ANALYTICAL SUMMARY REPORT

March 04, 2022

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

Work Order: B22021435 Quote ID: 5912

Project Name: CV18F0126, 60571032.02.46.01

Energy Laboratories Inc Billings MT received the following 36 samples from AECOM - Honolulu on 2/21/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Received Date	Matrix	Test
B22021435-001	ERH2542 (OWDFMW07A)	02/17/22 13:15	02/21/2022	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
B22021435-002	ERH2541 (Trip Blank) 14833	02/17/22 13:15	02/21/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22021435-003	ERH2541 (Trip Blank) 14754	02/17/22 13:15	02/21/2022	Trip Blank	Gasoline Range Organics SW8015C
B22021435-004	ERH2541 (Trip Blank) 14733	02/17/22 13:15	02/21/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22021435-005	ERH2541 (Trip Blank) 14808	02/17/22 13:15	02/21/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22021435-006	ERH2544 (OWDFMW08A)	02/16/22 16:30	02/21/2022	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
B22021435-007	ERH2545 (OWDFMW08A)	02/16/22 16:30	02/21/2022	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
B22021435-008	ERH2543 (Trip Blank) 14833	02/16/22 16:30	02/21/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22021435-009	ERH2543 (Trip Blank) 14754	02/16/22 16:30	02/21/2022	Trip Blank	Gasoline Range Organics SW8015C
B22021435-010	ERH2543 (Trip Blank) 14733	02/16/22 16:30	02/21/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22021435-011	ERH2543 (Trip Blank) 14808	02/16/22 16:30	02/21/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22021435-012	ERH2547 (RHMW19)	02/17/22 12:25	02/21/2022	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
B22021435-013	ERH2546 (Trip Blank) 14833	02/17/22 12:25	02/21/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22021435-014	ERH2546 (Trip Blank) 14754	02/17/22 12:25	02/21/2022	Trip Blank	Gasoline Range Organics SW8015C
B22021435-015	ERH2546 (Trip Blank) 14733	02/17/22 12:25	02/21/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22021435-016	ERH2546 (Trip Blank) 14808	02/17/22 12:25	02/21/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22021435-017	ERH2549 (RHMW01R)	02/16/22 15:30	02/21/2022	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
B22021435-018	ERH2548 (Trip Blank) 14833	02/16/22 15:30	02/21/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B

ANALYTICAL SUMMARY REPORT

B22021435-019	ERH2548 (Trip Blank) 14754	02/16/22 15:30	02/21/2022	Trip Blank	Gasoline Range Organics SW8015C
B22021435-020	ERH2548 (Trip Blank) 14733	02/16/22 15:30	02/21/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22021435-021	ERH2548 (Trip Blank) 14808	02/16/22 15:30	02/21/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22021435-022	ERH2551 (RHMW2254-01 Bailer)	02/17/22 13:40	02/21/2022	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
B22021435-023	ERH2550 (Trip Blank) 14754	02/17/22 13:40	02/21/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22021435-024	ERH2550 (Trip Blank) 14833	02/17/22 13:40	02/21/2022	Trip Blank	Gasoline Range Organics SW8015C
B22021435-025	ERH2550 (Trip Blank) 14733	02/17/22 13:40	02/21/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22021435-026	ERH2550 (Trip Blank) 14732	02/17/22 13:40	02/21/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22021435-027	ERH2553 (RHMW2254-01 Low Flow)	02/17/22 14:30	02/21/2022	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
B22021435-028	ERH2552 (Trip Blank) 14733	02/17/22 14:30	02/21/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22021435-029	ERH2552 (Trip Blank) 14754	02/17/22 14:30	02/21/2022	Trip Blank	Gasoline Range Organics SW8015C
B22021435-030	ERH2552 (Trip Blank) 14733	02/17/22 14:30	02/21/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22021435-031	ERH2552 (Trip Blank) 14732	02/17/22 14:30	02/21/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22021435-032	ERH2555 (Sump Audit 3)	02/17/22 15:40	02/21/2022	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
B22021435-033	ERH2554 (Trip Blank) 14833	02/17/22 15:40	02/21/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B

ANALYTICAL SUMMARY REPORT

B22021435-034	ERH2554 (Trip Blank) 14754	02/17/22 15:40	02/21/2022	Trip Blank	Gasoline Range Organics SW8015C
B22021435-035	ERH2554 (Trip Blank) 14733	02/17/22 15:40	02/21/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22021435-036	ERH2554 (Trip Blank) 14808	02/17/22 15:40	02/21/2022	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 18:27:32 -07:00

CLIENT: AECOM - Honolulu
Project: CV18F0126, 60571032.02.46.01
Work Order: B22021435

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).

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:

ERH2550 (Trip Blank) 14754 (B22021435-023)
ERH2554 (Trip Blank) 14833 (B22021435-033)

There were no analytes detected above the MDL so no further analysis was performed.

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Chain of Custody & Analytical Request Record

COC # 202202-17NOI

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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

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	ERH2541 (Trip Blank)	2/17/22	0915	8	GW WQ	✔	✔	✔	✔							X	B22021435-001/-003
2	ERH2542 (OWDFMW07A)	2/17/22	0935	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	-001 -004/005
3	Trip Blank-14833 (8260)			2													-002
4	Trip Blank-14754 (GRO)			2													-003
5	Trip Blank-14733 (8011)			2													-004
6	Trip Blank-14808 (Methane) 2/22/22			2													-005
7																	
8																	
9																	

2/17/22

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

Custody Record MUST be signed			
Relinquished by (print): Alet Fi Edmonds	Date/Time: 2/17/22 1630	Signature: [signature]	
Relinquished by (print):	Date/Time:	Signature:	
Received by (print):	Date/Time:	Signature:	
Received by Laboratory (print):	Date/Time: 2/21/22 0910	Signature: [signature]	

LABORATORY USE ONLY

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

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

ELI-COC-01/21 v.4

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Chain of Custody & Analytical Request Record

COC # 202202-19NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

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

Report Information (If different than Account Information)

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

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level 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	Matt Yim
Sampler Phone	808-349-4738
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

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	ERH2545 (OWDFMW08A)	02/16/2022	12:30 pm	4	GW					✔	✔					X	B2202 1435-007
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	

AN 02/17/22

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Alex Edmonds	2/17/22 1640	[signature]			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print) MBmaurent	Date/Time 2/21/22 0910	Signature [signature]

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 0.5 °C	Temp Blank (Y) N	On Ice (Y) N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)

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

ELI-COC-01/21 v.4

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Chain of Custody & Analytical Request Record

COC # 202202-18NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

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

Report Information (if different than Account Information)

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

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

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level 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	Matt Yim
Sampler Phone	808-349-4738
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	ERH2543 (Trip Blank)	02/16/2022	10:45 am	8	WQ	✔	✔	✔	✔							X	B2202 1435 - 008 -009 -010 -011
2	ERH2544 (OWDFMW08A)	02/16/2022	12:30 pm	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	-006
3	ERH2545 (OWDFMW08A)	02/16/2022	12:30 pm	6	GW	✔	✔									X	-007
4																	
5	TB (8260) - 14833																-008
6	TB (GRO) - 14754																-009
7	TB (8011) - 14733																-010
8	TB (Methane) - 14808																-011
9																	

2/17/2022

TB 2/22/22

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Diana Escobar	2/17/22				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					2/18/22 0910	

LABORATORY USE ONLY

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

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.

ELI-COC-01/21 v.4

Chain of Custody & Analytical Request Record

COC # 202202-20NOI

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DoD Samples Page 1 of 1

Account Information (Billing Information)

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

Report Information (If different than Account Information)

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

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

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level 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 Man
Sampler Phone	(808) 957-3201
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

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

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 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	ERH2546 (Trip Blank)	02/17/22	0800	8	QW	✔	✔	✔	✔							X	B2202148S-12A
2	ERH2547 (RHMW19)	02/17/22	0825	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	-13A
3																	-14A
4	TB 144033 (4760)			2													-15A
5	TB 14784 (GRO)																-16A
6	TB 14733 (DOH)																
7	TB 14806 (Methane)			2													
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
	Christina Hamilton	2/17/22 1700				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					2/18/22 0910	

LABORATORY USE ONLY

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

ELI-COC-01/21 v.4

D

QC Form

TB: ERH 2546

Sample ID/Well Number: ERH2547 / RHMW19

1. QC SIGN/DATE: [signature] 2/17/22

2. QC SIGN/DATE: _____

3. QC SIGN/DATE _____

Analysis	Container	Preservative	Bottle Count	ERH # from Label	1. QC Prep. kit	2. QC Field Samples	3 QC Packing
VOCs (Full Suite) + DCA by 8260 +TPG-g by 8015	40mL VOAs	HCl			2547	6	
Methane by RSK175	40mL VOAs	H2SO4			2547	2	
EDB by 8011	40mL VOAs	HCl			2547	3	
SVOCs (full suite + Nap, 1-2 Methylnap) by 8270DSIM	1L amber glass	UNPRESERVED			2547	2	
THP-d/o	1L amber glass	H2SO4			2547	2	
Total Organic Carbon by EPA 9060	250 mL amber glass	H3PO4			2547	2	
Total Lead by EPA 6020	250 mL plastic	HNO3			2547	1	
Dissolved Lead by EPA 6020 (field filtered)	250 mL plastic	HNO3			2547	1	
TRIP BLANKS							
VOCs, TPH-G	40-mL VOA	HCl			2546	4 1 VOA w/BBL	
EDB	40-mL VOA	HCl			2546	2 ✗ Bubble in 1 VOA	
Methane	40-mL VOA	H2SO4			2546	2 ✗ Bubbles in both	

ALL VOAs CHECKED FOR BUBBLES? (Y) / N is bubble smaller than a pea-size? Y / (N); if No, it needs to be replaced for a new VOA.

FILTER INSIDE COOLERS? Y /N

ADDITIONAL PLASTIC BAGS? Y / N

CUSTODY SEAL INCLUDED? Y / N

LIST LABS TO SEND SAMPLES: Energy

******* Keep the form attached to the inside top of cooler*******

QC Form / Prep. Sample Kit

Sample ID/Well Number: RHMW19 | ERH 2547 | ERH 2546 TB

QC SIGN/DATE: Diana Escobar 2/15/22

QC SIGN/DATE: _____

Analysis	Container	Preservative	Bottle Count	ERH # from Label
VOCs (Full Suite) + DCA by 8260 +TPG-g by 8015	40mL VOAs	HCl	6	ERH 2547
Methane by RSK175	40mL VOAs	H2SO4	3	ERH 2547
EDB by 8011	40mL VOAs	HCl	3	ERH 2547
SVOCs (full suite + Nap, 1-2 Methylnap) by 8270DSIM	1L amber glass	UNPRESERVED	2	ERH 2547
THP-d/o	1L amber glass	H2SO4	2	ERH 2547
Total Organic Carbon by EPA 9060	250 mL amber glass	H3PO4	2	ERH 2547
Total Lead by EPA 6020	250 mL plastic	HNO3	1	ERH 2547
Dissolved Lead by EPA 6020 (field filtered)	250 mL plastic	HNO3	1	ERH 2547
TRIP BLANKS				
VOCs, TPH-G	40-mL VOA	HCl	4	ERH 2546
EDB	40-mL VOA	HCl	2	ERH 2546
Methane	40-mL VOA	H2SO4	2	ERH 2546

ALL VOAs CHECKED FOR BUBBLES? (Y)/ N is bubble smaller than a pea-size? Y / N; if No, it needs to be replaced for a new VOA.

FILTER INSIDE COOLERS? (Y)/N

ADDITIONAL PLASTIC BAGS? (Y)/ N

CUSTODY SEAL INCLUDED? (Y) / N

LIST LABS TO SEND SAMPLES: Energy.

******* Keep the form attached to the inside top of cooler*******

Chain of Custody & Analytical Request Record

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COC # 202202-21NOI

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	Nicole Hecawlo; Sampler Phone 916-8356425
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	ERH2548 (Trip Blank)	02/16/22	11:20	8	QW	✔	✔	✔	✔							X	B22021435
2	ERH2549 (RHMW01R)	02/16/22	11:30	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	-017
3																	
4	TB-14833 (8260)	2/22/22 [TAE]		2													-018
5	TB-14754 (GRO)			2													-019
6	TB-14733 (8011)	DE 2/17/2022		2													-020
7	TB-14808 (Methane)			2													-021
8																	
9																	

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Diana Escobar	2/17/22				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
	[signature]				2/21/22 0910	[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	0.3 °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.

ELI-COC-01/21 v.4

Chain of Custody & Analytical Request Record

COC # 202202-22NOI

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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	Kevin Lee
Sampler Phone	808-636-3319
Sample Origin State	Hawaii
EPA/State Compliance	☐Yes ☒No

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

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

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	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [4 0ml 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 8020 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	ERH2550 (Trip Blank)	2/17/22	0915	8	QW	✔	✔	✔	✔							X	B220214 35-22A
2	ERH2551 (RHMW2254-01 Bailer)	2/17/22	0940	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	-023A
3																	-024A -025A
4	TB 14754 (8260)			3													-025A
5	TB 14833 (GRO)			2													-026A
6	TB 14733 (BTEX)			2													
7	TB 14732 (Methane)			2													
8																	

2/17/22

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Christina Hanstle	2/17/22 1500				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					2/24/22 09:10	

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)
				0.3	Y	Y			

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

ELI-COC-01/21 v.4

QC Form

Sample ID/Well Number: TB ERH 2550 ERH 2551 / RHMW 2254-01

1. QC SIGN/DATE: [signature] / 02-17-22

2. QC SIGN/DATE: _____

3. QC SIGN/DATE _____

Analysis	Container	Preservative	Bottle Count	ERH # from Label	1. QC Prep. kit	2. QC Field Samples	3 QC Packing
VOCs (Full Suite) + DCA by 8260 +TPG-g by 8015	40mL VOAs	HCl			2551	6	
Methane by RSK175	40mL VOAs	H2SO4			2551	2	
EDB by 8011	40mL VOAs	HCl			2551	3	
SVOCs (full suite + Nap, 1-2 Methylnap) by 8270DSIM	1L amber glass	UNPRESERVED			2551	2	
THP-d/o	1L amber glass	H2SO4			2551	2	
Total Organic Carbon by EPA 9060	250 mL amber glass	H3PO4			2551	2	
Total Lead by EPA 6020	250 mL plastic	HNO3			2551	1	
Dissolved Lead by EPA 6020 (field filtered)	250 mL plastic	HNO3			2551	1	
TRIP BLANKS							
VOCs, TPH-G	40-mL VOA	HCl		2550	4	bbl	
EDB	40-mL VOA	HCl		2550	2	bubble	
Methane	40-mL VOA	H2SO4		2550	2		

ALL VOAs CHECKED FOR BUBBLES? Y / N is bubble smaller than a pea-size? Y/ N; if No, it needs to be replaced for a new VOA.

FILTER INSIDE COOLERS? Y /N

ADDITIONAL PLASTIC BAGS? Y / N

CUSTODY SEAL INCLUDED? Y / N

LIST LABS TO SEND SAMPLES: Energy

******* Keep the form attached to the inside top of cooler*******

QC Form / Prep. Sample Kit

Sample ID/Well Number: ERH 2550 / ERH 2551

QC SIGN/DATE: Diana Escobar 2/15/22

QC SIGN/DATE: _____

Analysis	Container	Preservative	Bottle Count	ERH # from Label
VOCs (Full Suite) + DCA by 8260 +TPG-g by 8015	40mL VOAs	HCl	6	ERH 2551
Methane by RSK175	40mL VOAs	H2SO4	2	ERH 2551
EDB by 8011	40mL VOAs	HCl	3	ERH 2551
SVOCs (full suite + Nap, 1-2 Methylnap) by 8270DSIM	1L amber glass	UNPRESERVED	2	ERH 2551
THP-d/o	1L amber glass	H2SO4	2	ERH 2551
Total Organic Carbon by EPA 9060	250 mL amber glass	H3PO4	2	ERH 2551
Total Lead by EPA 6020	250 mL plastic	HNO3	1	ERH 2551
Dissolved Lead by EPA 6020 (field filtered)	250 mL plastic	HNO3	1	ERH 2551
TRIP BLANKS				
VOCs, TPH-G	40-mL VOA	HCl	4	ERH 2550
EDB	40-mL VOA	HCl	2	" "
Methane	40-mL VOA	H2SO4	2	" "

ALL VOAs CHECKED FOR BUBBLES? Y / (N) is bubble smaller than a pea-size? Y / N; if No, it needs to be replaced for a new VOA.

FILTER INSIDE COOLERS? (Y)/N

ADDITIONAL PLASTIC BAGS? (Y) / N

CUSTODY SEAL INCLUDED? (Y)/ N

LIST LABS TO SEND SAMPLES: ERRoy

******* Keep the form attached to the inside top of cooler*******

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202202-23NOI

www.energylab.com

DoD Samples Page 1 of 1

Account Information (Billing information)

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

Report Information (if different than Account Information)

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

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

Comments

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

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Kainlee
Sampler Phone	808 636 7319
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 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 ERH2552 (Trip Blank)	02/17/22	0920	8	QW	✔	✔	✔	✔							X	2202435
2 ERH2553 (RHMW2254-01 Low Flow)	02/17/22	1030	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	-027
3																
4 TB-14733 (8260)	TAT	2-22-22	2													-028
5 TB-14754 (GRO)			2													-029
6 TB-14733 (8011)			2													-030
7 TB-14732 (Methane)			2													-031
8																
9																

On 2/17/2022

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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
	Kainlee	02/17/22 1315		Christina Hardtke	2/17/22 1315	
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
	Christina Hardtke	2-17-22 1500			2/18/22 0910	

LABORATORY USE ONLY

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

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

ELI-COC-01/21 v.4

ERH-2552 CM

QC Form

Sample ID/Well Number: ERH 2553 + TB.ERH2552 + RHMW2254-01 low flow

1. QC SIGN/DATE: 02/17/22

2. QC SIGN/DATE: _____

3. QC SIGN/DATE _____

Analysis	Container	Preservative	Bottle Count	ERH # from Label	1. QC Prep. kit	2. QC Field Samples	3 QC Packing
VOCs (Full Suite) + DCA by 8260 +TPG-g by 8015	40mL VOAs	HCl	6	2553		3+3 CM 6	
Methane by RSK175	40mL VOAs	H2SO4	2	2553		2	
EDB by 8011	40mL VOAs	HCl	3	2553		3	
SVOCs (full suite + Nap, 1-2 Methylnap) by 8270DSIM	1L amber glass	UNPRESERVED	2	2553		2	
THP-d/o	1L amber glass	H2SO4	2	2553		2	
Total Organic Carbon by EPA 9060	250 mL amber glass	H3PO4	2	2553		2	
Total Lead by EPA 6020	250 mL plastic	HNO3	1	2553		1	
Dissolved Lead by EPA 6020 (field filtered)	250 mL plastic	HNO3	1	2553		1	
TRIP BLANKS							
VOCs, TPH-G	40-mL VOA	HCl	4	2552		4	
EDB	40-mL VOA	HCl	2	2552		2	
Methane	40-mL VOA	H2SO4	2	2552		2	

ALL VOAs CHECKED FOR BUBBLES? Y / N is bubble smaller than a pea-size? Y / N; if No, it needs to be replaced for a new VOA.

FILTER INSIDE COOLERS? Y /N

ADDITIONAL PLASTIC BAGS? Y / N

CUSTODY SEAL INCLUDED? (Y) / N

LIST LABS TO SEND SAMPLES: Energy

******* Keep the form attached to the inside top of cooler*******

QC Form / Prep. Sample Kit

Sample ID/Well Number: RHMW254-01 - ERH2553, ERH2552

QC SIGN/DATE: Alex E. [signature] 2/15/22

QC SIGN/DATE: _____

Analysis	Container	Preservative	Bottle Count	ERH # from Label
VOCs (Full Suite) + DCA by 8260 +TPG-g by 8015	40mL VOAs	HCl	6	ERH2553
Methane by RSK175	40mL VOAs	H2SO4	2	ERH2553
EDB by 8011	40mL VOAs	HCl	3	ERH2553
SVOCs (full suite + Nap, 1-2 Methylnap) by 8270DSIM	1L amber glass	UNPRESERVED	2	ERH2553
THP-d/o	1L amber glass	H2SO4	2	ERH2553
Total Organic Carbon by EPA 9060	250 mL amber glass	H3PO4	2	ERH2553
Total Lead by EPA 6020	250 mL plastic	HNO3	1	ERH2553
Dissolved Lead by EPA 6020 (field filtered)	250 mL plastic	HNO3	1	ERH2553
TRIP BLANKS				
VOCs, TPH-G	40-mL VOA	HCl	4	ERH2552
EDB	40-mL VOA	HCl	2	ERH2552
Methane	40-mL VOA	H2SO4	2	ERH2552

ALL VOAs CHECKED FOR BUBBLES? (Y) / N is bubble smaller than a pea-size? Y / N; if No, it needs to be replaced for a new VOA.

FILTER INSIDE COOLERS? (Y) /N

ADDITIONAL PLASTIC BAGS? (Y)/ N

CUSTODY SEAL INCLUDED? (Y) / N

LIST LABS TO SEND SAMPLES: Energy

******* Keep the form attached to the inside top of cooler*******

Chain of Custody & Analytical Request Record

COC # 202202-24NOI

ENERGY LABORATORIES — Trust our People. Trust our Data.

www.energylab.com

DoD Samples Page 1 of 1

Account Information (Billing information)

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

Report Information (if different than Account Information)

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

Comments

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

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Kevin Lee
Sampler Phone	808-636-3319
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

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

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

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

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

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	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	ERH2554 (Trip Blank)	2/17/22	1120	8	~~GW~~ WQ	✔	✔	✔	✔							X	8220214 35-032
2	ERH2555 (Sump Audit 3)	2/17/22	1140	19	GW	✔	✔	✔	✔	✔	✔	✔	✔	✔		X	-033, -034, -035, -036
3																	
4	TB (8260) - 14833	2															-032
5	TB (GRO) - 14754	2															-034
6	TB (8011) - 14733	2	DE 2/17/22														-035
7	TB (Methane) - 14808	2															-036
8	TB 2/22/22																
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
	Diana Escobar	2/17/2022				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					2/21/22 0910	

LABORATORY USE ONLY

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

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

ELI-COC-01/21 v.4

Work Order Receipt Checklist

AECOM - Honolulu

B22021435

Login completed by:	Richard L. Shular	Date Received:	2/21/2022
Reviewed by:	BL2000\tedwards	Received by:	leb
Reviewed Date:	2/25/2022	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 0.6°C, shipping container 2 was 0.5°C, shipping container 3 was 1.0°C, shipping container 4 was 0.4°C, shipping container 5 was 0.3°C, shipping container 6 was 0.3°C, shipping container 7 was 0.4°C and shipping container 8 was 0.4°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.

All the sample containers had custody seals present except for the VOA vials submitted for method SW8011 with sample ERH2544 (OWDFMW08A).

One of the two VOA vials received for the Methane analysis for sample ERH2549 (RHMW01R) was received broken. There is sufficient volume to continue with the analysis using the remaining vial.

The Hydrochloric preserved VOA containers for the 8260 VOC requested analysis for sample ERH2549 (RHMW01R) were not received with the bottle order label on the bubble bag that holds the VOA containers. Preservative traceability is not available for these containers. Proceeded with the 8260 VOC 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: ERH2542 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-001
Collection Date: 02/17/2022 13:15
Date Received: 02/21/2022
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	0.050	0.021		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.050	0.018		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Acenaphthene	ND	ug/L	1	U	0.10	0.050	0.032		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Acenaphthylene	ND	ug/L	1	U	0.10	0.050	0.025		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Anthracene	ND	ug/L	1	U	0.10	0.050	0.028		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.050	0.035		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Chrysene	ND	ug/L	1	U	0.10	0.050	0.046		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.050	0.037		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Fluorene	ND	ug/L	1	U	0.10	0.050	0.022		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.050	0.049		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Naphthalene	ND	ug/L	1	U	0.10	0.050	0.029		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Phenanthrene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
Pyrene	ND	ug/L	1	U	0.10	0.050	0.024		SW8270CSIM	02/28/2022 18:31/jph	SV5975.I_220228A : 15	163957
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.27	mg/L	1	J	0.50	0.50	0.17		SW9060A	02/25/2022 16:47/eli-ca	SUB-C280065 : 4	C_R280065
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	02/24/2022 17:00/car	ICPMS207-B_220224A : 35	R375174
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00008		SW6020	02/24/2022 17:31/car	ICPMS207-B_220224A : 40	163954
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2542 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-001
Collection Date: 02/17/2022 13:15
Date Received: 02/21/2022
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	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Surr: Dibromofluoromethane	114.0	%REC	1		80-119				SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Surr: 1,2-Dichloroethane-d4	117.0	%REC	1		81-118				SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-001
Collection Date: 02/17/2022 13:15
Date Received: 02/21/2022
Report Date: 03/04/2022

Client: AECOM - Honolulu
Client Sample ID: ERH2542 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Surr: Toluene-d8	106.0	%REC	1		89-112				SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	02/22/2022 16:27/msc	VOA5975C.I_220222A : 13	R375218
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	02/24/2022 21:02/clt	GECD.I_220224A : 21	163984
Surr: 1,1,1,2-Tetrachloroethane	100.0	%REC	1		70-130				SW8011	02/24/2022 21:02/clt	GECD.I_220224A : 21	163984
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/23/2022 19:36/jp	VARIAN1_220223A : 13	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/23/2022 19:36/jp	VARIAN1_220223A : 13	R375111
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	02/23/2022 19:36/jp	VARIAN1_220223A : 13	R375111
- 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	02/23/2022 16:31/amn	GCFID-HP5-B_220223A : 6	163927
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.083		SW8015C	02/23/2022 16:31/amn	GCFID-HP5-B_220223A : 6	163927
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	02/23/2022 16:31/amn	GCFID-HP5-B_220223A : 6	163927
Surr: o-Terphenyl	89.0	%REC	1		56-125				SW8015C	02/23/2022 16:31/amn	GCFID-HP5-B_220223A : 6	163927
Surr: n-Triacontane	82.0	%REC	1		50-150				SW8015C	02/23/2022 16:31/amn	GCFID-HP5-B_220223A : 6	163927
- 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	02/23/2022 10:38/jdw	FID-HEADSPACE_220223A : 5	R375084
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
1,2-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
1,3-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
1,4-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
2,4-Dichlorophenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
2,4-Dimethylphenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
2,4-Dinitrophenol	ND	ug/L	1	U	10	10	4.3		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
2,4-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
2,6-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
2-Chloronaphthalene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
2-Chlorophenol	ND	ug/L	1	U	10	5.0	2.5		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
2-Nitrophenol	ND	ug/L	1	U	10	5.0	2.4		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	10	2.3		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2542 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-001
Collection Date: 02/17/2022 13:15
Date Received: 02/21/2022
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												
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
4-Chlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
4-Nitrophenol	ND	ug/L	1	U	10	10	2.5		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Azobenzene	ND	ug/L	1	U	10	5.0	1.1		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	5.0	1.4		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Butylbenzylphthalate	ND	ug/L	1	U	10	5.0	1.6		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Di-n-butyl phthalate	ND	ug/L	1	U	10	5.0	0.93		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Di-n-octyl phthalate	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Diethyl phthalate	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Dimethyl phthalate	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Hexachlorobenzene	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Hexachlorobutadiene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Hexachloroethane	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Isophorone	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
m+p-Cresols	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
n-Nitrosodimethylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	5.0	1.2		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Nitrobenzene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
o-Cresol	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Pentachlorophenol	ND	ug/L	1	U	10	10	4.2		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Phenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Pyridine	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Surr: 2,4,6-Tribromophenol	78.0	%REC	1		43-140				SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Surr: 2-Fluorobiphenyl	69.0	%REC	1		44-119				SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Surr: 2-Fluorophenol	31.0	%REC	1		19-119				SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Surr: Nitrobenzene-d5	69.0	%REC	1		44-120				SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Surr: Phenol-d5	31.0	%REC	1		10-65				SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957
Surr: Terphenyl-d14	109.0	%REC	1		50-134				SW8270C	02/24/2022 18:52/dsm	SV5973N.I_220224A : 7	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2541 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-002
Collection Date: 02/17/2022 13:15
Date Received: 02/21/2022
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	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-002
Client: AECOM - Honolulu
Collection Date: 02/17/2022 13:15
Client Sample ID: ERH2541 (Trip Blank) 14833
Date Received: 02/21/2022
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	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218
Surr: p-Bromofluorobenzene	111.0	%REC	1		85-114				SW8260B	02/22/2022 16:55/msc	VOA5975C.I_220222A : 14	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-003
Client: AECOM - Honolulu
Collection Date: 02/17/2022 13:15
Client Sample ID: ERH2541 (Trip Blank) 14754
Date Received: 02/21/2022
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	02/23/2022 15:37/jp	VARIAN1_220223A : 6	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/23/2022 15:37/jp	VARIAN1_220223A : 6	R375111
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	02/23/2022 15:37/jp	VARIAN1_220223A : 6	R375111

- 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: B22021435-004
Client: AECOM - Honolulu
Collection Date: 02/17/2022 13:15
Client Sample ID: ERH2541 (Trip Blank) 14733
Date Received: 02/21/2022
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	0.0049	0.0025		SW8011	02/24/2022 18:44/clt	GECD.I_220224A : 14	163984
Surr: 1,1,1,2-Tetrachloroethane	93.0	%REC	1		70-130				SW8011	02/24/2022 18:44/clt	GECD.I_220224A : 14	163984

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2541 (Trip Blank) 14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-005
Collection Date: 02/17/2022 13:15
Date Received: 02/21/2022
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	02/23/2022 10:45/jdw	FID-HEADSPACE_220223A : 6	R375084

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2544 (OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-006
Collection Date: 02/16/2022 16:30
Date Received: 02/21/2022
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	0.050	0.021		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.050	0.018		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Acenaphthene	ND	ug/L	1	U	0.10	0.050	0.032		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Acenaphthylene	ND	ug/L	1	U	0.10	0.050	0.025		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Anthracene	ND	ug/L	1	U	0.10	0.050	0.028		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.050	0.035		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Chrysene	ND	ug/L	1	U	0.10	0.050	0.046		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.050	0.037		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Fluorene	ND	ug/L	1	U	0.10	0.050	0.022		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.050	0.049		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Naphthalene	ND	ug/L	1	U	0.10	0.050	0.029		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Phenanthrene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
Pyrene	ND	ug/L	1	U	0.10	0.050	0.024		SW8270CSIM	02/28/2022 19:03/jph	SV5975.I_220228A : 16	163957
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.4 to 0.4	0.36	mg/L	1	J	0.50	0.50	0.17		SW9060A	02/25/2022 18:49/eli-ca	SUB-C280065 : 7	C_R280065
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	02/24/2022 18:21/car	ICPMS207-B_220224A : 48	R375174
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00008		SW6020	02/24/2022 18:28/car	ICPMS207-B_220224A : 49	163954
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Chloroform	0.27	ug/L	1	J	1.0	0.20	0.079		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2544 (OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-006
Collection Date: 02/16/2022 16:30
Date Received: 02/21/2022
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	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Surr: 1,2-Dichloroethane-d4	115.0	%REC	1		81-118				SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2544 (OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-006
Collection Date: 02/16/2022 16:30
Date Received: 02/21/2022
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	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	02/22/2022 13:17/msc	VOA5975C.I_220222A : 6	R375218
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	02/24/2022 19:04/clt	GECD.I_220224A : 15	163984
Surr: 1,1,1,2-Tetrachloroethane	117.0	%REC	1		70-130				SW8011	02/24/2022 19:04/clt	GECD.I_220224A : 15	163984
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/24/2022 01:16/jp	VARIAN1_220223A : 20	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/24/2022 01:16/jp	VARIAN1_220223A : 20	R375111
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	02/24/2022 01:16/jp	VARIAN1_220223A : 20	R375111
- 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	02/23/2022 17:57/amn	GCFID-HP5-B_220223A : 8	163927
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.083		SW8015C	02/23/2022 17:57/amn	GCFID-HP5-B_220223A : 8	163927
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	02/23/2022 17:57/amn	GCFID-HP5-B_220223A : 8	163927
Surr: o-Terphenyl	94.0	%REC	1		56-125				SW8015C	02/23/2022 17:57/amn	GCFID-HP5-B_220223A : 8	163927
Surr: n-Triacontane	85.0	%REC	1		50-150				SW8015C	02/23/2022 17:57/amn	GCFID-HP5-B_220223A : 8	163927
- 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	02/23/2022 10:51/jdw	FID-HEADSPACE_220223A : 7	R375084
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
1,2-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
1,3-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
1,4-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
2,4-Dichlorophenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
2,4-Dimethylphenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
2,4-Dinitrophenol	ND	ug/L	1	U	10	10	4.3		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
2,4-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
2,6-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
2-Chloronaphthalene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
2-Chlorophenol	ND	ug/L	1	U	10	5.0	2.5		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
2-Nitrophenol	ND	ug/L	1	U	10	5.0	2.4		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	10	2.3		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2544 (OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-006
Collection Date: 02/16/2022 16:30
Date Received: 02/21/2022
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												
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
4-Chlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
4-Nitrophenol	ND	ug/L	1	U	10	10	2.5		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Azobenzene	ND	ug/L	1	U	10	5.0	1.1		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	5.0	1.4		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Butylbenzylphthalate	ND	ug/L	1	U	10	5.0	1.6		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Di-n-butyl phthalate	ND	ug/L	1	U	10	5.0	0.93		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Di-n-octyl phthalate	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Diethyl phthalate	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Dimethyl phthalate	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Hexachlorobenzene	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Hexachlorobutadiene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Hexachloroethane	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Isophorone	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
m+p-Cresols	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
n-Nitrosodimethylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	5.0	1.2		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Nitrobenzene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
o-Cresol	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Pentachlorophenol	ND	ug/L	1	U	10	10	4.2		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Phenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Pyridine	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Surr: 2,4,6-Tribromophenol	67.0	%REC	1		43-140				SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Surr: 2-Fluorobiphenyl	52.0	%REC	1		44-119				SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Surr: 2-Fluorophenol	26.0	%REC	1		19-119				SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Surr: Nitrobenzene-d5	53.0	%REC	1		44-120				SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Surr: Phenol-d5	25.0	%REC	1		10-65				SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957
Surr: Terphenyl-d14	90.0	%REC	1		50-134				SW8270C	02/24/2022 19:57/dsm	SV5973N.I_220224A : 9	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2545 (OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-007
Collection Date: 02/16/2022 16:30
Date Received: 02/21/2022
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	0.050	0.021		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.050	0.018		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Acenaphthene	ND	ug/L	1	U	0.10	0.050	0.032		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Acenaphthylene	ND	ug/L	1	U	0.10	0.050	0.025		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Anthracene	ND	ug/L	1	U	0.10	0.050	0.028		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.050	0.035		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Chrysene	ND	ug/L	1	U	0.10	0.050	0.046		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.050	0.037		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Fluorene	ND	ug/L	1	U	0.10	0.050	0.022		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.050	0.049		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Naphthalene	ND	ug/L	1	U	0.10	0.050	0.029		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Phenanthrene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
Pyrene	ND	ug/L	1	U	0.10	0.050	0.024		SW8270CSIM	02/28/2022 19:36/jph	SV5975.I_220228A : 17	163957
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Chloroform	0.30	ug/L	1	J	1.0	0.20	0.079		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2545 (OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-007
Collection Date: 02/16/2022 16:30
Date Received: 02/21/2022
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	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Surr: 1,2-Dichloroethane-d4	116.0	%REC	1		81-118				SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Surr: Toluene-d8	107.0	%REC	1		89-112				SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	02/22/2022 13:44/msc	VOA5975C.I_220222A : 7	R375218
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/23/2022 14:29/jp	VARIAN1_220223A : 5	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/23/2022 14:29/jp	VARIAN1_220223A : 5	R375111
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	02/23/2022 14:29/jp	VARIAN1_220223A : 5	R375111

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2545 (OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-007
Collection Date: 02/16/2022 16:30
Date Received: 02/21/2022
Report Date: 03/04/2022

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)	ND	mg/L	1	U	0.30	0.14	0.037		SW8015C	02/23/2022 19:23/amn	GCFID-HP5-B_220223A : 9	163927
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.083		SW8015C	02/23/2022 19:23/amn	GCFID-HP5-B_220223A : 9	163927
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	02/23/2022 19:23/amn	GCFID-HP5-B_220223A : 9	163927
Surr: o-Terphenyl	91.0	%REC	1		56-125				SW8015C	02/23/2022 19:23/amn	GCFID-HP5-B_220223A : 9	163927
Surr: n-Triacontane	84.0	%REC	1		50-150				SW8015C	02/23/2022 19:23/amn	GCFID-HP5-B_220223A : 9	163927
- 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.												
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
1,2-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
1,3-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
1,4-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
2,4-Dichlorophenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
2,4-Dimethylphenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
2,4-Dinitrophenol	ND	ug/L	1	U	10	10	4.3		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
2,4-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
2,6-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
2-Chloronaphthalene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
2-Chlorophenol	ND	ug/L	1	U	10	5.0	2.5		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
2-Nitrophenol	ND	ug/L	1	U	10	5.0	2.4		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	10	2.3		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
4-Chlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
4-Nitrophenol	ND	ug/L	1	U	10	10	2.5		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Azobenzene	ND	ug/L	1	U	10	5.0	1.1		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	5.0	1.4		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Butylbenzylphthalate	ND	ug/L	1	U	10	5.0	1.6		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Di-n-butyl phthalate	ND	ug/L	1	U	10	5.0	0.93		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Di-n-octyl phthalate	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Diethyl phthalate	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Dimethyl phthalate	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-007
Client: AECOM - Honolulu
Collection Date: 02/16/2022 16:30
Client Sample ID: ERH2545 (OWDFMW08A)
Date Received: 02/21/2022
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												
Hexachlorobenzene	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Hexachlorobutadiene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Hexachloroethane	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Isophorone	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
m+p-Cresols	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
n-Nitrosodimethylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	5.0	1.2		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Nitrobenzene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
o-Cresol	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Pentachlorophenol	ND	ug/L	1	U	10	10	4.2		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Phenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Pyridine	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Surr: 2,4,6-Tribromophenol	72.0	%REC	1		43-140				SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Surr: 2-Fluorobiphenyl	55.0	%REC	1		44-119				SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Surr: 2-Fluorophenol	28.0	%REC	1		19-119				SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Surr: Nitrobenzene-d5	57.0	%REC	1		44-120				SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Surr: Phenol-d5	25.0	%REC	1		10-65				SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957
Surr: Terphenyl-d14	92.0	%REC	1		50-134				SW8270C	02/24/2022 21:01/dsm	SV5973N.I_220224A : 11	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2543 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-008
Collection Date: 02/16/2022 16:30
Date Received: 02/21/2022
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	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-008
Client: AECOM - Honolulu
Collection Date: 02/16/2022 16:30
Client Sample ID: ERH2543 (Trip Blank) 14833
Date Received: 02/21/2022
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	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	02/22/2022 17:22/msc	VOA5975C.I_220222A : 15	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-009
Client: AECOM - Honolulu
Collection Date: 02/16/2022 16:30
Client Sample ID: ERH2543 (Trip Blank) 14754
Date Received: 02/21/2022
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	02/23/2022 16:11/jp	VARIAN1_220223A : 7	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/23/2022 16:11/jp	VARIAN1_220223A : 7	R375111
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	02/23/2022 16:11/jp	VARIAN1_220223A : 7	R375111

- 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: B22021435-010
Client: AECOM - Honolulu
Collection Date: 02/16/2022 16:30
Client Sample ID: ERH2543 (Trip Blank) 14733
Date Received: 02/21/2022
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	0.0049	0.0025		SW8011	02/24/2022 19:24/clt	GECD.I_220224A : 16	163984
Surr: 1,1,1,2-Tetrachloroethane	93.0	%REC	1		70-130				SW8011	02/24/2022 19:24/clt	GECD.I_220224A : 16	163984

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2543 (Trip Blank) 14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-011
Collection Date: 02/16/2022 16:30
Date Received: 02/21/2022
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	02/23/2022 11:04/jdw	FID-HEADSPACE_220223A : 8	R375084

