ANALYTICAL SUMMARY REPORT

March 16, 2022

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

Work Order: B22030433 Quote ID: 5912

Project Name: CV18F0126, 60571032.02.46.01

Energy Laboratories Inc Billings MT received the following 53 samples from AECOM - Honolulu on 3/5/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Received Date	Matrix	Test
B22030433-001	ERH2618 (OWDFMW05A)	03/02/22 13:15	03/05/2022	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
B22030433-002	ERH2674 (OWDFMW05A) FD	03/02/22 13:15	03/05/2022	Ground Water	DRO-Liquid-Liquid Extraction SW3520C 8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C Diesel Range Organics SW8015C
B22030433-003	ERH2617 (Trip Blank) 14733	03/02/22 13:15	03/05/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030433-004	ERH2617 (Trip Blank) 14894	03/02/22 13:15	03/05/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030433-005	ERH2617 (Trip Blank) 14894	03/02/22 13:15	03/05/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030433-006	ERH2617 (Trip Blank) 14895	03/02/22 13:15	03/05/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22030433-007	ERH2576 (RHMW03)	03/02/22 19:10	03/05/2022	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
B22030433-008	ERH2575 (Trip Blank) 14733	03/02/22 19:10	03/05/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030433-009	ERH2575 (Trip Blank) 14525	03/02/22 19:10	03/05/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030433-010	ERH2575 (Trip Blank) 14894	03/02/22 19:10	03/05/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030433-011	ERH2575 (Trip Blank) 14895	03/02/22 19:10	03/05/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030433-012	ERH2622 (RHMW02)	03/02/22 17:55	03/05/2022	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
B22030433-013	ERH2621 (Trip Blank) 14733	03/02/22 17:55	03/05/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030433-014	ERH2621 (Trip Blank) 14894	03/02/22 17:55	03/05/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030433-015	ERH2621 (Trip Blank) 14894	03/02/22 17:55	03/05/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030433-016	ERH2621 (Trip Blank) 14985	03/02/22 17:55	03/05/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22030433-017	ERH2602 (RHMW01R)	03/02/22 15:45	03/05/2022	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
B22030433-018	ERH2603 (RHMW01R FD)	03/02/22 15:45	03/05/2022	Ground Water	DRO-Liquid-Liquid Extraction SW3520C 8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C Diesel Range Organics SW8015C
B22030433-019	ERH2601 (Trip Blank) 14833	03/02/22 15:45	03/05/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030433-020	ERH2601 (Trip Blank) 14894	03/02/22 15:45	03/05/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030433-021	ERH2601 (Trip Blank) 14894	03/02/22 15:45	03/05/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030433-022	ERH2601 (Trip Blank) 14895	03/02/22 15:45	03/05/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030433-023	ERH2614 (Sump Audit 3)	03/02/22 18:20	03/05/2022	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
B22030433-024	ERH2613 (Trip Blank) 14733	03/02/22 18:20	03/05/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030433-025	ERH2613 (Trip Blank) 14833	03/02/22 18:20	03/05/2022	Trip Blank	Gasoline Range Organics SW8015C

ANALYTICAL SUMMARY REPORT

B22030433-026	ERH2613 (Trip Blank) 14894	03/02/22 18:20	03/05/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030433-027	ERH2613 (Trip Blank) 14895	03/02/22 18:20	03/05/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030433-038	ERH2612 (RHMW2254-01 LF)	03/03/22 13:10	03/05/2022	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
B22030433-039	ERH2611 (Trip Blank) 14833	03/03/22 13:10	03/05/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030433-040	ERH2611 (Trip Blank) 14754	03/03/22 13:10	03/05/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030433-041	ERH2611 (Trip Blank) 14833	03/03/22 13:10	03/05/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030433-042	ERH2611 (Trip Blank) 14732	03/03/22 13:10	03/05/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030433-043	ERH2610 (RHMW2254-01 Bailer)	03/03/22 12:30	03/05/2022	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
B22030433-044	ERH2609 (Trip Blank) 14833	03/03/22 12:30	03/05/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030433-045	ERH2609 (Trip Blank) 14694	03/03/22 12:30	03/05/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030433-046	ERH2609 (Trip Blank) 14894	03/03/22 12:30	03/05/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction

ANALYTICAL SUMMARY REPORT

B22030433-047	ERH2609 (Trip Blank) 14895	03/03/22 12:30	03/05/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030433-053	ERH2580 (RHMW05 m/MS/MSD volumes)	03/02/22 14:00	03/05/2022	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
B22030433-054	ERH2579 (Trip Blank) 14733	03/02/22 14:00	03/05/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030433-055	ERH2579 (Trip Blank) 14833	03/02/22 14:00	03/05/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030433-056	ERH2579 (Trip Blank) 14894	03/02/22 14:00	03/05/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030433-057	ERH2579 (Trip Blank) 14895	03/02/22 14:00	03/05/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030433-058	ERH2620 (OWDFMW04A)	03/02/22 15:50	03/05/2022	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
B22030433-059	ERH2676 (OWDFMW04A) FD	03/02/22 15:50	03/05/2022	Ground Water	DRO-Liquid-Liquid Extraction SW3520C 8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C Diesel Range Organics SW8015C
B22030433-060	ERH2619 (Trip Blank) 14733	03/02/22 15:50	03/05/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B

ANALYTICAL SUMMARY REPORT

B22030433-061	ERH2619 (Trip Blank) 14833	03/02/22 15:50	03/05/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030433-062	ERH2619 (Trip Blank) 14894	03/02/22 15:50	03/05/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030433-063	ERH2619 (Trip Blank) 14895	03/02/22 15:50	03/05/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22030433-064	ERH2590 (RHMW013.5)	03/02/22 14:05	03/05/2022	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
B22030433-065	ERH2589 (Trip Blank) 14833	03/02/22 14:05	03/05/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22030433-066	ERH2589 (Trip Blank) 14894	03/02/22 14:05	03/05/2022	Trip Blank	Gasoline Range Organics SW8015C
B22030433-067	ERH2589 (Trip Blank) 14894	03/02/22 14:05	03/05/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22030433-068	ERH2589 (Trip Blank) 14895	03/02/22 14:05	03/05/2022	Trip Blank	Headspace Gas Analysis SW8015M

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

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

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

Report Approved By: Cindy Rohrer Laboratory Manager

Digitally signed by
Cindy Rohrer
Date: 2022.03.16 19:19:46 -06:00

CLIENT: AECOM - Honolulu
Project: CV18F0126, 60571032.02.46.01
Work Order: B22030433

Report Date: 3/16/2022

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).

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-07NOI

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	308 393 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	ERH2617 (Trip Blank)	3/2/22	0850	8	WQ	✔	✔	✔	✔							X	B220304 33 -003,004,005,006
2	ERH2618(OWDFMW05A)	3/2/22	0915	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	001
3	ERH2674 (OWDFMW05A) FD	3/2/22	0915	8	GW	✔	✔				✔					X	002
4	TB 8260 -14733			2													-003
5	TB GRO -14894			2													-004
6	TB 8011 - MN 14894 3/3/22			2													-005
7	TB Methane -14695			2													-006
8	TJ 3/5/22																
9																	

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Maggie Nutter	3/3/22 0930				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Leslie Cachu	3/5/22 1145	

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)
				3.5 °C	(Y) N	(Y) N			

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

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-02NOI

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	Gavi Mora
Sampler Phone	808-987-3201
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

All turnaround times are standard unless marked as RUSH.

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	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	ERH2576 (RHMW03)	03/02/22	1510	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	B220330433-007
2	ERH2575 (Trip Blank)	03/02/22	1505	8	WQ	✔	✔									X	-008, 009, 010, 011
3																	
4	TB 8260 - 14733			1													-008
5	TBGRO(W) - 14525			1													-009
6	TB 8011 - 14894 03/03/2022			4													-010
7	TBMethane - 14895			2													-011
8	TJ																
9	3/5/22																

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	CLARA LIN	03/03/2022 0830				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					3/5/22 11:45	

LABORATORY USE ONLY

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

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

Chain of Custody & Analytical Request Record

COC # 202203-01NOI

ENERGY LABORATORIES — Trust our People. Trust our Data.

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	Gwin Mun
Sampler Phone	808 957-3201
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	ERH2622 (RHMW02)	03/02/22	1355	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	B22030433-012
2	ERH2621 (Trip Blank)	03/02/22	1350	8	WQ	✔	✔									X	-013-014-015-016
3																	
4	TB 8260 14893																-013
5	TB 8020 14894																-014
6	TB 8011 14894																-015
7	TB methane 14895																-016
8																	
9																	

J-L 3/5/22

Zoe Diermier 3-3-22

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Zoe Diermier	3-3-22/0827	Zoe Diermier	Leslie Carlson	3/5/22 1145	Leslie Carlson
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature

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)
				1.1	Y N	Y N			

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

Chain of Custody & Analytical Request Record

COC # 202203-05NOI

ENERGY LABORATORIES — Trust our People. Trust our Data.

www.energylab.com

DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM
Contact	Aletha Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City, State, Zip	Honolulu, Hawaii 96813
Email	aletha.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	808 987-3201
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

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

Analysis — Subcontract Lab

TOC — Energy Laboratories Inc., Casper

Matrix Codes

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

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	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	ERH2602 (RH MW01R)	03/02/22	1145	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	B22030433-017
2	ERH2601 (Trip Blank)	03/02/22	1140	8	WQ	✔	✔									X	019, 020, 021, 022, 072
3	ERH2603 (RH MW01R FD)	03/02/22	1145	8	GW	✔	✔				✔					X	-018
4	TB 8260 — 14833			2													-019
5	TB GRO — 14894			2													-020
6	TB 8011 — 14894			1													-021
7	TB Methane — 14895			2													-022
8	TB — 14576		03/03/22	1													-072
9		TJ 3/5/22															

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
	Taylor White	03/03/22 08:28				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Leslie Cadena	3/5/22 11:45	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 8.5 °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check_____	Amount $	Receipt Number (cash/check only)

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

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-08NOI

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	Kevin Lee
Sampler Phone	808 6363519
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	ERH2614 (Sump Audit 3)	03/02/22	1420	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	220304433-023
2	ERH2613 (Trip Blank)	03/02/22	1345	8	WQ	✔	✔									X	-024, 025, 026, 027
3	TB 8260 - 14733 2																-024
4	TB ~~ERO~~ - 14833 1																-025
5	TB 8011 - 14894 3																-026
6	TB Methane - 14895 2																-027
7	~~IJ 3/5/22~~	03/03/22															
8																	
9																	

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Taylor White	03/03/22 09:45				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Jasmine Cohen	3/5/22 11:45	

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)
				3.7 °C Frozen					

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

Chain of Custody & Analytical Request Record

COC # 202203-13NOI

ENERGY LABORATORIES — Trust our People. Trust our Data.

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	Kevinlee
Sampler Phone	8086363319
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	ERH2612 (RHMW2254-01 LF)	03/03/22	0910	17	GW	✓	✓	✓	✓		✓	✓	✓	✓		X	B220304336
2	ERH2611 (Trip Blank)	03/03/22	0840	8	WQ	✓	✓									X	039, 040, 041, 042, 070
3	TB-8260-14833			2													039
4	TB-GRO-14734			2													040
5	TB-8011-14833			2													041
6	TB-Methane-14732		3/3/22	2													042
7	TB-14808																070
8	TJ 3/5/22																
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
	Christian Perez	3/3/22 1245				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					3/5/22 15:48	

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)
				5.0	Y				

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

Chain of Custody & Analytical Request Record

COC # 202203-12NOI

ENERGY LABORATORIES — Trust our People. Trust our Data.

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	Nicolette Lawler
Sampler Phone	916-835-6425
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

All turnaround times are standard unless marked as RUSH.

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 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 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	ERH2610 (RHMW2254-01 Bailer)	3/3/22	08:30	17	GW	✓	✓	✓	✓		✓	✓	✓	✓		X	L2203043-043
2	ERH2609 (Trip Blank)	3/3/22	08:25	8	WQ	✓	✓									X	-044, 045, 046, 047
3																	
4	TB8260 - 14833			2													-044
5	TBGRO - 14894 03/03/2022			1													-045
6	TB8011 - 14894			2													-046
7	TB Methane - 14895			2													-047
8	TB - M705			1													-071
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
	Elana Lin	03/03/2022 1240				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					3/5/22 11:45	

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)
				1.2	Y N	Y N			

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

Chain of Custody & Analytical Request Record – DoD Project

ENERGY LABORATORIES — Trust our People. Trust our Data.

www.energylab.com

COC # 202203-04NOI

DoD Samples

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, HI 96813
Email	alethea.ramos@aecom.com / 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-methylnaphthalene)

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Gwin Mura
Sampler Phone	~~GMT~~ 808 987-36
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 - Other; DW - Drinking Water

Analysis Requested

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	MS/MSD 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 ERH2580 (RHMW05 MS/MSD volumes.)	03/02/22	1000	6	GW						X					✓	B220304 33-053
2																
3																
4																
5																
6																
7																
8																
9																
10																

3-3-22

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Zoe Diermier	3-3-22/0915	Zoe Diermier			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					3/5/22 1145	

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)
				3.6°C	(Y) N	(Y) N			

RO 24

ELI-COC-10/18 v.3

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record – DoD Project

COC # 202203-04NOI

www.energylab.com

DoD Samples Page 1 of 2

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, HI 96813
Email	alethea.ramos@aecom.com / 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-methylnaphthalene)

Project Information

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

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
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)	MS/MSD: 8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	MS/MSD: 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	ERH2580 (FHMW05 w/MS/MSD volumes)	03/02/22	1000	24	GW	X	X	X	X			X	X	X		✓	B22030433-053
2	ERH2579 (Trip Blank)	03/02/22	0955	8	WQ	X	X	X	X							✓	054, 055, 056, 057
3																	
4	TB 8260 - 14733			1													-054
5	TB GRO - 14833			1													-055
6	TB Metals - 14894			4													-056
7	TB 8015 - 14895			2													-057
8																	
9																	
10																	

CW 03/03/2022

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Clara Lin	03/02/2022 0850				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Leslie Cochran	3/3/22 11:45	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N	C B	Intact Y N	Receipt Temp 1.2 °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)

ELI-COC-10/18 v.3

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-06NOI

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 RJ SV
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	ERH2619 (Trip Blank)	3/2/22	1100	8	WQ	✓	✓	✓	✓							X	B22030440-058
2	ERH2620(OWDFMW04A)	3/2/22	1150	17	GW	✓	✓	✓	✓		✓	✓	✓	✓		X	-059
3	ERH2676 (OWDFMW04A) FD	3/2/22	1150	8	GW	✓	✓				✓					X	-060
4	TB 8260 14733																-061
5	TB Cerb 14833																-062
6	TB 804 14844																-063
7	TB Methane 14845																
8																	
9																	

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Maggie Nutter	3/3/22 0900				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					3/4/22 1100	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check_____	Amount $	Receipt Number (cash/check only)
				0.7 °C					

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

ELI-COC-01/21 v.4

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-03NOI

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	Sarah Walter
Sampler Phone	478-973-0578
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

All turnaround times are standard unless marked as RUSH.

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	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	ERH2590 (RHMW013.5)	3/2/22	1005	17	GW	✔	✔	✔	✔		✔	✔	✔	✔		X	B22030433-004
2	ERH2589 (Trip Blank)	3/2/22	0925	8	WQ	✔	✔									X	-005, 006, 007, 008, 009
3	~~TB 8260 - 14833~~																-005
4	~~TB GRO - 14894~~																-006
5	TB 8011 - 14894																-007
6	TB Methane - 14895																-008
7	TB 14653 TJ 3/5/22																-009
8																	
9																	

3/3/22 MN

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Maggie Nutter	3/3/22 0930				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					3/5/22 1148	

LABORATORY USE ONLY

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

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

Work Order Receipt Checklist

AECOM - Honolulu

B22030433

Login completed by:	Leslie S. Cadreau	Date Received:	3/5/2022
Reviewed by:	BL2000\tedwards	Received by:	lsc
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 of the sample(s) for shipping container 1 was 3.6°C and shipping container 8 was 3.7°C. The Temperature Blank temperature for shipping container 2 was 0.6°C, shipping container 3 was 1.0°C, shipping container 4 was 0.6°C, shipping container 5 was 0.7°C, shipping container 6 was 1.2°C, shipping container 7 was 1.1°C, shipping container 9 was 3.5°C, shipping container 10 was 1.2°C and shipping container 11 was 0.5°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.

One of the two containers for Total Organic Carbon for sample ERH2576 (RHMW03) was broken in the laboratory after receipt. There is sufficient volume to proceed using the remaining container.

One of the two containers for sample ERH2603 for Diesel Range Organics was received at pH >2. Sulfuric acid (1 mL) was added in the laboratory to preserve to pH <2.

A custody seal was not present on the following containers for sample ERH2602 (RHMW01R):

Total Metals
8011
Methane

The following containers were received without preservative traceability:

Sample ERH2618 (OWDFMW05A) for Gasoline Range Organics and Methane
Sample ERH2614 (Sump Audit 3) for 8011
Sample ERH2602 (RHMW01R) for Methane
An email was received from Cathy Larson on 3/10/2022, which indicated to proceed with analysis.

Samples ERH2600 (RHMW11-5), ERH2616 (OWDFMW01) and ERH2586 (RHMW09) were not received on 3/5/22.

Qualifiers and Abbreviations

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

Qualifiers and Abbreviations

Abbreviation

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

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

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2618 (OWDFMW05A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-001
Collection Date: 03/02/2022 13:15
Date Received: 03/05/2022
Report Date: 03/16/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.4 to 0.4	0.44	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/9/2022 13:29/eli-ca	SUB-C280346 : 22	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 11:56/srh	ICPMS207-B_220308A : 93	R375855
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/9/2022 12:40/srh	ICPMS207-B_220308A : 100	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2618 (OWDFMW05A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-001
Collection Date: 03/02/2022 13:15
Date Received: 03/05/2022
Report Date: 03/16/2022

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 14:18/msc	VOA5975C.I_220307A : 9	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Surr: 1,2-Dichloroethane-d4	116.0	%REC	1		81-118				SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/7/2022 14:18/msc	VOA5975C.I_220307A : 9	R376042
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/8/2022 19:51/clt	GECD.I_220308A : 14	164297
Surr: 1,1,1,2-Tetrachloroethane	110.0	%REC	1		70-130				SW8011	03/8/2022 19:51/clt	GECD.I_220308A : 14	164297
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/9/2022 12:30/jp	VARIAN1_220309A : 5	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/9/2022 12:30/jp	VARIAN1_220309A : 5	R375955
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/9/2022 12:30/jp	VARIAN1_220309A : 5	R375955
- 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	0.034		SW8015C	03/9/2022 16:51/jlb	GCFID-HP4-B_220309A : 8	164312
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/9/2022 16:51/jlb	GCFID-HP4-B_220309A : 8	164312
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.074		SW8015C	03/9/2022 16:51/jlb	GCFID-HP4-B_220309A : 8	164312
Surr: o-Terphenyl	96.0	%REC	1		56-125				SW8015C	03/9/2022 16:51/jlb	GCFID-HP4-B_220309A : 8	164312
Surr: n-Triacontane	100.0	%REC	1		50-150				SW8015C	03/9/2022 16:51/jlb	GCFID-HP4-B_220309A : 8	164312
- 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: ERH2618 (OWDFMW05A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-001
Collection Date: 03/02/2022 13:15
Date Received: 03/05/2022
Report Date: 03/16/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	0.0017	mg/L	1	J	0.0020	0.0012	0.00070		SW8015M	03/9/2022 10:25/jdw	FID-HEADSPACE_220309A : 5	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2674 (OWDFMW05A) FD
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-002
Collection Date: 03/02/2022 13:15
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-002
Client: AECOM - Honolulu
Collection Date: 03/02/2022 13:15
Client Sample ID: ERH2674 (OWDFMW05A) FD
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
Surr: p-Bromofluorobenzene	111.0	%REC	1		85-114				SW8260B	03/9/2022 11:51/msc	VOA5975C.I_220309B : 5	R376116
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/9/2022 23:52/jp	VARIAN1_220309A : 20	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/9/2022 23:52/jp	VARIAN1_220309A : 20	R375955
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/9/2022 23:52/jp	VARIAN1_220309A : 20	R375955
- 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	0.034		SW8015C	03/9/2022 17:36/jlb	GCFID-HP4-B_220309A : 9	164312
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/9/2022 17:36/jlb	GCFID-HP4-B_220309A : 9	164312
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.074		SW8015C	03/9/2022 17:36/jlb	GCFID-HP4-B_220309A : 9	164312
Surr: o-Terphenyl	90.0	%REC	1		56-125				SW8015C	03/9/2022 17:36/jlb	GCFID-HP4-B_220309A : 9	164312
Surr: n-Triacontane	93.0	%REC	1		50-150				SW8015C	03/9/2022 17:36/jlb	GCFID-HP4-B_220309A : 9	164312
- 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: ERH2617 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-003
Collection Date: 03/02/2022 13:15
Date Received: 03/05/2022
Report Date: 03/16/2022

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 18:50/msc	VOA5975C.I_220307A : 19	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-003
Client: AECOM - Honolulu
Collection Date: 03/02/2022 13:15
Client Sample ID: ERH2617 (Trip Blank) 14733
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Surr: Dibromofluoromethane	114.0	%REC	1		80-119				SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Surr: 1,2-Dichloroethane-d4	117.0	%REC	1		81-118				SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Surr: Toluene-d8	106.0	%REC	1		89-112				SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/7/2022 18:50/msc	VOA5975C.I_220307A : 19	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-004
Client: AECOM - Honolulu
Collection Date: 03/02/2022 13:15
Client Sample ID: ERH2617 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 13:38/jp	VARIAN1_220309A : 6	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/9/2022 13:38/jp	VARIAN1_220309A : 6	R375955
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/9/2022 13:38/jp	VARIAN1_220309A : 6	R375955

- 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: B22030433-005
Client: AECOM - Honolulu
Collection Date: 03/02/2022 13:15
Client Sample ID: ERH2617 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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 16:53/clt	GECD.I_220308A : 5	164297
Surr: 1,1,1,2-Tetrachloroethane	103.0	%REC	1		70-130				SW8011	03/8/2022 16:53/clt	GECD.I_220308A : 5	164297

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2617 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-006
Collection Date: 03/02/2022 13:15
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 10:48/jdw	FID-HEADSPACE_220309A : 7	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2576 (RHMW03)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-007
Collection Date: 03/02/2022 19:10
Date Received: 03/05/2022
Report Date: 03/16/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 1.8 to 1.9	1.8	mg/L	1		0.50	0.50	0.17		SW9060A	03/9/2022 15:48/eli-ca	SUB-C280346 : 23	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 13:18/srh	ICPMS207-B_220308A : 106	R375855
METALS, TOTAL												
Lead	0.00059	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/9/2022 13:24/srh	ICPMS207-B_220308A : 107	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2576 (RHMW03)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-007
Collection Date: 03/02/2022 19:10
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Surr: Toluene-d8	92.0	%REC	1		89-112				SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/9/2022 15:57/msc	VOA5975C.I_220309B : 14	R376116
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/8/2022 17:12/clt	GECD.I_220308A : 6	164297
Surr: 1,1,1,2-Tetrachloroethane	102.0	%REC	1		70-130				SW8011	03/8/2022 17:12/clt	GECD.I_220308A : 6	164297
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	UT	20	8.7	2.0		SW8015C	03/10/2022 01:01/jp	VARIAN1_220309A : 21	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	UT	20	10	3.1		SW8015C	03/10/2022 01:01/jp	VARIAN1_220309A : 21	R375955
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/10/2022 01:01/jp	VARIAN1_220309A : 21	R375955
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.16	mg/L	1	J	0.30	0.14	0.034		SW8015C	03/10/2022 07:10/jlb	GCFID-HP4-B_220309A : 22	164312
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.034		SW8015C	03/12/2022 07:29/jlb	GCFID-HP4-B_220311A : 18	164312
Oil Range Hydrocarbons (C24 to C40)	0.27	mg/L	1	J	0.30	0.14	0.049		SW8015C	03/10/2022 07:10/jlb	GCFID-HP4-B_220309A : 22	164312
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/12/2022 07:29/jlb	GCFID-HP4-B_220311A : 18	164312
Total Extractable Hydrocarbons	0.40	mg/L	1		0.30	0.14	0.074		SW8015C	03/10/2022 07:10/jlb	GCFID-HP4-B_220309A : 22	164312
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.14	0.074		SW8015C	03/12/2022 07:29/jlb	GCFID-HP4-B_220311A : 18	164312

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-007
Client: AECOM - Honolulu
Collection Date: 03/02/2022 19:10
Client Sample ID: ERH2576 (RHMW03)
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	88.0	%REC	1		56-125				SW8015C	03/10/2022 07:10/jlb	GCFID-HP4-B_220309A : 22	164312
Surr: o-Terphenyl (SGT)	86.0	%REC	1		56-125				SW8015C	03/12/2022 07:29/jlb	GCFID-HP4-B_220311A : 18	164312
Surr: n-Triacontane	93.0	%REC	1		50-150				SW8015C	03/10/2022 07:10/jlb	GCFID-HP4-B_220309A : 22	164312
Surr: n-Triacontane (SGT)	83.0	%REC	1		50-150				SW8015C	03/12/2022 07:29/jlb	GCFID-HP4-B_220311A : 18	164312
- 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	03/9/2022 10:55/jdw	FID-HEADSPACE_220309A : 8	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2575 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-008
Collection Date: 03/02/2022 19:10
Date Received: 03/05/2022
Report Date: 03/16/2022

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 19:18/msc	VOA5975C.I_220307A : 20	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Toluene	0.18	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-008
Client: AECOM - Honolulu
Collection Date: 03/02/2022 19:10
Client Sample ID: ERH2575 (Trip Blank) 14733
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Surr: Dibromofluoromethane	99.0	%REC	1		80-119				SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Surr: Toluene-d8	104.0	%REC	1		89-112				SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/7/2022 19:18/msc	VOA5975C.I_220307A : 20	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-009
Client: AECOM - Honolulu
Collection Date: 03/02/2022 19:10
Client Sample ID: ERH2575 (Trip Blank) 14525
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	4.8	ug/L	1	J	20	8.7	2.0		SW8015C	03/9/2022 14:13/jp	VARIAN1_220309A : 7	R375955
Total Purgeable Hydrocarbons	7.4	ug/L	1	J	20	10	3.1		SW8015C	03/9/2022 14:13/jp	VARIAN1_220309A : 7	R375955
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/9/2022 14:13/jp	VARIAN1_220309A : 7	R375955

- 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: B22030433-010
Client: AECOM - Honolulu
Collection Date: 03/02/2022 19:10
Client Sample ID: ERH2575 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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 17:32/clt	GECD.I_220308A : 7	164297
Surr: 1,1,1,2-Tetrachloroethane	103.0	%REC	1		70-130				SW8011	03/8/2022 17:32/clt	GECD.I_220308A : 7	164297

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-011
Client: AECOM - Honolulu
Collection Date: 03/02/2022 19:10
Client Sample ID: ERH2575 (Trip Blank) 14895
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 11:01/jdw	FID-HEADSPACE_220309A : 9	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2622 (RHMW02)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-012
Collection Date: 03/02/2022 17:55
Date Received: 03/05/2022
Report Date: 03/16/2022

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 4.2 to 4.3	4.3	mg/L	1		0.50	0.50	0.17		SW9060A	03/9/2022 16:35/eli-ca	SUB-C280346 : 24	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 13:43/srh	ICPMS207-B_220308A : 110	R375855
METALS, TOTAL												
Lead	0.00008	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/9/2022 13:49/srh	ICPMS207-B_220308A : 111	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Ethylbenzene	0.18	ug/L	1	J	1.0	0.20	0.084		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2622 (RHMW02)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-012
Collection Date: 03/02/2022 17:55
Date Received: 03/05/2022
Report Date: 03/16/2022

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 15:39/msc	VOA5975C.I_220307A : 12	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
o-Xylene	0.19	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Xylenes, Total	0.19	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Surr: 1,2-Dichloroethane-d4	118.0	%REC	1		81-118				SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
Surr: p-Bromofluorobenzene	105.0	%REC	1		85-114				SW8260B	03/7/2022 15:39/msc	VOA5975C.I_220307A : 12	R376042
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/8/2022 17:52/clt	GECD.I_220308A : 8	164297
Surr: 1,1,1,2-Tetrachloroethane	108.0	%REC	1		70-130				SW8011	03/8/2022 17:52/clt	GECD.I_220308A : 8	164297
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	39	ug/L	1		20	8.7	2.0		SW8015C	03/10/2022 02:09/jp	VARIAN1_220309A : 22	R375955
Total Purgeable Hydrocarbons	869	ug/L	1		20	10	3.1		SW8015C	03/10/2022 02:09/jp	VARIAN1_220309A : 22	R375955
Surr: Trifluorotoluene	82.0	%REC	1		70-130				SW8015C	03/10/2022 02:09/jp	VARIAN1_220309A : 22	R375955
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	3.0	mg/L	1		0.30	0.14	0.034		SW8015C	03/10/2022 04:54/jlb	GCFID-HP4-B_220309A : 21	164312
Diesel Range Organics (SGT-C10 to C24)	0.46	mg/L	1		0.30	0.14	0.034		SW8015C	03/12/2022 06:44/jlb	GCFID-HP4-B_220311A : 17	164312
Oil Range Hydrocarbons (C24 to C40)	0.58	mg/L	1		0.30	0.14	0.049		SW8015C	03/10/2022 04:54/jlb	GCFID-HP4-B_220309A : 21	164312
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/12/2022 06:44/jlb	GCFID-HP4-B_220311A : 17	164312
Total Extractable Hydrocarbons	3.5	mg/L	1		0.30	0.14	0.075		SW8015C	03/10/2022 04:54/jlb	GCFID-HP4-B_220309A : 21	164312
Total Extractable Hydrocarbons (SGT)	0.48	mg/L	1		0.30	0.14	0.075		SW8015C	03/12/2022 06:44/jlb	GCFID-HP4-B_220311A : 17	164312

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-012
Client: AECOM - Honolulu
Collection Date: 03/02/2022 17:55
Client Sample ID: ERH2622 (RHMW02)
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	89.0	%REC	1		56-125				SW8015C	03/10/2022 04:54/jlb	GCFID-HP4-B_220309A : 21	164312
Surr: o-Terphenyl (SGT)	83.0	%REC	1		56-125				SW8015C	03/12/2022 06:44/jlb	GCFID-HP4-B_220311A : 17	164312
Surr: n-Triacontane	95.0	%REC	1		50-150				SW8015C	03/10/2022 04:54/jlb	GCFID-HP4-B_220309A : 21	164312
Surr: n-Triacontane (SGT)	80.0	%REC	1		50-150				SW8015C	03/12/2022 06:44/jlb	GCFID-HP4-B_220311A : 17	164312
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	2.9	mg/L	78		0.16	0.090	0.055		SW8015M	03/9/2022 11:22/jdw	FID-HEADSPACE_220309A : 10	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2621 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-013
Collection Date: 03/02/2022 17:55
Date Received: 03/05/2022
Report Date: 03/16/2022

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 19:45/msc	VOA5975C.I_220307A : 21	R376042
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Toluene	0.25	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-013
Client: AECOM - Honolulu
Collection Date: 03/02/2022 17:55
Client Sample ID: ERH2621 (Trip Blank) 14733
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Surr: 1,2-Dichloroethane-d4	115.0	%REC	1		81-118				SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/7/2022 19:45/msc	VOA5975C.I_220307A : 21	R376042

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-014
Client: AECOM - Honolulu
Collection Date: 03/02/2022 17:55
Client Sample ID: ERH2621 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 14:47/jp	VARIAN1_220309A : 8	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/9/2022 14:47/jp	VARIAN1_220309A : 8	R375955
Surr: Trifluorotoluene	81.0	%REC	1		70-130				SW8015C	03/9/2022 14:47/jp	VARIAN1_220309A : 8	R375955

- 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: B22030433-015
Client: AECOM - Honolulu
Collection Date: 03/02/2022 17:55
Client Sample ID: ERH2621 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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 18:12/clt	GECD.I_220308A : 9	164297
Surr: 1,1,1,2-Tetrachloroethane	112.0	%REC	1		70-130				SW8011	03/8/2022 18:12/clt	GECD.I_220308A : 9	164297

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2621 (Trip Blank) 14985
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-016
Collection Date: 03/02/2022 17:55
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 11:46/jdw	FID-HEADSPACE_220309A : 12	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2602 (RHMW01R)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-017
Collection Date: 03/02/2022 15:45
Date Received: 03/05/2022
Report Date: 03/16/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 1.2 to 1.3	1.2	mg/L	1		0.50	0.50	0.17		SW9060A	03/9/2022 17:16/eli-ca	SUB-C280346 : 25	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 13:55/srh	ICPMS207-B_220308A : 112	R375855
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/9/2022 14:01/srh	ICPMS207-B_220308A : 113	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2602 (RHMW01R)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-017
Collection Date: 03/02/2022 15:45
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/9/2022 12:18/msc	VOA5975C.I_220309B : 6	R376116
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/8/2022 18:32/clt	GECD.I_220308A : 10	164297
Surr: 1,1,1,2-Tetrachloroethane	109.0	%REC	1		70-130				SW8011	03/8/2022 18:32/clt	GECD.I_220308A : 10	164297
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	3.3	ug/L	1	J	20	8.7	2.0		SW8015C	03/10/2022 03:17/jp	VARIAN1_220309A : 23	R375955
Total Purgeable Hydrocarbons	49	ug/L	1		20	10	3.1		SW8015C	03/10/2022 03:17/jp	VARIAN1_220309A : 23	R375955
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/10/2022 03:17/jp	VARIAN1_220309A : 23	R375955
- 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)	0.27	mg/L	1	J	0.30	0.14	0.034		SW8015C	03/10/2022 23:00/jlb	GCFID-HP4-B_220309A : 30	164312
Diesel Range Organics (SGT-C10 to C24)	0.039	mg/L	1	J	0.30	0.14	0.034		SW8015C	03/12/2022 11:15/jlb	GCFID-HP4-B_220311A : 22	164312
Oil Range Hydrocarbons (C24 to C40)	0.20	mg/L	1	J	0.30	0.14	0.049		SW8015C	03/10/2022 23:00/jlb	GCFID-HP4-B_220309A : 30	164312
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/12/2022 11:15/jlb	GCFID-HP4-B_220311A : 22	164312
Total Extractable Hydrocarbons	0.51	mg/L	1		0.30	0.14	0.074		SW8015C	03/10/2022 23:00/jlb	GCFID-HP4-B_220309A : 30	164312
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.14	0.074		SW8015C	03/12/2022 11:15/jlb	GCFID-HP4-B_220311A : 22	164312

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-017
Client: AECOM - Honolulu
Collection Date: 03/02/2022 15:45
Client Sample ID: ERH2602 (RHMW01R)
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	89.0	%REC	1		56-125				SW8015C	03/10/2022 23:00/jlb	GCFID-HP4-B_220309A : 30	164312
Surr: o-Terphenyl (SGT)	88.0	%REC	1		56-125				SW8015C	03/12/2022 11:15/jlb	GCFID-HP4-B_220311A : 22	164312
Surr: n-Triacontane	92.0	%REC	1		50-150				SW8015C	03/10/2022 23:00/jlb	GCFID-HP4-B_220309A : 30	164312
Surr: n-Triacontane (SGT)	83.0	%REC	1		50-150				SW8015C	03/12/2022 11:15/jlb	GCFID-HP4-B_220311A : 22	164312
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.56	mg/L	78		0.16	0.090	0.055		SW8015M	03/9/2022 12:09/jdw	FID-HEADSPACE_220309A : 13	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2603 (RHMW01R FD)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-018
Collection Date: 03/02/2022 15:45
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2603 (RHMW01R FD)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-018
Collection Date: 03/02/2022 15:45
Date Received: 03/05/2022
Report Date: 03/16/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/9/2022 12:45/msc	VOA5975C.I_220309B : 7	R376116
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	2.8	ug/L	1	J	20	8.7	2.0		SW8015C	03/10/2022 04:25/jp	VARIAN1_220309A : 24	R375955
Total Purgeable Hydrocarbons	35	ug/L	1		20	10	3.1		SW8015C	03/10/2022 04:25/jp	VARIAN1_220309A : 24	R375955
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/10/2022 04:25/jp	VARIAN1_220309A : 24	R375955
- 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)	0.27	mg/L	1	J	0.30	0.15	0.036		SW8015C	03/11/2022 01:15/jlb	GCFID-HP4-B_220309A : 31	164312
Diesel Range Organics (SGT-C10 to C24)	0.040	mg/L	1	J	0.30	0.15	0.036		SW8015C	03/12/2022 12:45/jlb	GCFID-HP4-B_220311A : 23	164312
Oil Range Hydrocarbons (C24 to C40)	0.19	mg/L	1	J	0.30	0.15	0.051		SW8015C	03/11/2022 01:15/jlb	GCFID-HP4-B_220309A : 31	164312
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.15	0.051		SW8015C	03/12/2022 12:45/jlb	GCFID-HP4-B_220311A : 23	164312
Total Extractable Hydrocarbons	0.49	mg/L	1		0.30	0.15	0.078		SW8015C	03/11/2022 01:15/jlb	GCFID-HP4-B_220309A : 31	164312
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.15	0.078		SW8015C	03/12/2022 12:45/jlb	GCFID-HP4-B_220311A : 23	164312
Surr: o-Terphenyl	90.0	%REC	1		56-125				SW8015C	03/11/2022 01:15/jlb	GCFID-HP4-B_220309A : 31	164312
Surr: o-Terphenyl (SGT)	95.0	%REC	1		56-125				SW8015C	03/12/2022 12:45/jlb	GCFID-HP4-B_220311A : 23	164312
Surr: n-Triacontane	94.0	%REC	1		50-150				SW8015C	03/11/2022 01:15/jlb	GCFID-HP4-B_220309A : 31	164312
Surr: n-Triacontane (SGT)	92.0	%REC	1		50-150				SW8015C	03/12/2022 12:45/jlb	GCFID-HP4-B_220311A : 23	164312
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2601 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-019
Collection Date: 03/02/2022 15:45
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Toluene	0.33	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-019
Client: AECOM - Honolulu
Collection Date: 03/02/2022 15:45
Client Sample ID: ERH2601 (Trip Blank) 14833
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Surr: Dibromofluoromethane	104.0	%REC	1		80-119				SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Surr: 1,2-Dichloroethane-d4	104.0	%REC	1		81-118				SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/9/2022 16:24/msc	VOA5975C.I_220309B : 15	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-020
Client: AECOM - Honolulu
Collection Date: 03/02/2022 15:45
Client Sample ID: ERH2601 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 15:21/jp	VARIAN1_220309A : 9	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/9/2022 15:21/jp	VARIAN1_220309A : 9	R375955
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/9/2022 15:21/jp	VARIAN1_220309A : 9	R375955

- 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: B22030433-021
Client: AECOM - Honolulu
Collection Date: 03/02/2022 15:45
Client Sample ID: ERH2601 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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 18:51/clt	GECD.I_220308A : 11	164297
Surr: 1,1,1,2-Tetrachloroethane	108.0	%REC	1		70-130				SW8011	03/8/2022 18:51/clt	GECD.I_220308A : 11	164297

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2601 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-022
Collection Date: 03/02/2022 15:45
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 12:18/jdw	FID-HEADSPACE_220309A : 14	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2614 (Sump Audit 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-023
Collection Date: 03/02/2022 18:20
Date Received: 03/05/2022
Report Date: 03/16/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.5 to 0.5	0.49	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/9/2022 17:57/eli-ca	SUB-C280346 : 26	C_R280346
METALS, DISSOLVED												
Lead	0.00009	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/9/2022 14:08/srh	ICPMS207-B_220308A : 114	R375855
METALS, TOTAL												
Lead	0.001	mg/L	1		0.001	0.0001	0.00005		SW6020	03/9/2022 14:14/srh	ICPMS207-B_220308A : 115	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Chloroform	0.14	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2614 (Sump Audit 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-023
Collection Date: 03/02/2022 18:20
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
o-Xylene	0.073	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Xylenes, Total	0.073	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/9/2022 13:12/msc	VOA5975C.I_220309B : 8	R376116
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/8/2022 19:11/clt	GECD.I_220308A : 12	164297
Surr: 1,1,1,2-Tetrachloroethane	130.0	%REC	1		70-130				SW8011	03/8/2022 19:11/clt	GECD.I_220308A : 12	164297
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	3.2	ug/L	1	J	20	8.7	2.0		SW8015C	03/10/2022 05:34/jp	VARIAN1_220309A : 25	R375955
Total Purgeable Hydrocarbons	41	ug/L	1		20	10	3.1		SW8015C	03/10/2022 05:34/jp	VARIAN1_220309A : 25	R375955
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/10/2022 05:34/jp	VARIAN1_220309A : 25	R375955
- 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)	0.14	mg/L	1	J	0.30	0.14	0.034		SW8015C	03/10/2022 18:28/jlb	GCFID-HP4-B_220309A : 26	164312
Diesel Range Organics (SGT-C10 to C24)	0.065	mg/L	1	J	0.30	0.14	0.034		SW8015C	03/12/2022 09:44/jlb	GCFID-HP4-B_220311A : 20	164312
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/10/2022 18:28/jlb	GCFID-HP4-B_220309A : 26	164312
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/12/2022 09:44/jlb	GCFID-HP4-B_220311A : 20	164312
Total Extractable Hydrocarbons	0.15	mg/L	1	J	0.30	0.14	0.074		SW8015C	03/10/2022 18:28/jlb	GCFID-HP4-B_220309A : 26	164312
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.14	0.074		SW8015C	03/12/2022 09:44/jlb	GCFID-HP4-B_220311A : 20	164312

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-023
Client: AECOM - Honolulu
Collection Date: 03/02/2022 18:20
Client Sample ID: ERH2614 (Sump Audit 3)
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	85.0	%REC	1		56-125				SW8015C	03/10/2022 18:28/jlb	GCFID-HP4-B_220309A : 26	164312
Surr: o-Terphenyl (SGT)	78.0	%REC	1		56-125				SW8015C	03/12/2022 09:44/jlb	GCFID-HP4-B_220311A : 20	164312
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/10/2022 18:28/jlb	GCFID-HP4-B_220309A : 26	164312
Surr: n-Triacontane (SGT)	74.0	%REC	1		50-150				SW8015C	03/12/2022 09:44/jlb	GCFID-HP4-B_220311A : 20	164312
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.0027	mg/L	1		0.0020	0.0012	0.00070		SW8015M	03/9/2022 12:23/jdw	FID-HEADSPACE_220309A : 15	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2613 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-024
Collection Date: 03/02/2022 18:20
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-024
Client: AECOM - Honolulu
Collection Date: 03/02/2022 18:20
Client Sample ID: ERH2613 (Trip Blank) 14733
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/9/2022 16:51/msc	VOA5975C.I_220309B : 16	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-025
Client: AECOM - Honolulu
Collection Date: 03/02/2022 18:20
Client Sample ID: ERH2613 (Trip Blank) 14833
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 15:55/jp	VARIAN1_220309A : 10	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/9/2022 15:55/jp	VARIAN1_220309A : 10	R375955
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/9/2022 15:55/jp	VARIAN1_220309A : 10	R375955

- 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: B22030433-026
Client: AECOM - Honolulu
Collection Date: 03/02/2022 18:20
Client Sample ID: ERH2613 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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 19:31/clt	GECD.I_220308A : 13	164297
Surr: 1,1,1,2-Tetrachloroethane	110.0	%REC	1		70-130				SW8011	03/8/2022 19:31/clt	GECD.I_220308A : 13	164297

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2613 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-027
Collection Date: 03/02/2022 18:20
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 12:34/jdw	FID-HEADSPACE_220309A : 16	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2612 (RHMW2254-01 LF)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-038
Collection Date: 03/03/2022 13:10
Date Received: 03/05/2022
Report Date: 03/16/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.27	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/9/2022 18:39/eli-ca	SUB-C280346 : 27	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 14:20/srh	ICPMS207-B_220308A : 116	R375855
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/9/2022 14:26/srh	ICPMS207-B_220308A : 117	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2612 (RHMW2254-01 LF)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-038
Collection Date: 03/03/2022 13:10
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Surr: Dibromofluoromethane	104.0	%REC	1		80-119				SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Surr: 1,2-Dichloroethane-d4	106.0	%REC	1		81-118				SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/9/2022 13:40/msc	VOA5975C.I_220309B : 9	R376116
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/8/2022 21:50/clt	GECD.I_220308A : 18	164297
Surr: 1,1,1,2-Tetrachloroethane	107.0	%REC	1		70-130				SW8011	03/8/2022 21:50/clt	GECD.I_220308A : 18	164297
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/10/2022 06:43/jp	VARIAN1_220309A : 26	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/10/2022 06:43/jp	VARIAN1_220309A : 26	R375955
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/10/2022 06:43/jp	VARIAN1_220309A : 26	R375955
- 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	0.034		SW8015C	03/9/2022 18:22/jlb	GCFID-HP4-B_220309A : 10	164312
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/9/2022 18:22/jlb	GCFID-HP4-B_220309A : 10	164312
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.074		SW8015C	03/9/2022 18:22/jlb	GCFID-HP4-B_220309A : 10	164312
Surr: o-Terphenyl	87.0	%REC	1		56-125				SW8015C	03/9/2022 18:22/jlb	GCFID-HP4-B_220309A : 10	164312
Surr: n-Triacontane	91.0	%REC	1		50-150				SW8015C	03/9/2022 18:22/jlb	GCFID-HP4-B_220309A : 10	164312
- 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: B22030433-038
Client: AECOM - Honolulu
Collection Date: 03/03/2022 13:10
Client Sample ID: ERH2612 (RHMW2254-01 LF)
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 12:40/jdw	FID-HEADSPACE_220309A : 17	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2611 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-039
Collection Date: 03/03/2022 13:10
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Toluene	0.13	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-039
Client: AECOM - Honolulu
Collection Date: 03/03/2022 13:10
Client Sample ID: ERH2611 (Trip Blank) 14833
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Surr: 1,2-Dichloroethane-d4	106.0	%REC	1		81-118				SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/9/2022 17:18/msc	VOA5975C.I_220309B : 17	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-040
Client: AECOM - Honolulu
Collection Date: 03/03/2022 13:10
Client Sample ID: ERH2611 (Trip Blank) 14754
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 16:29/jp	VARIAN1_220309A : 11	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/9/2022 16:29/jp	VARIAN1_220309A : 11	R375955
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/9/2022 16:29/jp	VARIAN1_220309A : 11	R375955

- 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: B22030433-041
Client: AECOM - Honolulu
Collection Date: 03/03/2022 13:10
Client Sample ID: ERH2611 (Trip Blank) 14833
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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 22:09/clt	GECD.I_220308A : 19	164297
Surr: 1,1,1,2-Tetrachloroethane	103.0	%REC	1		70-130				SW8011	03/8/2022 22:09/clt	GECD.I_220308A : 19	164297

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2611 (Trip Blank) 14732
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-042
Collection Date: 03/03/2022 13:10
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 12:48/jdw	FID-HEADSPACE_220309A : 18	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2610 (RHMW2254-01 Bailer)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-043
Collection Date: 03/03/2022 12:30
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 19:20/eli-ca	SUB-C280346 : 28	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 14:33/srh	ICPMS207-B_220308A : 118	R375855
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/9/2022 14:39/srh	ICPMS207-B_220308A : 119	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2610 (RHMW2254-01 Bailer)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-043
Collection Date: 03/03/2022 12:30
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Surr: 1,2-Dichloroethane-d4	106.0	%REC	1		81-118				SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/9/2022 14:07/msc	VOA5975C.I_220309B : 10	R376116
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/8/2022 22:29/clt	GECD.I_220308A : 20	164297
Surr: 1,1,1,2-Tetrachloroethane	105.0	%REC	1		70-130				SW8011	03/8/2022 22:29/clt	GECD.I_220308A : 20	164297
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/10/2022 14:07/jp	VARIAN1_220309A : 36	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/10/2022 14:07/jp	VARIAN1_220309A : 36	R375955
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	03/10/2022 14:07/jp	VARIAN1_220309A : 36	R375955
- 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)	0.42	mg/L	1		0.30	0.14	0.034		SW8015C	03/10/2022 04:09/jlb	GCFID-HP4-B_220309A : 20	164312
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.034		SW8015C	03/12/2022 05:59/jlb	GCFID-HP4-B_220311A : 16	164312
Oil Range Hydrocarbons (C24 to C40)	0.58	mg/L	1		0.30	0.14	0.049		SW8015C	03/10/2022 04:09/jlb	GCFID-HP4-B_220309A : 20	164312
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/12/2022 05:59/jlb	GCFID-HP4-B_220311A : 16	164312
Total Extractable Hydrocarbons	0.99	mg/L	1		0.30	0.14	0.075		SW8015C	03/10/2022 04:09/jlb	GCFID-HP4-B_220309A : 20	164312
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.14	0.075		SW8015C	03/12/2022 05:59/jlb	GCFID-HP4-B_220311A : 16	164312

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-043
Client: AECOM - Honolulu
Collection Date: 03/03/2022 12:30
Client Sample ID: ERH2610 (RHMW2254-01 Bailer)
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	91.0	%REC	1		56-125				SW8015C	03/10/2022 04:09/jlb	GCFID-HP4-B_220309A : 20	164312
Surr: o-Terphenyl (SGT)	85.0	%REC	1		56-125				SW8015C	03/12/2022 05:59/jlb	GCFID-HP4-B_220311A : 16	164312
Surr: n-Triacontane	98.0	%REC	1		50-150				SW8015C	03/10/2022 04:09/jlb	GCFID-HP4-B_220309A : 20	164312
Surr: n-Triacontane (SGT)	81.0	%REC	1		50-150				SW8015C	03/12/2022 05:59/jlb	GCFID-HP4-B_220311A : 16	164312
- 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	03/9/2022 12:55/jdw	FID-HEADSPACE_220309A : 19	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2609 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-044
Collection Date: 03/03/2022 12:30
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Toluene	0.12	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-044
Client: AECOM - Honolulu
Collection Date: 03/03/2022 12:30
Client Sample ID: ERH2609 (Trip Blank) 14833
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/9/2022 17:46/msc	VOA5975C.I_220309B : 18	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-045
Client: AECOM - Honolulu
Collection Date: 03/03/2022 12:30
Client Sample ID: ERH2609 (Trip Blank) 14694
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/10/2022 12:24/jp	VARIAN1_220309A : 33	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/10/2022 12:24/jp	VARIAN1_220309A : 33	R375955
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/10/2022 12:24/jp	VARIAN1_220309A : 33	R375955

