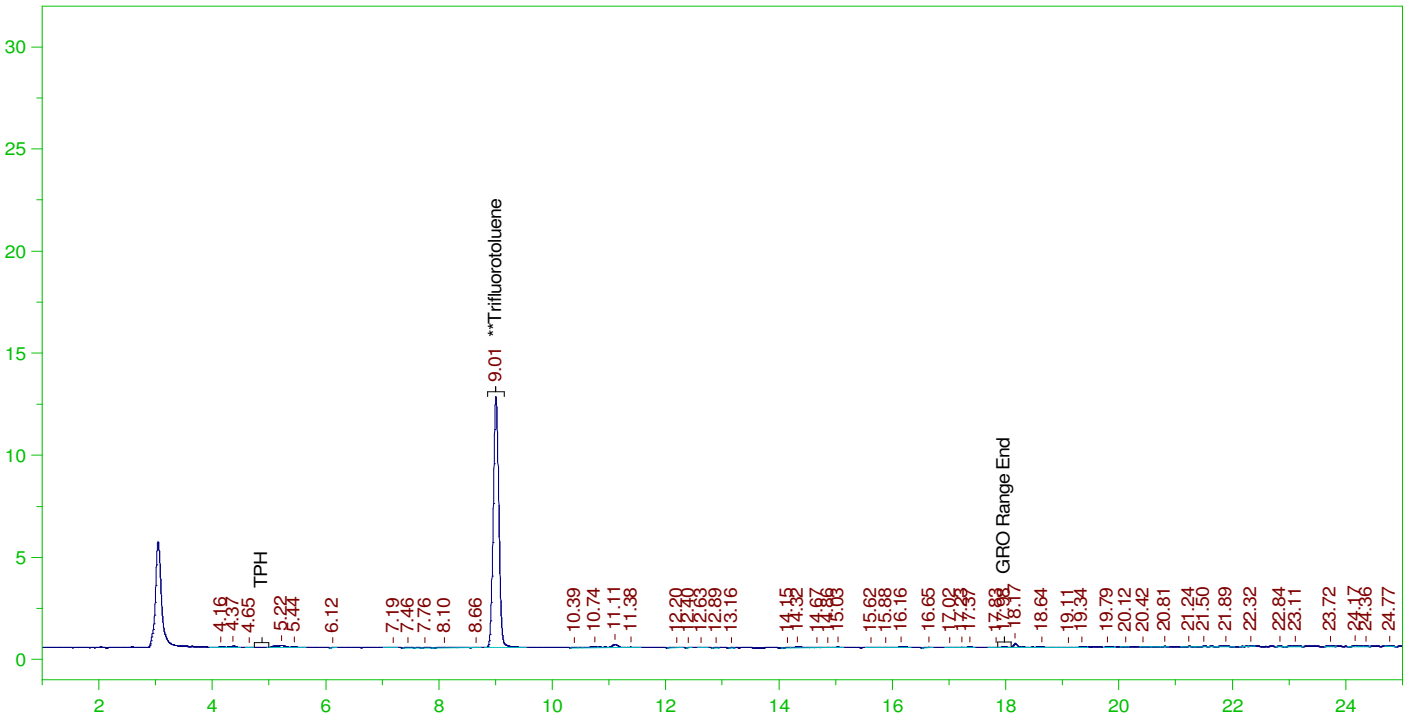
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.006	25.	20.195	80.78	-

C6 to C10 Area:4925.678 C6 to C10 Amount: 1.005262
TPH Area:9785.423 TPH Amount: 2.047857

ERH2587 Trip Blank-14754

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0028.RAW B22030244-039A ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-039A ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0028.RAW
Date & Time Acquired: 3/7/2022 11:28:26 PM
Method File: G:\Org\VAR\Methods\211208G244-39DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

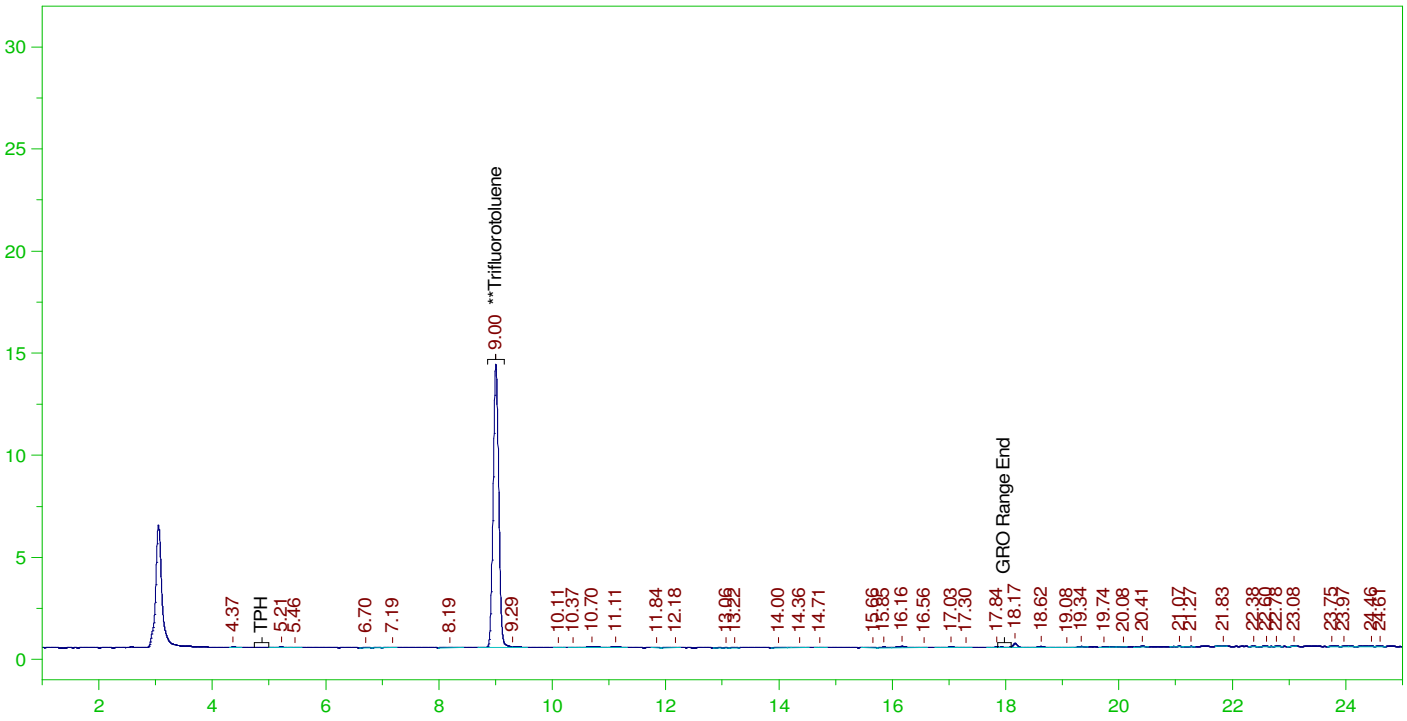
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.006	25.	18.267	73.07	-

C6 to C10 Area:7926.088 C6 to C10 Amount: 1.617604
TPH Area:12723.2 TPH Amount: 2.662664

ERH2596 (RHMW16)

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0053.RAW B22030244-042F ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-042F ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0053.RAW
Date & Time Acquired: 3/8/2022 1:40:22 PM
Method File: G:\Org\VAR\Methods\211208G244-42DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

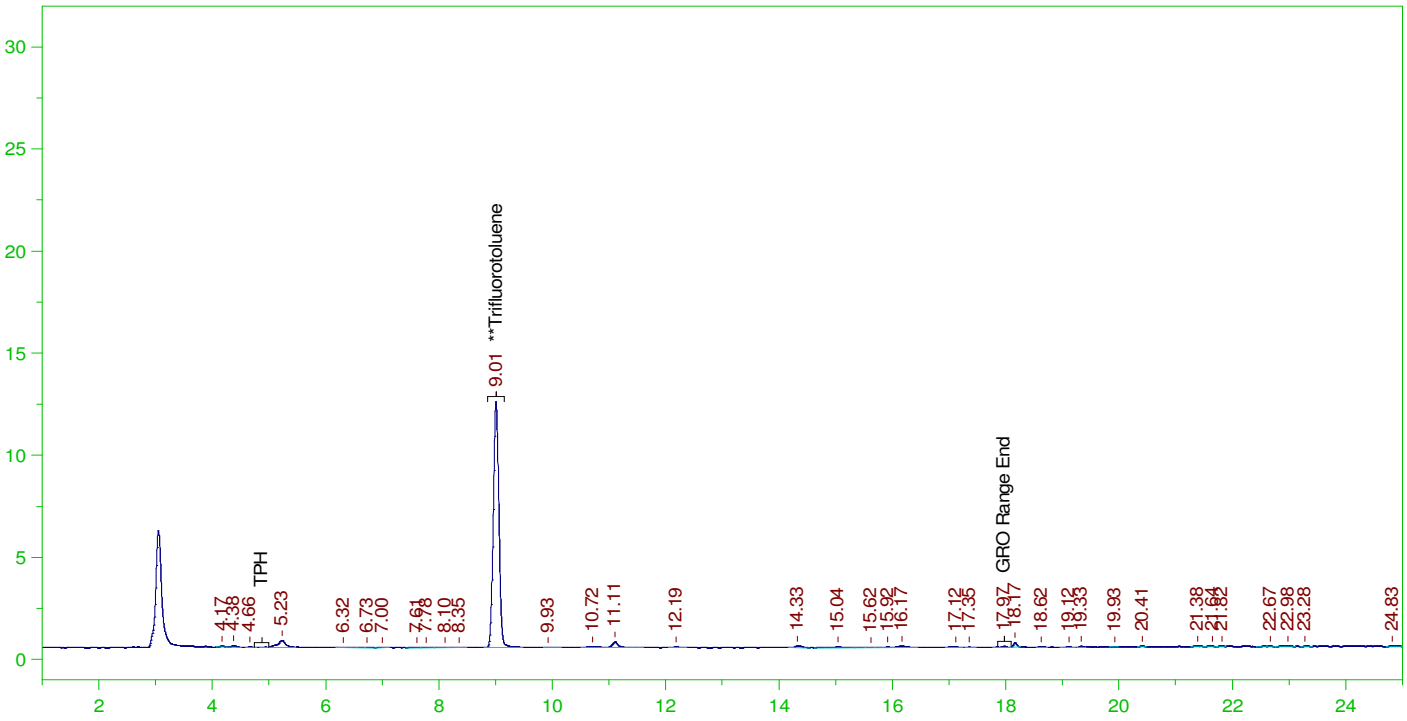
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.004	25.	20.644	82.58	-

C6 to C10 Area:5106.98 C6 to C10 Amount: 1.042263
TPH Area:9300.672 TPH Amount: 1.94641

ERH2595 Trip Blank-14754

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0029.RAW B22030244-044A ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-044A ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0029.RAW
Date & Time Acquired: 3/8/2022 12:02:31 AM
Method File: G:\Org\VAR\Methods\211208G244-44DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

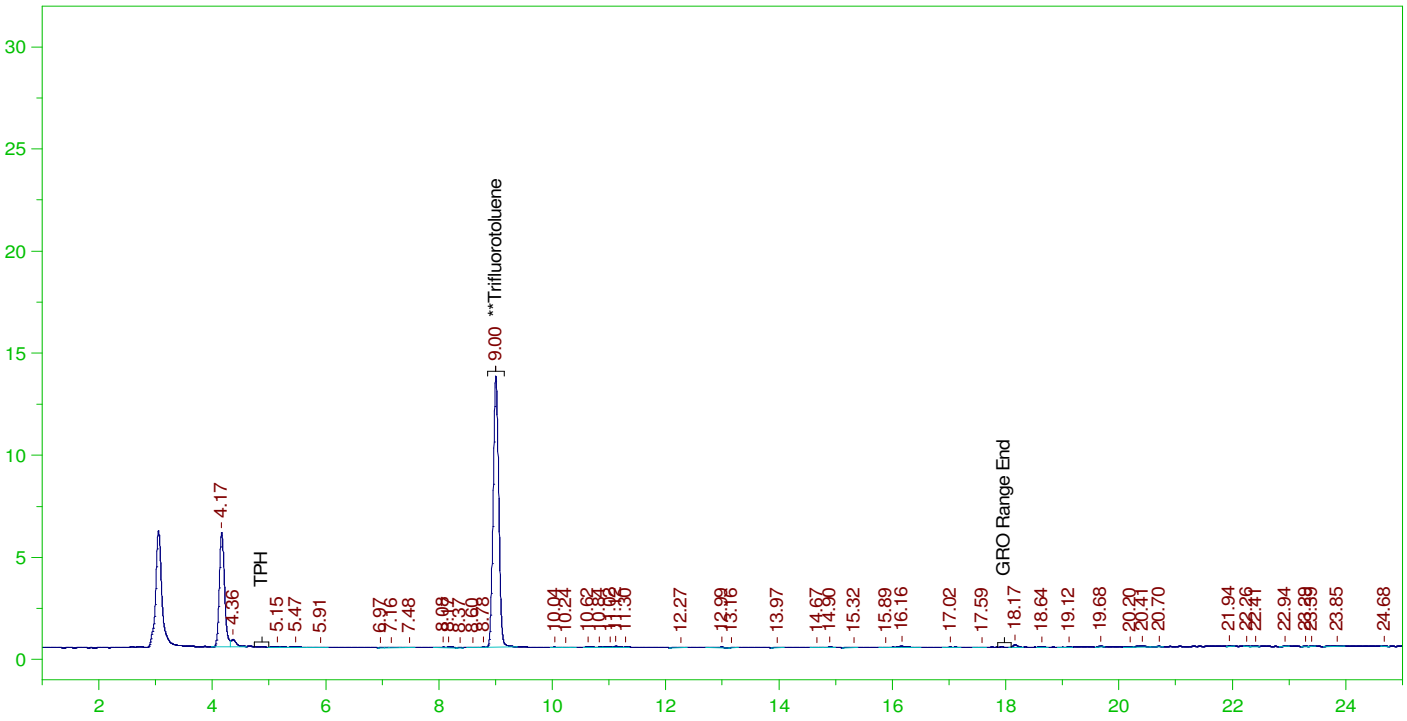
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	17.861	71.44	-

C6 to C10 Area:11196.93 C6 to C10 Amount: 2.285137
TPH Area:14884.57 TPH Amount: 3.114986

ERH2592 (RHMW14-3)

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0055.RAW B22030244-047F ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-047F ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0055.RAW
Date & Time Acquired: 3/8/2022 2:48:36 PM
Method File: G:\Org\VAR\Methods\211208G244-47DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

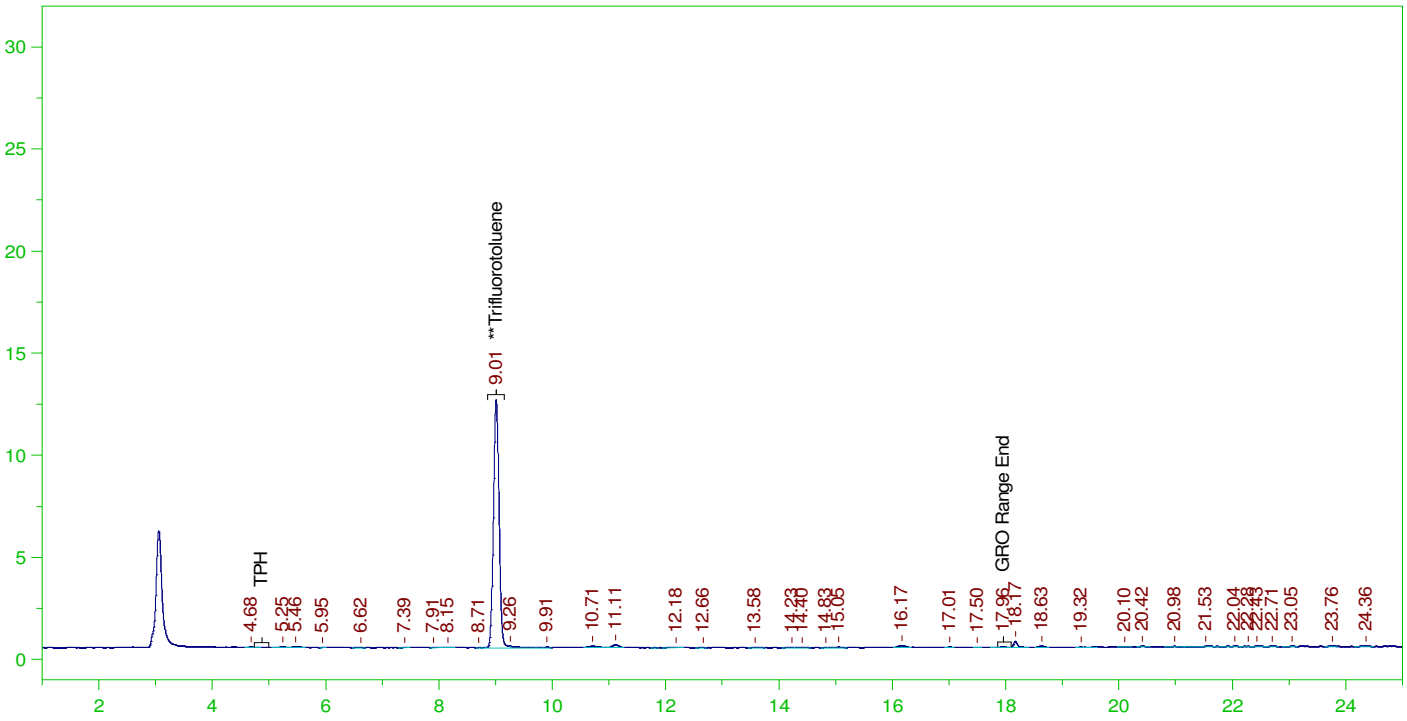
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.004	25.	19.723	78.89	-