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2547 (RHMW19)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-012
Collection Date: 02/17/2022 12:25
Date Received: 02/21/2022
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	0.050	0.021		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.050	0.018		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Acenaphthene	ND	ug/L	1	U	0.10	0.050	0.032		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Acenaphthylene	ND	ug/L	1	U	0.10	0.050	0.025		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Anthracene	ND	ug/L	1	U	0.10	0.050	0.028		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.050	0.035		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Chrysene	ND	ug/L	1	U	0.10	0.050	0.046		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.050	0.037		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Fluorene	ND	ug/L	1	U	0.10	0.050	0.022		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.050	0.049		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Naphthalene	ND	ug/L	1	U	0.10	0.050	0.029		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Phenanthrene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
Pyrene	ND	ug/L	1	U	0.10	0.050	0.024		SW8270CSIM	02/28/2022 20:41/jph	SV5975.I_220228A : 19	163957
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.7 to 0.7	0.70	mg/L	1		0.50	0.50	0.17		SW9060A	02/25/2022 19:31/eli-ca	SUB-C280065 : 8	C_R280065
METALS, DISSOLVED												
Lead	0.00003	mg/L	1	J	0.001	0.00005	0.00003		SW6020	02/24/2022 18:34/car	ICPMS207-B_220224A : 50	R375174
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00008		SW6020	02/24/2022 18:40/car	ICPMS207-B_220224A : 51	163954
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2547 (RHMW19)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-012
Collection Date: 02/17/2022 12:25
Date Received: 02/21/2022
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	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Surr: 1,2-Dichloroethane-d4	117.0	%REC	1		81-118				SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2547 (RHMW19)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-012
Collection Date: 02/17/2022 12:25
Date Received: 02/21/2022
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	106.0	%REC	1		89-112				SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	02/22/2022 14:11/msc	VOA5975C.I_220222A : 8	R375218
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	02/24/2022 19:44/clt	GECD.I_220224A : 17	163984
Surr: 1,1,1,2-Tetrachloroethane	97.0	%REC	1		70-130				SW8011	02/24/2022 19:44/clt	GECD.I_220224A : 17	163984
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/24/2022 02:24/jp	VARIAN1_220223A : 21	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/24/2022 02:24/jp	VARIAN1_220223A : 21	R375111
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	02/24/2022 02:24/jp	VARIAN1_220223A : 21	R375111
- 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	02/23/2022 20:06/amn	GCFID-HP5-B_220223A : 10	163927
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.026		SW8015C	02/25/2022 05:06/amn	GCFID-HP5-B_220223B : 6	163927
Oil Range Hydrocarbons (C24 to C40)	0.11	mg/L	1	J	0.30	0.14	0.083		SW8015C	02/23/2022 20:06/amn	GCFID-HP5-B_220223A : 10	163927
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.083		SW8015C	02/25/2022 05:06/amn	GCFID-HP5-B_220223B : 6	163927
Total Extractable Hydrocarbons	0.15	mg/L	1	J	0.30	0.14	0.071		SW8015C	02/23/2022 20:06/amn	GCFID-HP5-B_220223A : 10	163927
Total Extractable Hydrocarbons (SGT)	0.044	mg/L	1	J	0.30	0.11	0.034		SW8015C	02/25/2022 05:06/amn	GCFID-HP5-B_220223B : 6	163927
Surr: o-Terphenyl	97.0	%REC	1		56-125				SW8015C	02/23/2022 20:06/amn	GCFID-HP5-B_220223A : 10	163927
Surr: o-Terphenyl (SGT)	90.0	%REC	1		56-125				SW8015C	02/25/2022 05:06/amn	GCFID-HP5-B_220223B : 6	163927
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	02/23/2022 20:06/amn	GCFID-HP5-B_220223A : 10	163927
Surr: n-Triacontane (SGT)	78.0	%REC	1		50-150				SW8015C	02/25/2022 05:06/amn	GCFID-HP5-B_220223B : 6	163927
- 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	02/23/2022 11:09/jdw	FID-HEADSPACE_220223A : 9	R375084
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
1,2-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
1,3-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
1,4-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
2,4-Dichlorophenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
2,4-Dimethylphenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
2,4-Dinitrophenol	ND	ug/L	1	U	10	10	4.3		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
2,4-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2547 (RHMW19)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-012
Collection Date: 02/17/2022 12:25
Date Received: 02/21/2022
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												
2,6-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
2-Chloronaphthalene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
2-Chlorophenol	ND	ug/L	1	U	10	5.0	2.5		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
2-Nitrophenol	ND	ug/L	1	U	10	5.0	2.4		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	10	2.3		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
4-Chlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
4-Nitrophenol	ND	ug/L	1	U	10	10	2.5		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Azobenzene	ND	ug/L	1	U	10	5.0	1.1		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	5.0	1.4		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Butylbenzylphthalate	ND	ug/L	1	U	10	5.0	1.6		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Di-n-butyl phthalate	ND	ug/L	1	U	10	5.0	0.93		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Di-n-octyl phthalate	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Diethyl phthalate	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Dimethyl phthalate	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Hexachlorobenzene	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Hexachlorobutadiene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Hexachloroethane	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Isophorone	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
m+p-Cresols	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
n-Nitrosodimethylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	5.0	1.2		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Nitrobenzene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
o-Cresol	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Pentachlorophenol	ND	ug/L	1	U	10	10	4.2		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Phenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Pyridine	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Surr: 2,4,6-Tribromophenol	76.0	%REC	1		43-140				SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Surr: 2-Fluorobiphenyl	59.0	%REC	1		44-119				SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Surr: 2-Fluorophenol	28.0	%REC	1		19-119				SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Surr: Nitrobenzene-d5	61.0	%REC	1		44-120				SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-012
Client: AECOM - Honolulu
Collection Date: 02/17/2022 12:25
Client Sample ID: ERH2547 (RHMW19)
Date Received: 02/21/2022
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	25.0	%REC	1		10-65				SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957
Surr: Terphenyl-d14	93.0	%REC	1		50-134				SW8270C	02/24/2022 21:33/dsm	SV5973N.I_220224A : 12	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2546 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-013
Collection Date: 02/17/2022 12:25
Date Received: 02/21/2022
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	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Toluene	0.11	ug/L	1	J	1.0	0.20	0.068		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-013
Client: AECOM - Honolulu
Collection Date: 02/17/2022 12:25
Client Sample ID: ERH2546 (Trip Blank) 14833
Date Received: 02/21/2022
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	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Surr: Dibromofluoromethane	114.0	%REC	1		80-119				SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Surr: 1,2-Dichloroethane-d4	117.0	%REC	1		81-118				SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Surr: Toluene-d8	106.0	%REC	1		89-112				SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	02/22/2022 17:49/msc	VOA5975C.I_220222A : 16	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-014
Client: AECOM - Honolulu
Collection Date: 02/17/2022 12:25
Client Sample ID: ERH2546 (Trip Blank) 14754
Date Received: 02/21/2022
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	02/23/2022 16:45/jp	VARIAN1_220223A : 8	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/23/2022 16:45/jp	VARIAN1_220223A : 8	R375111
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	02/23/2022 16:45/jp	VARIAN1_220223A : 8	R375111

- 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: B22021435-015
Client: AECOM - Honolulu
Collection Date: 02/17/2022 12:25
Client Sample ID: ERH2546 (Trip Blank) 14733
Date Received: 02/21/2022
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	0.0049	0.0025		SW8011	02/24/2022 20:03/clt	GECD.I_220224A : 18	163984
Surr: 1,1,1,2-Tetrachloroethane	99.0	%REC	1		70-130				SW8011	02/24/2022 20:03/clt	GECD.I_220224A : 18	163984

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2546 (Trip Blank) 14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-016
Collection Date: 02/17/2022 12:25
Date Received: 02/21/2022
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	02/23/2022 11:15/jdw	FID-HEADSPACE_220223A : 10	R375084

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2549 (RHMW01R)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-017
Collection Date: 02/16/2022 15:30
Date Received: 02/21/2022
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	0.050	0.021		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.050	0.018		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Acenaphthene	ND	ug/L	1	U	0.10	0.050	0.032		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Acenaphthylene	ND	ug/L	1	U	0.10	0.050	0.025		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Anthracene	ND	ug/L	1	U	0.10	0.050	0.028		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.050	0.035		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Chrysene	ND	ug/L	1	U	0.10	0.050	0.046		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.050	0.037		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Fluorene	ND	ug/L	1	U	0.10	0.050	0.022		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.050	0.049		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Naphthalene	ND	ug/L	1	U	0.10	0.050	0.029		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Phenanthrene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
Pyrene	ND	ug/L	1	U	0.10	0.050	0.024		SW8270CSIM	02/28/2022 21:46/jph	SV5975.I_220228A : 21	163957
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 1.1 to 1.2	1.1	mg/L	1		0.50	0.50	0.17		SW9060A	02/25/2022 20:11/eli-ca	SUB-C280065 : 9	C_R280065
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	02/24/2022 18:46/car	ICPMS207-B_220224A : 52	R375174
METALS, TOTAL												
Lead	0.00035	mg/L	1	J	0.001	0.0001	0.00008		SW6020	02/24/2022 18:53/car	ICPMS207-B_220224A : 53	163954
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2549 (RHMW01R)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-017
Collection Date: 02/16/2022 15:30
Date Received: 02/21/2022
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	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Methyl ethyl ketone	12	ug/L	1	J	20	5.0	1.8		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Surr: 1,2-Dichloroethane-d4	115.0	%REC	1		81-118				SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2549 (RHMW01R)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-017
Collection Date: 02/16/2022 15:30
Date Received: 02/21/2022
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	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	02/22/2022 14:38/msc	VOA5975C.I_220222A : 9	R375218
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	02/24/2022 20:23/clt	GECD.I_220224A : 19	163984
Surr: 1,1,1,2-Tetrachloroethane	105.0	%REC	1		70-130				SW8011	02/24/2022 20:23/clt	GECD.I_220224A : 19	163984
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	3.8	ug/L	1	J	20	8.7	2.0		SW8015C	02/24/2022 03:32/jp	VARIAN1_220223A : 22	R375111
Total Purgeable Hydrocarbons	32	ug/L	1		20	10	3.1		SW8015C	02/24/2022 03:32/jp	VARIAN1_220223A : 22	R375111
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	02/24/2022 03:32/jp	VARIAN1_220223A : 22	R375111
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.27	mg/L	1	J	0.30	0.14	0.037		SW8015C	02/24/2022 06:51/amn	GCFID-HP5-B_220223A : 17	163927
Diesel Range Organics (SGT-C10 to C24)	0.038	mg/L	1	J	0.30	0.11	0.026		SW8015C	02/25/2022 09:24/amn	GCFID-HP5-B_220223B : 10	163927
Oil Range Hydrocarbons (C24 to C40)	0.17	mg/L	1	J	0.30	0.14	0.083		SW8015C	02/24/2022 06:51/amn	GCFID-HP5-B_220223A : 17	163927
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.083		SW8015C	02/25/2022 09:24/amn	GCFID-HP5-B_220223B : 10	163927
Total Extractable Hydrocarbons	0.56	mg/L	1		0.30	0.14	0.071		SW8015C	02/24/2022 06:51/amn	GCFID-HP5-B_220223A : 17	163927
Total Extractable Hydrocarbons (SGT)	0.043	mg/L	1	J	0.30	0.11	0.034		SW8015C	02/25/2022 09:24/amn	GCFID-HP5-B_220223B : 10	163927
Surr: o-Terphenyl	86.0	%REC	1		56-125				SW8015C	02/24/2022 06:51/amn	GCFID-HP5-B_220223A : 17	163927
Surr: o-Terphenyl (SGT)	82.0	%REC	1		56-125				SW8015C	02/25/2022 09:24/amn	GCFID-HP5-B_220223B : 10	163927
Surr: n-Triacontane	85.0	%REC	1		50-150				SW8015C	02/24/2022 06:51/amn	GCFID-HP5-B_220223A : 17	163927
Surr: n-Triacontane (SGT)	77.0	%REC	1		50-150				SW8015C	02/25/2022 09:24/amn	GCFID-HP5-B_220223B : 10	163927
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.35	mg/L	78		0.16	0.090	0.055		SW8015M	02/23/2022 11:36/jdw	FID-HEADSPACE_220223A : 11	R375084
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
1,2-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
1,3-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
1,4-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
2,4-Dichlorophenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
2,4-Dimethylphenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
2,4-Dinitrophenol	ND	ug/L	1	U	10	10	4.3		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
2,4-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2549 (RHMW01R)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-017
Collection Date: 02/16/2022 15:30
Date Received: 02/21/2022
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												
2,6-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
2-Chloronaphthalene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
2-Chlorophenol	ND	ug/L	1	U	10	5.0	2.5		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
2-Nitrophenol	ND	ug/L	1	U	10	5.0	2.4		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	10	2.3		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
4-Chlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
4-Nitrophenol	ND	ug/L	1	U	10	10	2.5		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Azobenzene	ND	ug/L	1	U	10	5.0	1.1		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	5.0	1.4		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Butylbenzylphthalate	ND	ug/L	1	U	10	5.0	1.6		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Di-n-butyl phthalate	ND	ug/L	1	U	10	5.0	0.93		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Di-n-octyl phthalate	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Diethyl phthalate	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Dimethyl phthalate	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Hexachlorobenzene	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Hexachlorobutadiene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Hexachloroethane	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Isophorone	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
m+p-Cresols	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
n-Nitrosodimethylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	5.0	1.2		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Nitrobenzene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
o-Cresol	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Pentachlorophenol	ND	ug/L	1	U	10	10	4.2		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Phenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Pyridine	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Surr: 2,4,6-Tribromophenol	61.0	%REC	1		43-140				SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Surr: 2-Fluorobiphenyl	58.0	%REC	1		44-119				SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Surr: 2-Fluorophenol	21.0	%REC	1		19-119				SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Surr: Nitrobenzene-d5	61.0	%REC	1		44-120				SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-017
Client: AECOM - Honolulu
Collection Date: 02/16/2022 15:30
Client Sample ID: ERH2549 (RHMW01R)
Date Received: 02/21/2022
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	26.0	%REC	1		10-65				SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957
Surr: Terphenyl-d14	94.0	%REC	1		50-134				SW8270C	02/24/2022 22:05/dsm	SV5973N.I_220224A : 13	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2548 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-018
Collection Date: 02/16/2022 15:30
Date Received: 02/21/2022
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	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-018
Client: AECOM - Honolulu
Collection Date: 02/16/2022 15:30
Client Sample ID: ERH2548 (Trip Blank) 14833
Date Received: 02/21/2022
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	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Surr: Toluene-d8	105.0	%REC	1		89-112				SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	02/22/2022 18:16/msc	VOA5975C.I_220222A : 17	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-019
Client: AECOM - Honolulu
Collection Date: 02/16/2022 15:30
Client Sample ID: ERH2548 (Trip Blank) 14754
Date Received: 02/21/2022
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	02/23/2022 17:20/jp	VARIAN1_220223A : 9	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/23/2022 17:20/jp	VARIAN1_220223A : 9	R375111
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	02/23/2022 17:20/jp	VARIAN1_220223A : 9	R375111

- 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: B22021435-020
Client: AECOM - Honolulu
Collection Date: 02/16/2022 15:30
Client Sample ID: ERH2548 (Trip Blank) 14733
Date Received: 02/21/2022
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	02/24/2022 20:43/clt	GECD.I_220224A : 20	163984
Surr: 1,1,1,2-Tetrachloroethane	97.0	%REC	1		70-130				SW8011	02/24/2022 20:43/clt	GECD.I_220224A : 20	163984

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2548 (Trip Blank) 14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-021
Collection Date: 02/16/2022 15:30
Date Received: 02/21/2022
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	02/23/2022 11:59/jdw	FID-HEADSPACE_220223A : 13	R375084

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2551 (RHMW2254-01 Bailer)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-022
Collection Date: 02/17/2022 13:40
Date Received: 02/21/2022
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	0.050	0.021		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.050	0.018		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Acenaphthene	ND	ug/L	1	U	0.10	0.050	0.032		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Acenaphthylene	ND	ug/L	1	U	0.10	0.050	0.025		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Anthracene	ND	ug/L	1	U	0.10	0.050	0.028		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.050	0.035		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Chrysene	ND	ug/L	1	U	0.10	0.050	0.046		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.050	0.037		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Fluorene	ND	ug/L	1	U	0.10	0.050	0.022		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.050	0.049		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Naphthalene	ND	ug/L	1	U	0.10	0.050	0.029		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Phenanthrene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
Pyrene	ND	ug/L	1	U	0.10	0.050	0.024		SW8270CSIM	02/28/2022 22:18/jph	SV5975.I_220228A : 22	163957
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.30	mg/L	1	J	0.50	0.50	0.17		SW9060A	02/25/2022 20:52/eli-ca	SUB-C280065 : 10	C_R280065
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	02/24/2022 18:59/car	ICPMS207-B_220224A : 54	R375174
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00008		SW6020	02/24/2022 19:05/car	ICPMS207-B_220224A : 55	163954
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2551 (RHMW2254-01 Bailer)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-022
Collection Date: 02/17/2022 13:40
Date Received: 02/21/2022
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	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Methyl ethyl ketone	5.1	ug/L	1	J	20	5.0	1.8		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Surr: 1,2-Dichloroethane-d4	115.0	%REC	1		81-118				SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2551 (RHMW2254-01 Bailer)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-022
Collection Date: 02/17/2022 13:40
Date Received: 02/21/2022
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	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	02/22/2022 15:06/msc	VOA5975C.I_220222A : 10	R375218
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	02/24/2022 23:01/clt	GECD.I_220224A : 25	163984
Surr: 1,1,1,2-Tetrachloroethane	100.0	%REC	1		70-130				SW8011	02/24/2022 23:01/clt	GECD.I_220224A : 25	163984
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	2.1	ug/L	1	J	20	8.7	2.0		SW8015C	02/24/2022 04:40/jp	VARIAN1_220223A : 23	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/24/2022 04:40/jp	VARIAN1_220223A : 23	R375111
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	02/24/2022 04:40/jp	VARIAN1_220223A : 23	R375111
- 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	02/24/2022 01:07/amn	GCFID-HP5-B_220223A : 14	163927
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.083		SW8015C	02/24/2022 01:07/amn	GCFID-HP5-B_220223A : 14	163927
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	02/24/2022 01:07/amn	GCFID-HP5-B_220223A : 14	163927
Surr: o-Terphenyl	93.0	%REC	1		56-125				SW8015C	02/24/2022 01:07/amn	GCFID-HP5-B_220223A : 14	163927
Surr: n-Triacontane	85.0	%REC	1		50-150				SW8015C	02/24/2022 01:07/amn	GCFID-HP5-B_220223A : 14	163927
- 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	02/23/2022 12:05/jdw	FID-HEADSPACE_220223A : 14	R375084
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
1,2-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
1,3-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
1,4-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
2,4-Dichlorophenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
2,4-Dimethylphenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
2,4-Dinitrophenol	ND	ug/L	1	U	10	10	4.3		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
2,4-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
2,6-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
2-Chloronaphthalene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
2-Chlorophenol	ND	ug/L	1	U	10	5.0	2.5		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
2-Nitrophenol	ND	ug/L	1	U	10	5.0	2.4		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	10	2.3		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2551 (RHMW2254-01 Bailer)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-022
Collection Date: 02/17/2022 13:40
Date Received: 02/21/2022
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												
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
4-Chlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
4-Nitrophenol	ND	ug/L	1	U	10	10	2.5		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Azobenzene	ND	ug/L	1	U	10	5.0	1.1		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	5.0	1.4		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Butylbenzylphthalate	ND	ug/L	1	U	10	5.0	1.6		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Di-n-butyl phthalate	ND	ug/L	1	U	10	5.0	0.93		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Di-n-octyl phthalate	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Diethyl phthalate	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Dimethyl phthalate	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Hexachlorobenzene	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Hexachlorobutadiene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Hexachloroethane	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Isophorone	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
m+p-Cresols	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
n-Nitrosodimethylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	5.0	1.2		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Nitrobenzene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
o-Cresol	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Pentachlorophenol	ND	ug/L	1	U	10	10	4.2		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Phenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Pyridine	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Surr: 2,4,6-Tribromophenol	80.0	%REC	1		43-140				SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Surr: 2-Fluorobiphenyl	64.0	%REC	1		44-119				SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Surr: 2-Fluorophenol	35.0	%REC	1		19-119				SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Surr: Nitrobenzene-d5	66.0	%REC	1		44-120				SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Surr: Phenol-d5	27.0	%REC	1		10-65				SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957
Surr: Terphenyl-d14	103.0	%REC	1		50-134				SW8270C	02/24/2022 22:37/dsm	SV5973N.I_220224A : 14	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2550 (Trip Blank) 14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-023
Collection Date: 02/17/2022 13:40
Date Received: 02/21/2022
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	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-023
Client: AECOM - Honolulu
Collection Date: 02/17/2022 13:40
Client Sample ID: ERH2550 (Trip Blank) 14754
Date Received: 02/21/2022
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	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Surr: 1,2-Dichloroethane-d4	119.0	%REC	1	S	81-118				SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Surr: Toluene-d8	106.0	%REC	1		89-112				SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	02/22/2022 18:43/msc	VOA5975C.I_220222A : 18	R375218

- 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. There were no analytes detected above the MDL so no further analysis was performed.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-024
Client: AECOM - Honolulu
Collection Date: 02/17/2022 13:40
Client Sample ID: ERH2550 (Trip Blank) 14833
Date Received: 02/21/2022
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	02/23/2022 17:53/jp	VARIAN1_220223A : 10	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/23/2022 17:53/jp	VARIAN1_220223A : 10	R375111
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	02/23/2022 17:53/jp	VARIAN1_220223A : 10	R375111

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2550 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-025
Collection Date: 02/17/2022 13:40
Date Received: 02/21/2022
Report Date: 03/04/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	02/24/2022 23:21/clt	GECD.I_220224A : 26	163984
Surr: 1,1,1,2-Tetrachloroethane	98.0	%REC	1		70-130				SW8011	02/24/2022 23:21/clt	GECD.I_220224A : 26	163984

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2550 (Trip Blank) 14732
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-026
Collection Date: 02/17/2022 13:40
Date Received: 02/21/2022
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	02/23/2022 12:11/jdw	FID-HEADSPACE_220223A : 15	R375084

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2553 (RHMW2254-01 Low Flow)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-027
Collection Date: 02/17/2022 14:30
Date Received: 02/21/2022
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	0.050	0.021		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.050	0.018		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Acenaphthene	ND	ug/L	1	U	0.10	0.050	0.032		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Acenaphthylene	ND	ug/L	1	U	0.10	0.050	0.025		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Anthracene	ND	ug/L	1	U	0.10	0.050	0.028		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Benzo(a)anthracene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Benzo(a)pyrene	ND	ug/L	1	U	0.10	0.050	0.035		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Benzo(b)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Benzo(g,h,i)perylene	ND	ug/L	1	U	0.10	0.050	0.027		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Benzo(k)fluoranthene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Chrysene	ND	ug/L	1	U	0.10	0.050	0.046		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Dibenzo(a,h)anthracene	ND	ug/L	1	U	0.10	0.050	0.037		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Fluorene	ND	ug/L	1	U	0.10	0.050	0.022		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Indeno(1,2,3-cd)pyrene	ND	ug/L	1	U	0.10	0.050	0.049		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Naphthalene	ND	ug/L	1	U	0.10	0.050	0.029		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Phenanthrene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
Pyrene	ND	ug/L	1	U	0.10	0.050	0.024		SW8270CSIM	02/28/2022 22:51/jph	SV5975.I_220228A : 23	163957
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.2 to 0.2	0.23	mg/L	1	J	0.50	0.50	0.17		SW9060A	02/25/2022 21:34/eli-ca	SUB-C280065 : 11	C_R280065
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	02/24/2022 19:11/car	ICPMS207-B_220224A : 56	R375174
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00008		SW6020	02/24/2022 19:30/car	ICPMS207-B_220224A : 59	163954
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2553 (RHMW2254-01 Low Flow)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-027
Collection Date: 02/17/2022 14:30
Date Received: 02/21/2022
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	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Methyl ethyl ketone	3.4	ug/L	1	J	20	5.0	1.8		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-027
Client: AECOM - Honolulu
Collection Date: 02/17/2022 14:30
Client Sample ID: ERH2553 (RHMW2254-01 Low Flow)
Date Received: 02/21/2022
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	106.0	%REC	1		89-112				SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	02/22/2022 15:33/msc	VOA5975C.I_220222A : 11	R375218
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	02/24/2022 23:41/clt	GECD.I_220224A : 27	163984
Surr: 1,1,1,2-Tetrachloroethane	118.0	%REC	1		70-130				SW8011	02/24/2022 23:41/clt	GECD.I_220224A : 27	163984
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	02/24/2022 05:48/jp	VARIAN1_220223A : 24	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/24/2022 05:48/jp	VARIAN1_220223A : 24	R375111
Surr: Trifluorotoluene	76.0	%REC	1		70-130				SW8015C	02/24/2022 05:48/jp	VARIAN1_220223A : 24	R375111
- 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	02/23/2022 17:14/amn	GCFID-HP5-B_220223A : 7	163927
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.083		SW8015C	02/23/2022 17:14/amn	GCFID-HP5-B_220223A : 7	163927
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	02/23/2022 17:14/amn	GCFID-HP5-B_220223A : 7	163927
Surr: o-Terphenyl	91.0	%REC	1		56-125				SW8015C	02/23/2022 17:14/amn	GCFID-HP5-B_220223A : 7	163927
Surr: n-Triacontane	83.0	%REC	1		50-150				SW8015C	02/23/2022 17:14/amn	GCFID-HP5-B_220223A : 7	163927
- 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	02/23/2022 12:16/jdw	FID-HEADSPACE_220223A : 16	R375084
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
1,2-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
1,3-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
1,4-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
2,4-Dichlorophenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
2,4-Dimethylphenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
2,4-Dinitrophenol	ND	ug/L	1	U	10	10	4.3		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
2,4-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
2,6-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
2-Chloronaphthalene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
2-Chlorophenol	ND	ug/L	1	U	10	5.0	2.5		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
2-Nitrophenol	ND	ug/L	1	U	10	5.0	2.4		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	10	2.3		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957

LABORATORY ANALYTICAL REPORT

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Client: AECOM - Honolulu
Client Sample ID: ERH2553 (RHMW2254-01 Low Flow)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-027
Collection Date: 02/17/2022 14:30
Date Received: 02/21/2022
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												
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
4-Chlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
4-Nitrophenol	ND	ug/L	1	U	10	10	2.5		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Azobenzene	ND	ug/L	1	U	10	5.0	1.1		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	5.0	1.4		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Butylbenzylphthalate	ND	ug/L	1	U	10	5.0	1.6		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Di-n-butyl phthalate	ND	ug/L	1	U	10	5.0	0.93		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Di-n-octyl phthalate	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Diethyl phthalate	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Dimethyl phthalate	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Hexachlorobenzene	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Hexachlorobutadiene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Hexachloroethane	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Isophorone	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
m+p-Cresols	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
n-Nitrosodimethylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	5.0	1.2		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Nitrobenzene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
o-Cresol	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Pentachlorophenol	ND	ug/L	1	U	10	10	4.2		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Phenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Pyridine	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Surr: 2,4,6-Tribromophenol	67.0	%REC	1		43-140				SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Surr: 2-Fluorobiphenyl	56.0	%REC	1		44-119				SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Surr: 2-Fluorophenol	29.0	%REC	1		19-119				SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Surr: Nitrobenzene-d5	56.0	%REC	1		44-120				SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Surr: Phenol-d5	26.0	%REC	1		10-65				SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957
Surr: Terphenyl-d14	94.0	%REC	1		50-134				SW8270C	02/24/2022 23:10/dsm	SV5973N.I_220224A : 15	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2552 (Trip Blank) 14733
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-028
Collection Date: 02/17/2022 14:30
Date Received: 02/21/2022
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	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-028
Client: AECOM - Honolulu
Collection Date: 02/17/2022 14:30
Client Sample ID: ERH2552 (Trip Blank) 14733
Date Received: 02/21/2022
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	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Surr: Dibromofluoromethane	113.0	%REC	1		80-119				SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Surr: 1,2-Dichloroethane-d4	115.0	%REC	1		81-118				SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Surr: Toluene-d8	104.0	%REC	1		89-112				SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	02/22/2022 19:10/msc	VOA5975C.I_220222A : 19	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-029
Client: AECOM - Honolulu
Collection Date: 02/17/2022 14:30
Client Sample ID: ERH2552 (Trip Blank) 14754
Date Received: 02/21/2022
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	02/23/2022 18:27/jp	VARIAN1_220223A : 11	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/23/2022 18:27/jp	VARIAN1_220223A : 11	R375111
Surr: Trifluorotoluene	78.0	%REC	1		70-130				SW8015C	02/23/2022 18:27/jp	VARIAN1_220223A : 11	R375111

- 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: B22021435-030
Client: AECOM - Honolulu
Collection Date: 02/17/2022 14:30
Client Sample ID: ERH2552 (Trip Blank) 14733
Date Received: 02/21/2022
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	02/25/2022 00:00/clt	GECD.I_220224A : 28	163984
Surr: 1,1,1,2-Tetrachloroethane	108.0	%REC	1		70-130				SW8011	02/25/2022 00:00/clt	GECD.I_220224A : 28	163984

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2552 (Trip Blank) 14732
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-031
Collection Date: 02/17/2022 14:30
Date Received: 02/21/2022
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	02/23/2022 12:23/jdw	FID-HEADSPACE_220223A : 17	R375084

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2555 (Sump Audit 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-032
Collection Date: 02/17/2022 15:40
Date Received: 02/21/2022
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	0.050	0.021		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
2-Methylnaphthalene	ND	ug/L	1	U	0.10	0.050	0.018		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Acenaphthene	ND	ug/L	1	U	0.10	0.050	0.032		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Acenaphthylene	ND	ug/L	1	U	0.10	0.050	0.025		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Anthracene	ND	ug/L	1	U	0.10	0.050	0.028		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Benzo(a)anthracene	0.058	ug/L	1	J	0.10	0.050	0.027		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Benzo(a)pyrene	0.069	ug/L	1	J	0.10	0.050	0.035		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Benzo(b)fluoranthene	0.12	ug/L	1		0.10	0.050	0.023		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Benzo(g,h,i)perylene	0.14	ug/L	1		0.10	0.050	0.027		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Benzo(k)fluoranthene	0.10	ug/L	1		0.10	0.050	0.030		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Chrysene	ND	ug/L	1	U	0.10	0.050	0.046		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Dibenzo(a,h)anthracene	0.12	ug/L	1		0.10	0.050	0.037		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Fluoranthene	ND	ug/L	1	U	0.10	0.050	0.023		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Fluorene	ND	ug/L	1	U	0.10	0.050	0.022		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Indeno(1,2,3-cd)pyrene	0.12	ug/L	1		0.10	0.050	0.049		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Naphthalene	ND	ug/L	1	U	0.10	0.050	0.029		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Phenanthrene	ND	ug/L	1	U	0.10	0.050	0.030		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
Pyrene	ND	ug/L	1	U	0.10	0.050	0.024		SW8270CSIM	02/28/2022 23:24/jph	SV5975.I_220228A : 24	163957
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.6 to 0.7	0.61	mg/L	1		0.50	0.50	0.17		SW9060A	02/25/2022 22:15/eli-ca	SUB-C280065 : 12	C_R280065
METALS, DISSOLVED												
Lead	0.00006	mg/L	1	J	0.001	0.00005	0.00003		SW6020	02/24/2022 19:36/car	ICPMS207-B_220224A : 60	R375174
METALS, TOTAL												
Lead	0.00036	mg/L	1	J	0.001	0.0001	0.00008		SW6020	02/24/2022 19:43/car	ICPMS207-B_220224A : 61	163954
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Chloroform	0.18	ug/L	1	J	1.0	0.20	0.079		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2555 (Sump Audit 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-032
Collection Date: 02/17/2022 15:40
Date Received: 02/21/2022
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	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Methyl ethyl ketone	19	ug/L	1	J	20	5.0	1.8		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
o-Xylene	0.11	ug/L	1	J	1.0	0.20	0.060		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Xylenes, Total	0.11	ug/L	1	J	1.0	0.20	0.060		SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Surr: 1,2-Dichloroethane-d4	113.0	%REC	1		81-118				SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218

LABORATORY ANALYTICAL REPORT

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Client: AECOM - Honolulu
Client Sample ID: ERH2555 (Sump Audit 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-032
Collection Date: 02/17/2022 15:40
Date Received: 02/21/2022
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	106.0	%REC	1		89-112				SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
Surr: p-Bromofluorobenzene	105.0	%REC	1		85-114				SW8260B	02/22/2022 16:00/msc	VOA5975C.I_220222A : 12	R375218
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	02/25/2022 16:15/clt	GECD.I_220225A : 10	164037
Surr: 1,1,1,2-Tetrachloroethane	107.0	%REC	1		70-130				SW8011	02/25/2022 16:15/clt	GECD.I_220225A : 10	164037
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	5.2	ug/L	1	J	20	8.7	2.0		SW8015C	02/24/2022 06:57/jp	VARIAN1_220223A : 25	R375111
Total Purgeable Hydrocarbons	55	ug/L	1		20	10	3.1		SW8015C	02/24/2022 06:57/jp	VARIAN1_220223A : 25	R375111
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	02/24/2022 06:57/jp	VARIAN1_220223A : 25	R375111
- 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)	0.18	mg/L	1	J	0.30	0.14	0.037		SW8015C	02/24/2022 01:50/amn	GCFID-HP5-B_220223A : 15	163927
Diesel Range Organics (SGT-C10 to C24)	0.088	mg/L	1	J	0.30	0.11	0.027		SW8015C	02/25/2022 07:15/amn	GCFID-HP5-B_220223B : 8	163927
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	02/24/2022 01:50/amn	GCFID-HP5-B_220223A : 15	163927
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	02/25/2022 07:15/amn	GCFID-HP5-B_220223B : 8	163927
Total Extractable Hydrocarbons	0.28	mg/L	1	J	0.30	0.14	0.071		SW8015C	02/24/2022 01:50/amn	GCFID-HP5-B_220223A : 15	163927
Total Extractable Hydrocarbons (SGT)	0.094	mg/L	1	J	0.30	0.11	0.034		SW8015C	02/25/2022 07:15/amn	GCFID-HP5-B_220223B : 8	163927
Surr: o-Terphenyl	98.0	%REC	1		56-125				SW8015C	02/24/2022 01:50/amn	GCFID-HP5-B_220223A : 15	163927
Surr: o-Terphenyl (SGT)	94.0	%REC	1		56-125				SW8015C	02/25/2022 07:15/amn	GCFID-HP5-B_220223B : 8	163927
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	02/24/2022 01:50/amn	GCFID-HP5-B_220223A : 15	163927
Surr: n-Triacontane (SGT)	81.0	%REC	1		50-150				SW8015C	02/25/2022 07:15/amn	GCFID-HP5-B_220223B : 8	163927
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.0022	mg/L	1		0.0020	0.0012	0.00070		SW8015M	02/23/2022 12:32/jdw	FID-HEADSPACE_220223A : 18	R375084
SEMI-VOLATILE ORGANIC COMPOUNDS												
1,2,4-Trichlorobenzene	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
1,2-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
1,3-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
1,4-Dichlorobenzene	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
2,4,5-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
2,4,6-Trichlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
2,4-Dichlorophenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
2,4-Dimethylphenol	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
2,4-Dinitrophenol	ND	ug/L	1	U	10	10	4.3		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
2,4-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2555 (Sump Audit 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22021435-032
Collection Date: 02/17/2022 15:40
Date Received: 02/21/2022
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												
2,6-Dinitrotoluene	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
2-Chloronaphthalene	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
2-Chlorophenol	ND	ug/L	1	U	10	5.0	2.5		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
2-Nitrophenol	ND	ug/L	1	U	10	5.0	2.4		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
3,3´-Dichlorobenzidine	ND	ug/L	1	U	10	5.0	2.1		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
4,6-Dinitro-2-methylphenol	ND	ug/L	1	U	10	10	2.3		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
4-Bromophenyl phenyl ether	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
4-Chloro-3-methylphenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
4-Chlorophenol	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
4-Chlorophenyl phenyl ether	ND	ug/L	1	U	10	5.0	2.0		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
4-Nitrophenol	ND	ug/L	1	U	10	10	2.5		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Azobenzene	ND	ug/L	1	U	10	5.0	1.1		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
bis(-2-chloroethoxy)Methane	ND	ug/L	1	U	10	5.0	1.4		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
bis(-2-chloroethyl)Ether	ND	ug/L	1	U	10	5.0	2.6		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
bis(2-chloroisopropyl)Ether	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
bis(2-ethylhexyl)Phthalate	ND	ug/L	1	U	10	5.0	1.9		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Butylbenzylphthalate	ND	ug/L	1	U	10	5.0	1.6		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Di-n-butyl phthalate	ND	ug/L	1	U	10	5.0	0.93		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Di-n-octyl phthalate	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Diethyl phthalate	ND	ug/L	1	U	10	5.0	2.2		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Dimethyl phthalate	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Hexachlorobenzene	ND	ug/L	1	U	10	5.0	1.3		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Hexachlorobutadiene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Hexachlorocyclopentadiene	ND	ug/L	1	U	10	5.0	3.0		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Hexachloroethane	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Isophorone	ND	ug/L	1	U	10	5.0	1.7		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
m+p-Cresols	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
n-Nitroso-di-n-propylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
n-Nitrosodimethylamine	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
n-Nitrosodiphenylamine	ND	ug/L	1	U	10	5.0	1.2		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Nitrobenzene	ND	ug/L	1	U	10	5.0	2.3		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
o-Cresol	ND	ug/L	1	U	10	5.0	1.8		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Pentachlorophenol	ND	ug/L	1	U	10	10	4.2		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Phenol	ND	ug/L	1	U	10	5.0	1.5		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Pyridine	ND	ug/L	1	U	10	5.0	3.2		SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Surr: 2,4,6-Tribromophenol	67.0	%REC	1		43-140				SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Surr: 2-Fluorobiphenyl	57.0	%REC	1		44-119				SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Surr: 2-Fluorophenol	28.0	%REC	1		19-119				SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Surr: Nitrobenzene-d5	57.0	%REC	1		44-120				SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-032
Client: AECOM - Honolulu
Collection Date: 02/17/2022 15:40
Client Sample ID: ERH2555 (Sump Audit 3)
Date Received: 02/21/2022
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	26.0	%REC	1		10-65				SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957
Surr: Terphenyl-d14	91.0	%REC	1		50-134				SW8270C	02/24/2022 23:42/dsm	SV5973N.I_220224A : 16	163957

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2554 (Trip Blank) 14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-033
Collection Date: 02/17/2022 15:40
Date Received: 02/21/2022
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	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-033
Client: AECOM - Honolulu
Collection Date: 02/17/2022 15:40
Client Sample ID: ERH2554 (Trip Blank) 14833
Date Received: 02/21/2022
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	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Surr: Dibromofluoromethane	116.0	%REC	1		80-119				SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Surr: 1,2-Dichloroethane-d4	119.0	%REC	1	S	81-118				SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Surr: Toluene-d8	104.0	%REC	1		89-112				SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	02/22/2022 19:37/msc	VOA5975C.I_220222A : 20	R375218

- 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. There were no analytes detected above the MDL so no further analysis was performed.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22021435-034
Client: AECOM - Honolulu
Collection Date: 02/17/2022 15:40
Client Sample ID: ERH2554 (Trip Blank) 14754
Date Received: 02/21/2022
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	02/23/2022 19:02/jp	VARIAN1_220223A : 12	R375111
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	02/23/2022 19:02/jp	VARIAN1_220223A : 12	R375111
Surr: Trifluorotoluene	77.0	%REC	1		70-130				SW8015C	02/23/2022 19:02/jp	VARIAN1_220223A : 12	R375111

- 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: B22021435-035
Client: AECOM - Honolulu
Collection Date: 02/17/2022 15:40
Client Sample ID: ERH2554 (Trip Blank) 14733
Date Received: 02/21/2022
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	0.0049	0.0025		SW8011	02/25/2022 16:34/clt	GECD.I_220225A : 11	163984
Surr: 1,1,1,2-Tetrachloroethane	100.0	%REC	1		70-130				SW8011	02/25/2022 16:34/clt	GECD.I_220225A : 11	163984