- 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: B22030433-046
Client: AECOM - Honolulu
Collection Date: 03/03/2022 12:30
Client Sample ID: ERH2609 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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 22:49/clt	GECD.I_220308A : 21	164297
Surr: 1,1,1,2-Tetrachloroethane	110.0	%REC	1		70-130				SW8011	03/8/2022 22:49/clt	GECD.I_220308A : 21	164297

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2609 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-047
Collection Date: 03/03/2022 12:30
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 13:00/jdw	FID-HEADSPACE_220309A : 20	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2580 (RHMW05 m/MS/MSD volumes)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-053
Collection Date: 03/02/2022 14:00
Date Received: 03/05/2022
Report Date: 03/16/2022

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	0.41	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/9/2022 20:01/eli-ca	SUB-C280346 : 29	C_R280346
METALS, DISSOLVED												
Lead	0.00011	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/9/2022 14:58/srh	ICPMS207-B_220308A : 122	R375855
METALS, TOTAL												
Lead	0.00013	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/9/2022 15:04/srh	ICPMS207-B_220308A : 123	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2580 (RHMW05 m/MS/MSD volumes)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-053
Collection Date: 03/02/2022 14:00
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/10/2022 03:18/msc	VOA5975C.I_220309C : 6	R376117
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/8/2022 23:09/clt	GECD.I_220308A : 22	164297
Surr: 1,1,1,2-Tetrachloroethane	108.0	%REC	1		70-130				SW8011	03/8/2022 23:09/clt	GECD.I_220308A : 22	164297
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/10/2022 10:42/jp	VARIAN1_220309A : 31	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/10/2022 10:42/jp	VARIAN1_220309A : 31	R375955
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/10/2022 10:42/jp	VARIAN1_220309A : 31	R375955
- 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	0.034		SW8015C	03/9/2022 13:50/jlb	GCFID-HP4-B_220309A : 5	164312
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.034		SW8015C	03/11/2022 19:27/jlb	GCFID-HP4-B_220311A : 5	164312
Oil Range Hydrocarbons (C24 to C40)	0.18	mg/L	1	J	0.30	0.14	0.049		SW8015C	03/9/2022 13:50/jlb	GCFID-HP4-B_220309A : 5	164312
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/11/2022 19:27/jlb	GCFID-HP4-B_220311A : 5	164312
Total Extractable Hydrocarbons	0.23	mg/L	1	J	0.30	0.14	0.075		SW8015C	03/9/2022 13:50/jlb	GCFID-HP4-B_220309A : 5	164312
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.14	0.075		SW8015C	03/11/2022 19:27/jlb	GCFID-HP4-B_220311A : 5	164312

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-053
Client: AECOM - Honolulu
Collection Date: 03/02/2022 14:00
Client Sample ID: ERH2580 (RHMW05 m/MS/MSD volumes)
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	84.0	%REC	1		56-125				SW8015C	03/9/2022 13:50/jlb	GCFID-HP4-B_220309A : 5	164312
Surr: o-Terphenyl (SGT)	84.0	%REC	1		56-125				SW8015C	03/11/2022 19:27/jlb	GCFID-HP4-B_220311A : 5	164312
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/9/2022 13:50/jlb	GCFID-HP4-B_220309A : 5	164312
Surr: n-Triacontane (SGT)	82.0	%REC	1		50-150				SW8015C	03/11/2022 19:27/jlb	GCFID-HP4-B_220311A : 5	164312
- 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	03/9/2022 13:06/jdw	FID-HEADSPACE_220309A : 21	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2579 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-054
Collection Date: 03/02/2022 14:00
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-054
Client: AECOM - Honolulu
Collection Date: 03/02/2022 14:00
Client Sample ID: ERH2579 (Trip Blank) 14733
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Surr: 1,2-Dichloroethane-d4	111.0	%REC	1		81-118				SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Surr: Toluene-d8	93.0	%REC	1		89-112				SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/10/2022 08:57/msc	VOA5975C.I_220309C : 7	R376117

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-055
Client: AECOM - Honolulu
Collection Date: 03/02/2022 14:00
Client Sample ID: ERH2579 (Trip Blank) 14833
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 17:37/jp	VARIAN1_220309A : 12	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/9/2022 17:37/jp	VARIAN1_220309A : 12	R375955
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/9/2022 17:37/jp	VARIAN1_220309A : 12	R375955

- 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: B22030433-056
Client: AECOM - Honolulu
Collection Date: 03/02/2022 14:00
Client Sample ID: ERH2579 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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 23:29/clt	GECD.I_220308A : 23	164297
Surr: 1,1,1,2-Tetrachloroethane	105.0	%REC	1		70-130				SW8011	03/8/2022 23:29/clt	GECD.I_220308A : 23	164297

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2579 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-057
Collection Date: 03/02/2022 14:00
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 13:12/jdw	FID-HEADSPACE_220309A : 22	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2620 (OWDFMW04A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-058
Collection Date: 03/02/2022 15:50
Date Received: 03/05/2022
Report Date: 03/16/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.9 to 0.9	0.90	mg/L	1		0.50	0.50	0.17		SW9060A	03/9/2022 20:43/eli-ca	SUB-C280346 : 30	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 15:10/srh	ICPMS207-B_220308A : 124	R375855
METALS, TOTAL												
Lead	0.00006	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/9/2022 15:16/srh	ICPMS207-B_220308A : 125	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Chloroform	2.5	ug/L	1		1.0	0.20	0.079		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2620 (OWDFMW04A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-058
Collection Date: 03/02/2022 15:50
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Surr: 1,2-Dichloroethane-d4	105.0	%REC	1		81-118				SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/9/2022 14:34/msc	VOA5975C.I_220309B : 11	R376116
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/8/2022 23:48/clt	GECD.I_220308A : 24	164297
Surr: 1,1,1,2-Tetrachloroethane	116.0	%REC	1		70-130				SW8011	03/8/2022 23:48/clt	GECD.I_220308A : 24	164297
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/10/2022 15:16/jp	VARIAN1_220309A : 37	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/10/2022 15:16/jp	VARIAN1_220309A : 37	R375955
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/10/2022 15:16/jp	VARIAN1_220309A : 37	R375955
- 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	0.034		SW8015C	03/9/2022 19:07/jlb	GCFID-HP4-B_220309A : 11	164312
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.034		SW8015C	03/11/2022 22:27/jlb	GCFID-HP4-B_220311A : 8	164312
Oil Range Hydrocarbons (C24 to C40)	0.10	mg/L	1	J	0.30	0.14	0.049		SW8015C	03/9/2022 19:07/jlb	GCFID-HP4-B_220309A : 11	164312
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/11/2022 22:27/jlb	GCFID-HP4-B_220311A : 8	164312
Total Extractable Hydrocarbons	0.12	mg/L	1	J	0.30	0.14	0.074		SW8015C	03/9/2022 19:07/jlb	GCFID-HP4-B_220309A : 11	164312
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.14	0.074		SW8015C	03/11/2022 22:27/jlb	GCFID-HP4-B_220311A : 8	164312

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-058
Client: AECOM - Honolulu
Collection Date: 03/02/2022 15:50
Client Sample ID: ERH2620 (OWDFMW04A)
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	85.0	%REC	1		56-125				SW8015C	03/9/2022 19:07/jlb	GCFID-HP4-B_220309A : 11	164312
Surr: o-Terphenyl (SGT)	84.0	%REC	1		56-125				SW8015C	03/11/2022 22:27/jlb	GCFID-HP4-B_220311A : 8	164312
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/9/2022 19:07/jlb	GCFID-HP4-B_220309A : 11	164312
Surr: n-Triacontane (SGT)	79.0	%REC	1		50-150				SW8015C	03/11/2022 22:27/jlb	GCFID-HP4-B_220311A : 8	164312
- 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	03/9/2022 13:22/jdw	FID-HEADSPACE_220309A : 23	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2676 (OWDFMW04A) FD
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-059
Collection Date: 03/02/2022 15:50
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Chloroform	2.6	ug/L	1		1.0	0.20	0.079		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-059
Client: AECOM - Honolulu
Collection Date: 03/02/2022 15:50
Client Sample ID: ERH2676 (OWDFMW04A) FD
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Surr: 1,2-Dichloroethane-d4	104.0	%REC	1		81-118				SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/9/2022 15:02/msc	VOA5975C.I_220309B : 12	R376116
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/10/2022 16:24/jp	VARIAN1_220309A : 38	R375955
Total Purgeable Hydrocarbons	3.5	ug/L	1	J	20	10	3.1		SW8015C	03/10/2022 16:24/jp	VARIAN1_220309A : 38	R375955
Surr: Trifluorotoluene	81.0	%REC	1		70-130				SW8015C	03/10/2022 16:24/jp	VARIAN1_220309A : 38	R375955
- 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	0.034		SW8015C	03/9/2022 19:52/jlb	GCFID-HP4-B_220309A : 12	164312
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.034		SW8015C	03/11/2022 23:12/jlb	GCFID-HP4-B_220311A : 9	164312
Oil Range Hydrocarbons (C24 to C40)	0.11	mg/L	1	J	0.30	0.14	0.049		SW8015C	03/9/2022 19:52/jlb	GCFID-HP4-B_220309A : 12	164312
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/11/2022 23:12/jlb	GCFID-HP4-B_220311A : 9	164312
Total Extractable Hydrocarbons	0.12	mg/L	1	J	0.30	0.14	0.074		SW8015C	03/9/2022 19:52/jlb	GCFID-HP4-B_220309A : 12	164312
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.14	0.074		SW8015C	03/11/2022 23:12/jlb	GCFID-HP4-B_220311A : 9	164312
Surr: o-Terphenyl	90.0	%REC	1		56-125				SW8015C	03/9/2022 19:52/jlb	GCFID-HP4-B_220309A : 12	164312
Surr: o-Terphenyl (SGT)	83.0	%REC	1		56-125				SW8015C	03/11/2022 23:12/jlb	GCFID-HP4-B_220311A : 9	164312
Surr: n-Triacontane	97.0	%REC	1		50-150				SW8015C	03/9/2022 19:52/jlb	GCFID-HP4-B_220309A : 12	164312
Surr: n-Triacontane (SGT)	82.0	%REC	1		50-150				SW8015C	03/11/2022 23:12/jlb	GCFID-HP4-B_220311A : 9	164312
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2619 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-060
Collection Date: 03/02/2022 15:50
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Toluene	0.24	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-060
Client: AECOM - Honolulu
Collection Date: 03/02/2022 15:50
Client Sample ID: ERH2619 (Trip Blank) 14733
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/9/2022 18:13/msc	VOA5975C.I_220309B : 19	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-061
Client: AECOM - Honolulu
Collection Date: 03/02/2022 15:50
Client Sample ID: ERH2619 (Trip Blank) 14833
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 18:11/jp	VARIAN1_220309A : 13	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/9/2022 18:11/jp	VARIAN1_220309A : 13	R375955
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/9/2022 18:11/jp	VARIAN1_220309A : 13	R375955

- 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: B22030433-062
Client: AECOM - Honolulu
Collection Date: 03/02/2022 15:50
Client Sample ID: ERH2619 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	0.0048	0.0025		SW8011	03/9/2022 00:08/clt	GECD.I_220308A : 25	164297
Surr: 1,1,1,2-Tetrachloroethane	108.0	%REC	1		70-130				SW8011	03/9/2022 00:08/clt	GECD.I_220308A : 25	164297

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-063
Client: AECOM - Honolulu
Collection Date: 03/02/2022 15:50
Client Sample ID: ERH2619 (Trip Blank) 14895
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 13:30/jdw	FID-HEADSPACE_220309A : 24	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2590 (RHMW013.5)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-064
Collection Date: 03/02/2022 14:05
Date Received: 03/05/2022
Report Date: 03/16/2022

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 0.6	0.50	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/9/2022 21:26/eli-ca	SUB-C280346 : 31	C_R280346
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/9/2022 15:23/srh	ICPMS207-B_220308A : 126	R375855
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/9/2022 15:29/srh	ICPMS207-B_220308A : 127	164289
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2590 (RHMW013.5)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22030433-064
Collection Date: 03/02/2022 14:05
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Surr: Dibromofluoromethane	105.0	%REC	1		80-119				SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
Surr: p-Bromofluorobenzene	105.0	%REC	1		85-114				SW8260B	03/9/2022 15:29/msc	VOA5975C.I_220309B : 13	R376116
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/9/2022 00:28/clt	GECD.I_220308A : 26	164297
Surr: 1,1,1,2-Tetrachloroethane	110.0	%REC	1		70-130				SW8011	03/9/2022 00:28/clt	GECD.I_220308A : 26	164297
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/10/2022 22:07/jp	VARIAN1_220309A : 45	R375955
Total Purgeable Hydrocarbons	15	ug/L	1	J	20	10	3.1		SW8015C	03/10/2022 22:07/jp	VARIAN1_220309A : 45	R375955
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/10/2022 22:07/jp	VARIAN1_220309A : 45	R375955

- 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	0.034		SW8015C	03/10/2022 03:24/jlb	GCFID-HP4-B_220309A : 19	164312
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.049		SW8015C	03/10/2022 03:24/jlb	GCFID-HP4-B_220309A : 19	164312
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.074		SW8015C	03/10/2022 03:24/jlb	GCFID-HP4-B_220309A : 19	164312
Surr: o-Terphenyl	87.0	%REC	1		56-125				SW8015C	03/10/2022 03:24/jlb	GCFID-HP4-B_220309A : 19	164312
Surr: n-Triacontane	92.0	%REC	1		50-150				SW8015C	03/10/2022 03:24/jlb	GCFID-HP4-B_220309A : 19	164312

- 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: B22030433-064
Client: AECOM - Honolulu
Collection Date: 03/02/2022 14:05
Client Sample ID: ERH2590 (RHMW013.5)
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 13:34/jdw	FID-HEADSPACE_220309A : 25	R375827

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2589 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22030433-065
Collection Date: 03/02/2022 14:05
Date Received: 03/05/2022
Report Date: 03/16/2022

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	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Toluene	0.24	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-065
Client: AECOM - Honolulu
Collection Date: 03/02/2022 14:05
Client Sample ID: ERH2589 (Trip Blank) 14833
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/9/2022 18:41/msc	VOA5975C.I_220309B : 20	R376116

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-066
Client: AECOM - Honolulu
Collection Date: 03/02/2022 14:05
Client Sample ID: ERH2589 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/10/2022 11:50/jp	VARIAN1_220309A : 32	R375955
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/10/2022 11:50/jp	VARIAN1_220309A : 32	R375955
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/10/2022 11:50/jp	VARIAN1_220309A : 32	R375955

- 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: B22030433-067
Client: AECOM - Honolulu
Collection Date: 03/02/2022 14:05
Client Sample ID: ERH2589 (Trip Blank) 14894
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	0.0048	0.0025		SW8011	03/9/2022 00:47/clt	GECD.I_220308A : 27	164297
Surr: 1,1,1,2-Tetrachloroethane	103.0	%REC	1		70-130				SW8011	03/9/2022 00:47/clt	GECD.I_220308A : 27	164297

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22030433-068
Client: AECOM - Honolulu
Collection Date: 03/02/2022 14:05
Client Sample ID: ERH2589 (Trip Blank) 14895
Date Received: 03/05/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/16/2022
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	03/9/2022 13:39/jdw	FID-HEADSPACE_220309A : 26	R375827

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001D, B22030433-007D, B22030433-012D, B22030433-017D, B22030433-023D, B22030433-038D, B22030433-043D, B22030433-053D, B22030433-058D, B22030433-064D**

- 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: **B22030433-001D, B22030433-007D, B22030433-012D, B22030433-017D, B22030433-023D, B22030433-038D, B22030433-043D, B22030433-053D, B22030433-058D, B22030433-064D**

- 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: **B22030433-001D, B22030433-007D, B22030433-012D, B22030433-017D, B22030433-023D, B22030433-038D, B22030433-043D, B22030433-053D, B22030433-058D, B22030433-064D**

- TOC Range is 5.3 to 5.3

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001D, B22030433-007D, B22030433-012D, B22030433-017D, B22030433-023D, B22030433-038D, B22030433-043D, B22030433-053D, B22030433-058D, B22030433-064D**

- TOC Range is 5.2 to 5.3

Run ID: Run Order: SUB-C280346: 3 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280346
Method: SW9060A **Analysis Date:** 03/09/2022 12:48 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	4.8	0.50	5.0		97.0	90	110				

Associated Samples: **B22030433-001D, B22030433-007D, B22030433-012D, B22030433-017D, B22030433-023D, B22030433-038D, B22030433-043D, B22030433-053D, B22030433-058D, B22030433-064D**

- TOC Range is 4.8 to 4.9

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: **B22030433-001D, B22030433-007D, B22030433-012D, B22030433-017D, B22030433-023D, B22030433-038D, B22030433-043D, B22030433-053D, B22030433-058D, B22030433-064D**

- TOC Range is 4.8 to 4.8

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001A, B22030433-007A, B22030433-012A, B22030433-017A, B22030433-023A, B22030433-038A, B22030433-043A, B22030433-053A, B22030433-058A, B22030433-064A**

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: **B22030433-001A, B22030433-007A, B22030433-012A, B22030433-017A, B22030433-023A, B22030433-038A, B22030433-043A, B22030433-053A, B22030433-058A, B22030433-064A**

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: **B22030433-001A, B22030433-007A, B22030433-012A, B22030433-017A, B22030433-023A, B22030433-038A, B22030433-043A, B22030433-053A, B22030433-058A, B22030433-064A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001A, B22030433-007A, B22030433-012A, B22030433-017A, B22030433-023A, B22030433-038A, B22030433-043A, B22030433-053A, B22030433-058A, B22030433-064A**

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: **B22030433-001A, B22030433-007A, B22030433-012A, B22030433-017A, B22030433-023A, B22030433-038A, B22030433-043A, B22030433-053A, B22030433-058A, B22030433-064A**

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: **B22030433-001A, B22030433-007A, B22030433-012A, B22030433-017A, B22030433-023A, B22030433-038A, B22030433-043A, B22030433-053A, B22030433-058A, B22030433-064A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001A, B22030433-007A, B22030433-012A, B22030433-017A, B22030433-023A, B22030433-038A, B22030433-043A, B22030433-053A, B22030433-058A, B22030433-064A**

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: **B22030433-001A, B22030433-007A, B22030433-012A, B22030433-017A, B22030433-023A, B22030433-038A, B22030433-043A, B22030433-053A, B22030433-058A, B22030433-064A**

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: **B22030433-001B, B22030433-007B, B22030433-012B, B22030433-017B, B22030433-023B, B22030433-038B, B22030433-043B, B22030433-053B, B22030433-058B, B22030433-064B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001B, B22030433-007B, B22030433-012B, B22030433-017B, B22030433-023B, B22030433-038B, B22030433-043B, B22030433-053B, B22030433-058B, B22030433-064B**

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: **B22030433-001B, B22030433-007B, B22030433-012B, B22030433-017B, B22030433-023B, B22030433-038B, B22030433-043B, B22030433-053B, B22030433-058B, B22030433-064B**

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: **B22030433-001B, B22030433-007B, B22030433-012B, B22030433-017B, B22030433-023B, B22030433-038B, B22030433-043B, B22030433-053B, B22030433-058B, B22030433-064B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001B, B22030433-007B, B22030433-012B, B22030433-017B, B22030433-023B, B22030433-038B, B22030433-043B, B22030433-053B, B22030433-058B, B22030433-064B**

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: **B22030433-001B, B22030433-007B, B22030433-012B, B22030433-017B, B22030433-023B, B22030433-038B, B22030433-043B, B22030433-053B, B22030433-058B, B22030433-064B**

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: **B22030433-001B, B22030433-007B, B22030433-012B, B22030433-017B, B22030433-023B, B22030433-038B, B22030433-043B, B22030433-053B, B22030433-058B, B22030433-064B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001B, B22030433-007B, B22030433-012B, B22030433-017B, B22030433-023B, B22030433-038B, B22030433-043B, B22030433-053B, B22030433-058B, B22030433-064B**

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: **B22030433-001B, B22030433-007B, B22030433-012B, B22030433-017B, B22030433-023B, B22030433-038B, B22030433-043B, B22030433-053B, B22030433-058B, B22030433-064B**

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: **B22030433-001B, B22030433-007B, B22030433-012B, B22030433-017B, B22030433-023B, B22030433-038B, B22030433-043B, B22030433-053B, B22030433-058B, B22030433-064B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001A, B22030433-001B, B22030433-007A, B22030433-007B, B22030433-012A, B22030433-012B, B22030433-017A, B22030433-017B, B22030433-023A, B22030433-023B, B22030433-038A, B22030433-038B, B22030433-043A, B22030433-043B, B22030433-053A, B22030433-053B, B22030433-058A, B22030433-058B, B22030433-064A, B22030433-064B**

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: **B22030433-001A, B22030433-001B, B22030433-007A, B22030433-007B, B22030433-012A, B22030433-012B, B22030433-017A, B22030433-017B, B22030433-023A, B22030433-023B, B22030433-038A, B22030433-038B, B22030433-043A, B22030433-043B, B22030433-053A, B22030433-053B, B22030433-058A, B22030433-058B, B22030433-064A, B22030433-064B**

Run ID: Run Order: ICPMS207-B_220308A: 108 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 13:30 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.050	0.001	0.050		100.0	90	110				

Associated Samples: **B22030433-001A, B22030433-001B, B22030433-007A, B22030433-007B, B22030433-012A, B22030433-012B, B22030433-017A, B22030433-017B, B22030433-023A, B22030433-023B, B22030433-038A, B22030433-038B, B22030433-043A, B22030433-043B, B22030433-053A, B22030433-053B, B22030433-058A, B22030433-058B, B22030433-064A, B22030433-064B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: ICPMS207-B_220308A: 120 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 14:45 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22030433-001A, B22030433-001B, B22030433-007A, B22030433-007B, B22030433-012A, B22030433-012B, B22030433-017A, B22030433-017B, B22030433-023A, B22030433-023B, B22030433-038A, B22030433-038B, B22030433-043A, B22030433-043B, B22030433-053A, B22030433-053B, B22030433-058A, B22030433-058B, B22030433-064A, B22030433-064B**

Run ID: Run Order: ICPMS207-B_220308A: 128 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375855
Method: SW6020 **Analysis Date:** 03/09/2022 15:35 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.049	0.001	0.050		98.0	90	110				

Associated Samples: **B22030433-001A, B22030433-001B, B22030433-007A, B22030433-007B, B22030433-012A, B22030433-012B, B22030433-017A, B22030433-017B, B22030433-023A, B22030433-023B, B22030433-038A, B22030433-038B, B22030433-043A, B22030433-043B, B22030433-053A, B22030433-053B, B22030433-058A, B22030433-058B, B22030433-064A, B22030433-064B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001E, B22030433-002B, B22030433-003A, B22030433-007E, B22030433-008A, B22030433-012E, B22030433-013A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001E, B22030433-002B, B22030433-003A, B22030433-007E, B22030433-008A, B22030433-012E, B22030433-013A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001E, B22030433-002B, B22030433-003A, B22030433-007E, B22030433-008A, B22030433-012E, B22030433-013A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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: **B22030433-001E, B22030433-002B, B22030433-003A, B22030433-007E, B22030433-008A, B22030433-012E, B22030433-013A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 4 **SampType:** Method Blank **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 11:23 **Prep Date:**
Lab ID: MBLK030922_ **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: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 4 **SampType:** Method Blank **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 11:23 **Prep Date:**
Lab ID: MBLK030922_ **Units:** ug/L **Prep Method:**

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

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 4 **SampType:** Method Blank **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 11:23 **Prep Date:**
Lab ID: MBLK030922_ **Units:** ug/L **Prep Method:**

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

Associated Samples: **B22030433-002B, B22030433-007E, B22030433-017E, B22030433-018B, B22030433-019A, B22030433-023E, B22030433-024A, B22030433-038E, B22030433-039A, B22030433-043E, B22030433-044A, B22030433-058E, B22030433-059B, B22030433-060A, B22030433-064E, B22030433-065A**

Run ID: Run Order: VOA5975C.I_220309B: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 10:29 **Prep Date:**
Lab ID: LCS030922_ **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	5.5	0.50	5.0		110.0	80	120				
Bromochloromethane	5.2	0.50	5.0		105.0	78	123				
Bromodichloromethane	5.3	0.50	5.0		106.0	79	125				
Bromoform	5.3	0.50	5.0		106.0	66	130				
Carbon tetrachloride	4.8	0.50	5.0		96.0	72	136				
Chlorobenzene	5.3	0.50	5.0		107.0	82	118				
Chlorodibromomethane	5.2	0.50	5.0		104.0	74	126				
Chloroethane	3.7	0.50	5.0		74.0	60	138				
Chloroform	4.9	0.50	5.0		98.0	79	124				
Chloromethane	4.6	0.50	5.0		91.0	50	139				
1,2-Dibromoethane	5.0	0.50	5.0		101.0	78	122				
2-Chlorotoluene	5.5	0.50	5.0		110.0	79	122				
Dibromomethane	5.2	0.50	5.0		103.0	79	123				
1,2-Dichlorobenzene	5.5	0.50	5.0		111.0	80	119				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 10:29 **Prep Date:**
Lab ID: LCS030922_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.7	0.50	5.0		114.0	78	122				
1,3-Dichlorobenzene	5.7	0.50	5.0		114.0	80	119				
1,4-Dichlorobenzene	5.4	0.50	5.0		109.0	79	118				
Dichlorodifluoromethane	4.2	0.50	5.0		84.0	32	152				
1,1-Dichloroethane	5.4	0.50	5.0		107.0	77	125				
1,2-Dichloroethane	5.3	0.50	5.0		105.0	73	128				
1,1-Dichloroethene	5.2	0.50	5.0		103.0	71	131				
cis-1,2-Dichloroethene	5.1	0.50	5.0		102.0	78	123				
trans-1,2-Dichloroethene	5.3	0.50	5.0		106.0	75	124				
1,2-Dichloropropane	5.2	0.50	5.0		105.0	78	122				
1,3-Dichloropropane	5.0	0.50	5.0		101.0	80	119				
2,2-Dichloropropane	5.3	0.50	5.0		105.0	60	139				
1,1-Dichloropropene	4.8	0.50	5.0		96.0	79	125				
cis-1,3-Dichloropropene	5.0	0.50	5.0		100.0	75	124				
trans-1,3-Dichloropropene	5.4	0.50	5.0		108.0	73	127				
Ethylbenzene	5.2	0.50	5.0		104.0	79	121				
Methyl tert-butyl ether (MTBE)	5.4	0.50	5.0		109.0	71	124				
Methyl ethyl ketone	55	10	50		110.0	56	143				
Methylene chloride	4.9	0.50	5.0		98.0	74	124				
Styrene	5.3	0.50	5.0		107.0	78	123				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0		103.0	78	124				
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0		108.0	71	121				
Tetrachloroethene	5.0	0.50	5.0		99.0	74	129				
Toluene	5.4	0.50	5.0		108.0	80	121				
1,1,1-Trichloroethane	5.0	0.50	5.0		99.0	74	131				
1,1,2-Trichloroethane	5.4	0.50	5.0		107.0	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: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 10:29 **Prep Date:**
Lab ID: LCS030922_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	4.1	0.50	5.0		81.0	65	141				
1,2,3-Trichloropropane	5.1	0.50	5.0		102.0	73	125				
Vinyl chloride	4.7	0.50	5.0		94.0	58	137				
m+p-Xylenes	10	0.50	10		102.0	80	121				
o-Xylene	5.3	0.50	5.0		106.0	78	122				
Xylenes, Total	15	0.50	15		103.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		103.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		103.0	80	119				
Surr: p-Bromofluorobenzene	10	0.50	10		105.0	85	114				
Surr: Toluene-d8	10	0.50	10		100.0	89	112				

Associated Samples: **B22030433-002B, B22030433-007E, B22030433-017E, B22030433-018B, B22030433-019A, B22030433-023E, B22030433-024A, B22030433-038E, B22030433-039A, B22030433-043E, B22030433-044A, B22030433-058E, B22030433-059B, B22030433-060A, B22030433-064E, B22030433-065A**

Run ID: Run Order: VOA5975C.I_220309B: 22 **SampType:** Sample Matrix Spike **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 19:08 **Prep Date:**
Lab ID: B22030433-017EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.0	0.50	5.0	0.0	99.0	79	120				
Bromobenzene	5.0	0.50	5.0	0.0	101.0	80	120				
Bromochloromethane	4.9	0.50	5.0	0.0	97.0	78	123				
Bromodichloromethane	4.8	0.50	5.0	0.0	97.0	79	125				
Bromoform	4.9	0.50	5.0	0.0	99.0	66	130				
Carbon tetrachloride	4.7	0.50	5.0	0.0	95.0	72	136				
Chlorobenzene	4.9	0.50	5.0	0.0	99.0	82	118				
Chlorodibromomethane	4.9	0.50	5.0	0.0	98.0	74	126				
Chloroethane	4.3	0.50	5.0	0.0	86.0	60	138				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 22 **SampType:** Sample Matrix Spike **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 19:08 **Prep Date:**
Lab ID: B22030433-017EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Chloroform	4.8	0.50	5.0	0.0	95.0	79	124				
Chloromethane	4.7	0.50	5.0	0.0	94.0	50	139				
1,2-Dibromoethane	4.9	0.50	5.0	0.0	98.0	78	122				
2-Chlorotoluene	5.2	0.50	5.0	0.0	104.0	79	122				
Dibromomethane	4.9	0.50	5.0	0.0	98.0	79	123				
1,2-Dichlorobenzene	5.1	0.50	5.0	0.0	102.0	80	119				
4-Chlorotoluene	5.3	0.50	5.0	0.0	106.0	78	122				
1,3-Dichlorobenzene	5.3	0.50	5.0	0.0	105.0	80	119				
1,4-Dichlorobenzene	5.0	0.50	5.0	0.0	101.0	79	118				
Dichlorodifluoromethane	4.5	0.50	5.0	0.0	90.0	32	152				
1,1-Dichloroethane	5.0	0.50	5.0	0.0	99.0	77	125				
1,2-Dichloroethane	4.8	0.50	5.0	0.0	97.0	73	128				
1,1-Dichloroethene	5.0	0.50	5.0	0.0	100.0	71	131				
cis-1,2-Dichloroethene	5.0	0.50	5.0	0.0	101.0	78	123				
trans-1,2-Dichloroethene	4.8	0.50	5.0	0.0	96.0	75	124				
1,2-Dichloropropane	4.7	0.50	5.0	0.0	94.0	78	122				
1,3-Dichloropropane	4.7	0.50	5.0	0.0	94.0	80	119				
2,2-Dichloropropane	4.8	0.50	5.0	0.0	97.0	60	139				
1,1-Dichloropropene	4.6	0.50	5.0	0.0	91.0	79	125				
cis-1,3-Dichloropropene	4.4	0.50	5.0	0.0	89.0	75	124				
trans-1,3-Dichloropropene	5.0	0.50	5.0	0.0	101.0	73	127				
Ethylbenzene	4.8	0.50	5.0	0.0	97.0	79	121				
Methyl tert-butyl ether (MTBE)	5.0	0.50	5.0	0.0	99.0	71	124				
Methyl ethyl ketone	54	10	50	0.0	109.0	56	143				
Methylene chloride	4.7	0.50	5.0	0.0	93.0	74	124				
Styrene	5.0	0.50	5.0	0.0	99.0	78	123				
1,1,1,2-Tetrachloroethane	4.9	0.50	5.0	0.0	98.0	78	124				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 22 **SampType:** Sample Matrix Spike **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 19:08 **Prep Date:**
Lab ID: B22030433-017EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	5.1	0.50	5.0	0.0	102.0	71	121				
Tetrachloroethene	4.8	0.50	5.0	0.0	97.0	74	129				
Toluene	5.1	0.50	5.0	0.0	101.0	80	121				
1,1,1-Trichloroethane	4.8	0.50	5.0	0.0	97.0	74	131				
1,1,2-Trichloroethane	5.1	0.50	5.0	0.0	101.0	80	119				
Trichloroethene	4.8	0.50	5.0	0.0	95.0	79	123				
Trichlorofluoromethane	4.8	0.50	5.0	0.0	97.0	65	141				
1,2,3-Trichloropropane	5.0	0.50	5.0	0.0	100.0	73	125				
Vinyl chloride	4.9	0.50	5.0	0.0	98.0	58	137				
m+p-Xylenes	9.6	0.50	10	0.0	96.0	80	121				
o-Xylene	4.9	0.50	5.0	0.0	98.0	78	122				
Xylenes, Total	15	0.50	15	0.0	97.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10	0.0	104.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10	0.0	103.0	80	119				
Surr: p-Bromofluorobenzene	10	0.50	10	0.0	104.0	85	114				
Surr: Toluene-d8	9.9	0.50	10	0.0	99.0	89	112				

Associated Samples: **B22030433-002B, B22030433-007E, B22030433-017E, B22030433-018B, B22030433-019A, B22030433-023E, B22030433-024A, B22030433-038E, B22030433-039A, B22030433-043E, B22030433-044A, B22030433-058E, B22030433-059B, B22030433-060A, B22030433-064E, B22030433-065A**

Run ID: Run Order: VOA5975C.I_220309B: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 19:35 **Prep Date:**
Lab ID: B22030433-017EMSD **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	105.0	79	120	5.0	5.6	20.0	
Bromobenzene	5.4	0.50	5.0	0.0	108.0	80	120	5.0	7.1	20.0	
Bromochloromethane	5.2	0.50	5.0	0.0	105.0	78	123	4.9	7.1	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 19:35 **Prep Date:**
Lab ID: B22030433-017EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	5.1	0.50	5.0	0.0	102.0	79	125	4.8	5.8	20.0	
Bromoform	5.3	0.50	5.0	0.0	105.0	66	130	4.9	6.0	20.0	
Carbon tetrachloride	5.1	0.50	5.0	0.0	101.0	72	136	4.7	6.5	20.0	
Chlorobenzene	5.3	0.50	5.0	0.0	106.0	82	118	4.9	7.6	20.0	
Chlorodibromomethane	5.0	0.50	5.0	0.0	100.0	74	126	4.9	1.1	20.0	
Chloroethane	4.4	0.50	5.0	0.0	88.0	60	138	4.3	2.2	20.0	
Chloroform	4.9	0.50	5.0	0.0	98.0	79	124	4.8	3.2	20.0	
Chloromethane	4.7	0.50	5.0	0.0	94.0	50	139	4.7	0.5	20.0	
1,2-Dibromoethane	5.2	0.50	5.0	0.0	103.0	78	122	4.9	5.6	20.0	
2-Chlorotoluene	5.5	0.50	5.0	0.0	111.0	79	122	5.2	6.6	20.0	
Dibromomethane	5.1	0.50	5.0	0.0	102.0	79	123	4.9	4.1	20.0	
1,2-Dichlorobenzene	5.4	0.50	5.0	0.0	107.0	80	119	5.1	5.2	20.0	
4-Chlorotoluene	5.6	0.50	5.0	0.0	112.0	78	122	5.3	6.3	20.0	
1,3-Dichlorobenzene	5.6	0.50	5.0	0.0	112.0	80	119	5.3	6.1	20.0	
1,4-Dichlorobenzene	5.3	0.50	5.0	0.0	106.0	79	118	5.0	5.5	20.0	
Dichlorodifluoromethane	4.6	0.50	5.0	0.0	91.0	32	152	4.5	1.7	20.0	
1,1-Dichloroethane	5.2	0.50	5.0	0.0	104.0	77	125	5.0	4.2	20.0	
1,2-Dichloroethane	5.0	0.50	5.0	0.0	100.0	73	128	4.8	3.8	20.0	
1,1-Dichloroethene	5.2	0.50	5.0	0.0	104.0	71	131	5.0	4.2	20.0	
cis-1,2-Dichloroethene	5.1	0.50	5.0	0.0	102.0	78	123	5.0	1.4	20.0	
trans-1,2-Dichloroethene	5.1	0.50	5.0	0.0	102.0	75	124	4.8	6.5	20.0	
1,2-Dichloropropane	4.9	0.50	5.0	0.0	99.0	78	122	4.7	5.1	20.0	
1,3-Dichloropropane	5.0	0.50	5.0	0.0	99.0	80	119	4.7	5.6	20.0	
2,2-Dichloropropane	5.1	0.50	5.0	0.0	102.0	60	139	4.8	5.3	20.0	
1,1-Dichloropropene	4.9	0.50	5.0	0.0	98.0	79	125	4.6	7.7	20.0	
cis-1,3-Dichloropropene	4.7	0.50	5.0	0.0	94.0	75	124	4.4	6.1	20.0	
trans-1,3-Dichloropropene	5.2	0.50	5.0	0.0	104.0	73	127	5.0	2.5	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 19:35 **Prep Date:**
Lab ID: B22030433-017EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Ethylbenzene	5.1	0.50	5.0	0.0	102.0	79	121	4.8	5.3	20.0	
Methyl tert-butyl ether (MTBE)	5.3	0.50	5.0	0.0	106.0	71	124	5.0	6.9	20.0	
Methyl ethyl ketone	56	10	50	0.0	112.0	56	143	54	2.6	20.0	
Methylene chloride	4.7	0.50	5.0	0.0	95.0	74	124	4.7	1.7	20.0	
Styrene	5.2	0.50	5.0	0.0	105.0	78	123	5.0	5.1	20.0	
1,1,1,2-Tetrachloroethane	5.2	0.50	5.0	0.0	104.0	78	124	4.9	5.6	20.0	
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0	0.0	107.0	71	121	5.1	4.2	20.0	
Tetrachloroethene	5.1	0.50	5.0	0.0	103.0	74	129	4.8	6.0	20.0	
Toluene	5.4	0.50	5.0	0.0	109.0	80	121	5.1	7.1	20.0	
1,1,1-Trichloroethane	5.0	0.50	5.0	0.0	100.0	74	131	4.8	3.6	20.0	
1,1,2-Trichloroethane	5.2	0.50	5.0	0.0	105.0	80	119	5.1	3.6	20.0	
Trichloroethene	5.1	0.50	5.0	0.0	102.0	79	123	4.8	6.6	20.0	
Trichlorofluoromethane	4.8	0.50	5.0	0.0	96.0	65	141	4.8	0.9	20.0	
1,2,3-Trichloropropane	5.2	0.50	5.0	0.0	105.0	73	125	5.0	4.2	20.0	
Vinyl chloride	5.1	0.50	5.0	0.0	102.0	58	137	4.9	4.4	20.0	
m+p-Xylenes	10	0.50	10	0.0	102.0	80	121	9.6	5.9	20.0	
o-Xylene	5.3	0.50	5.0	0.0	107.0	78	122	4.9	8.1	20.0	
Xylenes, Total	16	0.50	15	0.0	104.0	79	121	15	6.7	20.0	
Surr: 1,2-Dichloroethane-d4	10	0.50	10	0.0	103.0	81	118	0.0			
Surr: Dibromofluoromethane	10	0.50	10	0.0	103.0	80	119	0.0			
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	107.0	85	114	0.0			
Surr: Toluene-d8	10	0.50	10	0.0	100.0	89	112	0.0			

Associated Samples: **B22030433-002B, B22030433-007E, B22030433-017E, B22030433-018B, B22030433-019A, B22030433-023E, B22030433-024A, B22030433-038E, B22030433-039A, B22030433-043E, B22030433-044A, B22030433-058E, B22030433-059B, B22030433-060A, B22030433-064E, B22030433-065A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 4 **SampType:** Method Blank **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/10/2022 00:35 **Prep Date:**
Lab ID: MBLK030922a **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: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 4 **SampType:** Method Blank **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/10/2022 00:35 **Prep Date:**
Lab ID: MBLK030922a **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
trans-1,3-Dichloropropene	ND	0.50									
Ethylbenzene	ND	0.50									
Methyl tert-butyl ether (MTBE)	ND	0.50									
Methyl ethyl ketone	ND	10									
Methylene chloride	ND	0.50									
Styrene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
Vinyl chloride	ND	0.50									
m+p-Xylenes	ND	0.50									
o-Xylene	ND	0.50									
Xylenes, Total	ND	0.50									
Surr: 1,2-Dichloroethane-d4	11	0.50	10		108.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		106.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	85	114				
Surr: Toluene-d8	9.5	0.50	10		95.0	89	112				

Associated Samples: **B22030433-053E, B22030433-054A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/09/2022 23:41 **Prep Date:**
Lab ID: LCS030922a **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		106.0	79	120				
Bromobenzene	5.3	0.50	5.0		106.0	80	120				
Bromochloromethane	5.2	0.50	5.0		103.0	78	123				
Bromodichloromethane	5.3	0.50	5.0		106.0	79	125				
Bromoform	5.3	0.50	5.0		106.0	66	130				
Carbon tetrachloride	5.0	0.50	5.0		101.0	72	136				
Chlorobenzene	5.4	0.50	5.0		108.0	82	118				
Chlorodibromomethane	5.1	0.50	5.0		101.0	74	126				
Chloroethane	4.6	0.50	5.0		92.0	60	138				
Chloroform	5.0	0.50	5.0		101.0	79	124				
Chloromethane	4.8	0.50	5.0		96.0	50	139				
1,2-Dibromoethane	5.1	0.50	5.0		103.0	78	122				
2-Chlorotoluene	5.5	0.50	5.0		109.0	79	122				
Dibromomethane	5.0	0.50	5.0		100.0	79	123				
1,2-Dichlorobenzene	5.4	0.50	5.0		108.0	80	119				
4-Chlorotoluene	5.7	0.50	5.0		113.0	78	122				
1,3-Dichlorobenzene	5.5	0.50	5.0		111.0	80	119				
1,4-Dichlorobenzene	5.4	0.50	5.0		108.0	79	118				
Dichlorodifluoromethane	4.5	0.50	5.0		89.0	32	152				
1,1-Dichloroethane	5.4	0.50	5.0		107.0	77	125				
1,2-Dichloroethane	5.4	0.50	5.0		107.0	73	128				
1,1-Dichloroethene	5.3	0.50	5.0		106.0	71	131				
cis-1,2-Dichloroethene	5.2	0.50	5.0		104.0	78	123				
trans-1,2-Dichloroethene	5.1	0.50	5.0		103.0	75	124				
1,2-Dichloropropane	5.2	0.50	5.0		103.0	78	122				
1,3-Dichloropropane	5.0	0.50	5.0		99.0	80	119				
2,2-Dichloropropane	4.8	0.50	5.0		96.0	60	139				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/09/2022 23:41 **Prep Date:**
Lab ID: LCS030922a **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		99.0	79	125				
cis-1,3-Dichloropropene	4.8	0.50	5.0		96.0	75	124				
trans-1,3-Dichloropropene	5.1	0.50	5.0		102.0	73	127				
Ethylbenzene	5.2	0.50	5.0		104.0	79	121				
Methyl tert-butyl ether (MTBE)	5.3	0.50	5.0		106.0	71	124				
Methyl ethyl ketone	56	10	50		112.0	56	143				
Methylene chloride	4.9	0.50	5.0		98.0	74	124				
Styrene	5.4	0.50	5.0		107.0	78	123				
1,1,1,2-Tetrachloroethane	5.3	0.50	5.0		106.0	78	124				
1,1,2,2-Tetrachloroethane	5.1	0.50	5.0		102.0	71	121				
Tetrachloroethene	5.1	0.50	5.0		102.0	74	129				
Toluene	5.5	0.50	5.0		109.0	80	121				
1,1,1-Trichloroethane	5.1	0.50	5.0		102.0	74	131				
1,1,2-Trichloroethane	5.3	0.50	5.0		106.0	80	119				
Trichloroethene	5.0	0.50	5.0		101.0	79	123				
Trichlorofluoromethane	4.6	0.50	5.0		92.0	65	141				
1,2,3-Trichloropropane	5.1	0.50	5.0		103.0	73	125				
Vinyl chloride	5.1	0.50	5.0		102.0	58	137				
m+p-Xylenes	10	0.50	10		105.0	80	121				
o-Xylene	5.3	0.50	5.0		107.0	78	122				
Xylenes, Total	16	0.50	15		105.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		100.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		103.0	80	119				
Surr: p-Bromofluorobenzene	10	0.50	10		102.0	85	114				
Surr: Toluene-d8	10	0.50	10		100.0	89	112				

Associated Samples: **B22030433-053E, B22030433-054A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 8 **SampType:** Sample Matrix Spike **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/10/2022 09:25 **Prep Date:**
Lab ID: B22030433-053EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.2	0.50	5.0	0.0	103.0	79	120				
Bromobenzene	5.3	0.50	5.0	0.0	105.0	80	120				
Bromochloromethane	5.1	0.50	5.0	0.0	102.0	78	123				
Bromodichloromethane	5.1	0.50	5.0	0.0	103.0	79	125				
Bromoform	5.2	0.50	5.0	0.0	104.0	66	130				
Carbon tetrachloride	4.8	0.50	5.0	0.0	96.0	72	136				
Chlorobenzene	5.1	0.50	5.0	0.0	102.0	82	118				
Chlorodibromomethane	5.2	0.50	5.0	0.0	103.0	74	126				
Chloroethane	4.2	0.50	5.0	0.0	85.0	60	138				
Chloroform	4.9	0.50	5.0	0.0	98.0	79	124				
Chloromethane	4.6	0.50	5.0	0.0	91.0	50	139				
1,2-Dibromoethane	4.9	0.50	5.0	0.0	98.0	78	122				
2-Chlorotoluene	5.3	0.50	5.0	0.0	105.0	79	122				
Dibromomethane	4.9	0.50	5.0	0.0	97.0	79	123				
1,2-Dichlorobenzene	5.2	0.50	5.0	0.0	103.0	80	119				
4-Chlorotoluene	5.4	0.50	5.0	0.0	108.0	78	122				
1,3-Dichlorobenzene	5.5	0.50	5.0	0.0	109.0	80	119				
1,4-Dichlorobenzene	5.2	0.50	5.0	0.0	103.0	79	118				
Dichlorodifluoromethane	4.4	0.50	5.0	0.0	89.0	32	152				
1,1-Dichloroethane	5.2	0.50	5.0	0.0	105.0	77	125				
1,2-Dichloroethane	5.3	0.50	5.0	0.0	105.0	73	128				
1,1-Dichloroethene	5.0	0.50	5.0	0.0	101.0	71	131				
cis-1,2-Dichloroethene	5.1	0.50	5.0	0.0	101.0	78	123				
trans-1,2-Dichloroethene	5.0	0.50	5.0	0.0	99.0	75	124				
1,2-Dichloropropane	5.0	0.50	5.0	0.0	100.0	78	122				
1,3-Dichloropropane	4.8	0.50	5.0	0.0	95.0	80	119				
2,2-Dichloropropane	5.2	0.50	5.0	0.0	103.0	60	139				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 8 **SampType:** Sample Matrix Spike **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/10/2022 09:25 **Prep Date:**
Lab ID: B22030433-053EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	4.7	0.50	5.0	0.0	94.0	79	125				
cis-1,3-Dichloropropene	4.7	0.50	5.0	0.0	95.0	75	124				
trans-1,3-Dichloropropene	5.2	0.50	5.0	0.0	104.0	73	127				
Ethylbenzene	4.9	0.50	5.0	0.0	99.0	79	121				
Methyl tert-butyl ether (MTBE)	5.0	0.50	5.0	0.0	100.0	71	124				
Methyl ethyl ketone	53	10	50	0.0	106.0	56	143				
Methylene chloride	4.9	0.50	5.0	0.0	97.0	74	124				
Styrene	5.1	0.50	5.0	0.0	101.0	78	123				
1,1,1,2-Tetrachloroethane	5.2	0.50	5.0	0.0	103.0	78	124				
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0	0.0	107.0	71	121				
Tetrachloroethene	4.9	0.50	5.0	0.0	98.0	74	129				
Toluene	5.3	0.50	5.0	0.0	106.0	80	121				
1,1,1-Trichloroethane	4.9	0.50	5.0	0.0	98.0	74	131				
1,1,2-Trichloroethane	5.3	0.50	5.0	0.0	105.0	80	119				
Trichloroethene	4.9	0.50	5.0	0.0	98.0	79	123				
Trichlorofluoromethane	4.7	0.50	5.0	0.0	94.0	65	141				
1,2,3-Trichloropropane	5.0	0.50	5.0	0.0	100.0	73	125				
Vinyl chloride	4.7	0.50	5.0	0.0	95.0	58	137				
m+p-Xylenes	9.8	0.50	10	0.0	98.0	80	121				
o-Xylene	5.0	0.50	5.0	0.0	99.0	78	122				
Xylenes, Total	15	0.50	15	0.0	99.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10	0.0	102.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10	0.0	104.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	106.0	85	114				
Surr: Toluene-d8	9.9	0.50	10	0.0	99.0	89	112				