C6 to C10 Area:5443.976 C6 to C10 Amount: 1.111039
TPH Area:47828.52 TPH Amount: 10.00937

ERH2591 Trip Blank-14894

G:\Org\VAR\DAT\VAR030722_b\0307VARB.0030.RAW B22030244-049A ;0307VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-049A ;0307VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030722_b\0307VARB.0030.RAW
Date & Time Acquired: 3/8/2022 12:36:35 AM
Method File: G:\Org\VAR\Methods\211208G244-49DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

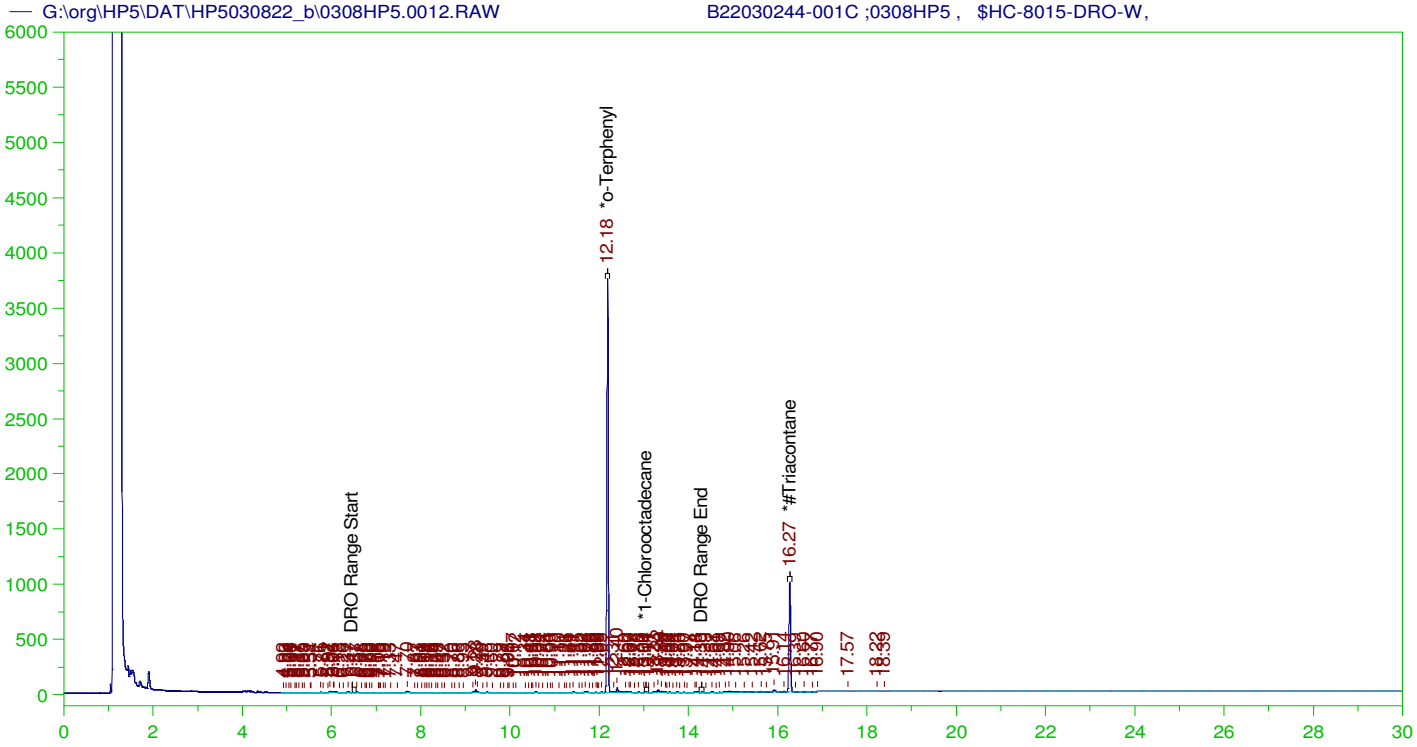
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.01	25.	18.152	72.61	-

C6 to C10 Area:6235.454 C6 to C10 Amount: 1.272569
TPH Area:10632.64 TPH Amount: 2.225158

ERH2607 (OWDFMW08A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0012.RAW B22030244-001C ;0308HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-001C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0012.RAW
Date & Time Acquired: 3/8/2022 4:05:53 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

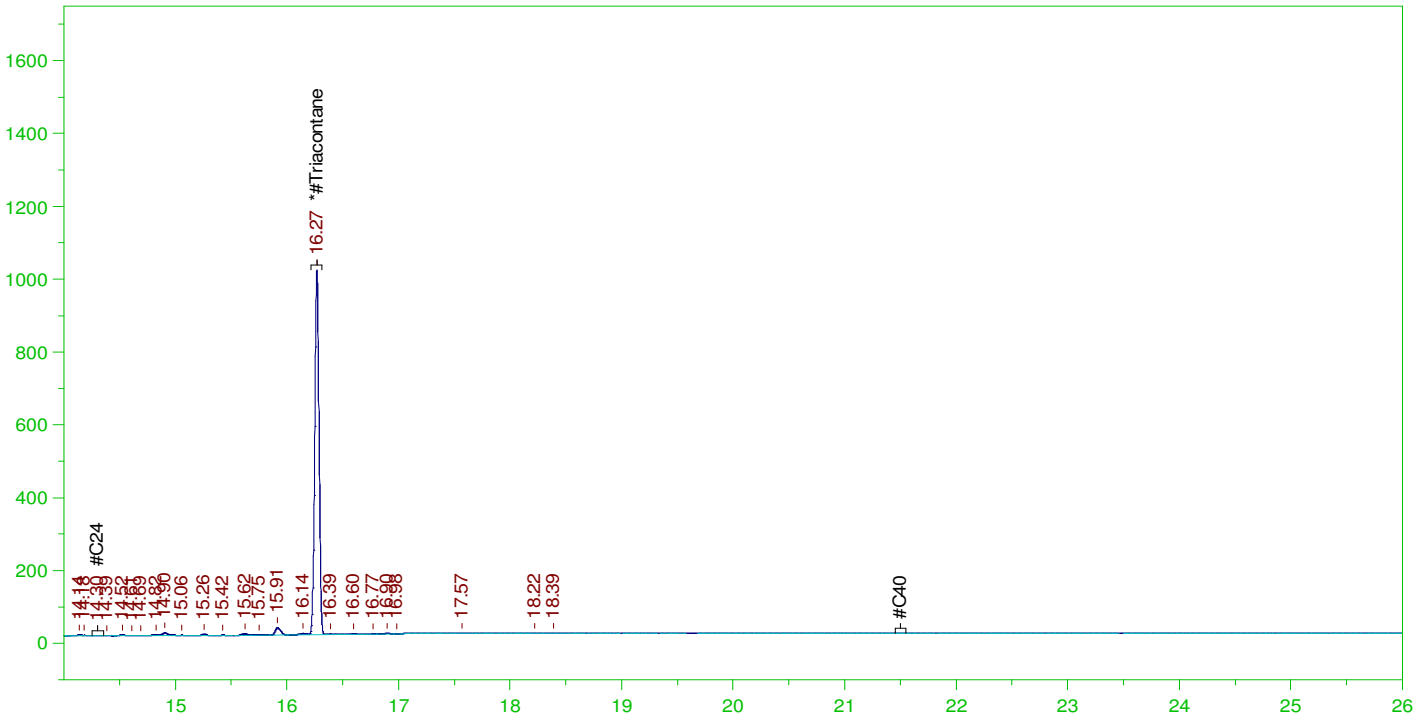
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.185	.19	.191	100.26	-
*1-Chlorooctadecane	13.044	.19	.	.06	-
*#Triacontane	16.269	.19	.086	45.25	-

DRO Area:773995.9 DRO Amount: 2.255948E-02
TEH Area:1156545 TEH Amount: 3.370955E-02

ERH2607 (OWDFMW08A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0012.RAW B22030244-001C ;0308HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-001C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0012.RAW
Date & Time Acquired: 3/8/2022 4:05:53 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

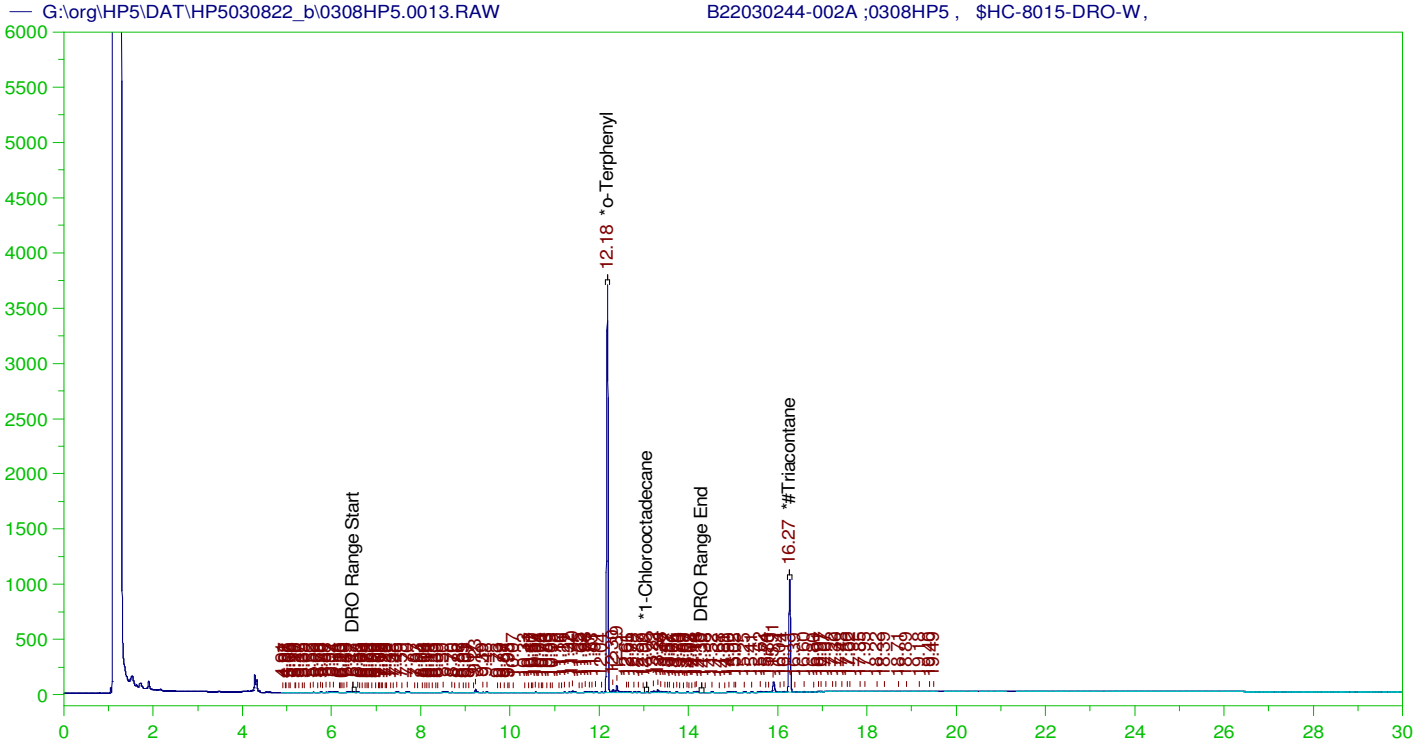
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.269	.476	.086	18.1	-

RRO Area:227408.7 RRO AMOUNT: 8.196153E-03

ERH2608 (OWDFMW08A) FD Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0013.RAW B22030244-002A ;0308HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-002A ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0013.RAW
Date & Time Acquired: 3/8/2022 4:48:29 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

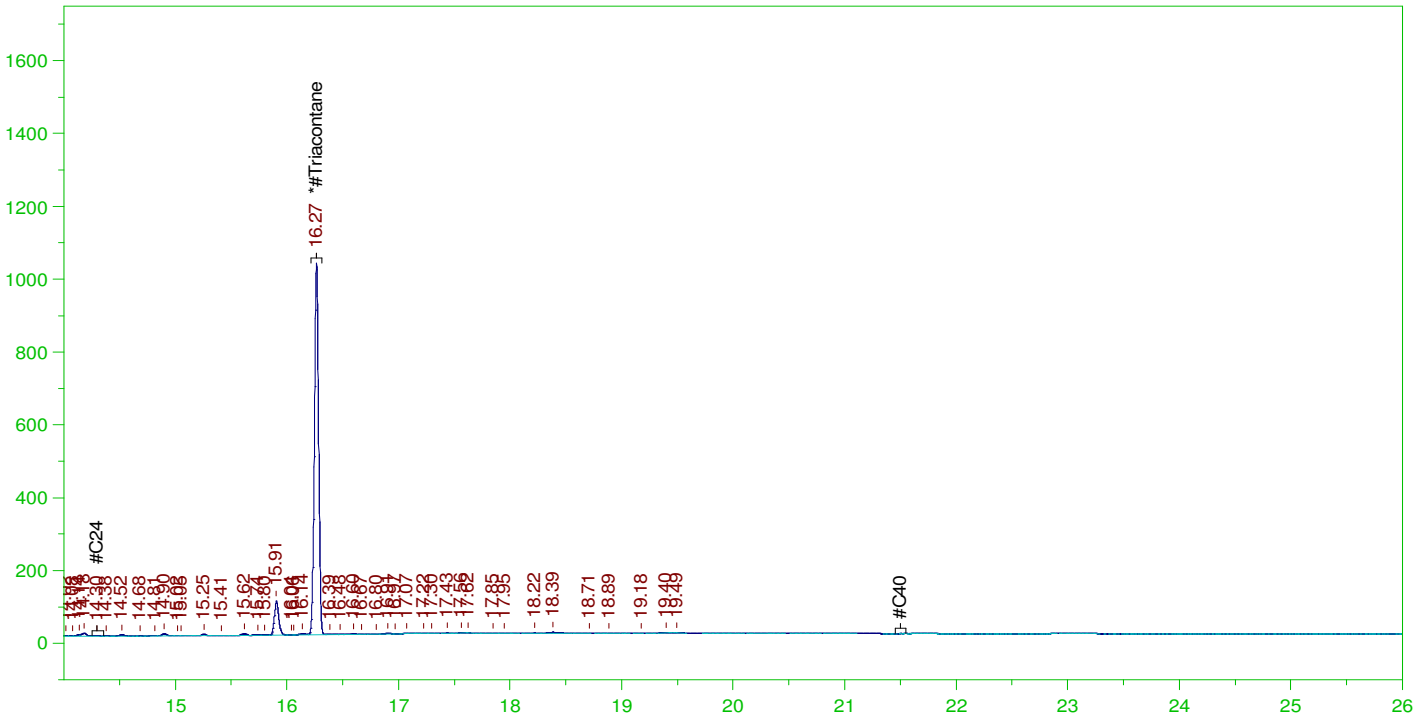
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.181	.19	.188	98.45	-
*1-Chlorooctadecane	13.057	.19	. .1		-
*#Triacontane	16.265	.19	.087	45.67	-

DRO Area:1049959 DRO Amount: 3.060292E-02
TEH Area:1638145 TEH Amount: 4.774664E-02

ERH2608 (OWDFMW08A) FD Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0013.RAW B22030244-002A ;0308HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-002A ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0013.RAW
Date & Time Acquired: 3/8/2022 4:48:29 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