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2554 (Trip Blank) 14808
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22021435-036
Collection Date: 02/17/2022 15:40
Date Received: 02/21/2022
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	02/23/2022 12:43/jdw	FID-HEADSPACE_220223A : 19	R375084

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220228A: 12 **SampType:** Method Blank **Batch ID:** 163957
Method: SW8270CSIM **Analysis Date:** 02/28/2022 16:53 **Prep Date:** 02/23/2022 09:42
Lab ID: MB-163957 **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: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Run ID: Run Order: SV5975.I_220228A: 13 **SampType:** Laboratory Control Sample **Batch ID:** 163957
Method: SW8270CSIM **Analysis Date:** 02/28/2022 17:26 **Prep Date:** 02/23/2022 09:42
Lab ID: LLCS-163957 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1-Methylnaphthalene	2.6	0.10	5.0		51.0	41	115				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220228A: 13 **SampType:** Laboratory Control Sample **Batch ID:** 163957
Method: SW8270CSIM **Analysis Date:** 02/28/2022 17:26 **Prep Date:** 02/23/2022 09:42
Lab ID: LLCS-163957 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
2-Methylnaphthalene	3.3	0.10	5.0		67.0	39	114				
Acenaphthene	3.5	0.10	5.0		69.0	48	114				
Acenaphthylene	2.8	0.10	5.0		57.0	35	121				
Anthracene	4.2	0.10	5.0		84.0	53	119				
Benzo(a)anthracene	4.3	0.10	5.0		87.0	59	120				
Benzo(a)pyrene	3.8	0.10	5.0		75.0	53	120				
Benzo(b)fluoranthene	4.1	0.10	5.0		83.0	53	126				
Benzo(g,h,i)perylene	3.8	0.10	5.0		76.0	44	128				
Benzo(k)fluoranthene	4.0	0.10	5.0		80.0	54	125				
Chrysene	4.5	0.10	5.0		89.0	57	120				
Dibenzo(a,h)anthracene	4.1	0.10	5.0		82.0	44	141				
Fluoranthene	3.9	0.10	5.0		79.0	58	120				
Fluorene	3.5	0.10	5.0		70.0	50	118				
Indeno(1,2,3-cd)pyrene	3.9	0.10	5.0		78.0	48	130				
Naphthalene	2.6	0.10	5.0		53.0	43	114				
Phenanthrene	4.1	0.10	5.0		81.0	53	115				
Pyrene	4.3	0.10	5.0		87.0	53	121				

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Run ID: Run Order: SV5975.I_220228A: 14 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163957
Method: SW8270CSIM **Analysis Date:** 02/28/2022 17:58 **Prep Date:** 02/23/2022 09:42
Lab ID: LLCSD-163957 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1-Methylnaphthalene	2.6	0.10	5.0		52.0	41	115	2.6	2.0	40.0	
2-Methylnaphthalene	3.1	0.10	5.0		62.0	39	114	3.3	8.0	40.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220228A: 14 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163957
Method: SW8270CSIM **Analysis Date:** 02/28/2022 17:58 **Prep Date:** 02/23/2022 09:42
Lab ID: LLCSD-163957 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Acenaphthene	3.7	0.10	5.0		74.0	48	114	3.5	6.4	40.0	
Acenaphthylene	3.5	0.10	5.0		69.0	35	121	2.8	19.0	40.0	
Anthracene	4.8	0.10	5.0		96.0	53	119	4.2	14.0	40.0	
Benzo(a)anthracene	5.0	0.10	5.0		101.0	59	120	4.3	15.0	40.0	
Benzo(a)pyrene	4.4	0.10	5.0		89.0	53	120	3.8	17.0	40.0	
Benzo(b)fluoranthene	5.0	0.10	5.0		100.0	53	126	4.1	19.0	40.0	
Benzo(g,h,i)perylene	4.6	0.10	5.0		93.0	44	128	3.8	20.0	40.0	
Benzo(k)fluoranthene	4.7	0.10	5.0		95.0	54	125	4.0	17.0	40.0	
Chrysene	5.1	0.10	5.0		101.0	57	120	4.5	13.0	40.0	
Dibenzo(a,h)anthracene	4.8	0.10	5.0		96.0	44	141	4.1	15.0	40.0	
Fluoranthene	4.5	0.10	5.0		90.0	58	120	3.9	13.0	40.0	
Fluorene	4.0	0.10	5.0		80.0	50	118	3.5	14.0	40.0	
Indeno(1,2,3-cd)pyrene	4.7	0.10	5.0		94.0	48	130	3.9	18.0	40.0	
Naphthalene	2.8	0.10	5.0		56.0	43	114	2.6	5.4	40.0	
Phenanthrene	4.6	0.10	5.0		92.0	53	115	4.1	12.0	40.0	
Pyrene	5.0	0.10	5.0		99.0	53	121	4.3	13.0	40.0	

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

- 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_220228A: 18 **SampType:** Sample Matrix Spike **Batch ID:** 163957
Method: SW8270CSIM **Analysis Date:** 02/28/2022 20:09 **Prep Date:** 02/23/2022 09:43
Lab ID: B22021435-007ALMS **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	5.0	0.0	57.0	41	115				
2-Methylnaphthalene	3.6	0.10	5.0	0.0	72.0	39	114				
Acenaphthene	3.9	0.10	5.0	0.0	77.0	48	114				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220228A: 18 **SampType:** Sample Matrix Spike **Batch ID:** 163957
Method: SW8270CSIM **Analysis Date:** 02/28/2022 20:09 **Prep Date:** 02/23/2022 09:43
Lab ID: B22021435-007ALMS **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Acenaphthylene	3.3	0.10	5.0	0.0	66.0	35	121				
Anthracene	4.7	0.10	5.0	0.0	94.0	53	119				
Benzo(a)anthracene	5.0	0.10	5.0	0.0	100.0	59	120				
Benzo(a)pyrene	4.3	0.10	5.0	0.0	86.0	53	120				
Benzo(b)fluoranthene	4.8	0.10	5.0	0.0	96.0	53	126				
Benzo(g,h,i)perylene	4.5	0.10	5.0	0.0	91.0	44	128				
Benzo(k)fluoranthene	4.5	0.10	5.0	0.0	91.0	54	125				
Chrysene	5.1	0.10	5.0	0.0	102.0	57	120				
Dibenzo(a,h)anthracene	4.7	0.10	5.0	0.0	94.0	44	141				
Fluoranthene	4.3	0.10	5.0	0.0	85.0	58	120				
Fluorene	3.8	0.10	5.0	0.0	76.0	50	118				
Indeno(1,2,3-cd)pyrene	4.5	0.10	5.0	0.0	91.0	48	130				
Naphthalene	3.0	0.10	5.0	0.0	60.0	43	114				
Phenanthrene	4.6	0.10	5.0	0.0	91.0	53	115				
Pyrene	4.8	0.10	5.0	0.0	97.0	53	121				

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220228A: 20 **SampType:** Sample Matrix Spike **Batch ID:** 163957
Method: SW8270CSIM **Analysis Date:** 02/28/2022 21:14 **Prep Date:** 02/23/2022 09:43
Lab ID: B22021435-012CLMS **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	5.0	0.0	45.0	41	115				
2-Methylnaphthalene	2.7	0.10	5.0	0.0	55.0	39	114				
Acenaphthene	3.2	0.10	5.0	0.0	64.0	48	114				
Acenaphthylene	3.0	0.10	5.0	0.0	60.0	35	121				
Anthracene	4.4	0.10	5.0	0.0	88.0	53	119				
Benzo(a)anthracene	4.5	0.10	5.0	0.0	90.0	59	120				
Benzo(a)pyrene	4.0	0.10	5.0	0.0	81.0	53	120				
Benzo(b)fluoranthene	4.6	0.10	5.0	0.0	91.0	53	126				
Benzo(g,h,i)perylene	4.2	0.10	5.0	0.0	84.0	44	128				
Benzo(k)fluoranthene	4.2	0.10	5.0	0.0	84.0	54	125				
Chrysene	4.5	0.10	5.0	0.0	91.0	57	120				
Dibenzo(a,h)anthracene	4.4	0.10	5.0	0.0	88.0	44	141				
Fluoranthene	4.1	0.10	5.0	0.0	83.0	58	120				
Fluorene	3.7	0.10	5.0	0.0	73.0	50	118				
Indeno(1,2,3-cd)pyrene	4.1	0.10	5.0	0.0	83.0	48	130				
Naphthalene	2.3	0.10	5.0	0.0	45.0	43	114				
Phenanthrene	4.4	0.10	5.0	0.0	87.0	53	115				
Pyrene	4.3	0.10	5.0	0.0	87.0	53	121				

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220228A: 10 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375360
Method: SW8270CSIM **Analysis Date:** 02/28/2022 15:48 **Prep Date:**
Lab ID: 28-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	2.1	0.10	2.0		107.0	80	120				
2-Methylnaphthalene	2.4	0.10	2.0		119.0	80	120				
Acenaphthene	2.2	0.10	2.0		112.0	80	120				
Acenaphthylene	1.9	0.10	2.0		96.0	80	120				
Anthracene	2.2	0.10	2.0		111.0	80	120				
Benzo(a)anthracene	2.2	0.10	2.0		110.0	80	120				
Benzo(a)pyrene	1.9	0.10	2.0		96.0	80	120				
Benzo(b)fluoranthene	2.1	0.10	2.0		103.0	80	120				
Benzo(g,h,i)perylene	2.0	0.10	2.0		100.0	80	120				
Benzo(k)fluoranthene	2.1	0.10	2.0		105.0	80	120				
Chrysene	2.3	0.10	2.0		114.0	80	120				
Dibenzo(a,h)anthracene	2.0	0.10	2.0		98.0	80	120				
Fluoranthene	2.1	0.10	2.0		103.0	80	120				
Fluorene	1.8	0.10	2.0		91.0	80	120				
Indeno(1,2,3-cd)pyrene	2.1	0.10	2.0		104.0	80	120				
Naphthalene	2.1	0.10	2.0		107.0	80	120				
Phenanthrene	2.2	0.10	2.0		110.0	80	120				
Pyrene	2.0	0.10	2.0		101.0	80	120				

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Run ID: Run Order: SV5975.I_220228A: 25 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375360
Method: SW8270CSIM **Analysis Date:** 02/28/2022 23:56 **Prep Date:**
Lab ID: 28-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	2.1	0.10	2.0		103.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5975.I_220228A: 25 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375360
Method: SW8270CSIM **Analysis Date:** 02/28/2022 23:56 **Prep Date:**
Lab ID: 28-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	2.1	0.10	2.0		105.0	50	150				
Acenaphthene	1.9	0.10	2.0		97.0	50	150				
Acenaphthylene	1.9	0.10	2.0		96.0	50	150				
Anthracene	2.0	0.10	2.0		98.0	50	150				
Benzo(a)anthracene	2.0	0.10	2.0		99.0	50	150				
Benzo(a)pyrene	1.9	0.10	2.0		95.0	50	150				
Benzo(b)fluoranthene	1.9	0.10	2.0		93.0	50	150				
Benzo(g,h,i)perylene	1.7	0.10	2.0		87.0	50	150				
Benzo(k)fluoranthene	1.8	0.10	2.0		91.0	50	150				
Chrysene	2.0	0.10	2.0		101.0	50	150				
Dibenzo(a,h)anthracene	1.9	0.10	2.0		95.0	50	150				
Fluoranthene	1.9	0.10	2.0		95.0	50	150				
Fluorene	1.8	0.10	2.0		92.0	50	150				
Indeno(1,2,3-cd)pyrene	1.9	0.10	2.0		95.0	50	150				
Naphthalene	1.9	0.10	2.0		97.0	50	150				
Phenanthrene	2.0	0.10	2.0		100.0	50	150				
Pyrene	1.8	0.10	2.0		92.0	50	150				

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SUB-C280065: 2 **SampType:** Method Blank **Batch ID:** C_R280065
Method: SW9060A **Analysis Date:** 02/25/2022 15:28 **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: **B22021435-001E, B22021435-006E, B22021435-012E, B22021435-017E, B22021435-022E, B22021435-027E, B22021435-032E**
- TOC Range is 0.0 to 0.0

Run ID: Run Order: SUB-C280065: 1 **SampType:** Laboratory Control Sample **Batch ID:** C_R280065
Method: SW9060A **Analysis Date:** 02/25/2022 14:48 **Prep Date:**
Lab ID: LCS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	4.8	0.50	5.0		97.0	91	111				

Associated Samples: **B22021435-001E, B22021435-006E, B22021435-012E, B22021435-017E, B22021435-022E, B22021435-027E, B22021435-032E**
- TOC Range is 4.8 to 4.9

Run ID: Run Order: SUB-C280065: 5 **SampType:** Sample Matrix Spike **Batch ID:** C_R280065
Method: SW9060A **Analysis Date:** 02/25/2022 17:27 **Prep Date:**
Lab ID: B22021435-001E **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	0.27	95.0	91	111				

Associated Samples: **B22021435-001E, B22021435-006E, B22021435-012E, B22021435-017E, B22021435-022E, B22021435-027E, B22021435-032E**
- TOC Range is 5.0 to 5.1

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SUB-C280065: 6 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** C_R280065
Method: SW9060A **Analysis Date:** 02/25/2022 18:08 **Prep Date:**
Lab ID: B22021435-001E **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	0.27	94.0	91	111	5.0	0.5	10.0	

Associated Samples: **B22021435-001E, B22021435-006E, B22021435-012E, B22021435-017E, B22021435-022E, B22021435-027E, B22021435-032E**
- TOC Range is 4.9 to 5.1

Run ID: Run Order: SUB-C280065: 3 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280065
Method: SW9060A **Analysis Date:** 02/25/2022 16:07 **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: **B22021435-001E, B22021435-006E, B22021435-012E, B22021435-017E, B22021435-022E, B22021435-027E, B22021435-032E**
- TOC Range is 4.7 to 4.8

Run ID: Run Order: SUB-C280065: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280065
Method: SW9060A **Analysis Date:** 02/25/2022 22:57 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22021435-001E, B22021435-006E, B22021435-012E, B22021435-017E, B22021435-022E, B22021435-027E, B22021435-032E**
- TOC Range is 4.7 to 4.8

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: ICPMS207-B_220224A: 24 **SampType:** Method Blank **Batch ID:** R375174
Method: SW6020 **Analysis Date:** 02/24/2022 15:51 **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: **B22021435-001A, B22021435-006A, B22021435-012A, B22021435-017A, B22021435-022A, B22021435-027A, B22021435-032A**

Run ID: Run Order: ICPMS207-B_220224A: 25 **SampType:** Laboratory Fortified Blank **Batch ID:** R375174
Method: SW6020 **Analysis Date:** 02/24/2022 15:58 **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	0.052	0.001	0.050		104.0	88	115				

Associated Samples: **B22021435-001A, B22021435-006A, B22021435-012A, B22021435-017A, B22021435-022A, B22021435-027A, B22021435-032A**

Run ID: Run Order: ICPMS207-B_220224A: 37 **SampType:** Sample Matrix Spike **Batch ID:** R375174
Method: SW6020 **Analysis Date:** 02/24/2022 17:13 **Prep Date:**
Lab ID: B22021435-001AMS **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	100.0	88	115				

Associated Samples: **B22021435-001A, B22021435-006A, B22021435-012A, B22021435-017A, B22021435-022A, B22021435-027A, B22021435-032A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: ICPMS207-B_220224A: 38 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R375174
Method: SW6020 **Analysis Date:** 02/24/2022 17:19 **Prep Date:**
Lab ID: B22021435-001AMSD **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.050	0.001	0.050	0.00	101.0	88	115	0.050	1.0	20.0	

Associated Samples: **B22021435-001A, B22021435-006A, B22021435-012A, B22021435-017A, B22021435-022A, B22021435-027A, B22021435-032A**

Run ID: Run Order: ICPMS207-B_220224A: 36 **SampType:** Serial Dilution **Batch ID:** R375174
Method: SW6020 **Analysis Date:** 02/24/2022 17:06 **Prep Date:**
Lab ID: B22021435-001ADIL **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: **B22021435-001A, B22021435-006A, B22021435-012A, B22021435-017A, B22021435-022A, B22021435-027A, B22021435-032A**

Run ID: Run Order: ICPMS207-B_220224A: 32 **SampType:** Method Blank **Batch ID:** 163954
Method: SW6020 **Analysis Date:** 02/24/2022 16:41 **Prep Date:** 02/23/2022 09:09
Lab ID: MB-163954 **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: **B22021435-001B, B22021435-006B, B22021435-012B, B22021435-017B, B22021435-022B, B22021435-027B, B22021435-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: ICPMS207-B_220224A: 33 **SampType:** Laboratory Control Sample **Batch ID:** 163954
Method: SW6020 **Analysis Date:** 02/24/2022 16:48 **Prep Date:** 02/23/2022 09:09
Lab ID: LCS4-163954 **Units:** mg/L **Prep Method:** SW3010A

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

Associated Samples: **B22021435-001B, B22021435-006B, B22021435-012B, B22021435-017B, B22021435-022B, B22021435-027B, B22021435-032B**

Run ID: Run Order: ICPMS207-B_220224A: 43 **SampType:** Sample Matrix Spike **Batch ID:** 163954
Method: SW6020 **Analysis Date:** 02/24/2022 17:50 **Prep Date:** 02/23/2022 09:10
Lab ID: B22021435-001BMS4 **Units:** mg/L **Prep Method:** SW3010A

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

Associated Samples: **B22021435-001B, B22021435-006B, B22021435-012B, B22021435-017B, B22021435-022B, B22021435-027B, B22021435-032B**

Run ID: Run Order: ICPMS207-B_220224A: 46 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 163954
Method: SW6020 **Analysis Date:** 02/24/2022 18:09 **Prep Date:** 02/23/2022 09:10
Lab ID: B22021435-001BMSD4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.102	0.001	0.100	0.00	102.0	88	115	0.100	1.8	20.0	

Associated Samples: **B22021435-001B, B22021435-006B, B22021435-012B, B22021435-017B, B22021435-022B, B22021435-027B, B22021435-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: ICPMS207-B_220224A: 42 **SampType:** Post Digestion/Distillation Spike **Batch ID:** 163954
Method: SW6020 **Analysis Date:** 02/24/2022 17:44 **Prep Date:** 02/23/2022 09:10
Lab ID: B22021435-001BPDS1 **Units:** mg/L **Prep Method:** SW3010A

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

Associated Samples: **B22021435-001B, B22021435-006B, B22021435-012B, B22021435-017B, B22021435-022B, B22021435-027B, B22021435-032B**

Run ID: Run Order: ICPMS207-B_220224A: 41 **SampType:** Serial Dilution **Batch ID:** 163954
Method: SW6020 **Analysis Date:** 02/24/2022 17:38 **Prep Date:** 02/23/2022 09:10
Lab ID: B22021435-001BDIL **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: **B22021435-001B, B22021435-006B, B22021435-012B, B22021435-017B, B22021435-022B, B22021435-027B, B22021435-032B**

Run ID: Run Order: ICPMS207-B_220224A: 30 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375174
Method: SW6020 **Analysis Date:** 02/24/2022 16:29 **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: **B22021435-001A, B22021435-001B, B22021435-006A, B22021435-006B, B22021435-012A, B22021435-012B, B22021435-017A, B22021435-017B, B22021435-022A, B22021435-022B, B22021435-027A, B22021435-027B, B22021435-032A, B22021435-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: ICPMS207-B_220224A: 44 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375174
Method: SW6020 **Analysis Date:** 02/24/2022 17:56 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

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

Associated Samples: **B22021435-001A, B22021435-001B, B22021435-006A, B22021435-006B, B22021435-012A, B22021435-012B, B22021435-017A, B22021435-017B, B22021435-022A, B22021435-022B, B22021435-027A, B22021435-027B, B22021435-032A, B22021435-032B**

Run ID: Run Order: ICPMS207-B_220224A: 57 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375174
Method: SW6020 **Analysis Date:** 02/24/2022 19:18 **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: **B22021435-001A, B22021435-001B, B22021435-006A, B22021435-006B, B22021435-012A, B22021435-012B, B22021435-017A, B22021435-017B, B22021435-022A, B22021435-022B, B22021435-027A, B22021435-027B, B22021435-032A, B22021435-032B**

Run ID: Run Order: ICPMS207-B_220224A: 62 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375174
Method: SW6020 **Analysis Date:** 02/24/2022 19:49 **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: **B22021435-001A, B22021435-001B, B22021435-006A, B22021435-006B, B22021435-012A, B22021435-012B, B22021435-017A, B22021435-017B, B22021435-022A, B22021435-022B, B22021435-027A, B22021435-027B, B22021435-032A, B22021435-032B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 4 **SampType:** Method Blank **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 11:50 **Prep Date:**
Lab ID: MBLK022222_ **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: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 4 **SampType:** Method Blank **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 11:50 **Prep Date:**
Lab ID: MBLK022222_ **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		113.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		110.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	85	114				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 4 **SampType:** Method Blank **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 11:50 **Prep Date:**
Lab ID: MBLK022222_ **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		106.0	89	112				

Associated Samples: **B22021435-001F, B22021435-002A, B22021435-006F, B22021435-007C, B22021435-008A, B22021435-012F, B22021435-013A, B22021435-017F, B22021435-018A, B22021435-022F, B22021435-023A, B22021435-027F, B22021435-028A, B22021435-032F, B22021435-033A**

Run ID: Run Order: VOA5975C.I_220222A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 10:55 **Prep Date:**
Lab ID: LCS022222_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.2	0.50	5.0		104.0	79	120				
Bromobenzene	5.4	0.50	5.0		109.0	80	120				
Bromochloromethane	5.0	0.50	5.0		101.0	78	123				
Bromodichloromethane	5.2	0.50	5.0		103.0	79	125				
Bromoform	5.3	0.50	5.0		106.0	66	130				
Carbon tetrachloride	4.9	0.50	5.0		99.0	72	136				
Chlorobenzene	5.1	0.50	5.0		103.0	82	118				
Chlorodibromomethane	5.1	0.50	5.0		101.0	74	126				
Chloroethane	4.5	0.50	5.0		90.0	60	138				
Chloroform	4.9	0.50	5.0		98.0	79	124				
Chloromethane	5.0	0.50	5.0		99.0	50	139				
1,2-Dibromoethane	5.3	0.50	5.0		105.0	78	122				
2-Chlorotoluene	5.3	0.50	5.0		106.0	79	122				
Dibromomethane	5.3	0.50	5.0		107.0	79	123				
1,2-Dichlorobenzene	5.2	0.50	5.0		105.0	80	119				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 10:55 **Prep Date:**
Lab ID: LCS022222_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.5	0.50	5.0		109.0	78	122				
1,3-Dichlorobenzene	5.3	0.50	5.0		106.0	80	119				
1,4-Dichlorobenzene	5.2	0.50	5.0		104.0	79	118				
Dichlorodifluoromethane	4.7	0.50	5.0		94.0	32	152				
1,1-Dichloroethane	5.2	0.50	5.0		104.0	77	125				
1,2-Dichloroethane	4.8	0.50	5.0		96.0	73	128				
1,1-Dichloroethene	5.1	0.50	5.0		102.0	71	131				
cis-1,2-Dichloroethene	5.2	0.50	5.0		104.0	78	123				
trans-1,2-Dichloroethene	5.1	0.50	5.0		102.0	75	124				
1,2-Dichloropropane	5.3	0.50	5.0		105.0	78	122				
1,3-Dichloropropane	5.1	0.50	5.0		103.0	80	119				
2,2-Dichloropropane	5.4	0.50	5.0		108.0	60	139				
1,1-Dichloropropene	4.9	0.50	5.0		99.0	79	125				
cis-1,3-Dichloropropene	5.0	0.50	5.0		100.0	75	124				
trans-1,3-Dichloropropene	5.6	0.50	5.0		113.0	73	127				
Ethylbenzene	5.0	0.50	5.0		101.0	79	121				
Methyl tert-butyl ether (MTBE)	5.2	0.50	5.0		104.0	71	124				
Methyl ethyl ketone	57	10	50		114.0	56	143				
Methylene chloride	5.1	0.50	5.0		102.0	74	124				
Styrene	5.1	0.50	5.0		102.0	78	123				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0		102.0	78	124				
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0		107.0	71	121				
Tetrachloroethene	4.9	0.50	5.0		98.0	74	129				
Toluene	5.3	0.50	5.0		107.0	80	121				
1,1,1-Trichloroethane	5.0	0.50	5.0		100.0	74	131				
1,1,2-Trichloroethane	5.1	0.50	5.0		102.0	80	119				
Trichloroethene	5.1	0.50	5.0		103.0	79	123				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 10:55 **Prep Date:**
Lab ID: LCS022222_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	4.6	0.50	5.0		93.0	65	141				
1,2,3-Trichloropropane	5.2	0.50	5.0		104.0	73	125				
Vinyl chloride	5.1	0.50	5.0		102.0	58	137				
m+p-Xylenes	9.8	0.50	10		98.0	80	121				
o-Xylene	5.0	0.50	5.0		100.0	78	122				
Xylenes, Total	15	0.50	15		99.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		113.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		109.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		106.0	85	114				
Surr: Toluene-d8	11	0.50	10		109.0	89	112				

Associated Samples: **B22021435-001F, B22021435-002A, B22021435-006F, B22021435-007C, B22021435-008A, B22021435-012F, B22021435-013A, B22021435-017F, B22021435-018A, B22021435-022F, B22021435-023A, B22021435-027F, B22021435-028A, B22021435-032F, B22021435-033A**

Run ID: Run Order: VOA5975C.I_220222A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 20:05 **Prep Date:**
Lab ID: B22021435-006FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.3	0.50	5.0	0.0	106.0	79	120				
Bromobenzene	5.4	0.50	5.0	0.0	109.0	80	120				
Bromochloromethane	4.9	0.50	5.0	0.0	99.0	78	123				
Bromodichloromethane	5.4	0.50	5.0	0.0	108.0	79	125				
Bromoform	5.3	0.50	5.0	0.0	105.0	66	130				
Carbon tetrachloride	5.3	0.50	5.0	0.0	106.0	72	136				
Chlorobenzene	5.4	0.50	5.0	0.0	108.0	82	118				
Chlorodibromomethane	5.2	0.50	5.0	0.0	104.0	74	126				
Chloroethane	5.5	0.50	5.0	0.0	110.0	60	138				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 20:05 **Prep Date:**
Lab ID: B22021435-006FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Chloroform	5.1	0.50	5.0	0.27	97.0	79	124				
Chloromethane	4.7	0.50	5.0	0.0	94.0	50	139				
1,2-Dibromoethane	5.2	0.50	5.0	0.0	105.0	78	122				
2-Chlorotoluene	5.5	0.50	5.0	0.0	111.0	79	122				
Dibromomethane	5.4	0.50	5.0	0.0	108.0	79	123				
1,2-Dichlorobenzene	5.4	0.50	5.0	0.0	108.0	80	119				
4-Chlorotoluene	5.7	0.50	5.0	0.0	114.0	78	122				
1,3-Dichlorobenzene	5.5	0.50	5.0	0.0	110.0	80	119				
1,4-Dichlorobenzene	5.4	0.50	5.0	0.0	108.0	79	118				
Dichlorodifluoromethane	4.7	0.50	5.0	0.0	94.0	32	152				
1,1-Dichloroethane	5.5	0.50	5.0	0.0	110.0	77	125				
1,2-Dichloroethane	5.1	0.50	5.0	0.0	103.0	73	128				
1,1-Dichloroethene	5.3	0.50	5.0	0.0	106.0	71	131				
cis-1,2-Dichloroethene	5.3	0.50	5.0	0.0	106.0	78	123				
trans-1,2-Dichloroethene	5.1	0.50	5.0	0.0	103.0	75	124				
1,2-Dichloropropane	5.3	0.50	5.0	0.0	105.0	78	122				
1,3-Dichloropropane	5.1	0.50	5.0	0.0	102.0	80	119				
2,2-Dichloropropane	5.1	0.50	5.0	0.0	102.0	60	139				
1,1-Dichloropropene	5.1	0.50	5.0	0.0	102.0	79	125				
cis-1,3-Dichloropropene	4.9	0.50	5.0	0.0	99.0	75	124				
trans-1,3-Dichloropropene	5.4	0.50	5.0	0.0	108.0	73	127				
Ethylbenzene	5.3	0.50	5.0	0.0	105.0	79	121				
Methyl tert-butyl ether (MTBE)	4.9	0.50	5.0	0.0	99.0	71	124				
Methyl ethyl ketone	46	10	50	0.0	92.0	56	143				
Methylene chloride	5.0	0.50	5.0	0.0	101.0	74	124				
Styrene	2.8	0.50	5.0	0.0	56.0	78	123				S
1,1,1,2-Tetrachloroethane	5.3	0.50	5.0	0.0	106.0	78	124				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 20:05 **Prep Date:**
Lab ID: B22021435-006FMS **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	5.6	0.50	5.0	0.0	112.0	71	121				
Tetrachloroethene	5.3	0.50	5.0	0.0	105.0	74	129				
Toluene	5.4	0.50	5.0	0.0	108.0	80	121				
1,1,1-Trichloroethane	5.3	0.50	5.0	0.0	105.0	74	131				
1,1,2-Trichloroethane	5.5	0.50	5.0	0.0	109.0	80	119				
Trichloroethene	5.5	0.50	5.0	0.0	109.0	79	123				
Trichlorofluoromethane	4.8	0.50	5.0	0.0	96.0	65	141				
1,2,3-Trichloropropane	5.2	0.50	5.0	0.0	104.0	73	125				
Vinyl chloride	5.0	0.50	5.0	0.0	101.0	58	137				
m+p-Xylenes	10	0.50	10	0.0	102.0	80	121				
o-Xylene	5.2	0.50	5.0	0.0	104.0	78	122				
Xylenes, Total	15	0.50	15	0.0	103.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	111.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10	0.0	110.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	107.0	85	114				
Surr: Toluene-d8	11	0.50	10	0.0	110.0	89	112				

Associated Samples: **B22021435-001F, B22021435-002A, B22021435-006F, B22021435-007C, B22021435-008A, B22021435-012F, B22021435-013A, B22021435-017F, B22021435-018A, B22021435-022F, B22021435-023A, B22021435-027F, B22021435-028A, B22021435-032F, B22021435-033A**

Run ID: Run Order: VOA5975C.I_220222A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 20:32 **Prep Date:**
Lab ID: B22021435-006FMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.3	0.50	5.0	0.0	106.0	79	120	5.3	0.5	20.0	
Bromobenzene	5.4	0.50	5.0	0.0	109.0	80	120	5.4	0.0	20.0	
Bromochloromethane	5.0	0.50	5.0	0.0	100.0	78	123	4.9	1.1	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 20:32 **Prep Date:**
Lab ID: B22021435-006FMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	5.4	0.50	5.0	0.0	107.0	79	125	5.4	0.3	20.0	
Bromoform	5.6	0.50	5.0	0.0	112.0	66	130	5.3	6.1	20.0	
Carbon tetrachloride	5.3	0.50	5.0	0.0	106.0	72	136	5.3	0.6	20.0	
Chlorobenzene	5.4	0.50	5.0	0.0	108.0	82	118	5.4	0.4	20.0	
Chlorodibromomethane	5.3	0.50	5.0	0.0	106.0	74	126	5.2	2.2	20.0	
Chloroethane	5.7	0.50	5.0	0.0	115.0	60	138	5.5	4.5	20.0	
Chloroform	5.3	0.50	5.0	0.27	100.0	79	124	5.1	2.6	20.0	
Chloromethane	5.0	0.50	5.0	0.0	101.0	50	139	4.7	6.6	20.0	
1,2-Dibromoethane	5.2	0.50	5.0	0.0	105.0	78	122	5.2	0.2	20.0	
2-Chlorotoluene	5.6	0.50	5.0	0.0	112.0	79	122	5.5	0.8	20.0	
Dibromomethane	5.1	0.50	5.0	0.0	102.0	79	123	5.4	5.2	20.0	
1,2-Dichlorobenzene	5.6	0.50	5.0	0.0	112.0	80	119	5.4	3.4	20.0	
4-Chlorotoluene	5.8	0.50	5.0	0.0	116.0	78	122	5.7	1.7	20.0	
1,3-Dichlorobenzene	5.6	0.50	5.0	0.0	112.0	80	119	5.5	1.6	20.0	
1,4-Dichlorobenzene	5.4	0.50	5.0	0.0	109.0	79	118	5.4	0.9	20.0	
Dichlorodifluoromethane	5.1	0.50	5.0	0.0	103.0	32	152	4.7	9.0	20.0	
1,1-Dichloroethane	5.4	0.50	5.0	0.0	109.0	77	125	5.5	0.9	20.0	
1,2-Dichloroethane	4.9	0.50	5.0	0.0	99.0	73	128	5.1	3.7	20.0	
1,1-Dichloroethene	4.3	0.50	5.0	0.0	86.0	71	131	5.3	21.0	20.0	R
cis-1,2-Dichloroethene	5.3	0.50	5.0	0.0	106.0	78	123	5.3	0.3	20.0	
trans-1,2-Dichloroethene	5.2	0.50	5.0	0.0	103.0	75	124	5.1	0.5	20.0	
1,2-Dichloropropane	5.2	0.50	5.0	0.0	105.0	78	122	5.3	0.6	20.0	
1,3-Dichloropropane	5.1	0.50	5.0	0.0	102.0	80	119	5.1	0.5	20.0	
2,2-Dichloropropane	5.2	0.50	5.0	0.0	103.0	60	139	5.1	0.6	20.0	
1,1-Dichloropropene	5.2	0.50	5.0	0.0	103.0	79	125	5.1	1.5	20.0	
cis-1,3-Dichloropropene	5.0	0.50	5.0	0.0	100.0	75	124	4.9	1.8	20.0	
trans-1,3-Dichloropropene	5.4	0.50	5.0	0.0	109.0	73	127	5.4	0.5	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 20:32 **Prep Date:**
Lab ID: B22021435-006FMSD **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	5.3	1.5	20.0	
Methyl tert-butyl ether (MTBE)	5.2	0.50	5.0	0.0	104.0	71	124	4.9	5.6	20.0	
Methyl ethyl ketone	52	10	50	0.0	104.0	56	143	46	12.0	20.0	
Methylene chloride	4.5	0.50	5.0	0.0	89.0	74	124	5.0	12.0	20.0	
Styrene	2.4	0.50	5.0	0.0	49.0	78	123	2.8	13.0	20.0	S
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0	0.0	103.0	78	124	5.3	2.8	20.0	
1,1,2,2-Tetrachloroethane	5.6	0.50	5.0	0.0	111.0	71	121	5.6	0.7	20.0	
Tetrachloroethene	5.2	0.50	5.0	0.0	103.0	74	129	5.3	1.5	20.0	
Toluene	5.4	0.50	5.0	0.0	108.0	80	121	5.4	0.1	20.0	
1,1,1-Trichloroethane	5.2	0.50	5.0	0.0	104.0	74	131	5.3	1.3	20.0	
1,1,2-Trichloroethane	5.3	0.50	5.0	0.0	107.0	80	119	5.5	2.0	20.0	
Trichloroethene	5.3	0.50	5.0	0.0	106.0	79	123	5.5	2.5	20.0	
Trichlorofluoromethane	4.9	0.50	5.0	0.0	98.0	65	141	4.8	2.2	20.0	
1,2,3-Trichloropropane	5.5	0.50	5.0	0.0	110.0	73	125	5.2	4.9	20.0	
Vinyl chloride	5.3	0.50	5.0	0.0	106.0	58	137	5.0	5.1	20.0	
m+p-Xylenes	10	0.50	10	0.0	102.0	80	121	10	0.3	20.0	
o-Xylene	5.2	0.50	5.0	0.0	104.0	78	122	5.2	0.0	20.0	
Xylenes, Total	15	0.50	15	0.0	103.0	79	121	15	0.2	20.0	
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	114.0	81	118	0.0			
Surr: Dibromofluoromethane	11	0.50	10	0.0	109.0	80	119	0.0			
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	108.0	85	114	0.0			
Surr: Toluene-d8	11	0.50	10	0.0	110.0	89	112	0.0			

Associated Samples: **B22021435-001F, B22021435-002A, B22021435-006F, B22021435-007C, B22021435-008A, B22021435-012F, B22021435-013A, B22021435-017F, B22021435-018A, B22021435-022F, B22021435-023A, B22021435-027F, B22021435-028A, B22021435-032F, B22021435-033A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 10:03 **Prep Date:**
Lab ID: CCV022222_ **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		103.0	80	120				
Bromobenzene	5.2	0.50	5.0		103.0	80	120				
Bromochloromethane	5.1	0.50	5.0		101.0	80	120				
Bromodichloromethane	5.2	0.50	5.0		103.0	80	120				
Bromoform	5.1	0.50	5.0		103.0	80	120				
Carbon tetrachloride	5.1	0.50	5.0		103.0	80	120				
Chlorobenzene	5.1	0.50	5.0		101.0	80	120				
Chlorodibromomethane	5.2	0.50	5.0		105.0	80	120				
Chloroethane	5.7	0.50	5.0		113.0	80	120				
Chloroform	4.9	0.50	5.0		99.0	80	120				
Chloromethane	5.5	0.50	5.0		110.0	80	120				
1,2-Dibromoethane	5.2	0.50	5.0		105.0	80	120				
2-Chlorotoluene	5.2	0.50	5.0		103.0	80	120				
Dibromomethane	5.2	0.50	5.0		105.0	80	120				
1,2-Dichlorobenzene	5.0	0.50	5.0		100.0	80	120				
4-Chlorotoluene	5.3	0.50	5.0		106.0	80	120				
1,3-Dichlorobenzene	5.0	0.50	5.0		100.0	80	120				
1,4-Dichlorobenzene	5.1	0.50	5.0		103.0	80	120				
Dichlorodifluoromethane	5.5	0.50	5.0		111.0	80	120				
1,1-Dichloroethane	5.0	0.50	5.0		101.0	80	120				
1,2-Dichloroethane	5.1	0.50	5.0		103.0	80	120				
1,1-Dichloroethene	5.0	0.50	5.0		100.0	80	120				
cis-1,2-Dichloroethene	5.1	0.50	5.0		101.0	80	120				
trans-1,2-Dichloroethene	4.9	0.50	5.0		97.0	80	120				
1,2-Dichloropropane	5.3	0.50	5.0		106.0	80	120				
1,3-Dichloropropane	5.2	0.50	5.0		105.0	80	120				
2,2-Dichloropropane	5.3	0.50	5.0		105.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 10:03 **Prep Date:**
Lab ID: CCV022222_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.2	0.50	5.0		104.0	80	120				
cis-1,3-Dichloropropene	5.3	0.50	5.0		107.0	80	120				
trans-1,3-Dichloropropene	5.4	0.50	5.0		109.0	80	120				
Ethylbenzene	5.0	0.50	5.0		101.0	80	120				
Methyl tert-butyl ether (MTBE)	5.0	0.50	5.0		99.0	80	120				
Methyl ethyl ketone	42	10	50		84.0	80	120				
Methylene chloride	5.1	0.50	5.0		103.0	80	120				
Styrene	5.1	0.50	5.0		102.0	80	120				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0		102.0	80	120				
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0		108.0	80	120				
Tetrachloroethene	4.9	0.50	5.0		98.0	80	120				
Toluene	5.2	0.50	5.0		105.0	80	120				
1,1,1-Trichloroethane	5.1	0.50	5.0		102.0	80	120				
1,1,2-Trichloroethane	5.3	0.50	5.0		106.0	80	120				
Trichloroethene	5.3	0.50	5.0		105.0	80	120				
Trichlorofluoromethane	5.7	0.50	5.0		113.0	80	120				
1,2,3-Trichloropropane	5.3	0.50	5.0		105.0	80	120				
Vinyl chloride	5.4	0.50	5.0		109.0	80	120				
m+p-Xylenes	10	0.50	10		101.0	80	120				
o-Xylene	5.0	0.50	5.0		100.0	80	120				
Xylenes, Total	15	0.50	15		101.0	80	120				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		110.0	80	120				
Surr: Dibromofluoromethane	11	0.50	10		107.0	80	120				
Surr: p-Bromofluorobenzene	11	0.50	10		106.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 10:03 **Prep Date:**
Lab ID: CCV022222_ **Units:** ug/L **Prep Method:**

