



ANALYTICAL SUMMARY REPORT

B22032035-007	ERH2908 (Trip Blank) 14964	03/22/22 14:00	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-008	ERH2908 (Trip Blank) 14909	03/22/22 14:00	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-009	ERH2908 (Trip Blank) 14964	03/22/22 14:00	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-010	ERH2908 (Trip Blank) 14971	03/22/22 14:00	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22032035-011	ERH2920 (RHMW2254- 01 B)	03/24/22 13:00	03/26/2022	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
B22032035-012	ERH2919 (Trip Blank) 14964	03/24/22 13:00	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-013	ERH2919 (Trip Blank) 14909	03/24/22 13:00	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-014	ERH2919 (Trip Blank) 14964	03/24/22 13:00	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-015	ERH2919 (Trip Blank) 14971	03/24/22 13:00	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22032035-016	ERH2926 (SUMP ADIT 3)	03/24/22 15:05	03/26/2022	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
B22032035-017	ERH2925 (Trip Blank) 14964	03/24/22 15:05	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B



ANALYTICAL SUMMARY REPORT

B22032035-018	ERH2925 (Trip Blank) 14909	03/24/22 15:05	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-019	ERH2925 (Trip Blank) 14964	03/24/22 15:05	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-020	ERH2925 (Trip Blank) 14971	03/24/22 15:05	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22032035-021	ERH2923 (RHMW2254- 01 LF)	03/24/22 14:10	03/26/2022	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
B22032035-022	ERH2922 (Trip Blank) 14754	03/24/22 14:10	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-023	ERH2922 (Trip Blank) 14964	03/24/22 14:10	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-024	ERH2922 (Trip Blank) 14964	03/24/22 14:10	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-025	ERH2922 (Trip Blank) 14971	03/24/22 14:10	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22032035-026	ERH2872 (RHMW12A)	03/22/22 13:40	03/26/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction



ANALYTICAL SUMMARY REPORT

B22032035-027	ERH2873 (RHMW12A FD)	03/22/22 13:40	03/26/2022	Ground Water	DRO-Liquid-Liquid Extraction SW3520C 8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C Diesel Range Organics SW8015C
B22032035-028	ERH2871 (Trip Blank) 14964	03/22/22 13:40	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-029	ERH2871 (Trip Blank) 14964	03/22/22 13:40	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-030	ERH2871 (Trip Blank) 14754	03/22/22 13:40	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-031	ERH2871 (Trip Blank) 14971	03/22/22 13:40	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22032035-032	ERH2892 (RHMW16)	03/22/22 16:55	03/26/2022	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
B22032035-033	ERH2893 (RHMW16 FD)	03/22/22 16:55	03/26/2022	Ground Water	DRO-Liquid-Liquid Extraction SW3520C 8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C Diesel Range Organics SW8015C
B22032035-034	ERH2891 (Trip Blank) 14964	03/22/22 16:55	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-035	ERH2891 (Trip Blank) 14754	03/22/22 16:55	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-036	ERH2891 (Trip Blank) 14909	03/22/22 16:55	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-037	ERH2891 (Trip Blank) 14971	03/22/22 16:55	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M



ANALYTICAL SUMMARY REPORT

B22032035-038	ERH2929 (RHMW11-05)	03/22/22 16:45	03/26/2022	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
B22032035-039	ERH2928 (Trip Blank) 14754	03/22/22 16:45	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-040	ERH2928 (Trip Blank) 14964	03/22/22 16:45	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-041	ERH2928 (Trip Blank) 14964	03/22/22 16:45	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-042	ERH2928 (Trip Blank) 14895	03/22/22 16:45	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22032035-043	ERH2917 (RHMW04)	03/23/22 13:50	03/26/2022	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
B22032035-044	ERH2916 (Trip Blank) 14964	03/23/22 13:50	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-045	ERH2916 (Trip Blank) 14909	03/23/22 13:50	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-046	ERH2916 (Trip Blank) 14964	03/23/22 13:50	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-047	ERH2916 (Trip Blank) 14971	03/23/22 13:50	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M



ANALYTICAL SUMMARY REPORT

B22032035-048	ERH2900 (OWDFMW07A)	03/23/22 18:15	03/26/2022	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
B22032035-049	ERH2899 (Trip Blank) 14909	03/23/22 18:15	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-050	ERH2899 (Trip Blank) 14964	03/23/22 18:15	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-051	ERH2899 (Trip Blank) 14754	03/23/22 18:15	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-052	ERH2899 (Trip Blank) 14971	03/23/22 18:15	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22032035-053	ERH2914(OWDFMW01)	03/23/22 15:55	03/26/2022	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
B22032035-054	ERH2913 (Trip Blank) 14964	03/23/22 15:55	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-055	ERH2913 (Trip Blank) 14909	03/23/22 15:55	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-056	ERH2913 (Trip Blank) 14964	03/23/22 15:55	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-057	ERH2913 (Trip Blank) 14971	03/23/22 15:55	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M



ANALYTICAL SUMMARY REPORT

B22032035-058	ERH2897 (OWDFMW05A)	03/22/22 16:16	03/26/2022	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
B22032035-059	ERH2896 (Trip Blank) 14833	03/22/22 16:16	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-060	ERH2896 (Trip Blank) 14894	03/22/22 16:16	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-061	ERH2896 (Trip Blank) 14894	03/22/22 16:16	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-062	ERH2896 (Trip Blank) 14895	03/22/22 16:16	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22032035-063	ERH2903 (RHMW08)	03/23/22 15:30	03/26/2022	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
B22032035-064	ERH2902 (Trip Blank) 14754	03/23/22 15:30	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-065	ERH2902 (Trip Blank) 14964	03/23/22 15:30	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-066	ERH2902 (Trip Blank) 14964	03/23/22 15:30	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-067	ERH2902 (Trip Blank) 14971	03/23/22 15:30	03/26/2022	Trip Blank	Headspace Gas Analysis SW8015M



ANALYTICAL SUMMARY REPORT

B22032035-068	ERH2869(RHMW14-03)	03/22/22 13:05	03/26/2022	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
B22032035-069	ERH2868 (Trip Blank) 14894	03/22/22 13:05	03/26/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22032035-070	ERH2868 (Trip Blank) 14833	03/22/22 13:05	03/26/2022	Trip Blank	Gasoline Range Organics SW8015C
B22032035-071	ERH2868 (Trip Blank) 14833	03/22/22 13:05	03/26/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22032035-072	ERH2868 (Trip Blank) 14895	03/22/22 13:05	03/26/2022	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:



CLIENT: AECOM - Honolulu
Project: CV18F0126, 60571032.02.46.01
Work Order: B22032035

Report Date: 4/4/2022

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 SW060A associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, PO Box 247, Casper, WY, EPA Number WY00002.

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

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

Analysis Specific Comments:

An Analytical QC Exceptions Report has been attached, summarizing all qualified QC results. All quality control measures met criteria; therefore there were no analytical QC exceptions on this report.



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Chain of Custody & Analytical Request Record

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COC # 202203-77NOI

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 1800	
City, State, Zip	Honolulu, Hawaii 96813	
Email	alethea.ramos / margie.pascua@aecom.com	
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order
N/A	N/A	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	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	
Special Report/Format:	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> ONELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

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

Please proceed with analysis without sample traceability

Revised COC 3/29/22

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01		
Sampler Name	Sarah Walter	Sampler Phone	4789730576
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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., Cooper		

Matrix Codes	
A - Air	
W - Water	
S - Solids/Sediment	
V - Vegetation	
B - Biosessory	
O - Oil	
DW - Drinking Water	

Analysis Requested												
8280 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8015 TPH-g (40ml VOA w/HCL)	MSK175 Methane (40ml VOA w/H2SO4)	8011 EOB (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o +SGC (1-L AG w/H2SO4)	EPA 8020 Diss Lead (250ml HDPE w/HNO3) (field Filtered)	EPA 8060 TOC (250ml AG w/H3PO4)	EPA 8020 Total Lead (250ml HDPE w/HNO3)					
✓	✓	✓	✓	✓	✓	✓	✓					
✓	✓	✓	✓									

See Attached

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested													TAT	ELI LAB ID Laboratory Use Only
	Date	Time			8280 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8015 TPH-g (40ml VOA w/HCL)	MSK175 Methane (40ml VOA w/H2SO4)	8011 EOB (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o +SGC (1-L AG w/H2SO4)	EPA 8020 Diss Lead (250ml HDPE w/HNO3) (field Filtered)	EPA 8060 TOC (250ml AG w/H3PO4)	EPA 8020 Total Lead (250ml HDPE w/HNO3)							
1 ERH2906 (RHMW06)	3/23/22	0815	17	GW	✓	✓	✓	✓	✓	✓	✓	✓						X	BZ203203S-w1
2 ERH2905 (Trip Blank)	3/23/22	0800	8	WQ	✓	✓	✓	✓										X	
3																			
4																			
5																			
6																			
7																			
8																			
9																			

280 3/29/22

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	Retrieved by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Sarah Walter	3/23/22 1330	<i>[Signature]</i>	Loe Diemier	3/23/22 1335	<i>[Signature]</i>
	Retrieved by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
	Loe Diemier	3/29/22 1116	<i>[Signature]</i>	Richard Skelton	3/26/22 1014	<i>[Signature]</i>

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 (attach only)
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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 noted on your analytical report.



Trust our People Trust our Data

Chain of Custody & Analytical Request Record

COC # 202203-77NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM		
Contact	Alethea Ramos / Margie Pascua		
Phone	808-529-7283 / 808-356-5373		
Mailing Address	1001 Bishop St., Suite 1600		
City, State, Zip	Honolulu, Hawaii 96813		
Email	alethea.ramos / margie.pascua@aecom.com		
Receive Invoice	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order	
N/A	N/A	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	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	
Special Report/Formats	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other		

Comments

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

Please proceed with analysis without sample traceability

Project Information

Project Name, PWSID, Permit, etc	CV18F0126, 60571032 02.46.01		
Sampler Name	Sarah Welter	Sampler Phone	4789730576
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.			
Analysis	Subcontract Lab		
TOC	Energy Laboratories Inc., Casper		

Matrix Codes

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

Analysis Requested

8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Dis. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	See Attached
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					X

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested								RUSH TAT	ELI LAB ID (Laboratory Use Only)
	Date	Time			8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Dis. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		
1 ERH2906 (RHMW06)	3/23/22	0815	17	GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	B220 52035-001
2 ERH2905 (Trip Blank)	3/23/22	0800	8	WQ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					X	-002 (-003) (-004) (-005)
3 TB 8260 - 14964			3											-002
4 TB G180 - 14909			2											-03
5 TB 8011 - 14894			1											-004
6 TB Methane - 14987			2											-005
7 TJ 3/26/22														
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			
	Sarah Welter	3/23/22 1330	Sarah Welter	Margie Pascua	3-23-22/1335	Margie Pascua			
	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature			
	Margie Pascua	3/24/22 1116	Margie Pascua	Richard Slater	3/26/22 10:40 AM	Richard Slater			
LABORATORY USE ONLY									
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount \$	Receipt Number (cash/check only)
				0 °C					

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



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Chain of Custody & Analytical Request Record

COC # 202203-78NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM		
Contact	Alethea Ramos / Margie Pascua		
Phone	808-529-7283 / 808-356-5373		
Mailing Address	1001 Bishop St., Suite 1600		
City, State, Zip	Honolulu, Hawaii 96813		
Email	alethea.ramos / margie.pascua@aecom.com		
Receive Invoice	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	Receive Report
Purchase Order	Quote	Bottle Order	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
N/A	N/A	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	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	
Special Report/Formats	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other		

Comments

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

Please proceed with analysis without sample traceability

Project Information

Project Name, PWSID, Permit, etc	CV18F0126, 60571032.02.46.01		
Sampler Name	AY, CW, TB, RST	Sampler Phone	402.671.5712
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.			
Analysis	Subcontract Lab		
TOC	Energy Laboratories Inc., Casper		

Matrix Codes

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

Analysis Requested

	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	9015 TPH-g [40ml VOA w/HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/9015 TPH-d/o + SGC [1-L AG w/H2SO4]	EPA 6020 Des. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	See Attached
1	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	✓	✓	✓	✓					✓
3									
4									
5									
6									
7									
8									
9									

All turnaround times are standard unless marked as RUSH

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

Sample Identification (Name, Location, Interval, etc.)	Collection		Number of Containers	Matrix (See Codes Above)	Analysis Requested									RUSH TAT	ELI LAB ID Laboratory Use Only
	Date	Time			8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	9015 TPH-g [40ml VOA w/HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/9015 TPH-d/o + SGC [1-L AG w/H2SO4]	EPA 6020 Des. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]			
1 ERH2909 (RHMW13-05)	03/23/22	1000	17	GW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	B22032035-006
2 ERH2908 (Trip Blank)	03/23/22	0450	8	WQ	✓	✓	✓	✓						✓	-007/-008/-009/-010
3 TB 8260 - 14964			2												-007
4 TB GRU - 14909			2												-008
5 TB 8011 - 14964			2												-009
6 TB Methane - 14971			2												-010
7 TJ 3/26/22															
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			
	Miranda DeBorne	03/23/22 8:23	[Signature]	Richard Shult	3/26/22 10:40	[Signature]			
LABORATORY USE ONLY									
Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
		Y N C B	Y N	03 °C	Y N	Y N	CC Cash Check	\$	

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



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Chain of Custody & Analytical Request Record

COC # 202203-81NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM	
Contact	Alethea Ramos / Margie Pascua	
Phone	808-529-7283 / 808-356-5373	
Mailing Address	1001 Bishop St., Suite 1600	
City, State, Zip	Honolulu, Hawaii 96813	
Email	alethea.ramos / margie.pascua@aecom.com	
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order
N/A	N/A	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	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	
Special Report/Formats	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

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

Please proceed with analysis without sample traceability

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01		
Sampler Name	Matthew Tim	Sampler Phone	808-349-4738
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analysis as indicated.			
Analysis	Subcontract Lab		
TOC	Energy Laboratories Inc., Casper		

Matrix Codes

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

Analysis Requested

8260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8015 TPH-g (40ml VOA w/ HCL)	RSK175 Methane (40ml VOA w/H2SO4)	8011 ED8 (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Diss. Lead (250ml HDPE w/HNO3) (field Filtered)	EPA 8060 TOC (250ml AG w/ H3PO4)	EPA 8020 Total Lead (250ml HDPE w/HNO3)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

See Attached

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested								See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
	Date	Time			8260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8015 TPH-g (40ml VOA w/ HCL)	RSK175 Methane (40ml VOA w/H2SO4)	8011 ED8 (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Diss. Lead (250ml HDPE w/HNO3) (field Filtered)	EPA 8060 TOC (250ml AG w/ H3PO4)	EPA 8020 Total Lead (250ml HDPE w/HNO3)			
1 ERH2920 (RHMW2254-01 B)	3/24/22	0700	17	GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		X	B22032035011
2 ERH2919 (Trip Blank)	3/24/22	0855	8	WQ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						X	-02/-013/-014/-015
3 TB 8260 - 14964			2												-012
4 TB GRO - 14909			2												-013
5 TB 8011 - 14964			2												-014
6 TB Methane - 14971			2												-015
7 TJ3/26/22															
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			
	Matthew Tim	3/24/22 1240	Matthew Tim	Col Diernie	3/24/22 1240	Col Diernie			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature			
	Col Diernie	3/24/22 1320	Col Diernie	Richard Stulu	3/26/22 1040	Richard Stulu			
LABORATORY USE ONLY									
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 03 °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.



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Chain of Custody & Analytical Request Record

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COC # 202203-83NOI

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	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order	
N/A	N/A	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	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email		
Special Report/Formats	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other		

Comments

1. Project performed under DoD QSM.
 2. TPH-d/o needs 3520 extraction.
 3. Preliminary data (or Level II) in 7 business days.
 4. Note: NOI log is separate from other COC's.
- Please proceed with analysis without sample traceability**

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01		
Sampler Name	Matthew Yin	Sampler Phone	808.349.4738
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.			
Analysis	Subcontract Lab		
TOC	Energy Laboratories Inc., Casper		

Matrix Codes

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

Analysis Requested

- 8260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)
- 8015 TPH-g (40ml VOA w/HCL)
- RSK175 Methane (40ml VOA w/H2SO4)
- 8011 EDB (40ml VOA w/HCL)
- EPA 3630/8015 TPH-d/o + SGC (1-L AG w/H2SO4)
- EPA 8020 Des. Lead (250ml HDPE w/HNO3) (field Filtered)
- EPA 9080 TOC (250ml AG w/H2PO4)
- EPA 6020 Total Lead (250ml HDPE w/HNO3)

See Attached

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested								See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only	
	Date	Time			8260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8015 TPH-g (40ml VOA w/HCL)	RSK175 Methane (40ml VOA w/H2SO4)	8011 EDB (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o + SGC (1-L AG w/H2SO4)	EPA 8020 Des. Lead (250ml HDPE w/HNO3) (field Filtered)	EPA 9080 TOC (250ml AG w/H2PO4)	EPA 6020 Total Lead (250ml HDPE w/HNO3)				
1 ERH2926 (SUMP ADIT 3)	3/24/22	1105	17	GW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1322032035-dk
2 ERH2925 (Trip Blank)	3/24/22	1100	8	WQ	✓	✓	✓	✓								-07/-08/-09/-20
3 TB 8260 - 14904			2													-017
4 TB 610 - 14909			2													-018
5 TB 8011 - 14904			2													-019
6 TB Methane - 14971			2													-020
7 TJ 3126122																
8																
9																

03/24

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)	Matthew Yin	Date/Time	3/24/22 12:40	Signature	Matthew Yin	Received by (print)	Taylor White	Date/Time	3/24/22 12:40	Signature	Taylor White
	Relinquished by (print)	Taylor White	Date/Time	3/24/22 13:30	Signature	Taylor White	Received by Laboratory (print)	Richard Stoltz	Date/Time	3/24/22 10:46	Signature	Richard Stoltz
LABORATORY USE ONLY												
Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)			
		Y N C B	Y N	0.6 °C	Y N	Y N	CC Cash Check	\$				

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



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Chain of Custody & Analytical Request Record

COC # 202203-82NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM	
Contact	Alethea Ramos / Margie Pascua	
Phone	808-529-7283 / 808-356-5373	
Mailing Address	1001 Bishop St., Suite 1600	
City, State, Zip	Honolulu, Hawaii 96813	
Email	alethea.ramos / margie.pascua@aecom.com	
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order
N/A	N/A	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	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	
Special Report/Formats	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

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

Please proceed with analysis without sample traceability

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01		
Sampler Name	Matthew Yin	Sampler Phone	808.286.3840
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.			
Analysis	Subcontract Lab		
TOC	Energy Laboratories Inc., Casper		

Matrix Codes

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

Analysis Requested

8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3030/8015 TPH-d/o + SGC [1-L AG w/H2SO4]	EPA 6020 Des. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9080 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]
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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		Number of Containers	Matrix (See Codes Above)	Analysis Requested								See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
	Date	Time			8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3030/8015 TPH-d/o + SGC [1-L AG w/H2SO4]	EPA 6020 Des. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9080 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]			
1 ERH2923 (RHMW2254-01 LF)	3/24/22	1010	17	GW	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	B22032035021
2 ERH2922 (Trip Blank)	3/24/22	0955	8	WQ	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	-022 -023 -024 -025
3 TB 8260 - 14754															-022
4 TB GRO - 14964															-023
5 TB 8011 - 14964															-024
6 TB Methane - 14971															-025
7 TJ 3/26/22					03/24 TW										
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			
	Matthew Yin	3/24/22 1240	Matthew Yin	Taylor White	03/24/22 19:40	Taylor White			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature			
	Taylor White	03/24/22 13:30	Taylor White	Richard Skala	3/26/22 10:40	Richard Skala			
LABORATORY USE ONLY									
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 0.7°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.



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-67NOI

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DoD Samples Page 1 of 1

Account Information (Billing Information)

Company Name	AECOM	
Contact	Alethea Ramos / Margie Pascua	
Phone	808-528-7283 / 808-356-5373	
Mailing Address	1001 Bishop St., Suite 1800	
City, State, Zip	Honolulu, Hawaii 96813	
Email	alethea.ramos / margie.pascua@aecom.com	
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order
N/A	N/A	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	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	
Special Report Format	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> INELAC <input checked="" type="checkbox"/> EDOYEDT (contact laboratory) <input type="checkbox"/> Other	

Comments

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

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01		
Sampler Name	Gene Mun	Sampler Phone	808 957-3201
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.			
Analyte	Subcontract Lab		
TOC	Energy Laboratories Inc. Cary		

Matrix Codes

- A - Air
- W - Water
- S - Solids
- V - Vegetation
- B - Biosolids
- O - Oil
- DW - Drinking Water

Analysis Requested

Analysis Requested	2280 VOC's (Full Suite) + DCA* (40ml VOA w/ICL)	815 TPH-g (40ml VOA w/HCL)	RM175 Methane (40ml VOA w/H2SO4)	8011 EDB (40ml VOA w/HCL)	EPA 3530/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Des. Lead (250ml HOPE w/HNO3) (field Fluores)	EPA 8080 TOC (250ml AG w/HOPO4)	EPA 8020 Total Lead (250ml HOPE w/HNO3)	See Attached
1 ERH2872 (RHMW12A)	✓	✓	✓	✓	✓	✓	✓	✓	X
2 ERH2871 (Trip Blank)	✓	✓	✓	✓					X
3 ERH2873 (RHMW12A FD)	✓	✓			✓				X
4 TB 8260 14964									
5 TB 6100 14964									
6 TB 3011 14754									
7 TB Methane 14977									
8									
9									

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

Sample Identification (Name, Location, Interval, etc.)	Collection		Number of Containers	Matrix (See Codes Above)	Analysis Requested									See Attached	ELI LAB ID Laboratory Use Only
	Date	Time			2280 VOC's (Full Suite) + DCA* (40ml VOA w/ICL)	815 TPH-g (40ml VOA w/HCL)	RM175 Methane (40ml VOA w/H2SO4)	8011 EDB (40ml VOA w/HCL)	EPA 3530/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Des. Lead (250ml HOPE w/HNO3) (field Fluores)	EPA 8080 TOC (250ml AG w/HOPO4)	EPA 8020 Total Lead (250ml HOPE w/HNO3)			
1 ERH2872 (RHMW12A)	03/22/22	08:45	17	GW	✓	✓	✓	✓	✓	✓	✓	✓	X	52205635-026	
2 ERH2871 (Trip Blank)	03/22/22	08:30	8	WQ	✓	✓	✓	✓					X	-0281-029-030-031	
3 ERH2873 (RHMW12A FD)	03/22/22	04:45	8	GW	✓	✓			✓				X	-027	
4 TB 8260 14964			2											-028	
5 TB 6100 14964			2											-029	
6 TB 3011 14754			2											-030	
7 TB Methane 14977			2											-031	
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	Retrieved by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Retrieved by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
	Gene Mun	03/22/22 1606	[Signature]	Kickal Skule	3/22/22	[Signature]

Shipped By	cooler ID(s)	Custody Seal	Insect	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
		Y N C B	Y N	1.1 °C	Y N	Y N	CC Cash Check	\$	

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



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Chain of Custody & Analytical Request Record

COC # 202203-72NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM		
Contact	Alethea Ramos / Margie Pascua		
Phone	808-529-7283 / 808-356-5373		
Mailing Address	1001 Bishop St., Suite 1600		
City State Zip	Honolulu, Hawaii 96813		
Email	alethea.ramos / margie.pascua@aecom.com		
Receive Invoice	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	Receive Report
Purchase Order	Quote	Bottle Order	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
N/A	N/A	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	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	
Special Report/Formats			
<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other			

Comments

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

Project Information

Project Name, PWSID, Permit, etc	CV18F0126, 60571032.02.46.01		
Sampler Name	Gavin Mura	Sampler Phone	808 987-3201
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.			
Analysis	Subcontract Lab		
TOC	Energy Laboratories Inc., Casper		

Matrix Codes

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

Analysis Requested

8260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8013 TPH-g (40ml VOA w/HCL)	RSK175 Methane (40ml VOA w/H2SO4)	8011 EDB (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Dis. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 8060 TOC [250ml AG w/H3PO4]	EPA 8020 Total Lead [250ml HDPE w/HNO3]	See Attached
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested								See Attached	ELI LAB ID Laboratory Use Only
	Date	Time			8260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8013 TPH-g (40ml VOA w/HCL)	RSK175 Methane (40ml VOA w/H2SO4)	8011 EDB (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Dis. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 8060 TOC [250ml AG w/H3PO4]	EPA 8020 Total Lead [250ml HDPE w/HNO3]		
1 ERH2892 (RHMW16)	05/22/22	1255	17	GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	B27032035-032
2 ERH2891 (Trip Blank)	05/22/22	1150	8	WQ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	033-034-035-034-037
3 ERH2893 (RHMW16 FD)	05/22/22	1255	8	GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	034-035-036-037-033
4 TB 826-14964			2											-034
5 TB 620-14754			2											-035
6 TB 8011-14909			2											-036
7 TB Methane-14971	05/24		2											-037
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	05/24/22	[Signature]	Richard Skulu	5/26/22 10:10 AM	[Signature]			
LABORATORY USE ONLY									
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 1.1 °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.



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Chain of Custody & Analytical Request Record

COC # 202203-74NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM	
Contact	Alethea Ramos / Margie Pascua	
Phone	808-529-7283 / 808-356-5373	
Mailing Address	1001 Bishop St., Suite 1600	
City, State, Zip	Honolulu, Hawaii 96813	
Email	alethea.ramos / margie.pascua@aecom.com	
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order
N/A	N/A	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	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	
Special Report/Formats:	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

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

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032 02.46.01		
Sampler Name	SW, CW, AY, CL	Sampler Phone	478.973.0578
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 - Bios assay
- O - Oil
- DW - Drinking Water

Analysis Requested

8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	9015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	9011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Diss Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 8060 TOC [250ml AG w/ H3PO4]	EPA 8020 Total Lead [250ml HDPE w/HNO3]
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

See Attached

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested								See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
	Date	Time			8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	9015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	9011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Diss Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 8060 TOC [250ml AG w/ H3PO4]	EPA 8020 Total Lead [250ml HDPE w/HNO3]			
1 ERH2929 (RHMW11-05)	03/22/22	1245	17	GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		X	B22052035-038
2 ERH2928 (Trip Blank)	03/22/22	1235	8	WQ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						X	-039 -040 -041 -042
3 TB 8260 - 14754			2												-039
4 TB CRO - 14964			2												-040
5 CW TB 8011 - 14964			2												-041
6 03/24/22 TB Methane - 14895			2												-042
7 TJ 3/26/22															
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			
	CARA LM	03/22/22 1600	[Signature]	Maggie Nutter	3/22/22 1615	[Signature]			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature			
	W. [Signature]	03/24/22 1600	CARA LM	Richard Stoltz	3/24/22 1040	[Signature]			
LABORATORY USE ONLY									
Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
		Y N C B	Y N	06 °C	Y N	Y N	CC Cash Check	\$	

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



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Chain of Custody & Analytical Request Record

COC # 202203-80NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM				
Contact	Alethea Ramos / Margie Pascua				
Phone	808-529-7283 / 808-356-5373				
Mailing Address	1001 Bishop St., Suite 1600				
City, State, Zip	Honolulu, Hawaii 96813				
Email	alethea.ramos / margie.pascua@aecom.com				
Receive Invoice	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	Receive Report	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order			
N/A	N/A	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	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email		
Special Report/Formats				
<input checked="" type="checkbox"/> LEVEL IV	<input type="checkbox"/> NELAC	<input checked="" type="checkbox"/> EDD/EDT (contact laboratory)	<input type="checkbox"/> Other	

Comments

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

Please proceed with analysis without sample traceability

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01		
Sampler Name	Sarah Wilkey	Sampler Phone	478 4730576
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.			
Analysis	Subcontract Lab		
TOC	Energy Laboratories Inc., Casper		

Matrix Codes

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

Analysis Requested

8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 ED6 [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Diss Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	See Attached
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested								See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
	Date	Time			8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 ED6 [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Diss Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]			
1 ERH2917 (RHMW04)	3/23/22	0950	17	GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	B22032035-043
2 ERH2916 (Trip Blank)	3/23/22	0945	8	WQ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	-044/-045/-046/-047
3 TB 8260 - 149104			2												-044
4 TB 6120 - 14909			2												-045
5 TB 8011 - 14904			2												-046
6 TB Methane - 14971			2												-047
7 T13/24/22															
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			
	Sarah Wilkey	3/23/22 1330	Sarah Wilkey	Clara Lin	3/23/22 1330	Clara Lin			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature			
	Richard St. Leger	3/24/22 1134	Richard St. Leger	Richard St. Leger	3/24/22 1040	Richard St. Leger			
LABORATORY USE ONLY									
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 0.6 °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.



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-75NOI

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	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	Receive Report
Purchase Order	Quote	Bottle Order	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
N/A	N/A	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	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	
Special Report/Format:	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other		

Comments

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

Please proceed with analysis without sample traceability

Project Information

Project Name, PWSID, Permit, etc	CV18F0126, 60571032.02.46.01		
Sampler Name	Crstan Perez	Sampler Phone	(909) 6375608
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.			
Analysis	Subcontract Lab	TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

Analysis Requested

8260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8015 TPH-g (40ml VOA w HCL)	RSK175 Methane (40ml VOA w/H2SO4)	8011 EDB (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Des Lead (250ml HDPE w/HNO3) (field Filtered)	EPA 9060 TOC (250ml AG w/ H3PO4)	EPA 6020 Total Lead (250ml HDPE w/HNO3)
✓	✓	✓	✓	✓	✓	✓	✓

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested								See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
	Date	Time			8260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8015 TPH-g (40ml VOA w HCL)	RSK175 Methane (40ml VOA w/H2SO4)	8011 EDB (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Des Lead (250ml HDPE w/HNO3) (field Filtered)	EPA 9060 TOC (250ml AG w/ H3PO4)	EPA 6020 Total Lead (250ml HDPE w/HNO3)			
1 ERH2900 (OWDFMW07A)	3/23/22	1415	17	GW	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	B2203203S-048
2 ERH2899 (Trip Blank)	3/23/22	1410	8	WQ	✓	✓	✓	✓						X	-049-054-051-052
3															
4															
5															
6		3/23/22													
7															
8															
9															

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature

LABORATORY USE ONLY

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

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



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Chain of Custody & Analytical Request Record

COC # 202203-79NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM	
Contact	Alethea Ramos / Margie Pascua	
Phone	808-529-7283 / 808-356-5373	
Mailing Address	1001 Bishop St., Suite 1600	
City, State, Zip	Honolulu, Hawaii 96813	
Email	alethea.amos / margie.pascua@aecom.com	
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order
N/A	N/A	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	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	
Special Report/Format	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> ONELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

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

Please proceed with analysis without sample traceability

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032 02.46.01		
Sampler Name	Gav.n, Mura	Sampler Phone	808.987.320
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analysis as indicated.			
Analysis	Subcontract Lab		
TOC	Energy Laboratories Inc., Casper		

Matrix Codes

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

Analysis Requested

8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o + SGC [1-L AG w/H2SO4]	EPA 8020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	See Attached
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested								RUSH TAT	ELI LAB ID Laboratory Use Only
	Date	Time			8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o + SGC [1-L AG w/H2SO4]	EPA 8020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		
1 ERH2914 (OWDFMW01)	03/23/22	1155	17	GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	BZZ032035-053
2 ERH2913 (Trip Blank)	03/23/22	0900	8	WQ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	-054/-055/-056/-057
3														
4 TB 8260-14964			2											-054
5 TB 620-14964			2											-055
6 TB 8011-14964	3/24/22		2											-056
7 TB Methane-149720	3/24/22		2	NA										-057
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			
	Gav.n Mura	03/23/22 1600	[Signature]	Mura Un	3/23/22 1600	[Signature]			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature			
	Zoe Bernia	3/24/22 1100	[Signature]	Richard Skulu	3/26/22 1640	[Signature]			
LABORATORY USE ONLY									
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 0.0 °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount \$	Receipt Number (cash/check only)

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



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-73NOI

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DoD Samples Page 1 of 1

Account Information (Billing Information)

Company Name	AECOM	
Contact	Alethea Ramos / Margie Pascua	
Phone	808-529-7283 / 808-356-5373	
Mailing Address	1001 Bishop St., Suite 1600	
City, State, Zip	Honolulu, Hawaii 96813	
Email	alethea.ramos / margie.pascua@aecom.com	
Receive Invoices	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order
N/A	N/A	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	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	
Special Report/Forms:	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> INELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

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

Revised COC 3/25/22

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01	
Sampler Name	<i>Eym Shilmon</i>	Sampler Phone <i>808 575 6607</i>
Sample Origin State	Hawaii	EPA/State Compliance <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.		
Analysts	Subcontract Lab	
TOC	Energy Laboratories Inc. Copper	

Matrix Codes

- A- Air
- W- Water
- S- Solids
- V- Vegetation
- B- Biosolids
- O- Oil
- DW- Drinking Water

Analysis Requested

Analysis Requested	See Attached
8260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	
8013 TPH-g (40ml VOA w HCL)	
R6K175 Methane (40ml VOA w/H2SO4)	
8011 EDB (40ml VOA w/HCL)	
EPA 3630/8015 TPH-d/o +SGC (1-L AG w/H2SO4)	
EPA 8020 Diss Lead (250ml HDPE w/HNO3) (field Filtered)	
EPA 8080 TOC (250ml AG w H2PO4)	
EPA 8020 Total Lead (250ml HDPE w/HNO3)	

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested							See Attached	ELI LAB ID Laboratory Use Only	
	Date	Time			8260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8013 TPH-g (40ml VOA w HCL)	R6K175 Methane (40ml VOA w/H2SO4)	8011 EDB (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o +SGC (1-L AG w/H2SO4)	EPA 8020 Diss Lead (250ml HDPE w/HNO3) (field Filtered)	EPA 8080 TOC (250ml AG w H2PO4)			EPA 8020 Total Lead (250ml HDPE w/HNO3)
1 ERH2897 (OWDFMW05A)	3/22/22	1216	17	GW	✓	✓	✓	✓	✓	✓	✓	✓	X	B22032035-058
2 ERH2896 (Trip Blank)	↓	1215	8	WQ	✓	✓	✓	✓					X	
3														
4														
5														
6														
7														
8														
9														

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

Custody Record MUST be signed	Requested by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature			
	<i>Eym Shilmon</i>	<i>3/24/22 12:02</i>	<i>[Signature]</i>	<i>Alex Edwards</i>	<i>3/24/22 11:41</i>	<i>[Signature]</i>			
	Requested by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature			
	<i>Taylor White</i>	<i>03/24/22 10:00</i>	<i>[Signature]</i>	<i>Kichael Sulu</i>	<i>3/26/22 10:46</i>	<i>[Signature]</i>			
LABORATORY USE ONLY									
Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
		Y N C B	Y N	°C	Y N	Y N	CC Cash Check	\$	

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 noted on your analytical report.



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Chain of Custody & Analytical Request Record

COC # 202203-73NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM		
Contact	Alethea Ramos / Margie Pascua		
Phone	808-529-7283 / 808-356-5373		
Mailing Address	1001 Bishop St., Suite 1600		
City, State, Zip	Honolulu, Hawaii 96813		
Email	alethea.ramos / margie.pascua@aecom.com		
Receive Invoice	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	Receive Report
Purchase Order	Quote	Bottle Order	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
N/A	N/A	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	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	
Special Report/Formats	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other		

Comments

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

Project Information

Project Name, PWSID, Permit, etc	CV18F0126, 60571032 02.46.01		
Sampler Name	<i>Ryan Shinnick</i>	Sampler Phone	<i>808-393-6607</i>
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.			
Analysis	Subcontract Lab		
TOC	Energy Laboratories Inc., Casper		

Matrix Codes

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

Analysis Requested

	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 ED8 [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Dies Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 8060 TOC [250ml AG w/H3PO4]	EPA 8020 Total Lead [250ml HDPE w/HNO3]	See Attached
1	✓	✓	✓	✓	✓	✓	✓	✓	X
2	✓	✓	✓	✓					X
3									
4									
5									
6									
7									
8									
9									

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

Sample Identification (Name, Location, Interval, etc.)	Collection		Number of Containers	Matrix (See Codes Above)	Analysis Requested									See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
	Date	Time			8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 ED8 [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Dies Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 8060 TOC [250ml AG w/H3PO4]	EPA 8020 Total Lead [250ml HDPE w/HNO3]				
1 ERH2897 (OWDFMW05A)			17	GW	✓	✓	✓	✓	✓	✓	✓	✓		X	B22032035-058	
2 ERH2896 (Trip Blank)			8	WQ	✓	✓	✓	✓						X	-059/-060-061-062	
3 TB 8260 - 14833															-059	
4 TB GRO - 14894															-060	
5 TB 8011 - 14894															-061	
6 TB Methane - 14895															-062	
7																
8																
9																

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

Custody Record MUST be signed	Reinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	<i>Ryan Shinnick</i>	<i>3/22/22 1200</i>	<i>[Signature]</i>	<i>Alex Edwards</i>	<i>3/22/22 1600</i>	<i>[Signature]</i>
	Reinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
	<i>Taylor White</i>	<i>03/24/22 1700</i>	<i>[Signature]</i>	<i>Richard Skulu</i>	<i>3/26/22 1040</i>	<i>[Signature]</i>

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 10 °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount \$	Receipt Number (cash/check only)
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In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.



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Chain of Custody & Analytical Request Record

COC # 202203-76NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM	
Contact	Alethea Ramos / Margie Pascua	
Phone	808-529-7283 / 808-356-5373	
Mailing Address	1001 Bishop St., Suite 1600	
City State, Zip	Honolulu, Hawaii 96813	
Email	alethea.amos / margie.pascua@aecom.com	
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order
N/A	N/A	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	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	
Special Report/Formats	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> MELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

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

Please proceed with analysis without sample traceability

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032 02.46 01		
Sampler Name	Sarah Welter	Sampler Phone	4789730578
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.			
Analysis	Subcontract Lab		
TOC	Energy Laboratories Inc., Casper		

Matrix Codes

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

Analysis Requested

8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDS [40ml VOA w/HCL]	EPA 3030/8015 TPH-d/o + SGC [1-L AG w/H2SO4]	EPA 8020 Diss Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9050 TOC [250ml AG w/H3PO4]	EPA 8020 Total Lead [250ml HDPE w/HNO3]
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

See Attached

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested								RUSH TAT	ELI LAB ID Laboratory Use Only
	Date	Time			8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDS [40ml VOA w/HCL]	EPA 3030/8015 TPH-d/o + SGC [1-L AG w/H2SO4]	EPA 8020 Diss Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9050 TOC [250ml AG w/H3PO4]	EPA 8020 Total Lead [250ml HDPE w/HNO3]		
1 ERH2903 (RHMW08)	3/23/22	1130	17	GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	13220 32035-063
2 ERH2902 (Trip Blank)	3/23/22	1120	8	WQ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					X	-064/-065/-066-067
3 TB 82100 14754			2											-064
4 TB 670 14904			2											-065
5 TB 8011 14964			2											-066
6 TB 002100 14971			2											-067
7 TJ 3/26/22														
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			
	Sarah Welter	3/23/22 1330	[Signature]	[Signature]	03/23/22 1330	[Signature]			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature			
	Taylor White	03/24/22 1200	[Signature]	Richard St...	3/26/22 10:40	[Signature]			
LABORATORY USE ONLY									
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 0.6 °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.



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Chain of Custody & Analytical Request Record

COC # 202203-66NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM		
Contact	Alethea Ramos / Margie Pascua		
Phone	808-529-7283 / 808-356-5373		
Mailing Address	1001 Bishop St., Suite 1600		
City, State, Zip	Honolulu, Hawaii 96813		
Email	alethea.ramos / margie.pascua@aecom.com		
Receive Invoice	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order	
N/A	N/A	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	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	
Special Report/Formats	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other		

Comments

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

Project Information

Project Name	PWSID, Permit, etc: CV18F0126, 60571032.02.46.01		
Sampler Name	CW, SW, A, U	Sampler Phone	478.973.0678
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
The following tests will be subcontracted to other certified laboratories as shown. Signing this CDC is authorization to subcontract the analyses as indicated.			
Analysis	Subcontract Lab		
TOC	Energy Laboratories Inc., Casper		

Matrix Codes

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

Analysis Requested

2260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8015 TPH-g (40ml VOA w HCL)	RSK175 Methane (40ml VOA w/H2SO4)	8011 EDB (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Diss Lead (250ml HDPE w/HNO3) (field Filled)	EPA 8080 TOC (250ml AG w/ H3PO4)	EPA 8020 Total Lead (250ml HDPE w/HNO3)	See Attached
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					X

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		Number of Containers	Matrix (See Codes Above)	Analysis Requested								RUSH TAT	ELI LAB ID Laboratory Use Only
	Date	Time			2260 VOC's (Full Suite) + DCA* (40ml VOA w/HCL)	8015 TPH-g (40ml VOA w HCL)	RSK175 Methane (40ml VOA w/H2SO4)	8011 EDB (40ml VOA w/HCL)	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Diss Lead (250ml HDPE w/HNO3) (field Filled)	EPA 8080 TOC (250ml AG w/ H3PO4)	EPA 8020 Total Lead (250ml HDPE w/HNO3)		
1 ERH2869 (RHMW14-03)	03/22/22	0905	17	GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X	1322032035-068
2 ERH2868 (Trip Blank)	03/22/22	0845	8	WQ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					X	-069/-070/-071/-072
3 TB 8260-1489U			3											-069
4 TB 620-14833			2											-070
5 TB 8011-14833			1											-071
6 TB Methane - 1489S			2	NA										-072
7														
8														
9														

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

Custody Record MUST be signed	Relinquished by (print) Clara Lin	Date/Time 03/22/22 1600	Signature <i>Clara Lin</i>	Received by (print) Margie Nutter	Date/Time 3/22/22 1618	Signature <i>Margie Nutter</i>
	Relinquished by (print) Clara Lin	Date/Time 03/24/22 1420	Signature <i>Clara Lin</i>	Received by Laboratory (print) Richard Shiu	Date/Time 3/26/22 10:40	Signature <i>Richard Shiu</i>
LABORATORY USE ONLY						
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 0.3 °C	Temp Blank Y N	On Ice Y N
Payment Type CC Cash Check			Amount \$	Receipt Number (cash/check only)		

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



Work Order Receipt Checklist

AECOM - Honolulu

B22032035

Login completed by: Leslie S. Cadreau
Reviewed by: BL2000\tedwards
Reviewed Date: 3/31/2022

Date Received: 3/26/2022
Received by: rs4
Carrier name: FedEx

- Shipping container/cooler in good condition? Yes [x] No [] Not Present []
Custody seals intact on all shipping container(s)/cooler(s)? Yes [x] No [] Not Present []
Custody seals intact on all sample bottles? Yes [] No [x] Not Present []
Chain of custody present? Yes [x] No []
Chain of custody signed when relinquished and received? Yes [x] No []
Chain of custody agrees with sample labels? Yes [x] No []
Samples in proper container/bottle? Yes [x] No []
Sample containers intact? Yes [x] No []
Sufficient sample volume for indicated test? Yes [x] No []
All samples received within holding time? Yes [x] No []
Temp Blank received in all shipping container(s)/cooler(s)? Yes [x] No [] Not Applicable []
Container/Temp Blank temperature: °C On Ice
Water - VOA vials have zero headspace? Yes [x] No [] Not Applicable []
Water - pH acceptable upon receipt? Yes [x] No [] Not Applicable []

Standard Reporting Procedures:

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

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

Contact and Corrective Action Comments:

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

The Temperature Blank temperature for shipping container 1 was 0.3°C, shipping container 2 was 1.1°C, shipping container 3 was 1.4°C, shipping container 4 was 0.7°C, shipping container 5 was 0.6°C, shipping container 6 was 1.0°C, shipping container 7 was 0.6°C, shipping container 8 was 0.6°C, shipping container 9 was 0.6°C, shipping container 10 was 0.6°C, shipping container 11 was 0.3°C, shipping container 12 was 0.0°C, shipping container 13 was 0.3°C, and shipping container 14 was 1.0°C.

The 40 mL VOA sulfuric acid preserved containers submitted for Methane analysis were not received with the bottle order labels on the containers for samples ERH2897 (OWDFMW05A) and ERH2869(RHMW14-03) . Preservative traceability is not available for these containers. Proceeded with the Methane analysis per Shari Endy, Energy Laboratories Project Manager.

All containers had a custody seal intact except for the 250mL Plastic Filtered Nitric preserved container for sample ERH2926 (SUMP ADIT 3) and one of the two 1 Liter Amber Glass Sulfuric preserved containers for sample ERH2920 (RHMW2254-01 B).

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 RPD limit 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 Quantitation (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

Lab ID: B22032035-001

Collection Date: 03/23/2022 12:15

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2906 (RHMW06)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.2 to 0.2	0.21	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/31/2022 16:36/eli-ca	SUB-C281031 : 4	C_R281031
METALS, DISSOLVED												
Lead	0.00006	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/30/2022 15:01/car	ICPMS207-B_220330B : 51	R378017
METALS, TOTAL												
Lead	0.00017	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/30/2022 15:32/car	ICPMS207-B_220330B : 56	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-001

Collection Date: 03/23/2022 12:15

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2906 (RHMW06)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Surr: 1,2-Dichloroethane-d4	113.0	%REC	1		81-118				SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/27/2022 11:28/msc	VOA5975C.I_220327A : 5	R377839
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 01:07/clt	GECD.I_220328B : 13	164912
Surr: 1,1,1,2-Tetrachloroethane	91.0	%REC	1		70-130				SW8011	03/29/2022 01:07/clt	GECD.I_220328B : 13	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/28/2022 11:45/jp	VARIAN1_220328A : 5	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/28/2022 11:45/jp	VARIAN1_220328A : 5	R377987
Surr: Trifluorotoluene	81.0	%REC	1		70-130				SW8015C	03/28/2022 11:45/jp	VARIAN1_220328A : 5	R377987
- 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)	0.082	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/30/2022 04:37/amn	GCFID-HP5-B_220329A : 19	164941
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	04/1/2022 01:30/amn	GCFID-HP5-B_220331A : 15	164941
Oil Range Hydrocarbons (C24 to C40)	0.088	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/30/2022 04:37/amn	GCFID-HP5-B_220329A : 19	164941
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	04/1/2022 01:30/amn	GCFID-HP5-B_220331A : 15	164941
Total Extractable Hydrocarbons	0.19	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/30/2022 04:37/amn	GCFID-HP5-B_220329A : 19	164941
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	04/1/2022 01:30/amn	GCFID-HP5-B_220331A : 15	164941



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-001

Collection Date: 03/23/2022 12:15

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2906 (RHMW06)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	96.0	%REC	1		56-125				SW8015C	03/30/2022 04:37/amn	GCFID-HP5-B_220329A : 19	164941
Surr: o-Terphenyl (SGT)	93.0	%REC	1		56-125				SW8015C	04/1/2022 01:30/amn	GCFID-HP5-B_220331A : 15	164941
Surr: n-Triacontane	91.0	%REC	1		50-150				SW8015C	03/30/2022 04:37/amn	GCFID-HP5-B_220329A : 19	164941
Surr: n-Triacontane (SGT)	84.0	%REC	1		50-150				SW8015C	04/1/2022 01:30/amn	GCFID-HP5-B_220331A : 15	164941
- 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	03/28/2022 10:02/jdw	FID-HEADSPACE_220328A : 5	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-002

Collection Date: 03/23/2022 12:15

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2905 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Toluene	0.089	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-002

Collection Date: 03/23/2022 12:15

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2905 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/27/2022 15:33/msc	VOA5975C.I_220327A : 14	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2905 (Trip Blank) 14909
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-003
Collection Date: 03/23/2022 12:15
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/28/2022 12:54/jp	VARIAN1_220328A : 6	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/28/2022 12:54/jp	VARIAN1_220328A : 6	R377987
Surr: Trifluorotoluene	81.0	%REC	1		70-130				SW8015C	03/28/2022 12:54/jp	VARIAN1_220328A : 6	R377987
- 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: B22032035-004

Collection Date: 03/23/2022 12:15

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2905 (Trip Blank) 14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/28/2022 22:49/clt	GECD.I_220328B : 6	164912
Surr: 1,1,1,2-Tetrachloroethane	86.0	%REC	1		70-130				SW8011	03/28/2022 22:49/clt	GECD.I_220328B : 6	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2905 (Trip Blank) 14987
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-005
Collection Date: 03/23/2022 12:15
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 10:06/jdw	FID-HEADSPACE_220328A : 6	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-006

Collection Date: 03/22/2022 14:00

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2909 (RHMW13-05)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.33	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/31/2022 17:16/eli-ca	SUB-C281031 : 5	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 16:22/car	ICPMS207-B_220330B : 64	R378017
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/30/2022 16:29/car	ICPMS207-B_220330B : 65	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-006

Collection Date: 03/22/2022 14:00

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2909 (RHMW13-05)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
Surr: p-Bromofluorobenzene	111.0	%REC	1		85-114				SW8260B	03/27/2022 11:55/msc	VOA5975C.I_220327A : 6	R377839
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/28/2022 23:09/clt	GECD.I_220328B : 7	164912
Surr: 1,1,1,2-Tetrachloroethane	84.0	%REC	1		70-130				SW8011	03/28/2022 23:09/clt	GECD.I_220328B : 7	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/28/2022 23:13/jp	VARIAN1_220328A : 21	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/28/2022 23:13/jp	VARIAN1_220328A : 21	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/28/2022 23:13/jp	VARIAN1_220328A : 21	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.037		SW8015C	03/30/2022 05:20/amn	GCFID-HP5-B_220329A : 20	164941
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/30/2022 05:20/amn	GCFID-HP5-B_220329A : 20	164941
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/30/2022 05:20/amn	GCFID-HP5-B_220329A : 20	164941
Surr: o-Terphenyl	98.0	%REC	1		56-125				SW8015C	03/30/2022 05:20/amn	GCFID-HP5-B_220329A : 20	164941
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/30/2022 05:20/amn	GCFID-HP5-B_220329A : 20	164941
- 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: B22032035-006

Collection Date: 03/22/2022 14:00

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2909 (RHMW13-05)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/28/2022 10:10/jdw	FID-HEADSPACE_220328A : 7	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-007

Collection Date: 03/22/2022 14:00

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2908 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-007

Collection Date: 03/22/2022 14:00

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2908 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839
Surr: p-Bromofluorobenzene	111.0	%REC	1		85-114				SW8260B	03/27/2022 16:00/msc	VOA5975C.I_220327A : 15	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-008

Collection Date: 03/22/2022 14:00

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2908 (Trip Blank) 14909
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/28/2022 13:28/jp	VARIAN1_220328A : 7	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/28/2022 13:28/jp	VARIAN1_220328A : 7	R377987
Surr: Trifluorotoluene	81.0	%REC	1		70-130				SW8015C	03/28/2022 13:28/jp	VARIAN1_220328A : 7	R377987

- 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: B22032035-009

Collection Date: 03/22/2022 14:00

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2908 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/28/2022 23:29/clt	GECD.I_220328B : 8	164912
Surr: 1,1,1,2-Tetrachloroethane	86.0	%REC	1		70-130				SW8011	03/28/2022 23:29/clt	GECD.I_220328B : 8	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2908 (Trip Blank) 14971
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-010
Collection Date: 03/22/2022 14:00
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 10:14/jdw	FID-HEADSPACE_220328A : 8	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-011
Collection Date: 03/24/2022 13:00
Date Received: 03/26/2022
Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2920 (RHMW2254-01 B)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.33	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/31/2022 19:16/eli-ca	SUB-C281031 : 8	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 16:35/car	ICPMS207-B_220330B : 66	R378017
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/30/2022 16:41/car	ICPMS207-B_220330B : 67	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-011

Collection Date: 03/24/2022 13:00

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2920 (RHMW2254-01 B)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/27/2022 12:22/msc	VOA5975C.I_220327A : 7	R377839
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/28/2022 23:48/clt	GECD.I_220328B : 9	164912
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	03/28/2022 23:48/clt	GECD.I_220328B : 9	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 00:22/jp	VARIAN1_220328A : 22	R377987
Total Purgeable Hydrocarbons	8.4	ug/L	1	J	20	10	3.1		SW8015C	03/29/2022 00:22/jp	VARIAN1_220328A : 22	R377987
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	03/29/2022 00:22/jp	VARIAN1_220328A : 22	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.25	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/30/2022 14:36/amn	GCFID-HP5-B_220329A : 28	164941
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	04/1/2022 07:14/amn	GCFID-HP5-B_220331A : 21	164941
Oil Range Hydrocarbons (C24 to C40)	0.32	mg/L	1		0.30	0.14	0.084		SW8015C	03/30/2022 14:36/amn	GCFID-HP5-B_220329A : 28	164941
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	04/1/2022 07:14/amn	GCFID-HP5-B_220331A : 21	164941
Total Extractable Hydrocarbons	0.58	mg/L	1		0.30	0.14	0.071		SW8015C	03/30/2022 14:36/amn	GCFID-HP5-B_220329A : 28	164941
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	04/1/2022 07:14/amn	GCFID-HP5-B_220331A : 21	164941



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-011

Collection Date: 03/24/2022 13:00

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2920 (RHMW2254-01 B)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	94.0	%REC	1		56-125				SW8015C	03/30/2022 14:36/amn	GCFID-HP5-B_220329A : 28	164941
Surr: o-Terphenyl (SGT)	93.0	%REC	1		56-125				SW8015C	04/1/2022 07:14/amn	GCFID-HP5-B_220331A : 21	164941
Surr: n-Triacontane	88.0	%REC	1		50-150				SW8015C	03/30/2022 14:36/amn	GCFID-HP5-B_220329A : 28	164941
Surr: n-Triacontane (SGT)	84.0	%REC	1		50-150				SW8015C	04/1/2022 07:14/amn	GCFID-HP5-B_220331A : 21	164941
- 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	03/28/2022 10:18/jdw	FID-HEADSPACE_220328A : 9	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-012

Collection Date: 03/24/2022 13:00

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2919 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-012

Collection Date: 03/24/2022 13:00

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2919 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/27/2022 16:28/msc	VOA5975C.I_220327A : 16	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2919 (Trip Blank) 14909
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-013
Collection Date: 03/24/2022 13:00
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/28/2022 14:03/jp	VARIAN1_220328A : 8	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/28/2022 14:03/jp	VARIAN1_220328A : 8	R377987
Surr: Trifluorotoluene	83.0	%REC	1		70-130				SW8015C	03/28/2022 14:03/jp	VARIAN1_220328A : 8	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2919 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-014
Collection Date: 03/24/2022 13:00
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 00:08/ct	GECD.I_220328B : 10	164912
Surr: 1,1,1,2-Tetrachloroethane	87.0	%REC	1		70-130				SW8011	03/29/2022 00:08/ct	GECD.I_220328B : 10	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2919 (Trip Blank) 14971
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-015
Collection Date: 03/24/2022 13:00
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 10:22/jdw	FID-HEADSPACE_220328A : 10	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-016
Collection Date: 03/24/2022 15:05
Date Received: 03/26/2022
Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2926 (SUMP ADIT 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.7 to 0.7	0.71	mg/L	1		0.50	0.50	0.17		SW9060A	03/31/2022 19:57/eli-ca	SUB-C281031 : 9	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 16:47/car	ICPMS207-B_220330B : 68	R378017
METALS, TOTAL												
Lead	0.018	mg/L	1		0.001	0.0001	0.00005		SW6020	03/30/2022 16:54/car	ICPMS207-B_220330B : 69	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Chloroform	0.11	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-016

Collection Date: 03/24/2022 15:05

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2926 (SUMP ADIT 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	27	ug/L	1		20	5.0	1.8		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
m+p-Xylenes	0.24	ug/L	1	J	1.0	0.50	0.15		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
o-Xylene	0.12	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Xylenes, Total	0.36	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Surr: 1,2-Dichloroethane-d4	115.0	%REC	1		81-118				SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/27/2022 12:49/msc	VOA5975C.I_220327A : 8	R377839
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 00:28/clt	GECD.I_220328B : 11	164912
Surr: 1,1,1,2-Tetrachloroethane	85.0	%REC	1		70-130				SW8011	03/29/2022 00:28/clt	GECD.I_220328B : 11	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	5.2	ug/L	1	J	20	8.7	2.0		SW8015C	03/29/2022 01:31/jp	VARIAN1_220328A : 23	R377987
Total Purgeable Hydrocarbons	35	ug/L	1		20	10	3.1		SW8015C	03/29/2022 01:31/jp	VARIAN1_220328A : 23	R377987
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/29/2022 01:31/jp	VARIAN1_220328A : 23	R377987
- 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)	0.44	mg/L	1		0.30	0.14	0.037		SW8015C	03/30/2022 15:19/amn	GCFID-HP5-B_220329A : 29	164941
Diesel Range Organics (SGT-C10 to C24)	0.36	mg/L	1		0.30	0.11	0.027		SW8015C	04/1/2022 07:57/amn	GCFID-HP5-B_220331A : 22	164941
Oil Range Hydrocarbons (C24 to C40)	0.28	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/30/2022 15:19/amn	GCFID-HP5-B_220329A : 29	164941
Oil Range Hydrocarbons (SGT-C24 to C40)	0.18	mg/L	1	J	0.30	0.14	0.084		SW8015C	04/1/2022 07:57/amn	GCFID-HP5-B_220331A : 22	164941
Total Extractable Hydrocarbons	0.73	mg/L	1		0.30	0.14	0.071		SW8015C	03/30/2022 15:19/amn	GCFID-HP5-B_220329A : 29	164941
Total Extractable Hydrocarbons (SGT)	0.54	mg/L	1		0.30	0.11	0.034		SW8015C	04/1/2022 07:57/amn	GCFID-HP5-B_220331A : 22	164941



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-016

Collection Date: 03/24/2022 15:05

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2926 (SUMP ADIT 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	93.0	%REC	1		56-125				SW8015C	03/30/2022 15:19/amn	GCFID-HP5-B_220329A : 29	164941
Surr: o-Terphenyl (SGT)	97.0	%REC	1		56-125				SW8015C	04/1/2022 07:57/amn	GCFID-HP5-B_220331A : 22	164941
Surr: n-Triacontane	87.0	%REC	1		50-150				SW8015C	03/30/2022 15:19/amn	GCFID-HP5-B_220329A : 29	164941
Surr: n-Triacontane (SGT)	87.0	%REC	1		50-150				SW8015C	04/1/2022 07:57/amn	GCFID-HP5-B_220331A : 22	164941
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.0025	mg/L	1		0.0020	0.0012	0.00070		SW8015M	03/28/2022 10:26/jdw	FID-HEADSPACE_220328A : 11	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-017

Collection Date: 03/24/2022 15:05

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2925 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-017

Collection Date: 03/24/2022 15:05

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2925 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/27/2022 16:55/msc	VOA5975C.I_220327A : 17	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2925 (Trip Blank) 14909
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-018
Collection Date: 03/24/2022 15:05
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/28/2022 14:37/jp	VARIAN1_220328A : 9	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/28/2022 14:37/jp	VARIAN1_220328A : 9	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/28/2022 14:37/jp	VARIAN1_220328A : 9	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2925 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-019
Collection Date: 03/24/2022 15:05
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 00:48/clt	GECD.I_220328B : 12	164912
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/29/2022 00:48/clt	GECD.I_220328B : 12	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2925 (Trip Blank) 14971
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-020
Collection Date: 03/24/2022 15:05
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 10:53/jdw	FID-HEADSPACE_220328A : 13	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-021
Collection Date: 03/24/2022 14:10
Date Received: 03/26/2022
Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2923 (RHMW2254-01 LF)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.2 to 0.3	0.25	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/31/2022 20:38/eli-ca	SUB-C281031 : 10	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 17:00/car	ICPMS207-B_220330B : 70	R378017
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/30/2022 17:06/car	ICPMS207-B_220330B : 71	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-021

Collection Date: 03/24/2022 14:10

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2923 (RHMW2254-01 LF)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	4.0	ug/L	1	J	20	5.0	1.8		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/27/2022 13:17/msc	VOA5975C.I_220327A : 9	R377839
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 03:06/clt	GECD.I_220328B : 17	164912
Surr: 1,1,1,2-Tetrachloroethane	84.0	%REC	1		70-130				SW8011	03/29/2022 03:06/clt	GECD.I_220328B : 17	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 02:39/jp	VARIAN1_220328A : 24	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 02:39/jp	VARIAN1_220328A : 24	R377987
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	03/29/2022 02:39/jp	VARIAN1_220328A : 24	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.037		SW8015C	03/30/2022 06:46/amn	GCFID-HP5-B_220329A : 21	164941
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	04/1/2022 02:13/amn	GCFID-HP5-B_220331A : 16	164941
Oil Range Hydrocarbons (C24 to C40)	0.094	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/30/2022 06:46/amn	GCFID-HP5-B_220329A : 21	164941
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	04/1/2022 02:13/amn	GCFID-HP5-B_220331A : 16	164941
Total Extractable Hydrocarbons	0.16	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/30/2022 06:46/amn	GCFID-HP5-B_220329A : 21	164941
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	04/1/2022 02:13/amn	GCFID-HP5-B_220331A : 16	164941



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-021

Collection Date: 03/24/2022 14:10

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2923 (RHMW2254-01 LF)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	97.0	%REC	1		56-125				SW8015C	03/30/2022 06:46/amn	GCFID-HP5-B_220329A : 21	164941
Surr: o-Terphenyl (SGT)	93.0	%REC	1		56-125				SW8015C	04/1/2022 02:13/amn	GCFID-HP5-B_220331A : 16	164941
Surr: n-Triacontane	91.0	%REC	1		50-150				SW8015C	03/30/2022 06:46/amn	GCFID-HP5-B_220329A : 21	164941
Surr: n-Triacontane (SGT)	83.0	%REC	1		50-150				SW8015C	04/1/2022 02:13/amn	GCFID-HP5-B_220331A : 16	164941
- 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	03/28/2022 10:57/jdw	FID-HEADSPACE_220328A : 14	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-022

Collection Date: 03/24/2022 14:10

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2922 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-022

Collection Date: 03/24/2022 14:10

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2922 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839
Surr: p-Bromofluorobenzene	112.0	%REC	1		85-114				SW8260B	03/27/2022 17:22/msc	VOA5975C.I_220327A : 18	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2922 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-023
Collection Date: 03/24/2022 14:10
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/28/2022 15:12/jp	VARIAN1_220328A : 10	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/28/2022 15:12/jp	VARIAN1_220328A : 10	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/28/2022 15:12/jp	VARIAN1_220328A : 10	R377987
- 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: B22032035-024

Collection Date: 03/24/2022 14:10

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2922 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 03:25/clt	GECD.I_220328B : 18	164912
Surr: 1,1,1,2-Tetrachloroethane	83.0	%REC	1		70-130				SW8011	03/29/2022 03:25/clt	GECD.I_220328B : 18	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2922 (Trip Blank) 14971
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-025
Collection Date: 03/24/2022 14:10
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 11:01/jdw	FID-HEADSPACE_220328A : 15	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-026

Collection Date: 03/22/2022 13:40

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2872 (RHMW12A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.34	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/31/2022 21:19/eli-ca	SUB-C281031 : 11	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 17:12/car	ICPMS207-B_220330B : 72	R378017
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/30/2022 17:31/car	ICPMS207-B_220330B : 75	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-026

