



ANALYTICAL SUMMARY REPORT

December 03, 2021

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

Work Order: B21110712 Quote ID: 5912

Project Name: CV18F0126/60571032.02.20.01

Energy Laboratories Inc Billings MT received the following 7 samples from AECOM - Honolulu on 11/6/2021 for analysis.

Lab ID	Client Sample ID	Collect Date	Received Date	Matrix	Test
B21110712-001	ERH1873 (RHMW01R)	11/03/21 14:45	11/06/2021	Ground Water	DRO-Liquid-Liquid Extraction SW3520C Diesel Range Organics SW8015C
B21110712-002	ERH1876 (RHMW02)	11/03/21 15:40	11/06/2021	Ground Water	Same As Above
B21110712-003	ERH1879 (RHMW03)	11/03/21 16:50	11/06/2021	Ground Water	Same As Above
B21110712-004	ERH1882 (RHMW05)	11/03/21 13:40	11/06/2021	Ground Water	Same As Above
B21110712-005	ERH1885 (RHMW2254-01)	11/03/21 13:25	11/06/2021	Ground Water	Same As Above
B21110712-006	ERH1888 (RHSF)	11/03/21 12:40	11/06/2021	Drinking Water	Same As Above
B21110712-007	ERH1890 (RHSF)	11/03/21 12:40	11/06/2021	Drinking Water	Same As Above

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

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

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

Report Approved By:



CLIENT: AECOM - Honolulu
Project: CV18F0126/60571032.02.20.01
Work Order: B21110712

Report Date: 12/3/2021

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.

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 Level IV 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. All quality control measures met criteria; therefore there were no analytical QC exceptions on this report.



Chain of Custody & Analytical Request Record 202111-01

DoD Samples

www.energylab.com

coc# NOI

Page 1 of 3

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@aecom.com / margie.pascua@aecom.com	
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order
N/A	N/A	N/A

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account Information
Phone	
Mailing Address	
City, State, Zip	
Email	USAPImaging@aecom.com
Receive Report	<input type="checkbox"/> Hard Copy <input type="checkbox"/> Email
Special Report/Formats:	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> ONELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other

Comments

1. Project performed under DoD QSM.
2. TPH-DRO/RRO 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 COCs.

Project Information

Project Name, PWSID, Permit, etc. CV18F0126/60571032.02.20.01	
Sampler Name GM, CF, NL	Sampler Phone 808-987-3201
Sample Origin State Hawaii	EPA/State Compliance <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
URANIUM MINING CLIENTS MUST indicate sample type	
<input type="checkbox"/> Unprocessed Ore	
<input type="checkbox"/> Processed Ore (Ground or Refined) **CALL BEFORE SENDING	
<input type="checkbox"/> 11(e)2 Byproduct Material (Can ONLY be Submitted to ELI Casper Location)	

Matrix Codes

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

Analysis Requested

EPA 8015 TPH-DRO/RRO w/SGC	EPA 8015 TPH-DRO/ RRO	Analysis Requested										See Attached	
✓	✓												
✓	✓												
✓	✓												
✓	✓												
✓	✓												
✓	✓												
✓	✓												
✓	✓												
✓	✓												

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

Sample Identification (Name, Location, Interval, etc.)	Collection		Number of Containers	Matrix (See Codes Above)	EPA 8015 TPH-DRO/RRO w/SGC	EPA 8015 TPH-DRO/ RRO								RUSH TAT	ELI-LAB ID (Laboratory Use Only)
	Date	Time													
1 ERH1873 (RHMW01R)	11/03/2021	10:45 am	2	GW	✓	✓								×	B21110712
2 ERH1876 (RHMW02)	11/03/2021	11:40 am	2	GW	✓	✓								×	
3 ERH1879 (RHMW03)	11/03/2021	12:50 pm	0	GW	✓	✓								×	
4 ERH1882 (RHMW05)	11/03/2021	9:40 am	0	GW	✓	✓								×	
5 ERH1885 (RHMW2254-01)	11/03/2021	9:25 am	0	GW	✓	✓								×	
6 ERH1888 (RHSF)	11/03/2021	8:40 am	0	DW	✓	✓								×	
7 ERH1890 (RHSF)	11/03/2021	8:40 am	0	DW	✓	✓								×	
8 MY 11/4/21															
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) Matthew Yim	Date/Time 11/4/2021 12:00	Signature	Received by (print)	Date/Time	Signature			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print) Margie Pascua	Date/Time 11/6/21 11:10	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.



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record 202111-03

DoD Samples

www.energylab.com

coc# NOI

Page 3 of 3

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@aecom.com / margie.pascua@aecom.com	
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote	Bottle Order
N/A	N/A	N/A

Report Information (if different than Account Information)

Company/Name	AECOM	
Contact	see Account Information	
Phone		
Mailing Address		
City, State, Zip		
Email	USAPImaging@aecom.com	
Receive Report	<input type="checkbox"/> Hard Copy <input type="checkbox"/> Email	
Special Report/Formats:	<input checked="" type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

1. Project performed under DoD QSM.
2. TPH-DRO/RRO 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 COCs.

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126/60571032.02.20.01		
Sampler Name	KL, AM	Sampler Phone	808-636-3319
Sample Origin State	Hawaii	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
URANIUM MINING CLIENTS MUST indicate sample type			
<input type="checkbox"/> Unprocessed Ore			
<input type="checkbox"/> Processed Ore (Ground or Refined) **CALL BEFORE SENDING			
<input checked="" type="checkbox"/> 11(e)2 Byproduct Material (Can ONLY be Submitted to ELI Casper Location)			

Matrix Codes

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

Analysis Requested

	EPA 8015 TPH-DRO/RRO w/SGC	EPA 8015 TPH-DRO/ RRO																
1	✓	✓																
2	✓	✓																
3	✓	✓																
4	✓	✓																
5	✓	✓																
6	✓	✓																
7	✓	✓																
8																		
9																		

All turnaround times are standard unless marked as RUSH.

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

Sample Identification (Name, Location, Interval, etc.)	Collection		Number of Containers	Matrix (See Codes Above)	EPA 8015 TPH-DRO/RRO w/SGC	EPA 8015 TPH-DRO/ RRO														
	Date	Time																		
1 ERH1873 (RHMW01R)	11/03/2021	10:45 am	0	GW	✓	✓														
2 ERH1876 (RHMW02)	11/03/2021	11:40 am	0	GW	✓	✓														
3 ERH1879 (RHMW03)	11/03/2021	12:50 pm	0	GW	✓	✓														
4 ERH1882 (RHMW05)	11/03/2021	9:40 am	0	GW	✓	✓														
5 ERH1885 (RHMW2254-01)	11/03/2021	9:25 am	2	GW	✓	✓														
6 ERH1888 (RHSF)	11/03/2021	8:40 am	2	DW	✓	✓														
7 ERH1890 (RHSF)	11/03/2021	8:40 am	2	DW	✓	✓														
8 NY 11/4/21																				
9																				

See Attached

RUSH TAT

ELI LAB ID: 32110712

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

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature			
	Matthew Yim	11/4/2021 12:00							
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature			
					11/6/21 1110				
Shipped By	Cooler ID(s)	Custody Seals	Impact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
		Y N C B	Y N	0.7 °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.



Work Order Receipt Checklist

AECOM - Honolulu

B21110712

Login completed by: Leslie S. Cadreau
Reviewed by: BL2000\gmccartney
Reviewed Date: 11/9/2021

Date Received: 11/6/2021
Received by: kmt
Carrier name: FedEx

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

Standard Reporting Procedures:

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

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

Contact and Corrective Action Comments:

The Temperature Blank temperature for shipping container 1 was 0.5°C, shipping container 2 was 0.4°C and shipping container 3 was 0.7°C.

