ANALYTICAL SUMMARY REPORT

March 04, 2022

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

Work Order: B22020962 Quote ID: 5912

Project Name: CV18F0126, 60571032.02.46.01

Energy Laboratories Inc Billings MT received the following 31 samples from AECOM - Honolulu on 2/12/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Received Date	Matrix	Test
B22020962-001	ERH2524 (OWDFMW07A)	02/09/22 17:45	02/12/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Low Level PAH by 8270C SIM SW8270CSIM Separatory Funnel SW3510C Liquid-Liquid Ext. 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 Semi-Volatile Organic Compounds, Extended List SW8270C SW8011 Microextraction
B22020962-002	ERH2523 (Trip Blank) 14694	02/09/22 17:45	02/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C
B22020962-004	ERH2523 (Trip Blank) 14733	02/09/22 17:45	02/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22020962-005	ERH2523 (Trip Blank) 14709	02/09/22 17:45	02/12/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22020962-006	ERH2531 (RHMW01R)	02/10/22 13:25	02/12/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Low Level PAH by 8270C SIM SW8270CSIM Separatory Funnel SW3510C Liquid-Liquid Ext. 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 Semi-Volatile Organic Compounds, Extended List SW8270C SW8011 Microextraction
B22020962-007	ERH2530 (Trip Blank) 14694	02/10/22 13:25	02/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C
B22020962-009	ERH2530 (Trip Blank) 14653	02/10/22 13:25	02/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22020962-010	ERH2530 (Trip Blank) 14663	02/10/22 13:25	02/12/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22020962-011	ERH2529 (RHMW19)	02/09/22 13:35	02/12/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Low Level PAH by 8270C SIM SW8270CSIM Separatory Funnel SW3510C Liquid-Liquid Ext. 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 Semi-Volatile Organic Compounds, Extended List SW8270C SW8011 Microextraction
B22020962-012	ERH2528 (Trip Blank) 14694	02/09/22 13:35	02/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C

ANALYTICAL SUMMARY REPORT

B22020962-014	ERH2528 (Trip Blank) 14733	02/09/22 13:35	02/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22020962-015	ERH2528 (Trip Blank) 14709	02/09/22 13:35	02/12/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22020962-016	ERH2535 (RHMW2254-01) Low Flow	02/10/22 13:50	02/12/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Low Level PAH by 8270C SIM SW8270CSIM Separatory Funnel SW3510C Liquid-Liquid Ext. 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 Semi-Volatile Organic Compounds, Extended List SW8270C SW8011 Microextraction
B22020962-017	ERH2534 (Trip Blank) 14765	02/10/22 13:50	02/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22020962-018	ERH2534 (Trip Blank) 14754	02/10/22 13:50	02/12/2022	Trip Blank	Gasoline Range Organics SW8015C
B22020962-019	ERH2534 (Trip Blank) 14833	02/10/22 13:50	02/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22020962-020	ERH2534 (Trip Blank) 14808	02/10/22 13:50	02/12/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22020962-021	ERH2533 (RHMW2254-01-Bailer)	02/10/22 13:00	02/12/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Low Level PAH by 8270C SIM SW8270CSIM Separatory Funnel SW3510C Liquid-Liquid Ext. 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 Semi-Volatile Organic Compounds, Extended List SW8270C SW8011 Microextraction
B22020962-022	ERH2532 (Trip Blank) 14694	02/10/22 13:00	02/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C
B22020962-024	ERH2532 (Trip Blank) 14733	02/10/22 13:00	02/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22020962-025	ERH2532 (Trip Blank) 14709	02/10/22 13:00	02/12/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22020962-026	ERH2537 (Sump Adit 3)	02/10/22 14:50	02/12/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Low Level PAH by 8270C SIM SW8270CSIM Separatory Funnel SW3510C Liquid-Liquid Ext. 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 Semi-Volatile Organic Compounds, Extended List SW8270C SW8011 Microextraction
B22020962-027	ERH2536 (Trip Blank) 14833	02/10/22 14:50	02/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22020962-028	ERH2536 (Trip Blank) 14754	02/10/22 14:50	02/12/2022	Trip Blank	Gasoline Range Organics SW8015C

ANALYTICAL SUMMARY REPORT

B22020962-029	ERH2536 (Trip Blank) 14833	02/10/22 14:50	02/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22020962-030	ERH2536 (Trip Blank) 14808	02/10/22 14:50	02/12/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22020962-031	ERH2526 (OWDFMW08A)	02/09/22 13:30	02/12/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Low Level PAH by 8270C SIM SW8270CSIM Separatory Funnel SW3510C Liquid-Liquid Ext. 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 Semi-Volatile Organic Compounds, Extended List SW8270C SW8011 Microextraction
B22020962-032	ERH2527 (OWDFMW08A-FD)	02/09/22 13:30	02/12/2022	Ground Water	DRO-Liquid-Liquid Extraction SW3520C Low Level PAH by 8270C SIM SW8270CSIM Separatory Funnel SW3510C Liquid-Liquid Ext. 8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Semi-Volatile Organic Compounds, Extended List SW8270C
B22020962-033	ERH2525 (Trip Blank) 14694	02/09/22 13:30	02/12/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C
B22020962-035	ERH2525 (Trip Blank) 14694	02/09/22 13:30	02/12/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction

ANALYTICAL SUMMARY REPORT

B22020962-036	ERH2525 (Trip Blank) 14709	02/09/22 13:30	02/12/2022	Trip Blank	Headspace Gas Analysis SW8015M

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

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

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

Report Approved By:

Cindy Rohrer
Laboratory Manager

Digitally signed by Cindy Rohrer
Date: 2022.03.04 18:36:18 -07:00

CLIENT: AECOM - Honolulu
Project: CV18F0126, 60571032.02.46.01
Work Order: B22020962

Report Date: 3/4/2022

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 SW9060A associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, PO Box 247, Casper, WY, EPA Number WY00002.

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

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

Analysis Specific Comments:

An Analytical QC Exceptions Report has been attached, summarizing all qualified QC results. Where qualified, an analyte exceeded quality control limits, but was not detected in the associated sample(s).

EPA 8260B:

The following samples had a slightly high recovery for surrogate 1,2-Dichloroethane-d4. This recovery was above the QSM 5.3 recovery limits but within EPA 8260B method defined limits. Re-analysis of a second vial produced similar results.

ERH2531 (RHMW01R) (B22020962-006)
ERH2529 (RHMW19) (B22020962-011)
ERH2528 (Trip Blank) 14694 (B22020962-012)
ERH2535 (RHMW2254-01) Low Flow (B22020962-016)

EPA 8260B and EPA 8015C GRO:

Sample ERH2528 (Trip Blank) 14694 (B22020962-012) - Headspace was not noted at sample receipt, but prior to analysis the sample contained headspace gas bubbles > 1/4 inch in diameter.

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Chain of Custody & Analytical Request Record

COC # 022022-10-NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

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

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City, State, Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email

Special Report/Formats:
☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other_____

Comments

1. Project performed under DoD QSM
2 TPH-d/o needs 3520 extraction.
3 Preliminary data (or Level 1) in 1-2 business days; Level IV report in 10 working days.
4 Note NOI log is separate from other COC's
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Jorge Villalobos
Sampler Phone	224-645-7832
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.
Analysis: TOC — Subcontract Lab: Energy Laboratories Inc., Casper

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

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2524 (OWDFMW07A)	2/9/2022	13:45	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	B220209602001
2	ERH2523 (Trip Blank)	2/9/2022	13:30	8	WQ	✔	✔	✔	✔							X	-002
3	TB 8260 14694			2													-002
4	TB GRO 14733			1													-003
5	TB 8011 14733			1													-004
6	TB 14709 Methane			2													-005
7	TB 14705	02/10/22		2													-039
8																	
9																	

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Alex Edmonds	2/10/22 1431				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richel Schiller	2/12/22 12:00	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check_____	Amount $	Receipt Number (cash/check only)
				0.					

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 # 022022-13-NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

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

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City, State, Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email

Special Report/Formats: ☒LEVEL IV ☐NELAC ☒EDD/EDT (contact laboratory) ☐Other

Comments

1. Project performed under DoD QSM
2. TPH-d/o needs 3520 extraction
3. Preliminary data (or Level 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's
5 *SVOC/VOC (full suite), PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

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

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

All turnaround times are standard unless marked as RUSH.

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270SIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2531 (RHMW01R)	02/10/22	0925	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	B22020962-006
2	ERH2530 Trip Blank	02/10/22	0920	8	WQ	✔	✔	✔	✔							X	
3																	
4	TB-14694-(8260)	2/10/2022		1													-007
5	TB-14694-(GRO)			1													-008
6	TB-14653-(8011)			1													-009
7	TB-14663-(Methane)			2													-010
8	TB-14705-			2													-011
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
	Art Edmond	2/10/22 1430				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Rachel Shelly	2/12/22 12:00	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)
				0.3 °C	Y N	Y N			

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

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Chain of Custody & Analytical Request Record

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COC # 022022-09-NOI

DoD Samples Page 1 of 1

Account Information (Billing information)

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

Report Information (if different than Account Information)

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

Comments

1 Project performed under DoD QSM
2 TPH-d/o needs 3520 extraction.
3 Preliminary data (or Level 1) in 1-2 business days, Level IV report in 10 working days.
4 Note: NOI log is separate from other COC's.
5. *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Gavin Murray
Sampler Phone	808 9873201
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

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

Analysis Requested

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	SVOCs (full suite+Nap, 1-2- ...)	EPA 3630/8015 TPH-d/o SGC[1L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
1	ERH2529 (RHMW19)	02/09/22	0935	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	B22020962-1A
2	ERH2528 (Trip Blank)	02/09/22	0925	8	QW	✔	✔	✔	✔							X	
3																	
4	TB: 14694 (8260)			2													-012A
5	TB 14733 (GRO)			1													-013A
6	TB 14735 (8011) QW 02/11/22			1													-014A
7	TB 14709 (Methane)			2													-015A
8	TB 14705			2													-040A
9	TB 2/14/22																

All turnaround times are standard unless marked as RUSH.

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

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Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Alex Bamonti	2/10/22 1430	[signature]			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard Shields	2/12/22 12:00	[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	0.9 °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 # 022022-15-NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

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

Report Information (if different than Account Information)

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

Comments

1 Project performed under DoD QSM.
2 TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level 1) in 1-2 business days, Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's
5 *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

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

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOCs (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2535 (RHMW2254-01) Low flow	2/10/22	0950	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	B220209102-016
2	ERH2534 (Trip Blank)	2/10/22	0855	8	WQ	✔	✔	✔	✔							X	-017-018-019-020
3	TB (8260) - 14765			1													-017
4	TB (GRO) - 14759			2													-018
5	TB (8011) - 14833			2													-019
6	TB (Methane) - H808 2/10/22			2													-020
7	~~TB - 14833~~ TB 2/11/22			1													
8																	
9																	

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

Custody Record MUST be signed	Relinquished by (print) Alex Edmonds	Date/Time 2/10/22 1500	Signature	Received by (print)	Date/Time	Signature
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print) Richard S.L.V	Date/Time 2/12/22 1200	Signature

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 0.2 °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 # 022022-14-NOI

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DoD Samples Page 1 of 1

Account Information (Billing Information)

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

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City, State, Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email

Special Report/Formats: ☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other_____

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level 1) in 1-2 business days; Level IV report in 10 working days.
4 Note NOI log is separate from other COC's.
5 *SVOC/VOC (full suite), PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

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

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

Analysis Requested

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
1 ERH2533 (RHMW2254-01- Bailer)	2/10/22	0900	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	2202094-02A
2 ERH2532 (~~RHMW2254-01~~) Trip Blank	2/10/22	0850	8	WQ	✔	✔	✔	✔							X	
3																
4 TB 14694 (8260)			2													-022A
5 TB 17433 (GRO)			1													-023A
6 TB 17433 (8011)			1													-024A
7 TB 14709 (Methane)			2													-025A
8 TB 14705			2													~~-026A~~ -026A
9 TB 2/14/22																TB 2/14/22

All turnaround times are standard unless marked as RUSH

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

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Alex Edmonds	2/10/22 1300				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Rachael Shultz	2/12/22 12:00	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp .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.

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Chain of Custody & Analytical Request Record

COC # 022022-16-NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

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

Report Information (if different than Account Information)

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

Comments

1. Project performed under DoD QSM
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level 1) in 1-2 business days, Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's
5 *SVOC/VOC (full suite), PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

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

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

All turnaround times are standard unless marked as RUSH.

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2537 (Sump Adit 3)	2/10/22	1050	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	32202062-026
2	ERH2536 (Trip Blank)	2/10/22	1040	8	WQ	✔	✔	✔	✔							X	
3																	
4	TB-14833 (8260)			2													-027
5	TB-14754 (6020)			2													-028
6	TB-14754 14833 (8011) DW	2/15/22		2													-029
7	TB-14808 (Methane) DW			2													-030
8	~~TB-148~~ DC 2/14/22																
9																	

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Alex Edmonds	2/10/22 1500				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard Shuck	2/12/22 12	

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)
				0.4	Y N	Y N			

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

Chain of Custody & Analytical Request Record

COC # 022022-11-NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

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

Report Information (if different than Account Information)

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

Comments

1. Project performed under DoD QSM
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level 1) in 1-2 business days, Level IV report in 10 working days
4. Note NOI log is separate from other COC's
5. *SVOC/VOC (full suite), PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

Project Name, PWSID, Permit, etc	CV18F0126, 60571032.02.46.01
Sampler Name	Jorge Villalobos
Sampler Phone	224-645-7537
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
1	ERH2526 (OWDFMW08A)	2/9/22	0930	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	B22020962-031
2	ERH2525 (Trip Blank)	2/9/22	0850	8	QC	✔	✔	✔	✔							X	-033, -031, -035, -036, -037, -038
3	ERH2527 (OWDFMW08A- FD)	2/9/22	0930	6	WQ	✔	✔									X	-032
4	~~ERH2525~~ TB (8260) - 14694			2													-033
5	TB (6RO) - 14694			1													-034
6	TB (8011) - 14694	do	02/10/22														-035
7	TB (Methane) - 14709	do		1													-036
8	TB - 14705			2													-037
9	TB - 14732 TB 2/10/22			1													-038

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Alex Edmonds	2/10/22 1430				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richard Shultz	2/12/22 12:00	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)
				0.9 °C	Y N	Y N			

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

ENERGY LABORATORIES
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Chain of Custody & Analytical Request Record

COC # 022022-12-NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

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

Report Information (if different than Account Information)

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

Comments

1 Project performed under DoD QSM
2 TPH-d/o needs 3520 extraction.
3 Preliminary data (or Level 1) in 1-2 business days; Level IV report in 10 working days.
4. Note: NOI log is separate from other COC's.
5 *SVOC/VOC (full suite); PAH SIM (naphthalene, 1-methylnaphthalene, 2-methylnaphthlene)

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46 01
Sampler Name	Jorge Villalobos
Sampler Phone	227-645-7832
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	SVOCs (full suite+Nap, 1-2-Methylnap) by 8270DSIM*	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2527 (OWDFMW08A FD)	02/09/22	0930	4	GW					✓	✓					X	B2202096 2-032A 032B
2																	
3																	
4																	
5		02/10/22															
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

	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
Custody Record MUST be signed	Alex Edmonds	2/10/22				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Richel Sloan	2/12/22 12:0	

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.

Work Order Receipt Checklist

AECOM - Honolulu

B22020962

Login completed by:	Tabitha Edwards	Date Received:	2/12/2022
Reviewed by:	BL2000\rshular	Received by:	rs4
Reviewed Date:	2/18/2022	Carrier name:	FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☑	No ☐	Not Present ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	°C On Ice		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	Not Applicable ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

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

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

Contact and Corrective Action Comments:

The Temperature Blank temperature for shipping container 1 was 0.1°C, shipping container 2 was 0.3°C, shipping container 3 was 0.9°C, shipping container 4 was 0.2°C, shipping container 5 was 1.0°C, shipping container 6 was 0.4°C, shipping container 7 was 0.9°C and shipping container 8 was 0.7°C.

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

One of the two phosphoric preserved containers for the Total Organic Carbon requested analysis was not received with the bottle order label on the containers for sample ERH2526 (OWDFMW08A). Preservative traceability is not available for this container. Proceeded with the requested analysis per Shari Endy, Energy Laboratories Project Manager.

Qualifiers and Abbreviations

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

Qualifiers and Abbreviations

Abbreviation

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

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

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2524 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-001
Collection Date: 02/09/2022 17:45
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
LOW LEVEL PAH BY 8270C SIM												
1-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.020		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.017		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Acenaphthene	ND	ug/L	1	U	0.10	0.048	0.030		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Acenaphthylene	ND	ug/L	1	U	0.10	0.048	0.024		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Anthracene	ND	ug/L	1	U	0.10	0.048	0.027		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.048	0.026		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.048	0.033		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.048	0.025		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Chrysene	ND	ug/L	1	U	0.10	0.048	0.044		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.048	0.035		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Fluorene	ND	ug/L	1	U	0.10	0.048	0.021		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.048	0.047		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Naphthalene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Phenanthrene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
Pyrene	ND	ug/L	1	U	0.10	0.048	0.023		SW8270CSIM	02/16/2022 19:33/jph	SV5975.I_220216A : 14	163724
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.29	mg/L	1	J	0.50	0.50	0.17		SW9060A	02/15/2022 16:23/eli-ca	SUB-C279755 : 4	C_R279755
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	02/18/2022 16:56/car	ICPMS207-B_220218B : 46	R374975
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00008		SW6020	02/18/2022 17:27/car	ICPMS207-B_220218B : 51	163745
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2524 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-001
Collection Date: 02/09/2022 17:45
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Surr: 1,2-Dichloroethane-d4	113.0	%REC	1		81-118				SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895

LABORATORY ANALYTICAL REPORT

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Client: AECOM - Honolulu
Client Sample ID: ERH2524 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-001
Collection Date: 02/09/2022 17:45
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Surr: Toluene-d8	100.0	%REC	1		89-112				SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
Surr: p-Bromofluorobenzene	101.0	%REC	1		85-114				SW8260B	02/15/2022 13:48/msc	VOA5975C.I_220215A : 8	R374895
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 18:03/clt	GECD.I_220216A : 13	163798
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	02/16/2022 18:03/clt	GECD.I_220216A : 13	163798
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/17/2022 18:05/jp	VARIAN1_220217A : 13	R374900
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/17/2022 18:05/jp	VARIAN1_220217A : 13	R374900
Surr: Trifluorotoluene	72.0	%REC	1		70-130				SW8015C	02/17/2022 18:05/jp	VARIAN1_220217A : 13	R374900
- 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	02/15/2022 17:26/amn	GCFID-HP5-B_220215A : 6	163748
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	02/16/2022 16:20/amn	GCFID-HP5-B_220215B : 6	163748
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	02/15/2022 17:26/amn	GCFID-HP5-B_220215A : 6	163748
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	02/16/2022 16:20/amn	GCFID-HP5-B_220215B : 6	163748
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	02/15/2022 17:26/amn	GCFID-HP5-B_220215A : 6	163748
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	02/16/2022 16:20/amn	GCFID-HP5-B_220215B : 6	163748
Surr: o-Terphenyl	100.0	%REC	1		56-125				SW8015C	02/15/2022 17:26/amn	GCFID-HP5-B_220215A : 6	163748
Surr: o-Terphenyl (SGT)	97.0	%REC	1		56-125				SW8015C	02/16/2022 16:20/amn	GCFID-HP5-B_220215B : 6	163748
Surr: n-Triacontane	109.0	%REC	1		50-150				SW8015C	02/15/2022 17:26/amn	GCFID-HP5-B_220215A : 6	163748
Surr: n-Triacontane (SGT)	99.0	%REC	1		50-150				SW8015C	02/16/2022 16:20/amn	GCFID-HP5-B_220215B : 6	163748
- 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	02/15/2022 10:33/jdw	FID-HEADSPACE_220215A : 5	R374776
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
1,2-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
1,3-Dichlorobenzene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
1,4-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
2,4-Dichlorophenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
2,4-Dimethylphenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
2,4-Dinitrophenol	ND	ug/L	1	U	10	9.5	4.1		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
2,4-Dinitrotoluene	ND	ug/L	1	U	10	4.8	2.9		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724

LABORATORY ANALYTICAL REPORT

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Client: AECOM - Honolulu
Client Sample ID: ERH2524 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-001
Collection Date: 02/09/2022 17:45
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Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
SEMI-VOLATILE ORGANIC COMPOUNDS												
2,6-Dinitrotoluene	ND	ug/L	1	U	10	4.8	3.0		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
2-Chloronaphthalene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
2-Chlorophenol	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
2-Nitrophenol	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	9.5	2.2		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
4-Chlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
4-Nitrophenol	ND	ug/L	1	U	10	9.5	2.4		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Azobenzene	ND	ug/L	1	U	10	4.8	1.0		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Butylbenzylphthalate	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Di-n-butyl phthalate	ND	ug/L	1	U	10	4.8	0.89		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Di-n-octyl phthalate	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Diethyl phthalate	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Dimethyl phthalate	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Hexachlorobenzene	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Hexachlorobutadiene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	4.8	2.8		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Hexachloroethane	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Isophorone	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
m+p-Cresols	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
n-Nitrosodimethylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	4.8	1.1		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Nitrobenzene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
o-Cresol	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Pentachlorophenol	ND	ug/L	1	U	10	9.5	4.0		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Phenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Pyridine	ND	ug/L	1	U	10	4.8	3.1		SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Surr: 2,4,6-Tribromophenol	77.0	%REC	1		43-140				SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Surr: 2-Fluorobiphenyl	64.0	%REC	1		44-119				SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Surr: 2-Fluorophenol	34.0	%REC	1		19-119				SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Surr: Nitrobenzene-d5	62.0	%REC	1		44-120				SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-001
Client: AECOM - Honolulu
Collection Date: 02/09/2022 17:45
Client Sample ID: ERH2524 (OWDFMW07A)
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
SEMI-VOLATILE ORGANIC COMPOUNDS												
Surr: Phenol-d5	31.0	%REC	1		10-65				SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724
Surr: Terphenyl-d14	101.0	%REC	1		50-134				SW8270C	02/20/2022 00:31/dsm	SV5973N.I_220218B : 7	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2523 (Trip Blank) 14694
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-002
Collection Date: 02/09/2022 17:45
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Toluene	0.15	ug/L	1	J	1.0	0.20	0.068		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-002
Client: AECOM - Honolulu
Collection Date: 02/09/2022 17:45
Client Sample ID: ERH2523 (Trip Blank) 14694
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Surr: 1,2-Dichloroethane-d4	113.0	%REC	1		81-118				SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Surr: Toluene-d8	106.0	%REC	1		89-112				SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	02/15/2022 16:32/msc	VOA5975C.I_220215A : 14	R374895
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/17/2022 14:41/jp	VARIAN1_220217A : 7	R374900
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/17/2022 14:41/jp	VARIAN1_220217A : 7	R374900
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	02/17/2022 14:41/jp	VARIAN1_220217A : 7	R374900

- 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: B22020962-004
Client: AECOM - Honolulu
Collection Date: 02/09/2022 17:45
Client Sample ID: ERH2523 (Trip Blank) 14733
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 15:44/clt	GECD.I_220216A : 6	163798
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	02/16/2022 15:44/clt	GECD.I_220216A : 6	163798

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2523 (Trip Blank) 14709
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-005
Collection Date: 02/09/2022 17:45
Date Received: 02/12/2022
Report Date: 03/04/2022

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	02/15/2022 10:39/jdw	FID-HEADSPACE_220215A : 6	R374776

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2531 (RHMW01R)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-006
Collection Date: 02/10/2022 13:25
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
LOW LEVEL PAH BY 8270C SIM												
1-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.020		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.017		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Acenaphthene	ND	ug/L	1	U	0.10	0.048	0.030		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Acenaphthylene	ND	ug/L	1	U	0.10	0.048	0.024		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Anthracene	ND	ug/L	1	U	0.10	0.048	0.027		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.048	0.026		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.048	0.033		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.048	0.025		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Chrysene	ND	ug/L	1	U	0.10	0.048	0.044		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.048	0.035		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Fluoranthene	0.084	ug/L	1	J	0.10	0.048	0.022		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Fluorene	ND	ug/L	1	U	0.10	0.048	0.021		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.048	0.047		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Naphthalene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Phenanthrene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
Pyrene	0.033	ug/L	1	J	0.10	0.048	0.023		SW8270CSIM	02/16/2022 20:05/jph	SV5975.I_220216A : 15	163724
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.9 to 1.0	0.98	mg/L	1		0.50	0.50	0.17		SW9060A	02/15/2022 18:23/eli-ca	SUB-C279755 : 7	C_R279755
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	02/18/2022 18:17/car	ICPMS207-B_220218B : 59	R374975
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00008		SW6020	02/18/2022 18:23/car	ICPMS207-B_220218B : 60	163745
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2531 (RHMW01R)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-006
Collection Date: 02/10/2022 13:25
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Surr: 1,2-Dichloroethane-d4	120.0	%REC	1	S	81-118				SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895

LABORATORY ANALYTICAL REPORT

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Client Sample ID: ERH2531 (RHMW01R)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-006
Collection Date: 02/10/2022 13:25
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	02/15/2022 14:16/msc	VOA5975C.I_220215A : 9	R374895
- The sample had a slightly high recovery for surrogate 1,2-Dichloroethane-d4. This recovery was slightly above the QSM 5.3 recovery limits but within EPA 8260B method defined limits. Re-analysis of a second vial produced similar results.												
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 16:04/clt	GECD.I_220216A : 7	163798
Surr: 1,1,1,2-Tetrachloroethane	97.0	%REC	1		70-130				SW8011	02/16/2022 16:04/clt	GECD.I_220216A : 7	163798
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	4.3	ug/L	1	J	20	8.7	2.0		SW8015C	02/17/2022 23:45/jp	VARIAN1_220217A : 20	R374900
Total Purgeable Hydrocarbons	39	ug/L	1		20	10	3.1		SW8015C	02/17/2022 23:45/jp	VARIAN1_220217A : 20	R374900
Surr: Trifluorotoluene	72.0	%REC	1		70-130				SW8015C	02/17/2022 23:45/jp	VARIAN1_220217A : 20	R374900
- 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)	0.91	mg/L	1		0.30	0.14	0.037		SW8015C	02/16/2022 03:28/amn	GCFID-HP5-B_220215A : 15	163748
Diesel Range Organics (SGT-C10 to C24)	0.046	mg/L	1	J	0.30	0.11	0.027		SW8015C	02/17/2022 12:42/amn	GCFID-HP5-B_220215B : 16	163748
Oil Range Hydrocarbons (C24 to C40)	0.72	mg/L	1		0.30	0.14	0.084		SW8015C	02/16/2022 03:28/amn	GCFID-HP5-B_220215A : 15	163748
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	02/17/2022 12:42/amn	GCFID-HP5-B_220215B : 16	163748
Total Extractable Hydrocarbons	1.6	mg/L	1		0.30	0.14	0.071		SW8015C	02/16/2022 03:28/amn	GCFID-HP5-B_220215A : 15	163748
Total Extractable Hydrocarbons (SGT)	0.052	mg/L	1	J	0.30	0.11	0.034		SW8015C	02/17/2022 12:42/amn	GCFID-HP5-B_220215B : 16	163748
Surr: o-Terphenyl	87.0	%REC	1		56-125				SW8015C	02/16/2022 03:28/amn	GCFID-HP5-B_220215A : 15	163748
Surr: o-Terphenyl (SGT)	86.0	%REC	1		56-125				SW8015C	02/17/2022 12:42/amn	GCFID-HP5-B_220215B : 16	163748
Surr: n-Triacontane	108.0	%REC	1		50-150				SW8015C	02/16/2022 03:28/amn	GCFID-HP5-B_220215A : 15	163748
Surr: n-Triacontane (SGT)	100.0	%REC	1		50-150				SW8015C	02/17/2022 12:42/amn	GCFID-HP5-B_220215B : 16	163748
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.57	mg/L	78		0.16	0.090	0.055		SW8015M	02/15/2022 11:05/jdw	FID-HEADSPACE_220215A : 7	R374776
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
1,2-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
1,3-Dichlorobenzene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
1,4-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
2,4-Dichlorophenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
2,4-Dimethylphenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
2,4-Dinitrophenol	ND	ug/L	1	U	10	9.5	4.1		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724

LABORATORY ANALYTICAL REPORT

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Client: AECOM - Honolulu
Client Sample ID: ERH2531 (RHMW01R)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-006
Collection Date: 02/10/2022 13:25
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
SEMI-VOLATILE ORGANIC COMPOUNDS												
2,4-Dinitrotoluene	ND	ug/L	1	U	10	4.8	2.9		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
2,6-Dinitrotoluene	ND	ug/L	1	U	10	4.8	3.0		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
2-Chloronaphthalene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
2-Chlorophenol	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
2-Nitrophenol	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	9.5	2.2		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
4-Chlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
4-Nitrophenol	ND	ug/L	1	U	10	9.5	2.4		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Azobenzene	ND	ug/L	1	U	10	4.8	1.0		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Butylbenzylphthalate	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Di-n-butyl phthalate	ND	ug/L	1	U	10	4.8	0.89		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Di-n-octyl phthalate	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Diethyl phthalate	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Dimethyl phthalate	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Hexachlorobenzene	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Hexachlorobutadiene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	4.8	2.8		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Hexachloroethane	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Isophorone	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
m+p-Cresols	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
n-Nitrosodimethylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	4.8	1.1		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Nitrobenzene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
o-Cresol	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Pentachlorophenol	ND	ug/L	1	U	10	9.5	4.0		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Phenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Pyridine	ND	ug/L	1	U	10	4.8	3.1		SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Surr: 2,4,6-Tribromophenol	77.0	%REC	1		43-140				SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Surr: 2-Fluorobiphenyl	66.0	%REC	1		44-119				SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Surr: 2-Fluorophenol	25.0	%REC	1		19-119				SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-006
Client: AECOM - Honolulu
Collection Date: 02/10/2022 13:25
Client Sample ID: ERH2531 (RHMW01R)
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
SEMI-VOLATILE ORGANIC COMPOUNDS												
Surr: Nitrobenzene-d5	65.0	%REC	1		44-120				SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Surr: Phenol-d5	29.0	%REC	1		10-65				SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724
Surr: Terphenyl-d14	107.0	%REC	1		50-134				SW8270C	02/20/2022 01:03/dsm	SV5973N.I_220218B : 8	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2530 (Trip Blank) 14694
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-007
Collection Date: 02/10/2022 13:25
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Toluene	0.10	ug/L	1	J	1.0	0.20	0.068		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-007
Client: AECOM - Honolulu
Collection Date: 02/10/2022 13:25
Client Sample ID: ERH2530 (Trip Blank) 14694
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Surr: 1,2-Dichloroethane-d4	113.0	%REC	1		81-118				SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Surr: Toluene-d8	106.0	%REC	1		89-112				SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	02/15/2022 17:00/msc	VOA5975C.I_220215A : 15	R374895
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/17/2022 15:15/jp	VARIAN1_220217A : 8	R374900
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/17/2022 15:15/jp	VARIAN1_220217A : 8	R374900
Surr: Trifluorotoluene	72.0	%REC	1		70-130				SW8015C	02/17/2022 15:15/jp	VARIAN1_220217A : 8	R374900

- 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: B22020962-009
Client: AECOM - Honolulu
Collection Date: 02/10/2022 13:25
Client Sample ID: ERH2530 (Trip Blank) 14653
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 16:24/clt	GECD.I_220216A : 8	163798
Surr: 1,1,1,2-Tetrachloroethane	89.0	%REC	1		70-130				SW8011	02/16/2022 16:24/clt	GECD.I_220216A : 8	163798

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2530 (Trip Blank) 14663
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-010
Collection Date: 02/10/2022 13:25
Date Received: 02/12/2022
Report Date: 03/04/2022

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	02/15/2022 11:37/jdw	FID-HEADSPACE_220215A : 9	R374776

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2529 (RHMW19)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-011
Collection Date: 02/09/2022 13:35
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
LOW LEVEL PAH BY 8270C SIM												
1-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.020		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.017		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Acenaphthene	ND	ug/L	1	U	0.10	0.048	0.030		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Acenaphthylene	ND	ug/L	1	U	0.10	0.048	0.024		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Anthracene	ND	ug/L	1	U	0.10	0.048	0.027		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.048	0.026		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.048	0.033		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.048	0.026		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Chrysene	ND	ug/L	1	U	0.10	0.048	0.044		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.048	0.035		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Fluorene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.048	0.047		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Naphthalene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Phenanthrene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
Pyrene	ND	ug/L	1	U	0.10	0.048	0.023		SW8270CSIM	02/16/2022 20:37/jph	SV5975.I_220216A : 16	163724
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.7 to 0.8	0.73	mg/L	1		0.50	0.50	0.17		SW9060A	02/15/2022 19:03/eli-ca	SUB-C279755 : 8	C_R279755
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	02/18/2022 18:30/car	ICPMS207-B_220218B : 61	R374975
METALS, TOTAL												
Lead	0.00059	mg/L	1	J	0.001	0.0001	0.00008		SW6020	02/18/2022 18:36/car	ICPMS207-B_220218B : 62	163745
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895

LABORATORY ANALYTICAL REPORT

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Client: AECOM - Honolulu
Client Sample ID: ERH2529 (RHMW19)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-011
Collection Date: 02/09/2022 13:35
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Surr: Dibromofluoromethane	114.0	%REC	1		80-119				SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Surr: 1,2-Dichloroethane-d4	119.0	%REC	1	S	81-118				SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895

LABORATORY ANALYTICAL REPORT

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Matrix: Ground Water

Lab ID: B22020962-011
Collection Date: 02/09/2022 13:35
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Surr: Toluene-d8	108.0	%REC	1		89-112				SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	02/15/2022 14:43/msc	VOA5975C.I_220215A : 10	R374895
- The sample had a slightly high recovery for surrogate 1,2-Dichloroethane-d4. This recovery was slightly above the QSM 5.3 recovery limits but within EPA 8260B method defined limits. Re-analysis of a second vial produced similar results.												
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 16:44/clt	GECD.I_220216A : 9	163798
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	02/16/2022 16:44/clt	GECD.I_220216A : 9	163798
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	2.3	ug/L	1	J	20	8.7	2.0		SW8015C	02/18/2022 00:53/jp	VARIAN1_220217A : 21	R374900
Total Purgeable Hydrocarbons	4.0	ug/L	1	J	20	10	3.1		SW8015C	02/18/2022 00:53/jp	VARIAN1_220217A : 21	R374900
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	02/18/2022 00:53/jp	VARIAN1_220217A : 21	R374900
- 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)	0.17	mg/L	1	J	0.30	0.14	0.037		SW8015C	02/16/2022 02:02/amn	GCFID-HP5-B_220215A : 14	163748
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	02/16/2022 20:37/amn	GCFID-HP5-B_220215B : 10	163748
Oil Range Hydrocarbons (C24 to C40)	0.49	mg/L	1		0.30	0.14	0.084		SW8015C	02/16/2022 02:02/amn	GCFID-HP5-B_220215A : 14	163748
Oil Range Hydrocarbons (SGT-C24 to C40)	0.18	mg/L	1	J	0.30	0.14	0.084		SW8015C	02/16/2022 20:37/amn	GCFID-HP5-B_220215B : 10	163748
Total Extractable Hydrocarbons	0.67	mg/L	1		0.30	0.14	0.072		SW8015C	02/16/2022 02:02/amn	GCFID-HP5-B_220215A : 14	163748
Total Extractable Hydrocarbons (SGT)	0.27	mg/L	1	J	0.30	0.11	0.034		SW8015C	02/16/2022 20:37/amn	GCFID-HP5-B_220215B : 10	163748
Surr: o-Terphenyl	77.0	%REC	1		56-125				SW8015C	02/16/2022 02:02/amn	GCFID-HP5-B_220215A : 14	163748
Surr: o-Terphenyl (SGT)	70.0	%REC	1		56-125				SW8015C	02/16/2022 20:37/amn	GCFID-HP5-B_220215B : 10	163748
Surr: n-Triacontane	111.0	%REC	1		50-150				SW8015C	02/16/2022 02:02/amn	GCFID-HP5-B_220215A : 14	163748
Surr: n-Triacontane (SGT)	94.0	%REC	1		50-150				SW8015C	02/16/2022 20:37/amn	GCFID-HP5-B_220215B : 10	163748
- 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	02/15/2022 11:43/jdw	FID-HEADSPACE_220215A : 10	R374776
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
1,2-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
1,3-Dichlorobenzene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
1,4-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
2,4-Dichlorophenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
2,4-Dimethylphenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
2,4-Dinitrophenol	ND	ug/L	1	U	10	9.6	4.1		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724

LABORATORY ANALYTICAL REPORT

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Client: AECOM - Honolulu
Client Sample ID: ERH2529 (RHMW19)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-011
Collection Date: 02/09/2022 13:35
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Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
SEMI-VOLATILE ORGANIC COMPOUNDS												
2,4-Dinitrotoluene	ND	ug/L	1	U	10	4.8	2.9		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
2,6-Dinitrotoluene	ND	ug/L	1	U	10	4.8	3.1		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
2-Chloronaphthalene	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
2-Chlorophenol	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
2-Nitrophenol	ND	ug/L	1	U	10	4.8	2.3		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	9.6	2.2		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
4-Chlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
4-Nitrophenol	ND	ug/L	1	U	10	9.6	2.4		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Azobenzene	ND	ug/L	1	U	10	4.8	1.0		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Butylbenzylphthalate	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Di-n-butyl phthalate	ND	ug/L	1	U	10	4.8	0.90		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Di-n-octyl phthalate	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Diethyl phthalate	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Dimethyl phthalate	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Hexachlorobenzene	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Hexachlorobutadiene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	4.8	2.9		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Hexachloroethane	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Isophorone	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
m+p-Cresols	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
n-Nitrosodimethylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	4.8	1.1		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Nitrobenzene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
o-Cresol	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Pentachlorophenol	ND	ug/L	1	U	10	9.6	4.1		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Phenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Pyridine	ND	ug/L	1	U	10	4.8	3.1		SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Surr: 2,4,6-Tribromophenol	82.0	%REC	1		43-140				SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Surr: 2-Fluorobiphenyl	71.0	%REC	1		44-119				SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Surr: 2-Fluorophenol	34.0	%REC	1		19-119				SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-011
Client: AECOM - Honolulu
Collection Date: 02/09/2022 13:35
Client Sample ID: ERH2529 (RHMW19)
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
SEMI-VOLATILE ORGANIC COMPOUNDS												
Surr: Nitrobenzene-d5	70.0	%REC	1		44-120				SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Surr: Phenol-d5	29.0	%REC	1		10-65				SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724
Surr: Terphenyl-d14	104.0	%REC	1		50-134				SW8270C	02/20/2022 02:08/dsm	SV5973N.I_220218B : 10	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2528 (Trip Blank) 14694
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-012
Collection Date: 02/09/2022 13:35
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Toluene	0.56	ug/L	1	J	1.0	0.20	0.068		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-012
Client: AECOM - Honolulu
Collection Date: 02/09/2022 13:35
Client Sample ID: ERH2528 (Trip Blank) 14694
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Surr: Dibromofluoromethane	115.0	%REC	1		80-119				SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Surr: 1,2-Dichloroethane-d4	123.0	%REC	1	S	81-118				SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Surr: Toluene-d8	104.0	%REC	1		89-112				SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	02/15/2022 17:27/msc	VOA5975C.I_220215A : 16	R374895
- Headspace was not noted at sample receipt, but prior to analysis the sample contained headspace gas bubbles > 1/4 inch in diameter.												
- The sample had a slightly high recovery for surrogate 1,2-Dichloroethane-d4. This recovery was above the QSM 5.3 recovery limits but within EPA 8260B method defined limits. Re-analysis was not possible due to limited sample volume.												
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/17/2022 15:49/jp	VARIAN1_220217A : 9	R374900
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/17/2022 15:49/jp	VARIAN1_220217A : 9	R374900
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	02/17/2022 15:49/jp	VARIAN1_220217A : 9	R374900
- 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.												
- Headspace was not noted at sample receipt, but prior to analysis the sample contained headspace gas bubbles > 1/4 inch in diameter.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-014
Client: AECOM - Honolulu
Collection Date: 02/09/2022 13:35
Client Sample ID: ERH2528 (Trip Blank) 14733
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 17:04/clt	GECD.I_220216A : 10	163798
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	02/16/2022 17:04/clt	GECD.I_220216A : 10	163798

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2528 (Trip Blank) 14709
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-015
Collection Date: 02/09/2022 13:35
Date Received: 02/12/2022
Report Date: 03/04/2022

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	02/15/2022 11:54/jdw	FID-HEADSPACE_220215A : 11	R374776

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2535 (RHMW2254-01) Low Flow
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-016
Collection Date: 02/10/2022 13:50
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
LOW LEVEL PAH BY 8270C SIM												
1-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.020		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.017		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Acenaphthene	ND	ug/L	1	U	0.10	0.048	0.030		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Acenaphthylene	ND	ug/L	1	U	0.10	0.048	0.024		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Anthracene	ND	ug/L	1	U	0.10	0.048	0.027		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.048	0.026		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.048	0.033		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.048	0.025		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Chrysene	ND	ug/L	1	U	0.10	0.048	0.044		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.048	0.035		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Fluorene	ND	ug/L	1	U	0.10	0.048	0.021		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.048	0.047		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Naphthalene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Phenanthrene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
Pyrene	ND	ug/L	1	U	0.10	0.048	0.023		SW8270CSIM	02/16/2022 21:42/jph	SV5975.I_220216A : 18	163724
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	02/15/2022 19:43/eli-ca	SUB-C279755 : 9	C_R279755
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	02/18/2022 18:43/car	ICPMS207-B_220218B : 63	R374975
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00008		SW6020	02/18/2022 18:50/car	ICPMS207-B_220218B : 64	163745
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-016
Collection Date: 02/10/2022 13:50
Date Received: 02/12/2022
Report Date: 03/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2535 (RHMW2254-01) Low Flow
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												
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Surr: 1,2-Dichloroethane-d4	119.0	%REC	1	S	81-118				SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-016
Client: AECOM - Honolulu
Collection Date: 02/10/2022 13:50
Client Sample ID: ERH2535 (RHMW2254-01) Low Flow
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Surr: Toluene-d8	107.0	%REC	1		89-112				SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
Surr: p-Bromofluorobenzene	105.0	%REC	1		85-114				SW8260B	02/15/2022 16:05/msc	VOA5975C.I_220215A : 13	R374895
- The sample had a slightly high recovery for surrogate 1,2-Dichloroethane-d4. This recovery wasabove the QSM 5.3 recovery limits but within EPA 8260B method defined limits. Re-analysis of a second vial produced similar results.												
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 17:24/clt	GECD.I_220216A : 11	163798
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	02/16/2022 17:24/clt	GECD.I_220216A : 11	163798
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/18/2022 02:01/jp	VARIAN1_220217A : 22	R374900
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/18/2022 02:01/jp	VARIAN1_220217A : 22	R374900
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	02/18/2022 02:01/jp	VARIAN1_220217A : 22	R374900
- 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	0.15	0.039		SW8015C	02/16/2022 06:20/amn	GCFID-HP5-B_220215A : 17	163748
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.15	0.087		SW8015C	02/16/2022 06:20/amn	GCFID-HP5-B_220215A : 17	163748
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.15	0.074		SW8015C	02/16/2022 06:20/amn	GCFID-HP5-B_220215A : 17	163748
Surr: o-Terphenyl	108.0	%REC	1		56-125				SW8015C	02/16/2022 06:20/amn	GCFID-HP5-B_220215A : 17	163748
Surr: n-Triacontane	116.0	%REC	1		50-150				SW8015C	02/16/2022 06:20/amn	GCFID-HP5-B_220215A : 17	163748
- 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.												
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	02/15/2022 12:00/jdw	FID-HEADSPACE_220215A : 12	R374776
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
1,2-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
1,3-Dichlorobenzene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
1,4-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
2,4-Dichlorophenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
2,4-Dimethylphenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
2,4-Dinitrophenol	ND	ug/L	1	U	10	9.5	4.1		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
2,4-Dinitrotoluene	ND	ug/L	1	U	10	4.8	2.9		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
2,6-Dinitrotoluene	ND	ug/L	1	U	10	4.8	3.0		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
2-Chloronaphthalene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
2-Chlorophenol	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
2-Nitrophenol	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2535 (RHMW2254-01) Low Flow
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-016
Collection Date: 02/10/2022 13:50
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
SEMI-VOLATILE ORGANIC COMPOUNDS												
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	9.5	2.2		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
4-Chlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
4-Nitrophenol	ND	ug/L	1	U	10	9.5	2.4		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Azobenzene	ND	ug/L	1	U	10	4.8	1.0		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Butylbenzylphthalate	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Di-n-butyl phthalate	ND	ug/L	1	U	10	4.8	0.89		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Di-n-octyl phthalate	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Diethyl phthalate	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Dimethyl phthalate	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Hexachlorobenzene	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Hexachlorobutadiene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	4.8	2.8		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Hexachloroethane	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Isophorone	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
m+p-Cresols	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
n-Nitrosodimethylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	4.8	1.1		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Nitrobenzene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
o-Cresol	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Pentachlorophenol	ND	ug/L	1	U	10	9.5	4.0		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Phenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Pyridine	ND	ug/L	1	U	10	4.8	3.1		SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Surr: 2,4,6-Tribromophenol	60.0	%REC	1		43-140				SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Surr: 2-Fluorobiphenyl	50.0	%REC	1		44-119				SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Surr: 2-Fluorophenol	25.0	%REC	1		19-119				SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Surr: Nitrobenzene-d5	55.0	%REC	1		44-120				SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Surr: Phenol-d5	25.0	%REC	1		10-65				SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724
Surr: Terphenyl-d14	94.0	%REC	1		50-134				SW8270C	02/20/2022 02:40/dsm	SV5973N.I_220218B : 11	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2534 (Trip Blank) 14765
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-017
Collection Date: 02/10/2022 13:50
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-017
Client: AECOM - Honolulu
Collection Date: 02/10/2022 13:50
Client Sample ID: ERH2534 (Trip Blank) 14765
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Surr: 1,2-Dichloroethane-d4	116.0	%REC	1		81-118				SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	02/15/2022 17:55/msc	VOA5975C.I_220215A : 17	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-018
Client: AECOM - Honolulu
Collection Date: 02/10/2022 13:50
Client Sample ID: ERH2534 (Trip Blank) 14754
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/17/2022 16:23/jp	VARIAN1_220217A : 10	R374900
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/17/2022 16:23/jp	VARIAN1_220217A : 10	R374900
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	02/17/2022 16:23/jp	VARIAN1_220217A : 10	R374900