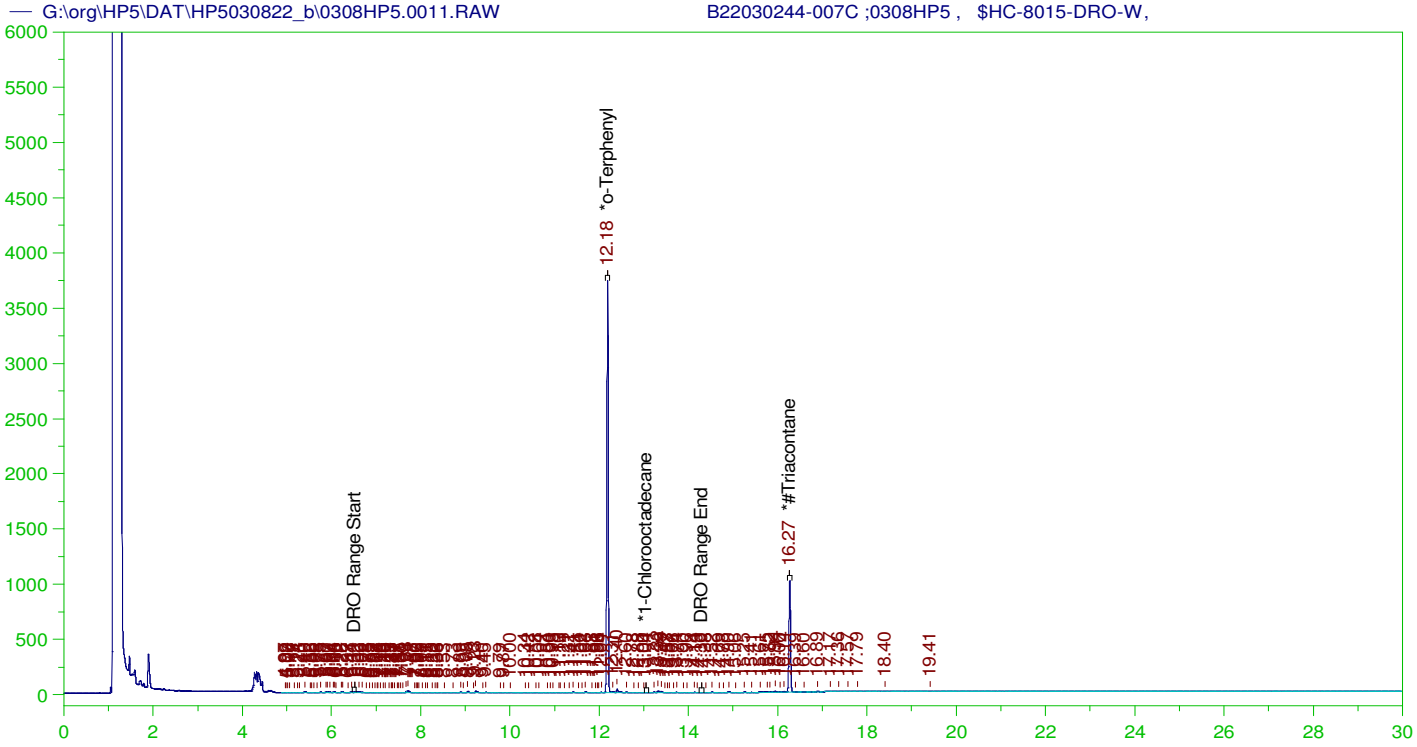
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.265	.476	.087	18.28	-

RRO Area:439388 RRO AMOUNT: 1.583621E-02

ERH2605 (OWDFMW07A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0011.RAW B22030244-007C ;0308HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-007C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0011.RAW
Date & Time Acquired: 3/8/2022 3:23:07 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

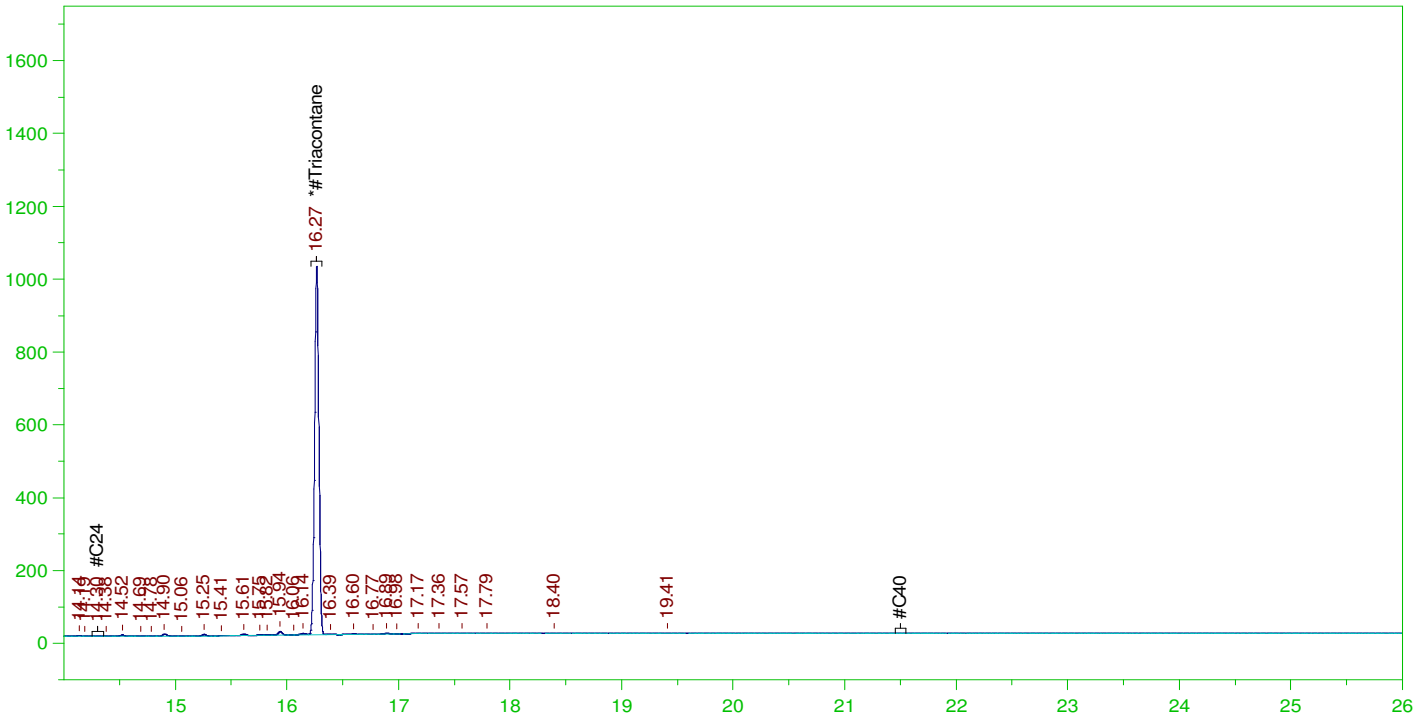
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.184	.19	.189	99.29	-
*1-Chlorooctadecane	13.043	.19	.	.05	-
*#Triacontane	16.267	.19	.087	45.8	-

DRO Area:756612.2 DRO Amount: 0.0220528
TEH Area:1112648 TEH Amount: 0.0324301

ERH2605 (OWDFMW07A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0011.RAW B22030244-007C ;0308HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-007C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0011.RAW
Date & Time Acquired: 3/8/2022 3:23:07 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

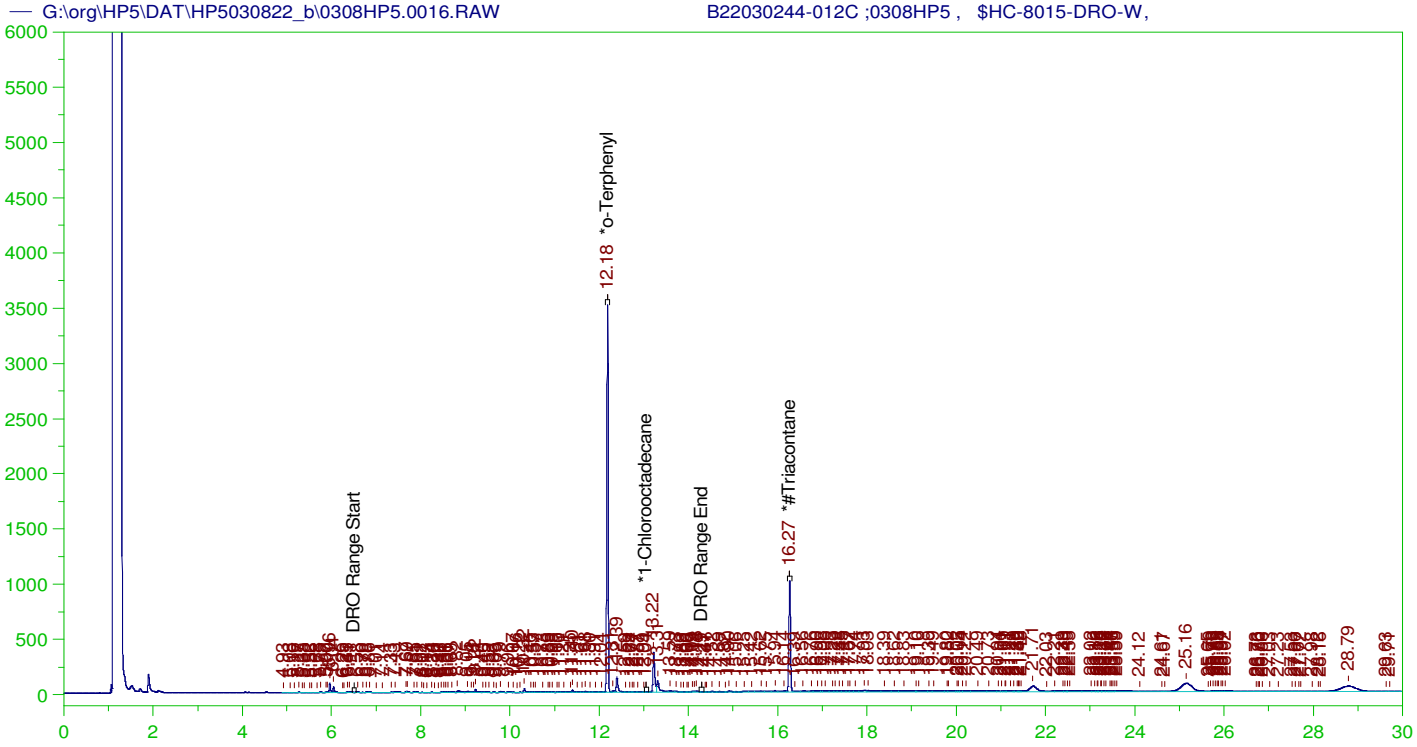
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.267	.476	.087	18.32	-

RRO Area:153916.9 RRO AMOUNT: 5.547399E-03

ERH2574 (RHMW16A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0016.RAW B22030244-012C ;0308HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-012C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0016.RAW
Date & Time Acquired: 3/8/2022 6:57:08 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

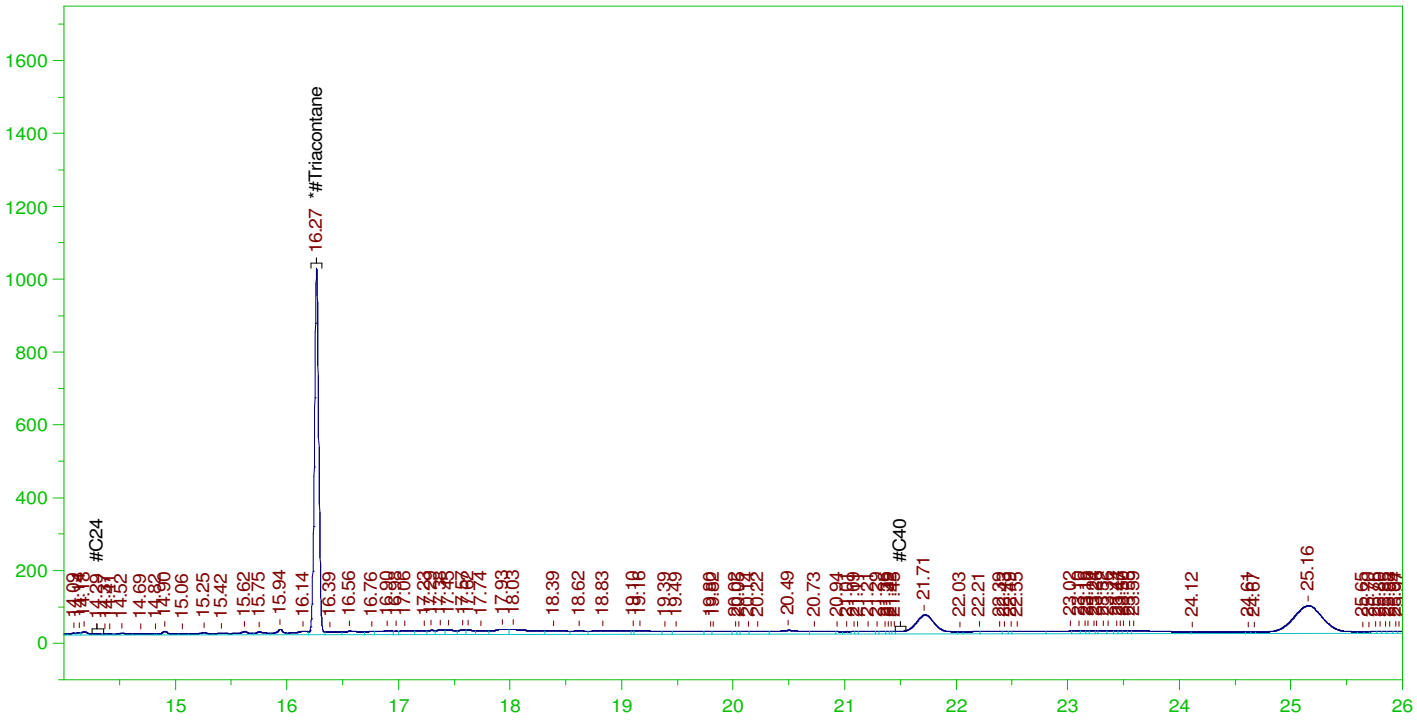
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.183	.19	.179	93.79	-
*1-Chlorooctadecane	13.043	.19	.	.15	-
*#Triacontane	16.266	.19	.087	45.72	-

DRO Area:3312392 DRO Amount: 9.654549E-02
TEH Area:1.232441E+07 TEH Amount: 0.3592166

ERH2574 (RHMW16A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0016.RAW B22030244-012C ;0308HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-012C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0016.RAW
Date & Time Acquired: 3/8/2022 6:57:08 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

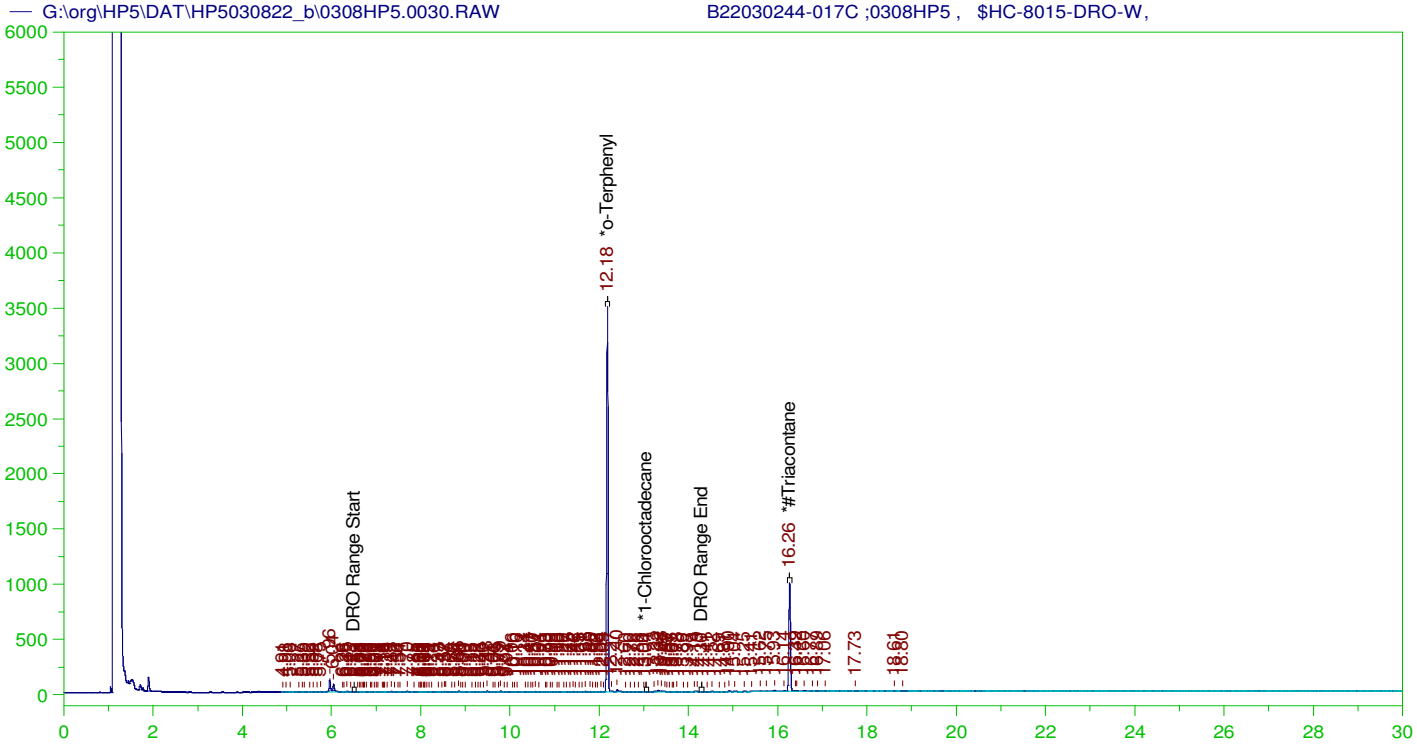
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.266	.476	.087	18.28	-

RRO Area:3497304 RRO AMOUNT: 0.1260481

ERH2584 (RHMW08) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0030.RAW B22030244-017C ;0308HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-017C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0030.RAW
Date & Time Acquired: 3/9/2022 4:56:38 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