Associated Samples: **B22030433-053E, B22030433-054A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 9 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/10/2022 09:52 **Prep Date:**
Lab ID: B22030433-053EMSD **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	5.2	2.8	20.0	
Bromobenzene	5.5	0.50	5.0	0.0	111.0	80	120	5.3	5.0	20.0	
Bromochloromethane	5.3	0.50	5.0	0.0	106.0	78	123	5.1	3.8	20.0	
Bromodichloromethane	5.1	0.50	5.0	0.0	102.0	79	125	5.1	0.2	20.0	
Bromoform	5.3	0.50	5.0	0.0	106.0	66	130	5.2	2.0	20.0	
Carbon tetrachloride	4.9	0.50	5.0	0.0	99.0	72	136	4.8	2.3	20.0	
Chlorobenzene	5.3	0.50	5.0	0.0	105.0	82	118	5.1	3.3	20.0	
Chlorodibromomethane	5.1	0.50	5.0	0.0	102.0	74	126	5.2	1.6	20.0	
Chloroethane	4.4	0.50	5.0	0.0	89.0	60	138	4.2	5.1	20.0	
Chloroform	4.9	0.50	5.0	0.0	99.0	79	124	4.9	1.2	20.0	
Chloromethane	4.9	0.50	5.0	0.0	98.0	50	139	4.6	6.6	20.0	
1,2-Dibromoethane	5.2	0.50	5.0	0.0	103.0	78	122	4.9	4.9	20.0	
2-Chlorotoluene	5.4	0.50	5.0	0.0	108.0	79	122	5.3	2.6	20.0	
Dibromomethane	4.8	0.50	5.0	0.0	96.0	79	123	4.9	0.9	20.0	
1,2-Dichlorobenzene	5.4	0.50	5.0	0.0	108.0	80	119	5.2	4.5	20.0	
4-Chlorotoluene	5.7	0.50	5.0	0.0	114.0	78	122	5.4	5.1	20.0	
1,3-Dichlorobenzene	5.6	0.50	5.0	0.0	113.0	80	119	5.5	3.1	20.0	
1,4-Dichlorobenzene	5.5	0.50	5.0	0.0	110.0	79	118	5.2	6.3	20.0	
Dichlorodifluoromethane	4.7	0.50	5.0	0.0	95.0	32	152	4.4	6.9	20.0	
1,1-Dichloroethane	5.4	0.50	5.0	0.0	108.0	77	125	5.2	3.6	20.0	
1,2-Dichloroethane	5.0	0.50	5.0	0.0	100.0	73	128	5.3	5.2	20.0	
1,1-Dichloroethene	5.2	0.50	5.0	0.0	104.0	71	131	5.0	2.8	20.0	
cis-1,2-Dichloroethene	5.2	0.50	5.0	0.0	105.0	78	123	5.1	3.2	20.0	
trans-1,2-Dichloroethene	5.2	0.50	5.0	0.0	105.0	75	124	5.0	5.7	20.0	
1,2-Dichloropropane	5.1	0.50	5.0	0.0	102.0	78	122	5.0	1.5	20.0	
1,3-Dichloropropane	4.9	0.50	5.0	0.0	97.0	80	119	4.8	2.2	20.0	
2,2-Dichloropropane	5.3	0.50	5.0	0.0	106.0	60	139	5.2	2.4	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 9 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/10/2022 09:52 **Prep Date:**
Lab ID: B22030433-053EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	4.8	0.50	5.0	0.0	97.0	79	125	4.7	3.0	20.0	
cis-1,3-Dichloropropene	4.9	0.50	5.0	0.0	97.0	75	124	4.7	3.1	20.0	
trans-1,3-Dichloropropene	5.3	0.50	5.0	0.0	105.0	73	127	5.2	1.6	20.0	
Ethylbenzene	5.2	0.50	5.0	0.0	103.0	79	121	4.9	4.4	20.0	
Methyl tert-butyl ether (MTBE)	5.2	0.50	5.0	0.0	104.0	71	124	5.0	4.6	20.0	
Methyl ethyl ketone	57	10	50	0.0	114.0	56	143	53	7.5	20.0	
Methylene chloride	5.0	0.50	5.0	0.0	99.0	74	124	4.9	1.9	20.0	
Styrene	5.2	0.50	5.0	0.0	104.0	78	123	5.1	2.4	20.0	
1,1,1,2-Tetrachloroethane	5.2	0.50	5.0	0.0	105.0	78	124	5.2	1.5	20.0	
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0	0.0	108.0	71	121	5.3	1.4	20.0	
Tetrachloroethene	5.0	0.50	5.0	0.0	99.0	74	129	4.9	1.6	20.0	
Toluene	5.3	0.50	5.0	0.0	106.0	80	121	5.3	0.1	20.0	
1,1,1-Trichloroethane	5.0	0.50	5.0	0.0	100.0	74	131	4.9	1.2	20.0	
1,1,2-Trichloroethane	5.2	0.50	5.0	0.0	103.0	80	119	5.3	1.9	20.0	
Trichloroethene	5.1	0.50	5.0	0.0	103.0	79	123	4.9	4.5	20.0	
Trichlorofluoromethane	4.9	0.50	5.0	0.0	99.0	65	141	4.7	5.0	20.0	
1,2,3-Trichloropropane	5.4	0.50	5.0	0.0	107.0	73	125	5.0	6.8	20.0	
Vinyl chloride	5.1	0.50	5.0	0.0	103.0	58	137	4.7	8.1	20.0	
m+p-Xylenes	10	0.50	10	0.0	101.0	80	121	9.8	2.8	20.0	
o-Xylene	5.2	0.50	5.0	0.0	104.0	78	122	5.0	5.2	20.0	
Xylenes, Total	15	0.50	15	0.0	102.0	79	121	15	3.6	20.0	
Surr: 1,2-Dichloroethane-d4	10	0.50	10	0.0	104.0	81	118	0.0			
Surr: Dibromofluoromethane	10	0.50	10	0.0	104.0	80	119	0.0			
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	107.0	85	114	0.0			
Surr: Toluene-d8	9.8	0.50	10	0.0	98.0	89	112	0.0			

Associated Samples: **B22030433-053E, B22030433-054A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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
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				
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				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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-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				
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: **B22030433-001E, B22030433-002B, B22030433-003A, B22030433-007E, B22030433-008A, B22030433-012E, B22030433-013A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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
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				
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				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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
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				
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: **B22030433-001E, B22030433-002B, B22030433-003A, B22030433-007E, B22030433-008A, B22030433-012E, B22030433-013A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 09:52 **Prep Date:**
Lab ID: CCV030922_ **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		99.0	80	120				
Bromobenzene	5.0	0.50	5.0		99.0	80	120				
Bromochloromethane	5.1	0.50	5.0		101.0	80	120				
Bromodichloromethane	4.8	0.50	5.0		96.0	80	120				
Bromoform	4.7	0.50	5.0		95.0	80	120				
Carbon tetrachloride	4.6	0.50	5.0		92.0	80	120				
Chlorobenzene	4.8	0.50	5.0		95.0	80	120				
Chlorodibromomethane	4.7	0.50	5.0		95.0	80	120				
Chloroethane	4.9	0.50	5.0		98.0	80	120				
Chloroform	4.6	0.50	5.0		92.0	80	120				
Chloromethane	4.7	0.50	5.0		95.0	80	120				
1,2-Dibromoethane	4.8	0.50	5.0		95.0	80	120				
2-Chlorotoluene	4.8	0.50	5.0		95.0	80	120				
Dibromomethane	4.9	0.50	5.0		98.0	80	120				
1,2-Dichlorobenzene	4.8	0.50	5.0		95.0	80	120				
4-Chlorotoluene	4.9	0.50	5.0		99.0	80	120				
1,3-Dichlorobenzene	4.9	0.50	5.0		98.0	80	120				
1,4-Dichlorobenzene	4.7	0.50	5.0		95.0	80	120				
Dichlorodifluoromethane	4.6	0.50	5.0		93.0	80	120				
1,1-Dichloroethane	4.8	0.50	5.0		96.0	80	120				
1,2-Dichloroethane	4.9	0.50	5.0		97.0	80	120				
1,1-Dichloroethene	4.9	0.50	5.0		98.0	80	120				
cis-1,2-Dichloroethene	4.8	0.50	5.0		97.0	80	120				
trans-1,2-Dichloroethene	4.7	0.50	5.0		95.0	80	120				
1,2-Dichloropropane	4.9	0.50	5.0		97.0	80	120				
1,3-Dichloropropane	4.9	0.50	5.0		98.0	80	120				
2,2-Dichloropropane	4.9	0.50	5.0		98.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 09:52 **Prep Date:**
Lab ID: CCV030922_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	4.6	0.50	5.0		92.0	80	120				
cis-1,3-Dichloropropene	4.7	0.50	5.0		94.0	80	120				
trans-1,3-Dichloropropene	5.0	0.50	5.0		101.0	80	120				
Ethylbenzene	4.6	0.50	5.0		93.0	80	120				
Methyl tert-butyl ether (MTBE)	4.9	0.50	5.0		99.0	80	120				
Methyl ethyl ketone	49	10	50		97.0	80	120				
Methylene chloride	4.7	0.50	5.0		93.0	80	120				
Styrene	4.8	0.50	5.0		96.0	80	120				
1,1,1,2-Tetrachloroethane	4.7	0.50	5.0		95.0	80	120				
1,1,2,2-Tetrachloroethane	4.9	0.50	5.0		97.0	80	120				
Tetrachloroethene	4.5	0.50	5.0		90.0	80	120				
Toluene	4.8	0.50	5.0		97.0	80	120				
1,1,1-Trichloroethane	4.6	0.50	5.0		92.0	80	120				
1,1,2-Trichloroethane	5.0	0.50	5.0		100.0	80	120				
Trichloroethene	4.7	0.50	5.0		94.0	80	120				
Trichlorofluoromethane	4.6	0.50	5.0		93.0	80	120				
1,2,3-Trichloropropane	4.8	0.50	5.0		96.0	80	120				
Vinyl chloride	4.7	0.50	5.0		95.0	80	120				
m+p-Xylenes	9.4	0.50	10		94.0	80	120				
o-Xylene	4.7	0.50	5.0		93.0	80	120				
Xylenes, Total	14	0.50	15		94.0	80	120				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		105.0	80	120				
Surr: Dibromofluoromethane	10	0.50	10		105.0	80	120				
Surr: p-Bromofluorobenzene	10	0.50	10		104.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 09:52 **Prep Date:**
Lab ID: CCV030922_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	9.8	0.50	10		98.0	80	120				

Associated Samples: **B22030433-002B, B22030433-007E, B22030433-017E, B22030433-018B, B22030433-019A, B22030433-023E, B22030433-024A, B22030433-038E, B22030433-039A, B22030433-043E, B22030433-044A, B22030433-058E, B22030433-059B, B22030433-060A, B22030433-064E, B22030433-065A**

Run ID: Run Order: VOA5975C.I_220309B: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 20:30 **Prep Date:**
Lab ID: CCV030922_Closing **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	50	150				
Bromobenzene	5.0	0.50	5.0		101.0	50	150				
Bromochloromethane	5.1	0.50	5.0		103.0	50	150				
Bromodichloromethane	4.9	0.50	5.0		98.0	50	150				
Bromoform	5.1	0.50	5.0		102.0	50	150				
Carbon tetrachloride	5.0	0.50	5.0		100.0	50	150				
Chlorobenzene	5.0	0.50	5.0		100.0	50	150				
Chlorodibromomethane	4.7	0.50	5.0		95.0	50	150				
Chloroethane	4.7	0.50	5.0		94.0	50	150				
Chloroform	5.0	0.50	5.0		100.0	50	150				
Chloromethane	5.4	0.50	5.0		108.0	50	150				
1,2-Dibromoethane	4.8	0.50	5.0		96.0	50	150				
2-Chlorotoluene	5.2	0.50	5.0		104.0	50	150				
Dibromomethane	4.9	0.50	5.0		98.0	50	150				
1,2-Dichlorobenzene	5.0	0.50	5.0		101.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 20:30 **Prep Date:**
Lab ID: CCV030922_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	5.1	0.50	5.0		102.0	50	150				
1,4-Dichlorobenzene	5.1	0.50	5.0		101.0	50	150				
Dichlorodifluoromethane	5.3	0.50	5.0		106.0	50	150				
1,1-Dichloroethane	5.1	0.50	5.0		101.0	50	150				
1,2-Dichloroethane	5.2	0.50	5.0		105.0	50	150				
1,1-Dichloroethene	5.3	0.50	5.0		106.0	50	150				
cis-1,2-Dichloroethene	5.1	0.50	5.0		102.0	50	150				
trans-1,2-Dichloroethene	5.0	0.50	5.0		100.0	50	150				
1,2-Dichloropropane	4.9	0.50	5.0		98.0	50	150				
1,3-Dichloropropane	4.9	0.50	5.0		98.0	50	150				
2,2-Dichloropropane	4.9	0.50	5.0		99.0	50	150				
1,1-Dichloropropene	5.0	0.50	5.0		99.0	50	150				
cis-1,3-Dichloropropene	4.8	0.50	5.0		97.0	50	150				
trans-1,3-Dichloropropene	5.1	0.50	5.0		101.0	50	150				
Ethylbenzene	5.0	0.50	5.0		100.0	50	150				
Methyl tert-butyl ether (MTBE)	4.6	0.50	5.0		92.0	50	150				
Methyl ethyl ketone	47	10	50		93.0	50	150				
Methylene chloride	4.8	0.50	5.0		96.0	50	150				
Styrene	5.0	0.50	5.0		100.0	50	150				
1,1,1,2-Tetrachloroethane	5.0	0.50	5.0		99.0	50	150				
1,1,2,2-Tetrachloroethane	5.0	0.50	5.0		100.0	50	150				
Tetrachloroethene	5.0	0.50	5.0		99.0	50	150				
Toluene	5.2	0.50	5.0		103.0	50	150				
1,1,1-Trichloroethane	5.0	0.50	5.0		99.0	50	150				
1,1,2-Trichloroethane	5.0	0.50	5.0		100.0	50	150				
Trichloroethene	5.0	0.50	5.0		100.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309B: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376116
Method: SW8260B **Analysis Date:** 03/09/2022 20:30 **Prep Date:**
Lab ID: CCV030922_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	5.0	0.50	5.0		99.0	50	150				
1,2,3-Trichloropropane	4.9	0.50	5.0		98.0	50	150				
Vinyl chloride	5.3	0.50	5.0		105.0	50	150				
m+p-Xylenes	10	0.50	10		101.0	50	150				
o-Xylene	5.0	0.50	5.0		101.0	50	150				
Xylenes, Total	15	0.50	15		101.0	50	150				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		101.0	50	150				
Surr: Dibromofluoromethane	10	0.50	10		103.0	50	150				
Surr: p-Bromofluorobenzene	11	0.50	10		106.0	50	150				
Surr: Toluene-d8	9.9	0.50	10		99.0	50	150				

Associated Samples: **B22030433-002B, B22030433-007E, B22030433-017E, B22030433-018B, B22030433-019A, B22030433-023E, B22030433-024A, B22030433-038E, B22030433-039A, B22030433-043E, B22030433-044A, B22030433-058E, B22030433-059B, B22030433-060A, B22030433-064E, B22030433-065A**

Run ID: Run Order: VOA5975C.I_220309C: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/09/2022 23:13 **Prep Date:**
Lab ID: CCV030922a **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	80	120				
Bromobenzene	4.8	0.50	5.0		97.0	80	120				
Bromochloromethane	5.0	0.50	5.0		100.0	80	120				
Bromodichloromethane	4.7	0.50	5.0		95.0	80	120				
Bromoform	4.8	0.50	5.0		96.0	80	120				
Carbon tetrachloride	5.0	0.50	5.0		100.0	80	120				
Chlorobenzene	4.9	0.50	5.0		99.0	80	120				
Chlorodibromomethane	4.7	0.50	5.0		94.0	80	120				
Chloroethane	4.5	0.50	5.0		90.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/09/2022 23:13 **Prep Date:**
Lab ID: CCV030922a **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Chloroform	5.0	0.50	5.0		99.0	80	120				
Chloromethane	5.0	0.50	5.0		99.0	80	120				
1,2-Dibromoethane	4.6	0.50	5.0		93.0	80	120				
2-Chlorotoluene	5.1	0.50	5.0		101.0	80	120				
Dibromomethane	4.8	0.50	5.0		95.0	80	120				
1,2-Dichlorobenzene	4.8	0.50	5.0		95.0	80	120				
4-Chlorotoluene	5.1	0.50	5.0		102.0	80	120				
1,3-Dichlorobenzene	5.0	0.50	5.0		100.0	80	120				
1,4-Dichlorobenzene	4.9	0.50	5.0		98.0	80	120				
Dichlorodifluoromethane	5.0	0.50	5.0		100.0	80	120				
1,1-Dichloroethane	5.0	0.50	5.0		99.0	80	120				
1,2-Dichloroethane	4.9	0.50	5.0		98.0	80	120				
1,1-Dichloroethene	5.2	0.50	5.0		103.0	80	120				
cis-1,2-Dichloroethene	5.0	0.50	5.0		100.0	80	120				
trans-1,2-Dichloroethene	4.9	0.50	5.0		97.0	80	120				
1,2-Dichloropropane	4.9	0.50	5.0		98.0	80	120				
1,3-Dichloropropane	4.8	0.50	5.0		96.0	80	120				
2,2-Dichloropropane	4.5	0.50	5.0		90.0	80	120				
1,1-Dichloropropene	4.9	0.50	5.0		99.0	80	120				
cis-1,3-Dichloropropene	4.5	0.50	5.0		91.0	80	120				
trans-1,3-Dichloropropene	4.8	0.50	5.0		97.0	80	120				
Ethylbenzene	4.9	0.50	5.0		97.0	80	120				
Methyl tert-butyl ether (MTBE)	4.6	0.50	5.0		92.0	80	120				
Methyl ethyl ketone	46	10	50		92.0	80	120				
Methylene chloride	4.8	0.50	5.0		97.0	80	120				
Styrene	4.9	0.50	5.0		98.0	80	120				
1,1,1,2-Tetrachloroethane	4.9	0.50	5.0		98.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/09/2022 23:13 **Prep Date:**
Lab ID: CCV030922a **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	4.7	0.50	5.0		94.0	80	120				
Tetrachloroethene	4.8	0.50	5.0		96.0	80	120				
Toluene	5.2	0.50	5.0		103.0	80	120				
1,1,1-Trichloroethane	4.9	0.50	5.0		99.0	80	120				
1,1,2-Trichloroethane	4.8	0.50	5.0		96.0	80	120				
Trichloroethene	5.0	0.50	5.0		100.0	80	120				
Trichlorofluoromethane	5.0	0.50	5.0		100.0	80	120				
1,2,3-Trichloropropane	5.0	0.50	5.0		99.0	80	120				
Vinyl chloride	5.0	0.50	5.0		100.0	80	120				
m+p-Xylenes	9.9	0.50	10		99.0	80	120				
o-Xylene	5.0	0.50	5.0		99.0	80	120				
Xylenes, Total	15	0.50	15		99.0	80	120				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		101.0	80	120				
Surr: Dibromofluoromethane	10	0.50	10		101.0	80	120				
Surr: p-Bromofluorobenzene	10	0.50	10		103.0	80	120				
Surr: Toluene-d8	10	0.50	10		100.0	80	120				

Associated Samples: **B22030433-053E, B22030433-054A**

Run ID: Run Order: VOA5975C.I_220309C: 10 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/10/2022 10:46 **Prep Date:**
Lab ID: CCV030922a_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		100.0	50	150				
Bromobenzene	4.9	0.50	5.0		97.0	50	150				
Bromochloromethane	5.0	0.50	5.0		100.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 10 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/10/2022 10:46 **Prep Date:**
Lab ID: CCV030922a_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	4.8	0.50	5.0		96.0	50	150				
Bromoform	4.6	0.50	5.0		92.0	50	150				
Carbon tetrachloride	4.8	0.50	5.0		96.0	50	150				
Chlorobenzene	4.8	0.50	5.0		96.0	50	150				
Chlorodibromomethane	4.7	0.50	5.0		94.0	50	150				
Chloroethane	4.4	0.50	5.0		87.0	50	150				
Chloroform	4.9	0.50	5.0		98.0	50	150				
Chloromethane	5.1	0.50	5.0		101.0	50	150				
1,2-Dibromoethane	4.7	0.50	5.0		94.0	50	150				
2-Chlorotoluene	4.9	0.50	5.0		99.0	50	150				
Dibromomethane	4.7	0.50	5.0		93.0	50	150				
1,2-Dichlorobenzene	4.8	0.50	5.0		96.0	50	150				
4-Chlorotoluene	5.1	0.50	5.0		102.0	50	150				
1,3-Dichlorobenzene	4.9	0.50	5.0		97.0	50	150				
1,4-Dichlorobenzene	4.7	0.50	5.0		95.0	50	150				
Dichlorodifluoromethane	5.1	0.50	5.0		102.0	50	150				
1,1-Dichloroethane	4.9	0.50	5.0		98.0	50	150				
1,2-Dichloroethane	4.9	0.50	5.0		98.0	50	150				
1,1-Dichloroethene	5.2	0.50	5.0		104.0	50	150				
cis-1,2-Dichloroethene	4.9	0.50	5.0		97.0	50	150				
trans-1,2-Dichloroethene	4.9	0.50	5.0		97.0	50	150				
1,2-Dichloropropane	4.8	0.50	5.0		96.0	50	150				
1,3-Dichloropropane	4.8	0.50	5.0		96.0	50	150				
2,2-Dichloropropane	5.0	0.50	5.0		101.0	50	150				
1,1-Dichloropropene	4.9	0.50	5.0		98.0	50	150				
cis-1,3-Dichloropropene	4.6	0.50	5.0		93.0	50	150				
trans-1,3-Dichloropropene	4.8	0.50	5.0		96.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VOA5975C.I_220309C: 10 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376117
Method: SW8260B **Analysis Date:** 03/10/2022 10:46 **Prep Date:**
Lab ID: CCV030922a_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)	4.8	0.50	5.0		96.0	50	150				
Methyl ethyl ketone	45	10	50		90.0	50	150				
Methylene chloride	4.7	0.50	5.0		94.0	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	4.8	0.50	5.0		96.0	50	150				
Tetrachloroethene	4.8	0.50	5.0		95.0	50	150				
Toluene	5.0	0.50	5.0		100.0	50	150				
1,1,1-Trichloroethane	4.8	0.50	5.0		97.0	50	150				
1,1,2-Trichloroethane	4.7	0.50	5.0		94.0	50	150				
Trichloroethene	4.9	0.50	5.0		97.0	50	150				
Trichlorofluoromethane	5.1	0.50	5.0		101.0	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	9.7	0.50	10		97.0	50	150				
o-Xylene	4.8	0.50	5.0		96.0	50	150				
Xylenes, Total	14	0.50	15		97.0	50	150				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		101.0	50	150				
Surr: Dibromofluoromethane	10	0.50	10		102.0	50	150				
Surr: p-Bromofluorobenzene	11	0.50	10		106.0	50	150				
Surr: Toluene-d8	9.8	0.50	10		98.0	50	150				

Associated Samples: **B22030433-053E, B22030433-054A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GECD.I_220308A: 2 **SampType:** Method Blank **Batch ID:** 164297
Method: SW8011 **Analysis Date:** 03/08/2022 15:34 **Prep Date:** 03/08/2022 09:10
Lab ID: MB-164297 **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	0.10	0.020	0.10		102.0	70	130				

Associated Samples: **B22030433-001G, B22030433-005A, B22030433-007G, B22030433-010A, B22030433-012G, B22030433-015A, B22030433-017G, B22030433-021A, B22030433-023G, B22030433-026A, B22030433-038G, B22030433-041A, B22030433-043G, B22030433-046A, B22030433-053G, B22030433-056A, B22030433-058G, B22030433-062A, B22030433-064G, B22030433-067A**

Run ID: Run Order: GECD.I_220308A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164297
Method: SW8011 **Analysis Date:** 03/08/2022 15:53 **Prep Date:** 03/08/2022 09:10
Lab ID: LCS-164297 **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	0.098	0.020	0.10		98.0	70	130				

Associated Samples: **B22030433-001G, B22030433-005A, B22030433-007G, B22030433-010A, B22030433-012G, B22030433-015A, B22030433-017G, B22030433-021A, B22030433-023G, B22030433-026A, B22030433-038G, B22030433-041A, B22030433-043G, B22030433-046A, B22030433-053G, B22030433-056A, B22030433-058G, B22030433-062A, B22030433-064G, B22030433-067A**

Run ID: Run Order: GECD.I_220308A: 4 **SampType:** Laboratory Control Sample **Batch ID:** 164297
Method: SW8011 **Analysis Date:** 03/08/2022 16:13 **Prep Date:** 03/08/2022 09:10
Lab ID: LCS1-164297 **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		111.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.10	0.020	0.10		102.0	70	130				

Associated Samples: **B22030433-001G, B22030433-005A, B22030433-007G, B22030433-010A, B22030433-012G, B22030433-015A, B22030433-017G, B22030433-021A, B22030433-023G, B22030433-026A, B22030433-038G, B22030433-041A, B22030433-043G, B22030433-046A, B22030433-053G, B22030433-056A, B22030433-058G, B22030433-062A, B22030433-064G, B22030433-067A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GECD.I_220308A: 15 **SampType:** Sample Matrix Spike **Batch ID:** 164297
Method: SW8011 **Analysis Date:** 03/08/2022 20:10 **Prep Date:** 03/08/2022 09:10
Lab ID: B22030433-001GMS **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.30	0.010	0.24	0.0	123.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.11	0.020	0.097	0.0	112.0	70	130				

Associated Samples: **B22030433-001G, B22030433-005A, B22030433-007G, B22030433-010A, B22030433-012G, B22030433-015A, B22030433-017G, B22030433-021A, B22030433-023G, B22030433-026A, B22030433-038G, B22030433-041A, B22030433-043G, B22030433-046A, B22030433-053G, B22030433-056A, B22030433-058G, B22030433-062A, B22030433-064G, B22030433-067A**

Run ID: Run Order: GECD.I_220308A: 16 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164297
Method: SW8011 **Analysis Date:** 03/08/2022 20:30 **Prep Date:** 03/08/2022 09:10
Lab ID: B22030433-001GMSD **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.29	0.010	0.24	0.0	118.0	60	140	0.30	4.1	20.0	
Surr: 1,1,1,2-Tetrachloroethane	0.10	0.020	0.097	0.0	108.0	70	130	0.0			

Associated Samples: **B22030433-001G, B22030433-005A, B22030433-007G, B22030433-010A, B22030433-012G, B22030433-015A, B22030433-017G, B22030433-021A, B22030433-023G, B22030433-026A, B22030433-038G, B22030433-041A, B22030433-043G, B22030433-046A, B22030433-053G, B22030433-056A, B22030433-058G, B22030433-062A, B22030433-064G, B22030433-067A**

Run ID: Run Order: GECD.I_220308A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164297
Method: SW8011 **Analysis Date:** 03/08/2022 15:14 **Prep Date:** 03/08/2022 09:10
Lab ID: CK3-164297 **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	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.10	0.020	0.10		100.0	80	120				

Associated Samples: **B22030433-001G, B22030433-005A, B22030433-007G, B22030433-010A, B22030433-012G, B22030433-015A, B22030433-017G, B22030433-021A, B22030433-023G, B22030433-026A, B22030433-038G, B22030433-041A, B22030433-043G, B22030433-046A, B22030433-053G, B22030433-056A, B22030433-058G, B22030433-062A, B22030433-064G, B22030433-067A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GECD.I_220308A: 17 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164297
Method: SW8011 **Analysis Date:** 03/08/2022 21:10 **Prep Date:** 03/08/2022 09:10
Lab ID: CK5-164297 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.50	0.010	0.40		124.0	80	120				S
Surr: 1,1,1,2-Tetrachloroethane	0.48	0.020	0.40		120.0	80	120				

Associated Samples: **B22030433-001G, B22030433-005A, B22030433-007G, B22030433-010A, B22030433-012G, B22030433-015A, B22030433-017G, B22030433-021A, B22030433-023G, B22030433-026A, B22030433-038G, B22030433-041A, B22030433-043G, B22030433-046A, B22030433-053G, B22030433-056A, B22030433-058G, B22030433-062A, B22030433-064G, B22030433-067A**

Run ID: Run Order: GECD.I_220308A: 28 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164297
Method: SW8011 **Analysis Date:** 03/09/2022 01:27 **Prep Date:** 03/08/2022 09:10
Lab ID: CK3-164297 **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		124.0	80	120				S
Surr: 1,1,1,2-Tetrachloroethane	0.11	0.020	0.10		107.0	80	120				

Associated Samples: **B22030433-001G, B22030433-005A, B22030433-007G, B22030433-010A, B22030433-012G, B22030433-015A, B22030433-017G, B22030433-021A, B22030433-023G, B22030433-026A, B22030433-038G, B22030433-041A, B22030433-043G, B22030433-046A, B22030433-053G, B22030433-056A, B22030433-058G, B22030433-062A, B22030433-064G, B22030433-067A**

Run ID: Run Order: GECD.I_220308A: 29 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164299
Method: SW8011 **Analysis Date:** 03/09/2022 02:06 **Prep Date:** 03/08/2022 09:12
Lab ID: CK3-164299 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.13	0.010	0.10		127.0	80	120				S
Surr: 1,1,1,2-Tetrachloroethane	0.11	0.020	0.10		110.0	80	120				

Associated Samples: **B22030433-001G, B22030433-005A, B22030433-007G, B22030433-010A, B22030433-012G, B22030433-015A, B22030433-017G, B22030433-021A, B22030433-023G, B22030433-026A, B22030433-038G, B22030433-041A, B22030433-043G, B22030433-046A, B22030433-053G, B22030433-056A, B22030433-058G, B22030433-062A, B22030433-064G, B22030433-067A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GECD.I_220308A: 47 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164299
Method: SW8011 **Analysis Date:** 03/09/2022 08:41 **Prep Date:** 03/08/2022 09:13
Lab ID: CK5-164299 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.51	0.010	0.40		126.0	80	120				S
Surr: 1,1,1,2-Tetrachloroethane	0.50	0.020	0.40		125.0	80	120				S

Associated Samples: **B22030433-001G, B22030433-005A, B22030433-007G, B22030433-010A, B22030433-012G, B22030433-015A, B22030433-017G, B22030433-021A, B22030433-023G, B22030433-026A, B22030433-038G, B22030433-041A, B22030433-043G, B22030433-046A, B22030433-053G, B22030433-056A, B22030433-058G, B22030433-062A, B22030433-064G, B22030433-067A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GCFID-HP4-B_220309A: 4 **SampType:** Method Blank **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/09/2022 13:05 **Prep Date:** 03/08/2022 11:08
Lab ID: MB-164312 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	ND	0.15									
Oil Range Hydrocarbons (C24 to C40)	ND	0.15									
Total Extractable Hydrocarbons	ND	0.15									
Surr: o-Terphenyl	0.18	0.0020	0.20		89.0	56	125				
Surr: n-Triacontane	0.094	0.0020	0.10		94.0	50	150				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220311A: 4 **SampType:** Method Blank **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/11/2022 18:41 **Prep Date:** 03/08/2022 11:08
Lab ID: MB-164312 **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)	0.15	0.0020	0.20		76.0	56	125				
Surr: n-Triacontane (SGT)	0.075	0.0020	0.10		75.0	50	150				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GCFID-HP4-B_220309A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/09/2022 12:20 **Prep Date:** 03/08/2022 11:08
Lab ID: LCS-164312 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	12	0.30	15		83.0	36	132				
Total Extractable Hydrocarbons	13	0.30	15		89.0	60	132				
Surr: o-Terphenyl	0.17	0.0020	0.20		86.0	56	125				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220309A: 32 **SampType:** Laboratory Control Sample **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/11/2022 03:31 **Prep Date:** 03/08/2022 11:09
Lab ID: LCS-164312-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)	4.5	0.30	5.0		89.0	41	113				
Surr: n-Triacontane	0.091	0.0020	0.10		91.0	50	150				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GCFID-HP4-B_220311A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/11/2022 17:56 **Prep Date:** 03/08/2022 11:08
Lab ID: LCS-164312 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	11	0.30	15		76.0	36	132				
Total Extractable Hydrocarbons (SGT)	12	0.30	15		81.0	60	132				
Surr: o-Terphenyl (SGT)	0.17	0.0020	0.20		84.0	56	125				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220311A: 26 **SampType:** Laboratory Control Sample **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/12/2022 16:29 **Prep Date:** 03/08/2022 11:09
Lab ID: LCS-164312-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)	4.0	0.30	5.0		80.0	41	113				
Surr: n-Triacontane (SGT)	0.076	0.0020	0.10		76.0	50	150				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GCFID-HP4-B_220309A: 6 **SampType:** Sample Matrix Spike **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/09/2022 14:36 **Prep Date:** 03/08/2022 11:09
Lab ID: B22030433-053CMS **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	0.049	84.0	36	132				
Total Extractable Hydrocarbons	13	0.30	14	0.23	88.0	60	132				
Surr: o-Terphenyl	0.16	0.0020	0.19	0.0	84.0	56	125				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220309A: 7 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/09/2022 15:21 **Prep Date:** 03/08/2022 11:09
Lab ID: B22030433-053CMSD **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	0.049	80.0	36	132	12	2.3	20.0	
Total Extractable Hydrocarbons	13	0.30	15	0.23	85.0	60	132	13	1.5	20.0	
Surr: o-Terphenyl	0.16	0.0020	0.19	0.0	83.0	56	125	0.0			

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GCFID-HP4-B_220309A: 33 **SampType:** Sample Matrix Spike **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/11/2022 05:02 **Prep Date:** 03/08/2022 11:09
Lab ID: B22030433-053CMS-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)	4.4	0.30	4.8	0.23	88.0	41	113				
Surr: n-Triacontane	0.087	0.0020	0.096	0.0	90.0	50	150				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220309A: 34 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/11/2022 06:32 **Prep Date:** 03/08/2022 11:09
Lab ID: B22030433-053CMSD-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)	4.7	0.30	4.9	0.23	91.0	41	113	4.4	4.9	20.0	
Surr: n-Triacontane	0.092	0.0020	0.097	0.0	95.0	50	150	0.0			

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220311A: 6 **SampType:** Sample Matrix Spike **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/11/2022 20:12 **Prep Date:** 03/08/2022 11:09
Lab ID: B22030433-053CMS **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	12	0.30	14	0.0	82.0	36	132				
Total Extractable Hydrocarbons (SGT)	12	0.30	14	0.0	87.0	60	132				
Surr: o-Terphenyl (SGT)	0.16	0.0020	0.19	0.0	83.0	56	125				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GCFID-HP4-B_220311A: 7 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/11/2022 20:57 **Prep Date:** 03/08/2022 11:09
Lab ID: B22030433-053CMSD **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	0.0	82.0	36	132	12	2.6	20.0	
Total Extractable Hydrocarbons (SGT)	13	0.30	15	0.0	88.0	60	132	12	2.7	20.0	
Surr: o-Terphenyl (SGT)	0.17	0.0020	0.19	0.0	87.0	56	125	0.0			

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220311A: 27 **SampType:** Sample Matrix Spike **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/12/2022 18:00 **Prep Date:** 03/08/2022 11:09
Lab ID: B22030433-053CMS-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)	4.2	0.30	4.8	0.0	86.0	41	113				
Surr: n-Triacontane (SGT)	0.079	0.0020	0.096	0.0	82.0	50	150				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220311A: 28 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164312
Method: SW8015C **Analysis Date:** 03/12/2022 19:31 **Prep Date:** 03/08/2022 11:09
Lab ID: B22030433-053CMSD-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)	4.4	0.30	4.9	0.0	90.0	41	113	4.2	4.8	20.0	
Surr: n-Triacontane (SGT)	0.084	0.0020	0.097	0.0	87.0	50	150	0.0			

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VARIAN1_220309A: 4 **SampType:** Method Blank **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/09/2022 11:56 **Prep Date:**
Lab ID: MBLK_0309VAR08r **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		81.0	70	130				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Run ID: Run Order: VARIAN1_220309A: 19 **SampType:** Method Blank **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/09/2022 23:18 **Prep Date:**
Lab ID: MBLK_0309VAR28r **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		81.0	70	130				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VARIAN1_220309A: 30 **SampType:** Method Blank **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/10/2022 10:07 **Prep Date:**
Lab ID: MBLK_0309VAR47r **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: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Run ID: Run Order: VARIAN1_220309A: 44 **SampType:** Method Blank **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/10/2022 21:33 **Prep Date:**
Lab ID: MBLK_0309VAR67r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	ND	10									
Total Purgeable Hydrocarbons	ND	10									
Surr: Trifluorotoluene	19	1.0	25		78.0	70	130				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VARIAN1_220309A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/09/2022 10:48 **Prep Date:**
Lab ID: LCS_0309VAR06r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	167	20	170		98.0	78	122				
Total Purgeable Hydrocarbons	200	20	200		100.0	70	130				
Surr: Trifluorotoluene	23	1.0	25		92.0	70	130				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Run ID: Run Order: VARIAN1_220309A: 18 **SampType:** Laboratory Control Sample **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/09/2022 22:10 **Prep Date:**
Lab ID: LCS_0309VAR26r **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	199	20	200		100.0	70	130				
Surr: Trifluorotoluene	23	1.0	25		92.0	70	130				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VARIAN1_220309A: 29 **SampType:** Laboratory Control Sample **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/10/2022 08:59 **Prep Date:**
Lab ID: LCS_0309VAR45r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	174	20	170		103.0	78	122				
Total Purgeable Hydrocarbons	211	20	200		105.0	70	130				
Surr: Trifluorotoluene	23	1.0	25		91.0	70	130				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Run ID: Run Order: VARIAN1_220309A: 43 **SampType:** Laboratory Control Sample **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/10/2022 20:25 **Prep Date:**
Lab ID: LCS_0309VAR65r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	171	20	170		101.0	78	122				
Total Purgeable Hydrocarbons	206	20	200		103.0	70	130				
Surr: Trifluorotoluene	22	1.0	25		90.0	70	130				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VARIAN1_220309A: 14 **SampType:** Sample Matrix Spike **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/09/2022 19:20 **Prep Date:**
Lab ID: B22030433-001FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	166	20	170	0.0	98.0	78	122				
Total Purgeable Hydrocarbons	201	20	200	0.0	101.0	70	130				
Surr: Trifluorotoluene	22	1.0	25	0.0	89.0	70	130				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Run ID: Run Order: VARIAN1_220309A: 15 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/09/2022 19:54 **Prep Date:**
Lab ID: B22030433-001FMSD **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	166	1.8	20.0	
Total Purgeable Hydrocarbons	204	20	200	0.0	102.0	70	130	201	1.5	20.0	
Surr: Trifluorotoluene	23	1.0	25	0.0	91.0	70	130	0.0			

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VARIAN1_220309A: 39 **SampType:** Sample Matrix Spike **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/10/2022 17:33 **Prep Date:**
Lab ID: B22030433-053FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	171	20	170	0.0	101.0	78	122				
Total Purgeable Hydrocarbons	206	20	200	0.0	103.0	70	130				
Surr: Trifluorotoluene	23	1.0	25	0.0	90.0	70	130				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Run ID: Run Order: VARIAN1_220309A: 40 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/10/2022 18:07 **Prep Date:**
Lab ID: B22030433-053FMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	173	20	170	0.0	102.0	78	122	171	1.0	20.0	
Total Purgeable Hydrocarbons	208	20	200	0.0	104.0	70	130	206	1.1	20.0	
Surr: Trifluorotoluene	23	1.0	25	0.0	90.0	70	130	0.0			

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GCFID-HP4-B_220309A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375884
Method: SW8015C **Analysis Date:** 03/09/2022 10:04 **Prep Date:**
Lab ID: CCV_0309HP403r-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	0.21	0.0020	0.20		103.0	80	120				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220309A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375884
Method: SW8015C **Analysis Date:** 03/09/2022 10:49 **Prep Date:**
Lab ID: CCV_0309HP404r **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		103.0	80	120				
Surr: o-Terphenyl	0.23	0.0020	0.20		113.0	80	120				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220309A: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375884
Method: SW8015C **Analysis Date:** 03/09/2022 21:23 **Prep Date:**
Lab ID: CCV_0309HP418r-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		101.0	80	120				
Surr: n-Triacontane	0.21	0.0020	0.20		105.0	80	120				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GCFID-HP4-B_220309A: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375884
Method: SW8015C **Analysis Date:** 03/09/2022 22:08 **Prep Date:**
Lab ID: CCV_0309HP419r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		97.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		100.0	80	120				
Surr: o-Terphenyl	0.22	0.0020	0.20		111.0	80	120				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220309A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375884
Method: SW8015C **Analysis Date:** 03/10/2022 09:21 **Prep Date:**
Lab ID: CCV_0309HP433r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.1	0.30	5.0		103.0	80	120				
Surr: n-Triacontane	0.21	0.0020	0.20		105.0	80	120				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GCFID-HP4-B_220309A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375884
Method: SW8015C **Analysis Date:** 03/10/2022 10:07 **Prep Date:**
Lab ID: CCV_0309HP434r **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		103.0	80	120				
Total Extractable Hydrocarbons	16	0.30	15		106.0	80	120				
Surr: o-Terphenyl	0.23	0.0020	0.20		117.0	80	120				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: GCFID-HP4-B_220309A: 28 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375884
Method: SW8015C **Analysis Date:** 03/10/2022 20:44 **Prep Date:**
Lab ID: CCV_0309HP448r-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		101.0	80	120				
Surr: n-Triacontane	0.20	0.0020	0.20		102.0	80	120				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GCFID-HP4-B_220309A: 29 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375884
Method: SW8015C **Analysis Date:** 03/10/2022 21:29 **Prep Date:**
Lab ID: CCV_0309HP449r **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	0.22	0.0020	0.20		109.0	80	120				

Associated Samples: **B22030433-001C, B22030433-002A, B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-038C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A, B22030433-064C**

Run ID: Run Order: VARIAN1_220309A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/09/2022 10:14 **Prep Date:**
Lab ID: CCV_0309VAR05r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	173	20	168		103.0	80	120				
Total Purgeable Hydrocarbons	207	20	200		103.0	80	120				
Surr: Trifluorotoluene	24	1.0	25		95.0	80	120				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VARIAN1_220309A: 17 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/09/2022 21:36 **Prep Date:**
Lab ID: CCV_0309VAR25r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	181	20	168		108.0	80	120				
Total Purgeable Hydrocarbons	217	20	200		109.0	80	120				
Surr: Trifluorotoluene	23	1.0	25		92.0	80	120				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Run ID: Run Order: VARIAN1_220309A: 28 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/10/2022 08:25 **Prep Date:**
Lab ID: CCV_0309VAR44r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	171	20	168		102.0	80	120				
Total Purgeable Hydrocarbons	206	20	200		103.0	80	120				
Surr: Trifluorotoluene	23	1.0	25		91.0	80	120				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Run ID: Run Order: VARIAN1_220309A: 42 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/10/2022 19:50 **Prep Date:**
Lab ID: CCV_0309VAR64r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	183	20	168		109.0	80	120				
Total Purgeable Hydrocarbons	218	20	200		109.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: VARIAN1_220309A: 42 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375955
Method: SW8015C **Analysis Date:** 03/10/2022 19:50 **Prep Date:**
Lab ID: CCV_0309VAR64r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Trifluorotoluene	23	1.0	25		93.0	80	120				

Associated Samples: **B22030433-001F, B22030433-002C, B22030433-004A, B22030433-007F, B22030433-009A, B22030433-012F, B22030433-014A, B22030433-017F, B22030433-018C, B22030433-020A, B22030433-023F, B22030433-025A, B22030433-038F, B22030433-040A, B22030433-043F, B22030433-045A, B22030433-053F, B22030433-055A, B22030433-058F, B22030433-059C, B22030433-061A, B22030433-064F, B22030433-066A**

Run ID: Run Order: GCFID-HP4-B_220311A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376066
Method: SW8015C **Analysis Date:** 03/11/2022 15:39 **Prep Date:**
Lab ID: CCV_0311HP404r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.1	0.30	5.0		103.0	80	120				
Surr: n-Triacontane	0.21	0.0020	0.20		107.0	80	120				

Associated Samples: **B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: GCFID-HP4-B_220311A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376066
Method: SW8015C **Analysis Date:** 03/11/2022 16:24 **Prep Date:**
Lab ID: CCV_0311HP405r **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		101.0	80	120				
Total Extractable Hydrocarbons	16	0.30	15		105.0	80	120				
Surr: o-Terphenyl	0.23	0.0020	0.20		113.0	80	120				

Associated Samples: **B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A**

Run ID: Run Order: GCFID-HP4-B_220311A: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376066
Method: SW8015C **Analysis Date:** 03/12/2022 02:58 **Prep Date:**
Lab ID: CCV_0311HP419r-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	0.21	0.0020	0.20		107.0	80	120				

Associated Samples: **B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A**

Run ID: Run Order: GCFID-HP4-B_220311A: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376066
Method: SW8015C **Analysis Date:** 03/12/2022 03:43 **Prep Date:**
Lab ID: CCV_0311HP420r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		98.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		102.0	80	120				
Surr: o-Terphenyl	0.22	0.0020	0.20		110.0	80	120				

Associated Samples: **B22030433-007C, B22030433-012C, B22030433-017C, B22030433-018A, B22030433-023C, B22030433-043C, B22030433-053C, B22030433-058C, B22030433-059A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: FID-HEADSPACE_220309A: 4 **SampType:** Method Blank **Batch ID:** R375827
Method: SW8015M **Analysis Date:** 03/09/2022 10:18 **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: **B22030433-001H, B22030433-006A, B22030433-007H, B22030433-011A, B22030433-012H, B22030433-016A, B22030433-017H, B22030433-022A, B22030433-023H, B22030433-027A, B22030433-038H, B22030433-042A, B22030433-043H, B22030433-047A, B22030433-053H, B22030433-057A, B22030433-058H, B22030433-063A, B22030433-064H, B22030433-068A**

Run ID: Run Order: FID-HEADSPACE_220309A: 2 **SampType:** Laboratory Control Sample **Batch ID:** R375827
Method: SW8015M **Analysis Date:** 03/09/2022 08:54 **Prep Date:**
Lab ID: LCS **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	100	2.0	100		101.0	85	115				

Associated Samples: **B22030433-001H, B22030433-006A, B22030433-007H, B22030433-011A, B22030433-012H, B22030433-016A, B22030433-017H, B22030433-022A, B22030433-023H, B22030433-027A, B22030433-038H, B22030433-042A, B22030433-043H, B22030433-047A, B22030433-053H, B22030433-057A, B22030433-058H, B22030433-063A, B22030433-064H, B22030433-068A**

Run ID: Run Order: FID-HEADSPACE_220309A: 3 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** R375827
Method: SW8015M **Analysis Date:** 03/09/2022 08:59 **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	100	2.0	100		101.0	85	115	100	0.5	20.0	

Associated Samples: **B22030433-001H, B22030433-006A, B22030433-007H, B22030433-011A, B22030433-012H, B22030433-016A, B22030433-017H, B22030433-022A, B22030433-023H, B22030433-027A, B22030433-038H, B22030433-042A, B22030433-043H, B22030433-047A, B22030433-053H, B22030433-057A, B22030433-058H, B22030433-063A, B22030433-064H, B22030433-068A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: FID-HEADSPACE_220309A: 6 **SampType:** Sample Duplicate **Batch ID:** R375827
Method: SW8015M **Analysis Date:** 03/09/2022 10:35 **Prep Date:**
Lab ID: B22030433-001HDUP **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			0.0017		20.0	

Associated Samples: **B22030433-001H, B22030433-006A, B22030433-007H, B22030433-011A, B22030433-012H, B22030433-016A, B22030433-017H, B22030433-022A, B22030433-023H, B22030433-027A, B22030433-038H, B22030433-042A, B22030433-043H, B22030433-047A, B22030433-053H, B22030433-057A, B22030433-058H, B22030433-063A, B22030433-064H, B22030433-068A**

Run ID: Run Order: FID-HEADSPACE_220309A: 11 **SampType:** Sample Duplicate **Batch ID:** R375827
Method: SW8015M **Analysis Date:** 03/09/2022 11:33 **Prep Date:**
Lab ID: B22030433-012HDUP **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	2.9	0.16			0.0			2.9	0.8	20.0	

Associated Samples: **B22030433-001H, B22030433-006A, B22030433-007H, B22030433-011A, B22030433-012H, B22030433-016A, B22030433-017H, B22030433-022A, B22030433-023H, B22030433-027A, B22030433-038H, B22030433-042A, B22030433-043H, B22030433-047A, B22030433-053H, B22030433-057A, B22030433-058H, B22030433-063A, B22030433-064H, B22030433-068A**

Run ID: Run Order: FID-HEADSPACE_220309A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375827
Method: SW8015M **Analysis Date:** 03/09/2022 08:50 **Prep Date:**
Lab ID: CCV **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	100	2.0	100		100.0	85	115				

Associated Samples: **B22030433-001H, B22030433-006A, B22030433-007H, B22030433-011A, B22030433-012H, B22030433-016A, B22030433-017H, B22030433-022A, B22030433-023H, B22030433-027A, B22030433-038H, B22030433-042A, B22030433-043H, B22030433-047A, B22030433-053H, B22030433-057A, B22030433-058H, B22030433-063A, B22030433-064H, B22030433-068A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

Run ID: Run Order: FID-HEADSPACE_220309A: 27 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375827
Method: SW8015M **Analysis Date:** 03/09/2022 13:45 **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: **B22030433-001H, B22030433-006A, B22030433-007H, B22030433-011A, B22030433-012H, B22030433-016A, B22030433-017H, B22030433-022A, B22030433-023H, B22030433-027A, B22030433-038H, B22030433-042A, B22030433-043H, B22030433-047A, B22030433-053H, B22030433-057A, B22030433-058H, B22030433-063A, B22030433-064H, B22030433-068A**

Analytical QC Exceptions Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01

Report Date: 03/16/2022

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, 023A, 038A, 043A, 053A, 058A, 064A	SD	B22030433-001ADIL	3/9/2022	12:15	Lead					10.0	N
SW8011	EDB in Water by ECD	164297	001G, 005A, 007G, 010A, 012G, 015A, 017G, 021A, 023G, 026A, 038G, 041A, 043G, 046A, 053G, 056A, 058G, 062A, 064G, 067A	CCV4	CK5-164297	3/8/2022	21:10	1,2-Dibromoethane	124.0	80	120			S
				CCV3	CK3-164297	3/9/2022	01:27	1,2-Dibromoethane	124.0	80	120			S
		164299	001G, 005A, 007G, 010A, 012G, 015A, 017G, 021A, 023G, 026A, 038G, 041A, 043G, 046A, 053G, 056A, 058G, 062A, 064G, 067A	CCV3	CK3-164299	3/9/2022	02:06	1,2-Dibromoethane	127.0	80	120			S
				CCV4	CK5-164299	3/9/2022	08:41	Surr: 1,1,1,2-Tetrachloroethane	125.0	80	120			S
								1,2-Dibromoethane	126.0	80	120			S

Preparation and Analysis Dates Report

Work Order: B22030433
Client: AECOM - Honolulu
Project Name: CV18F0126, 60571032.02.46.01
Report Date: 3/16/2022

Lab ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Method	Prep Date	Prep Batch	Analysis Method	Analysis Date
001B	ERH2618 (OWDFMW05A)	03/02/2022 13:15	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 12:40
001C	ERH2618 (OWDFMW05A)	03/02/2022 13:15	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/09/2022 16:51
001G	ERH2618 (OWDFMW05A)	03/02/2022 13:15	Ground Water	EDB in Water by ECD		SW8011	03/08/2022 09:10	164297	SW8011	03/08/2022 19:51
002A	ERH2674 (OWDFMW05A) FD	03/02/2022 13:15	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/09/2022 17:36
005A	ERH2617 (Trip Blank) 14894	03/02/2022 13:15	Trip Blank	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 16:53
007B	ERH2576 (RHMW03)	03/02/2022 19:10	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 13:24
007C	ERH2576 (RHMW03)	03/02/2022 19:10	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/10/2022 07:10
						SW3520C	03/08/2022 11:15	164312	SW8015C	03/12/2022 07:29
007G	ERH2576 (RHMW03)	03/02/2022 19:10	Ground Water	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 17:12
010A	ERH2575 (Trip Blank) 14894	03/02/2022 19:10	Trip Blank	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 17:32
012B	ERH2622 (RHMW02)	03/02/2022 17:55	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 13:49
012C	ERH2622 (RHMW02)	03/02/2022 17:55	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/10/2022 04:54
						SW3520C	03/08/2022 11:15	164312	SW8015C	03/12/2022 06:44
012G	ERH2622 (RHMW02)	03/02/2022 17:55	Ground Water	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 17:52
015A	ERH2621 (Trip Blank) 14894	03/02/2022 17:55	Trip Blank	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 18:12
017B	ERH2602 (RHMW01R)	03/02/2022 15:45	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 14:01
017C	ERH2602 (RHMW01R)	03/02/2022 15:45	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/10/2022 23:00
						SW3520C	03/08/2022 11:15	164312	SW8015C	03/12/2022 11:15
017G	ERH2602 (RHMW01R)	03/02/2022 15:45	Ground Water	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 18:32
018A	ERH2603 (RHMW01R FD)	03/02/2022 15:45	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/11/2022 01:15
						SW3520C	03/08/2022 11:15	164312	SW8015C	03/12/2022 12:45
021A	ERH2601 (Trip Blank) 14894	03/02/2022 15:45	Trip Blank	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 18:51
023B	ERH2614 (Sump Audit 3)	03/02/2022 18:20	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 14:14
023C	ERH2614 (Sump Audit 3)	03/02/2022 18:20	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/10/2022 18:28
						SW3520C	03/08/2022 11:15	164312	SW8015C	03/12/2022 09:44