Collection Date: 03/22/2022 13:40

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2872 (RHMW12A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/27/2022 13:44/msc	VOA5975C.I_220327A : 10	R377839
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 03:45/clt	GECD.I_220328B : 19	164912
Surr: 1,1,1,2-Tetrachloroethane	85.0	%REC	1		70-130				SW8011	03/29/2022 03:45/clt	GECD.I_220328B : 19	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 03:48/jp	VARIAN1_220328A : 25	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 03:48/jp	VARIAN1_220328A : 25	R377987
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/29/2022 03:48/jp	VARIAN1_220328A : 25	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.037		SW8015C	03/29/2022 15:00/amn	GCFID-HP5-B_220329A : 6	164941
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/31/2022 15:29/amn	GCFID-HP5-B_220331A : 6	164941
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/29/2022 15:00/amn	GCFID-HP5-B_220329A : 6	164941
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/31/2022 15:29/amn	GCFID-HP5-B_220331A : 6	164941
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/29/2022 15:00/amn	GCFID-HP5-B_220329A : 6	164941
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/31/2022 15:29/amn	GCFID-HP5-B_220331A : 6	164941



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-026

Collection Date: 03/22/2022 13:40

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2872 (RHMW12A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	99.0	%REC	1		56-125				SW8015C	03/29/2022 15:00/amn	GCFID-HP5-B_220329A : 6	164941
Surr: o-Terphenyl (SGT)	92.0	%REC	1		56-125				SW8015C	03/31/2022 15:29/amn	GCFID-HP5-B_220331A : 6	164941
Surr: n-Triacontane	91.0	%REC	1		50-150				SW8015C	03/29/2022 15:00/amn	GCFID-HP5-B_220329A : 6	164941
Surr: n-Triacontane (SGT)	80.0	%REC	1		50-150				SW8015C	03/31/2022 15:29/amn	GCFID-HP5-B_220331A : 6	164941
- 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	03/28/2022 11:06/jdw	FID-HEADSPACE_220328A : 16	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-027

Collection Date: 03/22/2022 13:40

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2873 (RHMW12A FD)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-027

Collection Date: 03/22/2022 13:40

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2873 (RHMW12A FD)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/27/2022 14:11/msc	VOA5975C.I_220327A : 11	R377839
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 04:57/jp	VARIAN1_220328A : 26	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 04:57/jp	VARIAN1_220328A : 26	R377987
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/29/2022 04:57/jp	VARIAN1_220328A : 26	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.037		SW8015C	03/29/2022 15:42/amn	GCFID-HP5-B_220329A : 7	164941
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/31/2022 16:12/amn	GCFID-HP5-B_220331A : 7	164941
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/29/2022 15:42/amn	GCFID-HP5-B_220329A : 7	164941
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/31/2022 16:12/amn	GCFID-HP5-B_220331A : 7	164941
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/29/2022 15:42/amn	GCFID-HP5-B_220329A : 7	164941
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/31/2022 16:12/amn	GCFID-HP5-B_220331A : 7	164941
Surr: o-Terphenyl	93.0	%REC	1		56-125				SW8015C	03/29/2022 15:42/amn	GCFID-HP5-B_220329A : 7	164941
Surr: o-Terphenyl (SGT)	91.0	%REC	1		56-125				SW8015C	03/31/2022 16:12/amn	GCFID-HP5-B_220331A : 7	164941
Surr: n-Triacontane	87.0	%REC	1		50-150				SW8015C	03/29/2022 15:42/amn	GCFID-HP5-B_220329A : 7	164941
Surr: n-Triacontane (SGT)	80.0	%REC	1		50-150				SW8015C	03/31/2022 16:12/amn	GCFID-HP5-B_220331A : 7	164941
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-028

Collection Date: 03/22/2022 13:40

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2871 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-028

Collection Date: 03/22/2022 13:40

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2871 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/27/2022 17:49/msc	VOA5975C.I_220327A : 19	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-029

Collection Date: 03/22/2022 13:40

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2871 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/28/2022 15:46/jp	VARIAN1_220328A : 11	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/28/2022 15:46/jp	VARIAN1_220328A : 11	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/28/2022 15:46/jp	VARIAN1_220328A : 11	R377987

- 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: B22032035-030

Collection Date: 03/22/2022 13:40

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2871 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 04:05/ct	GECD.I_220328B : 20	164912
Surr: 1,1,1,2-Tetrachloroethane	85.0	%REC	1		70-130				SW8011	03/29/2022 04:05/ct	GECD.I_220328B : 20	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2871 (Trip Blank) 14971
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-031
Collection Date: 03/22/2022 13:40
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 11:12/jdw	FID-HEADSPACE_220328A : 17	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-032
Collection Date: 03/22/2022 16:55
Date Received: 03/26/2022
Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2892 (RHMW16)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
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	03/31/2022 21:58/eli-ca	SUB-C281031 : 12	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 17:37/car	ICPMS207-B_220330B : 76	R378017
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/30/2022 17:44/car	ICPMS207-B_220330B : 77	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-032

Collection Date: 03/22/2022 16:55

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2892 (RHMW16)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/27/2022 14:39/msc	VOA5975C.I_220327A : 12	R377839
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 04:25/clt	GECD.I_220328B : 21	164912
Surr: 1,1,1,2-Tetrachloroethane	86.0	%REC	1		70-130				SW8011	03/29/2022 04:25/clt	GECD.I_220328B : 21	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 06:06/jp	VARIAN1_220328A : 27	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 06:06/jp	VARIAN1_220328A : 27	R377987
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/29/2022 06:06/jp	VARIAN1_220328A : 27	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.037		SW8015C	03/30/2022 07:29/amn	GCFID-HP5-B_220329A : 22	164941
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	04/1/2022 02:56/amn	GCFID-HP5-B_220331A : 17	164941
Oil Range Hydrocarbons (C24 to C40)	0.11	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/30/2022 07:29/amn	GCFID-HP5-B_220329A : 22	164941
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	04/1/2022 02:56/amn	GCFID-HP5-B_220331A : 17	164941
Total Extractable Hydrocarbons	0.16	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/30/2022 07:29/amn	GCFID-HP5-B_220329A : 22	164941
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	04/1/2022 02:56/amn	GCFID-HP5-B_220331A : 17	164941



LABORATORY ANALYTICAL REPORT

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Lab ID: B22032035-032

Collection Date: 03/22/2022 16:55

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Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2892 (RHMW16)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS SEMI-VOLATILE												
Surr: o-Terphenyl	93.0	%REC	1		56-125				SW8015C	03/30/2022 07:29/amn	GCFID-HP5-B_220329A : 22	164941
Surr: o-Terphenyl (SGT)	92.0	%REC	1		56-125				SW8015C	04/1/2022 02:56/amn	GCFID-HP5-B_220331A : 17	164941
Surr: n-Triacontane	87.0	%REC	1		50-150				SW8015C	03/30/2022 07:29/amn	GCFID-HP5-B_220329A : 22	164941
Surr: n-Triacontane (SGT)	80.0	%REC	1		50-150				SW8015C	04/1/2022 02:56/amn	GCFID-HP5-B_220331A : 17	164941
- 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	03/28/2022 11:16/jdw	FID-HEADSPACE_220328A : 18	R377979



LABORATORY ANALYTICAL REPORT

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Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2893 (RHMW16 FD)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-033
Collection Date: 03/22/2022 16:55
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Client: AECOM - Honolulu
Client Sample ID: ERH2893 (RHMW16 FD)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/27/2022 15:06/msc	VOA5975C.I_220327A : 13	R377839
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 10:06/jp	VARIAN1_220328A : 32	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 10:06/jp	VARIAN1_220328A : 32	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/29/2022 10:06/jp	VARIAN1_220328A : 32	R377987
- 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)	0.038	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/30/2022 11:46/amn	GCFID-HP5-B_220329A : 25	164941
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	04/1/2022 03:40/amn	GCFID-HP5-B_220331A : 18	164941
Oil Range Hydrocarbons (C24 to C40)	0.13	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/30/2022 11:46/amn	GCFID-HP5-B_220329A : 25	164941
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	04/1/2022 03:40/amn	GCFID-HP5-B_220331A : 18	164941
Total Extractable Hydrocarbons	0.20	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/30/2022 11:46/amn	GCFID-HP5-B_220329A : 25	164941
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	04/1/2022 03:40/amn	GCFID-HP5-B_220331A : 18	164941
Surr: o-Terphenyl	97.0	%REC	1		56-125				SW8015C	03/30/2022 11:46/amn	GCFID-HP5-B_220329A : 25	164941
Surr: o-Terphenyl (SGT)	89.0	%REC	1		56-125				SW8015C	04/1/2022 03:40/amn	GCFID-HP5-B_220331A : 18	164941
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/30/2022 11:46/amn	GCFID-HP5-B_220329A : 25	164941
Surr: n-Triacontane (SGT)	77.0	%REC	1		50-150				SW8015C	04/1/2022 03:40/amn	GCFID-HP5-B_220331A : 18	164941
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-034

Collection Date: 03/22/2022 16:55

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2891 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-034

Collection Date: 03/22/2022 16:55

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2891 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Surr: 1,2-Dichloroethane-d4	113.0	%REC	1		81-118				SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/27/2022 18:17/msc	VOA5975C.I_220327A : 20	R377839



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2891 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-035
Collection Date: 03/22/2022 16:55
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/28/2022 16:20/jp	VARIAN1_220328A : 12	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/28/2022 16:20/jp	VARIAN1_220328A : 12	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/28/2022 16:20/jp	VARIAN1_220328A : 12	R377987
- 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: B22032035-036

Collection Date: 03/22/2022 16:55

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2891 (Trip Blank) 14909
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 04:44/clt	GECD.I_220328B : 22	164912
Surr: 1,1,1,2-Tetrachloroethane	87.0	%REC	1		70-130				SW8011	03/29/2022 04:44/clt	GECD.I_220328B : 22	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2891 (Trip Blank) 14971
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-037
Collection Date: 03/22/2022 16:55
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 11:21/jdw	FID-HEADSPACE_220328A : 19	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-038
Collection Date: 03/22/2022 16:45
Date Received: 03/26/2022
Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2929 (RHMW11-05)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.34	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/31/2022 22:38/eli-ca	SUB-C281031 : 13	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 17:50/car	ICPMS207-B_220330B : 78	R378017
METALS, TOTAL												
Lead	0.00008	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/30/2022 17:56/car	ICPMS207-B_220330B : 79	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-038

Collection Date: 03/22/2022 16:45

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2929 (RHMW11-05)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Surr: Dibromofluoromethane	105.0	%REC	1		80-119				SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
Surr: p-Bromofluorobenzene	113.0	%REC	1		85-114				SW8260B	03/28/2022 12:59/msc	VOA5975C.I_220328A : 6	R378198
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	03/29/2022 05:04/clt	GECD.I_220328B : 23	164912
Surr: 1,1,1,2-Tetrachloroethane	86.0	%REC	1		70-130				SW8011	03/29/2022 05:04/clt	GECD.I_220328B : 23	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 16:24/jp	VARIAN1_220328A : 41	R377987
Total Purgeable Hydrocarbons	3.7	ug/L	1	JT	20	10	3.1		SW8015C	03/29/2022 16:24/jp	VARIAN1_220328A : 41	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/29/2022 16:24/jp	VARIAN1_220328A : 41	R377987
- 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)	0.044	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/30/2022 12:28/amn	GCFID-HP5-B_220329A : 26	164941
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	04/1/2022 05:05/amn	GCFID-HP5-B_220331A : 19	164941
Oil Range Hydrocarbons (C24 to C40)	0.15	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/30/2022 12:28/amn	GCFID-HP5-B_220329A : 26	164941
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	04/1/2022 05:05/amn	GCFID-HP5-B_220331A : 19	164941
Total Extractable Hydrocarbons	0.22	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/30/2022 12:28/amn	GCFID-HP5-B_220329A : 26	164941
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	04/1/2022 05:05/amn	GCFID-HP5-B_220331A : 19	164941



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-038

Collection Date: 03/22/2022 16:45

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2929 (RHMW11-05)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	95.0	%REC	1		56-125				SW8015C	03/30/2022 12:28/amn	GCFID-HP5-B_220329A : 26	164941
Surr: o-Terphenyl (SGT)	92.0	%REC	1		56-125				SW8015C	04/1/2022 05:05/amn	GCFID-HP5-B_220331A : 19	164941
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/30/2022 12:28/amn	GCFID-HP5-B_220329A : 26	164941
Surr: n-Triacontane (SGT)	82.0	%REC	1		50-150				SW8015C	04/1/2022 05:05/amn	GCFID-HP5-B_220331A : 19	164941
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.0017	mg/L	1	J	0.0020	0.0012	0.00070		SW8015M	03/28/2022 11:25/jdw	FID-HEADSPACE_220328A : 20	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-039

Collection Date: 03/22/2022 16:45

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2928 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-039

Collection Date: 03/22/2022 16:45

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2928 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/28/2022 17:05/msc	VOA5975C.I_220328A : 15	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2928 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-040
Collection Date: 03/22/2022 16:45
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/28/2022 16:55/jp	VARIAN1_220328A : 13	R377987
Total Purgeable Hydrocarbons	3.1	ug/L	1	J	20	10	3.1		SW8015C	03/28/2022 16:55/jp	VARIAN1_220328A : 13	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/28/2022 16:55/jp	VARIAN1_220328A : 13	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2928 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-041
Collection Date: 03/22/2022 16:45
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 05:24/clt	GECD.I_220328B : 24	164912
Surr: 1,1,1,2-Tetrachloroethane	86.0	%REC	1		70-130				SW8011	03/29/2022 05:24/clt	GECD.I_220328B : 24	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2928 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-042
Collection Date: 03/22/2022 16:45
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 11:35/jdw	FID-HEADSPACE_220328A : 21	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-043
Collection Date: 03/23/2022 13:50
Date Received: 03/26/2022
Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2917 (RHMW04)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
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	03/31/2022 23:17/eli-ca	SUB-C281031 : 14	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 18:02/car	ICPMS207-B_220330B : 80	R378017
METALS, TOTAL												
Lead	0.00007	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/30/2022 18:08/car	ICPMS207-B_220330B : 81	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-043

Collection Date: 03/23/2022 13:50

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2917 (RHMW04)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Surr: Dibromofluoromethane	104.0	%REC	1		80-119				SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Surr: 1,2-Dichloroethane-d4	106.0	%REC	1		81-118				SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
Surr: p-Bromofluorobenzene	112.0	%REC	1		85-114				SW8260B	03/28/2022 13:26/msc	VOA5975C.I_220328A : 7	R378198
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 05:44/clt	GECD.I_220328B : 25	164912
Surr: 1,1,1,2-Tetrachloroethane	84.0	%REC	1		70-130				SW8011	03/29/2022 05:44/clt	GECD.I_220328B : 25	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 17:32/jp	VARIAN1_220328A : 42	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 17:32/jp	VARIAN1_220328A : 42	R377987
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/29/2022 17:32/jp	VARIAN1_220328A : 42	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.037		SW8015C	03/30/2022 13:11/amn	GCFID-HP5-B_220329A : 27	164941
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/30/2022 13:11/amn	GCFID-HP5-B_220329A : 27	164941
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/30/2022 13:11/amn	GCFID-HP5-B_220329A : 27	164941
Surr: o-Terphenyl	100.0	%REC	1		56-125				SW8015C	03/30/2022 13:11/amn	GCFID-HP5-B_220329A : 27	164941
Surr: n-Triacontane	92.0	%REC	1		50-150				SW8015C	03/30/2022 13:11/amn	GCFID-HP5-B_220329A : 27	164941
- 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: B22032035-043

Collection Date: 03/23/2022 13:50

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2917 (RHMW04)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/28/2022 11:40/jdw	FID-HEADSPACE_220328A : 22	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-044

Collection Date: 03/23/2022 13:50

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2916 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-044

Collection Date: 03/23/2022 13:50

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2916 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Surr: Dibromofluoromethane	105.0	%REC	1		80-119				SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/28/2022 17:32/msc	VOA5975C.I_220328A : 16	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2916 (Trip Blank) 14909
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-045
Collection Date: 03/23/2022 13:50
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/28/2022 17:29/jp	VARIAN1_220328A : 14	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/28/2022 17:29/jp	VARIAN1_220328A : 14	R377987
Surr: Trifluorotoluene	81.0	%REC	1		70-130				SW8015C	03/28/2022 17:29/jp	VARIAN1_220328A : 14	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2916 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-046
Collection Date: 03/23/2022 13:50
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 06:03/ct	GECD.I_220328B : 26	164912
Surr: 1,1,1,2-Tetrachloroethane	87.0	%REC	1		70-130				SW8011	03/29/2022 06:03/ct	GECD.I_220328B : 26	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2916 (Trip Blank) 14971
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-047
Collection Date: 03/23/2022 13:50
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 11:44/jdw	FID-HEADSPACE_220328A : 23	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-048

Collection Date: 03/23/2022 18:15

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2900 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
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	03/31/2022 23:56/eli-ca	SUB-C281031 : 15	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 18:15/car	ICPMS207-B_220330B : 82	R378017
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/30/2022 18:21/car	ICPMS207-B_220330B : 83	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-048

Collection Date: 03/23/2022 18:15

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2900 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Surr: Dibromofluoromethane	103.0	%REC	1		80-119				SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Surr: 1,2-Dichloroethane-d4	106.0	%REC	1		81-118				SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/28/2022 13:53/msc	VOA5975C.I_220328A : 8	R378198
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 07:22/clt	GECD.I_220328B : 28	164912
Surr: 1,1,1,2-Tetrachloroethane	85.0	%REC	1		70-130				SW8011	03/29/2022 07:22/clt	GECD.I_220328B : 28	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 21:33/jp	VARIAN1_220328A : 47	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 21:33/jp	VARIAN1_220328A : 47	R377987
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/29/2022 21:33/jp	VARIAN1_220328A : 47	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.037		SW8015C	03/30/2022 00:20/amn	GCFID-HP5-B_220329A : 14	164941
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/30/2022 00:20/amn	GCFID-HP5-B_220329A : 14	164941
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/30/2022 00:20/amn	GCFID-HP5-B_220329A : 14	164941
Surr: o-Terphenyl	96.0	%REC	1		56-125				SW8015C	03/30/2022 00:20/amn	GCFID-HP5-B_220329A : 14	164941
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/30/2022 00:20/amn	GCFID-HP5-B_220329A : 14	164941
- 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: ERH2900 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22032035-048
Collection Date: 03/23/2022 18:15
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 11:48/jdw	FID-HEADSPACE_220328A : 24	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-049

Collection Date: 03/23/2022 18:15

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2899 (Trip Blank) 14909
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-049

Collection Date: 03/23/2022 18:15

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2899 (Trip Blank) 14909
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Surr: Dibromofluoromethane	105.0	%REC	1		80-119				SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/28/2022 18:00/msc	VOA5975C.I_220328A : 17	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2899 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-050
Collection Date: 03/23/2022 18:15
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 11:15/jp	VARIAN1_220328A : 33	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 11:15/jp	VARIAN1_220328A : 33	R377987
Surr: Trifluorotoluene	82.0	%REC	1		70-130				SW8015C	03/29/2022 11:15/jp	VARIAN1_220328A : 33	R377987
- 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: B22032035-051

Collection Date: 03/23/2022 18:15

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2899 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 07:42/clt	GECD.I_220328B : 29	164912
Surr: 1,1,1,2-Tetrachloroethane	84.0	%REC	1		70-130				SW8011	03/29/2022 07:42/clt	GECD.I_220328B : 29	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2899 (Trip Blank) 14971
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-052
Collection Date: 03/23/2022 18:15
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 11:52/jdw	FID-HEADSPACE_220328A : 25	R377979



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-053
Collection Date: 03/23/2022 15:55
Date Received: 03/26/2022
Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2914(OWDFMW01)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.2 to 0.3	0.26	mg/L	1	J	0.50	0.50	0.17		SW9060A	04/1/2022 01:55/eli-ca	SUB-C281031 : 17	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 18:27/car	ICPMS207-B_220330B : 84	R378017
METALS, TOTAL												
Lead	0.00005	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/30/2022 19:11/car	ICPMS207-B_220330B : 91	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Chloroform	0.18	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-053

Collection Date: 03/23/2022 15:55

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2914(OWDFMW01)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Surr: Dibromofluoromethane	104.0	%REC	1		80-119				SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/28/2022 14:21/msc	VOA5975C.I_220328A : 9	R378198
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 08:02/clt	GECD.I_220328B : 30	164912
Surr: 1,1,1,2-Tetrachloroethane	85.0	%REC	1		70-130				SW8011	03/29/2022 08:02/clt	GECD.I_220328B : 30	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 22:41/jp	VARIAN1_220328A : 48	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 22:41/jp	VARIAN1_220328A : 48	R377987
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/29/2022 22:41/jp	VARIAN1_220328A : 48	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.037		SW8015C	03/30/2022 01:03/amn	GCFID-HP5-B_220329A : 15	164941
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/30/2022 01:03/amn	GCFID-HP5-B_220329A : 15	164941
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/30/2022 01:03/amn	GCFID-HP5-B_220329A : 15	164941
Surr: o-Terphenyl	94.0	%REC	1		56-125				SW8015C	03/30/2022 01:03/amn	GCFID-HP5-B_220329A : 15	164941
Surr: n-Triacontane	88.0	%REC	1		50-150				SW8015C	03/30/2022 01:03/amn	GCFID-HP5-B_220329A : 15	164941
- 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: ERH2914(OWDFMW01)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22032035-053
Collection Date: 03/23/2022 15:55
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 13:08/jdw	FID-HEADSPACE_220328B : 5	R377980



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-054

Collection Date: 03/23/2022 15:55

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2913 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-054

Collection Date: 03/23/2022 15:55

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2913 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Surr: 1,2-Dichloroethane-d4	105.0	%REC	1		81-118				SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/28/2022 18:28/msc	VOA5975C.I_220328A : 18	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-055

Collection Date: 03/23/2022 15:55

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2913 (Trip Blank) 14909
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 11:49/jp	VARIAN1_220328A : 34	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 11:49/jp	VARIAN1_220328A : 34	R377987
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	03/29/2022 11:49/jp	VARIAN1_220328A : 34	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2913 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-056
Collection Date: 03/23/2022 15:55
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 08:21/ct	GECD.I_220328B : 31	164912
Surr: 1,1,1,2-Tetrachloroethane	82.0	%REC	1		70-130				SW8011	03/29/2022 08:21/ct	GECD.I_220328B : 31	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2913 (Trip Blank) 14971
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-057
Collection Date: 03/23/2022 15:55
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 13:12/jdw	FID-HEADSPACE_220328B : 6	R377980



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-058

Collection Date: 03/22/2022 16:16

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2897 (OWDFMW05A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
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	04/1/2022 02:38/eli-ca	SUB-C281031 : 18	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 19:48/car	ICPMS207-B_220330B : 97	R378017
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/30/2022 19:55/car	ICPMS207-B_220330B : 98	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-058

Collection Date: 03/22/2022 16:16

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2897 (OWDFMW05A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/28/2022 14:48/msc	VOA5975C.I_220328A : 10	R378198
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 08:41/clt	GECD.I_220328B : 32	164912
Surr: 1,1,1,2-Tetrachloroethane	83.0	%REC	1		70-130				SW8011	03/29/2022 08:41/clt	GECD.I_220328B : 32	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 23:50/jp	VARIAN1_220328A : 49	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 23:50/jp	VARIAN1_220328A : 49	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/29/2022 23:50/jp	VARIAN1_220328A : 49	R377987
- 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)	0.056	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/30/2022 02:29/amn	GCFID-HP5-B_220329A : 17	164941
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	04/1/2022 00:47/amn	GCFID-HP5-B_220331A : 14	164941
Oil Range Hydrocarbons (C24 to C40)	0.14	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/30/2022 02:29/amn	GCFID-HP5-B_220329A : 17	164941
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	04/1/2022 00:47/amn	GCFID-HP5-B_220331A : 14	164941
Total Extractable Hydrocarbons	0.21	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/30/2022 02:29/amn	GCFID-HP5-B_220329A : 17	164941
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	04/1/2022 00:47/amn	GCFID-HP5-B_220331A : 14	164941



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-058

Collection Date: 03/22/2022 16:16

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2897 (OWDFMW05A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	88.0	%REC	1		56-125				SW8015C	03/30/2022 02:29/amn	GCFID-HP5-B_220329A : 17	164941
Surr: o-Terphenyl (SGT)	84.0	%REC	1		56-125				SW8015C	04/1/2022 00:47/amn	GCFID-HP5-B_220331A : 14	164941
Surr: n-Triacontane	85.0	%REC	1		50-150				SW8015C	03/30/2022 02:29/amn	GCFID-HP5-B_220329A : 17	164941
Surr: n-Triacontane (SGT)	76.0	%REC	1		50-150				SW8015C	04/1/2022 00:47/amn	GCFID-HP5-B_220331A : 14	164941
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.0050	mg/L	1		0.0020	0.0012	0.00070		SW8015M	03/28/2022 13:16/jdw	FID-HEADSPACE_220328B : 7	R377980



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-059

Collection Date: 03/22/2022 16:16

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2896 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-059

Collection Date: 03/22/2022 16:16

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2896 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/28/2022 18:55/msc	VOA5975C.I_220328A : 19	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2896 (Trip Blank) 14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-060
Collection Date: 03/22/2022 16:16
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 12:23/jp	VARIAN1_220328A : 35	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 12:23/jp	VARIAN1_220328A : 35	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/29/2022 12:23/jp	VARIAN1_220328A : 35	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2896 (Trip Blank) 14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-061
Collection Date: 03/22/2022 16:16
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 09:01/ct	GECD.I_220328B : 33	164912
Surr: 1,1,1,2-Tetrachloroethane	84.0	%REC	1		70-130				SW8011	03/29/2022 09:01/ct	GECD.I_220328B : 33	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2896 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-062
Collection Date: 03/22/2022 16:16
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 13:38/jdw	FID-HEADSPACE_220328B : 9	R377980



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-063

Collection Date: 03/23/2022 15:30

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2903 (RHMW08)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.6 to 0.6	0.58	mg/L	1		0.50	0.50	0.17		SW9060A	04/1/2022 03:20/eli-ca	SUB-C281031 : 19	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 20:13/car	ICPMS207-B_220330B : 101	R378017
METALS, TOTAL												
Lead	0.00011	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/30/2022 20:20/car	ICPMS207-B_220330B : 102	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-063

Collection Date: 03/23/2022 15:30

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2903 (RHMW08)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Surr: 1,2-Dichloroethane-d4	106.0	%REC	1		81-118				SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
Surr: p-Bromofluorobenzene	111.0	%REC	1		85-114				SW8260B	03/28/2022 15:16/msc	VOA5975C.I_220328A : 11	R378198
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 09:21/clt	GECD.I_220328B : 34	164912
Surr: 1,1,1,2-Tetrachloroethane	82.0	%REC	1		70-130				SW8011	03/29/2022 09:21/clt	GECD.I_220328B : 34	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/30/2022 00:59/jp	VARIAN1_220328A : 50	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/30/2022 00:59/jp	VARIAN1_220328A : 50	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/30/2022 00:59/jp	VARIAN1_220328A : 50	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.070	mg/L	1	J	0.30	0.14	0.037		SW8015C	03/30/2022 16:45/amn	GCFID-HP5-B_220329A : 30	164941
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	04/1/2022 05:48/amn	GCFID-HP5-B_220331A : 20	164941
Oil Range Hydrocarbons (C24 to C40)	0.23	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/30/2022 16:45/amn	GCFID-HP5-B_220329A : 30	164941
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	04/1/2022 05:48/amn	GCFID-HP5-B_220331A : 20	164941
Total Extractable Hydrocarbons	0.32	mg/L	1		0.30	0.14	0.071		SW8015C	03/30/2022 16:45/amn	GCFID-HP5-B_220329A : 30	164941
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	04/1/2022 05:48/amn	GCFID-HP5-B_220331A : 20	164941



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-063

Collection Date: 03/23/2022 15:30

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2903 (RHMW08)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	96.0	%REC	1		56-125				SW8015C	03/30/2022 16:45/amn	GCFID-HP5-B_220329A : 30	164941
Surr: o-Terphenyl (SGT)	92.0	%REC	1		56-125				SW8015C	04/1/2022 05:48/amn	GCFID-HP5-B_220331A : 20	164941
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/30/2022 16:45/amn	GCFID-HP5-B_220329A : 30	164941
Surr: n-Triacontane (SGT)	80.0	%REC	1		50-150				SW8015C	04/1/2022 05:48/amn	GCFID-HP5-B_220331A : 20	164941
- 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	03/28/2022 13:42/jdw	FID-HEADSPACE_220328B : 10	R377980



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-064

Collection Date: 03/23/2022 15:30

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2902 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-064

Collection Date: 03/23/2022 15:30

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2902 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Surr: 1,2-Dichloroethane-d4	106.0	%REC	1		81-118				SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/28/2022 19:23/msc	VOA5975C.I_220328A : 20	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2902 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-065
Collection Date: 03/23/2022 15:30
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 12:58/jp	VARIAN1_220328A : 36	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 12:58/jp	VARIAN1_220328A : 36	R377987
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/29/2022 12:58/jp	VARIAN1_220328A : 36	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2902 (Trip Blank) 14964
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-066
Collection Date: 03/23/2022 15:30
Date Received: 03/26/2022
Report Date: 04/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 09:40/clt	GECD.I_220328B : 35	164912
Surr: 1,1,1,2-Tetrachloroethane	84.0	%REC	1		70-130				SW8011	03/29/2022 09:40/clt	GECD.I_220328B : 35	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2902 (Trip Blank) 14971
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-067
Collection Date: 03/23/2022 15:30
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 13:45/jdw	FID-HEADSPACE_220328B : 11	R377980



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-068

Collection Date: 03/22/2022 13:05

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2869(RHMW14-03)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.2 to 0.3	0.24	mg/L	1	J	0.50	0.50	0.17		SW9060A	04/1/2022 04:01/eli-ca	SUB-C281031 : 20	C_R281031
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/30/2022 20:26/car	ICPMS207-B_220330B : 103	R378017
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/30/2022 20:32/car	ICPMS207-B_220330B : 104	164942
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-068

Collection Date: 03/22/2022 13:05

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2869(RHMW14-03)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Surr: Dibromofluoromethane	105.0	%REC	1		80-119				SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
Surr: p-Bromofluorobenzene	111.0	%REC	1		85-114				SW8260B	03/28/2022 15:43/msc	VOA5975C.I_220328A : 12	R378198
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 10:00/clt	GECD.I_220328B : 36	164912
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/29/2022 10:00/clt	GECD.I_220328B : 36	164912
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/30/2022 02:07/jp	VARIAN1_220328A : 51	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/30/2022 02:07/jp	VARIAN1_220328A : 51	R377987
Surr: Trifluorotoluene	79.0	%REC	1		70-130				SW8015C	03/30/2022 02:07/jp	VARIAN1_220328A : 51	R377987
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.14	0.037		SW8015C	03/30/2022 03:55/amn	GCFID-HP5-B_220329A : 18	164941
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/30/2022 03:55/amn	GCFID-HP5-B_220329A : 18	164941
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/30/2022 03:55/amn	GCFID-HP5-B_220329A : 18	164941
Surr: o-Terphenyl	99.0	%REC	1		56-125				SW8015C	03/30/2022 03:55/amn	GCFID-HP5-B_220329A : 18	164941
Surr: n-Triacontane	92.0	%REC	1		50-150				SW8015C	03/30/2022 03:55/amn	GCFID-HP5-B_220329A : 18	164941
- 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: B22032035-068

Collection Date: 03/22/2022 13:05

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2869(RHMW14-03)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/28/2022 13:49/jdw	FID-HEADSPACE_220328B : 12	R377980



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-069

Collection Date: 03/22/2022 13:05

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2868 (Trip Blank) 14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-069

Collection Date: 03/22/2022 13:05

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2868 (Trip Blank) 14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/28/2022 19:50/msc	VOA5975C.I_220328A : 21	R378198



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22032035-070

Collection Date: 03/22/2022 13:05

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2868 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/29/2022 13:32/jp	VARIAN1_220328A : 37	R377987
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/29/2022 13:32/jp	VARIAN1_220328A : 37	R377987
Surr: Trifluorotoluene	80.0	%REC	1		70-130				SW8015C	03/29/2022 13:32/jp	VARIAN1_220328A : 37	R377987

- 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: B22032035-071

Collection Date: 03/22/2022 13:05

Date Received: 03/26/2022

Report Date: 04/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2868 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/29/2022 10:20/ct	GECD.I_220328B : 37	164912
Surr: 1,1,1,2-Tetrachloroethane	79.0	%REC	1		70-130				SW8011	03/29/2022 10:20/ct	GECD.I_220328B : 37	164912



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2868 (Trip Blank) 14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22032035-072
Collection Date: 03/22/2022 13:05
Date Received: 03/26/2022
Report Date: 04/04/2022

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	03/28/2022 13:54/jdw	FID-HEADSPACE_220328B : 13	R377980



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: SUB-C281031: 2 **SampType:** Method Blank **Batch ID:** C_R281031
Method: SW9060A **Analysis Date:** 03/31/2022 15:18 **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
Organic Carbon, Total (TOC)	ND	0.20									

Associated Samples: B22032035-001D, B22032035-006D, B22032035-011D, B22032035-016D, B22032035-021D, B22032035-026D, B22032035-032D, B22032035-038D, B22032035-043D, B22032035-048D, B22032035-053D, B22032035-058D, B22032035-063D, B22032035-068D

- TOC Range is 0.0 to 0.1

Run ID: Run Order: SUB-C281031: 1 **SampType:** Laboratory Control Sample **Batch ID:** C_R281031
Method: SW9060A **Analysis Date:** 03/31/2022 14:38 **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)	5.1	0.50	5.0		102.0	91	111				

Associated Samples: B22032035-001D, B22032035-006D, B22032035-011D, B22032035-016D, B22032035-021D, B22032035-026D, B22032035-032D, B22032035-038D, B22032035-043D, B22032035-048D, B22032035-053D, B22032035-058D, B22032035-063D, B22032035-068D

- TOC Range is 5.1 to 5.1

Run ID: Run Order: SUB-C281031: 6 **SampType:** Sample Matrix Spike **Batch ID:** C_R281031
Method: SW9060A **Analysis Date:** 03/31/2022 17:55 **Prep Date:**
Lab ID: C22030970-006DMS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.4	0.50	5.0	0.33	101.0	91	111				

Associated Samples: B22032035-001D, B22032035-006D, B22032035-011D, B22032035-016D, B22032035-021D, B22032035-026D, B22032035-032D, B22032035-038D, B22032035-043D, B22032035-048D, B22032035-053D, B22032035-058D, B22032035-063D, B22032035-068D

- TOC Range is 5.3 to 5.4



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: SUB-C281031: 7 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** C_R281031
Method: SW9060A **Analysis Date:** 03/31/2022 18:35 **Prep Date:**
Lab ID: C22030970-006DMSD **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.4	0.50	5.0	0.33	101.0	91	111	5.4	0.1	10.0	

Associated Samples: B22032035-001D, B22032035-006D, B22032035-011D, B22032035-016D, B22032035-021D, B22032035-026D, B22032035-032D, B22032035-038D, B22032035-043D, B22032035-048D, B22032035-053D, B22032035-058D, B22032035-063D, B22032035-068D

- TOC Range is 5.3 to 5.4

Run ID: Run Order: SUB-C281031: 3 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R281031
Method: SW9060A **Analysis Date:** 03/31/2022 15:56 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.1	0.50	5.0		101.0	90	110				

Associated Samples: B22032035-001D, B22032035-006D, B22032035-011D, B22032035-016D, B22032035-021D, B22032035-026D, B22032035-032D, B22032035-038D, B22032035-043D, B22032035-048D, B22032035-053D, B22032035-058D, B22032035-063D, B22032035-068D

- TOC Range is 5.0 to 5.1

Run ID: Run Order: SUB-C281031: 16 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R281031
Method: SW9060A **Analysis Date:** 04/01/2022 00:36 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.3	0.50	5.0		105.0	90	110				

Associated Samples: B22032035-001D, B22032035-006D, B22032035-011D, B22032035-016D, B22032035-021D, B22032035-026D, B22032035-032D, B22032035-038D, B22032035-043D, B22032035-048D, B22032035-053D, B22032035-058D, B22032035-063D, B22032035-068D

- TOC Range is 5.2 to 5.3



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: SUB-C281031: 21 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R281031
Method: SW9060A **Analysis Date:** 04/01/2022 05:22 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.2	0.50	5.0		104.0	90	110				

Associated Samples: B22032035-001D, B22032035-006D, B22032035-011D, B22032035-016D, B22032035-021D, B22032035-026D, B22032035-032D, B22032035-038D, B22032035-043D, B22032035-048D, B22032035-053D, B22032035-058D, B22032035-063D, B22032035-068D

- TOC Range is 5.2 to 5.3



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: ICPMS207-B_220330B: 37 **SampType:** Laboratory Fortified Blank **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 13:34 **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	0.051	0.001	0.050		102.0	88	115				

Associated Samples: B22032035-001A, B22032035-006A, B22032035-011A, B22032035-016A, B22032035-021A, B22032035-026A, B22032035-032A, B22032035-038A, B22032035-043A, B22032035-048A, B22032035-053A, B22032035-058A, B22032035-063A, B22032035-068A

Run ID: Run Order: ICPMS207-B_220330B: 36 **SampType:** Method Blank **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 13:28 **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: B22032035-001A, B22032035-006A, B22032035-011A, B22032035-016A, B22032035-021A, B22032035-026A, B22032035-032A, B22032035-038A, B22032035-043A, B22032035-048A, B22032035-053A, B22032035-058A, B22032035-063A, B22032035-068A

Run ID: Run Order: ICPMS207-B_220330B: 53 **SampType:** Sample Matrix Spike **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 15:14 **Prep Date:**
Lab ID: B22032035-001AMS **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	101.0	88	115				

Associated Samples: B22032035-001A, B22032035-006A, B22032035-011A, B22032035-016A, B22032035-021A, B22032035-026A, B22032035-032A, B22032035-038A, B22032035-043A, B22032035-048A, B22032035-053A, B22032035-058A, B22032035-063A, B22032035-068A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: ICPMS207-B_220330B: 54 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 15:20 **Prep Date:**
Lab ID: B22032035-001AMSD **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	103.0	88	115	0.050	2.1	20.0	

Associated Samples: B22032035-001A, B22032035-006A, B22032035-011A, B22032035-016A, B22032035-021A, B22032035-026A, B22032035-032A, B22032035-038A, B22032035-043A, B22032035-048A, B22032035-053A, B22032035-058A, B22032035-063A, B22032035-068A

Run ID: Run Order: ICPMS207-B_220330B: 88 **SampType:** Sample Matrix Spike **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 18:52 **Prep Date:**
Lab ID: B22032035-053AMS **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				

Associated Samples: B22032035-001A, B22032035-006A, B22032035-011A, B22032035-016A, B22032035-021A, B22032035-026A, B22032035-032A, B22032035-038A, B22032035-043A, B22032035-048A, B22032035-053A, B22032035-058A, B22032035-063A, B22032035-068A

Run ID: Run Order: ICPMS207-B_220330B: 89 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 18:58 **Prep Date:**
Lab ID: B22032035-053AMSD **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.052	0.001	0.050	0.00	104.0	88	115	0.051	2.2	20.0	

Associated Samples: B22032035-001A, B22032035-006A, B22032035-011A, B22032035-016A, B22032035-021A, B22032035-026A, B22032035-032A, B22032035-038A, B22032035-043A, B22032035-048A, B22032035-053A, B22032035-058A, B22032035-063A, B22032035-068A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: ICPMS207-B_220330B: 52 **SampType:** Serial Dilution **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 15:07 **Prep Date:**
Lab ID: B22032035-001ADIL **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.001						0		10.0	

Associated Samples: B22032035-001A, B22032035-006A, B22032035-011A, B22032035-016A, B22032035-021A, B22032035-026A, B22032035-032A, B22032035-038A, B22032035-043A, B22032035-048A, B22032035-053A, B22032035-058A, B22032035-063A, B22032035-068A

Run ID: Run Order: ICPMS207-B_220330B: 87 **SampType:** Serial Dilution **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 18:46 **Prep Date:**
Lab ID: B22032035-053ADIL **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: B22032035-001A, B22032035-006A, B22032035-011A, B22032035-016A, B22032035-021A, B22032035-026A, B22032035-032A, B22032035-038A, B22032035-043A, B22032035-048A, B22032035-053A, B22032035-058A, B22032035-063A, B22032035-068A

Run ID: Run Order: ICPMS207-B_220330B: 49 **SampType:** Laboratory Control Sample **Batch ID:** 164942
Method: SW6020 **Analysis Date:** 03/30/2022 14:49 **Prep Date:** 03/28/2022 14:33
Lab ID: LCS4-164942 **Units:** mg/L **Prep Method:** SW3010A

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

Associated Samples: B22032035-001B, B22032035-006B, B22032035-011B, B22032035-016B, B22032035-021B, B22032035-026B, B22032035-032B, B22032035-038B, B22032035-043B, B22032035-048B, B22032035-053B, B22032035-058B, B22032035-063B, B22032035-068B



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: ICPMS207-B_220330B: 58 **SampType:** Post Digestion/Distillation Spike **Batch ID:** 164942
Method: SW6020 **Analysis Date:** 03/30/2022 15:45 **Prep Date:** 03/28/2022 14:36
Lab ID: B22032035-001BPDS1 **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	96.0	80	120				

Associated Samples: B22032035-001B, B22032035-006B, B22032035-011B, B22032035-016B, B22032035-021B, B22032035-026B, B22032035-032B, B22032035-038B, B22032035-043B, B22032035-048B, B22032035-053B, B22032035-058B, B22032035-063B, B22032035-068B

Run ID: Run Order: ICPMS207-B_220330B: 59 **SampType:** Matrix Spike **Batch ID:** 164942
Method: SW6020 **Analysis Date:** 03/30/2022 15:51 **Prep Date:** 03/28/2022 14:36
Lab ID: B22032035-001BMS4 **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	102.0	88	115				

Associated Samples: B22032035-001B, B22032035-006B, B22032035-011B, B22032035-016B, B22032035-021B, B22032035-026B, B22032035-032B, B22032035-038B, B22032035-043B, B22032035-048B, B22032035-053B, B22032035-058B, B22032035-063B, B22032035-068B

Run ID: Run Order: ICPMS207-B_220330B: 62 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164942
Method: SW6020 **Analysis Date:** 03/30/2022 16:10 **Prep Date:** 03/28/2022 14:36
Lab ID: B22032035-001BMSD4 **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	100.0	88	115	0.102	1.3	20.0	

Associated Samples: B22032035-001B, B22032035-006B, B22032035-011B, B22032035-016B, B22032035-021B, B22032035-026B, B22032035-032B, B22032035-038B, B22032035-043B, B22032035-048B, B22032035-053B, B22032035-058B, B22032035-063B, B22032035-068B



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: ICPMS207-B_220330B: 93 **SampType:** Post Digestion/Distillation Spike **Batch ID:** 164942
Method: SW6020 **Analysis Date:** 03/30/2022 19:23 **Prep Date:** 03/28/2022 14:36
Lab ID: B22032035-053BPDS1 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.049	0.001	0.052	0	95.0	80	120				

Associated Samples: B22032035-001B, B22032035-006B, B22032035-011B, B22032035-016B, B22032035-021B, B22032035-026B, B22032035-032B, B22032035-038B, B22032035-043B, B22032035-048B, B22032035-053B, B22032035-058B, B22032035-063B, B22032035-068B

Run ID: Run Order: ICPMS207-B_220330B: 94 **SampType:** Matrix Spike **Batch ID:** 164942
Method: SW6020 **Analysis Date:** 03/30/2022 19:30 **Prep Date:** 03/28/2022 14:36
Lab ID: B22032035-053BMS4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.103	0.001	0.100	0	103.0	88	115				

Associated Samples: B22032035-001B, B22032035-006B, B22032035-011B, B22032035-016B, B22032035-021B, B22032035-026B, B22032035-032B, B22032035-038B, B22032035-043B, B22032035-048B, B22032035-053B, B22032035-058B, B22032035-063B, B22032035-068B

Run ID: Run Order: ICPMS207-B_220330B: 95 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164942
Method: SW6020 **Analysis Date:** 03/30/2022 19:36 **Prep Date:** 03/28/2022 14:36
Lab ID: B22032035-053BMSD4 **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	102.0	88	115	0.103	0.7	20.0	

Associated Samples: B22032035-001B, B22032035-006B, B22032035-011B, B22032035-016B, B22032035-021B, B22032035-026B, B22032035-032B, B22032035-038B, B22032035-043B, B22032035-048B, B22032035-053B, B22032035-058B, B22032035-063B, B22032035-068B



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: ICPMS207-B_220330B: 48 **SampType:** Method Blank **Batch ID:** 164942
Method: SW6020 **Analysis Date:** 03/30/2022 14:43 **Prep Date:** 03/28/2022 14:33
Lab ID: MB-164942 **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: B22032035-001B, B22032035-006B, B22032035-011B, B22032035-016B, B22032035-021B, B22032035-026B, B22032035-032B, B22032035-038B, B22032035-043B, B22032035-048B, B22032035-053B, B22032035-058B, B22032035-063B, B22032035-068B

Run ID: Run Order: ICPMS207-B_220330B: 57 **SampType:** Serial Dilution **Batch ID:** 164942
Method: SW6020 **Analysis Date:** 03/30/2022 15:39 **Prep Date:** 03/28/2022 14:36
Lab ID: B22032035-001BDIL **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.001						0		10.0	

Associated Samples: B22032035-001B, B22032035-006B, B22032035-011B, B22032035-016B, B22032035-021B, B22032035-026B, B22032035-032B, B22032035-038B, B22032035-043B, B22032035-048B, B22032035-053B, B22032035-058B, B22032035-063B, B22032035-068B

Run ID: Run Order: ICPMS207-B_220330B: 92 **SampType:** Serial Dilution **Batch ID:** 164942
Method: SW6020 **Analysis Date:** 03/30/2022 19:17 **Prep Date:** 03/28/2022 14:36
Lab ID: B22032035-053BDIL **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.001						0		10.0	

Associated Samples: B22032035-001B, B22032035-006B, B22032035-011B, B22032035-016B, B22032035-021B, B22032035-026B, B22032035-032B, B22032035-038B, B22032035-043B, B22032035-048B, B22032035-053B, B22032035-058B, B22032035-063B, B22032035-068B



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: ICPMS207-B_220330B: 45 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 14:24 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

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

Associated Samples: B22032035-001A, B22032035-001B, B22032035-006A, B22032035-006B, B22032035-011A, B22032035-011B, B22032035-016A, B22032035-016B, B22032035-021A, B22032035-021B, B22032035-026A, B22032035-026B, B22032035-032A, B22032035-032B, B22032035-038A, B22032035-038B, B22032035-043A, B22032035-043B, B22032035-048A, B22032035-048B, B22032035-053A, B22032035-053B, B22032035-058A, B22032035-058B, B22032035-063A, B22032035-063B, B22032035-068A, B22032035-068B

Run ID: Run Order: ICPMS207-B_220330B: 60 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 15:57 **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: B22032035-001A, B22032035-001B, B22032035-006A, B22032035-006B, B22032035-011A, B22032035-011B, B22032035-016A, B22032035-016B, B22032035-021A, B22032035-021B, B22032035-026A, B22032035-026B, B22032035-032A, B22032035-032B, B22032035-038A, B22032035-038B, B22032035-043A, B22032035-043B, B22032035-048A, B22032035-048B, B22032035-053A, B22032035-053B, B22032035-058A, B22032035-058B, B22032035-063A, B22032035-063B, B22032035-068A, B22032035-068B

Run ID: Run Order: ICPMS207-B_220330B: 73 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 17:19 **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		99.0	90	110				

Associated Samples: B22032035-001A, B22032035-001B, B22032035-006A, B22032035-006B, B22032035-011A, B22032035-011B, B22032035-016A, B22032035-016B, B22032035-021A, B22032035-021B, B22032035-026A, B22032035-026B, B22032035-032A, B22032035-032B, B22032035-038A, B22032035-038B, B22032035-043A, B22032035-043B, B22032035-048A, B22032035-048B, B22032035-053A, B22032035-053B, B22032035-058A, B22032035-058B, B22032035-063A, B22032035-063B, B22032035-068A, B22032035-068B



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: ICPMS207-B_220330B: 85 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 18:33 **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: B22032035-001A, B22032035-001B, B22032035-006A, B22032035-006B, B22032035-011A, B22032035-011B, B22032035-016A, B22032035-016B, B22032035-021A, B22032035-021B, B22032035-026A, B22032035-026B, B22032035-032A, B22032035-032B, B22032035-038A, B22032035-038B, B22032035-043A, B22032035-043B, B22032035-048A, B22032035-048B, B22032035-053A, B22032035-053B, B22032035-058A, B22032035-058B, B22032035-063A, B22032035-063B, B22032035-068A, B22032035-068B

Run ID: Run Order: ICPMS207-B_220330B: 99 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 20:01 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

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

Associated Samples: B22032035-001A, B22032035-001B, B22032035-006A, B22032035-006B, B22032035-011A, B22032035-011B, B22032035-016A, B22032035-016B, B22032035-021A, B22032035-021B, B22032035-026A, B22032035-026B, B22032035-032A, B22032035-032B, B22032035-038A, B22032035-038B, B22032035-043A, B22032035-043B, B22032035-048A, B22032035-048B, B22032035-053A, B22032035-053B, B22032035-058A, B22032035-058B, B22032035-063A, B22032035-063B, B22032035-068A, B22032035-068B

Run ID: Run Order: ICPMS207-B_220330B: 108 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378017
Method: SW6020 **Analysis Date:** 03/30/2022 20:57 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

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

Associated Samples: B22032035-001A, B22032035-001B, B22032035-006A, B22032035-006B, B22032035-011A, B22032035-011B, B22032035-016A, B22032035-016B, B22032035-021A, B22032035-021B, B22032035-026A, B22032035-026B, B22032035-032A, B22032035-032B, B22032035-038A, B22032035-038B, B22032035-043A, B22032035-043B, B22032035-048A, B22032035-048B, B22032035-053A, B22032035-053B, B22032035-058A, B22032035-058B, B22032035-063A, B22032035-063B, B22032035-068A, B22032035-068B



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 4 **SampType:** Method Blank **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 10:53 **Prep Date:**
Lab ID: MBLK032722_ **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: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 4 **SampType:** Method Blank **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 10:53 **Prep Date:**
Lab ID: MBLK032722_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
trans-1,3-Dichloropropene	ND	0.50									
Ethylbenzene	ND	0.50									
Methyl tert-butyl ether (MTBE)	ND	0.50									
Methyl ethyl ketone	ND	10									
Methylene chloride	ND	0.50									
Styrene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
Vinyl chloride	ND	0.50									
m+p-Xylenes	ND	0.50									
o-Xylene	ND	0.50									
Xylenes, Total	ND	0.50									
Surr: 1,2-Dichloroethane-d4	11	0.50	10		106.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		104.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		110.0	85	114				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 4 **SampType:** Method Blank **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 10:53 **Prep Date:**
Lab ID: MBLK032722_ **Units:** ug/L **Prep Method:**

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

Associated Samples: B22032035-001E, B22032035-002A, B22032035-006E, B22032035-007A, B22032035-011E, B22032035-012A, B22032035-016E, B22032035-017A, B22032035-021E, B22032035-022A, B22032035-026E, B22032035-027B, B22032035-028A, B22032035-032E, B22032035-033B, B22032035-034A

Run ID: Run Order: VOA5975C.I_220327A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 09:58 **Prep Date:**
Lab ID: LCS032722_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	4.9	0.50	5.0		98.0	79	120				
Bromobenzene	4.7	0.50	5.0		93.0	80	120				
Bromochloromethane	5.0	0.50	5.0		99.0	78	123				
Bromodichloromethane	4.9	0.50	5.0		98.0	79	125				
Bromoform	4.6	0.50	5.0		93.0	66	130				
Carbon tetrachloride	4.5	0.50	5.0		90.0	72	136				
Chlorobenzene	4.6	0.50	5.0		93.0	82	118				
Chlorodibromomethane	4.5	0.50	5.0		89.0	74	126				
Chloroethane	5.2	0.50	5.0		104.0	60	138				
Chloroform	4.6	0.50	5.0		93.0	79	124				
Chloromethane	4.9	0.50	5.0		98.0	50	139				
1,2-Dibromoethane	4.5	0.50	5.0		90.0	78	122				
2-Chlorotoluene	4.9	0.50	5.0		97.0	79	122				
Dibromomethane	4.6	0.50	5.0		92.0	79	123				
1,2-Dichlorobenzene	4.8	0.50	5.0		96.0	80	119				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 09:58 **Prep Date:**
Lab ID: LCS032722_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.1	0.50	5.0		102.0	78	122				
1,3-Dichlorobenzene	4.8	0.50	5.0		96.0	80	119				
1,4-Dichlorobenzene	4.7	0.50	5.0		94.0	79	118				
Dichlorodifluoromethane	4.5	0.50	5.0		91.0	32	152				
1,1-Dichloroethane	5.0	0.50	5.0		99.0	77	125				
1,2-Dichloroethane	4.8	0.50	5.0		96.0	73	128				
1,1-Dichloroethene	4.9	0.50	5.0		99.0	71	131				
cis-1,2-Dichloroethene	4.7	0.50	5.0		95.0	78	123				
trans-1,2-Dichloroethene	4.7	0.50	5.0		95.0	75	124				
1,2-Dichloropropane	4.7	0.50	5.0		93.0	78	122				
1,3-Dichloropropane	4.5	0.50	5.0		90.0	80	119				
2,2-Dichloropropane	4.8	0.50	5.0		97.0	60	139				
1,1-Dichloropropene	4.5	0.50	5.0		90.0	79	125				
cis-1,3-Dichloropropene	4.2	0.50	5.0		84.0	75	124				
trans-1,3-Dichloropropene	4.9	0.50	5.0		97.0	73	127				
Ethylbenzene	4.6	0.50	5.0		92.0	79	121				
Methyl tert-butyl ether (MTBE)	4.9	0.50	5.0		99.0	71	124				
Methyl ethyl ketone	59	10	50		117.0	56	143				
Methylene chloride	4.8	0.50	5.0		96.0	74	124				
Styrene	4.6	0.50	5.0		92.0	78	123				
1,1,1,2-Tetrachloroethane	4.4	0.50	5.0		88.0	78	124				
1,1,2,2-Tetrachloroethane	5.1	0.50	5.0		101.0	71	121				
Tetrachloroethene	4.3	0.50	5.0		85.0	74	129				
Toluene	4.8	0.50	5.0		97.0	80	121				
1,1,1-Trichloroethane	4.6	0.50	5.0		91.0	74	131				
1,1,2-Trichloroethane	4.6	0.50	5.0		93.0	80	119				
Trichloroethene	4.5	0.50	5.0		91.0	79	123				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 09:58 **Prep Date:**
Lab ID: LCS032722_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	5.3	0.50	5.0		105.0	65	141				
1,2,3-Trichloropropane	4.7	0.50	5.0		93.0	73	125				
Vinyl chloride	5.1	0.50	5.0		102.0	58	137				
m+p-Xylenes	8.9	0.50	10		89.0	80	121				
o-Xylene	4.6	0.50	5.0		91.0	78	122				
Xylenes, Total	13	0.50	15		89.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		105.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		103.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		108.0	85	114				
Surr: Toluene-d8	9.9	0.50	10		99.0	89	112				

Associated Samples: B22032035-001E, B22032035-002A, B22032035-006E, B22032035-007A, B22032035-011E, B22032035-012A, B22032035-016E, B22032035-017A, B22032035-021E, B22032035-022A, B22032035-026E, B22032035-027B, B22032035-028A, B22032035-032E, B22032035-033B, B22032035-034A

Run ID: Run Order: VOA5975C.I_220327A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 18:44 **Prep Date:**
Lab ID: B22032035-006EMS **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	101.0	79	120				
Bromobenzene	4.8	0.50	5.0	0.0	96.0	80	120				
Bromochloromethane	4.9	0.50	5.0	0.0	98.0	78	123				
Bromodichloromethane	5.0	0.50	5.0	0.0	101.0	79	125				
Bromoform	4.9	0.50	5.0	0.0	98.0	66	130				
Carbon tetrachloride	4.7	0.50	5.0	0.0	95.0	72	136				
Chlorobenzene	4.8	0.50	5.0	0.0	96.0	82	118				
Chlorodibromomethane	4.8	0.50	5.0	0.0	96.0	74	126				
Chloroethane	5.1	0.50	5.0	0.0	103.0	60	138				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 22

SampType: Sample Matrix Spike

Batch ID: R377839

Method: SW8260B

Analysis Date: 03/27/2022 18:44

Prep Date:

Lab ID: B22032035-006EMS

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	96.0	79	124				
Chloromethane	4.8	0.50	5.0	0.0	96.0	50	139				
1,2-Dibromoethane	4.7	0.50	5.0	0.0	94.0	78	122				
2-Chlorotoluene	5.0	0.50	5.0	0.0	101.0	79	122				
Dibromomethane	5.0	0.50	5.0	0.0	99.0	79	123				
1,2-Dichlorobenzene	4.7	0.50	5.0	0.0	95.0	80	119				
4-Chlorotoluene	5.2	0.50	5.0	0.0	103.0	78	122				
1,3-Dichlorobenzene	5.0	0.50	5.0	0.0	99.0	80	119				
1,4-Dichlorobenzene	4.8	0.50	5.0	0.0	96.0	79	118				
Dichlorodifluoromethane	4.4	0.50	5.0	0.0	88.0	32	152				
1,1-Dichloroethane	5.0	0.50	5.0	0.0	101.0	77	125				
1,2-Dichloroethane	5.1	0.50	5.0	0.0	102.0	73	128				
1,1-Dichloroethene	5.1	0.50	5.0	0.0	103.0	71	131				
cis-1,2-Dichloroethene	4.7	0.50	5.0	0.0	93.0	78	123				
trans-1,2-Dichloroethene	5.0	0.50	5.0	0.0	99.0	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	4.5	0.50	5.0	0.0	90.0	60	139				
1,1-Dichloropropene	4.7	0.50	5.0	0.0	94.0	79	125				
cis-1,3-Dichloropropene	4.3	0.50	5.0	0.0	85.0	75	124				
trans-1,3-Dichloropropene	4.8	0.50	5.0	0.0	96.0	73	127				
Ethylbenzene	4.8	0.50	5.0	0.0	95.0	79	121				
Methyl tert-butyl ether (MTBE)	4.5	0.50	5.0	0.0	90.0	71	124				
Methyl ethyl ketone	57	10	50	0.0	114.0	56	143				
Methylene chloride	4.9	0.50	5.0	0.0	98.0	74	124				
Styrene	4.8	0.50	5.0	0.0	96.0	78	123				
1,1,1,2-Tetrachloroethane	4.6	0.50	5.0	0.0	92.0	78	124				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 18:44 **Prep Date:**
Lab ID: B22032035-006EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	5.2	0.50	5.0	0.0	104.0	71	121				
Tetrachloroethene	4.5	0.50	5.0	0.0	91.0	74	129				
Toluene	5.1	0.50	5.0	0.0	102.0	80	121				
1,1,1-Trichloroethane	4.6	0.50	5.0	0.0	92.0	74	131				
1,1,2-Trichloroethane	5.0	0.50	5.0	0.0	100.0	80	119				
Trichloroethene	4.8	0.50	5.0	0.0	96.0	79	123				
Trichlorofluoromethane	5.3	0.50	5.0	0.0	106.0	65	141				
1,2,3-Trichloropropane	4.8	0.50	5.0	0.0	95.0	73	125				
Vinyl chloride	5.1	0.50	5.0	0.0	101.0	58	137				
m+p-Xylenes	9.4	0.50	10	0.0	94.0	80	121				
o-Xylene	4.7	0.50	5.0	0.0	94.0	78	122				
Xylenes, Total	14	0.50	15	0.0	94.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	107.0	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	10	0.50	10	0.0	102.0	89	112				

Associated Samples: B22032035-001E, B22032035-002A, B22032035-006E, B22032035-007A, B22032035-011E, B22032035-012A, B22032035-016E, B22032035-017A, B22032035-021E, B22032035-022A, B22032035-026E, B22032035-027B, B22032035-028A, B22032035-032E, B22032035-033B, B22032035-034A

Run ID: Run Order: VOA5975C.I_220327A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 19:11 **Prep Date:**
Lab ID: B22032035-006EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.2	0.50	5.0	0.0	105.0	79	120	5.0	3.8	20.0	
Bromobenzene	5.2	0.50	5.0	0.0	105.0	80	120	4.8	9.2	20.0	
Bromochloromethane	5.2	0.50	5.0	0.0	105.0	78	123	4.9	6.6	20.0	



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 19:11 **Prep Date:**
Lab ID: B22032035-006EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	5.4	0.50	5.0	0.0	108.0	79	125	5.0	6.9	20.0	
Bromoform	5.1	0.50	5.0	0.0	102.0	66	130	4.9	4.7	20.0	
Carbon tetrachloride	5.1	0.50	5.0	0.0	102.0	72	136	4.7	7.5	20.0	
Chlorobenzene	5.1	0.50	5.0	0.0	101.0	82	118	4.8	5.1	20.0	
Chlorodibromomethane	4.8	0.50	5.0	0.0	96.0	74	126	4.8	0.9	20.0	
Chloroethane	5.2	0.50	5.0	0.0	104.0	60	138	5.1	0.8	20.0	
Chloroform	5.1	0.50	5.0	0.0	101.0	79	124	4.8	4.9	20.0	
Chloromethane	5.0	0.50	5.0	0.0	100.0	50	139	4.8	4.2	20.0	
1,2-Dibromoethane	4.8	0.50	5.0	0.0	97.0	78	122	4.7	2.6	20.0	
2-Chlorotoluene	5.4	0.50	5.0	0.0	109.0	79	122	5.0	7.8	20.0	
Dibromomethane	5.1	0.50	5.0	0.0	102.0	79	123	5.0	2.5	20.0	
1,2-Dichlorobenzene	5.2	0.50	5.0	0.0	104.0	80	119	4.7	8.9	20.0	
4-Chlorotoluene	5.6	0.50	5.0	0.0	112.0	78	122	5.2	8.6	20.0	
1,3-Dichlorobenzene	5.4	0.50	5.0	0.0	108.0	80	119	5.0	8.1	20.0	
1,4-Dichlorobenzene	5.2	0.50	5.0	0.0	103.0	79	118	4.8	7.5	20.0	
Dichlorodifluoromethane	4.6	0.50	5.0	0.0	91.0	32	152	4.4	3.6	20.0	
1,1-Dichloroethane	5.4	0.50	5.0	0.0	108.0	77	125	5.0	6.5	20.0	
1,2-Dichloroethane	5.3	0.50	5.0	0.0	107.0	73	128	5.1	4.8	20.0	
1,1-Dichloroethene	5.5	0.50	5.0	0.0	109.0	71	131	5.1	6.3	20.0	
cis-1,2-Dichloroethene	5.1	0.50	5.0	0.0	102.0	78	123	4.7	8.8	20.0	
trans-1,2-Dichloroethene	5.0	0.50	5.0	0.0	100.0	75	124	5.0	0.5	20.0	
1,2-Dichloropropane	5.0	0.50	5.0	0.0	100.0	78	122	4.7	6.5	20.0	
1,3-Dichloropropane	4.8	0.50	5.0	0.0	96.0	80	119	4.7	1.6	20.0	
2,2-Dichloropropane	4.9	0.50	5.0	0.0	97.0	60	139	4.5	7.4	20.0	
1,1-Dichloropropene	5.1	0.50	5.0	0.0	101.0	79	125	4.7	7.5	20.0	
cis-1,3-Dichloropropene	4.4	0.50	5.0	0.0	88.0	75	124	4.3	3.4	20.0	
trans-1,3-Dichloropropene	5.1	0.50	5.0	0.0	101.0	73	127	4.8	4.8	20.0	