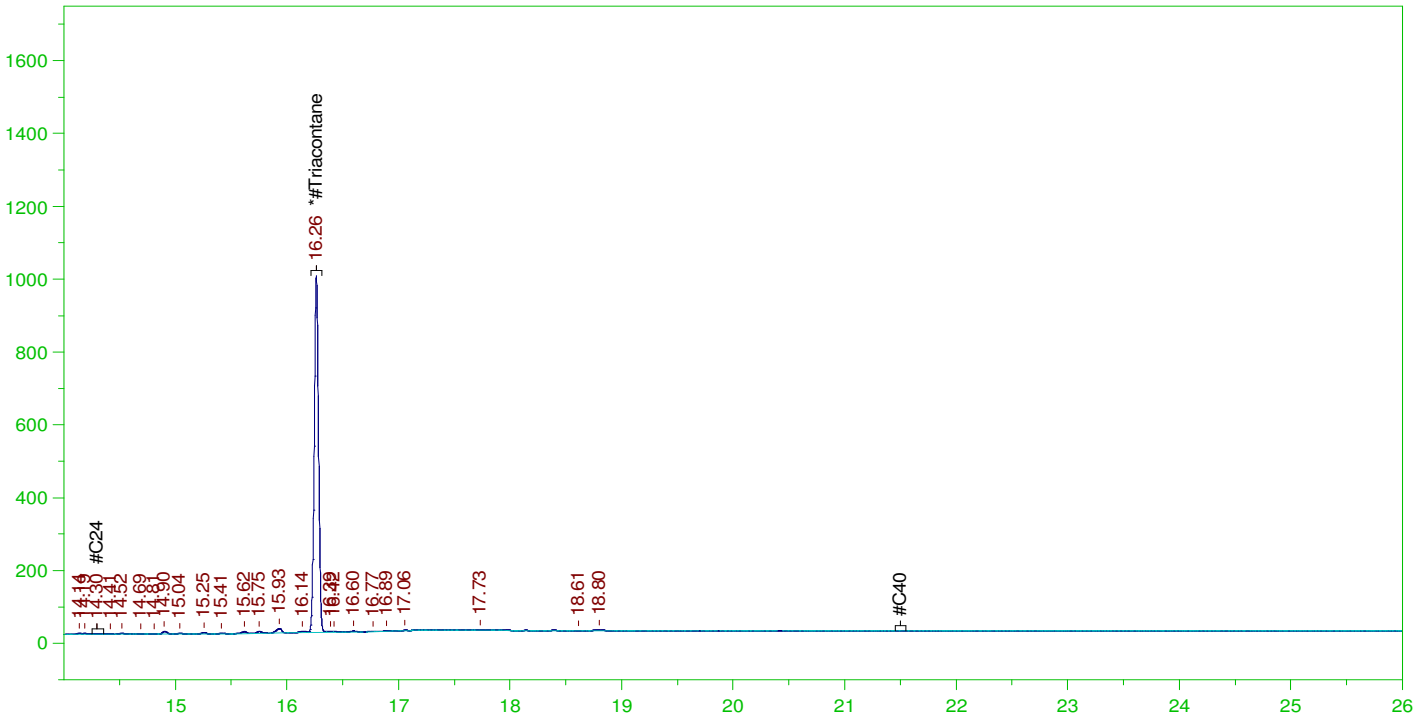
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.181	.19	.177	93.15	-
*1-Chlorooctadecane	13.042	.19	.	.08	-
*#Triacontane	16.263	.19	.085	44.62	-

DRO Area:771656.6 DRO Amount: 2.249129E-02
TEH Area:1604588 TEH Amount: 4.676854E-02

ERH2584 (RHMW08) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0030.RAW B22030244-017C ;0308HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-017C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0030.RAW
Date & Time Acquired: 3/9/2022 4:56:38 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

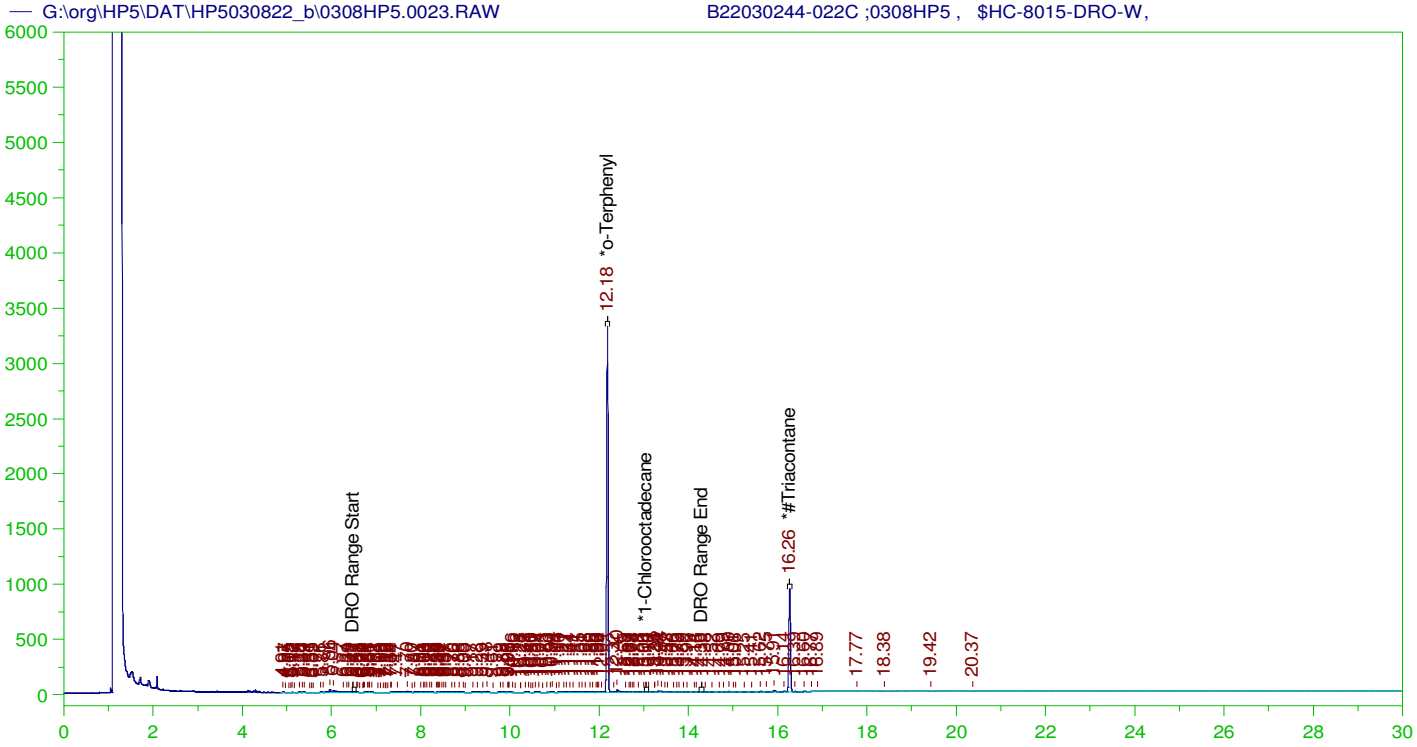
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.263	.476	.085	17.85	-

RRO Area:193407.8 RRO AMOUNT: 6.970711E-03

ERH2582 (RHMW06) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0023.RAW B22030244-022C ;0308HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-022C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0023.RAW
Date & Time Acquired: 3/8/2022 11:56:59 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

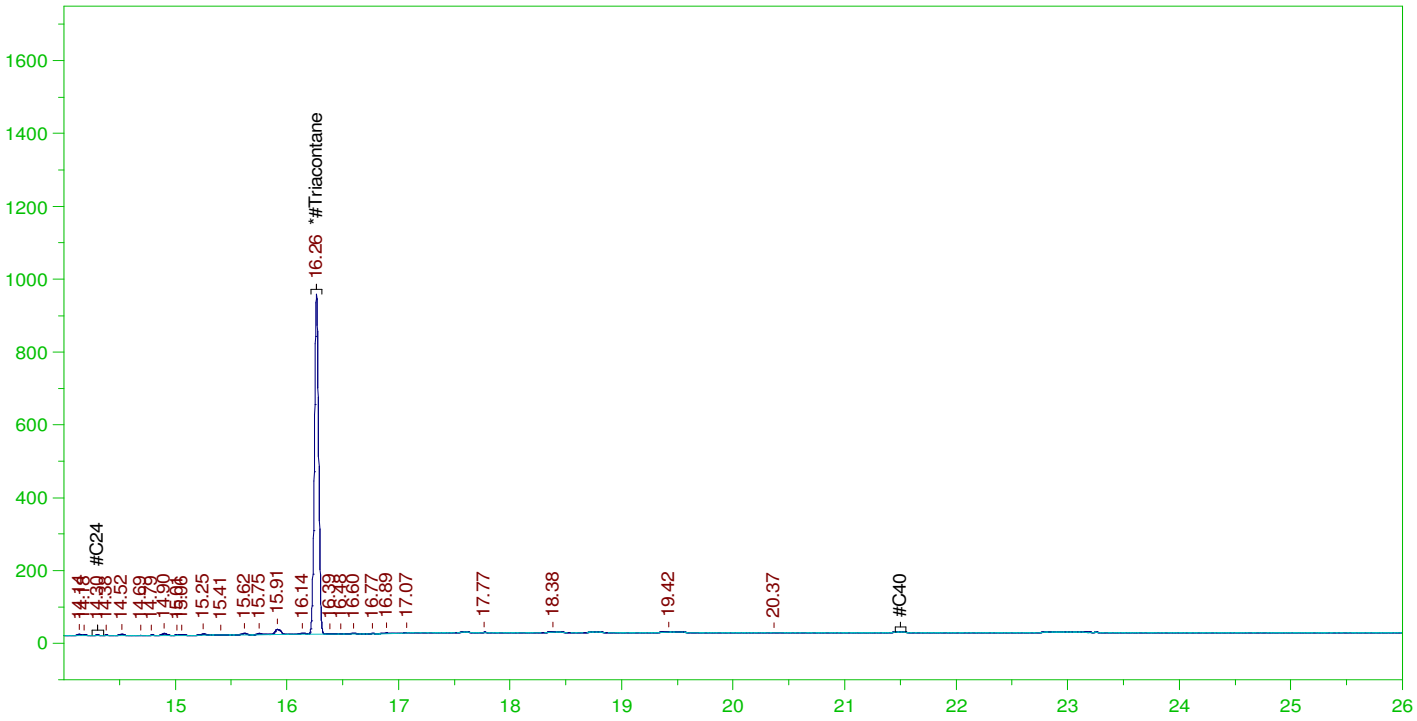
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.181	.19	.171	89.8	-
*1-Chlorooctadecane	13.039	.19	.	.08	-
*#Triacontane	16.265	.19	.08	41.92	-

DRO Area:678605 DRO Amount: 1.977914E-02
TEH Area:1087675 TEH Amount: 0.0317022

ERH2582 (RHMW06) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0023.RAW B22030244-022C ;0308HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-022C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0023.RAW
Date & Time Acquired: 3/8/2022 11:56:59 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

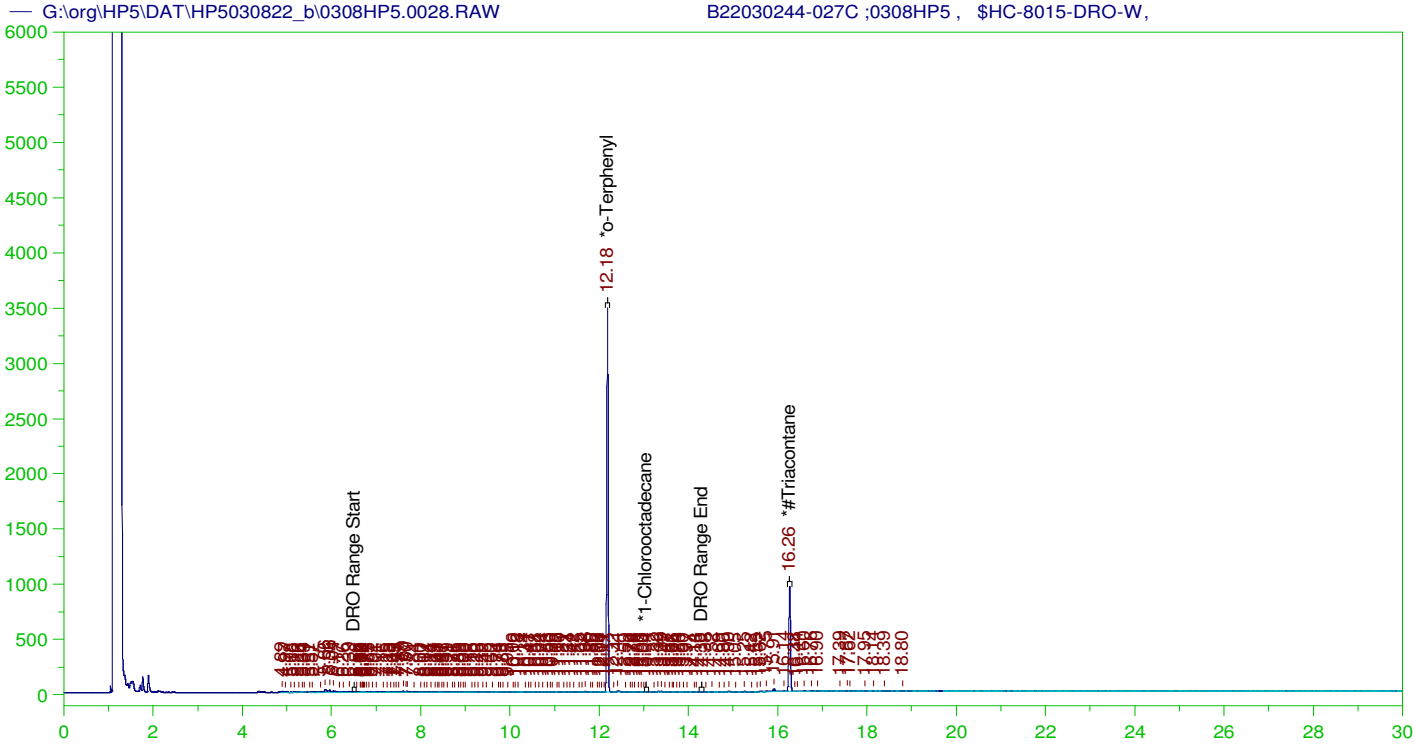
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.265	.476	.08	16.77	-

RRO Area:177602.5 RRO AMOUNT: 6.401065E-03

ERH2578 (RHMW04) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0028.RAW B22030244-027C ;0308HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-027C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0028.RAW
Date & Time Acquired: 3/9/2022 3:31:06 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

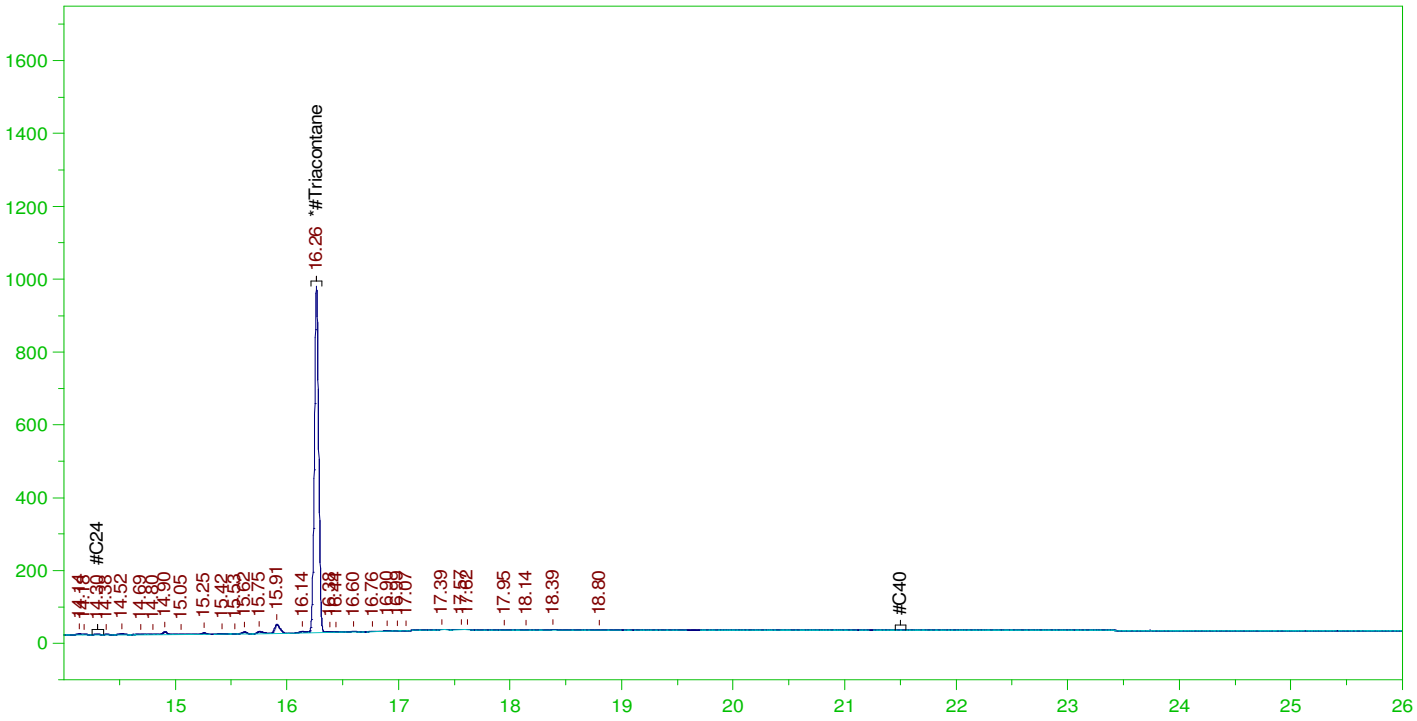
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.183	.19	.177	92.79	-
*1-Chlorooctadecane	13.043	.19	. .12		-
*#Triacontane	16.264	.19	.082	42.88	-