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

Qualifiers and Abbreviations

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

Qualifiers and Abbreviations

Abbreviation

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

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



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH1873 (RHMW01R)
Project: CV18F0126/60571032.02.20.01
Matrix: Ground Water

Lab ID: B21110712-001
Collection Date: 11/03/2021 14:45
Date Received: 11/06/2021
Report Date: 12/03/2021

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.47	mg/L	1		0.30	0.15	0.038		SW8015C	11/11/2021 19:47/amn	GCFID-HP5-B_211111A : 17	161122
Diesel Range Organics (SGT-C10 to C24)	0.078	mg/L	1	J	0.30	0.12	0.038		SW8015C	11/12/2021 11:23/amn	GCFID-HP5-B_211111B : 8	161122
Oil Range Hydrocarbons (C24 to C40)	0.22	mg/L	1	J	0.30	0.15	0.085		SW8015C	11/11/2021 19:47/amn	GCFID-HP5-B_211111A : 17	161122
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.15	0.085		SW8015C	11/12/2021 11:23/amn	GCFID-HP5-B_211111B : 8	161122
Total Extractable Hydrocarbons	0.90	mg/L	1		0.30	0.15	0.073		SW8015C	11/11/2021 19:47/amn	GCFID-HP5-B_211111A : 17	161122
Total Extractable Hydrocarbons (SGT)	0.087	mg/L	1	J	0.30	0.12	0.032		SW8015C	11/12/2021 11:23/amn	GCFID-HP5-B_211111B : 8	161122
Surr: o-Terphenyl	75.0	%REC	1		56-125				SW8015C	11/11/2021 19:47/amn	GCFID-HP5-B_211111A : 17	161122
Surr: o-Terphenyl (SGT)	73.0	%REC	1		56-125				SW8015C	11/12/2021 11:23/amn	GCFID-HP5-B_211111B : 8	161122
Surr: n-Triacontane	88.0	%REC	1		50-150				SW8015C	11/11/2021 19:47/amn	GCFID-HP5-B_211111A : 17	161122
Surr: n-Triacontane (SGT)	70.0	%REC	1		50-150				SW8015C	11/12/2021 11:23/amn	GCFID-HP5-B_211111B : 8	161122

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B21110712-002

Collection Date: 11/03/2021 15:40

Date Received: 11/06/2021

Report Date: 12/03/2021

Client: AECOM - Honolulu
Client Sample ID: ERH1876 (RHMW02)
Project: CV18F0126/60571032.02.20.01
Matrix: Ground Water

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	2.8	mg/L	1		0.30	0.14	0.037		SW8015C	11/11/2021 14:47/amn	GCFID-HP5-B_211111A : 12	161122
Diesel Range Organics (SGT-C10 to C24)	0.52	mg/L	1		0.30	0.11	0.037		SW8015C	11/12/2021 17:05/amn	GCFID-HP5-B_211111B : 14	161122
Oil Range Hydrocarbons (C24 to C40)	0.35	mg/L	1		0.30	0.14	0.083		SW8015C	11/11/2021 14:47/amn	GCFID-HP5-B_211111A : 12	161122
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.083		SW8015C	11/12/2021 17:05/amn	GCFID-HP5-B_211111B : 14	161122
Total Extractable Hydrocarbons	3.2	mg/L	1		0.30	0.14	0.071		SW8015C	11/11/2021 14:47/amn	GCFID-HP5-B_211111A : 12	161122
Total Extractable Hydrocarbons (SGT)	0.55	mg/L	1		0.30	0.11	0.031		SW8015C	11/12/2021 17:05/amn	GCFID-HP5-B_211111B : 14	161122
Surr: o-Terphenyl	98.0	%REC	1		56-125				SW8015C	11/11/2021 14:47/amn	GCFID-HP5-B_211111A : 12	161122
Surr: o-Terphenyl (SGT)	85.0	%REC	1		56-125				SW8015C	11/12/2021 17:05/amn	GCFID-HP5-B_211111B : 14	161122
Surr: n-Triacontane	92.0	%REC	1		50-150				SW8015C	11/11/2021 14:47/amn	GCFID-HP5-B_211111A : 12	161122
Surr: n-Triacontane (SGT)	82.0	%REC	1		50-150				SW8015C	11/12/2021 17:05/amn	GCFID-HP5-B_211111B : 14	161122

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH1879 (RHMW03)
Project: CV18F0126/60571032.02.20.01
Matrix: Ground Water

Lab ID: B21110712-003
Collection Date: 11/03/2021 16:50
Date Received: 11/06/2021
Report Date: 12/03/2021

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.11	mg/L	1	J	0.30	0.15	0.038		SW8015C	11/11/2021 12:39/amn	GCFID-HP5-B_211111A : 10	161122
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.12	0.038		SW8015C	11/12/2021 09:55/amn	GCFID-HP5-B_211111B : 7	161122
Oil Range Hydrocarbons (C24 to C40)	0.25	mg/L	1	J	0.30	0.15	0.086		SW8015C	11/11/2021 12:39/amn	GCFID-HP5-B_211111A : 10	161122
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.15	0.086		SW8015C	11/12/2021 09:55/amn	GCFID-HP5-B_211111B : 7	161122
Total Extractable Hydrocarbons	0.39	mg/L	1		0.30	0.15	0.073		SW8015C	11/11/2021 12:39/amn	GCFID-HP5-B_211111A : 10	161122
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.12	0.032		SW8015C	11/12/2021 09:55/amn	GCFID-HP5-B_211111B : 7	161122
Surr: o-Terphenyl	72.0	%REC	1		56-125				SW8015C	11/11/2021 12:39/amn	GCFID-HP5-B_211111A : 10	161122
Surr: o-Terphenyl (SGT)	57.0	%REC	1		56-125				SW8015C	11/12/2021 09:55/amn	GCFID-HP5-B_211111B : 7	161122
Surr: n-Triacontane	95.0	%REC	1		50-150				SW8015C	11/11/2021 12:39/amn	GCFID-HP5-B_211111A : 10	161122
Surr: n-Triacontane (SGT)	67.0	%REC	1		50-150				SW8015C	11/12/2021 09:55/amn	GCFID-HP5-B_211111B : 7	161122

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH1882 (RHMW05)
Project: CV18F0126/60571032.02.20.01
Matrix: Ground Water

Lab ID: B21110712-004
Collection Date: 11/03/2021 13:40
Date Received: 11/06/2021
Report Date: 12/03/2021

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.13	mg/L	1	J	0.30	0.14	0.037		SW8015C	11/11/2021 13:22/amn	GCFID-HP5-B_211111A : 1	161122
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.037		SW8015C	11/12/2021 12:06/amn	GCFID-HP5-B_211111B : 9	161122
Oil Range Hydrocarbons (C24 to C40)	0.18	mg/L	1	J	0.30	0.14	0.083		SW8015C	11/11/2021 13:22/amn	GCFID-HP5-B_211111A : 1	161122
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.083		SW8015C	11/12/2021 12:06/amn	GCFID-HP5-B_211111B : 9	161122
Total Extractable Hydrocarbons	0.46	mg/L	1		0.30	0.14	0.071		SW8015C	11/11/2021 13:22/amn	GCFID-HP5-B_211111A : 1	161122
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.031		SW8015C	11/12/2021 12:06/amn	GCFID-HP5-B_211111B : 9	161122
Surr: o-Terphenyl	74.0	%REC	1		56-125				SW8015C	11/11/2021 13:22/amn	GCFID-HP5-B_211111A : 1	161122
Surr: o-Terphenyl (SGT)	65.0	%REC	1		56-125				SW8015C	11/12/2021 12:06/amn	GCFID-HP5-B_211111B : 9	161122
Surr: n-Triacontane	94.0	%REC	1		50-150				SW8015C	11/11/2021 13:22/amn	GCFID-HP5-B_211111A : 1	161122
Surr: n-Triacontane (SGT)	68.0	%REC	1		50-150				SW8015C	11/12/2021 12:06/amn	GCFID-HP5-B_211111B : 9	161122

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH1885 (RHMW2254-01)
Project: CV18F0126/60571032.02.20.01
Matrix: Ground Water

Lab ID: B21110712-005
Collection Date: 11/03/2021 13:25
Date Received: 11/06/2021
Report Date: 12/03/2021

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	0.15	0.038		SW8015C	11/11/2021 11:56/amn	GCFID-HP5-B_211111A : 9	161122
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.15	0.086		SW8015C	11/11/2021 11:56/amn	GCFID-HP5-B_211111A : 9	161122
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.15	0.073		SW8015C	11/11/2021 11:56/amn	GCFID-HP5-B_211111A : 9	161122
Surr: o-Terphenyl	99.0	%REC	1		56-125				SW8015C	11/11/2021 11:56/amn	GCFID-HP5-B_211111A : 9	161122
Surr: n-Triacontane	93.0	%REC	1		50-150				SW8015C	11/11/2021 11:56/amn	GCFID-HP5-B_211111A : 9	161122

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.
 - Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH1888 (RHSF)
Project: CV18F0126/60571032.02.20.01
Matrix: Drinking Water

Lab ID: B21110712-006
Collection Date: 11/03/2021 12:40
Date Received: 11/06/2021
Report Date: 12/03/2021