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 19:11 **Prep Date:**
Lab ID: B22032035-006EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Ethylbenzene	5.0	0.50	5.0	0.0	100.0	79	121	4.8	4.9	20.0	
Methyl tert-butyl ether (MTBE)	4.8	0.50	5.0	0.0	96.0	71	124	4.5	6.2	20.0	
Methyl ethyl ketone	56	10	50	0.0	112.0	56	143	57	1.6	20.0	
Methylene chloride	5.2	0.50	5.0	0.0	105.0	74	124	4.9	6.5	20.0	
Styrene	5.0	0.50	5.0	0.0	99.0	78	123	4.8	3.4	20.0	
1,1,1,2-Tetrachloroethane	4.9	0.50	5.0	0.0	98.0	78	124	4.6	6.1	20.0	
1,1,2,2-Tetrachloroethane	5.7	0.50	5.0	0.0	113.0	71	121	5.2	8.7	20.0	
Tetrachloroethene	4.8	0.50	5.0	0.0	97.0	74	129	4.5	6.7	20.0	
Toluene	5.4	0.50	5.0	0.0	108.0	80	121	5.1	5.7	20.0	
1,1,1-Trichloroethane	5.0	0.50	5.0	0.0	99.0	74	131	4.6	7.6	20.0	
1,1,2-Trichloroethane	5.1	0.50	5.0	0.0	103.0	80	119	5.0	2.6	20.0	
Trichloroethene	5.0	0.50	5.0	0.0	100.0	79	123	4.8	4.1	20.0	
Trichlorofluoromethane	5.3	0.50	5.0	0.0	106.0	65	141	5.3	0.5	20.0	
1,2,3-Trichloropropane	5.0	0.50	5.0	0.0	101.0	73	125	4.8	5.5	20.0	
Vinyl chloride	5.3	0.50	5.0	0.0	105.0	58	137	5.1	3.8	20.0	
m+p-Xylenes	9.8	0.50	10	0.0	98.0	80	121	9.4	3.6	20.0	
o-Xylene	4.8	0.50	5.0	0.0	97.0	78	122	4.7	2.5	20.0	
Xylenes, Total	15	0.50	15	0.0	97.0	79	121	14	3.2	20.0	
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	106.0	81	118	0.0			
Surr: Dibromofluoromethane	10	0.50	10	0.0	102.0	80	119	0.0			
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	111.0	85	114	0.0			
Surr: Toluene-d8	10	0.50	10	0.0	101.0	89	112	0.0			

Associated Samples: B22032035-001E, B22032035-002A, B22032035-006E, B22032035-007A, B22032035-011E, B22032035-012A, B22032035-016E, B22032035-017A, B22032035-021E, B22032035-022A, B22032035-026E, B22032035-027B, B22032035-028A, B22032035-032E, B22032035-033B, B22032035-034A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 4 **SampType:** Method Blank **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 12:31 **Prep Date:**
Lab ID: MBLK032822_ **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: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 4 **SampType:** Method Blank **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 12:31 **Prep Date:**
Lab ID: MBLK032822_ **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	10	0.50	10		103.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		110.0	85	114				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 4 **SampType:** Method Blank **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 12:31 **Prep Date:**
Lab ID: MBLK032822_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	9.4	0.50	10		94.0	89	112				

Associated Samples: B22032035-038E, B22032035-039A, B22032035-043E, B22032035-044A, B22032035-048E, B22032035-049A, B22032035-053E, B22032035-054A, B22032035-058E, B22032035-059A, B22032035-063E, B22032035-064A, B22032035-068E, B22032035-069A

Run ID: Run Order: VOA5975C.I_220328A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 11:37 **Prep Date:**
Lab ID: LCS032822_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.4	0.50	5.0		108.0	79	120				
Bromobenzene	5.1	0.50	5.0		103.0	80	120				
Bromochloromethane	5.3	0.50	5.0		106.0	78	123				
Bromodichloromethane	5.4	0.50	5.0		109.0	79	125				
Bromoform	5.1	0.50	5.0		101.0	66	130				
Carbon tetrachloride	4.9	0.50	5.0		99.0	72	136				
Chlorobenzene	5.2	0.50	5.0		104.0	82	118				
Chlorodibromomethane	5.0	0.50	5.0		100.0	74	126				
Chloroethane	4.8	0.50	5.0		95.0	60	138				
Chloroform	5.1	0.50	5.0		101.0	79	124				
Chloromethane	4.6	0.50	5.0		92.0	50	139				
1,2-Dibromoethane	5.1	0.50	5.0		101.0	78	122				
2-Chlorotoluene	5.3	0.50	5.0		107.0	79	122				
Dibromomethane	5.4	0.50	5.0		107.0	79	123				
1,2-Dichlorobenzene	5.3	0.50	5.0		105.0	80	119				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 11:37 **Prep Date:**
Lab ID: LCS032822_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.6	0.50	5.0		112.0	78	122				
1,3-Dichlorobenzene	5.4	0.50	5.0		108.0	80	119				
1,4-Dichlorobenzene	5.1	0.50	5.0		102.0	79	118				
Dichlorodifluoromethane	4.2	0.50	5.0		84.0	32	152				
1,1-Dichloroethane	5.5	0.50	5.0		109.0	77	125				
1,2-Dichloroethane	5.2	0.50	5.0		104.0	73	128				
1,1-Dichloroethene	5.4	0.50	5.0		109.0	71	131				
cis-1,2-Dichloroethene	5.1	0.50	5.0		103.0	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		103.0	78	122				
1,3-Dichloropropane	5.0	0.50	5.0		100.0	80	119				
2,2-Dichloropropane	5.3	0.50	5.0		107.0	60	139				
1,1-Dichloropropene	5.0	0.50	5.0		101.0	79	125				
cis-1,3-Dichloropropene	4.8	0.50	5.0		96.0	75	124				
trans-1,3-Dichloropropene	5.3	0.50	5.0		106.0	73	127				
Ethylbenzene	5.1	0.50	5.0		102.0	79	121				
Methyl tert-butyl ether (MTBE)	4.9	0.50	5.0		97.0	71	124				
Methyl ethyl ketone	55	10	50		109.0	56	143				
Methylene chloride	5.2	0.50	5.0		104.0	74	124				
Styrene	5.1	0.50	5.0		102.0	78	123				
1,1,1,2-Tetrachloroethane	5.0	0.50	5.0		101.0	78	124				
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0		109.0	71	121				
Tetrachloroethene	4.8	0.50	5.0		95.0	74	129				
Toluene	5.5	0.50	5.0		109.0	80	121				
1,1,1-Trichloroethane	4.9	0.50	5.0		98.0	74	131				
1,1,2-Trichloroethane	5.3	0.50	5.0		106.0	80	119				
Trichloroethene	5.2	0.50	5.0		104.0	79	123				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 11:37 **Prep Date:**
Lab ID: LCS032822_ **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	65	141				
1,2,3-Trichloropropane	5.0	0.50	5.0		100.0	73	125				
Vinyl chloride	4.8	0.50	5.0		95.0	58	137				
m+p-Xylenes	10	0.50	10		101.0	80	121				
o-Xylene	5.1	0.50	5.0		103.0	78	122				
Xylenes, Total	15	0.50	15		102.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		106.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		102.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	85	114				
Surr: Toluene-d8	10	0.50	10		100.0	89	112				

Associated Samples: B22032035-038E, B22032035-039A, B22032035-043E, B22032035-044A, B22032035-048E, B22032035-049A, B22032035-053E, B22032035-054A, B22032035-058E, B22032035-059A, B22032035-063E, B22032035-064A, B22032035-068E, B22032035-069A

Run ID: Run Order: VOA5975C.I_220328A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 20:18 **Prep Date:**
Lab ID: B22032035-038EMS **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	101.0	79	120				
Bromobenzene	4.7	0.50	5.0	0.0	94.0	80	120				
Bromochloromethane	4.8	0.50	5.0	0.0	96.0	78	123				
Bromodichloromethane	5.0	0.50	5.0	0.0	101.0	79	125				
Bromoform	4.8	0.50	5.0	0.0	95.0	66	130				
Carbon tetrachloride	4.9	0.50	5.0	0.0	97.0	72	136				
Chlorobenzene	4.8	0.50	5.0	0.0	96.0	82	118				
Chlorodibromomethane	4.6	0.50	5.0	0.0	92.0	74	126				
Chloroethane	4.9	0.50	5.0	0.0	97.0	60	138				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 20:18 **Prep Date:**
Lab ID: B22032035-038EMS **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	96.0	79	124				
Chloromethane	4.7	0.50	5.0	0.0	93.0	50	139				
1,2-Dibromoethane	4.7	0.50	5.0	0.0	94.0	78	122				
2-Chlorotoluene	5.2	0.50	5.0	0.0	103.0	79	122				
Dibromomethane	4.9	0.50	5.0	0.0	98.0	79	123				
1,2-Dichlorobenzene	4.9	0.50	5.0	0.0	97.0	80	119				
4-Chlorotoluene	5.2	0.50	5.0	0.0	104.0	78	122				
1,3-Dichlorobenzene	5.0	0.50	5.0	0.0	100.0	80	119				
1,4-Dichlorobenzene	4.8	0.50	5.0	0.0	97.0	79	118				
Dichlorodifluoromethane	4.1	0.50	5.0	0.0	81.0	32	152				
1,1-Dichloroethane	5.1	0.50	5.0	0.0	102.0	77	125				
1,2-Dichloroethane	4.9	0.50	5.0	0.0	98.0	73	128				
1,1-Dichloroethene	5.1	0.50	5.0	0.0	102.0	71	131				
cis-1,2-Dichloroethene	4.8	0.50	5.0	0.0	96.0	78	123				
trans-1,2-Dichloroethene	4.8	0.50	5.0	0.0	96.0	75	124				
1,2-Dichloropropane	4.8	0.50	5.0	0.0	95.0	78	122				
1,3-Dichloropropane	4.6	0.50	5.0	0.0	93.0	80	119				
2,2-Dichloropropane	4.8	0.50	5.0	0.0	95.0	60	139				
1,1-Dichloropropene	4.7	0.50	5.0	0.0	95.0	79	125				
cis-1,3-Dichloropropene	4.3	0.50	5.0	0.0	86.0	75	124				
trans-1,3-Dichloropropene	4.9	0.50	5.0	0.0	98.0	73	127				
Ethylbenzene	4.8	0.50	5.0	0.0	97.0	79	121				
Methyl tert-butyl ether (MTBE)	4.5	0.50	5.0	0.0	90.0	71	124				
Methyl ethyl ketone	57	10	50	0.0	113.0	56	143				
Methylene chloride	4.9	0.50	5.0	0.0	97.0	74	124				
Styrene	4.8	0.50	5.0	0.0	96.0	78	123				
1,1,1,2-Tetrachloroethane	4.7	0.50	5.0	0.0	95.0	78	124				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 20:18 **Prep Date:**
Lab ID: B22032035-038EMS **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	96.0	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	95.0	74	131				
1,1,2-Trichloroethane	5.0	0.50	5.0	0.0	100.0	80	119				
Trichloroethene	4.9	0.50	5.0	0.0	98.0	79	123				
Trichlorofluoromethane	5.0	0.50	5.0	0.0	100.0	65	141				
1,2,3-Trichloropropane	4.9	0.50	5.0	0.0	98.0	73	125				
Vinyl chloride	4.9	0.50	5.0	0.0	97.0	58	137				
m+p-Xylenes	9.4	0.50	10	0.0	94.0	80	121				
o-Xylene	4.7	0.50	5.0	0.0	94.0	78	122				
Xylenes, Total	14	0.50	15	0.0	94.0	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	102.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	107.0	85	114				
Surr: Toluene-d8	10	0.50	10	0.0	101.0	89	112				

Associated Samples: B22032035-038E, B22032035-039A, B22032035-043E, B22032035-044A, B22032035-048E, B22032035-049A, B22032035-053E, B22032035-054A, B22032035-058E, B22032035-059A, B22032035-063E, B22032035-064A, B22032035-068E, B22032035-069A

Run ID: Run Order: VOA5975C.I_220328A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 20:45 **Prep Date:**
Lab ID: B22032035-038EMSD **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	104.0	79	120	5.0	3.0	20.0	
Bromobenzene	4.9	0.50	5.0	0.0	99.0	80	120	4.7	5.0	20.0	
Bromochloromethane	5.1	0.50	5.0	0.0	102.0	78	123	4.8	6.1	20.0	



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 20:45 **Prep Date:**
Lab ID: B22032035-038EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	5.3	0.50	5.0	0.0	106.0	79	125	5.0	5.2	20.0	
Bromoform	5.0	0.50	5.0	0.0	100.0	66	130	4.8	4.4	20.0	
Carbon tetrachloride	5.1	0.50	5.0	0.0	102.0	72	136	4.9	4.2	20.0	
Chlorobenzene	5.1	0.50	5.0	0.0	101.0	82	118	4.8	5.4	20.0	
Chlorodibromomethane	4.7	0.50	5.0	0.0	94.0	74	126	4.6	2.8	20.0	
Chloroethane	5.2	0.50	5.0	0.0	104.0	60	138	4.9	6.4	20.0	
Chloroform	5.0	0.50	5.0	0.0	100.0	79	124	4.8	4.2	20.0	
Chloromethane	5.0	0.50	5.0	0.0	99.0	50	139	4.7	6.2	20.0	
1,2-Dibromoethane	4.8	0.50	5.0	0.0	97.0	78	122	4.7	2.7	20.0	
2-Chlorotoluene	5.3	0.50	5.0	0.0	105.0	79	122	5.2	2.1	20.0	
Dibromomethane	5.2	0.50	5.0	0.0	104.0	79	123	4.9	6.5	20.0	
1,2-Dichlorobenzene	5.1	0.50	5.0	0.0	101.0	80	119	4.9	4.3	20.0	
4-Chlorotoluene	5.5	0.50	5.0	0.0	109.0	78	122	5.2	5.0	20.0	
1,3-Dichlorobenzene	5.3	0.50	5.0	0.0	105.0	80	119	5.0	5.4	20.0	
1,4-Dichlorobenzene	5.1	0.50	5.0	0.0	101.0	79	118	4.8	4.5	20.0	
Dichlorodifluoromethane	4.3	0.50	5.0	0.0	87.0	32	152	4.1	6.5	20.0	
1,1-Dichloroethane	5.3	0.50	5.0	0.0	106.0	77	125	5.1	3.9	20.0	
1,2-Dichloroethane	5.1	0.50	5.0	0.0	101.0	73	128	4.9	3.0	20.0	
1,1-Dichloroethene	5.4	0.50	5.0	0.0	109.0	71	131	5.1	6.3	20.0	
cis-1,2-Dichloroethene	5.1	0.50	5.0	0.0	101.0	78	123	4.8	5.4	20.0	
trans-1,2-Dichloroethene	5.1	0.50	5.0	0.0	101.0	75	124	4.8	5.3	20.0	
1,2-Dichloropropane	5.1	0.50	5.0	0.0	102.0	78	122	4.8	6.5	20.0	
1,3-Dichloropropane	4.8	0.50	5.0	0.0	96.0	80	119	4.6	3.0	20.0	
2,2-Dichloropropane	4.9	0.50	5.0	0.0	98.0	60	139	4.8	3.2	20.0	
1,1-Dichloropropene	5.0	0.50	5.0	0.0	100.0	79	125	4.7	5.0	20.0	
cis-1,3-Dichloropropene	4.5	0.50	5.0	0.0	90.0	75	124	4.3	5.6	20.0	
trans-1,3-Dichloropropene	5.2	0.50	5.0	0.0	103.0	73	127	4.9	5.3	20.0	



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 20:45 **Prep Date:**
Lab ID: B22032035-038EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Ethylbenzene	4.9	0.50	5.0	0.0	99.0	79	121	4.8	2.1	20.0	
Methyl tert-butyl ether (MTBE)	4.8	0.50	5.0	0.0	97.0	71	124	4.5	7.3	20.0	
Methyl ethyl ketone	57	10	50	0.0	115.0	56	143	57	1.4	20.0	
Methylene chloride	5.1	0.50	5.0	0.0	102.0	74	124	4.9	4.6	20.0	
Styrene	5.0	0.50	5.0	0.0	100.0	78	123	4.8	4.2	20.0	
1,1,1,2-Tetrachloroethane	4.9	0.50	5.0	0.0	99.0	78	124	4.7	4.3	20.0	
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0	0.0	106.0	71	121	5.1	3.7	20.0	
Tetrachloroethene	5.0	0.50	5.0	0.0	100.0	74	129	4.8	4.4	20.0	
Toluene	5.3	0.50	5.0	0.0	106.0	80	121	5.1	4.3	20.0	
1,1,1-Trichloroethane	4.9	0.50	5.0	0.0	99.0	74	131	4.8	3.4	20.0	
1,1,2-Trichloroethane	5.1	0.50	5.0	0.0	103.0	80	119	5.0	3.0	20.0	
Trichloroethene	5.0	0.50	5.0	0.0	99.0	79	123	4.9	1.4	20.0	
Trichlorofluoromethane	5.3	0.50	5.0	0.0	106.0	65	141	5.0	5.6	20.0	
1,2,3-Trichloropropane	5.1	0.50	5.0	0.0	101.0	73	125	4.9	3.0	20.0	
Vinyl chloride	5.1	0.50	5.0	0.0	103.0	58	137	4.9	5.7	20.0	
m+p-Xylenes	9.8	0.50	10	0.0	98.0	80	121	9.4	3.8	20.0	
o-Xylene	4.9	0.50	5.0	0.0	99.0	78	122	4.7	4.8	20.0	
Xylenes, Total	15	0.50	15	0.0	98.0	79	121	14	4.1	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: B22032035-038E, B22032035-039A, B22032035-043E, B22032035-044A, B22032035-048E, B22032035-049A, B22032035-053E, B22032035-054A, B22032035-058E, B22032035-059A, B22032035-063E, B22032035-064A, B22032035-068E, B22032035-069A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 09:22 **Prep Date:**
Lab ID: CCV032722_ **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	5.1	0.50	5.0		103.0	80	120				
Bromochloromethane	5.2	0.50	5.0		103.0	80	120				
Bromodichloromethane	5.0	0.50	5.0		100.0	80	120				
Bromoform	4.9	0.50	5.0		99.0	80	120				
Carbon tetrachloride	4.8	0.50	5.0		96.0	80	120				
Chlorobenzene	4.9	0.50	5.0		99.0	80	120				
Chlorodibromomethane	4.9	0.50	5.0		98.0	80	120				
Chloroethane	5.1	0.50	5.0		103.0	80	120				
Chloroform	5.0	0.50	5.0		101.0	80	120				
Chloromethane	5.1	0.50	5.0		102.0	80	120				
1,2-Dibromoethane	4.9	0.50	5.0		98.0	80	120				
2-Chlorotoluene	5.1	0.50	5.0		102.0	80	120				
Dibromomethane	4.7	0.50	5.0		94.0	80	120				
1,2-Dichlorobenzene	5.0	0.50	5.0		100.0	80	120				
4-Chlorotoluene	5.3	0.50	5.0		107.0	80	120				
1,3-Dichlorobenzene	5.1	0.50	5.0		101.0	80	120				
1,4-Dichlorobenzene	5.0	0.50	5.0		99.0	80	120				
Dichlorodifluoromethane	5.3	0.50	5.0		106.0	80	120				
1,1-Dichloroethane	5.1	0.50	5.0		102.0	80	120				
1,2-Dichloroethane	5.1	0.50	5.0		102.0	80	120				
1,1-Dichloroethene	5.0	0.50	5.0		100.0	80	120				
cis-1,2-Dichloroethene	4.9	0.50	5.0		98.0	80	120				
trans-1,2-Dichloroethene	5.0	0.50	5.0		99.0	80	120				
1,2-Dichloropropane	5.1	0.50	5.0		102.0	80	120				
1,3-Dichloropropane	4.9	0.50	5.0		98.0	80	120				
2,2-Dichloropropane	5.1	0.50	5.0		102.0	80	120				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 09:22 **Prep Date:**
Lab ID: CCV032722_ **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		99.0	80	120				
cis-1,3-Dichloropropene	4.9	0.50	5.0		97.0	80	120				
trans-1,3-Dichloropropene	5.1	0.50	5.0		102.0	80	120				
Ethylbenzene	4.8	0.50	5.0		97.0	80	120				
Methyl tert-butyl ether (MTBE)	4.7	0.50	5.0		95.0	80	120				
Methyl ethyl ketone	55	10	50		109.0	80	120				
Methylene chloride	5.0	0.50	5.0		100.0	80	120				
Styrene	4.9	0.50	5.0		97.0	80	120				
1,1,1,2-Tetrachloroethane	4.9	0.50	5.0		97.0	80	120				
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0		107.0	80	120				
Tetrachloroethene	4.6	0.50	5.0		91.0	80	120				
Toluene	5.2	0.50	5.0		104.0	80	120				
1,1,1-Trichloroethane	4.9	0.50	5.0		98.0	80	120				
1,1,2-Trichloroethane	5.2	0.50	5.0		103.0	80	120				
Trichloroethene	4.9	0.50	5.0		98.0	80	120				
Trichlorofluoromethane	5.2	0.50	5.0		105.0	80	120				
1,2,3-Trichloropropane	5.1	0.50	5.0		102.0	80	120				
Vinyl chloride	5.0	0.50	5.0		101.0	80	120				
m+p-Xylenes	9.8	0.50	10		98.0	80	120				
o-Xylene	4.9	0.50	5.0		99.0	80	120				
Xylenes, Total	15	0.50	15		98.0	80	120				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		107.0	80	120				
Surr: Dibromofluoromethane	10	0.50	10		104.0	80	120				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	80	120				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 09:22 **Prep Date:**
Lab ID: CCV032722_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	10	0.50	10		100.0	80	120				

Associated Samples: B22032035-001E, B22032035-002A, B22032035-006E, B22032035-007A, B22032035-011E, B22032035-012A, B22032035-016E, B22032035-017A, B22032035-021E, B22032035-022A, B22032035-026E, B22032035-027B, B22032035-028A, B22032035-032E, B22032035-033B, B22032035-034A

Run ID: Run Order: VOA5975C.I_220327A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 20:06 **Prep Date:**
Lab ID: CCV032722_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		97.0	50	150				
Bromochloromethane	4.6	0.50	5.0		91.0	50	150				
Bromodichloromethane	4.7	0.50	5.0		94.0	50	150				
Bromoform	4.5	0.50	5.0		89.0	50	150				
Carbon tetrachloride	4.5	0.50	5.0		89.0	50	150				
Chlorobenzene	4.6	0.50	5.0		93.0	50	150				
Chlorodibromomethane	4.5	0.50	5.0		91.0	50	150				
Chloroethane	5.2	0.50	5.0		105.0	50	150				
Chloroform	4.7	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		92.0	50	150				
2-Chlorotoluene	4.8	0.50	5.0		96.0	50	150				
Dibromomethane	4.7	0.50	5.0		93.0	50	150				
1,2-Dichlorobenzene	4.6	0.50	5.0		92.0	50	150				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 20:06 **Prep Date:**
Lab ID: CCV032722_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.0	0.50	5.0		99.0	50	150				
1,3-Dichlorobenzene	4.7	0.50	5.0		95.0	50	150				
1,4-Dichlorobenzene	4.7	0.50	5.0		93.0	50	150				
Dichlorodifluoromethane	5.1	0.50	5.0		102.0	50	150				
1,1-Dichloroethane	4.8	0.50	5.0		96.0	50	150				
1,2-Dichloroethane	4.8	0.50	5.0		96.0	50	150				
1,1-Dichloroethene	4.8	0.50	5.0		96.0	50	150				
cis-1,2-Dichloroethene	4.6	0.50	5.0		92.0	50	150				
trans-1,2-Dichloroethene	4.5	0.50	5.0		91.0	50	150				
1,2-Dichloropropane	4.7	0.50	5.0		94.0	50	150				
1,3-Dichloropropane	4.7	0.50	5.0		93.0	50	150				
2,2-Dichloropropane	4.3	0.50	5.0		86.0	50	150				
1,1-Dichloropropene	4.6	0.50	5.0		93.0	50	150				
cis-1,3-Dichloropropene	4.4	0.50	5.0		88.0	50	150				
trans-1,3-Dichloropropene	4.7	0.50	5.0		94.0	50	150				
Ethylbenzene	4.6	0.50	5.0		92.0	50	150				
Methyl tert-butyl ether (MTBE)	4.5	0.50	5.0		90.0	50	150				
Methyl ethyl ketone	52	10	50		103.0	50	150				
Methylene chloride	4.6	0.50	5.0		92.0	50	150				
Styrene	4.6	0.50	5.0		93.0	50	150				
1,1,1,2-Tetrachloroethane	4.6	0.50	5.0		92.0	50	150				
1,1,2,2-Tetrachloroethane	4.8	0.50	5.0		97.0	50	150				
Tetrachloroethene	4.3	0.50	5.0		86.0	50	150				
Toluene	4.8	0.50	5.0		96.0	50	150				
1,1,1-Trichloroethane	4.5	0.50	5.0		90.0	50	150				
1,1,2-Trichloroethane	4.8	0.50	5.0		95.0	50	150				
Trichloroethene	4.7	0.50	5.0		94.0	50	150				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220327A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377839
Method: SW8260B **Analysis Date:** 03/27/2022 20:06 **Prep Date:**
Lab ID: CCV032722_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	5.2	0.50	5.0		105.0	50	150				
1,2,3-Trichloropropane	4.7	0.50	5.0		94.0	50	150				
Vinyl chloride	5.1	0.50	5.0		102.0	50	150				
m+p-Xylenes	9.1	0.50	10		91.0	50	150				
o-Xylene	4.5	0.50	5.0		91.0	50	150				
Xylenes, Total	14	0.50	15		91.0	50	150				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		103.0	50	150				
Surr: Dibromofluoromethane	10	0.50	10		100.0	50	150				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	50	150				
Surr: Toluene-d8	10	0.50	10		100.0	50	150				

Associated Samples: B22032035-001E, B22032035-002A, B22032035-006E, B22032035-007A, B22032035-011E, B22032035-012A, B22032035-016E, B22032035-017A, B22032035-021E, B22032035-022A, B22032035-026E, B22032035-027B, B22032035-028A, B22032035-032E, B22032035-033B, B22032035-034A

Run ID: Run Order: VOA5975C.I_220328A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 11:02 **Prep Date:**
Lab ID: CCV032822_ **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		96.0	80	120				
Bromobenzene	4.7	0.50	5.0		95.0	80	120				
Bromochloromethane	4.7	0.50	5.0		93.0	80	120				
Bromodichloromethane	4.6	0.50	5.0		92.0	80	120				
Bromoform	4.5	0.50	5.0		90.0	80	120				
Carbon tetrachloride	4.5	0.50	5.0		90.0	80	120				
Chlorobenzene	4.6	0.50	5.0		91.0	80	120				
Chlorodibromomethane	4.4	0.50	5.0		88.0	80	120				
Chloroethane	5.2	0.50	5.0		104.0	80	120				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 11:02 **Prep Date:**
Lab ID: CCV032822_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Chloroform	4.5	0.50	5.0		90.0	80	120				
Chloromethane	5.0	0.50	5.0		101.0	80	120				
1,2-Dibromoethane	4.2	0.50	5.0		85.0	80	120				
2-Chlorotoluene	4.9	0.50	5.0		98.0	80	120				
Dibromomethane	4.4	0.50	5.0		88.0	80	120				
1,2-Dichlorobenzene	4.6	0.50	5.0		91.0	80	120				
4-Chlorotoluene	5.0	0.50	5.0		101.0	80	120				
1,3-Dichlorobenzene	4.7	0.50	5.0		94.0	80	120				
1,4-Dichlorobenzene	4.6	0.50	5.0		91.0	80	120				
Dichlorodifluoromethane	5.1	0.50	5.0		101.0	80	120				
1,1-Dichloroethane	4.7	0.50	5.0		93.0	80	120				
1,2-Dichloroethane	4.6	0.50	5.0		93.0	80	120				
1,1-Dichloroethene	4.8	0.50	5.0		96.0	80	120				
cis-1,2-Dichloroethene	4.7	0.50	5.0		95.0	80	120				
trans-1,2-Dichloroethene	4.7	0.50	5.0		94.0	80	120				
1,2-Dichloropropane	4.6	0.50	5.0		92.0	80	120				
1,3-Dichloropropane	4.5	0.50	5.0		91.0	80	120				
2,2-Dichloropropane	4.9	0.50	5.0		99.0	80	120				
1,1-Dichloropropene	4.7	0.50	5.0		95.0	80	120				
cis-1,3-Dichloropropene	4.4	0.50	5.0		89.0	80	120				
trans-1,3-Dichloropropene	4.5	0.50	5.0		91.0	80	120				
Ethylbenzene	4.6	0.50	5.0		92.0	80	120				
Methyl tert-butyl ether (MTBE)	4.6	0.50	5.0		92.0	80	120				
Methyl ethyl ketone	55	10	50		111.0	80	120				
Methylene chloride	4.6	0.50	5.0		91.0	80	120				
Styrene	4.5	0.50	5.0		90.0	80	120				
1,1,1,2-Tetrachloroethane	4.5	0.50	5.0		89.0	80	120				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 11:02 **Prep Date:**
Lab ID: CCV032822_ **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	4.8	0.50	5.0		95.0	80	120				
Tetrachloroethene	4.6	0.50	5.0		91.0	80	120				
Toluene	4.7	0.50	5.0		95.0	80	120				
1,1,1-Trichloroethane	4.5	0.50	5.0		90.0	80	120				
1,1,2-Trichloroethane	4.7	0.50	5.0		95.0	80	120				
Trichloroethene	4.7	0.50	5.0		94.0	80	120				
Trichlorofluoromethane	5.2	0.50	5.0		105.0	80	120				
1,2,3-Trichloropropane	4.7	0.50	5.0		93.0	80	120				
Vinyl chloride	5.1	0.50	5.0		102.0	80	120				
m+p-Xylenes	9.1	0.50	10		91.0	80	120				
o-Xylene	4.5	0.50	5.0		91.0	80	120				
Xylenes, Total	14	0.50	15		91.0	80	120				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		103.0	80	120				
Surr: Dibromofluoromethane	10	0.50	10		100.0	80	120				
Surr: p-Bromofluorobenzene	11	0.50	10		109.0	80	120				
Surr: Toluene-d8	9.9	0.50	10		99.0	80	120				

Associated Samples: B22032035-038E, B22032035-039A, B22032035-043E, B22032035-044A, B22032035-048E, B22032035-049A, B22032035-053E, B22032035-054A, B22032035-058E, B22032035-059A, B22032035-063E, B22032035-064A, B22032035-068E, B22032035-069A

Run ID: Run Order: VOA5975C.I_220328A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 21:41 **Prep Date:**
Lab ID: CCV032822_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.3	0.50	5.0		106.0	50	150				
Bromobenzene	5.2	0.50	5.0		103.0	50	150				
Bromochloromethane	5.2	0.50	5.0		105.0	50	150				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 21:41 **Prep Date:**
Lab ID: CCV032822_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	5.2	0.50	5.0		104.0	50	150				
Bromoform	5.1	0.50	5.0		103.0	50	150				
Carbon tetrachloride	5.0	0.50	5.0		100.0	50	150				
Chlorobenzene	5.2	0.50	5.0		103.0	50	150				
Chlorodibromomethane	4.9	0.50	5.0		98.0	50	150				
Chloroethane	5.2	0.50	5.0		104.0	50	150				
Chloroform	5.1	0.50	5.0		103.0	50	150				
Chloromethane	5.2	0.50	5.0		104.0	50	150				
1,2-Dibromoethane	5.0	0.50	5.0		99.0	50	150				
2-Chlorotoluene	5.4	0.50	5.0		109.0	50	150				
Dibromomethane	5.1	0.50	5.0		102.0	50	150				
1,2-Dichlorobenzene	5.1	0.50	5.0		102.0	50	150				
4-Chlorotoluene	5.5	0.50	5.0		111.0	50	150				
1,3-Dichlorobenzene	5.2	0.50	5.0		104.0	50	150				
1,4-Dichlorobenzene	5.2	0.50	5.0		104.0	50	150				
Dichlorodifluoromethane	5.1	0.50	5.0		103.0	50	150				
1,1-Dichloroethane	5.2	0.50	5.0		105.0	50	150				
1,2-Dichloroethane	5.4	0.50	5.0		108.0	50	150				
1,1-Dichloroethene	5.3	0.50	5.0		107.0	50	150				
cis-1,2-Dichloroethene	5.1	0.50	5.0		102.0	50	150				
trans-1,2-Dichloroethene	5.1	0.50	5.0		103.0	50	150				
1,2-Dichloropropane	5.2	0.50	5.0		105.0	50	150				
1,3-Dichloropropane	5.2	0.50	5.0		103.0	50	150				
2,2-Dichloropropane	4.9	0.50	5.0		98.0	50	150				
1,1-Dichloropropene	5.1	0.50	5.0		103.0	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		102.0	50	150				



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VOA5975C.I_220328A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378198
Method: SW8260B **Analysis Date:** 03/28/2022 21:41 **Prep Date:**
Lab ID: CCV032822_Closing **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		103.0	50	150				
Methyl tert-butyl ether (MTBE)	4.6	0.50	5.0		91.0	50	150				
Methyl ethyl ketone	49	10	50		98.0	50	150				
Methylene chloride	5.2	0.50	5.0		105.0	50	150				
Styrene	5.2	0.50	5.0		104.0	50	150				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0		102.0	50	150				
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0		105.0	50	150				
Tetrachloroethene	5.1	0.50	5.0		103.0	50	150				
Toluene	5.3	0.50	5.0		107.0	50	150				
1,1,1-Trichloroethane	5.2	0.50	5.0		103.0	50	150				
1,1,2-Trichloroethane	5.4	0.50	5.0		108.0	50	150				
Trichloroethene	5.1	0.50	5.0		102.0	50	150				
Trichlorofluoromethane	5.3	0.50	5.0		106.0	50	150				
1,2,3-Trichloropropane	5.4	0.50	5.0		109.0	50	150				
Vinyl chloride	5.1	0.50	5.0		102.0	50	150				
m+p-Xylenes	10	0.50	10		103.0	50	150				
o-Xylene	5.1	0.50	5.0		103.0	50	150				
Xylenes, Total	15	0.50	15		103.0	50	150				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		103.0	50	150				
Surr: Dibromofluoromethane	10	0.50	10		103.0	50	150				
Surr: p-Bromofluorobenzene	11	0.50	10		108.0	50	150				
Surr: Toluene-d8	10	0.50	10		101.0	50	150				

Associated Samples: B22032035-038E, B22032035-039A, B22032035-043E, B22032035-044A, B22032035-048E, B22032035-049A, B22032035-053E, B22032035-054A, B22032035-058E, B22032035-059A, B22032035-063E, B22032035-064A, B22032035-068E, B22032035-069A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GECD.I_220328B: 2 **SampType:** Method Blank **Batch ID:** 164912
Method: SW8011 **Analysis Date:** 03/28/2022 21:10 **Prep Date:** 03/28/2022 08:59
Lab ID: MB-164912 **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	0.086	0.020	0.10		86.0	70	130				

Associated Samples: B22032035-001G, B22032035-004A, B22032035-006G, B22032035-009A, B22032035-011G, B22032035-014A, B22032035-016G, B22032035-019A, B22032035-021G, B22032035-024A, B22032035-026G, B22032035-030A, B22032035-032G, B22032035-036A, B22032035-038G, B22032035-041A, B22032035-043G, B22032035-046A, B22032035-048G, B22032035-051A, B22032035-053G, B22032035-056A, B22032035-058G, B22032035-061A, B22032035-063G, B22032035-066A, B22032035-068G, B22032035-071A

Run ID: Run Order: GECD.I_220328B: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164912
Method: SW8011 **Analysis Date:** 03/28/2022 21:30 **Prep Date:** 03/28/2022 08:59
Lab ID: LCS-164912 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.23	0.010	0.25		93.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.086	0.020	0.10		86.0	70	130				

Associated Samples: B22032035-001G, B22032035-004A, B22032035-006G, B22032035-009A, B22032035-011G, B22032035-014A, B22032035-016G, B22032035-019A, B22032035-021G, B22032035-024A, B22032035-026G, B22032035-030A, B22032035-032G, B22032035-036A, B22032035-038G, B22032035-041A, B22032035-043G, B22032035-046A, B22032035-048G, B22032035-051A, B22032035-053G, B22032035-056A, B22032035-058G, B22032035-061A, B22032035-063G, B22032035-066A, B22032035-068G, B22032035-071A

Run ID: Run Order: GECD.I_220328B: 4 **SampType:** Laboratory Control Sample **Batch ID:** 164912
Method: SW8011 **Analysis Date:** 03/28/2022 21:50 **Prep Date:** 03/28/2022 09:00
Lab ID: LCS1-164912 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.088	0.010	0.10		88.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.084	0.020	0.10		84.0	70	130				

Associated Samples: B22032035-001G, B22032035-004A, B22032035-006G, B22032035-009A, B22032035-011G, B22032035-014A, B22032035-016G, B22032035-019A, B22032035-021G, B22032035-024A, B22032035-026G, B22032035-030A, B22032035-032G, B22032035-036A, B22032035-038G, B22032035-041A, B22032035-043G, B22032035-046A, B22032035-048G, B22032035-051A, B22032035-053G, B22032035-056A, B22032035-058G, B22032035-061A, B22032035-063G, B22032035-066A, B22032035-068G, B22032035-071A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GECD.I_220328B: 14 **SampType:** Sample Matrix Spike **Batch ID:** 164912
Method: SW8011 **Analysis Date:** 03/29/2022 01:27 **Prep Date:** 03/28/2022 09:00
Lab ID: B22032035-001GMS **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.23	0.010	0.25	0.0	94.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.088	0.020	0.099	0.0	89.0	70	130				

Associated Samples: B22032035-001G, B22032035-004A, B22032035-006G, B22032035-009A, B22032035-011G, B22032035-014A, B22032035-016G, B22032035-019A, B22032035-021G, B22032035-024A, B22032035-026G, B22032035-030A, B22032035-032G, B22032035-036A, B22032035-038G, B22032035-041A, B22032035-043G, B22032035-046A, B22032035-048G, B22032035-051A, B22032035-053G, B22032035-056A, B22032035-058G, B22032035-061A, B22032035-063G, B22032035-066A, B22032035-068G, B22032035-071A

Run ID: Run Order: GECD.I_220328B: 15 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164912
Method: SW8011 **Analysis Date:** 03/29/2022 01:47 **Prep Date:** 03/28/2022 09:01
Lab ID: B22032035-001GMSD **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.23	0.010	0.24	0.0	96.0	60	140	0.23	0.5	20.0	
Surr: 1,1,1,2-Tetrachloroethane	0.086	0.020	0.098	0.0	88.0	70	130	0.0			

Associated Samples: B22032035-001G, B22032035-004A, B22032035-006G, B22032035-009A, B22032035-011G, B22032035-014A, B22032035-016G, B22032035-019A, B22032035-021G, B22032035-024A, B22032035-026G, B22032035-030A, B22032035-032G, B22032035-036A, B22032035-038G, B22032035-041A, B22032035-043G, B22032035-046A, B22032035-048G, B22032035-051A, B22032035-053G, B22032035-056A, B22032035-058G, B22032035-061A, B22032035-063G, B22032035-066A, B22032035-068G, B22032035-071A

Run ID: Run Order: GECD.I_220328B: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164912
Method: SW8011 **Analysis Date:** 03/28/2022 20:51 **Prep Date:** 03/28/2022 09:00
Lab ID: CK3-164912 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.10	0.010	0.10		102.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.091	0.020	0.10		91.0	80	120				

Associated Samples: B22032035-001G, B22032035-004A, B22032035-006G, B22032035-009A, B22032035-011G, B22032035-014A, B22032035-016G, B22032035-019A, B22032035-021G, B22032035-024A, B22032035-026G, B22032035-030A, B22032035-032G, B22032035-036A, B22032035-038G, B22032035-041A, B22032035-043G, B22032035-046A, B22032035-048G, B22032035-051A, B22032035-053G, B22032035-056A, B22032035-058G, B22032035-061A, B22032035-063G, B22032035-066A, B22032035-068G, B22032035-071A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GECD.I_220328B: 16 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164912
Method: SW8011 **Analysis Date:** 03/29/2022 02:26 **Prep Date:** 03/28/2022 09:00
Lab ID: CK5-164912 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.40	0.010	0.40		101.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.41	0.020	0.40		103.0	80	120				

Associated Samples: B22032035-001G, B22032035-004A, B22032035-006G, B22032035-009A, B22032035-011G, B22032035-014A, B22032035-016G, B22032035-019A, B22032035-021G, B22032035-024A, B22032035-026G, B22032035-030A, B22032035-032G, B22032035-036A, B22032035-038G, B22032035-041A, B22032035-043G, B22032035-046A, B22032035-048G, B22032035-051A, B22032035-053G, B22032035-056A, B22032035-058G, B22032035-061A, B22032035-063G, B22032035-066A, B22032035-068G, B22032035-071A

Run ID: Run Order: GECD.I_220328B: 27 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164912
Method: SW8011 **Analysis Date:** 03/29/2022 06:43 **Prep Date:** 03/28/2022 09:00
Lab ID: CK3-164912 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.10	0.010	0.10		101.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.089	0.020	0.10		89.0	80	120				

Associated Samples: B22032035-001G, B22032035-004A, B22032035-006G, B22032035-009A, B22032035-011G, B22032035-014A, B22032035-016G, B22032035-019A, B22032035-021G, B22032035-024A, B22032035-026G, B22032035-030A, B22032035-032G, B22032035-036A, B22032035-038G, B22032035-041A, B22032035-043G, B22032035-046A, B22032035-048G, B22032035-051A, B22032035-053G, B22032035-056A, B22032035-058G, B22032035-061A, B22032035-063G, B22032035-066A, B22032035-068G, B22032035-071A

Run ID: Run Order: GECD.I_220328B: 38 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164912
Method: SW8011 **Analysis Date:** 03/29/2022 10:59 **Prep Date:** 03/28/2022 09:00
Lab ID: CK5-164912 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.39	0.010	0.40		99.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.40	0.020	0.40		100.0	80	120				

Associated Samples: B22032035-001G, B22032035-004A, B22032035-006G, B22032035-009A, B22032035-011G, B22032035-014A, B22032035-016G, B22032035-019A, B22032035-021G, B22032035-024A, B22032035-026G, B22032035-030A, B22032035-032G, B22032035-036A, B22032035-038G, B22032035-041A, B22032035-043G, B22032035-046A, B22032035-048G, B22032035-051A, B22032035-053G, B22032035-056A, B22032035-058G, B22032035-061A, B22032035-063G, B22032035-066A, B22032035-068G, B22032035-071A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VARIAN1_220328A: 4 **SampType:** Method Blank **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/28/2022 11:11 **Prep Date:**
Lab ID: MBLK_0328VAR07r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	ND	10									
Total Purgeable Hydrocarbons	ND	10									
Surr: Trifluorotoluene	21	1.0	25		82.0	70	130				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A

Run ID: Run Order: VARIAN1_220328A: 20 **SampType:** Method Blank **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/28/2022 22:39 **Prep Date:**
Lab ID: MBLK_0328VAR27r **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: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VARIAN1_220328A: 31 **SampType:** Method Blank **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/29/2022 09:32 **Prep Date:**
Lab ID: MBLK_0328VAR46r **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		80.0	70	130				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A

Run ID: Run Order: VARIAN1_220328A: 46 **SampType:** Method Blank **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/29/2022 20:58 **Prep Date:**
Lab ID: MBLK_0328VAR66r **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		79.0	70	130				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VARIAN1_220328A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/28/2022 10:02 **Prep Date:**
Lab ID: LCS_0328VAR05r **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	23	1.0	25		93.0	70	130				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A

Run ID: Run Order: VARIAN1_220328A: 19 **SampType:** Laboratory Control Sample **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/28/2022 21:30 **Prep Date:**
Lab ID: LCS_0328VAR25r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	170	20	170		100.0	78	122				
Total Purgeable Hydrocarbons	206	20	200		103.0	70	130				
Surr: Trifluorotoluene	24	1.0	25		94.0	70	130				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VARIAN1_220328A: 30 **SampType:** Laboratory Control Sample **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/29/2022 08:23 **Prep Date:**
Lab ID: LCS_0328VAR44r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	159	20	170		93.0	78	122				
Total Purgeable Hydrocarbons	192	20	200		96.0	70	130				
Surr: Trifluorotoluene	23	1.0	25		92.0	70	130				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A

Run ID: Run Order: VARIAN1_220328A: 45 **SampType:** Laboratory Control Sample **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/29/2022 19:50 **Prep Date:**
Lab ID: LCS_0328VAR64r **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		100.0	78	122				
Total Purgeable Hydrocarbons	205	20	200		102.0	70	130				
Surr: Trifluorotoluene	22	1.0	25		90.0	70	130				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VARIAN1_220328A: 15 **SampType:** Sample Matrix Spike **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/28/2022 18:38 **Prep Date:**
Lab ID: B22032035-001FMS **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	100.0	78	122				
Total Purgeable Hydrocarbons	207	20	200	0.0	104.0	70	130				
Surr: Trifluorotoluene	23	1.0	25	0.0	92.0	70	130				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A

Run ID: Run Order: VARIAN1_220328A: 16 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/28/2022 19:12 **Prep Date:**
Lab ID: B22032035-001FMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	170	20	170	0.0	100.0	78	122	171	0.3	20.0	
Total Purgeable Hydrocarbons	204	20	200	0.0	102.0	70	130	207	1.5	20.0	
Surr: Trifluorotoluene	23	1.0	25	0.0	92.0	70	130	0.0			

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VARIAN1_220328A: 39 **SampType:** Sample Matrix Spike **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/29/2022 14:41 **Prep Date:**
Lab ID: B22032035-033CMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	170	20	170	0.0	100.0	78	122				
Total Purgeable Hydrocarbons	206	20	200	0.0	103.0	70	130				
Surr: Trifluorotoluene	23	1.0	25	0.0	92.0	70	130				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A

Run ID: Run Order: VARIAN1_220328A: 40 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/29/2022 15:15 **Prep Date:**
Lab ID: B22032035-033CMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	172	20	170	0.0	101.0	78	122	170	1.2	20.0	
Total Purgeable Hydrocarbons	210	20	200	0.0	105.0	70	130	206	1.6	20.0	
Surr: Trifluorotoluene	23	1.0	25	0.0	93.0	70	130	0.0			

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220329A: 5 **SampType:** Method Blank **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/29/2022 14:17 **Prep Date:** 03/28/2022 13:17
Lab ID: MB-164941 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	ND	0.15									
Oil Range Hydrocarbons (C24 to C40)	ND	0.15									
Total Extractable Hydrocarbons	ND	0.15									
Surr: o-Terphenyl	0.19	0.0020	0.20		97.0	56	125				
Surr: n-Triacontane	0.089	0.0020	0.10		89.0	50	150				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C

Run ID: Run Order: GCFID-HP5-B_220331A: 5 **SampType:** Method Blank **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/31/2022 14:47 **Prep Date:** 03/28/2022 13:17
Lab ID: MB-164941 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	ND	0.15									
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	0.15									
Total Extractable Hydrocarbons (SGT)	ND	0.15									
Surr: o-Terphenyl (SGT)	0.17	0.0020	0.20		86.0	56	125				
Surr: n-Triacontane (SGT)	0.078	0.0020	0.10		78.0	50	150				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220329A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/29/2022 12:52 **Prep Date:** 03/28/2022 13:17
Lab ID: LCS-164941 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	13	0.30	15		84.0	36	132				
Total Extractable Hydrocarbons	13	0.30	15		89.0	60	132				
Surr: o-Terphenyl	0.19	0.0020	0.20		97.0	56	125				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C

Run ID: Run Order: GCFID-HP5-B_220329A: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/29/2022 13:35 **Prep Date:** 03/28/2022 13:17
Lab ID: LCSD-164941 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	13	0.30	15		85.0	36	132	13	1.7	20.0	
Total Extractable Hydrocarbons	14	0.30	15		91.0	60	132	13	1.8	20.0	
Surr: o-Terphenyl	0.19	0.0020	0.20		97.0	56	125	0.0			

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220329A: 10 **SampType:** Laboratory Control Sample **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/29/2022 18:35 **Prep Date:** 03/28/2022 13:17
Lab ID: LCS-164941-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.1	0.30	5.0		102.0	41	113				
Surr: n-Triacontane	0.089	0.0020	0.10		89.0	50	150				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C

Run ID: Run Order: GCFID-HP5-B_220329A: 11 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/29/2022 20:01 **Prep Date:** 03/28/2022 13:17
Lab ID: LCSD-164941-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.9	0.30	5.0		97.0	41	113	5.1	4.5	20.0	
Surr: n-Triacontane	0.087	0.0020	0.10		87.0	50	150	0.0			

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C

Run ID: Run Order: GCFID-HP5-B_220331A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/31/2022 13:21 **Prep Date:** 03/28/2022 13:17
Lab ID: LCS-164941 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	12	0.30	15		77.0	36	132				
Total Extractable Hydrocarbons (SGT)	12	0.30	15		82.0	60	132				
Surr: o-Terphenyl (SGT)	0.19	0.0020	0.20		95.0	56	125				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220331A: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/31/2022 14:04 **Prep Date:** 03/28/2022 13:17
Lab ID: LCSD-164941 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	12	0.30	15		77.0	36	132	12	0.2	20.0	
Total Extractable Hydrocarbons (SGT)	12	0.30	15		82.0	60	132	12	0.1	20.0	
Surr: o-Terphenyl (SGT)	0.18	0.0020	0.20		92.0	56	125	0.0			

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C

Run ID: Run Order: GCFID-HP5-B_220331A: 10 **SampType:** Laboratory Control Sample **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/31/2022 19:03 **Prep Date:** 03/28/2022 13:17
Lab ID: LCS-164941-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	5.1	0.30	5.0		103.0	41	113				
Surr: n-Triacontane (SGT)	0.083	0.0020	0.10		83.0	50	150				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C

Run ID: Run Order: GCFID-HP5-B_220331A: 11 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/31/2022 20:29 **Prep Date:** 03/28/2022 13:17
Lab ID: LCSD-164941-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	4.9	0.30	5.0		98.0	41	113	5.1	4.9	20.0	
Surr: n-Triacontane (SGT)	0.080	0.0020	0.10		80.0	50	150	0.0			

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220329A: 8 **SampType:** Sample Matrix Spike **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/29/2022 16:25 **Prep Date:** 03/28/2022 13:38
Lab ID: B22032035-026CMS **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	13	0.30	14	0.0	88.0	36	132				
Total Extractable Hydrocarbons	13	0.30	14	0.0	93.0	60	132				
Surr: o-Terphenyl	0.19	0.0020	0.19	0.0	97.0	56	125				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C

Run ID: Run Order: GCFID-HP5-B_220329A: 9 **SampType:** Sample Matrix Spike **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/29/2022 17:08 **Prep Date:** 03/28/2022 13:38
Lab ID: B22032035-027AMS-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	4.8	0.0	95.0	41	113				
Surr: n-Triacontane	0.080	0.0020	0.095	0.0	84.0	50	150				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220331A: 8 **SampType:** Sample Matrix Spike **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/31/2022 16:55 **Prep Date:** 03/28/2022 13:38
Lab ID: B22032035-026CMS **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	86.0	60	132				
Surr: o-Terphenyl (SGT)	0.18	0.0020	0.19	0.0	96.0	56	125				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C

Run ID: Run Order: GCFID-HP5-B_220331A: 9 **SampType:** Sample Matrix Spike **Batch ID:** 164941
Method: SW8015C **Analysis Date:** 03/31/2022 17:38 **Prep Date:** 03/28/2022 13:38
Lab ID: B22032035-027AMS-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	4.7	0.30	4.8	0.0	98.0	41	113				
Surr: n-Triacontane (SGT)	0.075	0.0020	0.095	0.0	79.0	50	150				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VARIAN1_220328A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/28/2022 09:28 **Prep Date:**
Lab ID: CCV_0328VAR04r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	176	20	168		104.0	80	120				
Total Purgeable Hydrocarbons	209	20	200		104.0	80	120				
Surr: Trifluorotoluene	24	1.0	25		96.0	80	120				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A

Run ID: Run Order: VARIAN1_220328A: 18 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/28/2022 20:56 **Prep Date:**
Lab ID: CCV_0328VAR24r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	174	20	168		103.0	80	120				
Total Purgeable Hydrocarbons	208	20	200		104.0	80	120				
Surr: Trifluorotoluene	24	1.0	25		96.0	80	120				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VARIAN1_220328A: 29 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/29/2022 07:49 **Prep Date:**
Lab ID: CCV_0328VAR43r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	158	20	168		94.0	80	120				
Total Purgeable Hydrocarbons	187	20	200		93.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		90.0	80	120				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A

Run ID: Run Order: VARIAN1_220328A: 44 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/29/2022 19:15 **Prep Date:**
Lab ID: CCV_0328VAR63r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	174	20	168		104.0	80	120				
Total Purgeable Hydrocarbons	208	20	200		104.0	80	120				
Surr: Trifluorotoluene	24	1.0	25		95.0	80	120				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: VARIAN1_220328A: 54 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377987
Method: SW8015C **Analysis Date:** 03/30/2022 04:59 **Prep Date:**
Lab ID: CCV_0328VAR80r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	161	20	168		96.0	80	120				
Total Purgeable Hydrocarbons	191	20	200		95.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		90.0	80	120				

Associated Samples: B22032035-001F, B22032035-003A, B22032035-006F, B22032035-008A, B22032035-011F, B22032035-013A, B22032035-016F, B22032035-018A, B22032035-021F, B22032035-023A, B22032035-026F, B22032035-027C, B22032035-029A, B22032035-032F, B22032035-033C, B22032035-035A, B22032035-038F, B22032035-040A, B22032035-043F, B22032035-045A, B22032035-048F, B22032035-050A, B22032035-053F, B22032035-055A, B22032035-058F, B22032035-060A, B22032035-063F, B22032035-065A, B22032035-068F, B22032035-070A

Run ID: Run Order: GCFID-HP5-B_220329A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378031
Method: SW8015C **Analysis Date:** 03/29/2022 10:01 **Prep Date:**
Lab ID: CCV_0329HP504r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.1	0.30	5.0		102.0	80	120				
Surr: n-Triacontane	0.20	0.0020	0.20		99.0	80	120				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220329A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378031
Method: SW8015C **Analysis Date:** 03/29/2022 10:44 **Prep Date:**
Lab ID: CCV_0329HP505r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	14	0.30	15		95.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		98.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C

Run ID: Run Order: GCFID-HP5-B_220329A: 12 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378031
Method: SW8015C **Analysis Date:** 03/29/2022 21:27 **Prep Date:**
Lab ID: CCV_0329HP520r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.3	0.30	5.0		107.0	80	120				
Surr: n-Triacontane	0.21	0.0020	0.20		104.0	80	120				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220329A: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378031
Method: SW8015C **Analysis Date:** 03/29/2022 22:11 **Prep Date:**
Lab ID: CCV_0329HP521r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	14	0.30	15		96.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		100.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		97.0	80	120				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C

Run ID: Run Order: GCFID-HP5-B_220329A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378031
Method: SW8015C **Analysis Date:** 03/30/2022 08:54 **Prep Date:**
Lab ID: CCV_0329HP536r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.0	0.30	5.0		101.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220329A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378031
Method: SW8015C **Analysis Date:** 03/30/2022 09:37 **Prep Date:**
Lab ID: CCV_0329HP537r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	14	0.30	15		95.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		98.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: **B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C**

Run ID: Run Order: GCFID-HP5-B_220329A: 31 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378031
Method: SW8015C **Analysis Date:** 03/30/2022 18:11 **Prep Date:**
Lab ID: CCV_0329HP549r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.2	0.30	5.0		104.0	80	120				
Surr: n-Triacontane	0.20	0.0020	0.20		98.0	80	120				

Associated Samples: **B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C**



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220329A: 32 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378031
Method: SW8015C **Analysis Date:** 03/30/2022 18:54 **Prep Date:**
Lab ID: CCV_0329HP550r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		100.0	80	120				
Total Extractable Hydrocarbons	16	0.30	15		104.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		102.0	80	120				

Associated Samples: B22032035-001C, B22032035-006C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-043C, B22032035-048C, B22032035-053C, B22032035-058C, B22032035-063C, B22032035-068C

Run ID: Run Order: GCFID-HP5-B_220331A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378116
Method: SW8015C **Analysis Date:** 03/31/2022 10:31 **Prep Date:**
Lab ID: CCV_00331HP503r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.0	0.30	5.0		101.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		97.0	80	120				

Associated Samples: B22032035-001C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-058C, B22032035-063C



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220331A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378116
Method: SW8015C **Analysis Date:** 03/31/2022 11:13 **Prep Date:**
Lab ID: CCV_00331HP504r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	14	0.30	15		94.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		97.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		95.0	80	120				

Associated Samples: **B22032035-001C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-058C, B22032035-063C**

Run ID: Run Order: GCFID-HP5-B_220331A: 12 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378116
Method: SW8015C **Analysis Date:** 03/31/2022 21:55 **Prep Date:**
Lab ID: CCV_0331HP519r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.2	0.30	5.0		104.0	80	120				
Surr: n-Triacontane	0.20	0.0020	0.20		101.0	80	120				

Associated Samples: **B22032035-001C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-058C, B22032035-063C**



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220331A: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378116
Method: SW8015C **Analysis Date:** 03/31/2022 22:38 **Prep Date:**
Lab ID: CCV_0331HP520r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		98.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		101.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		99.0	80	120				

Associated Samples: **B22032035-001C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-058C, B22032035-063C**

Run ID: Run Order: GCFID-HP5-B_220331A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378116
Method: SW8015C **Analysis Date:** 04/01/2022 09:22 **Prep Date:**
Lab ID: CCV_0331HP535r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.2	0.30	5.0		103.0	80	120				
Surr: n-Triacontane	0.20	0.0020	0.20		101.0	80	120				

Associated Samples: **B22032035-001C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-058C, B22032035-063C**



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: GCFID-HP5-B_220331A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R378116
Method: SW8015C **Analysis Date:** 04/01/2022 10:05 **Prep Date:**
Lab ID: CCV_0331HP536r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		97.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		100.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		97.0	80	120				

Associated Samples: **B22032035-001C, B22032035-011C, B22032035-016C, B22032035-021C, B22032035-026C, B22032035-027A, B22032035-032C, B22032035-033A, B22032035-038C, B22032035-058C, B22032035-063C**



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: FID-HEADSPACE_220328A: 4 **SampType:** Method Blank **Batch ID:** R377979
Method: SW8015M **Analysis Date:** 03/28/2022 09:56 **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: B22032035-001H, B22032035-005A, B22032035-006H, B22032035-010A, B22032035-011H, B22032035-015A, B22032035-016H, B22032035-020A, B22032035-021H, B22032035-025A, B22032035-026H, B22032035-031A, B22032035-032H, B22032035-037A, B22032035-038H, B22032035-042A, B22032035-043H, B22032035-047A, B22032035-048H, B22032035-052A

Run ID: Run Order: FID-HEADSPACE_220328A: 2 **SampType:** Laboratory Control Sample **Batch ID:** R377979
Method: SW8015M **Analysis Date:** 03/28/2022 08:40 **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	98	2.0	100		98.0	85	115				

Associated Samples: B22032035-001H, B22032035-005A, B22032035-006H, B22032035-010A, B22032035-011H, B22032035-015A, B22032035-016H, B22032035-020A, B22032035-021H, B22032035-025A, B22032035-026H, B22032035-031A, B22032035-032H, B22032035-037A, B22032035-038H, B22032035-042A, B22032035-043H, B22032035-047A, B22032035-048H, B22032035-052A

Run ID: Run Order: FID-HEADSPACE_220328A: 3 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** R377979
Method: SW8015M **Analysis Date:** 03/28/2022 08:45 **Prep Date:**
Lab ID: LCSD **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	98	2.0	100		98.0	85	115	98	0.5	20.0	

Associated Samples: B22032035-001H, B22032035-005A, B22032035-006H, B22032035-010A, B22032035-011H, B22032035-015A, B22032035-016H, B22032035-020A, B22032035-021H, B22032035-025A, B22032035-026H, B22032035-031A, B22032035-032H, B22032035-037A, B22032035-038H, B22032035-042A, B22032035-043H, B22032035-047A, B22032035-048H, B22032035-052A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: FID-HEADSPACE_220328A: 12 **SampType:** Sample Duplicate **Batch ID:** R377979
Method: SW8015M **Analysis Date:** 03/28/2022 10:41 **Prep Date:**
Lab ID: B22032035-016HDUP **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	0.0025	0.0020			0.0			0.0025	1.2	20.0	

Associated Samples: B22032035-001H, B22032035-005A, B22032035-006H, B22032035-010A, B22032035-011H, B22032035-015A, B22032035-016H, B22032035-020A, B22032035-021H, B22032035-025A, B22032035-026H, B22032035-031A, B22032035-032H, B22032035-037A, B22032035-038H, B22032035-042A, B22032035-043H, B22032035-047A, B22032035-048H, B22032035-052A

Run ID: Run Order: FID-HEADSPACE_220328B: 4 **SampType:** Method Blank **Batch ID:** R377980
Method: SW8015M **Analysis Date:** 03/28/2022 13:01 **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: B22032035-053H, B22032035-057A, B22032035-058H, B22032035-062A, B22032035-063H, B22032035-067A, B22032035-068H, B22032035-072A

Run ID: Run Order: FID-HEADSPACE_220328B: 2 **SampType:** Laboratory Control Sample **Batch ID:** R377980
Method: SW8015M **Analysis Date:** 03/28/2022 12:22 **Prep Date:**
Lab ID: LCS **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	96	2.0	100		96.0	85	115				

Associated Samples: B22032035-053H, B22032035-057A, B22032035-058H, B22032035-062A, B22032035-063H, B22032035-067A, B22032035-068H, B22032035-072A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: FID-HEADSPACE_220328B: 3 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** R377980
Method: SW8015M **Analysis Date:** 03/28/2022 12:27 **Prep Date:**
Lab ID: LCSD **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	97	2.0	100		97.0	85	115	96	0.6	20.0	

Associated Samples: B22032035-053H, B22032035-057A, B22032035-058H, B22032035-062A, B22032035-063H, B22032035-067A, B22032035-068H, B22032035-072A

Run ID: Run Order: FID-HEADSPACE_220328B: 8 **SampType:** Sample Duplicate **Batch ID:** R377980
Method: SW8015M **Analysis Date:** 03/28/2022 13:24 **Prep Date:**
Lab ID: B22032035-058HDUP **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	0.0051	0.0020			0.0			0.0050	2.9	20.0	

Associated Samples: B22032035-053H, B22032035-057A, B22032035-058H, B22032035-062A, B22032035-063H, B22032035-067A, B22032035-068H, B22032035-072A

Run ID: Run Order: FID-HEADSPACE_220328A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377979
Method: SW8015M **Analysis Date:** 03/28/2022 08:35 **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	94	2.0	100		94.0	85	115				

Associated Samples: B22032035-001H, B22032035-005A, B22032035-006H, B22032035-010A, B22032035-011H, B22032035-015A, B22032035-016H, B22032035-020A, B22032035-021H, B22032035-025A, B22032035-026H, B22032035-031A, B22032035-032H, B22032035-037A, B22032035-038H, B22032035-042A, B22032035-043H, B22032035-047A, B22032035-048H, B22032035-052A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

Run ID: Run Order: FID-HEADSPACE_220328A: 26 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377979
Method: SW8015M **Analysis Date:** 03/28/2022 11:57 **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	96	2.0	100		96.0	85	115				

Associated Samples: B22032035-001H, B22032035-005A, B22032035-006H, B22032035-010A, B22032035-011H, B22032035-015A, B22032035-016H, B22032035-020A, B22032035-021H, B22032035-025A, B22032035-026H, B22032035-031A, B22032035-032H, B22032035-037A, B22032035-038H, B22032035-042A, B22032035-043H, B22032035-047A, B22032035-048H, B22032035-052A

Run ID: Run Order: FID-HEADSPACE_220328B: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377980
Method: SW8015M **Analysis Date:** 03/28/2022 12:16 **Prep Date:**
Lab ID: CCV **Units:** ppm **Prep Method:**

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

Associated Samples: B22032035-053H, B22032035-057A, B22032035-058H, B22032035-062A, B22032035-063H, B22032035-067A, B22032035-068H, B22032035-072A

Run ID: Run Order: FID-HEADSPACE_220328B: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377980
Method: SW8015M **Analysis Date:** 03/28/2022 14:00 **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: B22032035-053H, B22032035-057A, B22032035-058H, B22032035-062A, B22032035-063H, B22032035-067A, B22032035-068H, B22032035-072A



Analytical QC Exceptions Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22032035
Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

All quality control measures met criteria; there were no Analytical QC Exceptions.