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

Associated Samples: **B22021435-001F, B22021435-002A, B22021435-006F, B22021435-007C, B22021435-008A, B22021435-012F, B22021435-013A, B22021435-017F, B22021435-018A, B22021435-022F, B22021435-023A, B22021435-027F, B22021435-028A, B22021435-032F, B22021435-033A**

Run ID: Run Order: VOA5975C.I_220222A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 21:26 **Prep Date:**
Lab ID: CCV022222_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	4.8	0.50	5.0		97.0	50	150				
Bromobenzene	4.7	0.50	5.0		93.0	50	150				
Bromochloromethane	4.9	0.50	5.0		98.0	50	150				
Bromodichloromethane	4.9	0.50	5.0		98.0	50	150				
Bromoform	4.5	0.50	5.0		91.0	50	150				
Carbon tetrachloride	4.9	0.50	5.0		98.0	50	150				
Chlorobenzene	4.7	0.50	5.0		93.0	50	150				
Chlorodibromomethane	4.7	0.50	5.0		94.0	50	150				
Chloroethane	6.2	0.50	5.0		124.0	50	150				
Chloroform	4.7	0.50	5.0		94.0	50	150				
Chloromethane	5.4	0.50	5.0		109.0	50	150				
1,2-Dibromoethane	4.7	0.50	5.0		95.0	50	150				
2-Chlorotoluene	4.8	0.50	5.0		95.0	50	150				
Dibromomethane	4.8	0.50	5.0		96.0	50	150				
1,2-Dichlorobenzene	4.6	0.50	5.0		91.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 21:26 **Prep Date:**
Lab ID: CCV022222_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	4.9	0.50	5.0		98.0	50	150				
1,3-Dichlorobenzene	4.5	0.50	5.0		91.0	50	150				
1,4-Dichlorobenzene	4.7	0.50	5.0		94.0	50	150				
Dichlorodifluoromethane	5.7	0.50	5.0		114.0	50	150				
1,1-Dichloroethane	4.8	0.50	5.0		96.0	50	150				
1,2-Dichloroethane	4.6	0.50	5.0		92.0	50	150				
1,1-Dichloroethene	4.8	0.50	5.0		96.0	50	150				
cis-1,2-Dichloroethene	4.8	0.50	5.0		95.0	50	150				
trans-1,2-Dichloroethene	4.7	0.50	5.0		93.0	50	150				
1,2-Dichloropropane	4.8	0.50	5.0		97.0	50	150				
1,3-Dichloropropane	4.9	0.50	5.0		97.0	50	150				
2,2-Dichloropropane	4.7	0.50	5.0		93.0	50	150				
1,1-Dichloropropene	5.0	0.50	5.0		100.0	50	150				
cis-1,3-Dichloropropene	4.6	0.50	5.0		92.0	50	150				
trans-1,3-Dichloropropene	4.8	0.50	5.0		96.0	50	150				
Ethylbenzene	4.6	0.50	5.0		93.0	50	150				
Methyl tert-butyl ether (MTBE)	4.7	0.50	5.0		93.0	50	150				
Methyl ethyl ketone	41	10	50		81.0	50	150				
Methylene chloride	4.7	0.50	5.0		95.0	50	150				
Styrene	4.6	0.50	5.0		92.0	50	150				
1,1,1,2-Tetrachloroethane	4.7	0.50	5.0		94.0	50	150				
1,1,2,2-Tetrachloroethane	4.7	0.50	5.0		94.0	50	150				
Tetrachloroethene	4.6	0.50	5.0		93.0	50	150				
Toluene	4.8	0.50	5.0		97.0	50	150				
1,1,1-Trichloroethane	4.9	0.50	5.0		97.0	50	150				
1,1,2-Trichloroethane	4.8	0.50	5.0		96.0	50	150				
Trichloroethene	4.9	0.50	5.0		98.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VOA5975C.I_220222A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375218
Method: SW8260B **Analysis Date:** 02/22/2022 21:26 **Prep Date:**
Lab ID: CCV022222_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	5.4	0.50	5.0		108.0	50	150				
1,2,3-Trichloropropane	4.6	0.50	5.0		92.0	50	150				
Vinyl chloride	5.4	0.50	5.0		109.0	50	150				
m+p-Xylenes	9.4	0.50	10		94.0	50	150				
o-Xylene	4.6	0.50	5.0		92.0	50	150				
Xylenes, Total	14	0.50	15		93.0	50	150				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		112.0	50	150				
Surr: Dibromofluoromethane	11	0.50	10		109.0	50	150				
Surr: p-Bromofluorobenzene	10	0.50	10		102.0	50	150				
Surr: Toluene-d8	11	0.50	10		109.0	50	150				

Associated Samples: **B22021435-001F, B22021435-002A, B22021435-006F, B22021435-007C, B22021435-008A, B22021435-012F, B22021435-013A, B22021435-017F, B22021435-018A, B22021435-022F, B22021435-023A, B22021435-027F, B22021435-028A, B22021435-032F, B22021435-033A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GECD.I_220224A: 10 **SampType:** Method Blank **Batch ID:** 163984
Method: SW8011 **Analysis Date:** 02/24/2022 17:06 **Prep Date:** 02/24/2022 07:53
Lab ID: MB-163984 **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	0.097	0.020	0.10		97.0	70	130				

Associated Samples: **B22021435-001H, B22021435-004A, B22021435-006H, B22021435-010A, B22021435-012H, B22021435-015A, B22021435-017H, B22021435-020A, B22021435-022H, B22021435-025A, B22021435-027H, B22021435-030A, B22021435-035A**

Run ID: Run Order: GECD.I_220224A: 11 **SampType:** Laboratory Control Sample **Batch ID:** 163984
Method: SW8011 **Analysis Date:** 02/24/2022 17:25 **Prep Date:** 02/24/2022 07:53
Lab ID: LCS-163984 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.24	0.010	0.25		97.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.096	0.020	0.10		96.0	70	130				

Associated Samples: **B22021435-001H, B22021435-004A, B22021435-006H, B22021435-010A, B22021435-012H, B22021435-015A, B22021435-017H, B22021435-020A, B22021435-022H, B22021435-025A, B22021435-027H, B22021435-030A, B22021435-035A**

Run ID: Run Order: GECD.I_220224A: 12 **SampType:** Laboratory Control Sample **Batch ID:** 163984
Method: SW8011 **Analysis Date:** 02/24/2022 17:45 **Prep Date:** 02/24/2022 07:55
Lab ID: LCS1-163984 **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		107.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.10	0.020	0.10		102.0	70	130				

Associated Samples: **B22021435-001H, B22021435-004A, B22021435-006H, B22021435-010A, B22021435-012H, B22021435-015A, B22021435-017H, B22021435-020A, B22021435-022H, B22021435-025A, B22021435-027H, B22021435-030A, B22021435-035A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GECD.I_220224A: 22 **SampType:** Sample Matrix Spike **Batch ID:** 163984
Method: SW8011 **Analysis Date:** 02/24/2022 21:22 **Prep Date:** 02/24/2022 08:00
Lab ID: B22021435-001HMS **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.24	0.010	0.24	0.0	97.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.095	0.020	0.098	0.0	97.0	70	130				

Associated Samples: **B22021435-001H, B22021435-004A, B22021435-006H, B22021435-010A, B22021435-012H, B22021435-015A, B22021435-017H, B22021435-020A, B22021435-022H, B22021435-025A, B22021435-027H, B22021435-030A, B22021435-035A**

Run ID: Run Order: GECD.I_220224A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 163984
Method: SW8011 **Analysis Date:** 02/24/2022 21:42 **Prep Date:** 02/24/2022 08:00
Lab ID: B22021435-001HMSD **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	0.24	0.0	95.0	60	140	0.24	1.7	40.0	
Surr: 1,1,1,2-Tetrachloroethane	0.097	0.020	0.098	0.0	99.0	70	130	0.0			

Associated Samples: **B22021435-001H, B22021435-004A, B22021435-006H, B22021435-010A, B22021435-012H, B22021435-015A, B22021435-017H, B22021435-020A, B22021435-022H, B22021435-025A, B22021435-027H, B22021435-030A, B22021435-035A**

Run ID: Run Order: GECD.I_220225A: 2 **SampType:** Method Blank **Batch ID:** 164037
Method: SW8011 **Analysis Date:** 02/25/2022 13:16 **Prep Date:** 02/25/2022 09:49
Lab ID: MB-164037 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	ND	0.0050									
Surr: 1,1,1,2-Tetrachloroethane	0.10	0.020	0.10		100.0	70	130				

Associated Samples: **B22021435-032H, B22021435-035A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GECD.I_220225A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164037
Method: SW8011 **Analysis Date:** 02/25/2022 13:36 **Prep Date:** 02/25/2022 09:49
Lab ID: LCS-164037 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.25	0.010	0.25		98.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.098	0.020	0.10		98.0	70	130				

Associated Samples: **B22021435-032H**

Run ID: Run Order: GECD.I_220225A: 4 **SampType:** Laboratory Control Sample **Batch ID:** 164037
Method: SW8011 **Analysis Date:** 02/25/2022 13:56 **Prep Date:** 02/25/2022 09:49
Lab ID: LCS1-164037 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.10	0.010	0.10		102.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.098	0.020	0.10		98.0	70	130				

Associated Samples: **B22021435-032H**

Run ID: Run Order: GECD.I_220225A: 13 **SampType:** Sample Matrix Spike **Batch ID:** 164037
Method: SW8011 **Analysis Date:** 02/25/2022 17:14 **Prep Date:** 02/25/2022 09:50
Lab ID: B22021627-001HMS **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.25	0.010	0.24	0.0	102.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.10	0.020	0.098	0.0	102.0	70	130				

Associated Samples: **B22021435-032H**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GECD.I_220225A: 14 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164037
Method: SW8011 **Analysis Date:** 02/25/2022 17:34 **Prep Date:** 02/25/2022 09:50
Lab ID: B22021627-001HMSD **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.25	0.010	0.24	0.0	105.0	60	140	0.25	2.1	20.0	
Surr: 1,1,1,2-Tetrachloroethane	0.10	0.020	0.097	0.0	107.0	70	130	0.0			

Associated Samples: **B22021435-032H**

Run ID: Run Order: GECD.I_220224A: 9 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 163984
Method: SW8011 **Analysis Date:** 02/24/2022 16:46 **Prep Date:** 02/24/2022 07:58
Lab ID: CAL3-163984 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.10	0.010	0.10		102.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.094	0.020	0.10		94.0	80	120				

Associated Samples: **B22021435-001H, B22021435-004A, B22021435-006H, B22021435-010A, B22021435-012H, B22021435-015A, B22021435-017H, B22021435-020A, B22021435-022H, B22021435-025A, B22021435-027H, B22021435-030A**

Run ID: Run Order: GECD.I_220224A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 163984
Method: SW8011 **Analysis Date:** 02/24/2022 22:22 **Prep Date:** 02/24/2022 07:59
Lab ID: CAL5-163984 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.41	0.010	0.40		103.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.42	0.020	0.40		106.0	80	120				

Associated Samples: **B22021435-001H, B22021435-004A, B22021435-006H, B22021435-010A, B22021435-012H, B22021435-015A, B22021435-017H, B22021435-020A, B22021435-022H, B22021435-025A, B22021435-027H, B22021435-030A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GECD.I_220224A: 31 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 163984
Method: SW8011 **Analysis Date:** 02/25/2022 02:38 **Prep Date:** 02/24/2022 07:58
Lab ID: CAL3-163984 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.12	0.010	0.10		119.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.10	0.020	0.10		103.0	80	120				

Associated Samples: **B22021435-001H, B22021435-004A, B22021435-006H, B22021435-010A, B22021435-012H, B22021435-015A, B22021435-017H, B22021435-020A, B22021435-022H, B22021435-025A, B22021435-027H, B22021435-030A**

Run ID: Run Order: GECD.I_220225A: 15 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164037
Method: SW8011 **Analysis Date:** 02/25/2022 18:13 **Prep Date:** 02/25/2022 09:50
Lab ID: CK5-164037 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.45	0.010	0.40		112.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.46	0.020	0.40		115.0	80	120				

Associated Samples: **B22021435-032H, B22021435-035A**

Run ID: Run Order: GECD.I_220225A: 18 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164037
Method: SW8011 **Analysis Date:** 02/25/2022 19:52 **Prep Date:** 02/25/2022 09:50
Lab ID: CK3-164037 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.12	0.010	0.10		123.0	70	130				
Surr: 1,1,1,2-Tetrachloroethane	0.11	0.020	0.10		106.0	70	130				

Associated Samples: **B22021435-032H, B22021435-035A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VARIAN1_220223A: 4 **SampType:** Method Blank **Batch ID:** R375111
Method: SW8015C **Analysis Date:** 02/23/2022 13:21 **Prep Date:**
Lab ID: MBLK_0223VAR05r **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		77.0	70	130				

Associated Samples: **B22021435-001G, B22021435-003A, B22021435-006G, B22021435-007D, B22021435-009A, B22021435-012G, B22021435-014A, B22021435-017G, B22021435-019A, B22021435-022G, B22021435-024A, B22021435-027G, B22021435-029A, B22021435-032G, B22021435-034A**

Run ID: Run Order: VARIAN1_220223A: 19 **SampType:** Method Blank **Batch ID:** R375111
Method: SW8015C **Analysis Date:** 02/24/2022 00:42 **Prep Date:**
Lab ID: MBLK_0223VAR25r **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		77.0	70	130				

Associated Samples: **B22021435-001G, B22021435-003A, B22021435-006G, B22021435-007D, B22021435-009A, B22021435-012G, B22021435-014A, B22021435-017G, B22021435-019A, B22021435-022G, B22021435-024A, B22021435-027G, B22021435-029A, B22021435-032G, B22021435-034A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VARIAN1_220223A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R375111
Method: SW8015C **Analysis Date:** 02/23/2022 12:14 **Prep Date:**
Lab ID: LCS_0223VAR03r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	162	20	170		95.0	78	122				
Total Purgeable Hydrocarbons	195	20	200		98.0	70	130				
Surr: Trifluorotoluene	22	1.0	25		87.0	70	130				

Associated Samples: **B22021435-001G, B22021435-003A, B22021435-006G, B22021435-007D, B22021435-009A, B22021435-012G, B22021435-014A, B22021435-017G, B22021435-019A, B22021435-022G, B22021435-024A, B22021435-027G, B22021435-029A, B22021435-032G, B22021435-034A**

Run ID: Run Order: VARIAN1_220223A: 18 **SampType:** Laboratory Control Sample **Batch ID:** R375111
Method: SW8015C **Analysis Date:** 02/23/2022 23:34 **Prep Date:**
Lab ID: LCS_0223VAR23r **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		98.0	78	122				
Total Purgeable Hydrocarbons	200	20	200		100.0	70	130				
Surr: Trifluorotoluene	22	1.0	25		90.0	70	130				

Associated Samples: **B22021435-001G, B22021435-003A, B22021435-006G, B22021435-007D, B22021435-009A, B22021435-012G, B22021435-014A, B22021435-017G, B22021435-019A, B22021435-022G, B22021435-024A, B22021435-027G, B22021435-029A, B22021435-032G, B22021435-034A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VARIAN1_220223A: 14 **SampType:** Sample Matrix Spike **Batch ID:** R375111
Method: SW8015C **Analysis Date:** 02/23/2022 20:44 **Prep Date:**
Lab ID: B22021435-007DMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	164	20	170	0.0	97.0	78	122				
Total Purgeable Hydrocarbons	199	20	200	0.0	100.0	70	130				
Surr: Trifluorotoluene	22	1.0	25	0.0	89.0	70	130				

Associated Samples: **B22021435-001G, B22021435-003A, B22021435-006G, B22021435-007D, B22021435-009A, B22021435-012G, B22021435-014A, B22021435-017G, B22021435-019A, B22021435-022G, B22021435-024A, B22021435-027G, B22021435-029A, B22021435-032G, B22021435-034A**

Run ID: Run Order: VARIAN1_220223A: 15 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R375111
Method: SW8015C **Analysis Date:** 02/23/2022 21:18 **Prep Date:**
Lab ID: B22021435-007DMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	161	20	170	0.0	95.0	78	122	164	1.8	20.0	
Total Purgeable Hydrocarbons	195	20	200	0.0	98.0	70	130	199	2.1	20.0	
Surr: Trifluorotoluene	22	1.0	25	0.0	89.0	70	130	0.0			

Associated Samples: **B22021435-001G, B22021435-003A, B22021435-006G, B22021435-007D, B22021435-009A, B22021435-012G, B22021435-014A, B22021435-017G, B22021435-019A, B22021435-022G, B22021435-024A, B22021435-027G, B22021435-029A, B22021435-032G, B22021435-034A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220223A: 5 **SampType:** Method Blank **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/23/2022 15:48 **Prep Date:** 02/22/2022 12:25
Lab ID: MB-163927 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	ND	0.15									
Oil Range Hydrocarbons (C24 to C40)	ND	0.15									
Total Extractable Hydrocarbons	ND	0.15									
Surr: o-Terphenyl	0.19	0.0020	0.20		93.0	56	125				
Surr: n-Triacontane	0.085	0.0020	0.10		85.0	50	150				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223B: 5 **SampType:** Method Blank **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/25/2022 04:24 **Prep Date:** 02/22/2022 12:25
Lab ID: MB-163927 **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)	0.18	0.0020	0.20		88.0	56	125				
Surr: n-Triacontane (SGT)	0.078	0.0020	0.10		78.0	50	150				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220223A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/23/2022 14:22 **Prep Date:** 02/22/2022 12:25
Lab ID: LCS-163927 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	12	0.30	15		81.0	36	132				
Total Extractable Hydrocarbons	13	0.30	15		86.0	60	132				
Surr: o-Terphenyl	0.18	0.0020	0.20		92.0	56	125				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223A: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/23/2022 15:05 **Prep Date:** 02/22/2022 12:25
Lab ID: LCSD-163927 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	13	0.30	15		84.0	36	132	12	3.4	20.0	
Total Extractable Hydrocarbons	13	0.30	15		89.0	60	132	13	3.4	20.0	
Surr: o-Terphenyl	0.19	0.0020	0.20		95.0	56	125	0.0			

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223A: 21 **SampType:** Laboratory Control Sample **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/24/2022 14:02 **Prep Date:** 02/22/2022 12:25
Lab ID: LCS-RRO-163927 **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		104.0	41	113				
Surr: n-Triacontane	0.091	0.0020	0.10		91.0	50	150				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220223A: 22 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/24/2022 14:45 **Prep Date:** 02/22/2022 12:25
Lab ID: LCSD-RRO-163927 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.1	0.30	5.0		103.0	41	113	5.2	0.8	20.0	
Surr: n-Triacontane	0.087	0.0020	0.10		87.0	50	150	0.0			

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223B: 3 **SampType:** Laboratory Control Sample **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/25/2022 02:58 **Prep Date:** 02/22/2022 12:25
Lab ID: LCS-163927 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	12	0.30	15		77.0	36	132				
Total Extractable Hydrocarbons (SGT)	12	0.30	15		82.0	60	132				
Surr: o-Terphenyl (SGT)	0.19	0.0020	0.20		93.0	56	125				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223B: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/25/2022 03:41 **Prep Date:** 02/22/2022 12:25
Lab ID: LCSD-163927 **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		80.0	36	132	12	3.9	20.0	
Total Extractable Hydrocarbons (SGT)	13	0.30	15		85.0	60	132	12	3.6	20.0	
Surr: o-Terphenyl (SGT)	0.19	0.0020	0.20		94.0	56	125	0.0			

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220223B: 16 **SampType:** Laboratory Control Sample **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/25/2022 15:50 **Prep Date:** 02/22/2022 12:25
Lab ID: LCS-RRO-163927 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	4.9	0.30	5.0		98.0	41	113				
Surr: n-Triacontane (SGT)	0.083	0.0020	0.10		83.0	50	150				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223B: 17 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/25/2022 17:15 **Prep Date:** 02/22/2022 12:25
Lab ID: LCSD-RRO-163927 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	4.6	0.30	5.0		93.0	41	113	4.9	5.3	20.0	
Surr: n-Triacontane (SGT)	0.077	0.0020	0.10		77.0	50	150	0.0			

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223A: 11 **SampType:** Sample Matrix Spike **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/23/2022 20:49 **Prep Date:** 02/22/2022 12:25
Lab ID: B22021435-012DMS **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	12	0.30	14	0.0	85.0	36	132				
Total Extractable Hydrocarbons	13	0.30	14	0.15	91.0	60	132				
Surr: o-Terphenyl	0.18	0.0020	0.19	0.0	95.0	56	125				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220223A: 18 **SampType:** Sample Matrix Spike **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/24/2022 07:34 **Prep Date:** 02/22/2022 12:26
Lab ID: B22021435-017DMS-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.8	0.30	4.7	0.42	94.0	41	113				
Surr: n-Triacontane	0.078	0.0020	0.094	0.0	83.0	50	150				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223B: 7 **SampType:** Sample Matrix Spike **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/25/2022 05:49 **Prep Date:** 02/22/2022 12:25
Lab ID: B22021435-012DMS **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	12	0.30	14	0.0	82.0	36	132				
Total Extractable Hydrocarbons (SGT)	13	0.30	14	0.044	87.0	60	132				
Surr: o-Terphenyl (SGT)	0.19	0.0020	0.19	0.0	98.0	56	125				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223B: 11 **SampType:** Sample Matrix Spike **Batch ID:** 163927
Method: SW8015C **Analysis Date:** 02/25/2022 10:06 **Prep Date:** 02/22/2022 12:26
Lab ID: B22021435-017DMS-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	4.4	0.30	4.7	0.0	93.0	41	113				
Surr: n-Triacontane (SGT)	0.075	0.0020	0.094	0.0	80.0	50	150				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VARIAN1_220223A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375111
Method: SW8015C **Analysis Date:** 02/23/2022 11:40 **Prep Date:**
Lab ID: CCV_0223VAR02r **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	168		100.0	80	120				
Total Purgeable Hydrocarbons	201	20	200		101.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		89.0	80	120				

Associated Samples: **B22021435-001G, B22021435-003A, B22021435-006G, B22021435-007D, B22021435-009A, B22021435-012G, B22021435-014A, B22021435-017G, B22021435-019A, B22021435-022G, B22021435-024A, B22021435-027G, B22021435-029A, B22021435-032G, B22021435-034A**

Run ID: Run Order: VARIAN1_220223A: 17 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375111
Method: SW8015C **Analysis Date:** 02/23/2022 23:00 **Prep Date:**
Lab ID: CCV_0223VAR22r **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		102.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		89.0	80	120				

Associated Samples: **B22021435-001G, B22021435-003A, B22021435-006G, B22021435-007D, B22021435-009A, B22021435-012G, B22021435-014A, B22021435-017G, B22021435-019A, B22021435-022G, B22021435-024A, B22021435-027G, B22021435-029A, B22021435-032G, B22021435-034A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: VARIAN1_220223A: 27 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375111
Method: SW8015C **Analysis Date:** 02/24/2022 08:39 **Prep Date:**
Lab ID: CCV_0223VAR39r **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	166		100.0	80	120				
Total Purgeable Hydrocarbons	200	20	200		100.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		89.0	80	120				

Associated Samples: **B22021435-001G, B22021435-003A, B22021435-006G, B22021435-007D, B22021435-009A, B22021435-012G, B22021435-014A, B22021435-017G, B22021435-019A, B22021435-022G, B22021435-024A, B22021435-027G, B22021435-029A, B22021435-032G, B22021435-034A**

Run ID: Run Order: GCFID-HP5-B_220223A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375155
Method: SW8015C **Analysis Date:** 02/23/2022 11:22 **Prep Date:**
Lab ID: CCV_0223HP504r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.6	0.30	5.0		111.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375155
Method: SW8015C **Analysis Date:** 02/23/2022 12:05 **Prep Date:**
Lab ID: CCV_0223HP505r **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: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220223A: 12 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375155
Method: SW8015C **Analysis Date:** 02/23/2022 22:15 **Prep Date:**
Lab ID: CCV_0223HP519r-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: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223A: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375155
Method: SW8015C **Analysis Date:** 02/23/2022 22:58 **Prep Date:**
Lab ID: CCV_0223HP520r **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		92.0	80	120				
Total Extractable Hydrocarbons	14	0.30	15		96.0	80	120				
Surr: o-Terphenyl	0.18	0.0020	0.20		88.0	80	120				

Associated Samples: **B22021435-001D, B22021435-006D, B22021435-007B, B22021435-012D, B22021435-017D, B22021435-022D, B22021435-027D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375295
Method: SW8015C **Analysis Date:** 02/25/2022 00:49 **Prep Date:**
Lab ID: CCV_0223HP556r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		101.0	80	120				
Total Extractable Hydrocarbons	16	0.30	15		105.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: **B22021435-012D, B22021435-017D, B22021435-032D**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: GCFID-HP5-B_220223B: 12 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375295
Method: SW8015C **Analysis Date:** 02/25/2022 11:33 **Prep Date:**
Lab ID: CCV_0223HP571r-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		97.0	80	120				

Associated Samples: **B22021435-012D, B22021435-017D, B22021435-032D**

Run ID: Run Order: GCFID-HP5-B_220223B: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375295
Method: SW8015C **Analysis Date:** 02/25/2022 12:16 **Prep Date:**
Lab ID: CCV_0223HP572r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		99.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		102.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		94.0	80	120				

Associated Samples: **B22021435-012D, B22021435-017D, B22021435-032D**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: FID-HEADSPACE_220223A: 4 **SampType:** Method Blank **Batch ID:** R375084
Method: SW8015M **Analysis Date:** 02/23/2022 10:32 **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: **B22021435-001I, B22021435-005A, B22021435-006I, B22021435-011A, B22021435-012I, B22021435-016A, B22021435-017I, B22021435-021A, B22021435-022I, B22021435-026A, B22021435-027I, B22021435-031A, B22021435-032I, B22021435-036A**

Run ID: Run Order: FID-HEADSPACE_220223A: 2 **SampType:** Laboratory Control Sample **Batch ID:** R375084
Method: SW8015M **Analysis Date:** 02/23/2022 08:56 **Prep Date:**
Lab ID: LCS **Units:** ppm **Prep Method:**

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

Associated Samples: **B22021435-001I, B22021435-005A, B22021435-006I, B22021435-011A, B22021435-012I, B22021435-016A, B22021435-017I, B22021435-021A, B22021435-022I, B22021435-026A, B22021435-027I, B22021435-031A, B22021435-032I, B22021435-036A**

Run ID: Run Order: FID-HEADSPACE_220223A: 3 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** R375084
Method: SW8015M **Analysis Date:** 02/23/2022 09:02 **Prep Date:**
Lab ID: LCSD **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	100	2.0	100		101.0	85	115	100	0.6	20.0	

Associated Samples: **B22021435-001I, B22021435-005A, B22021435-006I, B22021435-011A, B22021435-012I, B22021435-016A, B22021435-017I, B22021435-021A, B22021435-022I, B22021435-026A, B22021435-027I, B22021435-031A, B22021435-032I, B22021435-036A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: FID-HEADSPACE_220223A: 12 **SampType:** Sample Duplicate **Batch ID:** R375084
Method: SW8015M **Analysis Date:** 02/23/2022 11:48 **Prep Date:**
Lab ID: B22021435-017IDUP **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	0.34	0.16			0.0			0.35	2.8	20.0	

Associated Samples: **B22021435-001I, B22021435-005A, B22021435-006I, B22021435-011A, B22021435-012I, B22021435-016A, B22021435-017I, B22021435-021A, B22021435-022I, B22021435-026A, B22021435-027I, B22021435-031A, B22021435-032I, B22021435-036A**

Run ID: Run Order: FID-HEADSPACE_220223A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375084
Method: SW8015M **Analysis Date:** 02/23/2022 08:47 **Prep Date:**
Lab ID: CCV **Units:** ppm **Prep Method:**

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

Associated Samples: **B22021435-001I, B22021435-005A, B22021435-006I, B22021435-011A, B22021435-012I, B22021435-016A, B22021435-017I, B22021435-021A, B22021435-022I, B22021435-026A, B22021435-027I, B22021435-031A, B22021435-032I, B22021435-036A**

Run ID: Run Order: FID-HEADSPACE_220223A: 20 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375084
Method: SW8015M **Analysis Date:** 02/23/2022 12:48 **Prep Date:**
Lab ID: CCV **Units:** ppm **Prep Method:**

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

Associated Samples: **B22021435-001I, B22021435-005A, B22021435-006I, B22021435-011A, B22021435-012I, B22021435-016A, B22021435-017I, B22021435-021A, B22021435-022I, B22021435-026A, B22021435-027I, B22021435-031A, B22021435-032I, B22021435-036A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 4 **SampType:** Method Blank **Batch ID:** 163957
Method: SW8270C **Analysis Date:** 02/24/2022 17:15 **Prep Date:** 02/23/2022 09:42
Lab ID: MB-163957 **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: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 4 **SampType:** Method Blank **Batch ID:** 163957
Method: SW8270C **Analysis Date:** 02/24/2022 17:15 **Prep Date:** 02/23/2022 09:42
Lab ID: MB-163957 **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	134	5.0	200		67.0	43	140				
Surr: 2-Fluorobiphenyl	64	5.0	100		64.0	44	119				
Surr: 2-Fluorophenol	62	5.0	200		31.0	19	119				
Surr: Nitrobenzene-d5	61	5.0	100		61.0	44	120				
Surr: Phenol-d5	56	5.0	200		28.0	10	65				
Surr: Terphenyl-d14	100	5.0	100		100.0	50	134				

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 5 **SampType:** Laboratory Control Sample **Batch ID:** 163957
Method: SW8270C **Analysis Date:** 02/24/2022 17:48 **Prep Date:** 02/23/2022 09:42
Lab ID: LCS-163957 **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	60	10	100		60.0	29	116				
1,2-Dichlorobenzene	57	10	100		57.0	32	111				
1,3-Dichlorobenzene	55	10	100		55.0	28	110				
1,4-Dichlorobenzene	52	10	100		52.0	29	112				
2,4,5-Trichlorophenol	73	10	100		73.0	53	123				
2,4,6-Trichlorophenol	75	10	100		75.0	50	125				
2,4-Dichlorophenol	66	10	100		66.0	47	121				
2,4-Dimethylphenol	76	10	100		76.0	31	124				
2,4-Dinitrophenol	71	10	100		71.0	23	142				
2,4-Dinitrotoluene	91	10	100		91.0	57	128				
2,6-Dinitrotoluene	83	10	100		83.0	50	118				
2-Chloronaphthalene	77	10	100		77.0	40	116				
2-Chlorophenol	57	10	100		57.0	38	117				
2-Nitrophenol	76	10	100		76.0	47	123				
3,3´-Dichlorobenzidine	60	10	100		60.0	27	129				
4,6-Dinitro-2-methylphenol	83	10	100		83.0	44	137				
4-Bromophenyl phenyl ether	83	10	100		83.0	55	124				
4-Chloro-3-methylphenol	71	10	100		71.0	52	119				
4-Chlorophenol	59	10	100		59.0	41	81				
4-Chlorophenyl phenyl ether	85	10	100		85.0	53	121				
4-Nitrophenol	38	10	100		38.0	15	36				S
Azobenzene	73	10	100		73.0	61	116				
bis(-2-chloroethoxy)Methane	74	10	100		74.0	48	120				
bis(-2-chloroethyl)Ether	64	10	100		64.0	43	118				
bis(2-chloroisopropyl)Ether	58	10	100		58.0	37	130				
bis(2-ethylhexyl)Phthalate	92	10	100		92.0	55	135				
Butylbenzylphthalate	89	10	100		89.0	53	134				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 5 **SampType:** Laboratory Control Sample **Batch ID:** 163957
Method: SW8270C **Analysis Date:** 02/24/2022 17:48 **Prep Date:** 02/23/2022 09:42
Lab ID: LCS-163957 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	91	10	100		91.0	56	125				
Dimethyl phthalate	91	10	100		91.0	45	127				
Di-n-butyl phthalate	93	10	100		93.0	59	127				
Di-n-octyl phthalate	93	10	100		93.0	51	140				
Hexachlorobenzene	80	10	100		80.0	53	125				
Hexachlorobutadiene	55	10	100		55.0	22	124				
Hexachlorocyclopentadiene	67	10	100		67.0	39	91				
Hexachloroethane	56	10	100		56.0	21	115				
Isophorone	76	10	100		76.0	42	124				
m+p-Cresols	66	10	100		66.0	29	110				
Nitrobenzene	70	10	100		70.0	45	121				
n-Nitrosodimethylamine	46	10	100		46.0	20	45				S
n-Nitroso-di-n-propylamine	83	10	100		83.0	49	119				
n-Nitrosodiphenylamine	83	10	100		83.0	51	123				
o-Cresol	64	10	100		64.0	30	117				
Pentachlorophenol	82	10	100		82.0	35	138				
Phenol	41	10	100		41.0	37	75				
Pyridine	29	10	100		29.0	16	45				
Surr: 2,4,6-Tribromophenol	161	10	200		80.0	43	140				
Surr: 2-Fluorobiphenyl	71	10	100		71.0	44	119				
Surr: 2-Fluorophenol	78	10	200		39.0	19	119				
Surr: Nitrobenzene-d5	73	10	100		73.0	44	120				
Surr: Phenol-d5	73	10	200		36.0	10	65				
Surr: Terphenyl-d14	91	10	100		91.0	50	134				

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 6 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163957
Method: SW8270C **Analysis Date:** 02/24/2022 18:20 **Prep Date:** 02/23/2022 09:42
Lab ID: LCSD-163957 **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	63	10	100		63.0	29	116	60	5.1	20.0	
1,2-Dichlorobenzene	76	10	100		76.0	32	111	57	29.0	20.0	R
1,3-Dichlorobenzene	64	10	100		64.0	28	110	55	15.0	20.0	
1,4-Dichlorobenzene	61	10	100		61.0	29	112	52	15.0	20.0	
2,4,5-Trichlorophenol	81	10	100		81.0	53	123	73	11.0	20.0	
2,4,6-Trichlorophenol	91	10	100		91.0	50	125	75	20.0	20.0	
2,4-Dichlorophenol	67	10	100		67.0	47	121	66	2.6	20.0	
2,4-Dimethylphenol	72	10	100		72.0	31	124	76	4.6	20.0	
2,4-Dinitrophenol	74	10	100		74.0	23	142	71	4.3	20.0	
2,4-Dinitrotoluene	108	10	100		108.0	57	128	91	17.0	20.0	
2,6-Dinitrotoluene	100	10	100		100.0	50	118	83	18.0	20.0	
2-Chloronaphthalene	92	10	100		92.0	40	116	77	18.0	20.0	
2-Chlorophenol	66	10	100		66.0	38	117	57	14.0	20.0	
2-Nitrophenol	79	10	100		79.0	47	123	76	4.8	20.0	
3,3´-Dichlorobenzidine	67	10	100		67.0	27	129	60	11.0	20.0	
4,6-Dinitro-2-methylphenol	82	10	100		82.0	44	137	83	1.4	20.0	
4-Bromophenyl phenyl ether	93	10	100		93.0	55	124	83	11.0	20.0	
4-Chloro-3-methylphenol	75	10	100		75.0	52	119	71	6.0	20.0	
4-Chlorophenol	63	10	100		63.0	41	81	59	5.9	20.0	
4-Chlorophenyl phenyl ether	105	10	100		105.0	53	121	85	21.0	20.0	R
4-Nitrophenol	42	10	100		42.0	15	36	38	9.2	20.0	S
Azobenzene	80	10	100		80.0	61	116	73	8.5	20.0	
bis(-2-chloroethoxy)Methane	75	10	100		75.0	48	120	74	1.3	20.0	
bis(-2-chloroethyl)Ether	75	10	100		75.0	43	118	64	16.0	20.0	
bis(2-chloroisopropyl)Ether	70	10	100		70.0	37	130	58	18.0	20.0	
bis(2-ethylhexyl)Phthalate	107	10	100		107.0	55	135	92	15.0	20.0	
Butylbenzylphthalate	105	10	100		105.0	53	134	89	16.0	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 6 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 163957
Method: SW8270C **Analysis Date:** 02/24/2022 18:20 **Prep Date:** 02/23/2022 09:42
Lab ID: LCSD-163957 **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	116	10	100		116.0	56	125	91	24.0	20.0	R
Dimethyl phthalate	108	10	100		108.0	45	127	91	17.0	20.0	
Di-n-butyl phthalate	105	10	100		105.0	59	127	93	13.0	20.0	
Di-n-octyl phthalate	94	10	100		94.0	51	140	93	1.5	20.0	
Hexachlorobenzene	86	10	100		86.0	53	125	80	7.3	20.0	
Hexachlorobutadiene	60	10	100		60.0	22	124	55	8.5	20.0	
Hexachlorocyclopentadiene	78	10	100		78.0	39	91	67	15.0	20.0	
Hexachloroethane	63	10	100		63.0	21	115	56	12.0	20.0	
Isophorone	78	10	100		78.0	42	124	76	3.2	20.0	
m+p-Cresols	74	10	100		74.0	29	110	66	12.0	20.0	
Nitrobenzene	88	10	100		88.0	45	121	70	23.0	20.0	R
n-Nitrosodimethylamine	62	10	100		62.0	20	45	46	30.0	20.0	SR
n-Nitroso-di-n-propylamine	95	10	100		95.0	49	119	83	14.0	20.0	
n-Nitrosodiphenylamine	95	10	100		95.0	51	123	83	14.0	20.0	
o-Cresol	72	10	100		72.0	30	117	64	11.0	20.0	
Pentachlorophenol	92	10	100		92.0	35	138	82	12.0	20.0	
Phenol	47	10	100		47.0	37	75	41	15.0	20.0	
Pyridine	37	10	100		37.0	16	45	29	25.0	20.0	R
Surr: 2,4,6-Tribromophenol	171	10	200		86.0	43	140	0.0	0.0		
Surr: 2-Fluorobiphenyl	88	10	100		88.0	44	119	0.0	0.0		
Surr: 2-Fluorophenol	87	10	200		43.0	19	119	0.0	0.0		
Surr: Nitrobenzene-d5	84	10	100		84.0	44	120	0.0	0.0		
Surr: Phenol-d5	90	10	200		45.0	10	65	0.0	0.0		
Surr: Terphenyl-d14	92	10	100		92.0	50	134	0.0	0.0		