- 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: B22020962-019
Client: AECOM - Honolulu
Collection Date: 02/10/2022 13:50
Client Sample ID: ERH2534 (Trip Blank) 14833
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 17:43/clt	GECD.I_220216A : 12	163798
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	02/16/2022 17:43/clt	GECD.I_220216A : 12	163798

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2534 (Trip Blank) 14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-020
Collection Date: 02/10/2022 13:50
Date Received: 02/12/2022
Report Date: 03/04/2022

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	02/15/2022 12:07/jdw	FID-HEADSPACE_220215A : 13	R374776

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2533 (RHMW2254-01-Bailer)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-021
Collection Date: 02/10/2022 13:00
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
LOW LEVEL PAH BY 8270C SIM												
1-Methylnaphthalene	0.068	ug/L	1	J	0.10	0.048	0.020		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
2-Methylnaphthalene	0.066	ug/L	1	J	0.10	0.048	0.017		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Acenaphthene	ND	ug/L	1	U	0.10	0.048	0.030		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Acenaphthylene	ND	ug/L	1	U	0.10	0.048	0.024		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Anthracene	ND	ug/L	1	U	0.10	0.048	0.027		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.048	0.026		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.048	0.033		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.048	0.025		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Chrysene	ND	ug/L	1	U	0.10	0.048	0.044		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.048	0.035		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Fluorene	ND	ug/L	1	U	0.10	0.048	0.021		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.048	0.047		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Naphthalene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Phenanthrene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
Pyrene	ND	ug/L	1	U	0.10	0.048	0.023		SW8270CSIM	02/16/2022 22:14/jph	SV5975.I_220216A : 19	163724
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.29	mg/L	1	J	0.50	0.50	0.17		SW9060A	02/15/2022 20:24/eli-ca	SUB-C279755 : 10	C_R279755
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	02/18/2022 18:56/car	ICPMS207-B_220218B : 65	R374975
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00008		SW6020	02/18/2022 19:02/car	ICPMS207-B_220218B : 66	163745
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Chloroform	0.12	ug/L	1	J	1.0	0.20	0.079		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Chloromethane	0.19	ug/L	1	J	1.0	0.50	0.16		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-021
Collection Date: 02/10/2022 13:00
Date Received: 02/12/2022
Report Date: 03/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2533 (RHMW2254-01-Bailer)
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												
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Surr: 1,2-Dichloroethane-d4	115.0	%REC	1		81-118				SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2533 (RHMW2254-01-Bailer)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-021
Collection Date: 02/10/2022 13:00
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	02/15/2022 12:54/msc	VOA5975C.I_220215A : 6	R374895
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 20:01/clt	GECD.I_220216A : 17	163798
Surr: 1,1,1,2-Tetrachloroethane	98.0	%REC	1		70-130				SW8011	02/16/2022 20:01/clt	GECD.I_220216A : 17	163798
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/18/2022 03:10/jp	VARIAN1_220217A : 23	R374900
Total Purgeable Hydrocarbons	13	ug/L	1	J	20	10	3.1		SW8015C	02/18/2022 03:10/jp	VARIAN1_220217A : 23	R374900
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	02/18/2022 03:10/jp	VARIAN1_220217A : 23	R374900
- 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)	0.13	mg/L	1	J	0.30	0.14	0.037		SW8015C	02/15/2022 21:01/amn	GCFID-HP5-B_220215A : 10	163748
Diesel Range Organics (SGT-C10 to C24)	0.030	mg/L	1	J	0.30	0.11	0.027		SW8015C	02/16/2022 18:28/amn	GCFID-HP5-B_220215B : 8	163748
Oil Range Hydrocarbons (C24 to C40)	0.28	mg/L	1	J	0.30	0.14	0.084		SW8015C	02/15/2022 21:01/amn	GCFID-HP5-B_220215A : 10	163748
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	02/16/2022 18:28/amn	GCFID-HP5-B_220215B : 8	163748
Total Extractable Hydrocarbons	0.43	mg/L	1		0.30	0.14	0.072		SW8015C	02/15/2022 21:01/amn	GCFID-HP5-B_220215A : 10	163748
Total Extractable Hydrocarbons (SGT)	0.039	mg/L	1	J	0.30	0.11	0.034		SW8015C	02/16/2022 18:28/amn	GCFID-HP5-B_220215B : 8	163748
Surr: o-Terphenyl	98.0	%REC	1		56-125				SW8015C	02/15/2022 21:01/amn	GCFID-HP5-B_220215A : 10	163748
Surr: o-Terphenyl (SGT)	94.0	%REC	1		56-125				SW8015C	02/16/2022 18:28/amn	GCFID-HP5-B_220215B : 8	163748
Surr: n-Triacontane	107.0	%REC	1		50-150				SW8015C	02/15/2022 21:01/amn	GCFID-HP5-B_220215A : 10	163748
Surr: n-Triacontane (SGT)	94.0	%REC	1		50-150				SW8015C	02/16/2022 18:28/amn	GCFID-HP5-B_220215B : 8	163748
- 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	02/15/2022 12:12/jdw	FID-HEADSPACE_220215A : 14	R374776
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
1,2-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
1,3-Dichlorobenzene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
1,4-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
2,4-Dichlorophenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
2,4-Dimethylphenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
2,4-Dinitrophenol	ND	ug/L	1	U	10	9.5	4.1		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
2,4-Dinitrotoluene	ND	ug/L	1	U	10	4.8	2.9		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-021
Collection Date: 02/10/2022 13:00
Date Received: 02/12/2022
Report Date: 03/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2533 (RHMW2254-01-Bailer)
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
SEMI-VOLATILE ORGANIC COMPOUNDS												
2,6-Dinitrotoluene	ND	ug/L	1	U	10	4.8	3.0		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
2-Chloronaphthalene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
2-Chlorophenol	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
2-Nitrophenol	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	9.5	2.2		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
4-Chlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
4-Nitrophenol	ND	ug/L	1	U	10	9.5	2.4		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Azobenzene	ND	ug/L	1	U	10	4.8	1.0		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Butylbenzylphthalate	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Di-n-butyl phthalate	ND	ug/L	1	U	10	4.8	0.89		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Di-n-octyl phthalate	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Diethyl phthalate	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Dimethyl phthalate	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Hexachlorobenzene	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Hexachlorobutadiene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	4.8	2.8		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Hexachloroethane	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Isophorone	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
m+p-Cresols	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
n-Nitrosodimethylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	4.8	1.1		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Nitrobenzene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
o-Cresol	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Pentachlorophenol	ND	ug/L	1	U	10	9.5	4.0		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Phenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Pyridine	ND	ug/L	1	U	10	4.8	3.1		SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Surr: 2,4,6-Tribromophenol	78.0	%REC	1		43-140				SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Surr: 2-Fluorobiphenyl	67.0	%REC	1		44-119				SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Surr: 2-Fluorophenol	29.0	%REC	1		19-119				SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Surr: Nitrobenzene-d5	65.0	%REC	1		44-120				SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-021
Client: AECOM - Honolulu
Collection Date: 02/10/2022 13:00
Client Sample ID: ERH2533 (RHMW2254-01-Bailer)
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
SEMI-VOLATILE ORGANIC COMPOUNDS												
Surr: Phenol-d5	27.0	%REC	1		10-65				SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724
Surr: Terphenyl-d14	105.0	%REC	1		50-134				SW8270C	02/20/2022 03:12/dsm	SV5973N.I_220218B : 12	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2532 (Trip Blank) 14694
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-022
Collection Date: 02/10/2022 13:00
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Toluene	0.19	ug/L	1	J	1.0	0.20	0.068		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-022
Client: AECOM - Honolulu
Collection Date: 02/10/2022 13:00
Client Sample ID: ERH2532 (Trip Blank) 14694
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
Surr: p-Bromofluorobenzene	105.0	%REC	1		85-114				SW8260B	02/15/2022 18:22/msc	VOA5975C.I_220215A : 18	R374895
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/17/2022 16:57/jp	VARIAN1_220217A : 11	R374900
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/17/2022 16:57/jp	VARIAN1_220217A : 11	R374900
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	02/17/2022 16:57/jp	VARIAN1_220217A : 11	R374900

- 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: B22020962-024
Client: AECOM - Honolulu
Collection Date: 02/10/2022 13:00
Client Sample ID: ERH2532 (Trip Blank) 14733
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 20:21/clt	GECD.I_220216A : 18	163798
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	02/16/2022 20:21/clt	GECD.I_220216A : 18	163798

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2532 (Trip Blank) 14709
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-025
Collection Date: 02/10/2022 13:00
Date Received: 02/12/2022
Report Date: 03/04/2022

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	02/15/2022 12:18/jdw	FID-HEADSPACE_220215A : 15	R374776

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2537 (Sump Adit 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-026
Collection Date: 02/10/2022 14:50
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
LOW LEVEL PAH BY 8270C SIM												
1-Methylnaphthalene	2.3	ug/L	1		0.10	0.048	0.020		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
2-Methylnaphthalene	3.6	ug/L	1		0.10	0.048	0.017		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Acenaphthene	0.28	ug/L	1		0.10	0.048	0.030		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Acenaphthylene	0.15	ug/L	1		0.10	0.048	0.024		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Anthracene	0.33	ug/L	1		0.10	0.048	0.027		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Benzo(a)anthracene	0.99	ug/L	1		0.10	0.048	0.026		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Benzo(a)pyrene	0.83	ug/L	1		0.10	0.048	0.033		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Benzo(b)fluoranthene	1.2	ug/L	1		0.10	0.048	0.022		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Benzo(g,h,i)perylene	0.51	ug/L	1		0.10	0.048	0.026		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Benzo(k)fluoranthene	0.42	ug/L	1		0.10	0.048	0.028		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Chrysene	1.2	ug/L	1		0.10	0.048	0.044		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Dibenzo(a,h)anthracene	0.13	ug/L	1		0.10	0.048	0.035		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Fluoranthene	2.6	ug/L	1		0.10	0.048	0.022		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Fluorene	0.45	ug/L	1		0.10	0.048	0.022		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Indeno(1,2,3-cd)pyrene	0.57	ug/L	1		0.10	0.048	0.047		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Naphthalene	1.2	ug/L	1		0.10	0.048	0.028		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Phenanthrene	1.7	ug/L	1		0.10	0.048	0.028		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
Pyrene	2.6	ug/L	1		0.10	0.048	0.023		SW8270CSIM	02/16/2022 22:47/jph	SV5975.I_220216A : 20	163724
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 1.1 to 1.1	1.1	mg/L	1		0.50	0.50	0.17		SW9060A	02/15/2022 21:06/eli-ca	SUB-C279755 : 11	C_R279755
METALS, DISSOLVED												
Lead	0.011	mg/L	1		0.001	0.00005	0.00003		SW6020	02/18/2022 19:08/car	ICPMS207-B_220218B : 67	R374975
METALS, TOTAL												
Lead	0.129	mg/L	1		0.001	0.0001	0.00008		SW6020	02/18/2022 19:27/car	ICPMS207-B_220218B : 70	163745
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Chloroform	0.18	ug/L	1	J	1.0	0.20	0.079		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2537 (Sump Adit 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-026
Collection Date: 02/10/2022 14:50
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Ethylbenzene	0.13	ug/L	1	J	1.0	0.20	0.084		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Methyl ethyl ketone	4.0	ug/L	1	J	20	5.0	1.8		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
m+p-Xylenes	0.33	ug/L	1	J	1.0	0.50	0.15		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
o-Xylene	0.34	ug/L	1	J	1.0	0.20	0.060		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Xylenes, Total	0.66	ug/L	1	J	1.0	0.20	0.060		SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Surr: 1,2-Dichloroethane-d4	118.0	%REC	1		81-118				SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-026
Client: AECOM - Honolulu
Collection Date: 02/10/2022 14:50
Client Sample ID: ERH2537 (Sump Adit 3)
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Surr: Toluene-d8	104.0	%REC	1		89-112				SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
Surr: p-Bromofluorobenzene	103.0	%REC	1		85-114				SW8260B	02/15/2022 13:21/msc	VOA5975C.I_220215A : 7	R374895
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 20:40/clt	GECD.I_220216A : 19	163798
Surr: 1,1,1,2-Tetrachloroethane	94.0	%REC	1		70-130				SW8011	02/16/2022 20:40/clt	GECD.I_220216A : 19	163798
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	27	ug/L	1		20	8.7	2.0		SW8015C	02/18/2022 04:18/jp	VARIAN1_220217A : 24	R374900
Total Purgeable Hydrocarbons	495	ug/L	1		20	10	3.1		SW8015C	02/18/2022 04:18/jp	VARIAN1_220217A : 24	R374900
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	02/18/2022 04:18/jp	VARIAN1_220217A : 24	R374900
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	3.5	mg/L	1		0.30	0.15	0.039		SW8015C	02/15/2022 22:28/amn	GCFID-HP5-B_220215A : 11	163748
Diesel Range Organics (SGT-C10 to C24)	2.3	mg/L	1		0.30	0.12	0.028		SW8015C	02/16/2022 21:20/amn	GCFID-HP5-B_220215B : 11	163748
Oil Range Hydrocarbons (C24 to C40)	0.88	mg/L	1		0.30	0.15	0.088		SW8015C	02/15/2022 22:28/amn	GCFID-HP5-B_220215A : 11	163748
Oil Range Hydrocarbons (SGT-C24 to C40)	0.47	mg/L	1		0.30	0.15	0.088		SW8015C	02/16/2022 21:20/amn	GCFID-HP5-B_220215B : 11	163748
Total Extractable Hydrocarbons	4.3	mg/L	1		0.30	0.15	0.075		SW8015C	02/15/2022 22:28/amn	GCFID-HP5-B_220215A : 11	163748
Total Extractable Hydrocarbons (SGT)	2.7	mg/L	1		0.30	0.12	0.036		SW8015C	02/16/2022 21:20/amn	GCFID-HP5-B_220215B : 11	163748
Surr: o-Terphenyl	98.0	%REC	1		56-125				SW8015C	02/15/2022 22:28/amn	GCFID-HP5-B_220215A : 11	163748
Surr: o-Terphenyl (SGT)	76.0	%REC	1		56-125				SW8015C	02/16/2022 21:20/amn	GCFID-HP5-B_220215B : 11	163748
Surr: n-Triacontane	116.0	%REC	1		50-150				SW8015C	02/15/2022 22:28/amn	GCFID-HP5-B_220215A : 11	163748
Surr: n-Triacontane (SGT)	79.0	%REC	1		50-150				SW8015C	02/16/2022 21:20/amn	GCFID-HP5-B_220215B : 11	163748
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.057	mg/L	1		0.0020	0.0012	0.00070		SW8015M	02/15/2022 12:24/jdw	FID-HEADSPACE_220215A : 16	R374776
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
1,2-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
1,3-Dichlorobenzene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
1,4-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
2,4-Dichlorophenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
2,4-Dimethylphenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
2,4-Dinitrophenol	ND	ug/L	1	U	10	9.6	4.1		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
2,4-Dinitrotoluene	ND	ug/L	1	U	10	4.8	2.9		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-026
Collection Date: 02/10/2022 14:50
Date Received: 02/12/2022
Report Date: 03/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2537 (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
SEMI-VOLATILE ORGANIC COMPOUNDS												
2,6-Dinitrotoluene	ND	ug/L	1	U	10	4.8	3.1		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
2-Chloronaphthalene	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
2-Chlorophenol	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
2-Nitrophenol	ND	ug/L	1	U	10	4.8	2.3		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	9.6	2.2		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
4-Chlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
4-Nitrophenol	ND	ug/L	1	U	10	9.6	2.4		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Azobenzene	ND	ug/L	1	U	10	4.8	1.0		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Butylbenzylphthalate	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Di-n-butyl phthalate	ND	ug/L	1	U	10	4.8	0.90		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Di-n-octyl phthalate	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Diethyl phthalate	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Dimethyl phthalate	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Hexachlorobenzene	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Hexachlorobutadiene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	4.8	2.9		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Hexachloroethane	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Isophorone	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
m+p-Cresols	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
n-Nitrosodimethylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	4.8	1.1		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Nitrobenzene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
o-Cresol	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Pentachlorophenol	ND	ug/L	1	U	10	9.6	4.1		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Phenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Pyridine	ND	ug/L	1	U	10	4.8	3.1		SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Surr: 2,4,6-Tribromophenol	62.0	%REC	1		43-140				SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Surr: 2-Fluorobiphenyl	61.0	%REC	1		44-119				SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Surr: 2-Fluorophenol	34.0	%REC	1		19-119				SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Surr: Nitrobenzene-d5	68.0	%REC	1		44-120				SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-026
Client: AECOM - Honolulu
Collection Date: 02/10/2022 14:50
Client Sample ID: ERH2537 (Sump Adit 3)
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
SEMI-VOLATILE ORGANIC COMPOUNDS												
Surr: Phenol-d5	31.0	%REC	1		10-65				SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724
Surr: Terphenyl-d14	87.0	%REC	1		50-134				SW8270C	02/20/2022 03:44/dsm	SV5973N.I_220218B : 13	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2536 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-027
Collection Date: 02/10/2022 14:50
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-027
Client: AECOM - Honolulu
Collection Date: 02/10/2022 14:50
Client Sample ID: ERH2536 (Trip Blank) 14833
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Surr: 1,2-Dichloroethane-d4	115.0	%REC	1		81-118				SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Surr: Toluene-d8	107.0	%REC	1		89-112				SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	02/15/2022 18:49/msc	VOA5975C.I_220215A : 19	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-028
Client: AECOM - Honolulu
Collection Date: 02/10/2022 14:50
Client Sample ID: ERH2536 (Trip Blank) 14754
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/17/2022 14:07/jp	VARIAN1_220217A : 6	R374900
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/17/2022 14:07/jp	VARIAN1_220217A : 6	R374900
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	02/17/2022 14:07/jp	VARIAN1_220217A : 6	R374900

- 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: B22020962-029
Client: AECOM - Honolulu
Collection Date: 02/10/2022 14:50
Client Sample ID: ERH2536 (Trip Blank) 14833
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 21:01/clt	GECD.I_220216A : 20	163798
Surr: 1,1,1,2-Tetrachloroethane	97.0	%REC	1		70-130				SW8011	02/16/2022 21:01/clt	GECD.I_220216A : 20	163798

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2536 (Trip Blank) 14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-030
Collection Date: 02/10/2022 14:50
Date Received: 02/12/2022
Report Date: 03/04/2022

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	02/15/2022 12:37/jdw	FID-HEADSPACE_220215A : 17	R374776

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2526 (OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-031
Collection Date: 02/09/2022 13:30
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
LOW LEVEL PAH BY 8270C SIM												
1-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.020		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.017		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Acenaphthene	ND	ug/L	1	U	0.10	0.048	0.030		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Acenaphthylene	ND	ug/L	1	U	0.10	0.048	0.024		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Anthracene	ND	ug/L	1	U	0.10	0.048	0.027		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.048	0.026		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.048	0.033		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.048	0.025		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Chrysene	ND	ug/L	1	U	0.10	0.048	0.044		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.048	0.035		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Fluorene	ND	ug/L	1	U	0.10	0.048	0.021		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.048	0.047		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Naphthalene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Phenanthrene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
Pyrene	ND	ug/L	1	U	0.10	0.048	0.023		SW8270CSIM	02/16/2022 23:19/jph	SV5975.I_220216A : 21	163724
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.4 to 0.4	0.37	mg/L	1	J	0.50	0.50	0.17		SW9060A	02/15/2022 21:49/eli-ca	SUB-C279755 : 12	C_R279755
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	02/18/2022 19:33/car	ICPMS207-B_220218B : 71	R374975
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00008		SW6020	02/18/2022 19:40/car	ICPMS207-B_220218B : 72	163745
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Chloroform	0.30	ug/L	1	J	1.0	0.20	0.079		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2526 (OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-031
Collection Date: 02/09/2022 13:30
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Surr: 1,2-Dichloroethane-d4	115.0	%REC	1		81-118				SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-031
Client: AECOM - Honolulu
Collection Date: 02/09/2022 13:30
Client Sample ID: ERH2526 (OWDFMW08A)
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Surr: Toluene-d8	107.0	%REC	1		89-112				SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	02/15/2022 15:10/msc	VOA5975C.I_220215A : 11	R374895
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 21:20/clt	GECD.I_220216A : 21	163798
Surr: 1,1,1,2-Tetrachloroethane	95.0	%REC	1		70-130				SW8011	02/16/2022 21:20/clt	GECD.I_220216A : 21	163798
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/17/2022 12:59/jp	VARIAN1_220217A : 5	R374900
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/17/2022 12:59/jp	VARIAN1_220217A : 5	R374900
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	02/17/2022 12:59/jp	VARIAN1_220217A : 5	R374900
- 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	02/15/2022 19:36/amn	GCFID-HP5-B_220215A : 8	163748
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.083		SW8015C	02/15/2022 19:36/amn	GCFID-HP5-B_220215A : 8	163748
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	02/15/2022 19:36/amn	GCFID-HP5-B_220215A : 8	163748
Surr: o-Terphenyl	101.0	%REC	1		56-125				SW8015C	02/15/2022 19:36/amn	GCFID-HP5-B_220215A : 8	163748
Surr: n-Triacontane	109.0	%REC	1		50-150				SW8015C	02/15/2022 19:36/amn	GCFID-HP5-B_220215A : 8	163748
- 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.												
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	02/15/2022 12:42/jdw	FID-HEADSPACE_220215A : 18	R374776
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
1,2-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
1,3-Dichlorobenzene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
1,4-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
2,4-Dichlorophenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
2,4-Dimethylphenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
2,4-Dinitrophenol	ND	ug/L	1	U	10	9.5	4.1		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
2,4-Dinitrotoluene	ND	ug/L	1	U	10	4.8	2.9		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
2,6-Dinitrotoluene	ND	ug/L	1	U	10	4.8	3.0		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
2-Chloronaphthalene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
2-Chlorophenol	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
2-Nitrophenol	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	9.5	2.2		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-031
Client: AECOM - Honolulu
Collection Date: 02/09/2022 13:30
Client Sample ID: ERH2526 (OWDFMW08A)
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
SEMI-VOLATILE ORGANIC COMPOUNDS												
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
4-Chlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
4-Nitrophenol	ND	ug/L	1	U	10	9.5	2.4		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Azobenzene	ND	ug/L	1	U	10	4.8	1.0		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Butylbenzylphthalate	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Di-n-butyl phthalate	ND	ug/L	1	U	10	4.8	0.89		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Di-n-octyl phthalate	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Diethyl phthalate	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Dimethyl phthalate	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Hexachlorobenzene	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Hexachlorobutadiene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	4.8	2.8		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Hexachloroethane	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Isophorone	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
m+p-Cresols	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
n-Nitrosodimethylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	4.8	1.1		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Nitrobenzene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
o-Cresol	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Pentachlorophenol	ND	ug/L	1	U	10	9.5	4.0		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Phenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Pyridine	ND	ug/L	1	U	10	4.8	3.1		SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Surr: 2,4,6-Tribromophenol	81.0	%REC	1		43-140				SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Surr: 2-Fluorobiphenyl	68.0	%REC	1		44-119				SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Surr: 2-Fluorophenol	31.0	%REC	1		19-119				SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Surr: Nitrobenzene-d5	68.0	%REC	1		44-120				SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Surr: Phenol-d5	29.0	%REC	1		10-65				SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724
Surr: Terphenyl-d14	103.0	%REC	1		50-134				SW8270C	02/20/2022 04:16/dsm	SV5973N.I_220218B : 14	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2527 (OWDFMW08A-FD)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-032
Collection Date: 02/09/2022 13:30
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
LOW LEVEL PAH BY 8270C SIM												
1-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.020		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.048	0.017		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Acenaphthene	ND	ug/L	1	U	0.10	0.048	0.030		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Acenaphthylene	ND	ug/L	1	U	0.10	0.048	0.024		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Anthracene	ND	ug/L	1	U	0.10	0.048	0.027		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.048	0.026		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.048	0.033		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.048	0.025		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Chrysene	ND	ug/L	1	U	0.10	0.048	0.044		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.048	0.035		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Fluoranthene	ND	ug/L	1	U	0.10	0.048	0.022		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Fluorene	ND	ug/L	1	U	0.10	0.048	0.021		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.048	0.047		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Naphthalene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Phenanthrene	ND	ug/L	1	U	0.10	0.048	0.028		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
Pyrene	ND	ug/L	1	U	0.10	0.048	0.023		SW8270CSIM	02/17/2022 00:24/jph	SV5975.I_220216A : 23	163724
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Chloroform	0.31	ug/L	1	J	1.0	0.20	0.079		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2527 (OWDFMW08A-FD)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22020962-032
Collection Date: 02/09/2022 13:30
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	02/15/2022 15:38/msc	VOA5975C.I_220215A : 12	R374895
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/18/2022 05:26/jp	VARIAN1_220217A : 25	R374900
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/18/2022 05:26/jp	VARIAN1_220217A : 25	R374900
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	02/18/2022 05:26/jp	VARIAN1_220217A : 25	R374900

- 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: B22020962-032
Client: AECOM - Honolulu
Collection Date: 02/09/2022 13:30
Client Sample ID: ERH2527 (OWDFMW08A-FD)
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.19	mg/L	1	J	0.30	0.14	0.037		SW8015C	02/15/2022 20:19/amn	GCFID-HP5-B_220215A : 9	163748
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.026		SW8015C	02/16/2022 19:12/amn	GCFID-HP5-B_220215B : 9	163748
Oil Range Hydrocarbons (C24 to C40)	0.25	mg/L	1	J	0.30	0.14	0.083		SW8015C	02/15/2022 20:19/amn	GCFID-HP5-B_220215A : 9	163748
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.083		SW8015C	02/16/2022 19:12/amn	GCFID-HP5-B_220215B : 9	163748
Total Extractable Hydrocarbons	0.46	mg/L	1		0.30	0.14	0.071		SW8015C	02/15/2022 20:19/amn	GCFID-HP5-B_220215A : 9	163748
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	02/16/2022 19:12/amn	GCFID-HP5-B_220215B : 9	163748
Surr: o-Terphenyl	97.0	%REC	1		56-125				SW8015C	02/15/2022 20:19/amn	GCFID-HP5-B_220215A : 9	163748
Surr: o-Terphenyl (SGT)	91.0	%REC	1		56-125				SW8015C	02/16/2022 19:12/amn	GCFID-HP5-B_220215B : 9	163748
Surr: n-Triacontane	107.0	%REC	1		50-150				SW8015C	02/15/2022 20:19/amn	GCFID-HP5-B_220215A : 9	163748
Surr: n-Triacontane (SGT)	92.0	%REC	1		50-150				SW8015C	02/16/2022 19:12/amn	GCFID-HP5-B_220215B : 9	163748
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
1,2-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
1,3-Dichlorobenzene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
1,4-Dichlorobenzene	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
2,4-Dichlorophenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
2,4-Dimethylphenol	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
2,4-Dinitrophenol	ND	ug/L	1	U	10	9.5	4.1		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
2,4-Dinitrotoluene	ND	ug/L	1	U	10	4.8	2.9		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
2,6-Dinitrotoluene	ND	ug/L	1	U	10	4.8	3.0		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
2-Chloronaphthalene	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
2-Chlorophenol	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
2-Nitrophenol	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	4.8	2.0		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	9.5	2.2		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
4-Chlorophenol	ND	ug/L	1	U	10	4.8	2.5		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	4.8	1.9		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
4-Nitrophenol	ND	ug/L	1	U	10	9.5	2.4		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Azobenzene	ND	ug/L	1	U	10	4.8	1.0		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	4.8	2.4		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	4.8	1.8		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-032
Client: AECOM - Honolulu
Collection Date: 02/09/2022 13:30
Client Sample ID: ERH2527 (OWDFMW08A-FD)
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
SEMI-VOLATILE ORGANIC COMPOUNDS												
Butylbenzylphthalate	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Di-n-butyl phthalate	ND	ug/L	1	U	10	4.8	0.89		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Di-n-octyl phthalate	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Diethyl phthalate	ND	ug/L	1	U	10	4.8	2.1		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Dimethyl phthalate	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Hexachlorobenzene	ND	ug/L	1	U	10	4.8	1.3		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Hexachlorobutadiene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	4.8	2.8		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Hexachloroethane	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Isophorone	ND	ug/L	1	U	10	4.8	1.6		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
m+p-Cresols	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
n-Nitrosodimethylamine	ND	ug/L	1	U	10	4.8	1.5		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	4.8	1.1		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Nitrobenzene	ND	ug/L	1	U	10	4.8	2.2		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
o-Cresol	ND	ug/L	1	U	10	4.8	1.7		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Pentachlorophenol	ND	ug/L	1	U	10	9.5	4.0		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Phenol	ND	ug/L	1	U	10	4.8	1.4		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Pyridine	ND	ug/L	1	U	10	4.8	3.1		SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Surr: 2,4,6-Tribromophenol	81.0	%REC	1		43-140				SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Surr: 2-Fluorobiphenyl	73.0	%REC	1		44-119				SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Surr: 2-Fluorophenol	32.0	%REC	1		19-119				SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Surr: Nitrobenzene-d5	68.0	%REC	1		44-120				SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Surr: Phenol-d5	31.0	%REC	1		10-65				SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724
Surr: Terphenyl-d14	107.0	%REC	1		50-134				SW8270C	02/20/2022 04:49/dsm	SV5973N.I_220218B : 15	163724

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2525 (Trip Blank) 14694
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-033
Collection Date: 02/09/2022 13:30
Date Received: 02/12/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Toluene	0.21	ug/L	1	J	1.0	0.20	0.068		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22020962-033
Client: AECOM - Honolulu
Collection Date: 02/09/2022 13:30
Client Sample ID: ERH2525 (Trip Blank) 14694
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Surr: Dibromofluoromethane	113.0	%REC	1		77-126				SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Surr: 1,2-Dichloroethane-d4	117.0	%REC	1		70-130				SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Surr: Toluene-d8	106.0	%REC	1		79-122				SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
Surr: p-Bromofluorobenzene	107.0	%REC	1		76-127				SW8260B	02/15/2022 19:17/msc	VOA5975C.I_220215A : 20	R374895
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/17/2022 17:31/jp	VARIAN1_220217A : 12	R374900
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/17/2022 17:31/jp	VARIAN1_220217A : 12	R374900
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	02/17/2022 17:31/jp	VARIAN1_220217A : 12	R374900

- 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: B22020962-035
Client: AECOM - Honolulu
Collection Date: 02/09/2022 13:30
Client Sample ID: ERH2525 (Trip Blank) 14694
Date Received: 02/12/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/04/2022
Matrix: Trip Blank

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/16/2022 21:40/clt	GECD.I_220216A : 22	163798
Surr: 1,1,1,2-Tetrachloroethane	95.0	%REC	1		70-130				SW8011	02/16/2022 21:40/clt	GECD.I_220216A : 22	163798

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2525 (Trip Blank) 14709
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22020962-036
Collection Date: 02/09/2022 13:30
Date Received: 02/12/2022
Report Date: 03/04/2022

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	02/15/2022 12:49/jdw	FID-HEADSPACE_220215A : 19	R374776

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220216A: 11 **SampType:** Method Blank **Batch ID:** 163724
Method: SW8270CSIM **Analysis Date:** 02/16/2022 17:56 **Prep Date:** 02/14/2022 08:37
Lab ID: MB-163724 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.10									
2-Methylnaphthalene	ND	0.10									
Acenaphthene	ND	0.10									
Acenaphthylene	ND	0.10									
Anthracene	ND	0.10									
Benzo(a)anthracene	ND	0.10									
Benzo(a)pyrene	ND	0.10									
Benzo(b)fluoranthene	ND	0.10									
Benzo(g,h,i)perylene	ND	0.10									
Benzo(k)fluoranthene	ND	0.10									
Chrysene	ND	0.10									
Dibenzo(a,h)anthracene	ND	0.10									
Fluoranthene	ND	0.10									
Fluorene	ND	0.10									
Indeno(1,2,3-cd)pyrene	ND	0.10									
Naphthalene	ND	0.10									
Phenanthrene	ND	0.10									
Pyrene	ND	0.10									

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Run ID: Run Order: SV5975.I_220216A: 12 **SampType:** Laboratory Control Sample **Batch ID:** 163724
Method: SW8270CSIM **Analysis Date:** 02/16/2022 18:28 **Prep Date:** 02/14/2022 11:18
Lab ID: LLCS-163724 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1-Methylnaphthalene	3.1	0.10	5.0		62.0	41	115				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220216A: 12 **SampType:** Laboratory Control Sample **Batch ID:** 163724
Method: SW8270CSIM **Analysis Date:** 02/16/2022 18:28 **Prep Date:** 02/14/2022 11:18
Lab ID: LLCS-163724 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
2-Methylnaphthalene	3.7	0.10	5.0		74.0	39	114				
Acenaphthene	4.3	0.10	5.0		86.0	48	114				
Acenaphthylene	3.8	0.10	5.0		75.0	35	121				
Anthracene	4.9	0.10	5.0		97.0	53	119				
Benzo(a)anthracene	5.0	0.10	5.0		100.0	59	120				
Benzo(a)pyrene	4.7	0.10	5.0		94.0	53	120				
Benzo(b)fluoranthene	4.8	0.10	5.0		97.0	53	126				
Benzo(g,h,i)perylene	4.7	0.10	5.0		94.0	44	128				
Benzo(k)fluoranthene	4.5	0.10	5.0		90.0	54	125				
Chrysene	4.9	0.10	5.0		99.0	57	120				
Dibenzo(a,h)anthracene	4.8	0.10	5.0		95.0	44	141				
Fluoranthene	4.8	0.10	5.0		96.0	58	120				
Fluorene	4.5	0.10	5.0		91.0	50	118				
Indeno(1,2,3-cd)pyrene	4.7	0.10	5.0		94.0	48	130				
Naphthalene	3.6	0.10	5.0		71.0	43	114				
Phenanthrene	4.7	0.10	5.0		95.0	53	115				
Pyrene	4.9	0.10	5.0		98.0	53	121				

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Run ID: Run Order: SV5975.I_220216A: 13 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163724
Method: SW8270CSIM **Analysis Date:** 02/16/2022 19:00 **Prep Date:** 02/14/2022 11:19
Lab ID: LLCSD-163724 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1-Methylnaphthalene	2.9	0.10	5.0		57.0	41	115	3.1	7.3	40.0	
2-Methylnaphthalene	3.5	0.10	5.0		70.0	39	114	3.7	5.6	40.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220216A: 13 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163724
Method: SW8270CSIM **Analysis Date:** 02/16/2022 19:00 **Prep Date:** 02/14/2022 11:19
Lab ID: LLCSD-163724 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Acenaphthene	4.0	0.10	5.0		80.0	48	114	4.3	7.8	40.0	
Acenaphthylene	3.5	0.10	5.0		70.0	35	121	3.8	7.6	40.0	
Anthracene	4.5	0.10	5.0		89.0	53	119	4.9	8.6	40.0	
Benzo(a)anthracene	4.8	0.10	5.0		95.0	59	120	5.0	4.5	40.0	
Benzo(a)pyrene	4.5	0.10	5.0		90.0	53	120	4.7	4.0	40.0	
Benzo(b)fluoranthene	4.7	0.10	5.0		95.0	53	126	4.8	1.8	40.0	
Benzo(g,h,i)perylene	4.4	0.10	5.0		89.0	44	128	4.7	5.6	40.0	
Benzo(k)fluoranthene	4.5	0.10	5.0		89.0	54	125	4.5	0.7	40.0	
Chrysene	4.7	0.10	5.0		94.0	57	120	4.9	5.0	40.0	
Dibenzo(a,h)anthracene	4.7	0.10	5.0		94.0	44	141	4.8	1.9	40.0	
Fluoranthene	4.6	0.10	5.0		92.0	58	120	4.8	4.7	40.0	
Fluorene	4.3	0.10	5.0		86.0	50	118	4.5	5.0	40.0	
Indeno(1,2,3-cd)pyrene	4.6	0.10	5.0		91.0	48	130	4.7	3.1	40.0	
Naphthalene	3.3	0.10	5.0		66.0	43	114	3.6	7.4	40.0	
Phenanthrene	4.6	0.10	5.0		92.0	53	115	4.7	3.0	40.0	
Pyrene	4.5	0.10	5.0		90.0	53	121	4.9	8.7	40.0	

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

- Insufficient sample was submitted to perform a Matrix Spike/Duplicate, so a Laboratory Control Sample Duplicate is included in the reporting package to assess precision.