Preparation and Analysis Dates Report

Work Order: B22032035

Client: AECOM - Honolulu

Project Name: CV18F0126, 60571032.02.46.01

Report Date: 4/04/2022

Lab ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Method	Prep Date	Prep Batch	Analysis Method	Analysis Date
001B	ERH2906 (RHMW06)	03/23/2022 12:15	Ground Water	Metals by ICP-MS, Total		SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 15:32
001C	ERH2906 (RHMW06)	03/23/2022 12:15	Ground Water	Diesel Range Organics		SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 04:37
						SW3520C	03/28/2022 13:38	164941	SW8015C	04/01/2022 01:30
001G	ERH2906 (RHMW06)	03/23/2022 12:15	Ground Water	EDB in Water by ECD		SW8011	03/28/2022 09:00	164912	SW8011	03/29/2022 01:07
004A	ERH2905 (Trip Blank) 14894	03/23/2022 12:15	Trip Blank	EDB in Water by ECD		SW8011	03/28/2022 09:01	164912	SW8011	03/28/2022 22:49
006B	ERH2909 (RHMW13-05)	03/22/2022 14:00	Ground Water	Metals by ICP-MS, Total		SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 16:29
006C	ERH2909 (RHMW13-05)	03/22/2022 14:00	Ground Water	Diesel Range Organics		SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 05:20
006G	ERH2909 (RHMW13-05)	03/22/2022 14:00	Ground Water	EDB in Water by ECD		SW8011	03/28/2022 09:01	164912	SW8011	03/28/2022 23:09
009A	ERH2908 (Trip Blank) 14964	03/22/2022 14:00	Trip Blank	EDB in Water by ECD		SW8011	03/28/2022 09:01	164912	SW8011	03/28/2022 23:29
011B	ERH2920 (RHMW2254-01 B)	03/24/2022 13:00	Ground Water	Metals by ICP-MS, Total		SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 16:41
011C	ERH2920 (RHMW2254-01 B)	03/24/2022 13:00	Ground Water	Diesel Range Organics		SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 14:36
						SW3520C	03/28/2022 13:38	164941	SW8015C	04/01/2022 07:14
011G	ERH2920 (RHMW2254-01 B)	03/24/2022 13:00	Ground Water	EDB in Water by ECD		SW8011	03/28/2022 09:01	164912	SW8011	03/28/2022 23:48
014A	ERH2919 (Trip Blank) 14964	03/24/2022 13:00	Trip Blank	EDB in Water by ECD		SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 00:08
016B	ERH2926 (SUMP ADIT 3)	03/24/2022 15:05	Ground Water	Metals by ICP-MS, Total		SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 16:54
016C	ERH2926 (SUMP ADIT 3)	03/24/2022 15:05	Ground Water	Diesel Range Organics		SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 15:19
						SW3520C	03/28/2022 13:38	164941	SW8015C	04/01/2022 07:57
016G	ERH2926 (SUMP ADIT 3)	03/24/2022 15:05	Ground Water	EDB in Water by ECD		SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 00:28
019A	ERH2925 (Trip Blank) 14964	03/24/2022 15:05	Trip Blank	EDB in Water by ECD		SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 00:48
021B	ERH2923 (RHMW2254-01 LF)	03/24/2022 14:10	Ground Water	Metals by ICP-MS, Total		SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 17:06
021C	ERH2923 (RHMW2254-01 LF)	03/24/2022 14:10	Ground Water	Diesel Range Organics		SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 06:46
						SW3520C	03/28/2022 13:38	164941	SW8015C	04/01/2022 02:13
021G	ERH2923 (RHMW2254-01 LF)	03/24/2022 14:10	Ground Water	EDB in Water by ECD		SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 03:06
024A	ERH2922 (Trip Blank) 14964	03/24/2022 14:10	Trip Blank	EDB in Water by ECD		SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 03:25
026B	ERH2872 (RHMW12A)	03/22/2022 13:40	Ground Water	Metals by ICP-MS, Total		SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 17:31



Preparation and Analysis Dates Report

Work Order: B22032035

Client: AECOM - Honolulu

Project Name: CV18F0126, 60571032.02.46.01

Report Date: 4/04/2022

026C	ERH2872 (RHMW12A)	03/22/2022 13:40	Ground Water	Diesel Range Organics	SW3520C	03/28/2022 13:38	164941	SW8015C	03/29/2022 15:00
					SW3520C	03/28/2022 13:38	164941	SW8015C	03/31/2022 15:29
026G	ERH2872 (RHMW12A)	03/22/2022 13:40	Ground Water	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 03:45
027A	ERH2873 (RHMW12A FD)	03/22/2022 13:40	Ground Water	Diesel Range Organics	SW3520C	03/28/2022 13:38	164941	SW8015C	03/29/2022 15:42
					SW3520C	03/28/2022 13:38	164941	SW8015C	03/31/2022 16:12
030A	ERH2871 (Trip Blank) 14754	03/22/2022 13:40	Trip Blank	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 04:05
032B	ERH2892 (RHMW16)	03/22/2022 16:55	Ground Water	Metals by ICP-MS, Total	SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 17:44
032C	ERH2892 (RHMW16)	03/22/2022 16:55	Ground Water	Diesel Range Organics	SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 07:29
					SW3520C	03/28/2022 13:38	164941	SW8015C	04/01/2022 02:56
032G	ERH2892 (RHMW16)	03/22/2022 16:55	Ground Water	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 04:25
033A	ERH2893 (RHMW16 FD)	03/22/2022 16:55	Ground Water	Diesel Range Organics	SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 11:46
					SW3520C	03/28/2022 13:38	164941	SW8015C	04/01/2022 03:40
036A	ERH2891 (Trip Blank) 14909	03/22/2022 16:55	Trip Blank	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 04:44
038B	ERH2929 (RHMW11-05)	03/22/2022 16:45	Ground Water	Metals by ICP-MS, Total	SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 17:56
038C	ERH2929 (RHMW11-05)	03/22/2022 16:45	Ground Water	Diesel Range Organics	SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 12:28
					SW3520C	03/28/2022 13:38	164941	SW8015C	04/01/2022 05:05
038G	ERH2929 (RHMW11-05)	03/22/2022 16:45	Ground Water	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 05:04
041A	ERH2928 (Trip Blank) 14964	03/22/2022 16:45	Trip Blank	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 05:24
043B	ERH2917 (RHMW04)	03/23/2022 13:50	Ground Water	Metals by ICP-MS, Total	SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 18:08
043C	ERH2917 (RHMW04)	03/23/2022 13:50	Ground Water	Diesel Range Organics	SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 13:11
043G	ERH2917 (RHMW04)	03/23/2022 13:50	Ground Water	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 05:44
046A	ERH2916 (Trip Blank) 14964	03/23/2022 13:50	Trip Blank	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 06:03
048B	ERH2900 (OWDFMW07A)	03/23/2022 18:15	Ground Water	Metals by ICP-MS, Total	SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 18:21
048C	ERH2900 (OWDFMW07A)	03/23/2022 18:15	Ground Water	Diesel Range Organics	SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 00:20
048G	ERH2900 (OWDFMW07A)	03/23/2022 18:15	Ground Water	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 07:22
051A	ERH2899 (Trip Blank) 14754	03/23/2022 18:15	Trip Blank	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 07:42
053B	ERH2914(OWDFMW01)	03/23/2022 15:55	Ground Water	Metals by ICP-MS, Total	SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 19:11



Preparation and Analysis Dates Report

Work Order: B22032035

Client: AECOM - Honolulu

Project Name: CV18F0126, 60571032.02.46.01

Report Date: 4/04/2022

053C	ERH2914(OWDFMW01)	03/23/2022 15:55	Ground Water	Diesel Range Organics	SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 01:03
053G	ERH2914(OWDFMW01)	03/23/2022 15:55	Ground Water	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 08:02
056A	ERH2913 (Trip Blank) 14964	03/23/2022 15:55	Trip Blank	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 08:21
058B	ERH2897 (OWDFMW05A)	03/22/2022 16:16	Ground Water	Metals by ICP-MS, Total	SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 19:55
058C	ERH2897 (OWDFMW05A)	03/22/2022 16:16	Ground Water	Diesel Range Organics	SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 02:29
					SW3520C	03/28/2022 13:38	164941	SW8015C	04/01/2022 00:47
058G	ERH2897 (OWDFMW05A)	03/22/2022 16:16	Ground Water	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 08:41
061A	ERH2896 (Trip Blank) 14894	03/22/2022 16:16	Trip Blank	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 09:01
063B	ERH2903 (RHMW08)	03/23/2022 15:30	Ground Water	Metals by ICP-MS, Total	SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 20:20
063C	ERH2903 (RHMW08)	03/23/2022 15:30	Ground Water	Diesel Range Organics	SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 16:45
					SW3520C	03/28/2022 13:38	164941	SW8015C	04/01/2022 05:48
063G	ERH2903 (RHMW08)	03/23/2022 15:30	Ground Water	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 09:21
066A	ERH2902 (Trip Blank) 14964	03/23/2022 15:30	Trip Blank	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 09:40
068B	ERH2869(RHMW14-03)	03/22/2022 13:05	Ground Water	Metals by ICP-MS, Total	SW3010A	03/28/2022 14:36	164942	SW6020	03/30/2022 20:32
068C	ERH2869(RHMW14-03)	03/22/2022 13:05	Ground Water	Diesel Range Organics	SW3520C	03/28/2022 13:38	164941	SW8015C	03/30/2022 03:55
068G	ERH2869(RHMW14-03)	03/22/2022 13:05	Ground Water	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 10:00
071A	ERH2868 (Trip Blank) 14833	03/22/2022 13:05	Trip Blank	EDB in Water by ECD	SW8011	03/28/2022 09:01	164912	SW8011	03/29/2022 10:20



Chemical Abstracts Service (CAS) Registry Numbers

Prepared by Billings, MT Branch

Client: AECOM - Honolulu

Workorder: B22032035

Project: CV18F0126, 60571032.02.46.01

Report Date: 04/04/2022

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
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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)	

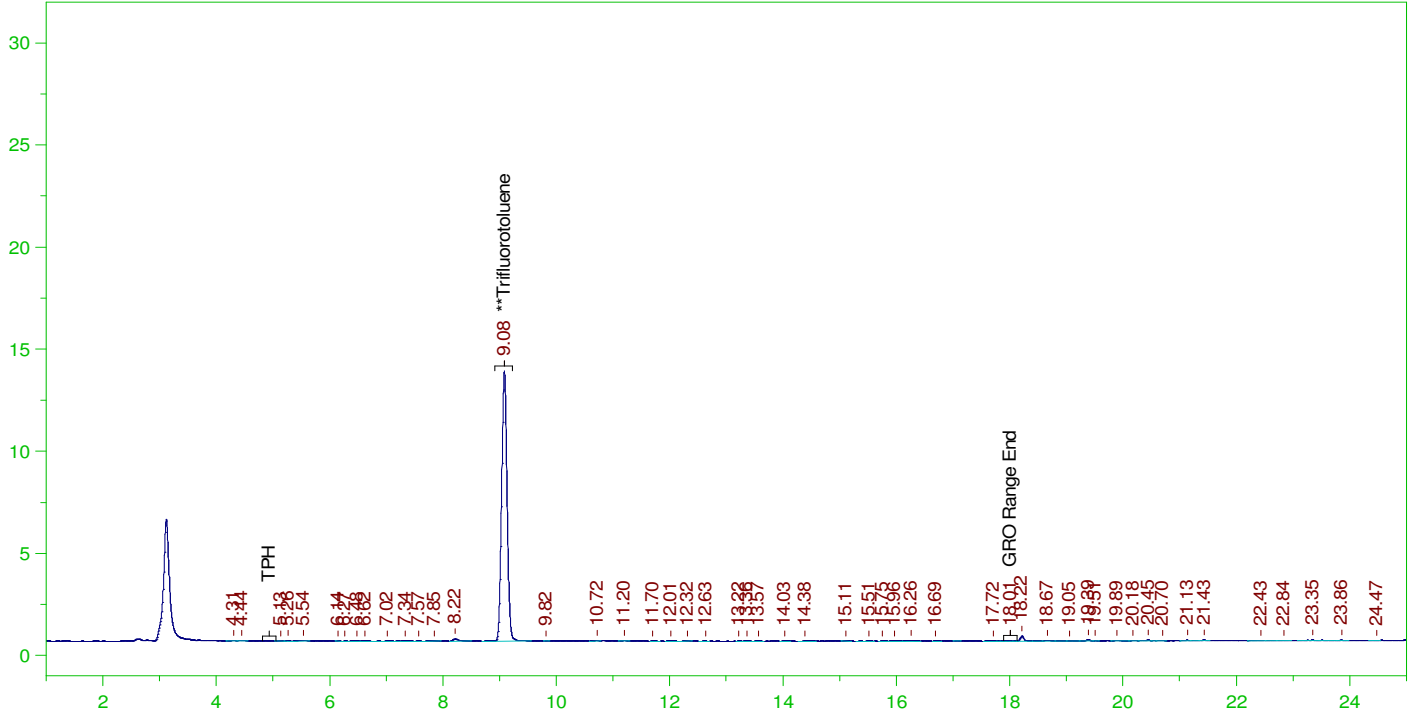
ORGANIC CHARACTERISTICS

Methane	74-82-8
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ERH2906 (RHMW06)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0008.RAW

B22032035-001F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-001F ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0008.RAW
Date & Time Acquired: 3/28/2022 11:45:45 AM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.083	89666	25.	20.235	80.94

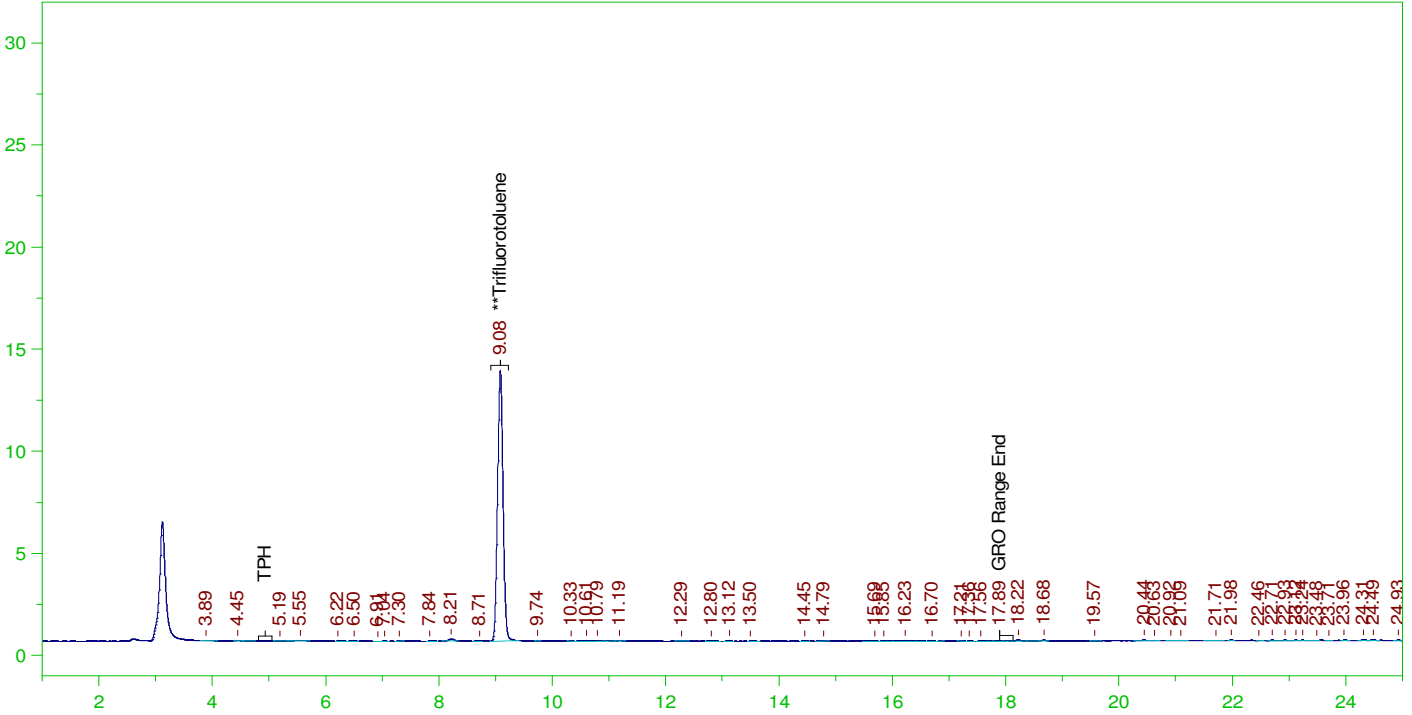
C6 to C10 Area:6570.041 C6 to C10 Amount: 1.362809
TPH Area:11770.41 TPH Amount: 2.481422



ERH2905 (Trip Blank) 14909

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0010.RAW

B22032035-003A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-003A ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0010.RAW
Date & Time Acquired: 3/28/2022 12:54:25 PM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.082	89832	25.	20.272	81.09

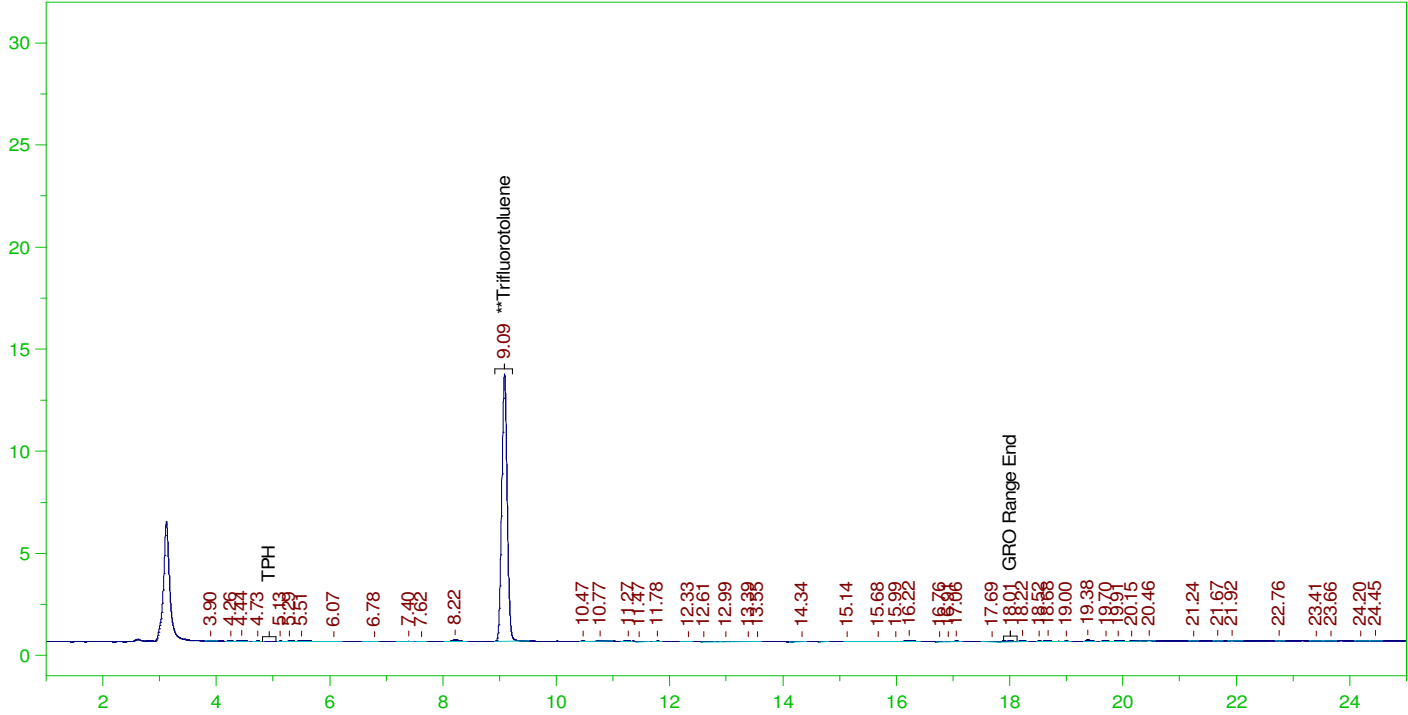
C6 to C10 Area:5727.187 C6 to C10 Amount: 1.187978
TPH Area:9513.836 TPH Amount: 2.005694



ERH2909 (RHMW13-05)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0028.RAW

B22032035-006F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-006F ;0328VAR , \$HC-8015-GRO-W,
 Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0028.RAW
 Date & Time Acquired: 3/28/2022 11:13:40 PM
 Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
 Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
 Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
 Mean RF for TPH: 948.6828
 Rt range for Gasoline Range Organics: 4.81 to 18.13

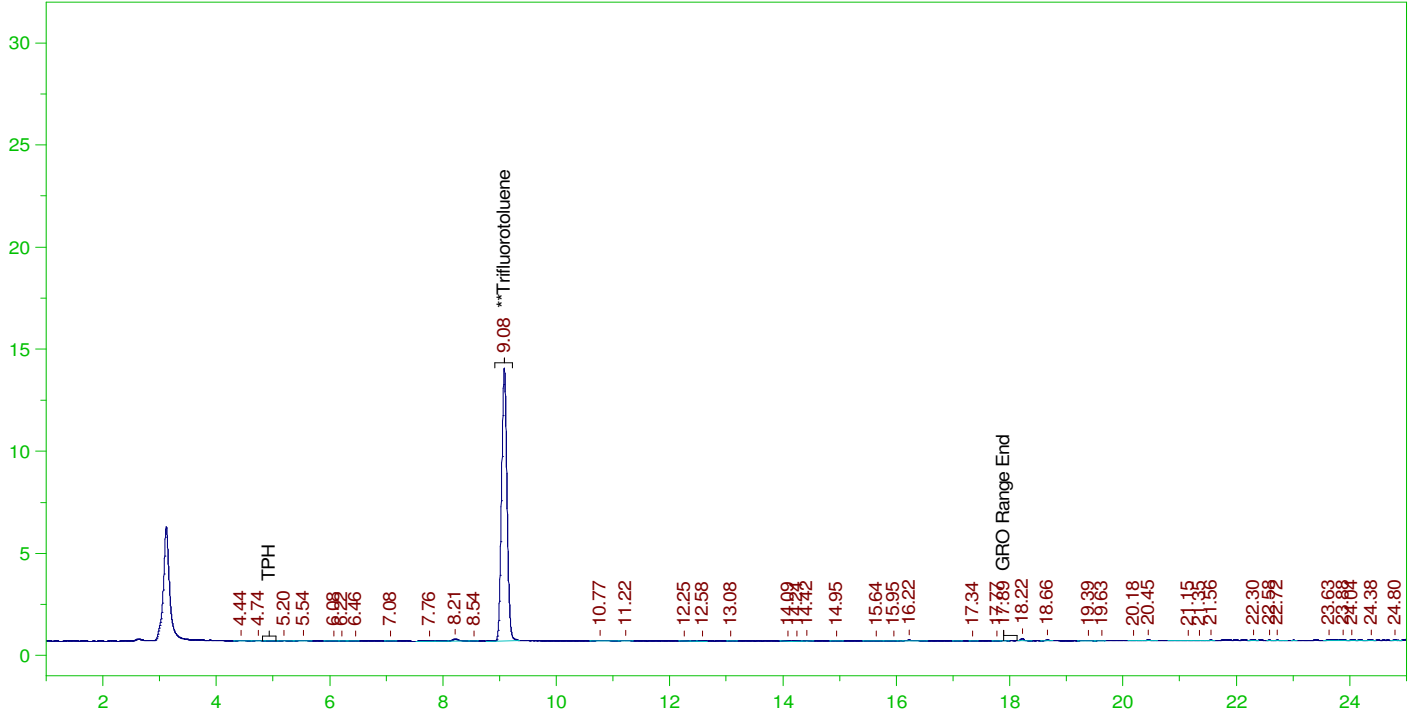
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.085	88658	25.	20.008	80.03	-

C6 to C10 Area:5748.804 C6 to C10 Amount: 1.192462
 TPH Area:9593.584 TPH Amount: 2.022506

ERH2908 (Trip Blank) 14909

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0011.RAW

B22032035-008A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-008A ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0011.RAW
Date & Time Acquired: 3/28/2022 1:28:47 PM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

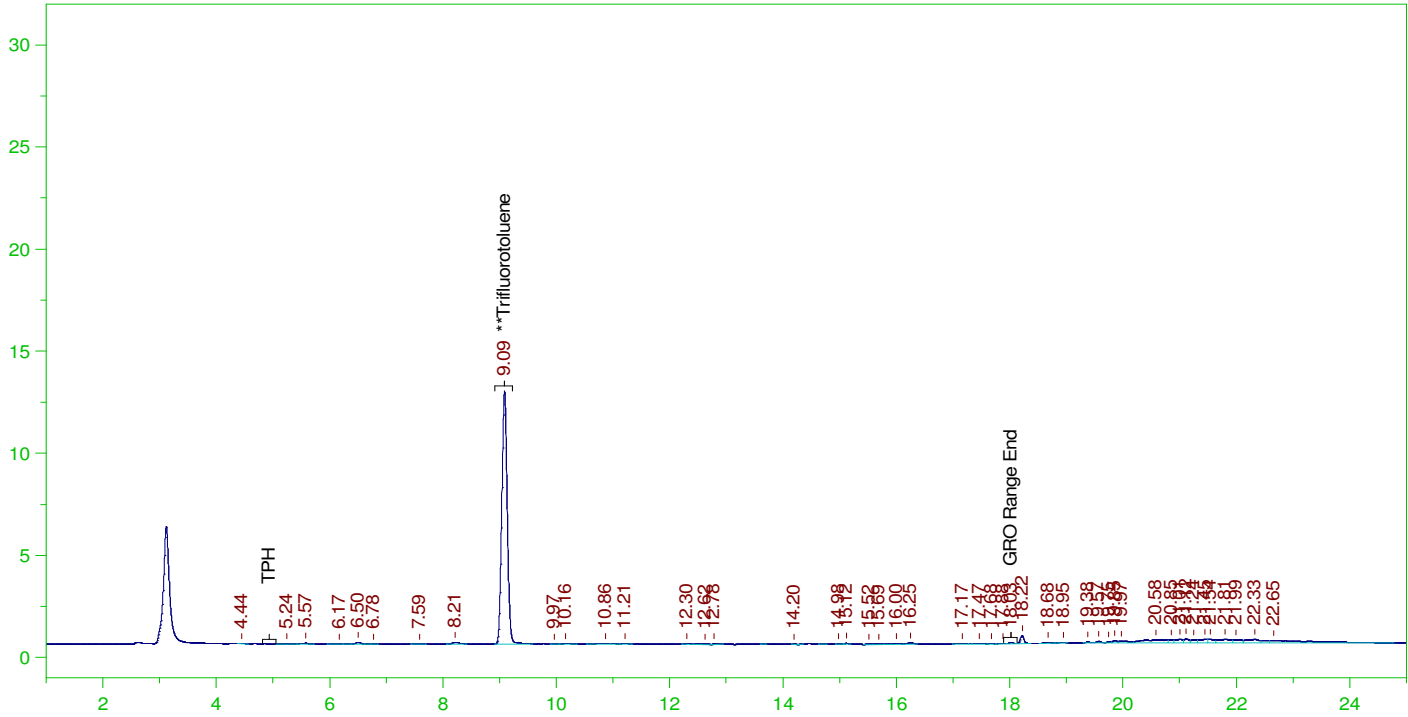
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.082	90148	25.	20.344	81.37

C6 to C10 Area:5343.559 C6 to C10 Amount: 1.108403
TPH Area:10678.08 TPH Amount: 2.251139

ERH2920 (RHMW2254-01 B)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0030.RAW

B22032035-011F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-011F ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0030.RAW
Date & Time Acquired: 3/29/2022 12:22:21 AM
Method File: G:\Org\VAR\Methods\220324AG2035-11DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

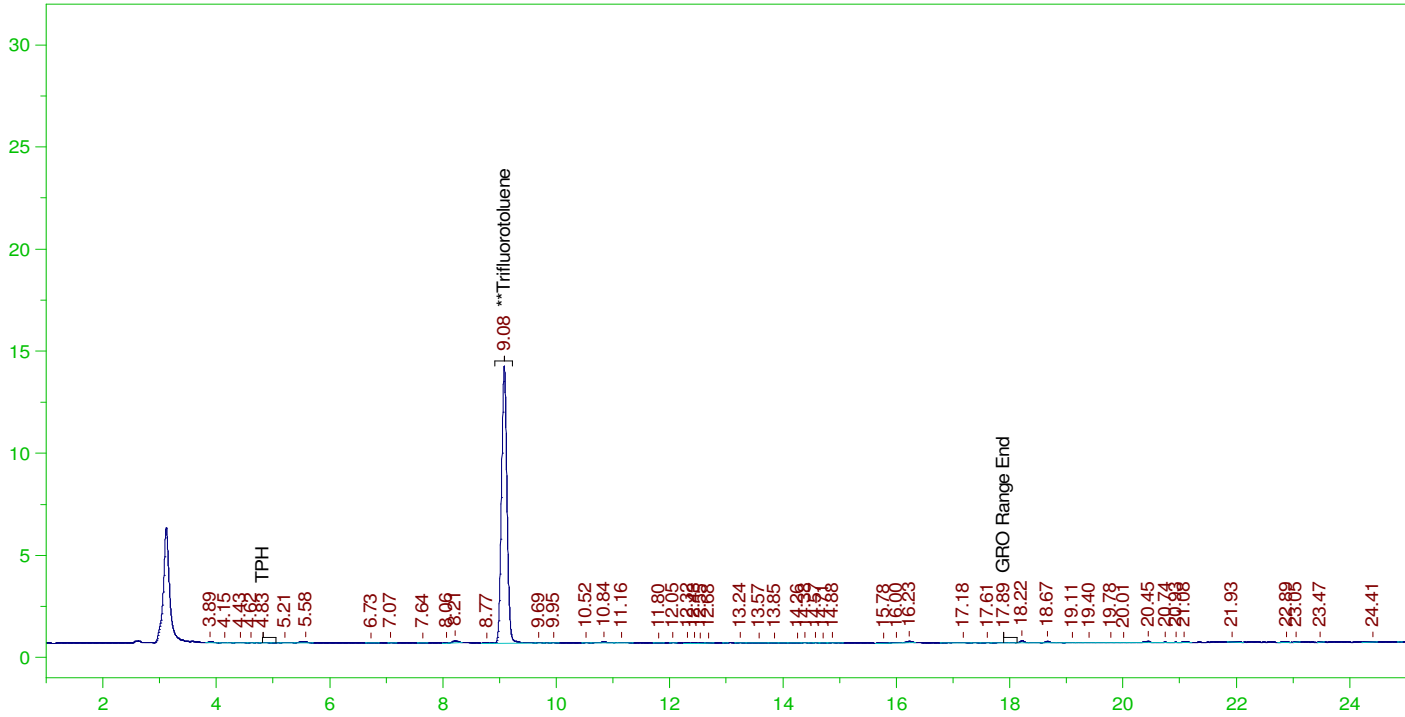
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.086	83770	25.	18.904	75.62	-

C6 to C10 Area:6934.818 C6 to C10 Amount: 1.438474
TPH Area:39821.53 TPH Amount: 8.395121

ERH2919 (Trip Blank) 14909

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0012.RAW

B22032035-013A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-013A ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0012.RAW
Date & Time Acquired: 3/28/2022 2:03:11 PM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

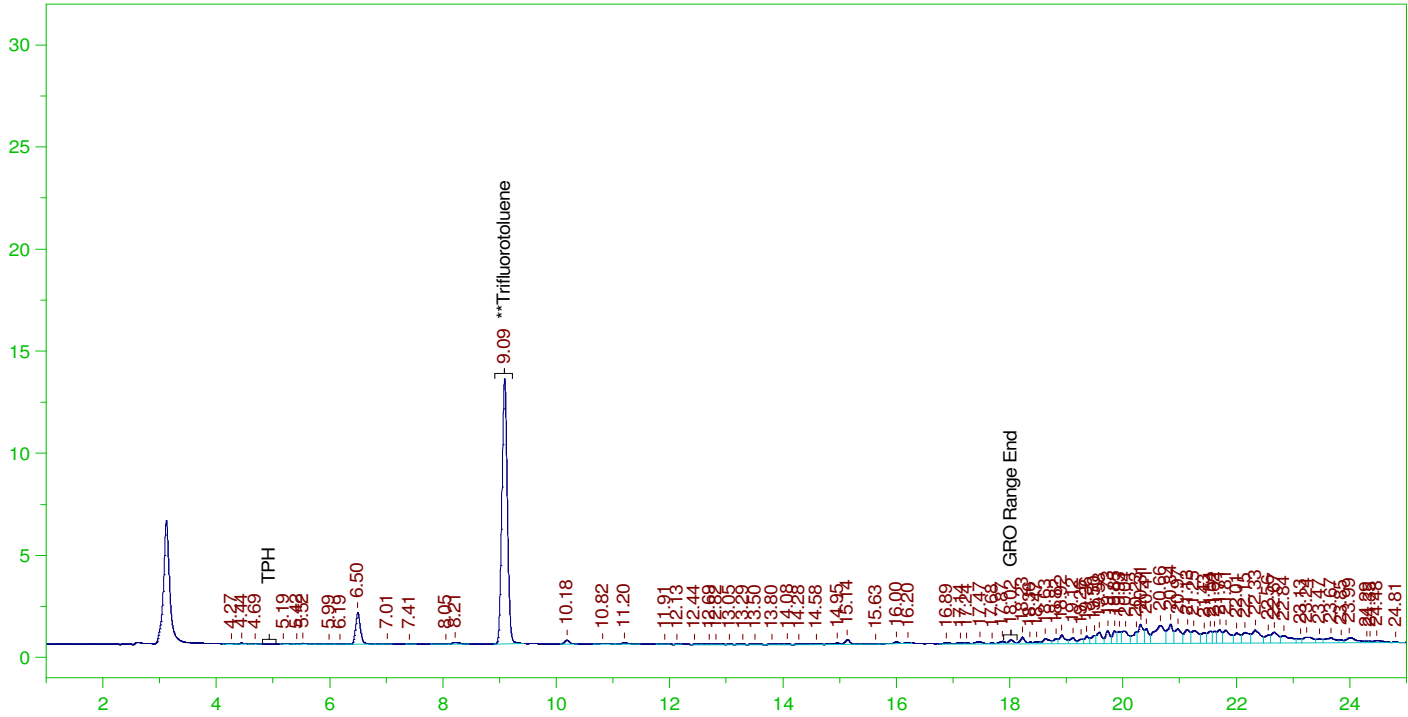
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.081	92471	25.	20.868	83.47

C6 to C10 Area:7759.618 C6 to C10 Amount: 1.609561
TPH Area:12791.13 TPH Amount: 2.696609

ERH2926 (SUMP ADIT 3)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0032.RAW

B22032035-016F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-016F ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0032.RAW
Date & Time Acquired: 3/29/2022 1:31:02 AM
Method File: G:\Org\VAR\Methods\220324AG2035-16DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

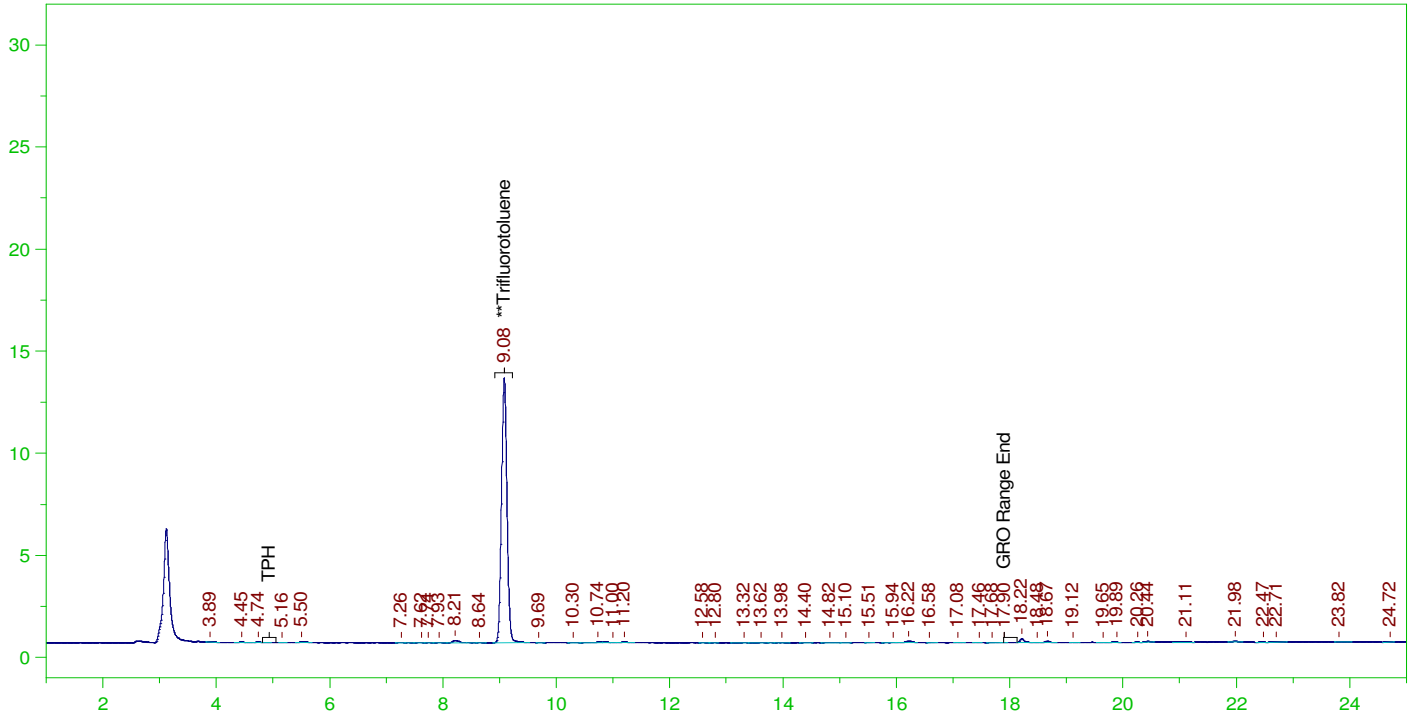
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.088	87802	25.	19.814	79.26	-

C6 to C10 Area:24892.8 C6 to C10 Amount: 5.163459
TPH Area:164442.8 TPH Amount: 34.66759

ERH2925 (Trip Blank) 14909

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0013.RAW

B22032035-018A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-018A ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0013.RAW
Date & Time Acquired: 3/28/2022 2:37:39 PM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

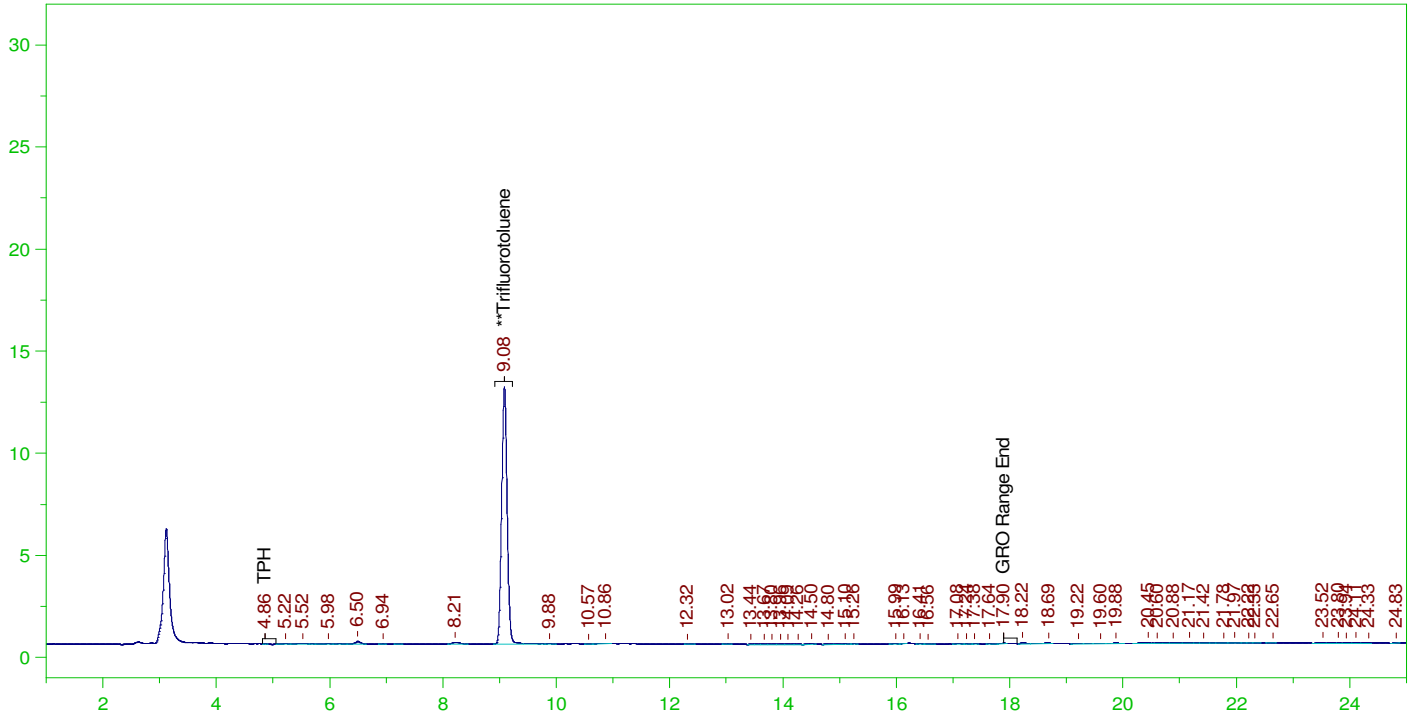
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.081	88246	25.	19.914	79.66

C6 to C10 Area:6602.131 C6 to C10 Amount: 1.369466
TPH Area:11156.65 TPH Amount: 2.35203

ERH2923 (RHMW2254-01 LF)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0034.RAW

B22032035-021F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-021F ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0034.RAW
Date & Time Acquired: 3/29/2022 2:39:45 AM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

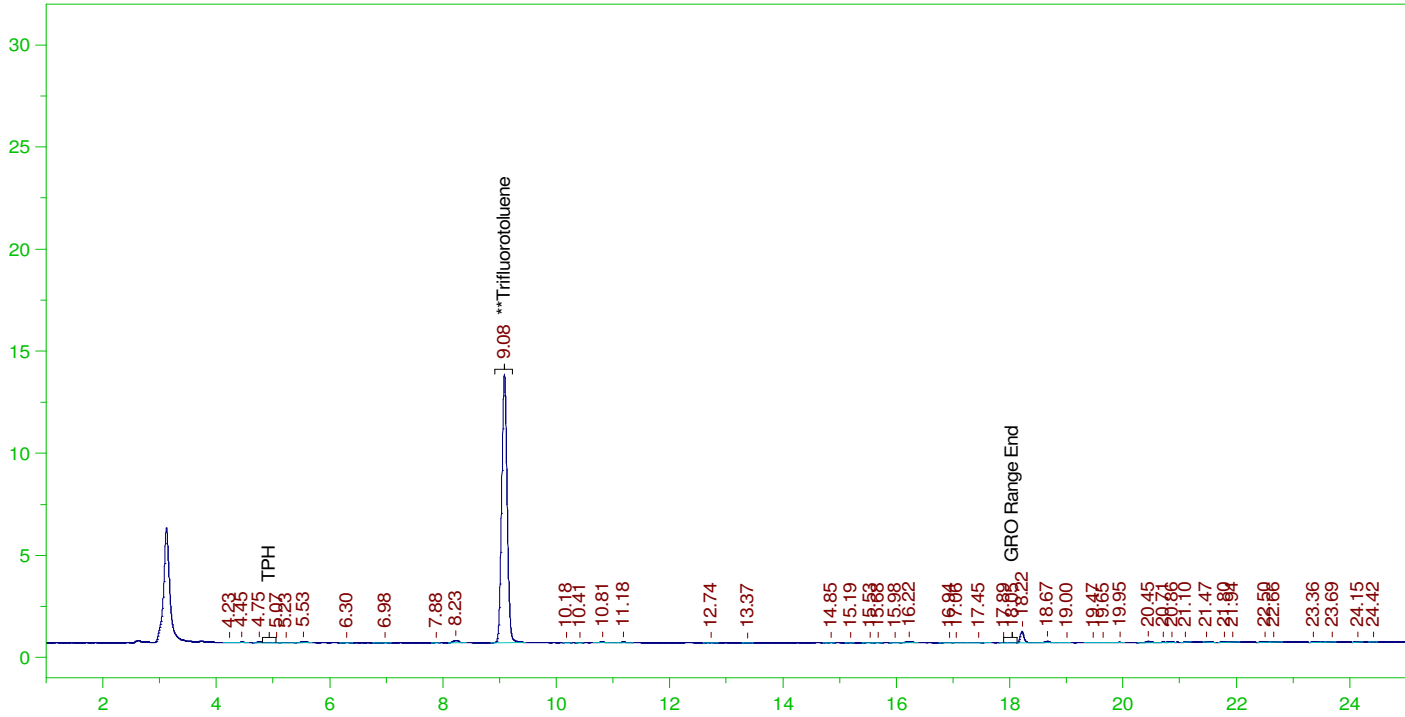
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.084	85537	25.	19.303	77.21

C6 to C10 Area:6386.415 C6 to C10 Amount: 1.32472
TPH Area:11212.49 TPH Amount: 2.363803

ERH2922 (Trip Blank) 14964

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0014.RAW

B22032035-023A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-023A ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0014.RAW
Date & Time Acquired: 3/28/2022 3:12:07 PM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

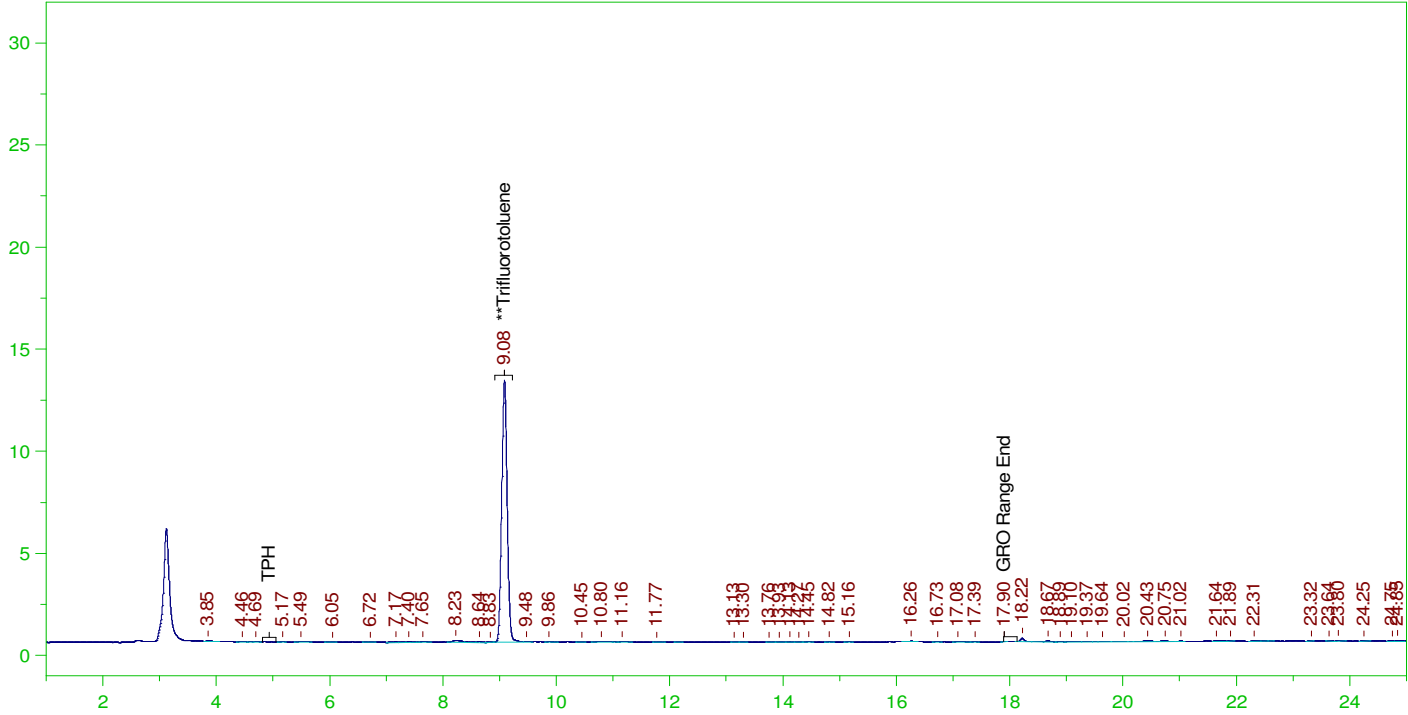
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.084	88998	25.	20.084	80.34

C6 to C10 Area:4514.443 C6 to C10 Amount: 0.9364211
TPH Area:11975.27 TPH Amount: 2.524609

ERH2872 (RHMW12A)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0036.RAW

B22032035-026F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-026F ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0036.RAW
Date & Time Acquired: 3/29/2022 3:48:28 AM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

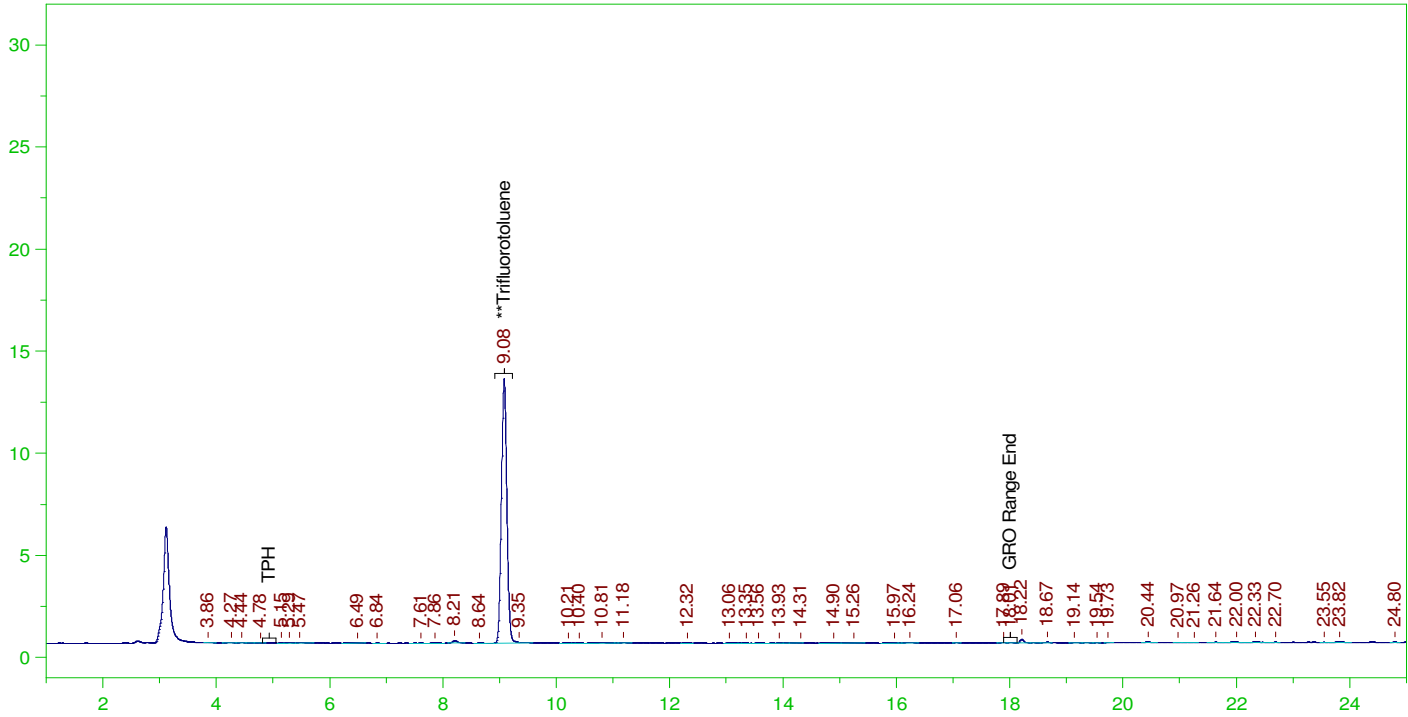
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.084	87013	25.	19.636	78.55

C6 to C10 Area:5813.32 C6 to C10 Amount: 1.205844
TPH Area:11367.8 TPH Amount: 2.396544

ERH2873 (RHMW12A FD)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0038.RAW

B22032035-027C ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-027C ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0038.RAW
Date & Time Acquired: 3/29/2022 4:57:21 AM
Method File: G:\Org\VAR\Methods\220324AG2035-27DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.079	87830	25.	19.821	79.28	-

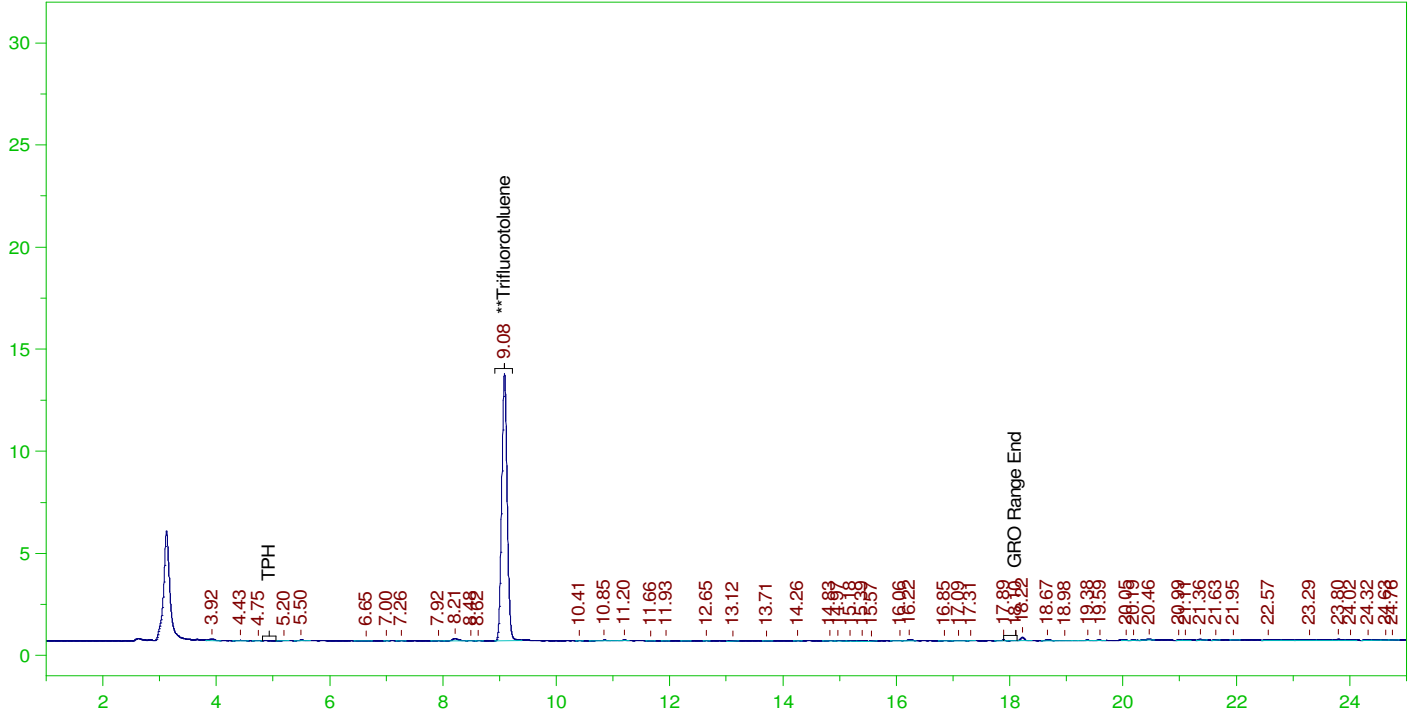
C6 to C10 Area:6668.465 C6 to C10 Amount: 1.383225
TPH Area:10329.54 TPH Amount: 2.177659



ERH2871 (Trip Blank) 14964

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0015.RAW

B22032035-029A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-029A ;0328VAR , \$HC-8015-GRO-W,
 Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0015.RAW
 Date & Time Acquired: 3/28/2022 3:46:31 PM
 Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
 Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
 Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
 Mean RF for TPH: 948.6828
 Rt range for Gasoline Range Organics: 4.81 to 18.13

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.084	88370	25.	19.943	79.77

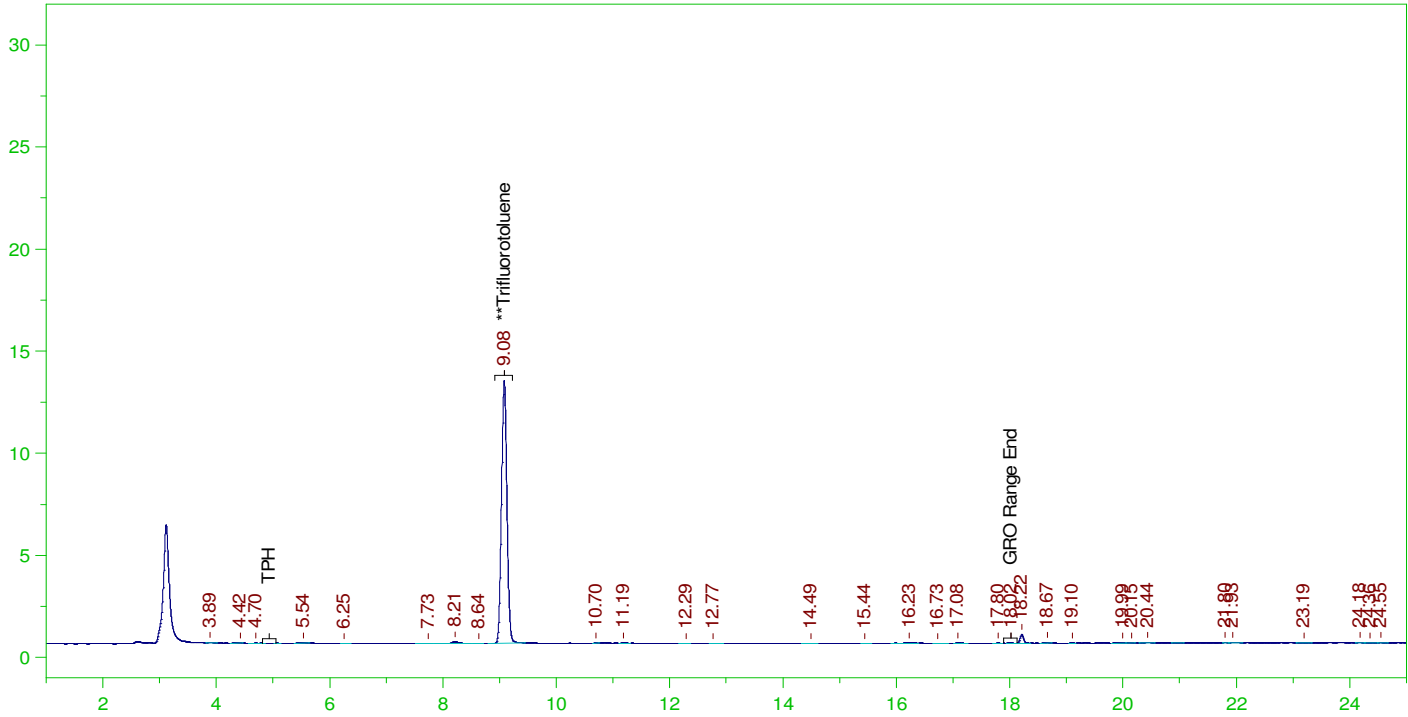
C6 to C10 Area:6379.81 C6 to C10 Amount: 1.32335
 TPH Area:12464.91 TPH Amount: 2.627834



ERH2892 (RHMW16)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0040.RAW

B22032035-032F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-032F ;0328VAR , \$HC-8015-GRO-W,
 Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0040.RAW
 Date & Time Acquired: 3/29/2022 6:06:14 AM
 Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
 Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
 Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
 Mean RF for TPH: 948.6828
 Rt range for Gasoline Range Organics: 4.81 to 18.13