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 8 **SampType:** Sample Matrix Spike **Batch ID:** 163957
Method: SW8270C **Analysis Date:** 02/24/2022 19:24 **Prep Date:** 02/23/2022 09:43
Lab ID: B22021435-001CMS **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	62	10	100	0.0	62.0	48	98				
1,2-Dichlorobenzene	62	10	100	0.0	62.0	48	91				
1,3-Dichlorobenzene	59	10	100	0.0	59.0	46	89				
1,4-Dichlorobenzene	56	10	100	0.0	56.0	46	90				
2,4,5-Trichlorophenol	67	10	100	0.0	67.0	27	123				
2,4,6-Trichlorophenol	70	10	100	0.0	70.0	24	120				
2,4-Dichlorophenol	64	10	100	0.0	64.0	24	107				
2,4-Dimethylphenol	76	10	100	0.0	76.0	39	96				
2,4-Dinitrophenol	67	10	100	0.0	67.0	16	105				
2,4-Dinitrotoluene	89	10	100	0.0	89.0	64	116				
2,6-Dinitrotoluene	80	10	100	0.0	80.0	56	116				
2-Chloronaphthalene	78	10	100	0.0	78.0	55	104				
2-Chlorophenol	58	10	100	0.0	58.0	22	97				
2-Nitrophenol	74	10	100	0.0	74.0	30	105				
3,3´-Dichlorobenzidine	59	10	100	0.0	59.0	36	120				
4,6-Dinitro-2-methylphenol	81	10	100	0.0	81.0	19	128				
4-Bromophenyl phenyl ether	88	10	100	0.0	88.0	60	113				
4-Chloro-3-methylphenol	77	10	100	0.0	77.0	35	101				
4-Chlorophenol	62	10	100	0.0	62.0	16	98				
4-Chlorophenyl phenyl ether	89	10	100	0.0	89.0	60	108				
4-Nitrophenol	37	10	100	0.0	37.0	10	77				
Azobenzene	75	10	100	0.0	75.0	58	107				
bis(-2-chloroethoxy)Methane	76	10	100	0.0	76.0	54	102				
bis(-2-chloroethyl)Ether	64	10	100	0.0	64.0	45	92				
bis(2-chloroisopropyl)Ether	59	10	100	0.0	59.0	43	85				
bis(2-ethylhexyl)Phthalate	90	10	100	0.0	90.0	44	128				
Butylbenzylphthalate	93	10	100	0.0	93.0	57	121				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 8 **SampType:** Sample Matrix Spike **Batch ID:** 163957
Method: SW8270C **Analysis Date:** 02/24/2022 19:24 **Prep Date:** 02/23/2022 09:43
Lab ID: B22021435-001CMS **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	97	10	100	0.0	97.0	56	115				
Dimethyl phthalate	94	10	100	0.0	94.0	46	115				
Di-n-butyl phthalate	99	10	100	0.0	99.0	57	121				
Di-n-octyl phthalate	91	10	100	0.0	91.0	45	106				
Hexachlorobenzene	82	10	100	0.0	82.0	57	106				
Hexachlorobutadiene	57	10	100	0.0	57.0	38	95				
Hexachlorocyclopentadiene	62	10	100	0.0	62.0	44	95				
Hexachloroethane	57	10	100	0.0	57.0	39	98				
Isophorone	77	10	100	0.0	77.0	51	97				
m+p-Cresols	68	10	100	0.0	68.0	25	98				
Nitrobenzene	69	10	100	0.0	69.0	49	110				
n-Nitrosodimethylamine	54	10	100	0.0	54.0	21	65				
n-Nitroso-di-n-propylamine	85	10	100	0.0	85.0	55	106				
n-Nitrosodiphenylamine	83	10	100	0.0	83.0	58	117				
o-Cresol	67	10	100	0.0	67.0	34	98				
Pentachlorophenol	88	10	100	0.0	88.0	24	130				
Phenol	44	10	100	0.0	44.0	37	75				
Pyridine	32	10	100	0.0	32.0	10	65				
Surr: 2,4,6-Tribromophenol	158	10	200	0.0	79.0	25	140				
Surr: 2-Fluorobiphenyl	72	10	100	0.0	72.0	28	107				
Surr: 2-Fluorophenol	71	10	200	0.0	35.0	10	75				
Surr: Nitrobenzene-d5	69	10	100	0.0	69.0	32	94				
Surr: Phenol-d5	75	10	200	0.0	37.0	10	65				
Surr: Terphenyl-d14	92	10	100	0.0	92.0	32	122				

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 10 **SampType:** Sample Matrix Spike **Batch ID:** 163957
Method: SW8270C **Analysis Date:** 02/24/2022 20:29 **Prep Date:** 02/23/2022 09:43
Lab ID: B22021435-006CMS **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	61	10	100	0.0	61.0	48	98				
1,2-Dichlorobenzene	58	10	100	0.0	58.0	48	91				
1,3-Dichlorobenzene	56	10	100	0.0	56.0	46	89				
1,4-Dichlorobenzene	52	10	100	0.0	52.0	46	90				
2,4,5-Trichlorophenol	64	10	100	0.0	64.0	27	123				
2,4,6-Trichlorophenol	68	10	100	0.0	68.0	24	120				
2,4-Dichlorophenol	56	10	100	0.0	56.0	24	107				
2,4-Dimethylphenol	68	10	100	0.0	68.0	39	96				
2,4-Dinitrophenol	67	10	100	0.0	67.0	16	105				
2,4-Dinitrotoluene	100	10	100	0.0	100.0	64	116				
2,6-Dinitrotoluene	88	10	100	0.0	88.0	56	116				
2-Chloronaphthalene	81	10	100	0.0	81.0	55	104				
2-Chlorophenol	52	10	100	0.0	52.0	22	97				
2-Nitrophenol	68	10	100	0.0	68.0	30	105				
3,3´-Dichlorobenzidine	63	10	100	0.0	63.0	36	120				
4,6-Dinitro-2-methylphenol	74	10	100	0.0	74.0	19	128				
4-Bromophenyl phenyl ether	86	10	100	0.0	86.0	60	113				
4-Chloro-3-methylphenol	71	10	100	0.0	71.0	35	101				
4-Chlorophenol	57	10	100	0.0	57.0	16	98				
4-Chlorophenyl phenyl ether	86	10	100	0.0	86.0	60	108				
4-Nitrophenol	36	10	100	0.0	36.0	10	77				
Azobenzene	79	10	100	0.0	79.0	58	107				
bis(-2-chloroethoxy)Methane	73	10	100	0.0	73.0	54	102				
bis(-2-chloroethyl)Ether	62	10	100	0.0	62.0	45	92				
bis(2-chloroisopropyl)Ether	56	10	100	0.0	56.0	43	85				
bis(2-ethylhexyl)Phthalate	86	10	100	0.0	86.0	44	128				
Butylbenzylphthalate	95	10	100	0.0	95.0	57	121				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 10 **SampType:** Sample Matrix Spike **Batch ID:** 163957
Method: SW8270C **Analysis Date:** 02/24/2022 20:29 **Prep Date:** 02/23/2022 09:43
Lab ID: B22021435-006CMS **Units:** ug/L **Prep Method:** SW3510C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	97	10	100	0.0	97.0	56	115				
Dimethyl phthalate	89	10	100	0.0	89.0	46	115				
Di-n-butyl phthalate	96	10	100	0.0	96.0	57	121				
Di-n-octyl phthalate	84	10	100	0.0	84.0	45	106				
Hexachlorobenzene	84	10	100	0.0	84.0	57	106				
Hexachlorobutadiene	55	10	100	0.0	55.0	38	95				
Hexachlorocyclopentadiene	62	10	100	0.0	62.0	44	95				
Hexachloroethane	55	10	100	0.0	55.0	39	98				
Isophorone	72	10	100	0.0	72.0	51	97				
m+p-Cresols	60	10	100	0.0	60.0	25	98				
Nitrobenzene	69	10	100	0.0	69.0	49	110				
n-Nitrosodimethylamine	49	10	100	0.0	49.0	21	65				
n-Nitroso-di-n-propylamine	79	10	100	0.0	79.0	55	106				
n-Nitrosodiphenylamine	88	10	100	0.0	88.0	58	117				
o-Cresol	61	10	100	0.0	61.0	34	98				
Pentachlorophenol	89	10	100	0.0	89.0	24	130				
Phenol	41	10	100	0.0	41.0	37	75				
Pyridine	28	10	100	0.0	28.0	10	65				
Surr: 2,4,6-Tribromophenol	151	10	200	0.0	75.0	25	140				
Surr: 2-Fluorobiphenyl	70	10	100	0.0	70.0	28	107				
Surr: 2-Fluorophenol	59	10	200	0.0	29.0	10	75				
Surr: Nitrobenzene-d5	68	10	100	0.0	68.0	32	94				
Surr: Phenol-d5	70	10	200	0.0	35.0	10	65				
Surr: Terphenyl-d14	93	10	100	0.0	93.0	32	122				

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375205
Method: SW8270C **Analysis Date:** 02/24/2022 16:11 **Prep Date:**
Lab ID: 24-Feb-22_CCV_2 **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	67	10	75		90.0	80	120				
1,2-Dichlorobenzene	70	10	75		94.0	80	120				
1,3-Dichlorobenzene	70	10	75		94.0	80	120				
1,4-Dichlorobenzene	69	10	75		91.0	80	120				
2,4,5-Trichlorophenol	62	10	75		82.0	80	120				
2,4,6-Trichlorophenol	65	10	75		87.0	80	120				
2,4-Dichlorophenol	62	10	75		83.0	80	120				
2,4-Dimethylphenol	74	10	75		98.0	80	120				
2,4-Dinitrophenol	78	10	75		104.0	80	120				
2,4-Dinitrotoluene	76	10	75		101.0	80	120				
2,6-Dinitrotoluene	73	10	75		98.0	80	120				
2-Chloronaphthalene	69	10	75		92.0	80	120				
2-Chlorophenol	63	10	75		84.0	80	120				
2-Nitrophenol	74	10	75		98.0	80	120				
3,3´-Dichlorobenzidine	63	10	75		84.0	80	120				
4,6-Dinitro-2-methylphenol	76	10	75		101.0	80	120				
4-Bromophenyl phenyl ether	72	10	75		96.0	80	120				
4-Chloro-3-methylphenol	68	10	75		90.0	80	120				
4-Chlorophenol	67	10	75		90.0	80	120				
4-Chlorophenyl phenyl ether	72	10	75		96.0	80	120				
4-Nitrophenol	68	10	75		91.0	80	120				
Azobenzene	66	10	75		88.0	80	120				
bis(-2-chloroethoxy)Methane	72	10	75		96.0	80	120				
bis(-2-chloroethyl)Ether	70	10	75		93.0	80	120				
bis(2-chloroisopropyl)Ether	68	10	75		91.0	80	120				
bis(2-ethylhexyl)Phthalate	75	10	75		100.0	80	120				
Butylbenzylphthalate	75	10	75		99.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375205
Method: SW8270C **Analysis Date:** 02/24/2022 16:11 **Prep Date:**
Lab ID: 24-Feb-22_CCV_2 **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	71	10	75		94.0	80	120				
Dimethyl phthalate	72	10	75		97.0	80	120				
Di-n-butyl phthalate	69	10	75		93.0	80	120				
Di-n-octyl phthalate	72	10	75		96.0	80	120				
Hexachlorobenzene	69	10	75		91.0	80	120				
Hexachlorobutadiene	66	10	75		89.0	80	120				
Hexachlorocyclopentadiene	74	10	75		98.0	80	120				
Hexachloroethane	70	10	75		94.0	80	120				
Isophorone	76	10	75		102.0	80	120				
m+p-Cresols	72	10	75		96.0	80	120				
Nitrobenzene	65	10	75		87.0	80	120				
n-Nitrosodimethylamine	83	10	75		111.0	80	120				
n-Nitroso-di-n-propylamine	74	10	75		99.0	80	120				
n-Nitrosodiphenylamine	70	10	75		93.0	80	120				
o-Cresol	67	10	75		90.0	80	120				
Pentachlorophenol	65	10	75		86.0	80	120				
Phenol	70	10	75		93.0	80	120				
Pyridine	80	10	75		106.0	80	120				
Surr: 2,4,6-Tribromophenol	69	10	75		92.0	80	120				
Surr: 2-Fluorobiphenyl	68	10	75		91.0	80	120				
Surr: 2-Fluorophenol	69	10	75		93.0	80	120				
Surr: Nitrobenzene-d5	70	10	75		94.0	80	120				
Surr: Phenol-d5	73	10	75		97.0	80	120				
Surr: Terphenyl-d14	70	10	75		94.0	80	120				

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 17 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375205
Method: SW8270C **Analysis Date:** 02/25/2022 00:14 **Prep Date:**
Lab ID: 24-Feb-22_CCV_17 **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene	72	10	75		96.0	50	150				
1,2-Dichlorobenzene	80	10	75		106.0	50	150				
1,3-Dichlorobenzene	76	10	75		102.0	50	150				
1,4-Dichlorobenzene	72	10	75		96.0	50	150				
2,4,5-Trichlorophenol	80	10	75		107.0	50	150				
2,4,6-Trichlorophenol	81	10	75		108.0	50	150				
2,4-Dichlorophenol	76	10	75		101.0	50	150				
2,4-Dimethylphenol	78	10	75		104.0	50	150				
2,4-Dinitrophenol	79	10	75		106.0	50	150				
2,4-Dinitrotoluene	85	10	75		114.0	50	150				
2,6-Dinitrotoluene	85	10	75		113.0	50	150				
2-Chloronaphthalene	81	10	75		109.0	50	150				
2-Chlorophenol	82	10	75		109.0	50	150				
2-Nitrophenol	80	10	75		107.0	50	150				
3,3´-Dichlorobenzidine	74	10	75		99.0	50	150				
4,6-Dinitro-2-methylphenol	76	10	75		102.0	50	150				
4-Bromophenyl phenyl ether	74	10	75		98.0	50	150				
4-Chloro-3-methylphenol	80	10	75		106.0	50	150				
4-Chlorophenol	84	10	75		111.0	50	150				
4-Chlorophenyl phenyl ether	80	10	75		107.0	50	150				
4-Nitrophenol	81	10	75		109.0	50	150				
Azobenzene	78	10	75		104.0	50	150				
bis(-2-chloroethoxy)Methane	77	10	75		103.0	50	150				
bis(-2-chloroethyl)Ether	78	10	75		104.0	50	150				
bis(2-chloroisopropyl)Ether	77	10	75		103.0	50	150				
bis(2-ethylhexyl)Phthalate	80	10	75		107.0	50	150				
Butylbenzylphthalate	80	10	75		106.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/04/2022

Run ID: Run Order: SV5973N.I_220224A: 17 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R375205
Method: SW8270C **Analysis Date:** 02/25/2022 00:14 **Prep Date:**
Lab ID: 24-Feb-22_CCV_17 **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diethyl phthalate	86	10	75		114.0	50	150				
Dimethyl phthalate	85	10	75		113.0	50	150				
Di-n-butyl phthalate	81	10	75		107.0	50	150				
Di-n-octyl phthalate	80	10	75		107.0	50	150				
Hexachlorobenzene	79	10	75		106.0	50	150				
Hexachlorobutadiene	72	10	75		96.0	50	150				
Hexachlorocyclopentadiene	82	10	75		110.0	50	150				
Hexachloroethane	78	10	75		104.0	50	150				
Isophorone	81	10	75		108.0	50	150				
m+p-Cresols	81	10	75		109.0	50	150				
Nitrobenzene	79	10	75		105.0	50	150				
n-Nitrosodimethylamine	80	10	75		107.0	50	150				
n-Nitroso-di-n-propylamine	82	10	75		109.0	50	150				
n-Nitrosodiphenylamine	75	10	75		100.0	50	150				
o-Cresol	78	10	75		105.0	50	150				
Pentachlorophenol	82	10	75		109.0	50	150				
Phenol	76	10	75		101.0	50	150				
Pyridine	84	10	75		112.0	50	150				
Surr: 2,4,6-Tribromophenol	79	10	75		106.0	50	150				
Surr: 2-Fluorobiphenyl	74	10	75		99.0	50	150				
Surr: 2-Fluorophenol	80	10	75		106.0	50	150				
Surr: Nitrobenzene-d5	83	10	75		111.0	50	150				
Surr: Phenol-d5	81	10	75		107.0	50	150				
Surr: Terphenyl-d14	76	10	75		102.0	50	150				

Associated Samples: **B22021435-001C, B22021435-006C, B22021435-007A, B22021435-012C, B22021435-017C, B22021435-022C, B22021435-027C, B22021435-032C**

Analytical QC Exceptions Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
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
SW8260B	8260-Volatile Organic Compounds QC Samples	R375218	001F, 002A, 006F, 007C, 008A, 012F, 013A, 017F, 018A, 022F, 023A, 027F, 028A, 032F, 033A	MS-DOD	B22021435-006FMS	2/22/2022	20:05	Styrene	56.0	78	123			S
				MSD-DOD	B22021435-006FMSD	2/22/2022	20:32	1,1-Dichloroethene	86.0	71	131	21	20.0	R
								Styrene	49.0	78	123	13	20.0	S
SW8270C	Semi-Volatile Organic Compounds, Extended List	163957	001C, 006C, 007A, 012C, 017C, 022C, 027C, 032C	LCS-DOD	LCS-163957	2/24/2022	17:48	4-Nitrophenol	38.0	15	36			S
								n-Nitrosodimethylamine	46.0	20	45			S
				LCSD-DOD	LCSD-163957	2/24/2022	18:20	1,2-Dichlorobenzene	76.0	32	111	29	20.0	R
								4-Chlorophenyl phenyl ether	105.0	53	121	21	20.0	R
								4-Nitrophenol	42.0	15	36	9.2	20.0	S
								Diethyl phthalate	116.0	56	125	24	20.0	R
								Nitrobenzene	88.0	45	121	23	20.0	R
								n-Nitrosodimethylamine	62.0	20	45	30	20.0	SR
								Pyridine	37.0	16	45	25	20.0	R

Preparation and Analysis Dates Report

Work Order: B22021435
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	ERH2542 (OWDFMW07A)	02/17/2022 13:15	Ground Water	Metals by ICP-MS, Total		SW3010A	02/23/2022 09:10	163954	SW6020	02/24/2022 17:31
001C	ERH2542 (OWDFMW07A)	02/17/2022 13:15	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/23/2022 09:43	163957	SW8270CSIM	02/28/2022 18:31
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/23/2022 09:43	163957	SW8270C	02/24/2022 18:52
001D	ERH2542 (OWDFMW07A)	02/17/2022 13:15	Ground Water	Diesel Range Organics		SW3520C	02/22/2022 12:25	163927	SW8015C	02/23/2022 16:31
001H	ERH2542 (OWDFMW07A)	02/17/2022 13:15	Ground Water	EDB in Water by ECD		SW8011	02/24/2022 07:59	163984	SW8011	02/24/2022 21:02
004A	ERH2541 (Trip Blank) 14733	02/17/2022 13:15	Trip Blank	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/24/2022 18:44
006B	ERH2544 (OWDFMW08A)	02/16/2022 16:30	Ground Water	Metals by ICP-MS, Total		SW3010A	02/23/2022 09:10	163954	SW6020	02/24/2022 18:28
006C	ERH2544 (OWDFMW08A)	02/16/2022 16:30	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/23/2022 09:43	163957	SW8270CSIM	02/28/2022 19:03
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/23/2022 09:43	163957	SW8270C	02/24/2022 19:57
006D	ERH2544 (OWDFMW08A)	02/16/2022 16:30	Ground Water	Diesel Range Organics		SW3520C	02/22/2022 12:25	163927	SW8015C	02/23/2022 17:57
006H	ERH2544 (OWDFMW08A)	02/16/2022 16:30	Ground Water	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/24/2022 19:04
007A	ERH2545 (OWDFMW08A)	02/16/2022 16:30	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/23/2022 09:43	163957	SW8270CSIM	02/28/2022 19:36
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/23/2022 09:43	163957	SW8270C	02/24/2022 21:01
007B	ERH2545 (OWDFMW08A)	02/16/2022 16:30	Ground Water	Diesel Range Organics		SW3520C	02/22/2022 12:25	163927	SW8015C	02/23/2022 19:23
010A	ERH2543 (Trip Blank) 14733	02/16/2022 16:30	Trip Blank	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/24/2022 19:24
012B	ERH2547 (RHMW19)	02/17/2022 12:25	Ground Water	Metals by ICP-MS, Total		SW3010A	02/23/2022 09:10	163954	SW6020	02/24/2022 18:40
012C	ERH2547 (RHMW19)	02/17/2022 12:25	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/23/2022 09:43	163957	SW8270CSIM	02/28/2022 20:41
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/23/2022 09:43	163957	SW8270C	02/24/2022 21:33
012D	ERH2547 (RHMW19)	02/17/2022 12:25	Ground Water	Diesel Range Organics		SW3520C	02/22/2022 12:25	163927	SW8015C	02/23/2022 20:06
						SW3520C	02/22/2022 12:25	163927	SW8015C	02/25/2022 05:06
012H	ERH2547 (RHMW19)	02/17/2022 12:25	Ground Water	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/24/2022 19:44
015A	ERH2546 (Trip Blank) 14733	02/17/2022 12:25	Trip Blank	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/24/2022 20:03
017B	ERH2549 (RHMW01R)	02/16/2022 15:30	Ground Water	Metals by ICP-MS, Total		SW3010A	02/23/2022 09:10	163954	SW6020	02/24/2022 18:53
017C	ERH2549 (RHMW01R)	02/16/2022 15:30	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/23/2022 09:43	163957	SW8270CSIM	02/28/2022 21:46

Preparation and Analysis Dates Report

Work Order: B22021435
Client: AECOM - Honolulu
Project Name: CV18F0126, 60571032.02.46.01
Report Date: 3/04/2022

017C	ERH2549 (RHMW01R)	02/16/2022 15:30	Ground Water	Semi-Volatile Organic Compounds, Extended List		SW3510C	02/23/2022 09:43	163957	SW8270C	02/24/2022 22:05
017D	ERH2549 (RHMW01R)	02/16/2022 15:30	Ground Water	Diesel Range Organics		SW3520C	02/22/2022 12:26	163927	SW8015C	02/24/2022 06:51
						SW3520C	02/22/2022 12:26	163927	SW8015C	02/25/2022 09:24
017H	ERH2549 (RHMW01R)	02/16/2022 15:30	Ground Water	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/24/2022 20:23
020A	ERH2548 (Trip Blank) 14733	02/16/2022 15:30	Trip Blank	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/24/2022 20:43
022B	ERH2551 (RHMW2254-01 Bailer)	02/17/2022 13:40	Ground Water	Metals by ICP-MS, Total		SW3010A	02/23/2022 09:10	163954	SW6020	02/24/2022 19:05
022C	ERH2551 (RHMW2254-01 Bailer)	02/17/2022 13:40	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/23/2022 09:43	163957	SW8270CSIM	02/28/2022 22:18
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/23/2022 09:43	163957	SW8270C	02/24/2022 22:37
022D	ERH2551 (RHMW2254-01 Bailer)	02/17/2022 13:40	Ground Water	Diesel Range Organics		SW3520C	02/22/2022 12:26	163927	SW8015C	02/24/2022 01:07
022H	ERH2551 (RHMW2254-01 Bailer)	02/17/2022 13:40	Ground Water	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/24/2022 23:01
025A	ERH2550 (Trip Blank) 14733	02/17/2022 13:40	Trip Blank	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/24/2022 23:21
027B	ERH2553 (RHMW2254-01 Low Flow)	02/17/2022 14:30	Ground Water	Metals by ICP-MS, Total		SW3010A	02/23/2022 09:10	163954	SW6020	02/24/2022 19:30
027C	ERH2553 (RHMW2254-01 Low Flow)	02/17/2022 14:30	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/23/2022 09:43	163957	SW8270CSIM	02/28/2022 22:51
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/23/2022 09:43	163957	SW8270C	02/24/2022 23:10
027D	ERH2553 (RHMW2254-01 Low Flow)	02/17/2022 14:30	Ground Water	Diesel Range Organics		SW3520C	02/22/2022 12:26	163927	SW8015C	02/23/2022 17:14
027H	ERH2553 (RHMW2254-01 Low Flow)	02/17/2022 14:30	Ground Water	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/24/2022 23:41
030A	ERH2552 (Trip Blank) 14733	02/17/2022 14:30	Trip Blank	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/25/2022 00:00
032B	ERH2555 (Sump Audit 3)	02/17/2022 15:40	Ground Water	Metals by ICP-MS, Total		SW3010A	02/23/2022 09:10	163954	SW6020	02/24/2022 19:43
032C	ERH2555 (Sump Audit 3)	02/17/2022 15:40	Ground Water	Low Level PAH by 8270C SIM		SW3510C	02/23/2022 09:43	163957	SW8270CSIM	02/28/2022 23:24
				Semi-Volatile Organic Compounds, Extended List		SW3510C	02/23/2022 09:43	163957	SW8270C	02/24/2022 23:42
032D	ERH2555 (Sump Audit 3)	02/17/2022 15:40	Ground Water	Diesel Range Organics		SW3520C	02/22/2022 12:26	163927	SW8015C	02/24/2022 01:50
						SW3520C	02/22/2022 12:26	163927	SW8015C	02/25/2022 07:15
032H	ERH2555 (Sump Audit 3)	02/17/2022 15:40	Ground Water	EDB in Water by ECD		SW8011	02/25/2022 09:50	164037	SW8011	02/25/2022 16:15
035A	ERH2554 (Trip Blank) 14733	02/17/2022 15:40	Trip Blank	EDB in Water by ECD		SW8011	02/24/2022 08:00	163984	SW8011	02/25/2022 16:34

Chemical Abstracts Service (CAS) Registry Numbers

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22021435
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

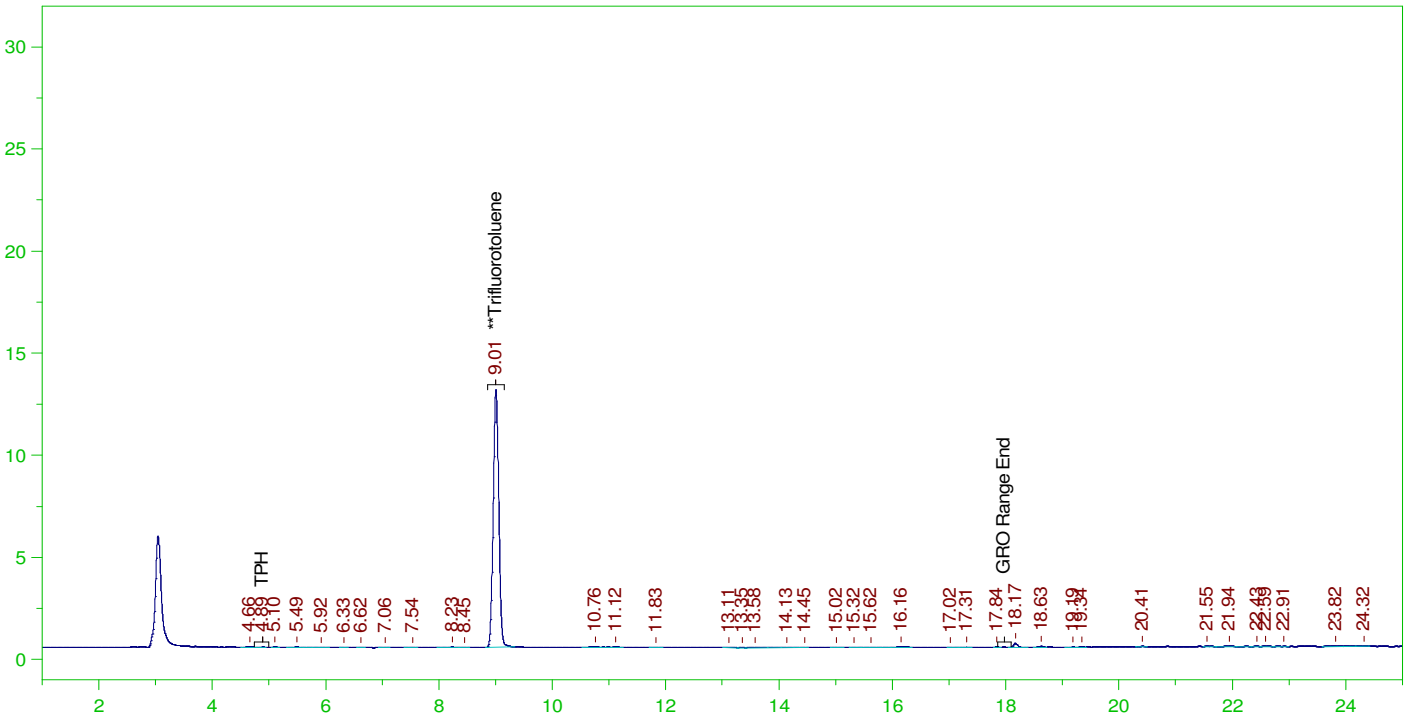
1,2,4-Trichlorobenzene	120-82-1
1,2-Dichlorobenzene	95-50-1
1,3-Dichlorobenzene	541-73-1
1,4-Dichlorobenzene	106-46-7
2,4,5-Trichlorophenol	95-95-4
2,4,6-Trichlorophenol	88-06-2
2,4-Dichlorophenol	120-83-2
2,4-Dimethylphenol	105-67-9
2,4-Dinitrophenol	51-28-5
2,4-Dinitrotoluene	121-14-2
2,6-Dinitrotoluene	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 18:27:32 -07:00

ERH2542 (OWDFMW07A)

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0016.RAW B22021435-001G ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-001G ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0016.RAW
Date & Time Acquired: 2/23/2022 7:36:01 PM
Method File: G:\Org\VAR\Methods\211208G1435-1DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

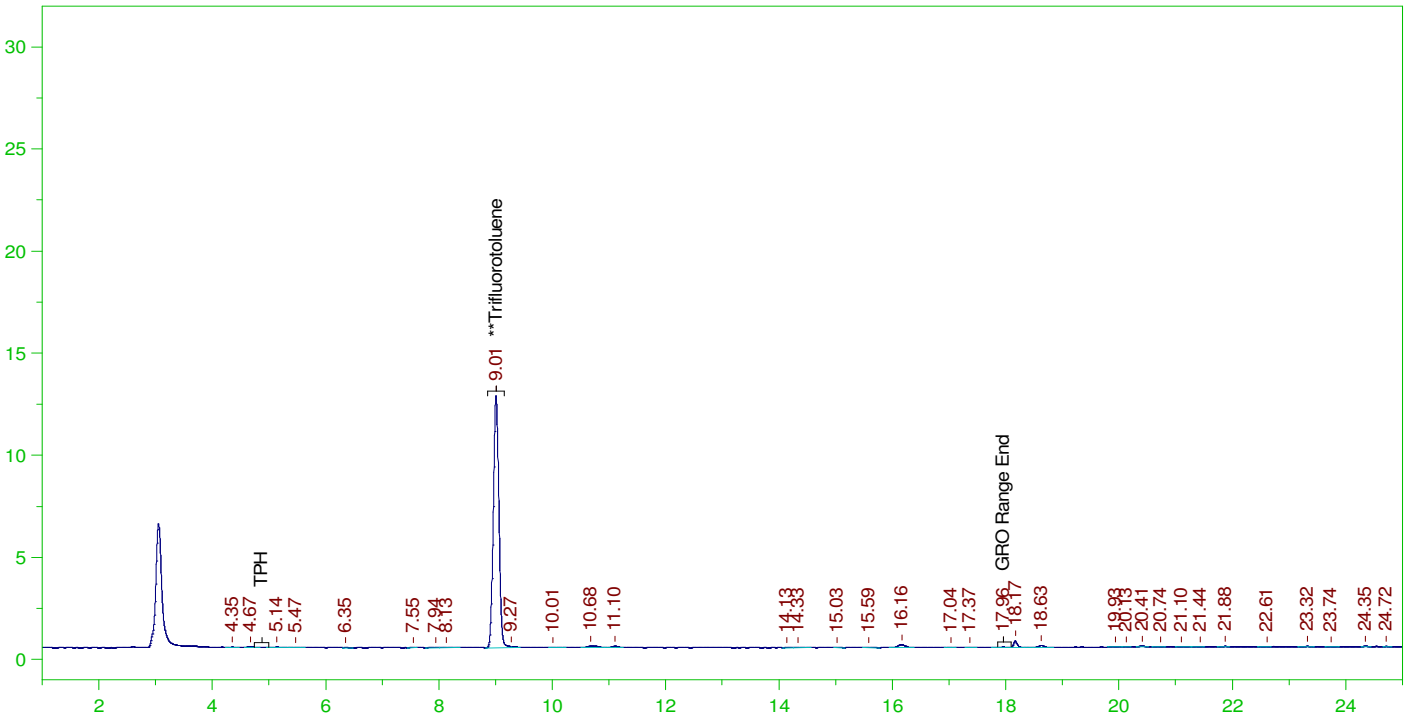
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.006	25.	18.602	74.41	-

C6 to C10 Area:3318.727 C6 to C10 Amount: 0.6773059
TPH Area:6332.914 TPH Amount: 1.325328

ERH2541 (Trip Blank)

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0009.RAW B22021435-003A ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-003A ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0009.RAW
Date & Time Acquired: 2/23/2022 3:37:59 PM
Method File: G:\Org\VAR\Methods\211208G1435-3DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

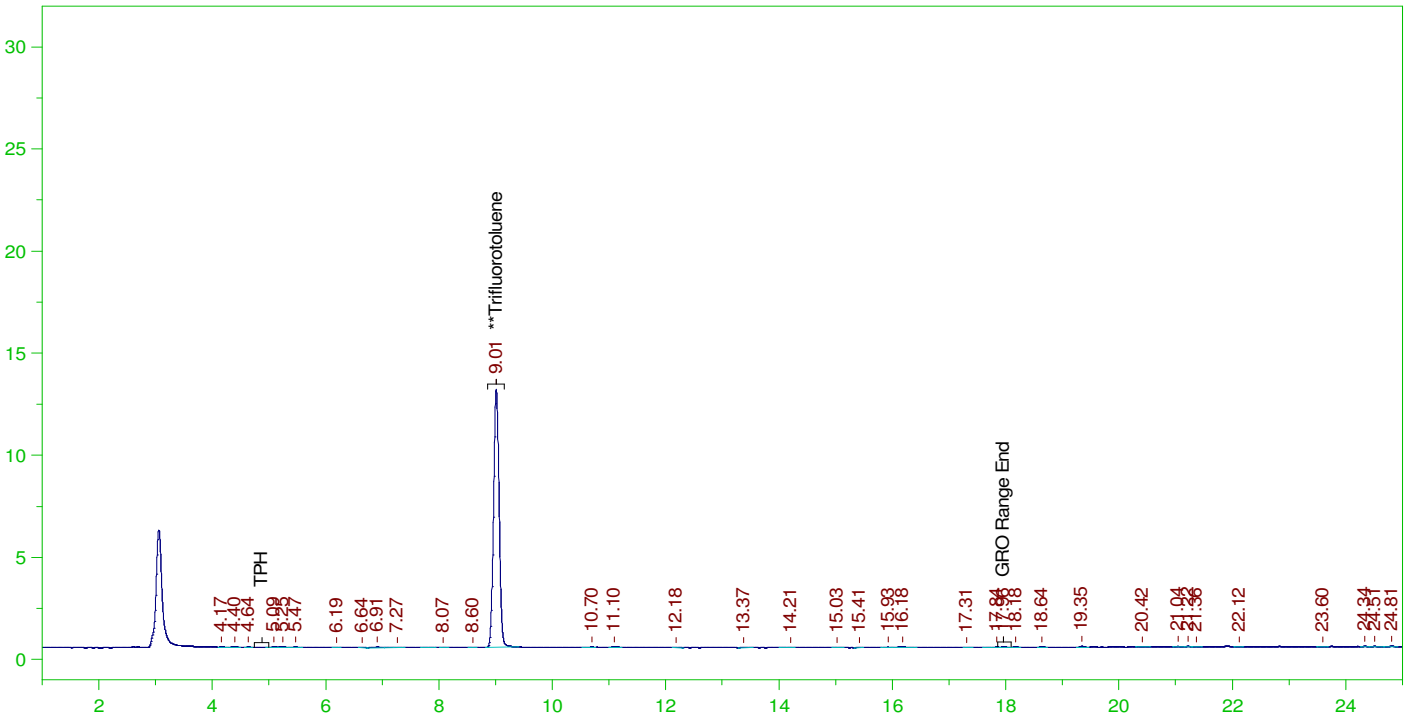
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	18.252	73.01	-

C6 to C10 Area:4674.548 C6 to C10 Amount: 0.95401
TPH Area:8365.778 TPH Amount: 1.750759

ERH2544 (OWDFMW08A)

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0026.RAW B22021435-006G ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-006G ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0026.RAW
Date & Time Acquired: 2/24/2022 1:16:33 AM
Method File: G:\Org\VAR\Methods\211208G1435-6DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

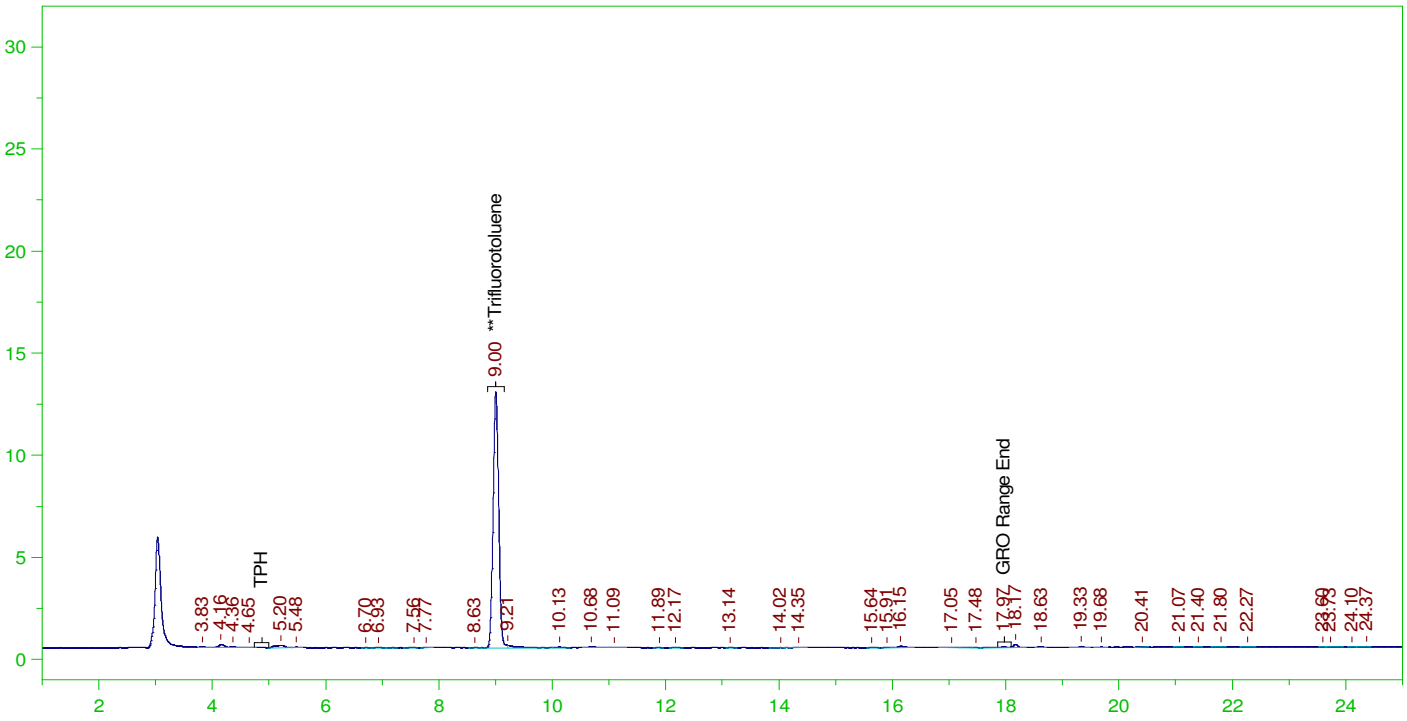
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.011	25.	18.745	74.98	-

C6 to C10 Area:2915.889 C6 to C10 Amount: 0.5950922
TPH Area:4690.684 TPH Amount: 0.9816487

ERH2545 (OWDFMW08A)

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0007.RAW B22021435-007D ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-007D ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0007.RAW
Date & Time Acquired: 2/23/2022 2:29:55 PM
Method File: G:\Org\VAR\Methods\211208G1435-7DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