DRO Area:629175.3 DRO Amount: 1.833842E-02
TEH Area:1183053 TEH Amount: 3.448216E-02

ERH2578 (RHMW04) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0028.RAW B22030244-027C ;0308HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-027C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0028.RAW
Date & Time Acquired: 3/9/2022 3:31:06 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

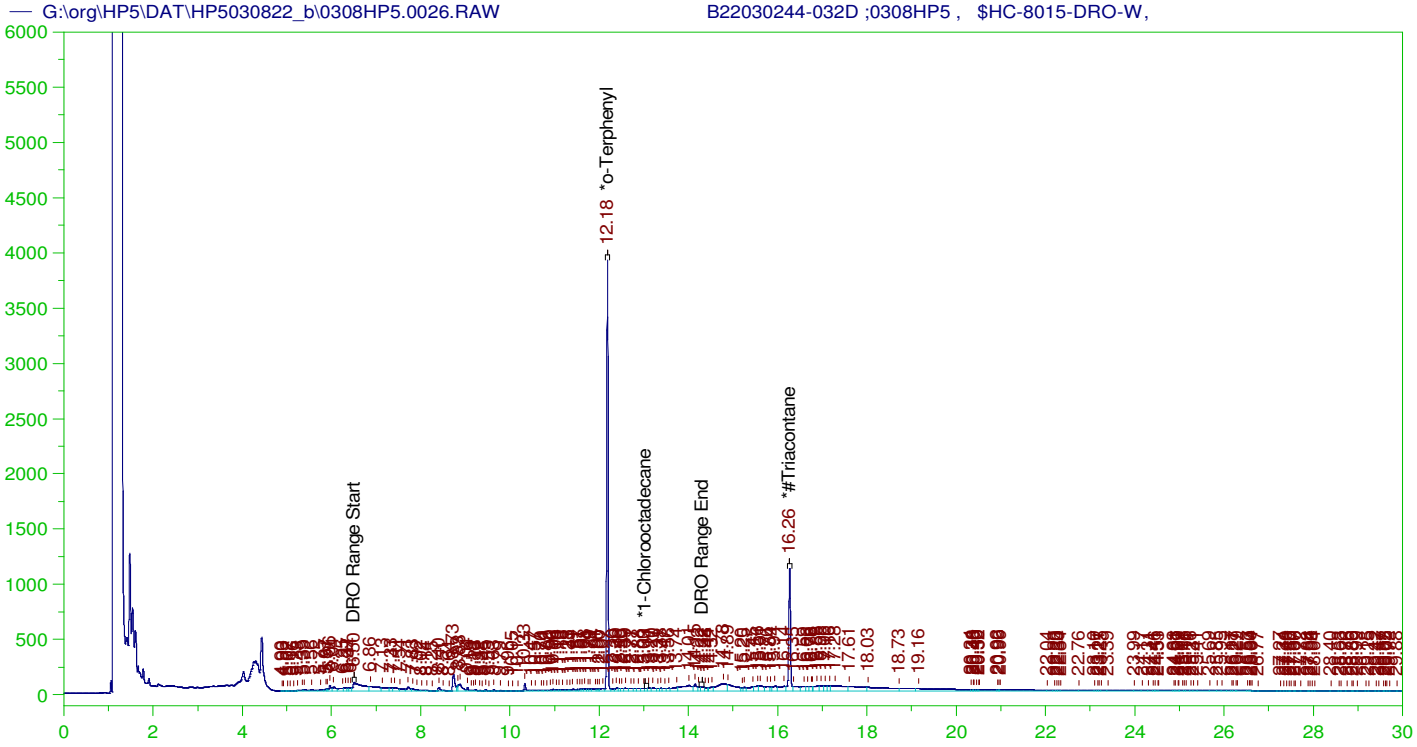
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.264	.476	.082	17.15	-

RRO Area:229614.3 RRO AMOUNT: 8.275646E-03

ERH2624 (RHMW07) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0026.RAW B22030244-032D ;0308HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-032D ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0026.RAW
Date & Time Acquired: 3/9/2022 2:05:29 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

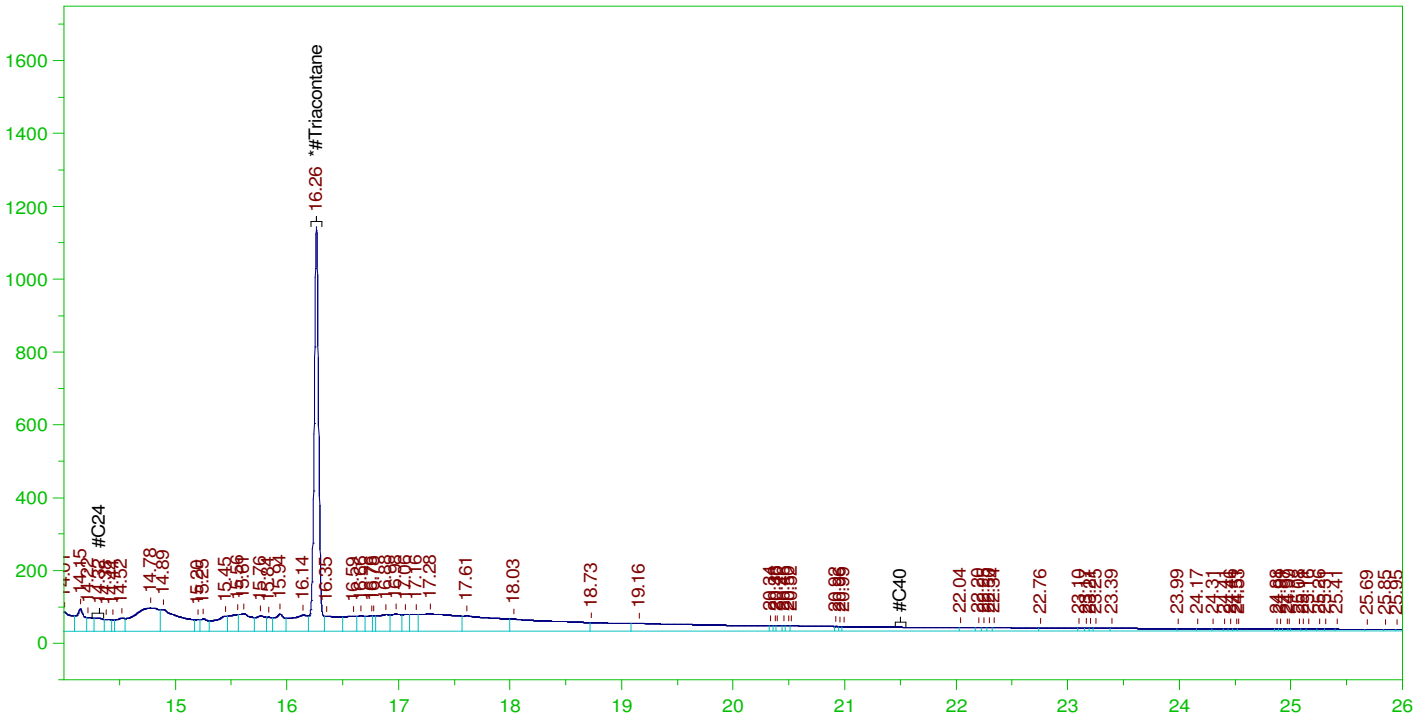
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.182	.19	.199	104.42	-
*1-Chlorooctadecane	13.035	.19	.002	1.18	-
*#Triacontane	16.264	.19	.102	53.57	-

DRO Area:1.007627E+07 DRO Amount: 0.2936905
TEH Area:2.592243E+07 TEH Amount: 0.755555

ERH2624 (RHMW07) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0026.RAW B22030244-032D ;0308HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-032D ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0026.RAW
Date & Time Acquired: 3/9/2022 2:05:29 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

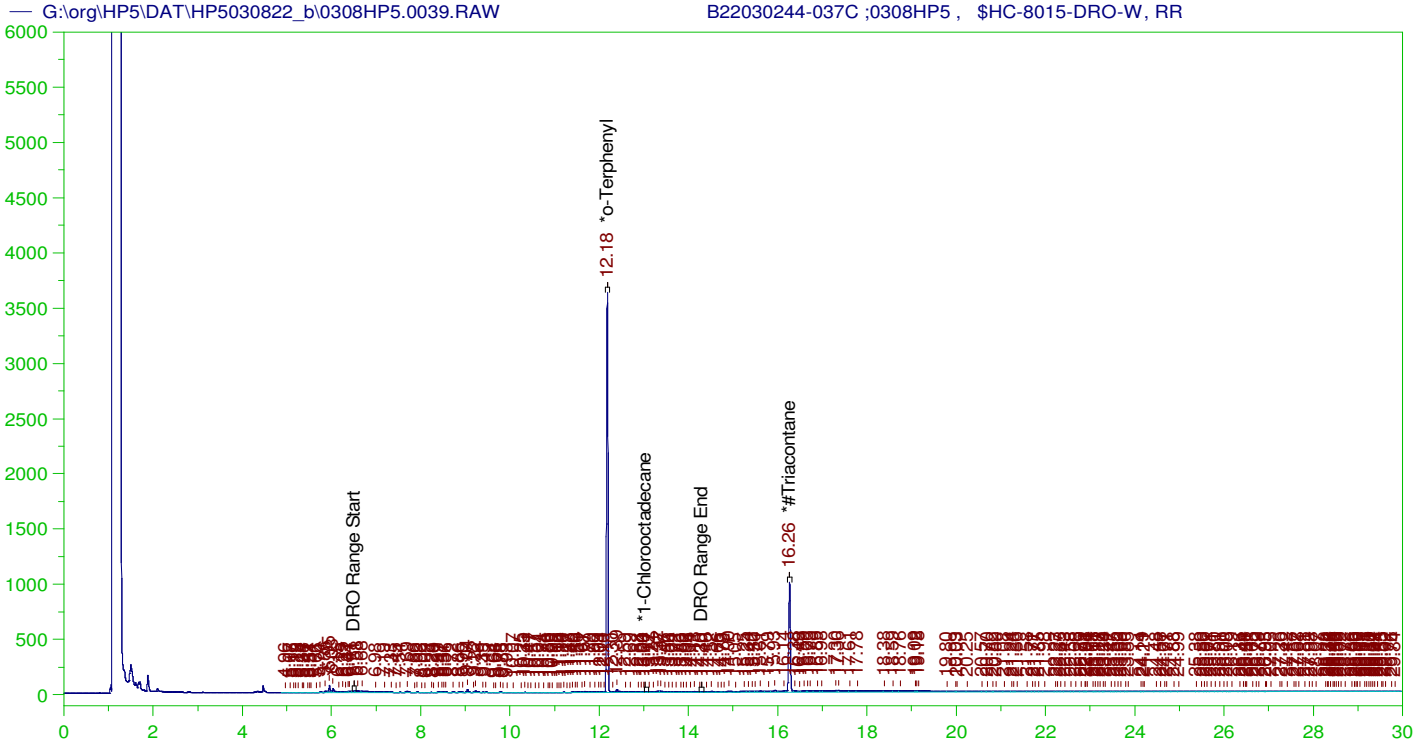
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.264	.476	.102	21.43	-

RRO Area:1.294494E+07 RRO AMOUNT: 0.4665553

ERH2588 (RHMW12A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0039.RAW B22030244-037C ;0308HP5 , $HC-8015-DRO-W, RR



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-037C ;0308HP5 , $HC-8015-DRO-W, RR
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0039.RAW
Date & Time Acquired: 3/9/2022 11:22:14 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

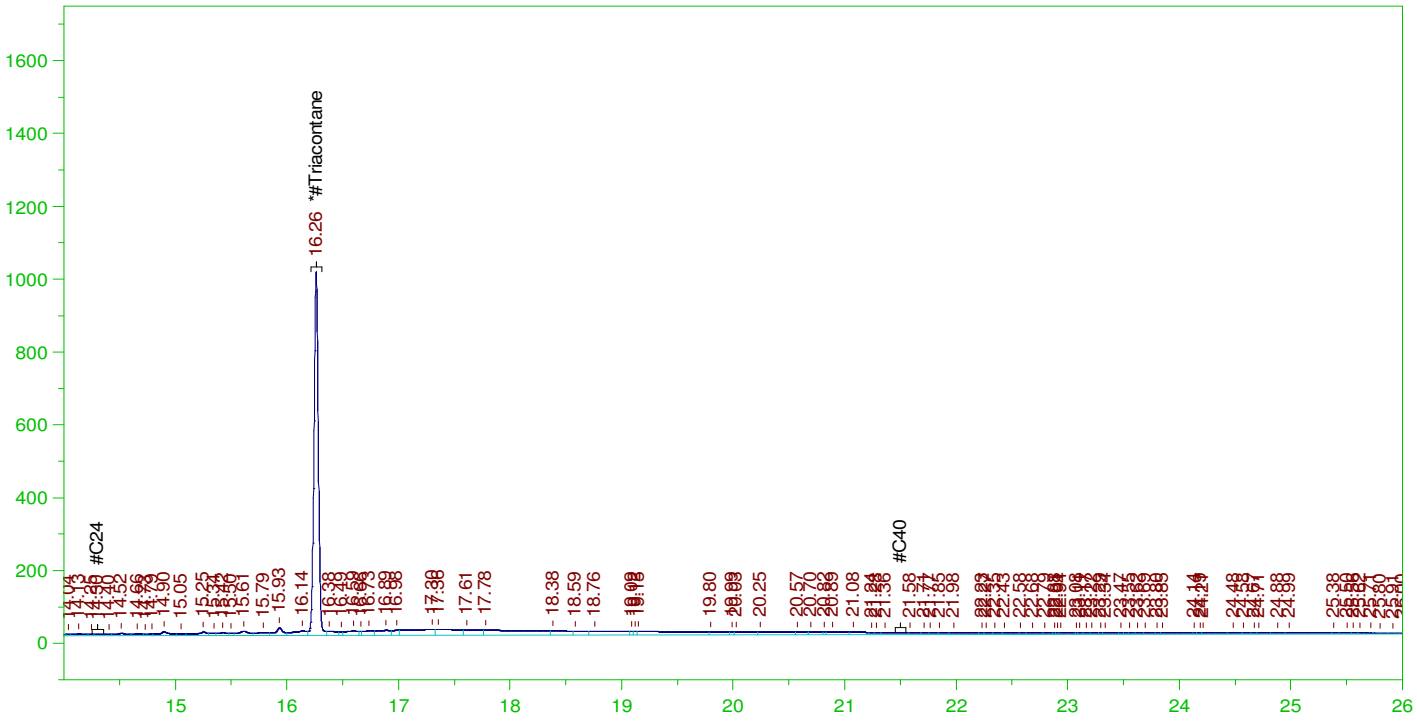
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.178	.19	.186	97.48	-
*1-Chlorooctadecane	13.035	.19	.	.24	-
*#Triacontane	16.262	.19	.088	46.38	-

DRO Area:1686143 DRO Amount: 4.914559E-02
TEH Area:7601433 TEH Amount: 0.2215572

ERH2588 (RHMW12A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0039.RAW B22030244-037C ;0308HP5 , $HC-8015-DRO-W, RR



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-037C ;0308HP5 , $HC-8015-DRO-W, RR
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0039.RAW
Date & Time Acquired: 3/9/2022 11:22:14 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