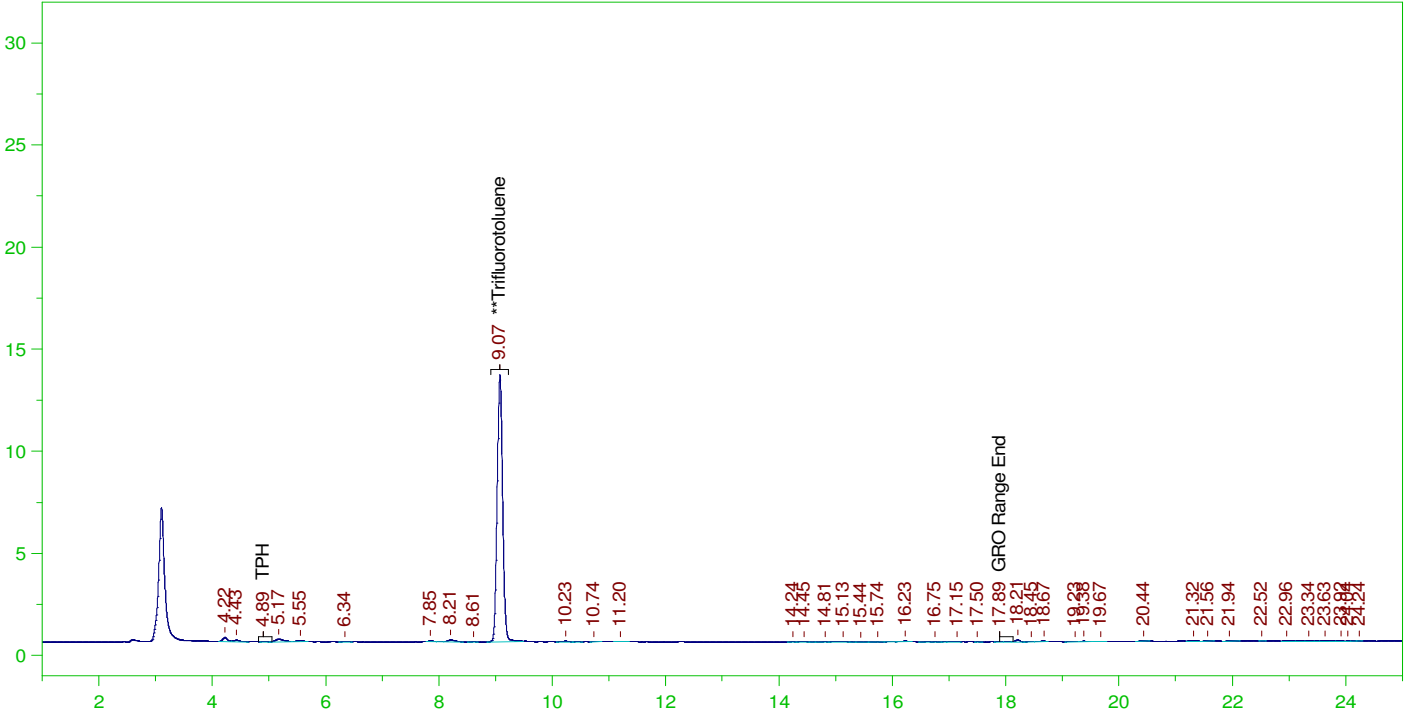
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.081	87308	25.	19.703	78.81

C6 to C10 Area:2966.213 C6 to C10 Amount: 0.6152751
 TPH Area:6943.868 TPH Amount: 1.463897

ERH2893 (RHMW16 FD)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0047.RAW

B22032035-033C ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-033C ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0047.RAW
Date & Time Acquired: 3/29/2022 10:06:27 AM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

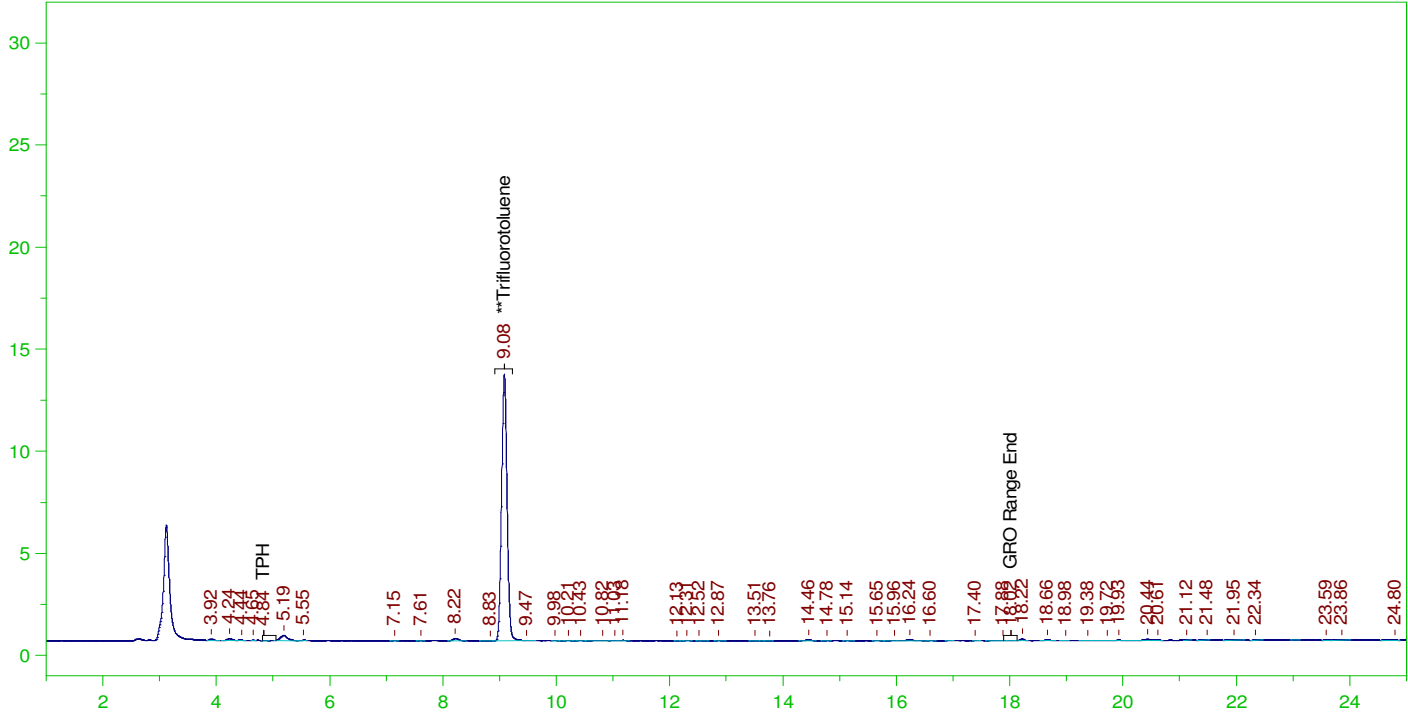
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.075	88480	25.	19.967	79.87

C6 to C10 Area:6615.561 C6 to C10 Amount: 1.372251
TPH Area:11475.77 TPH Amount: 2.419306

ERH2891 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0016.RAW

B22032035-035A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-035A ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0016.RAW
Date & Time Acquired: 3/28/2022 4:20:55 PM
Method File: G:\Org\VAR\Methods\220324AG2035-35DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.082	88737	25.	20.025	80.1

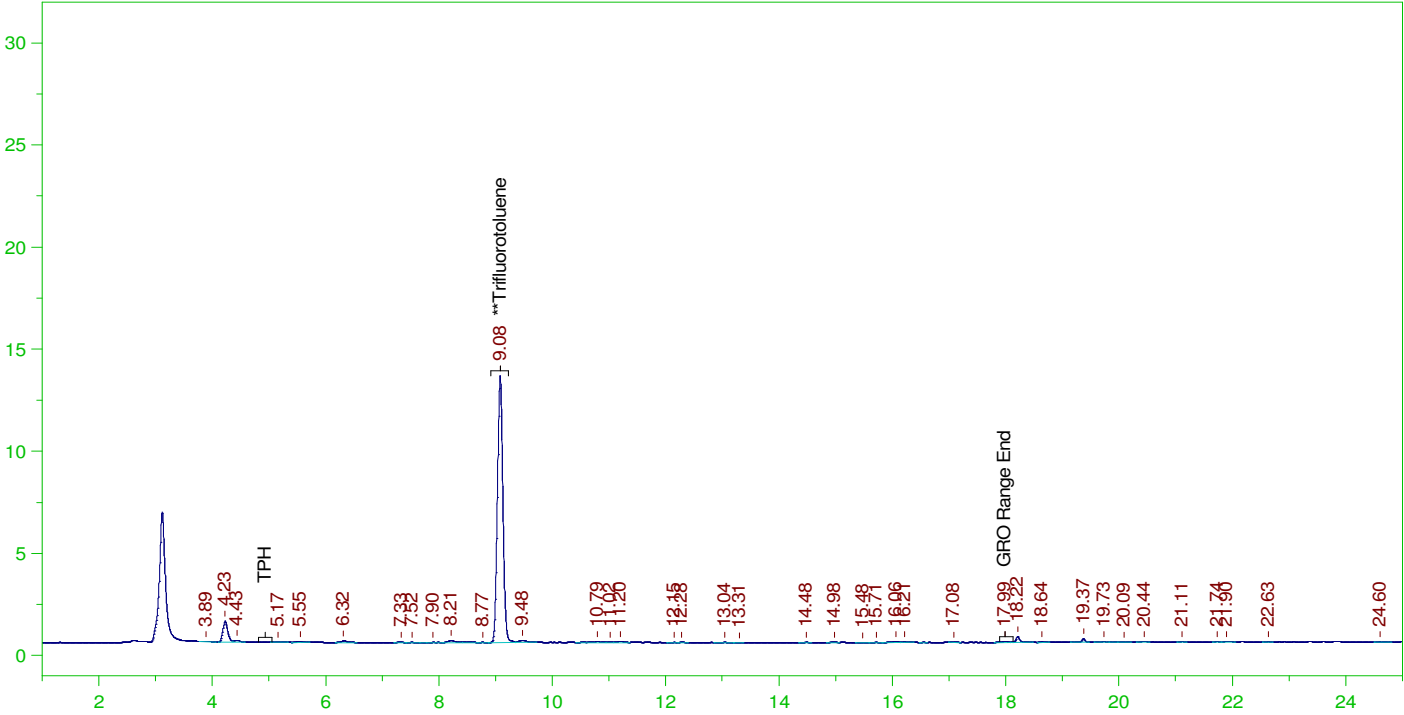
C6 to C10 Area:8590.138 C6 to C10 Amount: 1.781834
TPH Area:13051 TPH Amount: 2.751394



ERH2929 (RHMW11-05)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0058.RAW

B22032035-038F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-038F ;0328VAR , \$HC-8015-GRO-W,
 Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0058.RAW
 Date & Time Acquired: 3/29/2022 4:24:19 PM
 Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
 Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
 Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
 Mean RF for TPH: 948.6828
 Rt range for Gasoline Range Organics: 4.81 to 18.13

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.079	88730	25.	20.024	80.09

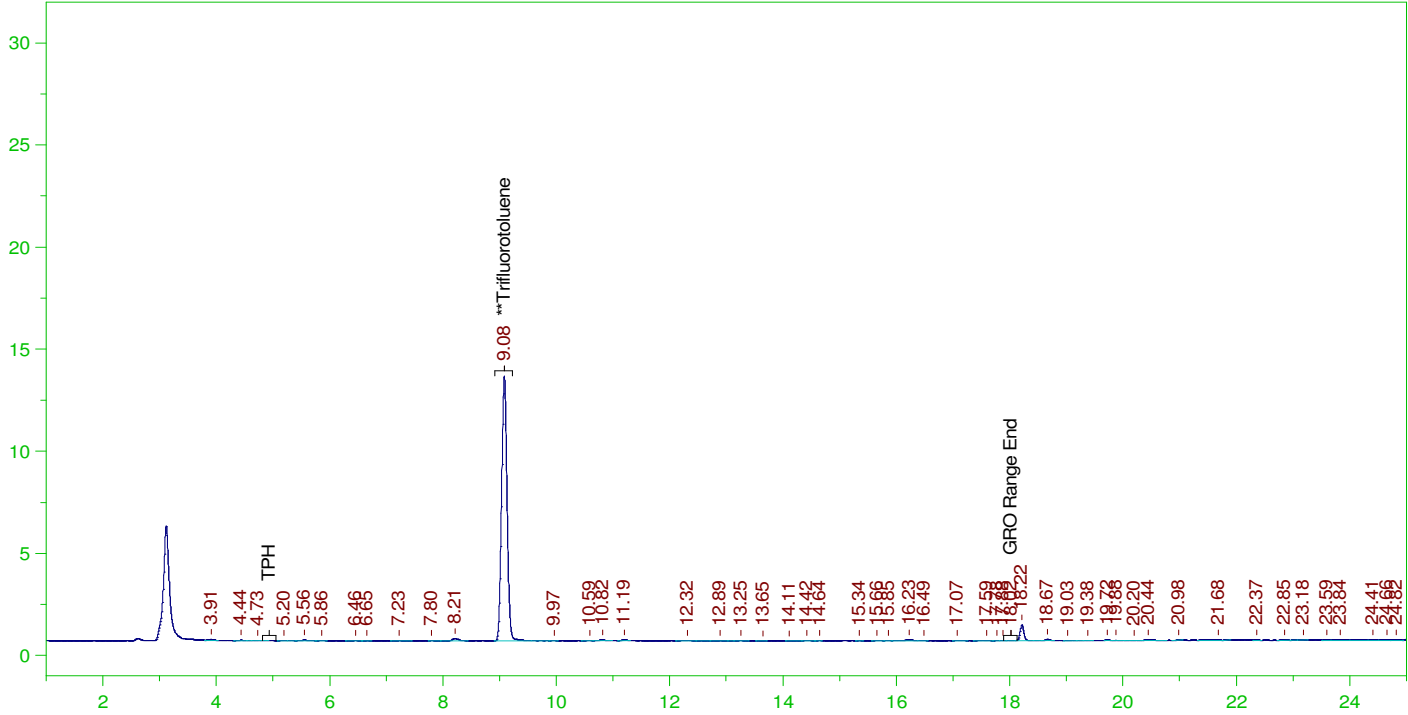
C6 to C10 Area:7126.179 C6 to C10 Amount: 1.478168
 TPH Area:17704.66 TPH Amount: 3.732472



ERH2928 (Trip Blank) 14964

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0017.RAW

B22032035-040A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-040A ;0328VAR , \$HC-8015-GRO-W,
 Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0017.RAW
 Date & Time Acquired: 3/28/2022 4:55:21 PM
 Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
 Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
 Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
 Mean RF for TPH: 948.6828
 Rt range for Gasoline Range Organics: 4.81 to 18.13

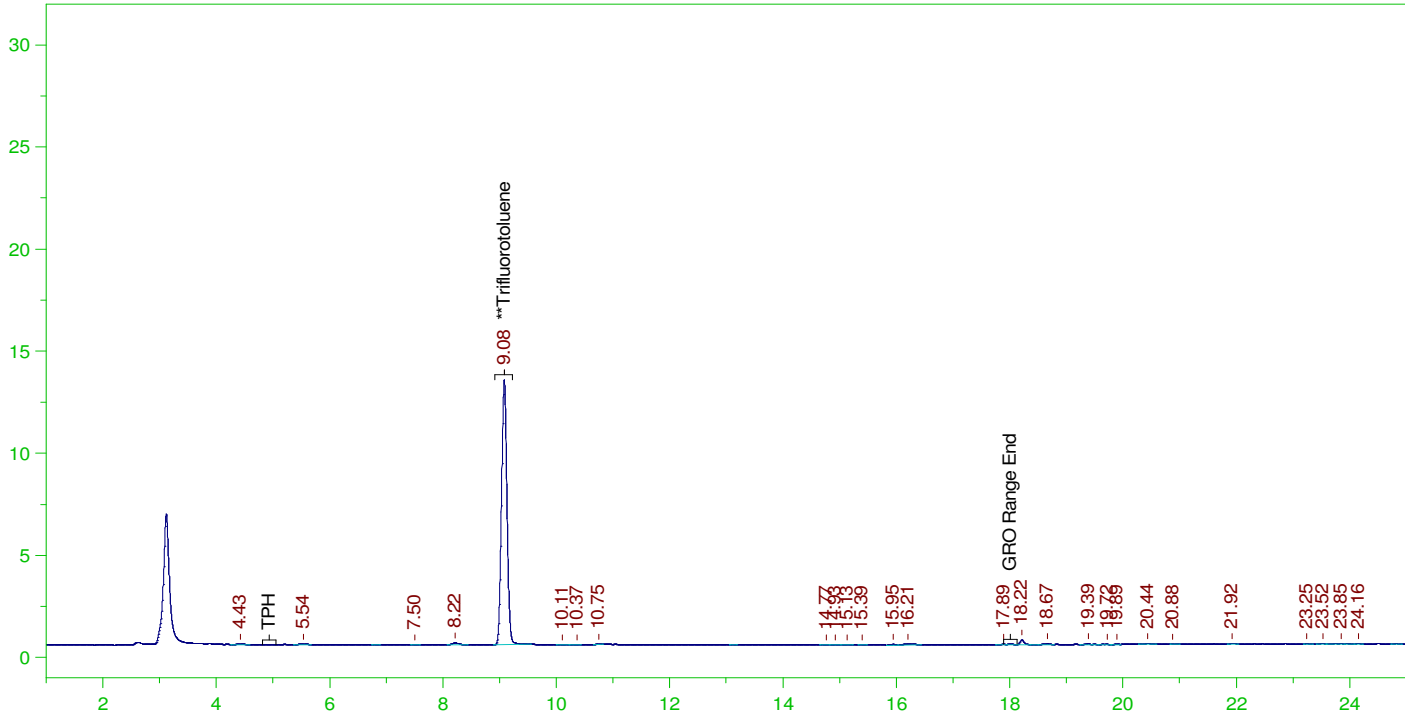
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.082	88263	25.	19.918	79.67

C6 to C10 Area:7121.718 C6 to C10 Amount: 1.477242
 TPH Area:14610.03 TPH Amount: 3.080066

ERH2917 (RHMW04)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0060.RAW

B22032035-043F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-043F ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0060.RAW
Date & Time Acquired: 3/29/2022 5:32:51 PM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

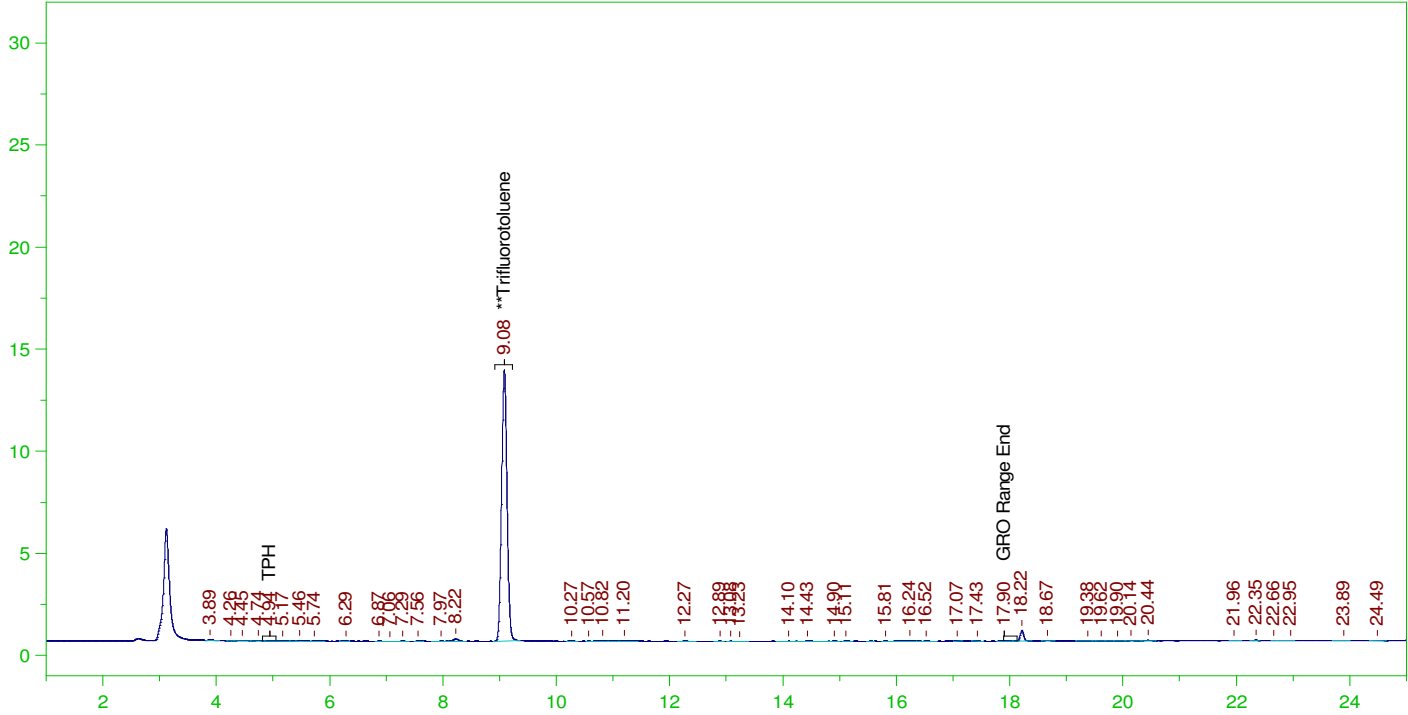
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.081	88008	25.	19.861	79.44

C6 to C10 Area:2688.785 C6 to C10 Amount: 0.5577288
TPH Area:6231.313 TPH Amount: 1.313677

ERH2916 (Trip Blank) 14909

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0018.RAW

B22032035-045A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-045A ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0018.RAW
Date & Time Acquired: 3/28/2022 5:29:44 PM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.082	89539	25.	20.206	80.82	-

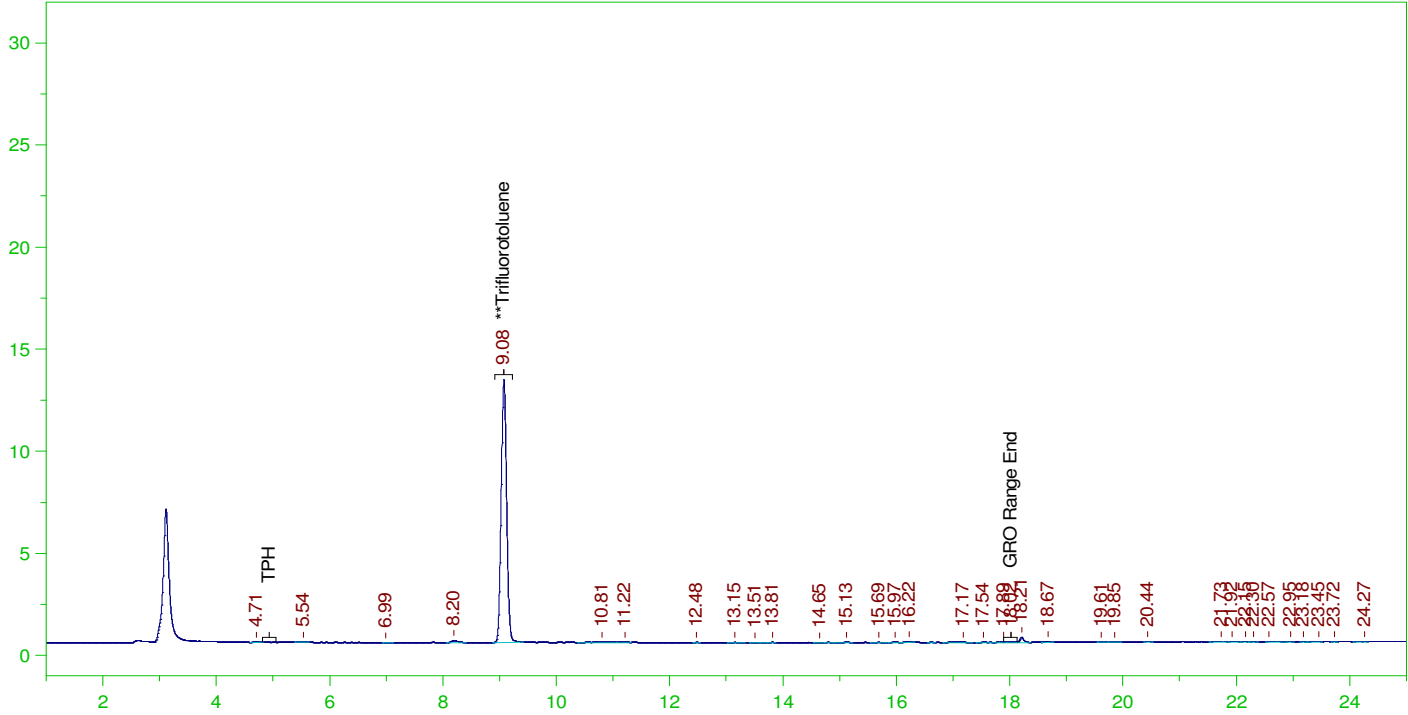
C6 to C10 Area:5548.497 C6 to C10 Amount: 1.150913
TPH Area:11317.16 TPH Amount: 2.385868



ERH2900 (OWDFMW07A)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0067.RAW

B22032035-048F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-048F ;0328VAR , \$HC-8015-GRO-W,
 Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0067.RAW
 Date & Time Acquired: 3/29/2022 9:33:07 PM
 Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
 Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
 Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
 Mean RF for TPH: 948.6828
 Rt range for Gasoline Range Organics: 4.81 to 18.13

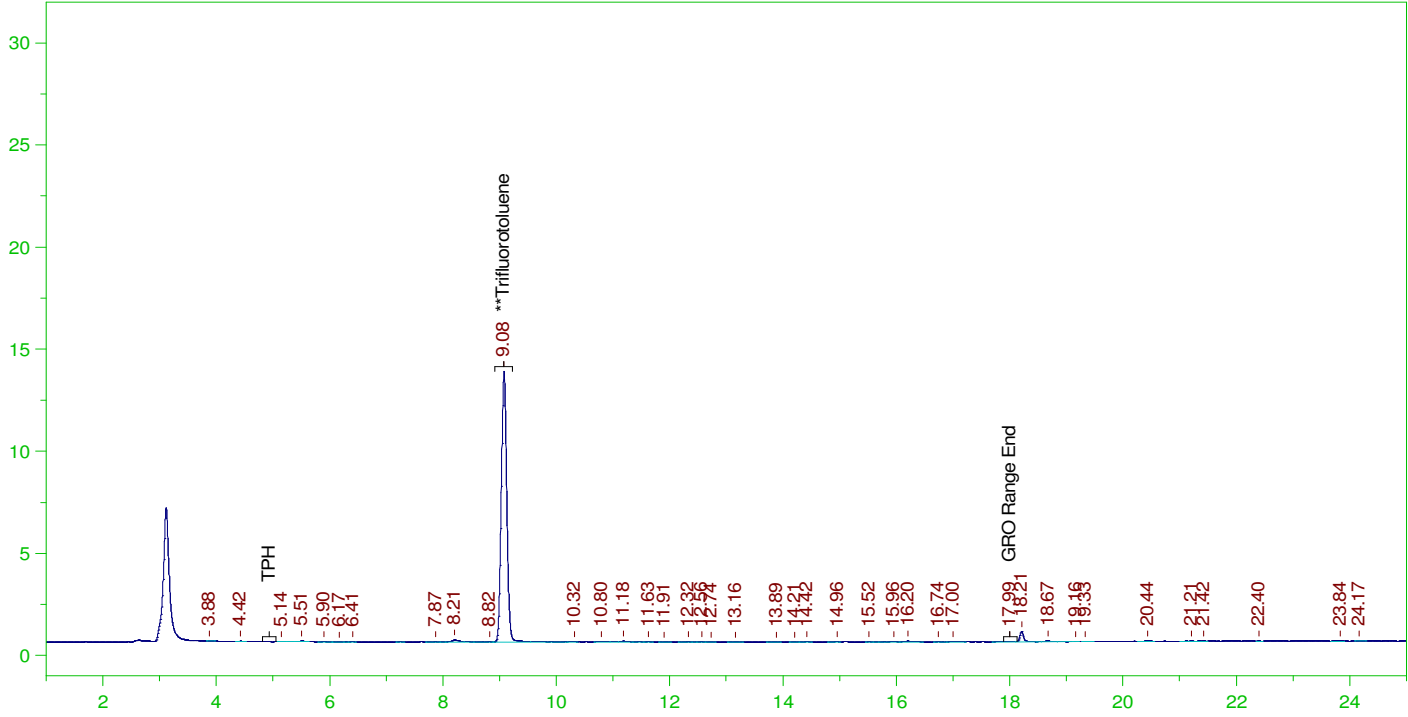
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.075	87142	25.	19.665	78.66	-

C6 to C10 Area:4007.093 C6 to C10 Amount: 0.8311826
 TPH Area:7505.055 TPH Amount: 1.582205

ERH2899 (Trip Blank) 14964

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0049.RAW

B22032035-050A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-050A ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0049.RAW
Date & Time Acquired: 3/29/2022 11:15:05 AM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

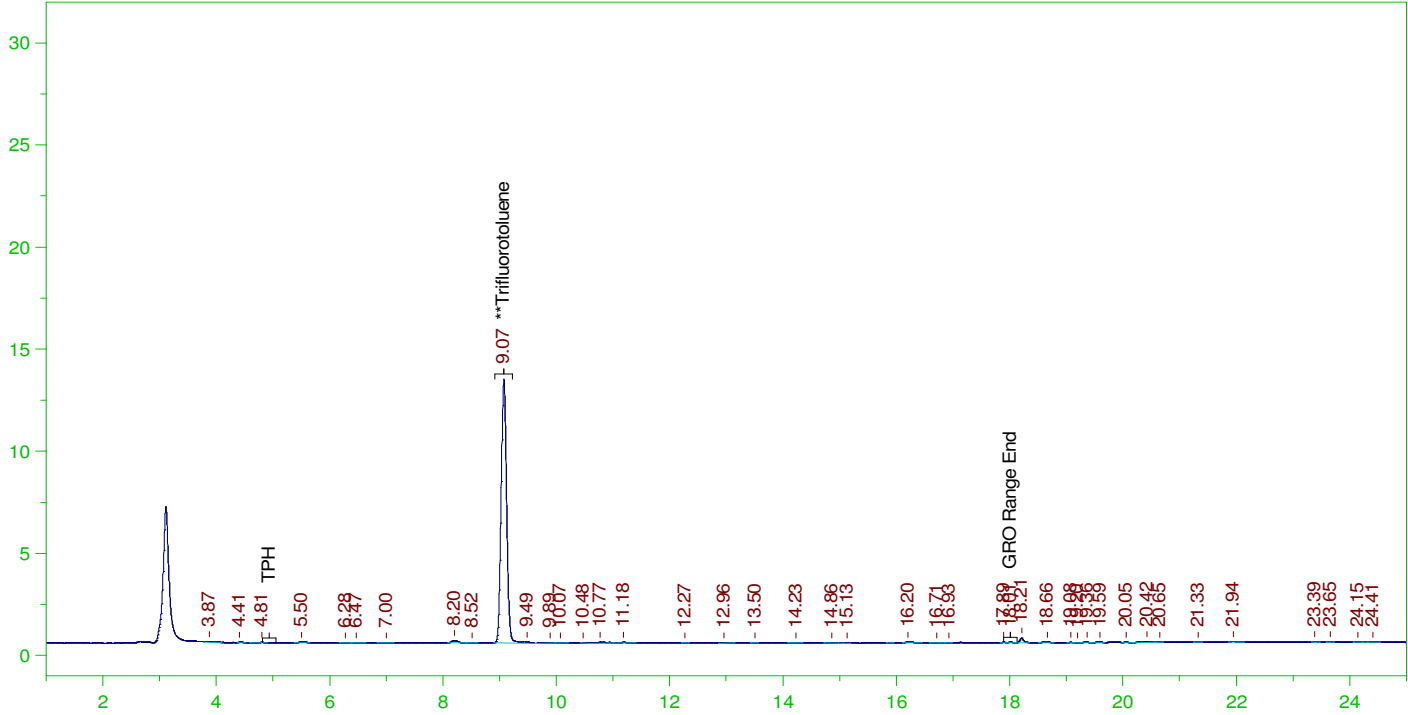
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.077	90609	25.	20.448	81.79

C6 to C10 Area:5536.899 C6 to C10 Amount: 1.148507
TPH Area:9798.415 TPH Amount: 2.065688

ERH2914 (OWDFMW01)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0069.RAW

B22032035-053F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-053F ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0069.RAW
Date & Time Acquired: 3/29/2022 10:41:46 PM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

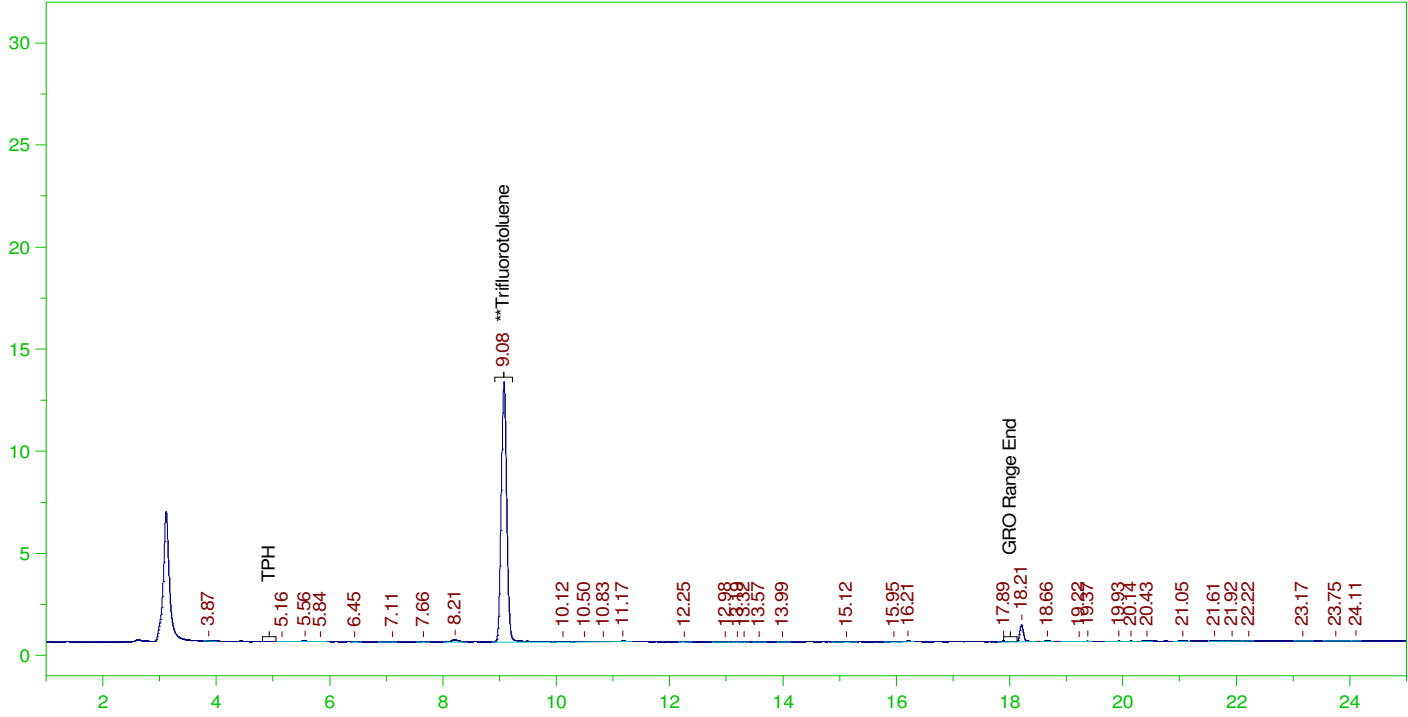
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.074	88063	25.	19.873	79.49

C6 to C10 Area:4784.119 C6 to C10 Amount: 0.9923593
TPH Area:9042.86 TPH Amount: 1.906403

ERH2913 (Trip Blank) 14909

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0050.RAW

B22032035-055A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-055A ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0050.RAW
Date & Time Acquired: 3/29/2022 11:49:30 AM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

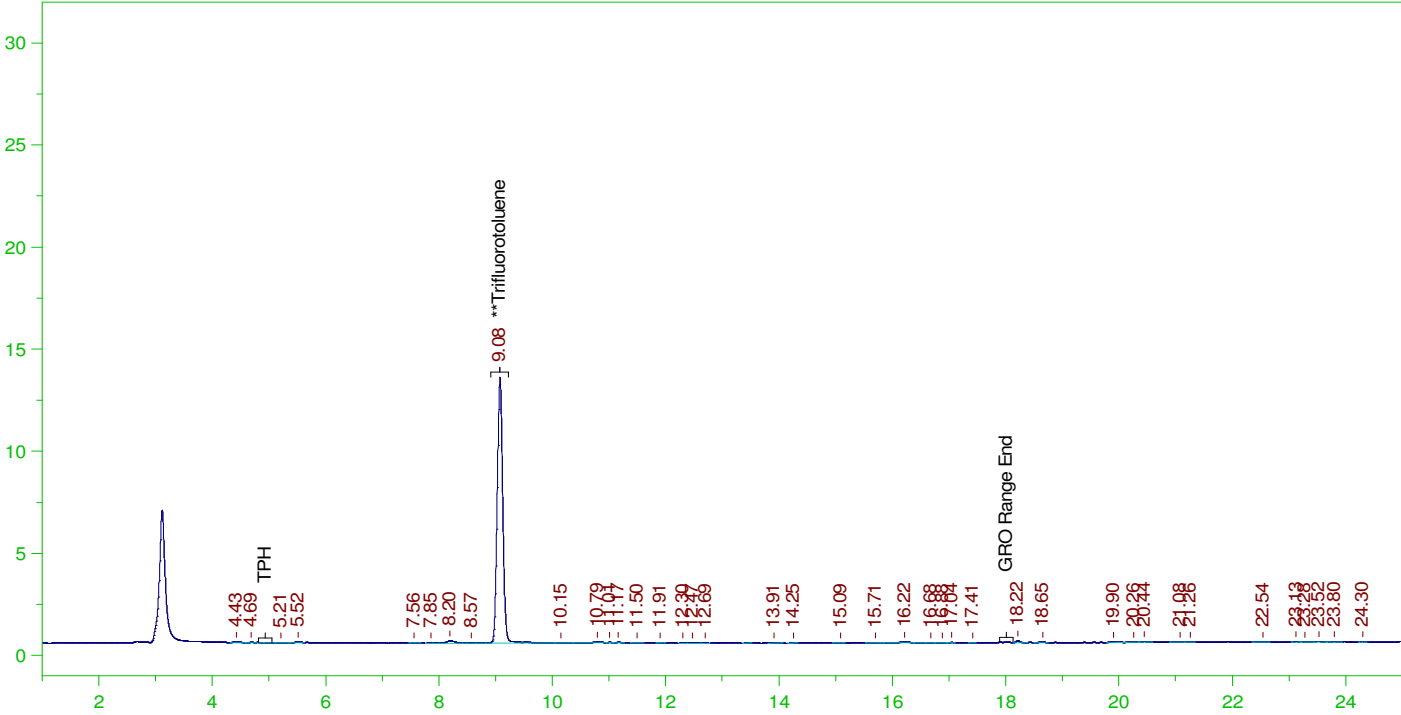
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.077	86895	25.	19.61	78.44	-

C6 to C10 Area:4359.163 C6 to C10 Amount: 0.9042116
TPH Area:10979.1 TPH Amount: 2.314599

ERH2897 (OWDFMW05A)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0071.RAW

B22032035-058F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-058F ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0071.RAW
Date & Time Acquired: 3/29/2022 11:50:30 PM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

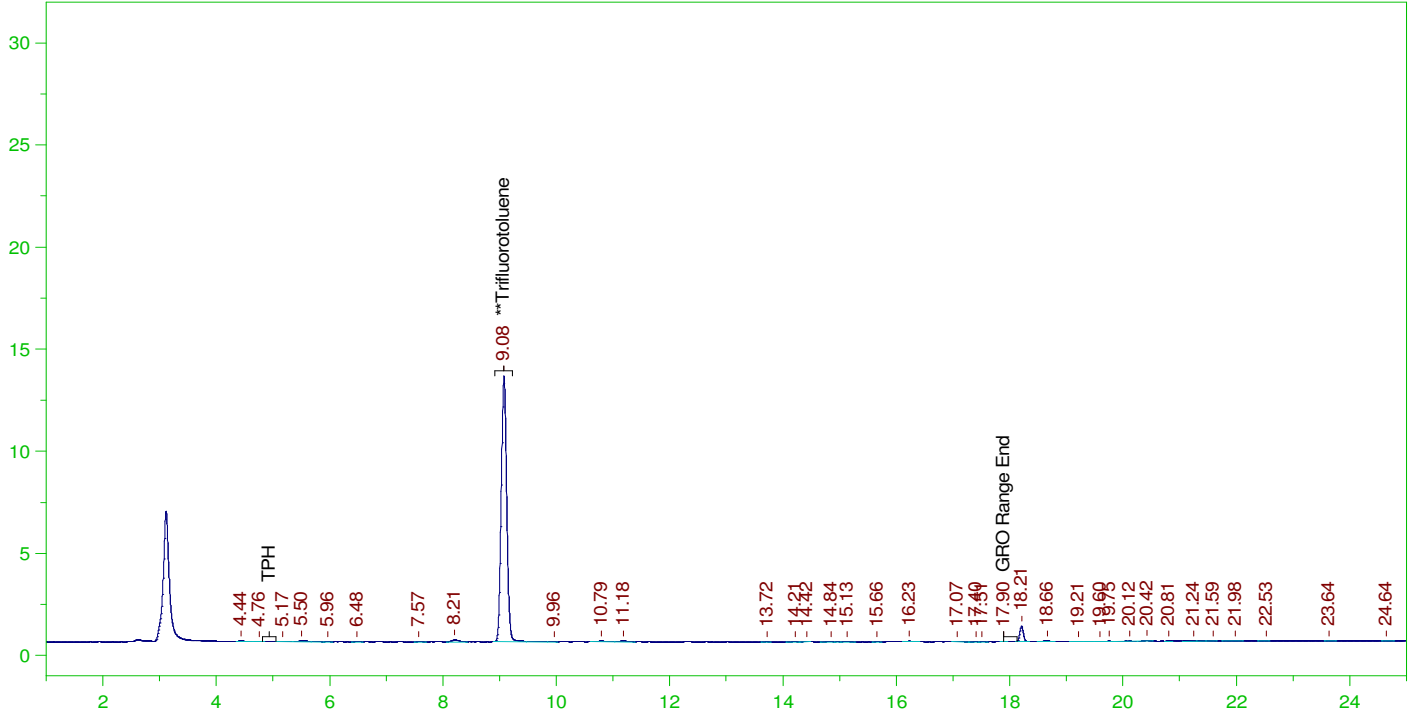
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.076	88864	25.	20.054	80.22	-

C6 to C10 Area:5053.097 C6 to C10 Amount: 1.048153
TPH Area:7656.503 TPH Amount: 1.614133

ERH2896 (Trip Blank) 14894

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0051.RAW

B22032035-060A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-060A ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0051.RAW
Date & Time Acquired: 3/29/2022 12:23:54 PM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

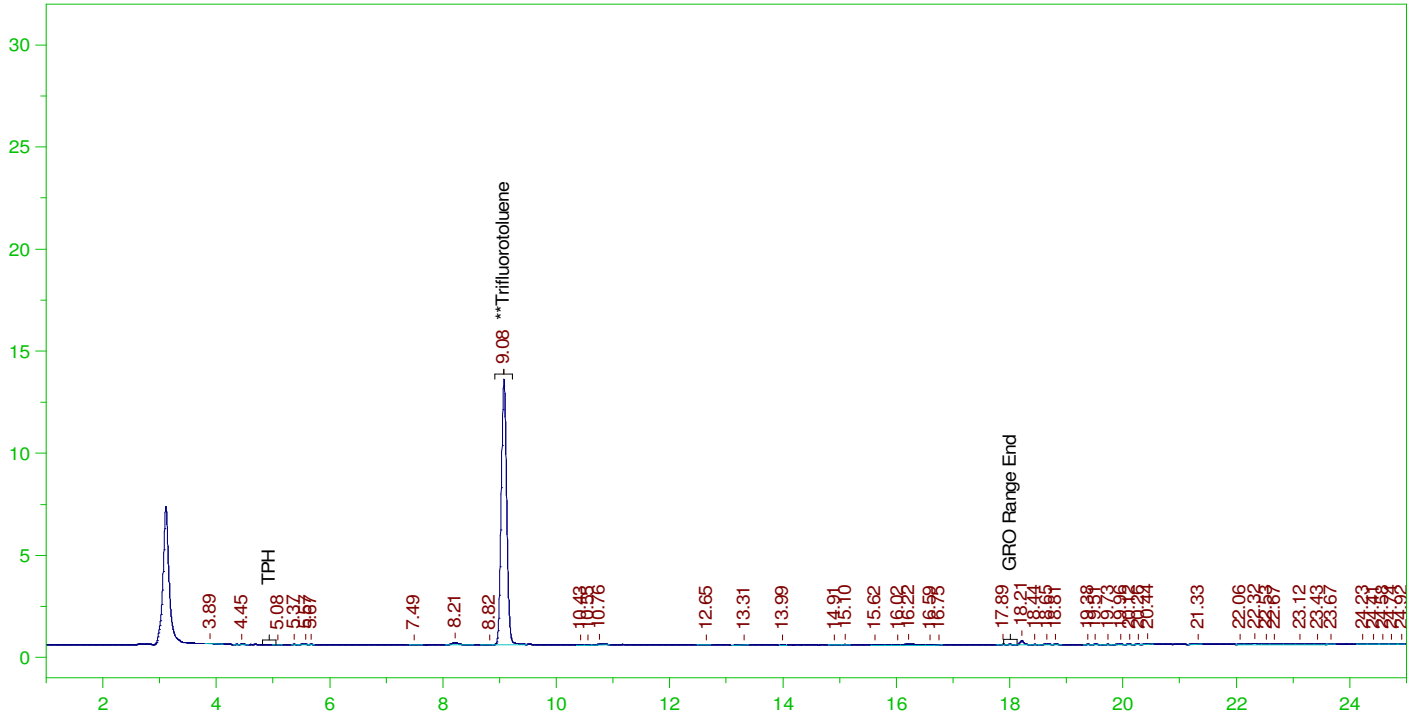
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.076	88658	25.	20.007	80.03

C6 to C10 Area:4480.557 C6 to C10 Amount: 0.9293922
TPH Area:11043.91 TPH Amount: 2.328262

ERH2903 (RHMW08)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0073.RAW

B22032035-063F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-063F ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0073.RAW
Date & Time Acquired: 3/30/2022 12:59:16 AM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.076	88152	25.	19.893	79.57	-

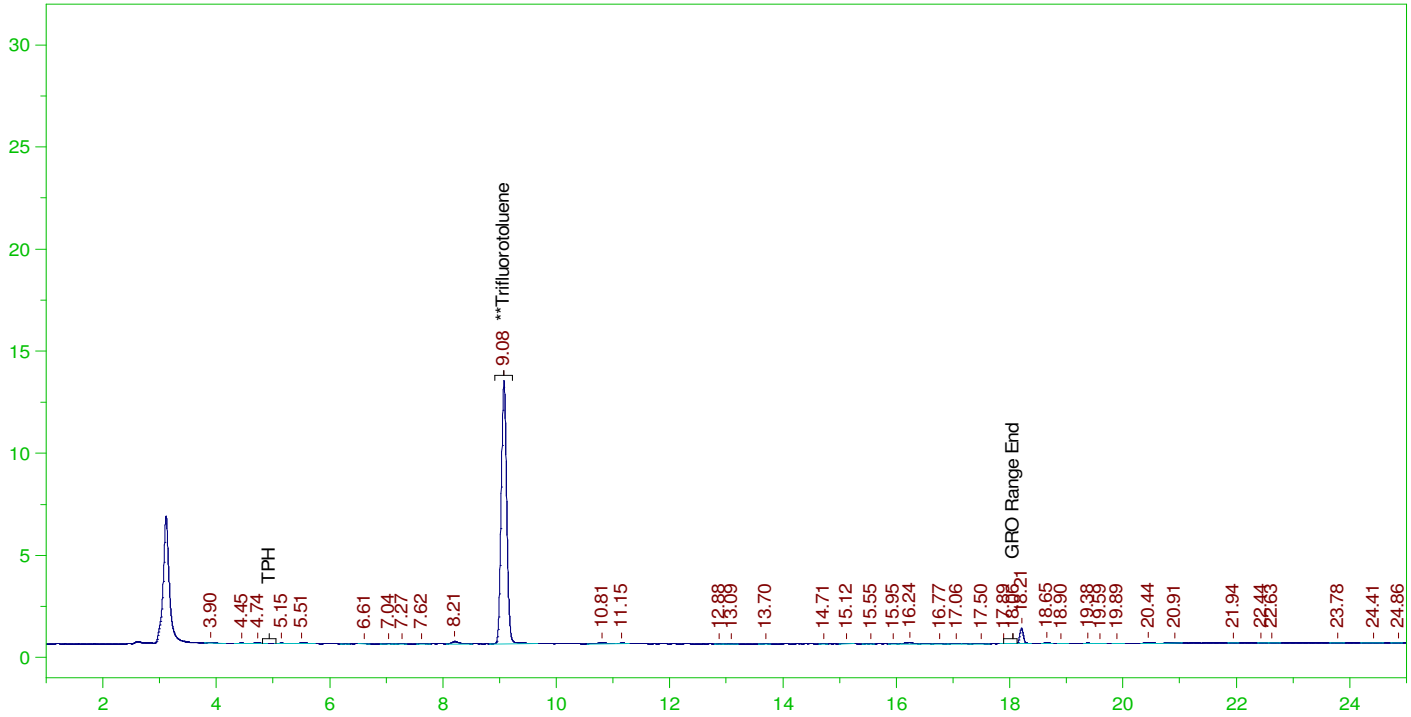
C6 to C10 Area:4090.993 C6 to C10 Amount: 0.8485857
TPH Area:9401.862 TPH Amount: 1.982088



ERH2902 (Trip Blank) 14964

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0052.RAW

B22032035-065A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-065A ;0328VAR , \$HC-8015-GRO-W,
 Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0052.RAW
 Date & Time Acquired: 3/29/2022 12:58:19 PM
 Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
 Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
 Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
 Mean RF for TPH: 948.6828
 Rt range for Gasoline Range Organics: 4.81 to 18.13

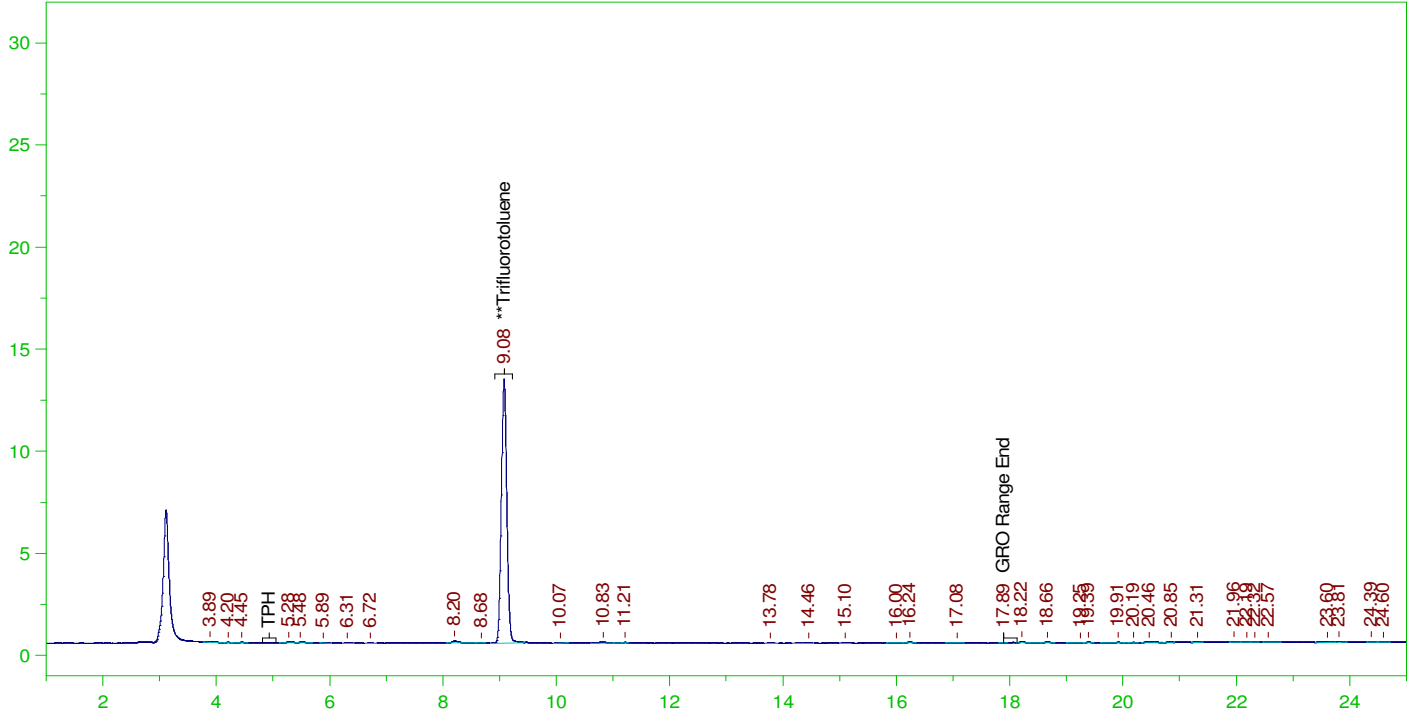
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.076	87883	25.	19.833	79.33

C6 to C10 Area:5203.28 C6 to C10 Amount: 1.079305
 TPH Area:11515.05 TPH Amount: 2.427587

ERH2869 (RHMW14-03)

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0075.RAW

B22032035-068F ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-068F ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0075.RAW
Date & Time Acquired: 3/30/2022 2:07:57 AM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

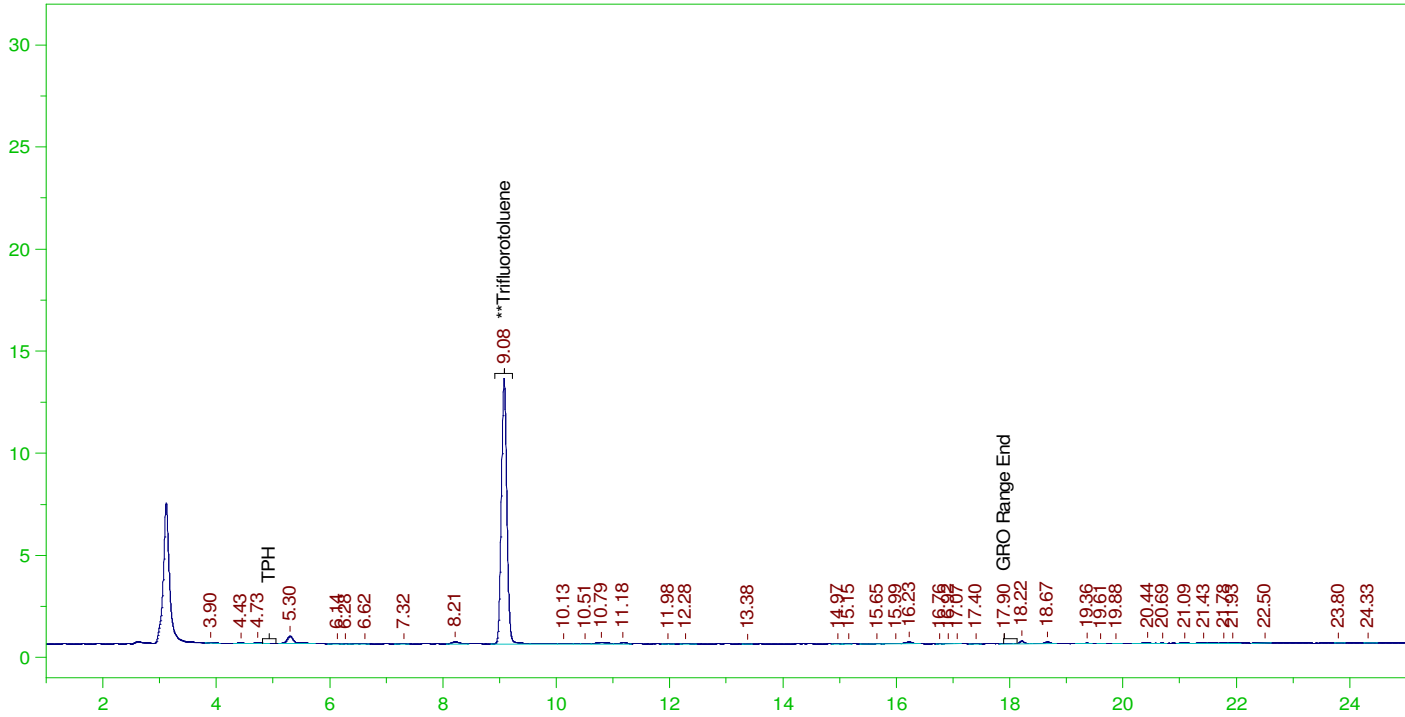
SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC
**Trifluorotoluene	9.078	87442	25.	19.733	78.93

C6 to C10 Area:3599.338 C6 to C10 Amount: 0.7466029
TPH Area:7294.738 TPH Amount: 1.537867

ERH2868 (Trip Blank) 14833

G:\Org\VAR\DAT\VAR032822_b\0328VARB.0053.RAW

B22032035-070A ;0328VAR , \$HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-070A ;0328VAR , \$HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032822_b\0328VARB.0053.RAW
Date & Time Acquired: 3/29/2022 1:32:44 PM
Method File: G:\Org\VAR\Methods\220324AGRO_DoDB%.MET
Calibration File: G:\Org\VAR\Cals\220324GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

Mean RF for C6 to C10: 964.1908
Mean RF for TPH: 948.6828
Rt range for Gasoline Range Organics: 4.81 to 18.13

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.079	88956	25.	20.075	80.3	-

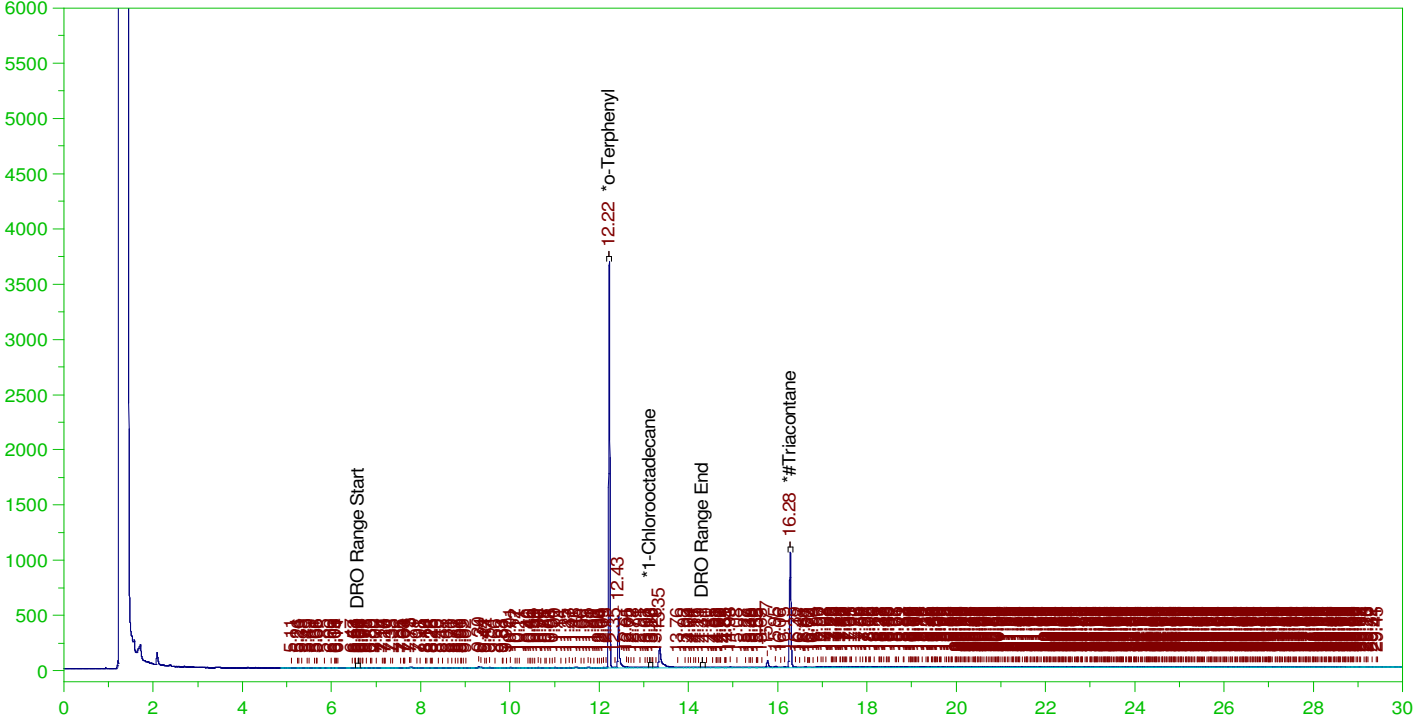
C6 to C10 Area:9585.707 C6 to C10 Amount: 1.988342
TPH Area:13970.18 TPH Amount: 2.945174

ERH2906 (RHMW06)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0030.RAW

B22032035-001C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-001C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0030.RAW
Date & Time Acquired: 3/30/2022 4:37:59 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.19	.183	96.05	-
*1-Chlorooctadecane	13.132	.19	.	.1	-
*#Triacontane	16.279	.19	.089	46.48	-

DRO Area:2823840

DRO Amount: 8.230577E-02

TEH Area:6446364

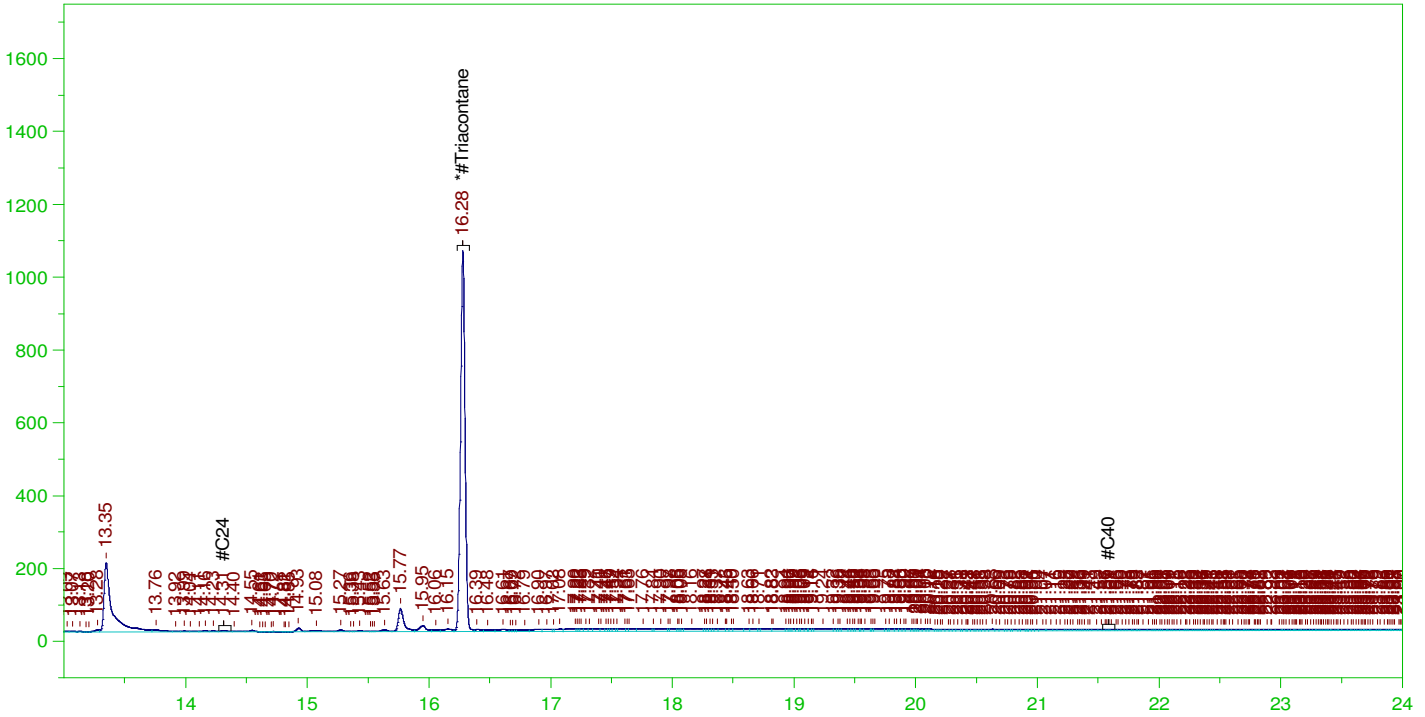
TEH Amount: 0.1878906

ERH2906 (RHMW06)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0030.RAW

B22032035-001C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-001C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0030.RAW
Date & Time Acquired: 3/30/2022 4:37:59 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.279	.476	.089	18.59