Preparation and Analysis Dates Report

Work Order: B22030433
Client: AECOM - Honolulu
Project Name: CV18F0126, 60571032.02.46.01
Report Date: 3/16/2022

023G	ERH2614 (Sump Audit 3)	03/02/2022 18:20	Ground Water	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 19:11
026A	ERH2613 (Trip Blank) 14894	03/02/2022 18:20	Trip Blank	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 19:31
038B	ERH2612 (RHMW2254-01 LF)	03/03/2022 13:10	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 14:26
038C	ERH2612 (RHMW2254-01 LF)	03/03/2022 13:10	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/09/2022 18:22
038G	ERH2612 (RHMW2254-01 LF)	03/03/2022 13:10	Ground Water	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 21:50
041A	ERH2611 (Trip Blank) 14833	03/03/2022 13:10	Trip Blank	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 22:09
043B	ERH2610 (RHMW2254-01 Bailer)	03/03/2022 12:30	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 14:39
043C	ERH2610 (RHMW2254-01 Bailer)	03/03/2022 12:30	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/10/2022 04:09
						SW3520C	03/08/2022 11:15	164312	SW8015C	03/12/2022 05:59
043G	ERH2610 (RHMW2254-01 Bailer)	03/03/2022 12:30	Ground Water	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 22:29
046A	ERH2609 (Trip Blank) 14894	03/03/2022 12:30	Trip Blank	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 22:49
053B	ERH2580 (RHMW05 m/MS/MSD volumes)	03/02/2022 14:00	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 15:04
053C	ERH2580 (RHMW05 m/MS/MSD volumes)	03/02/2022 14:00	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:09	164312	SW8015C	03/09/2022 13:50
						SW3520C	03/08/2022 11:09	164312	SW8015C	03/11/2022 19:27
053G	ERH2580 (RHMW05 m/MS/MSD volumes)	03/02/2022 14:00	Ground Water	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 23:09
056A	ERH2579 (Trip Blank) 14894	03/02/2022 14:00	Trip Blank	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 23:29
058B	ERH2620 (OWDFMW04A)	03/02/2022 15:50	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 15:16
058C	ERH2620 (OWDFMW04A)	03/02/2022 15:50	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/09/2022 19:07
						SW3520C	03/08/2022 11:15	164312	SW8015C	03/11/2022 22:27
058G	ERH2620 (OWDFMW04A)	03/02/2022 15:50	Ground Water	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/08/2022 23:48
059A	ERH2676 (OWDFMW04A) FD	03/02/2022 15:50	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/09/2022 19:52
						SW3520C	03/08/2022 11:15	164312	SW8015C	03/11/2022 23:12
062A	ERH2619 (Trip Blank) 14894	03/02/2022 15:50	Trip Blank	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/09/2022 00:08
064B	ERH2590 (RHMW013.5)	03/02/2022 14:05	Ground Water	Metals by ICP-MS, Total		SW3010A	03/07/2022 16:31	164289	SW6020	03/09/2022 15:29
064C	ERH2590 (RHMW013.5)	03/02/2022 14:05	Ground Water	Diesel Range Organics		SW3520C	03/08/2022 11:15	164312	SW8015C	03/10/2022 03:24
064G	ERH2590 (RHMW013.5)	03/02/2022 14:05	Ground Water	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/09/2022 00:28

Preparation and Analysis Dates Report

Work Order: B22030433
Client: AECOM - Honolulu
Project Name: CV18F0126, 60571032.02.46.01
Report Date: 3/16/2022

067A	ERH2589 (Trip Blank) 14894	03/02/2022 14:05	Trip Blank	EDB in Water by ECD		SW8011	03/08/2022 09:11	164297	SW8011	03/09/2022 00:47

Chemical Abstracts Service (CAS) Registry Numbers

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22030433
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/16/2022

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

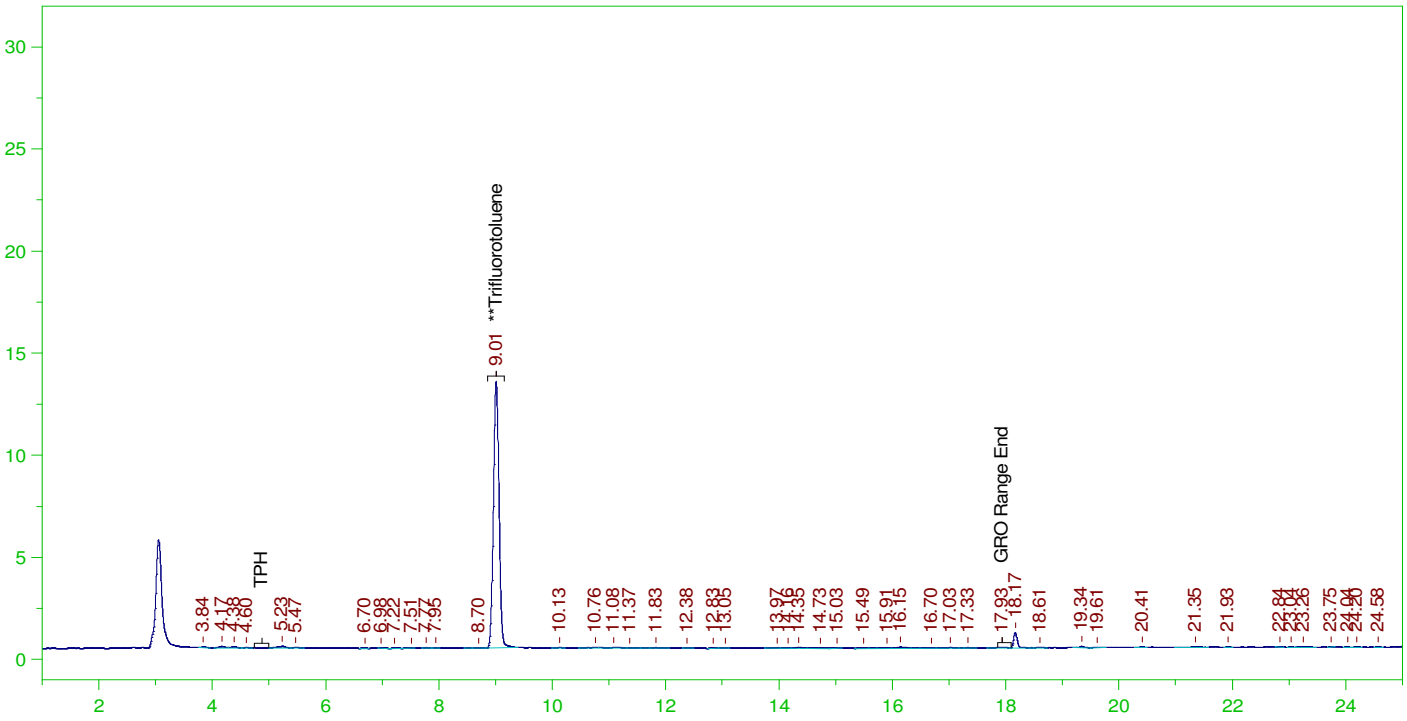
Total Extractable Hydrocarbons (SGT)

ORGANIC CHARACTERISTICS

Methane	74-82-8

ERH2618 (OWDFMW05A)

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0009.RAW B22030433-001F ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-001F ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0009.RAW
Date & Time Acquired: 3/9/2022 12:30:50 PM
Method File: G:\Org\VAR\Methods\211208G433-1DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

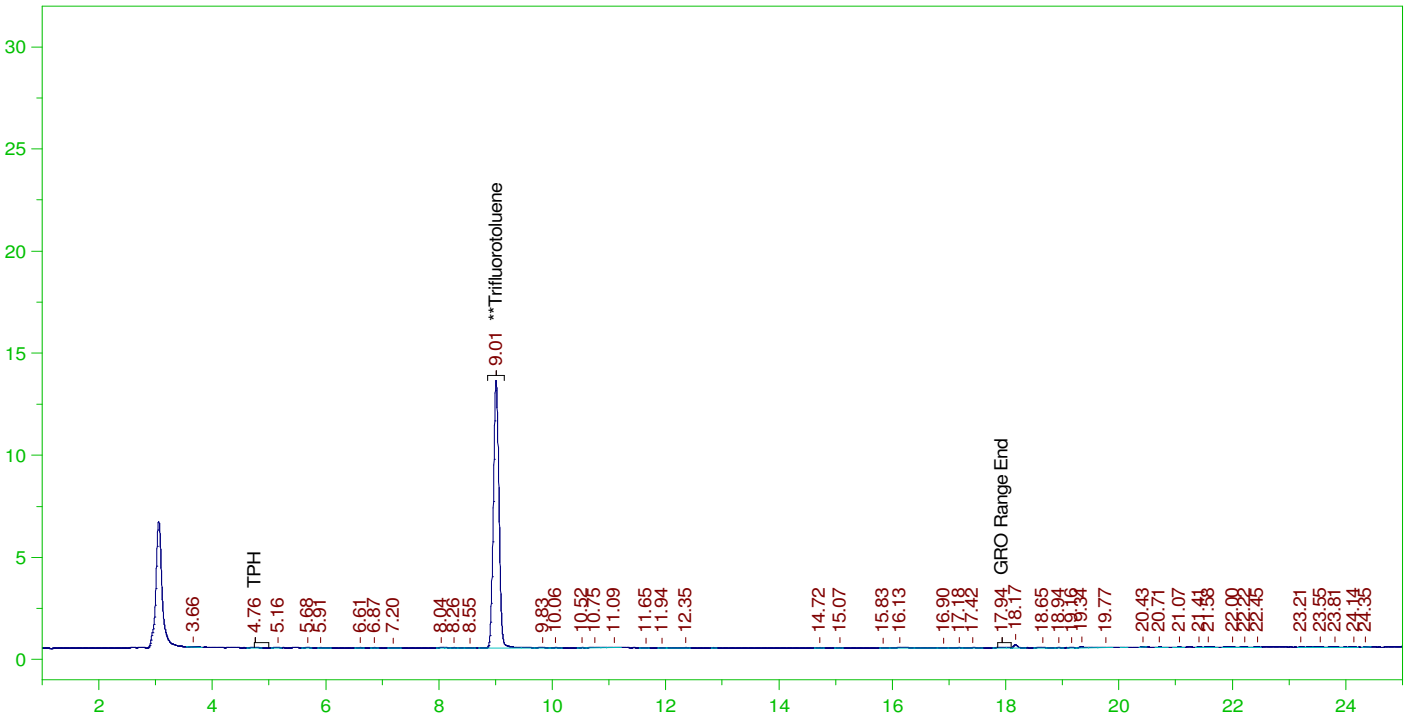
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	19.417	77.67	-

C6 to C10 Area:7047.692 C6 to C10 Amount: 1.438336
TPH Area:13887.27 TPH Amount: 2.906276

ERH2674 (OWDFMW05A) FD

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0029.RAW B22030433-002C ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-002C ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0029.RAW
Date & Time Acquired: 3/9/2022 11:52:51 PM
Method File: G:\Org\VAR\Methods\211208G433-2DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

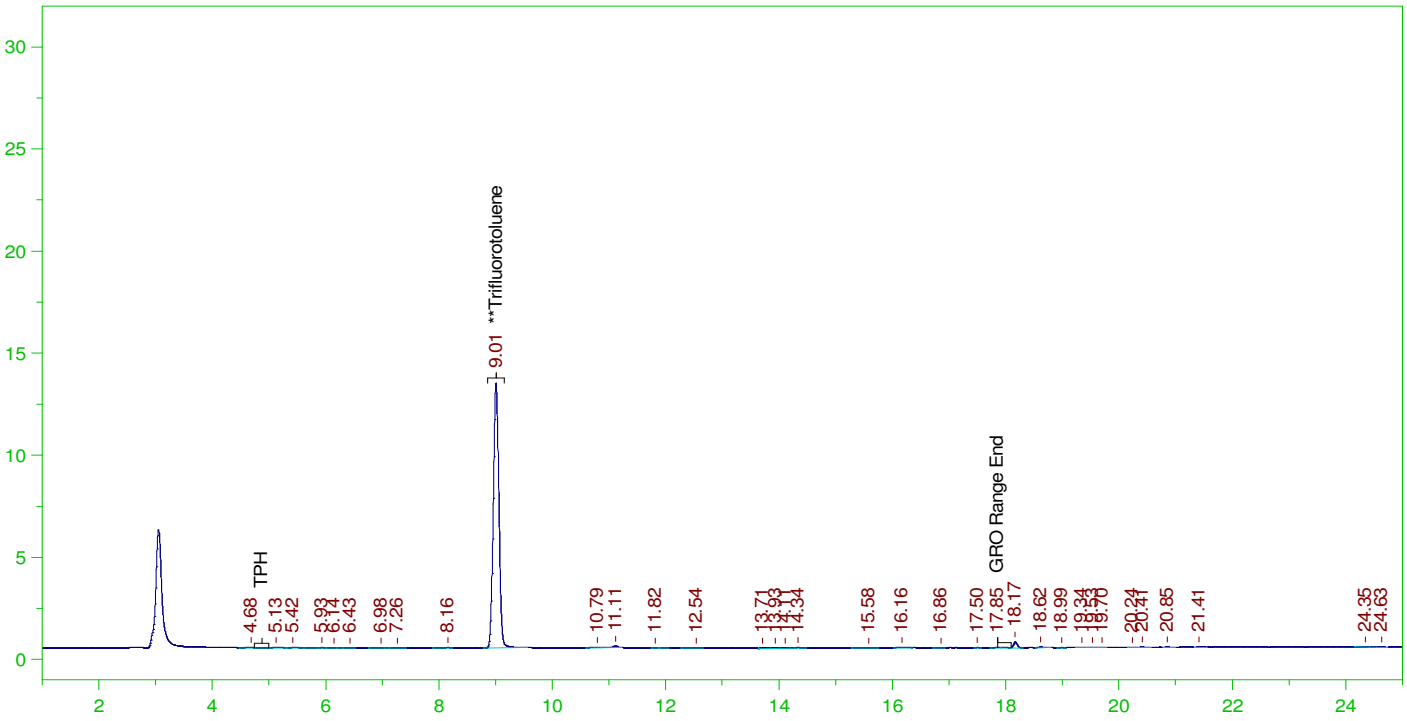
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.582	78.33	-

C6 to C10 Area:4131.734 C6 to C10 Amount: 0.8432293
TPH Area:8211.348 TPH Amount: 1.71844

ERH2617 (Trip Blank) 14894

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0011.RAW B22030433-004A ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-004A ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0011.RAW
Date & Time Acquired: 3/9/2022 1:38:59 PM
Method File: G:\Org\VAR\Methods\211208G433-4DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

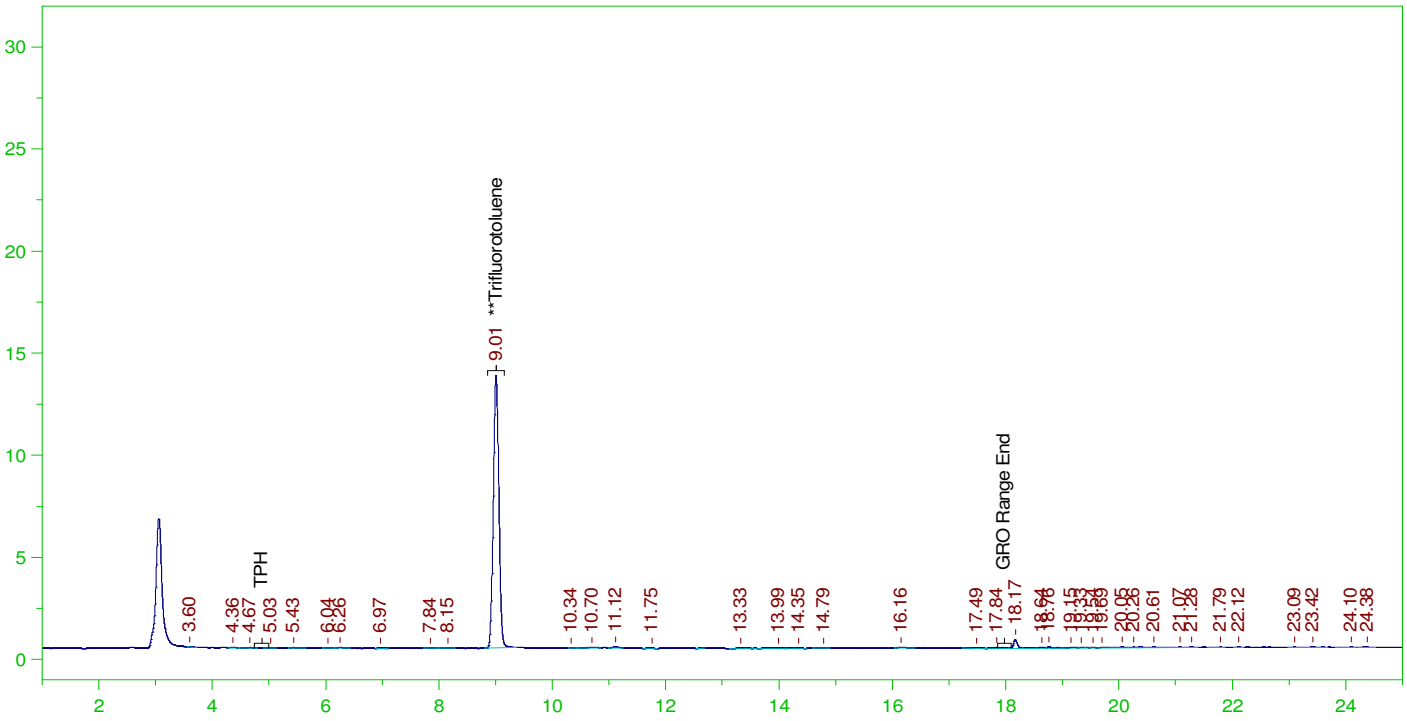
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.341	77.36	-

C6 to C10 Area:3915.103 C6 to C10 Amount: 0.7990178
TPH Area:6979.727 TPH Amount: 1.460691

ERH2576 (RHMW03)

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0031.RAW B22030433-007F ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-007F ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0031.RAW
Date & Time Acquired: 3/10/2022 1:01:02 AM
Method File: G:\Org\VAR\Methods\211208G433-7DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

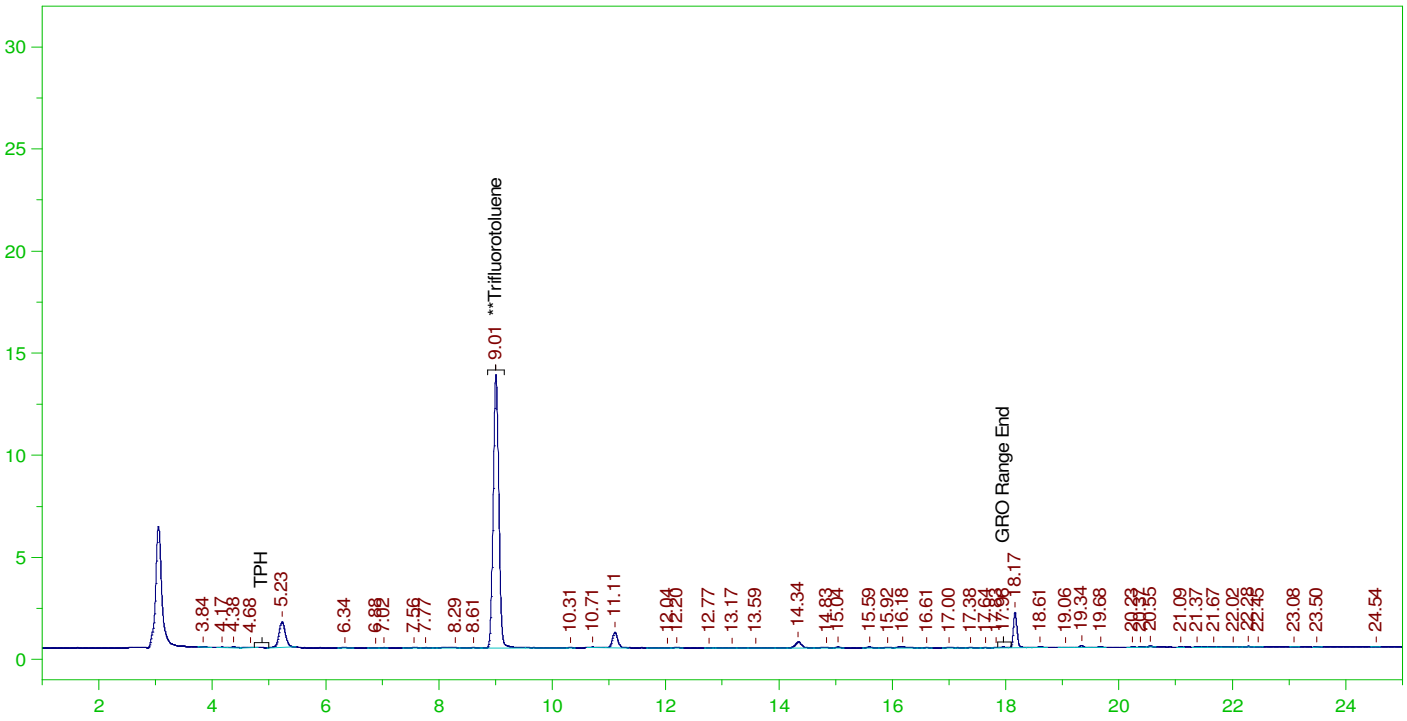
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.707	78.83	-

C6 to C10 Area:4215.062 C6 to C10 Amount: 0.8602352
TPH Area:11134.01 TPH Amount: 2.330084

ERH2575 (Trip Blank) 14525

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0012.RAW B22030433-009A ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-009A ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0012.RAW
Date & Time Acquired: 3/9/2022 2:13:04 PM
Method File: G:\Org\VAR\Methods\211208G433-9DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

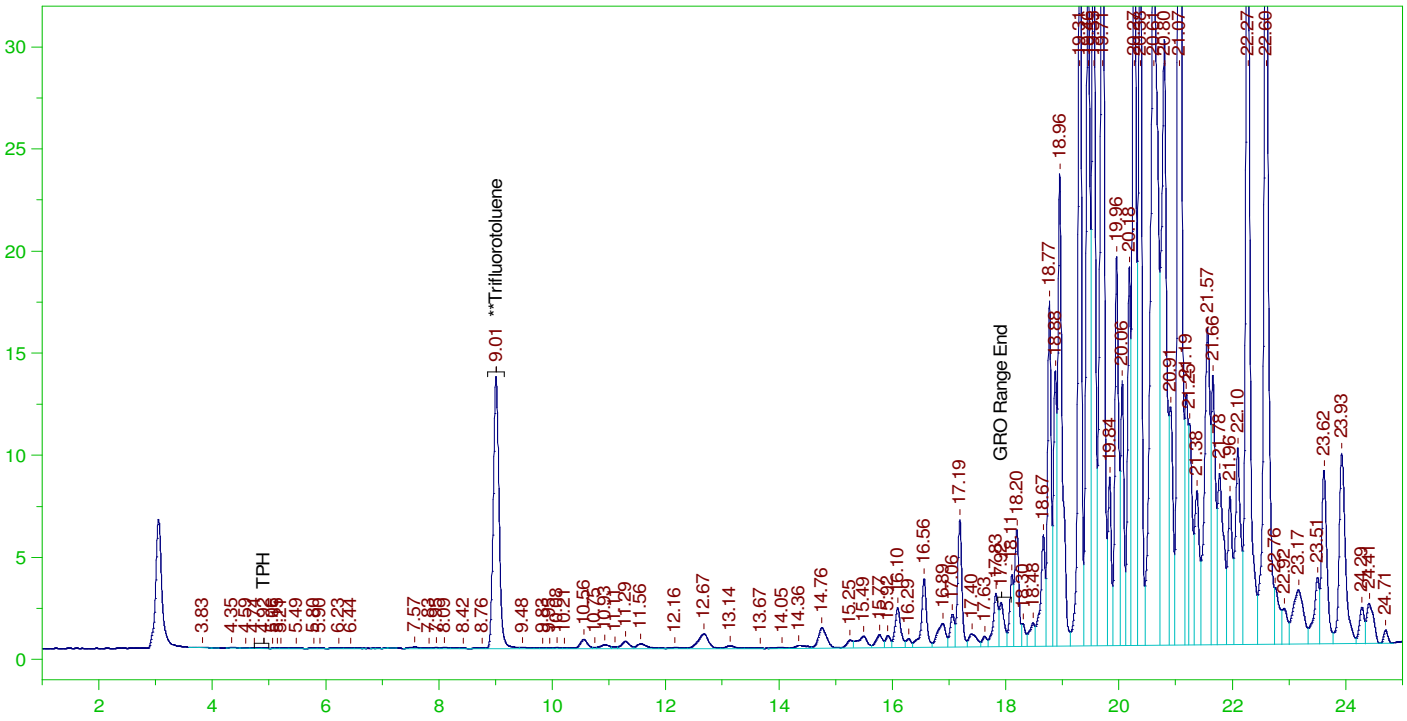
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.005	25.	20.066	80.26	-

C6 to C10 Area:23643.35 C6 to C10 Amount: 4.825278
TPH Area:35141.44 TPH Amount: 7.354268

ERH2622 (RHMW02)

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0033.RAW B22030433-012F ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-012F ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0033.RAW
Date & Time Acquired: 3/10/2022 2:09:09 AM
Method File: G:\Org\VAR\Methods\211208G433-12DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

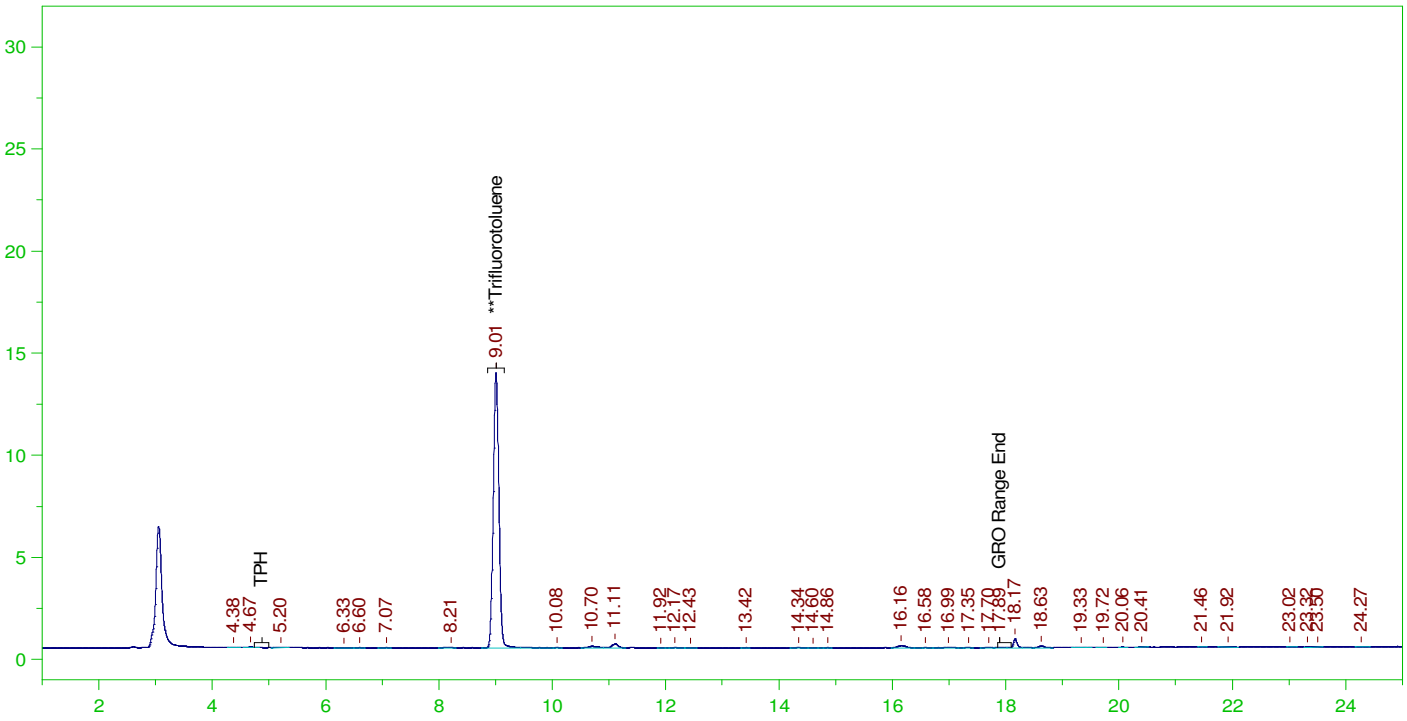
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	20.49	81.96	-

C6 to C10 Area:191744.2 C6 to C10 Amount: 39.13231
TPH Area:4153679 TPH Amount: 869.2662

ERH2621 (Trip Blank) 14894

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0013.RAW B22030433-014A ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-014A ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0013.RAW
Date & Time Acquired: 3/9/2022 2:47:09 PM
Method File: G:\Org\VAR\Methods\211208G433-14DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

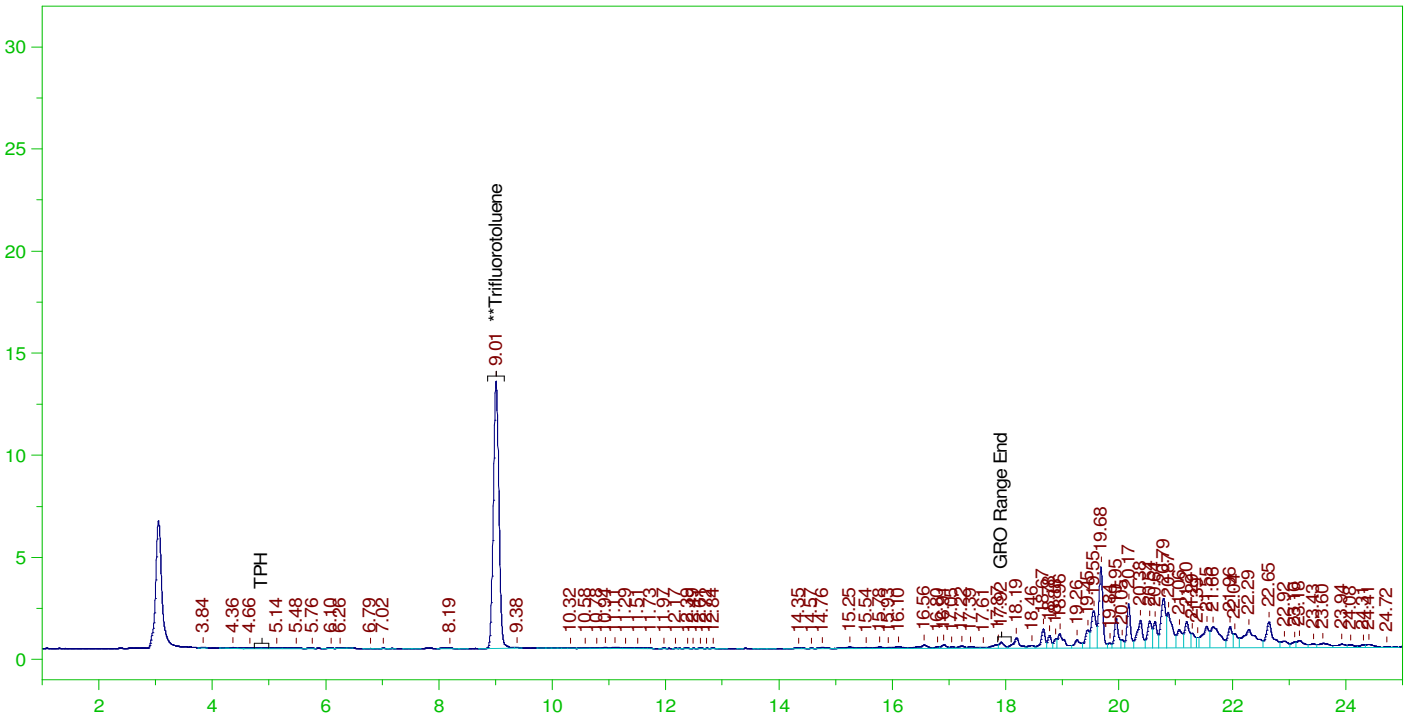
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	20.198	80.79	-

C6 to C10 Area:6005.593 C6 to C10 Amount: 1.225658
TPH Area:10366.86 TPH Amount: 2.169537

ERH2602 (RHMW01R)

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0035.RAW B22030433-017F ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-017F ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0035.RAW
Date & Time Acquired: 3/10/2022 3:17:19 AM
Method File: G:\Org\VAR\Methods\211208G433-17DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

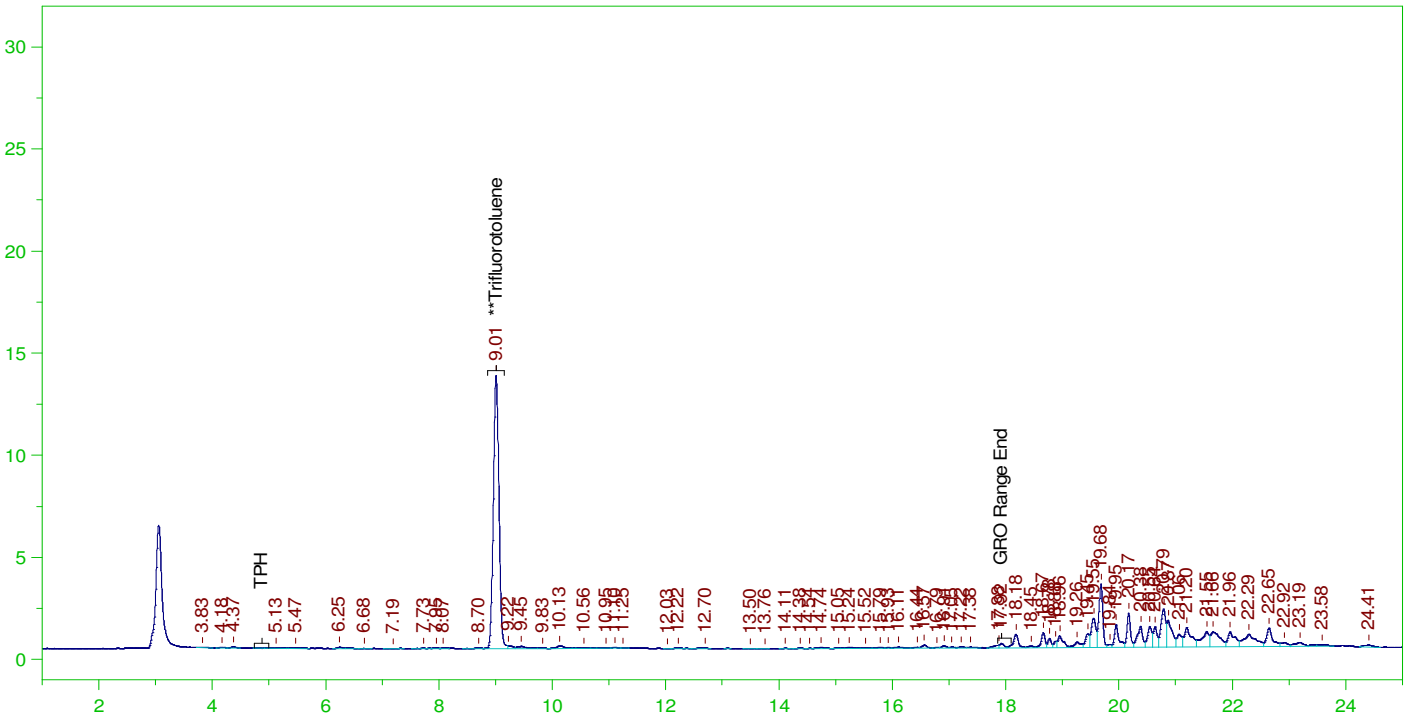
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.386	77.54	-

C6 to C10 Area:16198.69 C6 to C10 Amount: 3.305927
TPH Area:234433.1 TPH Amount: 49.06128

ERH2603 (RHMW01R FD)

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0037.RAW B22030433-018C ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-018C ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0037.RAW
Date & Time Acquired: 3/10/2022 4:25:51 AM
Method File: G:\Org\VAR\Methods\211208G433-18DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

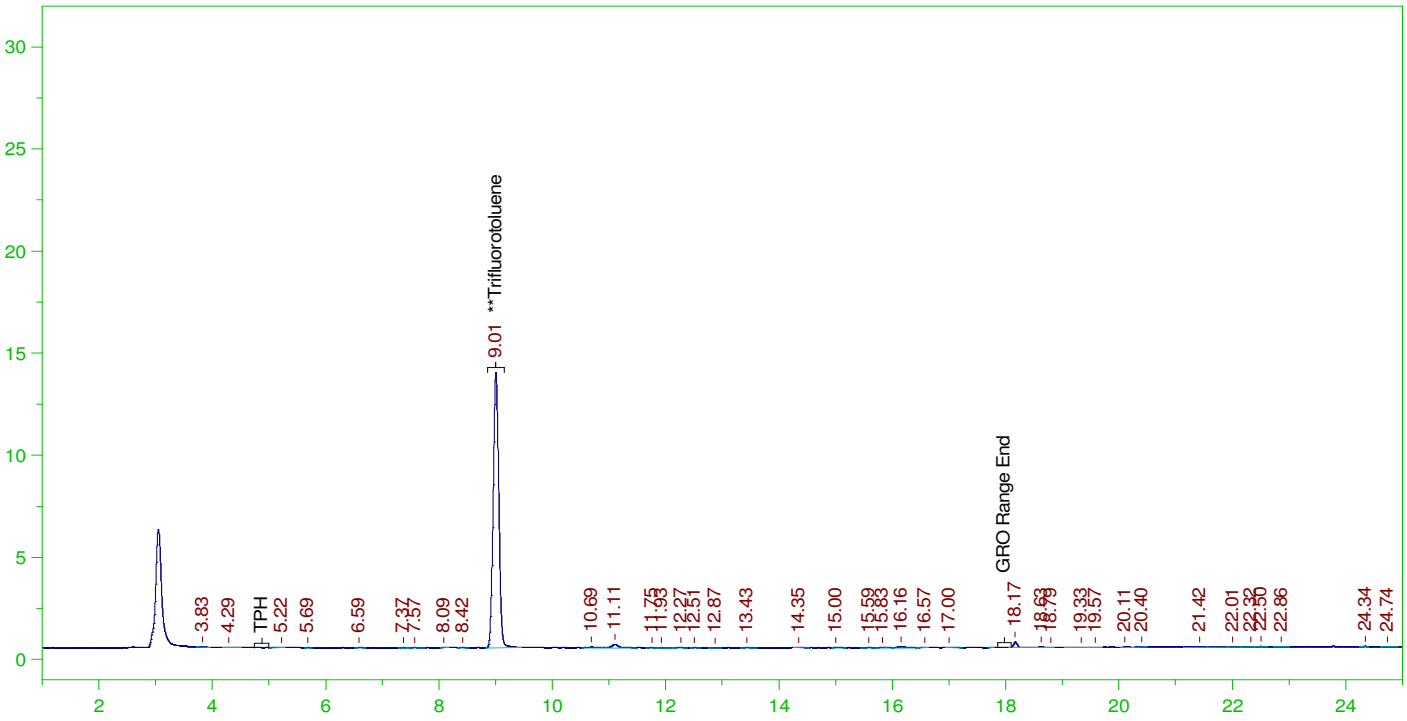
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.819	79.28	-

C6 to C10 Area:13631.44 C6 to C10 Amount: 2.781987
TPH Area:168942.3 TPH Amount: 35.35561

ERH2601 (Trip Blank) 14894

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0014.RAW B22030433-020A ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-020A ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0014.RAW
Date & Time Acquired: 3/9/2022 3:21:13 PM
Method File: G:\Org\VAR\Methods\211208G433-20DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

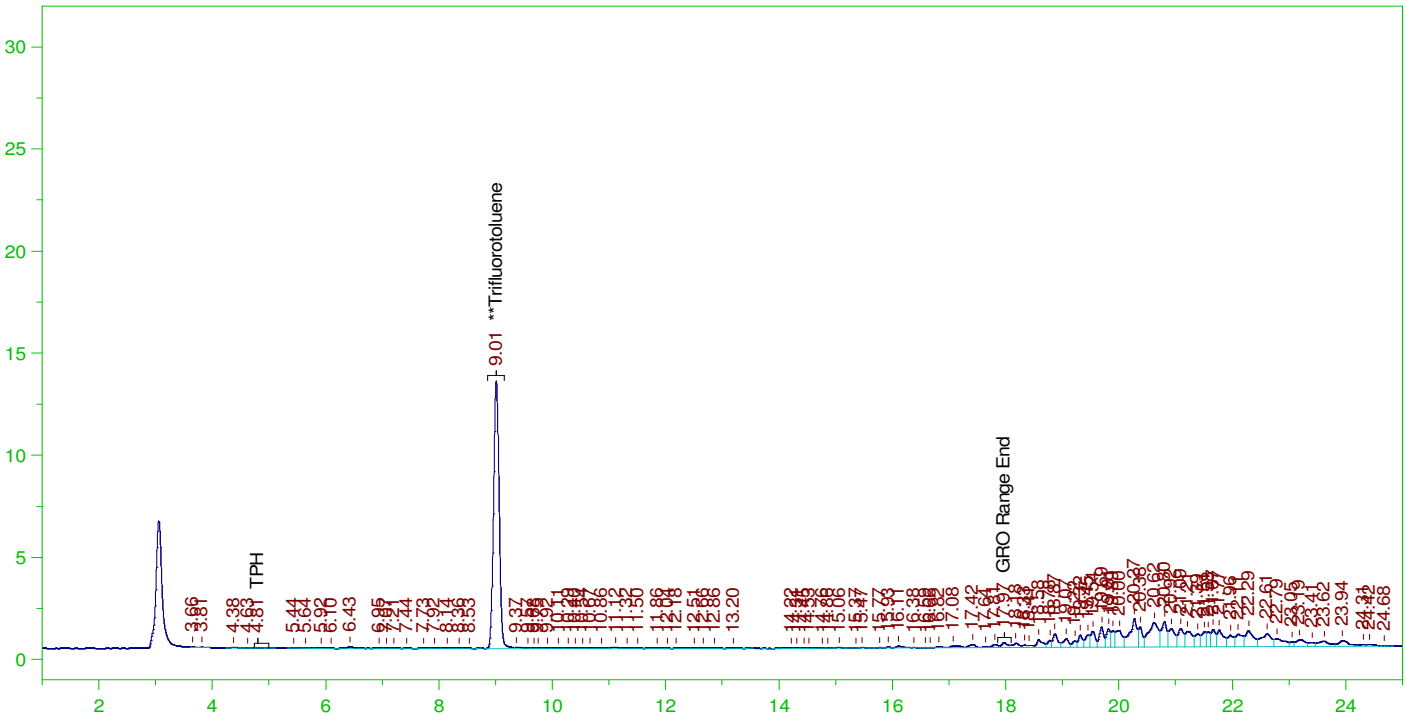
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.005	25.	20.078	80.31	-

C6 to C10 Area:4939.97 C6 to C10 Amount: 1.008179
TPH Area:8747.347 TPH Amount: 1.830612

ERH2614 (Sump Audit 3)

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0039.RAW B22030433-023F ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-023F ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0039.RAW
Date & Time Acquired: 3/10/2022 5:34:27 AM
Method File: G:\Org\VAR\Methods\211208G433-23DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

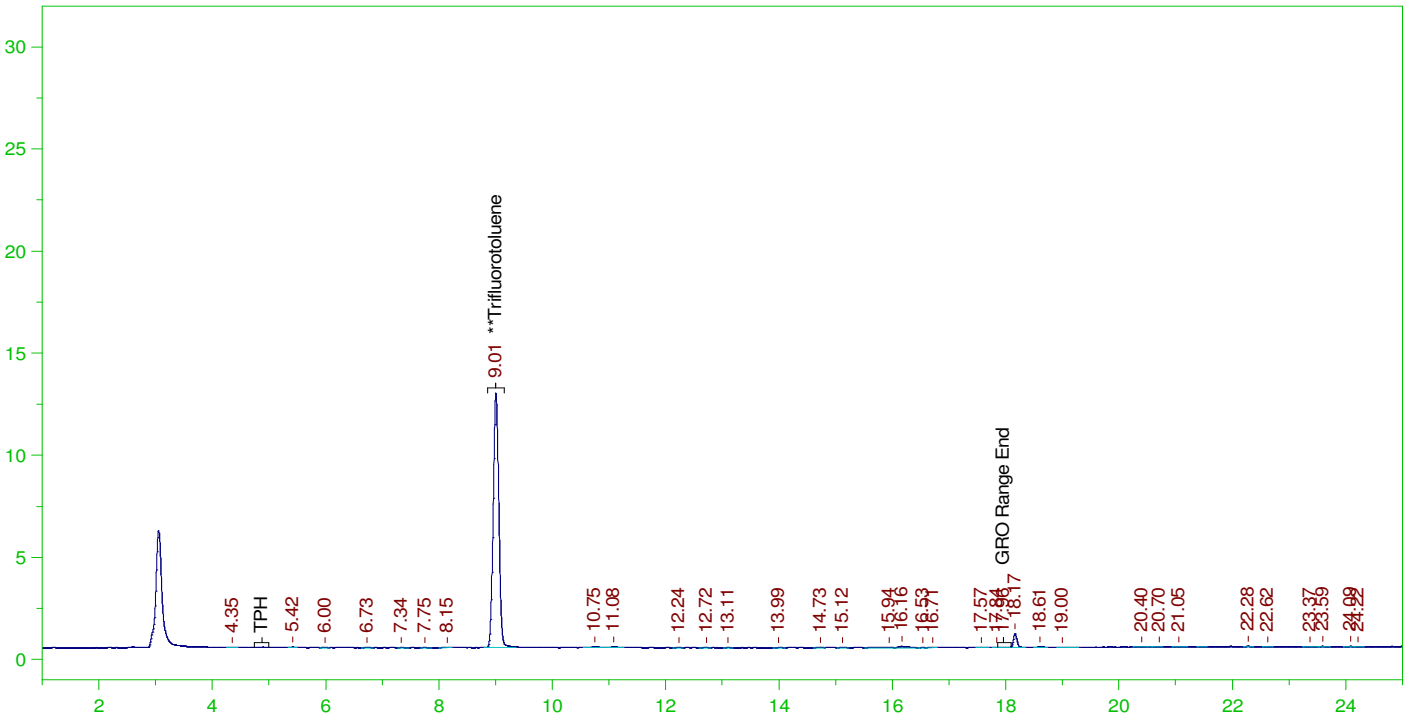
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.011	25.	19.491	77.96	-

C6 to C10 Area:15486.69 C6 to C10 Amount: 3.160617
TPH Area:194908 TPH Amount: 40.78962

ERH2613 (Trip Blank) 14833

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0015.RAW B22030433-025A ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-025A ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0015.RAW
Date & Time Acquired: 3/9/2022 3:55:18 PM
Method File: G:\Org\VAR\Methods\211208G433-25DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

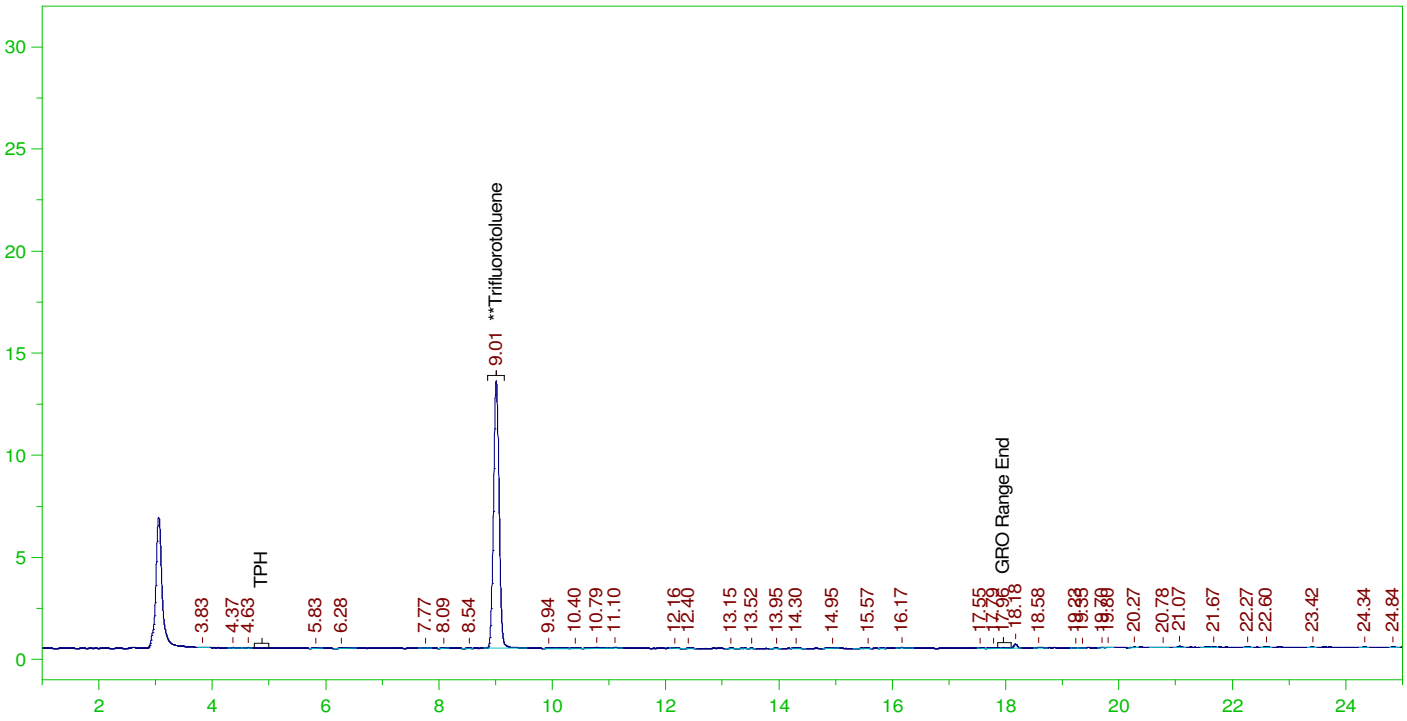
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.005	25.	18.53	74.12	-