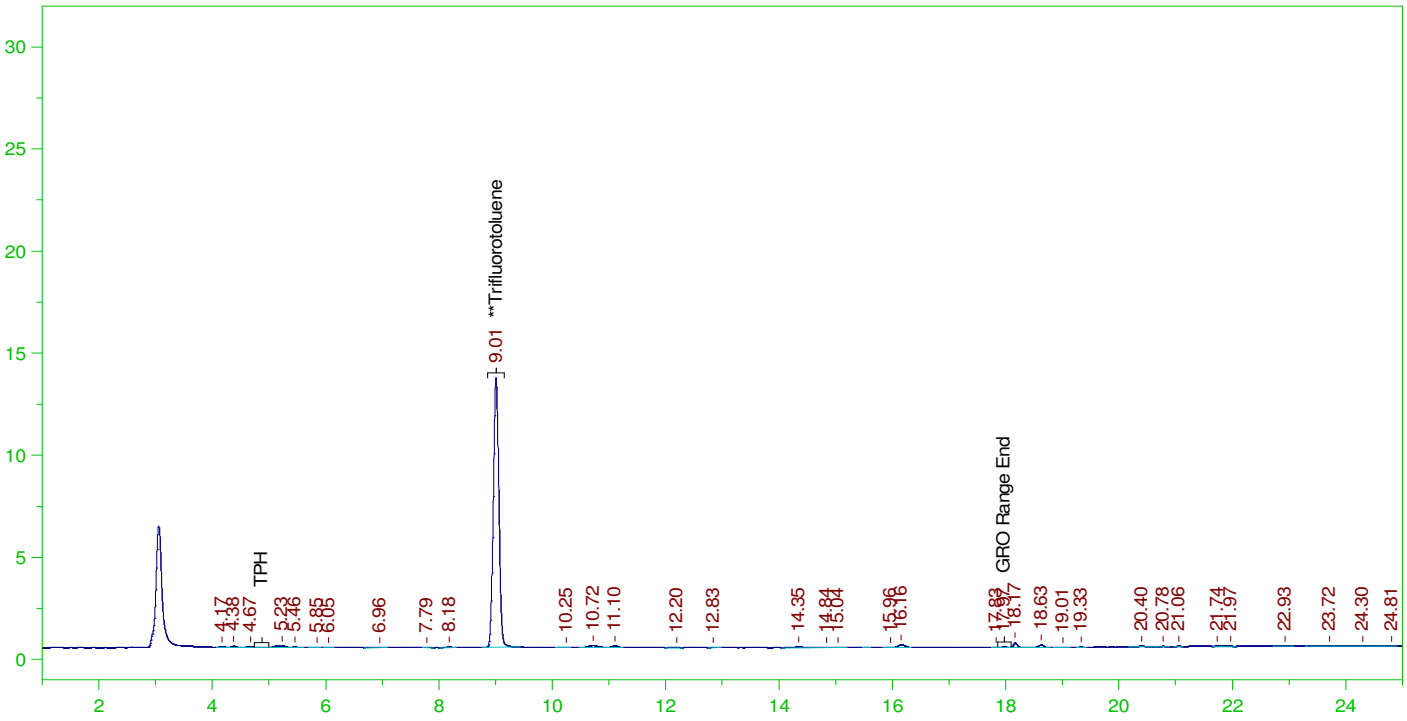
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.004	25.	18.534	74.14	-

C6 to C10 Area:6860.391 C6 to C10 Amount: 1.40011
TPH Area:10776.65 TPH Amount: 2.255296

ERH2543 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0010.RAW B22021435-009A ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-009A ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0010.RAW
Date & Time Acquired: 2/23/2022 4:11:59 PM
Method File: G:\Org\VAR\Methods\211208G1435-9DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

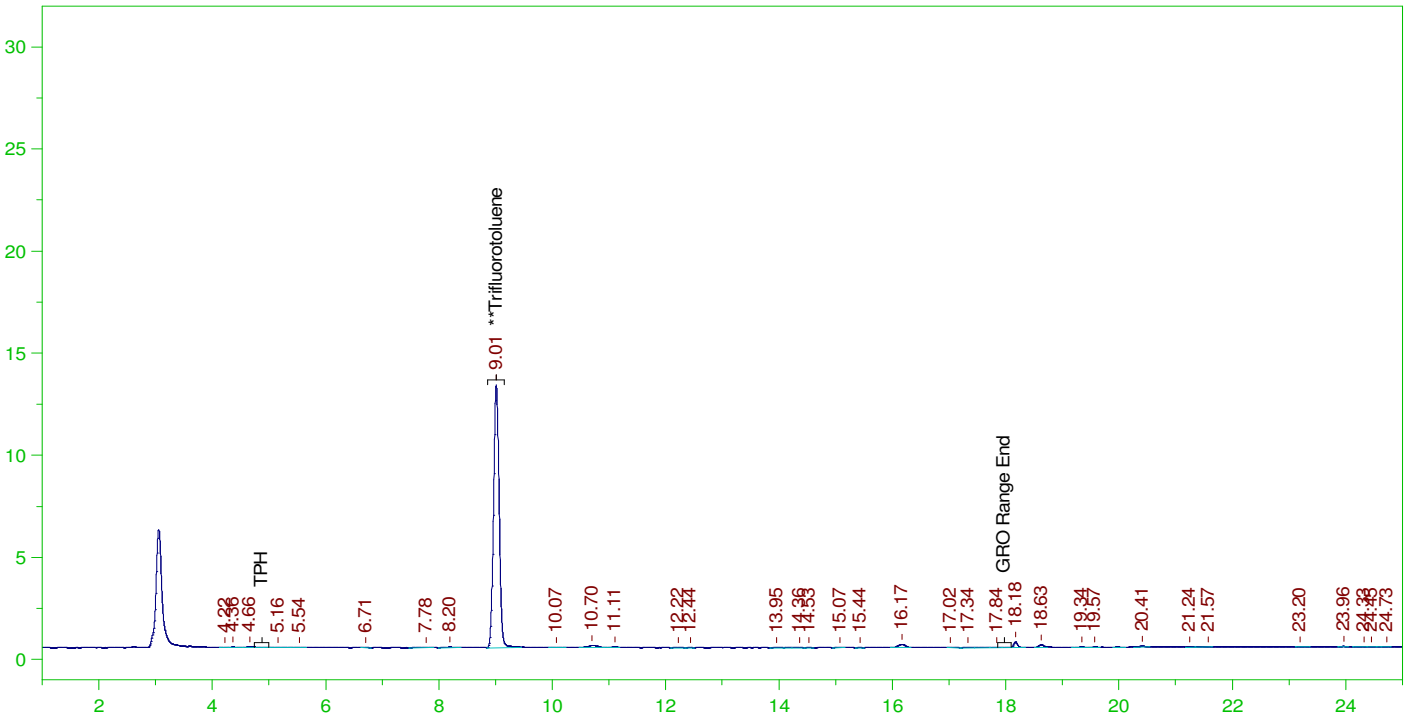
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.521	78.08	-

C6 to C10 Area:6456.274 C6 to C10 Amount: 1.317636
TPH Area:10861.8 TPH Amount: 2.273117

ERH2547 (RHMW19)

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0028.RAW B22021435-012G ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-012G ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0028.RAW
Date & Time Acquired: 2/24/2022 2:24:35 AM
Method File: G:\Org\VAR\Methods\211208G1435-12DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

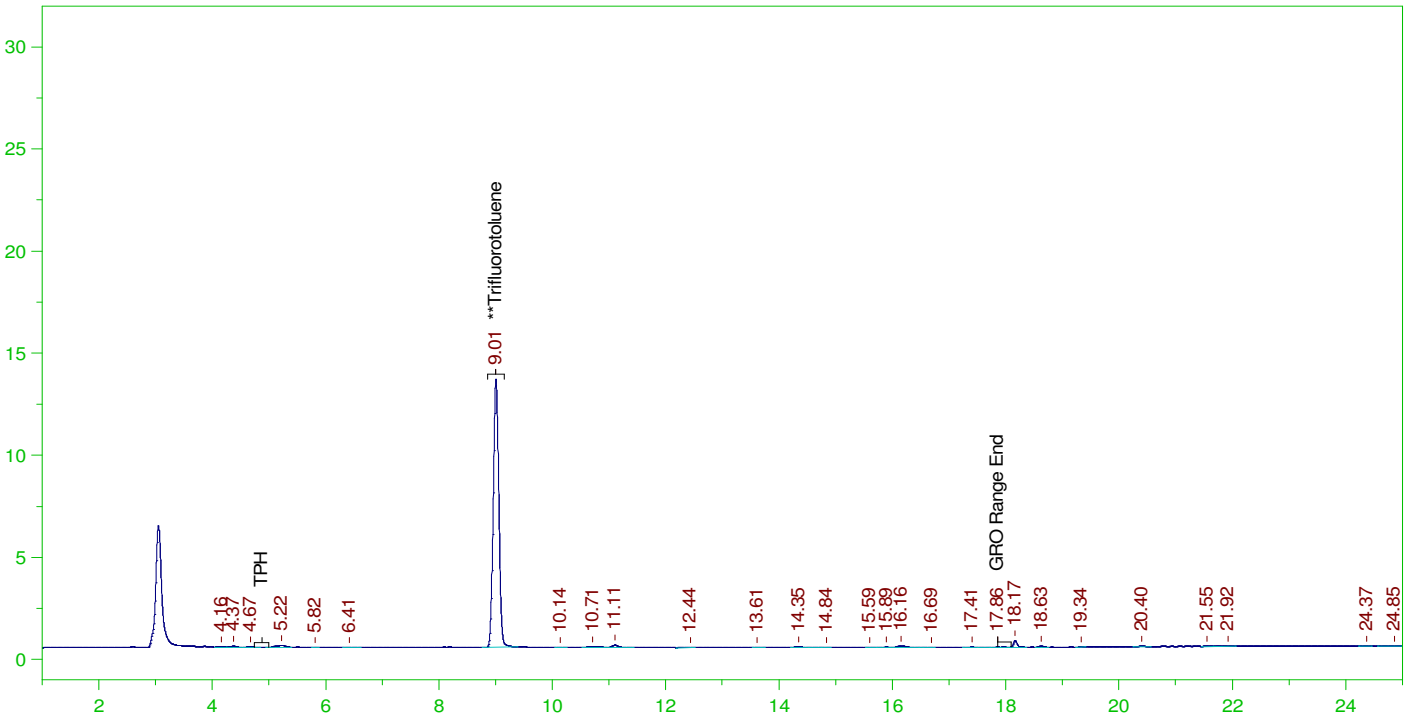
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.011	25.	19.055	76.22	-

C6 to C10 Area:4958.094 C6 to C10 Amount: 1.011878
TPH Area:9188.542 TPH Amount: 1.922943

ERH2546 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0011.RAW B22021435-014A ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-014A ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0011.RAW
Date & Time Acquired: 2/23/2022 4:45:59 PM
Method File: G:\Org\VAR\Methods\211208G1435-14DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

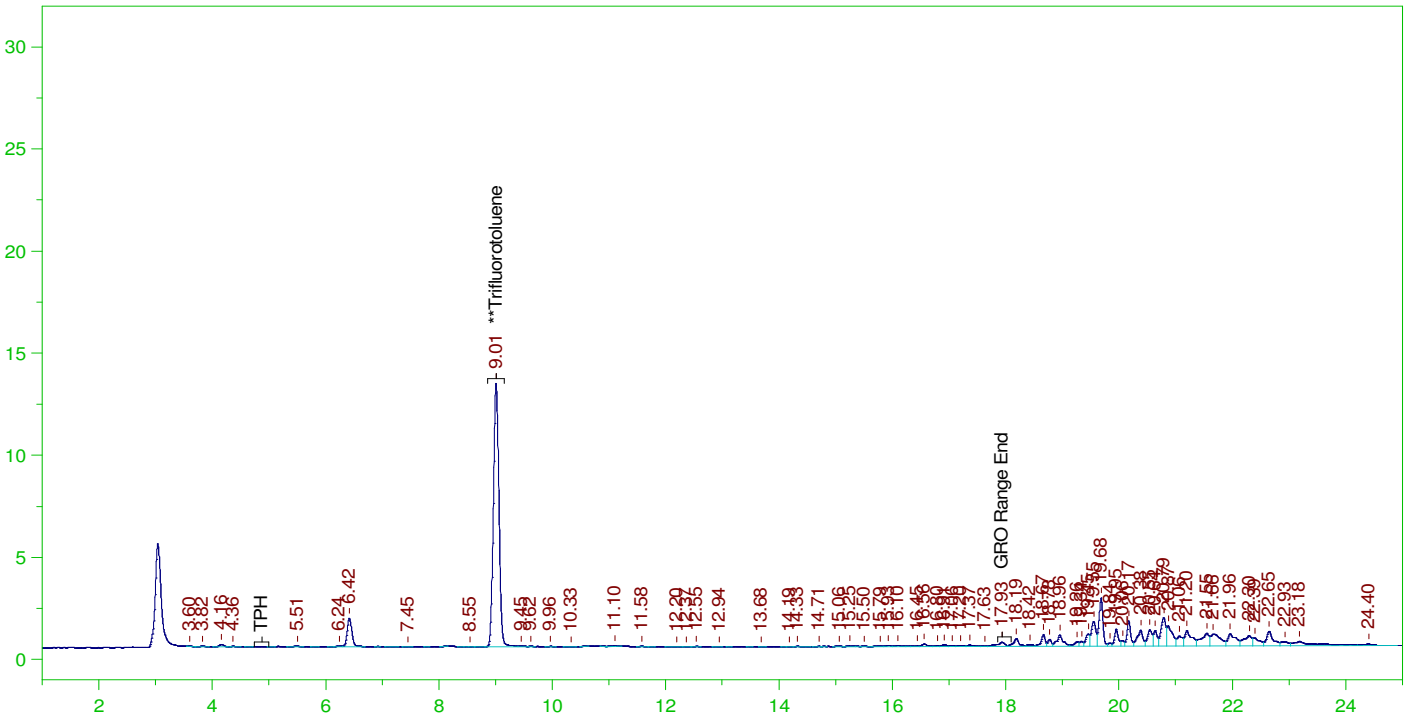
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.006	25.	19.46	77.84	-

C6 to C10 Area:4972.975 C6 to C10 Amount: 1.014915
TPH Area:8706.132 TPH Amount: 1.821987

ERH2549 (RHMW01R)

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0030.RAW B22021435-017G ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-017G ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0030.RAW
Date & Time Acquired: 2/24/2022 3:32:44 AM
Method File: G:\Org\VAR\Methods\211208G1435-17DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

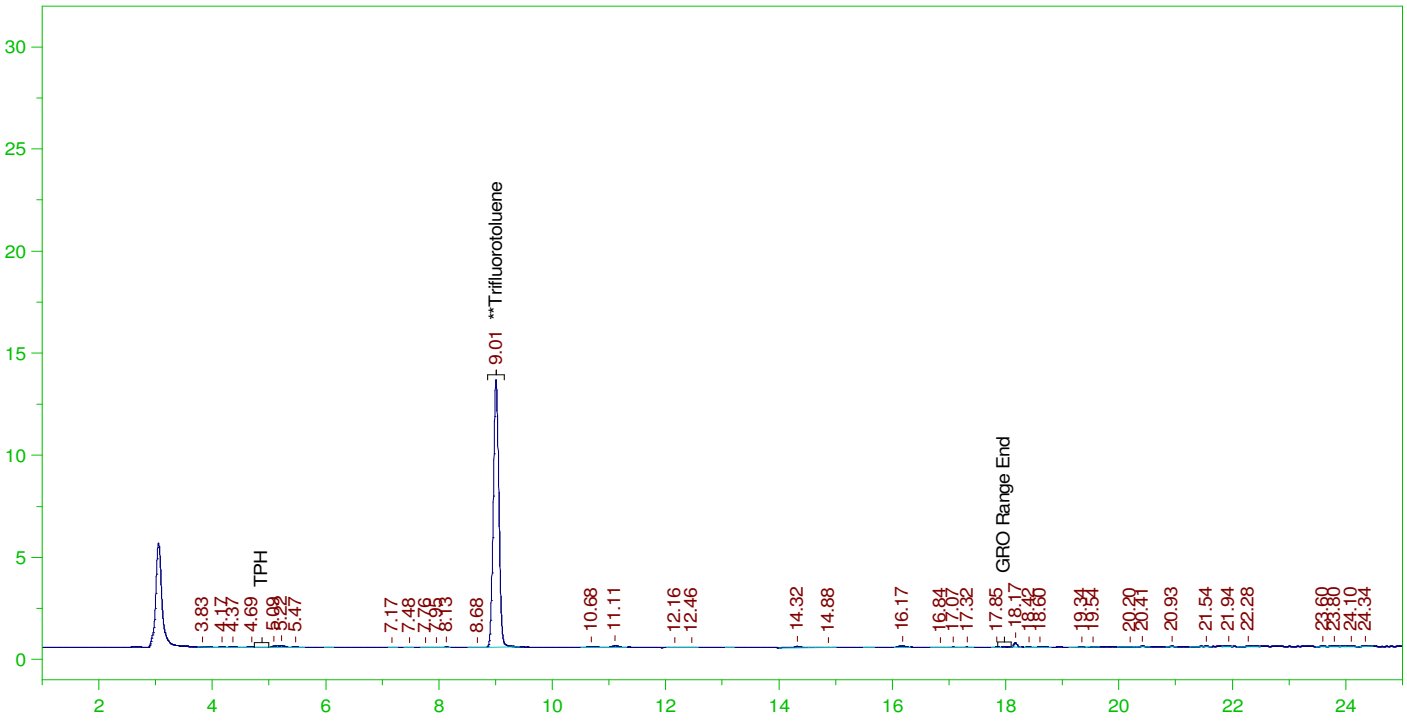
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.008	25.	19.09	76.36	-

C6 to C10 Area:18397.41 C6 to C10 Amount: 3.754654
TPH Area:151846.4 TPH Amount: 31.77784

ERH2548 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0012.RAW B22021435-019A ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-019A ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0012.RAW
Date & Time Acquired: 2/23/2022 5:20:00 PM
Method File: G:\Org\VAR\Methods\211208G1435-19DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

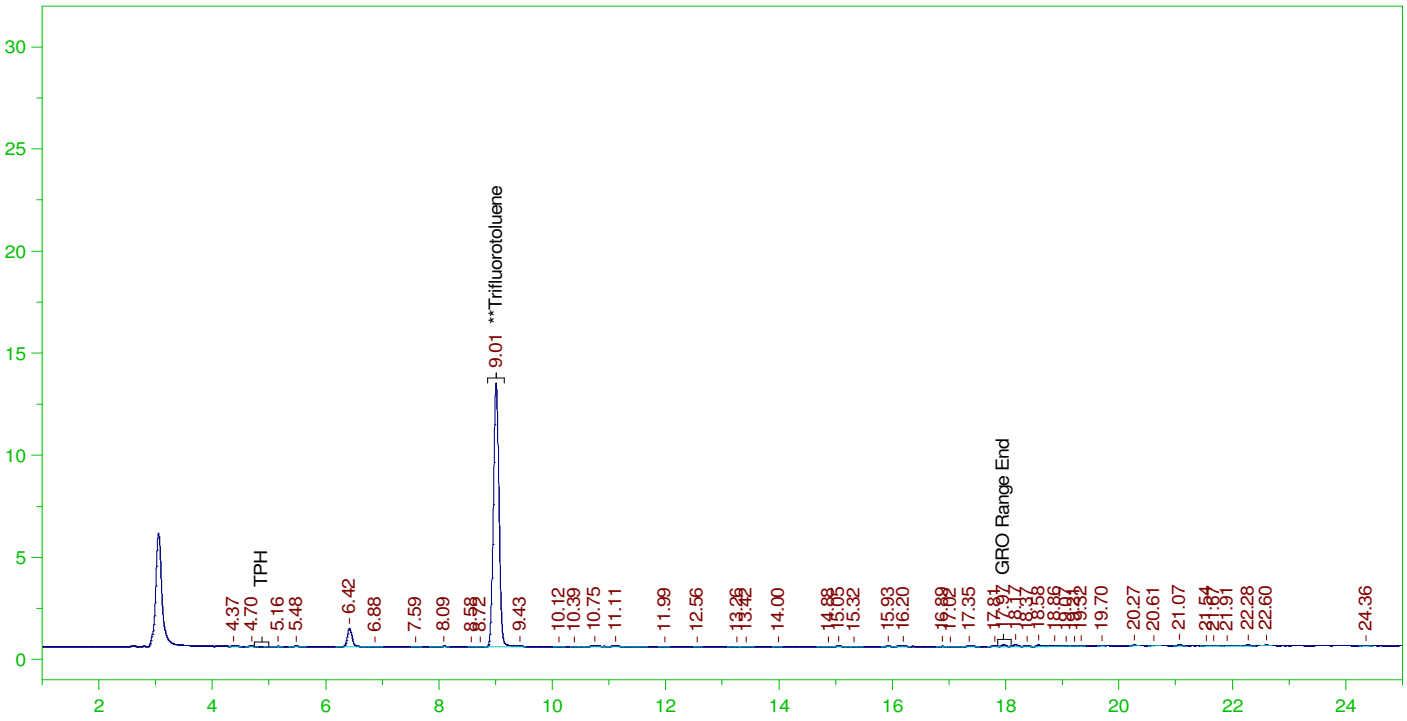
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.418	77.67	-

C6 to C10 Area:4590.263 C6 to C10 Amount: 0.9368086
TPH Area:8753.411 TPH Amount: 1.831881

ERH2551 (RHMW2254-01 Bailer)

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0032.RAW B22021435-022G ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-022G ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0032.RAW
Date & Time Acquired: 2/24/2022 4:40:50 AM
Method File: G:\Org\VAR\Methods\211208G1435-22DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

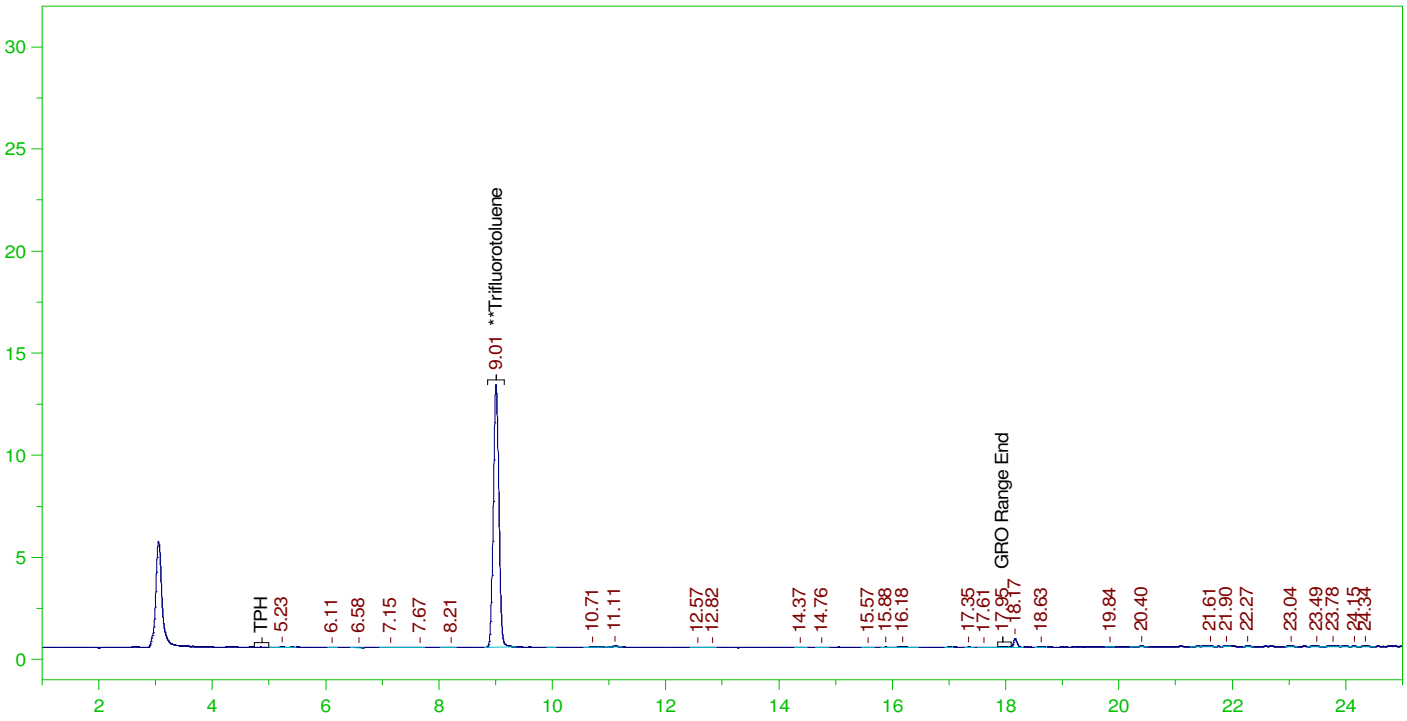
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	19.189	76.76	-

C6 to C10 Area:10432.29 C6 to C10 Amount: 2.129085
TPH Area:14452.05 TPH Amount: 3.024471

ERH2550 (Trip Blank) 14833

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0013.RAW B22021435-024A ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-024A ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0013.RAW
Date & Time Acquired: 2/23/2022 5:53:59 PM
Method File: G:\Org\VAR\Methods\211208G1435-24DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

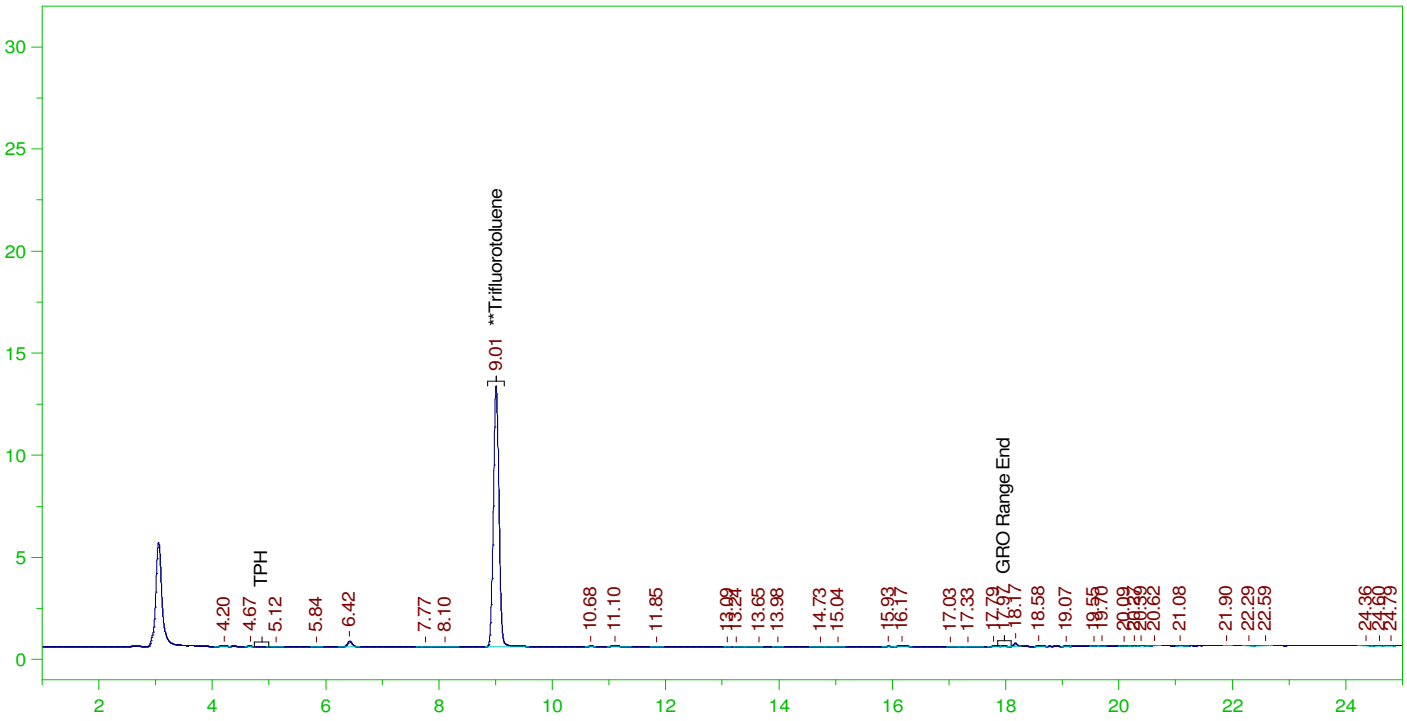
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.044	76.18	-

C6 to C10 Area:2651.223 C6 to C10 Amount: 0.5410777
TPH Area:6074.786 TPH Amount: 1.271308

ERH2553 (RHMW2254-01 Low Flow)

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0034.RAW B22021435-027G ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-027G ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0034.RAW
Date & Time Acquired: 2/24/2022 5:48:55 AM
Method File: G:\Org\VAR\Methods\211208G1435-27DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

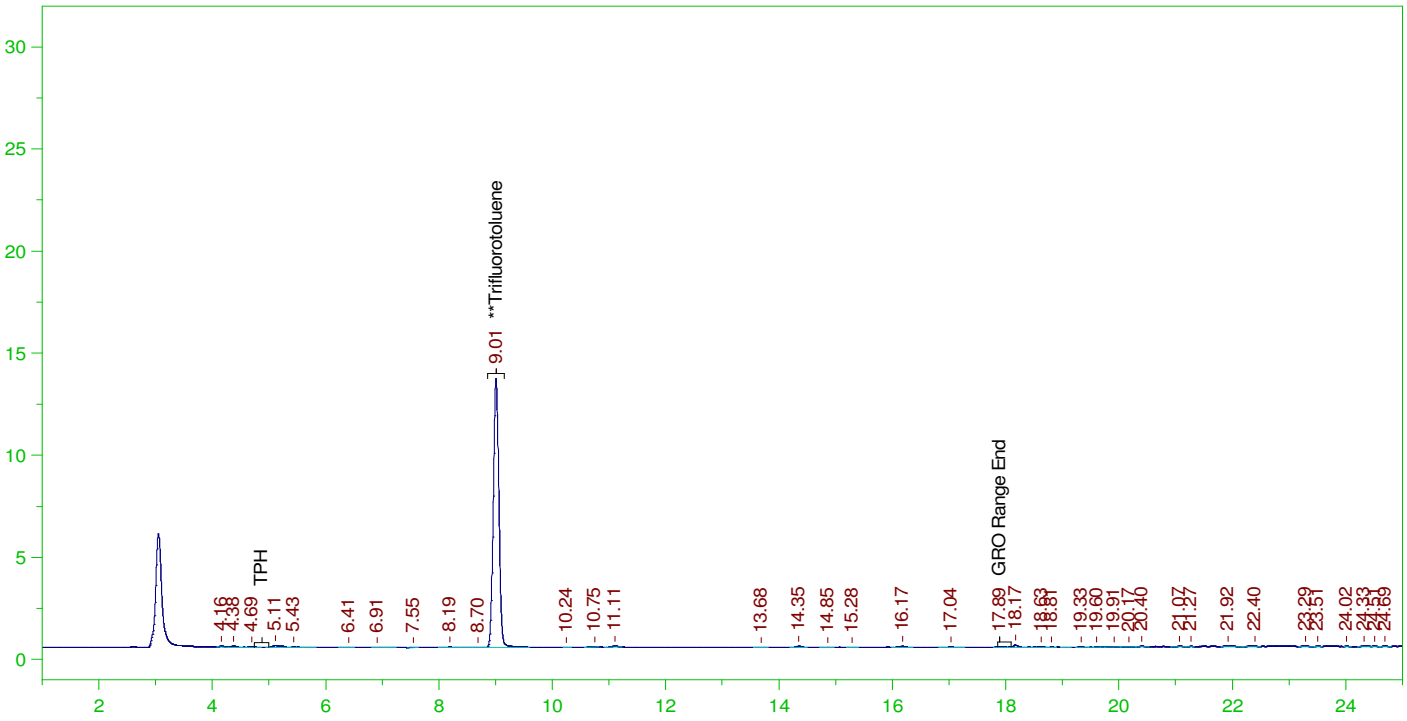
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.009	25.	18.933	75.73	-

C6 to C10 Area:4125.326 C6 to C10 Amount: 0.8419215
TPH Area:6877.005 TPH Amount: 1.439194

ERH2552 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0014.RAW B22021435-029A ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-029A ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0014.RAW
Date & Time Acquired: 2/23/2022 6:27:57 PM
Method File: G:\Org\VAR\Methods\211208G1435-29DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

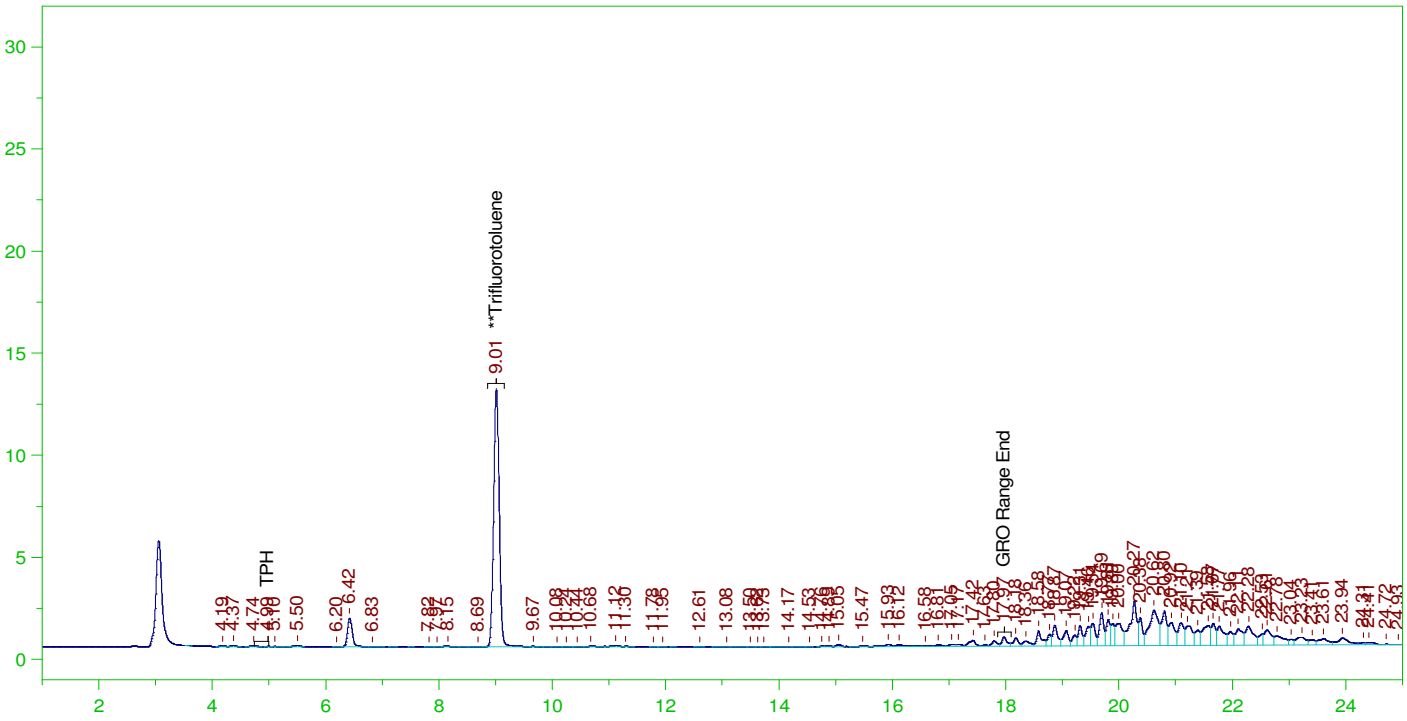
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.007	25.	19.611	78.44	-

C6 to C10 Area:4228.293 C6 to C10 Amount: 0.8629355
TPH Area:8043.118 TPH Amount: 1.683233

ERH2555 (Sump Audit 3)

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0036.RAW B22021435-032G ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-032G ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0036.RAW
Date & Time Acquired: 2/24/2022 6:57:01 AM
Method File: G:\Org\VAR\Methods\211208G1435-32DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

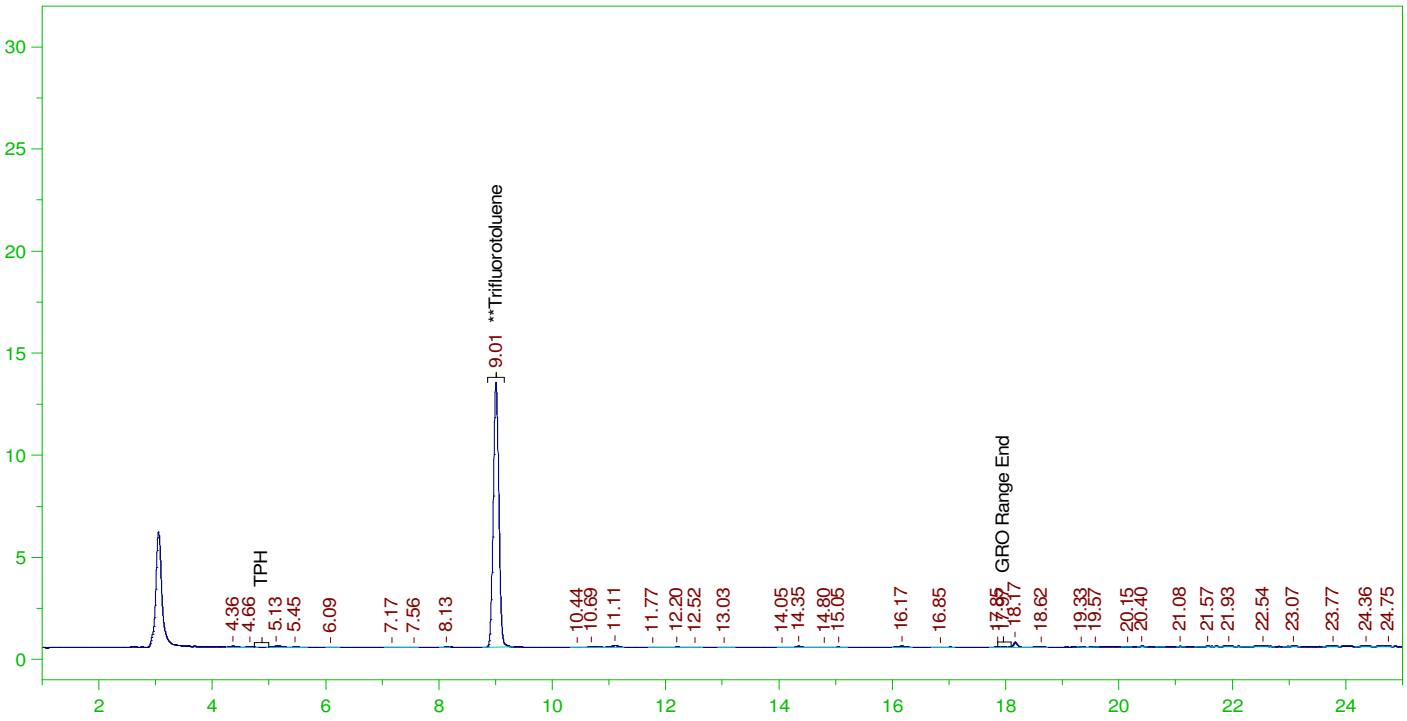
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.013	25.	18.818	75.27	-

C6 to C10 Area:25496.59 C6 to C10 Amount: 5.203498
TPH Area:262733.5 TPH Amount: 54.98388

ERH2554 (Trip Blank) 14754

G:\Org\VAR\DAT\VAR022322_b\0223VARB.0015.RAW B22021435-034A ;0223VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-034A ;0223VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR022322_b\0223VARB.0015.RAW
Date & Time Acquired: 2/23/2022 7:02:00 PM
Method File: G:\Org\VAR\Methods\211208G1435-34DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