RRO Area:2439108

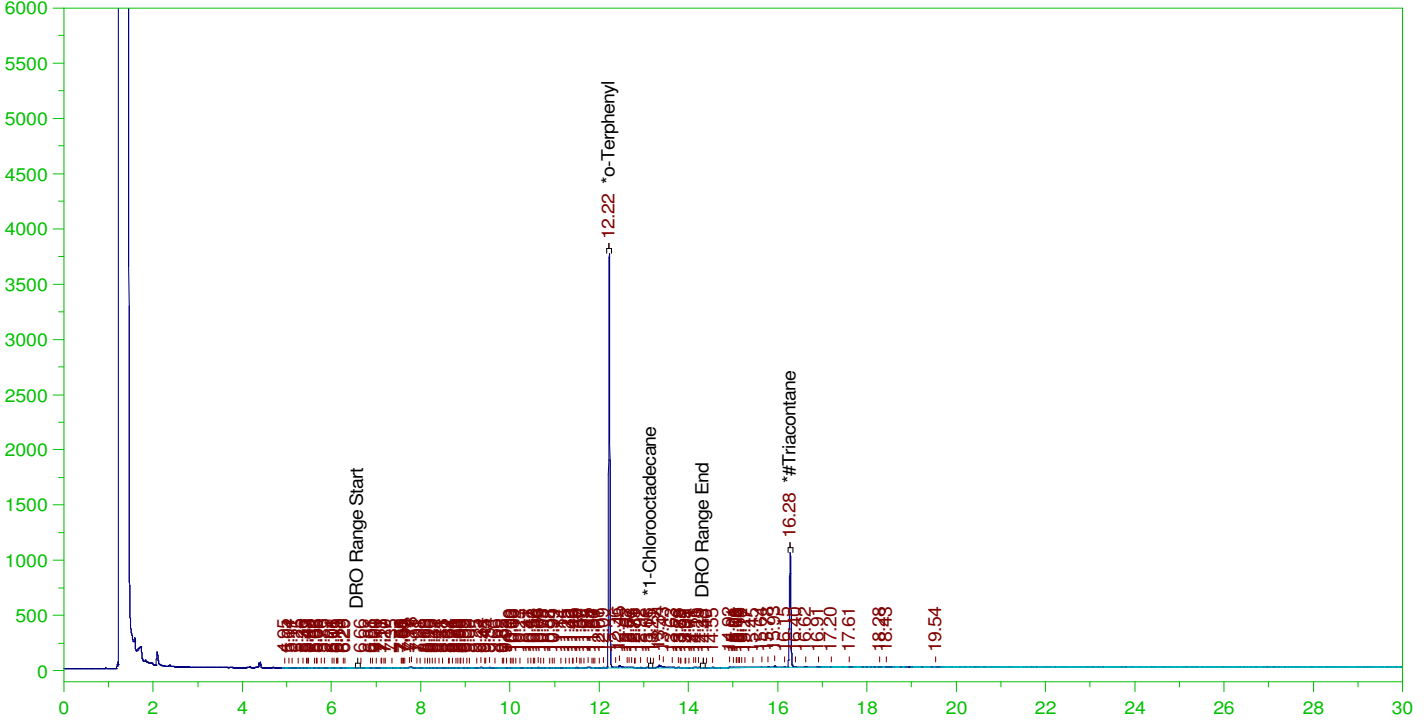
RRO AMOUNT: 8.790913E-02

ERH2909 (RHMW13-05)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0031.RAW

B22032035-006C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-006C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0031.RAW
Date & Time Acquired: 3/30/2022 5:20:53 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.19	.188	98.7	-
*1-Chlorooctadecane	13.145	.19	.	.02	-
*#Triacontane	16.277	.19	.087	45.54	-

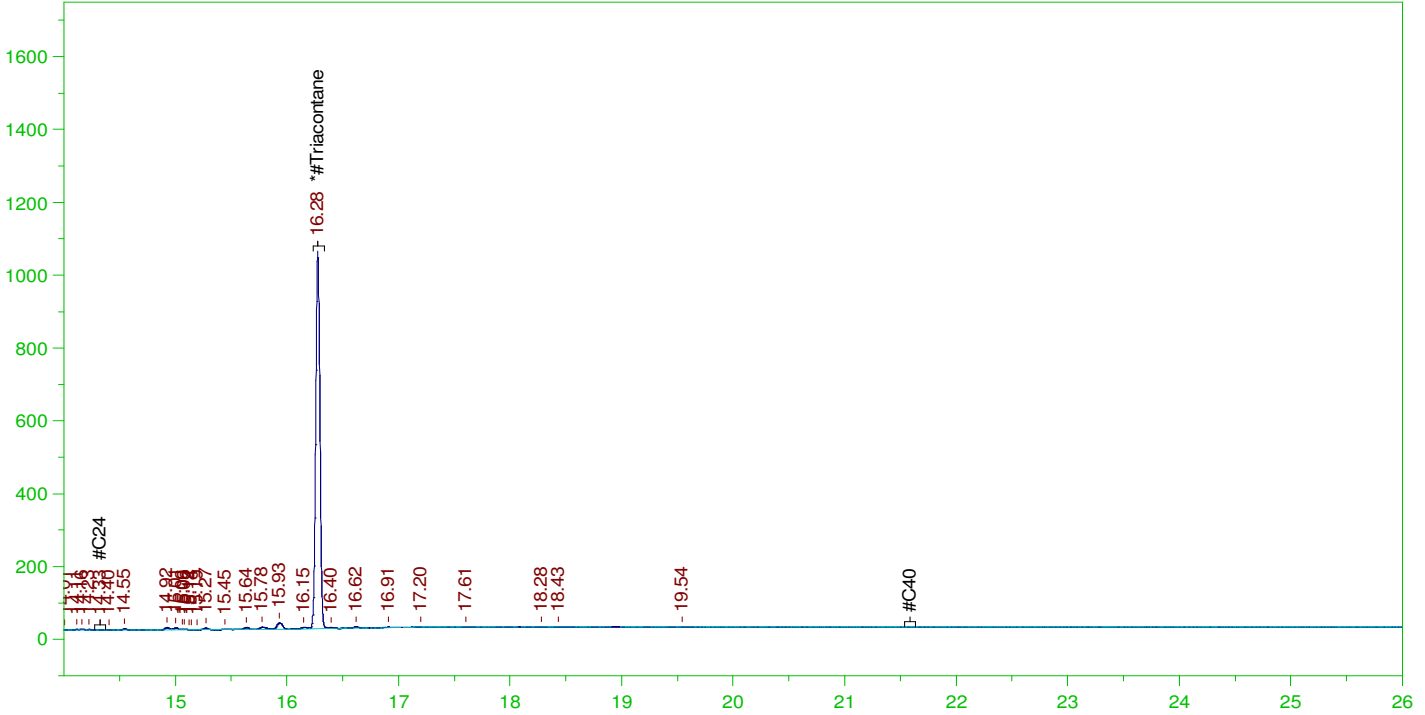
DRO Area:729992.3 DRO Amount: 2.127691E-02
TEH Area:1033170 TEH Amount: 3.011355E-02

ERH2909 (RHMW13-05)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0031.RAW

B22032035-006C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-006C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0031.RAW
Date & Time Acquired: 3/30/2022 5:20:53 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.277	.476	.087	18.22

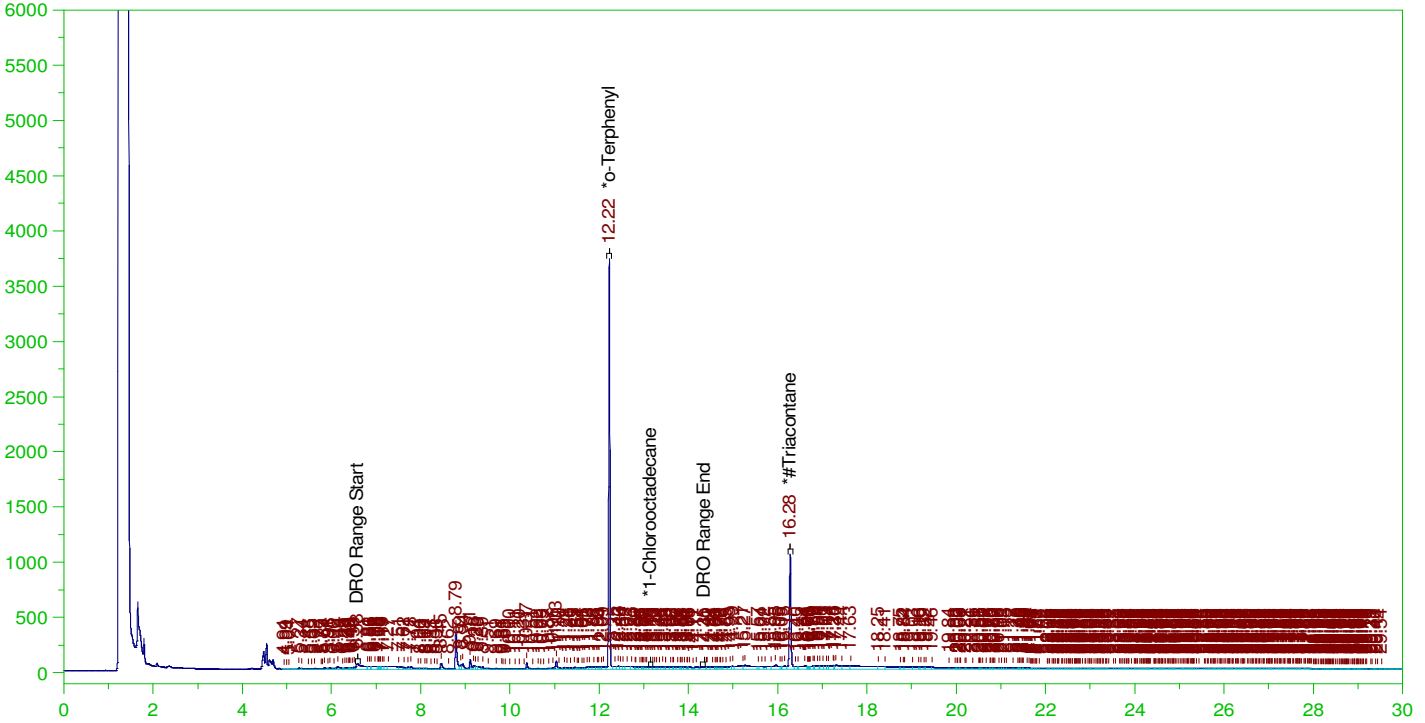
RRO Area:219982.5 RRO AMOUNT: 7.928504E-03

ERH2920 (RHMW2254-01 B)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0044.RAW

B22032035-011C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-011C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0044.RAW
Date & Time Acquired: 3/30/2022 2:36:55 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.223	.19	.184	96.65	-
*1-Chlorooctadecane	13.146	.19	.003	1.33	-
*#Triacontane	16.276	.19	.092	48.13	-

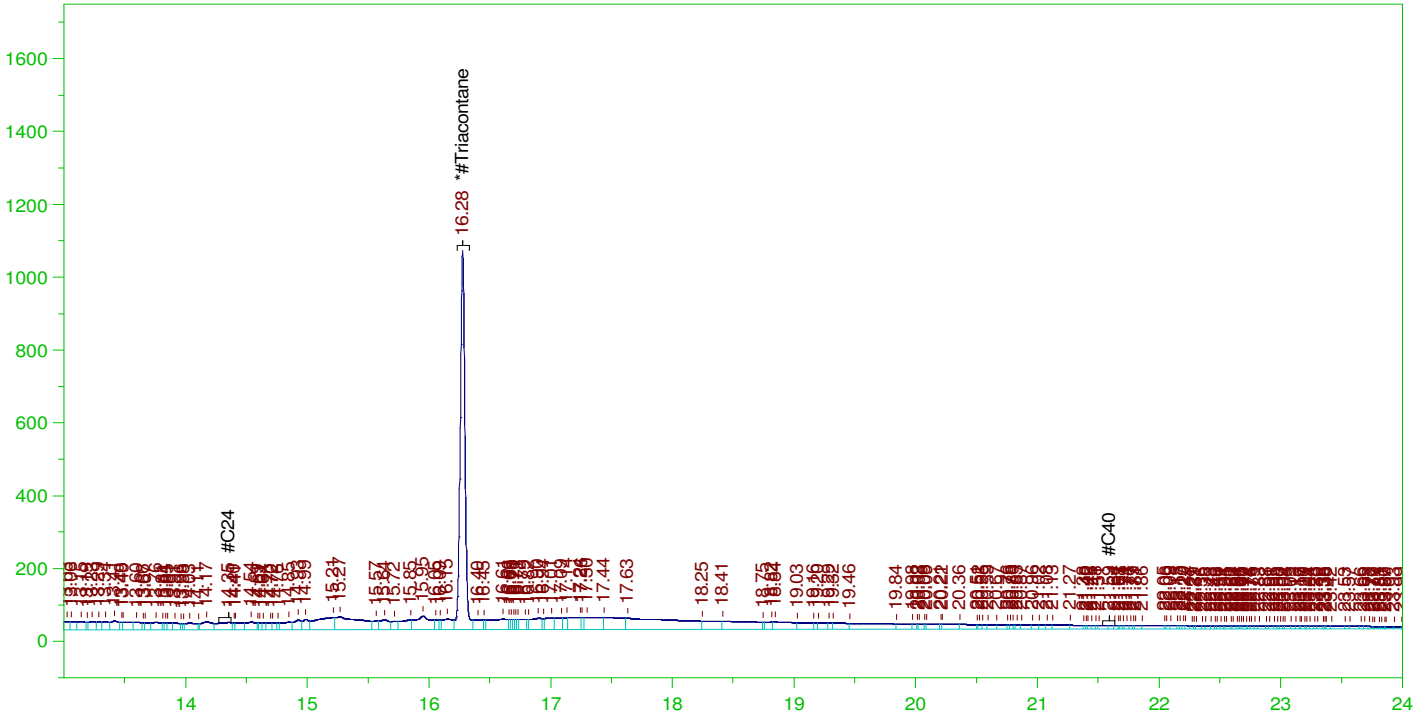
DRO Area:8695482 DRO Amount: 0.2534451
TEH Area:1.993303E+07 TEH Amount: 0.5809834

ERH2920 (RHMW2254-01 B)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0044.RAW

B22032035-011C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-011C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0044.RAW
Date & Time Acquired: 3/30/2022 2:36:55 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.276	.476	.092	19.25

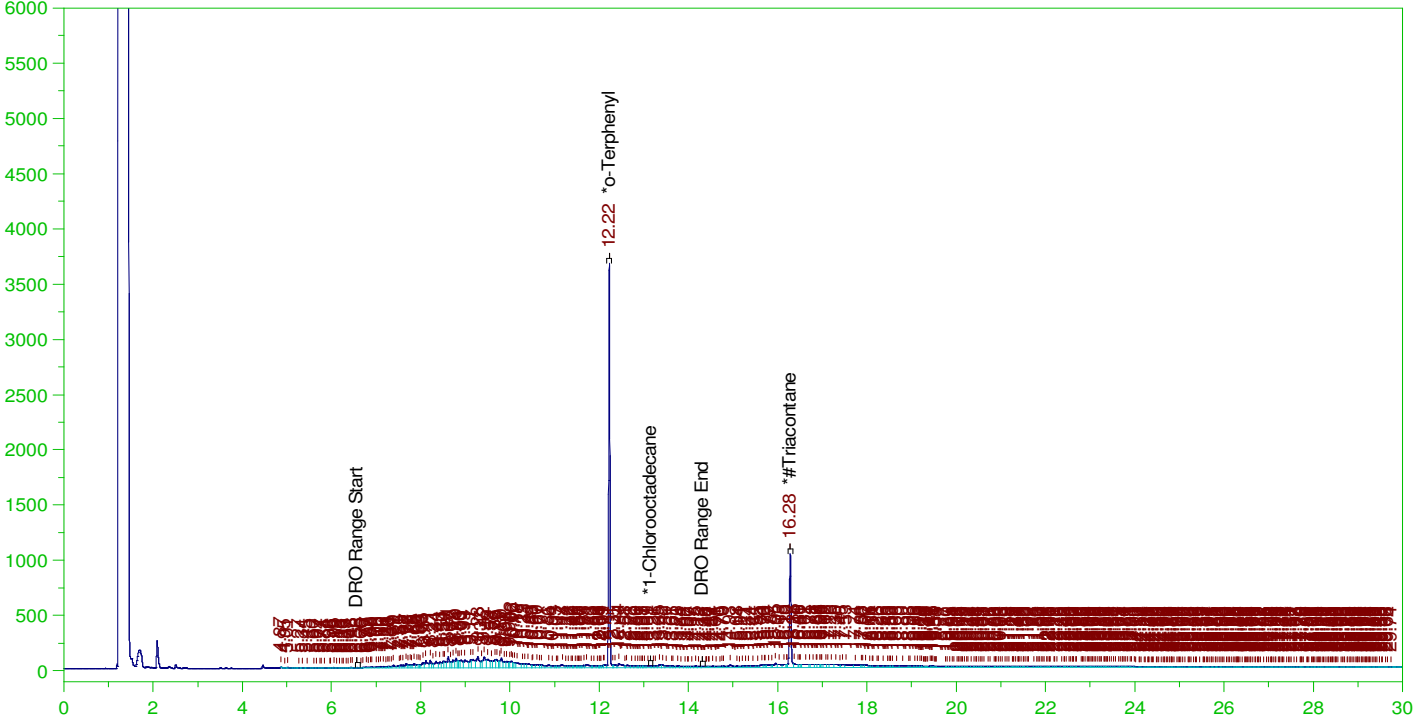
RRO Area:8756405 RRO AMOUNT: 0.3155941

ERH2926 (SUMP ADIT 3)

G:\org\HP5\DAT\HP5032922_b\0329HP5.0045.RAW

Batch ID: 164941

B22032035-016C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-016C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0045.RAW
Date & Time Acquired: 3/30/2022 3:19:39 PM
Method File: G:\Org\HP5\Methods\D3_8015-032933-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.19	.183	96.04	-
*1-Chlorooctadecane	29.971	.19	.	.	-
*#Triacontane	16.278	.19	.092	48.18	-

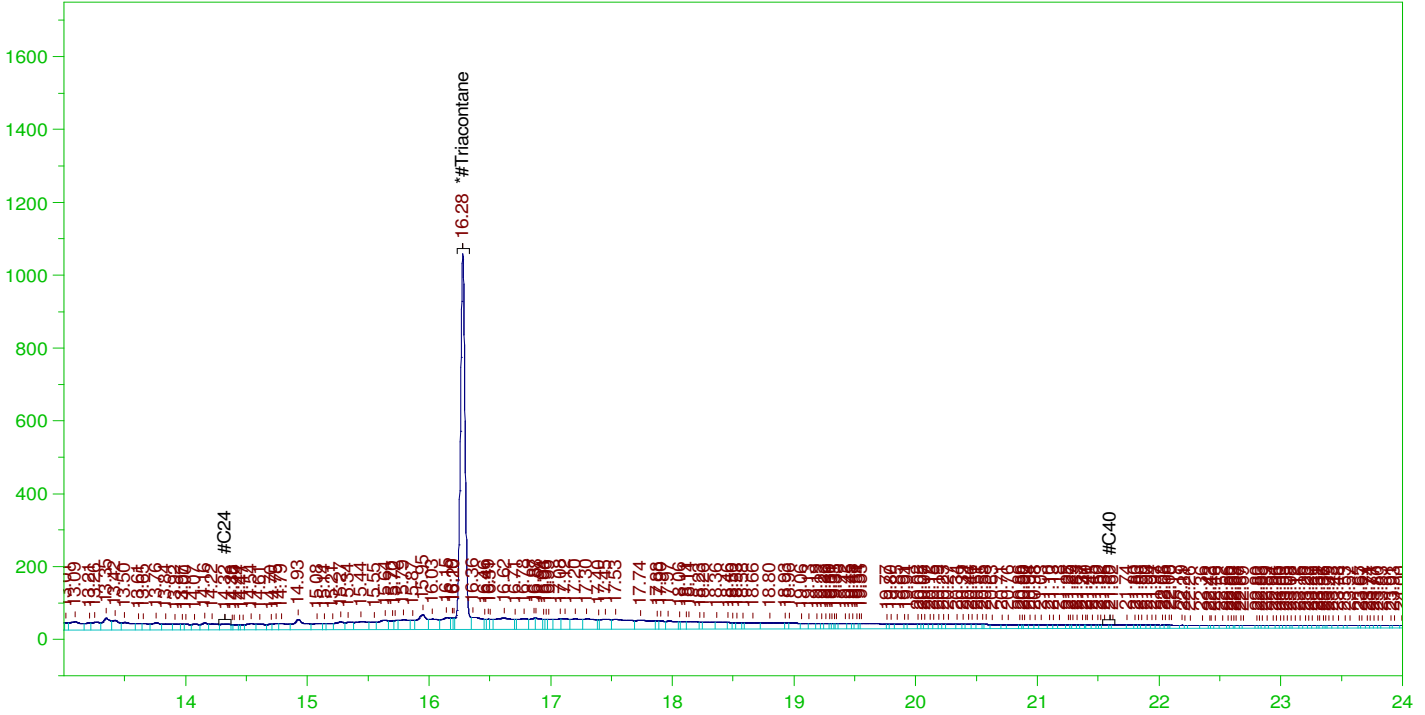
DRO Area:1.515473E+07 DRO Amount: 0.4417113
TEH Area:2.49972E+07 TEH Amount: 0.7285874

ERH2926 (SUMP ADIT 3)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0045.RAW

B22032035-016C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-016C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0045.RAW
Date & Time Acquired: 3/30/2022 3:19:39 PM
Method File: G:\Org\HP5\Methods\D3_OROS-032933-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.278	.476	.092	19.27

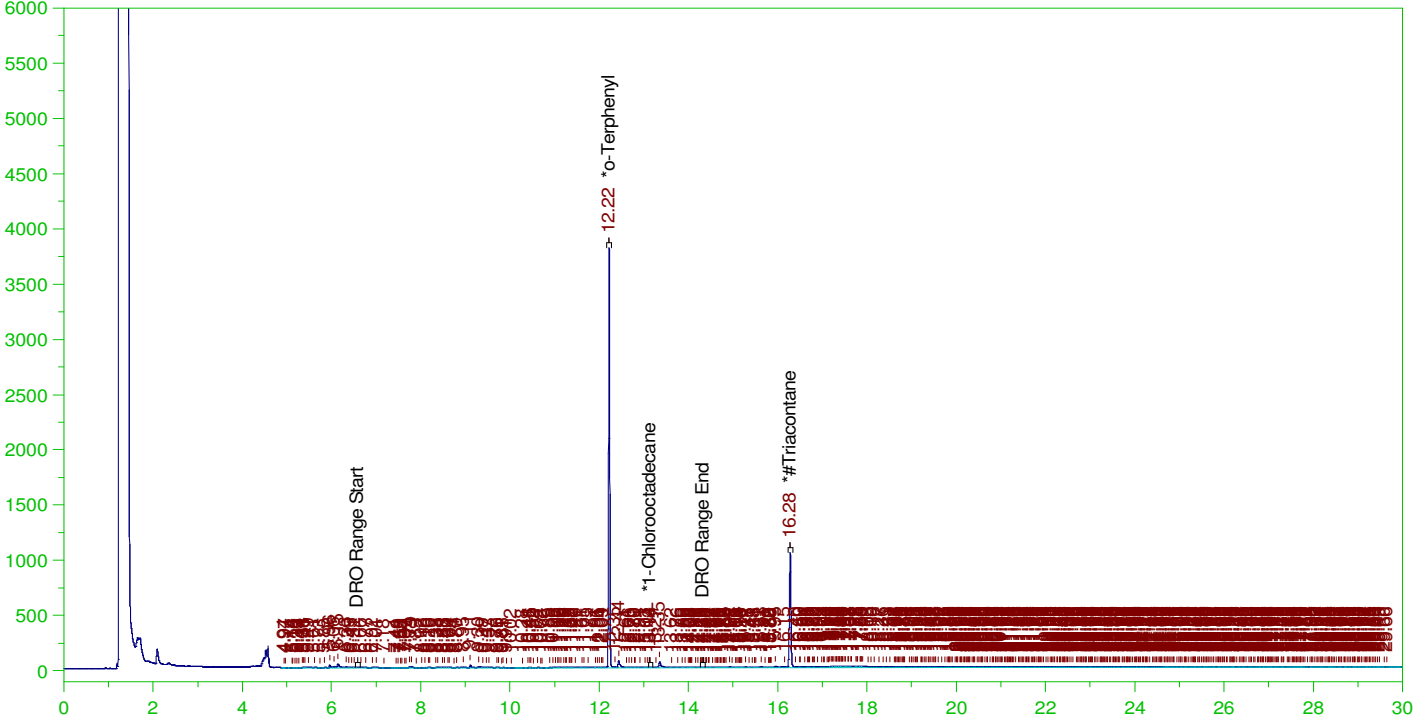
RRO Area:7839831 RRO AMOUNT: 0.2825594

ERH2923 (RHMW2254-01 LF)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0033.RAW

B22032035-021C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-021C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0033.RAW
Date & Time Acquired: 3/30/2022 6:46:47 AM
Method File: G:\Org\HP5\Methods\D3_8015-032933-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.22	.19	.187	97.96	-
*1-Chlorooctadecane	13.14	.19	.	.03	-
*#Triacontane	16.277	.19	.089	46.59	-

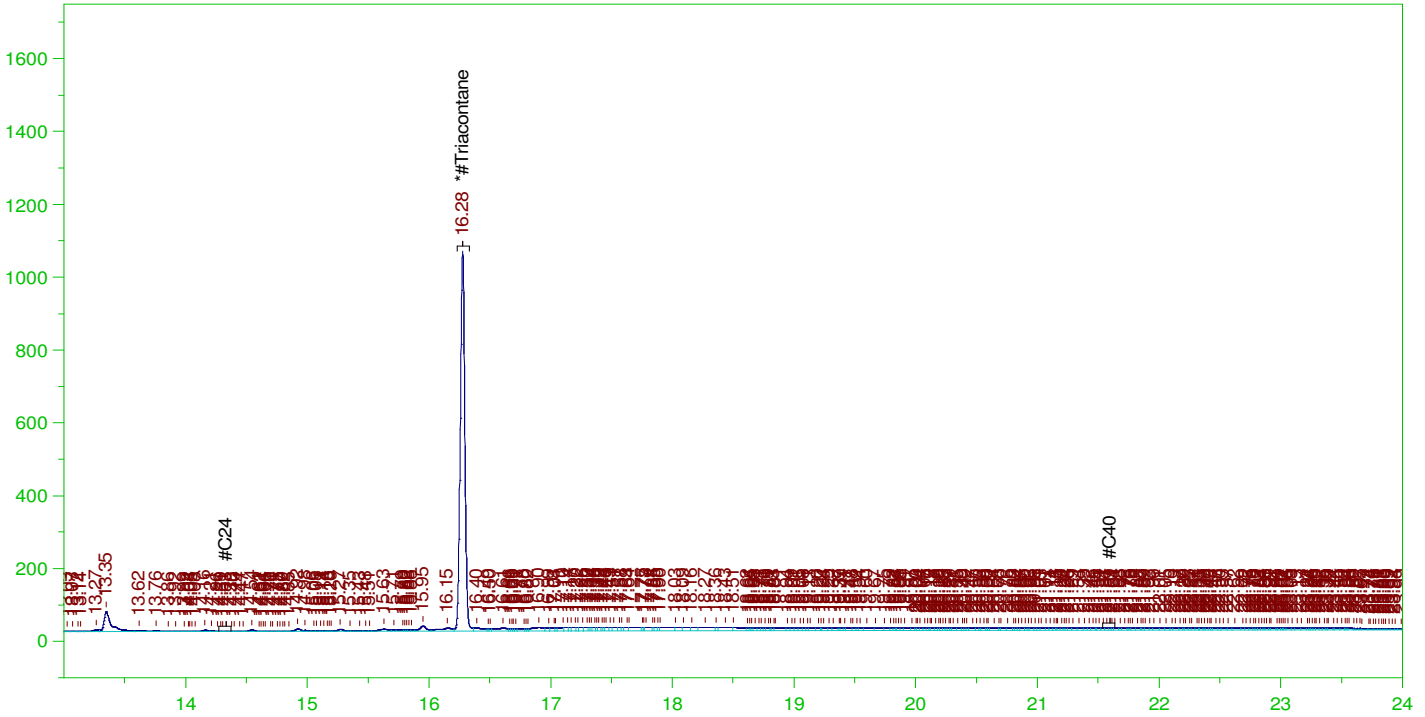
DRO Area:1252032 DRO Amount: 3.649269E-02
TEH Area:5588829 TEH Amount: 0.1628963

ERH2923 (RHMW2254-01 LF)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0033.RAW

B22032035-021C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-021C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0033.RAW
Date & Time Acquired: 3/30/2022 6:46:47 AM
Method File: G:\Org\HP5\Methods\D3_OROS-032933-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.277	.476	.089	18.63

RRO Area:2601491

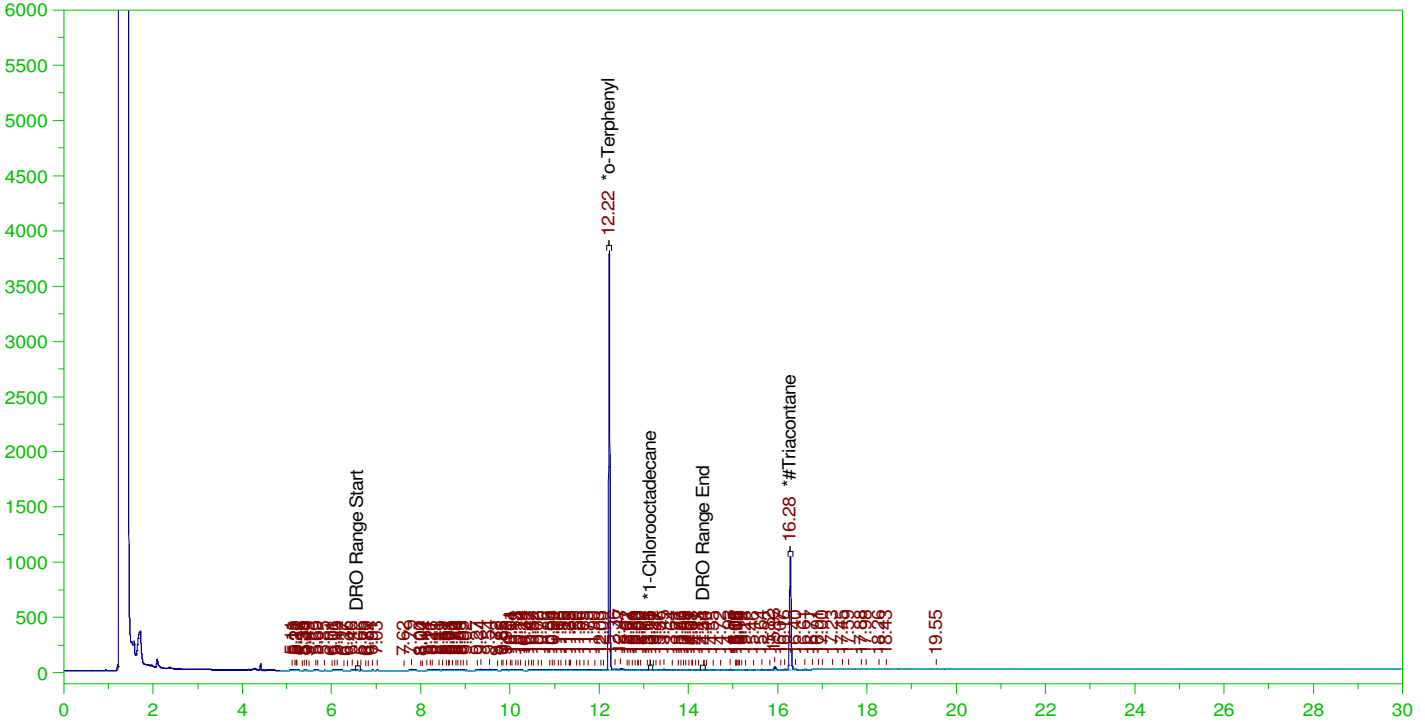
RRO AMOUNT: 9.376168E-02

ERH2872 (RHMW12A)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0011.RAW

B22032035-026C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-026C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0011.RAW
Date & Time Acquired: 3/29/2022 3:00:16 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.19	.19	99.78	-
*1-Chlorooctadecane	13.15	.19	.	.03	-
*#Triacontane	16.28	.19	.087	45.8	-

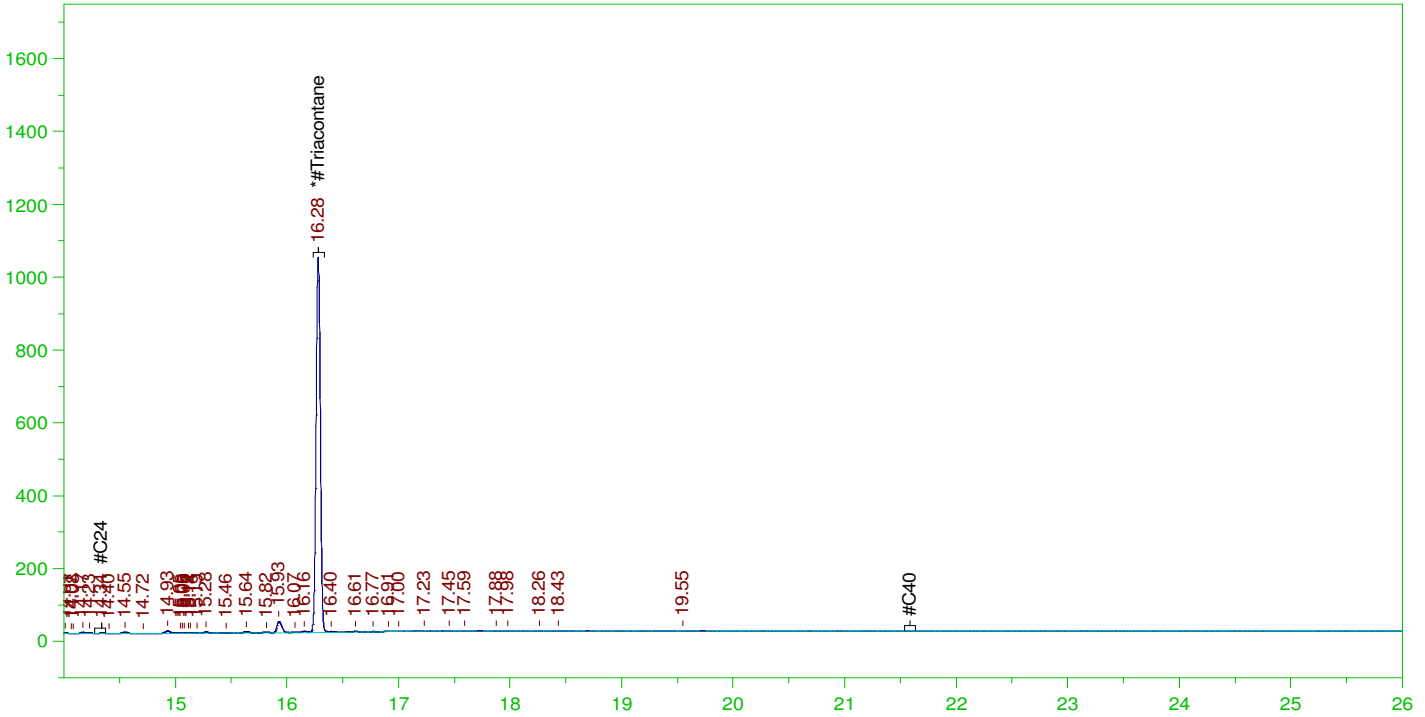
DRO Area:639454.9 DRO Amount: 1.863804E-02
TEH Area:965557.3 TEH Amount: 2.814287E-02

ERH2872 (RHMW12A)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0011.RAW

B22032035-026C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-026C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0011.RAW
Date & Time Acquired: 3/29/2022 3:00:16 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.28	.476	.087	18.32

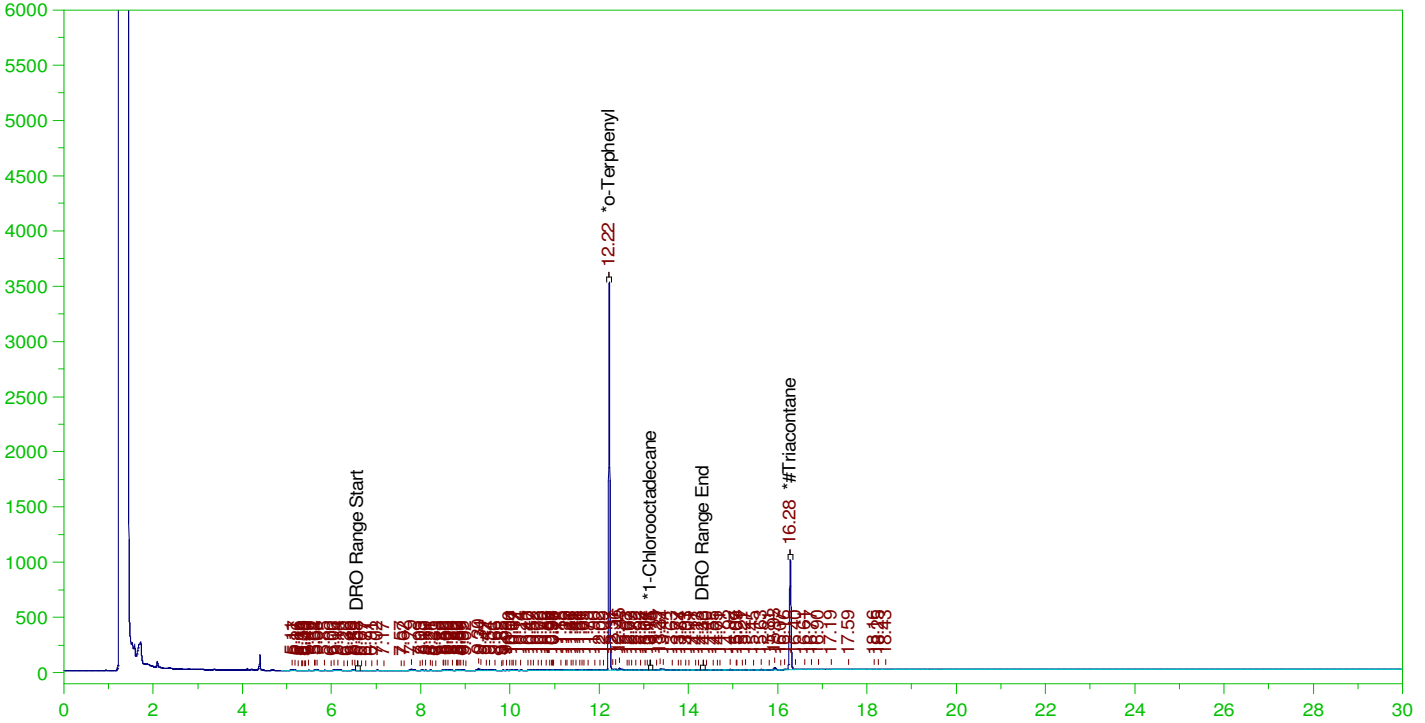
RRO Area:231369.1 RRO AMOUNT: 8.338893E-03

ERH2873 (RHMW12A FD)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0012.RAW

B22032035-027A ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-027A ;0329HP5 , \$HC-8015-DRO-W,
 Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0012.RAW
 Date & Time Acquired: 3/29/2022 3:42:54 PM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
 Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	.19	.178	93.49	-
*1-Chlorooctadecane	13.152	.19	.	.01	-
*#Triacontane	16.278	.19	.083	43.76	-

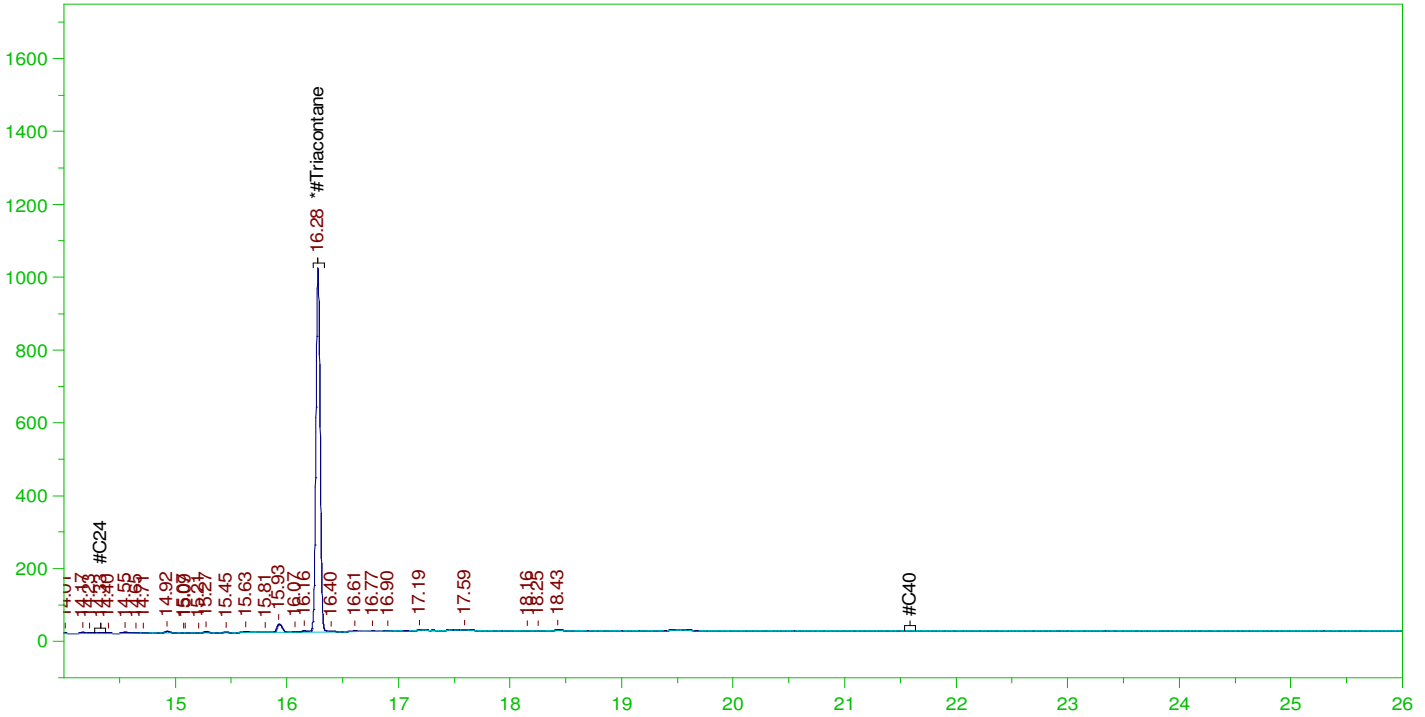
DRO Area:622904.3 DRO Amount: 1.815564E-02
 TEH Area:901881 TEH Amount: 2.628691E-02

ERH2873 (RHMW12A FD)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0012.RAW

B22032035-027A ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-027A ;0329HP5 , \$HC-8015-DRO-W,
 Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0012.RAW
 Date & Time Acquired: 3/29/2022 3:42:54 PM
 Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.278	.476	.083	17.51

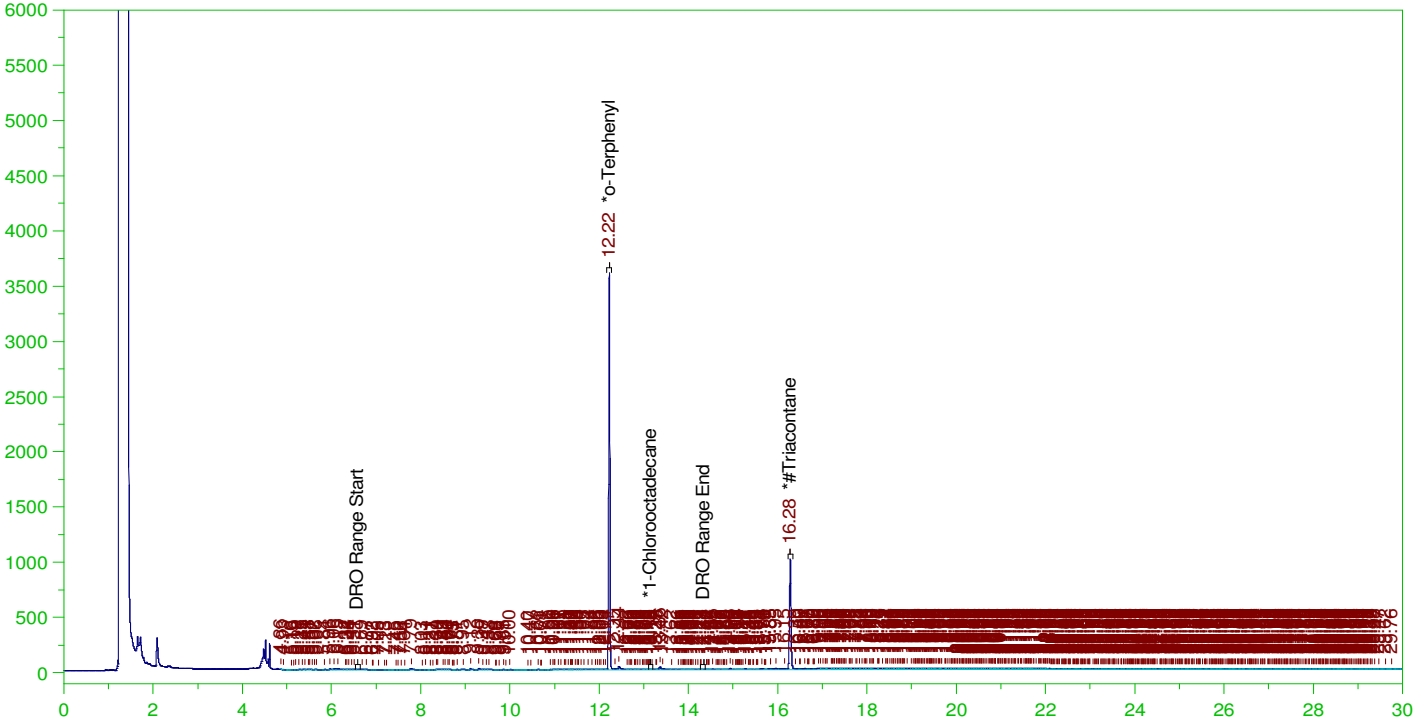
RRO Area:186437.3 RRO AMOUNT: 6.719483E-03

ERH2892 (RHMW16)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0034.RAW

B22032035-032C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-032C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0034.RAW
Date & Time Acquired: 3/30/2022 7:29:25 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.19	.179	93.9	-
*1-Chlorooctadecane	13.157	.19	.	.02	-
*#Triacontane	16.278	.19	.086	44.92	-

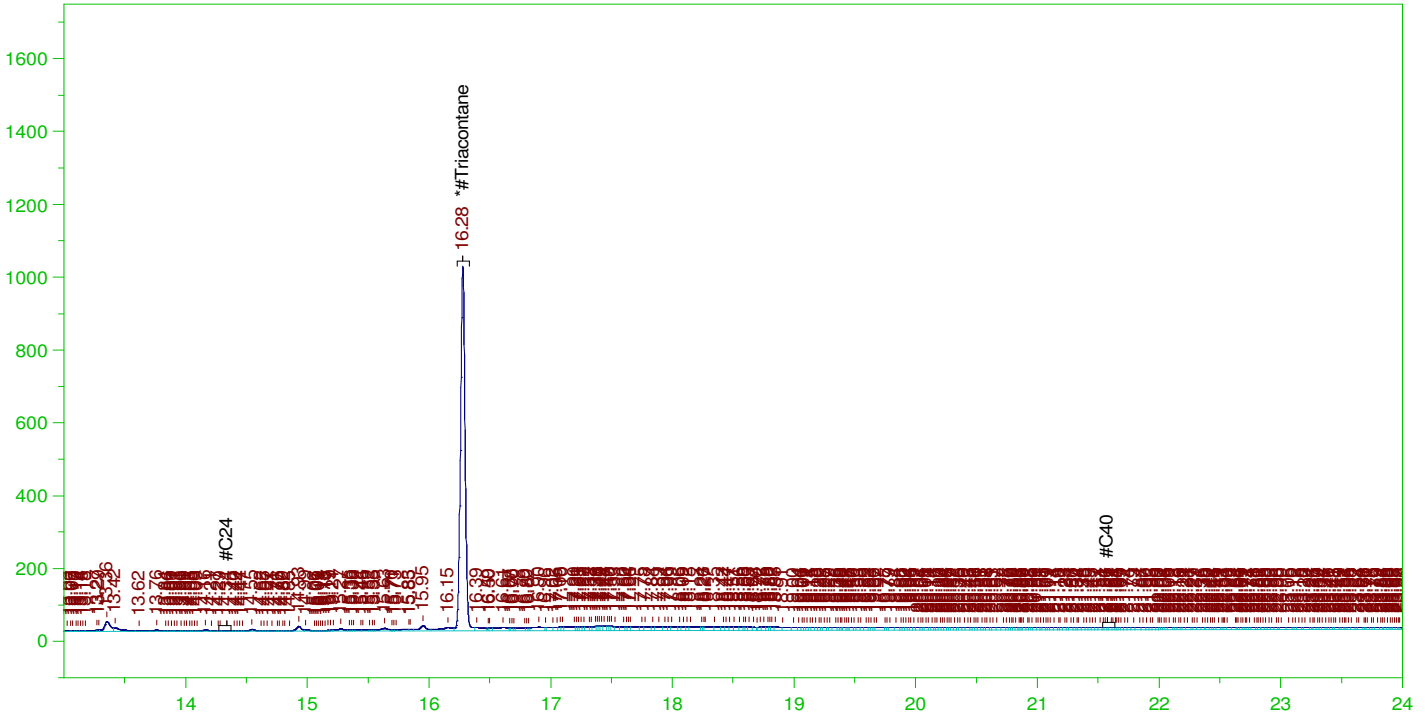
DRO Area:904435.6 DRO Amount: 2.636137E-02
TEH Area:5491905 TEH Amount: 0.1600713

ERH2892 (RHMW16)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0034.RAW

B22032035-032C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-032C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0034.RAW
Date & Time Acquired: 3/30/2022 7:29:25 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.278	.476	.086	17.97

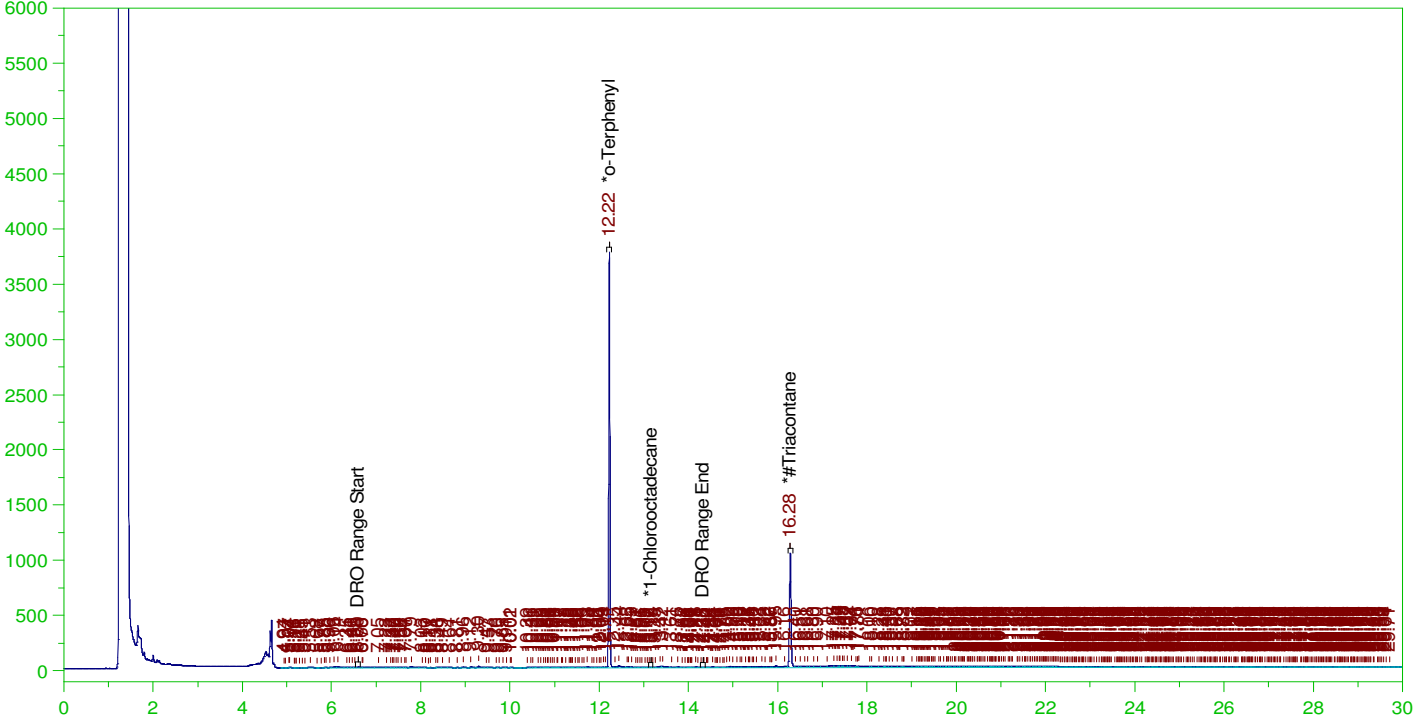
RRO Area:2961729 RRO AMOUNT: 0.1067452

ERH2893 (RHMW16 FD)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0040.RAW

B22032035-033A ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-033A ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0040.RAW
Date & Time Acquired: 3/30/2022 11:46:21 AM
Method File: G:\Org\HP5\Methods\D3_8015-032933-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.223	.19	.186	97.89	-
*1-Chlorooctadecane	13.171	.19	.	.04	-
*#Triacontane	16.279	.19	.089	46.55	-

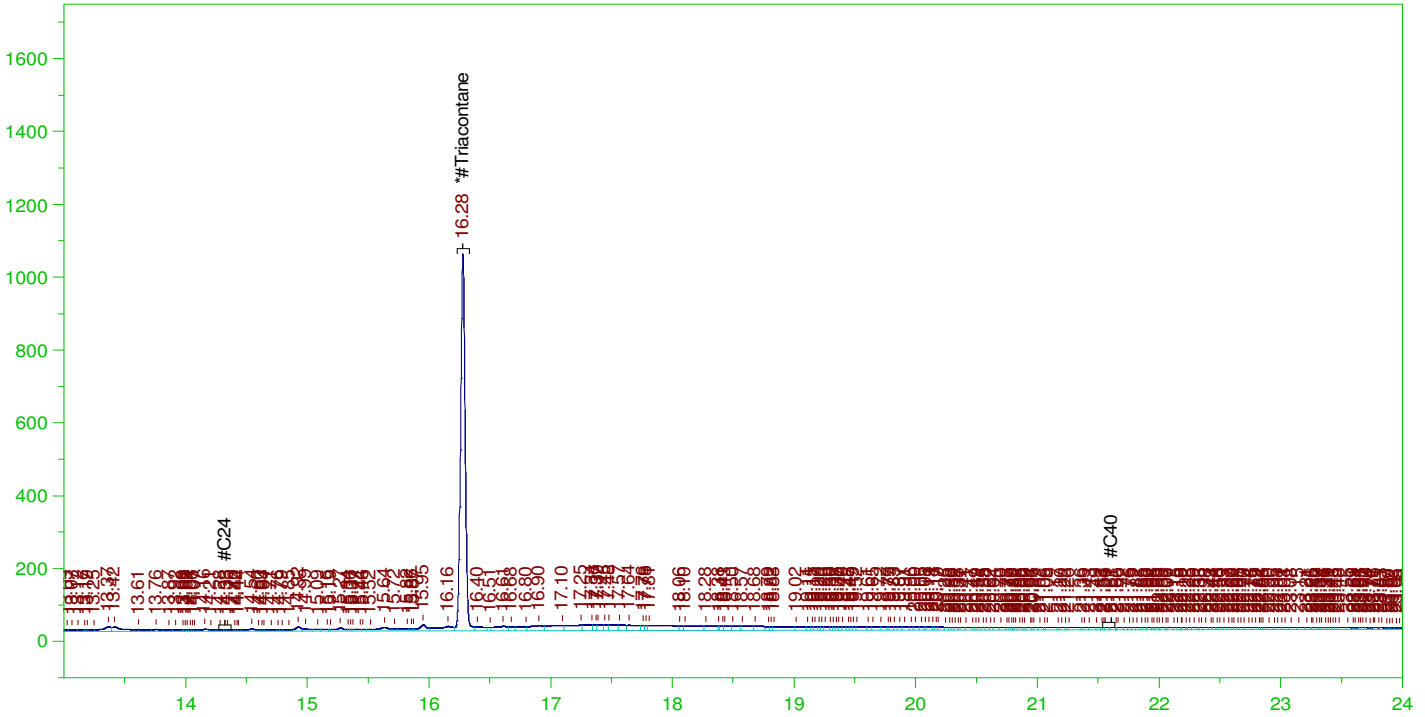
DRO Area:1308773 DRO Amount: 0.0381465
TEH Area:6799400 TEH Amount: 0.1981805

ERH2893 (RHMW16 FD)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0040.RAW

B22032035-033A ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-033A ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0040.RAW
Date & Time Acquired: 3/30/2022 11:46:21 AM
Method File: G:\Org\HP5\Methods\D3_OROS-032933-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.279	.476	.089	18.62

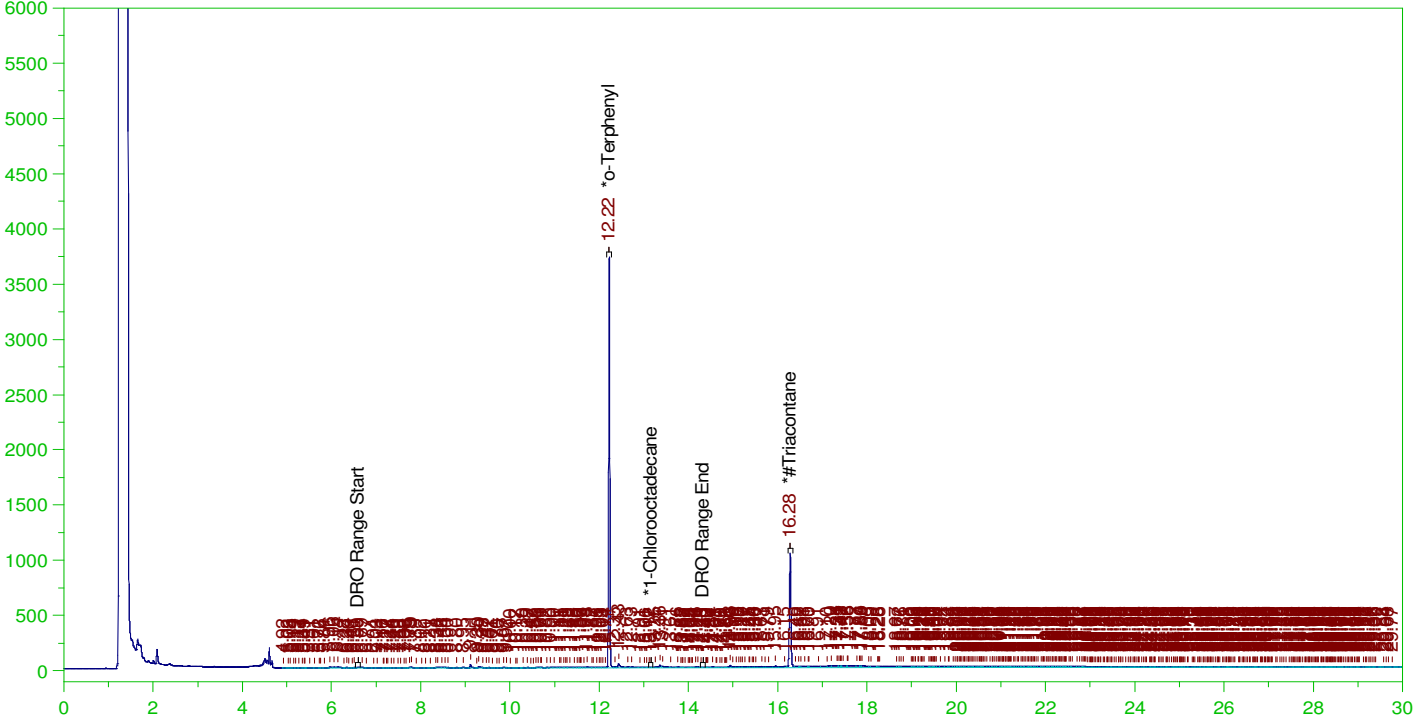
RRO Area:3745224 RRO AMOUNT: 0.1349835

ERH2929 (RHMW11-05)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0041.RAW

B22032035-038C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-038C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0041.RAW
Date & Time Acquired: 3/30/2022 12:28:52 PM
Method File: G:\Org\HP5\Methods\D3_8015-032933-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	.19	.183	96.12	-
*1-Chlorooctadecane	13.169	.19	.	.05	-
*#Triacontane	16.276	.19	.089	46.55	-

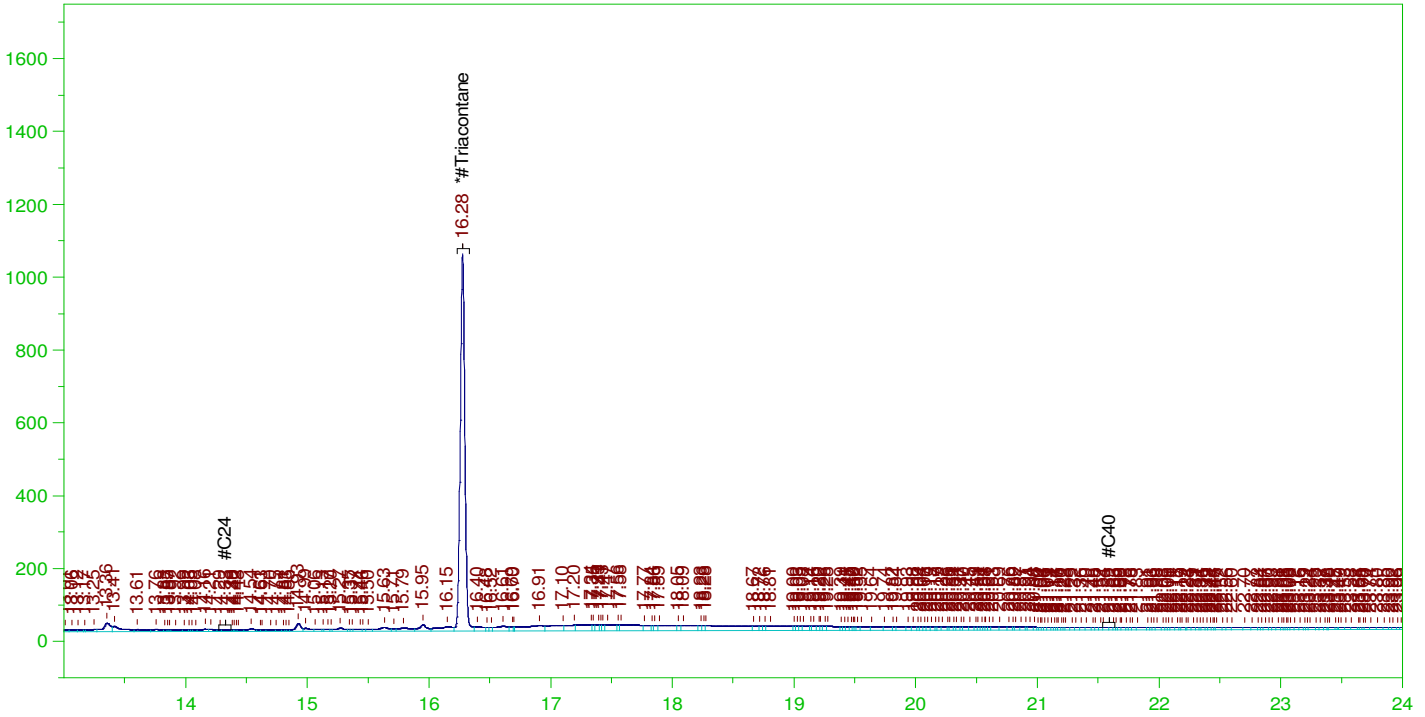
DRO Area:1503017 DRO Amount: 4.380808E-02
TEH Area:7660250 TEH Amount: 0.2232715