C6 to C10 Area:3505.416 C6 to C10 Amount: 0.7154065
TPH Area:8169.387 TPH Amount: 1.709659

ERH2612 (RHMW2254-01 LF)

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0041.RAW B22030433-038F ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-038F ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0041.RAW
Date & Time Acquired: 3/10/2022 6:43:01 AM
Method File: G:\Org\VAR\Methods\211208G433-38DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

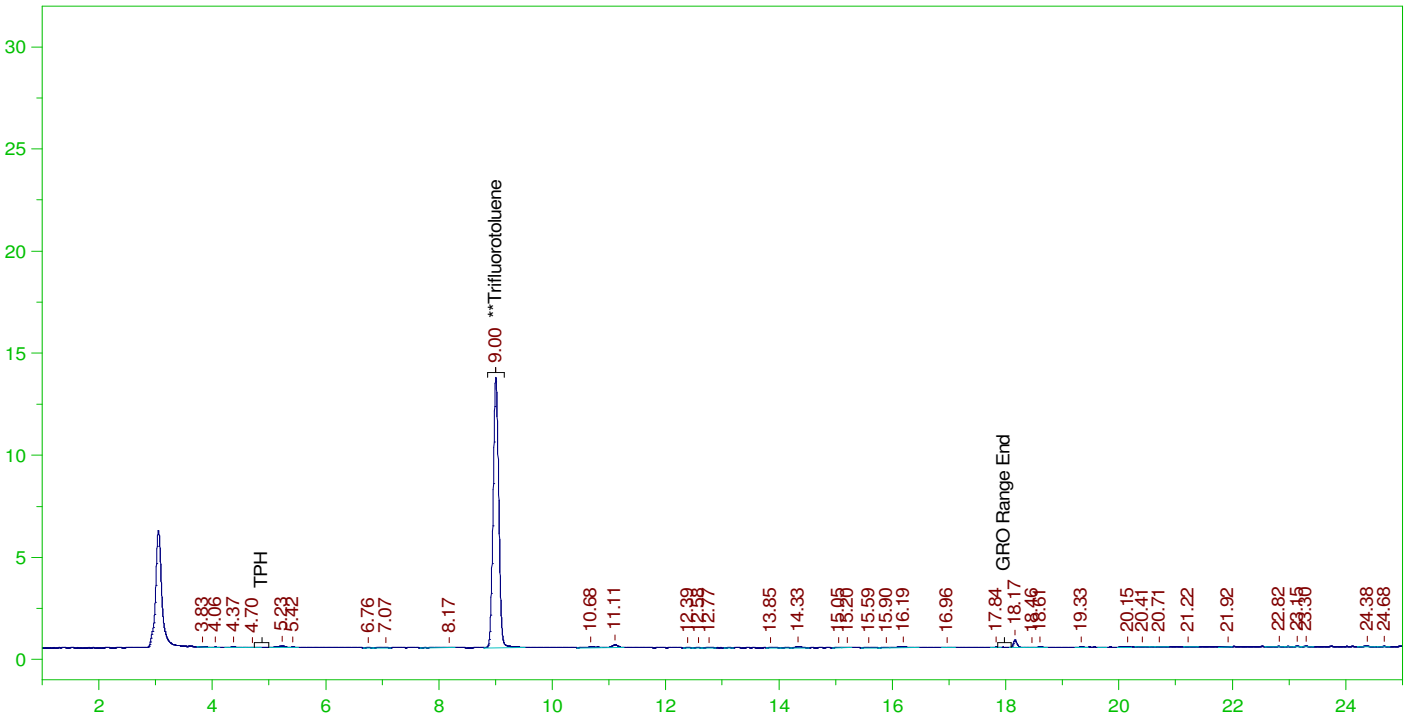
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.011	25.	19.502	78.01	-

C6 to C10 Area:2911.258 C6 to C10 Amount: 0.5941471
TPH Area:5838.958 TPH Amount: 1.221955

ERH2611 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0016.RAW B22030433-040A ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-040A ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0016.RAW
Date & Time Acquired: 3/9/2022 4:29:25 PM
Method File: G:\Org\VAR\Methods\211208G433-40DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

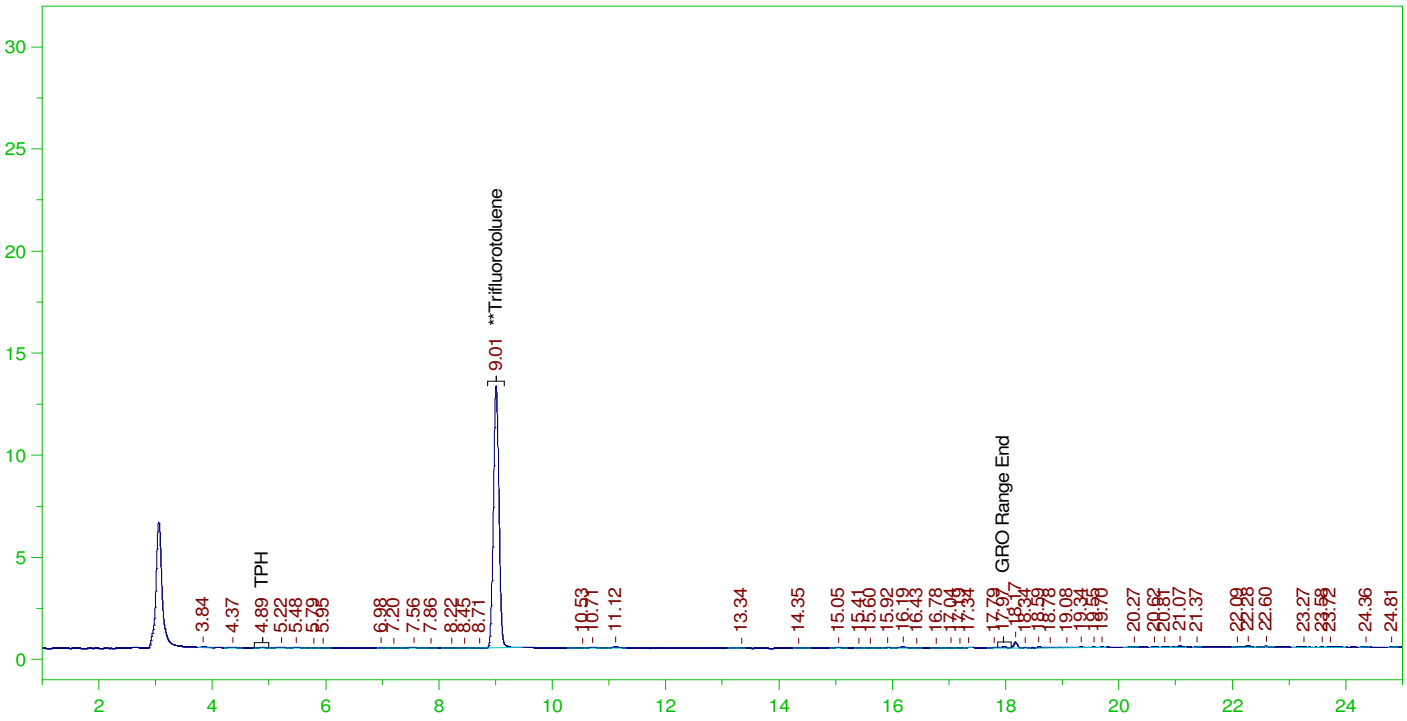
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.004	25.	19.751	79.	-

C6 to C10 Area:5027.998 C6 to C10 Amount: 1.026144
TPH Area:9695.484 TPH Amount: 2.029034

ERH2610 (RHMW2254-01 Bailer)

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0054.RAW B22030433-043F ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-043F ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0054.RAW
Date & Time Acquired: 3/10/2022 2:07:50 PM
Method File: G:\Org\VAR\Methods\211208G433-43DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

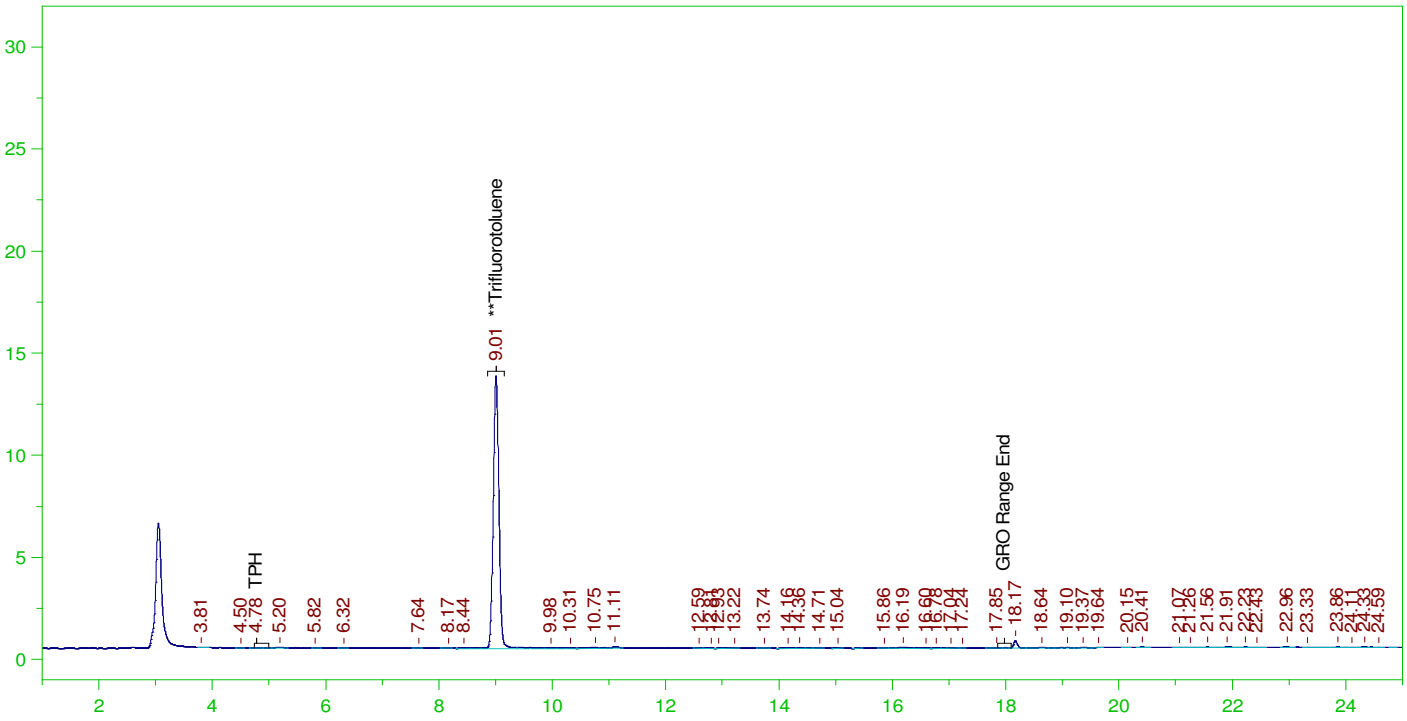
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	19.	76.	-

C6 to C10 Area:5989.471 C6 to C10 Amount: 1.222367
TPH Area:11643.54 TPH Amount: 2.436717

ERH2609 (Trip Blank) 14694

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0051.RAW B22030433-045A ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-045A ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0051.RAW
Date & Time Acquired: 3/10/2022 12:24:58 PM
Method File: G:\Org\VAR\Methods\211208G433-45ADoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

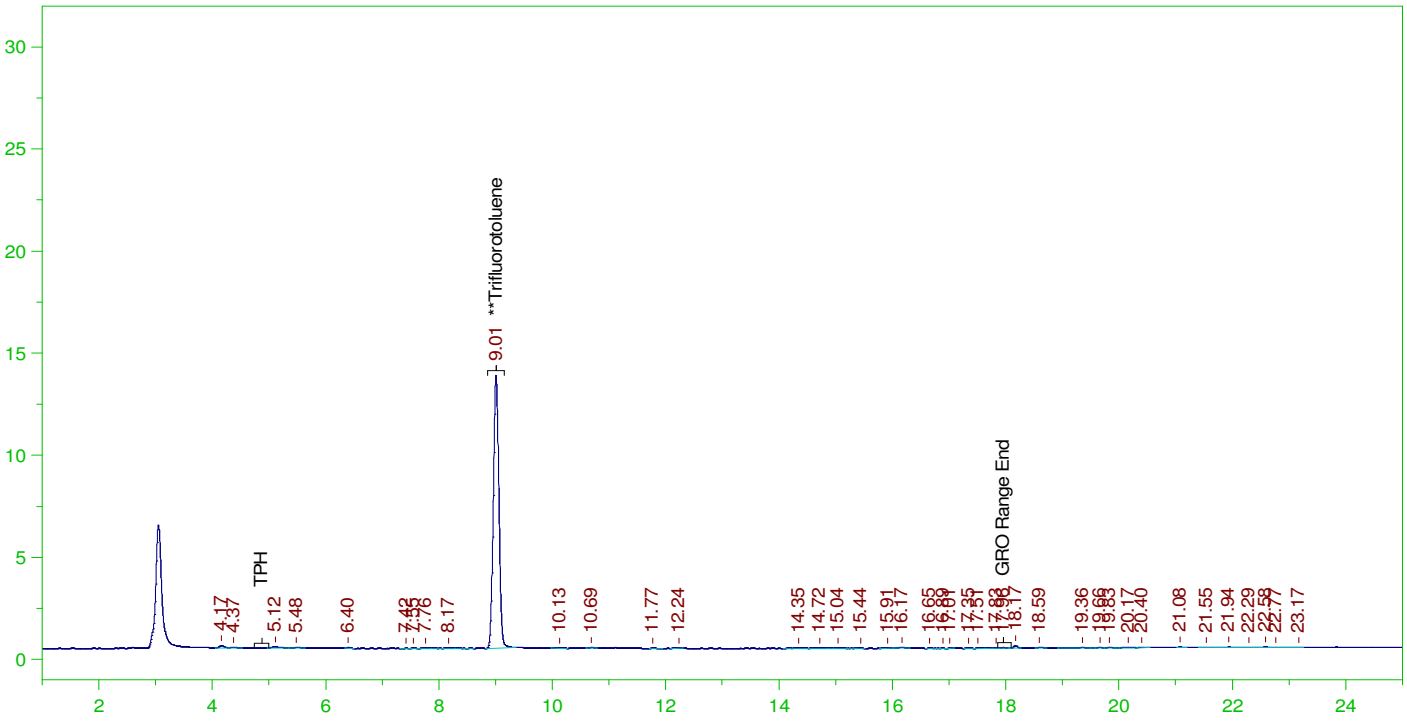
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.857	79.43	-

C6 to C10 Area:4716.699 C6 to C10 Amount: 0.9626123
TPH Area:10415.98 TPH Amount: 2.179817

ERH2580 (RHMW05 m/MS/MSD volumes)

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0048.RAW B22030433-053F ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-053F ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0048.RAW
Date & Time Acquired: 3/10/2022 10:42:09 AM
Method File: G:\Org\VAR\Methods\211208G433-53DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

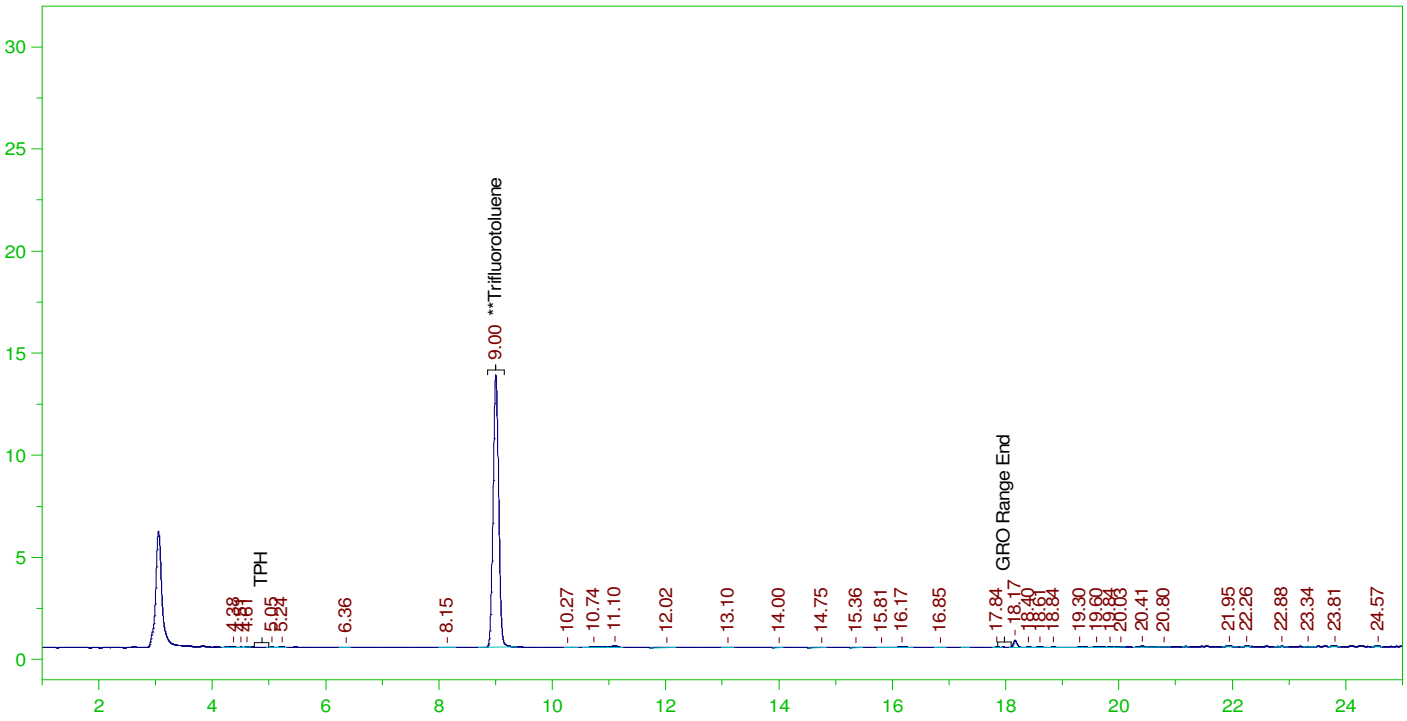
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.799	79.2	-

C6 to C10 Area:4790.884 C6 to C10 Amount: 0.9777525
TPH Area:8517.936 TPH Amount: 1.782601

ERH2579 (Trip Blank) 14833

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0018.RAW B22030433-055A ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-055A ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0018.RAW
Date & Time Acquired: 3/9/2022 5:37:39 PM
Method File: G:\Org\VAR\Methods\211208G433-55DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

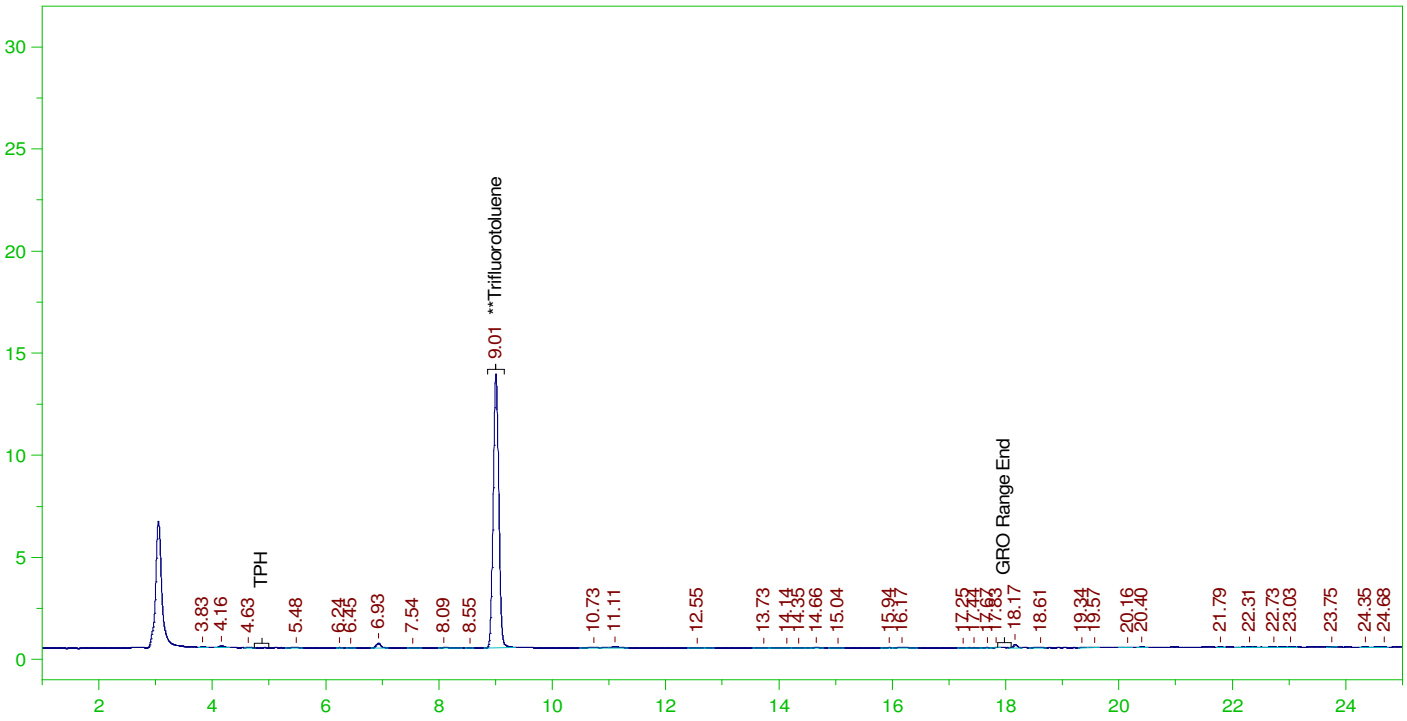
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.003	25.	19.774	79.1	-

C6 to C10 Area:2986.514 C6 to C10 Amount: 0.6095058
TPH Area:7600.449 TPH Amount: 1.590593

ERH2620 (OWDFMW04A)

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0056.RAW B22030433-058F ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-058F ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0056.RAW
Date & Time Acquired: 3/10/2022 3:16:16 PM
Method File: G:\Org\VAR\Methods\211208G433-58DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

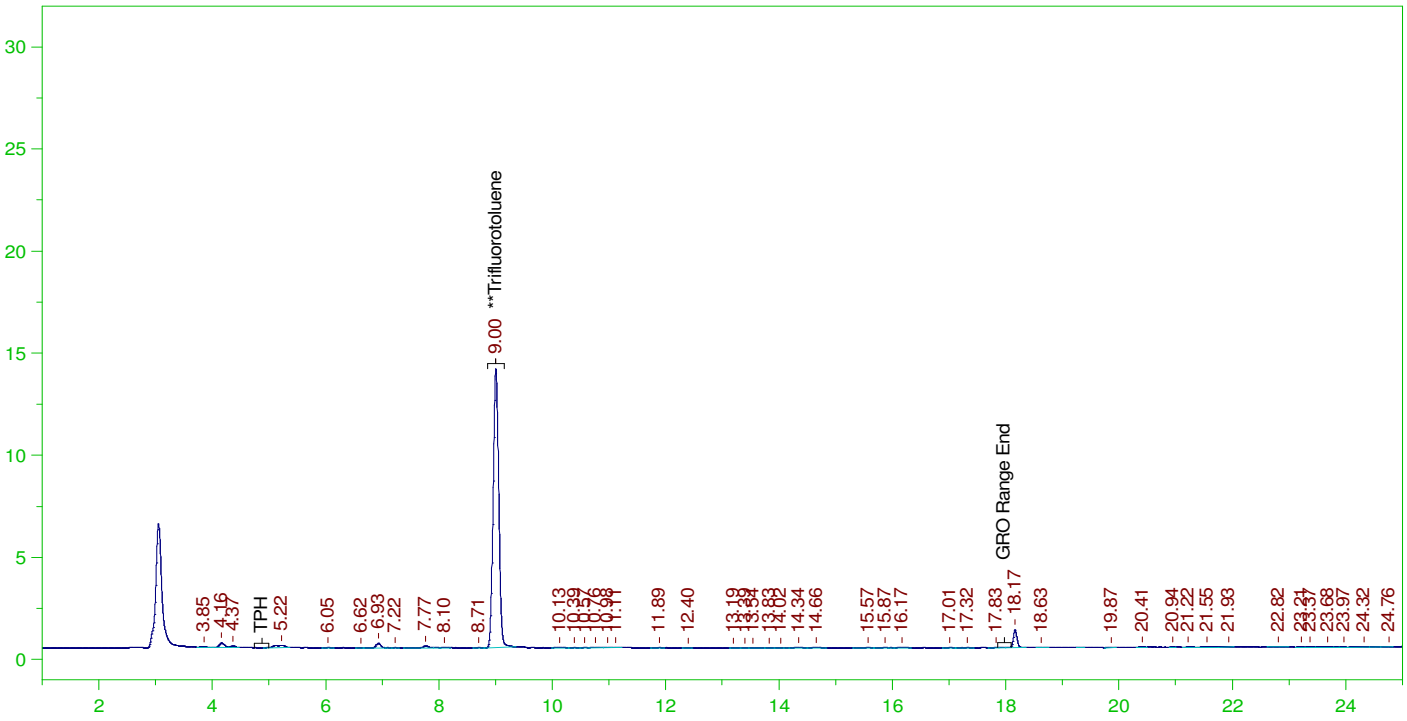
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.005	25.	19.836	79.34	-

C6 to C10 Area:5281.561 C6 to C10 Amount: 1.077893
TPH Area:8360.633 TPH Amount: 1.749682

ERH2676 (OWDFMW04A) FD

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0058.RAW B22030433-059C ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-059C ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0058.RAW
Date & Time Acquired: 3/10/2022 4:24:47 PM
Method File: G:\Org\VAR\Methods\211208G433-59DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

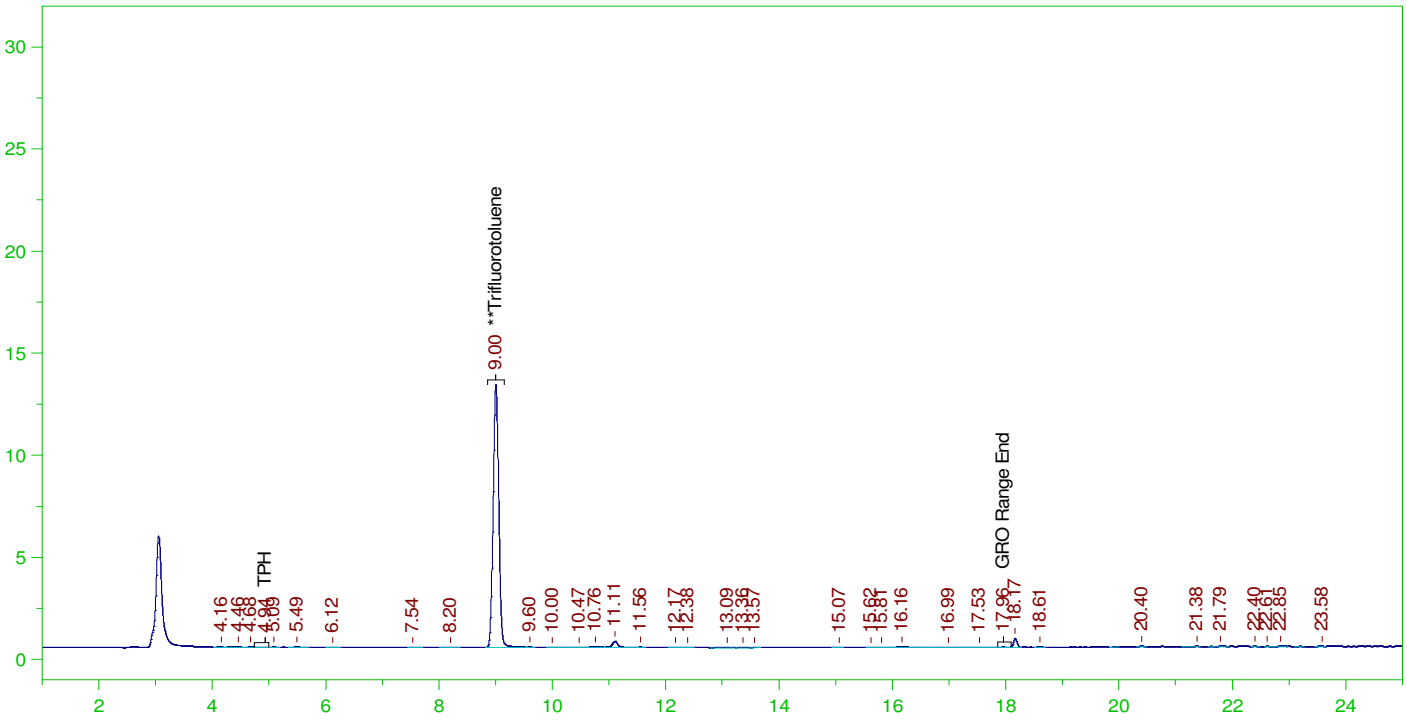
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.005	25.	20.27	81.08	-

C6 to C10 Area:7896.789 C6 to C10 Amount: 1.611624
TPH Area:16491.41 TPH Amount: 3.451261

ERH2619 (Trip Blank) 14833

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0019.RAW B22030433-061A ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-061A ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0019.RAW
Date & Time Acquired: 3/9/2022 6:11:48 PM
Method File: G:\Org\VAR\Methods\211208G433-61DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

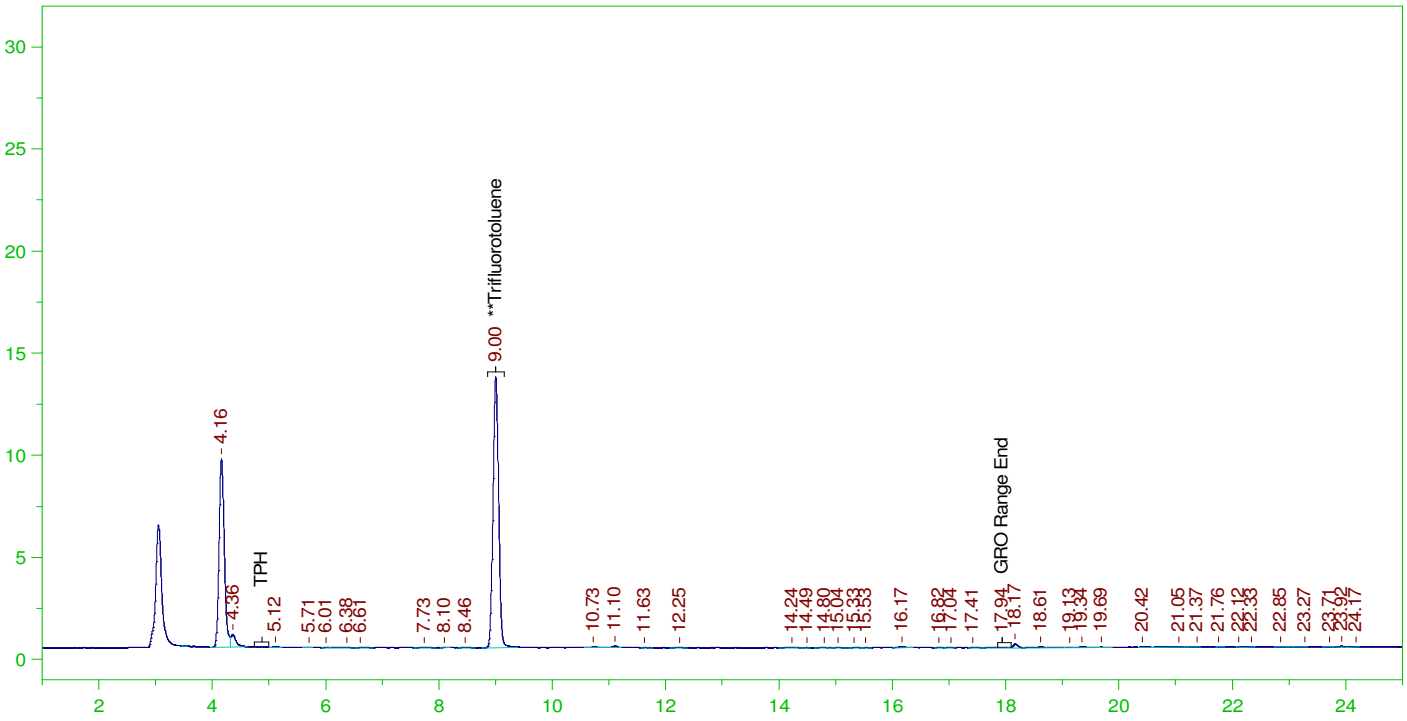
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.005	25.	19.219	76.88	-

C6 to C10 Area:7096.406 C6 to C10 Amount: 1.448277
TPH Area:10694.96 TPH Amount: 2.238201

ERH2590 (RHMW013.5)

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0068.RAW B22030433-064F ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-064F ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0068.RAW
Date & Time Acquired: 3/10/2022 10:07:54 PM
Method File: G:\Org\VAR\Methods\211208G433-64DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

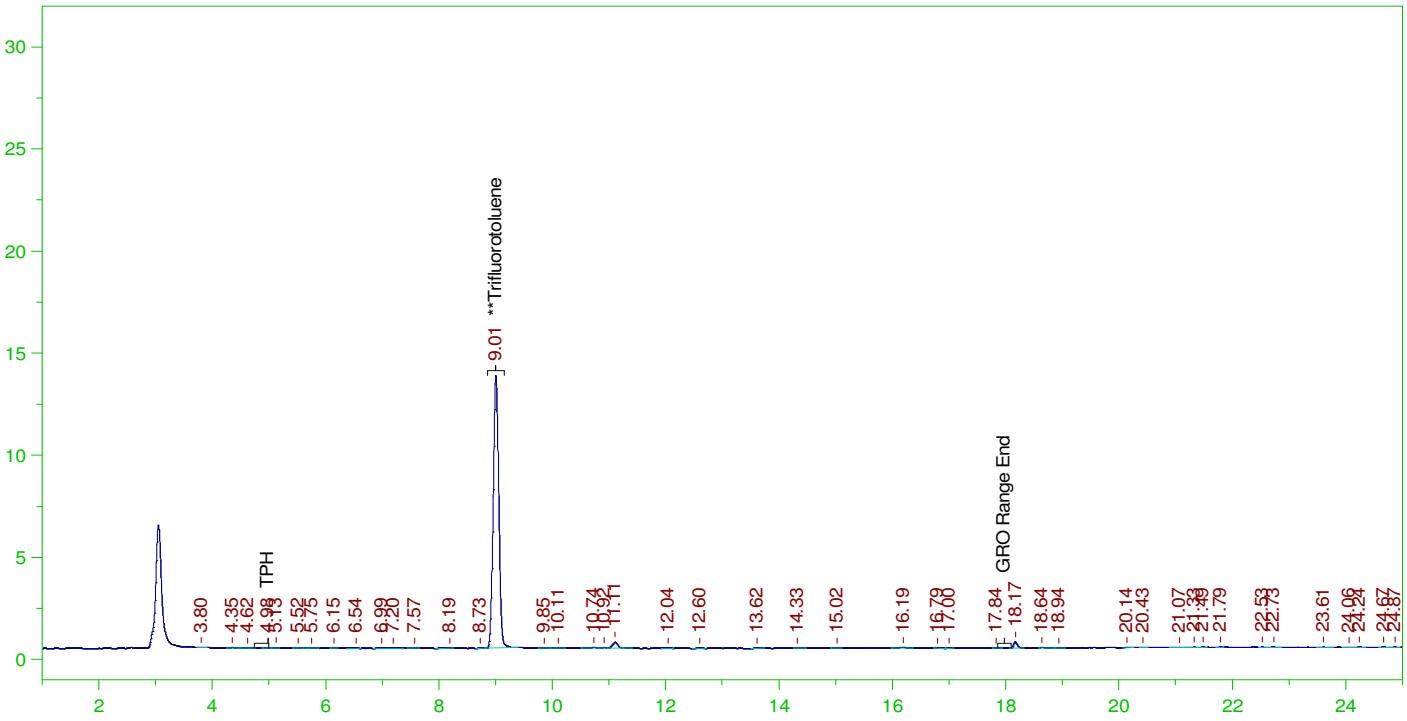
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.002	25.	19.665	78.66	-

C6 to C10 Area:4534.673 C6 to C10 Amount: 0.9254636
TPH Area:72165.63 TPH Amount: 15.10255

ERH2589 (Trip Blank) 14894

G:\Org\VAR\DAT\VAR030922_b\0309VARB.0050.RAW B22030433-066A ;0309VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-066A ;0309VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR030922_b\0309VARB.0050.RAW
Date & Time Acquired: 3/10/2022 11:50:39 AM
Method File: G:\Org\VAR\Methods\211208G433-66DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

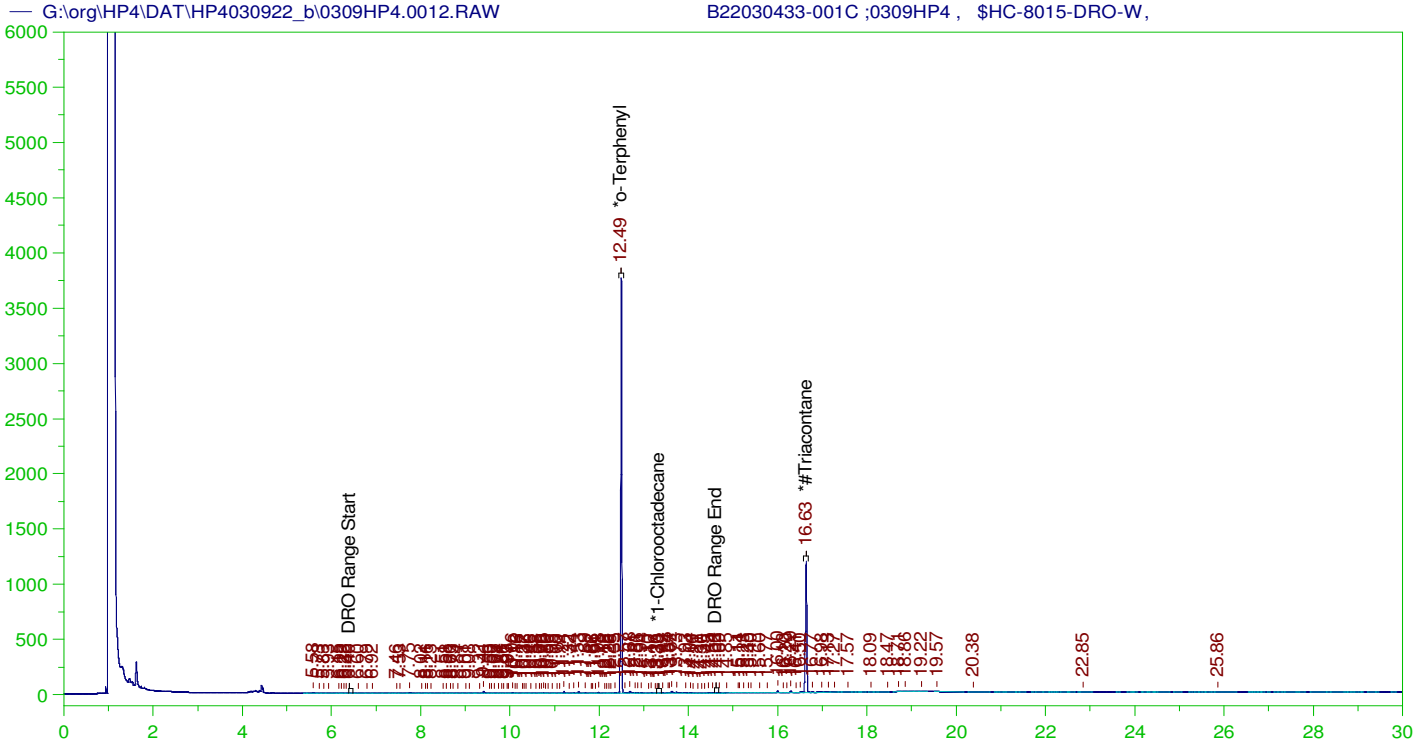
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.005	25.	19.701	78.8	-

C6 to C10 Area:4612.503 C6 to C10 Amount: 0.9413475
TPH Area:8115.299 TPH Amount: 1.698339

ERH2618 (OWDFMW05A) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0012.RAW B22030433-001C ;0309HP4 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-001C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0012.RAW
Date & Time Acquired: 3/9/2022 4:51:35 PM
Method File: G:\Org\HP4\methods\DR_8015-C24T-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

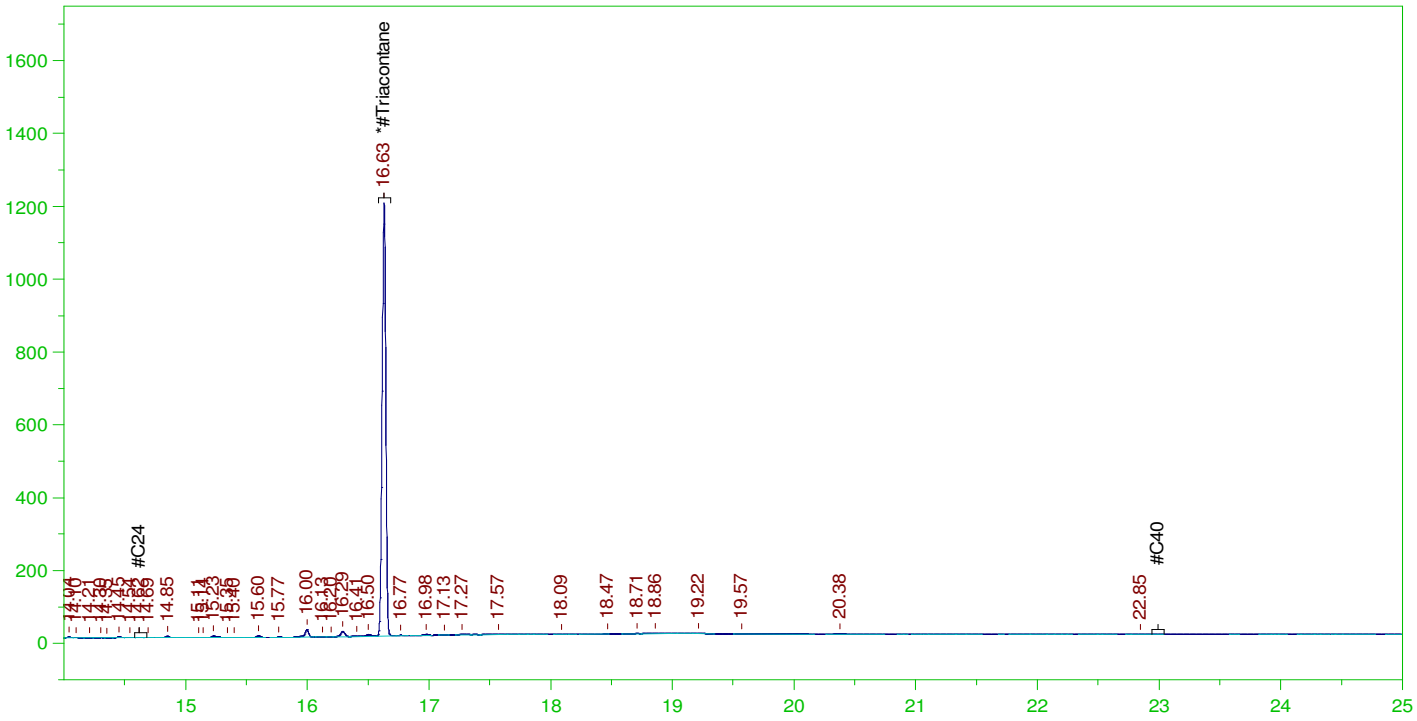
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.491	.19	.182	95.68	-
*1-Chlorooctadecane	13.332	.19	. .03		-
*#Triacontane	16.631	.19	.095	50.03	-

DRO Area:486528.6 DRO Amount: 0.0157749
TEH Area:738963.8 TEH Amount: 2.395971E-02

ERH2618 (OWDFMW05A) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0012.RAW B22030433-001C ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-001C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0012.RAW
Date & Time Acquired: 3/9/2022 4:51:35 PM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

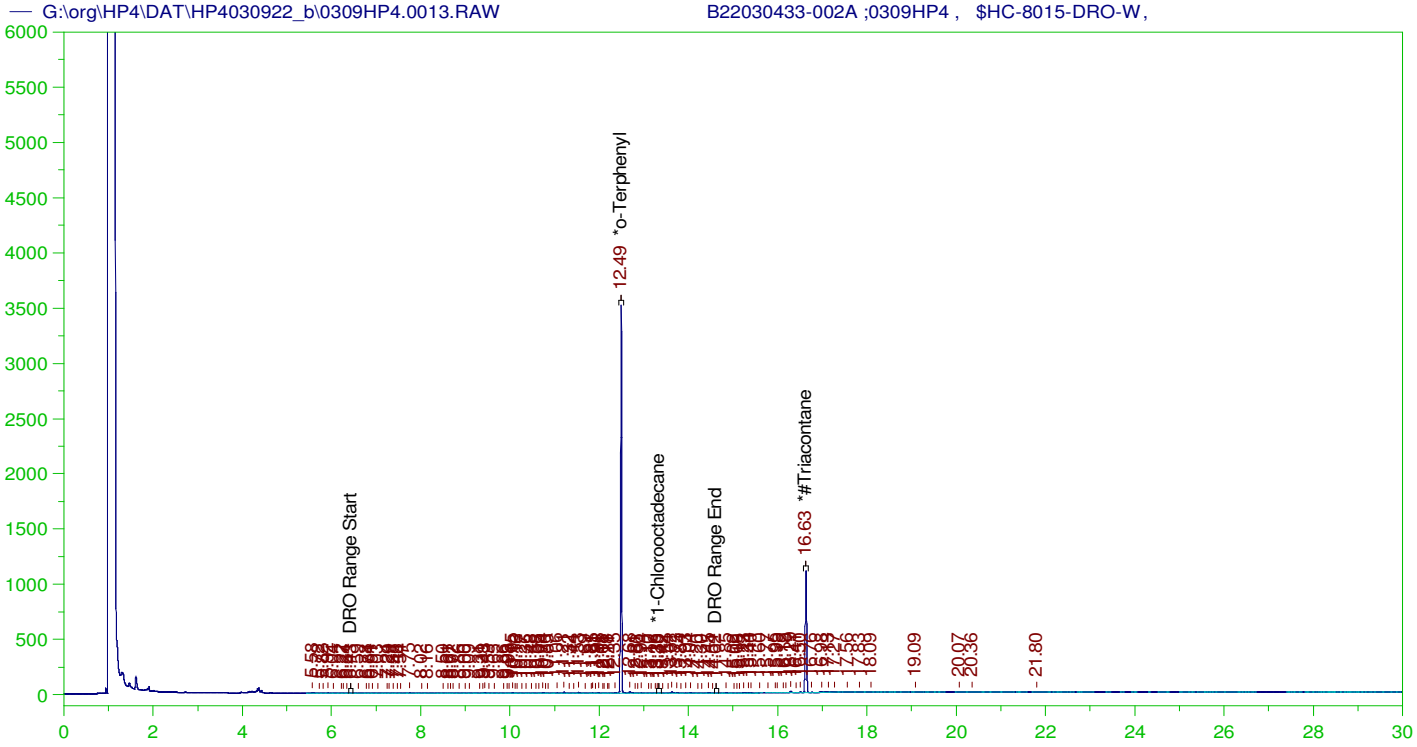
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.631	.476	.095	20.01	-

RRO Area:189387.2 RRO AMOUNT: 7.353116E-03

ERH2674 (OWDFMW05A) FD Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0013.RAW B22030433-002A ;0309HP4 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-002A ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0013.RAW
Date & Time Acquired: 3/9/2022 5:36:50 PM
Method File: G:\Org\HP4\methods\DR_8015-C24T-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

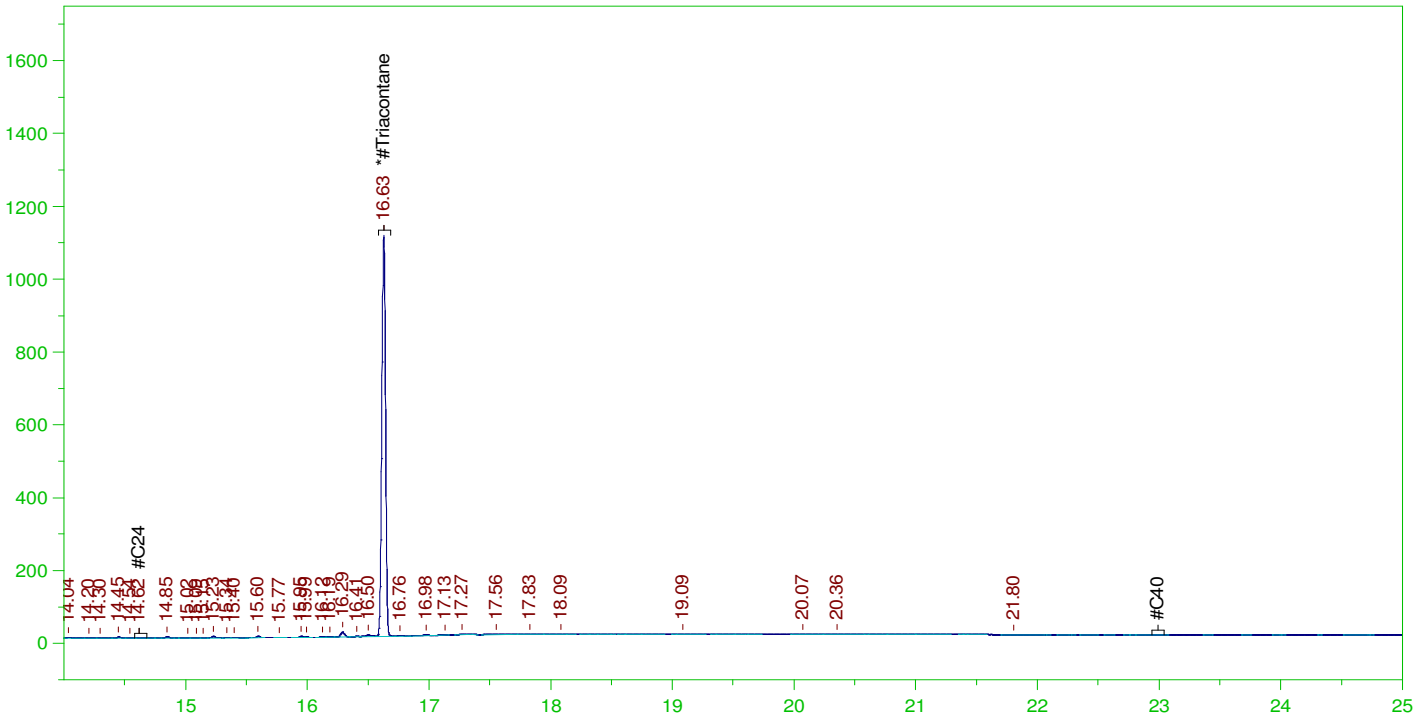
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.488	.19	.171	89.99	-
*1-Chlorooctadecane	13.33	.19	.	.03	-
*#Triacontane	16.628	.19	.089	46.83	-