Run ID: Run Order: SV5975.I_220216A: 17 **SampType:** Sample Matrix Spike **Batch ID:** 163724
Method: SW8270CSIM **Analysis Date:** 02/16/2022 21:10 **Prep Date:** 02/14/2022 09:23
Lab ID: B22020962-011CLMS **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1-Methylnaphthalene	2.3	0.10	4.9	0.0	48.0	41	115				
2-Methylnaphthalene	2.9	0.10	4.9	0.0	59.0	39	114				
Acenaphthene	3.5	0.10	4.9	0.0	72.0	48	114				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220216A: 17 **SampType:** Sample Matrix Spike **Batch ID:** 163724
Method: SW8270CSIM **Analysis Date:** 02/16/2022 21:10 **Prep Date:** 02/14/2022 09:23
Lab ID: B22020962-011CLMS **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Acenaphthylene	3.4	0.10	4.9	0.0	69.0	35	121				
Anthracene	3.9	0.10	4.9	0.0	81.0	53	119				
Benzo(a)anthracene	4.0	0.10	4.9	0.0	83.0	59	120				
Benzo(a)pyrene	3.7	0.10	4.9	0.0	77.0	53	120				
Benzo(b)fluoranthene	4.1	0.10	4.9	0.0	84.0	53	126				
Benzo(g,h,i)perylene	4.0	0.10	4.9	0.0	82.0	44	128				
Benzo(k)fluoranthene	3.7	0.10	4.9	0.0	76.0	54	125				
Chrysene	3.9	0.10	4.9	0.0	81.0	57	120				
Dibenzo(a,h)anthracene	4.1	0.10	4.9	0.0	84.0	44	141				
Fluoranthene	3.9	0.10	4.9	0.0	80.0	58	120				
Fluorene	3.9	0.10	4.9	0.0	80.0	50	118				
Indeno(1,2,3-cd)pyrene	3.9	0.10	4.9	0.0	80.0	48	130				
Naphthalene	2.8	0.10	4.9	0.0	58.0	43	114				
Phenanthrene	3.9	0.10	4.9	0.0	80.0	53	115				
Pyrene	3.9	0.10	4.9	0.0	80.0	53	121				

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220216A: 22 **SampType:** Sample Matrix Spike **Batch ID:** 163724
Method: SW8270CSIM **Analysis Date:** 02/16/2022 23:51 **Prep Date:** 02/14/2022 09:23
Lab ID: B22020962-031CLMS **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1-Methylnaphthalene	2.8	0.10	4.8	0.0	59.0	41	115				
2-Methylnaphthalene	3.3	0.10	4.8	0.0	68.0	39	114				
Acenaphthene	4.0	0.10	4.8	0.0	83.0	48	114				
Acenaphthylene	3.8	0.10	4.8	0.0	80.0	35	121				
Anthracene	4.1	0.10	4.8	0.0	87.0	53	119				
Benzo(a)anthracene	4.5	0.10	4.8	0.0	94.0	59	120				
Benzo(a)pyrene	4.3	0.10	4.8	0.0	90.0	53	120				
Benzo(b)fluoranthene	4.6	0.10	4.8	0.0	97.0	53	126				
Benzo(g,h,i)perylene	4.5	0.10	4.8	0.0	94.0	44	128				
Benzo(k)fluoranthene	4.2	0.10	4.8	0.0	87.0	54	125				
Chrysene	4.4	0.10	4.8	0.0	92.0	57	120				
Dibenzo(a,h)anthracene	4.6	0.10	4.8	0.0	97.0	44	141				
Fluoranthene	4.5	0.10	4.8	0.0	94.0	58	120				
Fluorene	4.2	0.10	4.8	0.0	88.0	50	118				
Indeno(1,2,3-cd)pyrene	4.3	0.10	4.8	0.0	90.0	48	130				
Naphthalene	3.3	0.10	4.8	0.0	70.0	43	114				
Phenanthrene	4.4	0.10	4.8	0.0	92.0	53	115				
Pyrene	4.5	0.10	4.8	0.0	94.0	53	121				

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220216A: 25 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374834
Method: SW8270CSIM **Analysis Date:** 02/16/2022 16:51 **Prep Date:**
Lab ID: 16-Feb-22_CCV_9 **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1-Methylnaphthalene	2.0	0.10	2.0		101.0	80	120				
2-Methylnaphthalene	2.4	0.10	2.0		120.0	80	120				
Acenaphthene	2.4	0.10	2.0		120.0	80	120				
Acenaphthylene	2.3	0.10	2.0		115.0	80	120				
Anthracene	2.2	0.10	2.0		109.0	80	120				
Benzo(a)anthracene	2.3	0.10	2.0		117.0	80	120				
Benzo(a)pyrene	2.2	0.10	2.0		111.0	80	120				
Benzo(b)fluoranthene	2.3	0.10	2.0		116.0	80	120				
Benzo(g,h,i)perylene	2.2	0.10	2.0		110.0	80	120				
Benzo(k)fluoranthene	2.2	0.10	2.0		110.0	80	120				
Chrysene	2.3	0.10	2.0		117.0	80	120				
Dibenzo(a,h)anthracene	2.2	0.10	2.0		108.0	80	120				
Fluoranthene	2.2	0.10	2.0		111.0	80	120				
Fluorene	2.4	0.10	2.0		118.0	80	120				
Indeno(1,2,3-cd)pyrene	2.2	0.10	2.0		109.0	80	120				
Naphthalene	2.3	0.10	2.0		113.0	80	120				
Phenanthrene	2.3	0.10	2.0		114.0	80	120				
Pyrene	2.3	0.10	2.0		115.0	80	120				

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Run ID: Run Order: SV5975.I_220216A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374834
Method: SW8270CSIM **Analysis Date:** 02/17/2022 00:56 **Prep Date:**
Lab ID: 16-Feb-22_CCV_24 **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1-Methylnaphthalene	1.8	0.10	2.0		91.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220216A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374834
Method: SW8270CSIM **Analysis Date:** 02/17/2022 00:56 **Prep Date:**
Lab ID: 16-Feb-22_CCV_24 **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
2-Methylnaphthalene	2.0	0.10	2.0		101.0	80	120				
Acenaphthene	2.0	0.10	2.0		98.0	80	120				
Acenaphthylene	2.1	0.10	2.0		103.0	80	120				
Anthracene	1.9	0.10	2.0		97.0	80	120				
Benzo(a)anthracene	2.0	0.10	2.0		102.0	80	120				
Benzo(a)pyrene	2.1	0.10	2.0		105.0	80	120				
Benzo(b)fluoranthene	2.1	0.10	2.0		104.0	80	120				
Benzo(g,h,i)perylene	2.0	0.10	2.0		101.0	80	120				
Benzo(k)fluoranthene	2.2	0.10	2.0		108.0	80	120				
Chrysene	2.0	0.10	2.0		101.0	80	120				
Dibenzo(a,h)anthracene	2.0	0.10	2.0		101.0	80	120				
Fluoranthene	2.1	0.10	2.0		103.0	80	120				
Fluorene	2.1	0.10	2.0		105.0	80	120				
Indeno(1,2,3-cd)pyrene	2.1	0.10	2.0		106.0	80	120				
Naphthalene	2.0	0.10	2.0		102.0	80	120				
Phenanthrene	2.1	0.10	2.0		104.0	80	120				
Pyrene	2.1	0.10	2.0		103.0	80	120				

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SUB-C279755: 2 **SampType:** Method Blank **Batch ID:** C_R279755
Method: SW9060A **Analysis Date:** 02/15/2022 15:04 **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: **B22020962-001E, B22020962-006E, B22020962-011E, B22020962-016E, B22020962-021E, B22020962-026E, B22020962-031E**
- TOC Range is 0.0 to 0.0

Run ID: Run Order: SUB-C279755: 1 **SampType:** Laboratory Control Sample **Batch ID:** C_R279755
Method: SW9060A **Analysis Date:** 02/15/2022 14:24 **Prep Date:**
Lab ID: LCS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	4.9	0.50	5.0		97.0	91	111				

Associated Samples: **B22020962-001E, B22020962-006E, B22020962-011E, B22020962-016E, B22020962-021E, B22020962-026E, B22020962-031E**
- TOC Range is 4.8 to 4.9

Run ID: Run Order: SUB-C279755: 5 **SampType:** Sample Matrix Spike **Batch ID:** C_R279755
Method: SW9060A **Analysis Date:** 02/15/2022 17:02 **Prep Date:**
Lab ID: B22020962-001E **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.0	0.50	5.0	0.29	94.0	91	111				

Associated Samples: **B22020962-001E, B22020962-006E, B22020962-011E, B22020962-016E, B22020962-021E, B22020962-026E, B22020962-031E**
- TOC Range is 4.9 to 5.0

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SUB-C279755: 6 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** C_R279755
Method: SW9060A **Analysis Date:** 02/15/2022 17:52 **Prep Date:**
Lab ID: B22020962-001E **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.0	0.50	5.0	0.29	93.0	91	111	5.0	0.2	10.0	

Associated Samples: **B22020962-001E, B22020962-006E, B22020962-011E, B22020962-016E, B22020962-021E, B22020962-026E, B22020962-031E**
- TOC Range is 4.9 to 5.0

Run ID: Run Order: SUB-C279755: 3 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R279755
Method: SW9060A **Analysis Date:** 02/15/2022 15:42 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	4.7	0.50	5.0		95.0	90	110				

Associated Samples: **B22020962-001E, B22020962-006E, B22020962-011E, B22020962-016E, B22020962-021E, B22020962-026E, B22020962-031E**
- TOC Range is 4.7 to 4.8

Run ID: Run Order: SUB-C279755: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R279755
Method: SW9060A **Analysis Date:** 02/15/2022 22:31 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	4.8	0.50	5.0		95.0	90	110				

Associated Samples: **B22020962-001E, B22020962-006E, B22020962-011E, B22020962-016E, B22020962-021E, B22020962-026E, B22020962-031E**
- TOC Range is 4.7 to 4.8

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: ICPMS207-B_220218B: 36 **SampType:** Method Blank **Batch ID:** R374975
Method: SW6020 **Analysis Date:** 02/18/2022 15:54 **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: **B22020962-001A, B22020962-006A, B22020962-011A, B22020962-016A, B22020962-021A, B22020962-026A, B22020962-031A**

Run ID: Run Order: ICPMS207-B_220218B: 37 **SampType:** Laboratory Fortified Blank **Batch ID:** R374975
Method: SW6020 **Analysis Date:** 02/18/2022 16:00 **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	0.050	0.001	0.050		100.0	88	115				

Associated Samples: **B22020962-001A, B22020962-006A, B22020962-011A, B22020962-016A, B22020962-021A, B22020962-026A, B22020962-031A**

Run ID: Run Order: ICPMS207-B_220218B: 48 **SampType:** Sample Matrix Spike **Batch ID:** R374975
Method: SW6020 **Analysis Date:** 02/18/2022 17:09 **Prep Date:**
Lab ID: B22020962-001AMS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.050	0.001	0.050	0.00	99.0	88	115				

Associated Samples: **B22020962-001A, B22020962-006A, B22020962-011A, B22020962-016A, B22020962-021A, B22020962-026A, B22020962-031A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: ICPMS207-B_220218B: 49 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R374975
Method: SW6020 **Analysis Date:** 02/18/2022 17:15 **Prep Date:**
Lab ID: B22020962-001AMSD **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.050	0.001	0.050	0.00	100.0	88	115	0.050	0.7	20.0	

Associated Samples: **B22020962-001A, B22020962-006A, B22020962-011A, B22020962-016A, B22020962-021A, B22020962-026A, B22020962-031A**

Run ID: Run Order: ICPMS207-B_220218B: 47 **SampType:** Serial Dilution **Batch ID:** R374975
Method: SW6020 **Analysis Date:** 02/18/2022 17:02 **Prep Date:**
Lab ID: B22020962-001ADIL **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.001						0.00		10.0	

Associated Samples: **B22020962-001A, B22020962-006A, B22020962-011A, B22020962-016A, B22020962-021A, B22020962-026A, B22020962-031A**

Run ID: Run Order: ICPMS207-B_220218B: 44 **SampType:** Method Blank **Batch ID:** 163745
Method: SW6020 **Analysis Date:** 02/18/2022 16:44 **Prep Date:** 02/14/2022 12:54
Lab ID: MB-163745 **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: **B22020962-001B, B22020962-006B, B22020962-011B, B22020962-016B, B22020962-021B, B22020962-026B, B22020962-031B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: ICPMS207-B_220218B: 45 **SampType:** Laboratory Control Sample **Batch ID:** 163745
Method: SW6020 **Analysis Date:** 02/18/2022 16:50 **Prep Date:** 02/14/2022 12:54
Lab ID: LCS4-163745 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.099	0.001	0.100		99.0	88	115				

Associated Samples: **B22020962-001B, B22020962-006B, B22020962-011B, B22020962-016B, B22020962-021B, B22020962-026B, B22020962-031B**

Run ID: Run Order: ICPMS207-B_220218B: 54 **SampType:** Sample Matrix Spike **Batch ID:** 163745
Method: SW6020 **Analysis Date:** 02/18/2022 17:46 **Prep Date:** 02/14/2022 13:01
Lab ID: B22020962-001BMS4 **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	0.00	102.0	88	115				

Associated Samples: **B22020962-001B, B22020962-006B, B22020962-011B, B22020962-016B, B22020962-021B, B22020962-026B, B22020962-031B**

Run ID: Run Order: ICPMS207-B_220218B: 57 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 163745
Method: SW6020 **Analysis Date:** 02/18/2022 18:05 **Prep Date:** 02/14/2022 13:01
Lab ID: B22020962-001BMSD4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.100	0.001	0.100	0.00	100.0	88	115	0.102	2.3	20.0	

Associated Samples: **B22020962-001B, B22020962-006B, B22020962-011B, B22020962-016B, B22020962-021B, B22020962-026B, B22020962-031B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: ICPMS207-B_220218B: 53 **SampType:** Post Digestion/Distillation Spike **Batch ID:** 163745
Method: SW6020 **Analysis Date:** 02/18/2022 17:40 **Prep Date:** 02/14/2022 13:01
Lab ID: B22020962-001BPDS1 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.049	0.001	0.052	0.00	95.0	80	120				

Associated Samples: **B22020962-001B, B22020962-006B, B22020962-011B, B22020962-016B, B22020962-021B, B22020962-026B, B22020962-031B**

Run ID: Run Order: ICPMS207-B_220218B: 52 **SampType:** Serial Dilution **Batch ID:** 163745
Method: SW6020 **Analysis Date:** 02/18/2022 17:33 **Prep Date:** 02/14/2022 13:01
Lab ID: B22020962-001BDIL **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.001						0.00		10.0	

Associated Samples: **B22020962-001B, B22020962-006B, B22020962-011B, B22020962-016B, B22020962-021B, B22020962-026B, B22020962-031B**

Run ID: Run Order: ICPMS207-B_220218B: 42 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374975
Method: SW6020 **Analysis Date:** 02/18/2022 16:31 **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	0.051	0.001	0.050		102.0	90	110				

Associated Samples: **B22020962-001A, B22020962-001B, B22020962-006A, B22020962-006B, B22020962-011A, B22020962-011B, B22020962-016A, B22020962-016B, B22020962-021A, B22020962-021B, B22020962-026A, B22020962-026B, B22020962-031A, B22020962-031B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: ICPMS207-B_220218B: 55 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374975
Method: SW6020 **Analysis Date:** 02/18/2022 17:52 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22020962-001A, B22020962-001B, B22020962-006A, B22020962-006B, B22020962-011A, B22020962-011B, B22020962-016A, B22020962-016B, B22020962-021A, B22020962-021B, B22020962-026A, B22020962-026B, B22020962-031A, B22020962-031B**

Run ID: Run Order: ICPMS207-B_220218B: 68 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374975
Method: SW6020 **Analysis Date:** 02/18/2022 19:15 **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		101.0	90	110				

Associated Samples: **B22020962-001A, B22020962-001B, B22020962-006A, B22020962-006B, B22020962-011A, B22020962-011B, B22020962-016A, B22020962-016B, B22020962-021A, B22020962-021B, B22020962-026A, B22020962-026B, B22020962-031A, B22020962-031B**

Run ID: Run Order: ICPMS207-B_220218B: 74 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374975
Method: SW6020 **Analysis Date:** 02/18/2022 19:52 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22020962-001A, B22020962-001B, B22020962-006A, B22020962-006B, B22020962-011A, B22020962-011B, B22020962-016A, B22020962-016B, B22020962-021A, B22020962-021B, B22020962-026A, B22020962-026B, B22020962-031A, B22020962-031B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 4 **SampType:** Method Blank **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 11:34 **Prep Date:**
Lab ID: MBLK021522_ **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: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 4 **SampType:** Method Blank **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 11:34 **Prep Date:**
Lab ID: MBLK021522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
trans-1,3-Dichloropropene	ND	0.50									
Ethylbenzene	ND	0.50									
Methyl tert-butyl ether (MTBE)	ND	0.50									
Methyl ethyl ketone	ND	10									
Methylene chloride	ND	0.50									
Styrene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
Vinyl chloride	ND	0.50									
m+p-Xylenes	ND	0.50									
o-Xylene	ND	0.50									
Xylenes, Total	ND	0.50									
Surr: 1,2-Dichloroethane-d4	11	0.50	10		111.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		112.0	80	119				
Surr: p-Bromofluorobenzene	10	0.50	10		104.0	85	114				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 4 **SampType:** Method Blank **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 11:34 **Prep Date:**
Lab ID: MBLK021522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	11	0.50	10		105.0	89	112				

Associated Samples: **B22020962-001F, B22020962-002A, B22020962-006F, B22020962-007A, B22020962-011F, B22020962-012A, B22020962-016F, B22020962-017A, B22020962-021F, B22020962-022A, B22020962-026F, B22020962-027A, B22020962-031F, B22020962-032C, B22020962-033A**

Run ID: Run Order: VOA5975C.I_220215A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 10:39 **Prep Date:**
Lab ID: LCS021522_ **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		97.0	79	120				
Bromobenzene	5.2	0.50	5.0		103.0	80	120				
Bromochloromethane	4.6	0.50	5.0		93.0	78	123				
Bromodichloromethane	5.1	0.50	5.0		103.0	79	125				
Bromoform	5.0	0.50	5.0		100.0	66	130				
Carbon tetrachloride	4.6	0.50	5.0		92.0	72	136				
Chlorobenzene	5.0	0.50	5.0		101.0	82	118				
Chlorodibromomethane	4.9	0.50	5.0		98.0	74	126				
Chloroethane	4.5	0.50	5.0		90.0	60	138				
Chloroform	4.6	0.50	5.0		91.0	79	124				
Chloromethane	4.4	0.50	5.0		89.0	50	139				
1,2-Dibromoethane	4.9	0.50	5.0		99.0	78	122				
2-Chlorotoluene	5.0	0.50	5.0		100.0	79	122				
Dibromomethane	5.0	0.50	5.0		100.0	79	123				
1,2-Dichlorobenzene	5.1	0.50	5.0		101.0	80	119				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 10:39 **Prep Date:**
Lab ID: LCS021522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.2	0.50	5.0		105.0	78	122				
1,3-Dichlorobenzene	5.1	0.50	5.0		102.0	80	119				
1,4-Dichlorobenzene	5.1	0.50	5.0		102.0	79	118				
Dichlorodifluoromethane	4.4	0.50	5.0		89.0	32	152				
1,1-Dichloroethane	5.0	0.50	5.0		100.0	77	125				
1,2-Dichloroethane	4.7	0.50	5.0		94.0	73	128				
1,1-Dichloroethene	4.9	0.50	5.0		97.0	71	131				
cis-1,2-Dichloroethene	4.8	0.50	5.0		96.0	78	123				
trans-1,2-Dichloroethene	4.8	0.50	5.0		95.0	75	124				
1,2-Dichloropropane	5.0	0.50	5.0		100.0	78	122				
1,3-Dichloropropane	4.8	0.50	5.0		96.0	80	119				
2,2-Dichloropropane	4.9	0.50	5.0		98.0	60	139				
1,1-Dichloropropene	4.5	0.50	5.0		90.0	79	125				
cis-1,3-Dichloropropene	4.7	0.50	5.0		94.0	75	124				
trans-1,3-Dichloropropene	5.2	0.50	5.0		103.0	73	127				
Ethylbenzene	4.8	0.50	5.0		96.0	79	121				
Methyl tert-butyl ether (MTBE)	5.0	0.50	5.0		100.0	71	124				
Methyl ethyl ketone	50	10	50		101.0	56	143				
Methylene chloride	4.7	0.50	5.0		95.0	74	124				
Styrene	5.0	0.50	5.0		100.0	78	123				
1,1,1,2-Tetrachloroethane	4.8	0.50	5.0		95.0	78	124				
1,1,2,2-Tetrachloroethane	5.2	0.50	5.0		104.0	71	121				
Tetrachloroethene	4.6	0.50	5.0		92.0	74	129				
Toluene	5.0	0.50	5.0		100.0	80	121				
1,1,1-Trichloroethane	4.8	0.50	5.0		96.0	74	131				
1,1,2-Trichloroethane	5.0	0.50	5.0		99.0	80	119				
Trichloroethene	4.9	0.50	5.0		97.0	79	123				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 10:39 **Prep Date:**
Lab ID: LCS021522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	4.1	0.50	5.0		83.0	65	141				
1,2,3-Trichloropropane	5.1	0.50	5.0		103.0	73	125				
Vinyl chloride	4.6	0.50	5.0		92.0	58	137				
m+p-Xylenes	9.5	0.50	10		95.0	80	121				
o-Xylene	4.9	0.50	5.0		98.0	78	122				
Xylenes, Total	14	0.50	15		96.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		107.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		107.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		108.0	85	114				
Surr: Toluene-d8	11	0.50	10		111.0	89	112				

Associated Samples: **B22020962-001F, B22020962-002A, B22020962-006F, B22020962-007A, B22020962-011F, B22020962-012A, B22020962-016F, B22020962-017A, B22020962-021F, B22020962-022A, B22020962-026F, B22020962-027A, B22020962-031F, B22020962-032C, B22020962-033A**

Run ID: Run Order: VOA5975C.I_220215A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 19:44 **Prep Date:**
Lab ID: B22020962-021FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.0	0.50	5.0	0.0	100.0	79	120				
Bromobenzene	5.2	0.50	5.0	0.0	104.0	80	120				
Bromochloromethane	4.8	0.50	5.0	0.0	96.0	78	123				
Bromodichloromethane	5.0	0.50	5.0	0.0	100.0	79	125				
Bromoform	4.8	0.50	5.0	0.0	96.0	66	130				
Carbon tetrachloride	5.1	0.50	5.0	0.0	101.0	72	136				
Chlorobenzene	5.2	0.50	5.0	0.0	104.0	82	118				
Chlorodibromomethane	5.1	0.50	5.0	0.0	101.0	74	126				
Chloroethane	4.9	0.50	5.0	0.0	99.0	60	138				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 19:44 **Prep Date:**
Lab ID: B22020962-021FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Chloroform	4.9	0.50	5.0	0.12	96.0	79	124				
Chloromethane	4.8	0.50	5.0	0.19	93.0	50	139				
1,2-Dibromoethane	4.9	0.50	5.0	0.0	98.0	78	122				
2-Chlorotoluene	5.4	0.50	5.0	0.0	107.0	79	122				
Dibromomethane	5.0	0.50	5.0	0.0	100.0	79	123				
1,2-Dichlorobenzene	5.1	0.50	5.0	0.0	102.0	80	119				
4-Chlorotoluene	5.5	0.50	5.0	0.0	110.0	78	122				
1,3-Dichlorobenzene	5.3	0.50	5.0	0.0	105.0	80	119				
1,4-Dichlorobenzene	5.2	0.50	5.0	0.0	104.0	79	118				
Dichlorodifluoromethane	4.9	0.50	5.0	0.0	99.0	32	152				
1,1-Dichloroethane	5.3	0.50	5.0	0.0	106.0	77	125				
1,2-Dichloroethane	4.8	0.50	5.0	0.0	97.0	73	128				
1,1-Dichloroethene	5.1	0.50	5.0	0.0	101.0	71	131				
cis-1,2-Dichloroethene	5.0	0.50	5.0	0.0	100.0	78	123				
trans-1,2-Dichloroethene	5.0	0.50	5.0	0.0	100.0	75	124				
1,2-Dichloropropane	5.0	0.50	5.0	0.0	100.0	78	122				
1,3-Dichloropropane	4.7	0.50	5.0	0.0	94.0	80	119				
2,2-Dichloropropane	5.0	0.50	5.0	0.0	100.0	60	139				
1,1-Dichloropropene	4.9	0.50	5.0	0.0	97.0	79	125				
cis-1,3-Dichloropropene	4.6	0.50	5.0	0.0	93.0	75	124				
trans-1,3-Dichloropropene	5.1	0.50	5.0	0.0	102.0	73	127				
Ethylbenzene	5.1	0.50	5.0	0.0	103.0	79	121				
Methyl tert-butyl ether (MTBE)	4.8	0.50	5.0	0.0	96.0	71	124				
Methyl ethyl ketone	50	10	50	0.0	99.0	56	143				
Methylene chloride	4.9	0.50	5.0	0.0	97.0	74	124				
Styrene	5.1	0.50	5.0	0.0	103.0	78	123				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0	0.0	101.0	78	124				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 19:44 **Prep Date:**
Lab ID: B22020962-021FMS **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	5.0	0.50	5.0	0.0	100.0	71	121				
Tetrachloroethene	5.2	0.50	5.0	0.0	104.0	74	129				
Toluene	5.3	0.50	5.0	0.0	106.0	80	121				
1,1,1-Trichloroethane	5.1	0.50	5.0	0.0	101.0	74	131				
1,1,2-Trichloroethane	4.9	0.50	5.0	0.0	97.0	80	119				
Trichloroethene	5.0	0.50	5.0	0.0	100.0	79	123				
Trichlorofluoromethane	5.1	0.50	5.0	0.0	102.0	65	141				
1,2,3-Trichloropropane	4.7	0.50	5.0	0.0	94.0	73	125				
Vinyl chloride	4.9	0.50	5.0	0.0	98.0	58	137				
m+p-Xylenes	10	0.50	10	0.0	101.0	80	121				
o-Xylene	5.2	0.50	5.0	0.0	104.0	78	122				
Xylenes, Total	15	0.50	15	0.0	102.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	110.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10	0.0	106.0	80	119				
Surr: p-Bromofluorobenzene	10	0.50	10	0.0	104.0	85	114				
Surr: Toluene-d8	11	0.50	10	0.0	110.0	89	112				

Associated Samples: **B22020962-001F, B22020962-002A, B22020962-006F, B22020962-007A, B22020962-011F, B22020962-012A, B22020962-016F, B22020962-017A, B22020962-021F, B22020962-022A, B22020962-026F, B22020962-027A, B22020962-031F, B22020962-032C, B22020962-033A**

Run ID: Run Order: VOA5975C.I_220215A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 20:12 **Prep Date:**
Lab ID: B22020962-021FMSD **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	3.7	20.0	
Bromobenzene	5.4	0.50	5.0	0.0	107.0	80	120	5.2	2.7	20.0	
Bromochloromethane	4.9	0.50	5.0	0.0	98.0	78	123	4.8	2.0	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 20:12 **Prep Date:**
Lab ID: B22020962-021FMSD **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	105.0	79	125	5.0	5.7	20.0	
Bromoform	5.2	0.50	5.0	0.0	104.0	66	130	4.8	8.3	20.0	
Carbon tetrachloride	5.1	0.50	5.0	0.0	102.0	72	136	5.1	0.8	20.0	
Chlorobenzene	5.4	0.50	5.0	0.0	108.0	82	118	5.2	3.9	20.0	
Chlorodibromomethane	5.2	0.50	5.0	0.0	104.0	74	126	5.1	2.5	20.0	
Chloroethane	5.0	0.50	5.0	0.0	100.0	60	138	4.9	1.1	20.0	
Chloroform	5.0	0.50	5.0	0.12	97.0	79	124	4.9	0.9	20.0	
Chloromethane	5.1	0.50	5.0	0.19	98.0	50	139	4.8	5.3	20.0	
1,2-Dibromoethane	5.2	0.50	5.0	0.0	103.0	78	122	4.9	5.8	20.0	
2-Chlorotoluene	5.4	0.50	5.0	0.0	108.0	79	122	5.4	0.6	20.0	
Dibromomethane	5.0	0.50	5.0	0.0	101.0	79	123	5.0	1.1	20.0	
1,2-Dichlorobenzene	5.3	0.50	5.0	0.0	107.0	80	119	5.1	4.2	20.0	
4-Chlorotoluene	5.5	0.50	5.0	0.0	110.0	78	122	5.5	0.6	20.0	
1,3-Dichlorobenzene	5.4	0.50	5.0	0.0	109.0	80	119	5.3	3.0	20.0	
1,4-Dichlorobenzene	5.4	0.50	5.0	0.0	107.0	79	118	5.2	3.2	20.0	
Dichlorodifluoromethane	5.3	0.50	5.0	0.0	105.0	32	152	4.9	6.3	20.0	
1,1-Dichloroethane	5.5	0.50	5.0	0.0	109.0	77	125	5.3	2.7	20.0	
1,2-Dichloroethane	5.0	0.50	5.0	0.0	100.0	73	128	4.8	3.4	20.0	
1,1-Dichloroethene	5.2	0.50	5.0	0.0	104.0	71	131	5.1	2.8	20.0	
cis-1,2-Dichloroethene	5.3	0.50	5.0	0.0	105.0	78	123	5.0	5.2	20.0	
trans-1,2-Dichloroethene	5.2	0.50	5.0	0.0	104.0	75	124	5.0	4.4	20.0	
1,2-Dichloropropane	5.2	0.50	5.0	0.0	105.0	78	122	5.0	4.4	20.0	
1,3-Dichloropropane	5.0	0.50	5.0	0.0	100.0	80	119	4.7	6.3	20.0	
2,2-Dichloropropane	5.1	0.50	5.0	0.0	103.0	60	139	5.0	2.5	20.0	
1,1-Dichloropropene	4.9	0.50	5.0	0.0	98.0	79	125	4.9	1.1	20.0	
cis-1,3-Dichloropropene	4.9	0.50	5.0	0.0	98.0	75	124	4.6	5.5	20.0	
trans-1,3-Dichloropropene	5.1	0.50	5.0	0.0	103.0	73	127	5.1	0.7	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 20:12 **Prep Date:**
Lab ID: B22020962-021FMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Ethylbenzene	5.2	0.50	5.0	0.0	104.0	79	121	5.1	1.7	20.0	
Methyl tert-butyl ether (MTBE)	5.2	0.50	5.0	0.0	104.0	71	124	4.8	7.6	20.0	
Methyl ethyl ketone	53	10	50	0.0	106.0	56	143	50	6.7	20.0	
Methylene chloride	5.0	0.50	5.0	0.0	100.0	74	124	4.9	2.3	20.0	
Styrene	5.3	0.50	5.0	0.0	105.0	78	123	5.1	2.5	20.0	
1,1,1,2-Tetrachloroethane	5.2	0.50	5.0	0.0	104.0	78	124	5.1	2.7	20.0	
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0	0.0	106.0	71	121	5.0	5.7	20.0	
Tetrachloroethene	5.2	0.50	5.0	0.0	104.0	74	129	5.2	0.2	20.0	
Toluene	5.4	0.50	5.0	0.0	107.0	80	121	5.3	1.2	20.0	
1,1,1-Trichloroethane	5.1	0.50	5.0	0.0	102.0	74	131	5.1	0.5	20.0	
1,1,2-Trichloroethane	5.2	0.50	5.0	0.0	105.0	80	119	4.9	7.4	20.0	
Trichloroethene	5.3	0.50	5.0	0.0	106.0	79	123	5.0	5.8	20.0	
Trichlorofluoromethane	5.2	0.50	5.0	0.0	104.0	65	141	5.1	2.2	20.0	
1,2,3-Trichloropropane	5.2	0.50	5.0	0.0	104.0	73	125	4.7	11.0	20.0	
Vinyl chloride	5.2	0.50	5.0	0.0	104.0	58	137	4.9	6.0	20.0	
m+p-Xylenes	10	0.50	10	0.0	104.0	80	121	10	2.6	20.0	
o-Xylene	5.3	0.50	5.0	0.0	107.0	78	122	5.2	2.6	20.0	
Xylenes, Total	16	0.50	15	0.0	105.0	79	121	15	2.6	20.0	
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	109.0	81	118	0.0			
Surr: Dibromofluoromethane	11	0.50	10	0.0	105.0	80	119	0.0			
Surr: p-Bromofluorobenzene	10	0.50	10	0.0	104.0	85	114	0.0			
Surr: Toluene-d8	11	0.50	10	0.0	110.0	89	112	0.0			

Associated Samples: **B22020962-001F, B22020962-002A, B22020962-006F, B22020962-007A, B22020962-011F, B22020962-012A, B22020962-016F, B22020962-017A, B22020962-021F, B22020962-022A, B22020962-026F, B22020962-027A, B22020962-031F, B22020962-032C, B22020962-033A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 10:04 **Prep Date:**
Lab ID: CCV021522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.5	0.50	5.0		109.0	80	120				
Bromobenzene	5.3	0.50	5.0		105.0	80	120				
Bromochloromethane	5.3	0.50	5.0		106.0	80	120				
Bromodichloromethane	5.5	0.50	5.0		110.0	80	120				
Bromoform	5.1	0.50	5.0		101.0	80	120				
Carbon tetrachloride	5.4	0.50	5.0		108.0	80	120				
Chlorobenzene	5.3	0.50	5.0		106.0	80	120				
Chlorodibromomethane	5.3	0.50	5.0		106.0	80	120				
Chloroethane	4.7	0.50	5.0		95.0	80	120				
Chloroform	5.3	0.50	5.0		106.0	80	120				
Chloromethane	5.1	0.50	5.0		102.0	80	120				
1,2-Dibromoethane	5.2	0.50	5.0		105.0	80	120				
2-Chlorotoluene	5.4	0.50	5.0		107.0	80	120				
Dibromomethane	5.4	0.50	5.0		108.0	80	120				
1,2-Dichlorobenzene	5.3	0.50	5.0		105.0	80	120				
4-Chlorotoluene	5.5	0.50	5.0		110.0	80	120				
1,3-Dichlorobenzene	5.2	0.50	5.0		105.0	80	120				
1,4-Dichlorobenzene	5.3	0.50	5.0		105.0	80	120				
Dichlorodifluoromethane	5.1	0.50	5.0		103.0	80	120				
1,1-Dichloroethane	5.4	0.50	5.0		108.0	80	120				
1,2-Dichloroethane	5.2	0.50	5.0		104.0	80	120				
1,1-Dichloroethene	5.4	0.50	5.0		108.0	80	120				
cis-1,2-Dichloroethene	5.3	0.50	5.0		106.0	80	120				
trans-1,2-Dichloroethene	5.4	0.50	5.0		109.0	80	120				
1,2-Dichloropropane	5.5	0.50	5.0		110.0	80	120				
1,3-Dichloropropane	5.3	0.50	5.0		106.0	80	120				
2,2-Dichloropropane	5.5	0.50	5.0		111.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 10:04 **Prep Date:**
Lab ID: CCV021522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.5	0.50	5.0		109.0	80	120				
cis-1,3-Dichloropropene	5.3	0.50	5.0		105.0	80	120				
trans-1,3-Dichloropropene	5.6	0.50	5.0		111.0	80	120				
Ethylbenzene	5.3	0.50	5.0		107.0	80	120				
Methyl tert-butyl ether (MTBE)	4.8	0.50	5.0		95.0	80	120				
Methyl ethyl ketone	46	10	50		92.0	80	120				
Methylene chloride	5.3	0.50	5.0		105.0	80	120				
Styrene	5.4	0.50	5.0		108.0	80	120				
1,1,1,2-Tetrachloroethane	5.3	0.50	5.0		105.0	80	120				
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0		105.0	80	120				
Tetrachloroethene	5.2	0.50	5.0		104.0	80	120				
Toluene	5.5	0.50	5.0		109.0	80	120				
1,1,1-Trichloroethane	5.4	0.50	5.0		108.0	80	120				
1,1,2-Trichloroethane	5.3	0.50	5.0		106.0	80	120				
Trichloroethene	5.4	0.50	5.0		109.0	80	120				
Trichlorofluoromethane	5.2	0.50	5.0		103.0	80	120				
1,2,3-Trichloropropane	5.1	0.50	5.0		101.0	80	120				
Vinyl chloride	5.1	0.50	5.0		102.0	80	120				
m+p-Xylenes	11	0.50	10		108.0	80	120				
o-Xylene	5.2	0.50	5.0		105.0	80	120				
Xylenes, Total	16	0.50	15		107.0	80	120				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		112.0	80	120				
Surr: Dibromofluoromethane	11	0.50	10		107.0	80	120				
Surr: p-Bromofluorobenzene	10	0.50	10		103.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 10:04 **Prep Date:**
Lab ID: CCV021522_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	11	0.50	10		108.0	80	120				

Associated Samples: **B22020962-001F, B22020962-002A, B22020962-006F, B22020962-007A, B22020962-011F, B22020962-012A, B22020962-016F, B22020962-017A, B22020962-021F, B22020962-022A, B22020962-026F, B22020962-027A, B22020962-031F, B22020962-032C, B22020962-033A**

Run ID: Run Order: VOA5975C.I_220215A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 21:06 **Prep Date:**
Lab ID: CCV021522_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	4.9	0.50	5.0		98.0	50	150				
Bromobenzene	4.9	0.50	5.0		99.0	50	150				
Bromochloromethane	4.8	0.50	5.0		97.0	50	150				
Bromodichloromethane	4.8	0.50	5.0		96.0	50	150				
Bromoform	4.6	0.50	5.0		93.0	50	150				
Carbon tetrachloride	4.9	0.50	5.0		99.0	50	150				
Chlorobenzene	4.9	0.50	5.0		98.0	50	150				
Chlorodibromomethane	4.7	0.50	5.0		93.0	50	150				
Chloroethane	4.9	0.50	5.0		98.0	50	150				
Chloroform	4.8	0.50	5.0		97.0	50	150				
Chloromethane	4.9	0.50	5.0		97.0	50	150				
1,2-Dibromoethane	5.0	0.50	5.0		99.0	50	150				
2-Chlorotoluene	5.1	0.50	5.0		102.0	50	150				
Dibromomethane	4.9	0.50	5.0		98.0	50	150				
1,2-Dichlorobenzene	4.9	0.50	5.0		98.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 21:06 **Prep Date:**
Lab ID: CCV021522_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.2	0.50	5.0		103.0	50	150				
1,3-Dichlorobenzene	4.9	0.50	5.0		99.0	50	150				
1,4-Dichlorobenzene	4.9	0.50	5.0		98.0	50	150				
Dichlorodifluoromethane	4.9	0.50	5.0		98.0	50	150				
1,1-Dichloroethane	5.0	0.50	5.0		100.0	50	150				
1,2-Dichloroethane	4.8	0.50	5.0		97.0	50	150				
1,1-Dichloroethene	4.0	0.50	5.0		81.0	50	150				
cis-1,2-Dichloroethene	4.8	0.50	5.0		97.0	50	150				
trans-1,2-Dichloroethene	4.7	0.50	5.0		95.0	50	150				
1,2-Dichloropropane	4.9	0.50	5.0		97.0	50	150				
1,3-Dichloropropane	4.9	0.50	5.0		97.0	50	150				
2,2-Dichloropropane	4.8	0.50	5.0		97.0	50	150				
1,1-Dichloropropene	5.1	0.50	5.0		101.0	50	150				
cis-1,3-Dichloropropene	4.7	0.50	5.0		94.0	50	150				
trans-1,3-Dichloropropene	4.8	0.50	5.0		96.0	50	150				
Ethylbenzene	4.9	0.50	5.0		98.0	50	150				
Methyl tert-butyl ether (MTBE)	4.4	0.50	5.0		88.0	50	150				
Methyl ethyl ketone	48	10	50		96.0	50	150				
Methylene chloride	4.8	0.50	5.0		97.0	50	150				
Styrene	4.9	0.50	5.0		99.0	50	150				
1,1,1,2-Tetrachloroethane	4.7	0.50	5.0		94.0	50	150				
1,1,2,2-Tetrachloroethane	4.9	0.50	5.0		97.0	50	150				
Tetrachloroethene	4.9	0.50	5.0		97.0	50	150				
Toluene	4.9	0.50	5.0		99.0	50	150				
1,1,1-Trichloroethane	5.0	0.50	5.0		99.0	50	150				
1,1,2-Trichloroethane	4.9	0.50	5.0		98.0	50	150				
Trichloroethene	5.0	0.50	5.0		99.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220215A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374895
Method: SW8260B **Analysis Date:** 02/15/2022 21:06 **Prep Date:**
Lab ID: CCV021522_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	4.7	0.50	5.0		94.0	50	150				
1,2,3-Trichloropropane	4.7	0.50	5.0		94.0	50	150				
Vinyl chloride	4.9	0.50	5.0		98.0	50	150				
m+p-Xylenes	9.9	0.50	10		99.0	50	150				
o-Xylene	4.8	0.50	5.0		97.0	50	150				
Xylenes, Total	15	0.50	15		98.0	50	150				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		110.0	50	150				
Surr: Dibromofluoromethane	11	0.50	10		106.0	50	150				
Surr: p-Bromofluorobenzene	10	0.50	10		105.0	50	150				
Surr: Toluene-d8	11	0.50	10		109.0	50	150				

Associated Samples: **B22020962-001F, B22020962-002A, B22020962-006F, B22020962-007A, B22020962-011F, B22020962-012A, B22020962-016F, B22020962-017A, B22020962-021F, B22020962-022A, B22020962-026F, B22020962-027A, B22020962-031F, B22020962-032C, B22020962-033A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GECD.I_220216A: 2 **SampType:** Method Blank **Batch ID:** 163798
Method: SW8011 **Analysis Date:** 02/16/2022 14:06 **Prep Date:** 02/16/2022 07:52
Lab ID: MB-163798 **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	0.087	0.020	0.10		87.0	70	130				

Associated Samples: **B22020962-001H, B22020962-004A, B22020962-006H, B22020962-009A, B22020962-011H, B22020962-014A, B22020962-016H, B22020962-019A, B22020962-021H, B22020962-024A, B22020962-026H, B22020962-029A, B22020962-031H, B22020962-035A**

Run ID: Run Order: GECD.I_220216A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 163798
Method: SW8011 **Analysis Date:** 02/16/2022 14:25 **Prep Date:** 02/16/2022 07:52
Lab ID: LCS1-163798 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.092	0.010	0.10		92.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.090	0.020	0.10		90.0	70	130				

Associated Samples: **B22020962-001H, B22020962-004A, B22020962-006H, B22020962-009A, B22020962-011H, B22020962-014A, B22020962-016H, B22020962-019A, B22020962-021H, B22020962-024A, B22020962-026H, B22020962-029A, B22020962-031H, B22020962-035A**

Run ID: Run Order: GECD.I_220216A: 4 **SampType:** Laboratory Control Sample **Batch ID:** 163798
Method: SW8011 **Analysis Date:** 02/16/2022 14:45 **Prep Date:** 02/16/2022 07:52
Lab ID: LCS-163798 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.22	0.010	0.25		88.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.11	0.020	0.10		109.0	70	130				

Associated Samples: **B22020962-001H, B22020962-004A, B22020962-006H, B22020962-009A, B22020962-011H, B22020962-014A, B22020962-016H, B22020962-019A, B22020962-021H, B22020962-024A, B22020962-026H, B22020962-029A, B22020962-031H, B22020962-035A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GECD.I_220216A: 14 **SampType:** Sample Matrix Spike **Batch ID:** 163798
Method: SW8011 **Analysis Date:** 02/16/2022 18:23 **Prep Date:** 02/16/2022 07:53
Lab ID: B22020962-001HMS **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.22	0.010	0.25	0.0	90.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.090	0.020	0.10	0.0	90.0	70	130				

Associated Samples: **B22020962-001H, B22020962-004A, B22020962-006H, B22020962-009A, B22020962-011H, B22020962-014A, B22020962-016H, B22020962-019A, B22020962-021H, B22020962-024A, B22020962-026H, B22020962-029A, B22020962-031H, B22020962-035A**

Run ID: Run Order: GECD.I_220216A: 15 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 163798
Method: SW8011 **Analysis Date:** 02/16/2022 18:43 **Prep Date:** 02/16/2022 07:53
Lab ID: B22020962-001HMSD **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	92.0	60	140	0.22	2.6	20.0	
Surr: 1,1,1,2-Tetrachloroethane	0.091	0.020	0.10	0.0	91.0	70	130	0.0			

Associated Samples: **B22020962-001H, B22020962-004A, B22020962-006H, B22020962-009A, B22020962-011H, B22020962-014A, B22020962-016H, B22020962-019A, B22020962-021H, B22020962-024A, B22020962-026H, B22020962-029A, B22020962-031H, B22020962-035A**

Run ID: Run Order: GECD.I_220216A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 163798
Method: SW8011 **Analysis Date:** 02/16/2022 13:46 **Prep Date:** 02/16/2022 07:53
Lab ID: CK3-163798 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.093	0.010	0.10		93.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.089	0.020	0.10		89.0	80	120				

Associated Samples: **B22020962-001H, B22020962-004A, B22020962-006H, B22020962-009A, B22020962-011H, B22020962-014A, B22020962-016H, B22020962-019A, B22020962-021H, B22020962-024A, B22020962-026H, B22020962-029A, B22020962-031H, B22020962-035A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GECD.I_220216A: 16 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 163798
Method: SW8011 **Analysis Date:** 02/16/2022 19:22 **Prep Date:** 02/16/2022 07:53
Lab ID: CK5-163798 **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		98.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.40	0.020	0.40		100.0	80	120				

Associated Samples: **B22020962-001H, B22020962-004A, B22020962-006H, B22020962-009A, B22020962-011H, B22020962-014A, B22020962-016H, B22020962-019A, B22020962-021H, B22020962-024A, B22020962-026H, B22020962-029A, B22020962-031H, B22020962-035A**

Run ID: Run Order: GECD.I_220216A: 27 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 163798
Method: SW8011 **Analysis Date:** 02/16/2022 23:39 **Prep Date:** 02/16/2022 07:53
Lab ID: CK3-163798 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.11	0.010	0.10		113.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.098	0.020	0.10		98.0	80	120				

Associated Samples: **B22020962-001H, B22020962-004A, B22020962-006H, B22020962-009A, B22020962-011H, B22020962-014A, B22020962-016H, B22020962-019A, B22020962-021H, B22020962-024A, B22020962-026H, B22020962-029A, B22020962-031H, B22020962-035A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220215A: 5 **SampType:** Method Blank **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/15/2022 16:43 **Prep Date:** 02/14/2022 13:41
Lab ID: MB-163748 **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	0.22	0.0020	0.20		108.0	56	125				
Surr: n-Triacontane	0.12	0.0020	0.10		115.0	50	150				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215B: 5 **SampType:** Method Blank **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/16/2022 15:37 **Prep Date:** 02/14/2022 13:41
Lab ID: MB-163748 **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)	0.20	0.0020	0.20		98.0	56	125				
Surr: n-Triacontane (SGT)	0.10	0.0020	0.10		100.0	50	150				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220215A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/15/2022 15:17 **Prep Date:** 02/14/2022 13:41
Lab ID: LCS-163748 **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)	14	0.30	15		96.0	36	132				
Total Extractable Hydrocarbons	14	0.30	15		94.0	60	132				
Surr: o-Terphenyl	0.20	0.0020	0.20		100.0	56	125				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215A: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/15/2022 16:00 **Prep Date:** 02/14/2022 13:41
Lab ID: LCSD-163748 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	13	0.30	15		86.0	36	132	14	12.0	20.0	
Total Extractable Hydrocarbons	14	0.30	15		92.0	60	132	14	2.4	20.0	
Surr: o-Terphenyl	0.20	0.0020	0.20		101.0	56	125	0.0			

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215A: 18 **SampType:** Laboratory Control Sample **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/16/2022 08:29 **Prep Date:** 02/14/2022 13:41
Lab ID: LCS-163748-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)	5.5	0.30	5.0		110.0	41	113				
Surr: n-Triacontane	0.11	0.0020	0.10		112.0	50	150				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220215A: 19 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/16/2022 09:54 **Prep Date:** 02/14/2022 13:41
Lab ID: LCSD-163748-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.2	0.30	5.0		105.0	41	113	5.5	5.1	20.0	
Surr: n-Triacontane	0.11	0.0020	0.10		108.0	50	150	0.0			