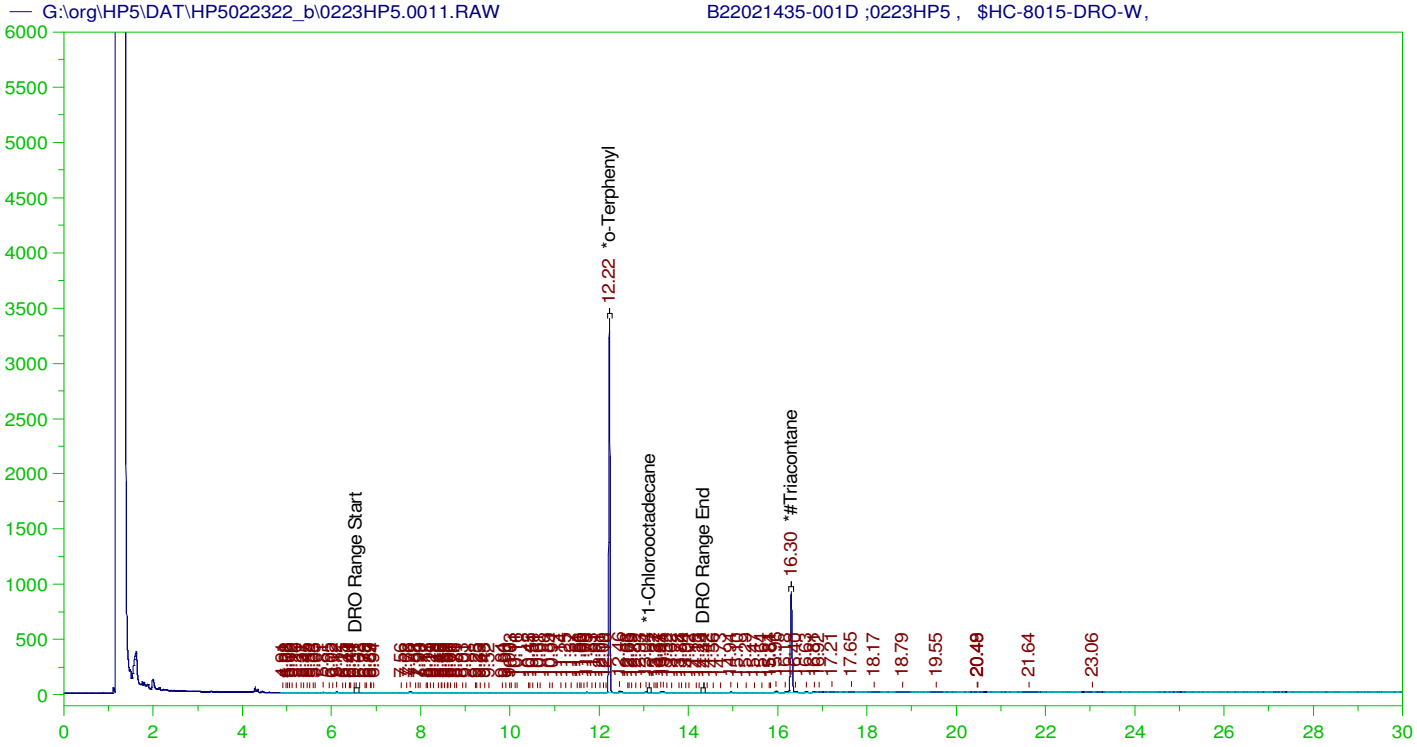
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.75 to 18.09

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.006	25.	19.152	76.61	-

C6 to C10 Area:4829.303 C6 to C10 Amount: 0.9855934
TPH Area:8731.763 TPH Amount: 1.82735

ERH2542 (OWDFMW07A) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0011.RAW B22021435-001D ;0223HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-001D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0011.RAW
Date & Time Acquired: 2/23/2022 4:31:21 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JFb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JFb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

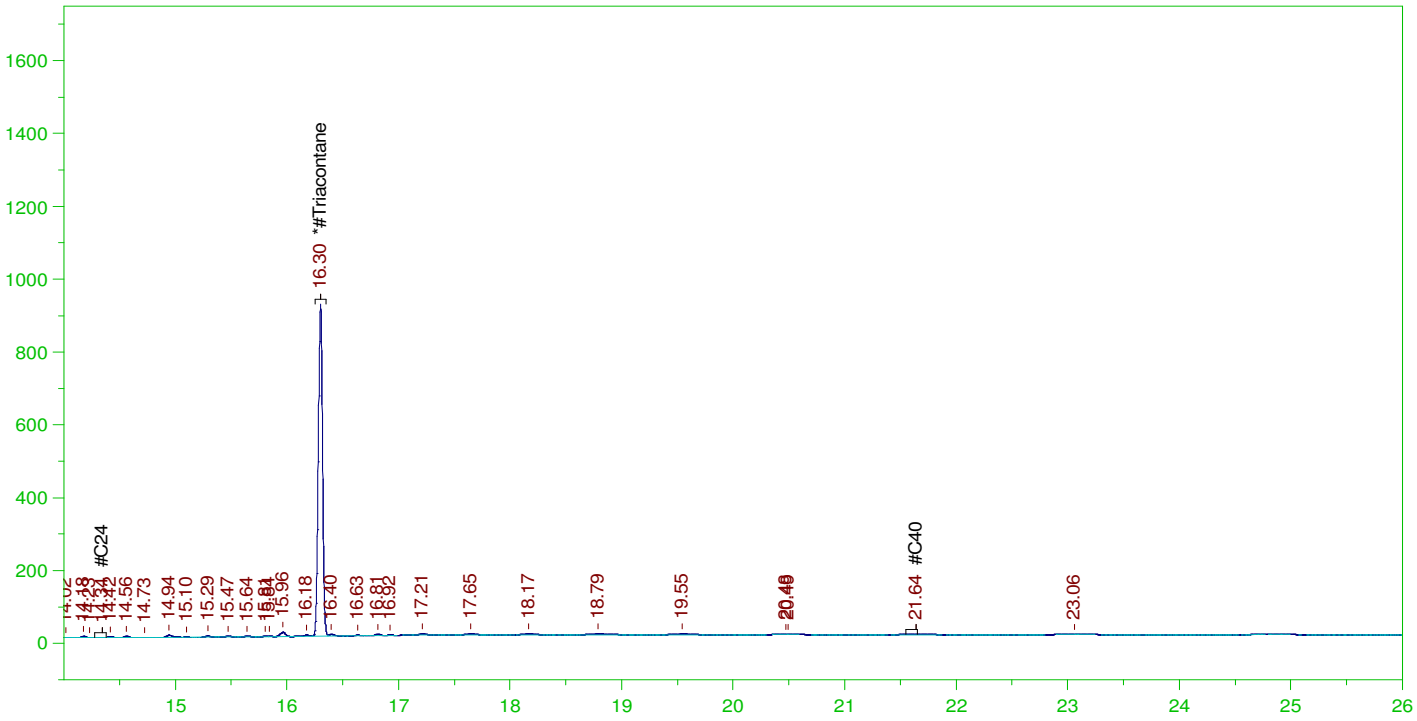
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.224	.189	.169	89.37	-
*1-Chlorooctadecane	29.972	.189	.	.	-
*#Triacontane	16.301	.189	.077	40.98	-

DRO Area:412457.1 DRO Amount: 1.190838E-02
TEH Area:828424.2 TEH Amount: 2.391809E-02

ERH2542 (OWDFMW07A) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0011.RAW B22021435-001D ;0223HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22021435-001D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0011.RAW
Date & Time Acquired: 2/23/2022 4:31:21 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BF_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

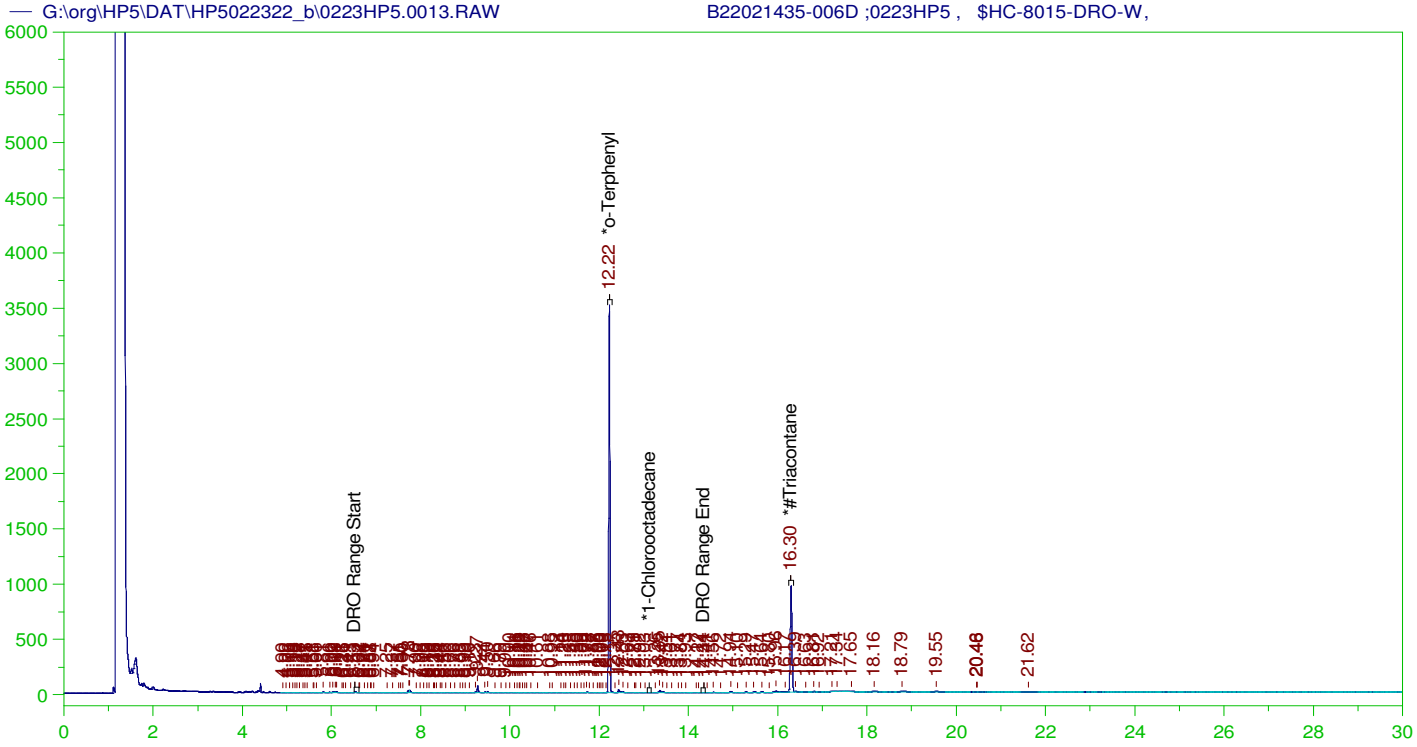
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.28 to 21.65

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.301	.472	.077	16.39	-

RRO Area:276649 RRO AMOUNT: 9.876785E-03

ERH2544 (OWDFMW08A) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0013.RAW B22021435-006D ;0223HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-006D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0013.RAW
Date & Time Acquired: 2/23/2022 5:57:22 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JFb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JFb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

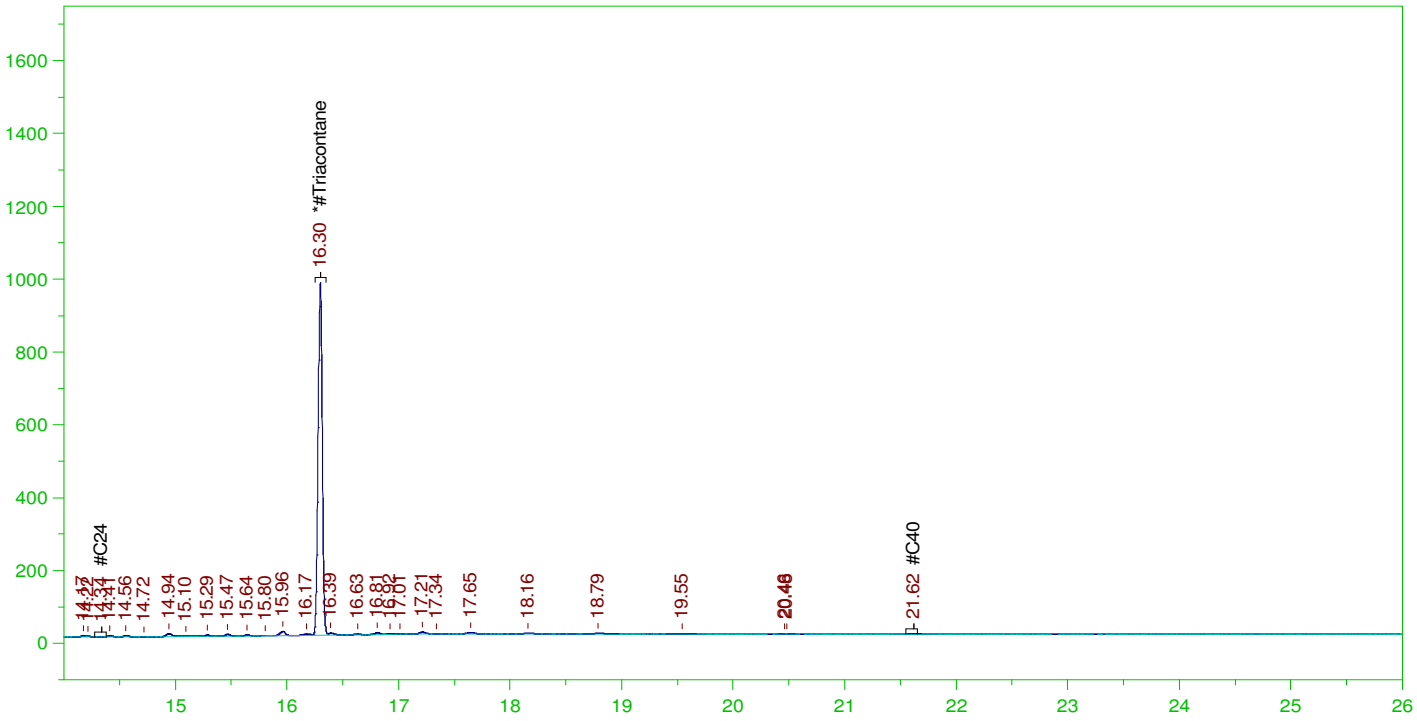
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.223	.189	.177	93.78	-
*1-Chlorooctadecane	29.987	.189	.	.	-
*#Triacontane	16.298	.189	.081	43.03	-

DRO Area:922744.9 DRO Amount: 0.0266413
TEH Area:1381699 TEH Amount: 3.989212E-02

ERH2544 (OWDFMW08A) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0013.RAW B22021435-006D ;0223HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22021435-006D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0013.RAW
Date & Time Acquired: 2/23/2022 5:57:22 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BF_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

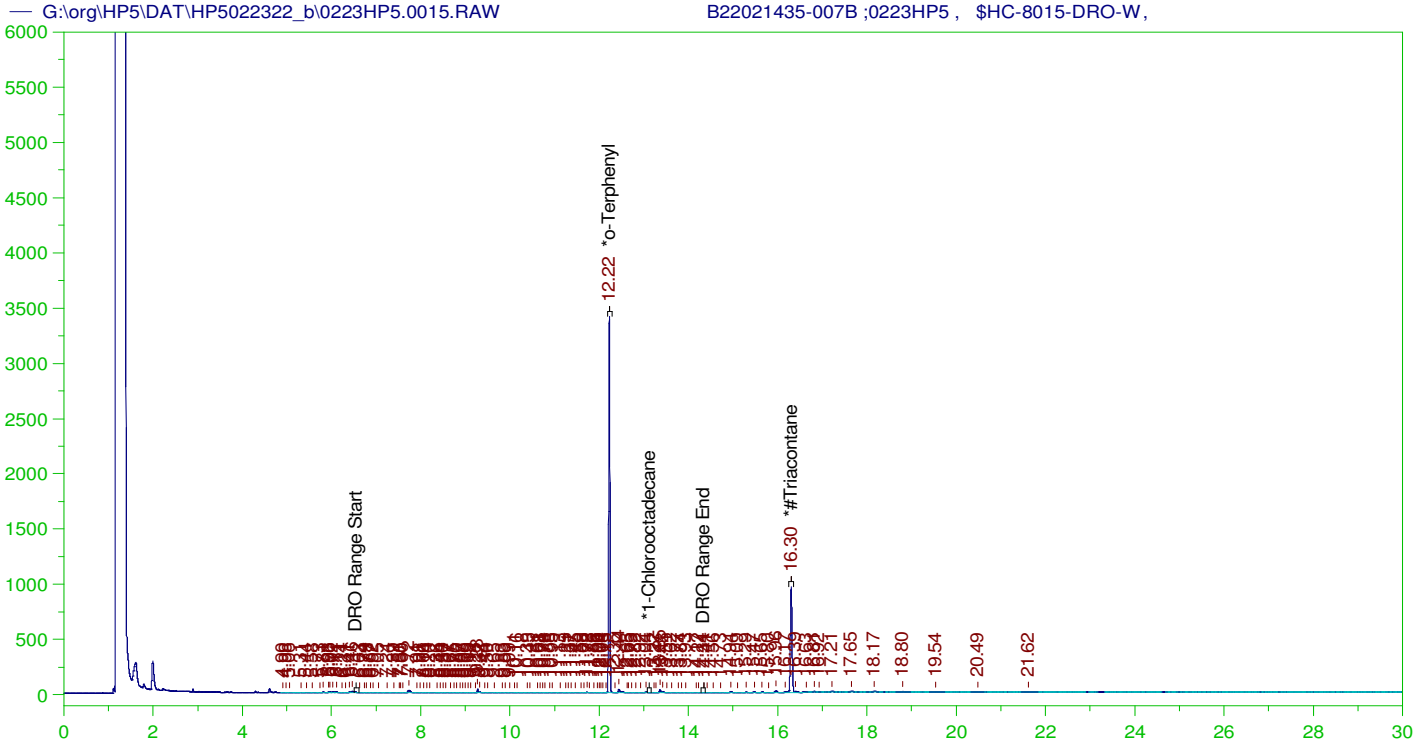
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.28 to 21.65

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.298	.472	.081	17.21	-

RRO Area:303201.2 RRO AMOUNT: 1.082474E-02

ERH2545 (OWDFMW08A) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0015.RAW B22021435-007B ;0223HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-007B ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0015.RAW
Date & Time Acquired: 2/23/2022 7:23:31 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JFb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JFb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

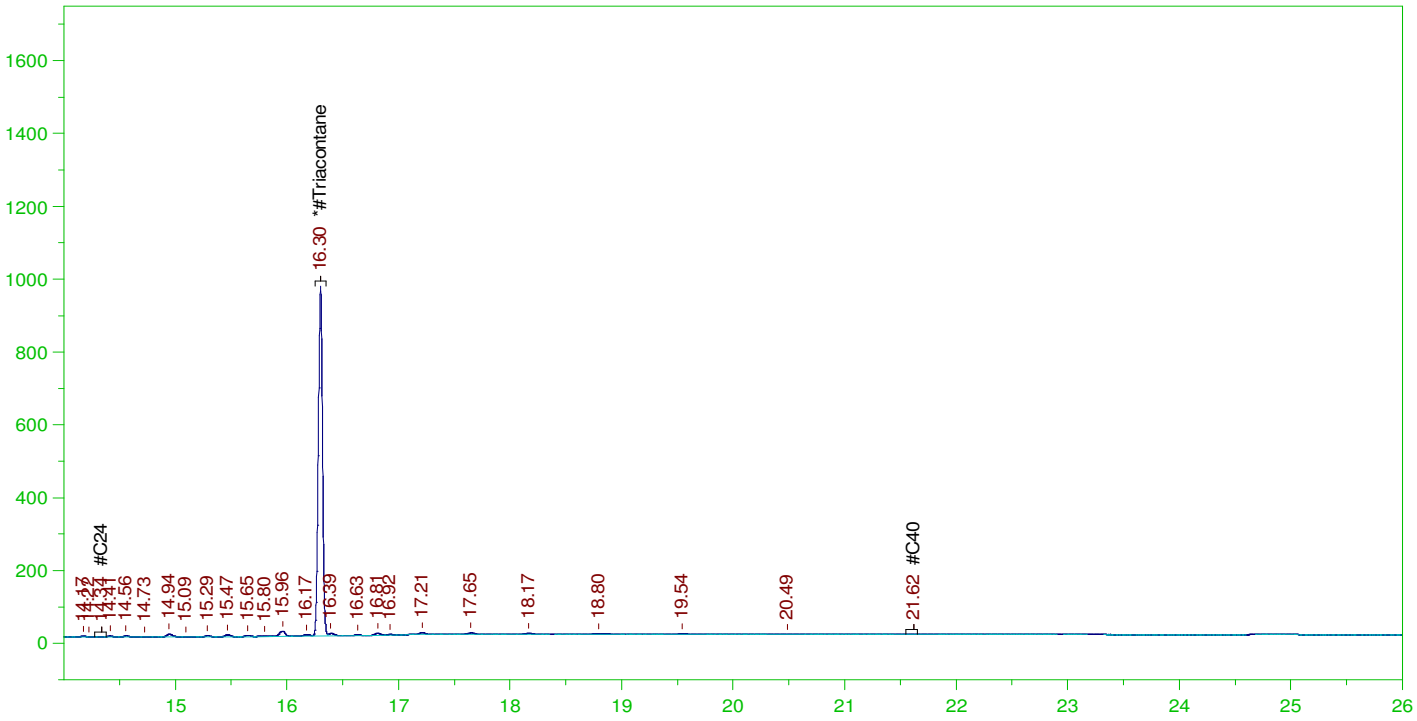
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.189	.171	90.85	-
*1-Chlorooctadecane	29.964	.189	.	.	-
*#Triacontane	16.3	.189	.08	42.51	-

DRO Area:765806.6 DRO Amount: 2.211021E-02
TEH Area:1364010 TEH Amount: 3.938141E-02

ERH2545 (OWDFMW08A) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0015.RAW B22021435-007B ;0223HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22021435-007B ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0015.RAW
Date & Time Acquired: 2/23/2022 7:23:31 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BF_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

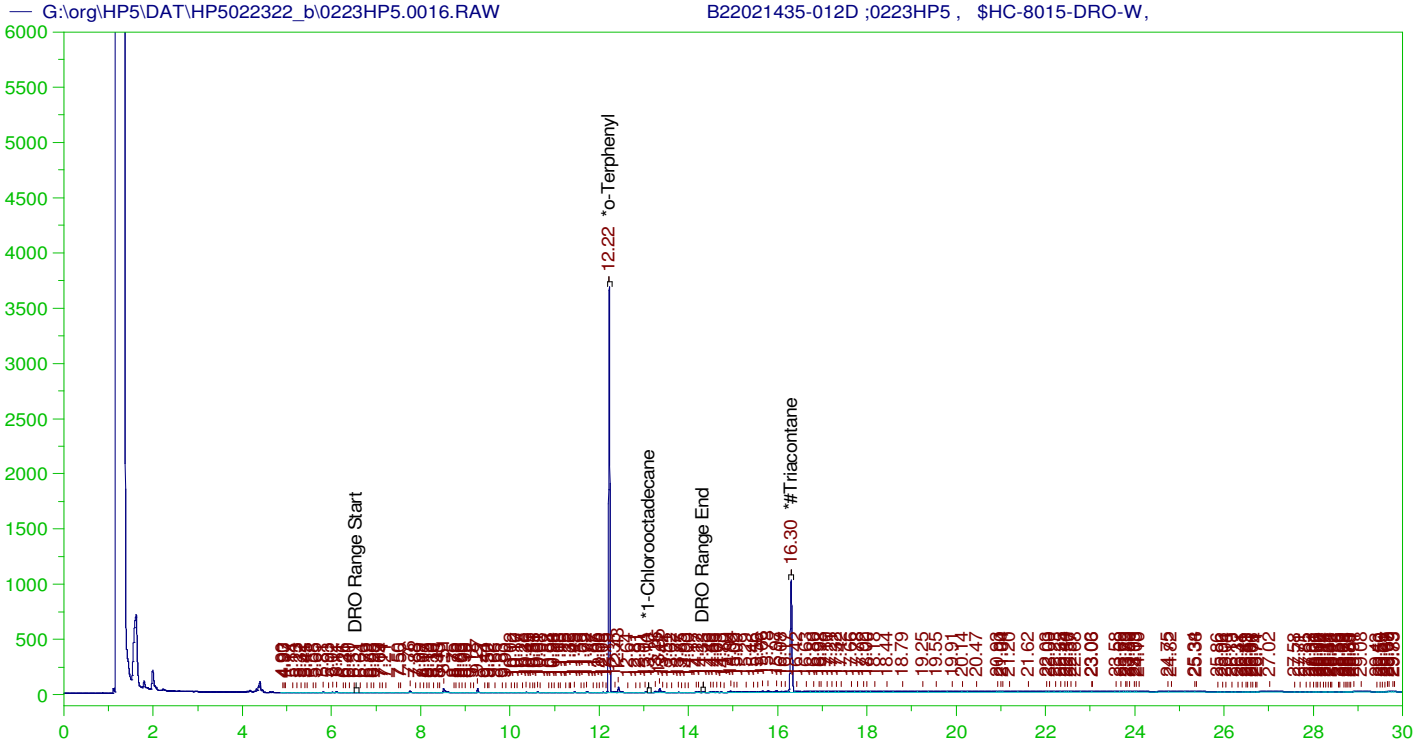
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.28 to 21.65

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.3	.472	.08	17.01	-

RRO Area:349287.5 RRO AMOUNT: 1.247009E-02

ERH2547 (RHMW19) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0016.RAW B22021435-012D ;0223HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-012D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0016.RAW
Date & Time Acquired: 2/23/2022 8:06:27 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JFb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JFb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

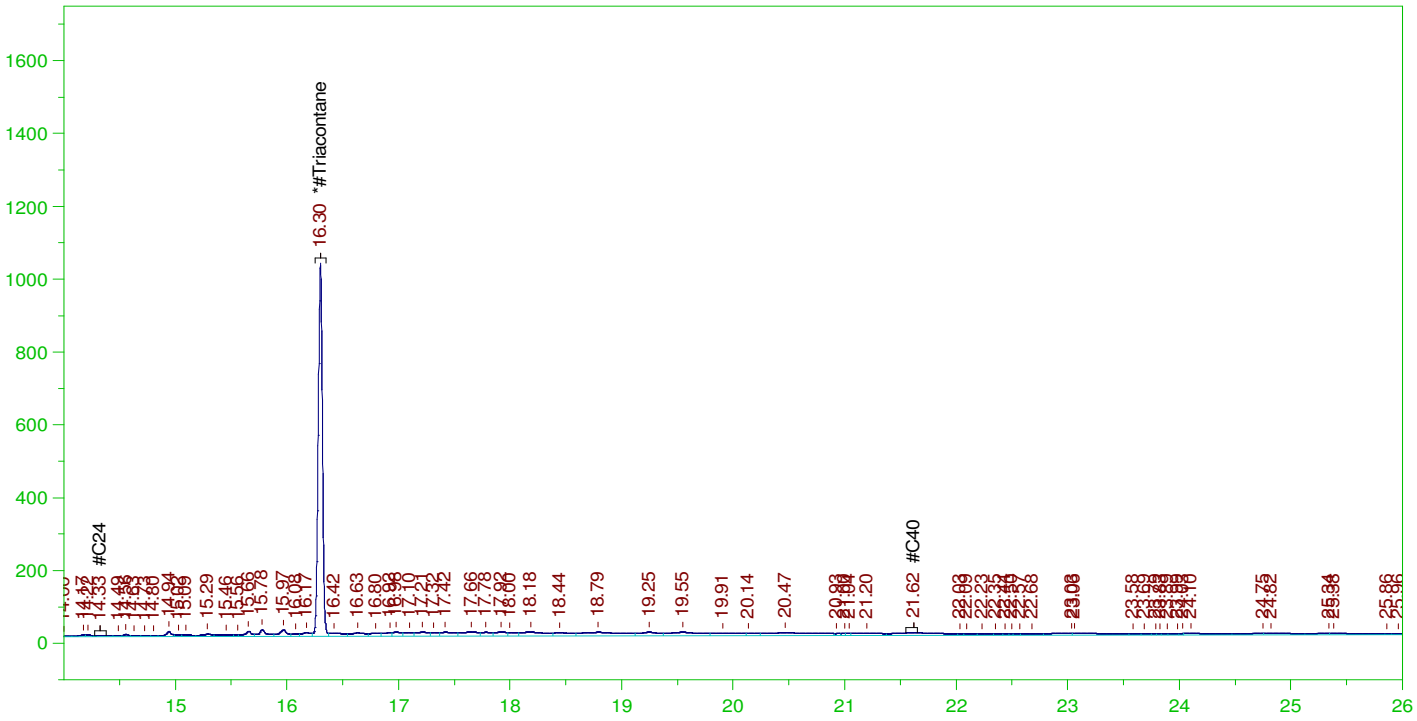
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.189	.183	96.82	-
*1-Chlorooctadecane	13.098	.189	.	.05	-
*#Triacontane	16.299	.189	.086	45.57	-

DRO Area:1055986 DRO Amount: 3.048821E-02
TEH Area:5253937 TEH Amount: 0.1516906

ERH2547 (RHMW19) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0016.RAW B22021435-012D ;0223HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22021435-012D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0016.RAW
Date & Time Acquired: 2/23/2022 8:06:27 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BF_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

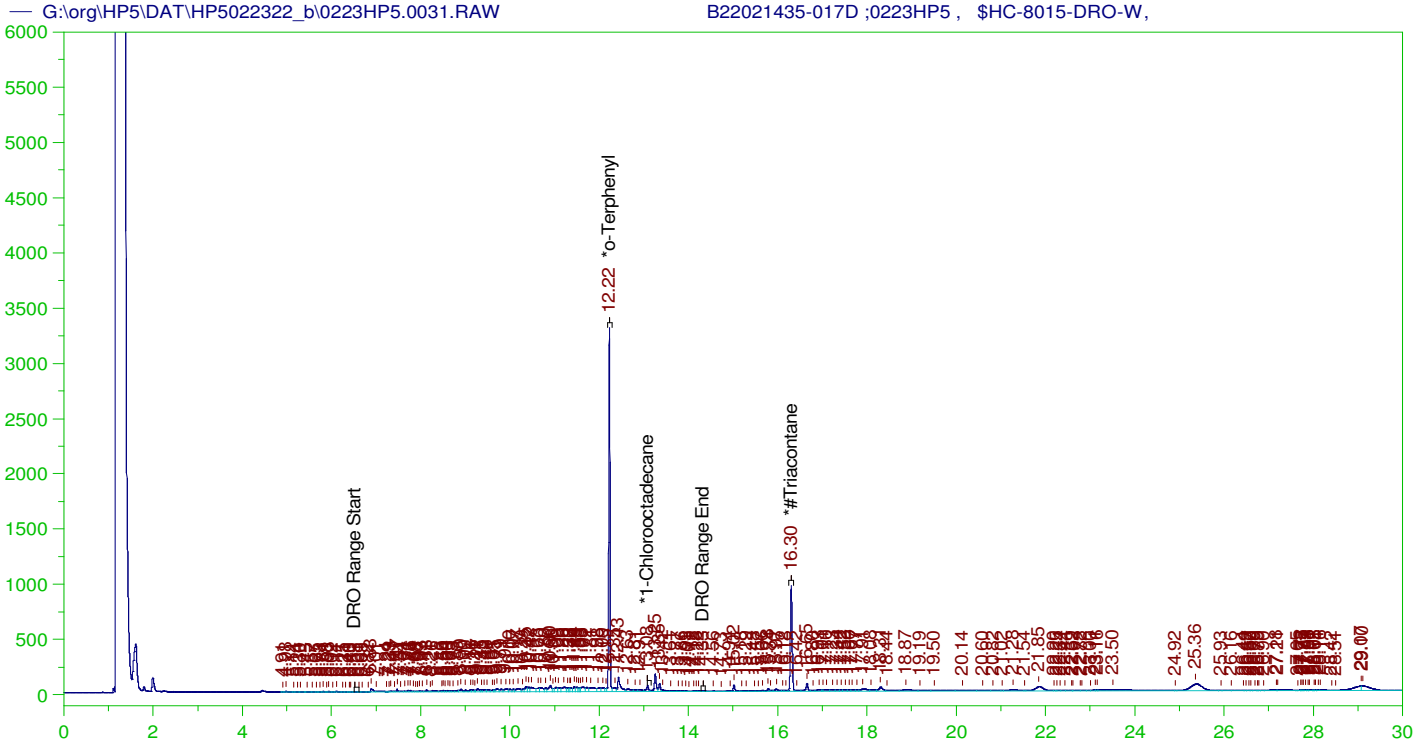
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.28 to 21.65

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.299	.472	.086	18.23	-

RRO Area:3025143 RRO AMOUNT: 0.1080021

ERH2549 (RHMW01R) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0031.RAW B22021435-017D ;0223HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-017D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0031.RAW
Date & Time Acquired: 2/24/2022 6:51:00 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JFb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JFb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

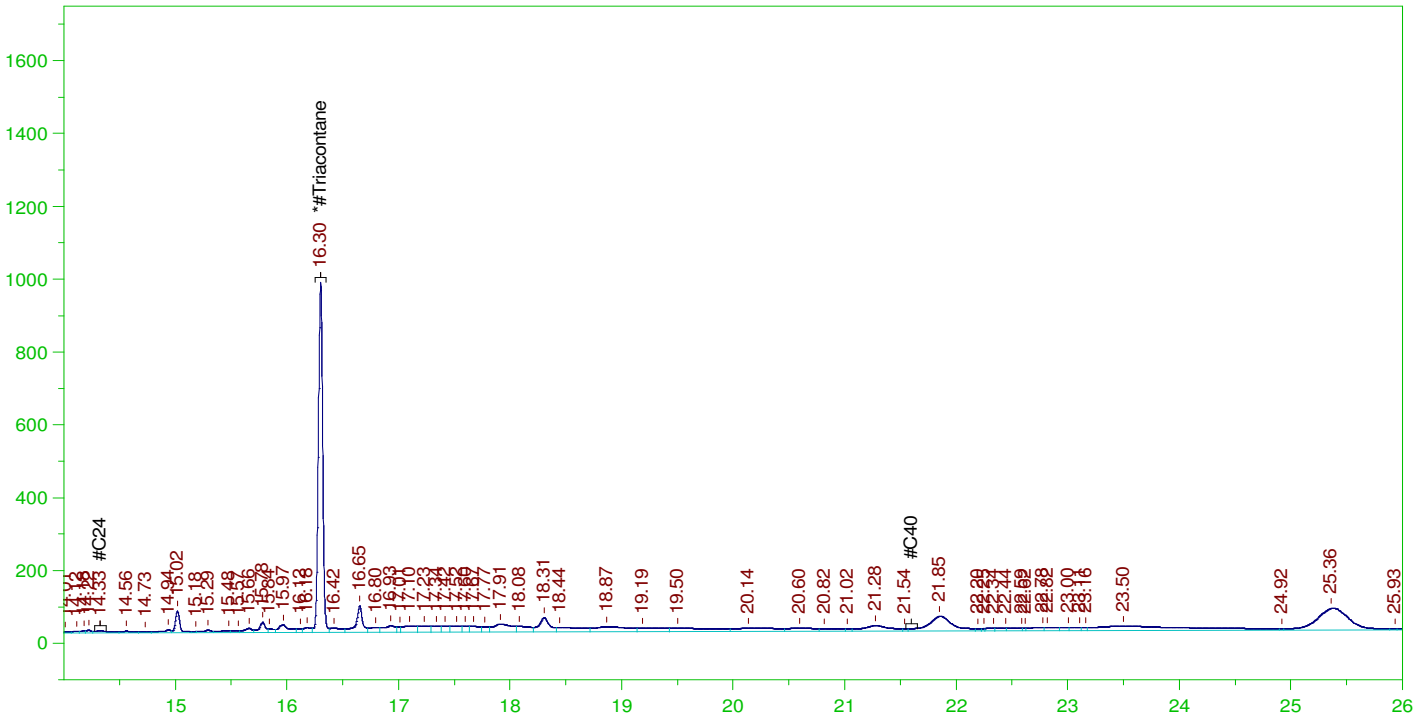
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.224	.189	.168	88.96	-
*1-Chlorooctadecane	13.079	.189	.005	2.89	-
*#Triacontane	16.301	.189	.083	44.08	-

DRO Area:9386433 DRO Amount: 0.2710032
TEH Area:1.947016E+07 TEH Amount: 0.5621383

ERH2549 (RHMW01R) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0031.RAW B22021435-017D ;0223HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22021435-017D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0031.RAW
Date & Time Acquired: 2/24/2022 6:51:00 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BF_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

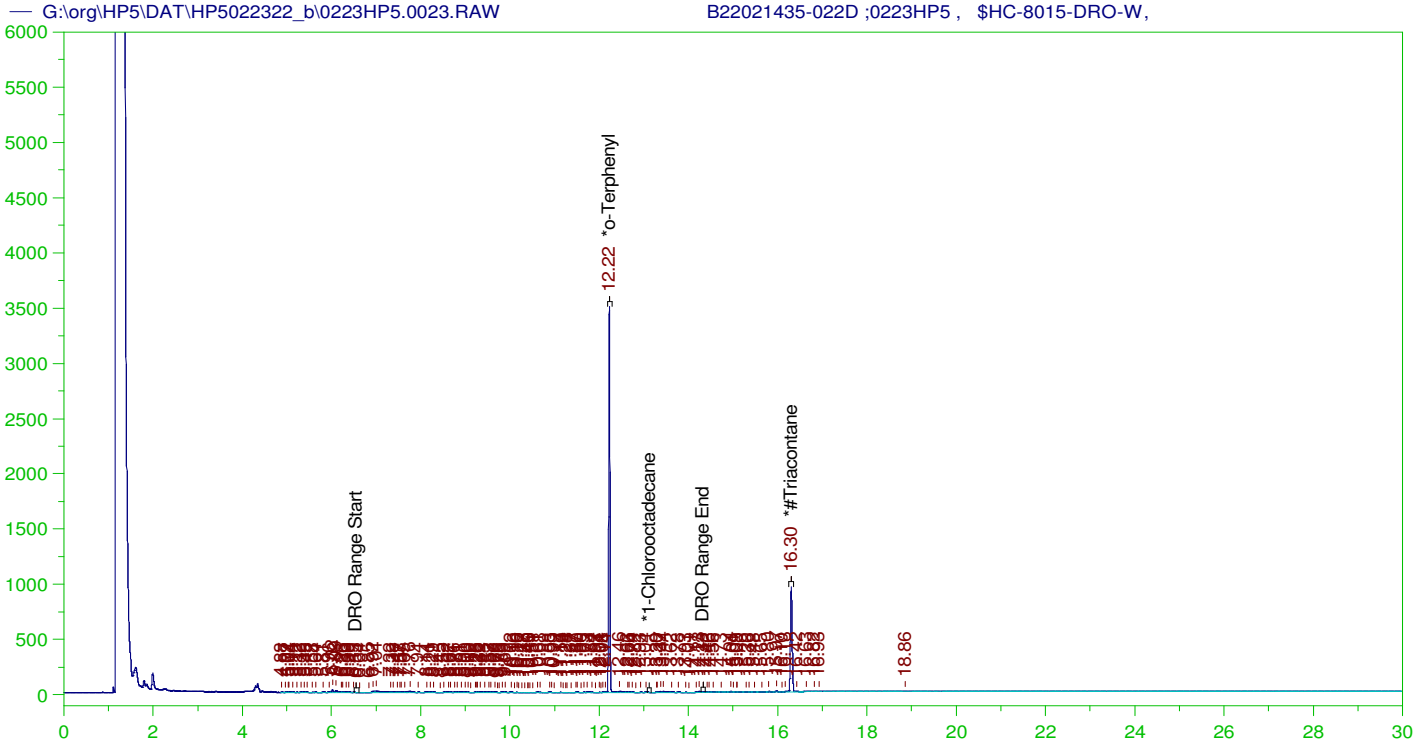
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.28 to 21.65

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.301	.472	.083	17.63	-

RRO Area:4723182 RRO AMOUNT: 0.1686247

ERH2551 (RHMW2254-01 Bailer) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0023.RAW B22021435-022D ;0223HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-022D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0023.RAW
Date & Time Acquired: 2/24/2022 1:07:07 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JFb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JFb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