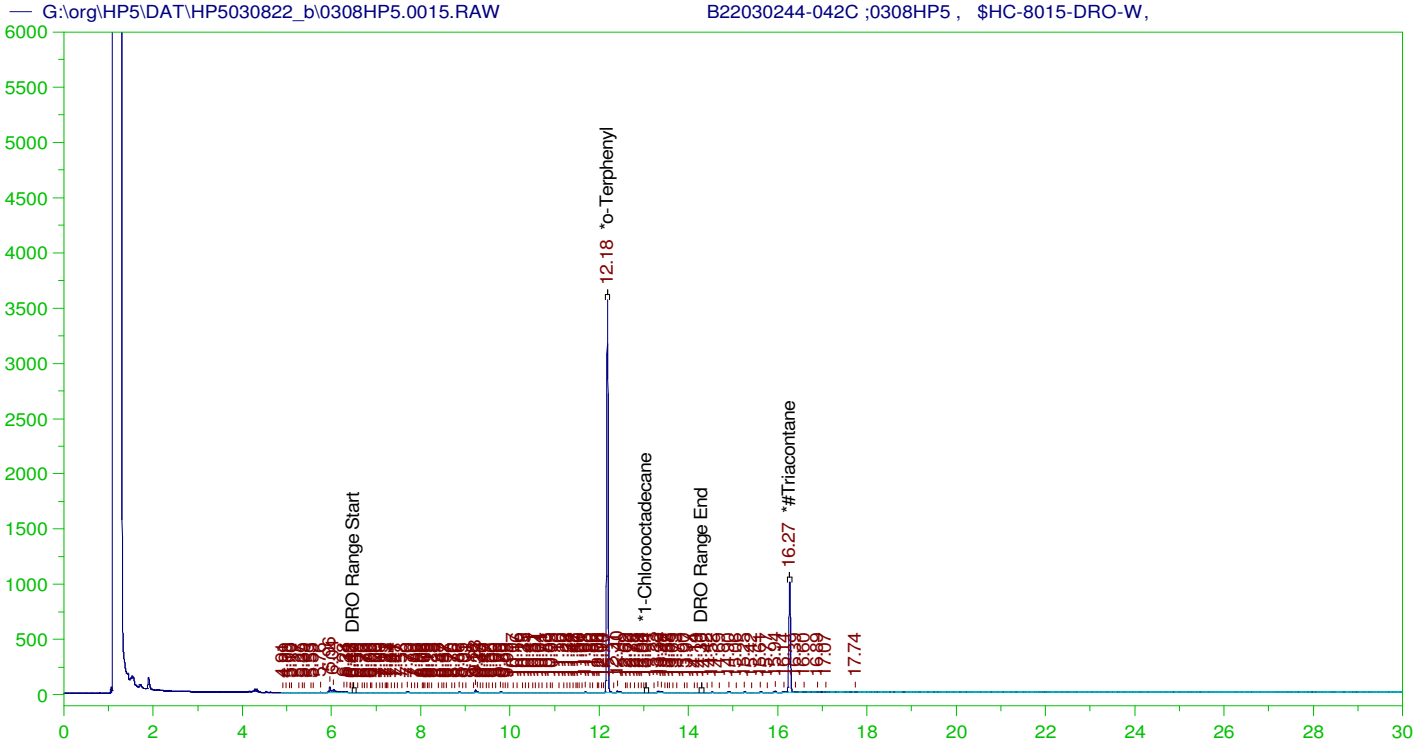
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.262	.476	.088	18.55	-

RRO Area:3978236 RRO AMOUNT: 0.1433817

ERH2596 (RHMW16) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0015.RAW B22030244-042C ;0308HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-042C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0015.RAW
Date & Time Acquired: 3/8/2022 6:14:18 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

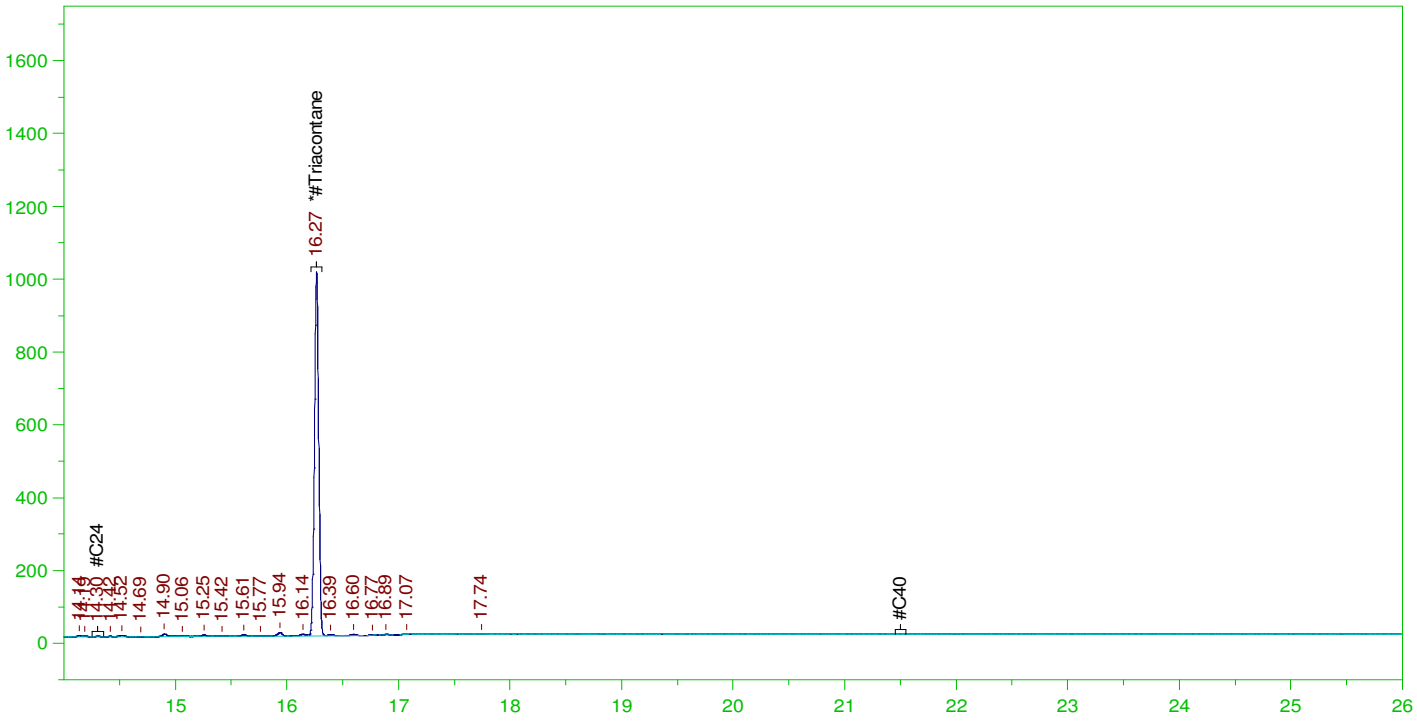
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.181	.19	.182	95.41	-
*1-Chlorooctadecane	13.044	.19	.	.06	-
*#Triacontane	16.266	.19	.086	44.93	-

DRO Area:620780.6 DRO Amount: 1.809374E-02
TEH Area:1167940 TEH Amount: 3.404167E-02

ERH2596 (RHMW16) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0015.RAW B22030244-042C ;0308HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-042C ;0308HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0015.RAW
Date & Time Acquired: 3/8/2022 6:14:18 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

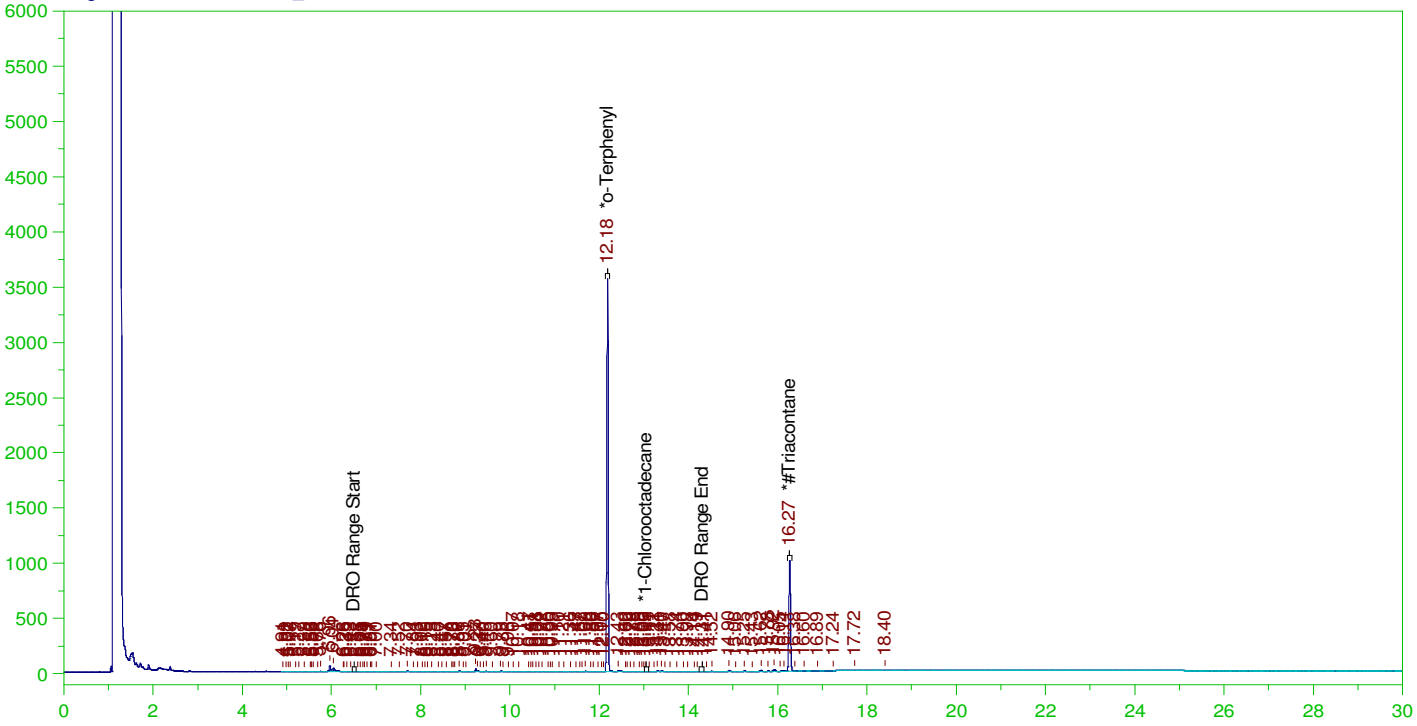
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.266	.476	.086	17.97	-

RRO Area:134593.9 RRO AMOUNT: 4.85097E-03

ERH2592 (RHMW14-3) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0038.RAW B22030244-047C ;0308HP5 , $HC-8015-DRO-W, RR



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-047C ;0308HP5 , $HC-8015-DRO-W, RR
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0038.RAW
Date & Time Acquired: 3/9/2022 10:39:16 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

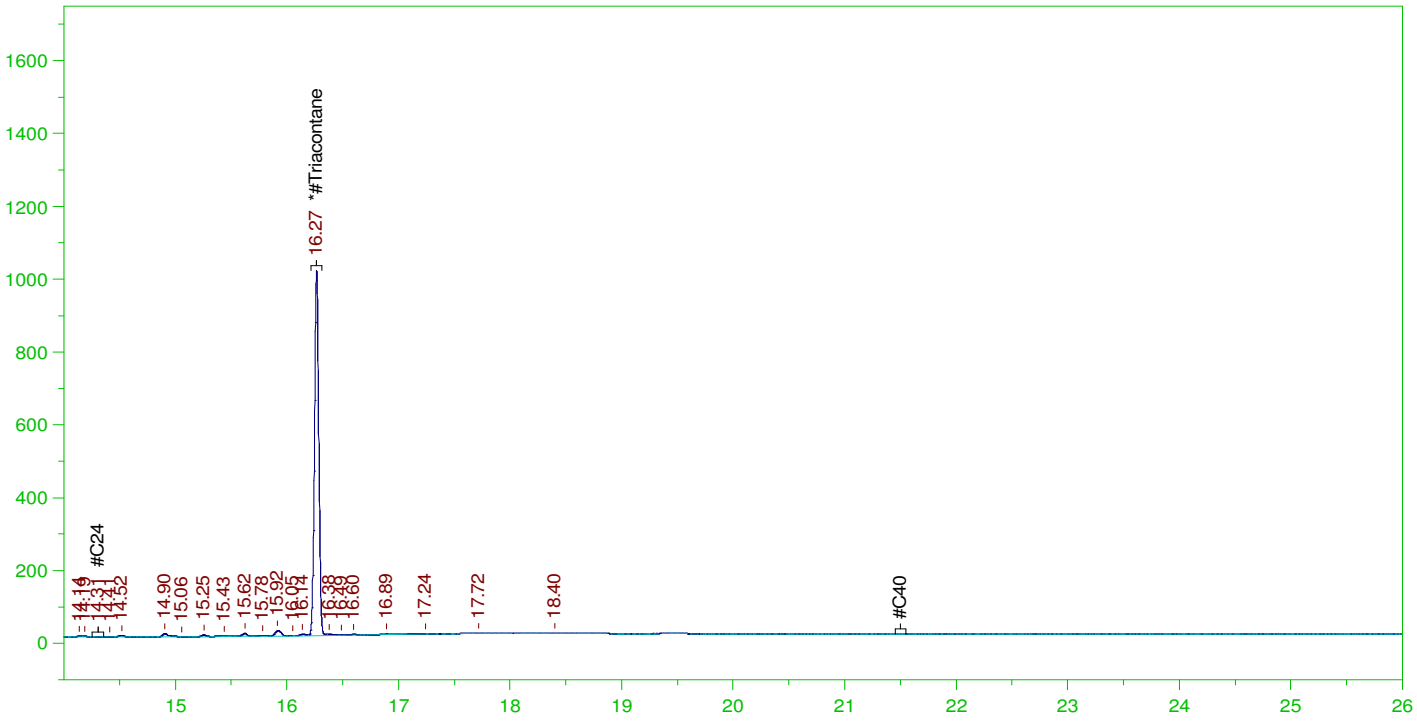
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.183	.19	.185	97.18	-
*1-Chlorooctadecane	13.046	.19	.	.04	-
*#Triacontane	16.266	.19	.087	45.55	-

DRO Area:577784.2 DRO Amount: 1.684054E-02
TEH Area:1169622 TEH Amount: 3.409069E-02

ERH2592 (RHMW14-3) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0038.RAW B22030244-047C ;0308HP5 , $HC-8015-DRO-W, RR



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-047C ;0308HP5 , $HC-8015-DRO-W, RR
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0038.RAW
Date & Time Acquired: 3/9/2022 10:39:16 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

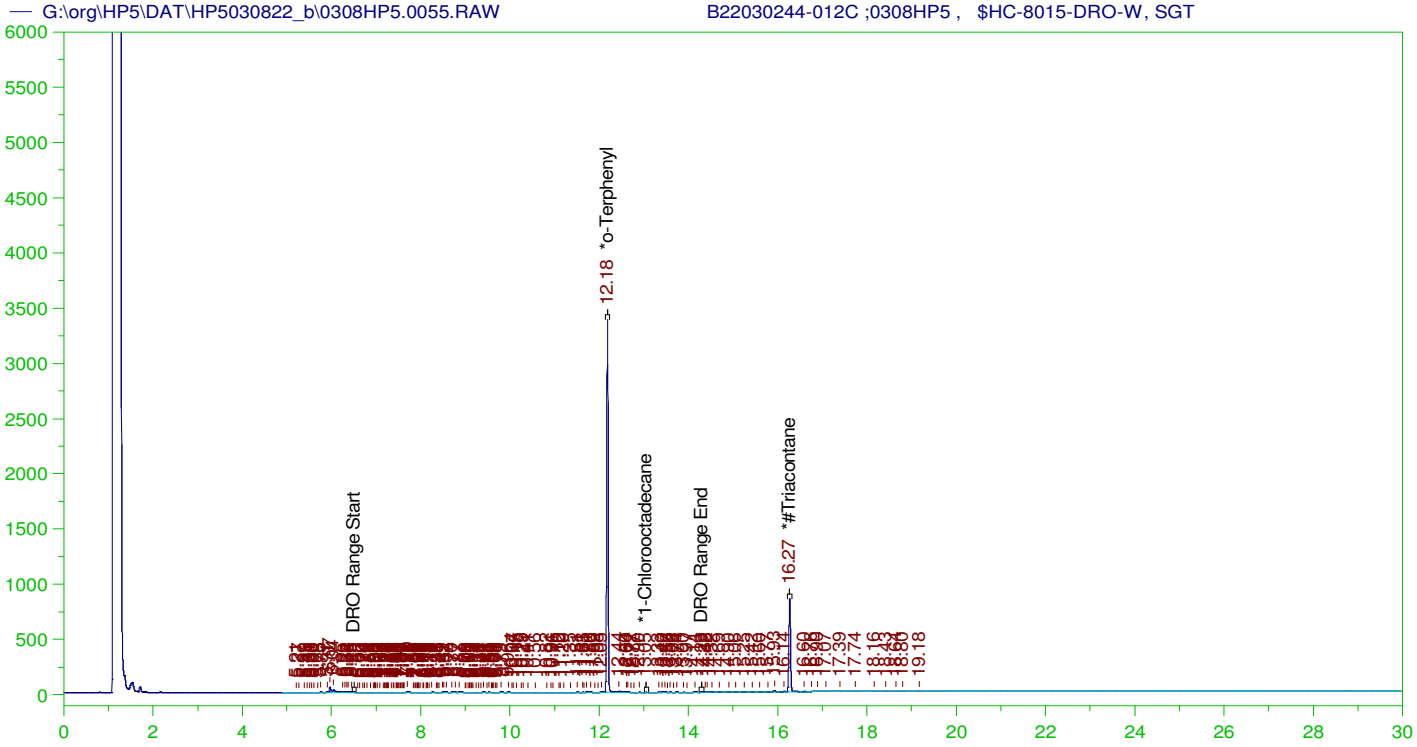
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.266	.476	.087	18.23	-