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	11/11/2021 11:13/amn	GCFID-HP5-B_211111A : 8	161122
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	11/11/2021 11:13/amn	GCFID-HP5-B_211111A : 8	161122
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	11/11/2021 11:13/amn	GCFID-HP5-B_211111A : 8	161122
Surr: o-Terphenyl	103.0	%REC	1		56-125				SW8015C	11/11/2021 11:13/amn	GCFID-HP5-B_211111A : 8	161122
Surr: n-Triacontane	95.0	%REC	1		50-150				SW8015C	11/11/2021 11:13/amn	GCFID-HP5-B_211111A : 8	161122

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.
 - Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH1890 (RHSF)
Project: CV18F0126/60571032.02.20.01
Matrix: Drinking Water

Lab ID: B21110712-007
Collection Date: 11/03/2021 12:40
Date Received: 11/06/2021
Report Date: 12/03/2021

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	0.15	0.038		SW8015C	11/11/2021 10:31/amn	GCFID-HP5-B_211111A : 7	161122
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.15	0.085		SW8015C	11/11/2021 10:31/amn	GCFID-HP5-B_211111A : 7	161122
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.15	0.073		SW8015C	11/11/2021 10:31/amn	GCFID-HP5-B_211111A : 7	161122
Surr: o-Terphenyl	98.0	%REC	1		56-125				SW8015C	11/11/2021 10:31/amn	GCFID-HP5-B_211111A : 7	161122
Surr: n-Triacontane	93.0	%REC	1		50-150				SW8015C	11/11/2021 10:31/amn	GCFID-HP5-B_211111A : 7	161122

- 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.



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B21110712
Project: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

Run ID: Run Order: GCFID-HP5-B_211111A: 6 **SampType:** Method Blank **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/11/2021 09:48 **Prep Date:** 11/08/2021 15:08
Lab ID: MB-161122 **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		96.0	56	125				
Surr: n-Triacontane	0.087	0.0020	0.10		87.0	50	150				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111B: 6 **SampType:** Method Blank **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/12/2021 09:12 **Prep Date:** 11/08/2021 15:08
Lab ID: MB-161122 **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)	0.13	0.0020	0.20		67.0	56	125				
Surr: n-Triacontane (SGT)	0.063	0.0020	0.10		63.0	50	150				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B21110712
Project: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

Run ID: Run Order: GCFID-HP5-B_211111A: 4 **SampType:** Laboratory Control Sample **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/11/2021 08:22 **Prep Date:** 11/08/2021 15:08
Lab ID: LCS-161122 **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		89.0	36	132				
Total Extractable Hydrocarbons	14	0.30	15		95.0	60	132				
Surr: o-Terphenyl	0.21	0.0020	0.20		105.0	56	125				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111A: 5 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/11/2021 09:05 **Prep Date:** 11/08/2021 15:10
Lab ID: LCSD-161122 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	13	0.30	15		85.0	36	132	13	4.6	20.0	
Total Extractable Hydrocarbons	14	0.30	15		91.0	60	132	14	4.4	20.0	
Surr: o-Terphenyl	0.20	0.0020	0.20		101.0	56	125	0.0			

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111A: 19 **SampType:** Laboratory Control Sample **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/11/2021 21:55 **Prep Date:** 11/08/2021 15:50
Lab ID: LCS-161122-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	5.0		95.0	41	113				
Surr: n-Triacontane	0.090	0.0020	0.10		90.0	50	150				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B21110712
Project: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

Run ID: Run Order: GCFID-HP5-B_211111A: 20 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/11/2021 23:21 **Prep Date:** 11/08/2021 15:10
Lab ID: LCSD-161122-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.4	0.30	5.0		88.0	41	113	4.8	7.4	20.0	
Surr: n-Triacontane	0.084	0.0020	0.10		84.0	50	150	0.0			

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111B: 4 **SampType:** Laboratory Control Sample **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/12/2021 07:46 **Prep Date:** 11/08/2021 15:08
Lab ID: LCS-161122 **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)	9.8	0.30	15		65.0	36	132				
Total Extractable Hydrocarbons (SGT)	10	0.30	15		70.0	60	132				
Surr: o-Terphenyl (SGT)	0.16	0.0020	0.20		82.0	56	125				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111B: 5 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/12/2021 08:29 **Prep Date:** 11/08/2021 15:10
Lab ID: LCSD-161122 **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)	9.9	0.30	15		66.0	36	132	9.8	0.4	20.0	
Total Extractable Hydrocarbons (SGT)	11	0.30	15		70.0	60	132	10	0.2	20.0	
Surr: o-Terphenyl (SGT)	0.17	0.0020	0.20		83.0	56	125	0.0			

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B21110712
Project: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

Run ID: Run Order: GCFID-HP5-B_211111B: 16 **SampType:** Laboratory Control Sample **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/12/2021 19:14 **Prep Date:** 11/08/2021 15:50
Lab ID: LCS-161122-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	4.2	0.30	5.0		83.0	41	113				
Surr: n-Triacontane (SGT)	0.076	0.0020	0.10		76.0	50	150				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111B: 17 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/12/2021 20:40 **Prep Date:** 11/08/2021 15:10
Lab ID: LCSD-161122-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)	3.9	0.30	5.0		78.0	41	113	4.2	7.3	20.0	
Surr: n-Triacontane (SGT)	0.068	0.0020	0.10		68.0	50	150	0.0			

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111A: 18 **SampType:** Sample Matrix Spike **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/11/2021 20:29 **Prep Date:** 11/08/2021 15:10
Lab ID: B21110712-001AMS **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	0.47	84.0	36	132				
Total Extractable Hydrocarbons	14	0.30	15	0.90	90.0	60	132				
Surr: o-Terphenyl	0.19	0.0020	0.20	0.0	97.0	56	125				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B21110712
Project: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

Run ID: Run Order: GCFID-HP5-B_211111A: 21 **SampType:** Sample Matrix Spike **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/12/2021 00:46 **Prep Date:** 11/08/2021 15:10
Lab ID: B21110712-002AMS-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.7	0.30	4.7	1.0	78.0	41	113				
Surr: n-Triacontane	0.083	0.0020	0.095	0.0	88.0	50	150				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111B: 15 **SampType:** Sample Matrix Spike **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/12/2021 17:48 **Prep Date:** 11/08/2021 15:10
Lab ID: B21110712-001AMS **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	12	0.30	15	0.078	82.0	36	132				
Total Extractable Hydrocarbons (SGT)	13	0.30	15	0.087	87.0	60	132				
Surr: o-Terphenyl (SGT)	0.19	0.0020	0.20	0.0	96.0	56	125				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111B: 18 **SampType:** Sample Matrix Spike **Batch ID:** 161122
Method: SW8015C **Analysis Date:** 11/12/2021 22:06 **Prep Date:** 11/08/2021 15:10
Lab ID: B21110712-002AMS-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)	3.8	0.30	4.7	0.0	81.0	41	113				
Surr: n-Triacontane (SGT)	0.068	0.0020	0.095	0.0	72.0	50	150				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B21110712
Project: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

Run ID: Run Order: GCFID-HP5-B_211111A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R370204
Method: SW8015C **Analysis Date:** 11/11/2021 06:07 **Prep Date:**
Lab ID: CCV_1111HP503r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.7	0.30	5.0		94.0	80	120				
Surr: n-Triacontane	0.20	0.0020	0.20		98.0	80	120				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111A: 3 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R370204
Method: SW8015C **Analysis Date:** 11/11/2021 06:49 **Prep Date:**
Lab ID: CCV_1111HP504r **Units:** mg/L **Prep Method:**

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

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111A: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R370204
Method: SW8015C **Analysis Date:** 11/11/2021 16:55 **Prep Date:**
Lab ID: CCV_1111HP519r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.6	0.30	5.0		92.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B21110712
Project: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

Run ID: Run Order: GCFID-HP5-B_211111A: 15 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R370204
Method: SW8015C **Analysis Date:** 11/11/2021 17:38 **Prep Date:**
Lab ID: CCV_1111HP520r **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		99.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		98.0	80	120				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R370204
Method: SW8015C **Analysis Date:** 11/12/2021 02:55 **Prep Date:**
Lab ID: CCV_1111HP532r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.9	0.30	5.0		97.0	80	120				
Surr: n-Triacontane	0.20	0.0020	0.20		101.0	80	120				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A

Run ID: Run Order: GCFID-HP5-B_211111A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R370204
Method: SW8015C **Analysis Date:** 11/12/2021 03:38 **Prep Date:**
Lab ID: CCV_1111HP533r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		99.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		103.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		101.0	80	120				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A, B21110712-005A, B21110712-006A, B21110712-007A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B21110712
Project: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