DRO Area:399114.9 DRO Amount: 1.294065E-02
TEH Area:599096.9 TEH Amount: 1.942475E-02

ERH2674 (OWDFMW05A) FD Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0013.RAW B22030433-002A ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-002A ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0013.RAW
Date & Time Acquired: 3/9/2022 5:36:50 PM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

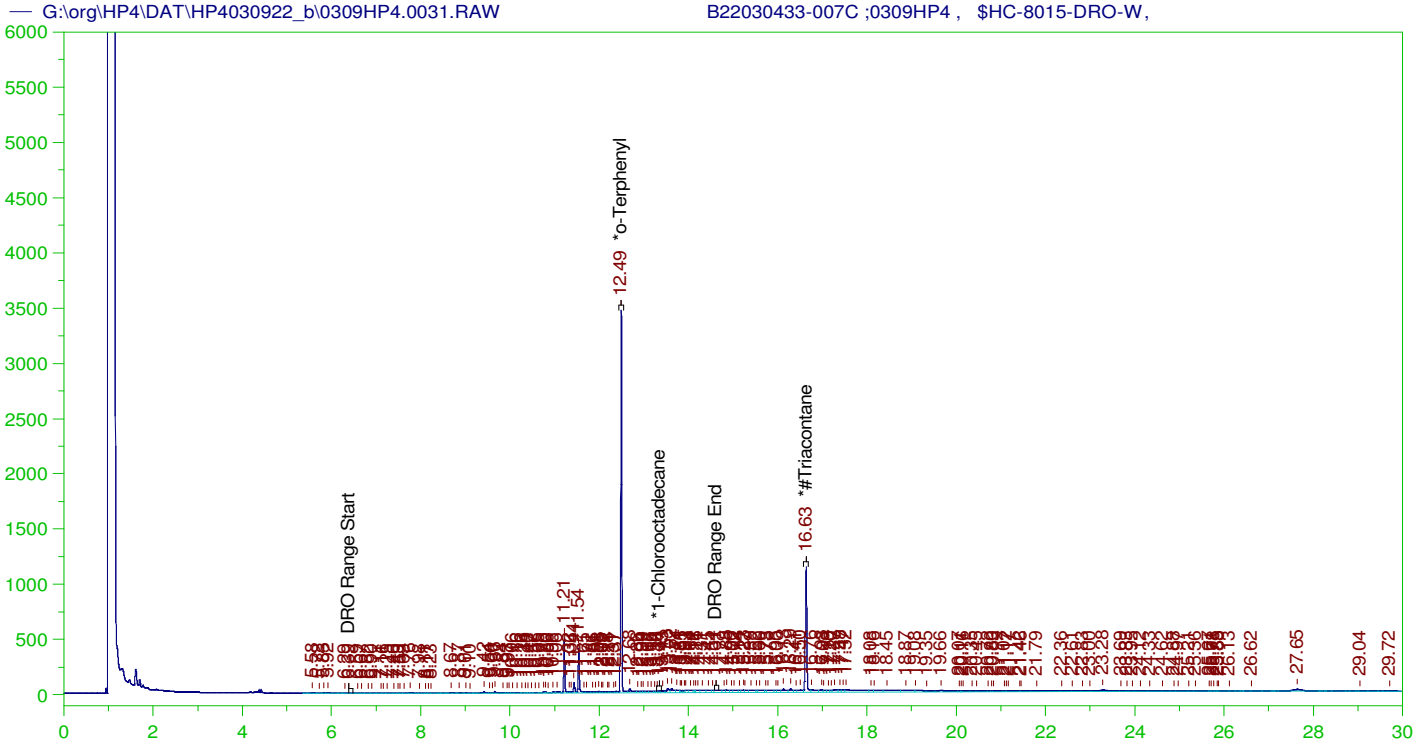
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.628	.476	.089	18.73	-

RRO Area:127733.6 RRO AMOUNT: 4.959366E-03

ERH2576 (RHMW03) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0031.RAW B22030433-007C ;0309HP4 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-007C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0031.RAW
Date & Time Acquired: 3/10/2022 7:10:19 AM
Method File: G:\Org\HP4\methods\D3_8015-030931-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

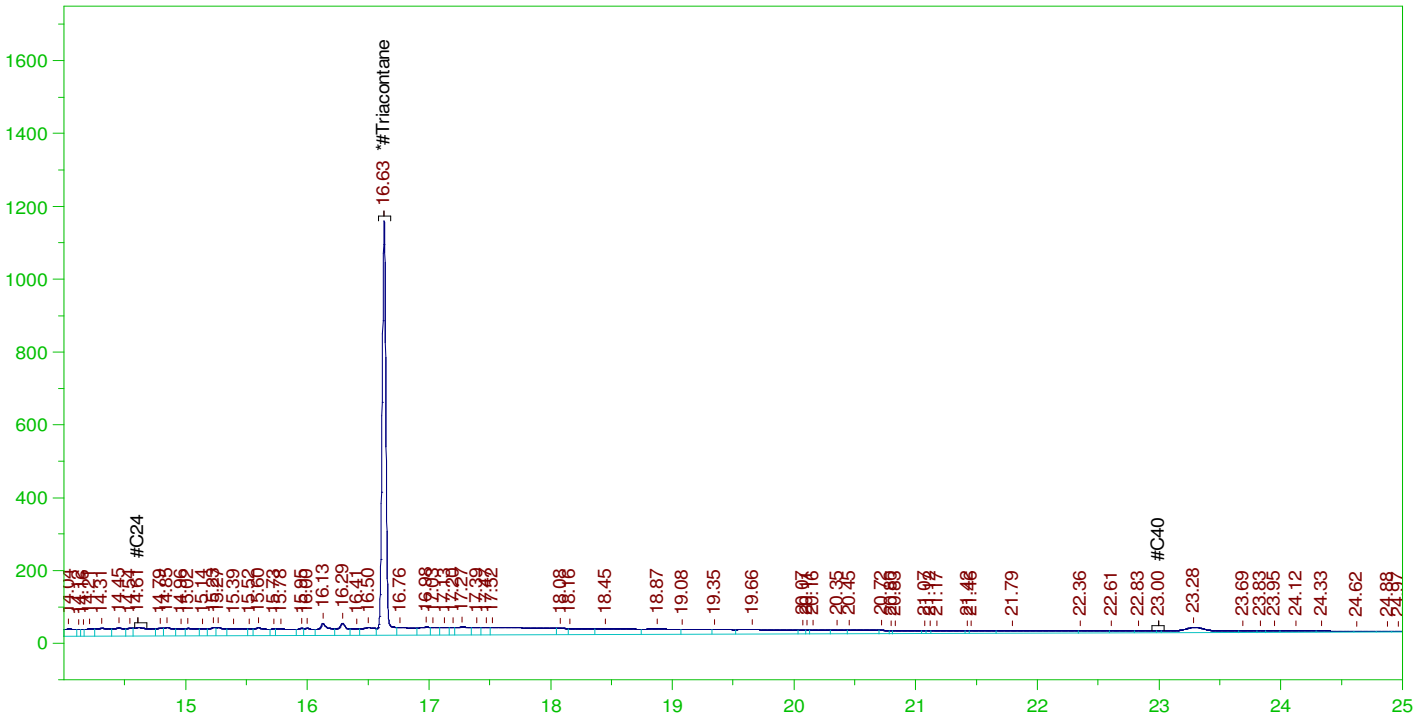
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.49	.19	.171	89.85	-
*1-Chlorooctadecane	13.34	.19	.001	.62	-
*#Triacontane	16.631	.19	.097	50.77	-

DRO Area:4825373 DRO Amount: 0.1564549
TEH Area:1.232976E+07 TEH Amount: 0.3997724

ERH2576 (RHMW03) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0031.RAW B22030433-007C ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-007C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0031.RAW
Date & Time Acquired: 3/10/2022 7:10:19 AM
Method File: G:\Org\HP4\Methods\D3_ORO-S-030931-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

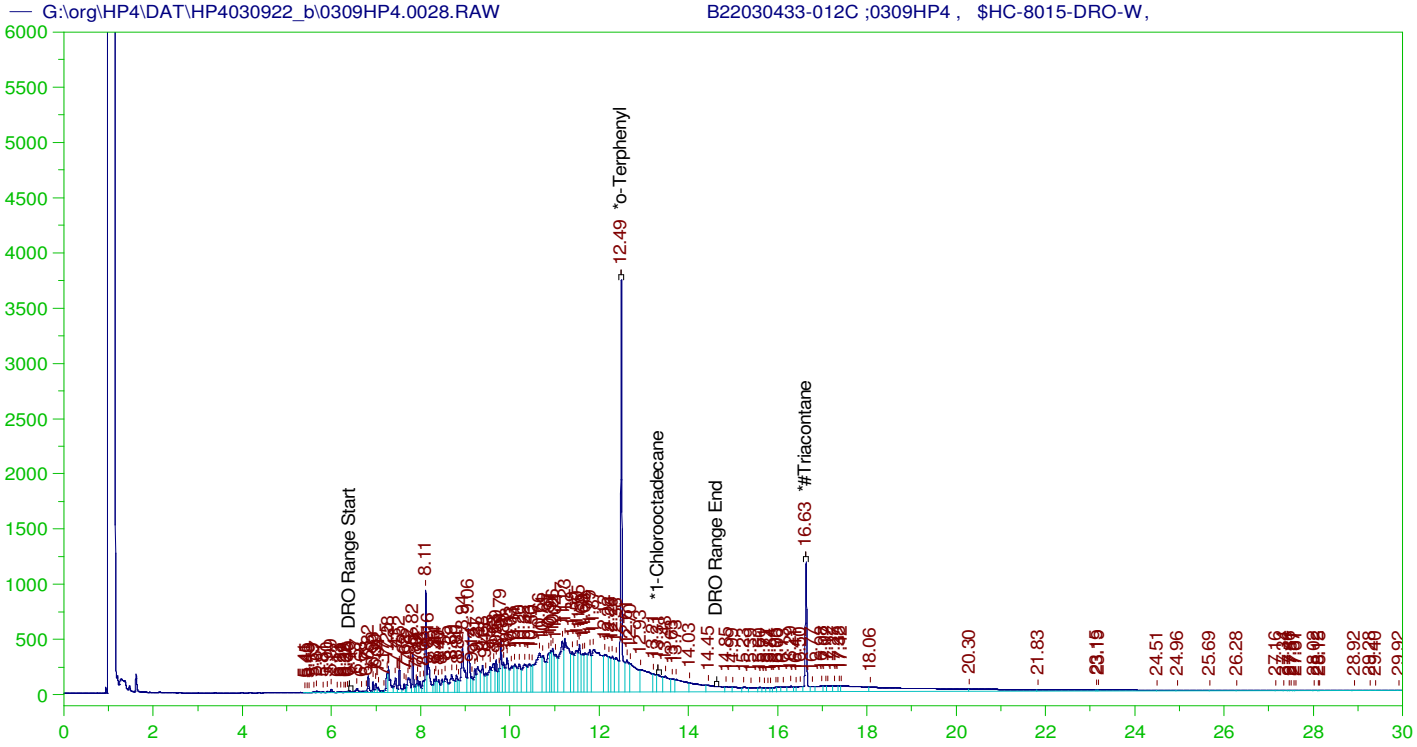
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.631	.476	.097	20.31	-

RRO Area:6835089 RRO AMOUNT: 0.2653781

ERH2622 (RHMW02) Batch ID: 164312

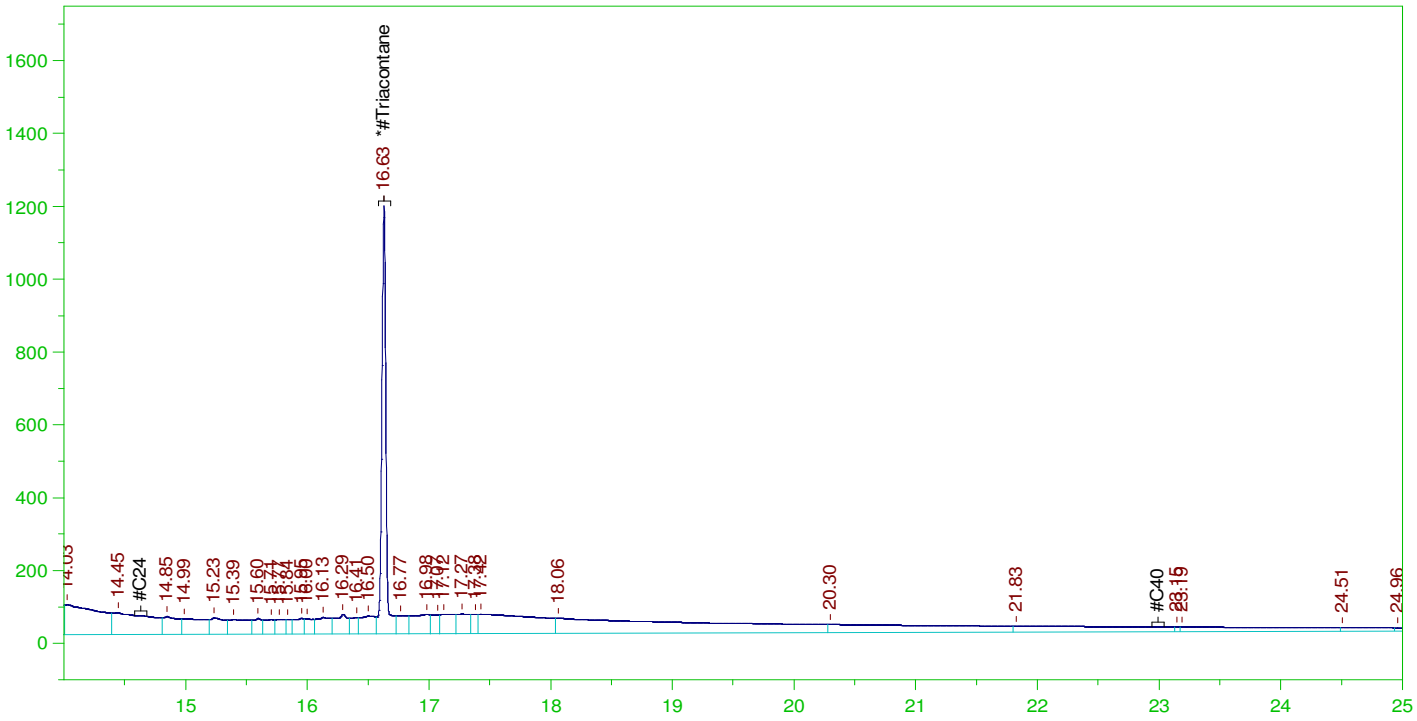
G:\org\HP4\DAT\HP4030922_b\0309HP4.0028.RAW B22030433-012C ;0309HP4 , $HC-8015-DRO-W,



G:\Org\HP4\Methods\DS_ORO-T-AH-L%.met

ERH2622 (RHMW02) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0028.RAW B22030433-012C ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-012C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0028.RAW
Date & Time Acquired: 3/10/2022 4:54:38 AM
Method File: G:\Org\HP4\Methods\D3_ORO-S-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

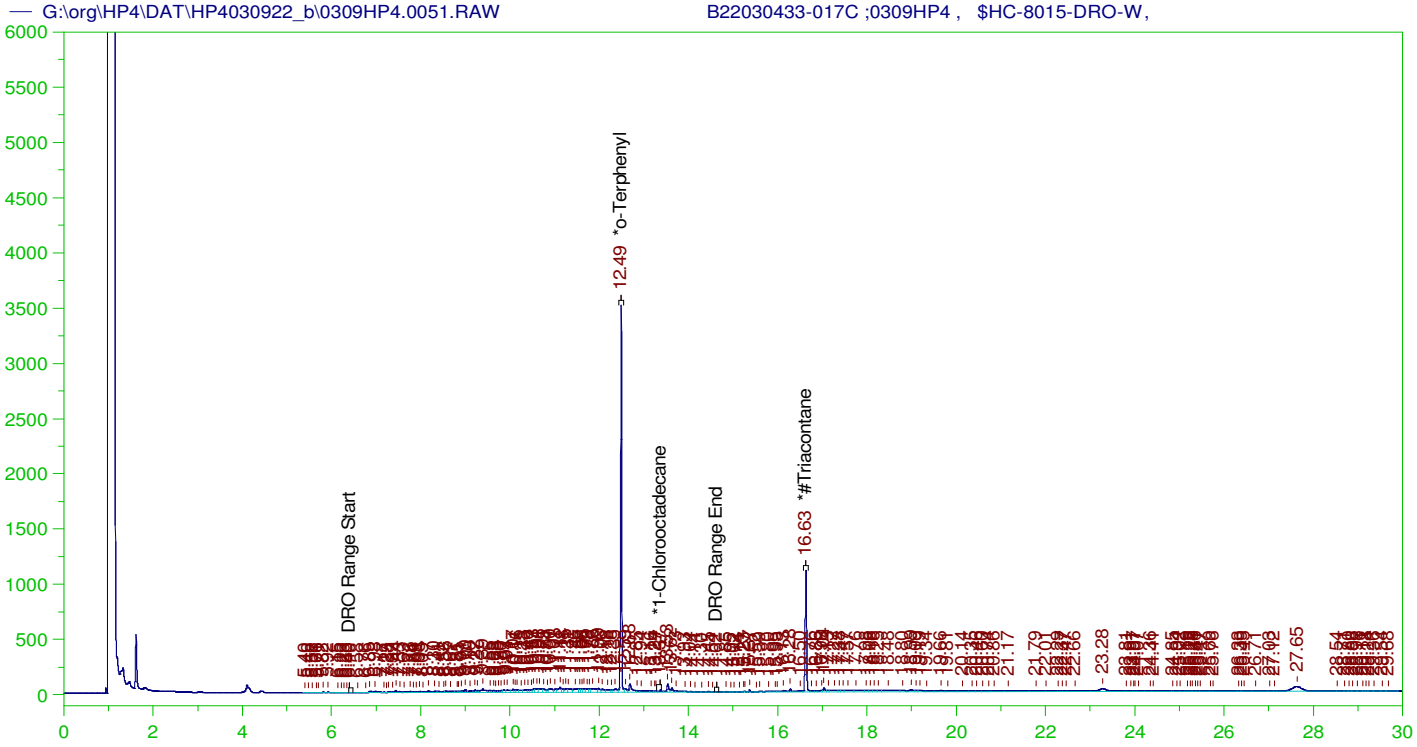
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.63	.481	.109	22.7	-

RRO Area:1.49206E+07 RRO AMOUNT: 0.5848752

ERH2602 (RHMW01R) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0051.RAW B22030433-017C ;0309HP4 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-017C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0051.RAW
Date & Time Acquired: 3/10/2022 11:00:16 PM
Method File: G:\Org\HP4\methods\D3_8015-C24T-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

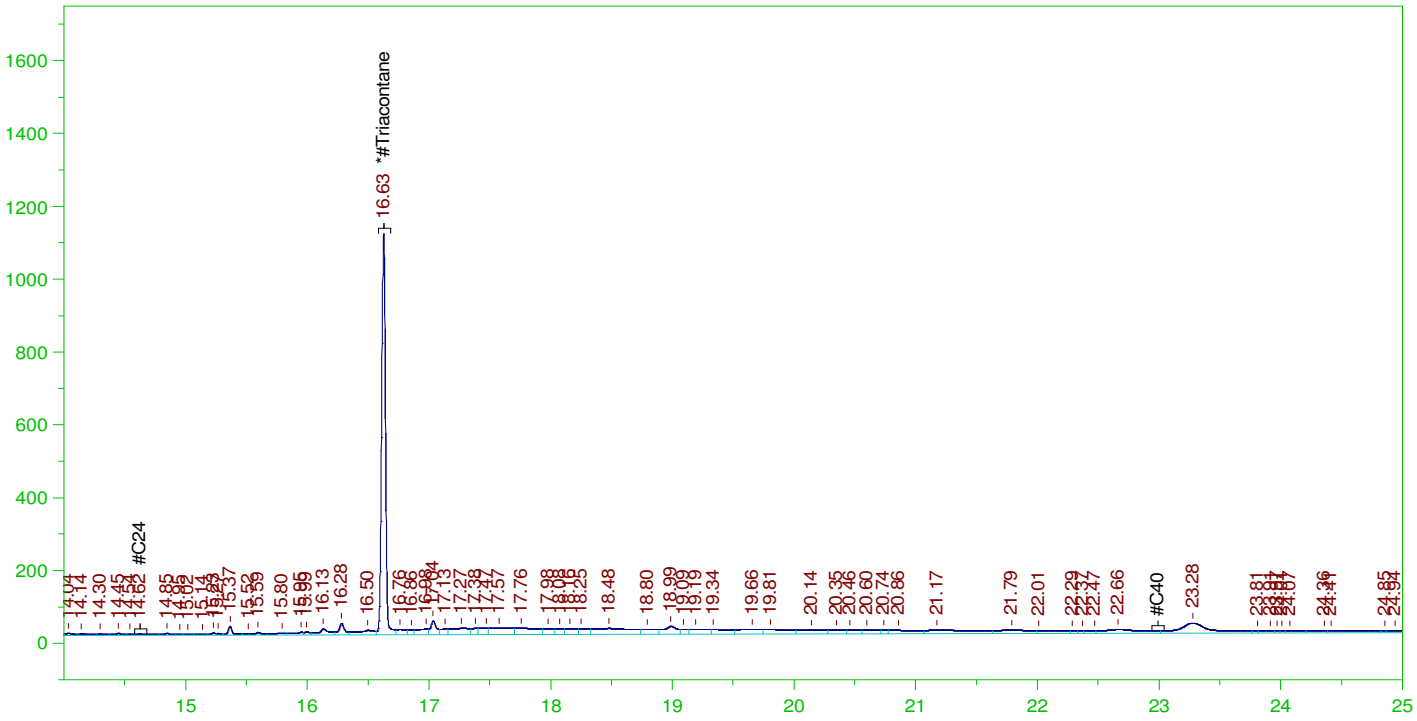
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.488	.19	.175	92.12	-
*1-Chlorooctadecane	13.368	.19	.003	1.46	-
*#Triacontane	16.628	.19	.092	48.53	-

DRO Area:8346683 DRO Amount: 0.2706277
TEH Area:1.583211E+07 TEH Amount: 0.5133306

ERH2602 (RHMW01R) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0051.RAW B22030433-017C ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-017C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0051.RAW
Date & Time Acquired: 3/10/2022 11:00:16 PM
Method File: G:\Org\HP4\Methods\D3_ORO-S-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

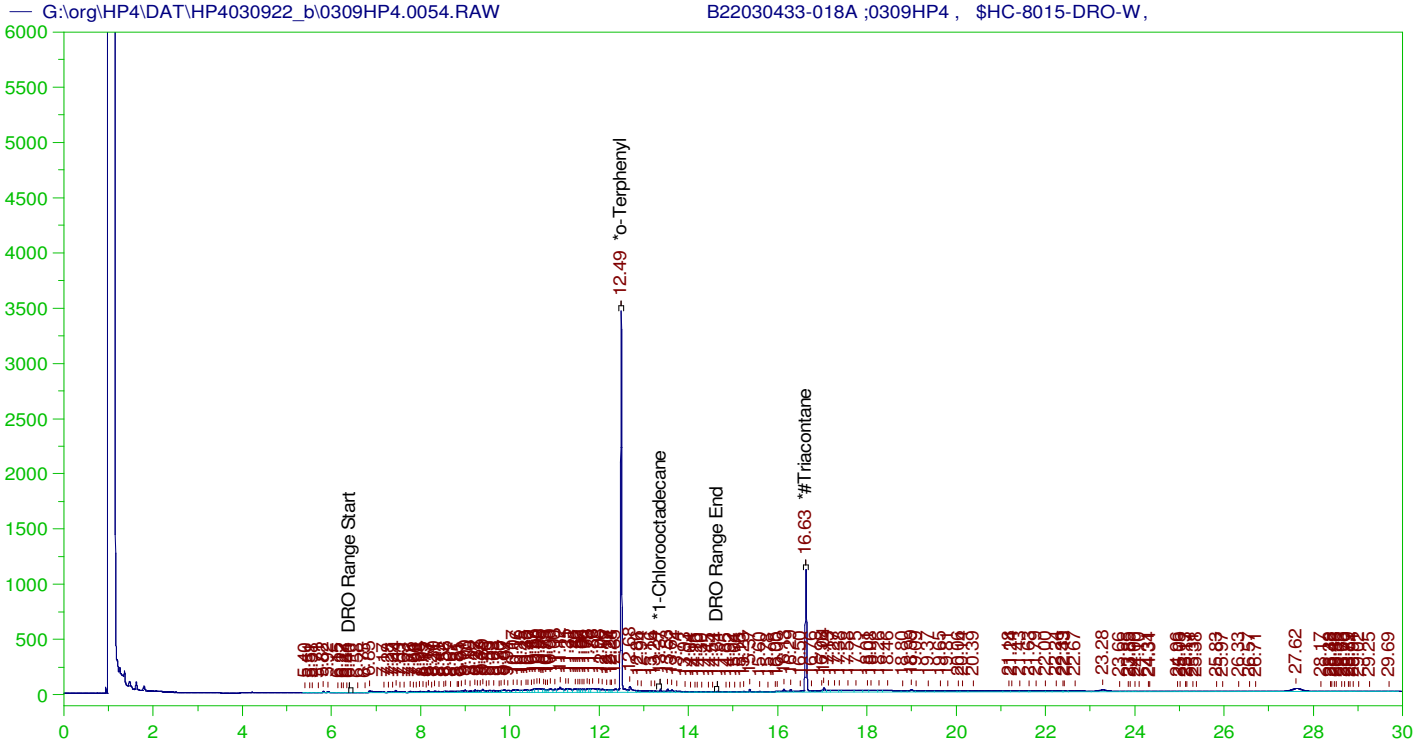
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.628	.476	.092	19.41	-

RRO Area:5080921 RRO AMOUNT: 0.197271

ERH2603 (RHMW01R FD) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0054.RAW B22030433-018A ;0309HP4 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-018A ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0054.RAW
Date & Time Acquired: 3/11/2022 1:15:54 AM
Method File: G:\Org\HP4\methods\D3_8015-C24T-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

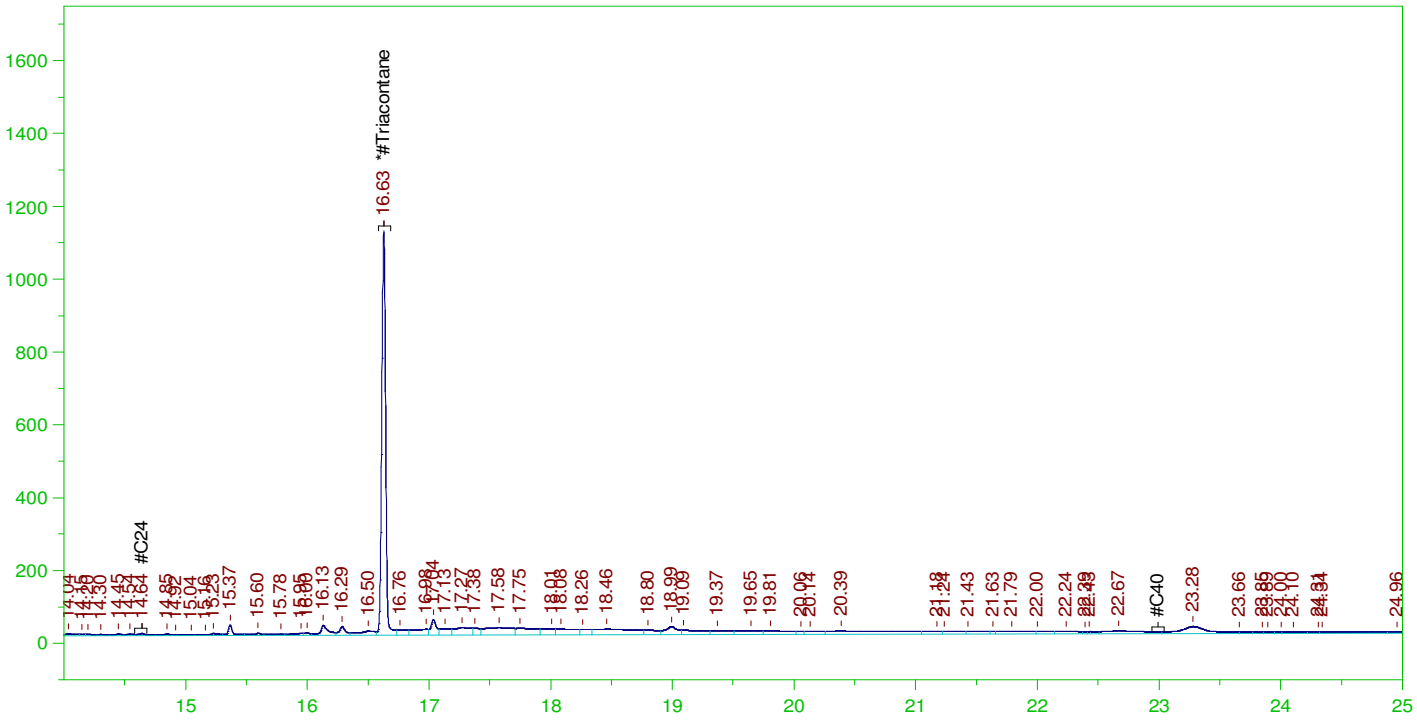
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.489	.2	.189	94.59	-
*1-Chlorooctadecane	13.369	.2	.004	1.78	-
*#Triacontane	16.628	.2	.099	49.31	-

DRO Area:7823030 DRO Amount: 0.2663316
TEH Area:1.439747E+07 TEH Amount: 0.4901552

ERH2603 (RHMW01R FD) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0054.RAW B22030433-018A ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-018A ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0054.RAW
Date & Time Acquired: 3/11/2022 1:15:54 AM
Method File: G:\Org\HP4\Methods\D3_ORO-S-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

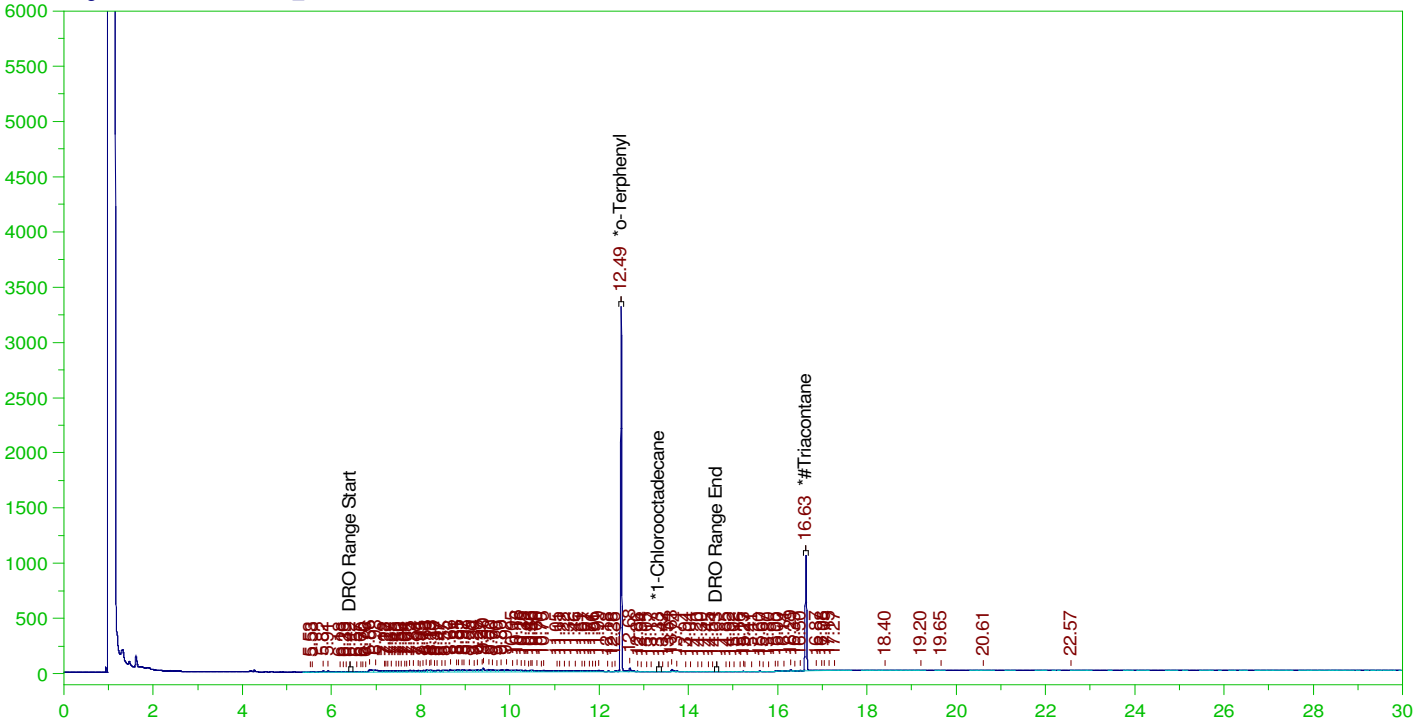
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.628	.5	.099	19.72	-

RRO Area:4770628 RRO AMOUNT: 0.1944848

ERH2614 (Sump Audit 3) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0045.RAW B22030433-023C ;0309HP4 , $HC-8015-DRO-W, RR



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-023C ;0309HP4 , $HC-8015-DRO-W, RR
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0045.RAW
Date & Time Acquired: 3/10/2022 6:28:06 PM
Method File: G:\Org\HP4\methods\DR_8015-C24T-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

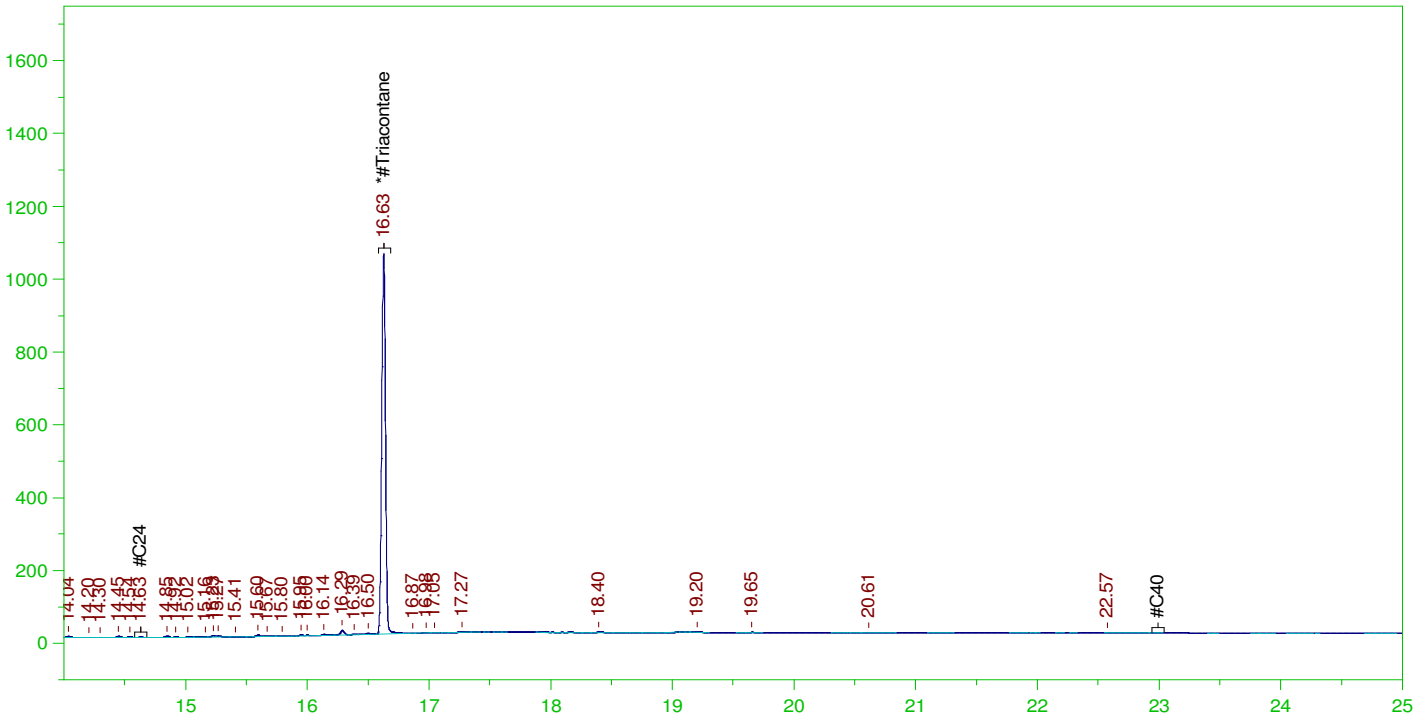
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.488	.19	.164	86.07	-
*1-Chlorooctadecane	13.327	.19	.	.19	-
*#Triacontane	16.628	.19	.086	45.03	-

DRO Area:4232415 DRO Amount: 0.1372292
TEH Area:4496282 TEH Amount: 0.1457846

ERH2614 (Sump Audit 3) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0045.RAW B22030433-023C ;0309HP4 , $HC-8015-DRO-W, RR



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-023C ;0309HP4 , $HC-8015-DRO-W, RR
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0045.RAW
Date & Time Acquired: 3/10/2022 6:28:06 PM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

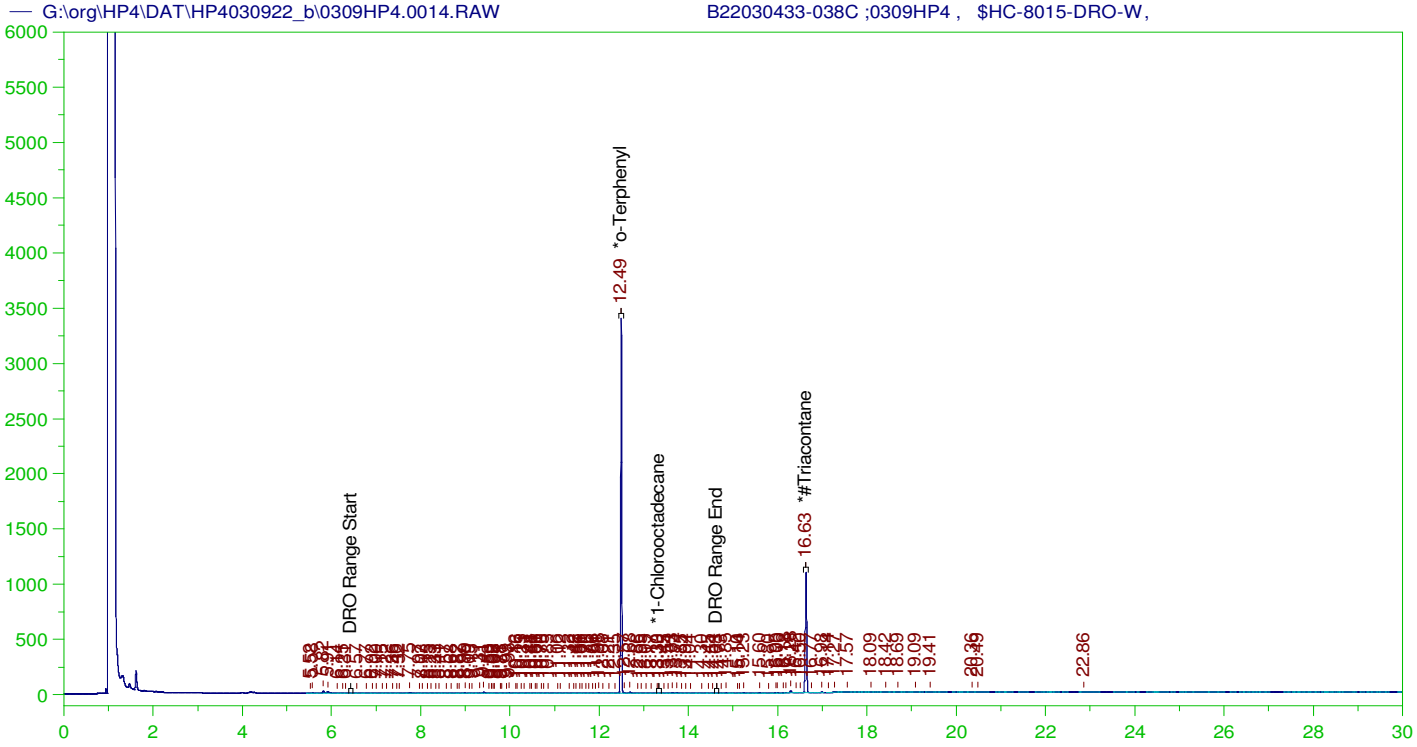
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.628	.476	.086	17.98	-

RRO Area:126600 RRO AMOUNT: 4.915352E-03

ERH2612 (RHMW2254-01 LF) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0014.RAW B22030433-038C ;0309HP4 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-038C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0014.RAW
Date & Time Acquired: 3/9/2022 6:22:15 PM
Method File: G:\Org\HP4\methods\DR_8015-C24T-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

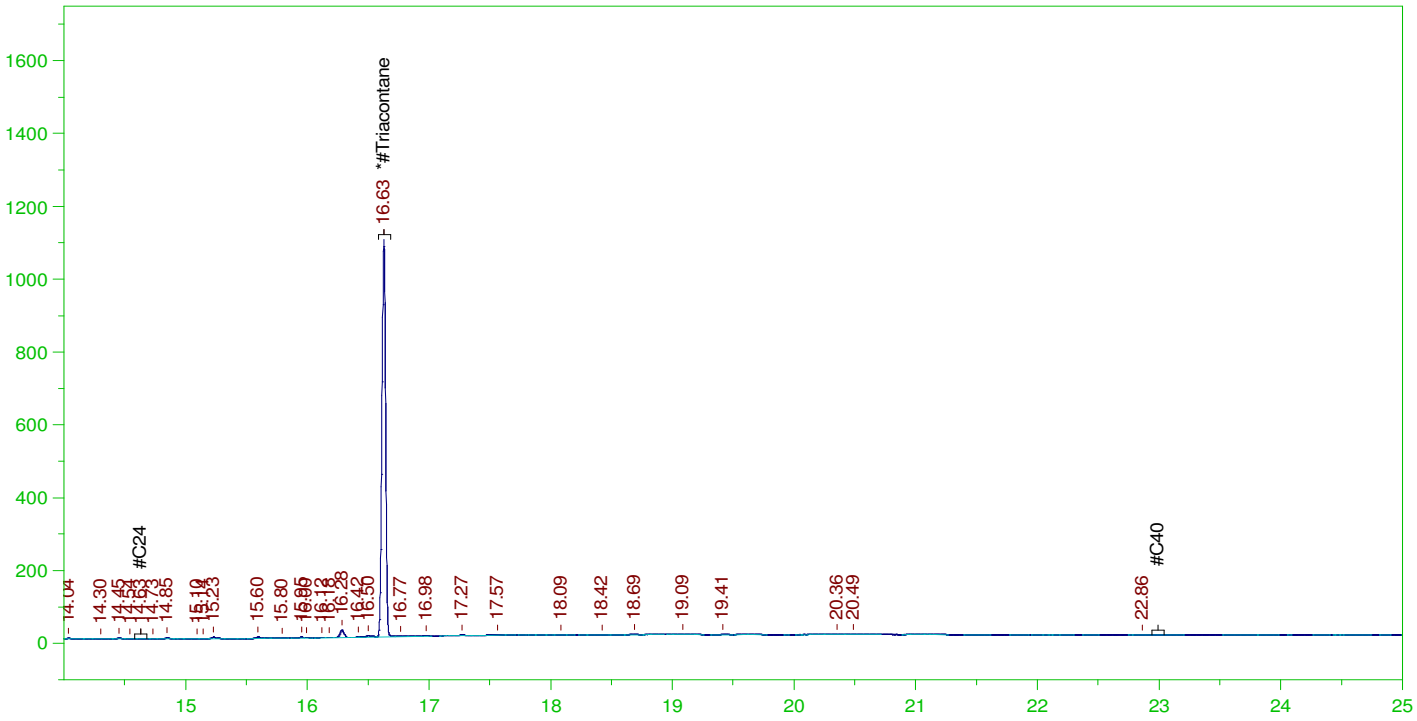
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.489	.19	.166	86.92	-
*1-Chlorooctadecane	13.33	.19	.	.02	-
*#Triacontane	16.629	.19	.088	45.98	-

DRO Area:392933.6 DRO Amount: 1.274023E-02
TEH Area:704734.6 TEH Amount: 2.284988E-02

ERH2612 (RHMW2254-01 LF) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0014.RAW B22030433-038C ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-038C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0014.RAW
Date & Time Acquired: 3/9/2022 6:22:15 PM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

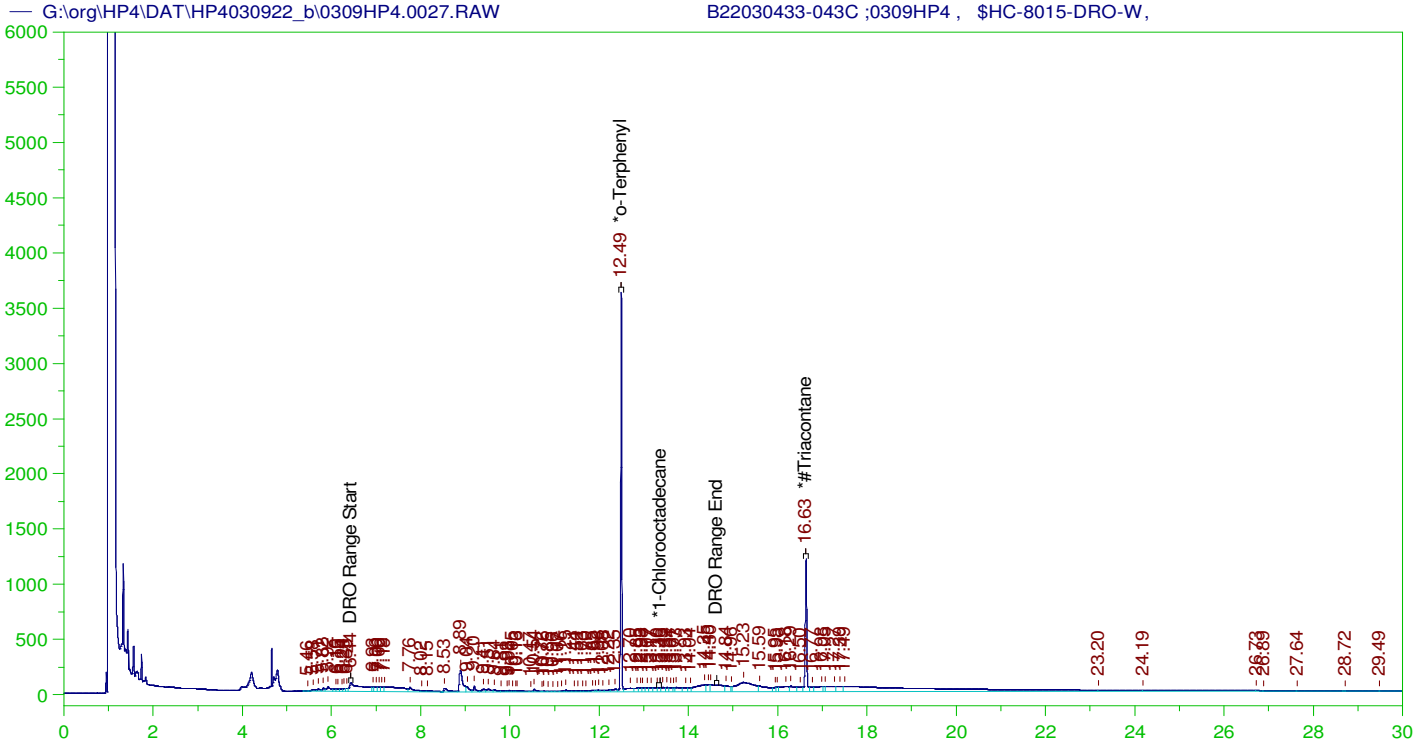
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.629	.476	.088	18.39	-

RRO Area:141452 RRO AMOUNT: 5.491992E-03

ERH2610 (RHMW2254-01 Bailer) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0027.RAW B22030433-043C ;0309HP4 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-043C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0027.RAW
Date & Time Acquired: 3/10/2022 4:09:26 AM
Method File: G:\Org\HP4\methods\D3_8015-C24T-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