ERH2929 (RHMW11-05)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0041.RAW

B22032035-038C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-038C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0041.RAW
Date & Time Acquired: 3/30/2022 12:28:52 PM
Method File: G:\Org\HP5\Methods\D3_OROS-032933-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.276	.476	.089	18.62

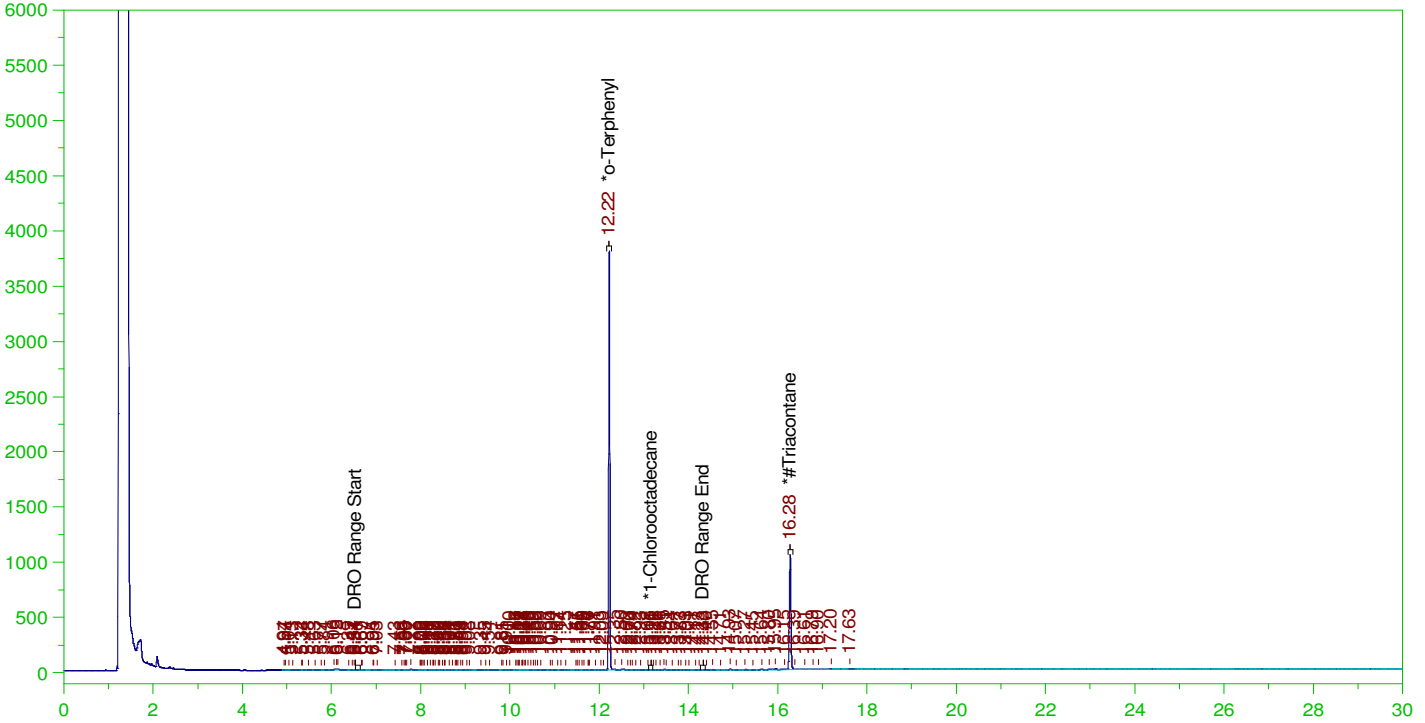
RRO Area:4284392 RRO AMOUNT: 0.154416

ERH2917 (RHMW04)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0042.RAW

B22032035-043C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-043C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0042.RAW
Date & Time Acquired: 3/30/2022 1:11:33 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	.19	.191	100.49	-
*1-Chlorooctadecane	13.162	.19	.	.01	-
*#Triacontane	16.276	.19	.089	46.81	-

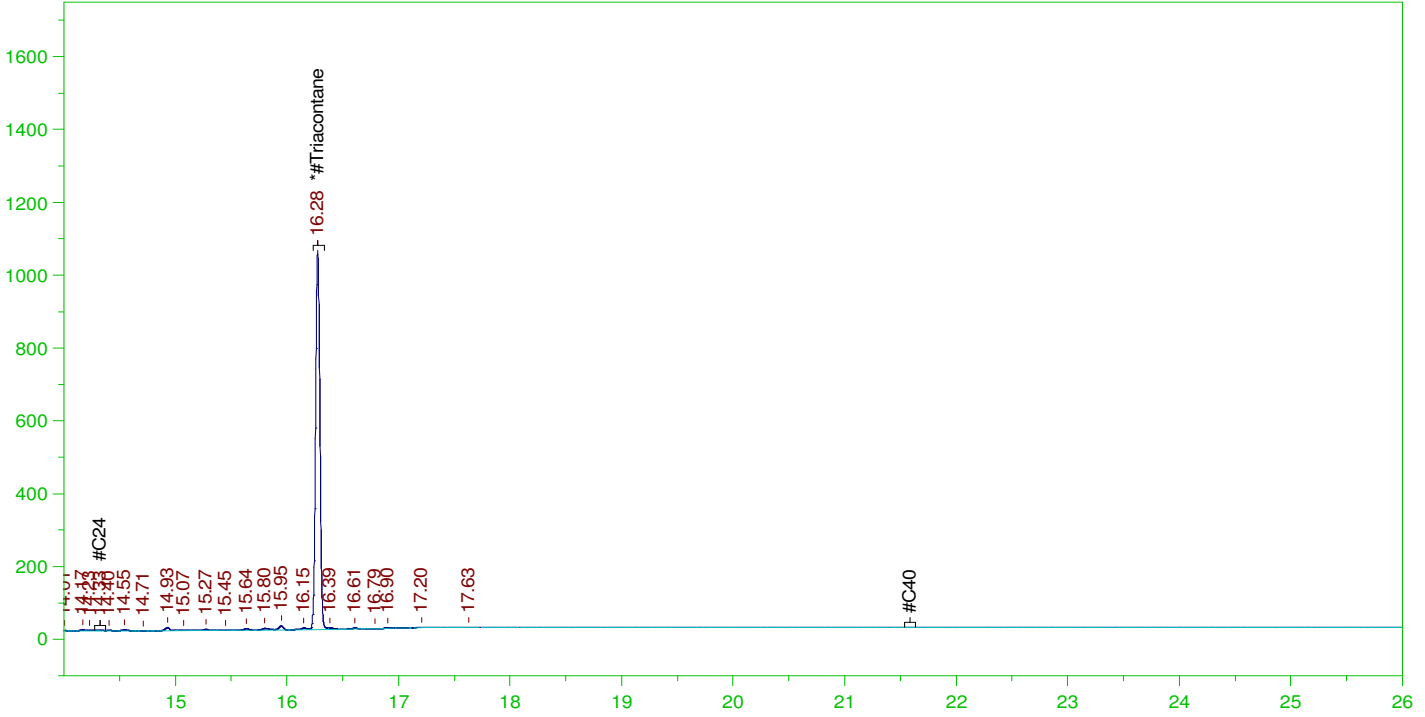
DRO Area:484819.3 DRO Amount: 1.413091E-02
TEH Area:823486.1 TEH Amount: 2.400195E-02

ERH2917 (RHMW04)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0042.RAW

B22032035-043C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-043C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0042.RAW
Date & Time Acquired: 3/30/2022 1:11:33 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.276	.476	.089	18.72

RRO Area:174425.5 RRO AMOUNT: 6.286559E-03

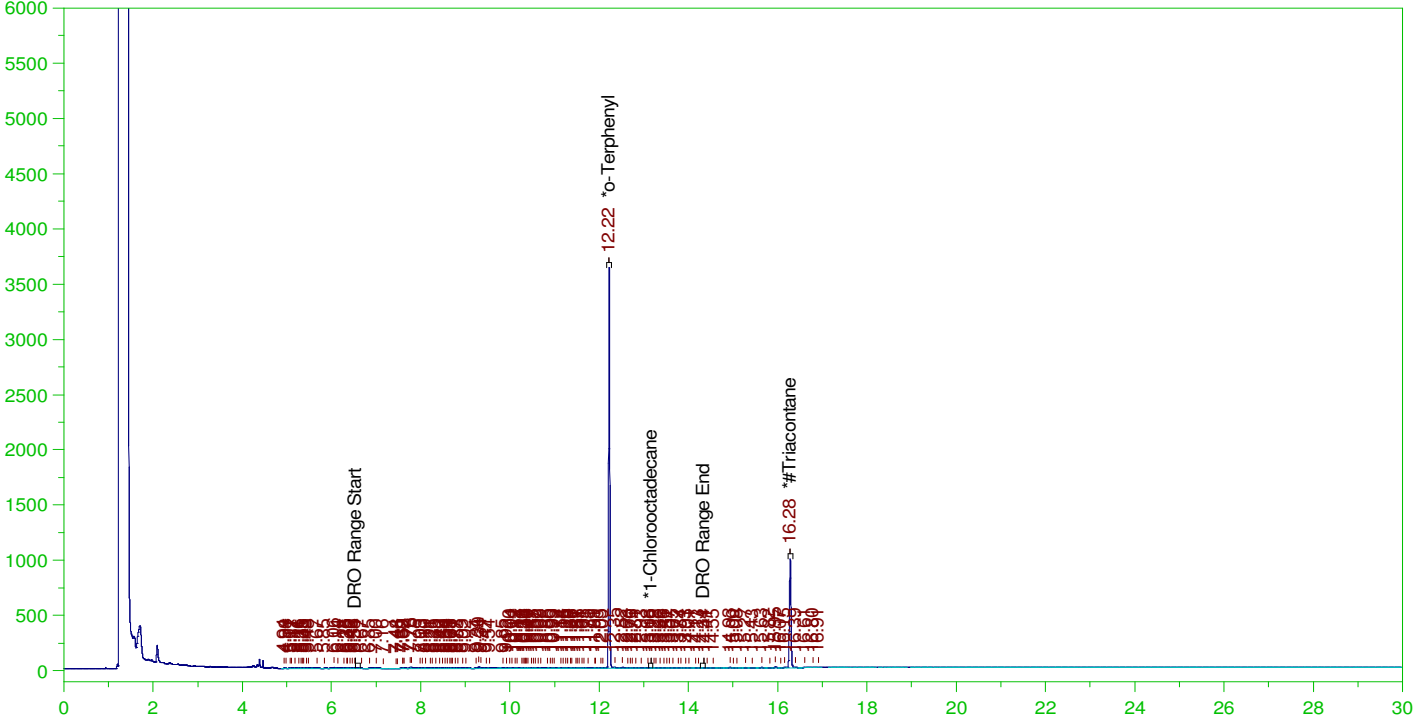


ERH2900 (OWDFMW07A)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0024.RAW

B22032035-048C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-048C ;0329HP5 , \$HC-8015-DRO-W,
 Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0024.RAW
 Date & Time Acquired: 3/30/2022 12:20:17 AM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.22	.19	.183	96.31	-
*1-Chlorooctadecane	13.16	.19	.	.01	-
*#Triacontane	16.277	.19	.086	44.94	-

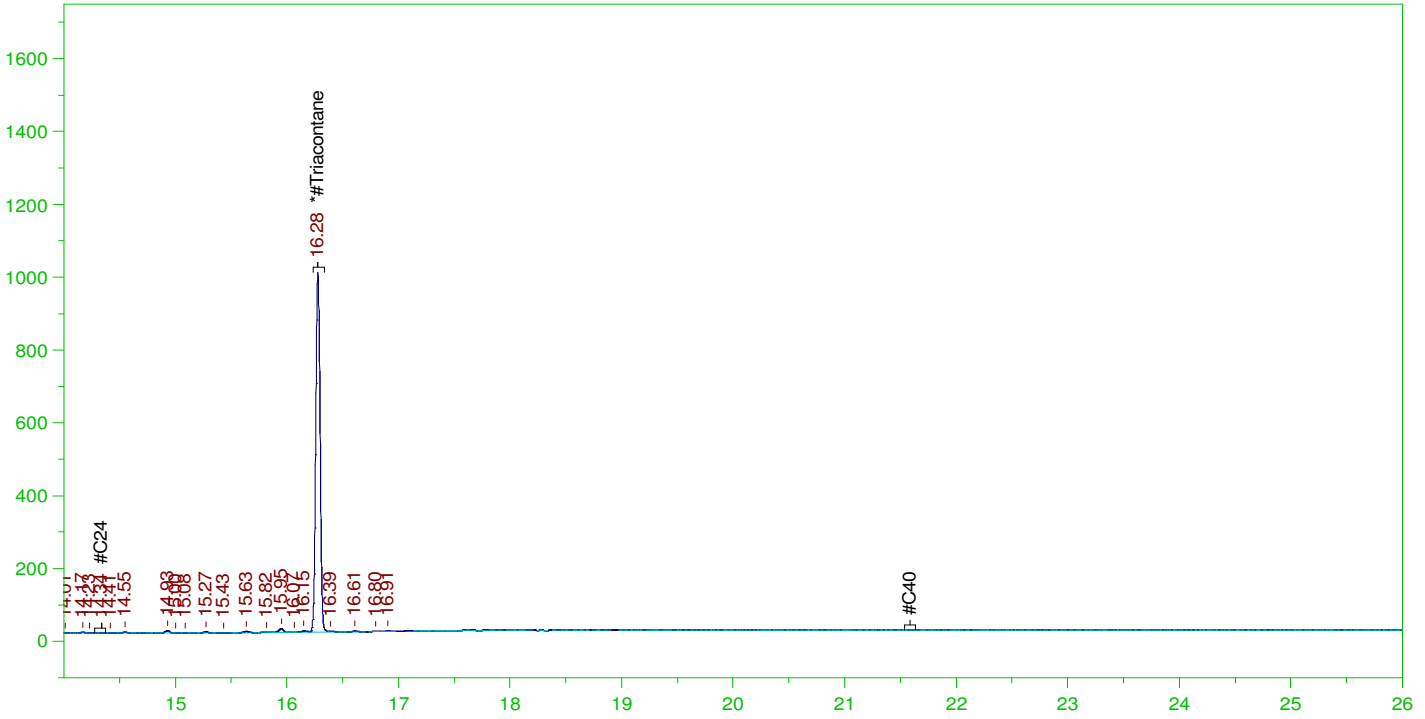
DRO Area:551284.6 DRO Amount: 1.606816E-02
 TEH Area:854270.3 TEH Amount: 2.489921E-02

ERH2900 (OWDFMW07A)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0024.RAW

B22032035-048C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-048C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0024.RAW
Date & Time Acquired: 3/30/2022 12:20:17 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.277	.476	.086	17.97

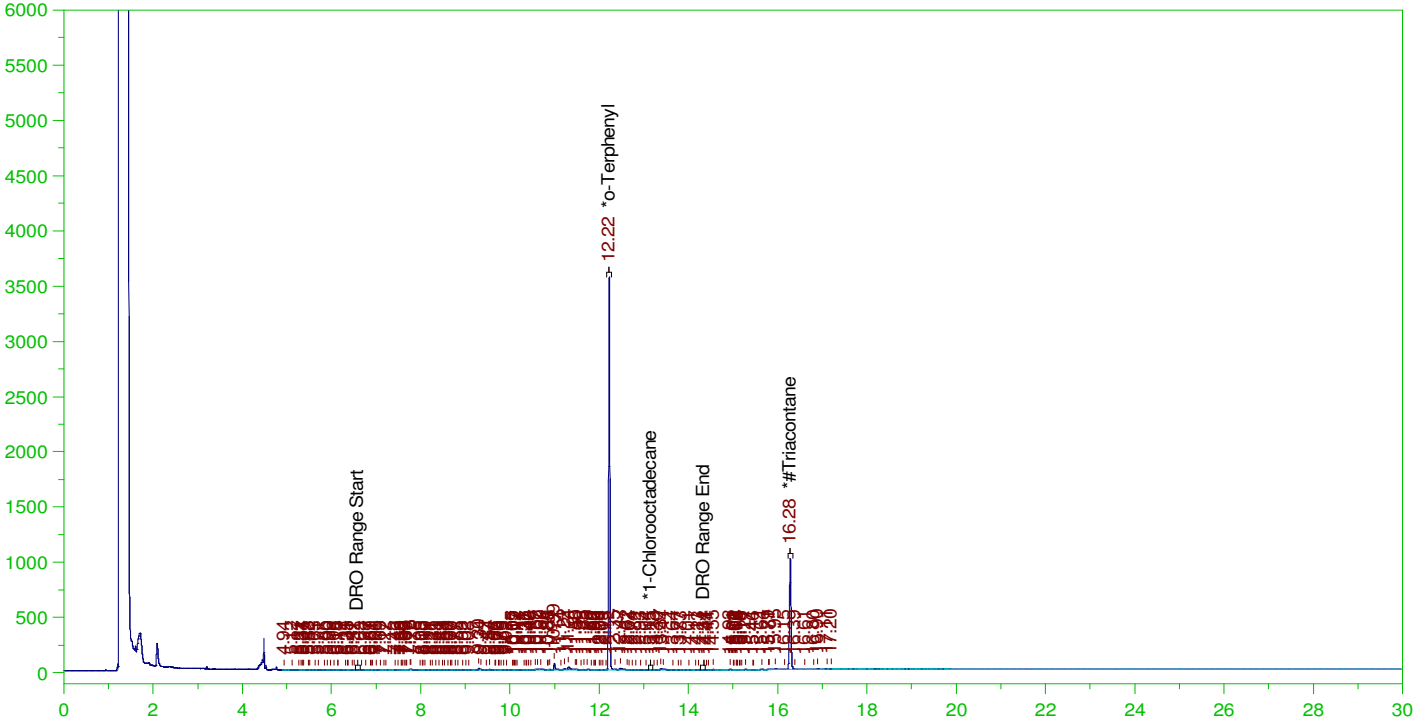
RRO Area:140883.6 RRO AMOUNT: 5.07766E-03

ERH2914 (OWDFMW01)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0025.RAW

B22032035-053C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-053C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0025.RAW
Date & Time Acquired: 3/30/2022 1:03:16 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	.19	.18	94.52	-
*1-Chlorooctadecane	13.151	.19	.	.01	-
*#Triacontane	16.278	.19	.085	44.66	-

DRO Area:1184749

DRO Amount: 0.0345316

TEH Area:1491780

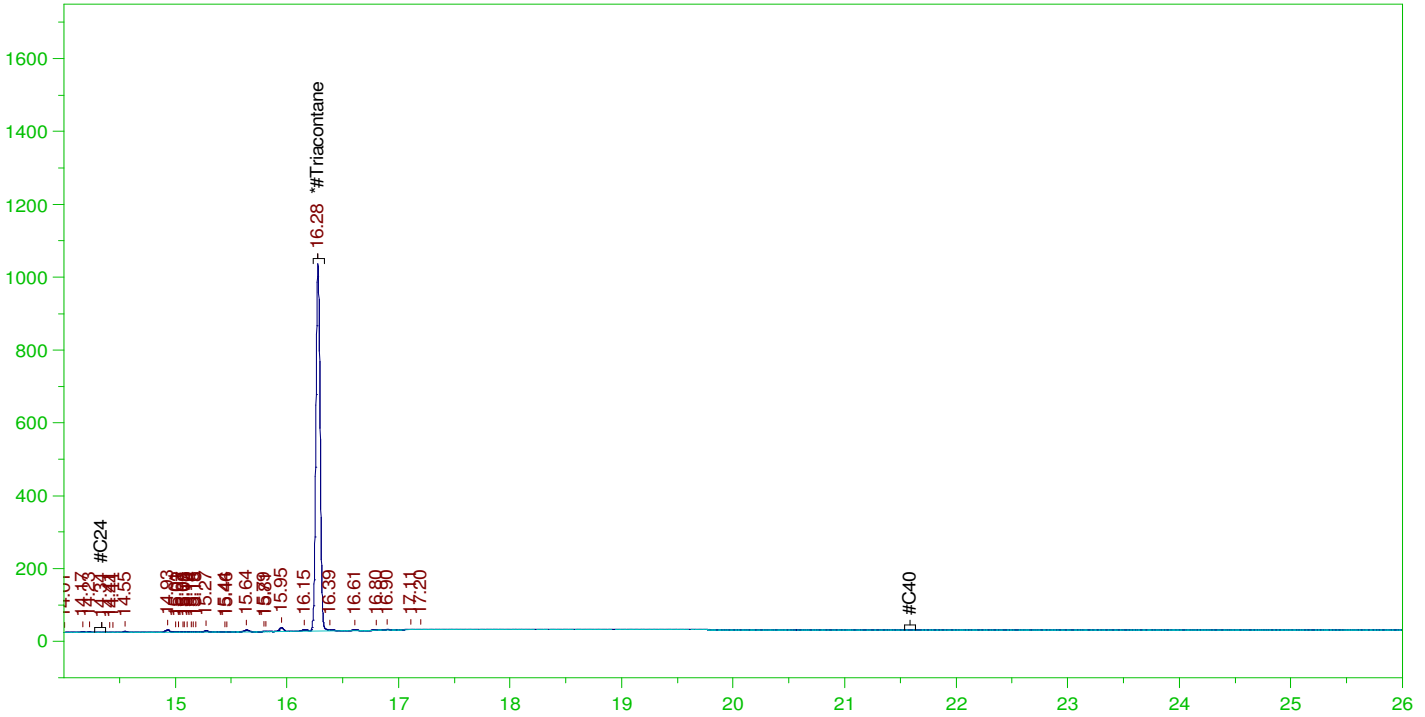
TEH Amount: 4.348055E-02

ERH2914 (OWDFMW01)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0025.RAW

B22032035-053C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-053C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0025.RAW
Date & Time Acquired: 3/30/2022 1:03:16 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.278	.476	.085	17.86

RRO Area:141238.1 RRO AMOUNT: 5.090436E-03

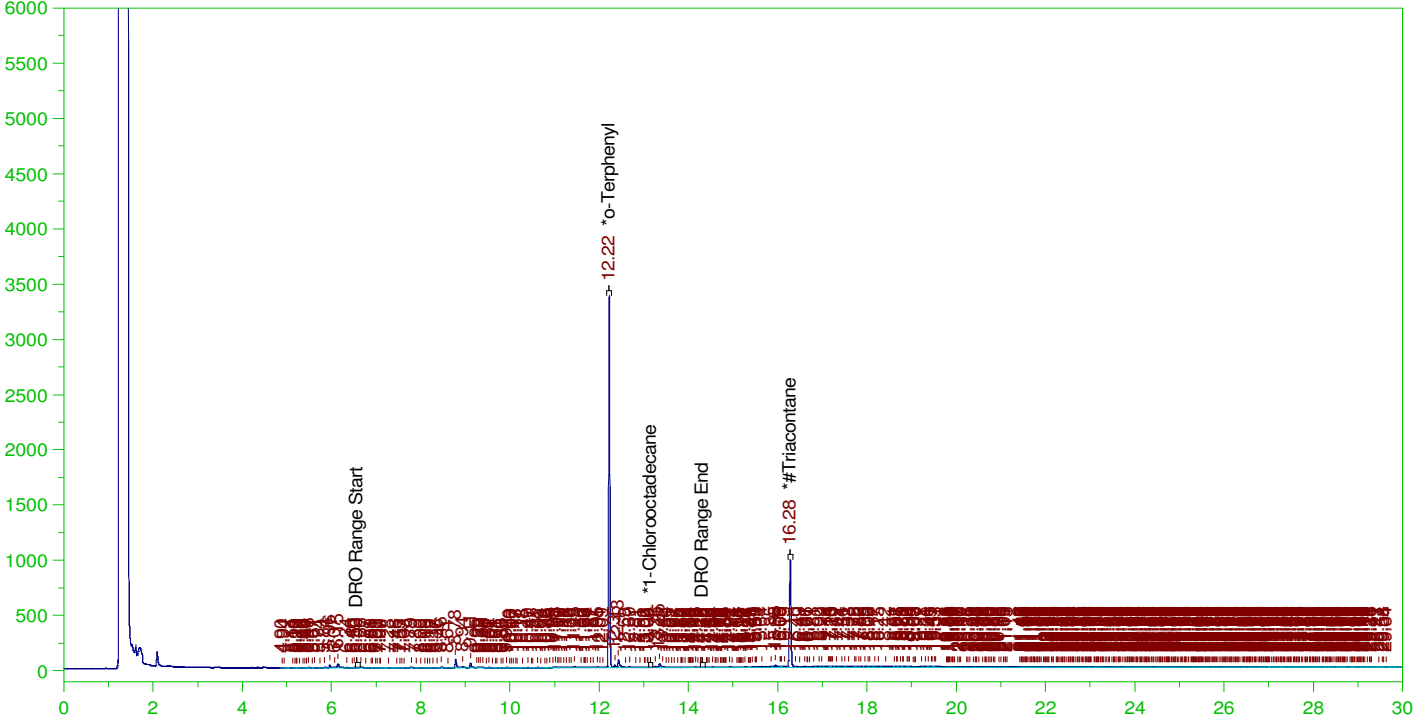


ERH2897 (OWDFMW05A)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0027.RAW

B22032035-058C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-058C ;0329HP5 , \$HC-8015-DRO-W,
 Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0027.RAW
 Date & Time Acquired: 3/30/2022 2:29:15 AM
 Method File: G:\Org\HP5\Methods\D3_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
 Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	.19	.17	89.16	-
*1-Chlorooctadecane	29.988	.19	.	.	-
*#Triacontane	16.278	.19	.085	44.68	-

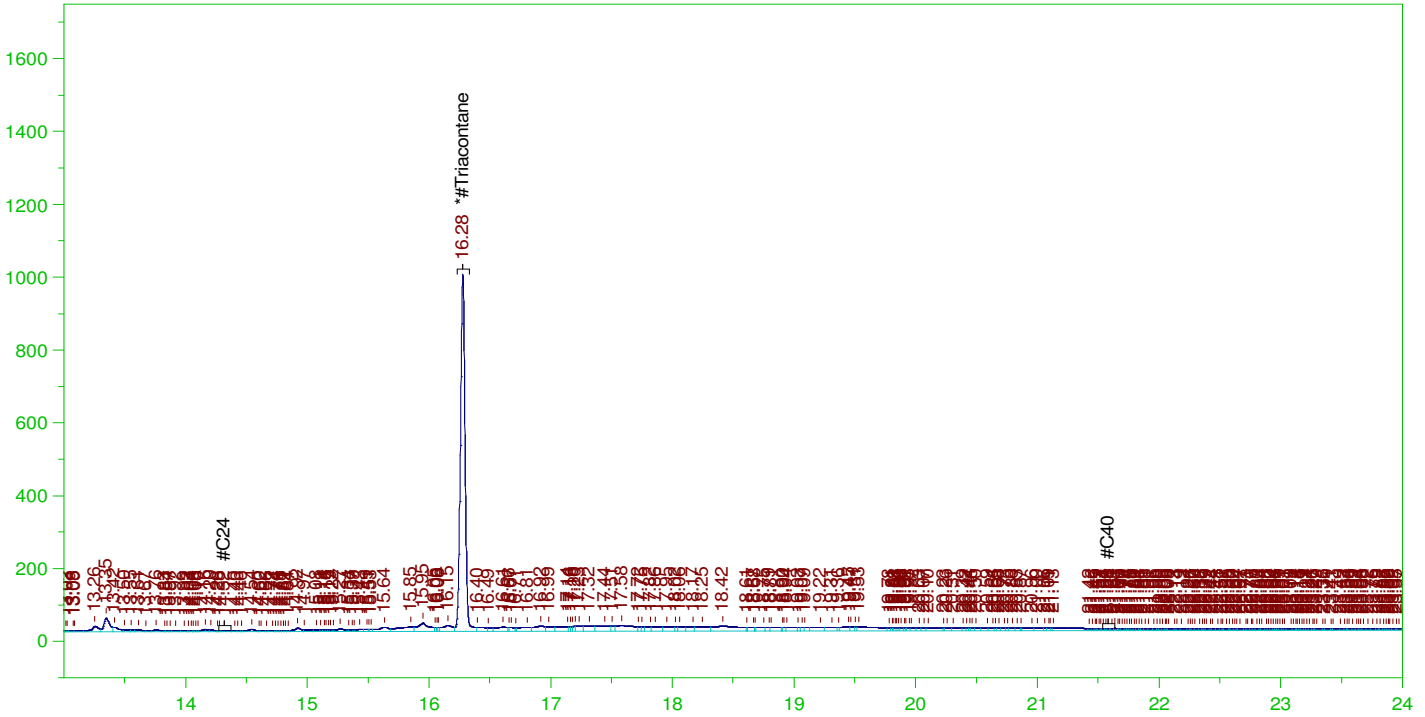
DRO Area:1910765 DRO Amount: 5.569261E-02
 TEH Area:7346522 TEH Amount: 0.2141273

ERH2897 (OWDFMW05A)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0027.RAW

B22032035-058C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-058C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0027.RAW
Date & Time Acquired: 3/30/2022 2:29:15 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.278	.476	.085	17.87

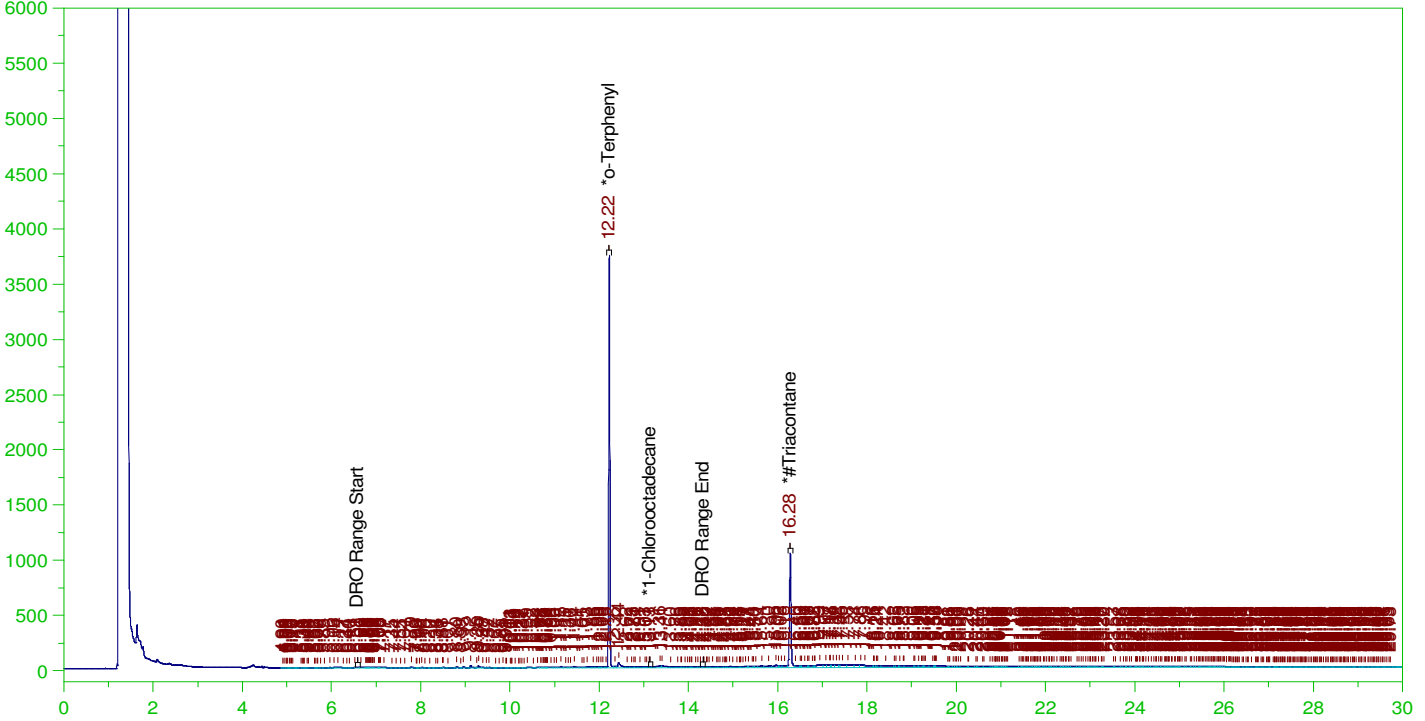
RRO Area:3761928 RRO AMOUNT: 0.1355856

ERH2903 (RHMW08)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0047.RAW

B22032035-063C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-063C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0047.RAW
Date & Time Acquired: 3/30/2022 4:45:28 PM
Method File: G:\Org\HP5\Methods\D3_8015-032933-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36

Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.19	.185	97.06	-
*1-Chlorooctadecane	13.128	.19	.001	.33	-
*#Triacontane	16.278	.19	.091	47.76	-

DRO Area:2396817 DRO Amount: 6.985946E-02

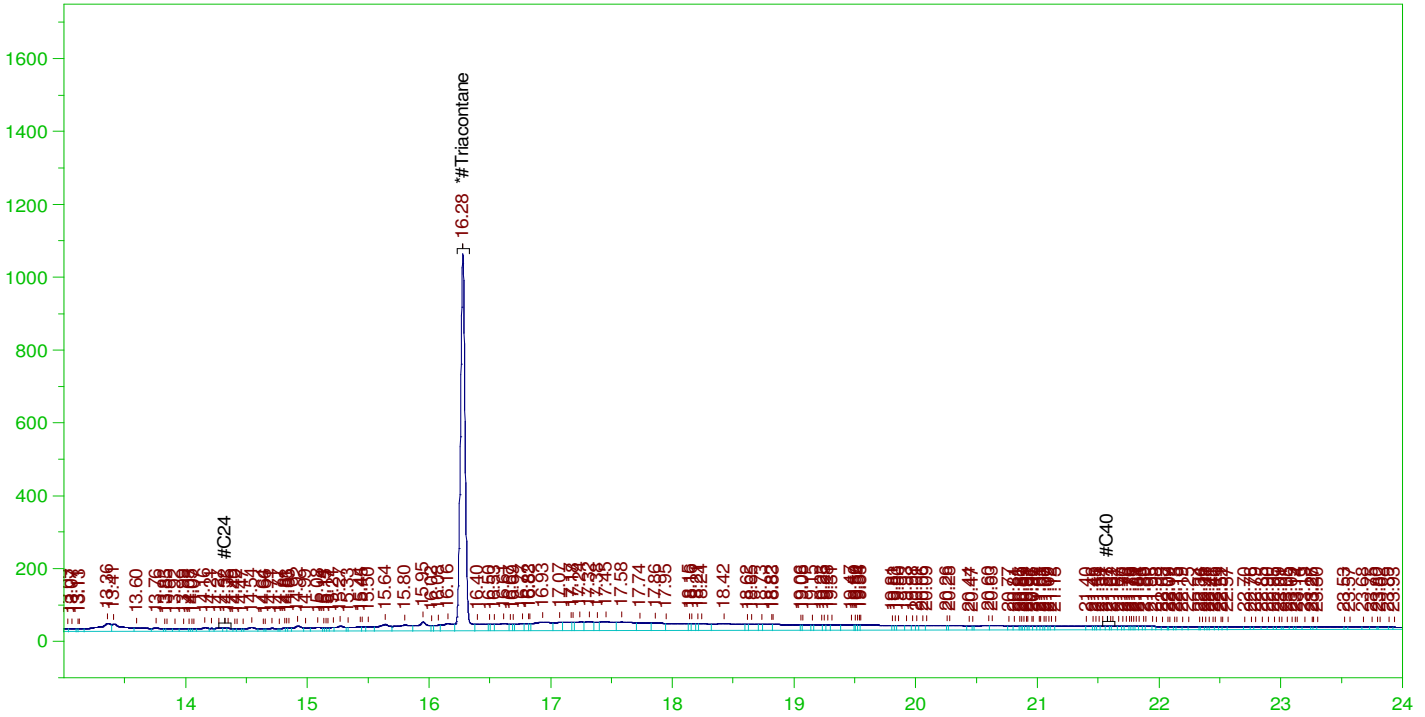
TEH Area:1.098338E+07 TEH Amount: 0.3201299

ERH2903 (RHMW08)

Batch ID: 164941

G:\Org\HP5\DAT\HP5032922_b\0329HP5.0047.RAW

B22032035-063C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-063C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5032922_b\0329HP5.0047.RAW
Date & Time Acquired: 3/30/2022 4:45:28 PM
Method File: G:\Org\HP5\Methods\D3_OROS-032933-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.278	.476	.091	19.11

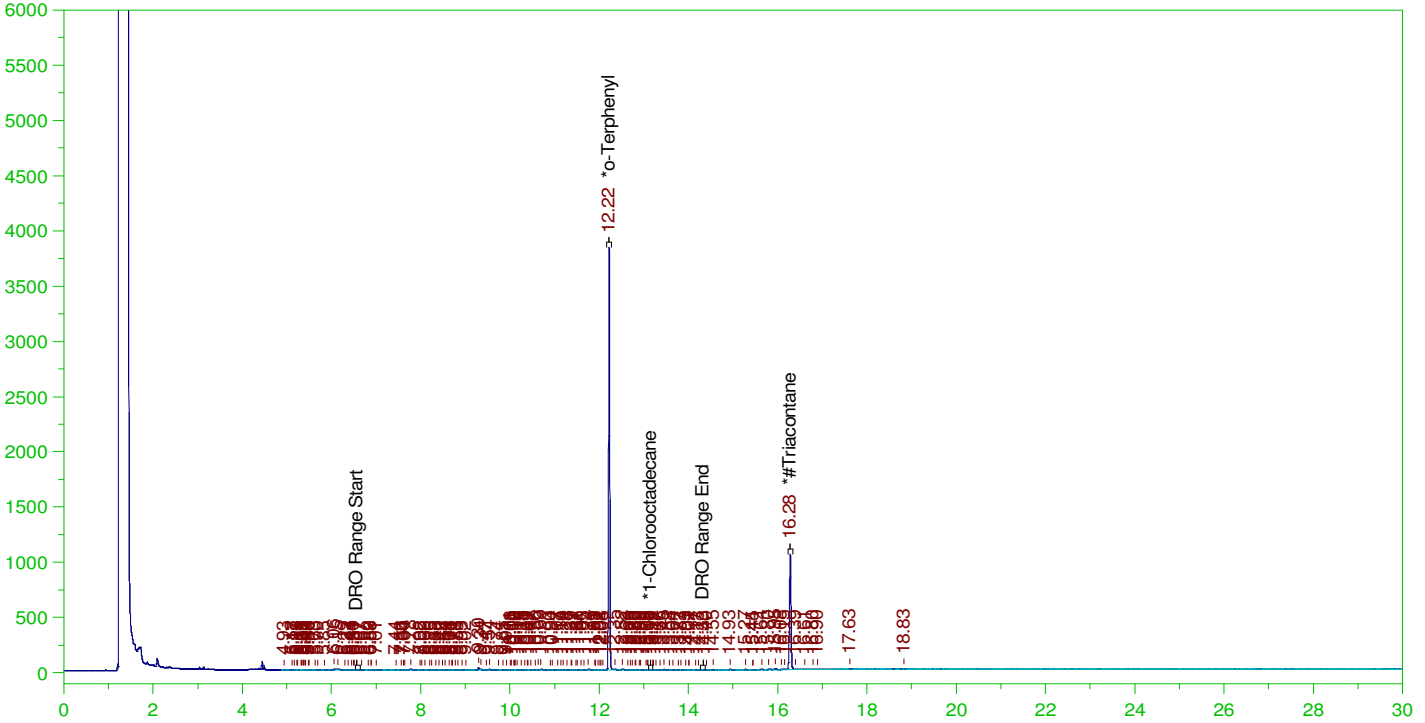
RRO Area:6302671 RRO AMOUNT: 0.2271578

ERH2869 (RHMW14-03)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0029.RAW

B22032035-068C ;0329HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-068C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0029.RAW
Date & Time Acquired: 3/30/2022 3:55:07 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.22	.19	.189	98.99	-
*1-Chlorooctadecane	13.156	.19	.	.01	-
*#Triacontane	16.278	.19	.089	46.59	-

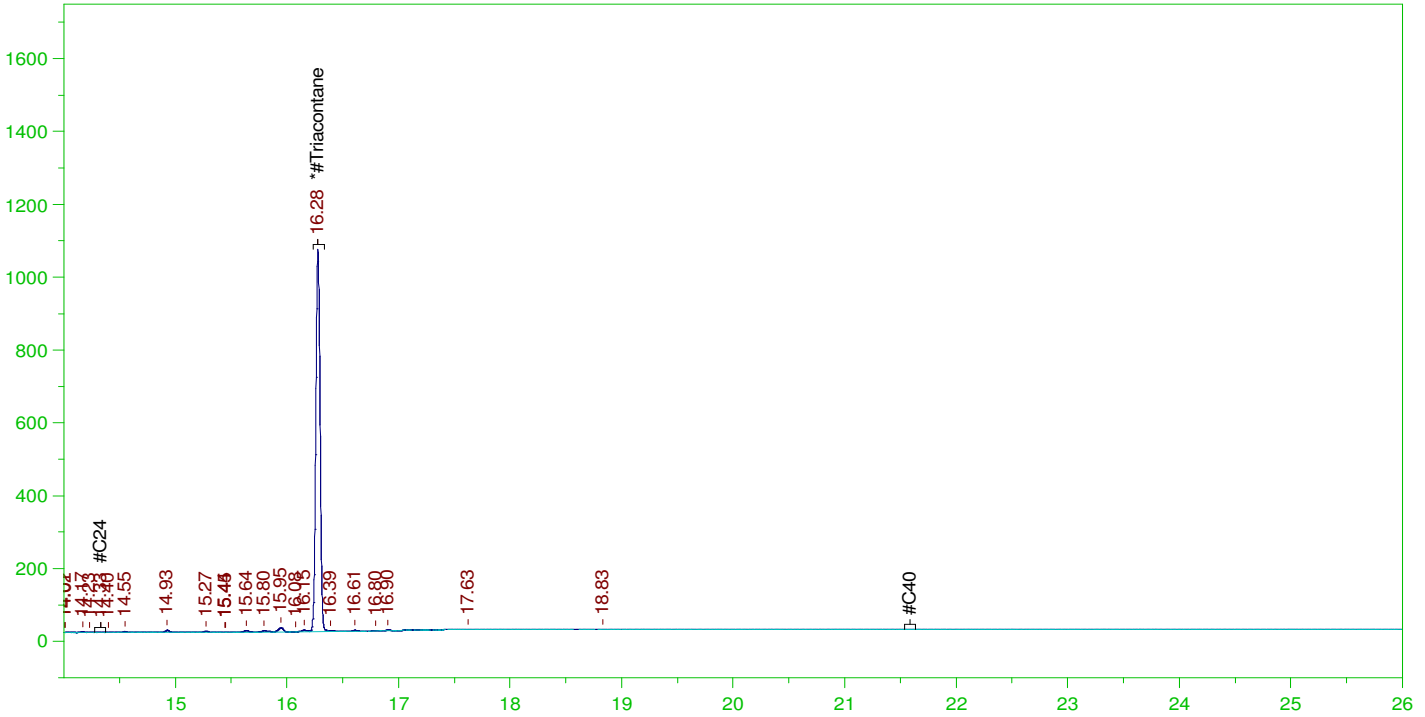
DRO Area:660880.8 DRO Amount: 1.926254E-02
TEH Area:1004106 TEH Amount: 2.926643E-02

ERH2869 (RHMW14-03)

Batch ID: 164941

G:\org\HP5\DAT\HP5032922_b\0329HP5.0029.RAW

B22032035-068C ;0329HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-068C ;0329HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032922_b\0329HP5.0029.RAW
Date & Time Acquired: 3/30/2022 3:55:07 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.278	.476	.089	18.64

RRO Area:160818.5 RRO AMOUNT: 5.796143E-03

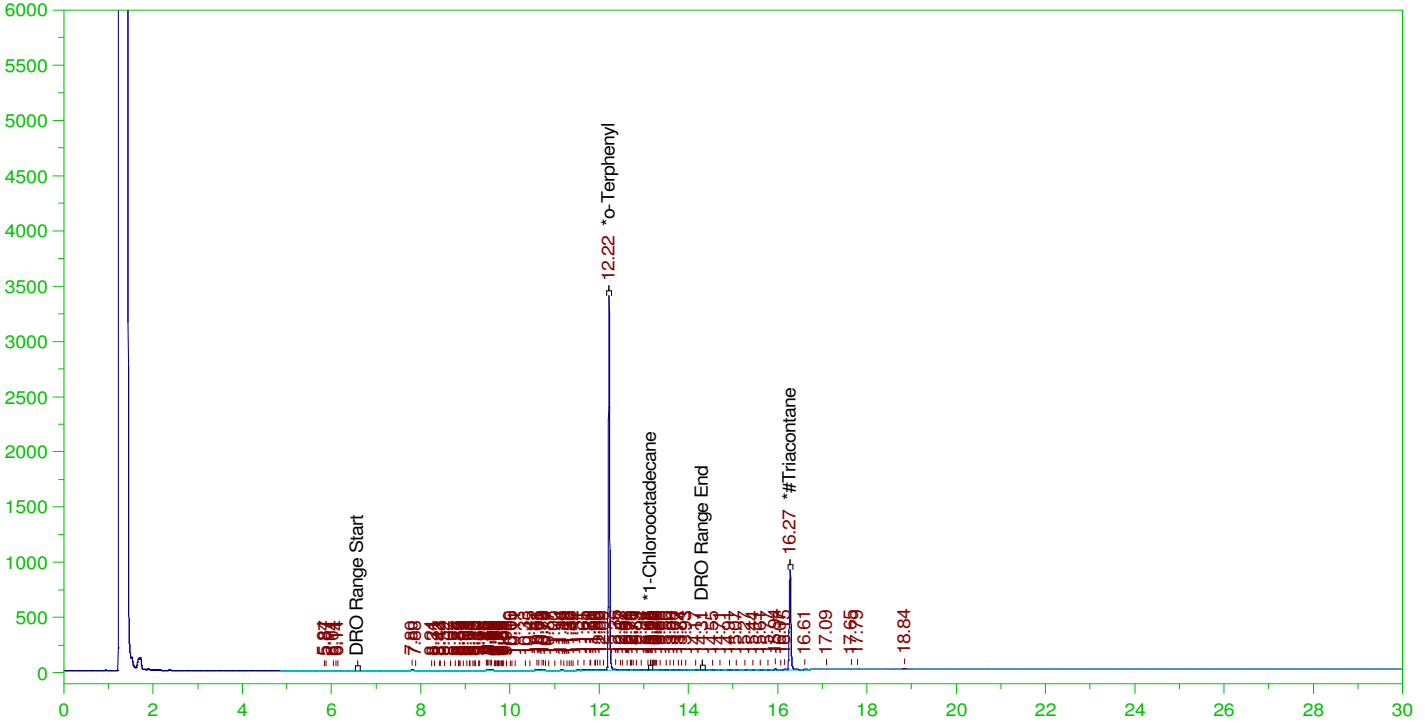


ERH2906 (RHMW06)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0024.RAW

B22032035-001C ;0331HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-001C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0024.RAW
 Date & Time Acquired: 4/1/2022 1:30:46 AM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
 Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.217	.19	.177	93.19	-
*1-Chlorooctadecane	13.154	.19	.	.01	-
*#Triacontane	16.274	.19	.081	42.28	-

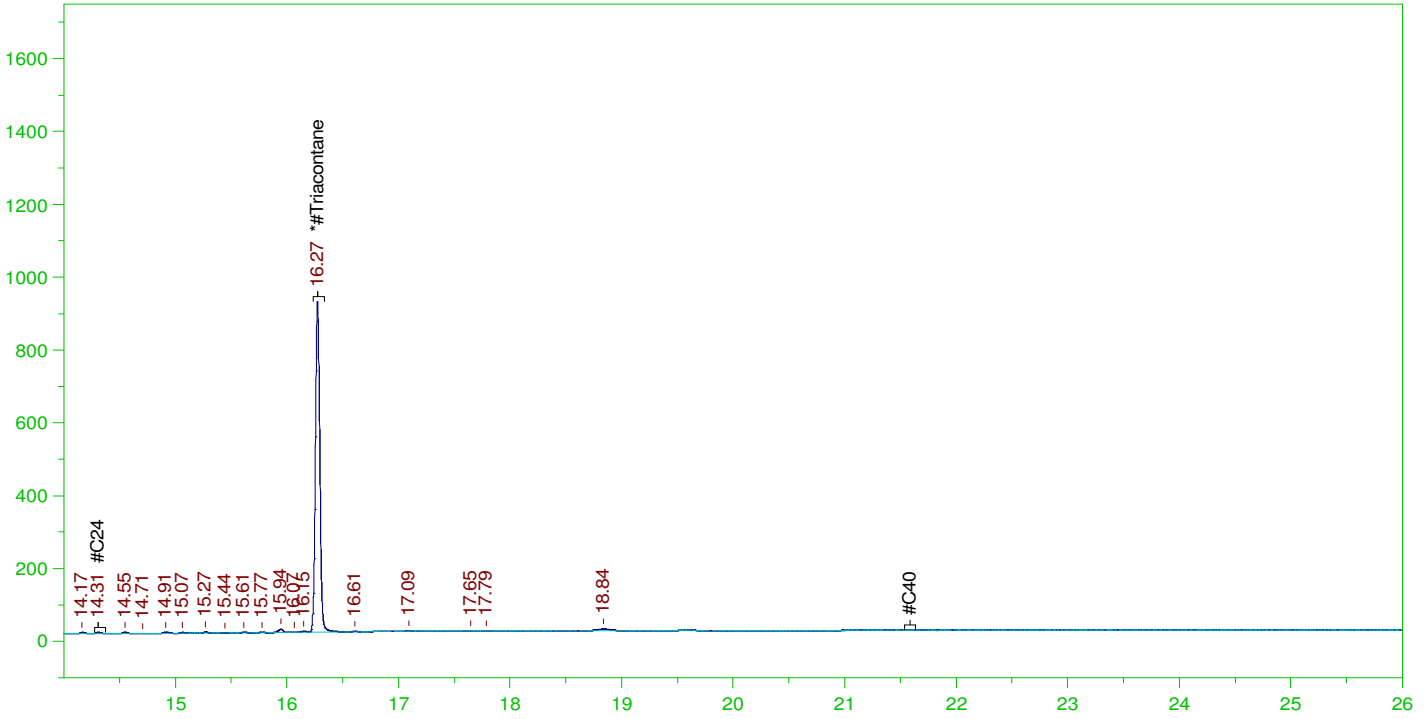
DRO Area:330730.9 DRO Amount: 9.639735E-03
 TEH Area:490153.7 TEH Amount: 1.428639E-02

ERH2906 (RHMW06)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0024.RAW

B22032035-001C ;0331HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-001C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0024.RAW
 Date & Time Acquired: 4/1/2022 1:30:46 AM
 Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.274	.476	.081	16.91

RRO Area:139684.4 RRO AMOUNT: 5.034438E-03

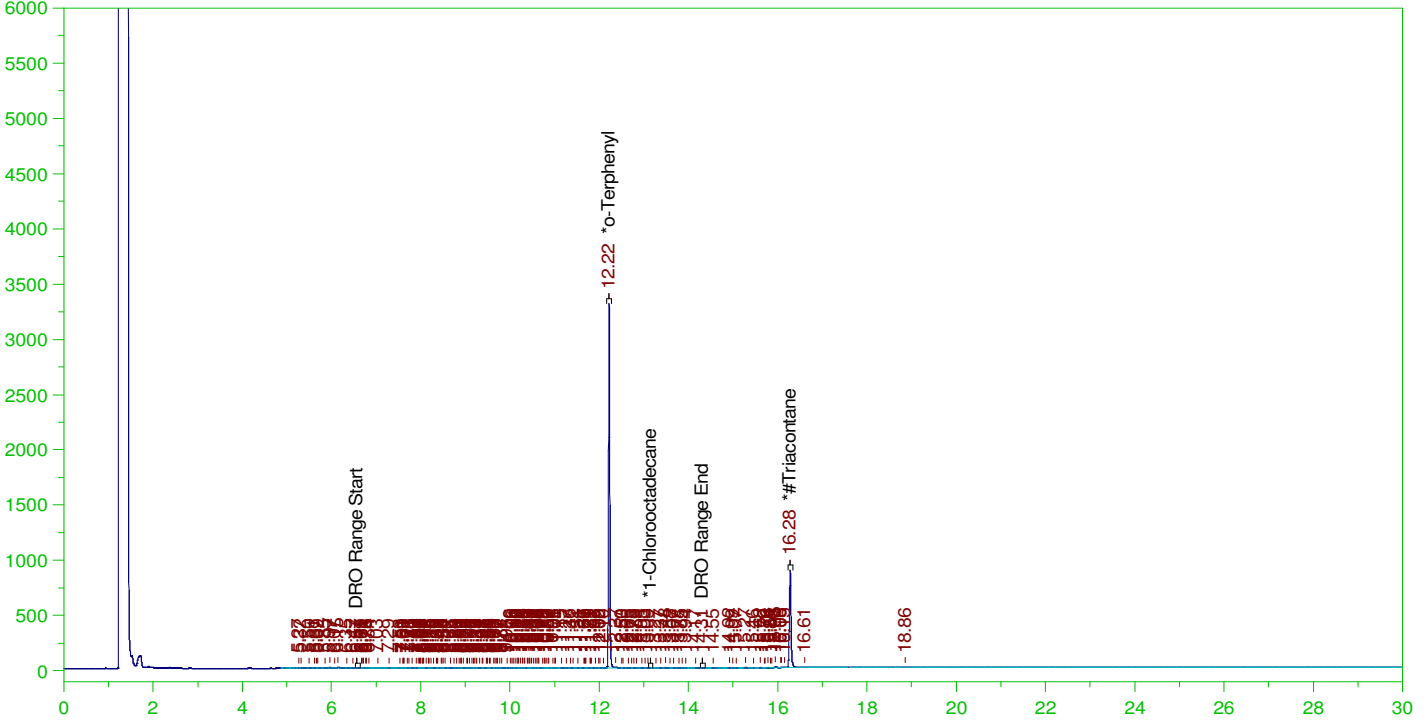


ERH2920 (RHMW2254-01 B)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0032.RAW

B22032035-011C ;0331HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-011C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0032.RAW
 Date & Time Acquired: 4/1/2022 7:14:42 AM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
 Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.219	.19	.179	94.03	-
*1-Chlorooctadecane	29.996	.19	.	.	-
*#Triacontane	16.276	.19	.08	42.06	-

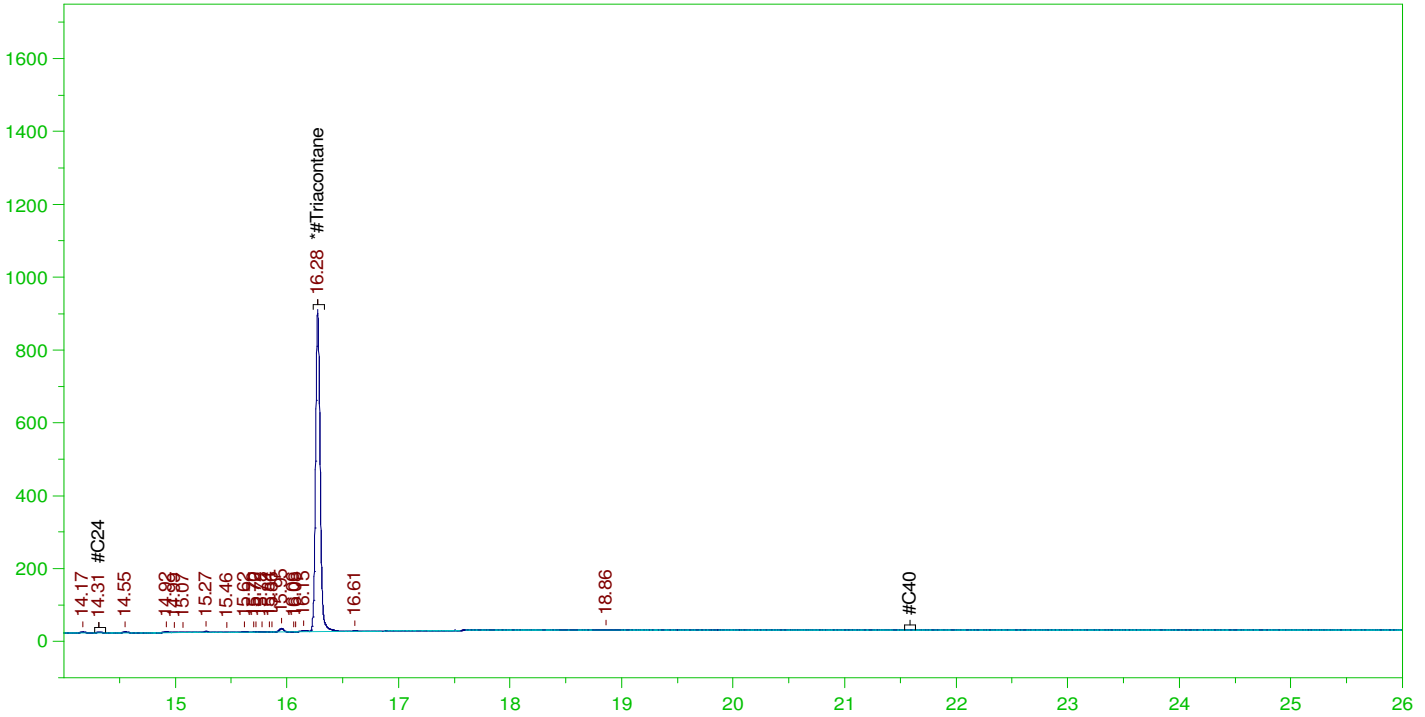
DRO Area:522145.3 DRO Amount: 1.521885E-02
 TEH Area:811768.1 TEH Amount: 2.366041E-02

ERH2920 (RHMW2254-01 B)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0032.RAW

B22032035-011C ;0331HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-011C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0032.RAW
 Date & Time Acquired: 4/1/2022 7:14:42 AM
 Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.276	.476	.08	16.83	-

RRO Area:110951.8 RRO AMOUNT: 3.998871E-03

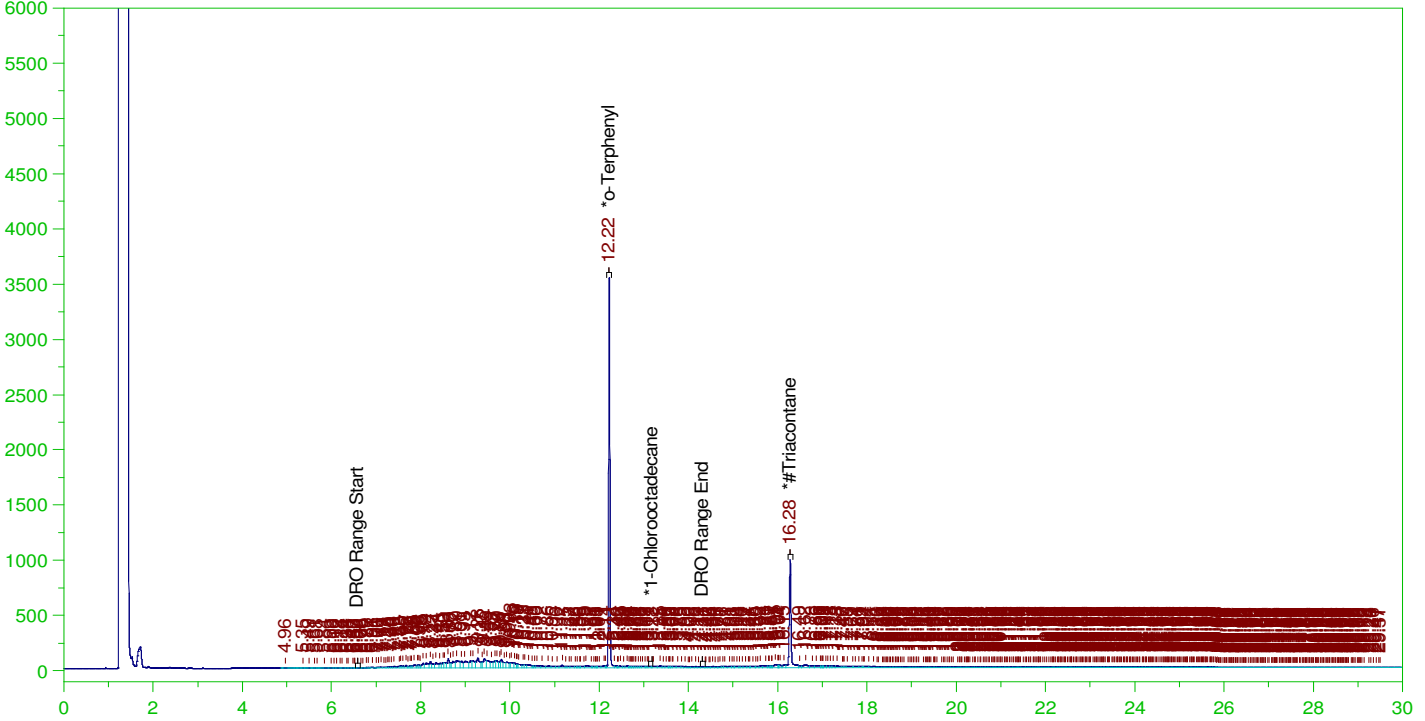


ERH2926 (SUMP ADIT 3)

G:\org\HP5\DAT\HP5033122_b\0331HP5.0033.RAW

Batch ID: 164941

B22032035-016C ;0331HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-016C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0033.RAW
 Date & Time Acquired: 4/1/2022 7:57:20 AM
 Method File: G:\Org\HP5\Methods\D3_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
 Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	.19	.19	99.57	-
*1-Chlorooctadecane	13.177	.19	.	.2	-
*#Triacontane	16.276	.19	.096	50.16	-