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215B: 3 **SampType:** Laboratory Control Sample **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/16/2022 14:12 **Prep Date:** 02/14/2022 13:41
Lab ID: LCS-163748 **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)	13	0.30	15		85.0	36	132				
Total Extractable Hydrocarbons (SGT)	14	0.30	15		90.0	60	132				
Surr: o-Terphenyl (SGT)	0.20	0.0020	0.20		102.0	56	125				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215B: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/16/2022 14:54 **Prep Date:** 02/14/2022 13:41
Lab ID: LCSD-163748 **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		78.0	36	132	13	9.0	20.0	
Total Extractable Hydrocarbons (SGT)	12	0.30	15		83.0	60	132	14	8.8	20.0	
Surr: o-Terphenyl (SGT)	0.19	0.0020	0.20		94.0	56	125	0.0			

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220215B: 18 **SampType:** Laboratory Control Sample **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/17/2022 14:51 **Prep Date:** 02/14/2022 13:41
Lab ID: LCS-163748-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	5.2	0.30	5.0		104.0	41	113				
Surr: n-Triacontane (SGT)	0.099	0.0020	0.10		99.0	50	150				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215B: 19 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/17/2022 16:16 **Prep Date:** 02/14/2022 13:41
Lab ID: LCSD-163748-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)	5.0	0.30	5.0		100.0	41	113	5.2	4.1	20.0	
Surr: n-Triacontane (SGT)	0.094	0.0020	0.10		94.0	50	150	0.0			

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215A: 7 **SampType:** Sample Matrix Spike **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/15/2022 18:10 **Prep Date:** 02/14/2022 13:41
Lab ID: B22020962-001DMS **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)	14	0.30	14	0.0	96.0	36	132				
Total Extractable Hydrocarbons	15	0.30	14	0.0	102.0	60	132				
Surr: o-Terphenyl	0.21	0.0020	0.19	0.0	109.0	56	125				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220215A: 16 **SampType:** Sample Matrix Spike **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/16/2022 04:11 **Prep Date:** 02/14/2022 13:42
Lab ID: B22020962-006DMS-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.2	0.30	4.8	1.1	87.0	41	113				
Surr: n-Triacontane	0.10	0.0020	0.095	0.0	105.0	50	150				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215B: 7 **SampType:** Sample Matrix Spike **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/16/2022 17:03 **Prep Date:** 02/14/2022 13:41
Lab ID: B22020962-001DMS **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	83.0	36	132				
Total Extractable Hydrocarbons (SGT)	13	0.30	14	0.0	88.0	60	132				
Surr: o-Terphenyl (SGT)	0.19	0.0020	0.19	0.0	98.0	56	125				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215B: 17 **SampType:** Sample Matrix Spike **Batch ID:** 163748
Method: SW8015C **Analysis Date:** 02/17/2022 13:25 **Prep Date:** 02/14/2022 13:42
Lab ID: B22020962-006DMS-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)	4.8	0.30	4.8	0.0	101.0	41	113				
Surr: n-Triacontane (SGT)	0.091	0.0020	0.095	0.0	96.0	50	150				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VARIAN1_220217A: 4 **SampType:** Method Blank **Batch ID:** R374900
Method: SW8015C **Analysis Date:** 02/17/2022 11:51 **Prep Date:**
Lab ID: MBLK_0217VAR08r **Units:** ug/L **Prep Method:**

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

Associated Samples: **B22020962-001G, B22020962-002A, B22020962-006G, B22020962-007A, B22020962-011G, B22020962-012A, B22020962-016G, B22020962-018A, B22020962-021G, B22020962-022A, B22020962-026G, B22020962-028A, B22020962-031G, B22020962-032D, B22020962-033A**

Run ID: Run Order: VARIAN1_220217A: 19 **SampType:** Method Blank **Batch ID:** R374900
Method: SW8015C **Analysis Date:** 02/17/2022 23:11 **Prep Date:**
Lab ID: MBLK_0217VAR28r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	ND	10									
Total Purgeable Hydrocarbons	ND	10									
Surr: Trifluorotoluene	18	1.0	25		73.0	70	130				

Associated Samples: **B22020962-001G, B22020962-002A, B22020962-006G, B22020962-007A, B22020962-011G, B22020962-012A, B22020962-016G, B22020962-018A, B22020962-021G, B22020962-022A, B22020962-026G, B22020962-028A, B22020962-031G, B22020962-032D, B22020962-033A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VARIAN1_220217A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R374900
Method: SW8015C **Analysis Date:** 02/17/2022 10:43 **Prep Date:**
Lab ID: LCS_0217VAR06r **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		103.0	70	130				
Surr: Trifluorotoluene	22	1.0	25		86.0	70	130				

Associated Samples: **B22020962-001G, B22020962-002A, B22020962-006G, B22020962-007A, B22020962-011G, B22020962-012A, B22020962-016G, B22020962-018A, B22020962-021G, B22020962-022A, B22020962-026G, B22020962-028A, B22020962-031G, B22020962-032D, B22020962-033A**

Run ID: Run Order: VARIAN1_220217A: 18 **SampType:** Laboratory Control Sample **Batch ID:** R374900
Method: SW8015C **Analysis Date:** 02/17/2022 22:03 **Prep Date:**
Lab ID: LCS_0217VAR26r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	166	20	170		97.0	78	122				
Total Purgeable Hydrocarbons	201	20	200		100.0	70	130				
Surr: Trifluorotoluene	21	1.0	25		84.0	70	130				

Associated Samples: **B22020962-001G, B22020962-002A, B22020962-006G, B22020962-007A, B22020962-011G, B22020962-012A, B22020962-016G, B22020962-018A, B22020962-021G, B22020962-022A, B22020962-026G, B22020962-028A, B22020962-031G, B22020962-032D, B22020962-033A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VARIAN1_220217A: 14 **SampType:** Sample Matrix Spike **Batch ID:** R374900
Method: SW8015C **Analysis Date:** 02/17/2022 19:13 **Prep Date:**
Lab ID: B22020962-031GMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	171	20	170	0.0	101.0	78	122				
Total Purgeable Hydrocarbons	207	20	200	0.0	104.0	70	130				
Surr: Trifluorotoluene	22	1.0	25	0.0	87.0	70	130				

Associated Samples: **B22020962-001G, B22020962-002A, B22020962-006G, B22020962-007A, B22020962-011G, B22020962-012A, B22020962-016G, B22020962-018A, B22020962-021G, B22020962-022A, B22020962-026G, B22020962-028A, B22020962-031G, B22020962-032D, B22020962-033A**

Run ID: Run Order: VARIAN1_220217A: 15 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R374900
Method: SW8015C **Analysis Date:** 02/17/2022 19:47 **Prep Date:**
Lab ID: B22020962-031GMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	168	20	170	0.0	99.0	78	122	171	1.8	20.0	
Total Purgeable Hydrocarbons	203	20	200	0.0	102.0	70	130	207	1.8	20.0	
Surr: Trifluorotoluene	21	1.0	25	0.0	85.0	70	130	0.0			

Associated Samples: **B22020962-001G, B22020962-002A, B22020962-006G, B22020962-007A, B22020962-011G, B22020962-012A, B22020962-016G, B22020962-018A, B22020962-021G, B22020962-022A, B22020962-026G, B22020962-028A, B22020962-031G, B22020962-032D, B22020962-033A**

Run ID: Run Order: GCFID-HP5-B_220215A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374849
Method: SW8015C **Analysis Date:** 02/15/2022 12:08 **Prep Date:**
Lab ID: CCV_0215HP504r-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	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220215A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374849
Method: SW8015C **Analysis Date:** 02/15/2022 13:09 **Prep Date:**
Lab ID: CCV_0215HP505r **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	15	0.30	15		100.0	80	120				
Surr: o-Terphenyl	0.18	0.0020	0.20		92.0	80	120				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215A: 12 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374849
Method: SW8015C **Analysis Date:** 02/15/2022 23:53 **Prep Date:**
Lab ID: CCV_0215HP520r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.2	0.30	5.0		104.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		97.0	80	120				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215A: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374849
Method: SW8015C **Analysis Date:** 02/16/2022 00:36 **Prep Date:**
Lab ID: CCV_0215HP521r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		98.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		102.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		94.0	80	120				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220215A: 20 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374849
Method: SW8015C **Analysis Date:** 02/16/2022 11:20 **Prep Date:**
Lab ID: CCV_0215HP536r-W **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215A: 21 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374849
Method: SW8015C **Analysis Date:** 02/16/2022 12:03 **Prep Date:**
Lab ID: CCV_0215HP537r **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	0.18	0.0020	0.20		92.0	80	120				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-016D, B22020962-021D, B22020962-026D, B22020962-031D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215B: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374888
Method: SW8015C **Analysis Date:** 02/16/2022 11:20 **Prep Date:**
Lab ID: CCV_0215HP536r-W **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-021D, B22020962-026D, B22020962-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220215B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374888
Method: SW8015C **Analysis Date:** 02/16/2022 12:03 **Prep Date:**
Lab ID: CCV_0215HP537r **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	0.18	0.0020	0.20		92.0	80	120				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-021D, B22020962-026D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215B: 12 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374888
Method: SW8015C **Analysis Date:** 02/16/2022 22:46 **Prep Date:**
Lab ID: CCV_0215HP552r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.2	0.30	5.0		104.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-021D, B22020962-026D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215B: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374888
Method: SW8015C **Analysis Date:** 02/16/2022 23:29 **Prep Date:**
Lab ID: CCV_0215HP553r **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	0.18	0.0020	0.20		90.0	80	120				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-021D, B22020962-026D, B22020962-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220215B: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374888
Method: SW8015C **Analysis Date:** 02/17/2022 09:51 **Prep Date:**
Lab ID: CCV_0215HP556r-W **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-021D, B22020962-026D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215B: 15 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374888
Method: SW8015C **Analysis Date:** 02/17/2022 10:34 **Prep Date:**
Lab ID: CCV_0215HP557r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Total Extractable Hydrocarbons	15	0.30	15		100.0	80	120				
Surr: o-Terphenyl	0.18	0.0020	0.20		92.0	80	120				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-021D, B22020962-026D, B22020962-032B**

Run ID: Run Order: GCFID-HP5-B_220215B: 20 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374888
Method: SW8015C **Analysis Date:** 02/17/2022 17:42 **Prep Date:**
Lab ID: CCV_0215HP567r-W **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-021D, B22020962-026D, B22020962-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220215B: 21 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374888
Method: SW8015C **Analysis Date:** 02/17/2022 18:26 **Prep Date:**
Lab ID: CCV_0215HP568r **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	0.18	0.0020	0.20		92.0	80	120				

Associated Samples: **B22020962-001D, B22020962-006D, B22020962-011D, B22020962-021D, B22020962-026D, B22020962-032B**

Run ID: Run Order: VARIAN1_220217A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374900
Method: SW8015C **Analysis Date:** 02/17/2022 10:09 **Prep Date:**
Lab ID: CCV_0217VAR05r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	177	20	168		105.0	80	120				
Total Purgeable Hydrocarbons	213	20	200		106.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		89.0	80	120				

Associated Samples: **B22020962-001G, B22020962-002A, B22020962-006G, B22020962-007A, B22020962-011G, B22020962-012A, B22020962-016G, B22020962-018A, B22020962-021G, B22020962-022A, B22020962-026G, B22020962-028A, B22020962-031G, B22020962-032D, B22020962-033A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VARIAN1_220217A: 17 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374900
Method: SW8015C **Analysis Date:** 02/17/2022 21:29 **Prep Date:**
Lab ID: CCV_0217VAR25r **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	168		101.0	80	120				
Total Purgeable Hydrocarbons	204	20	200		102.0	80	120				
Surr: Trifluorotoluene	21	1.0	25		84.0	80	120				

Associated Samples: **B22020962-001G, B22020962-002A, B22020962-006G, B22020962-007A, B22020962-011G, B22020962-012A, B22020962-016G, B22020962-018A, B22020962-021G, B22020962-022A, B22020962-026G, B22020962-028A, B22020962-031G, B22020962-032D, B22020962-033A**

Run ID: Run Order: VARIAN1_220217A: 27 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374900
Method: SW8015C **Analysis Date:** 02/18/2022 07:08 **Prep Date:**
Lab ID: CCV_0217VAR42r **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	168		101.0	80	120				
Total Purgeable Hydrocarbons	205	20	200		103.0	80	120				
Surr: Trifluorotoluene	21	1.0	25		85.0	80	120				

Associated Samples: **B22020962-001G, B22020962-002A, B22020962-006G, B22020962-007A, B22020962-011G, B22020962-012A, B22020962-016G, B22020962-018A, B22020962-021G, B22020962-022A, B22020962-026G, B22020962-028A, B22020962-031G, B22020962-032D, B22020962-033A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: FID-HEADSPACE_220215A: 4 **SampType:** Method Blank **Batch ID:** R374776
Method: SW8015M **Analysis Date:** 02/15/2022 10:27 **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: **B22020962-001I, B22020962-005A, B22020962-006I, B22020962-010A, B22020962-011I, B22020962-015A, B22020962-016I, B22020962-020A, B22020962-021I, B22020962-025A, B22020962-026I, B22020962-030A, B22020962-031I, B22020962-036A**

Run ID: Run Order: FID-HEADSPACE_220215A: 2 **SampType:** Laboratory Control Sample **Batch ID:** R374776
Method: SW8015M **Analysis Date:** 02/15/2022 09:19 **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	99	2.0	100		99.0	85	115				

Associated Samples: **B22020962-001I, B22020962-005A, B22020962-006I, B22020962-010A, B22020962-011I, B22020962-015A, B22020962-016I, B22020962-020A, B22020962-021I, B22020962-025A, B22020962-026I, B22020962-030A, B22020962-031I, B22020962-036A**

Run ID: Run Order: FID-HEADSPACE_220215A: 3 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** R374776
Method: SW8015M **Analysis Date:** 02/15/2022 09:24 **Prep Date:**
Lab ID: LCSD **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	100	2.0	100		100.0	85	115	99	0.5	20.0	

Associated Samples: **B22020962-001I, B22020962-005A, B22020962-006I, B22020962-010A, B22020962-011I, B22020962-015A, B22020962-016I, B22020962-020A, B22020962-021I, B22020962-025A, B22020962-026I, B22020962-030A, B22020962-031I, B22020962-036A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: FID-HEADSPACE_220215A: 8 **SampType:** Sample Duplicate **Batch ID:** R374776
Method: SW8015M **Analysis Date:** 02/15/2022 11:17 **Prep Date:**
Lab ID: B22020962-006IDUP **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	0.56	0.16			0.0			0.57	1.6	20.0	

Associated Samples: **B22020962-001I, B22020962-005A, B22020962-006I, B22020962-010A, B22020962-011I, B22020962-015A, B22020962-016I, B22020962-020A, B22020962-021I, B22020962-025A, B22020962-026I, B22020962-030A, B22020962-031I, B22020962-036A**

Run ID: Run Order: FID-HEADSPACE_220215A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374776
Method: SW8015M **Analysis Date:** 02/15/2022 09:14 **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: **B22020962-001I, B22020962-005A, B22020962-006I, B22020962-010A, B22020962-011I, B22020962-015A, B22020962-016I, B22020962-020A, B22020962-021I, B22020962-025A, B22020962-026I, B22020962-030A, B22020962-031I, B22020962-036A**

Run ID: Run Order: FID-HEADSPACE_220215A: 20 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374776
Method: SW8015M **Analysis Date:** 02/15/2022 12:55 **Prep Date:**
Lab ID: CCV **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	95	2.0	100		95.0	85	115				

Associated Samples: **B22020962-001I, B22020962-005A, B22020962-006I, B22020962-010A, B22020962-011I, B22020962-015A, B22020962-016I, B22020962-020A, B22020962-021I, B22020962-025A, B22020962-026I, B22020962-030A, B22020962-031I, B22020962-036A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218A: 17 **SampType:** Method Blank **Batch ID:** 163724
Method: SW8270C **Analysis Date:** 02/19/2022 15:33 **Prep Date:** 02/14/2022 08:37
Lab ID: MB-163724 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	ND	5.0									
1,2-Dichlorobenzene	ND	5.0									
1,3-Dichlorobenzene	ND	5.0									
1,4-Dichlorobenzene	ND	5.0									
2,4,5-Trichlorophenol	ND	5.0									
2,4,6-Trichlorophenol	ND	5.0									
2,4-Dichlorophenol	ND	5.0									
2,4-Dimethylphenol	ND	5.0									
2,4-Dinitrophenol	ND	10									
2,4-Dinitrotoluene	ND	5.0									
2,6-Dinitrotoluene	ND	5.0									
2-Chloronaphthalene	ND	5.0									
2-Chlorophenol	ND	5.0									
2-Nitrophenol	ND	5.0									
3,3´-Dichlorobenzidine	ND	10									
4,6-Dinitro-2-methylphenol	ND	10									
4-Bromophenyl phenyl ether	ND	5.0									
4-Chloro-3-methylphenol	ND	5.0									
4-Chlorophenol	ND	5.0									
4-Chlorophenyl phenyl ether	ND	5.0									
4-Nitrophenol	ND	10									
Azobenzene	ND	5.0									
bis(-2-chloroethoxy)Methane	ND	5.0									
bis(-2-chloroethyl)Ether	ND	5.0									
bis(2-chloroisopropyl)Ether	ND	5.0									
bis(2-ethylhexyl)Phthalate	ND	5.0									
Butylbenzylphthalate	ND	5.0									

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218A: 17 **SampType:** Method Blank **Batch ID:** 163724
Method: SW8270C **Analysis Date:** 02/19/2022 15:33 **Prep Date:** 02/14/2022 08:37
Lab ID: MB-163724 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	ND	5.0									
Dimethyl phthalate	ND	5.0									
Di-n-butyl phthalate	ND	5.0									
Di-n-octyl phthalate	ND	5.0									
Hexachlorobenzene	ND	5.0									
Hexachlorobutadiene	ND	5.0									
Hexachlorocyclopentadiene	ND	5.0									
Hexachloroethane	ND	5.0									
Isophorone	ND	5.0									
m+p-Cresols	ND	5.0									
Nitrobenzene	ND	5.0									
n-Nitrosodimethylamine	ND	5.0									
n-Nitroso-di-n-propylamine	ND	5.0									
n-Nitrosodiphenylamine	ND	10									
o-Cresol	ND	5.0									
Pentachlorophenol	ND	10									
Phenol	ND	5.0									
Pyridine	ND	5.0									
Surr: 2,4,6-Tribromophenol	161	5.0	200		80.0	43	140				
Surr: 2-Fluorobiphenyl	67	5.0	100		67.0	44	119				
Surr: 2-Fluorophenol	65	5.0	200		32.0	19	119				
Surr: Nitrobenzene-d5	62	5.0	100		62.0	44	120				
Surr: Phenol-d5	64	5.0	200		32.0	10	65				
Surr: Terphenyl-d14	110	5.0	100		110.0	50	134				

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218A: 18 **SampType:** Laboratory Control Sample **Batch ID:** 163724
Method: SW8270C **Analysis Date:** 02/19/2022 16:05 **Prep Date:** 02/14/2022 08:37
Lab ID: LCS-163724 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	73	10	100		73.0	29	116				
1,2-Dichlorobenzene	67	10	100		67.0	32	111				
1,3-Dichlorobenzene	70	10	100		70.0	28	110				
1,4-Dichlorobenzene	67	10	100		67.0	29	112				
2,4,5-Trichlorophenol	83	10	100		83.0	53	123				
2,4,6-Trichlorophenol	91	10	100		91.0	50	125				
2,4-Dichlorophenol	75	10	100		75.0	47	121				
2,4-Dimethylphenol	80	10	100		80.0	31	124				
2,4-Dinitrophenol	87	10	100		87.0	23	142				
2,4-Dinitrotoluene	92	10	100		92.0	57	128				
2,6-Dinitrotoluene	85	10	100		85.0	50	118				
2-Chloronaphthalene	83	10	100		83.0	40	116				
2-Chlorophenol	67	10	100		67.0	38	117				
2-Nitrophenol	82	10	100		82.0	47	123				
3,3´-Dichlorobenzidine	74	10	100		74.0	27	129				
4,6-Dinitro-2-methylphenol	90	10	100		90.0	44	137				
4-Bromophenyl phenyl ether	97	10	100		97.0	55	124				
4-Chloro-3-methylphenol	86	10	100		86.0	52	119				
4-Chlorophenol	66	10	100		66.0	41	81				
4-Chlorophenyl phenyl ether	99	10	100		99.0	53	121				
4-Nitrophenol	36	10	100		36.0	15	36				
Azobenzene	84	10	100		84.0	61	116				
bis(-2-chloroethoxy)Methane	85	10	100		85.0	48	120				
bis(-2-chloroethyl)Ether	76	10	100		76.0	43	118				
bis(2-chloroisopropyl)Ether	65	10	100		65.0	37	130				
bis(2-ethylhexyl)Phthalate	97	10	100		97.0	55	135				
Butylbenzylphthalate	96	10	100		96.0	53	134				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218A: 18 **SampType:** Laboratory Control Sample **Batch ID:** 163724
Method: SW8270C **Analysis Date:** 02/19/2022 16:05 **Prep Date:** 02/14/2022 08:37
Lab ID: LCS-163724 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	92	10	100		92.0	56	125				
Dimethyl phthalate	96	10	100		96.0	45	127				
Di-n-butyl phthalate	100	10	100		100.0	59	127				
Di-n-octyl phthalate	97	10	100		97.0	51	140				
Hexachlorobenzene	93	10	100		93.0	53	125				
Hexachlorobutadiene	71	10	100		71.0	22	124				
Hexachlorocyclopentadiene	78	10	100		78.0	39	91				
Hexachloroethane	65	10	100		65.0	21	115				
Isophorone	81	10	100		81.0	42	124				
m+p-Cresols	76	10	100		76.0	29	110				
Nitrobenzene	89	10	100		89.0	45	121				
n-Nitrosodimethylamine	50	10	100		50.0	20	45				S
n-Nitroso-di-n-propylamine	101	10	100		101.0	49	119				
n-Nitrosodiphenylamine	97	10	100		97.0	51	123				
o-Cresol	75	10	100		75.0	30	117				
Pentachlorophenol	102	10	100		102.0	35	138				
Phenol	48	10	100		48.0	37	75				
Pyridine	35	10	100		35.0	16	45				
Surr: 2,4,6-Tribromophenol	183	10	200		91.0	43	140				
Surr: 2-Fluorobiphenyl	87	10	100		87.0	44	119				
Surr: 2-Fluorophenol	78	10	200		39.0	19	119				
Surr: Nitrobenzene-d5	75	10	100		75.0	44	120				
Surr: Phenol-d5	81	10	200		41.0	10	65				
Surr: Terphenyl-d14	100	10	100		100.0	50	134				

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218A: 19 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163724
Method: SW8270C **Analysis Date:** 02/19/2022 16:38 **Prep Date:** 02/14/2022 11:18
Lab ID: LCSD-163724 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	74	10	100		74.0	29	116	73	0.9	20.0	
1,2-Dichlorobenzene	68	10	100		68.0	32	111	67	0.5	20.0	
1,3-Dichlorobenzene	67	10	100		67.0	28	110	70	4.8	20.0	
1,4-Dichlorobenzene	67	10	100		67.0	29	112	67	0.7	20.0	
2,4,5-Trichlorophenol	83	10	100		83.0	53	123	83	0.8	20.0	
2,4,6-Trichlorophenol	94	10	100		94.0	50	125	91	3.8	20.0	
2,4-Dichlorophenol	79	10	100		79.0	47	121	75	4.7	20.0	
2,4-Dimethylphenol	88	10	100		88.0	31	124	80	8.9	20.0	
2,4-Dinitrophenol	93	10	100		93.0	23	142	87	6.0	20.0	
2,4-Dinitrotoluene	95	10	100		95.0	57	128	92	3.1	20.0	
2,6-Dinitrotoluene	95	10	100		95.0	50	118	85	11.0	20.0	
2-Chloronaphthalene	87	10	100		87.0	40	116	83	5.4	20.0	
2-Chlorophenol	71	10	100		71.0	38	117	67	5.2	20.0	
2-Nitrophenol	89	10	100		89.0	47	123	82	7.8	20.0	
3,3´-Dichlorobenzidine	80	10	100		80.0	27	129	74	7.3	20.0	
4,6-Dinitro-2-methylphenol	88	10	100		88.0	44	137	90	2.5	20.0	
4-Bromophenyl phenyl ether	100	10	100		100.0	55	124	97	3.1	20.0	
4-Chloro-3-methylphenol	91	10	100		91.0	52	119	86	6.0	20.0	
4-Chlorophenol	75	10	100		75.0	41	81	66	12.0	20.0	
4-Chlorophenyl phenyl ether	105	10	100		105.0	53	121	99	5.6	20.0	
4-Nitrophenol	39	10	100		39.0	15	36	36	8.8	20.0	S
Azobenzene	86	10	100		86.0	61	116	84	2.2	20.0	
bis(-2-chloroethoxy)Methane	91	10	100		91.0	48	120	85	6.5	20.0	
bis(-2-chloroethyl)Ether	78	10	100		78.0	43	118	76	3.4	20.0	
bis(2-chloroisopropyl)Ether	68	10	100		68.0	37	130	65	5.2	20.0	
bis(2-ethylhexyl)Phthalate	106	10	100		106.0	55	135	97	8.7	20.0	
Butylbenzylphthalate	102	10	100		102.0	53	134	96	6.7	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218A: 19 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163724
Method: SW8270C **Analysis Date:** 02/19/2022 16:38 **Prep Date:** 02/14/2022 11:18
Lab ID: LCSD-163724 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	95	10	100		95.0	56	125	92	3.6	20.0	
Dimethyl phthalate	100	10	100		100.0	45	127	96	3.8	20.0	
Di-n-butyl phthalate	102	10	100		102.0	59	127	100	1.7	20.0	
Di-n-octyl phthalate	102	10	100		102.0	51	140	97	5.2	20.0	
Hexachlorobenzene	93	10	100		93.0	53	125	93	0.1	20.0	
Hexachlorobutadiene	73	10	100		73.0	22	124	71	2.7	20.0	
Hexachlorocyclopentadiene	80	10	100		80.0	39	91	78	2.6	20.0	
Hexachloroethane	56	10	100		56.0	21	115	65	14.0	20.0	
Isophorone	86	10	100		86.0	42	124	81	5.4	20.0	
m+p-Cresols	85	10	100		85.0	29	110	76	11.0	20.0	
Nitrobenzene	96	10	100		96.0	45	121	89	8.1	20.0	
n-Nitrosodimethylamine	54	10	100		54.0	20	45	50	8.3	20.0	S
n-Nitroso-di-n-propylamine	102	10	100		102.0	49	119	101	1.0	20.0	
n-Nitrosodiphenylamine	99	10	100		99.0	51	123	97	2.5	20.0	
o-Cresol	81	10	100		81.0	30	117	75	7.1	20.0	
Pentachlorophenol	104	10	100		104.0	35	138	102	2.1	20.0	
Phenol	50	10	100		50.0	37	75	48	4.0	20.0	
Pyridine	39	10	100		39.0	16	45	35	10.0	20.0	
Surr: 2,4,6-Tribromophenol	183	10	200		91.0	43	140	0.0	0.0		
Surr: 2-Fluorobiphenyl	86	10	100		86.0	44	119	0.0	0.0		
Surr: 2-Fluorophenol	78	10	200		39.0	19	119	0.0	0.0		
Surr: Nitrobenzene-d5	82	10	100		82.0	44	120	0.0	0.0		
Surr: Phenol-d5	85	10	200		43.0	10	65	0.0	0.0		
Surr: Terphenyl-d14	102	10	100		102.0	50	134	0.0	0.0		

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

- Insufficient sample was submitted to perform a Matrix Spike/Duplicate, so a Laboratory Control Sample Duplicate is included in the reporting package to assess precision.

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218B: 9 **SampType:** Sample Matrix Spike **Batch ID:** 163724
Method: SW8270C **Analysis Date:** 02/20/2022 01:36 **Prep Date:** 02/14/2022 11:20
Lab ID: B22020962-006CMS **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	70	10	95	0.0	74.0	29	116				
1,2-Dichlorobenzene	63	10	95	0.0	66.0	32	111				
1,3-Dichlorobenzene	62	10	95	0.0	65.0	28	110				
1,4-Dichlorobenzene	61	10	95	0.0	64.0	29	112				
2,4,5-Trichlorophenol	73	10	95	0.0	77.0	53	123				
2,4,6-Trichlorophenol	79	10	95	0.0	83.0	50	125				
2,4-Dichlorophenol	66	10	95	0.0	69.0	47	121				
2,4-Dimethylphenol	65	10	95	0.0	68.0	31	124				
2,4-Dinitrophenol	85	10	95	0.0	89.0	23	142				
2,4-Dinitrotoluene	85	10	95	0.0	89.0	57	128				
2,6-Dinitrotoluene	76	10	95	0.0	80.0	50	118				
2-Chloronaphthalene	78	10	95	0.0	82.0	40	116				
2-Chlorophenol	57	10	95	0.0	60.0	38	117				
2-Nitrophenol	77	10	95	0.0	81.0	47	123				
3,3´-Dichlorobenzidine	54	10	95	0.0	56.0	27	129				
4,6-Dinitro-2-methylphenol	86	10	95	0.0	90.0	44	137				
4-Bromophenyl phenyl ether	83	10	95	0.0	88.0	55	124				
4-Chloro-3-methylphenol	78	10	95	0.0	82.0	52	119				
4-Chlorophenol	60	10	95	0.0	63.0	41	81				
4-Chlorophenyl phenyl ether	89	10	95	0.0	93.0	53	121				
4-Nitrophenol	38	10	95	0.0	40.0	15	36				S
Azobenzene	74	10	95	0.0	78.0	61	116				
bis(-2-chloroethoxy)Methane	73	10	95	0.0	76.0	48	120				
bis(-2-chloroethyl)Ether	69	10	95	0.0	73.0	43	118				
bis(2-chloroisopropyl)Ether	63	10	95	0.0	66.0	37	130				
bis(2-ethylhexyl)Phthalate	91	10	95	0.0	96.0	55	135				
Butylbenzylphthalate	94	10	95	0.0	98.0	53	134				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218B: 9 **SampType:** Sample Matrix Spike **Batch ID:** 163724
Method: SW8270C **Analysis Date:** 02/20/2022 01:36 **Prep Date:** 02/14/2022 11:20
Lab ID: B22020962-006CMS **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	86	10	95	0.0	91.0	56	125				
Dimethyl phthalate	92	10	95	0.0	96.0	45	127				
Di-n-butyl phthalate	96	10	95	0.0	101.0	59	127				
Di-n-octyl phthalate	86	10	95	0.0	91.0	51	140				
Hexachlorobenzene	78	10	95	0.0	82.0	53	125				
Hexachlorobutadiene	64	10	95	0.0	68.0	22	124				
Hexachlorocyclopentadiene	64	10	95	0.0	67.0	39	91				
Hexachloroethane	61	10	95	0.0	64.0	21	115				
Isophorone	75	10	95	0.0	79.0	42	124				
m+p-Cresols	60	10	95	0.0	63.0	29	110				
Nitrobenzene	76	10	95	0.0	80.0	45	121				
n-Nitrosodimethylamine	50	10	95	0.0	52.0	20	45				S
n-Nitroso-di-n-propylamine	90	10	95	0.0	94.0	49	119				
n-Nitrosodiphenylamine	83	10	95	0.0	88.0	51	123				
o-Cresol	69	10	95	0.0	72.0	30	117				
Pentachlorophenol	98	10	95	0.0	102.0	35	138				
Phenol	41	10	95	0.0	43.0	37	75				
Pyridine	29	10	95	0.0	31.0	16	45				
Surr: 2,4,6-Tribromophenol	160	10	190	0.0	84.0	43	140				
Surr: 2-Fluorobiphenyl	75	10	95	0.0	79.0	44	119				
Surr: 2-Fluorophenol	62	10	190	0.0	33.0	19	119				
Surr: Nitrobenzene-d5	71	10	95	0.0	75.0	44	120				
Surr: Phenol-d5	69	10	190	0.0	36.0	10	65				
Surr: Terphenyl-d14	90	10	95	0.0	95.0	50	134				

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218B: 16 **SampType:** Sample Matrix Spike **Batch ID:** 163724
Method: SW8270C **Analysis Date:** 02/20/2022 05:21 **Prep Date:** 02/14/2022 09:23
Lab ID: B22020962-032AMS **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	71	10	95	0.0	74.0	29	116				
1,2-Dichlorobenzene	62	10	95	0.0	65.0	32	111				
1,3-Dichlorobenzene	60	10	95	0.0	63.0	28	110				
1,4-Dichlorobenzene	60	10	95	0.0	63.0	29	112				
2,4,5-Trichlorophenol	84	10	95	0.0	88.0	53	123				
2,4,6-Trichlorophenol	93	10	95	0.0	98.0	50	125				
2,4-Dichlorophenol	78	10	95	0.0	82.0	47	121				
2,4-Dimethylphenol	74	10	95	0.0	78.0	31	124				
2,4-Dinitrophenol	89	10	95	0.0	94.0	23	142				
2,4-Dinitrotoluene	90	10	95	0.0	95.0	57	128				
2,6-Dinitrotoluene	84	10	95	0.0	88.0	50	118				
2-Chloronaphthalene	82	10	95	0.0	86.0	40	116				
2-Chlorophenol	65	10	95	0.0	68.0	38	117				
2-Nitrophenol	85	10	95	0.0	90.0	47	123				
3,3´-Dichlorobenzidine	76	10	95	0.0	80.0	27	129				
4,6-Dinitro-2-methylphenol	88	10	95	0.0	93.0	44	137				
4-Bromophenyl phenyl ether	94	10	95	0.0	99.0	55	124				
4-Chloro-3-methylphenol	86	10	95	0.0	91.0	52	119				
4-Chlorophenol	72	10	95	0.0	76.0	41	81				
4-Chlorophenyl phenyl ether	97	10	95	0.0	102.0	53	121				
4-Nitrophenol	37	10	95	0.0	39.0	15	36				S
Azobenzene	85	10	95	0.0	90.0	61	116				
bis(-2-chloroethoxy)Methane	77	10	95	0.0	81.0	48	120				
bis(-2-chloroethyl)Ether	70	10	95	0.0	73.0	43	118				
bis(2-chloroisopropyl)Ether	64	10	95	0.0	67.0	37	130				
bis(2-ethylhexyl)Phthalate	97	10	95	0.0	102.0	55	135				
Butylbenzylphthalate	98	10	95	0.0	102.0	53	134				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218B: 16 **SampType:** Sample Matrix Spike **Batch ID:** 163724
Method: SW8270C **Analysis Date:** 02/20/2022 05:21 **Prep Date:** 02/14/2022 09:23
Lab ID: B22020962-032AMS **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	92	10	95	0.0	97.0	56	125				
Dimethyl phthalate	99	10	95	0.0	104.0	45	127				
Di-n-butyl phthalate	100	10	95	0.0	105.0	59	127				
Di-n-octyl phthalate	98	10	95	0.0	103.0	51	140				
Hexachlorobenzene	91	10	95	0.0	95.0	53	125				
Hexachlorobutadiene	68	10	95	0.0	71.0	22	124				
Hexachlorocyclopentadiene	72	10	95	0.0	75.0	39	91				
Hexachloroethane	61	10	95	0.0	64.0	21	115				
Isophorone	83	10	95	0.0	88.0	42	124				
m+p-Cresols	68	10	95	0.0	72.0	29	110				
Nitrobenzene	79	10	95	0.0	83.0	45	121				
n-Nitrosodimethylamine	54	10	95	0.0	56.0	20	45				S
n-Nitroso-di-n-propylamine	97	10	95	0.0	102.0	49	119				
n-Nitrosodiphenylamine	94	10	95	0.0	99.0	51	123				
o-Cresol	72	10	95	0.0	76.0	30	117				
Pentachlorophenol	101	10	95	0.0	107.0	35	138				
Phenol	44	10	95	0.0	46.0	37	75				
Pyridine	32	10	95	0.0	34.0	16	45				
Surr: 2,4,6-Tribromophenol	179	10	190	0.0	94.0	43	140				
Surr: 2-Fluorobiphenyl	79	10	95	0.0	83.0	44	119				
Surr: 2-Fluorophenol	75	10	190	0.0	39.0	19	119				
Surr: Nitrobenzene-d5	72	10	95	0.0	76.0	44	120				
Surr: Phenol-d5	75	10	190	0.0	39.0	10	65				
Surr: Terphenyl-d14	98	10	95	0.0	103.0	50	134				

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374943
Method: SW8270C **Analysis Date:** 02/19/2022 21:50 **Prep Date:**
Lab ID: 18-Feb-22_CCV_27 **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	80	10	75		107.0	70	130				
1,2-Dichlorobenzene	76	10	75		102.0	70	130				
1,3-Dichlorobenzene	80	10	75		106.0	70	130				
1,4-Dichlorobenzene	78	10	75		103.0	80	120				
2,4,5-Trichlorophenol	80	10	75		107.0	70	130				
2,4,6-Trichlorophenol	85	10	75		113.0	80	120				
2,4-Dichlorophenol	79	10	75		105.0	80	120				
2,4-Dimethylphenol	74	10	75		99.0	70	130				
2,4-Dinitrophenol	82	10	75		109.0	70	130				
2,4-Dinitrotoluene	80	10	75		107.0	70	130				
2,6-Dinitrotoluene	75	10	75		100.0	70	130				
2-Chloronaphthalene	78	10	75		105.0	70	130				
2-Chlorophenol	78	10	75		104.0	70	130				
2-Nitrophenol	83	10	75		111.0	80	120				
3,3´-Dichlorobenzidine	81	10	75		108.0	70	130				
4,6-Dinitro-2-methylphenol	84	10	75		112.0	70	130				
4-Bromophenyl phenyl ether	81	10	75		107.0	70	130				
4-Chloro-3-methylphenol	80	10	75		107.0	80	120				
4-Chlorophenol	81	10	75		108.0	70	130				
4-Chlorophenyl phenyl ether	83	10	75		111.0	70	130				
4-Nitrophenol	85	10	75		113.0	70	130				
Azobenzene	77	10	75		102.0	70	130				
bis(-2-chloroethoxy)Methane	75	10	75		100.0	70	130				
bis(-2-chloroethyl)Ether	80	10	75		107.0	70	130				
bis(2-chloroisopropyl)Ether	77	10	75		103.0	70	130				
bis(2-ethylhexyl)Phthalate	84	10	75		113.0	70	130				
Butylbenzylphthalate	82	10	75		110.0	70	130				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374943
Method: SW8270C **Analysis Date:** 02/19/2022 21:50 **Prep Date:**
Lab ID: 18-Feb-22_CCV_27 **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	79	10	75		105.0	70	130				
Dimethyl phthalate	83	10	75		110.0	70	130				
Di-n-butyl phthalate	86	10	75		114.0	70	130				
Di-n-octyl phthalate	83	10	75		111.0	80	120				
Hexachlorobenzene	83	10	75		110.0	70	130				
Hexachlorobutadiene	83	10	75		111.0	80	120				
Hexachlorocyclopentadiene	84	10	75		112.0	70	130				
Hexachloroethane	77	10	75		103.0	70	130				
Isophorone	81	10	75		108.0	70	130				
m+p-Cresols	82	10	75		109.0	70	130				
Nitrobenzene	85	10	75		113.0	70	130				
n-Nitrosodimethylamine	89	10	75		118.0	70	130				
n-Nitroso-di-n-propylamine	88	10	75		117.0	70	130				
n-Nitrosodiphenylamine	79	10	75		105.0	80	120				
o-Cresol	77	10	75		102.0	70	130				
Pentachlorophenol	85	10	75		113.0	80	120				
Phenol	77	10	75		103.0	80	120				
Pyridine	80	10	75		107.0	70	130				
Surr: 2,4,6-Tribromophenol	84	10	75		112.0	70	130				
Surr: 2-Fluorobiphenyl	80	10	75		106.0	70	130				
Surr: 2-Fluorophenol	79	10	75		105.0	70	130				
Surr: Nitrobenzene-d5	79	10	75		106.0	70	130				
Surr: Phenol-d5	77	10	75		103.0	70	130				
Surr: Terphenyl-d14	78	10	75		105.0	70	130				

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218B: 17 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374943
Method: SW8270C **Analysis Date:** 02/20/2022 05:53 **Prep Date:**
Lab ID: 18-Feb-22_CCV_42 **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	83	10	75		111.0	50	150				
1,2-Dichlorobenzene	84	10	75		112.0	50	150				
1,3-Dichlorobenzene	78	10	75		104.0	50	150				
1,4-Dichlorobenzene	80	10	75		107.0	50	150				
2,4,5-Trichlorophenol	78	10	75		104.0	50	150				
2,4,6-Trichlorophenol	77	10	75		103.0	50	150				
2,4-Dichlorophenol	81	10	75		108.0	50	150				
2,4-Dimethylphenol	70	10	75		94.0	50	150				
2,4-Dinitrophenol	73	10	75		98.0	50	150				
2,4-Dinitrotoluene	84	10	75		112.0	50	150				
2,6-Dinitrotoluene	79	10	75		105.0	50	150				
2-Chloronaphthalene	84	10	75		111.0	50	150				
2-Chlorophenol	80	10	75		107.0	50	150				
2-Nitrophenol	76	10	75		102.0	50	150				
3,3´-Dichlorobenzidine	78	10	75		104.0	50	150				
4,6-Dinitro-2-methylphenol	75	10	75		100.0	50	150				
4-Bromophenyl phenyl ether	74	10	75		99.0	50	150				
4-Chloro-3-methylphenol	79	10	75		105.0	50	150				
4-Chlorophenol	83	10	75		111.0	50	150				
4-Chlorophenyl phenyl ether	74	10	75		99.0	50	150				
4-Nitrophenol	79	10	75		105.0	50	150				
Azobenzene	81	10	75		108.0	50	150				
bis(-2-chloroethoxy)Methane	77	10	75		102.0	50	150				
bis(-2-chloroethyl)Ether	79	10	75		105.0	50	150				
bis(2-chloroisopropyl)Ether	80	10	75		107.0	50	150				
bis(2-ethylhexyl)Phthalate	82	10	75		109.0	50	150				
Butylbenzylphthalate	81	10	75		109.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220218B: 17 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R374943
Method: SW8270C **Analysis Date:** 02/20/2022 05:53 **Prep Date:**
Lab ID: 18-Feb-22_CCV_42 **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	84	10	75		112.0	50	150				
Dimethyl phthalate	80	10	75		107.0	50	150				
Di-n-butyl phthalate	82	10	75		109.0	50	150				
Di-n-octyl phthalate	83	10	75		111.0	50	150				
Hexachlorobenzene	77	10	75		103.0	50	150				
Hexachlorobutadiene	79	10	75		106.0	50	150				
Hexachlorocyclopentadiene	78	10	75		104.0	50	150				
Hexachloroethane	78	10	75		103.0	50	150				
Isophorone	83	10	75		110.0	50	150				
m+p-Cresols	81	10	75		109.0	50	150				
Nitrobenzene	73	10	75		97.0	50	150				
n-Nitrosodimethylamine	75	10	75		99.0	50	150				
n-Nitroso-di-n-propylamine	79	10	75		105.0	50	150				
n-Nitrosodiphenylamine	81	10	75		108.0	50	150				
o-Cresol	77	10	75		102.0	50	150				
Pentachlorophenol	86	10	75		115.0	50	150				
Phenol	81	10	75		108.0	50	150				
Pyridine	75	10	75		101.0	50	150				
Surr: 2,4,6-Tribromophenol	80	10	75		106.0	50	150				
Surr: 2-Fluorobiphenyl	73	10	75		97.0	50	150				
Surr: 2-Fluorophenol	79	10	75		105.0	50	150				
Surr: Nitrobenzene-d5	79	10	75		105.0	50	150				
Surr: Phenol-d5	81	10	75		108.0	50	150				
Surr: Terphenyl-d14	77	10	75		103.0	50	150				