Run ID: Run Order: GCFID-HP5-B_211111B: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R370291
Method: SW8015C **Analysis Date:** 11/12/2021 02:55 **Prep Date:**
Lab ID: CCV_1111HP532r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.9	0.30	5.0		97.0	80	120				
Surr: n-Triacontane	0.20	0.0020	0.20		101.0	80	120				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A

Run ID: Run Order: GCFID-HP5-B_211111B: 3 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R370291
Method: SW8015C **Analysis Date:** 11/12/2021 03:38 **Prep Date:**
Lab ID: CCV_1111HP533r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		99.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		103.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		101.0	80	120				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A

Run ID: Run Order: GCFID-HP5-B_211111B: 11 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R370291
Method: SW8015C **Analysis Date:** 11/12/2021 14:14 **Prep Date:**
Lab ID: CCV_1111HP545r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.5	0.30	5.0		90.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		95.0	80	120				

Associated Samples: B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A



Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B21110712
Project: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

Run ID: Run Order: GCFID-HP5-B_211111B: 12 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R370291
Method: SW8015C **Analysis Date:** 11/12/2021 14:57 **Prep Date:**
Lab ID: CCV_1111HP546r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		100.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		103.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		101.0	80	120				

Associated Samples: **B21110712-001A, B21110712-002A, B21110712-003A, B21110712-004A**



Analytical QC Exceptions Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B21110712
Project: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

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



Preparation and Analysis Dates Report

Work Order: B21110712

Client: AECOM - Honolulu

Project Name: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

Lab ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Method	Prep Date	Prep Batch	Analysis Method	Analysis Date
001A	ERH1873 (RHMW01R)	11/03/2021 14:45	Ground Water	Diesel Range Organics		SW3520C	11/08/2021 15:10	161122	SW8015C	11/11/2021 19:47
						SW3520C	11/08/2021 15:10	161122	SW8015C	11/12/2021 11:23
002A	ERH1876 (RHMW02)	11/03/2021 15:40	Ground Water	Diesel Range Organics		SW3520C	11/08/2021 15:10	161122	SW8015C	11/11/2021 14:47
						SW3520C	11/08/2021 15:10	161122	SW8015C	11/12/2021 17:05
003A	ERH1879 (RHMW03)	11/03/2021 16:50	Ground Water	Diesel Range Organics		SW3520C	11/08/2021 15:11	161122	SW8015C	11/11/2021 12:39
						SW3520C	11/08/2021 15:11	161122	SW8015C	11/12/2021 09:55
004A	ERH1882 (RHMW05)	11/03/2021 13:40	Ground Water	Diesel Range Organics		SW3520C	11/08/2021 15:11	161122	SW8015C	11/11/2021 13:22
						SW3520C	11/08/2021 15:11	161122	SW8015C	11/12/2021 12:06
005A	ERH1885 (RHMW2254-01)	11/03/2021 13:25	Ground Water	Diesel Range Organics		SW3520C	11/08/2021 15:11	161122	SW8015C	11/11/2021 11:56
006A	ERH1888 (RHSF)	11/03/2021 12:40	Drinking Water	Diesel Range Organics		SW3520C	11/08/2021 15:11	161122	SW8015C	11/11/2021 11:13
007A	ERH1890 (RHSF)	11/03/2021 12:40	Drinking Water	Diesel Range Organics		SW3520C	11/08/2021 15:11	161122	SW8015C	11/11/2021 10:31



Chemical Abstracts Service (CAS) Registry Numbers

Prepared by Billings, MT Branch

Client: AECOM - Honolulu

Workorder: B21110712

Project: CV18F0126/60571032.02.20.01

Report Date: 12/03/2021

Analyses

CAS No

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

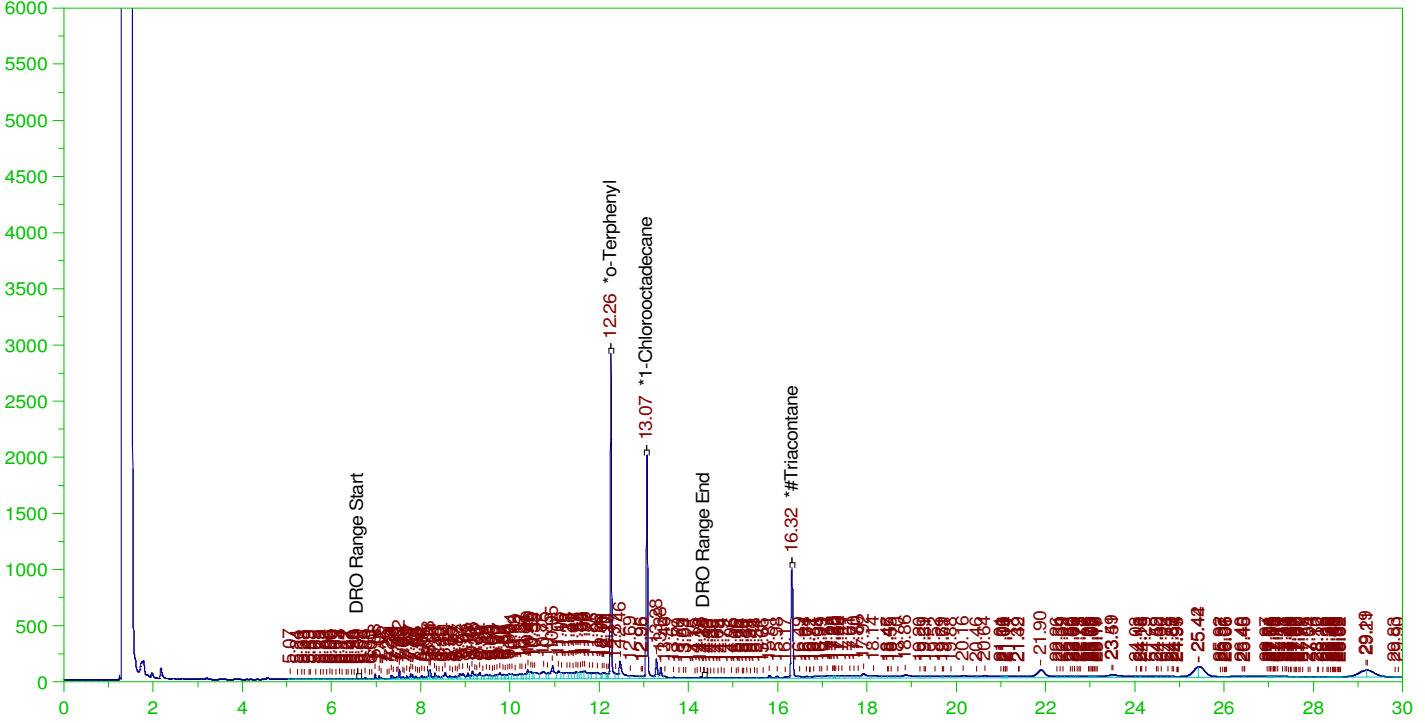
Total Extractable Hydrocarbons (SGT)

ERH1873 (RHMW01R)

G:\org\HP5\DAT\HP5111121_b\1111HP5.0022.RAW

Batch ID: 161122

B21110712-001A ; 1111HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21110712-001A ; 1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0022.RAW
Date & Time Acquired: 11/11/2021 7:47:10 PM
Method File: G:\Org\HP5\Methods\D3_8015-111115-IB-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB-24-Tri.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19

Rt range for Diesel Range Organics: 6.57 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.261	.194	.157	80.8	-
*1-Chlorooctadecane	13.065	.194	.122	62.95	-
*#Triacontane	16.316	.194	.091	46.72	-