RRO Area:200712.3 RRO AMOUNT: 7.233977E-03

ERH2574 (RHMW16A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0055.RAW B22030244-012C ;0308HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-012C ;0308HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0055.RAW
Date & Time Acquired: 3/9/2022 10:46:49 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

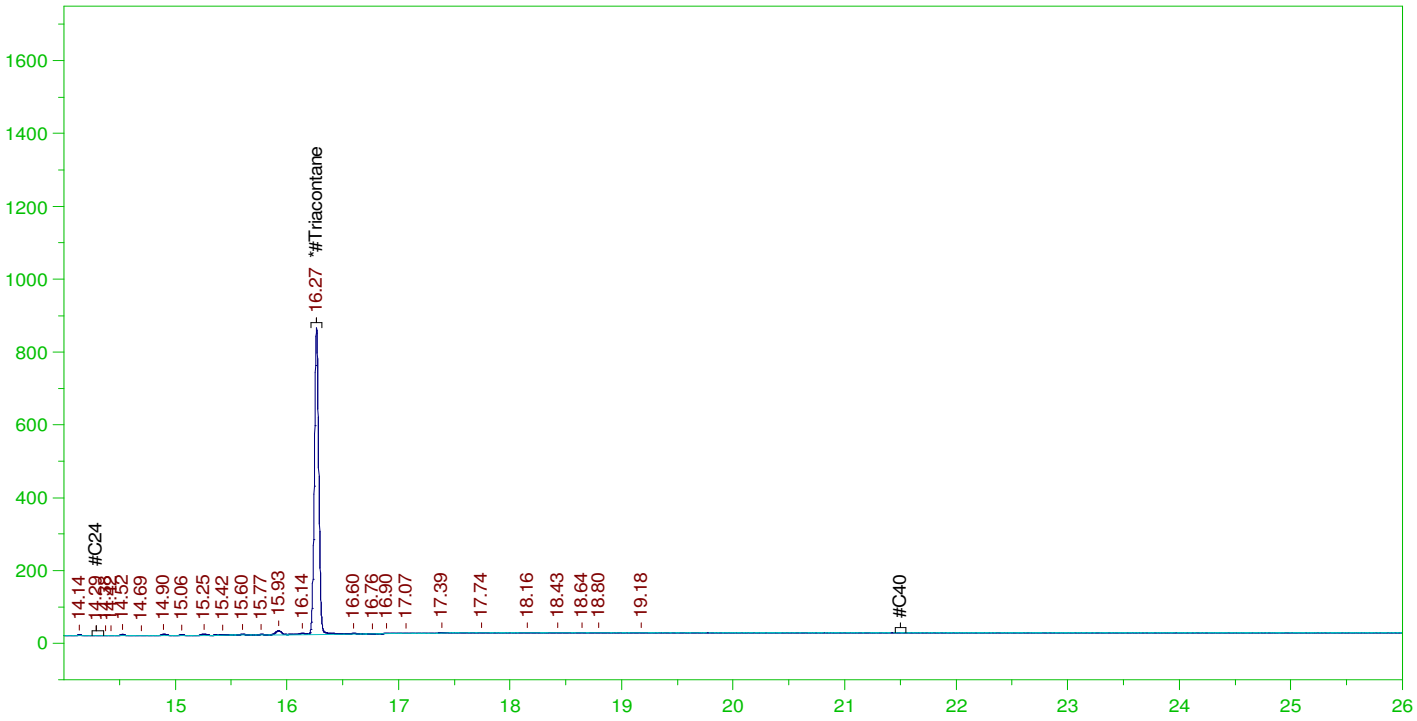
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.182	.19	.175	91.68	-
*1-Chlorooctadecane	13.052	.19	.	.04	-
*#Triacontane	16.265	.19	.075	39.22	-

DRO Area:404053.2 DRO Amount: 1.177684E-02
TEH Area:897821.6 TEH Amount: 2.616859E-02

ERH2574 (RHMW16A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0055.RAW B22030244-012C ;0308HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-012C ;0308HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0055.RAW
Date & Time Acquired: 3/9/2022 10:46:49 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

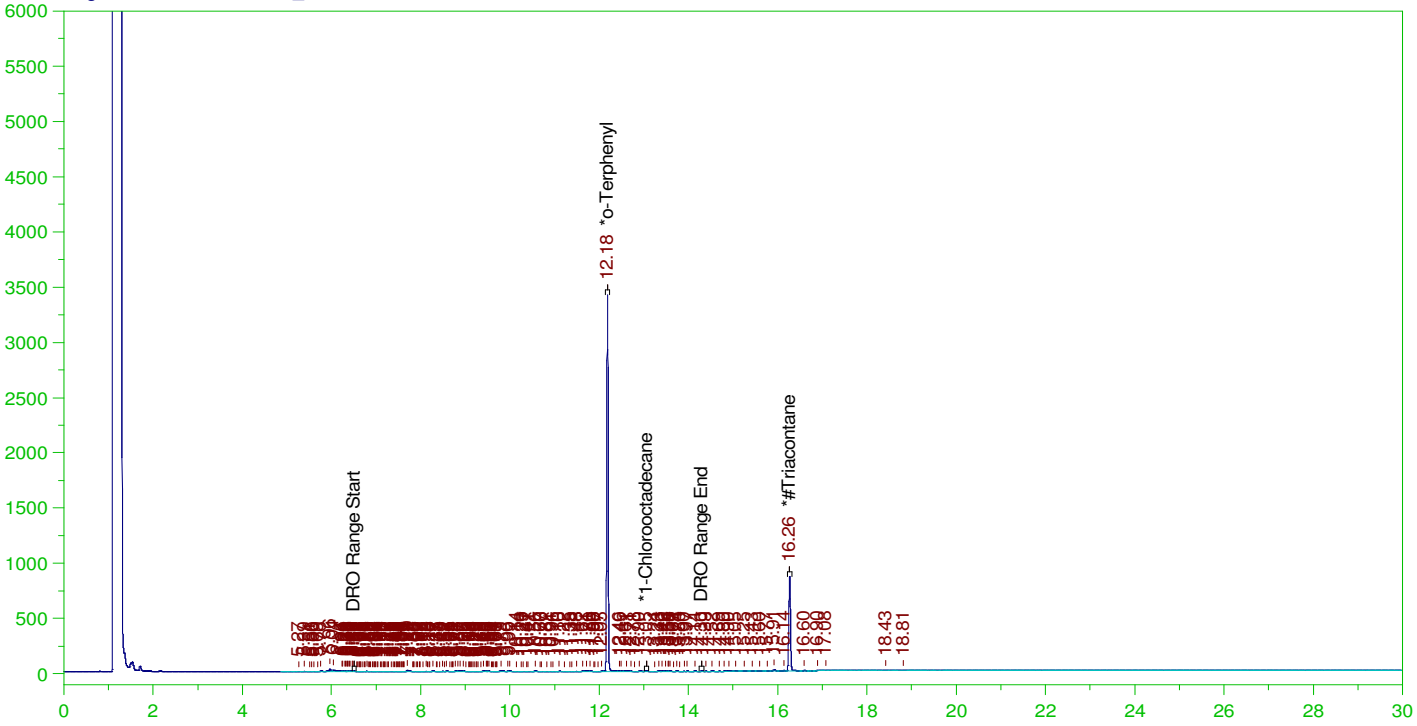
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.265	.476	.075	15.72	-

RRO Area:137619.9 RRO AMOUNT: 4.96003E-03

ERH2582 (RHMW06) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0052.RAW B22030244-022C ;0308HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-022C ;0308HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0052.RAW
Date & Time Acquired: 3/9/2022 8:38:34 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

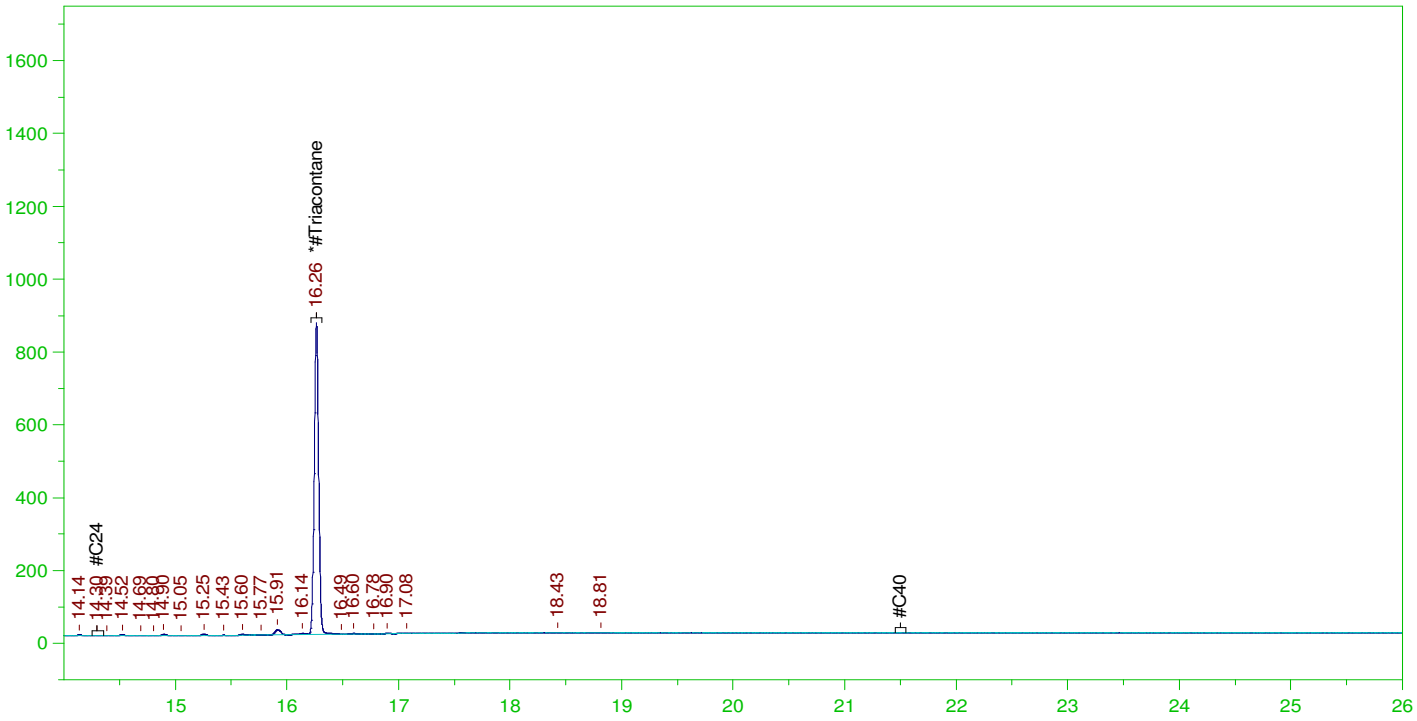
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.182	.19	.177	93.03	-
*1-Chlorooctadecane	13.053	.19	.	.08	-
*#Triacontane	16.264	.19	.076	39.95	-

DRO Area:334548.6 DRO Amount: 9.751008E-03
TEH Area:654792.3 TEH Amount: 1.908508E-02

ERH2582 (RHMW06) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0052.RAW B22030244-022C ;0308HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-022C ;0308HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0052.RAW
Date & Time Acquired: 3/9/2022 8:38:34 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

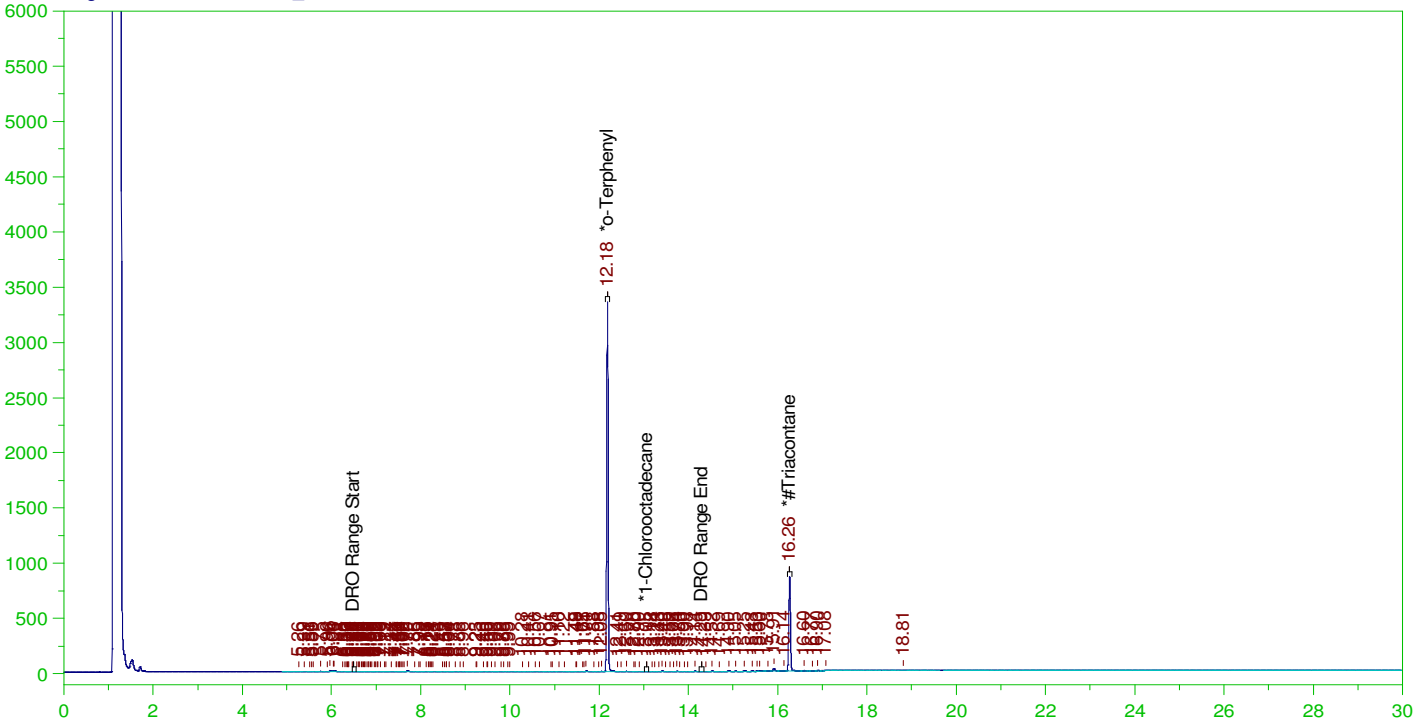
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.264	.476	.076	16.	-

RRO Area:136640.6 RRO AMOUNT: 4.924734E-03

ERH2578 (RHMW04) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0051.RAW B22030244-027C ;0308HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-027C ;0308HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0051.RAW
Date & Time Acquired: 3/9/2022 7:55:54 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

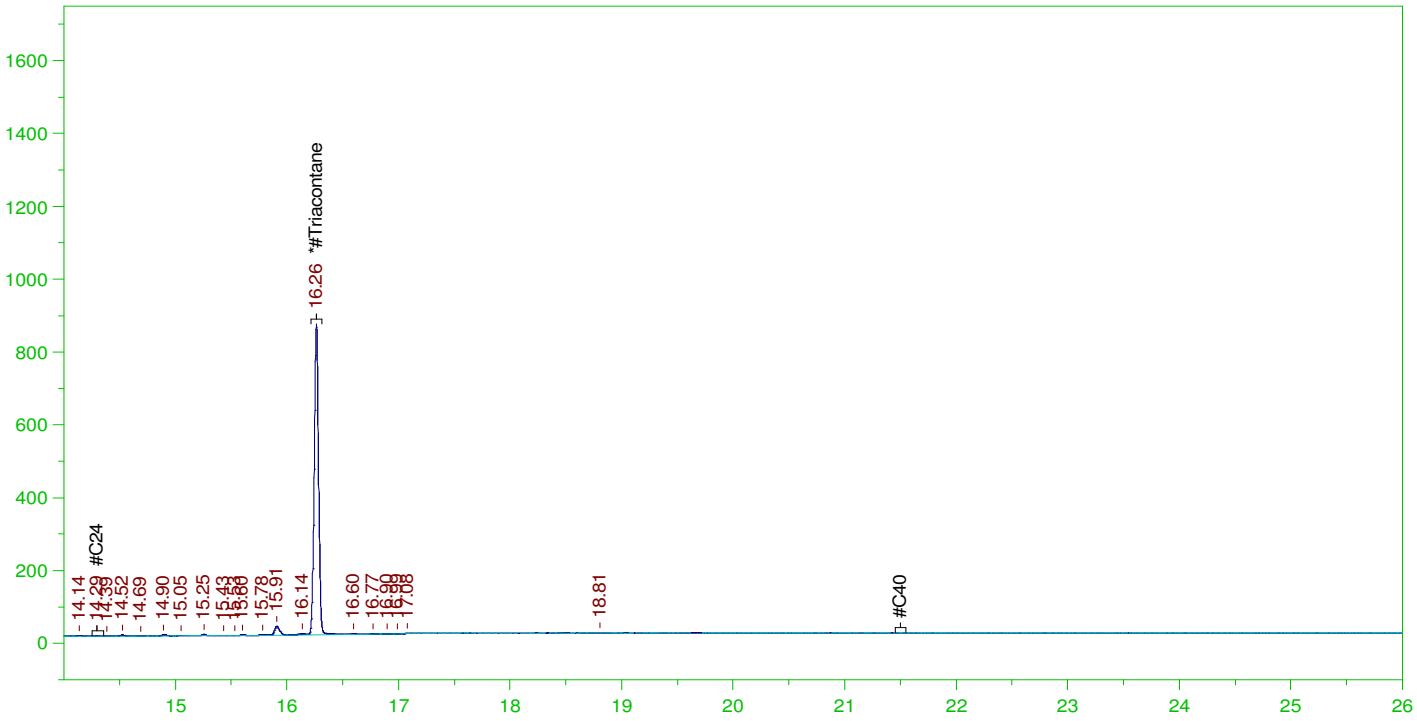
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.182	.19	.177	92.83	-
*1-Chlorooctadecane	13.053	.19	.	.08	-
*#Triacontane	16.264	.19	.075	39.4	-