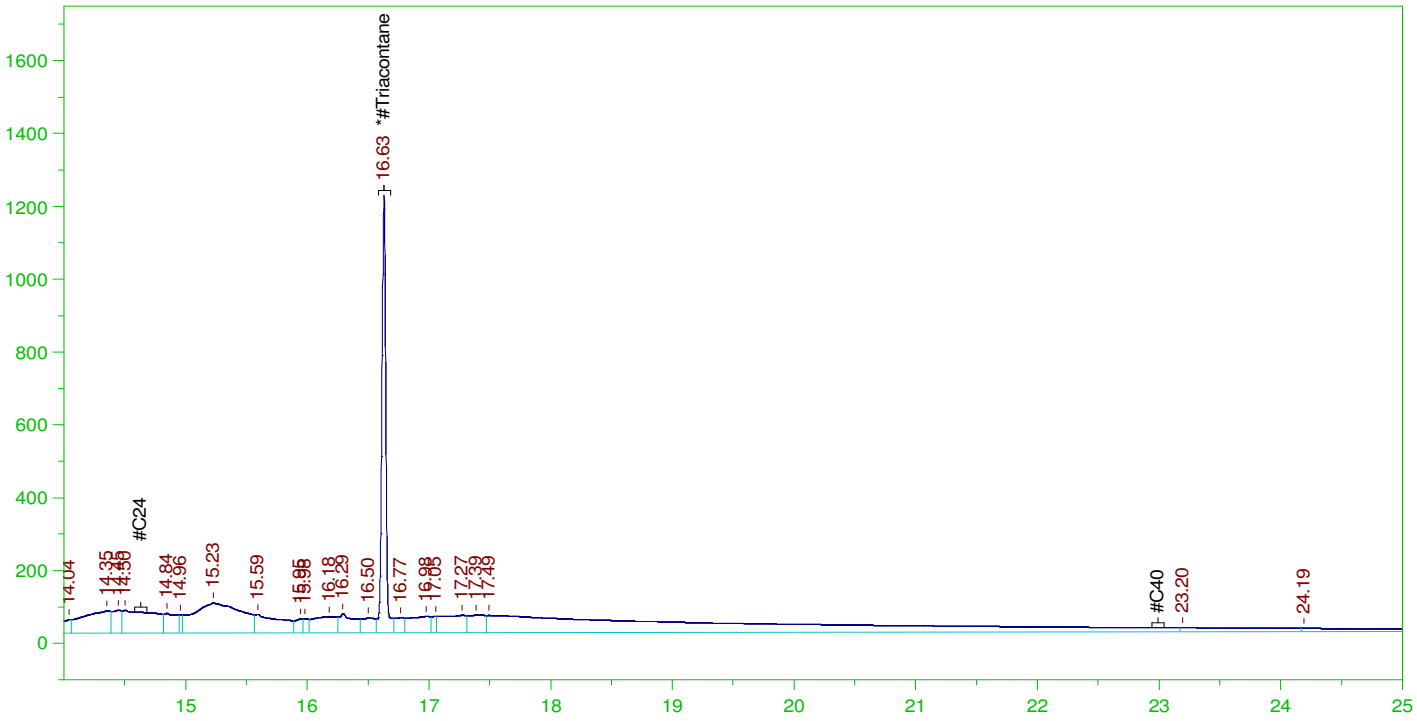
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.491	.192	.181	93.86	-
*1-Chlorooctadecane	13.365	.192	.004	2.07	-
*#Triacontane	16.63	.192	.106	55.18	-

DRO Area:1.271729E+07 DRO Amount: 0.4163024
TEH Area:3.028446E+07 TEH Amount: 0.9913661

ERH2610 (RHMW2254-01 Bailer) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0027.RAW B22030433-043C ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-043C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0027.RAW
Date & Time Acquired: 3/10/2022 4:09:26 AM
Method File: G:\Org\HP4\Methods\D3_ORO-S-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

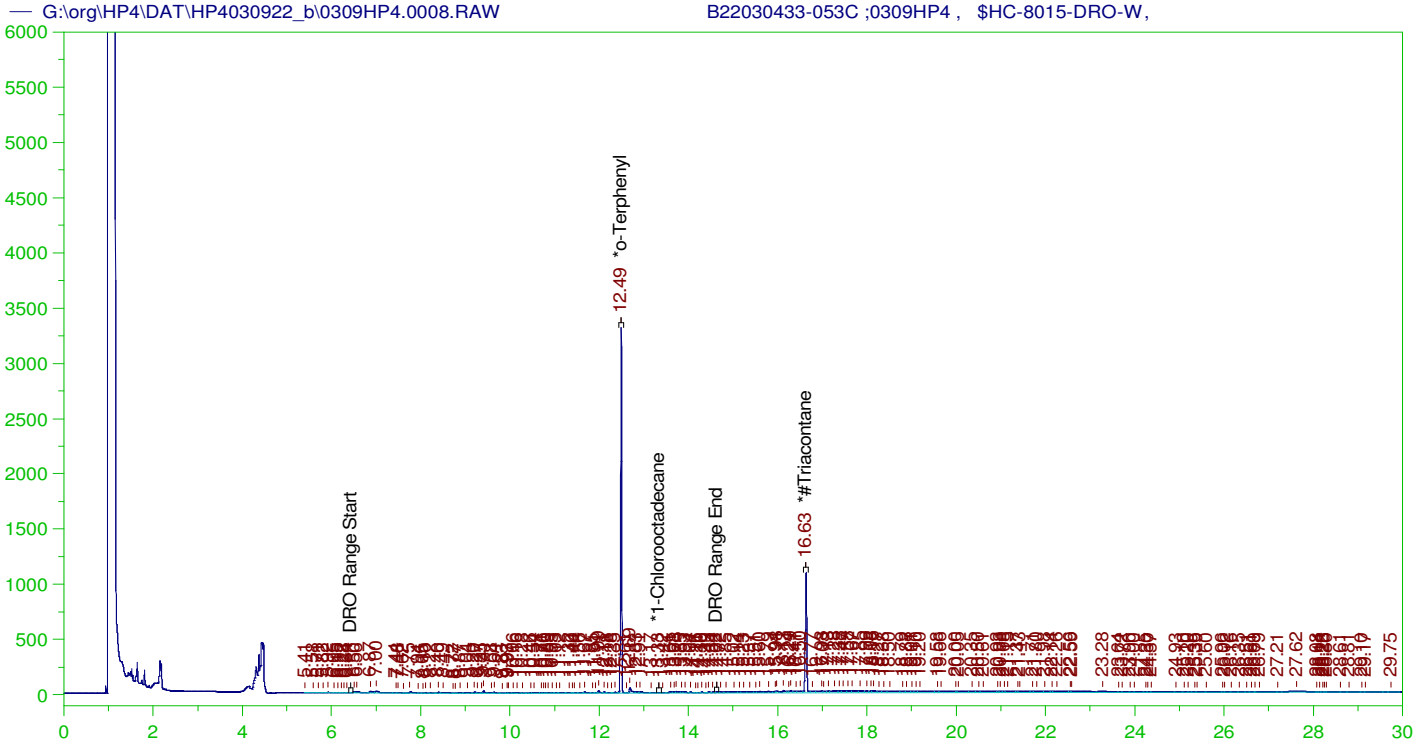
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.63	.481	.106	22.07	-

RRO Area:1.472564E+07 RRO AMOUNT: 0.5772328

ERH2580 (RHMW05 m/MS/MSD volumes) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0008.RAW B22030433-053C ;0309HP4 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-053C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0008.RAW
Date & Time Acquired: 3/9/2022 1:50:53 PM
Method File: G:\Org\HP4\methods\D3_8015-030908-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

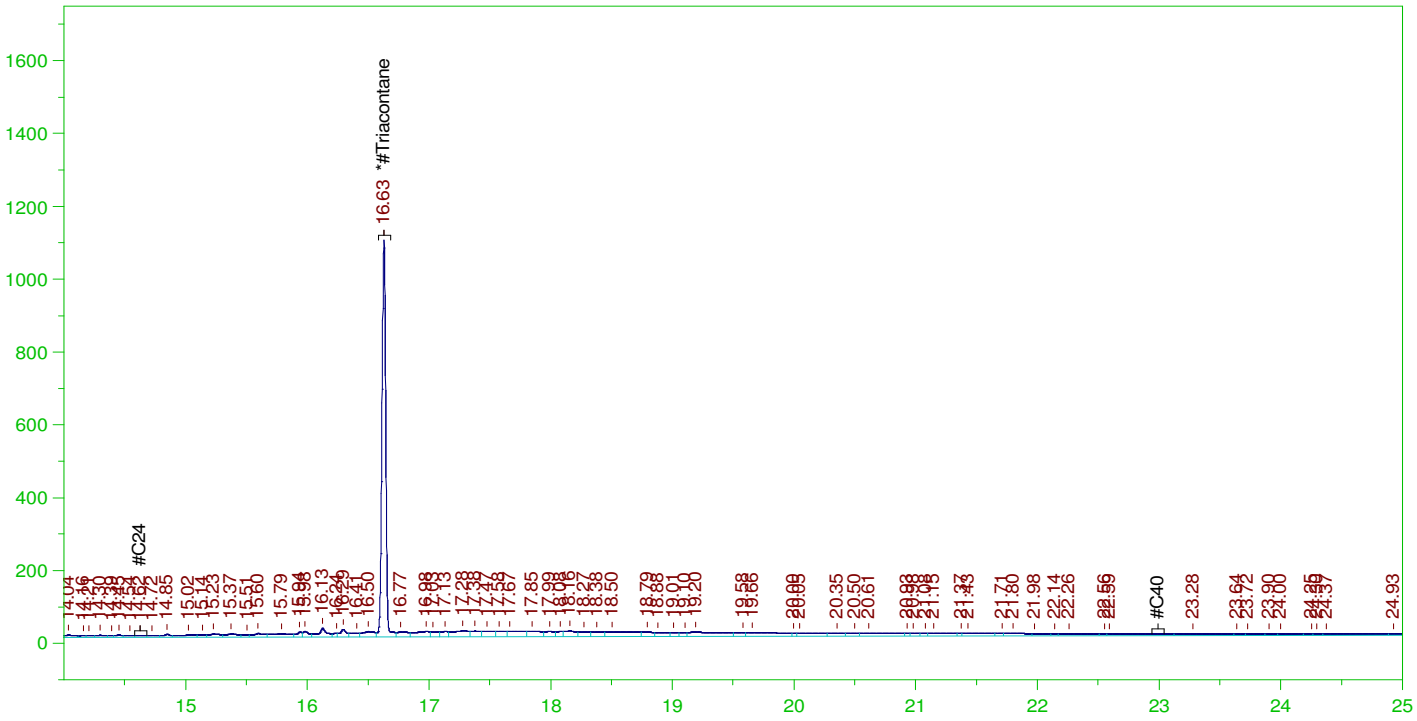
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.489	.192	.163	84.72	-
*1-Chlorooctadecane	13.328	.192	. .24		-
*#Triacontane	16.63	.192	.092	47.64	-

DRO Area:1506307 DRO Amount: 4.930916E-02
TEH Area:7115098 TEH Amount: 0.2329137

ERH2580 (RHMW05 m/MS/MSD volumes) Batch ID: 164312

— G:\org\HP4\DAT\HP4030922_b\0309HP4.0008.RAW B22030433-053C ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-053C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0008.RAW
Date & Time Acquired: 3/9/2022 1:50:53 PM
Method File: G:\Org\HP4\Methods\D3_ORO-S030908-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

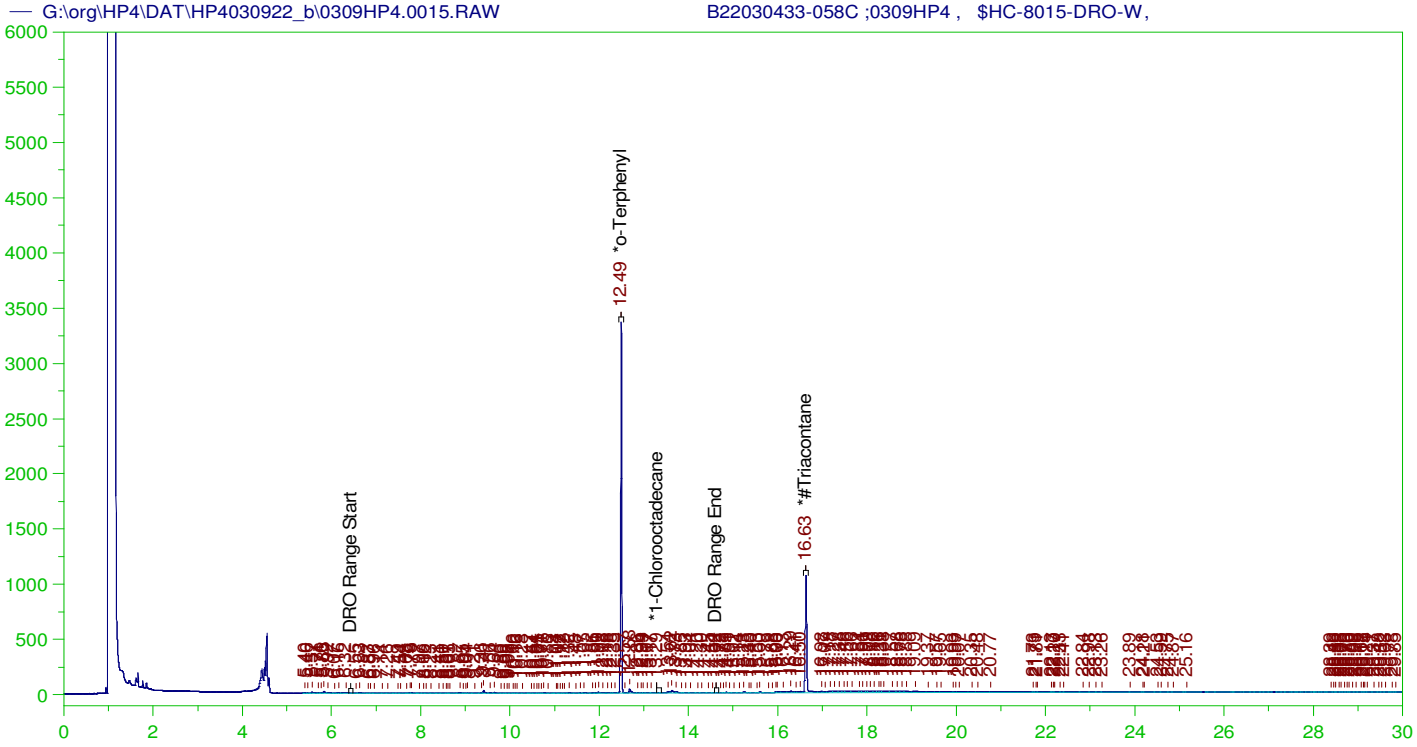
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.63	.481	.092	19.06	-

RRO Area:4495978 RRO AMOUNT: 0.1762386

ERH2620 (OWDFMW04A) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0015.RAW B22030433-058C ;0309HP4 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-058C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0015.RAW
Date & Time Acquired: 3/9/2022 7:07:30 PM
Method File: G:\Org\HP4\methods\D3_8015-030915-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

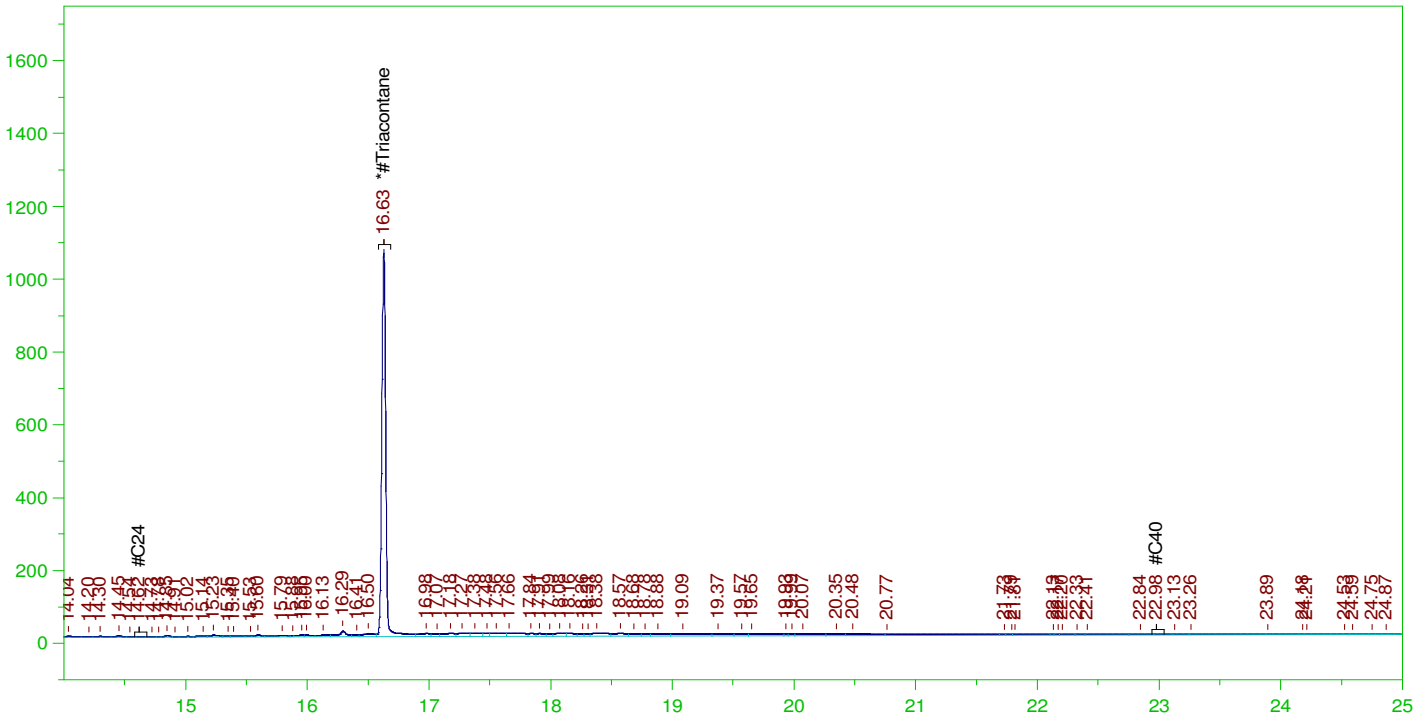
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.49	.19	.163	85.54	-
*1-Chlorooctadecane	13.293	.19	.	.14	-
*#Triacontane	16.629	.19	.092	48.46	-

DRO Area:852527.9 DRO Amount: 2.764184E-02
TEH Area:3842311 TEH Amount: 0.1245807

ERH2620 (OWDFMW04A) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0015.RAW B22030433-058C ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-058C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0015.RAW
Date & Time Acquired: 3/9/2022 7:07:30 PM
Method File: G:\Org\HP4\Methods\D3_ORO-S-030915-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

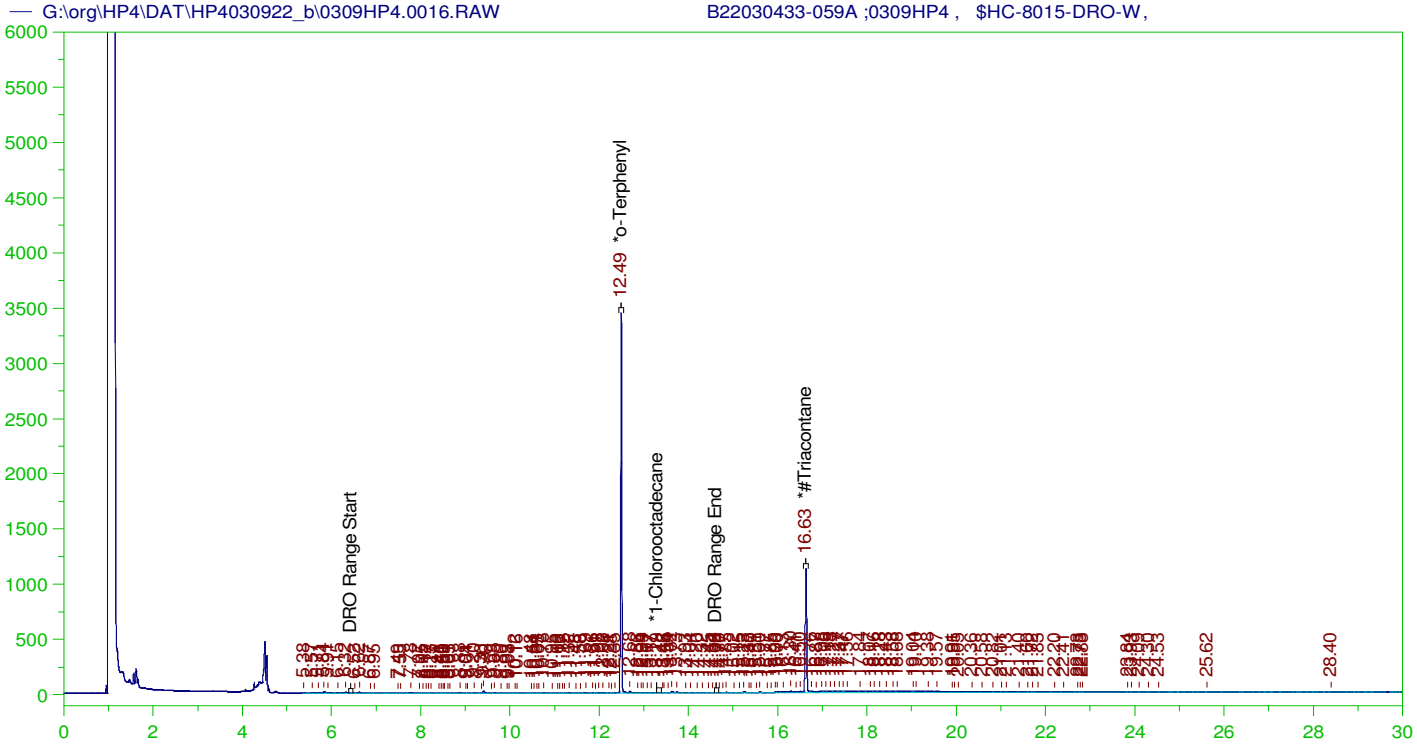
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.629	.476	.092	19.38	-

RRO Area:2620056 RRO AMOUNT: 0.1017259

ERH2676 (OWDFMW04A) FD Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0016.RAW B22030433-059A ;0309HP4 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-059A ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0016.RAW
Date & Time Acquired: 3/9/2022 7:52:44 PM
Method File: G:\Org\HP4\methods\D3_8015-030916-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

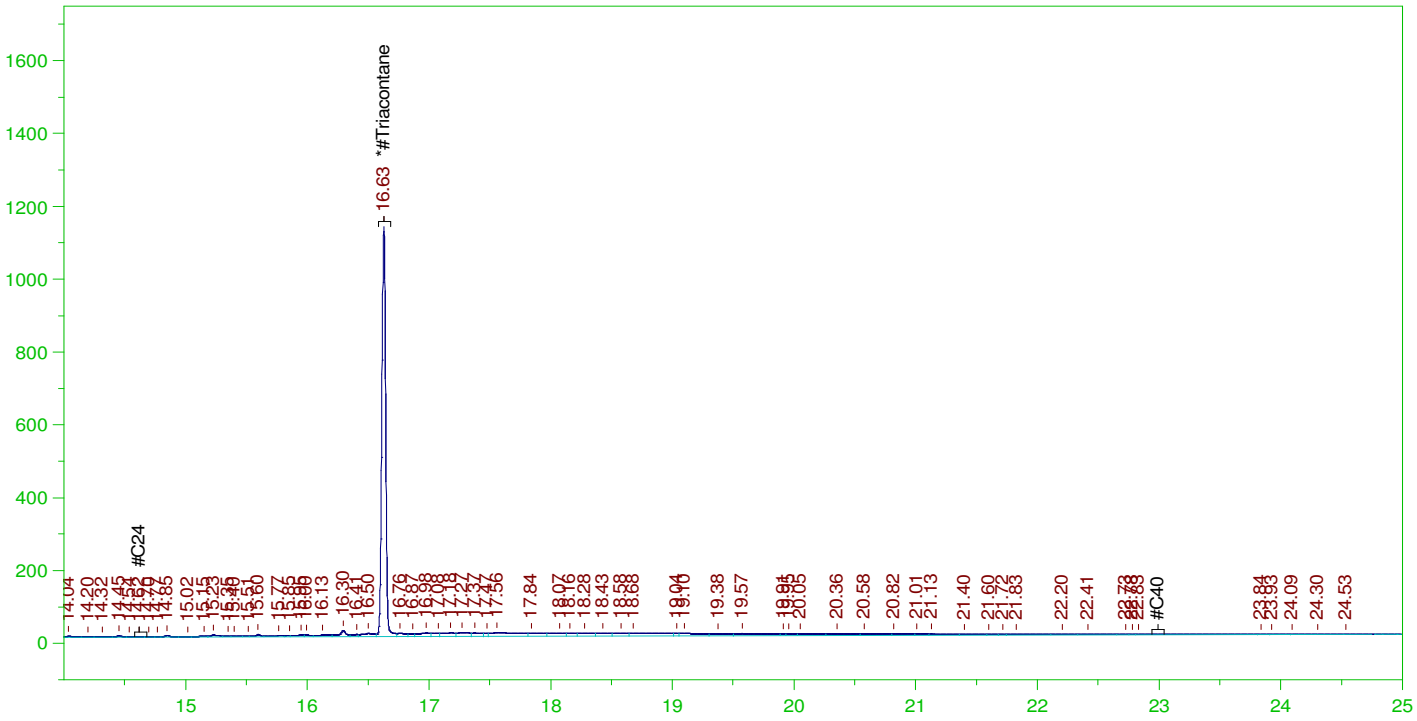
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.49	.19	.172	90.35	-
*1-Chlorooctadecane	13.293	.19	.	.16	-
*#Triacontane	16.629	.19	.095	49.97	-

DRO Area:620257.2 DRO Amount: 2.011083E-02
TEH Area:3647981 TEH Amount: 0.1182799

ERH2676 (OWDFMW04A) FD Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0016.RAW B22030433-059A ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-059A ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0016.RAW
Date & Time Acquired: 3/9/2022 7:52:44 PM
Method File: G:\Org\HP4\Methods\D3_ORO-S-030916-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

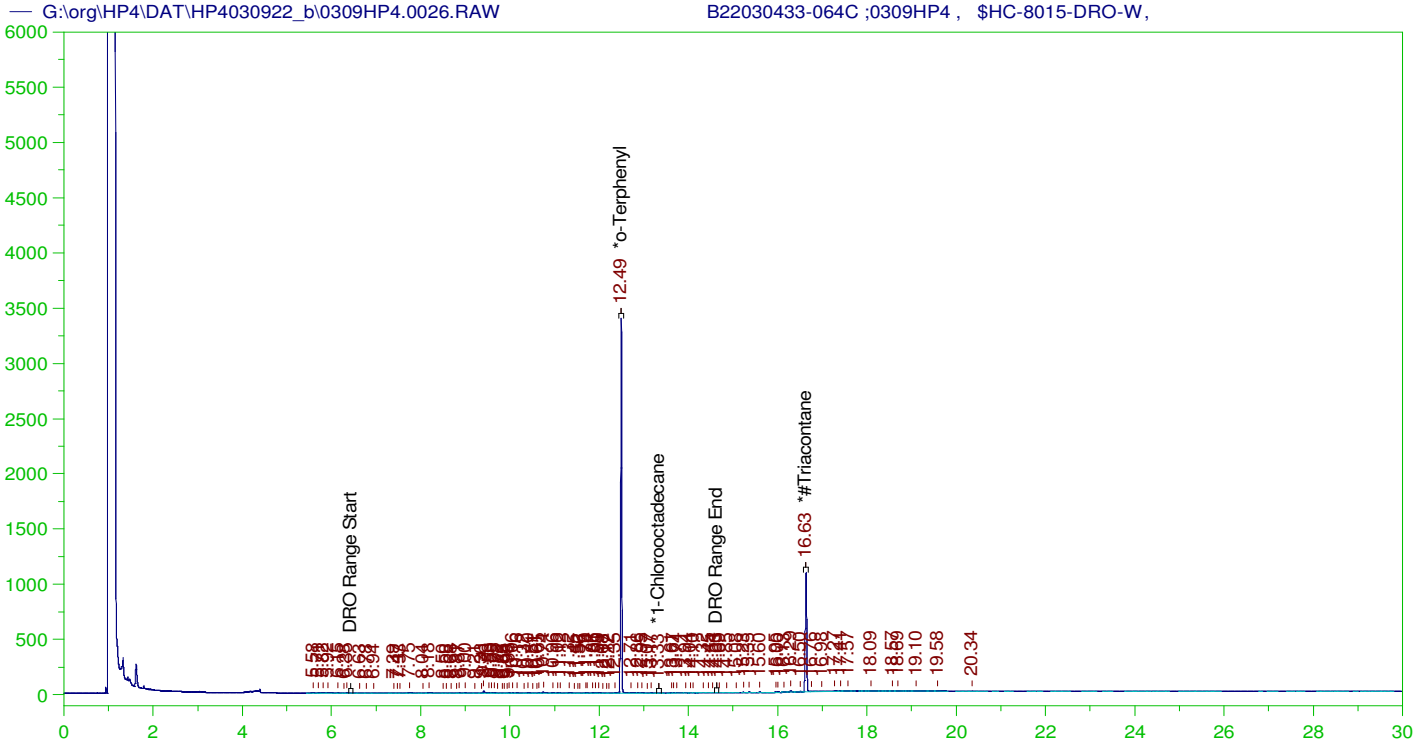
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.629	.476	.095	19.99	-

RRO Area:2807136 RRO AMOUNT: 0.1089894

ERH2590 (RHMW013.5) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0026.RAW B22030433-064C ;0309HP4 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-064C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0026.RAW
Date & Time Acquired: 3/10/2022 3:24:20 AM
Method File: G:\Org\HP4\methods\DR_8015-C24T-ON-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102ON-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

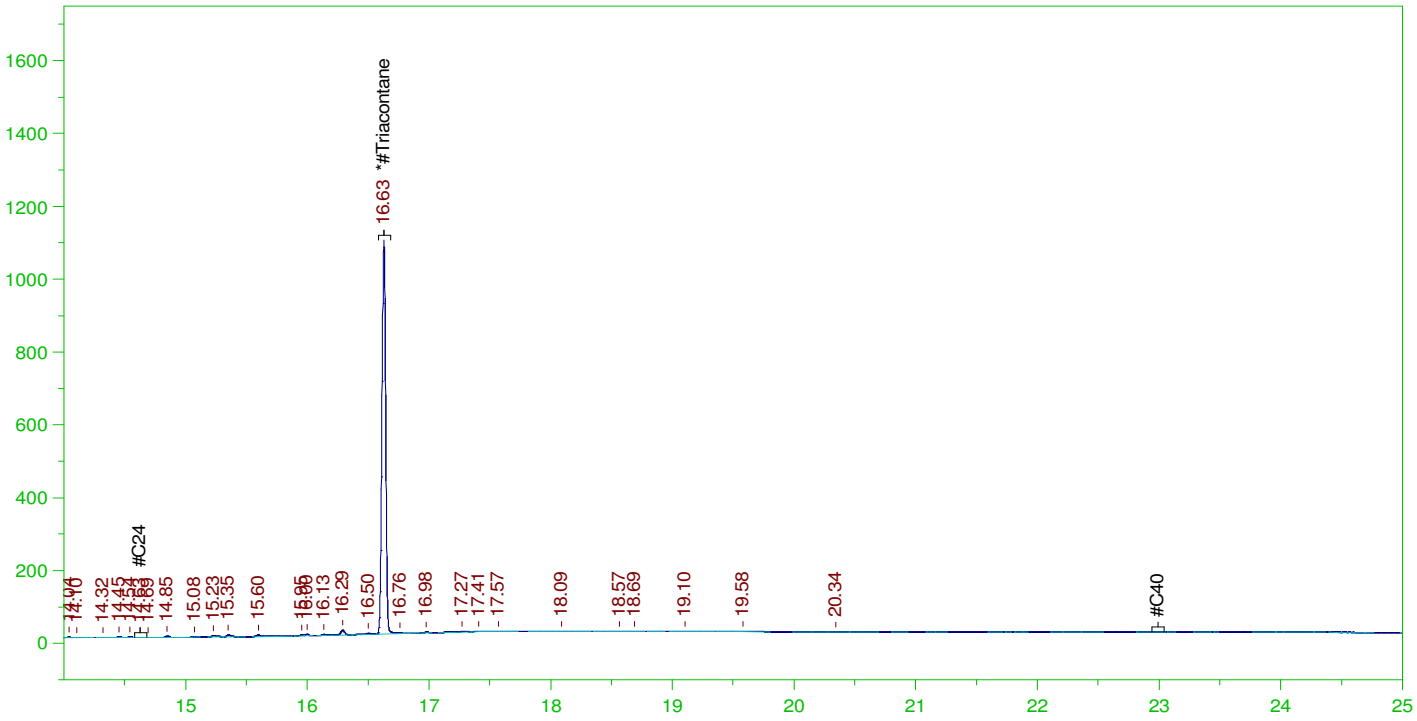
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.489	.19	.166	87.05	-
*1-Chlorooctadecane	13.33	.19	.	.02	-
*#Triacontane	16.629	.19	.088	46.29	-

DRO Area:399508.1 DRO Amount: 0.0129534
TEH Area:663139.9 TEH Amount: 2.150124E-02

ERH2590 (RHMW013.5) Batch ID: 164312

G:\org\HP4\DAT\HP4030922_b\0309HP4.0026.RAW B22030433-064C ;0309HP4 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-064C ;0309HP4 , $HC-8015-DRO-W,
Raw File: G:\org\HP4\DAT\HP4030922_b\0309HP4.0026.RAW
Date & Time Acquired: 3/10/2022 3:24:20 AM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AH-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AH-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

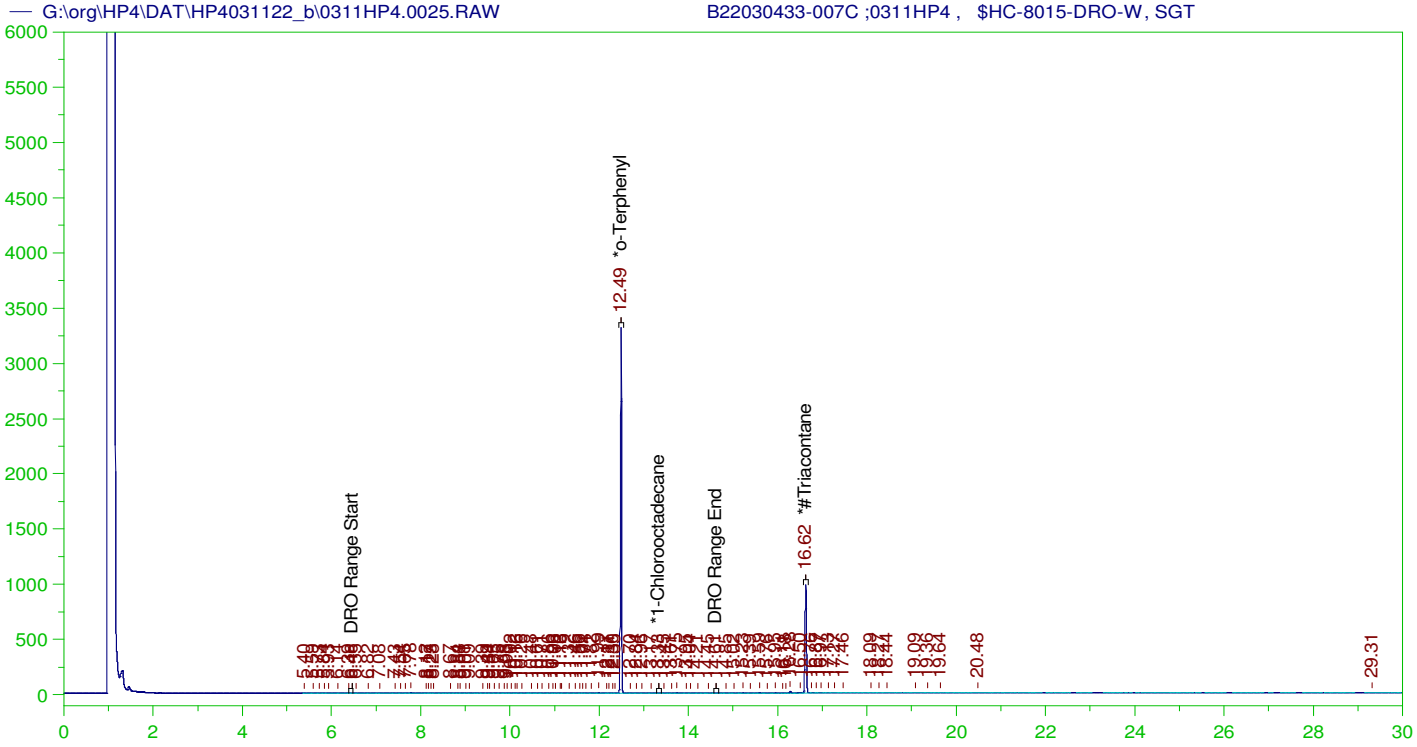
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.58 to 23.04

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.629	.476	.088	18.51	-

RRO Area:146233.5 RRO AMOUNT: 5.677638E-03

ERH2576 (RHMW03) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0025.RAW B22030433-007C ;0311HP4 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-007C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0025.RAW
Date & Time Acquired: 3/12/2022 7:29:28 AM
Method File: G:\Org\HP4\methods\DR_8015-C24T-OO-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102OO-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

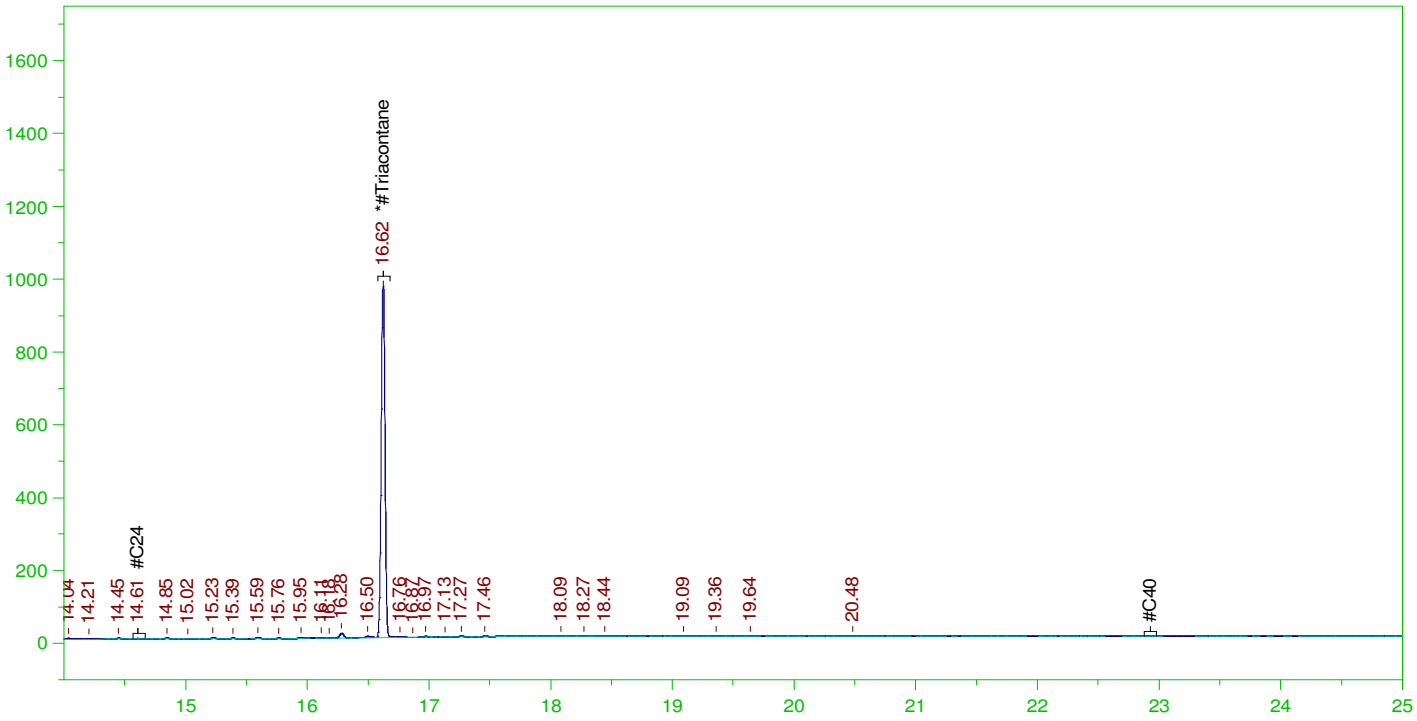
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.67

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.485	.19	.164	86.01	-
*1-Chlorooctadecane	13.328	.19	.	.04	-
*#Triacontane	16.623	.19	.079	41.68	-

DRO Area:192612.5 DRO Amount: 6.245147E-03
TEH Area:363125.8 TEH Amount: 1.177377E-02

ERH2576 (RHMW03) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0025.RAW B22030433-007C ;0311HP4 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-007C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0025.RAW
Date & Time Acquired: 3/12/2022 7:29:28 AM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AI-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AI-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

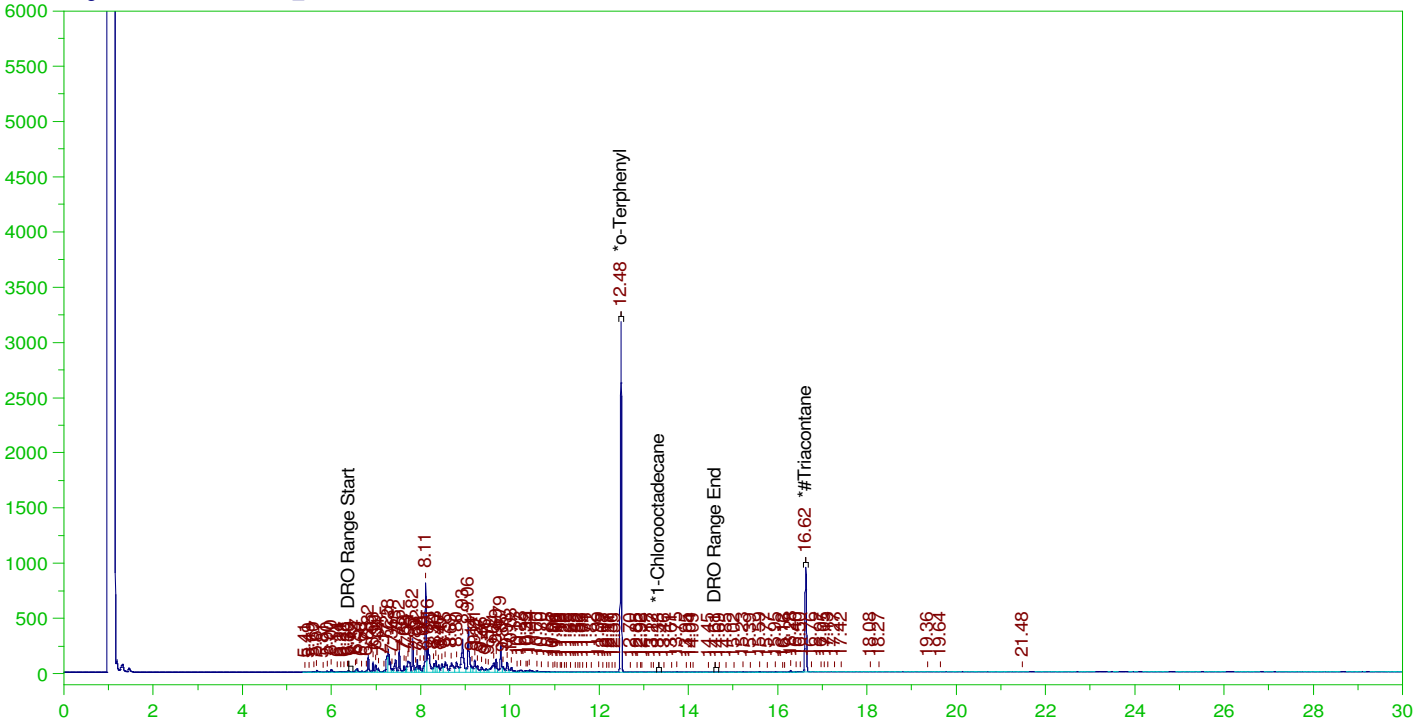
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.57 to 22.98

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.623	.476	.079	16.67	-

RRO Area:130709.3 RRO AMOUNT: 0.0050749

ERH2622 (RHMW02) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0024.RAW B22030433-012C ;0311HP4 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-012C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0024.RAW
Date & Time Acquired: 3/12/2022 6:44:20 AM
Method File: G:\Org\HP4\methods\DR_8015-C24T-OO-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102OO-C24-TRI.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

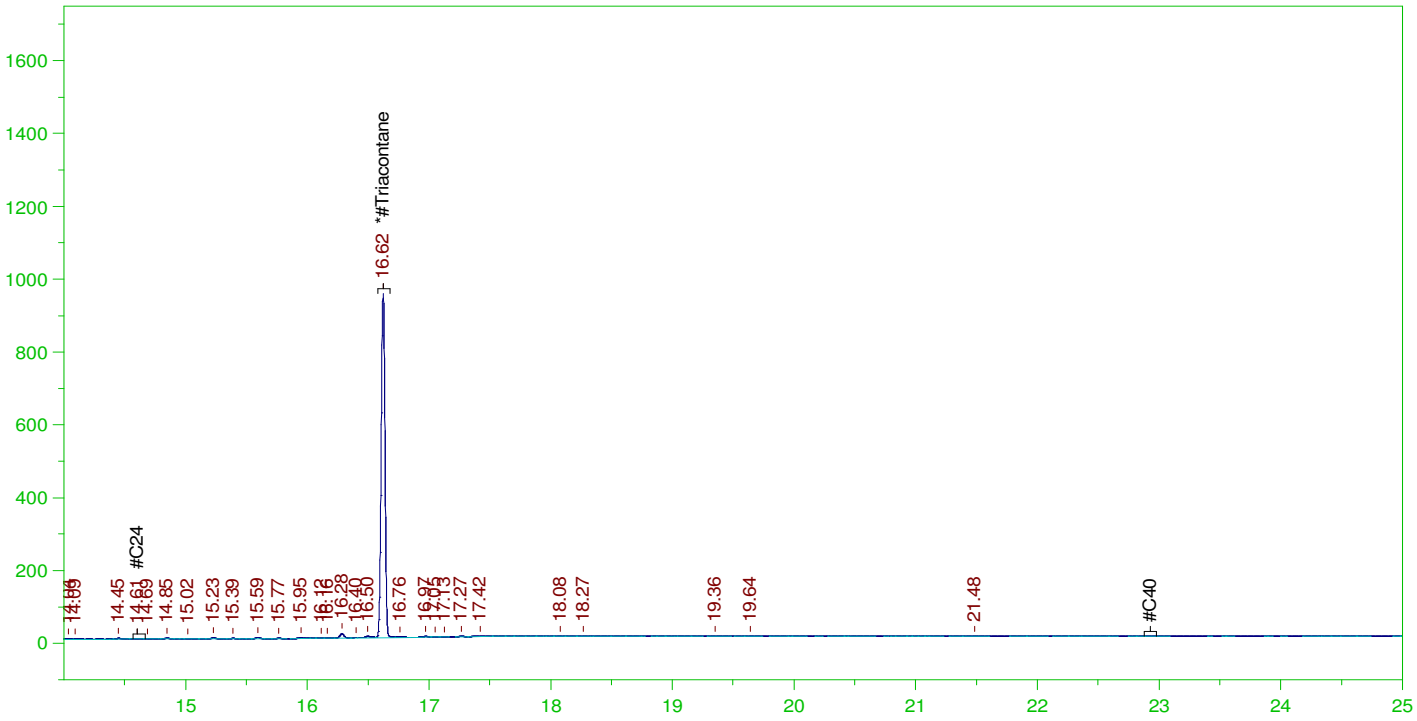
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.67

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.485	.192	.159	82.89	-
*1-Chlorooctadecane	13.326	.192	.03		-
*#Triacontane	16.623	.192	.078	40.49	-

DRO Area:1.418861E+07 DRO Amount: 0.4644662
TEH Area:1.456723E+07 TEH Amount: 0.4768604

ERH2622 (RHMW02) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0024.RAW B22030433-012C ;0311HP4 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-012C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0024.RAW
Date & Time Acquired: 3/12/2022 6:44:20 AM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AI-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AI-SAMPLE.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

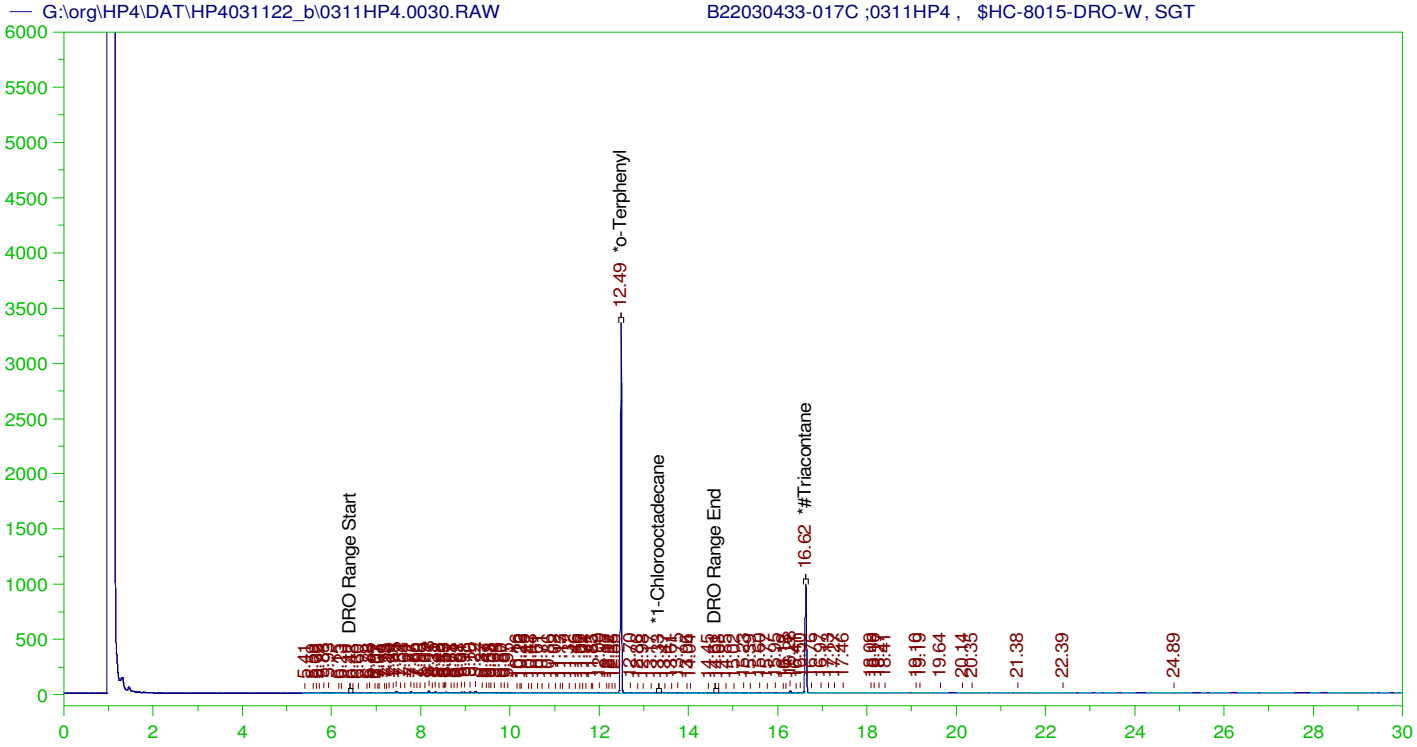
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.57 to 22.98