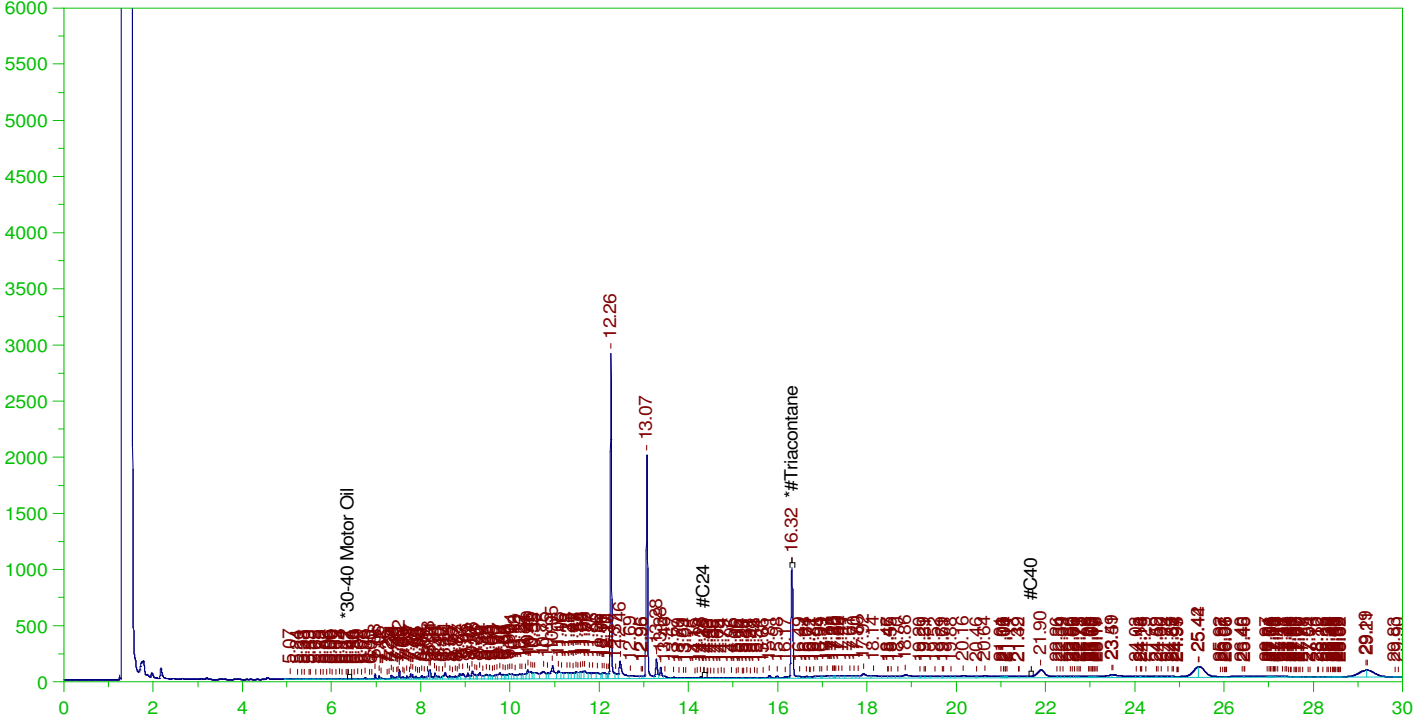
DRO Area: 1.51811E+07 DRO Amount: 0.4700936
TEH Area: 2.9047E+07 TEH Amount: 0.899461

ERH1873 (RHMW01R)

Batch ID: 161122

G:\org\HP5\DAT\HP5111121_b\1111HP5.0022.RAW

B21110712-001A ; 1111HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21110712-001A ; 1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0022.RAW
Date & Time Acquired: 11/11/2021 7:47:10 PM
Method File: G:\Org\HP5\Methods\D3_OROS-111115-AD-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AD-SAMP.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.32 to 21.73

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.316	.485	.091	18.69

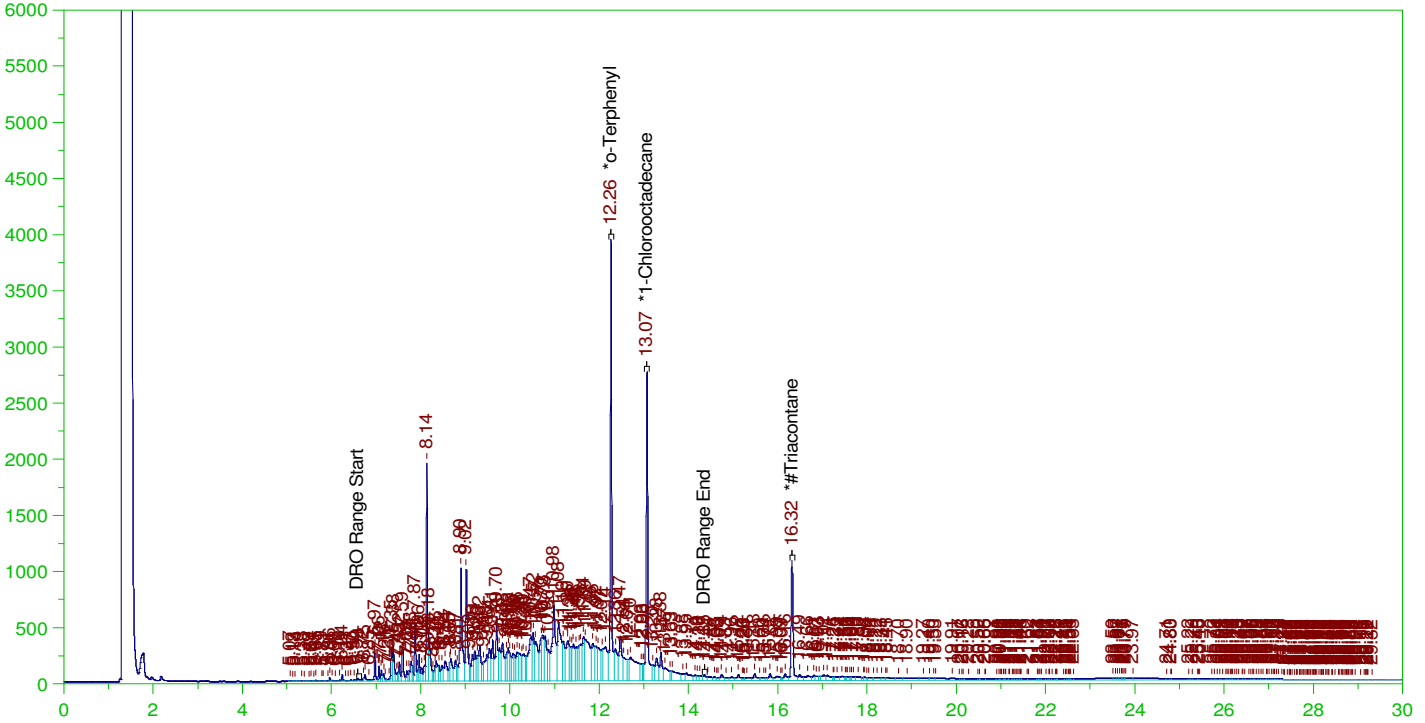
RRO Area: 6390146 RRO AMOUNT: 0.2173616

ERH1876 (RHMW02)

Batch ID: 161122

G:\Org\HP5\DAT\HP5111121_b\1111HP5.0015.RAW

B21110712-002A ; 1111HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21110712-002A ; 1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5111121_b\1111HP5.0015.RAW
Date & Time Acquired: 11/11/2021 2:47:24 PM
Method File: G:\Org\HP5\Methods\D3_8015-111115-IB-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB-24-Tri.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19

Rt range for Diesel Range Organics: 6.57 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.264	.189	.239	126.73	-
*1-Chlorooctadecane	13.066	.189	.183	97.1	-
*#Triacontane	16.318	.189	.099	52.69	-