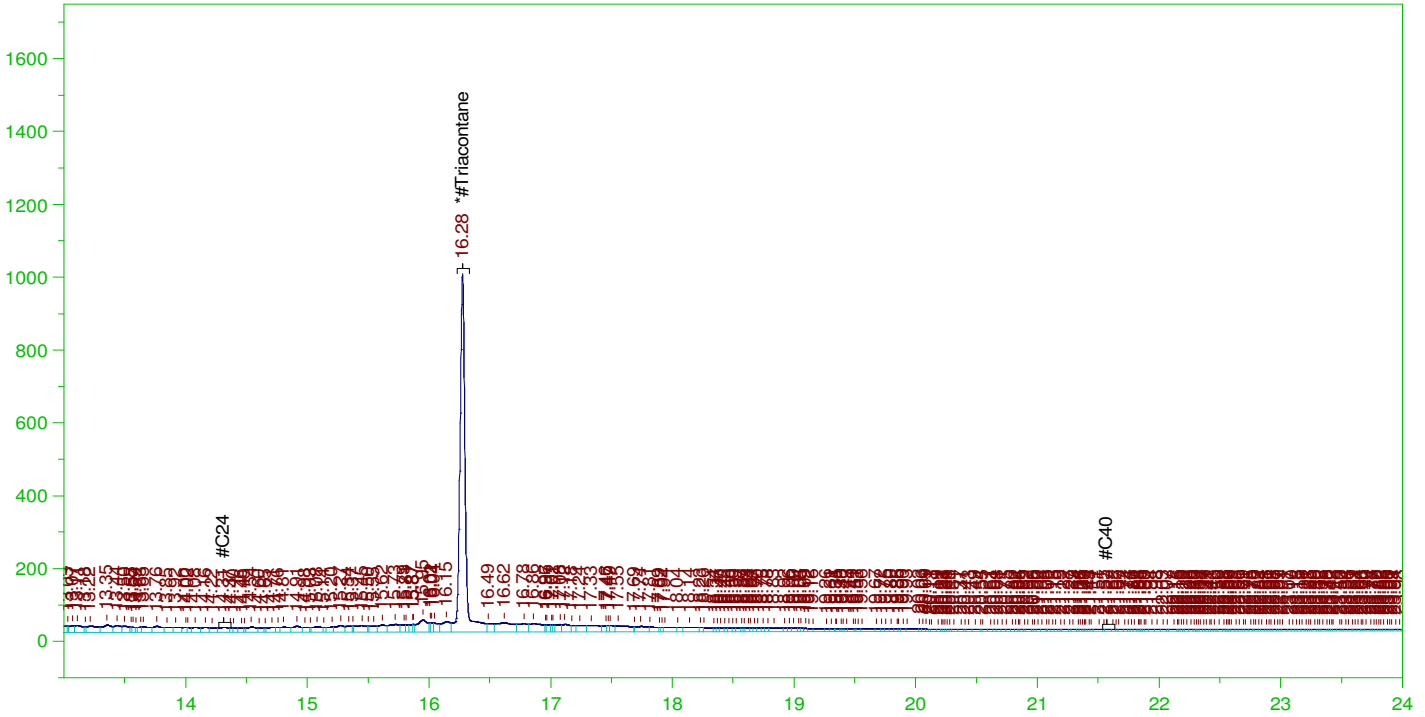
DRO Area:1.247179E+07 DRO Amount: 0.3635122
 TEH Area:1.853819E+07 TEH Amount: 0.5403283

ERH2926 (SUMP ADIT 3)

Batch ID: 164941

G:\Org\HP5\DAT\HP5033122_b\0331HP5.0033.RAW

B22032035-016C ;0331HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-016C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\Org\HP5\DAT\HP5033122_b\0331HP5.0033.RAW
 Date & Time Acquired: 4/1/2022 7:57:20 AM
 Method File: G:\Org\HP5\Methods\D3_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.276	.476	.096	20.06

RRO Area:5005150 RRO AMOUNT: 0.1803932

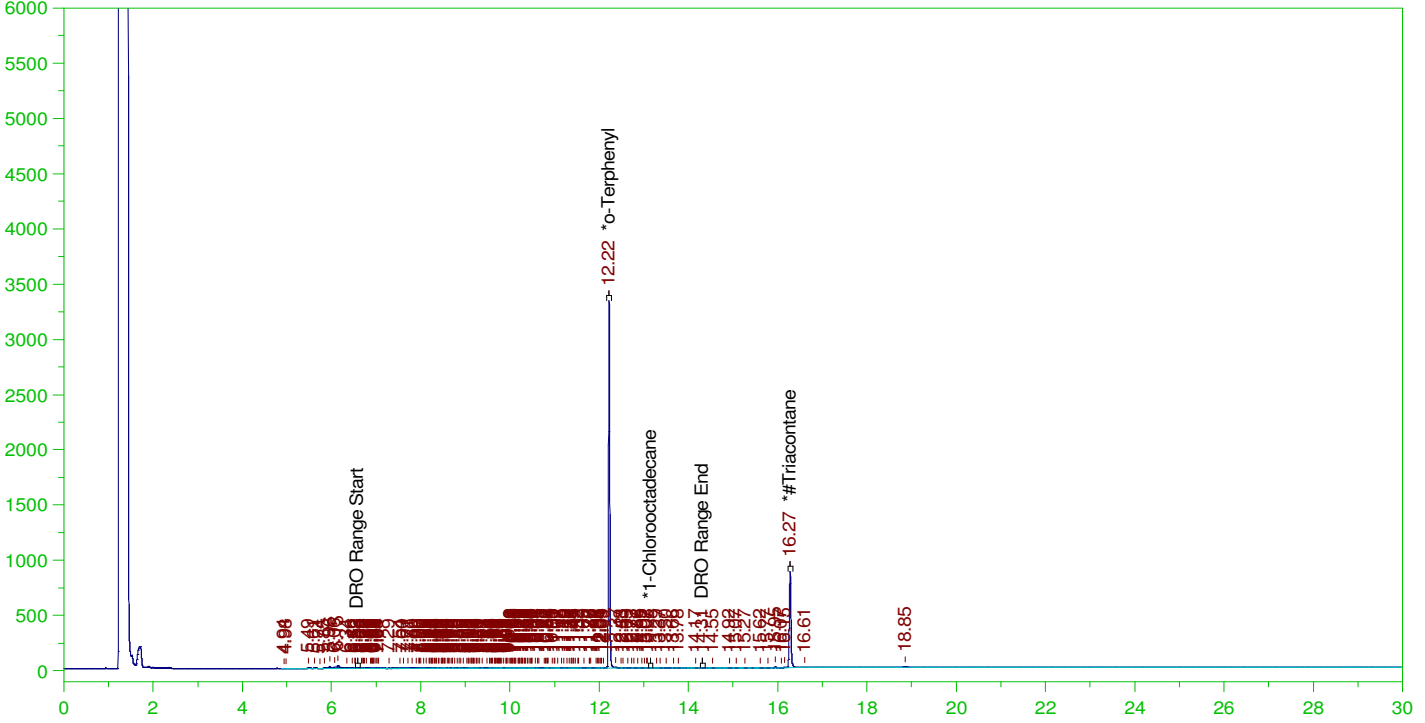


ERH2923 (RHMW2254-01 LF)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0025.RAW

B22032035-021C ;0331HP5 , \$HC-8015-DRO-W, SGT

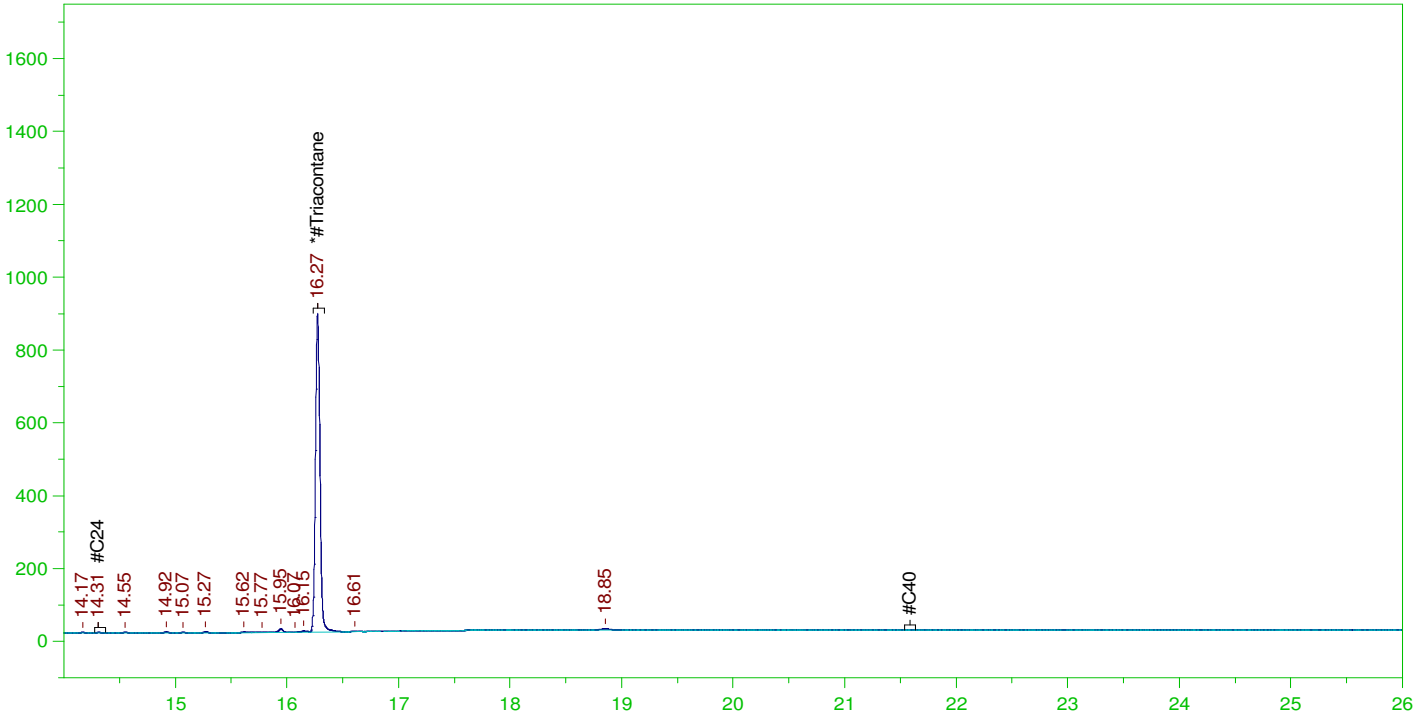


ERH2923 (RHMW2254-01 LF)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0025.RAW

B22032035-021C ;0331HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-021C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0025.RAW
 Date & Time Acquired: 4/1/2022 2:13:54 AM
 Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.275	.476	.079	16.59

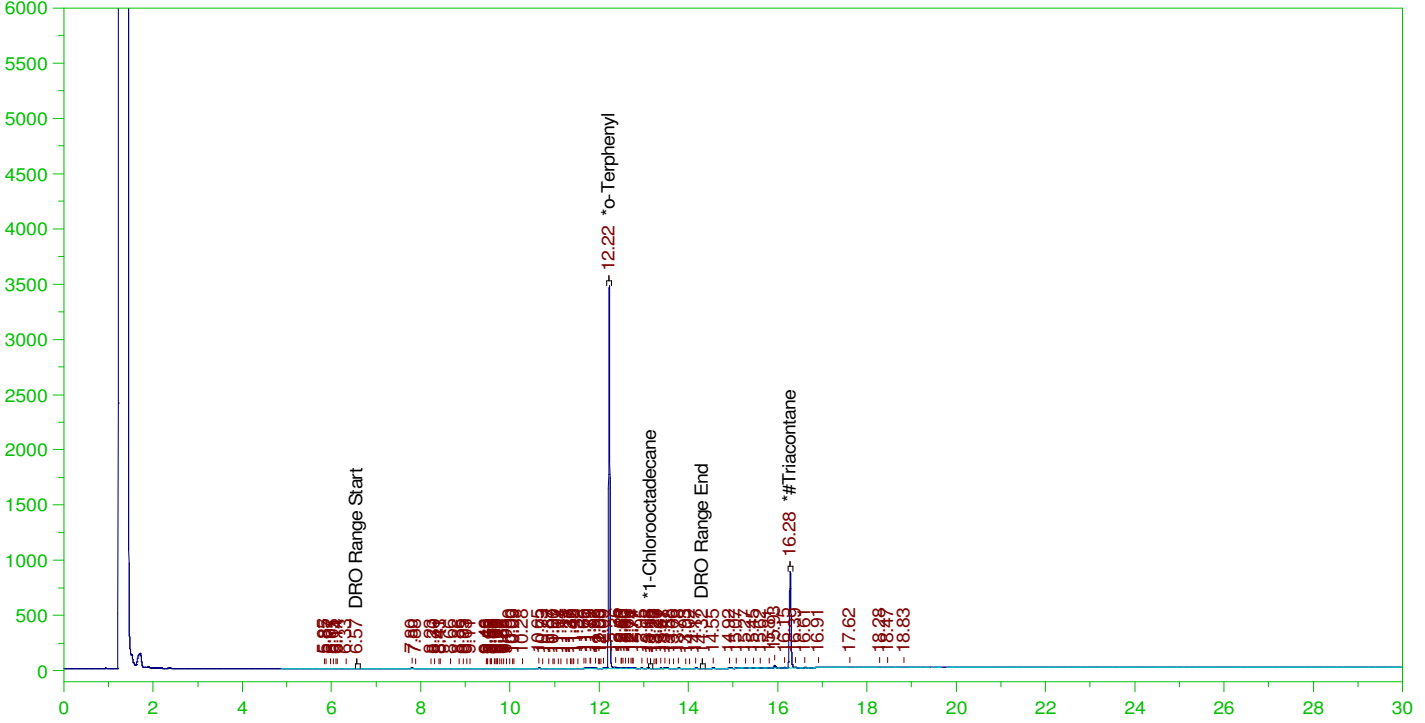
RRO Area:120643.3 RRO AMOUNT: 4.348167E-03

ERH2872 (RHMW12A)

Batch ID: 164941

G:\Org\HP5\DAT\HP5033122_b\0331HP5.0010.RAW

B22032035-026C ;0331HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-026C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\Org\HP5\DAT\HP5033122_b\0331HP5.0010.RAW
 Date & Time Acquired: 3/31/2022 3:29:55 PM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
 Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	.19	.176	92.57	-
*1-Chlorooctadecane	13.147	.19	.	.01	-
*#Triacontane	16.277	.19	.077	40.18	-

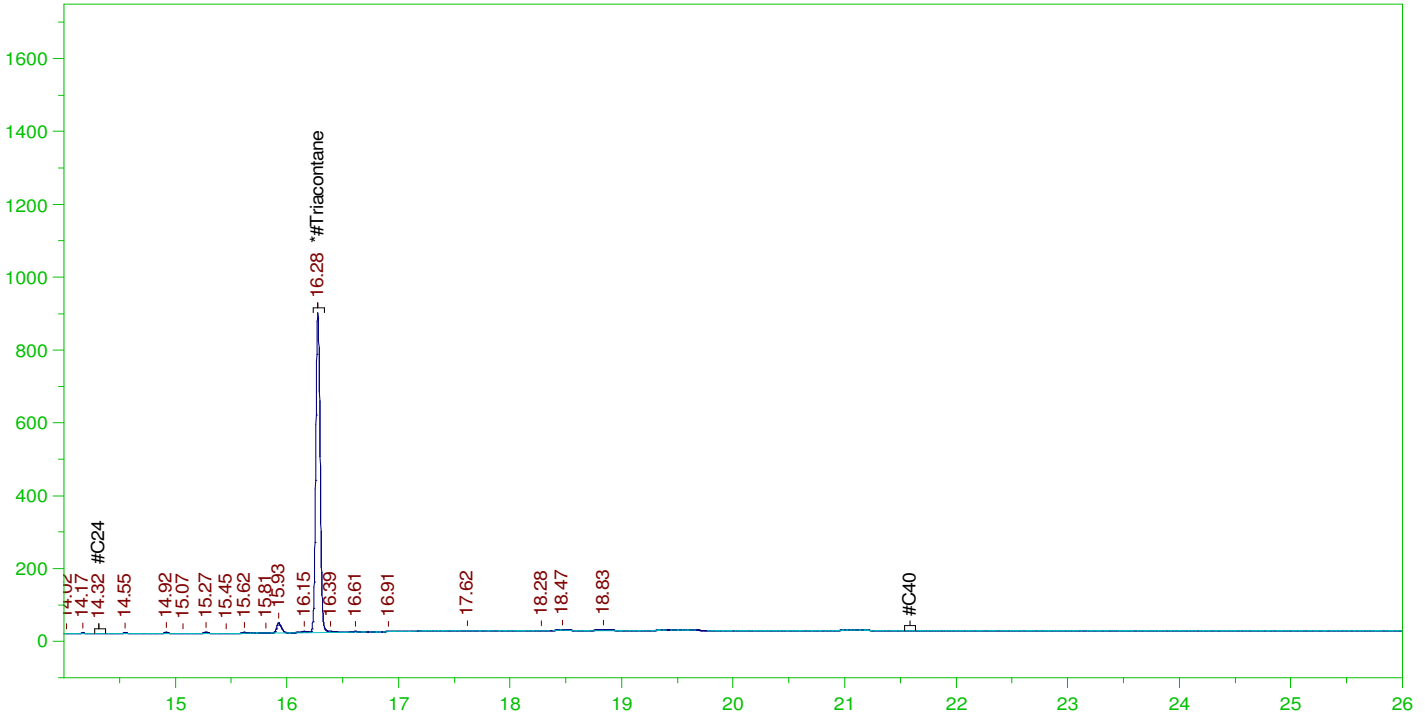
DRO Area:254503.8 DRO Amount: 7.417963E-03
 TEH Area:460383.3 TEH Amount: 1.341868E-02

ERH2872 (RHMW12A)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0010.RAW

B22032035-026C ;0331HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-026C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0010.RAW
 Date & Time Acquired: 3/31/2022 3:29:55 PM
 Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.277	.476	.077	16.07

RRO Area:172099.3 RRO AMOUNT: 6.202719E-03

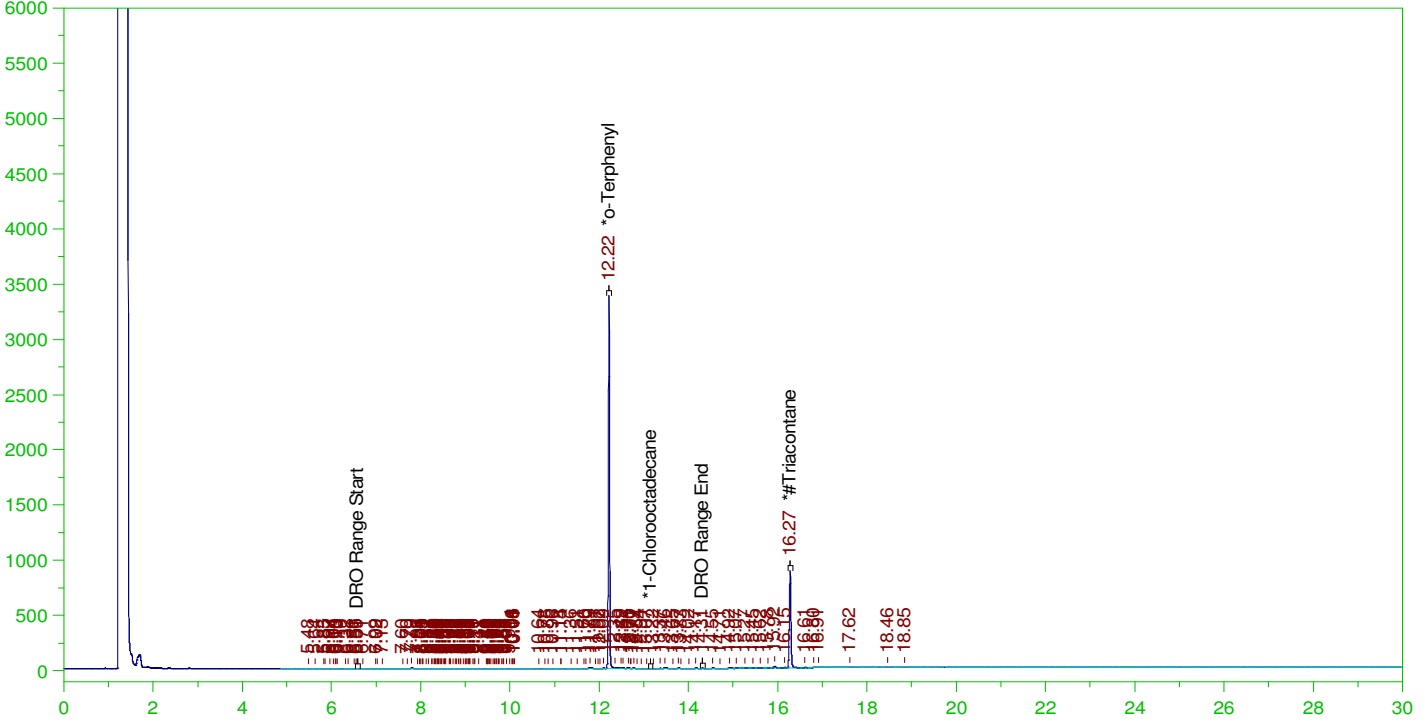


ERH2873 (RHMW12A FD)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0011.RAW

B22032035-027A ;0331HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-027A ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0011.RAW
 Date & Time Acquired: 3/31/2022 4:12:45 PM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
 Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.215	.19	.174	91.28	-
*1-Chlorooctadecane	29.984	.19	.	.	-
*#Triacontane	16.275	.19	.077	40.26	-

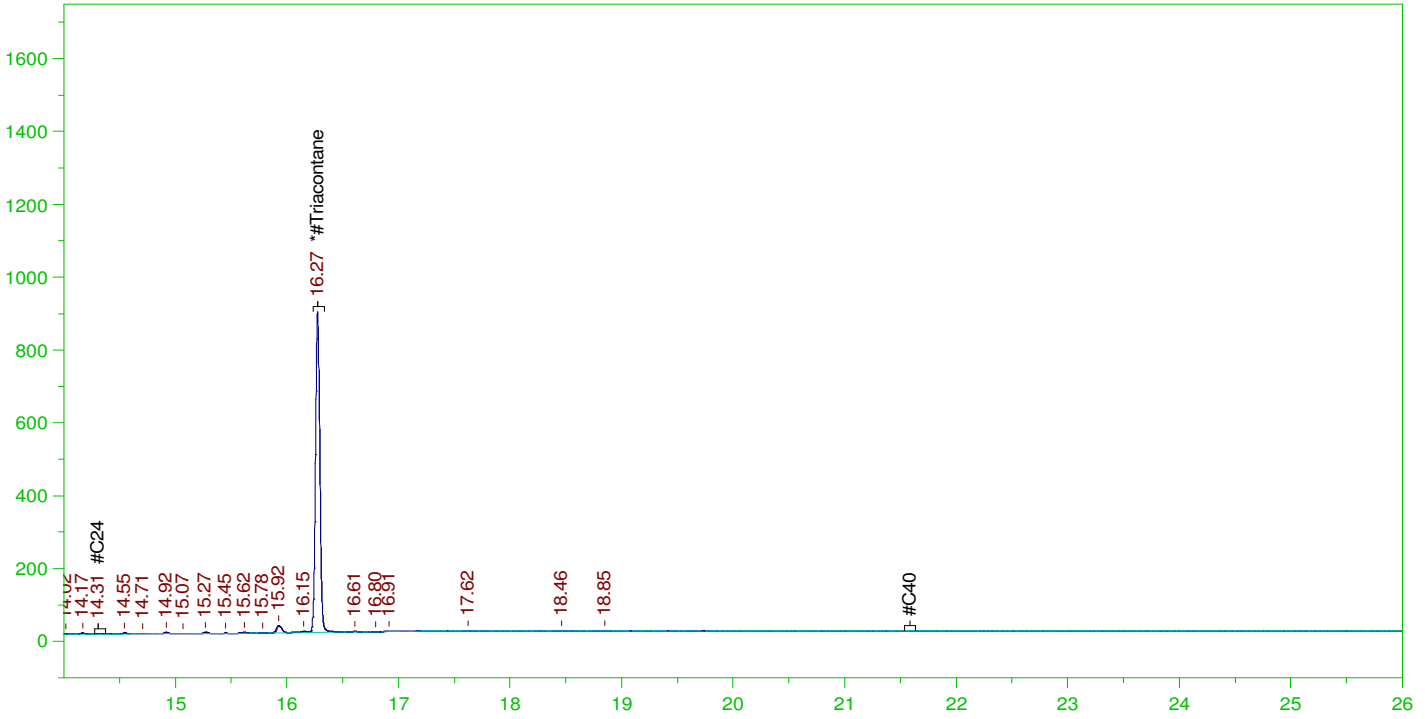
DRO Area:279902.2 DRO Amount: 8.158242E-03
 TEH Area:468159.9 TEH Amount: 1.364534E-02

ERH2873 (RHMW12A FD)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0011.RAW

B22032035-027A ;0331HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-027A ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0011.RAW
 Date & Time Acquired: 3/31/2022 4:12:45 PM
 Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.275	.476	.077	16.1

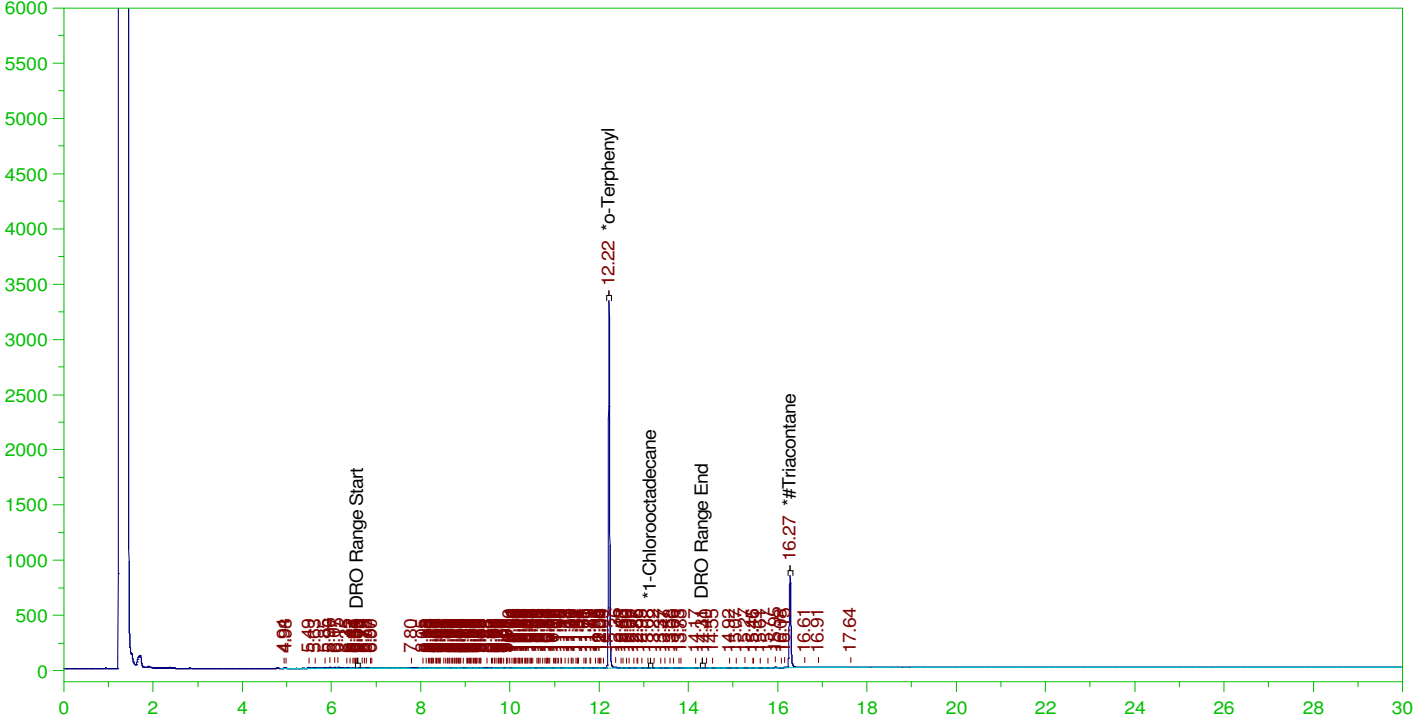
RRO Area:148813.6 RRO AMOUNT: 5.363468E-03

ERH2892 (RHMW16)

Batch ID: 164941

G:\Org\HP5\DAT\HP5033122_b\0331HP5.0026.RAW

B22032035-032C ;0331HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-032C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0026.RAW
 Date & Time Acquired: 4/1/2022 2:56:57 AM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
 Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.217	.19	.176	92.59	-
*1-Chlorooctadecane	29.985	.19	.	.	-
*#Triacontane	16.273	.19	.077	40.23	-

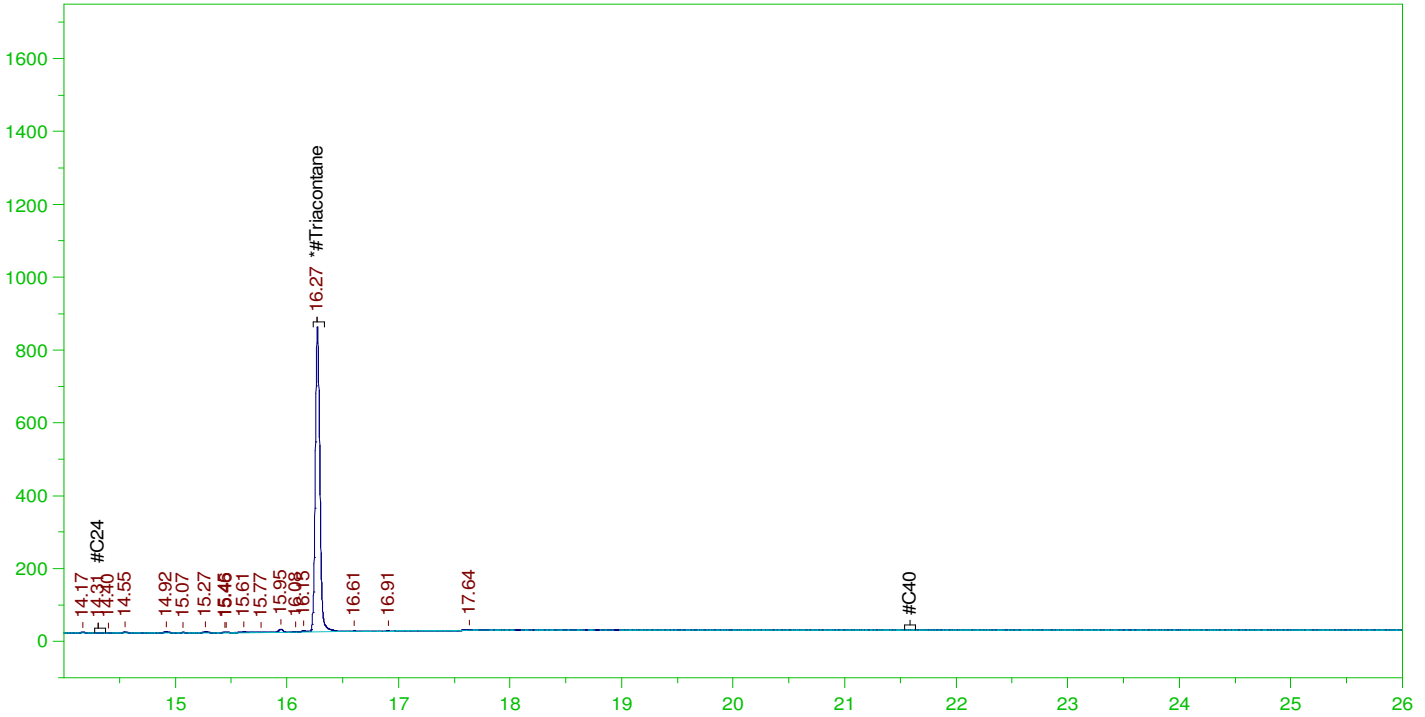
DRO Area:353967.1 DRO Amount: 1.031699E-02
 TEH Area:583296.2 TEH Amount: 1.700119E-02

ERH2892 (RHMW16)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0026.RAW

B22032035-032C ;0331HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-032C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0026.RAW
 Date & Time Acquired: 4/1/2022 2:56:57 AM
 Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.273	.476	.077	16.09

RRO Area:87453.67 RRO AMOUNT: 3.151963E-03

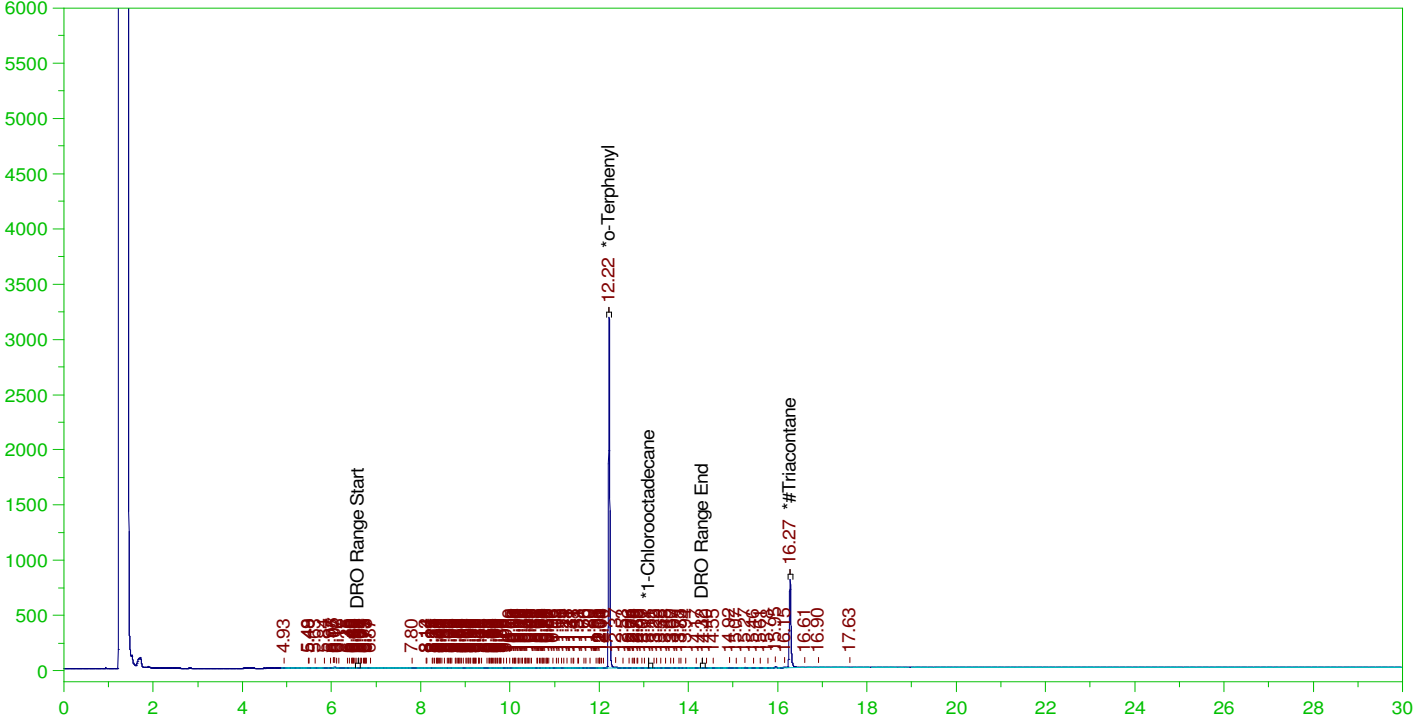


ERH2893 (RHMW16 FD)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0027.RAW

B22032035-033A ;0331HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-033A ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0027.RAW
 Date & Time Acquired: 4/1/2022 3:40:00 AM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
 Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.219	.19	.171	89.7	-
*1-Chlorooctadecane	13.108	.19	.	.06	-
*#Triacontane	16.274	.19	.073	38.37	-

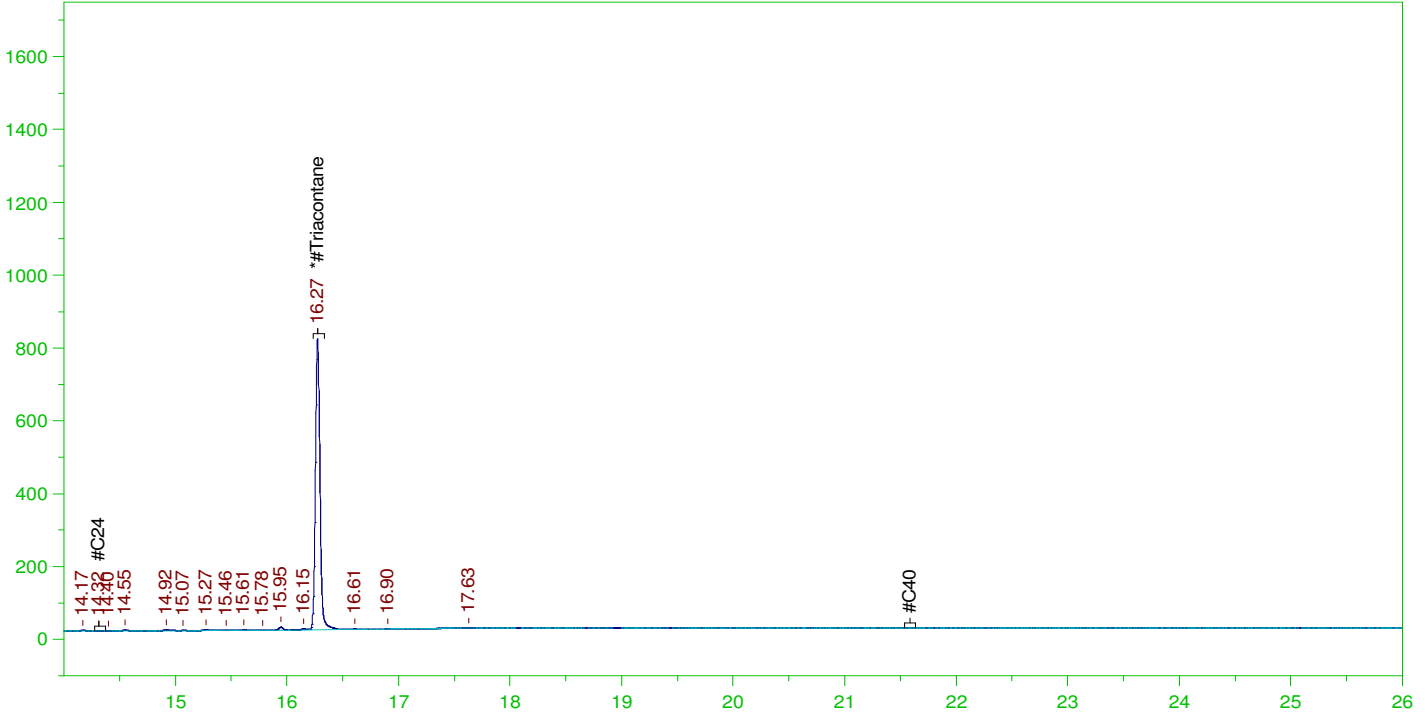
DRO Area:336385.4 DRO Amount: 9.804547E-03
 TEH Area:524490.2 TEH Amount: 1.528719E-02

ERH2893 (RHMW16 FD)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0027.RAW

B22032035-033A ;0331HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-033A ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0027.RAW
 Date & Time Acquired: 4/1/2022 3:40:00 AM
 Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.274	.476	.073	15.35

RRO Area:85164.48 RRO AMOUNT: 3.069457E-03

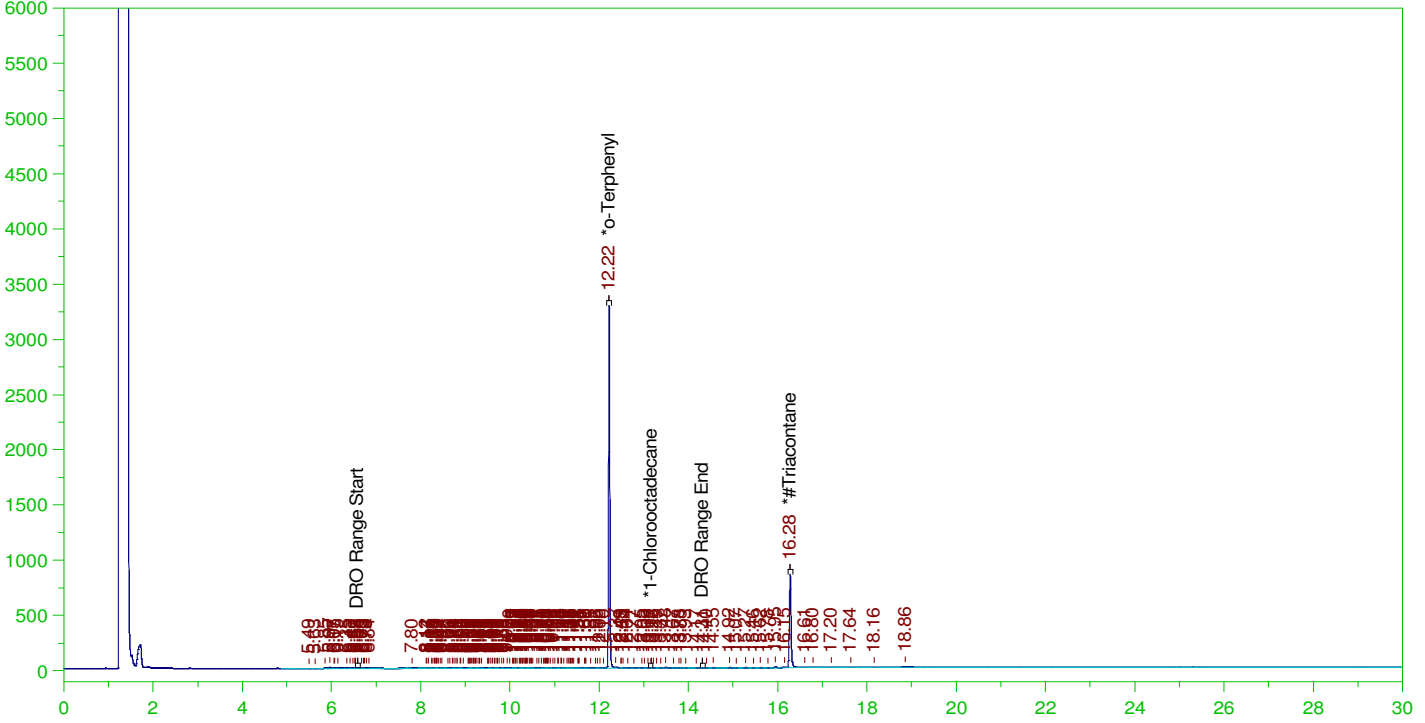


ERH2929 (RHMW11-05)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0029.RAW

B22032035-038C ;0331HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-038C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0029.RAW
 Date & Time Acquired: 4/1/2022 5:05:57 AM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
 Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.22	.19	.175	92.13	-
*1-Chlorooctadecane	13.167	.19	.	.01	-
*#Triacontane	16.276	.19	.078	40.94	-

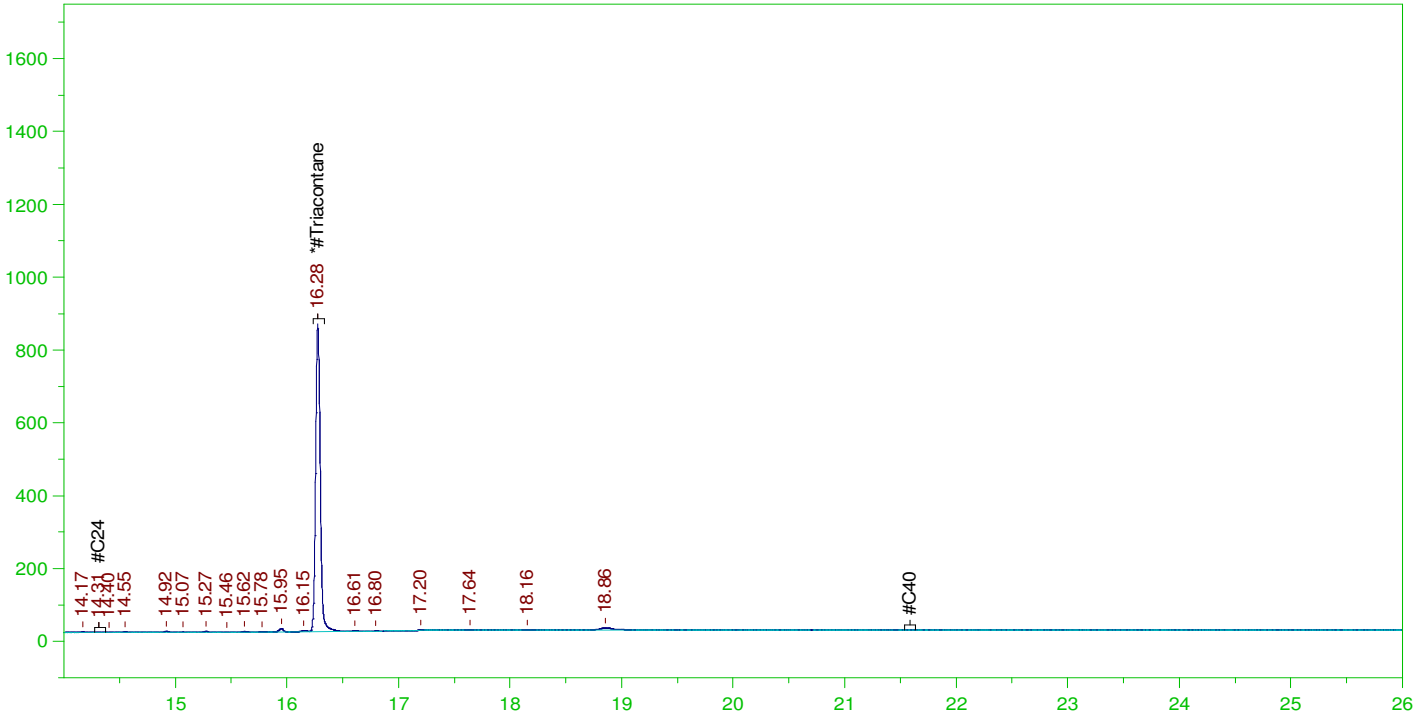
DRO Area:388267.6 DRO Amount: 1.131674E-02
 TEH Area:638646.4 TEH Amount: 1.861448E-02

ERH2929 (RHMW11-05)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0029.RAW

B22032035-038C ;0331HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-038C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0029.RAW
 Date & Time Acquired: 4/1/2022 5:05:57 AM
 Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.276	.476	.078	16.37

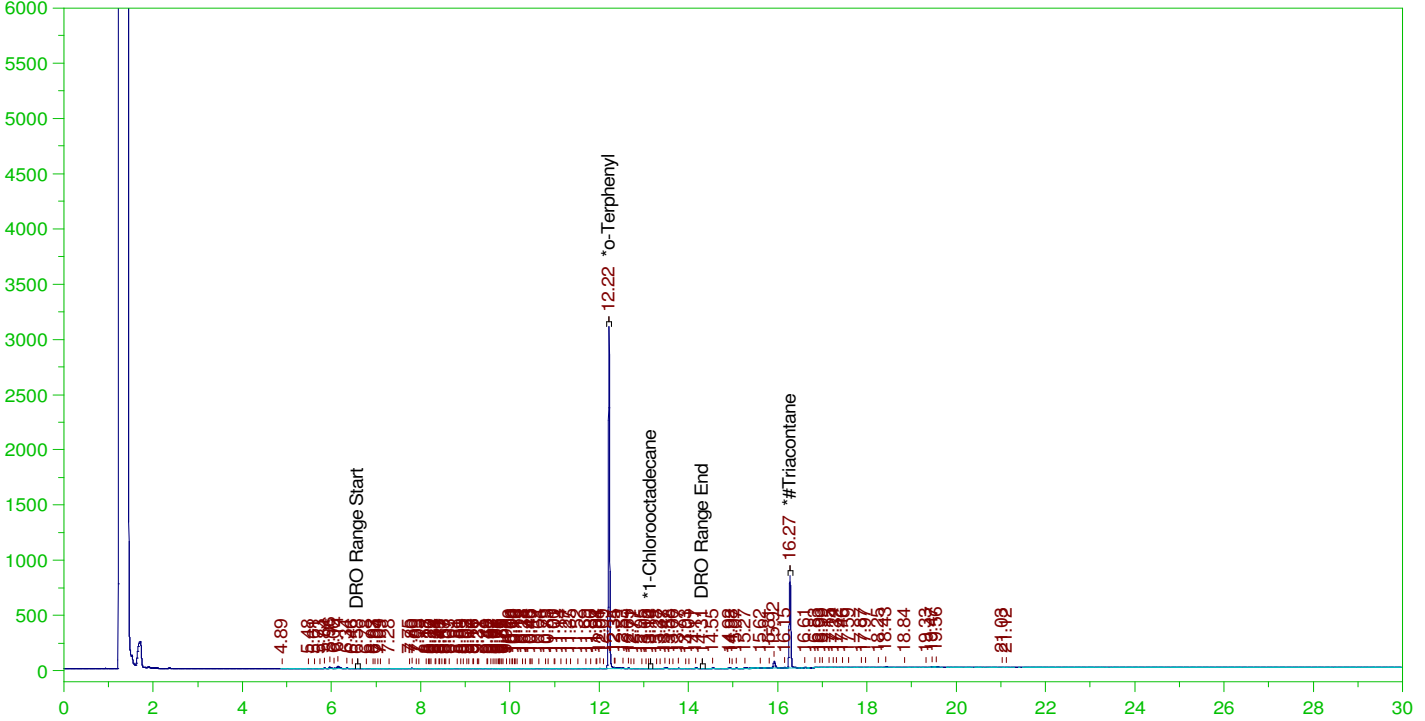
RRO Area:142659.9 RRO AMOUNT: 5.141678E-03

ERH2897 (OWDFMW05A)

Batch ID: 164941

G:\Org\HP5\DAT\HP5033122_b\0331HP5.0023.RAW

B22032035-058C ;0331HP5 , \$HC-8015-DRO-W, SGT

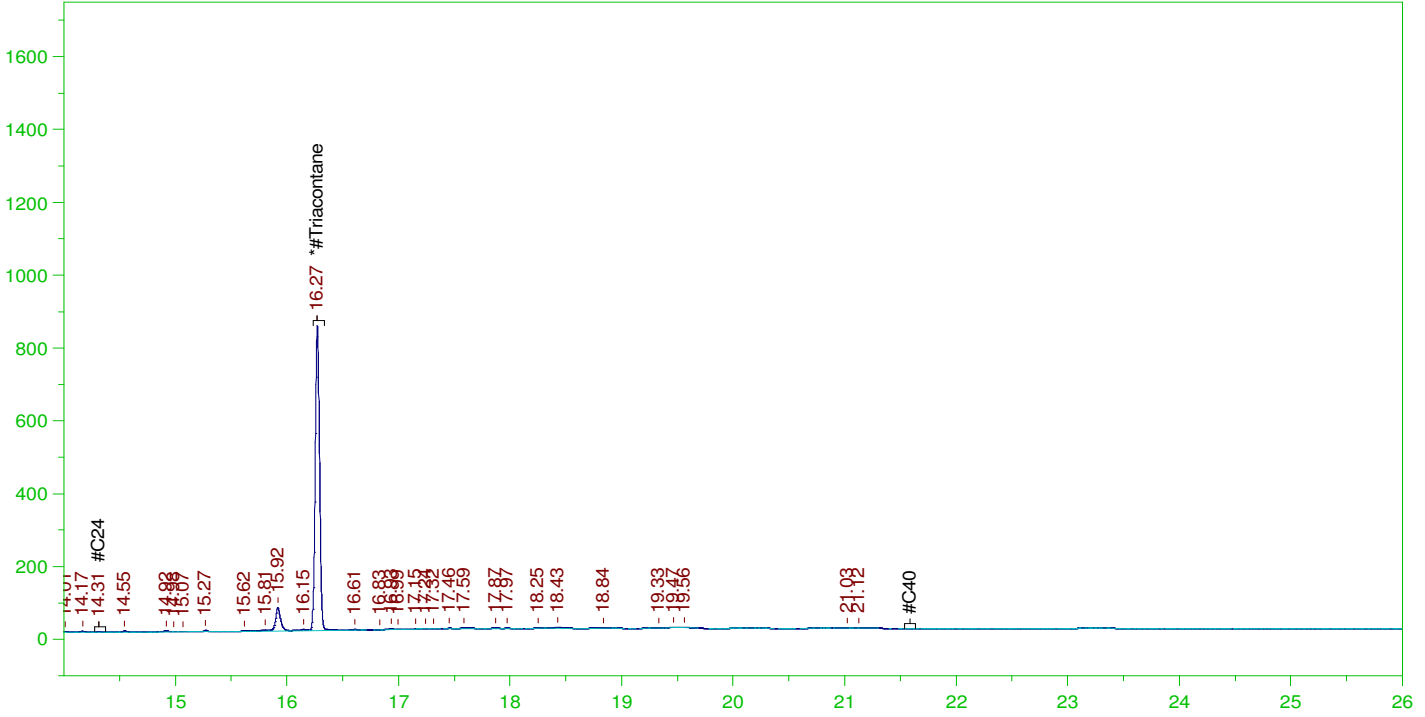


ERH2897 (OWDFMW05A)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0023.RAW

B22032035-058C ;0331HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-058C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0023.RAW
 Date & Time Acquired: 4/1/2022 12:47:43 AM
 Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.272	.476	.073	15.27

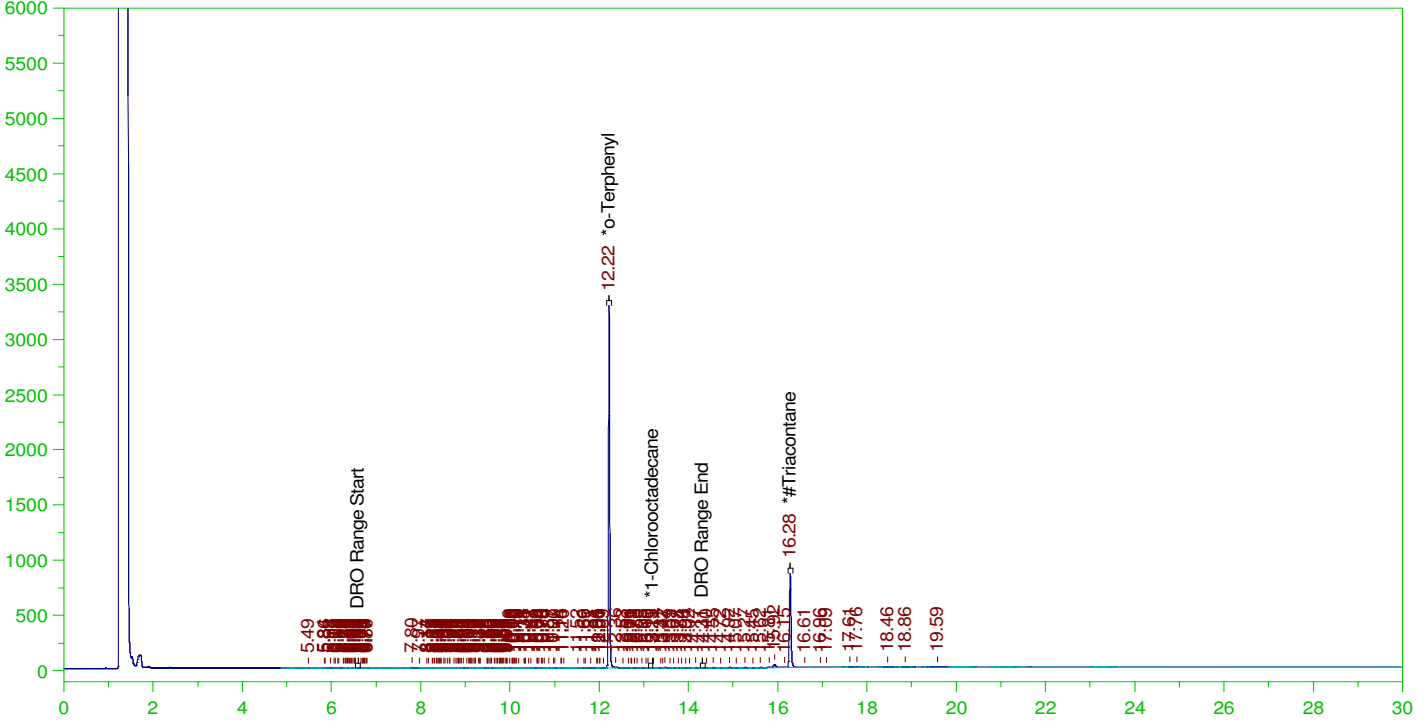
RRO Area:339007.8 RRO AMOUNT: 1.221836E-02

ERH2903 (RHMW08)

Batch ID: 164941

G:\Org\HP5\DAT\HP5033122_b\0331HP5.0030.RAW

B22032035-063C ;0331HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22032035-063C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\Org\HP5\DAT\HP5033122_b\0331HP5.0030.RAW
 Date & Time Acquired: 4/1/2022 5:48:54 AM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-JM-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JM-C24-T.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 32675.36
 Rt range for Diesel Range Organics: 6.54 to 14.375

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.218	.19	.176	92.29	-
*1-Chlorooctadecane	13.193	.19	.	.01	-
*#Triacontane	16.276	.19	.076	39.94	-

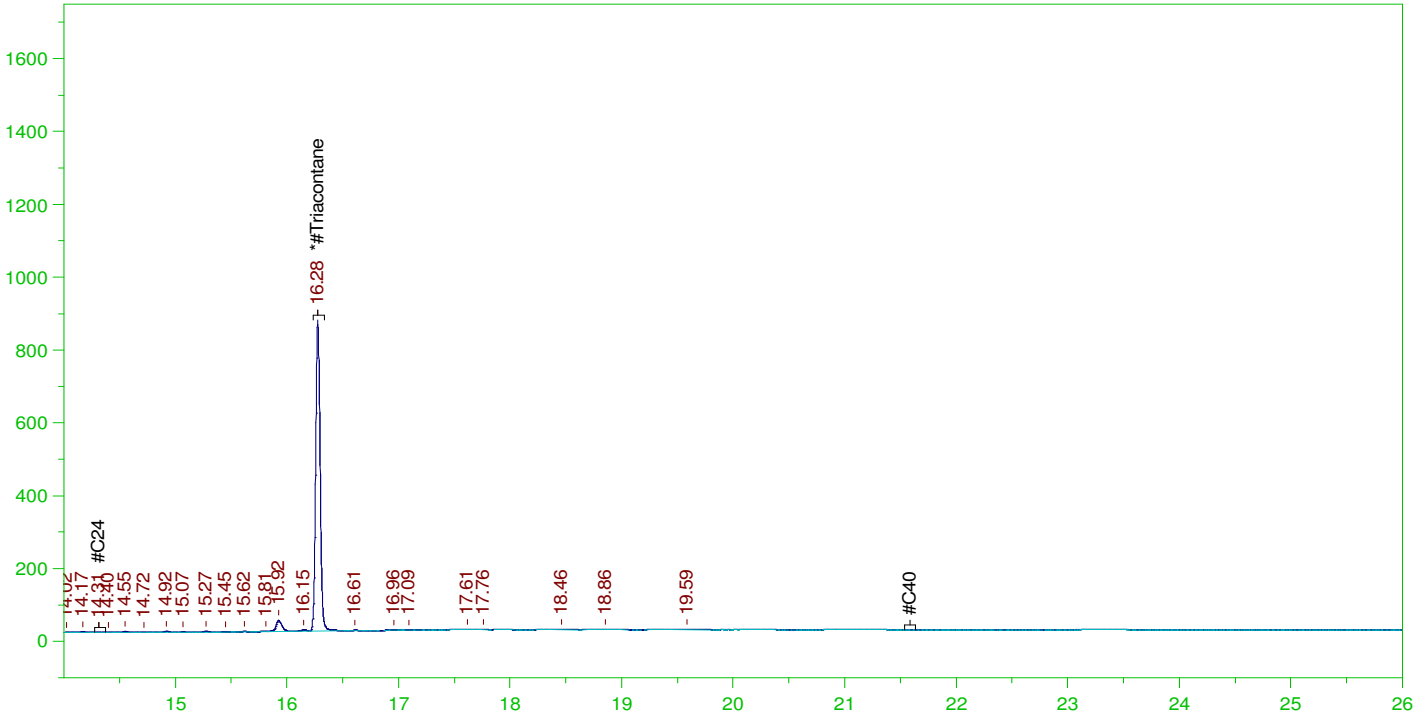
DRO Area:305666.2 DRO Amount: 8.909181E-03
 TEH Area:608477.3 TEH Amount: 1.773514E-02

ERH2903 (RHMW08)

Batch ID: 164941

G:\org\HP5\DAT\HP5033122_b\0331HP5.0030.RAW

B22032035-063C ;0331HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22032035-063C ;0331HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5033122_b\0331HP5.0030.RAW
 Date & Time Acquired: 4/1/2022 5:48:54 AM
 Method File: G:\Org\HP5\Methods\DR_OROS-BM-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BM_SAMP.CAL
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
 Rt range for Residual Range Organics: 14.275 to 21.635

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.276	.476	.076	15.97

RRO Area:236972.1 RRO AMOUNT: 8.540834E-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
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M +1-808-389-5383
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From: Tabitha Edwards <tedwards@energylab.com>
Sent: Monday, December 13, 2021 7:05 AM
To: Ramos, Alethea <alethea.ramos@aecom.com>
Cc: Pascua, Margie <Margie.Pascua@aecom.com>; billingsPM@energylab.com
Subject: [EXTERNAL] FW: CV18F0126: Expedited NOI Groundwater Samples, Saturday 12/12 Submission
Importance: High

Alethea,

The TOC by 9060 must be subcontracted to our office in Casper, WY. I need authorization from you to subcontract these. Once that has been received we will discuss the TAT with them and let you know what is achievable.

Thank you,

Energy Laboratories, Inc.

Trust our People. Trust our Data.

Tabitha Edwards | Office Manager | Billings, MT

O: 406-869-6286 | tedwards@energylab.com | www.energylab.com

This transmission may contain confidential information and is for the use of the intended recipient(s). If you received this in error, please contact the sender and delete this email and all copies.

***We want to help you ship successfully!** Please plan ahead and allow extra time to receive supplies from the lab and for the lab to receive your samples. All carriers are in full-swing holiday peak season operating with double the volume and limited capacity. We appreciate your business so please contact your local branch or Project Manager to discuss adjustments to your shipping schedule or to ask questions.*

From: Ramos, Alethea [<mailto:alethea.ramos@aecom.com>]

Sent: Saturday, December 11, 2021 3:20 AM

To: Shari Endy; billingsPM@energylab.com

Cc: Jillian Miller; Pascua, Margie; KaaihiliChoy, Terri Ann

Subject: CV18F0126: Expedited NOI Groundwater Samples, Saturday 12/12 Submission

Importance: High

Hi Shari and Billings PM,

You will be receiving a Saturday shipment (12/12) of groundwater samples indicated in the attached COCs. We will need results by **Wednesday, December 15th**, and will pay any fees incurred for an expedited TAT. Please proceed with analysis without preservation traceability. Please see below tracking information links:

<https://www.fedex.com/fedextrack/?trknbr=287337969629&trkqual=2459558000~287337969629~FX>

<https://www.fedex.com/fedextrack/?trknbr=287343101019&trkqual=2459559000~287343101019~FX>

Thank you,

Alethea Ramos, CIH

Environmental Scientist, Environmental Health & Science, Environment

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