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.623	.481	.078	16.2	-

RRO Area:116680.3 RRO AMOUNT: 4.573769E-03

ERH2602 (RHMW01R) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0030.RAW B22030433-017C ;0311HP4 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-017C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0030.RAW
Date & Time Acquired: 3/12/2022 11:15:00 AM
Method File: G:\Org\HP4\methods\DR_8015-C24T-OO-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102OO-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

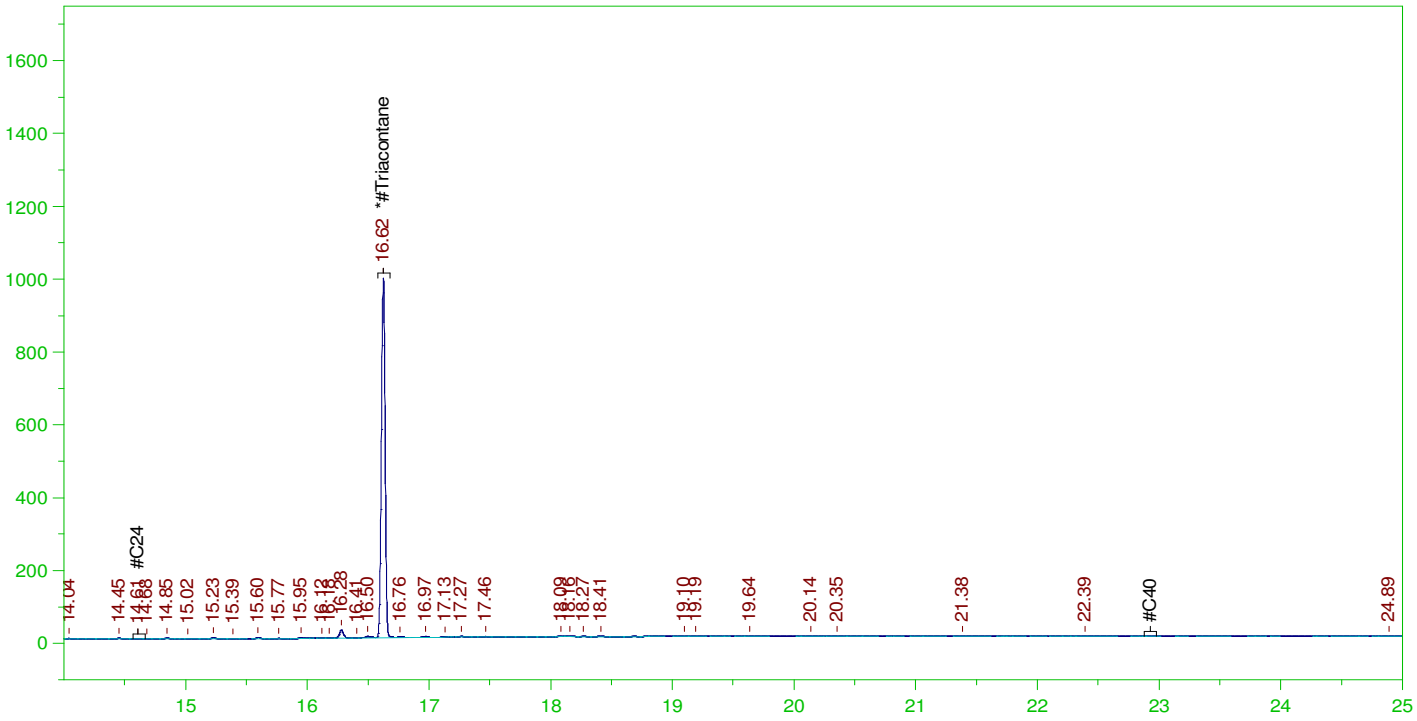
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.67

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.486	.19	.167	87.67	-
*1-Chlorooctadecane	13.327	.19	.	.04	-
*#Triacontane	16.625	.19	.079	41.62	-

DRO Area:1193174 DRO Amount: 3.868674E-02
TEH Area:1417044 TEH Amount: 4.594535E-02

ERH2602 (RHMW01R) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0030.RAW B22030433-017C ;0311HP4 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-017C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0030.RAW
Date & Time Acquired: 3/12/2022 11:15:00 AM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AI-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AI-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

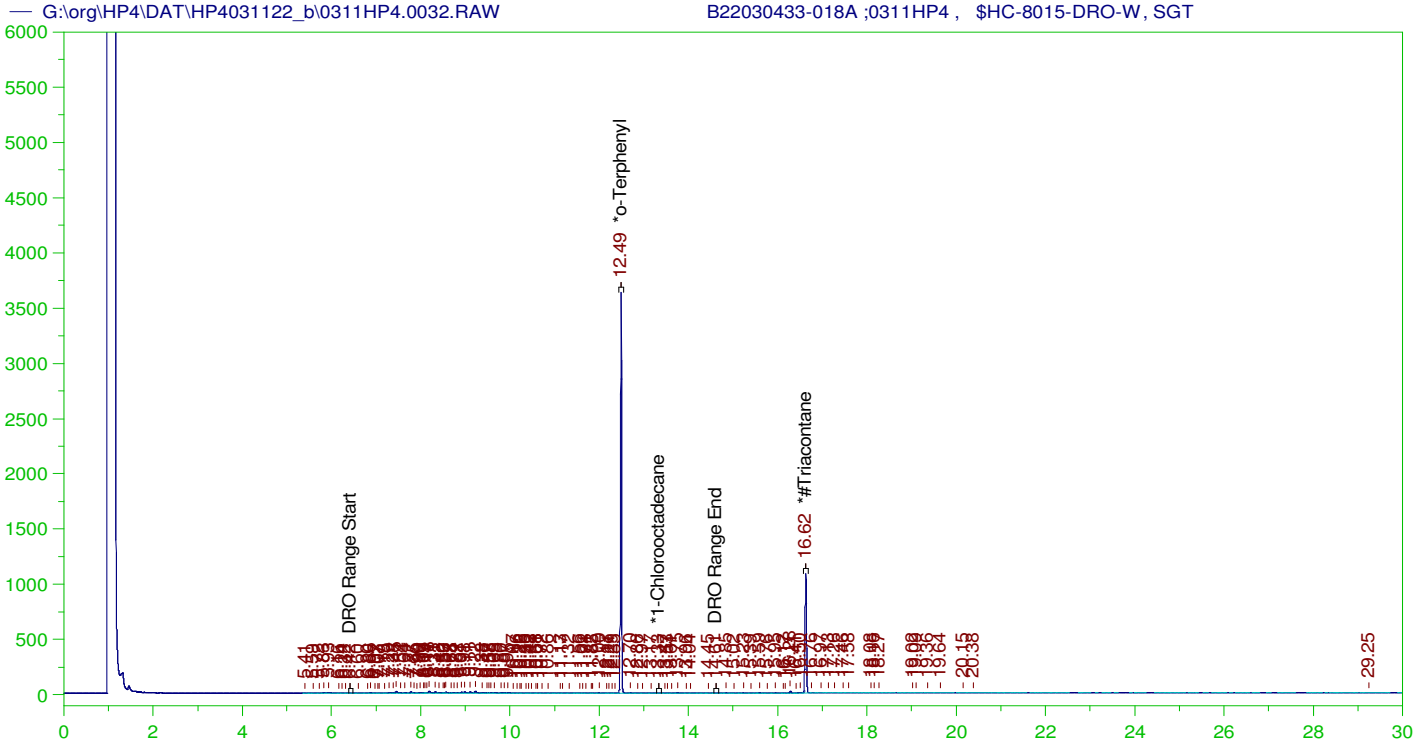
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.57 to 22.98

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.625	.476	.079	16.65	-

RRO Area:139943.4 RRO AMOUNT: 5.43342E-03

ERH2603 (RHMW01R FD) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0032.RAW B22030433-018A ;0311HP4 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-018A ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0032.RAW
Date & Time Acquired: 3/12/2022 12:45:09 PM
Method File: G:\Org\HP4\methods\DR_8015-C24T-OO-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102OO-C24-TRI.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

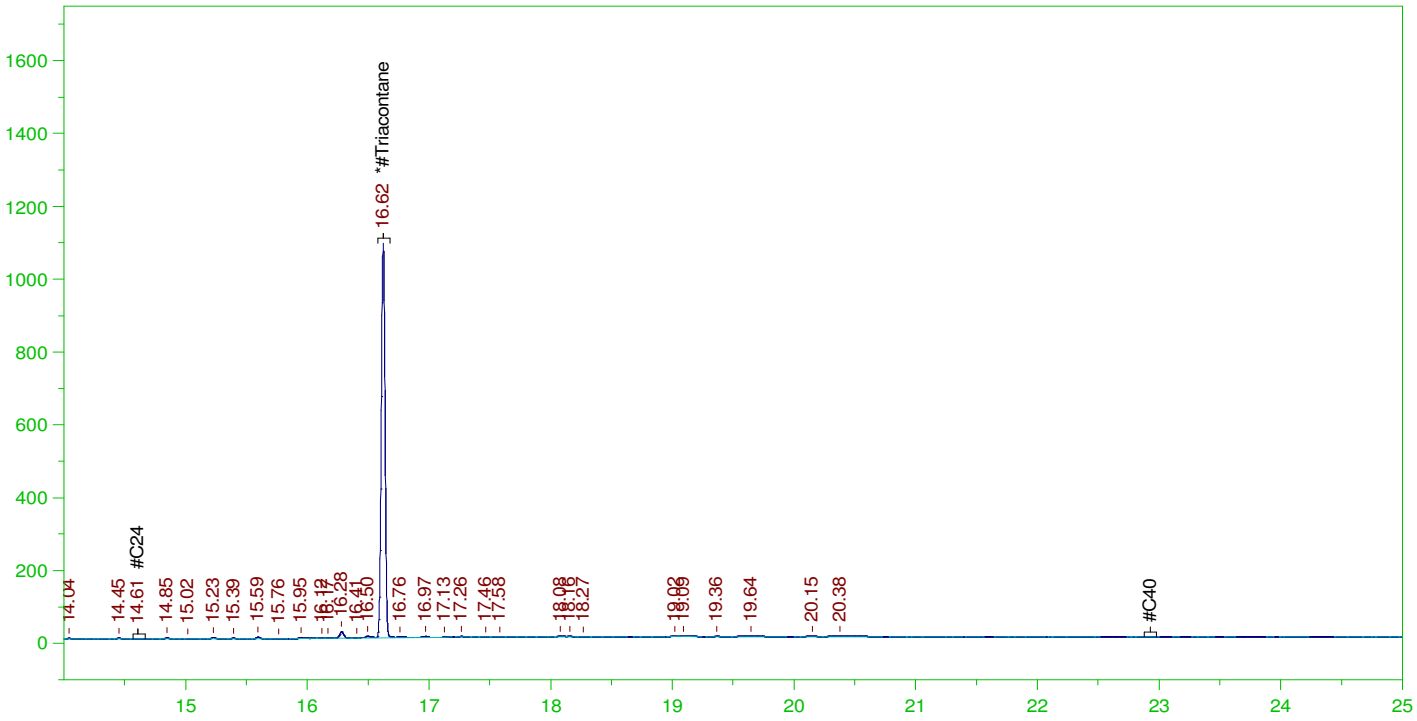
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.67

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.486	.2	.19	95.11	-
*1-Chlorooctadecane	13.327	.2	.	.05	-
*#Triacontane	16.624	.2	.092	46.08	-

DRO Area:1170611 DRO Amount: 3.985291E-02
TEH Area:1437410 TEH Amount: 4.893597E-02

ERH2603 (RHMW01R FD) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0032.RAW B22030433-018A ;0311HP4 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-018A ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0032.RAW
Date & Time Acquired: 3/12/2022 12:45:09 PM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AI-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AI-SAMPLE.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

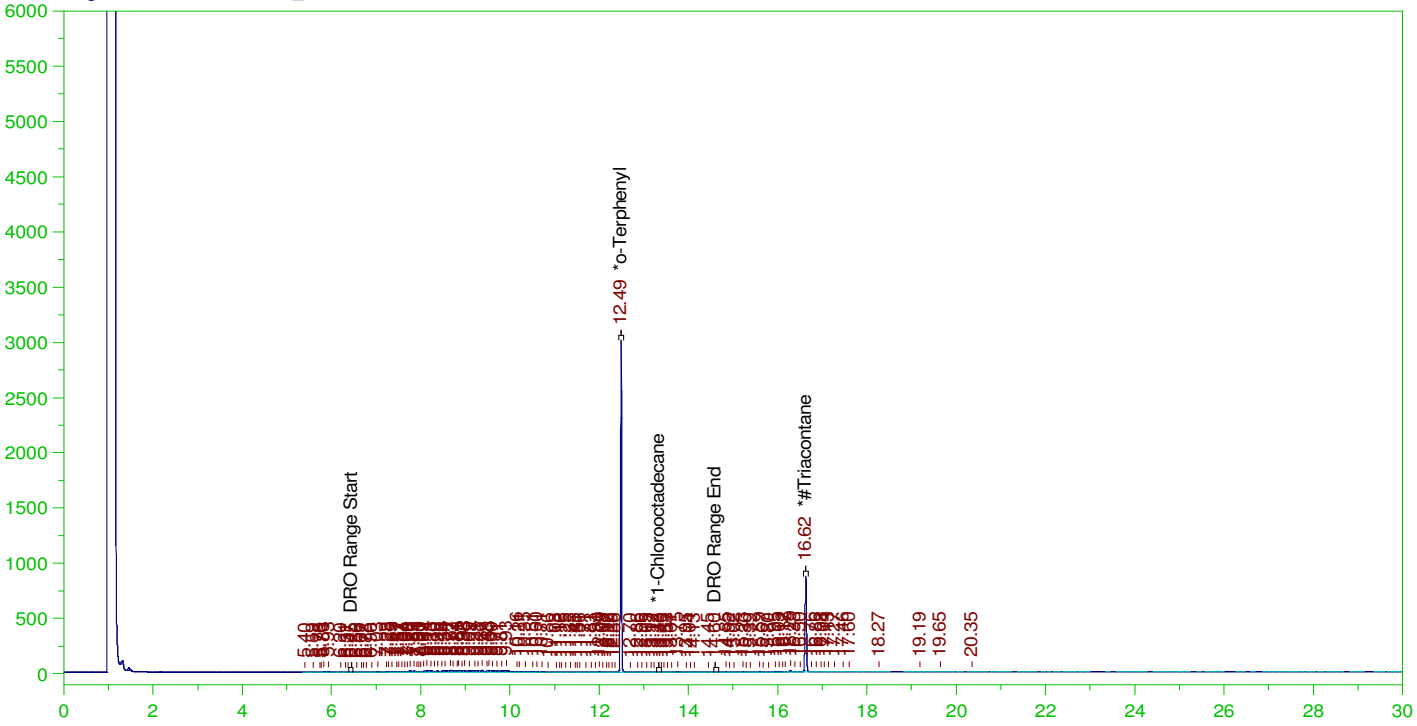
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.57 to 22.98

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.624	.5	.092	18.43	-

RRO Area:157615.6 RRO AMOUNT: 6.425536E-03

ERH2614 (Sump Audit 3) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0028.RAW B22030433-023C ;0311HP4 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-023C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0028.RAW
Date & Time Acquired: 3/12/2022 9:44:32 AM
Method File: G:\Org\HP4\methods\DR_8015-C24T-OO-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102OO-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

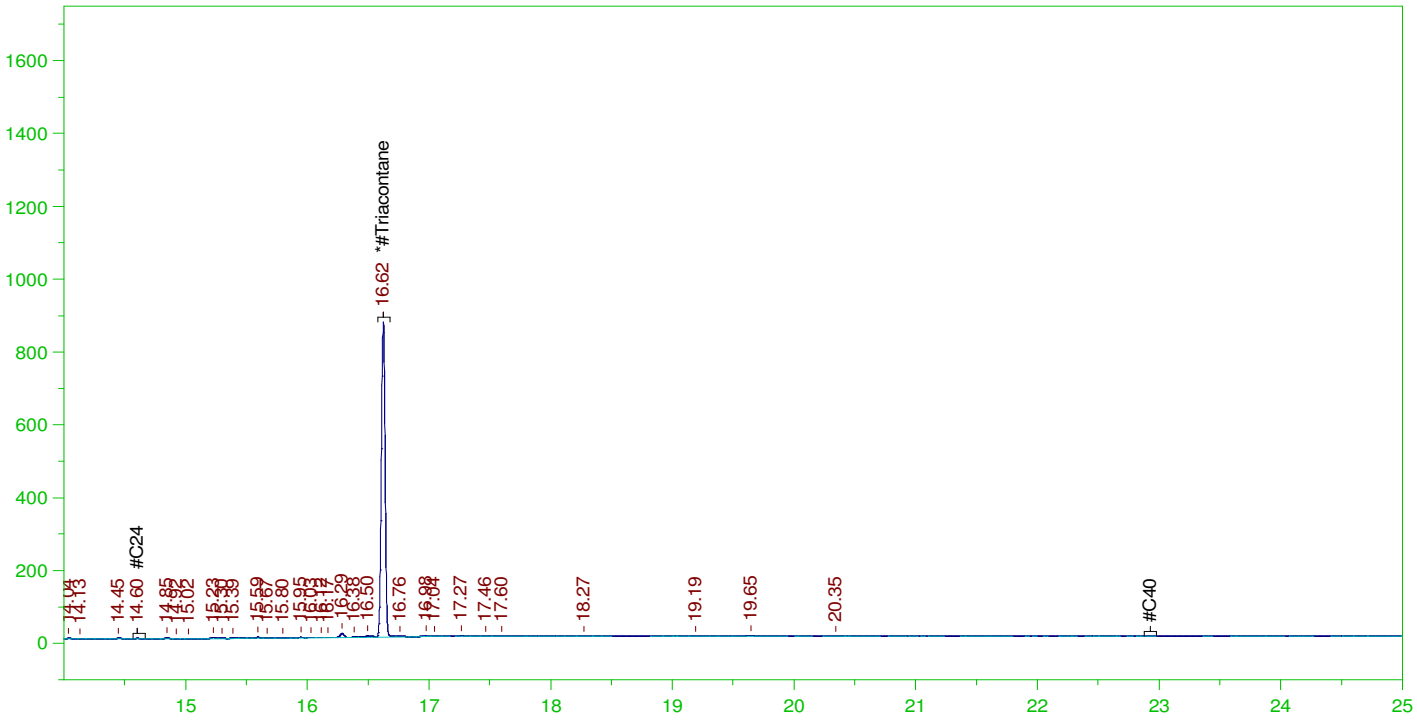
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.67

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.486	.19	.149	78.4	-
*1-Chlorooctadecane	13.328	.19	.	.06	-
*#Triacontane	16.625	.19	.07	36.85	-

DRO Area:2009999 DRO Amount: 6.517097E-02
TEH Area:2215919 TEH Amount: 7.184758E-02

ERH2614 (Sump Audit 3) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0028.RAW B22030433-023C ;0311HP4 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-023C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0028.RAW
Date & Time Acquired: 3/12/2022 9:44:32 AM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AI-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AI-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

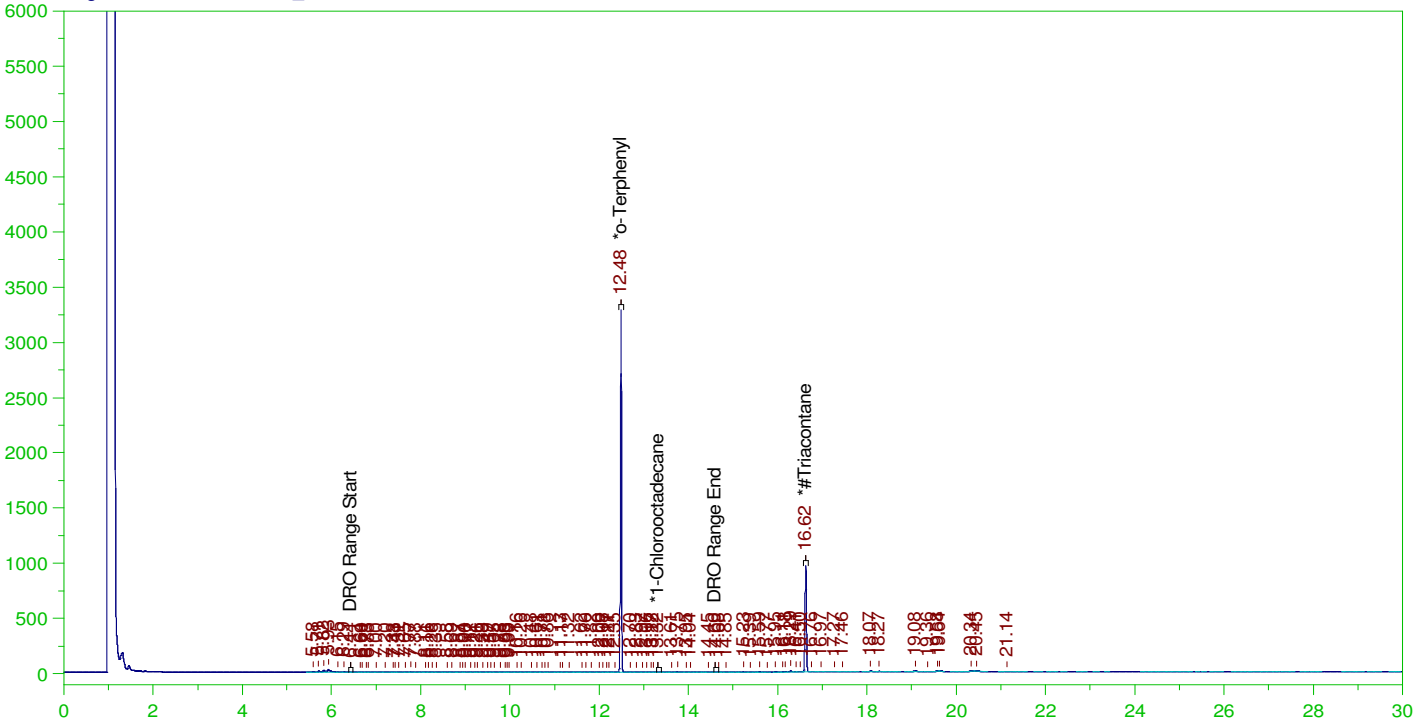
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.57 to 22.98

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.625	.476	.07	14.74	-

RRO Area:114832.9 RRO AMOUNT: 4.458484E-03

ERH2610 (RHMW2254-01 Bailer) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0023.RAW B22030433-043C ;0311HP4 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-043C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0023.RAW
Date & Time Acquired: 3/12/2022 5:59:15 AM
Method File: G:\Org\HP4\methods\DR_8015-C24T-OO-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102OO-C24-TRI.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

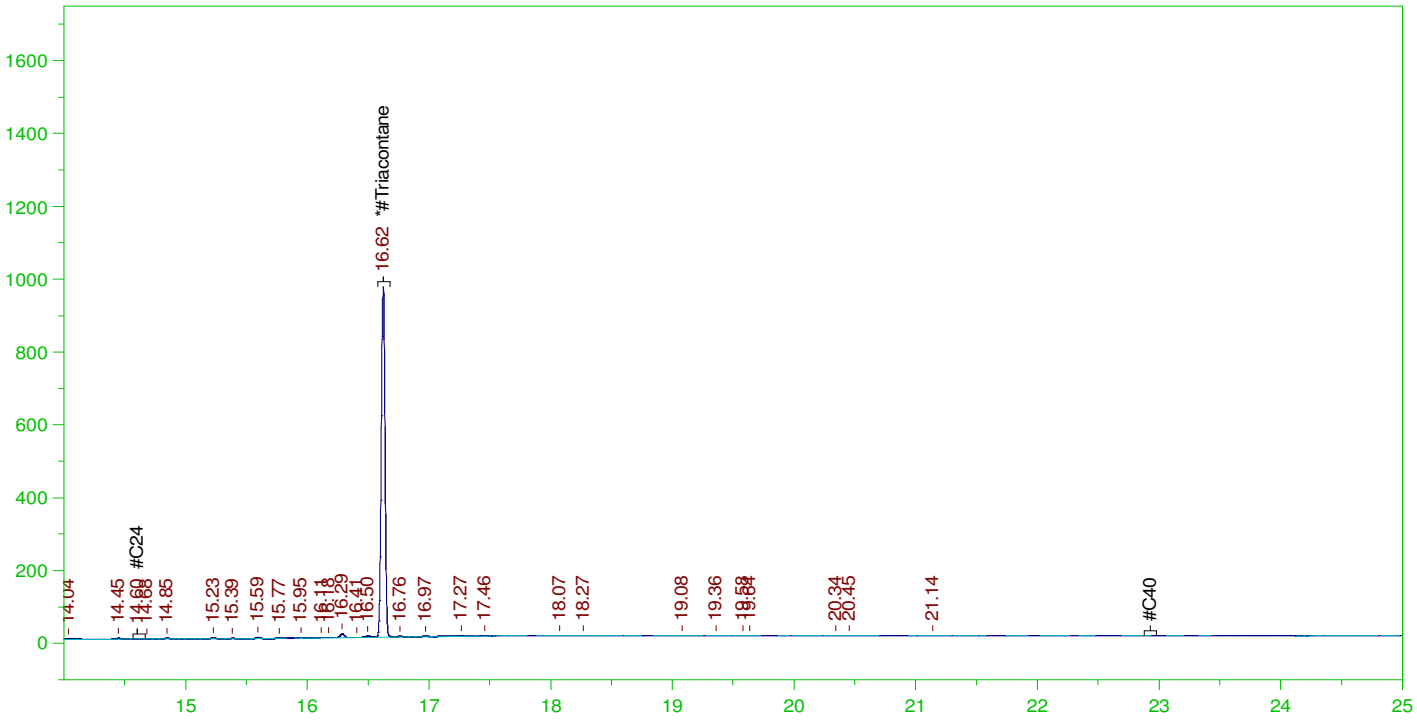
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.67

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.485	.192	.163	84.86	-
*1-Chlorooctadecane	13.322	.192	.	.03	-
*#Triacontane	16.624	.192	.078	40.64	-

DRO Area:207935.1 DRO Amount: 6.806787E-03
TEH Area:630277.4 TEH Amount: 2.063222E-02

ERH2610 (RHMW2254-01 Bailer) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0023.RAW B22030433-043C ;0311HP4 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-043C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0023.RAW
Date & Time Acquired: 3/12/2022 5:59:15 AM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AI-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AI-SAMPLE.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

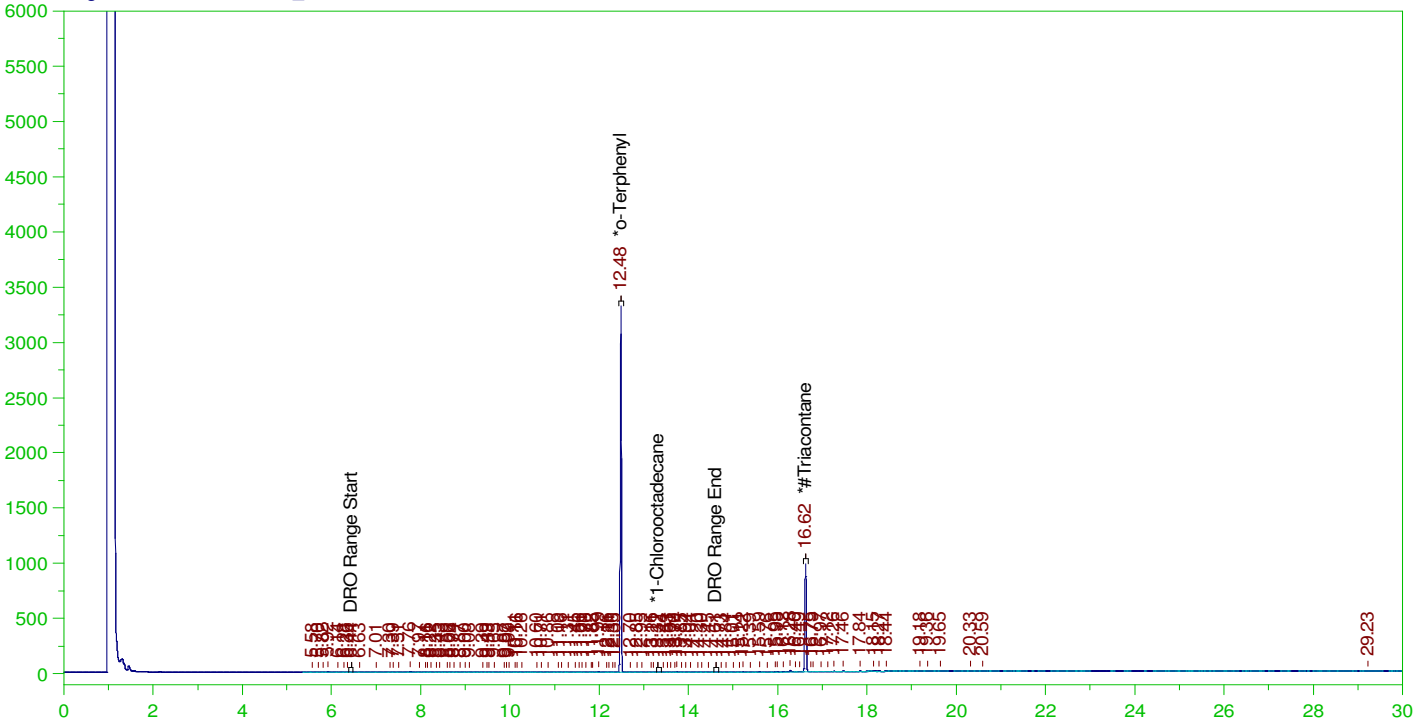
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.57 to 22.98

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.624	.481	.078	16.26	-

RRO Area:114165.4 RRO AMOUNT: 4.475189E-03

ERH2580 (RHMW05 m/MS/MSD volumes) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0009.RAW B22030433-053C ;0311HP4 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-053C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0009.RAW
Date & Time Acquired: 3/11/2022 7:27:01 PM
Method File: G:\Org\HP4\methods\DR_8015-C24T-OO-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102OO-C24-TRI.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

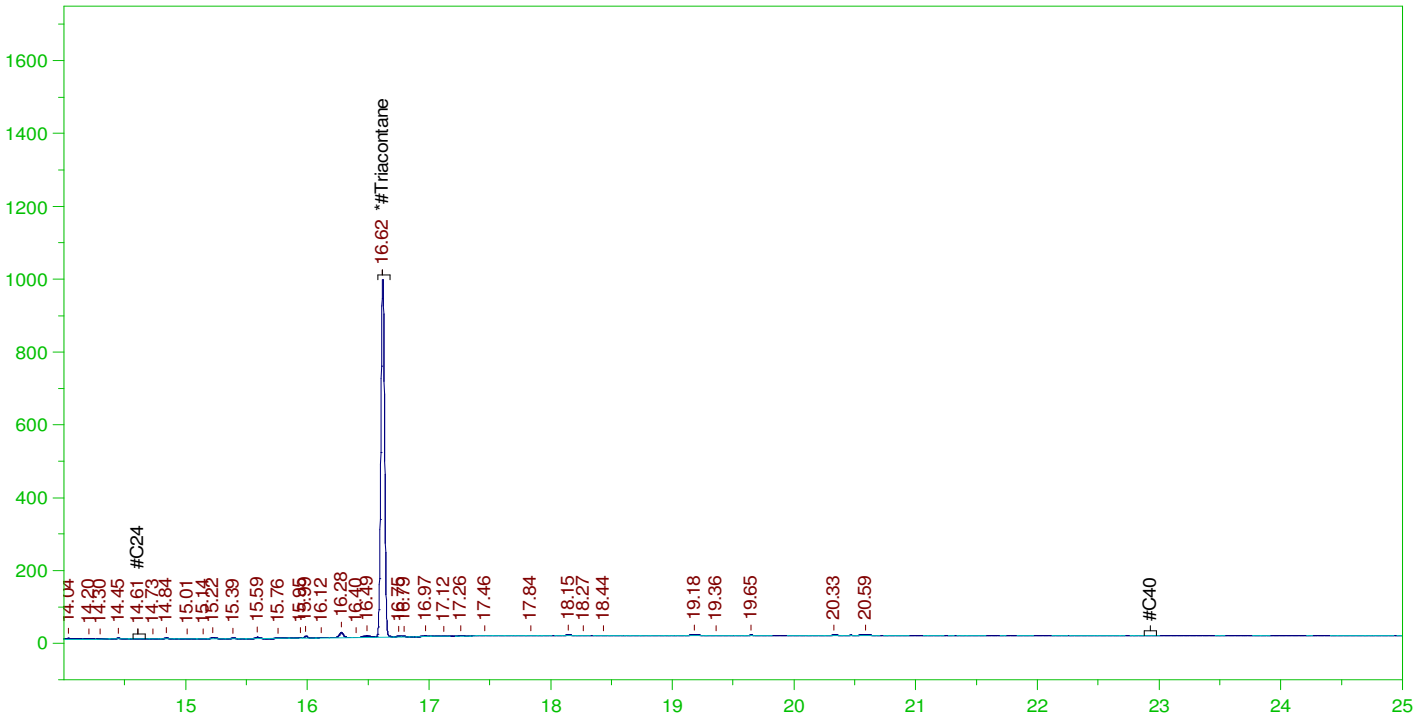
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.67

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.482	.192	.163	84.64	-
*1-Chlorooctadecane	13.321	.192	.	.03	-
*#Triacontane	16.62	.192	.079	41.21	-

DRO Area:213524.3 DRO Amount: 6.989747E-03
TEH Area:462647 TEH Amount: 1.514482E-02

ERH2580 (RHMW05 m/MS/MSD volumes) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0009.RAW B22030433-053C ;0311HP4 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-053C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0009.RAW
Date & Time Acquired: 3/11/2022 7:27:01 PM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AI-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AI-SAMPLE.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

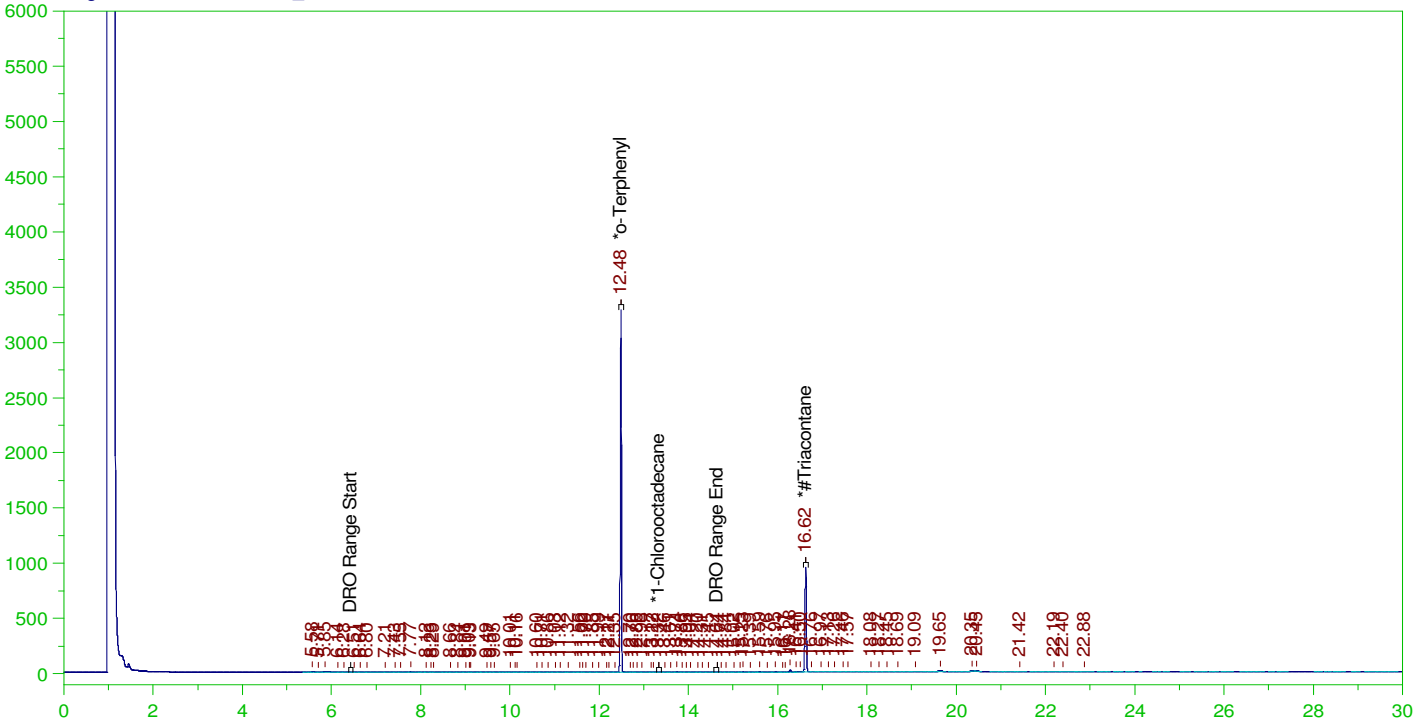
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.57 to 22.98

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.62	.481	.079	16.48	-

RRO Area:164760 RRO AMOUNT: 6.458456E-03

ERH2620 (OWDFMW04A) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0013.RAW B22030433-058C ;0311HP4 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-058C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0013.RAW
Date & Time Acquired: 3/11/2022 10:27:49 PM
Method File: G:\Org\HP4\methods\DR_8015-C24T-OO-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102OO-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

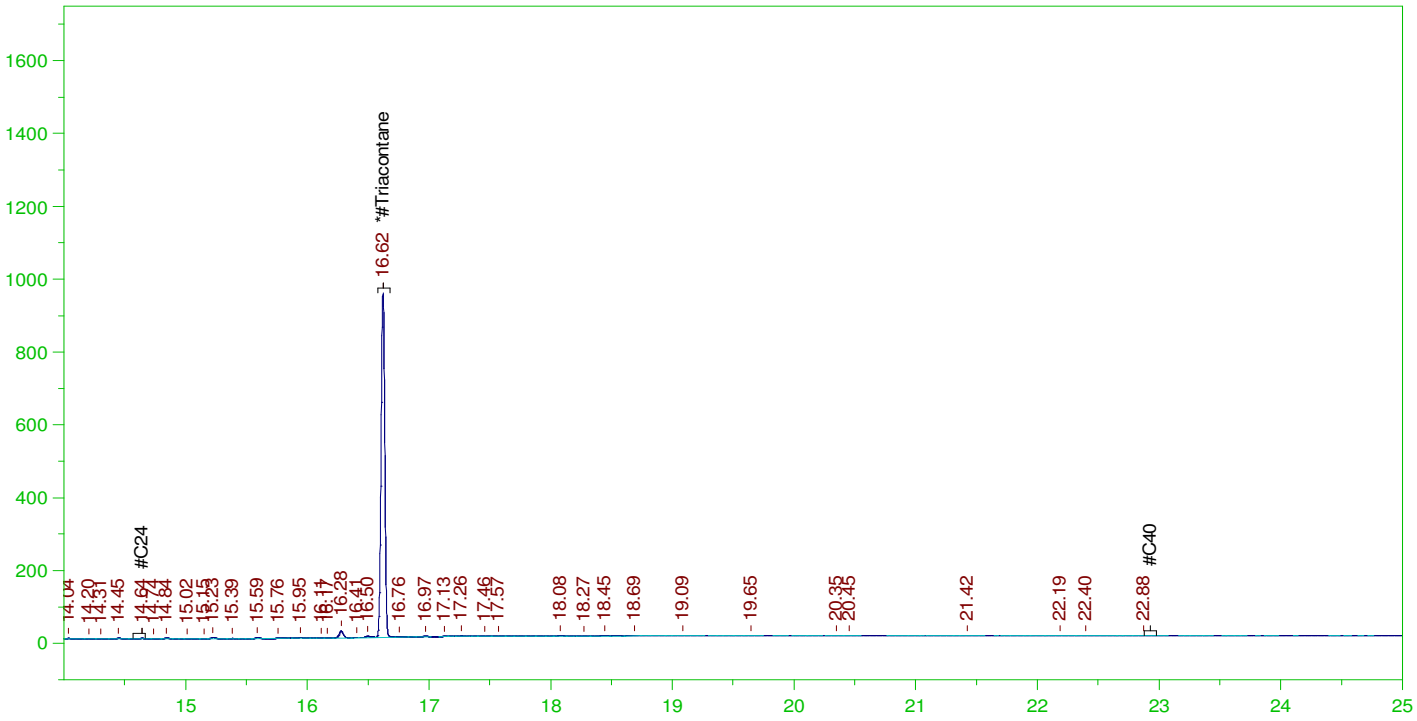
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.67

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.482	.19	.16	84.2	-
*1-Chlorooctadecane	13.324	.19	.	.04	-
*#Triacontane	16.622	.19	.075	39.51	-

DRO Area:173405.4 DRO Amount: 5.622388E-03
TEH Area:452699.6 TEH Amount: 1.467805E-02

ERH2620 (OWDFMW04A) Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0013.RAW B22030433-058C ;0311HP4 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-058C ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0013.RAW
Date & Time Acquired: 3/11/2022 10:27:49 PM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AI-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AI-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

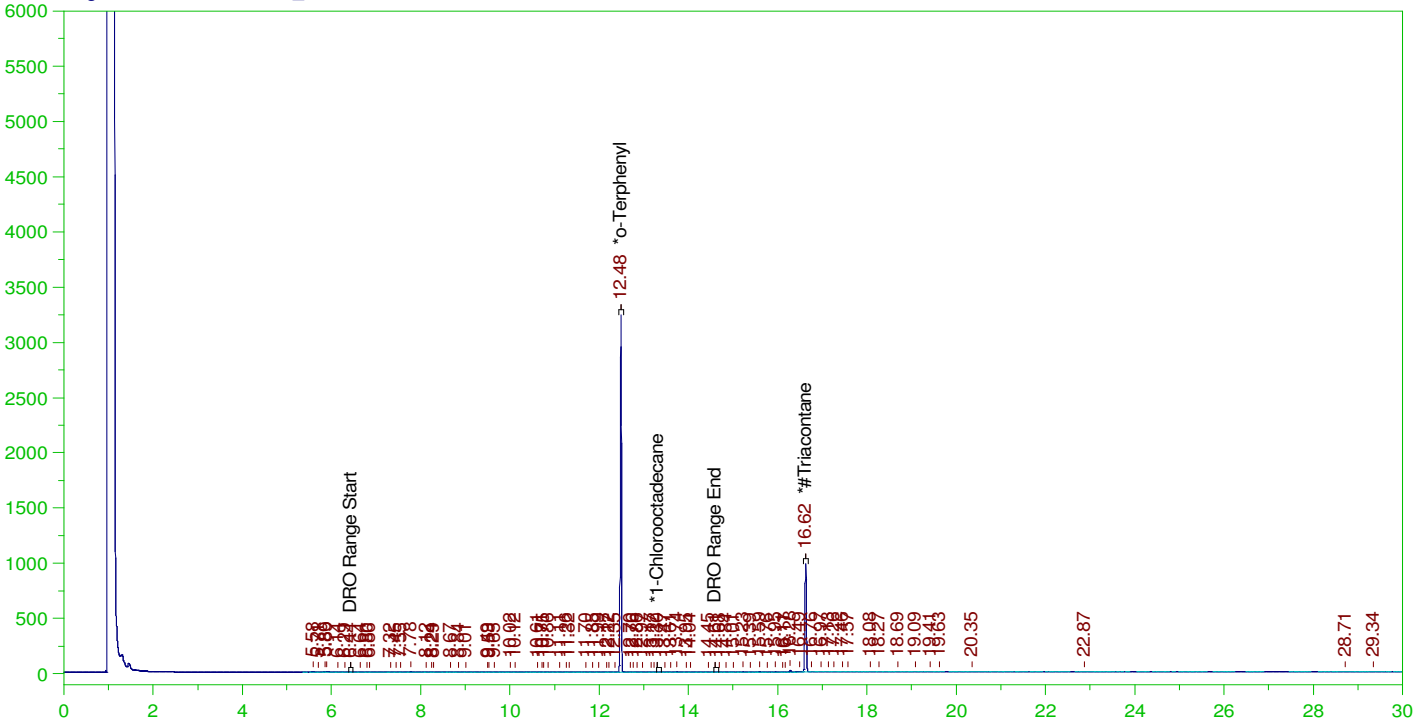
Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.57 to 22.98

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.622	.476	.075	15.8	-

RRO Area:137829.7 RRO AMOUNT: 5.351355E-03

ERH2676 (OWDFMW04A) FD Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0014.RAW B22030433-059A ;0311HP4 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22030433-059A ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0014.RAW
Date & Time Acquired: 3/11/2022 11:12:49 PM
Method File: G:\Org\HP4\methods\DR_8015-C24T-OO-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_DRO211102OO-C24-TRI.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

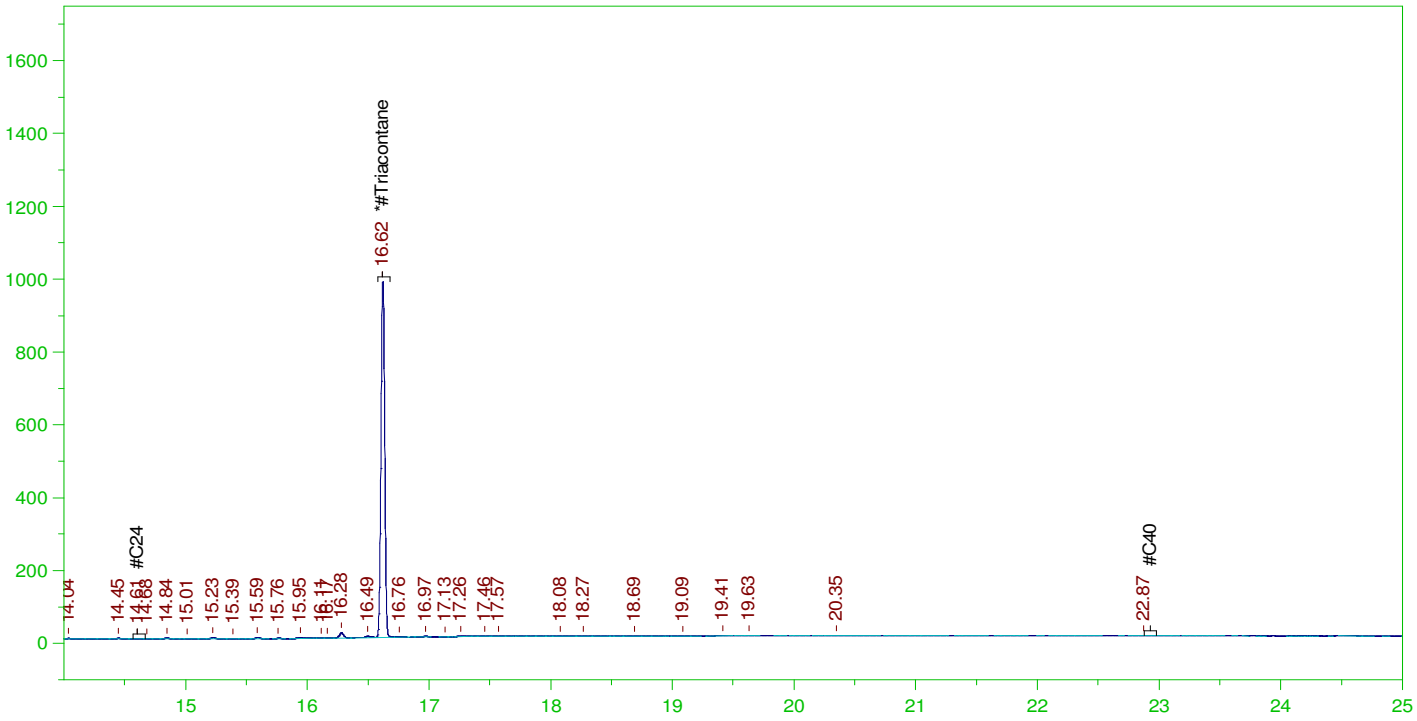
Mean RF for TEH: 29373.28
Rt range for Diesel Range Organics: 6.38 to 14.67

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.483	.19	.158	82.92	-
*1-Chlorooctadecane	13.297	.19	.	.05	-
*#Triacontane	16.621	.19	.078	41.19	-

DRO Area:152719 DRO Amount: 4.951665E-03
TEH Area:397547.1 TEH Amount: 1.288982E-02

ERH2676 (OWDFMW04A) FD Batch ID: 164312

G:\org\HP4\DAT\HP4031122_b\0311HP4.0014.RAW B22030433-059A ;0311HP4 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22030433-059A ;0311HP4 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP4\DAT\HP4031122_b\0311HP4.0014.RAW
Date & Time Acquired: 3/11/2022 11:12:49 PM
Method File: G:\Org\HP4\Methods\DR_ORO-S-AI-L%.met
Calibration File: G:\Org\HP4\Cals\SW8015C_ORO211007AI-SAMPLE.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56
Rt range for Residual Range Organics: 14.57 to 22.98

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.621	.476	.078	16.48	-

RRO Area:118045.5 RRO AMOUNT: 4.583218E-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

From: Larson, Cathy <Cathy.Larson@aecom.com>
Sent: Thursday, March 10, 2022 9:56 PM
To: Shari Endy; Ramos, Alethea
Subject: RE: [EXTERNAL] Samples received 3/5/2022

Yes, please proceed with analysis and narrate the issue.

Cathy

From: Shari Endy <sendy@energylab.com>
Sent: Thursday, March 10, 2022 9:19 AM
To: Ramos, Alethea <alethea.ramos@aecom.com>; Larson, Cathy <Cathy.Larson@aecom.com>
Subject: [EXTERNAL] Samples received 3/5/2022

CUI

For samples received 3/5/2022, assigned workorder number B22030433, the following issues occurred:

The following containers were received without preservative traceability: Sample ERH2618 (OWDFMW05A) for Gasoline Range Organics and Methane, Sample ERH2614 (Sump Audit 3) for 8011 and Sample ERH2602 (RHMW01R) for Methane.

Please verify if it is ok to proceed with analysis. Thank you.

Energy Laboratories, Inc.
Trust our People. Trust our Data.

Shari Endy | Sr. Project Manager | Billings, MT
O: 406-869-6253| sendy@energylab.com | www.energylab.com

***We want to help you ship successfully**! Please plan ahead and allow extra time to receive supplies from the lab and for the lab to receive your samples. All carriers are in full-swing holiday peak season operating with double the volume and limited capacity. We appreciate your business so please contact your local branch or Project Manager to discuss adjustments to your shipping schedule or to ask questions.*

CUI