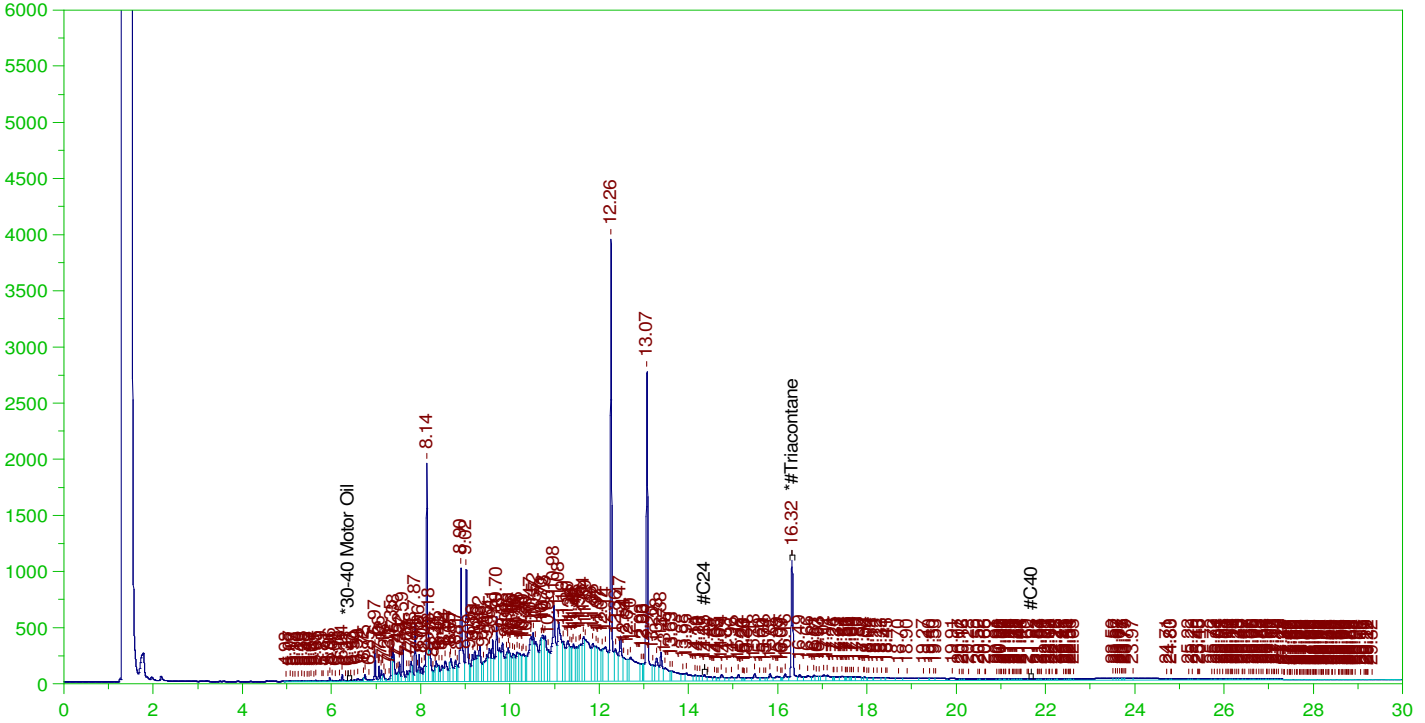
DRO Area: 9.284582E+07 DRO Amount: 2.793668
TEH Area: 1.067831E+08 TEH Amount: 3.213031

ERH1876 (RHMW02)

Batch ID: 161122

G:\org\HP5\DAT\HP5111121_b\1111HP5.0015.RAW

B21110712-002A ; 1111HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21110712-002A ; 1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0015.RAW
Date & Time Acquired: 11/11/2021 2:47:24 PM
Method File: G:\Org\HP5\Methods\D3_OROS-111115-AD-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AD-SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.32 to 21.73

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.318	.472	.099	21.08

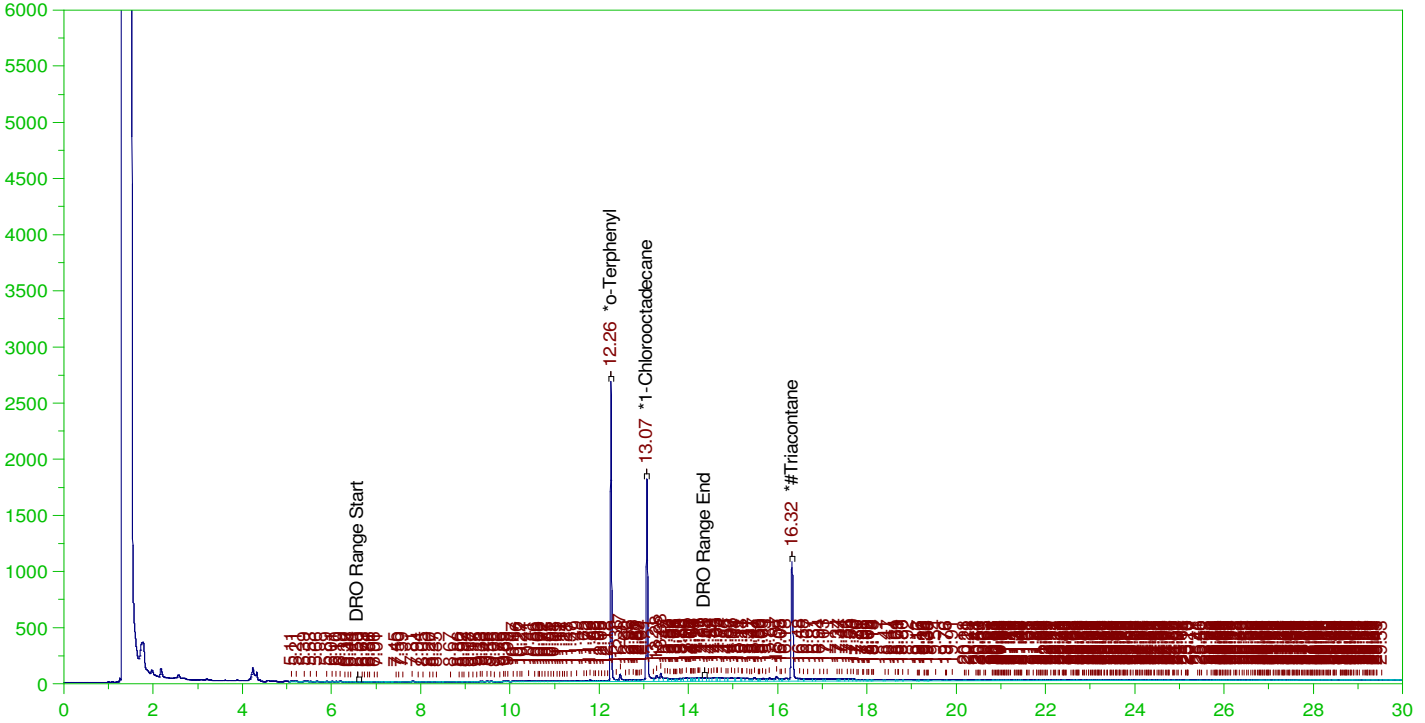
RRO Area: 1.045758E+07 RRO AMOUNT: 0.3456484

ERH1879 (RHMW03)

Batch ID: 161122

G:\Org\HP5\DAT\HP5111121_b\1111HP5.0012.RAW

B21110712-003A ; 1111HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21110712-003A ; 1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5111121_b\1111HP5.0012.RAW
Date & Time Acquired: 11/11/2021 12:39:26 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-IB-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19

Rt range for Diesel Range Organics: 6.57 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.262	.196	.143	72.92	-
*1-Chlorooctadecane	13.065	.196	.113	57.7	-
*#Triacontane	16.318	.196	.102	52.19	-

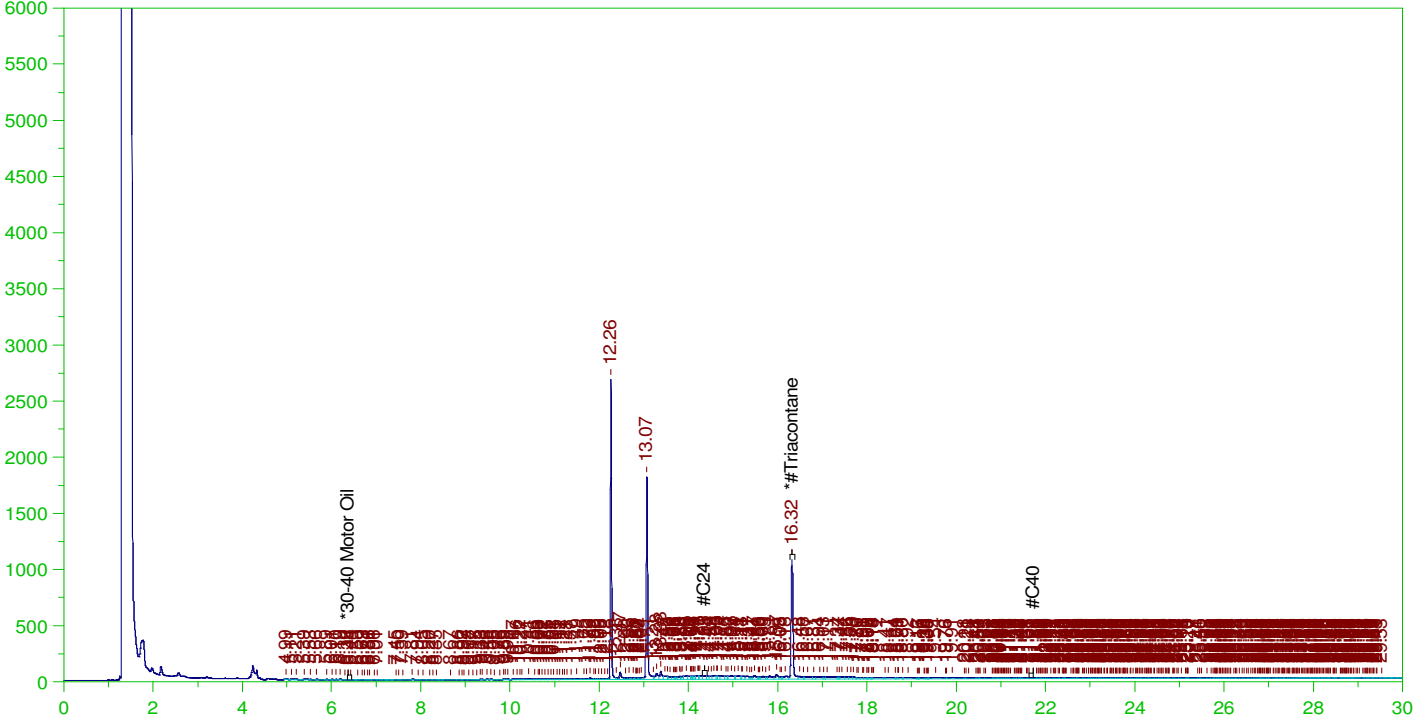
DRO Area: 3547424 DRO Amount: 0.1109254
TEH Area: 1.238437E+07 TEH Amount: 0.3872505