Associated Samples: **B22020962-001C, B22020962-006C, B22020962-011C, B22020962-016C, B22020962-021C, B22020962-026C, B22020962-031C, B22020962-032A**

Analytical QC Exceptions Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01

Report Date: 03/04/2022

Analysis Method	Analysis	Batch ID	Associated Samples	Sample Type	Lab ID	Analysis Date	Analysis Time	Analyte	%REC	Low Limit	High Limit	% RPD	RPD Limit	Qual
SW8270C	Semi-Volatile Organic Compounds, Extended List	163724	001C, 006C, 011C, 016C, 021C, 026C, 031C, 032A	LCS-DOD	LCS-163724	2/19/2022	16:05	n-Nitrosodimethylamine	50.0	20	45			S
				LCSD-DOD	LCSD-163724	2/19/2022	16:38	4-Nitrophenol	39.0	15	36	8.8	20.0	S
								n-Nitrosodimethylamine	54.0	20	45	8.3	20.0	S
				MS-DOD	B22020962-006CMS	2/20/2022	01:36	4-Nitrophenol	40.0	15	36			S
								n-Nitrosodimethylamine	52.0	20	45			S
				MS-DOD	B22020962-032AMS	2/20/2022	05:21	4-Nitrophenol	39.0	15	36			S
								n-Nitrosodimethylamine	56.0	20	45			S

Preparation and Analysis Dates Report

Work Order: B22020962
Client: AECOM - Honolulu
Project Name: CV18F0126, 60571032.02.46.01
Report Date: 3/04/2022

Lab ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Method	Prep Date	Prep Batch	Analysis Method	Analysis Date
001B	ERH2524 (OWDFMW07A)	02/09/2022 17:45	Ground Water	Metals by ICP-MS, Total		SW3010A	02/14/2022 13:01	163745	SW6020	02/18/2022 17:27
001C	ERH2524 (OWDFMW07A)	02/09/2022 17:45	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/14/2022 10:30	163724	SW8270CSIM	02/16/2022 19:33
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/14/2022 10:30	163724	SW8270C	02/20/2022 00:31
001D	ERH2524 (OWDFMW07A)	02/09/2022 17:45	Ground Water	Diesel Range Organics		SW3520C	02/14/2022 13:41	163748	SW8015C	02/15/2022 17:26
						SW3520C	02/14/2022 13:41	163748	SW8015C	02/16/2022 16:20
001H	ERH2524 (OWDFMW07A)	02/09/2022 17:45	Ground Water	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 18:03
004A	ERH2523 (Trip Blank) 14733	02/09/2022 17:45	Trip Blank	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 15:44
006B	ERH2531 (RHMW01R)	02/10/2022 13:25	Ground Water	Metals by ICP-MS, Total		SW3010A	02/14/2022 13:01	163745	SW6020	02/18/2022 18:23
006C	ERH2531 (RHMW01R)	02/10/2022 13:25	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/14/2022 10:30	163724	SW8270CSIM	02/16/2022 20:05
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/14/2022 10:30	163724	SW8270C	02/20/2022 01:03
006D	ERH2531 (RHMW01R)	02/10/2022 13:25	Ground Water	Diesel Range Organics		SW3520C	02/14/2022 13:41	163748	SW8015C	02/16/2022 03:28
						SW3520C	02/14/2022 13:41	163748	SW8015C	02/17/2022 12:42
006H	ERH2531 (RHMW01R)	02/10/2022 13:25	Ground Water	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 16:04
009A	ERH2530 (Trip Blank) 14653	02/10/2022 13:25	Trip Blank	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 16:24
011B	ERH2529 (RHMW19)	02/09/2022 13:35	Ground Water	Metals by ICP-MS, Total		SW3010A	02/14/2022 13:01	163745	SW6020	02/18/2022 18:36
011C	ERH2529 (RHMW19)	02/09/2022 13:35	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/14/2022 09:23	163724	SW8270CSIM	02/16/2022 20:37
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/14/2022 09:23	163724	SW8270C	02/20/2022 02:08
011D	ERH2529 (RHMW19)	02/09/2022 13:35	Ground Water	Diesel Range Organics		SW3520C	02/14/2022 13:42	163748	SW8015C	02/16/2022 02:02
						SW3520C	02/14/2022 13:42	163748	SW8015C	02/16/2022 20:37
011H	ERH2529 (RHMW19)	02/09/2022 13:35	Ground Water	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 16:44
014A	ERH2528 (Trip Blank) 14733	02/09/2022 13:35	Trip Blank	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 17:04
016B	ERH2535 (RHMW2254-01) Low Flow	02/10/2022 13:50	Ground Water	Metals by ICP-MS, Total		SW3010A	02/14/2022 13:01	163745	SW6020	02/18/2022 18:50
016C	ERH2535 (RHMW2254-01) Low Flow	02/10/2022 13:50	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/14/2022 10:30	163724	SW8270CSIM	02/16/2022 21:42
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/14/2022 10:30	163724	SW8270C	02/20/2022 02:40
016D	ERH2535 (RHMW2254-01) Low Flow	02/10/2022 13:50	Ground Water	Diesel Range Organics		SW3520C	02/14/2022 13:42	163748	SW8015C	02/16/2022 06:20

Preparation and Analysis Dates Report

Work Order: B22020962
Client: AECOM - Honolulu
Project Name: CV18F0126, 60571032.02.46.01
Report Date: 3/04/2022

016H	ERH2535 (RHMW2254-01) Low Flow	02/10/2022 13:50	Ground Water	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 17:24
019A	ERH2534 (Trip Blank) 14833	02/10/2022 13:50	Trip Blank	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 17:43
021B	ERH2533 (RHMW2254-01-Bailer)	02/10/2022 13:00	Ground Water	Metals by ICP-MS, Total		SW3010A	02/14/2022 13:01	163745	SW6020	02/18/2022 19:02
021C	ERH2533 (RHMW2254-01-Bailer)	02/10/2022 13:00	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/14/2022 10:30	163724	SW8270CSIM	02/16/2022 22:14
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/14/2022 10:30	163724	SW8270C	02/20/2022 03:12
021D	ERH2533 (RHMW2254-01-Bailer)	02/10/2022 13:00	Ground Water	Diesel Range Organics		SW3520C	02/14/2022 13:42	163748	SW8015C	02/15/2022 21:01
						SW3520C	02/14/2022 13:42	163748	SW8015C	02/16/2022 18:28
021H	ERH2533 (RHMW2254-01-Bailer)	02/10/2022 13:00	Ground Water	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 20:01
024A	ERH2532 (Trip Blank) 14733	02/10/2022 13:00	Trip Blank	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 20:21
026B	ERH2537 (Sump Adit 3)	02/10/2022 14:50	Ground Water	Metals by ICP-MS, Total		SW3010A	02/14/2022 13:01	163745	SW6020	02/18/2022 19:27
026C	ERH2537 (Sump Adit 3)	02/10/2022 14:50	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/14/2022 10:30	163724	SW8270CSIM	02/16/2022 22:47
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/14/2022 10:30	163724	SW8270C	02/20/2022 03:44
026D	ERH2537 (Sump Adit 3)	02/10/2022 14:50	Ground Water	Diesel Range Organics		SW3520C	02/14/2022 13:42	163748	SW8015C	02/15/2022 22:28
						SW3520C	02/14/2022 13:42	163748	SW8015C	02/16/2022 21:20
026H	ERH2537 (Sump Adit 3)	02/10/2022 14:50	Ground Water	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 20:40
029A	ERH2536 (Trip Blank) 14833	02/10/2022 14:50	Trip Blank	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 21:01
031B	ERH2526 (OWDFMW08A)	02/09/2022 13:30	Ground Water	Metals by ICP-MS, Total		SW3010A	02/14/2022 13:01	163745	SW6020	02/18/2022 19:40
031C	ERH2526 (OWDFMW08A)	02/09/2022 13:30	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/14/2022 09:23	163724	SW8270CSIM	02/16/2022 23:19
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/14/2022 09:23	163724	SW8270C	02/20/2022 04:16
031D	ERH2526 (OWDFMW08A)	02/09/2022 13:30	Ground Water	Diesel Range Organics		SW3520C	02/14/2022 13:42	163748	SW8015C	02/15/2022 19:36
031H	ERH2526 (OWDFMW08A)	02/09/2022 13:30	Ground Water	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 21:20
032A	ERH2527 (OWDFMW08A-FD)	02/09/2022 13:30	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/14/2022 08:37	163724	SW8270CSIM	02/17/2022 00:24
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/14/2022 08:37	163724	SW8270C	02/20/2022 04:49
032B	ERH2527 (OWDFMW08A-FD)	02/09/2022 13:30	Ground Water	Diesel Range Organics		SW3520C	02/14/2022 13:42	163748	SW8015C	02/15/2022 20:19
						SW3520C	02/14/2022 13:42	163748	SW8015C	02/16/2022 19:12
035A	ERH2525 (Trip Blank) 14694	02/09/2022 13:30	Trip Blank	EDB in Water by ECD		SW8011	02/16/2022 07:53	163798	SW8011	02/16/2022 21:40

Chemical Abstracts Service (CAS) Registry Numbers

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22020962
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Analyses	CAS No
LOW LEVEL PAH BY 8270C SIM	
1-Methylnaphthalene	90-12-0
2-Methylnaphthalene	91-57-6
Acenaphthene	83-32-9
Acenaphthylene	208-96-8
Anthracene	120-12-7
Benzo(a)anthracene	56-55-3
Benzo(a)pyrene	50-32-8
Benzo(b)fluoranthene	205-99-2
Benzo(g,h,i)perylene	191-24-2
Benzo(k)fluoranthene	207-08-9
Chrysene	218-01-9
Dibenzo(a,h)anthracene	53-70-3
Fluoranthene	206-44-0
Fluorene	86-73-7
Indeno(1,2,3-cd)pyrene	193-39-5
Naphthalene	91-20-3
Phenanthrene	85-01-8
Pyrene	129-00-0
AGGREGATE ORGANICS	
Organic Carbon, Total (TOC)	7440-44-0
METALS, TOTAL	
Lead	7439-92-1
METALS, DISSOLVED	
Lead	7439-92-1
VOLATILE ORGANIC COMPOUNDS	
Benzene	71-43-2
Bromobenzene	108-86-1
Bromochloromethane	74-97-5
Bromodichloromethane	75-27-4
Bromoform	75-25-2
Carbon tetrachloride	56-23-5
Chlorobenzene	108-90-7
Chlorodibromomethane	124-48-1
Chloroethane	75-00-3
Chloroform	67-66-3
Chloromethane	74-87-3
1,2-Dibromoethane	106-93-4

2-Chlorotoluene	95-49-8
4-Chlorotoluene	106-43-4
Dibromomethane	74-95-3
1,2-Dichlorobenzene	95-50-1
1,3-Dichlorobenzene	541-73-1
1,4-Dichlorobenzene	106-46-7
Dichlorodifluoromethane	75-71-8
1,1-Dichloroethane	75-34-3
1,2-Dichloroethane	107-06-2
1,1-Dichloroethene	75-35-4
cis-1,2-Dichloroethene	156-59-2
trans-1,2-Dichloroethene	156-60-5
1,2-Dichloropropane	78-87-5
1,3-Dichloropropane	142-28-9
2,2-Dichloropropane	594-20-7
1,1-Dichloropropene	563-58-6
cis-1,3-Dichloropropene	10061-01-5
trans-1,3-Dichloropropene	10061-02-6
Ethylbenzene	100-41-4
Methyl ethyl ketone	78-93-3
Methyl tert-butyl ether (MTBE)	1634-04-4
Methylene chloride	75-09-2
Styrene	100-42-5
1,1,1,2-Tetrachloroethane	630-20-6
1,1,2,2-Tetrachloroethane	79-34-5
Tetrachloroethene	127-18-4
Toluene	108-88-3
1,1,1-Trichloroethane	71-55-6
1,1,2-Trichloroethane	79-00-5
Trichloroethene	79-01-6
Trichlorofluoromethane	75-69-4
1,2,3-Trichloropropane	96-18-4
Vinyl chloride	75-01-4
m+p-Xylenes	179601-23-1
o-Xylene	95-47-6
Xylenes, Total	1330-20-7

VOCS BY MICROEXTRACTION-ECD

1,2-Dibromoethane	106-93-4

PETROLEUM HYDROCARBONS-VOLATILE

C6 to C10

Total Purgeable Hydrocarbons

PETROLEUM HYDROCARBONS-SEMI-VOLATILE

Diesel Range Organics (C10 to C24)

Diesel Range Organics (SGT-C10 to C24)

Oil Range Hydrocarbons (C24 to C40)

Oil Range Hydrocarbons (SGT-C24 to C40)

Total Extractable Hydrocarbons

Total Extractable Hydrocarbons (SGT)

ORGANIC CHARACTERISTICS

Methane	74-82-8

SEMI-VOLATILE ORGANIC COMPOUNDS

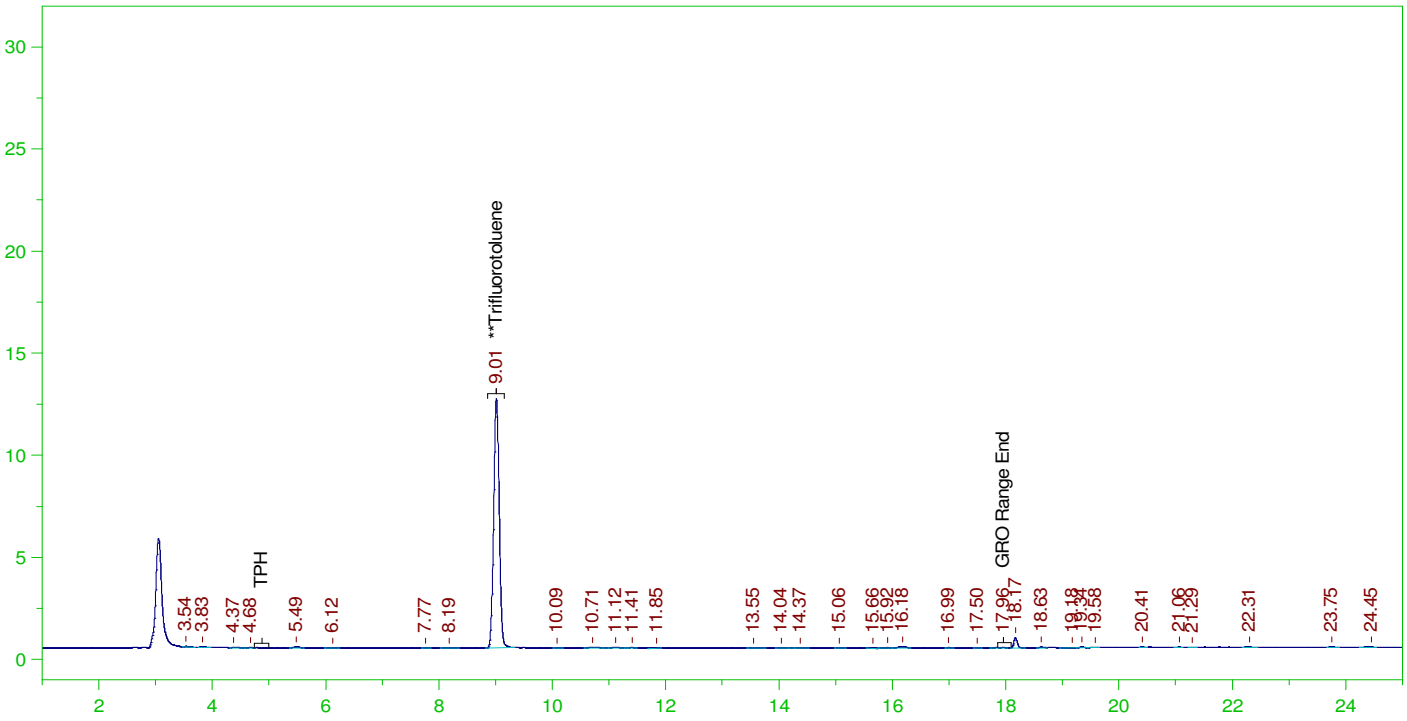
1,2,4-Trichlorobenzene	120-82-1
1,2-Dichlorobenzene	95-50-1
1,3-Dichlorobenzene	541-73-1
1,4-Dichlorobenzene	106-46-7
2,4,5-Trichlorophenol	95-95-4
2,4,6-Trichlorophenol	88-06-2
2,4-Dichlorophenol	120-83-2
2,4-Dimethylphenol	105-67-9
2,4-Dinitrophenol	51-28-5
2,4-Dinitrotoluene	121-14-2
2,6-Dinitrotoluene	606-20-2
2-Chloronaphthalene	91-58-7
2-Chlorophenol	95-57-8
2-Nitrophenol	88-75-5
3,3´-Dichlorobenzidine	91-94-1
4,6-Dinitro-2-methylphenol	534-52-1
4-Bromophenyl phenyl ether	101-55-3
4-Chloro-3-methylphenol	59-50-7
4-Chlorophenol	106-48-9
4-Chlorophenyl phenyl ether	7005-72-3
4-Nitrophenol	100-02-7
Azobenzene	103-33-3
bis(-2-chloroethoxy)Methane	111-91-1
bis(-2-chloroethyl)Ether	111-44-4
bis(2-chloroisopropyl)Ether	108-60-1
bis(2-ethylhexyl)Phthalate	117-81-7
Butylbenzylphthalate	85-68-7
Di-n-butyl phthalate	84-74-2
Di-n-octyl phthalate	117-84-0
Diethyl phthalate	84-66-2
Dimethyl phthalate	131-11-3
Hexachlorobenzene	118-74-1
Hexachlorobutadiene	87-68-3
Hexachlorocyclopentadiene	77-47-4
Hexachloroethane	67-72-1
Isophorone	78-59-1
m+p-Cresols	15831-10-4
n-Nitroso-di-n-propylamine	621-64-7
n-Nitrosodimethylamine	62-75-9
n-Nitrosodiphenylamine	86-30-6
Nitrobenzene	98-95-3
o-Cresol	95-48-7
Pentachlorophenol	87-86-5
Phenol	108-95-2
Pyridine	110-86-1

Cindy Rohrer
Laboratory Manager

Digitally signed by Cindy Rohrer
Date: 2022.03.04 18:36:18 -07:00

ERH2524 (OWDFMW07A)

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0019.RAW B22020962-001G ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-001G ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0019.RAW
Date & Time Acquired: 2/17/2022 6:05:37 PM
Method File: G:\Org\VAR\Methods\211208G962-1DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

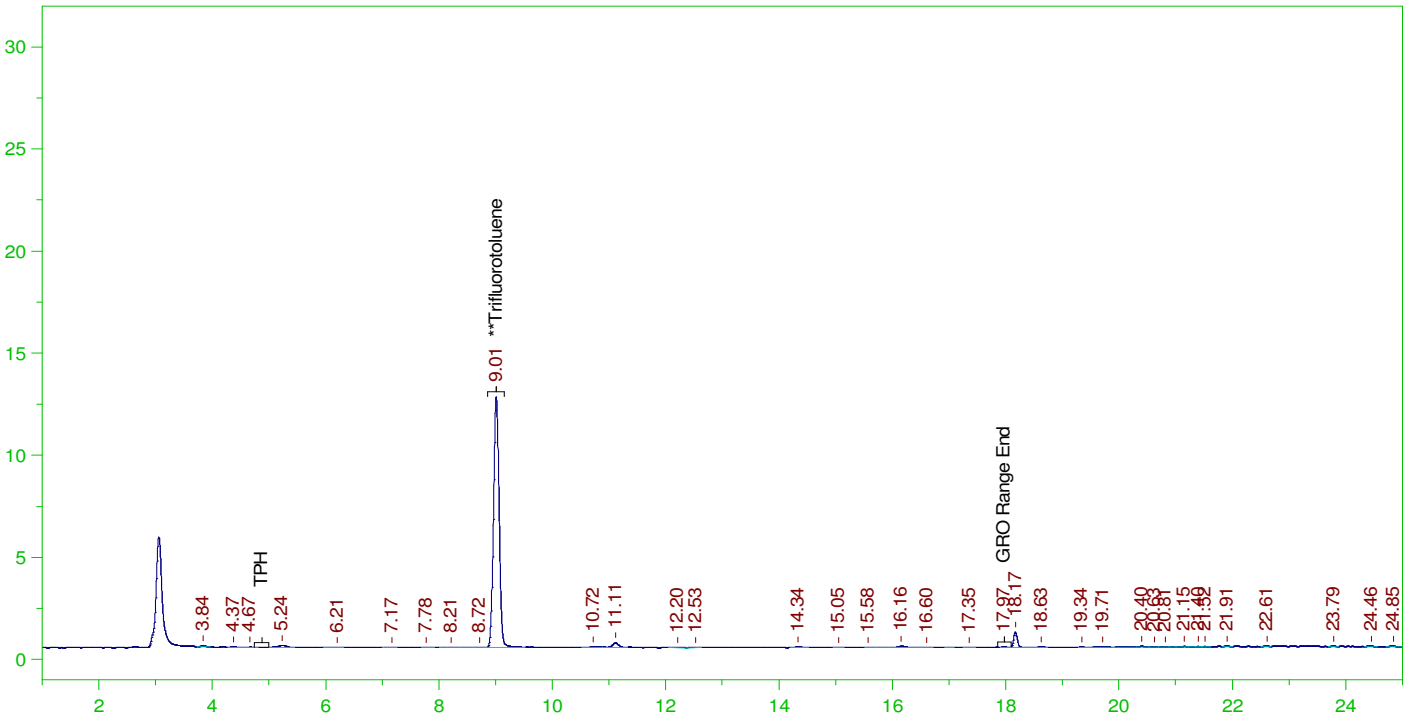
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.013	25.	18.017	72.07	-

C6 to C10 Area:3698.134 C6 to C10 Amount: 0.7547376
TPH Area:7857.4 TPH Amount: 1.644367

ERH2523 (Trip Blank) 14694

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0013.RAW B22020962-002A ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-002A ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0013.RAW
Date & Time Acquired: 2/17/2022 2:41:34 PM
Method File: G:\Org\VAR\Methods\211208G962-2DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

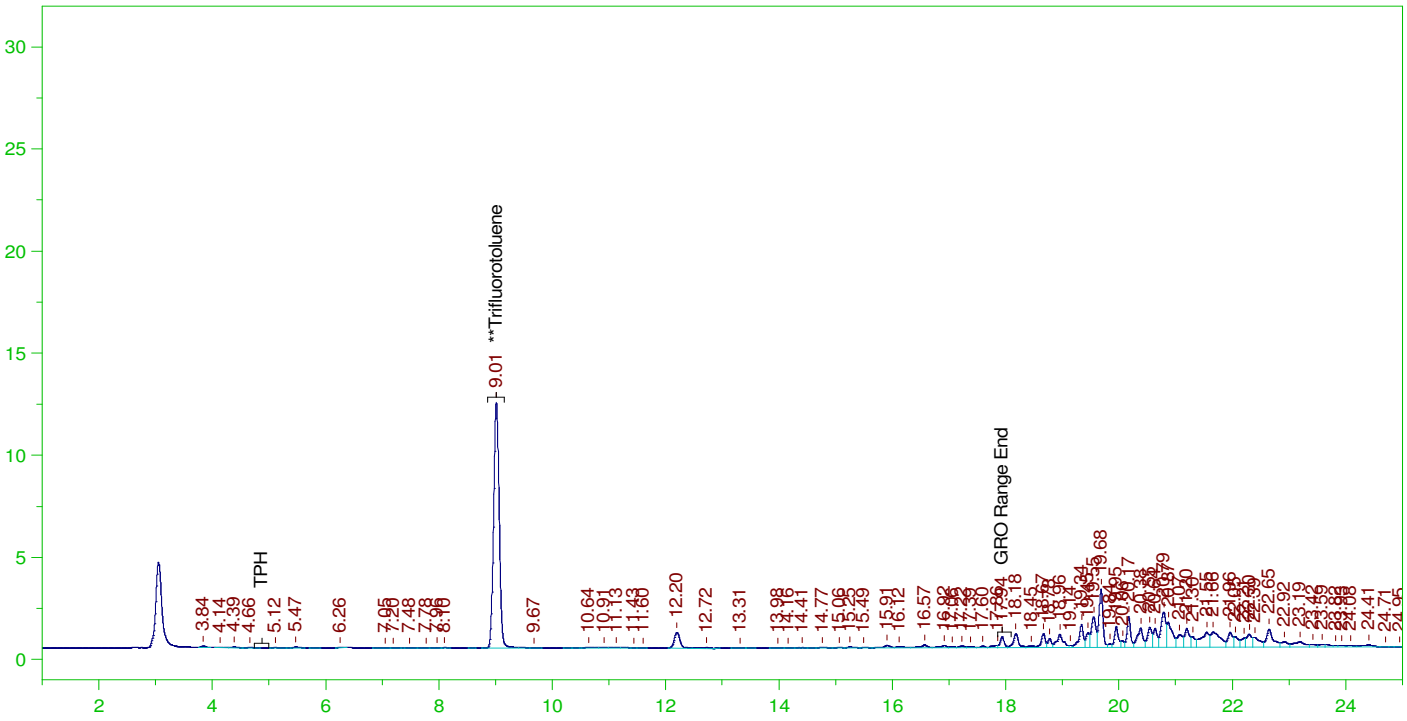
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.011	25.	18.269	73.08	-

C6 to C10 Area:5949.91 C6 to C10 Amount: 1.214293
TPH Area:12035.88 TPH Amount: 2.518823

ERH2531 (RHMW01R)

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0029.RAW B22020962-006G ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-006G ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0029.RAW
Date & Time Acquired: 2/17/2022 11:45:49 PM
Method File: G:\Org\VAR\Methods\211208G962-6DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

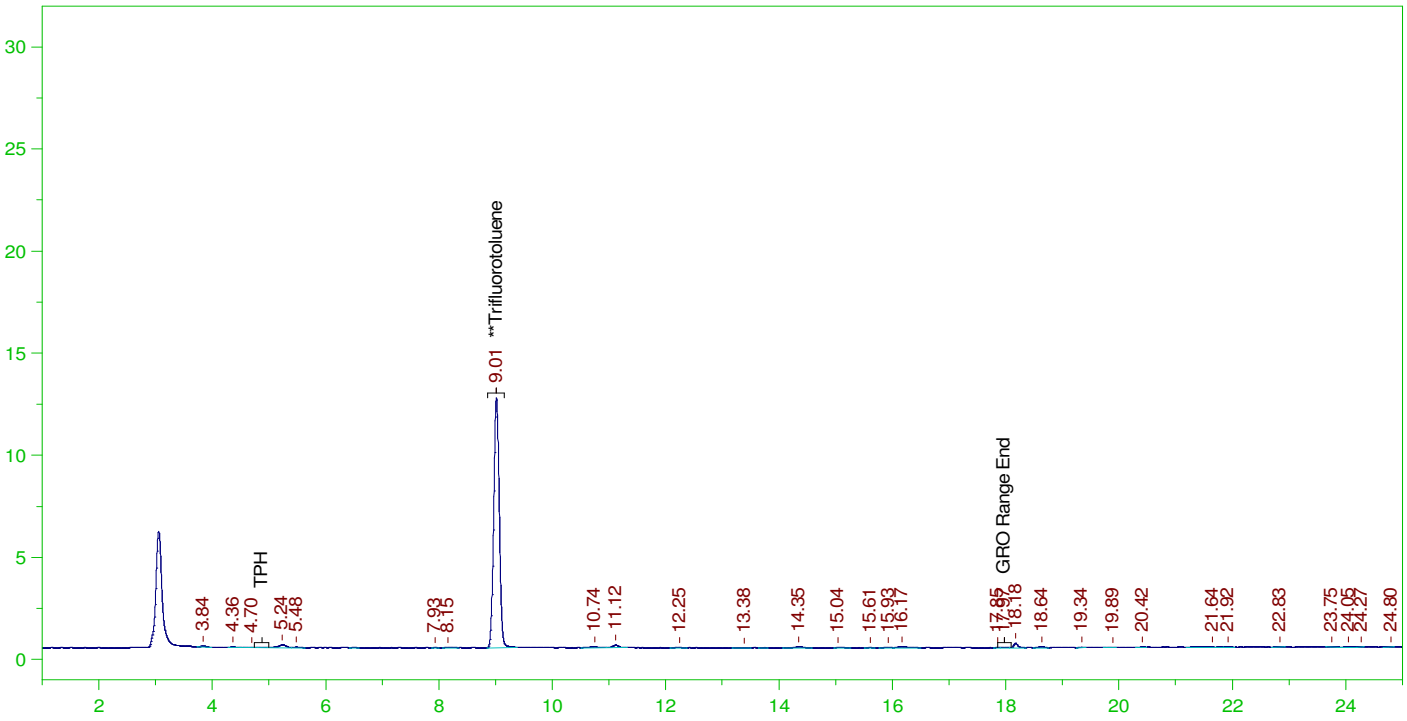
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.012	25.	17.965	71.86	-

C6 to C10 Area:21082.36 C6 to C10 Amount: 4.302615
TPH Area:188611.3 TPH Amount: 39.47186

ERH2530 (Trip Blank) 14694

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0014.RAW B22020962-007A ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-007A ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0014.RAW
Date & Time Acquired: 2/17/2022 3:15:36 PM
Method File: G:\Org\VAR\Methods\211208G962-7DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

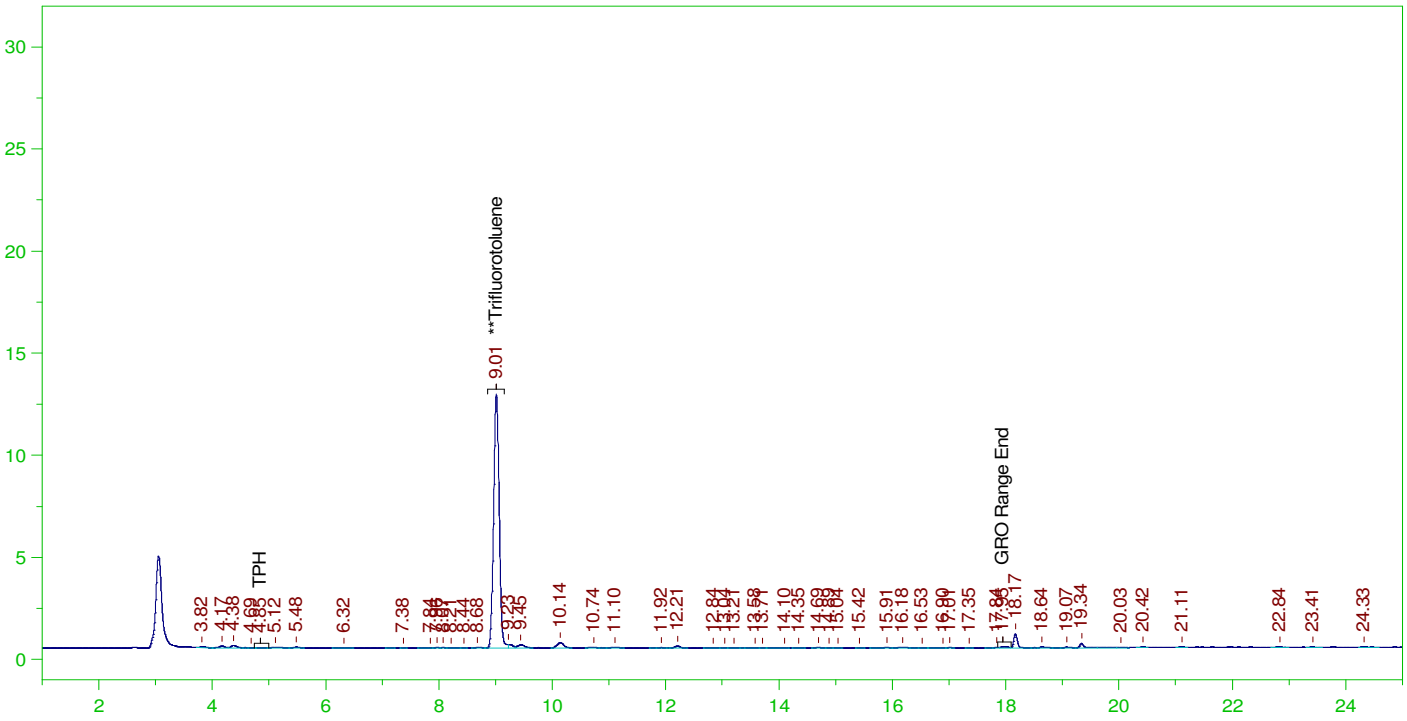
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.014	25.	18.118	72.47	-

C6 to C10 Area:5979.317 C6 to C10 Amount: 1.220295
TPH Area:9616.334 TPH Amount: 2.01247

ERH2529 (RHMW19)

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0031.RAW B22020962-011G ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-011G ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0031.RAW
Date & Time Acquired: 2/18/2022 12:53:53 AM
Method File: G:\Org\VAR\Methods\211208G962-11DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

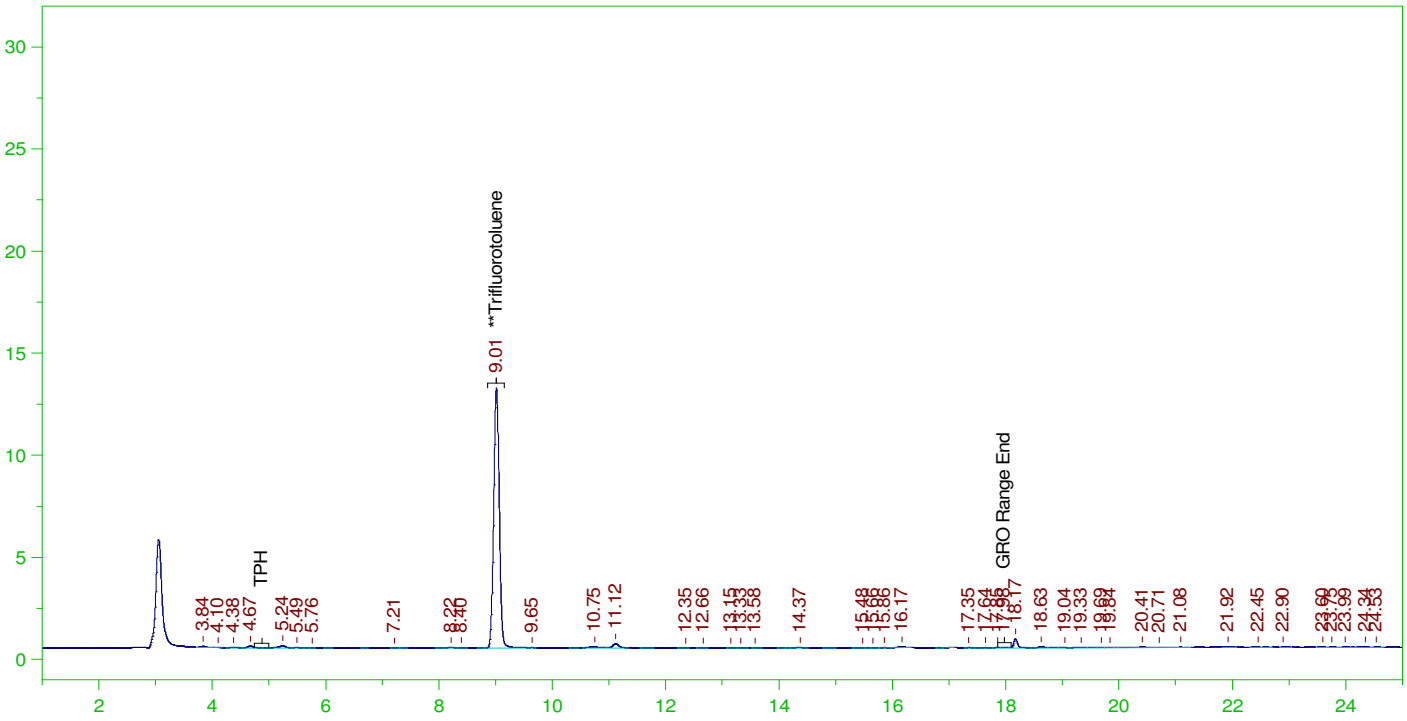
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.012	25.	18.457	73.83	-

C6 to C10 Area:11273.12 C6 to C10 Amount: 2.300686
TPH Area:19119.35 TPH Amount: 4.001225

ERH2528 (Trip Blank) 14694

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0015.RAW B22020962-012A ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-012A ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0015.RAW
Date & Time Acquired: 2/17/2022 3:49:37 PM
Method File: G:\Org\VAR\Methods\211208G962-12DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

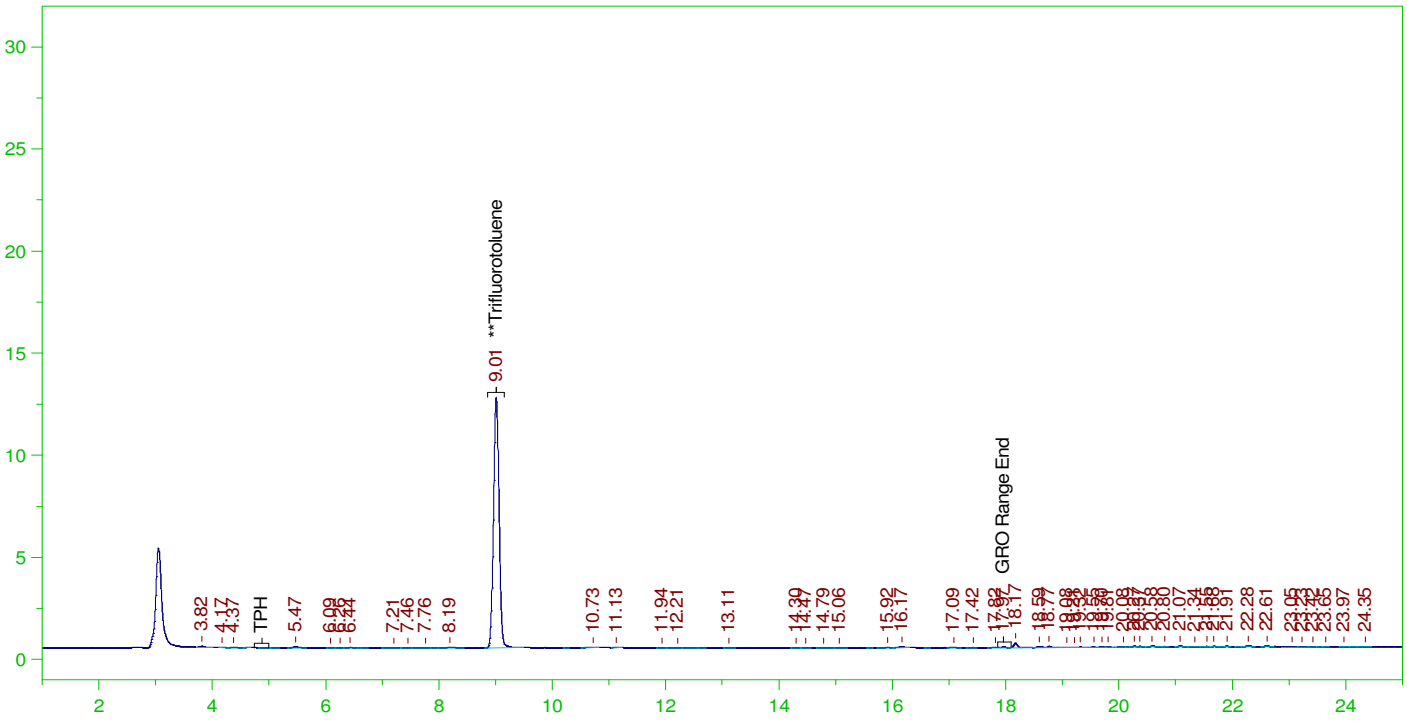
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.014	25.	19.032	76.13	-

C6 to C10 Area:6492.612 C6 to C10 Amount: 1.325052
TPH Area:12972.1 TPH Amount: 2.714752

ERH2535 (RHMW2254-01) Low Flow

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0033.RAW B22020962-016G ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-016G ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0033.RAW
Date & Time Acquired: 2/18/2022 2:01:59 AM
Method File: G:\Org\VAR\Methods\211208G962-16DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

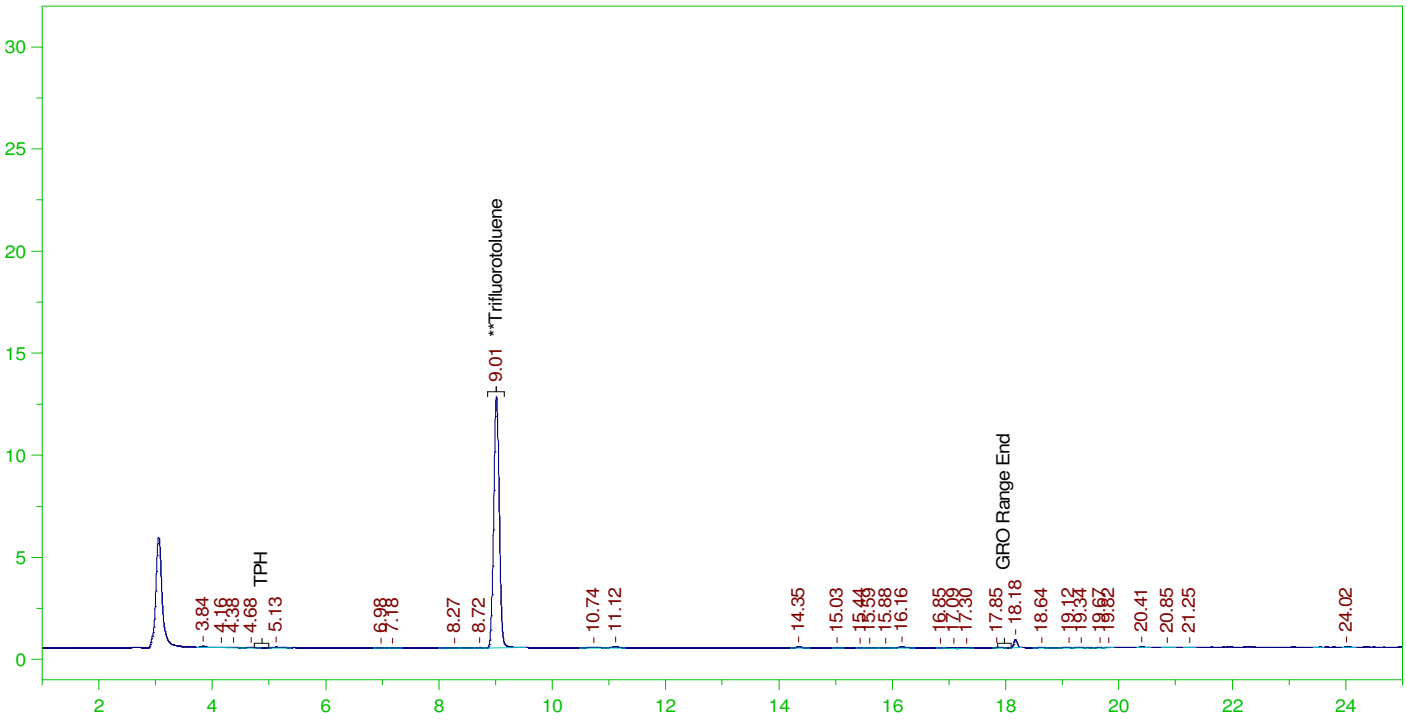
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.011	25.	18.184	72.74	-

C6 to C10 Area:3739.933 C6 to C10 Amount: 0.7632681
TPH Area:9520.548 TPH Amount: 1.992424

ERH2534 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0016.RAW B22020962-018A ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-018A ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0016.RAW
Date & Time Acquired: 2/17/2022 4:23:38 PM
Method File: G:\Org\VAR\Methods\211208G962-18DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