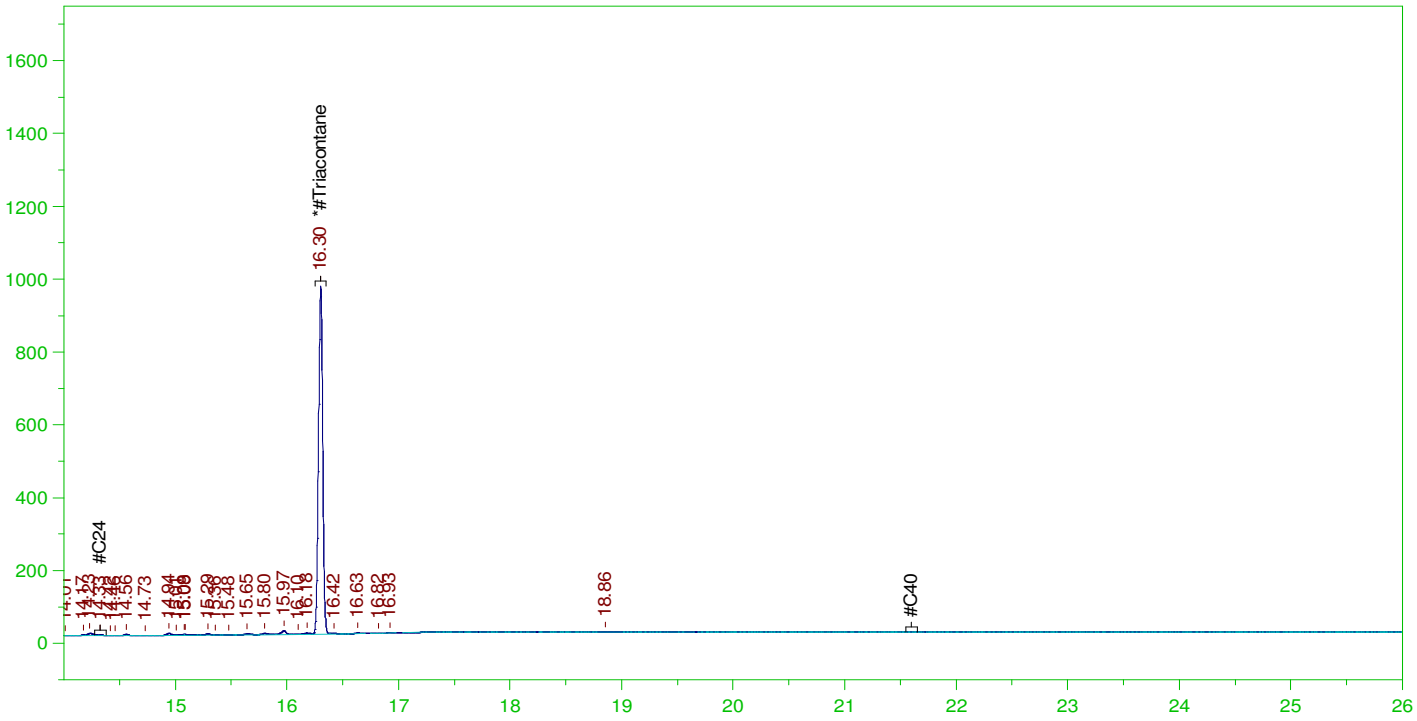
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.223	.189	.176	93.05	-
*1-Chlorooctadecane	29.989	.189	.	.	-
*#Triacontane	16.302	.189	.081	42.78	-

DRO Area:685565.2 DRO Amount: 0.0197935
TEH Area:1123990 TEH Amount: 3.245162E-02

ERH2551 (RHMW2254-01 Bailer) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0023.RAW B22021435-022D ;0223HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22021435-022D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0023.RAW
Date & Time Acquired: 2/24/2022 1:07:07 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BF_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

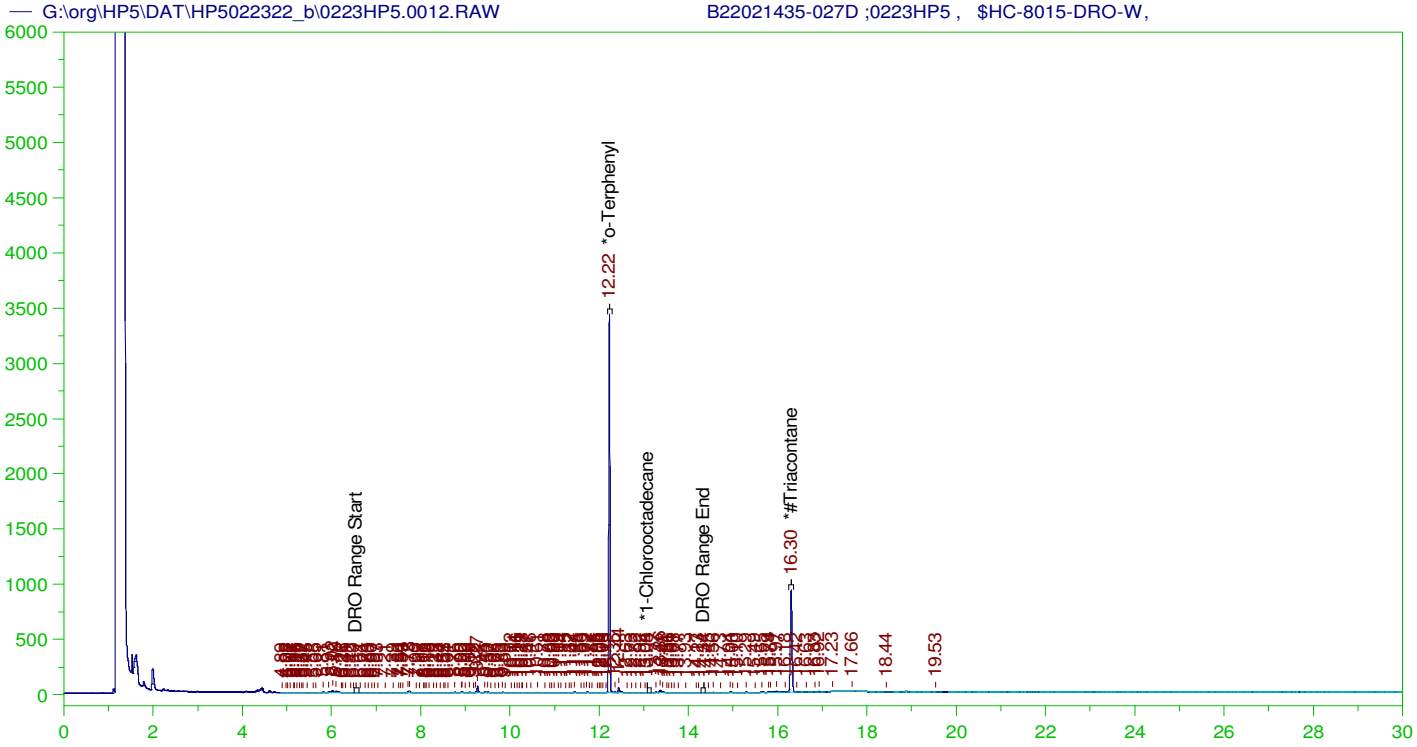
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.28 to 21.65

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.302	.472	.081	17.11	-

RRO Area:151105.1 RRO AMOUNT: 5.39468E-03

ERH2553 (RHMW2254-01 Low Flow) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0012.RAW B22021435-027D ;0223HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-027D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0012.RAW
Date & Time Acquired: 2/23/2022 5:14:25 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JFb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JFb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

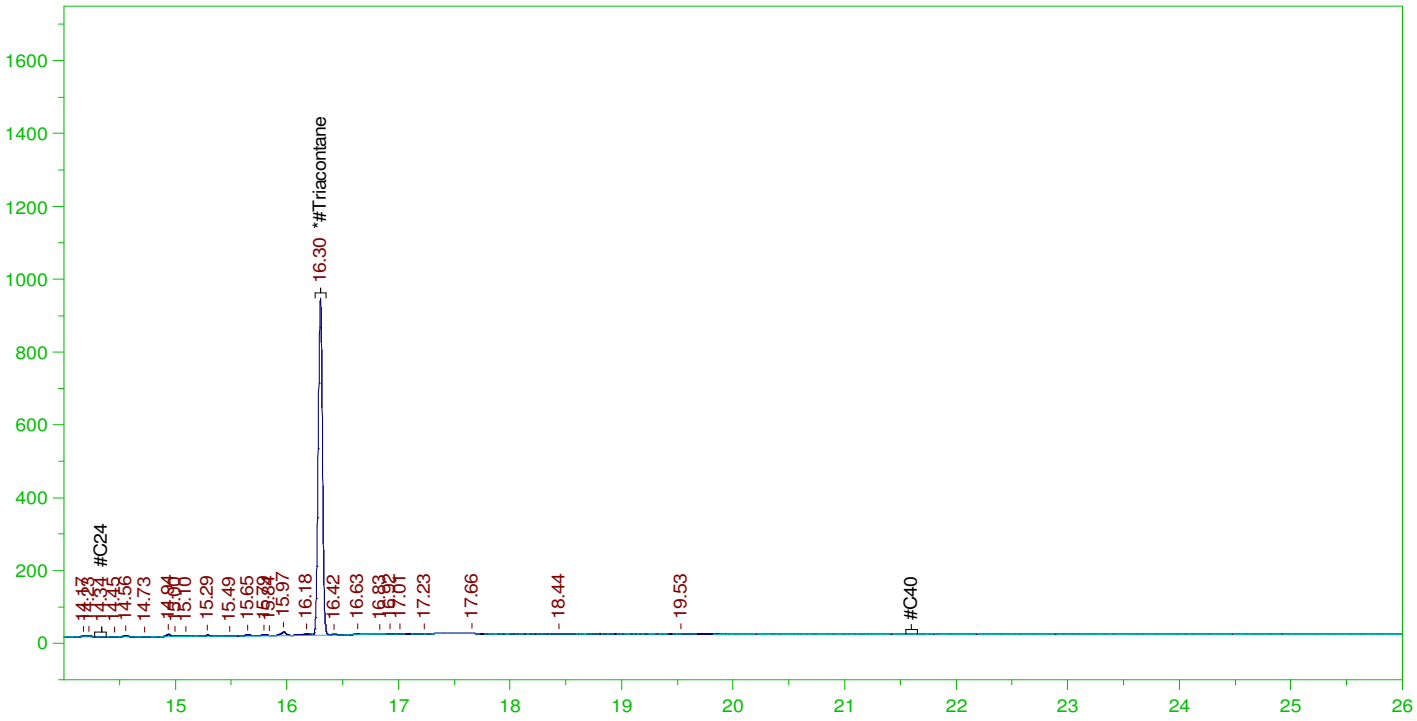
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.223	.189	.172	90.96	-
*1-Chlorooctadecane	13.078	.189	.	.07	-
*#Triacontane	16.299	.189	.079	41.7	-

DRO Area:967812.6 DRO Amount: 2.794249E-02
TEH Area:1388966 TEH Amount: 4.010195E-02

ERH2553 (RHMW2254-01 Low Flow) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0012.RAW B22021435-027D ;0223HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22021435-027D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0012.RAW
Date & Time Acquired: 2/23/2022 5:14:25 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BF_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

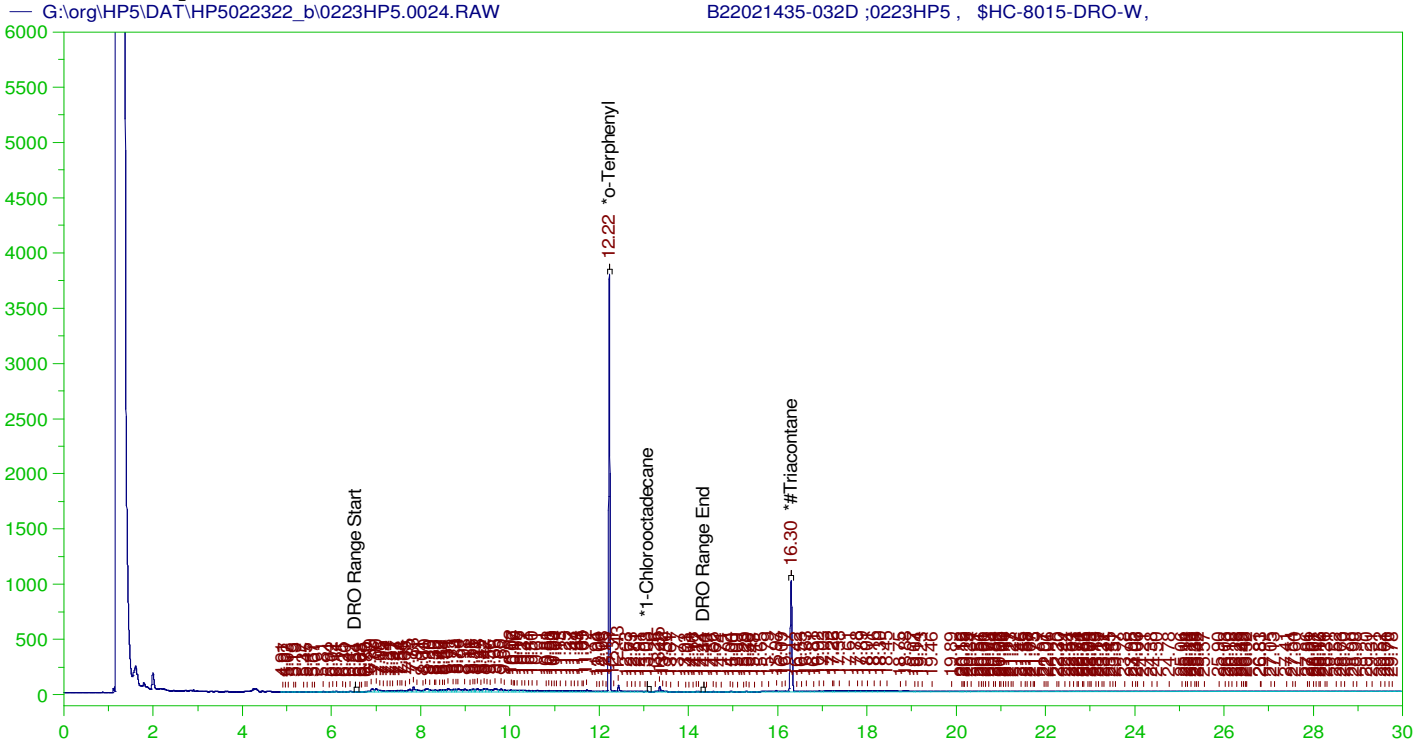
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.28 to 21.65

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.299	.472	.079	16.68	-

RRO Area:156538.7 RRO AMOUNT: 5.588667E-03

ERH2555 (Sump Audit 3) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0024.RAW B22021435-032D ;0223HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-032D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0024.RAW
Date & Time Acquired: 2/24/2022 1:50:09 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JFb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JFb-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

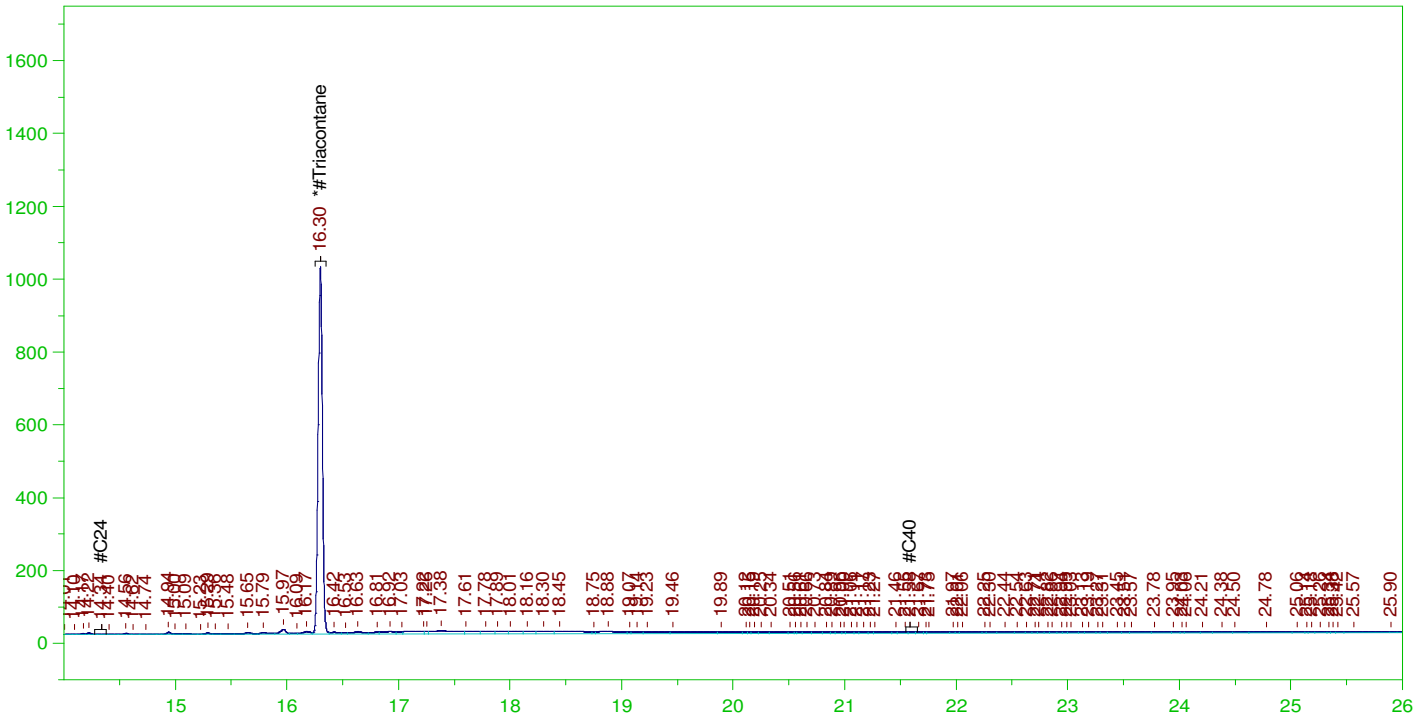
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.19	.188	98.68	-
*1-Chlorooctadecane	13.078	.19	.	.26	-
*#Triacontane	16.299	.19	.087	45.57	-

DRO Area:6288002 DRO Amount: 0.1832749
TEH Area:9732279 TEH Amount: 0.2836644

ERH2555 (Sump Audit 3) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0024.RAW B22021435-032D ;0223HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22021435-032D ;0223HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0024.RAW
Date & Time Acquired: 2/24/2022 1:50:09 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BF_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

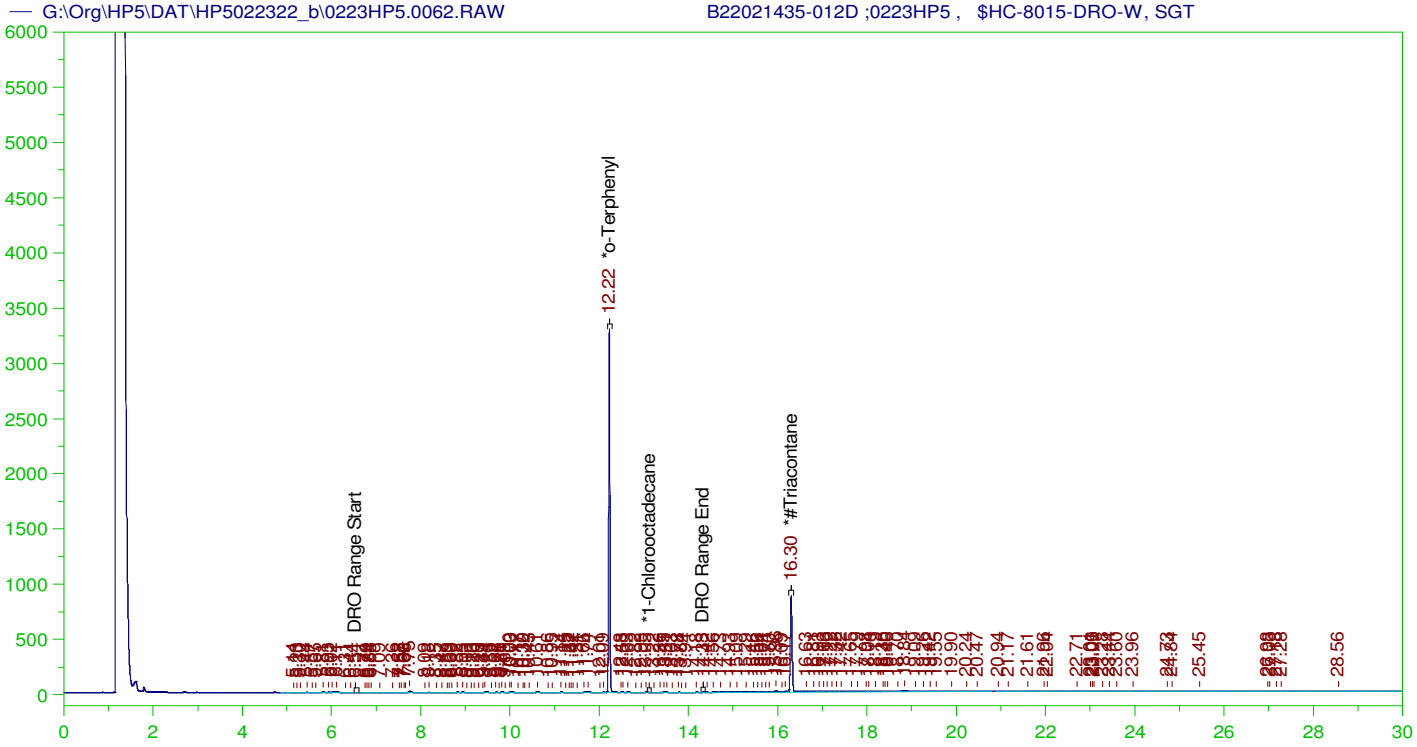
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.28 to 21.65

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.299	.476	.087	18.23	-

RRO Area:2175531 RRO AMOUNT: 7.840945E-02

ERH2547 (RHMW19) Batch ID: 163927

G:\Org\HP5\DAT\HP5022322_b\0223HP5.0062.RAW B22021435-012D ;0223HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-012D ;0223HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\Org\HP5\DAT\HP5022322_b\0223HP5.0062.RAW
Date & Time Acquired: 2/25/2022 5:06:57 AM
Method File: G:\Org\HP5\Methods\D3_8015-022362-JFb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JFb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

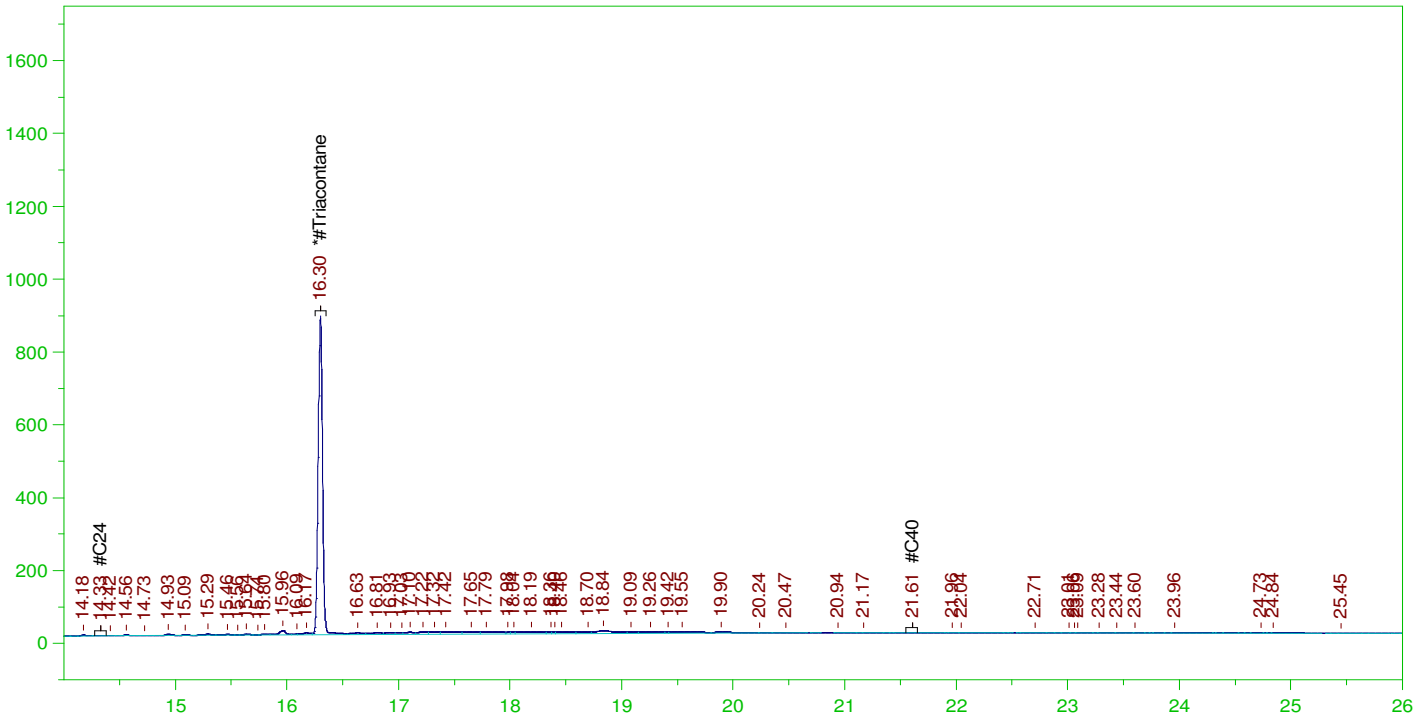
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.189	.17	90.07	-
*1-Chlorooctadecane	29.94	.189	.	.	-
*#Triacontane	16.3	.189	.077	40.76	-

DRO Area:349776.7 DRO Amount: 1.009868E-02
TEH Area:1527477 TEH Amount: 0.044101

ERH2547 (RHMW19) Batch ID: 163927

G:\Org\HP5\DAT\HP5022322_b\0223HP5.0062.RAW B22021435-012D ;0223HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22021435-012D ;0223HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\Org\HP5\DAT\HP5022322_b\0223HP5.0062.RAW
Date & Time Acquired: 2/25/2022 5:06:57 AM
Method File: G:\Org\HP5\Methods\D3_OROS-022362-BF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BF_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

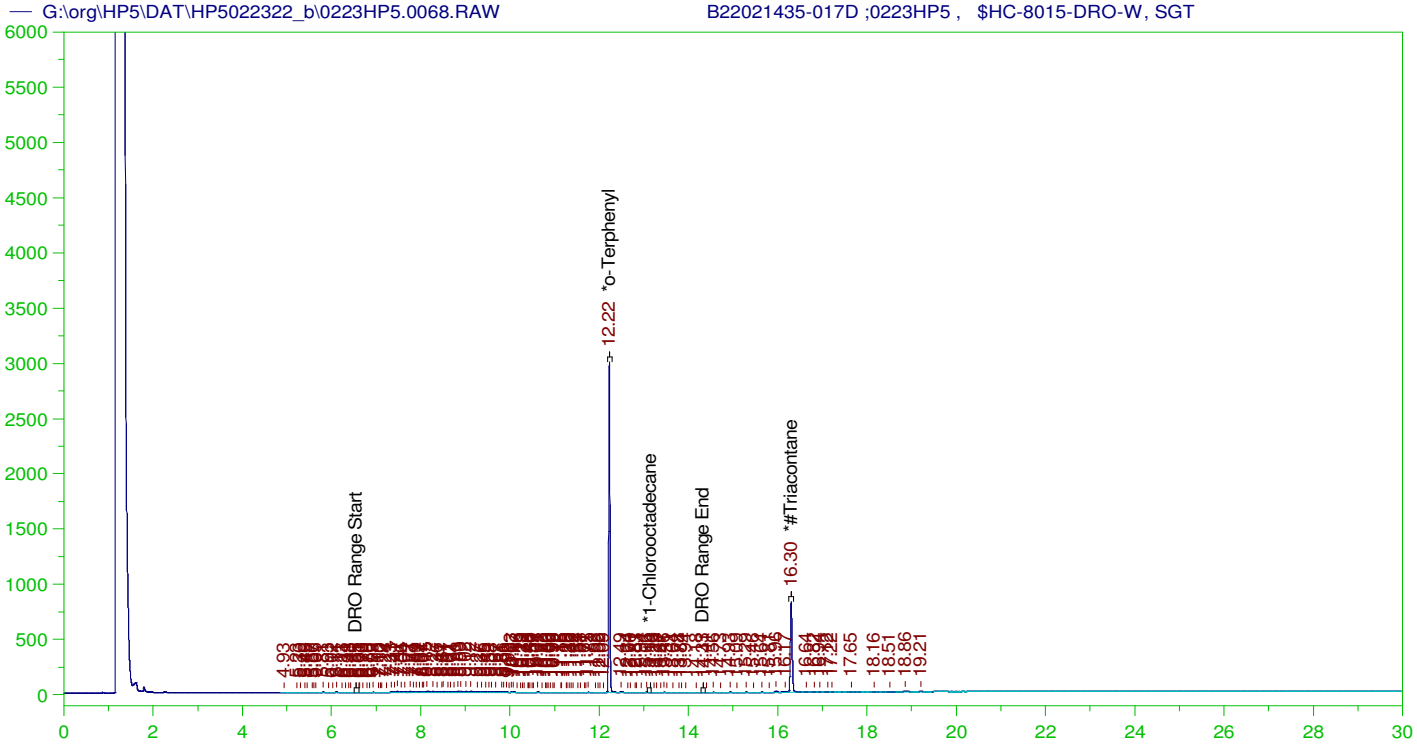
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.28 to 21.65

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.3	.472	.077	16.3	-

RRO Area:1089383 RRO AMOUNT: 3.889259E-02

ERH2549 (RHMW01R) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0068.RAW B22021435-017D ;0223HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-017D ;0223HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0068.RAW
Date & Time Acquired: 2/25/2022 9:24:04 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JFb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JFb-C24-T.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

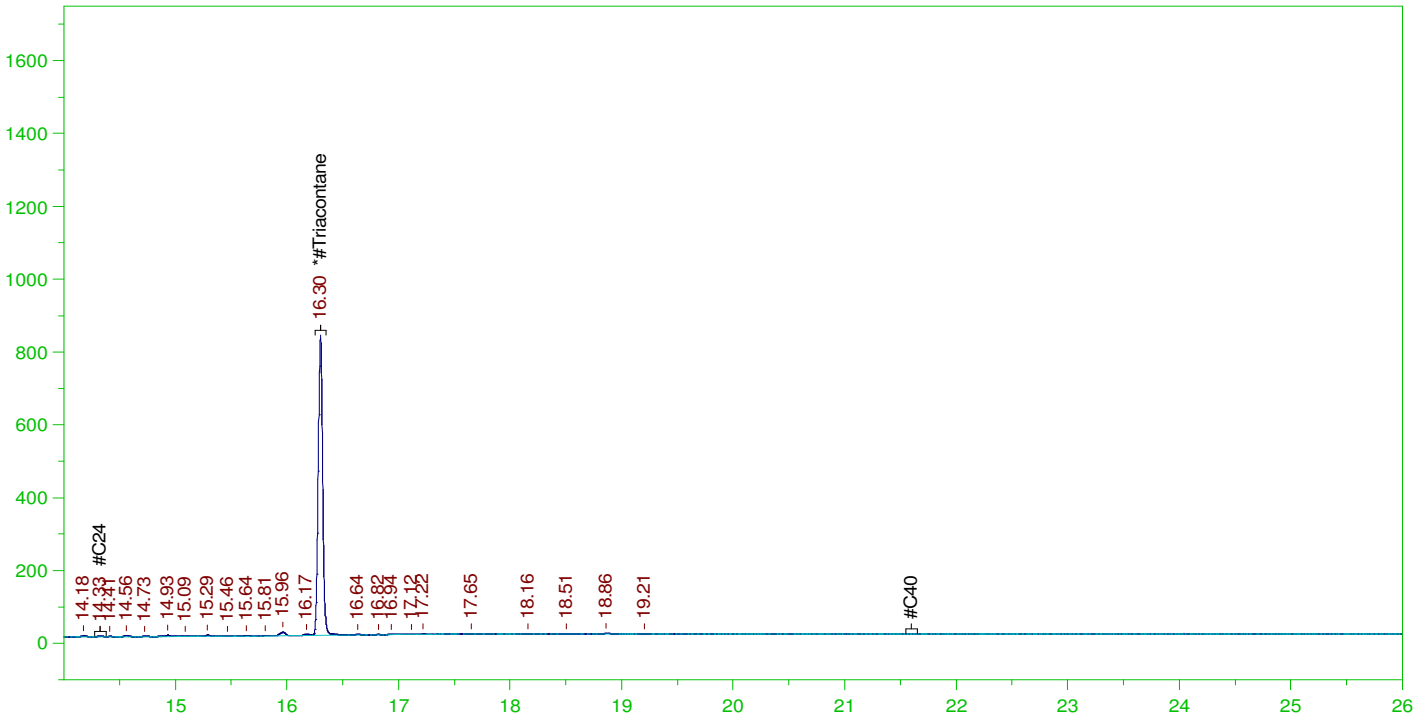
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.189	.156	82.66	-
*1-Chlorooctadecane	13.145	.189	.	.02	-
*#Triacontane	16.3	.189	.073	38.84	-

DRO Area:1299704 DRO Amount: 0.0375248
TEH Area:1484174 TEH Amount: 4.285076E-02

ERH2549 (RHMW01R) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0068.RAW B22021435-017D ;0223HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22021435-017D ;0223HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0068.RAW
Date & Time Acquired: 2/25/2022 9:24:04 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BF_SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

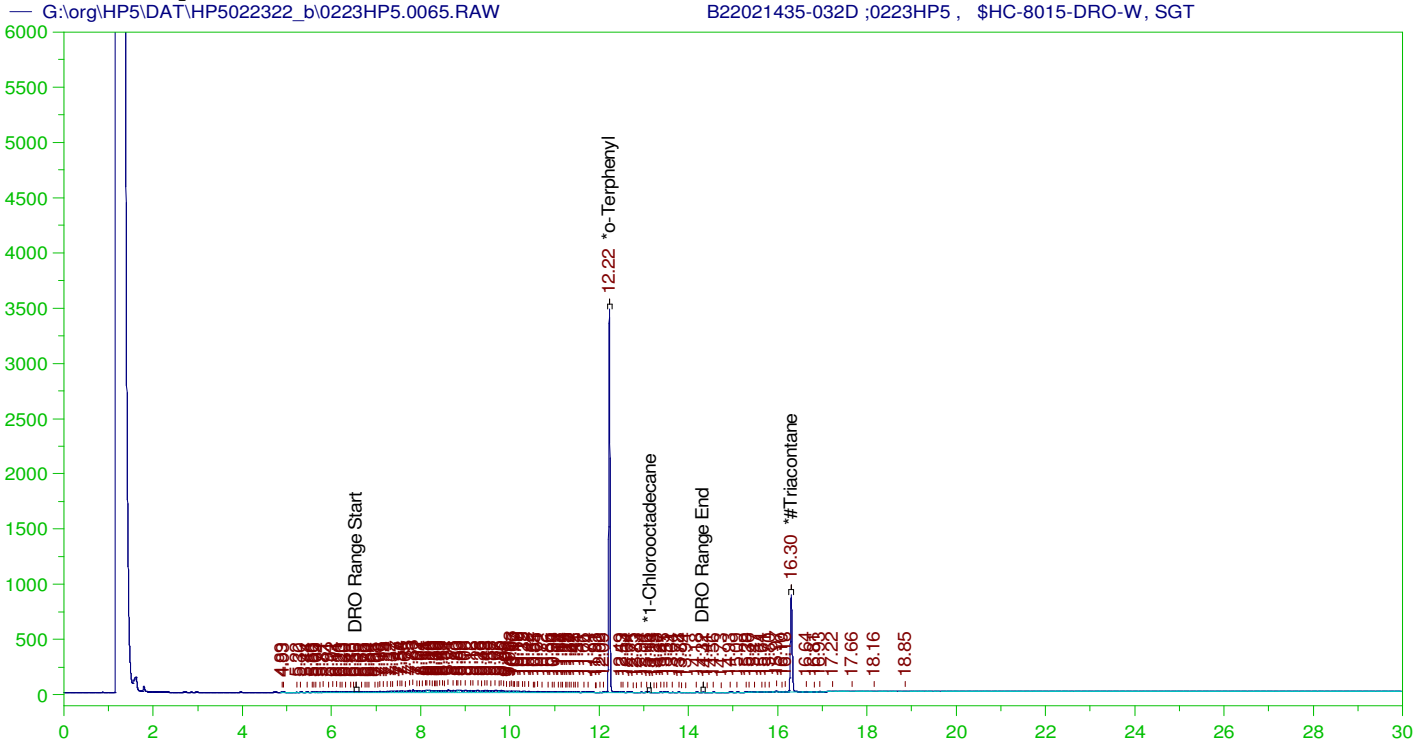
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.28 to 21.65

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.3	.472	.073	15.55	-

RRO Area:120635.8 RRO AMOUNT: 4.306879E-03

ERH2555 (Sump Audit 3) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0065.RAW B22021435-032D ;0223HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22021435-032D ;0223HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0065.RAW
Date & Time Acquired: 2/25/2022 7:15:21 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JFb-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JFb-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

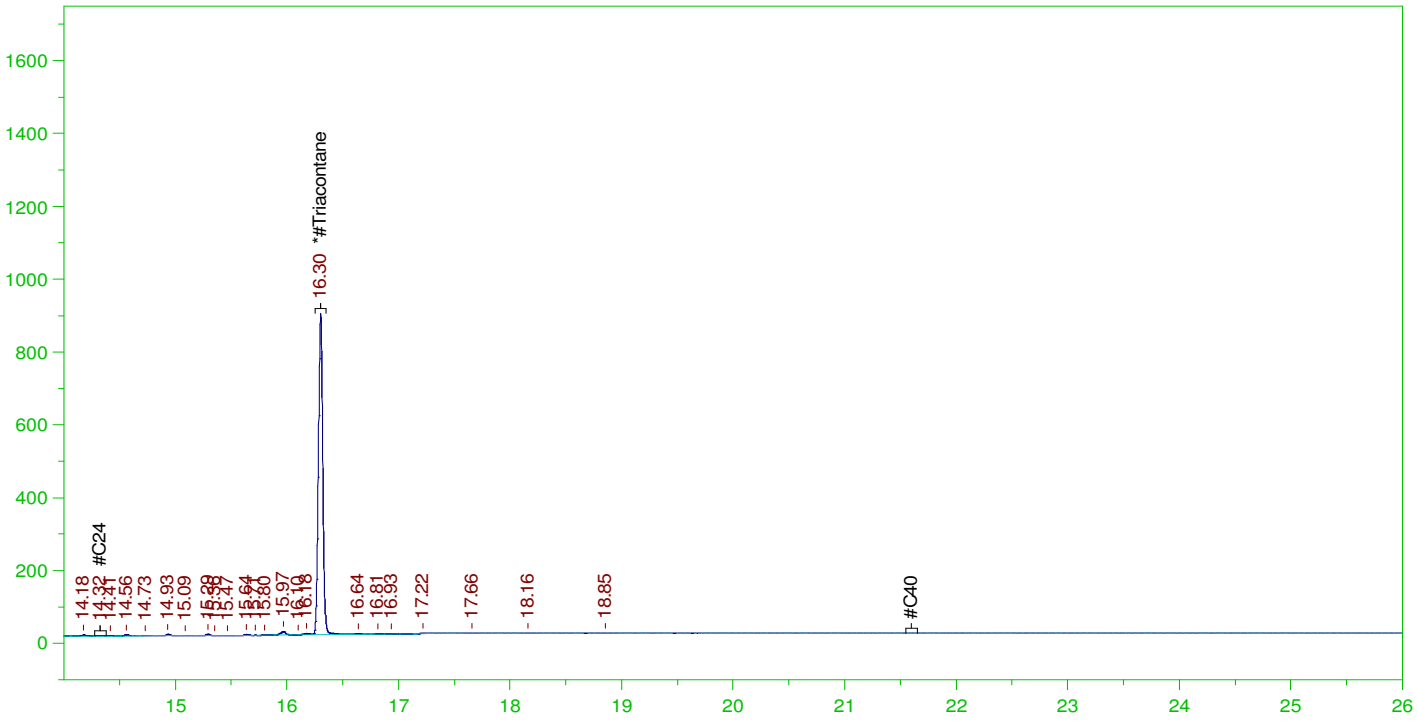
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.224	.19	.179	93.91	-
*1-Chlorooctadecane	13.144	.19	.	.02	-
*#Triacontane	16.301	.19	.078	40.71	-

DRO Area:3004185 DRO Amount: 8.756227E-02
TEH Area:3230063 TEH Amount: 9.414586E-02

ERH2555 (Sump Audit 3) Batch ID: 163927

G:\org\HP5\DAT\HP5022322_b\0223HP5.0065.RAW B22021435-032D ;0223HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22021435-032D ;0223HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5022322_b\0223HP5.0065.RAW
Date & Time Acquired: 2/25/2022 7:15:21 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BF_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: 14.28 to 21.65

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.301	.476	.078	16.31	-

RRO Area:117934.4 RRO AMOUNT: 4.250535E-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

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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
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