ERH1879 (RHMW03)

G:\org\HP5\DAT\HP5111121_b\1111HP5.0012.RAW

Batch ID: 161122

B21110712-003A ;1111HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21110712-003A ;1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0012.RAW
Date & Time Acquired: 11/11/2021 12:39:26 PM
Method File: G:\Org\HP5\Methods\D3_OROS-AD-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AD-SAMP.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.32 to 21.73

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.318	.49	.102	20.87	-

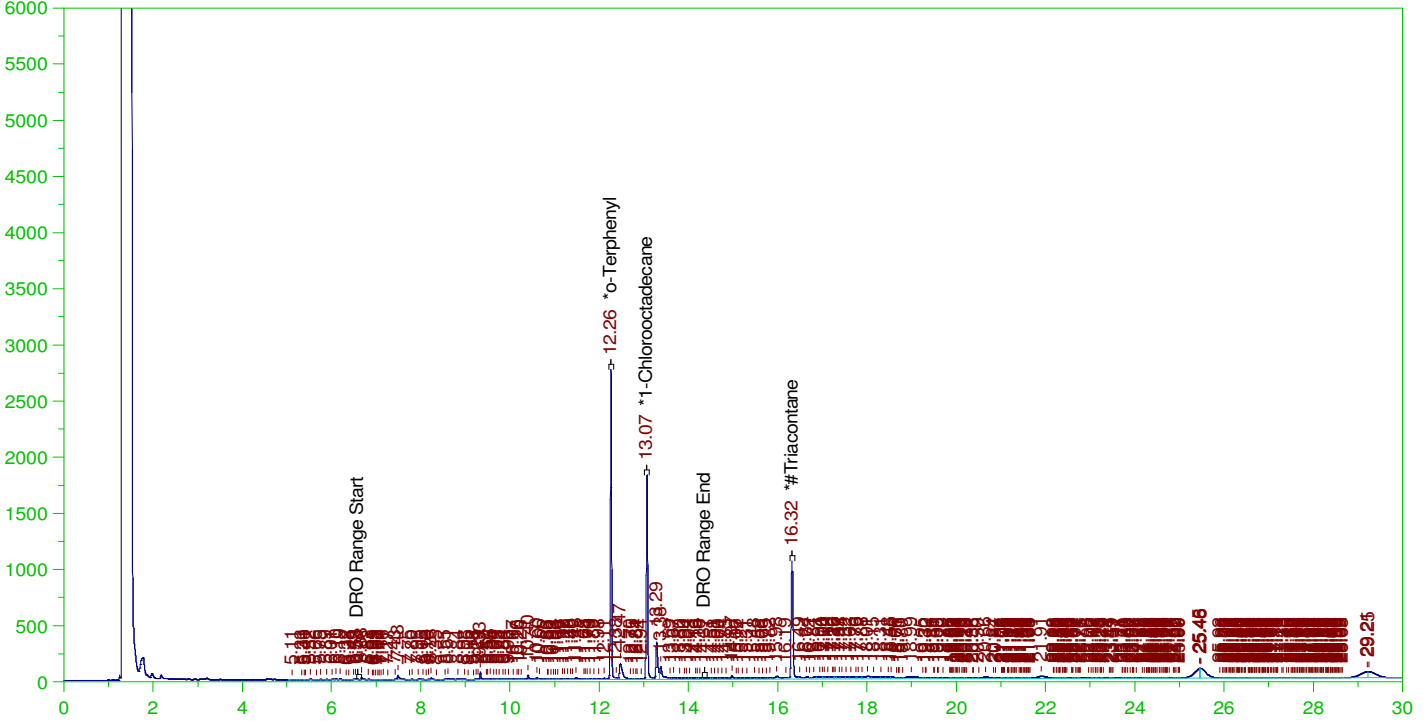
RRO Area:7275728 RRO AMOUNT: 0.2499112

ERH1882 (RHMW05)

G:\Org\HP5\DAT\HP5111121_b\1111HP5.0013.RAW

Batch ID: 161122

B21110712-004A ;1111HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21110712-004A ;1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5111121_b\1111HP5.0013.RAW
Date & Time Acquired: 11/11/2021 1:22:14 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-IB-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB-24-Tri.CAL
Sample Weight: 1055 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19

Rt range for Diesel Range Organics: 6.57 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.264	.19	.143	75.44	-
*1-Chlorooctadecane	13.066	.19	.106	55.78	-
*#Triacontane	16.319	.19	.095	50.03	-

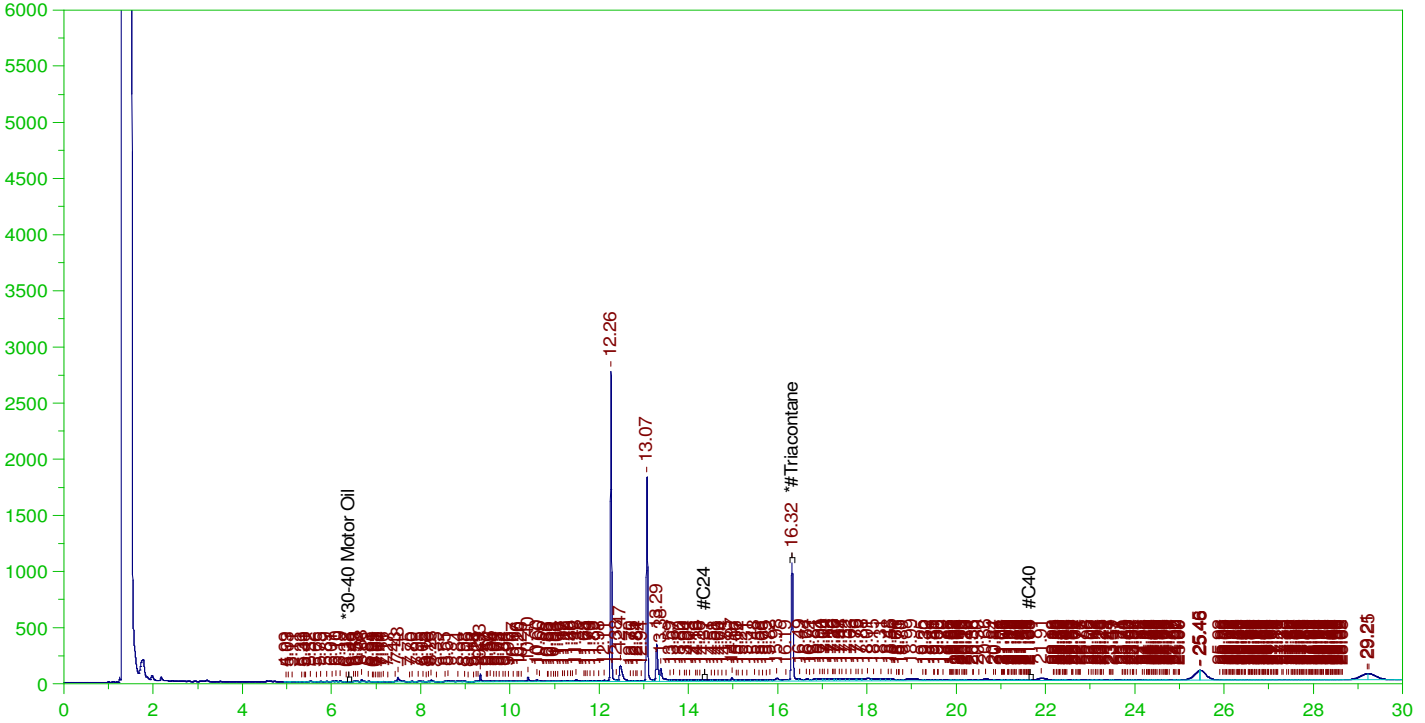
DRO Area:4178584 DRO Amount: 0.1263266
TEH Area:1.505665E+07 TEH Amount: 0.4551913