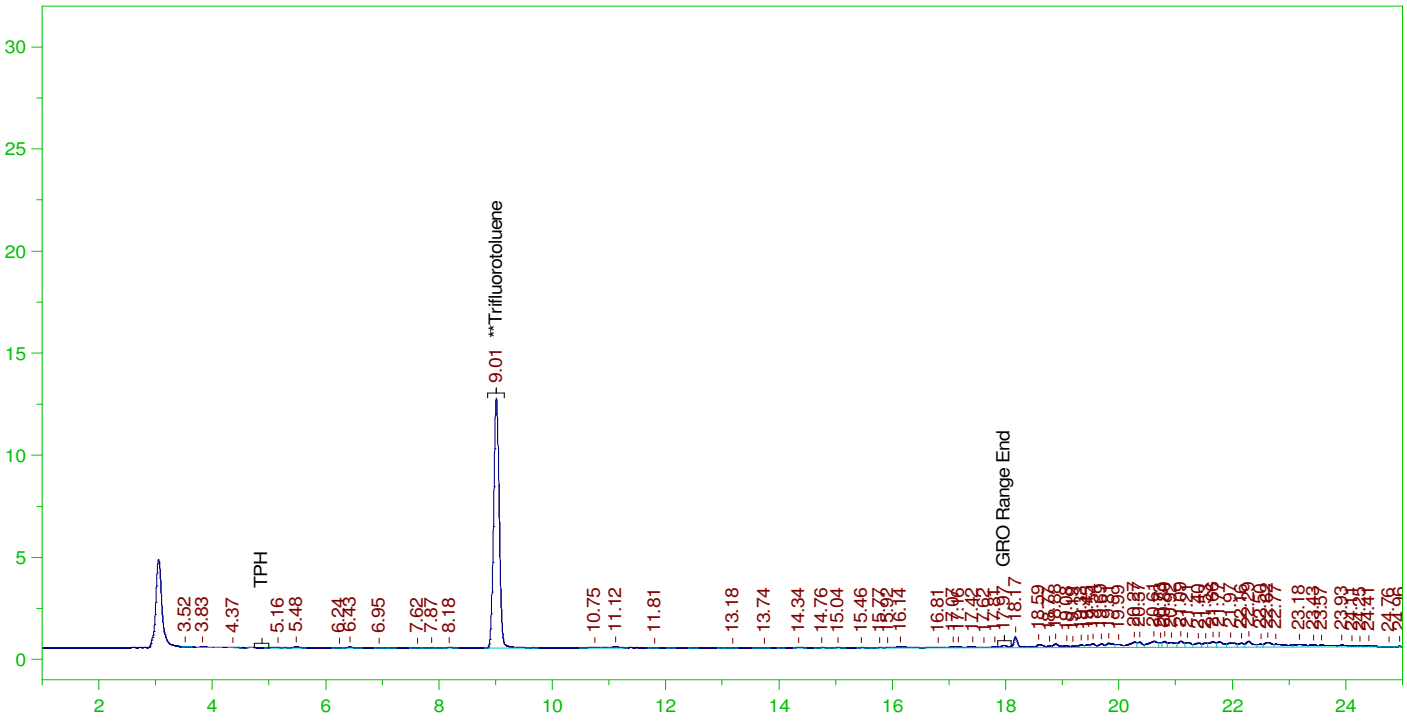
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.014	25.	18.3	73.2	-

C6 to C10 Area:4181.516 C6 to C10 Amount: 0.853389
TPH Area:8232.509 TPH Amount: 1.722868

ERH2533 (RHMW2254-01-Bailer)

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0035.RAW B22020962-021G ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-021G ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0035.RAW
Date & Time Acquired: 2/18/2022 3:10:08 AM
Method File: G:\Org\VAR\Methods\211208G962-21DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

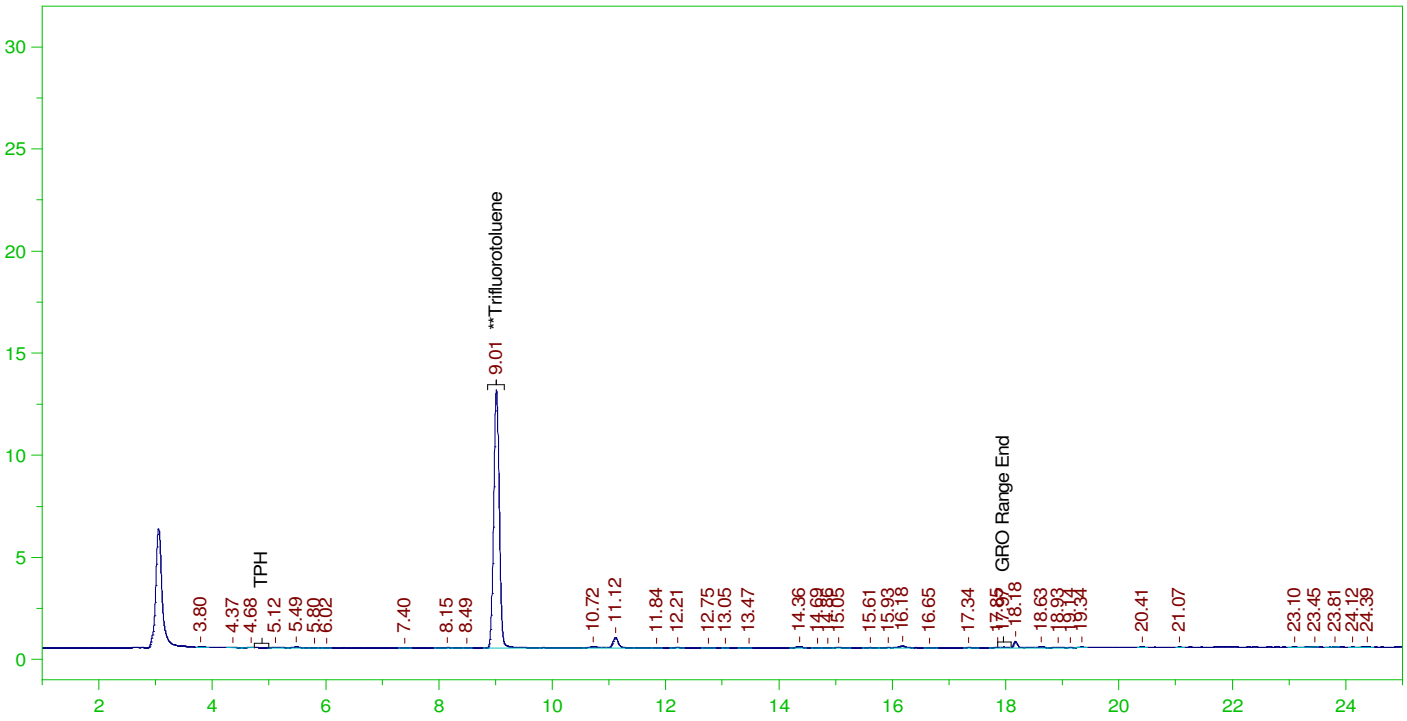
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.013	25.	18.175	72.7	-

C6 to C10 Area:7122.173 C6 to C10 Amount: 1.453536
TPH Area:63222.18 TPH Amount: 13.2309

ERH2532 (Trip Blank) 14694

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0017.RAW B22020962-022A ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-022A ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0017.RAW
Date & Time Acquired: 2/17/2022 4:57:36 PM
Method File: G:\Org\VAR\Methods\211208G962-22DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

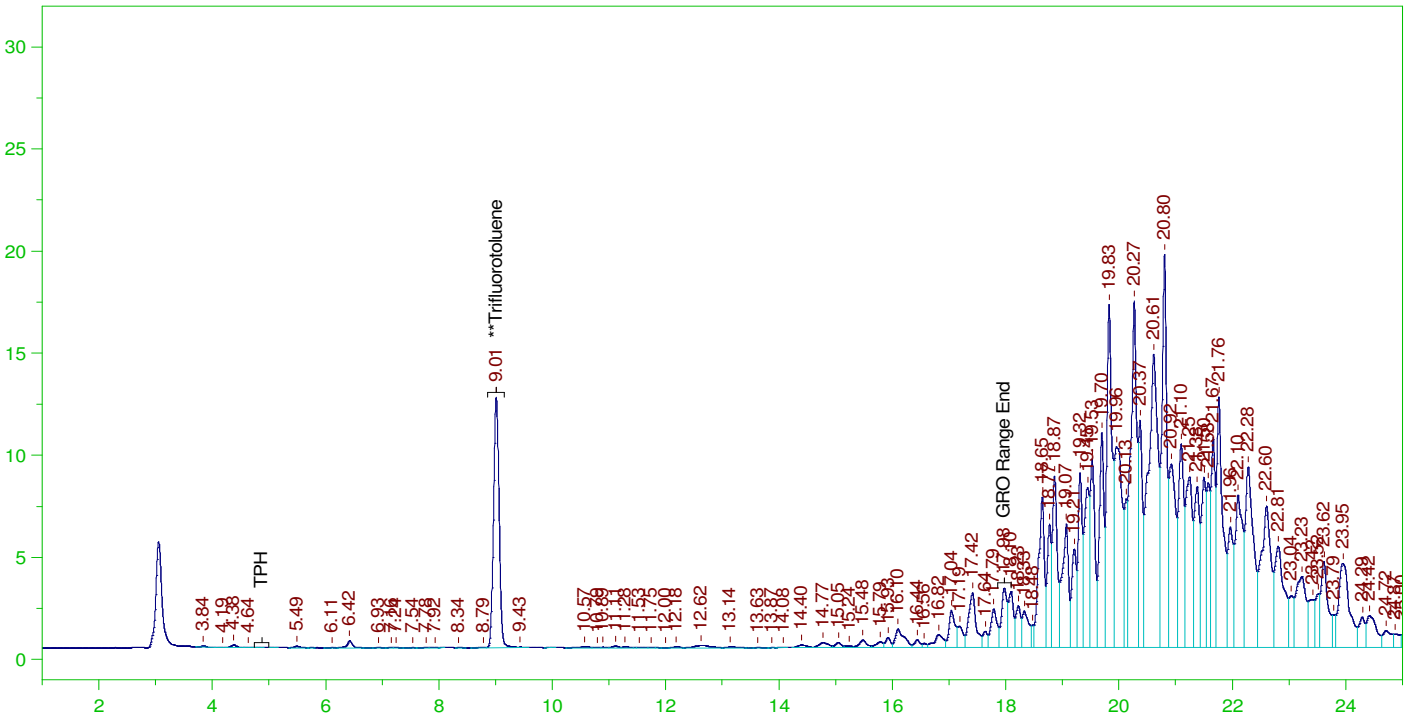
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.014	25.	18.898	75.59	-

C6 to C10 Area:8980.416 C6 to C10 Amount: 1.832778
TPH Area:12505.94 TPH Amount: 2.617196

ERH2537 (Sump Adit 3)

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0037.RAW B22020962-026G ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-026G ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0037.RAW
Date & Time Acquired: 2/18/2022 4:18:21 AM
Method File: G:\Org\VAR\Methods\211208G962-26DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

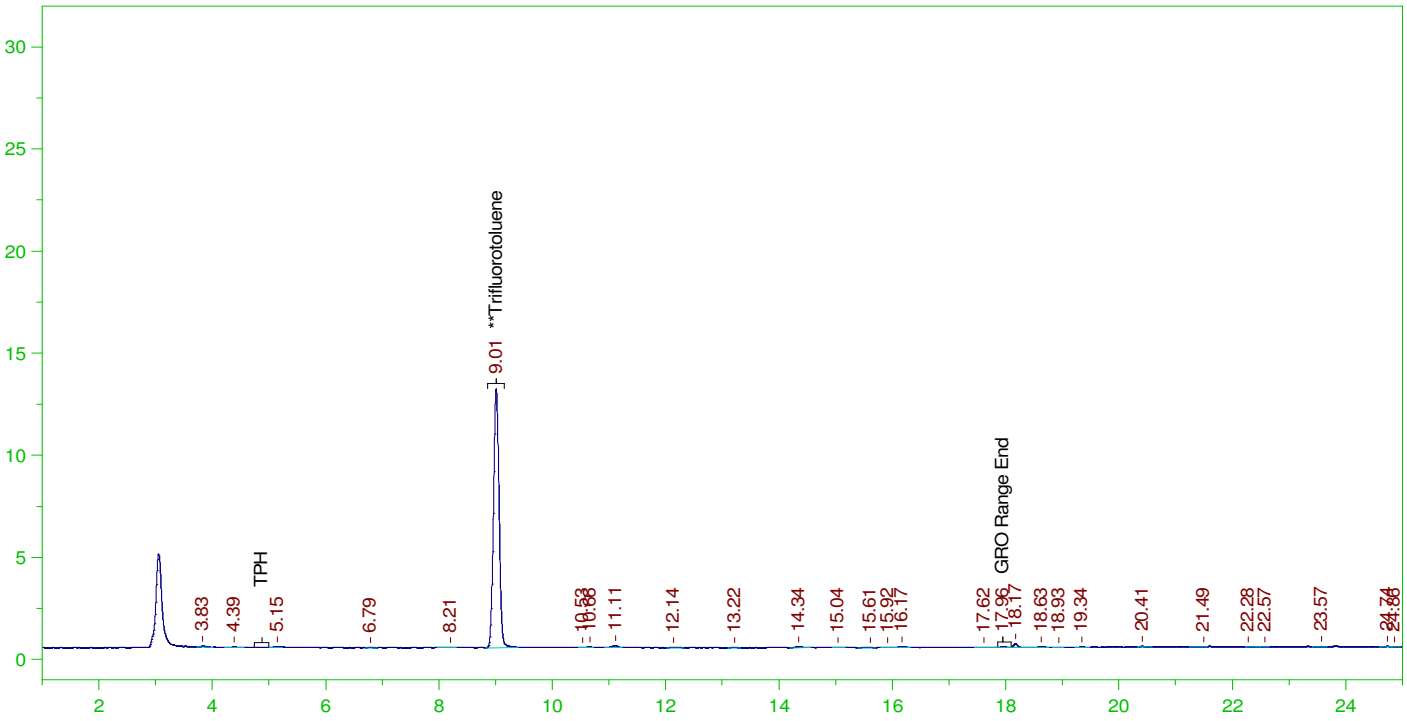
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.011	25.	18.272	73.09	-

C6 to C10 Area:133994.3 C6 to C10 Amount: 27.34637
TPH Area:2366562 TPH Amount: 495.2651

ERH2536 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0012.RAW B22020962-028A ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-028A ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0012.RAW
Date & Time Acquired: 2/17/2022 2:07:33 PM
Method File: G:\Org\VAR\Methods\211208G962-28DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

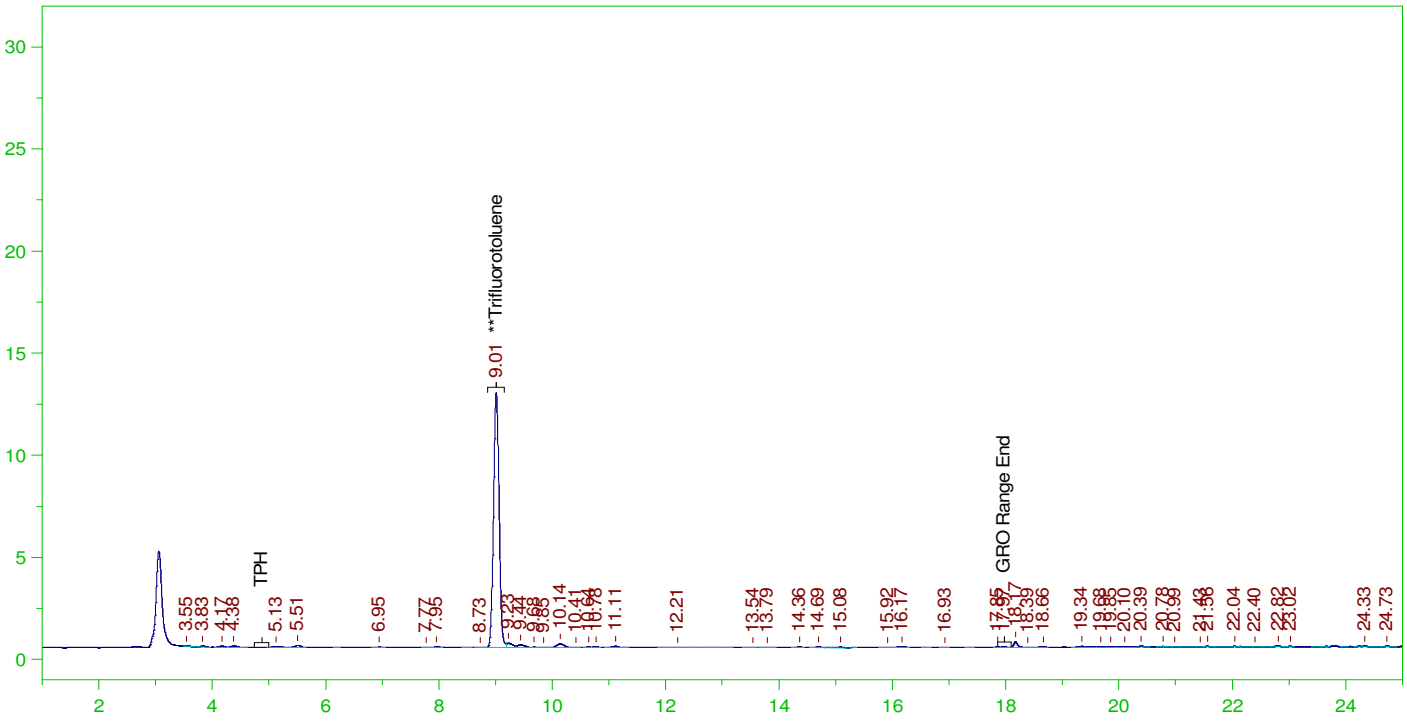
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.01	25.	18.816	75.27	-

C6 to C10 Area:3091.171 C6 to C10 Amount: 0.6308649
TPH Area:5769.81 TPH Amount: 1.207484

ERH2526 (OWDFMW08A)

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0010.RAW B22020962-031G ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-031G ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0010.RAW
Date & Time Acquired: 2/17/2022 12:59:26 PM
Method File: G:\Org\VAR\Methods\211208G962-31DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

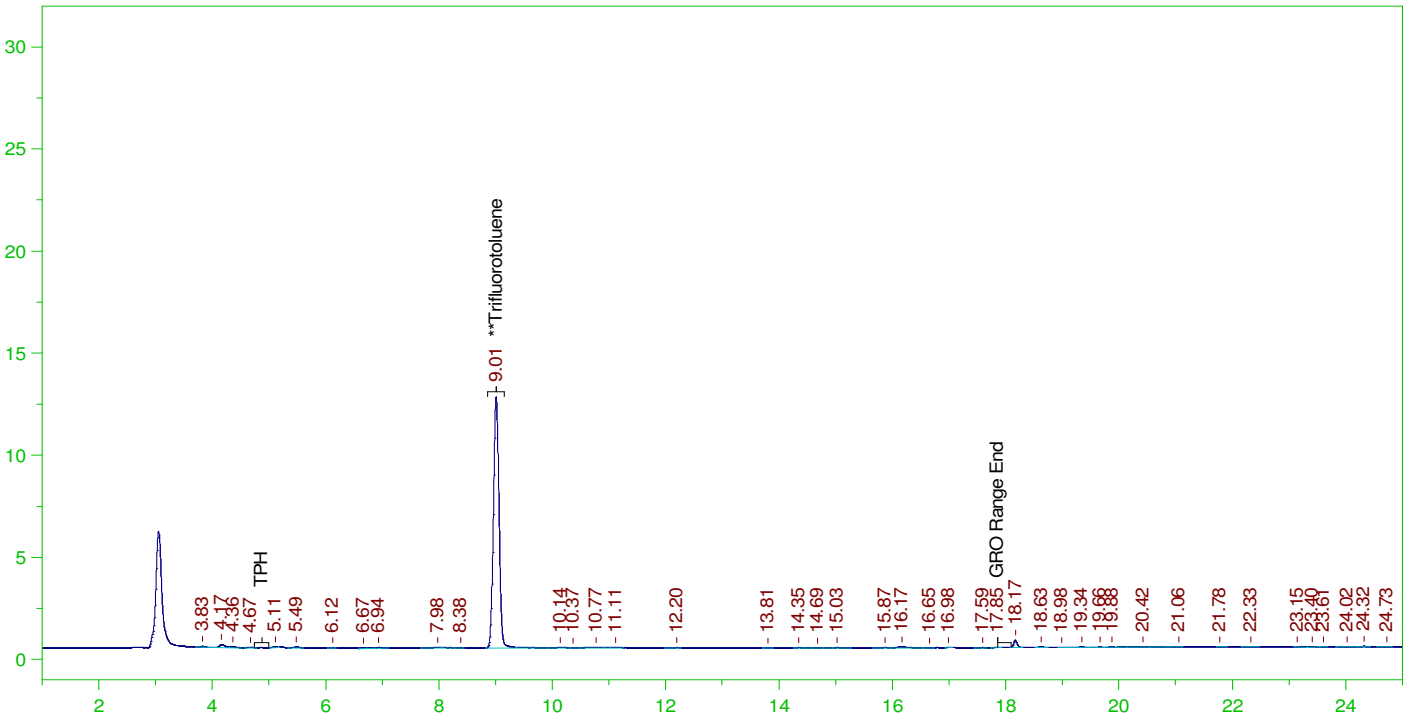
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.011	25.	18.503	74.01	-

C6 to C10 Area:8746.21 C6 to C10 Amount: 1.784979
TPH Area:14541.72 TPH Amount: 3.043236

ERH2527 (OWDFMW08A-FD)

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0039.RAW B22020962-032D ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-032D ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0039.RAW
Date & Time Acquired: 2/18/2022 5:26:30 AM
Method File: G:\Org\VAR\Methods\211208G962-32DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

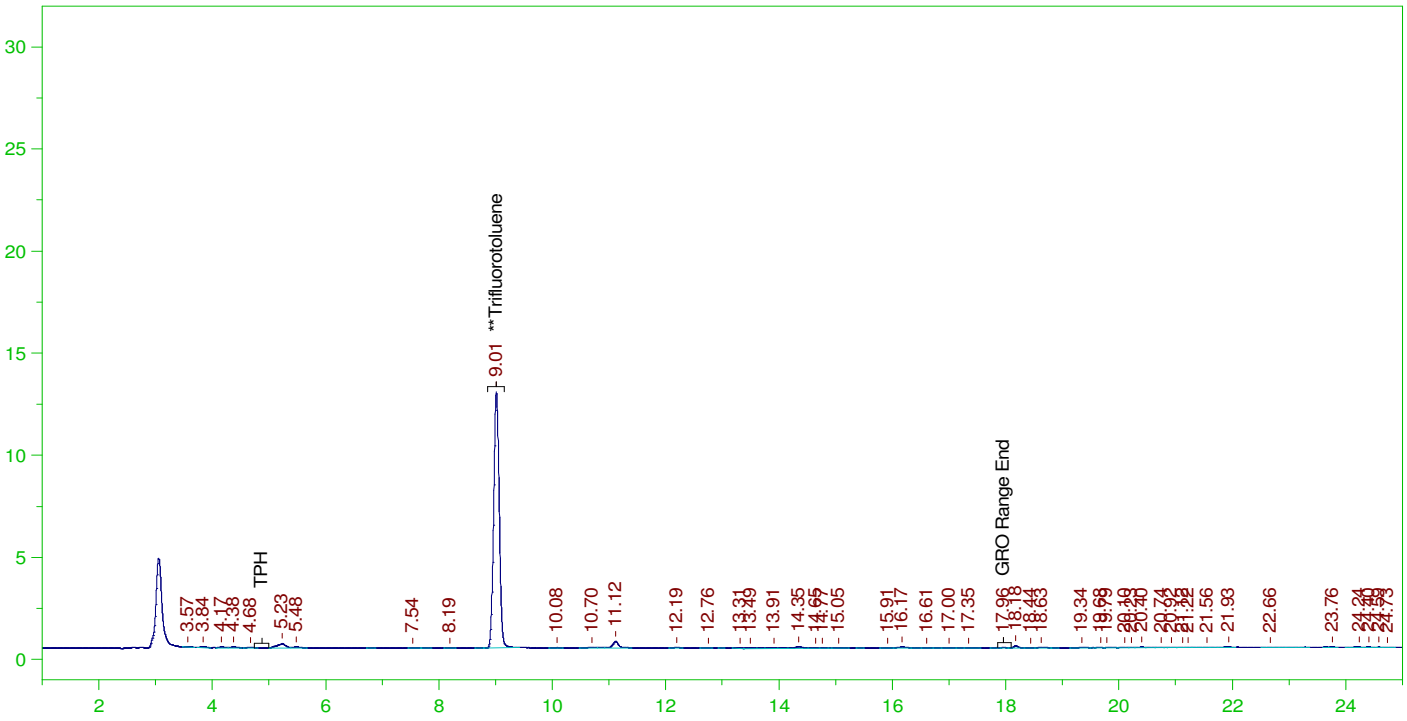
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	18.336	73.34	-

C6 to C10 Area:4573.7 C6 to C10 Amount: 0.9334283
TPH Area:10842.65 TPH Amount: 2.269109

ERH2525 (Trip Blank) 14694

G:\Org\VAR\DAT\VAR021722_b\0217VARB.0018.RAW B22020962-033A ;0217VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-033A ;0217VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR021722_b\0217VARB.0018.RAW
Date & Time Acquired: 2/17/2022 5:31:34 PM
Method File: G:\Org\VAR\Methods\211208G962-33DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

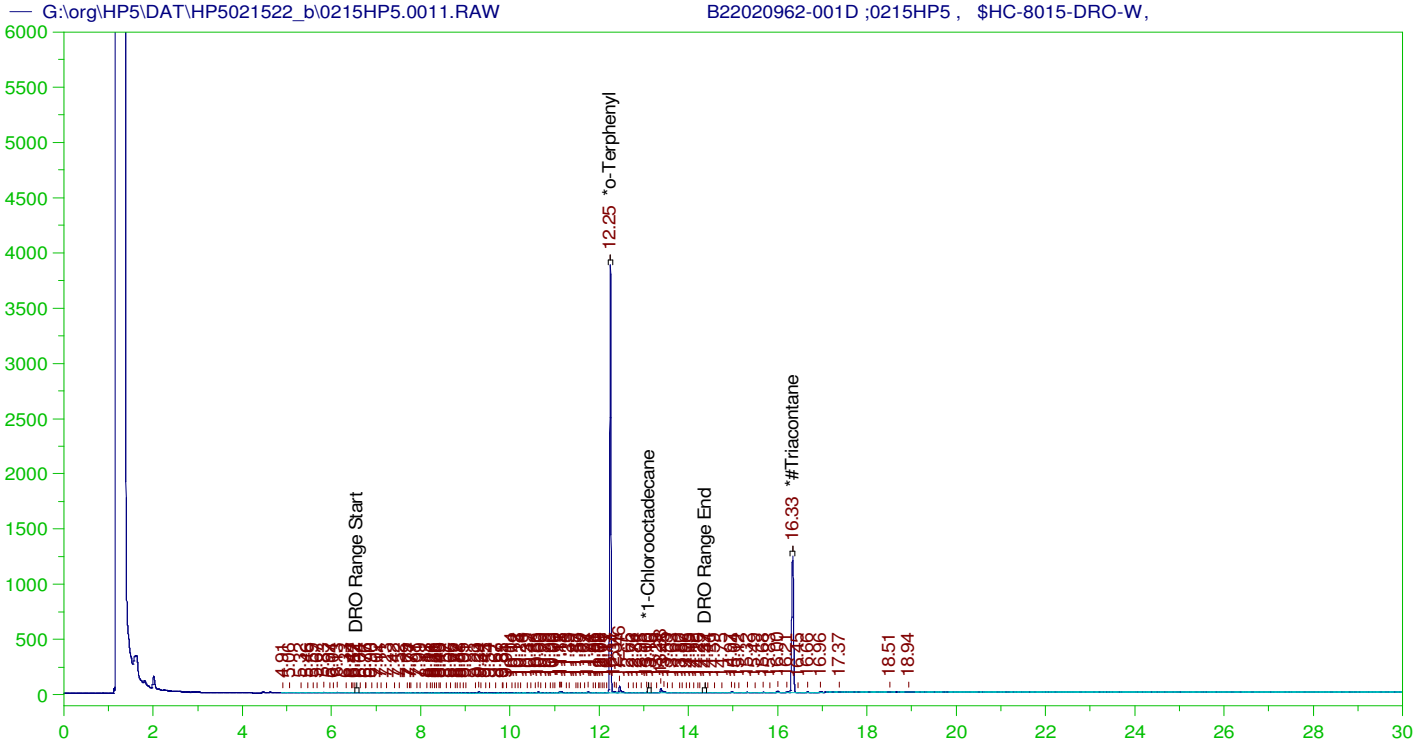
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.013	25.	18.548	74.19	-

C6 to C10 Area:8903.552 C6 to C10 Amount: 1.817091
TPH Area:14424.28 TPH Amount: 3.01866

ERH2524 (OWDFMW07A) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0011.RAW B22020962-001D ;0215HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-001D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0011.RAW
Date & Time Acquired: 2/15/2022 5:26:50 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24Tb-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

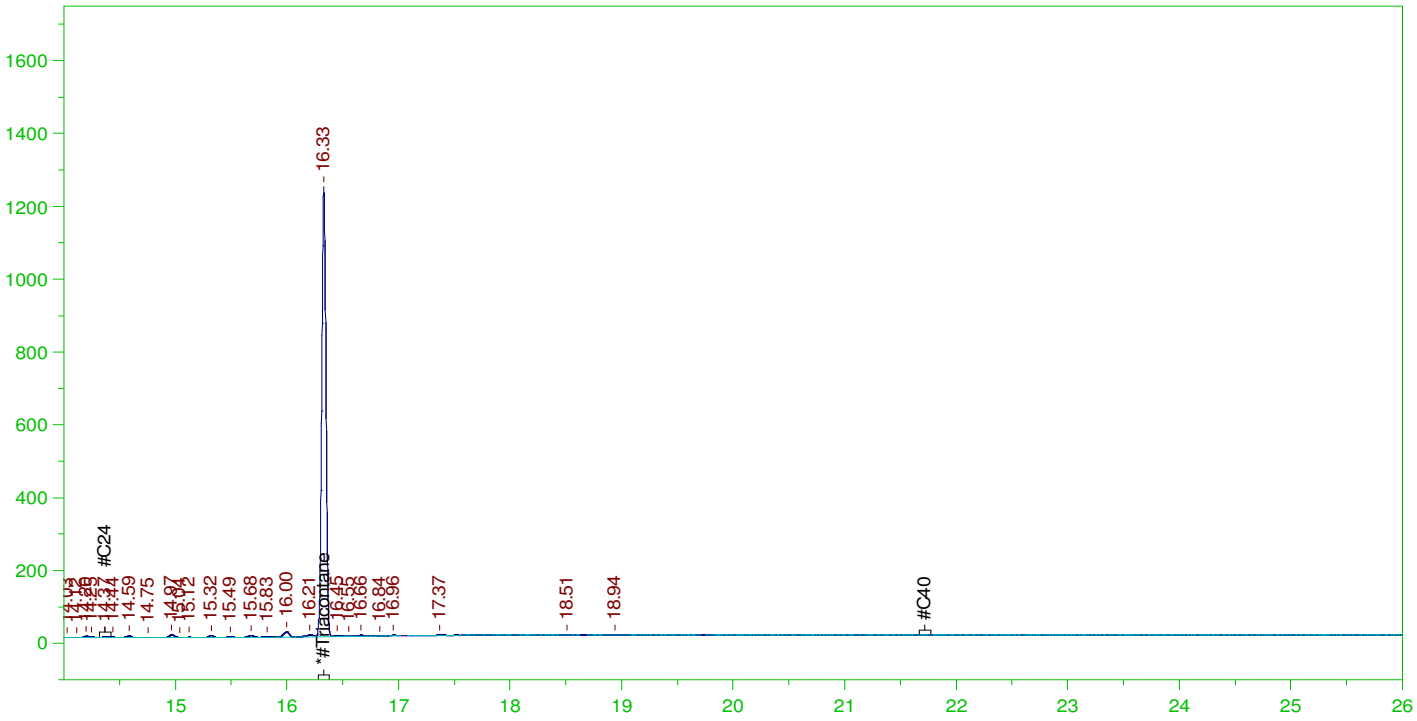
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.248	.19	.191	100.3	-
*1-Chlorooctadecane	13.103	.19	.	.14	-
*#Triacontane	16.331	.19	.105	54.97	-

DRO Area:995916.4 DRO Amount: 2.902774E-02
TEH Area:1289321 TEH Amount: 3.757952E-02

ERH2524 (OWDFMW07A) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0011.RAW B22020962-001D ;0215HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-001D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0011.RAW
Date & Time Acquired: 2/15/2022 5:26:50 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

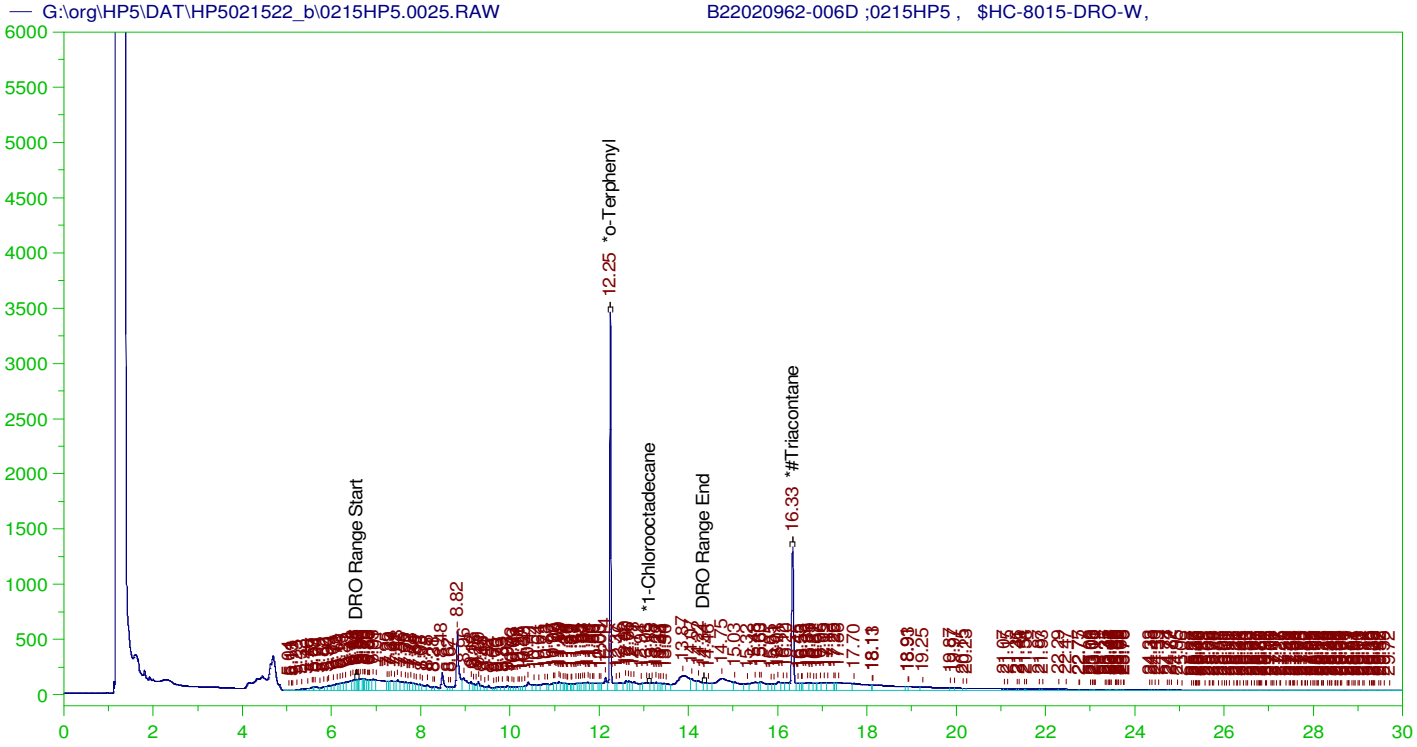
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.331	.476	.105	21.99	-

RRO Area:192831.7 RRO AMOUNT: 6.949947E-03

ERH2531 (RHMW01R) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0025.RAW B22020962-006D ;0215HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-006D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0025.RAW
Date & Time Acquired: 2/16/2022 3:28:52 AM
Method File: G:\Org\HP5\Methods\D3_8015-021516-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

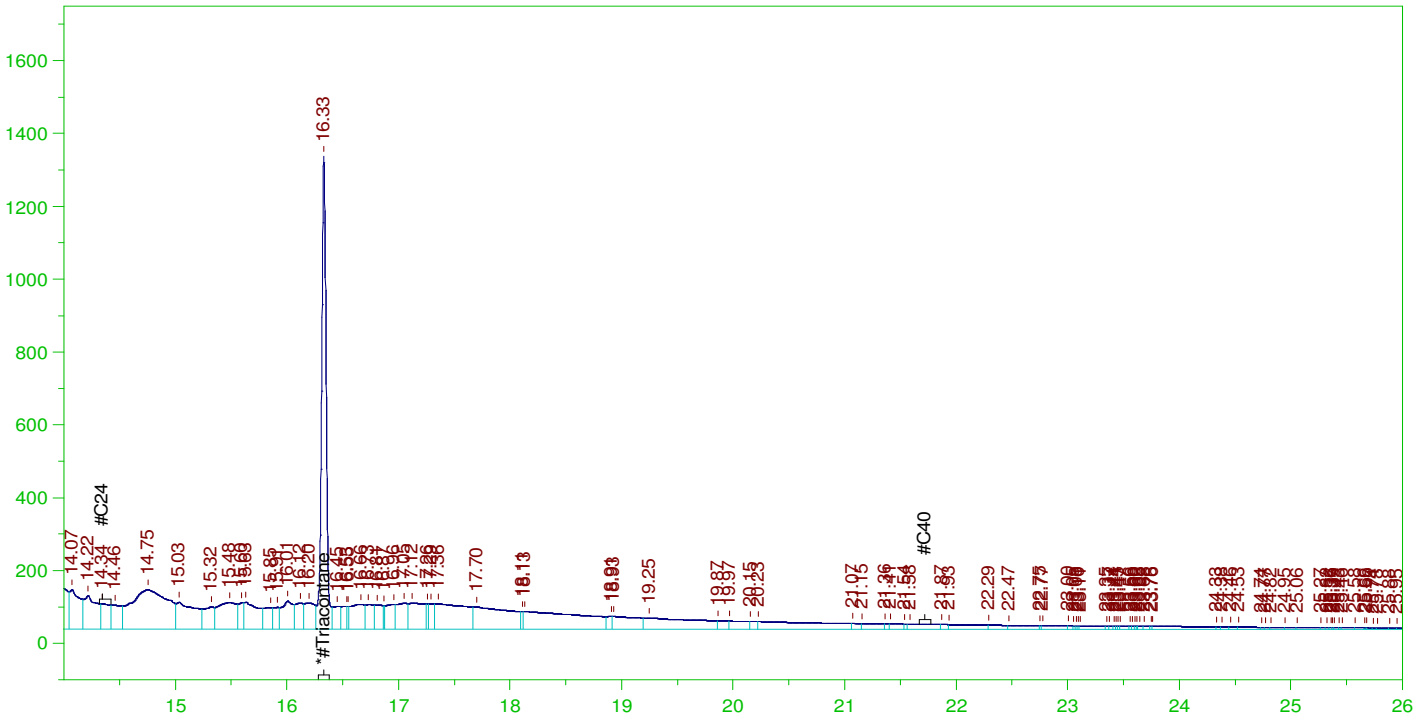
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.247	.19	.181	95.13	-
*1-Chlorooctadecane	29.979	.19	.	.	-
*#Triacontane	16.331	.19	.12	63.24	-

DRO Area:3.115223E+07 DRO Amount: 0.9079867
TEH Area:5.617084E+07 TEH Amount: 1.637198

ERH2531 (RHMW01R) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0025.RAW B22020962-006D ;0215HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-006D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0025.RAW
Date & Time Acquired: 2/16/2022 3:28:52 AM
Method File: G:\Org\HP5\Methods\D3_OROS-021516-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

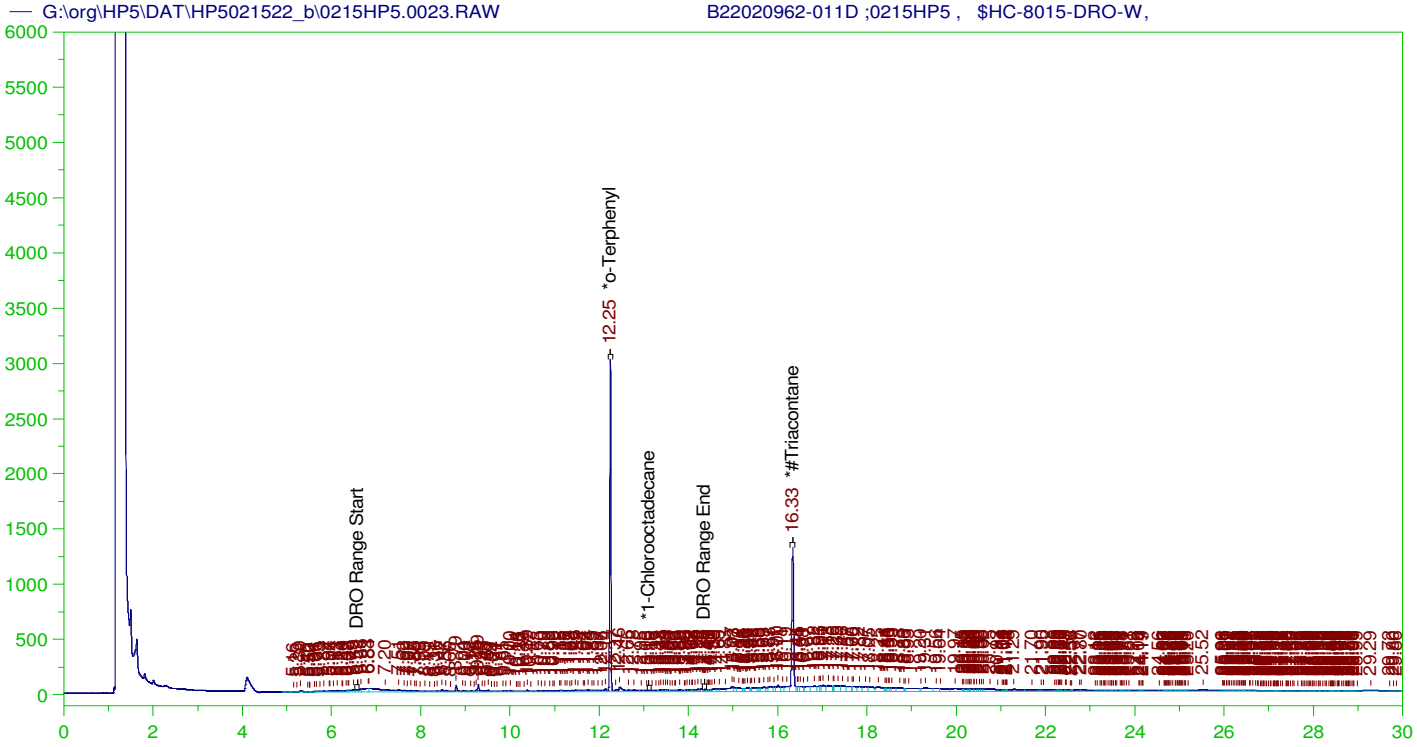
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.331	.476	.12	25.3	-

RRO Area:2.005147E+07 RRO AMOUNT: 0.7226853

ERH2529 (RHMW19) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0023.RAW B22020962-011D ;0215HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-011D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0023.RAW
Date & Time Acquired: 2/16/2022 2:02:54 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24Tb-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