DRO Area:260715.3 DRO Amount: 7.599007E-03
TEH Area:537168.9 TEH Amount: 1.565674E-02

ERH2578 (RHMW04) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0051.RAW B22030244-027C ;0308HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-027C ;0308HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0051.RAW
Date & Time Acquired: 3/9/2022 7:55:54 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

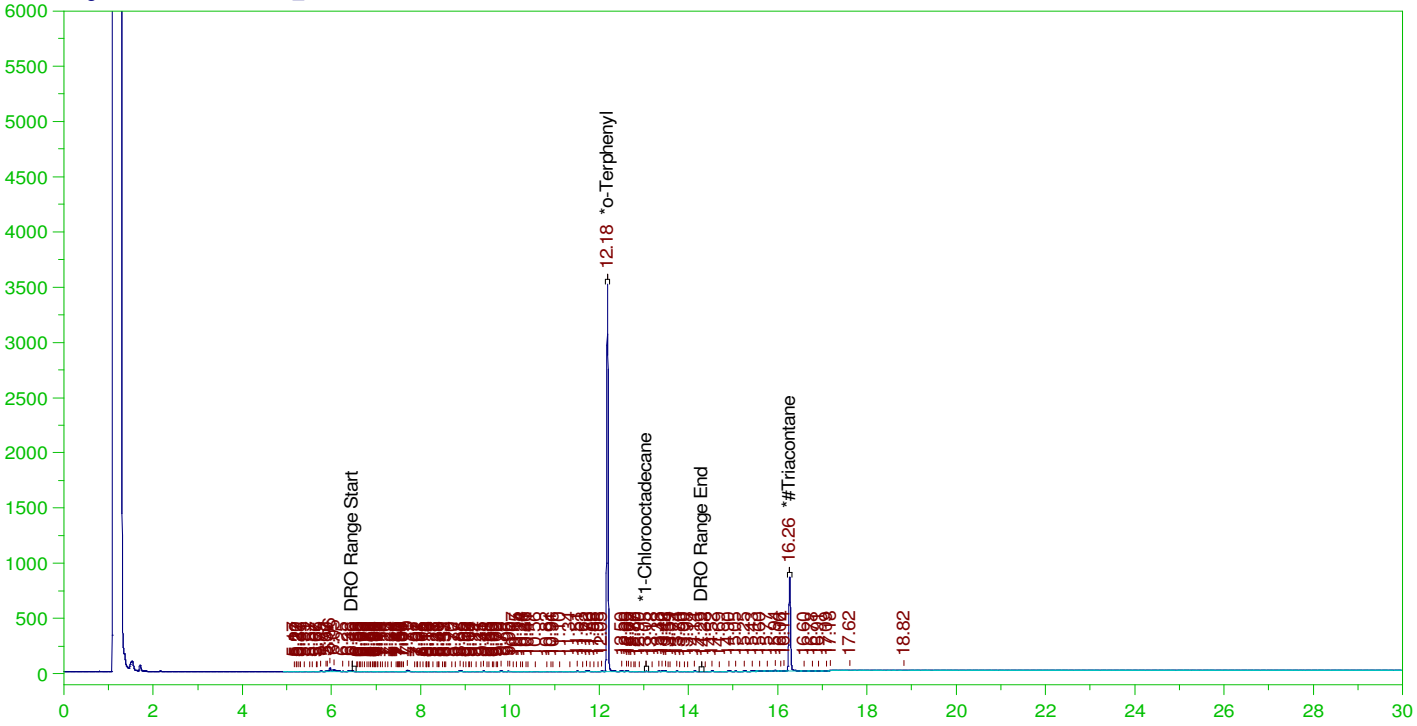
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.264	.476	.075	15.79	-

RRO Area:166869.7 RRO AMOUNT: 6.014238E-03

ERH2624 (RHMW07) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0057.RAW B22030244-032D ;0308HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-032D ;0308HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0057.RAW
Date & Time Acquired: 3/10/2022 12:12:22 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

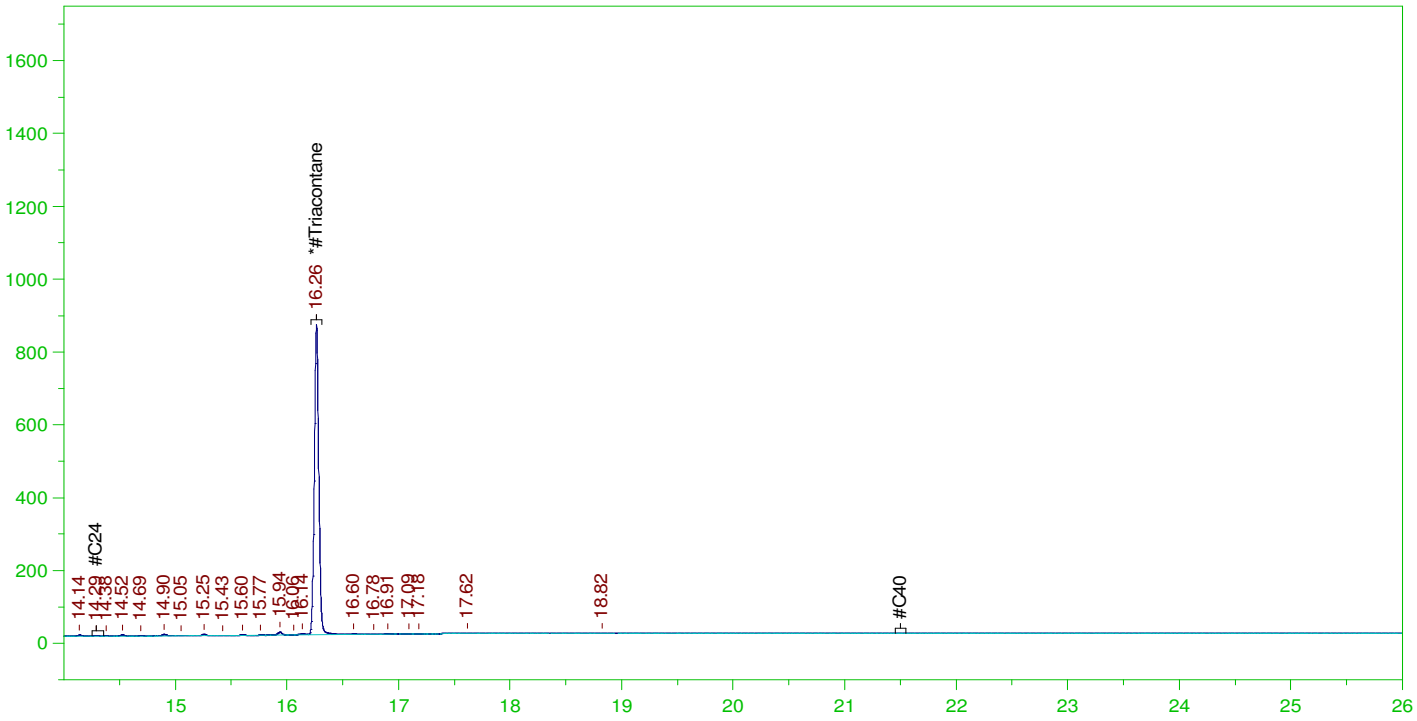
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.182	.19	.181	95.25	-
*1-Chlorooctadecane	13.051	.19	. .07		-
*#Triacontane	16.265	.19	.077	40.29	-

DRO Area:398633.3 DRO Amount: 1.161887E-02
TEH Area:786392.9 TEH Amount: 2.292081E-02

ERH2624 (RHMW07) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0057.RAW B22030244-032D ;0308HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-032D ;0308HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0057.RAW
Date & Time Acquired: 3/10/2022 12:12:22 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

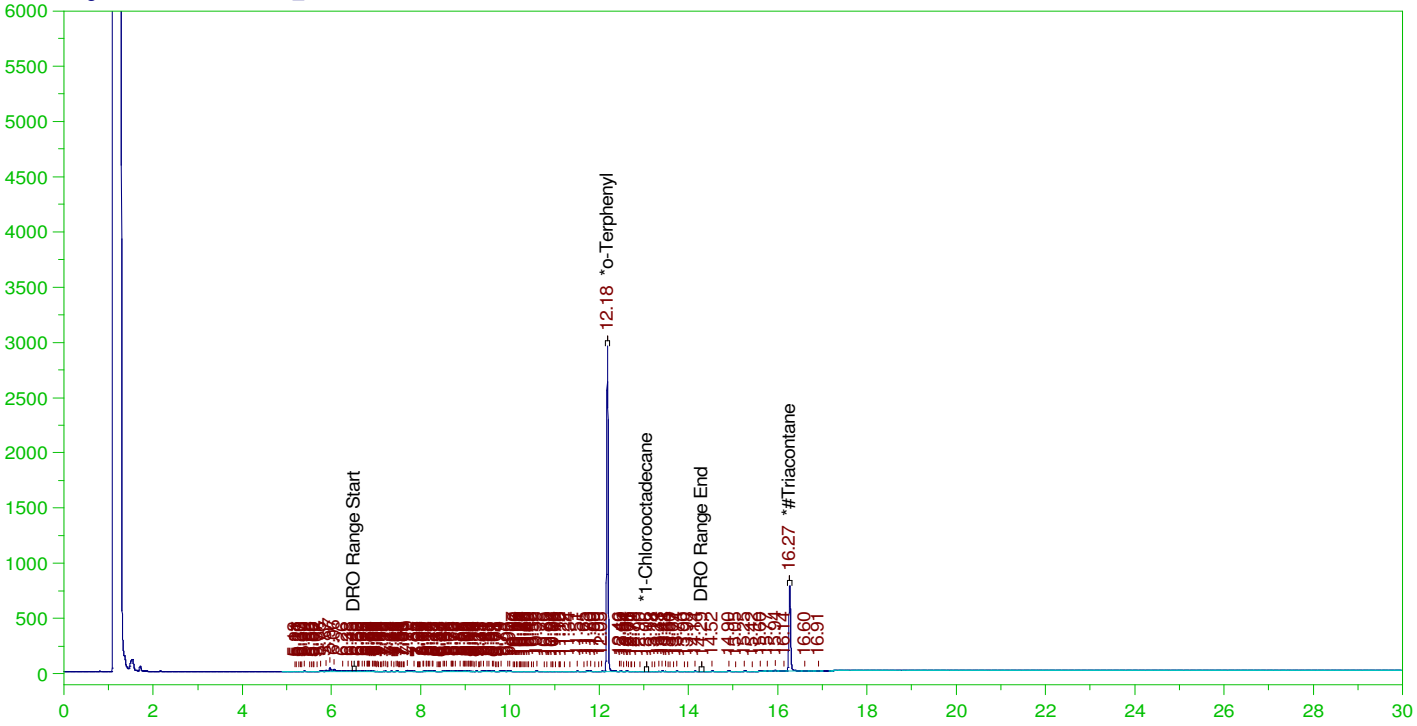
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.265	.476	.077	16.14	-

RRO Area:108507.7 RRO AMOUNT: 3.910783E-03

ERH2588 (RHMW12A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0056.RAW B22030244-037C ;0308HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030244-037C ;0308HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0056.RAW
Date & Time Acquired: 3/9/2022 11:29:29 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JI-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111Ji-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

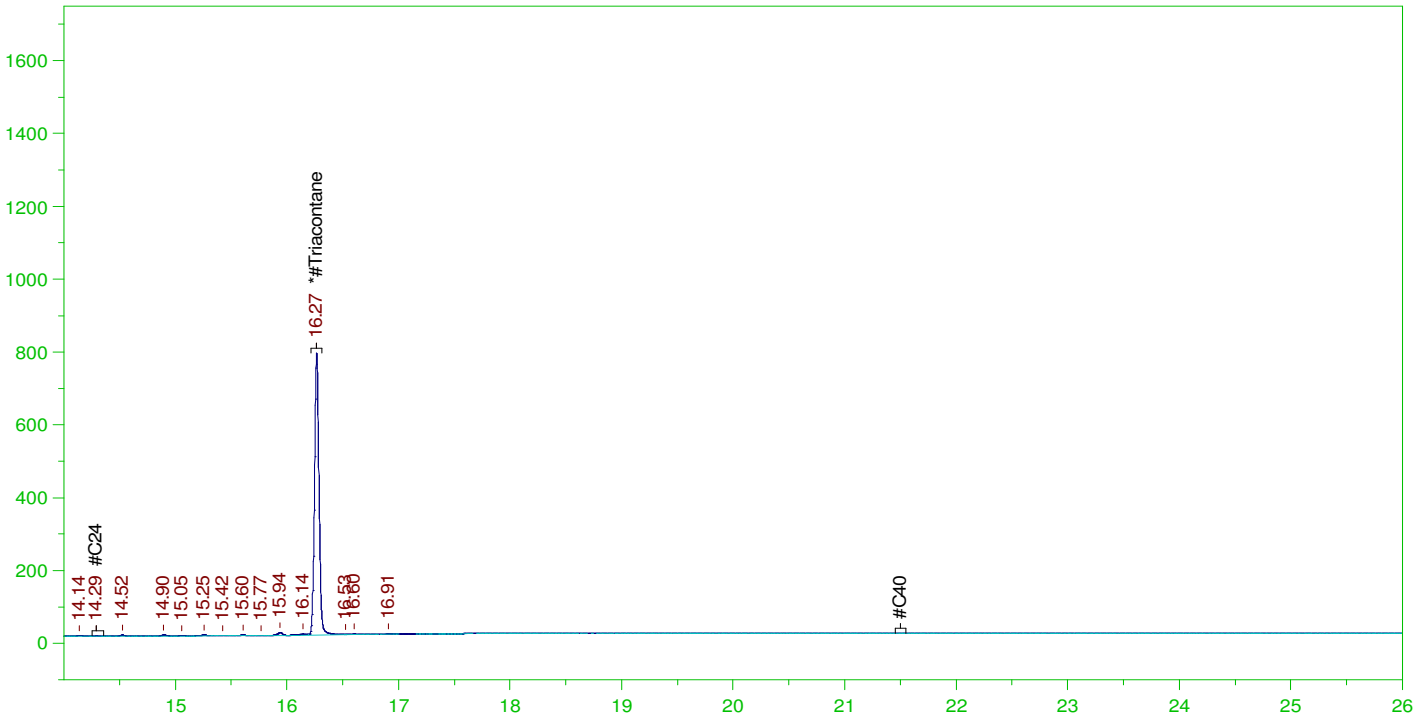
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.46 to 14.345

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.182	.19	.155	81.32	-
*1-Chlorooctadecane	13.057	.19	.	.06	-
*#Triacontane	16.267	.19	.07	36.92	-

DRO Area:456828.1 DRO Amount: 1.331506E-02
TEH Area:859657.2 TEH Amount: 2.505622E-02

ERH2588 (RHMW12A) Batch ID: 164267

G:\org\HP5\DAT\HP5030822_b\0308HP5.0056.RAW B22030244-037C ;0308HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030244-037C ;0308HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5030822_b\0308HP5.0056.RAW
Date & Time Acquired: 3/9/2022 11:29:29 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BI-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BI_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: 14.255 to 21.55

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.267	.476	.071	14.81	-

RRO Area:83955.23 RRO AMOUNT: 3.025874E-03

From: Ramos, Alethea <alethea.ramos@aecom.com>
Sent: Monday, December 13, 2021 3:11 PM
To: Tabitha Edwards
Cc: Pascua, Margie; billingsPM@energylab.com
Subject: RE: [EXTERNAL] FW: CV18F0126: Expedited NOI Groundwater Samples, Saturday 12/12 Submission

Categories: Must Attend

Hi Tabitha,

I believe Casper WY is DoD ELAP accredited in the TOC 9060 method. I spoke to Shari and she indicated there is a daily courier between Billings and Casper, and would be appx. a day delay. Under those stipulations, please subcontract these samples and inform on expedited TAT.

Thank you,

Alethea Ramos, CIH
Environmental Scientist, Environmental Health & Science, Environment
D +1-808-529-7283
M +1-808-389-5383
alethea.ramos@aecom.com

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
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

Imagine it. Delivered.

LinkedIn | Twitter | Facebook | Instagram

Fortune World's Most Admired Companies 2020