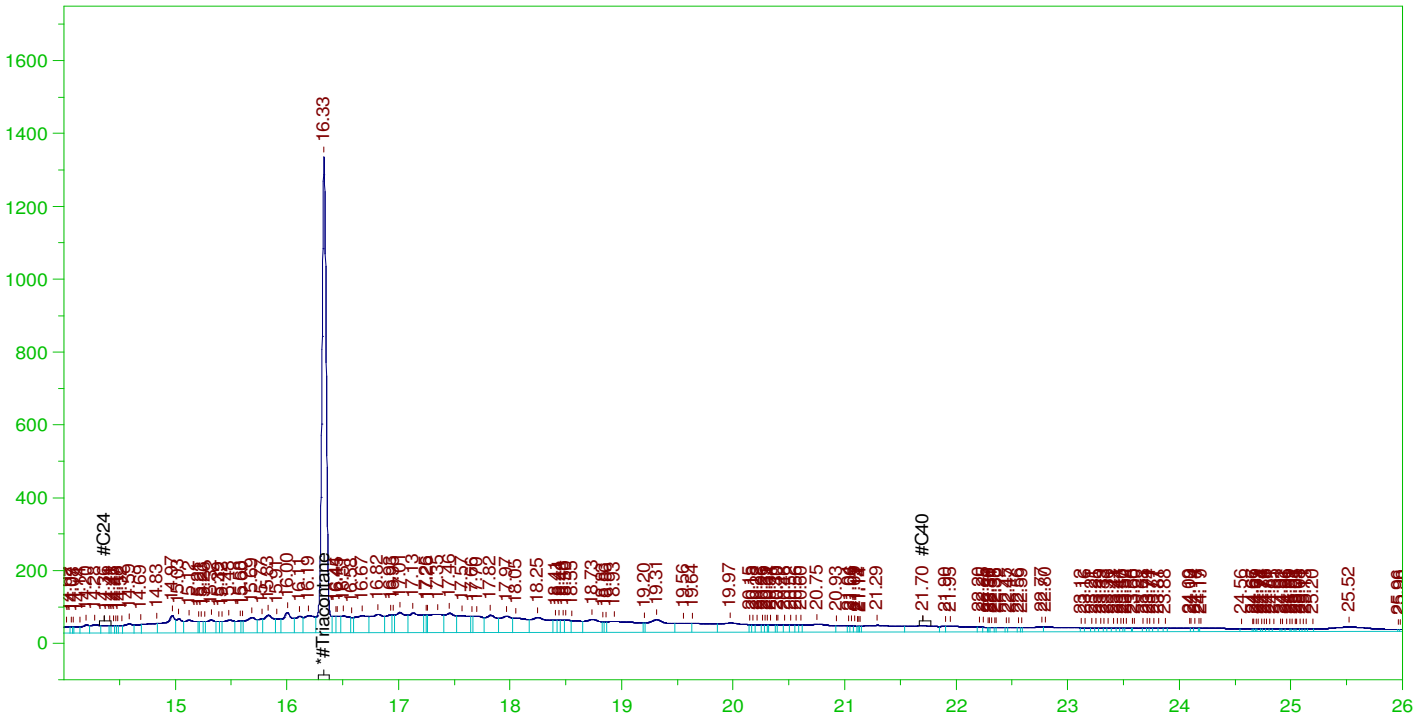
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.248	.191	.151	78.89	-
*1-Chlorooctadecane	13.101	.191	.001	.69	-
*#Triacontane	16.333	.191	.118	61.57	-

DRO Area:5797046 DRO Amount: 0.1697735
TEH Area:2.290777E+07 TEH Amount: 0.670882

ERH2529 (RHMW19) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0023.RAW B22020962-011D ;0215HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-011D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0023.RAW
Date & Time Acquired: 2/16/2022 2:02:54 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

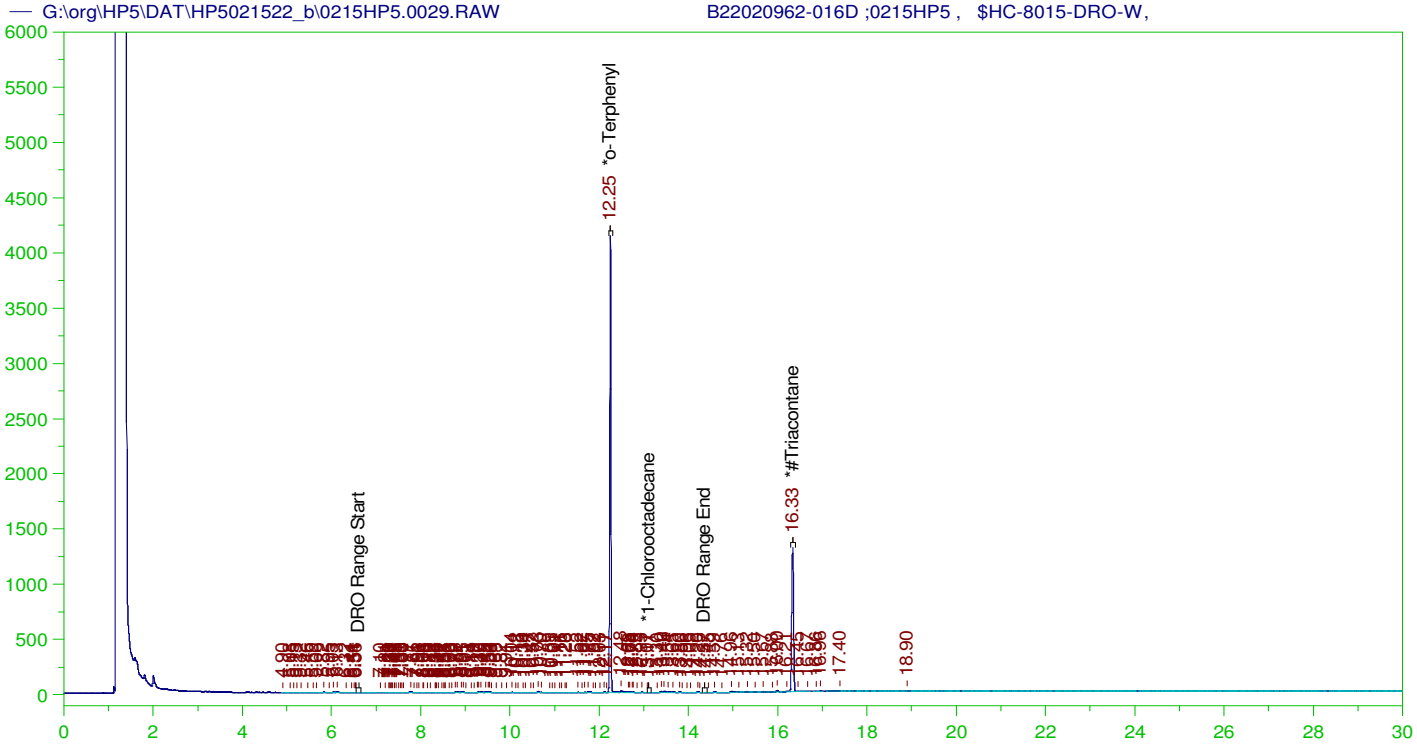
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.333	.478	.118	24.63	-

RRO Area:1.364789E+07 RRO AMOUNT: 0.4942441

ERH2535 (RHMW2254-01) Low Flow Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0029.RAW B22020962-016D ;0215HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-016D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0029.RAW
Date & Time Acquired: 2/16/2022 6:20:41 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24Tb-JE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JE-C24-T.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

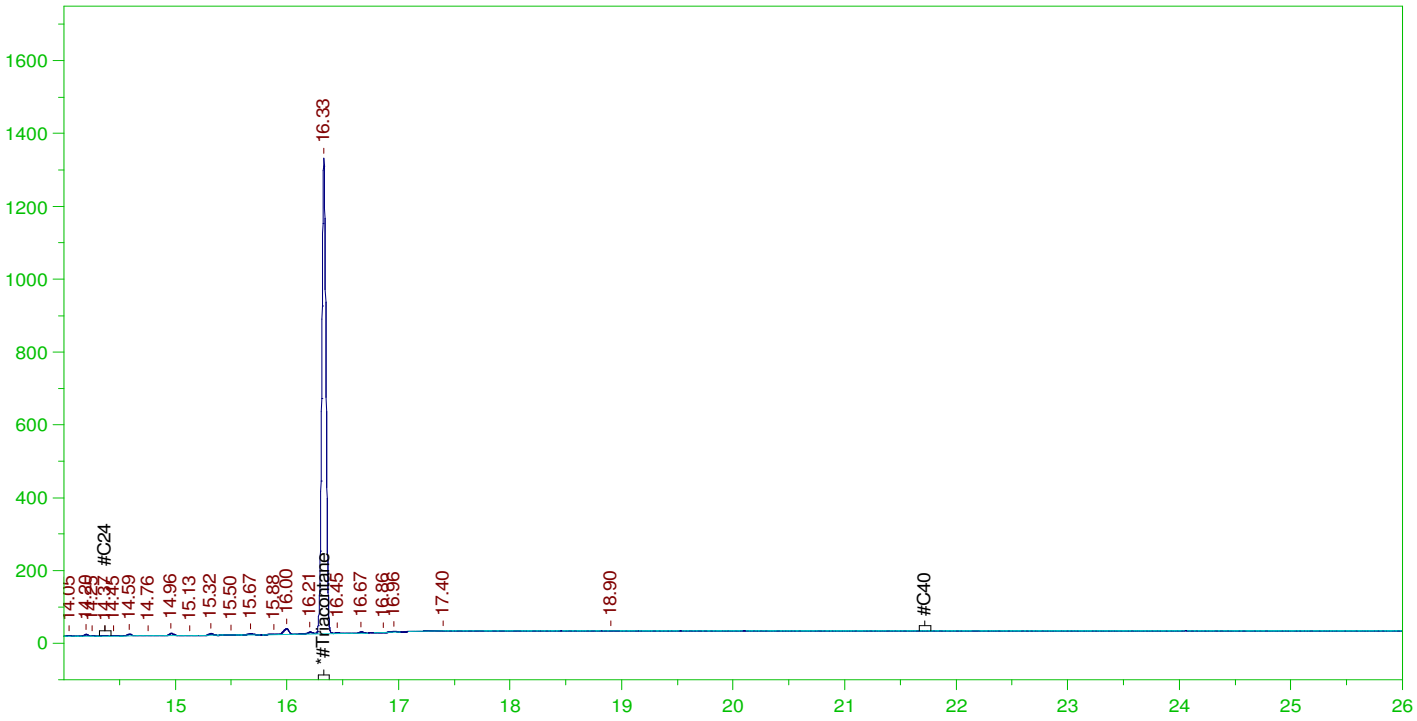
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.248	.198	.214	108.13	-
*1-Chlorooctadecane	13.106	.198	. .03		-
*#Triacontane	16.331	.198	.115	58.2	-

DRO Area:568843.7 DRO Amount: 1.723658E-02
TEH Area:840378.4 TEH Amount: 2.546438E-02

ERH2535 (RHMW2254-01) Low Flow Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0029.RAW B22020962-016D ;0215HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-016D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0029.RAW
Date & Time Acquired: 2/16/2022 6:20:41 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

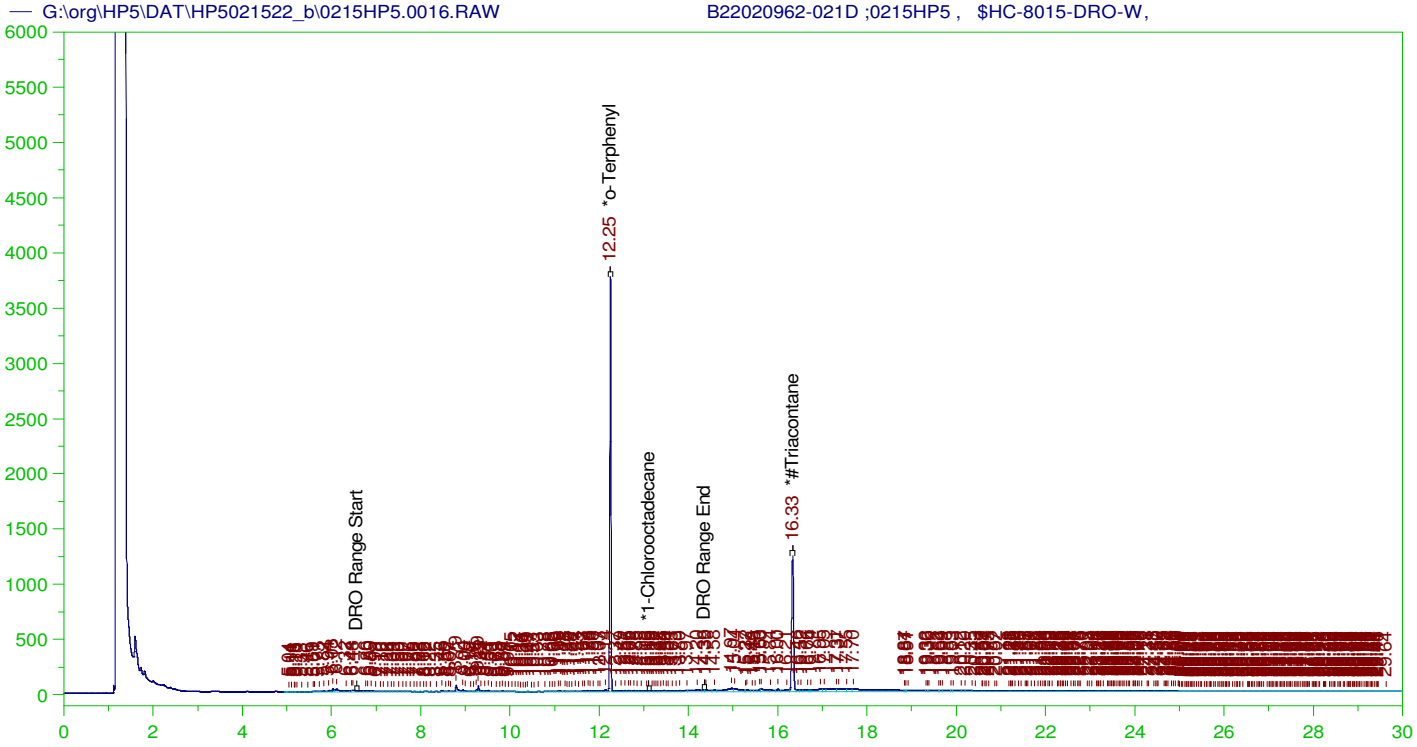
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.331	.495	.115	23.28	-

RRO Area:177785.6 RRO AMOUNT: 6.661431E-03

ERH2533 (RHMW2254-01-Bailer) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0016.RAW B22020962-021D ;0215HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-021D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0016.RAW
Date & Time Acquired: 2/15/2022 9:01:59 PM
Method File: G:\Org\HP5\Methods\D3_8015-021516-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

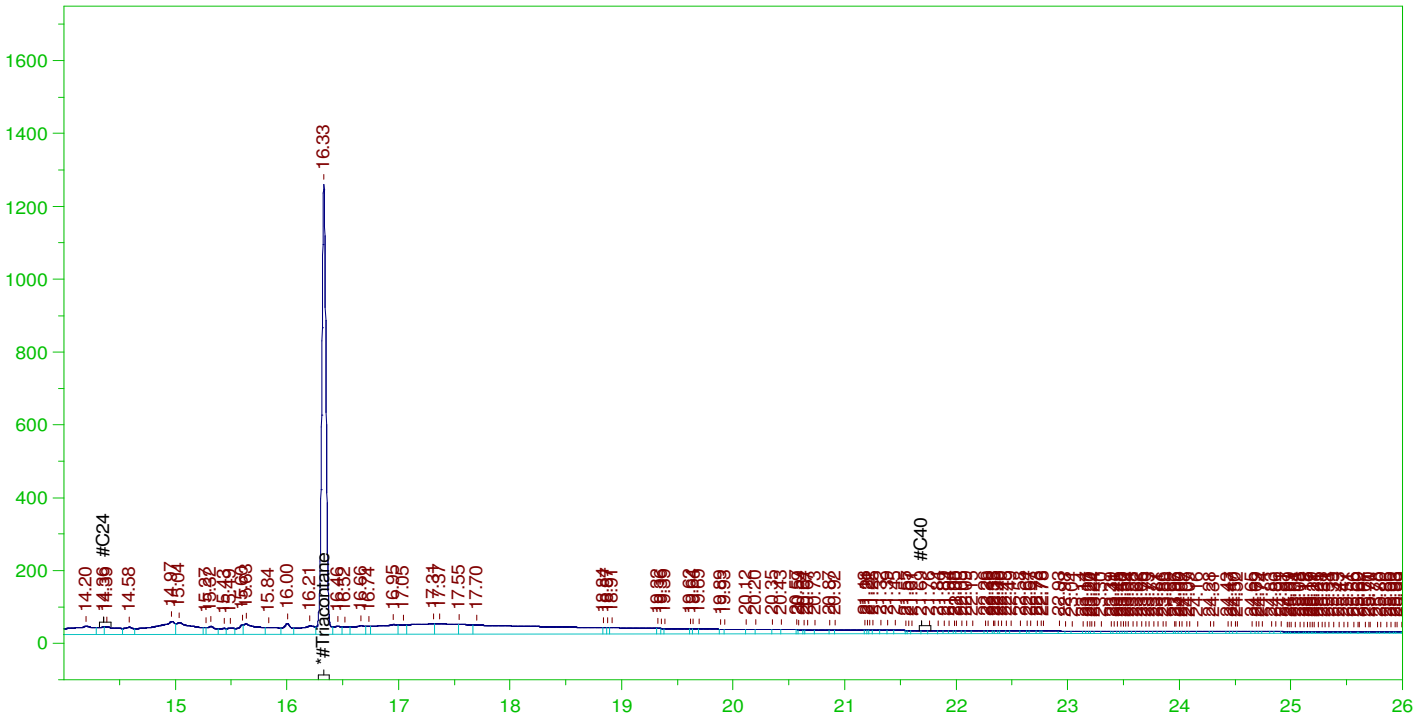
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.249	.191	.189	98.85	-
*1-Chlorooctadecane	13.098	.191	.001	.48	-
*#Triacontane	16.331	.191	.108	56.5	-

DRO Area:4416048 DRO Amount: 0.1293294
TEH Area:1.458743E+07 TEH Amount: 0.4272106

ERH2533 (RHMW2254-01-Bailer) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0016.RAW B22020962-021D ;0215HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-021D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0016.RAW
Date & Time Acquired: 2/15/2022 9:01:59 PM
Method File: G:\Org\HP5\Methods\D3_OROS-021516-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

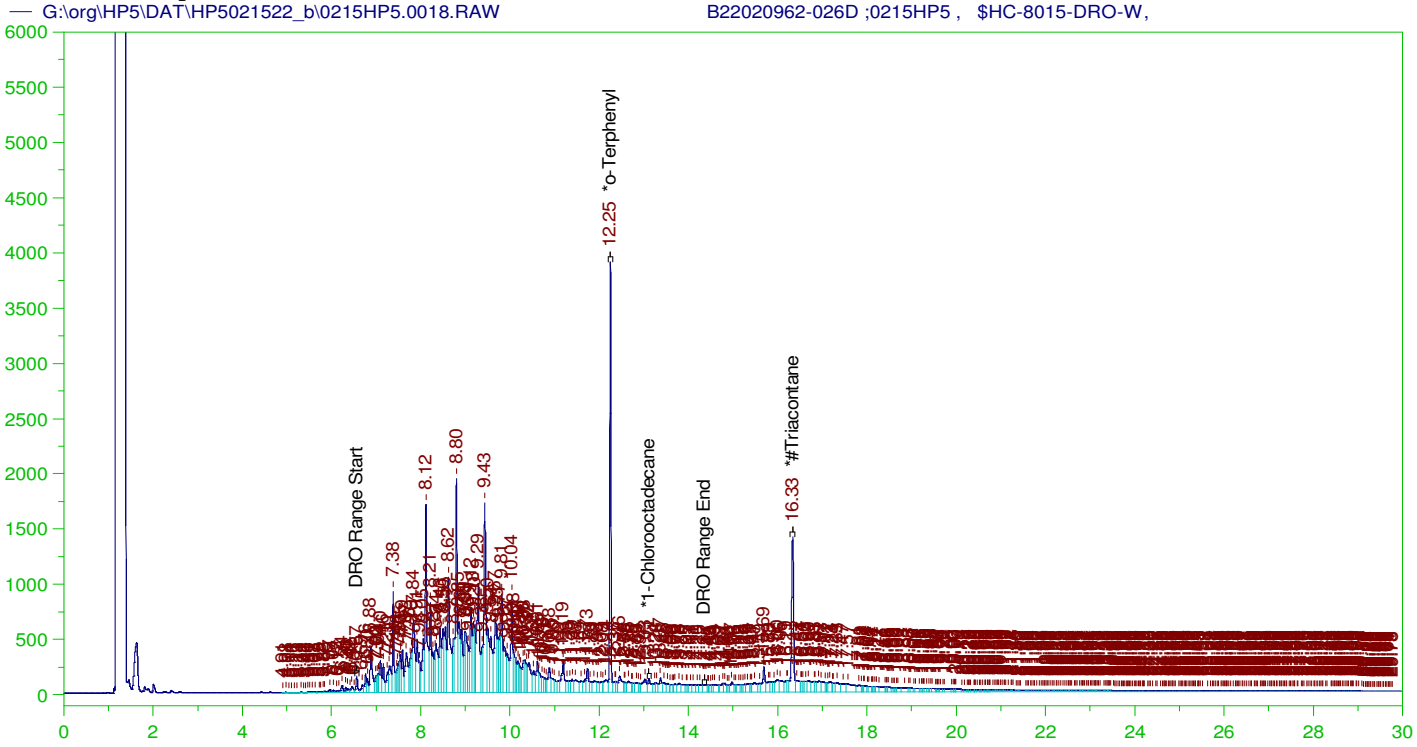
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.331	.478	.108	22.6	-

RRO Area:7724023 RRO AMOUNT: 0.2797175

ERH2537 (Sump Adit 3) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0018.RAW B22020962-026D ;0215HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-026D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0018.RAW
Date & Time Acquired: 2/15/2022 10:28:02 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24Tb-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

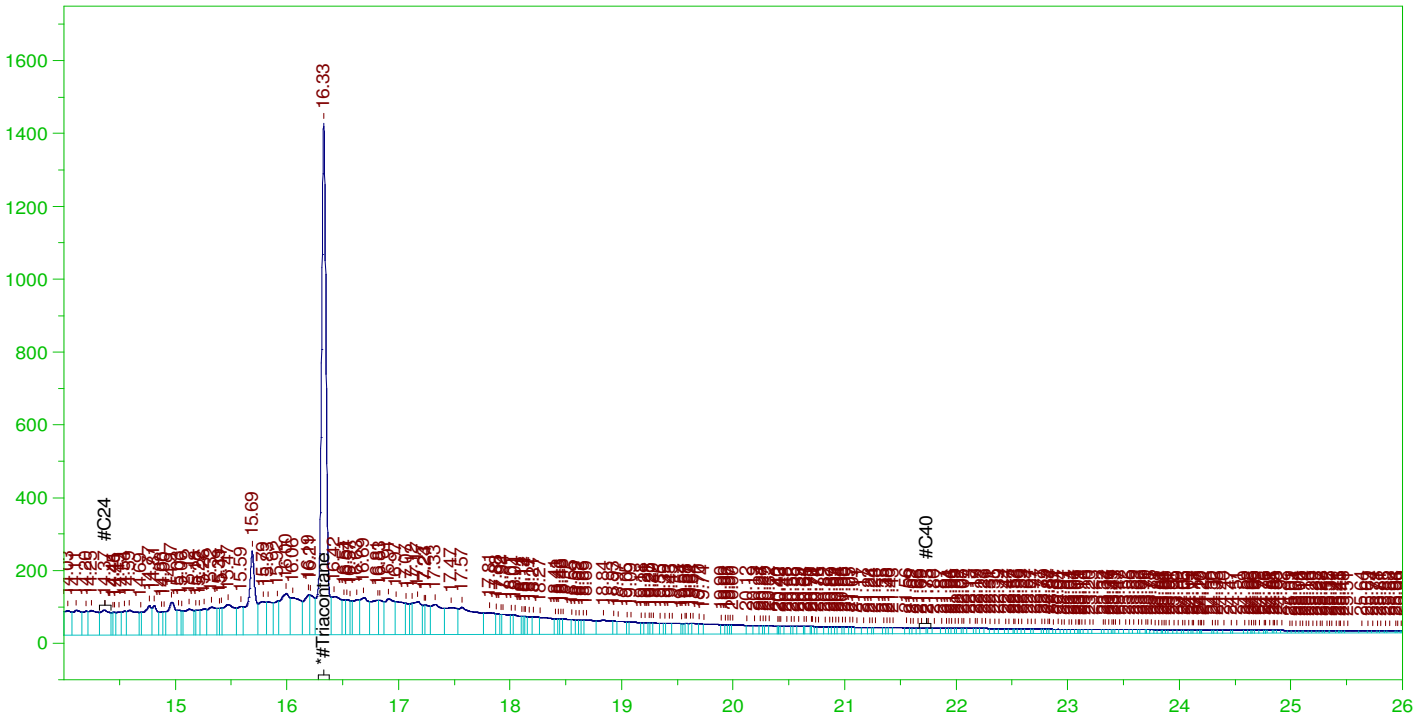
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.248	.2	.212	105.87	-
*1-Chlorooctadecane	13.111	.2	.018	8.94	-
*#Triacontane	16.331	.2	.146	72.98	-

DRO Area:1.151425E+08 DRO Amount: 3.523833
TEH Area:1.420501E+08 TEH Amount: 4.347314

ERH2537 (Sump Adit 3) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0018.RAW B22020962-026D ;0215HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-026D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0018.RAW
Date & Time Acquired: 2/15/2022 10:28:02 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

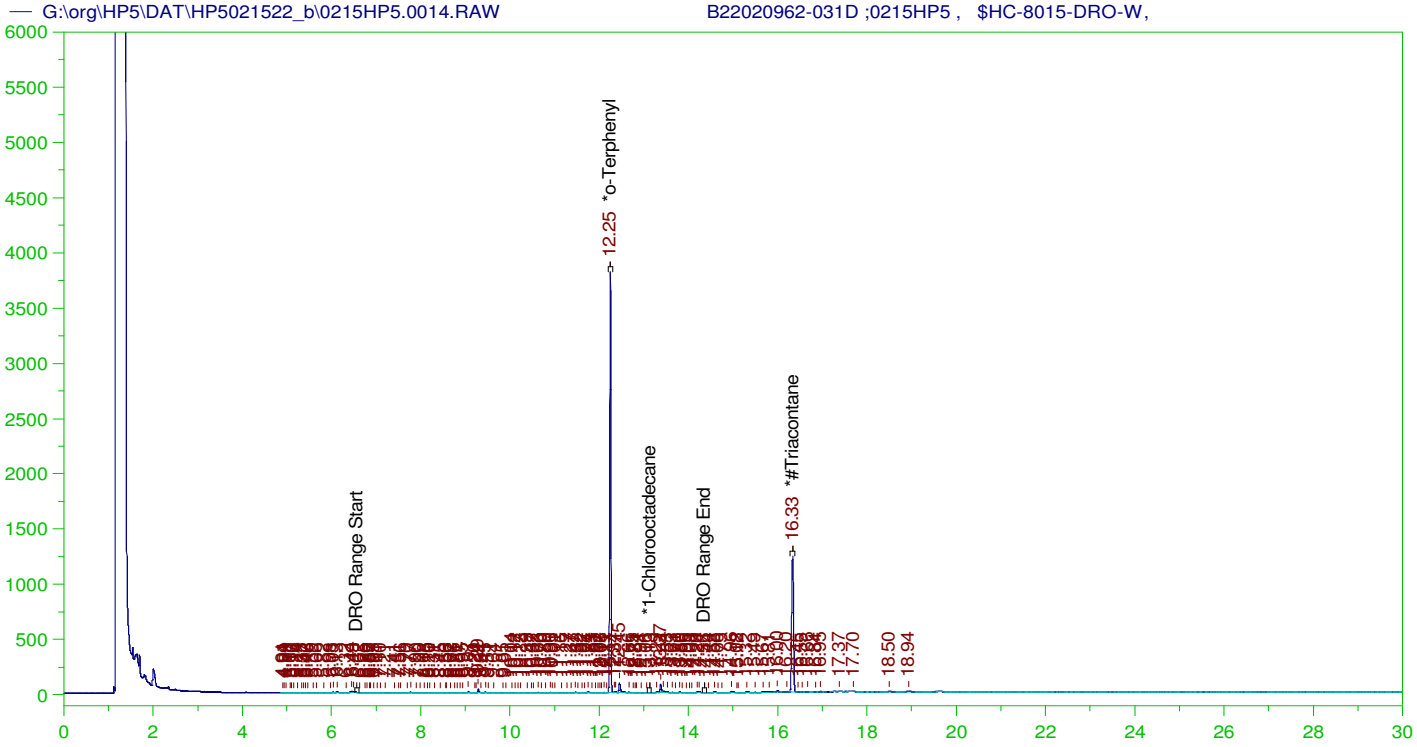
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.331	.5	.146	29.19	-

RRO Area:2.324795E+07 RRO AMOUNT: 0.879786

ERH2526 (OWDFMW08A) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0014.RAW B22020962-031D ;0215HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-031D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0014.RAW
Date & Time Acquired: 2/15/2022 7:36:03 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24Tb-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

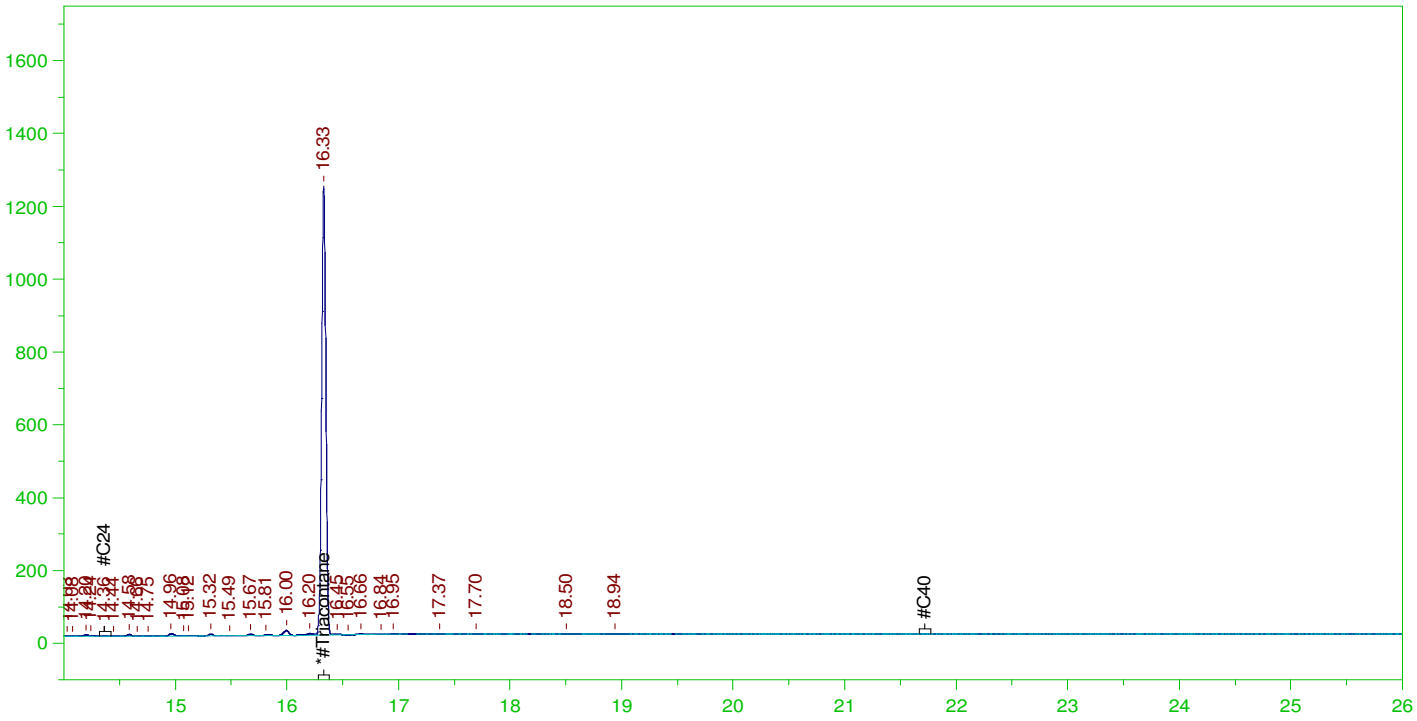
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.247	.189	.19	100.78	-
*1-Chlorooctadecane	13.131	.189	.	.11	-
*#Triacontane	16.33	.189	.103	54.66	-

DRO Area:965439.4 DRO Amount: 2.787397E-02
TEH Area:1357710 TEH Amount: 3.919953E-02

ERH2526 (OWDFMW08A) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0014.RAW B22020962-031D ;0215HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-031D ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0014.RAW
Date & Time Acquired: 2/15/2022 7:36:03 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

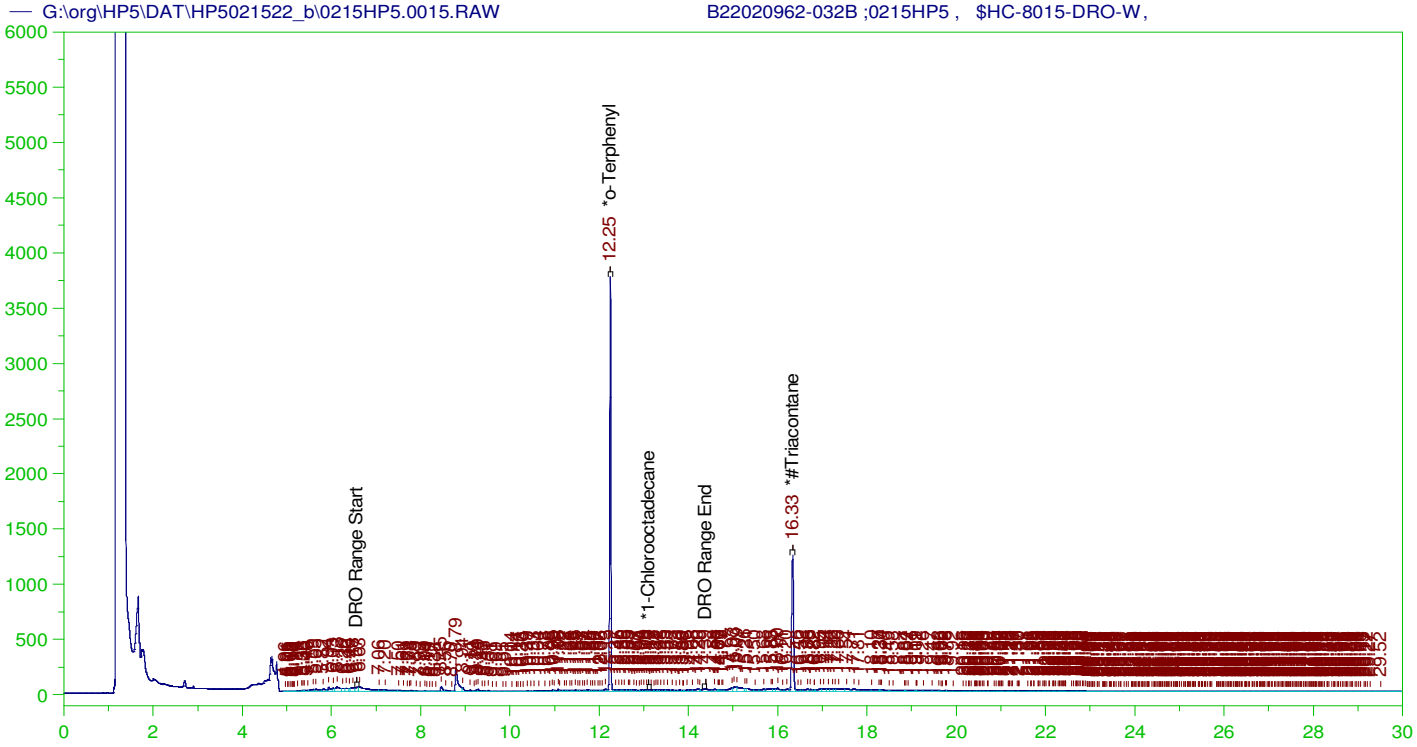
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.33	.472	.103	21.87	-

RRO Area:184615.2 RRO AMOUNT: 6.59104E-03

ERH2527 (OWDFMW08A-FD) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0015.RAW B22020962-032B ;0215HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-032B ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0015.RAW
Date & Time Acquired: 2/15/2022 8:19:02 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24Tb-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

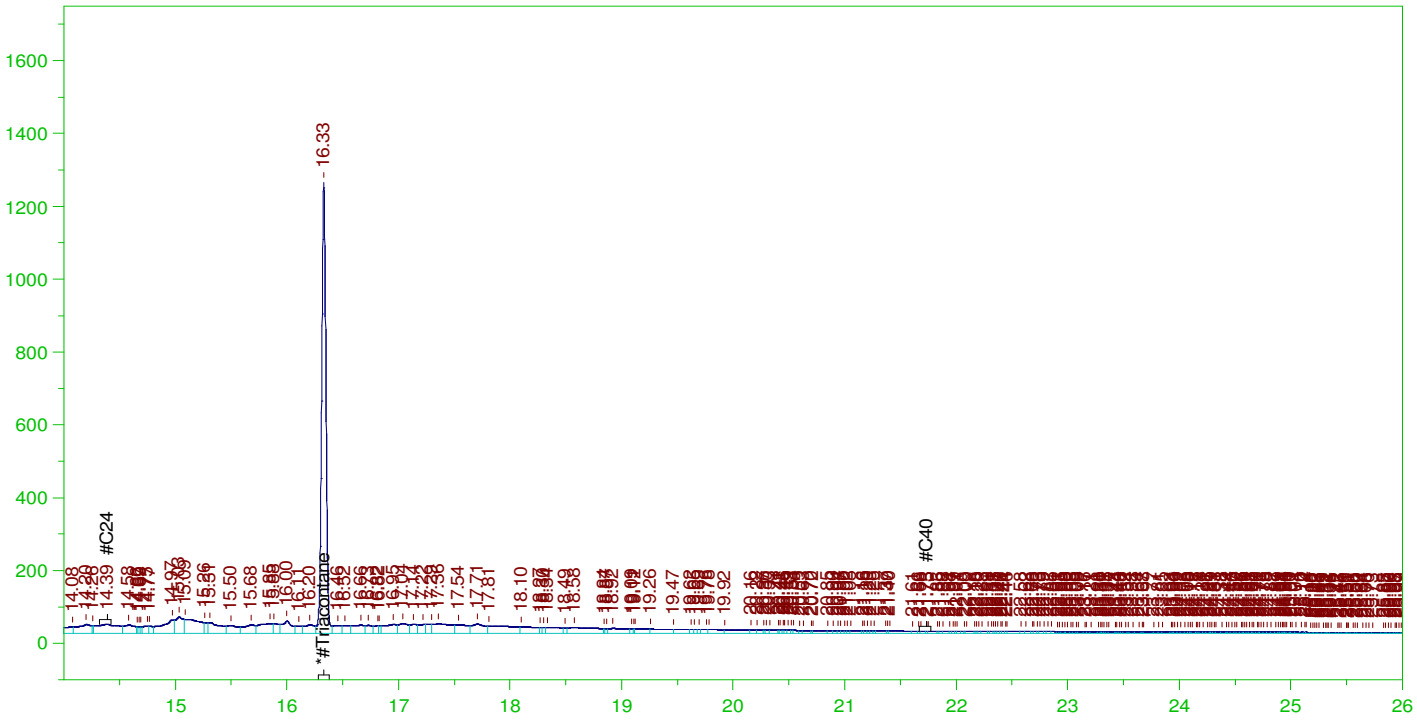
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.247	.189	.186	98.82	-
*1-Chlorooctadecane	13.099	.189	.002	.81	-
*#Triacontane	16.331	.189	.106	56.26	-

DRO Area:6468954 DRO Amount: 0.1867703
TEH Area:1.585632E+07 TEH Amount: 0.4578004

ERH2527 (OWDFMW08A-FD) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0015.RAW B22020962-032B ;0215HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-032B ;0215HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0015.RAW
Date & Time Acquired: 2/15/2022 8:19:02 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

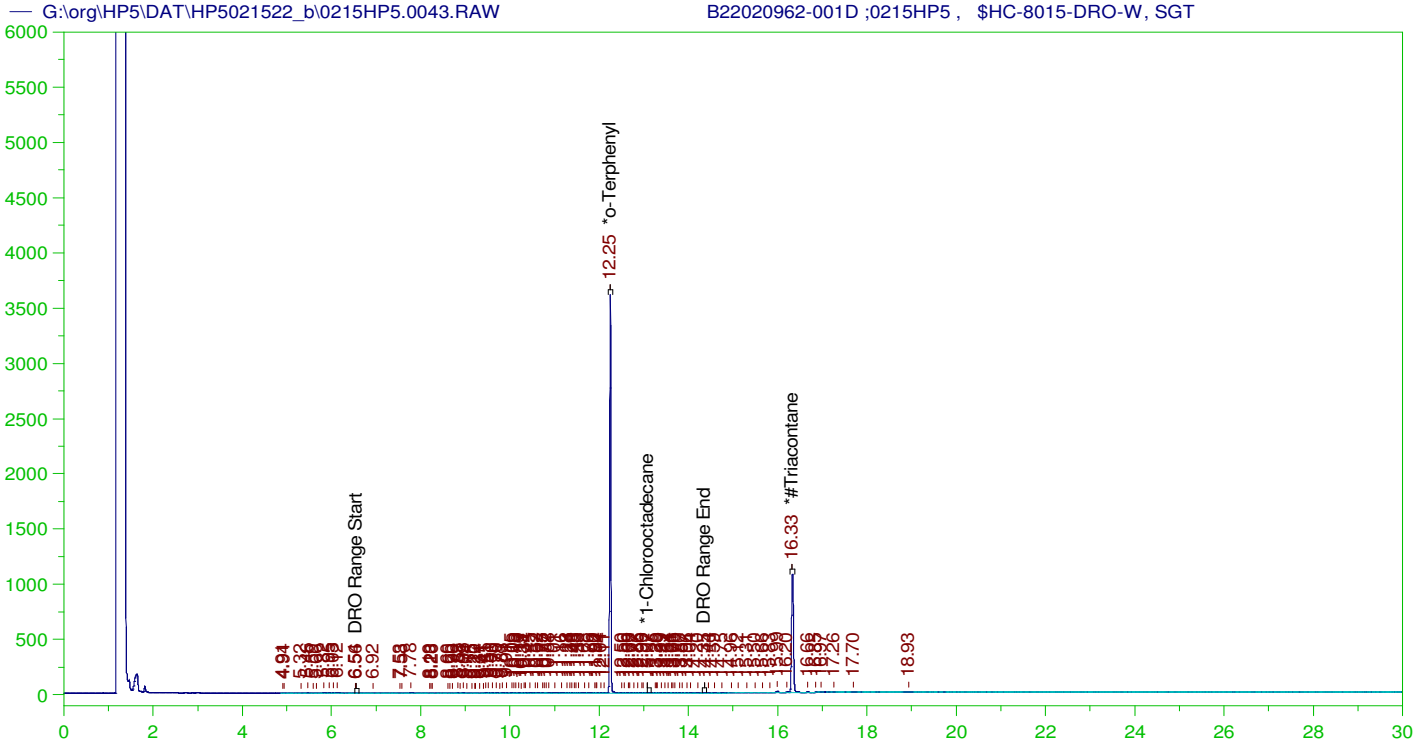
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.331	.472	.106	22.5	-

RRO Area:7041861 RRO AMOUNT: 0.251405

ERH2524 (OWDFMW07A) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0043.RAW B22020962-001D ;0215HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-001D ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0043.RAW
Date & Time Acquired: 2/16/2022 4:20:20 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24Tb-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

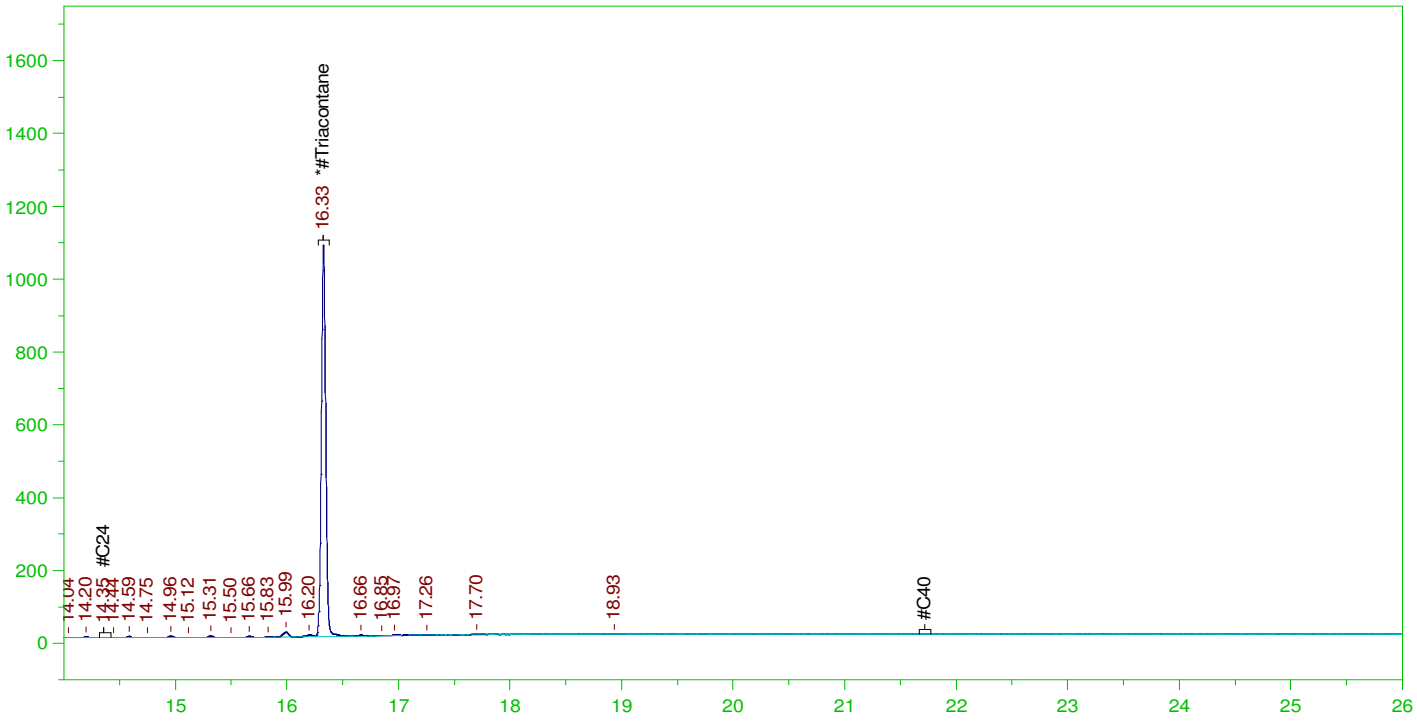
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.246	.19	.185	96.93	-
*1-Chlorooctadecane	13.074	.19	. .25		-
*#Triacontane	16.328	.19	.095	49.62	-

DRO Area:329790.6 DRO Amount: 9.612327E-03
TEH Area:527998.8 TEH Amount: 1.538946E-02

ERH2524 (OWDFMW07A) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0043.RAW B22020962-001D ;0215HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-001D ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0043.RAW
Date & Time Acquired: 2/16/2022 4:20:20 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

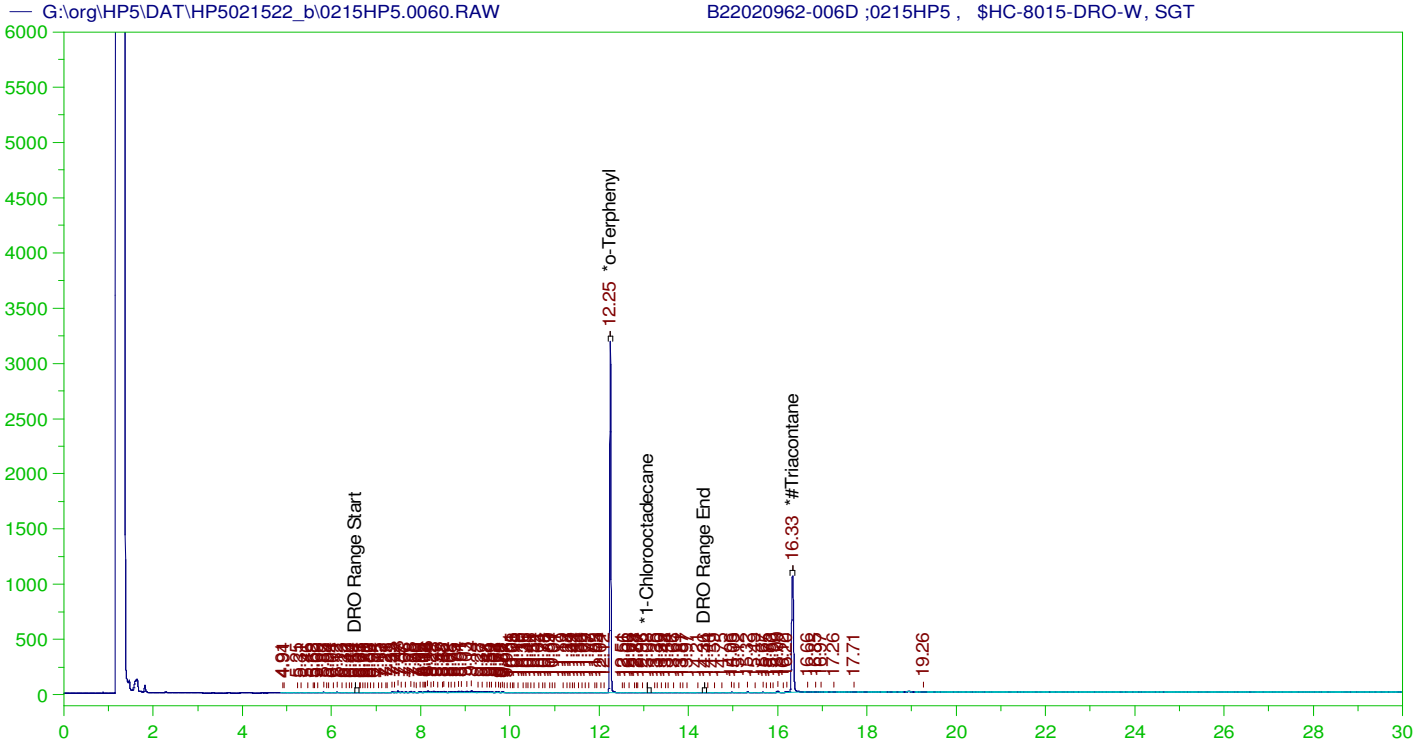
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.328	.476	.095	19.87	-

RRO Area:148512.9 RRO AMOUNT: 5.352631E-03

ERH2531 (RHMW01R) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0060.RAW B22020962-006D ;0215HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-006D ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0060.RAW
Date & Time Acquired: 2/17/2022 12:42:40 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24Tb-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

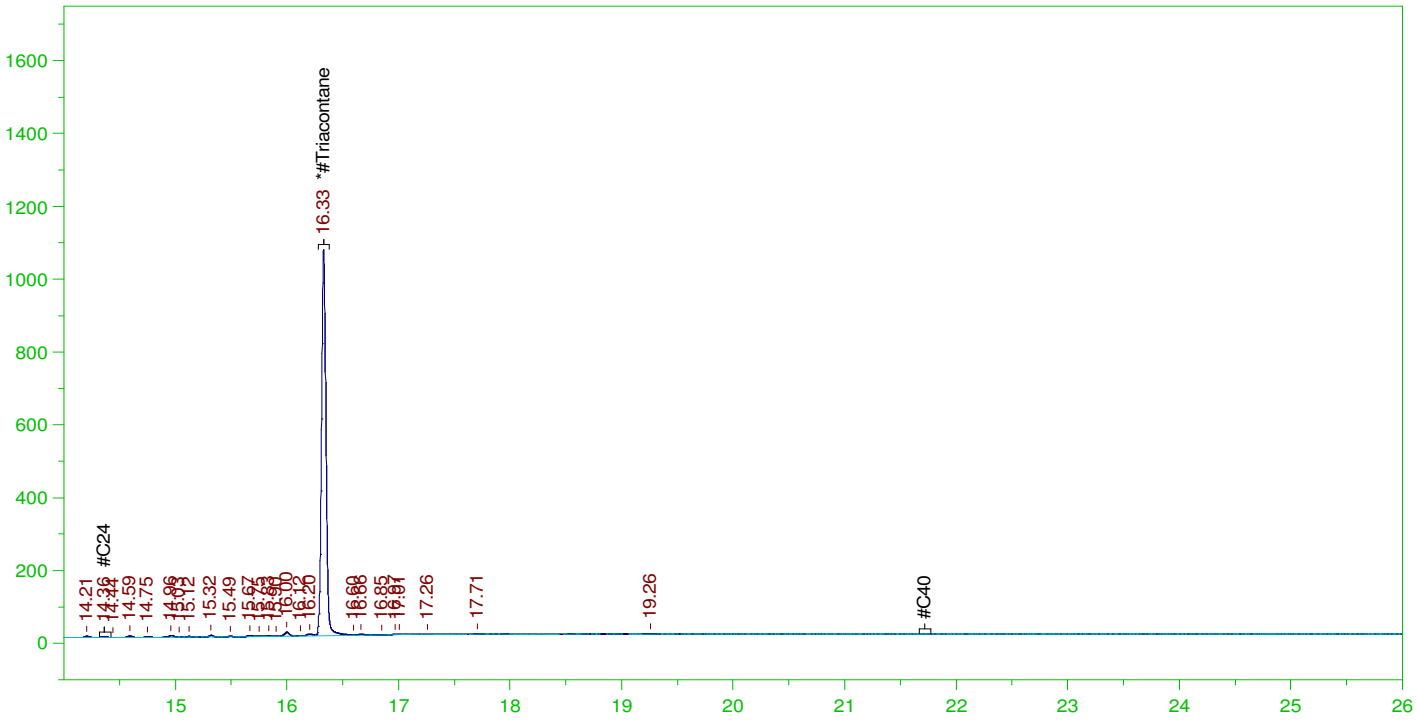
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.246	.19	.164	86.05	-
*1-Chlorooctadecane	13.081	.19	. .16		-
*#Triacontane	16.329	.19	.096	50.26	-

DRO Area:1568527 DRO Amount: 4.571747E-02
TEH Area:1789863 TEH Amount: 0.0521687

ERH2531 (RHMW01R) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0060.RAW B22020962-006D ;0215HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-006D ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0060.RAW
Date & Time Acquired: 2/17/2022 12:42:40 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

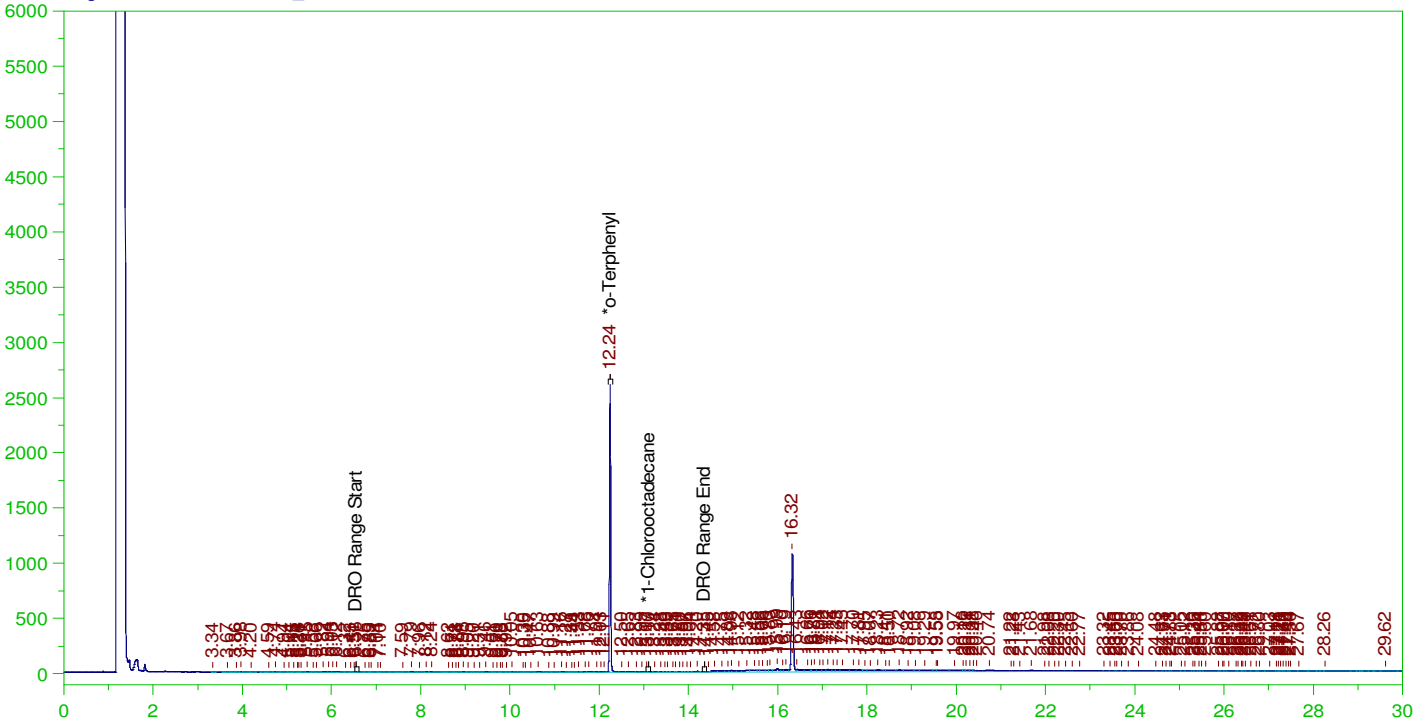
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.329	.476	.096	20.2	-

RRO Area:155611.4 RRO AMOUNT: 5.608471E-03

ERH2529 (RHMW19) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0049.RAW B22020962-011D ;0215HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-011D ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0049.RAW
Date & Time Acquired: 2/16/2022 8:37:56 PM
Method File: G:\Org\HP5\Methods\D3_8015-021549-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

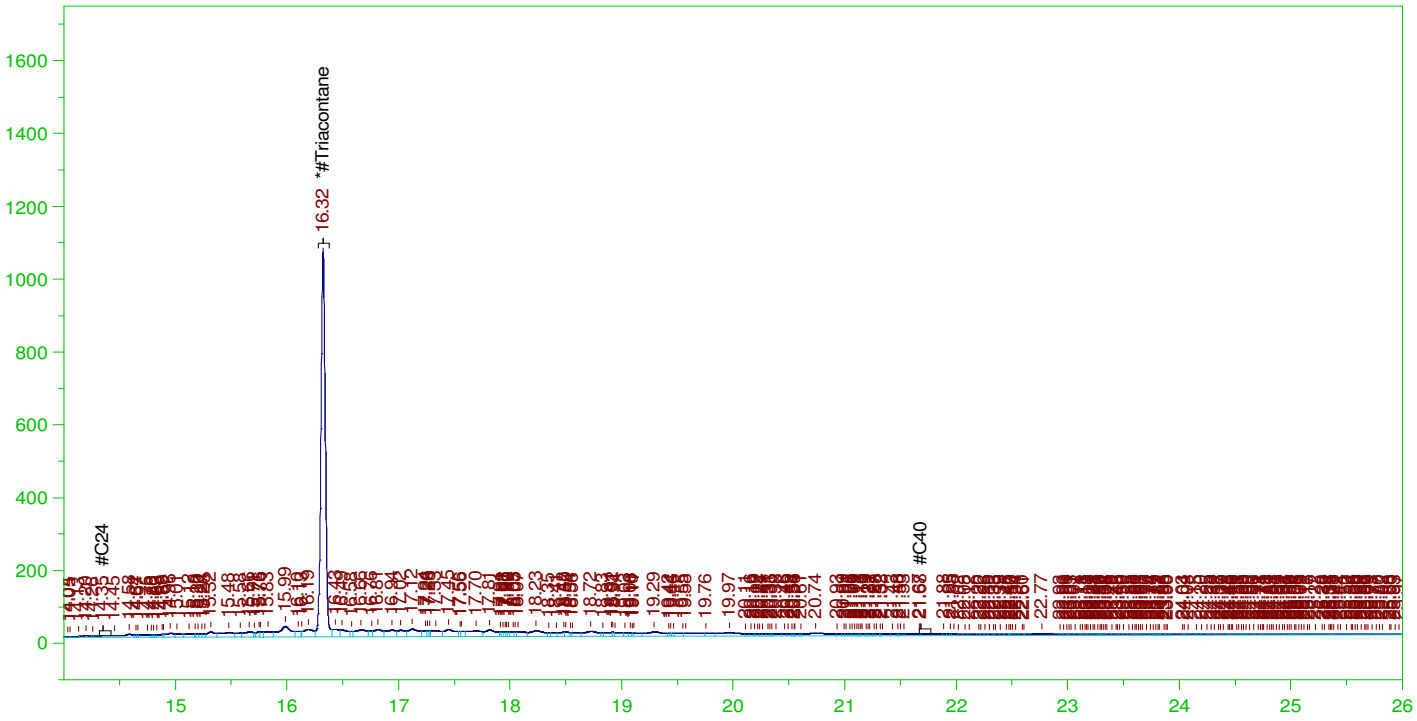
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.241	.191	.134	70.14	-
*1-Chlorooctadecane	13.103	.191	. .03		-

DRO Area:297080.8 DRO Amount: 8.700373E-03
TEH Area:9123262 TEH Amount: 0.2671859

ERH2529 (RHMW19) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0049.RAW B22020962-011D ;0215HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-011D ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0049.RAW
Date & Time Acquired: 2/16/2022 8:37:56 PM
Method File: G:\Org\HP5\Methods\D3_OROS-021549-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

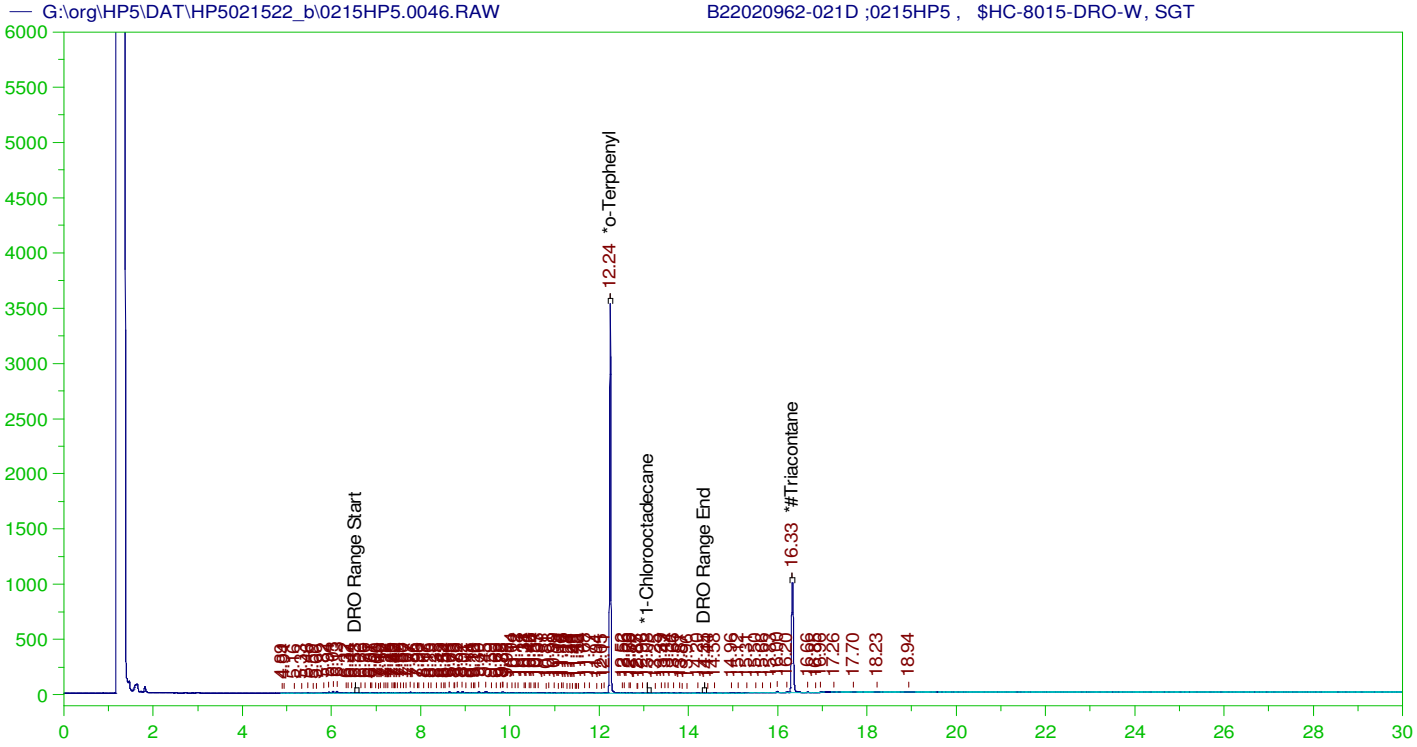
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.324	.478	.095	19.91	-

RRO Area:4972892 RRO AMOUNT: 0.1800881

ERH2533 (RHMW2254-01-Bailer) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0046.RAW B22020962-021D ;0215HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-021D ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0046.RAW
Date & Time Acquired: 2/16/2022 6:28:59 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24Tb-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

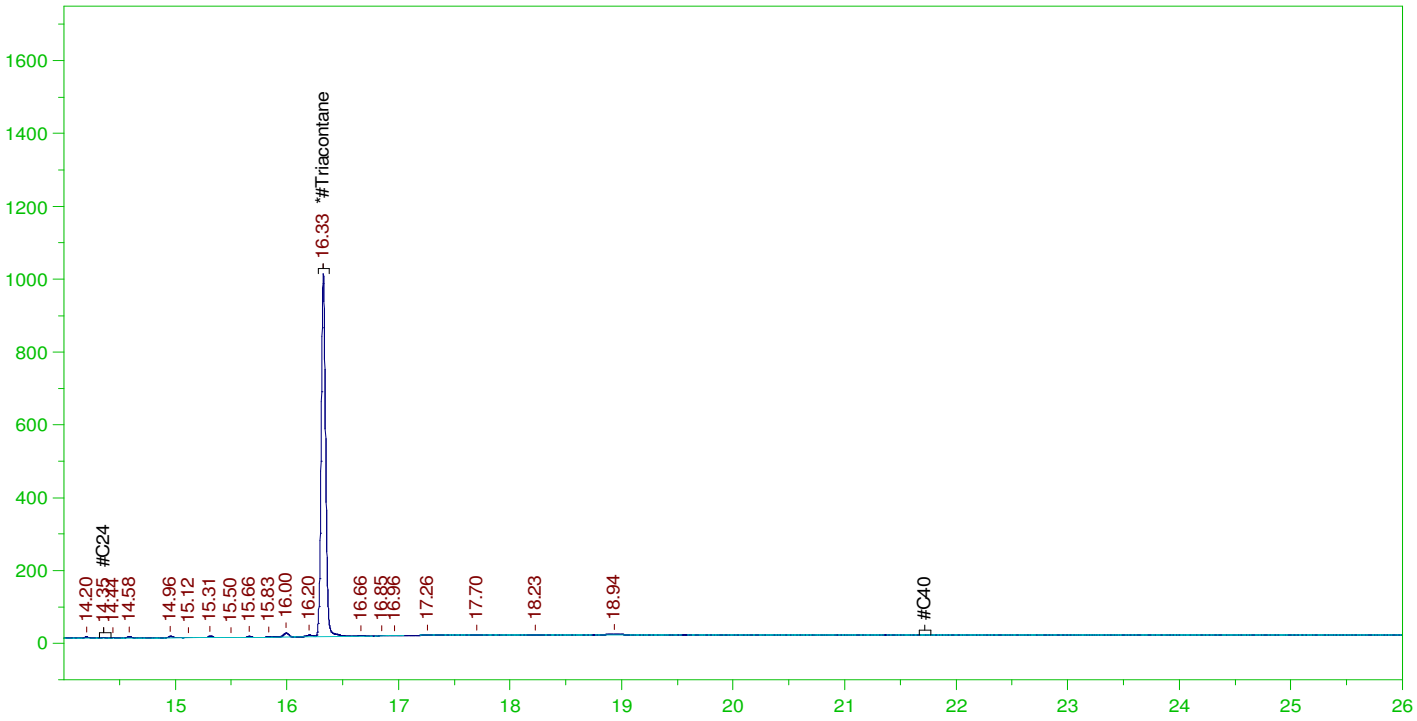
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.244	.191	.18	94.21	-
*1-Chlorooctadecane	13.081	.191	.	.07	-
*#Triacontane	16.326	.191	.09	47.19	-

DRO Area:1017510 DRO Amount: 2.979903E-02
TEH Area:1335184 TEH Amount: 3.910249E-02

ERH2533 (RHMW2254-01-Bailer) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0046.RAW B22020962-021D ;0215HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-021D ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0046.RAW
Date & Time Acquired: 2/16/2022 6:28:59 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

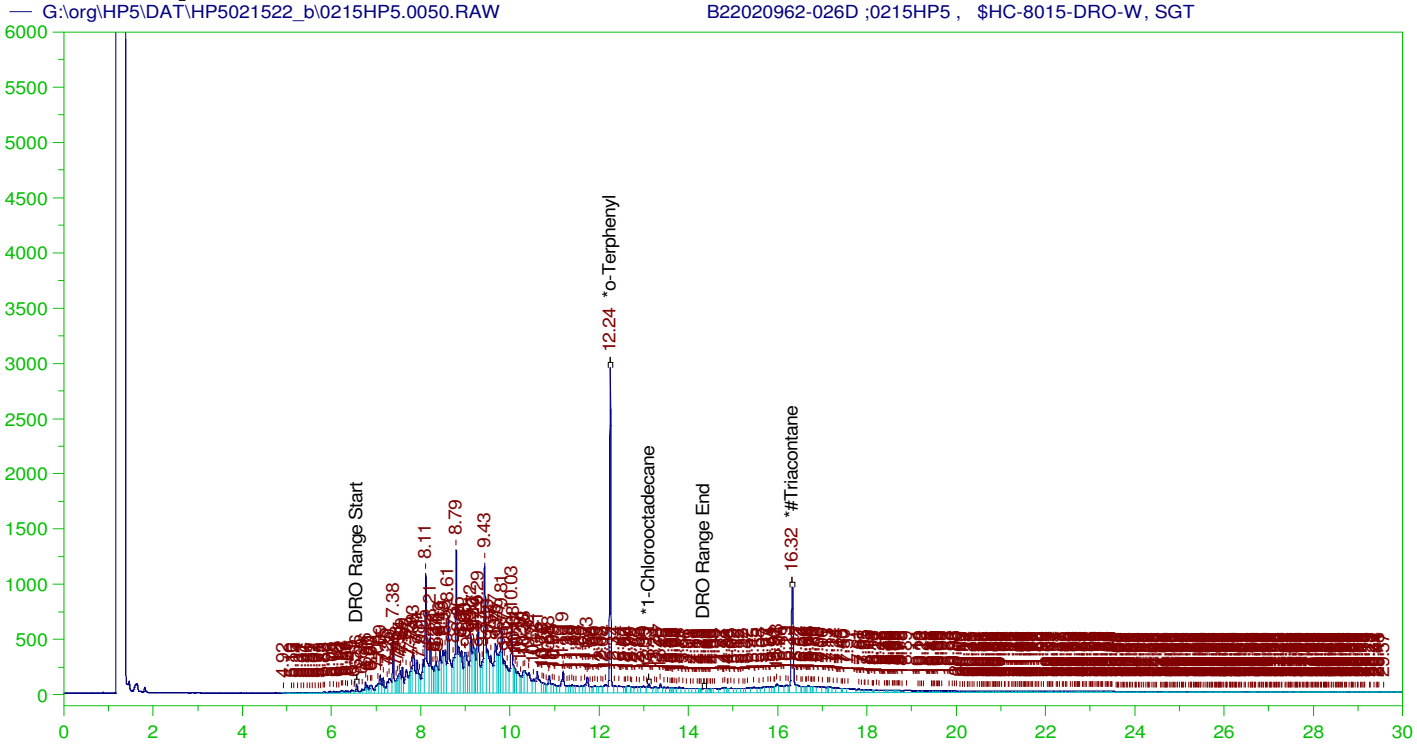
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.326	.478	.09	18.91	-

RRO Area:140164 RRO AMOUNT: 5.075896E-03

ERH2537 (Sump Adit 3) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0050.RAW B22020962-026D ;0215HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-026D ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0050.RAW
Date & Time Acquired: 2/16/2022 9:20:56 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24Tb-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

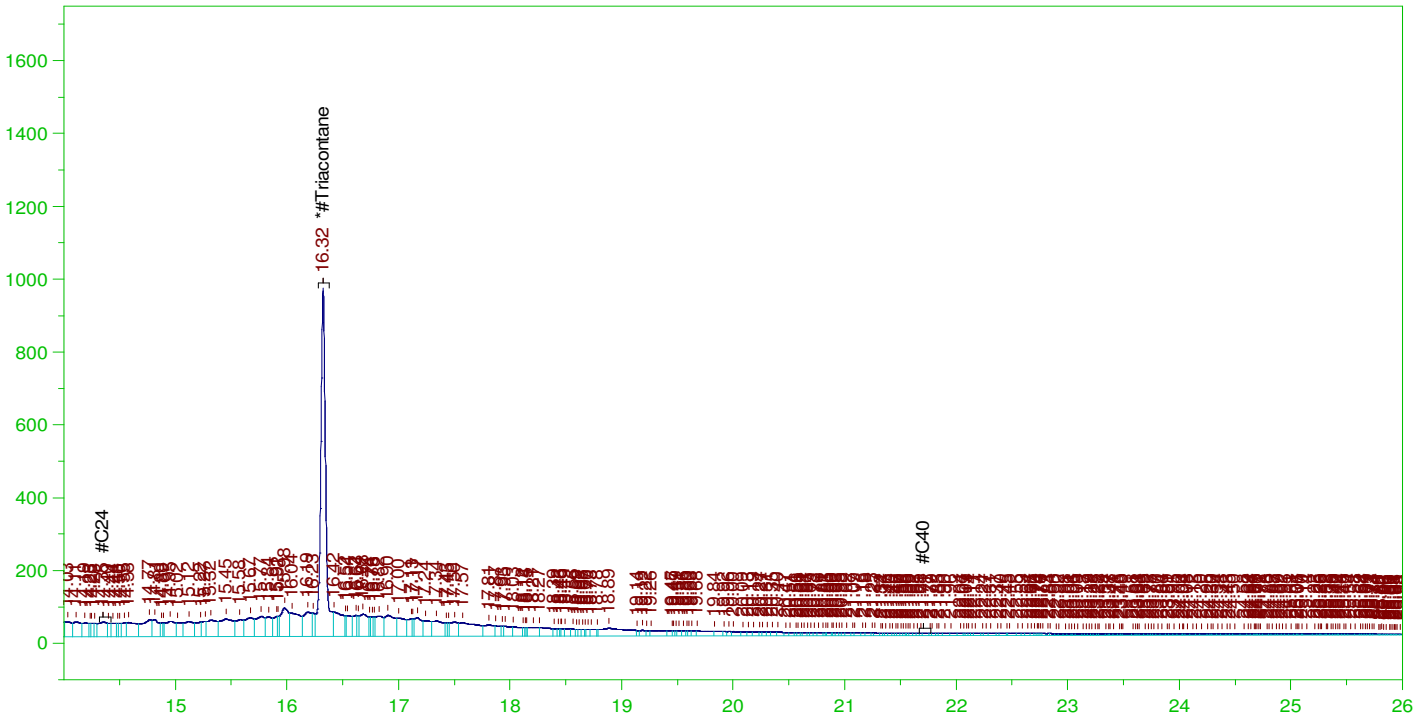
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.244	.2	.163	81.56	-
*1-Chlorooctadecane	13.111	.2	.012	6.13	-
*#Triacontane	16.324	.2	.1	50.16	-

DRO Area:7.362742E+07 DRO Amount: 2.253301
TEH Area:8.775042E+07 TEH Amount: 2.685523

ERH2537 (Sump Adit 3) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0050.RAW B22020962-026D ;0215HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-026D ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0050.RAW
Date & Time Acquired: 2/16/2022 9:20:56 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

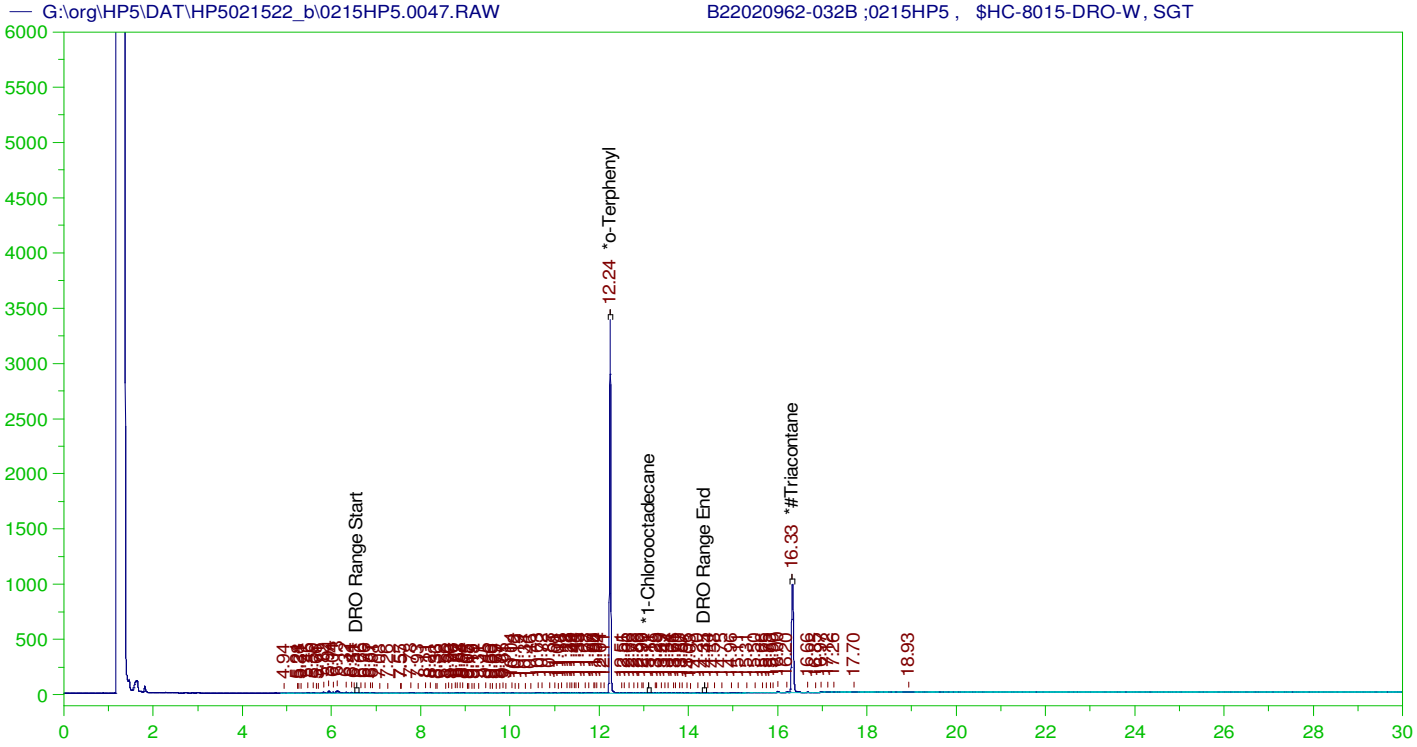
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.324	.5	.1	20.06	-

RRO Area:1.252767E+07 RRO AMOUNT: 0.4740919

ERH2527 (OWDFMW08A-FD) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0047.RAW B22020962-032B ;0215HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22020962-032B ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0047.RAW
Date & Time Acquired: 2/16/2022 7:12:01 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24Tb-JEb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JEb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

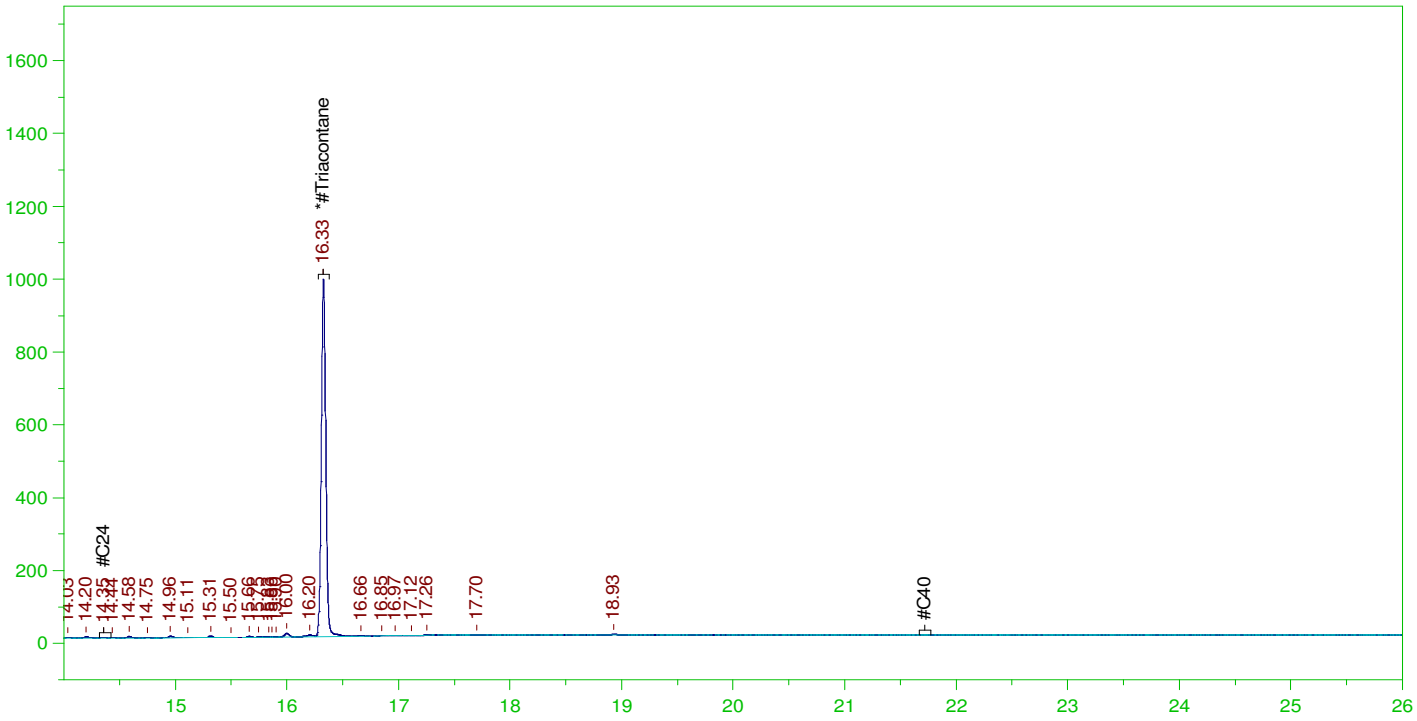
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.52 to 14.41

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.243	.189	.173	91.61	-
*1-Chlorooctadecane	13.111	.189	.15		-
*#Triacontane	16.328	.189	.088	46.63	-

DRO Area:333775.1 DRO Amount: 9.636686E-03
TEH Area:751659.8 TEH Amount: 2.170176E-02

ERH2527 (OWDFMW08A-FD) Batch ID: 163748

G:\org\HP5\DAT\HP5021522_b\0215HP5.0047.RAW B22020962-032B ;0215HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22020962-032B ;0215HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5021522_b\0215HP5.0047.RAW
Date & Time Acquired: 2/16/2022 7:12:01 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BEb-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BEb_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.32 to 21.77

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.328	.472	.088	18.68	-

RRO Area:133513 RRO AMOUNT: 4.766613E-03

From: Ramos, Alethea <alethea.ramos@aecom.com>
Sent: Monday, December 13, 2021 3:11 PM
To: Tabitha Edwards
Cc: Pascua, Margie; billingsPM@energylab.com
Subject: RE: [EXTERNAL] FW: CV18F0126: Expedited NOI Groundwater Samples, Saturday 12/12 Submission

Categories: Must Attend

Hi Tabitha,

I believe Casper WY is DoD ELAP accredited in the TOC 9060 method. I spoke to Shari and she indicated there is a daily courier between Billings and Casper, and would be appx. a day delay. Under those stipulations, please subcontract these samples and inform on expedited TAT.

Thank you,

Alethea Ramos, CIH
Environmental Scientist, Environmental Health & Science, Environment
D +1-808-529-7283
M +1-808-389-5383
alethea.ramos@aecom.com

AECOM
1001 Bishop Street
Suite 1600
Honolulu, HI 96813, United States of America
aecom.com

From: Tabitha Edwards <tedwards@energylab.com>
Sent: Monday, December 13, 2021 7:05 AM
To: Ramos, Alethea <alethea.ramos@aecom.com>
Cc: Pascua, Margie <Margie.Pascua@aecom.com>; billingsPM@energylab.com
Subject: [EXTERNAL] FW: CV18F0126: Expedited NOI Groundwater Samples, Saturday 12/12 Submission
Importance: High

Alethea,

The TOC by 9060 must be subcontracted to our office in Casper, WY. I need authorization from you to subcontract these. Once that has been received we will discuss the TAT with them and let you know what is achievable.

Thank you,

Energy Laboratories, Inc.
Trust our People. Trust our Data.

Tabitha Edwards | Office Manager | Billings, MT
O: 406-869-6286 | tedwards@energylab.com | www.energylab.com

***We want to help you ship successfully**! Please plan ahead and allow extra time to receive supplies from the lab and for the lab to receive your samples. All carriers are in full-swing holiday peak season operating with double the volume and limited capacity. We appreciate your business so please contact your local branch or Project Manager to discuss adjustments to your shipping schedule or to ask questions.*

From: Ramos, Alethea [mailto:alethea.ramos@aecom.com]
Sent: Saturday, December 11, 2021 3:20 AM
To: Shari Endy; billingsPM@energylab.com
Cc: Jillian Miller; Pascua, Margie; KaaihiliChoy, Terri Ann
Subject: CV18F0126: Expedited NOI Groundwater Samples, Saturday 12/12 Submission
Importance: High

Hi Shari and Billings PM,

You will be receiving a Saturday shipment (12/12) of groundwater samples indicated in the attached COCs. We will need results by **Wednesday, December 15th**, and will pay any fees incurred for an expedited TAT. Please proceed with analysis without preservation traceability. Please see below tracking information links:

https://www.fedex.com/fedextrack/?trknbr=287337969629&trkqual=2459558000~287337969629~FX
https://www.fedex.com/fedextrack/?trknbr=287343101019&trkqual=2459559000~287343101019~FX

Thank you,

Alethea Ramos, CIH
Environmental Scientist, Environmental Health & Science, Environment
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