ERH1882 (RHMW05)

Batch ID: 161122

G:\org\HP5\DAT\HP5111121_b\1111HP5.0013.RAW

B21110712-004A ;1111HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21110712-004A ;1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0013.RAW
Date & Time Acquired: 11/11/2021 1:22:14 PM
Method File: G:\Org\HP5\Methods\D3_OROS-AD-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AD-SAMP.CAL
Sample Weight: 1055 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.32 to 21.73

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacotane	16.319	.474	.095	20.01

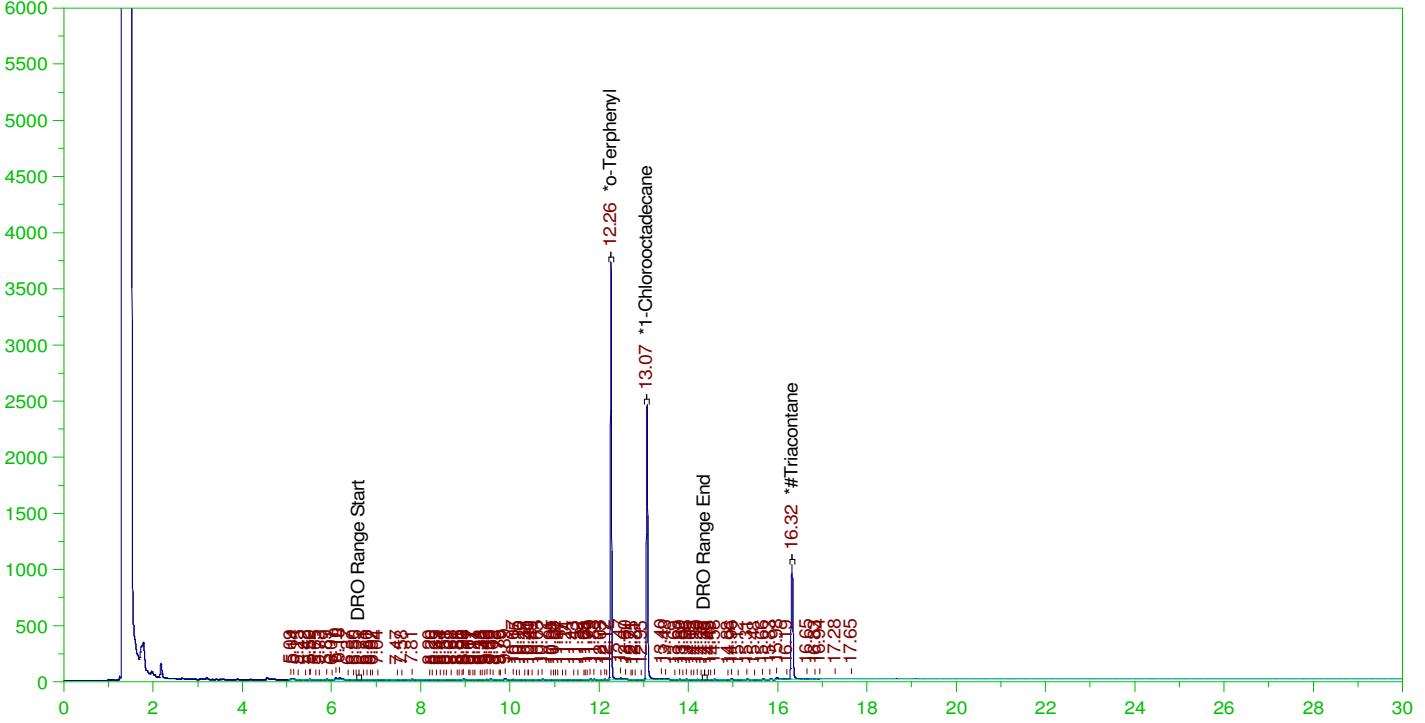
RRO Area:5564734 RRO AMOUNT: 0.1847997

ERH1885 (RHMW2254-01)

Batch ID: 161122

G:\org\HP5\DAT\HP5111121_b\1111HP5.0011.RAW

B21110712-005A ;1111HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21110712-005A ;1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0011.RAW
Date & Time Acquired: 11/11/2021 11:56:31 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IB-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19

Rt range for Diesel Range Organics: 6.57 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.263	.196	.195	99.41	-
*1-Chlorooctadecane	13.067	.196	.149	75.95	-
*#Triacontane	16.318	.196	.092	46.91	-

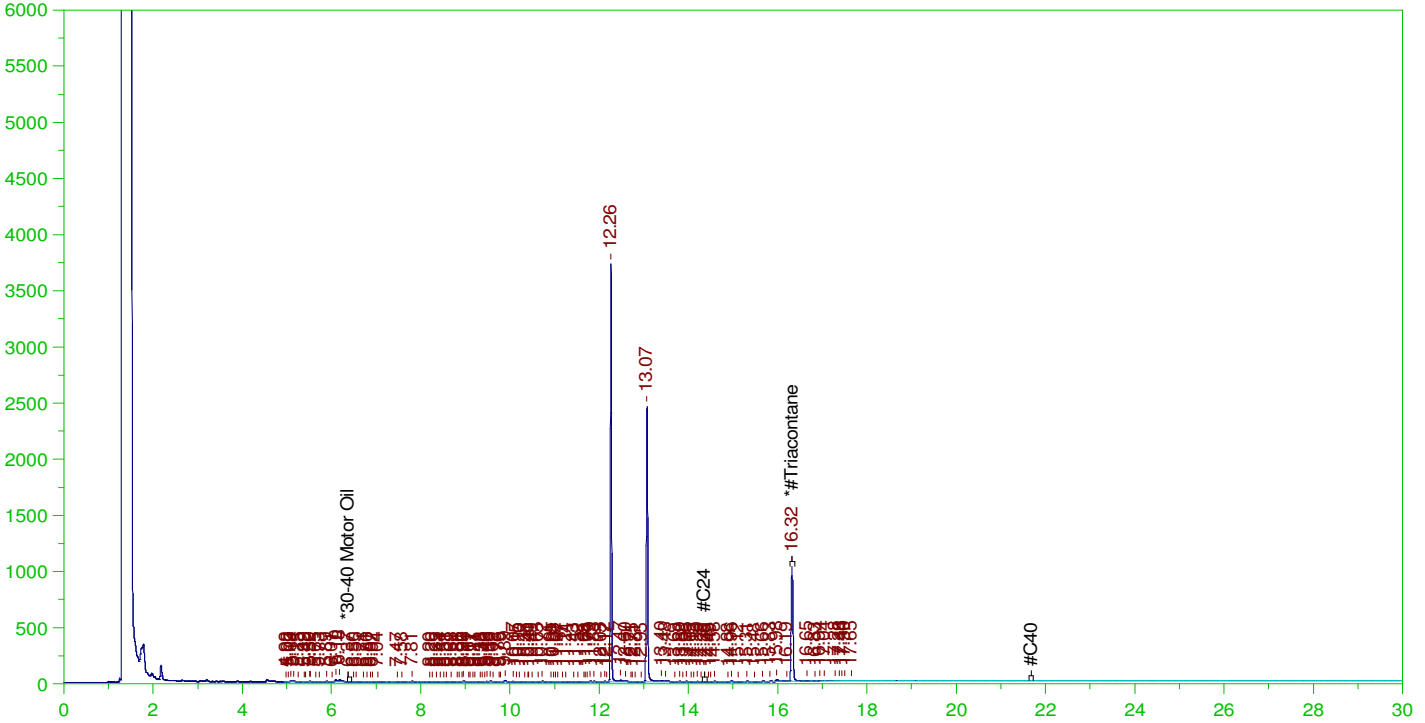
DRO Area:552610.3 DRO Amount: 1.727973E-02
TEH Area:914796.4 TEH Amount: 2.860504E-02

ERH1885 (RHMW2254-01)

Batch ID: 161122

G:\org\HP5\DAT\HP5111121_b\1111HP5.0011.RAW

B21110712-005A ;1111HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21110712-005A ;1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0011.RAW
Date & Time Acquired: 11/11/2021 11:56:31 AM
Method File: G:\Org\HP5\Methods\DR_OROS-AD-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AD-SAMP.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.32 to 21.73

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.318	.49	.092	18.76	-

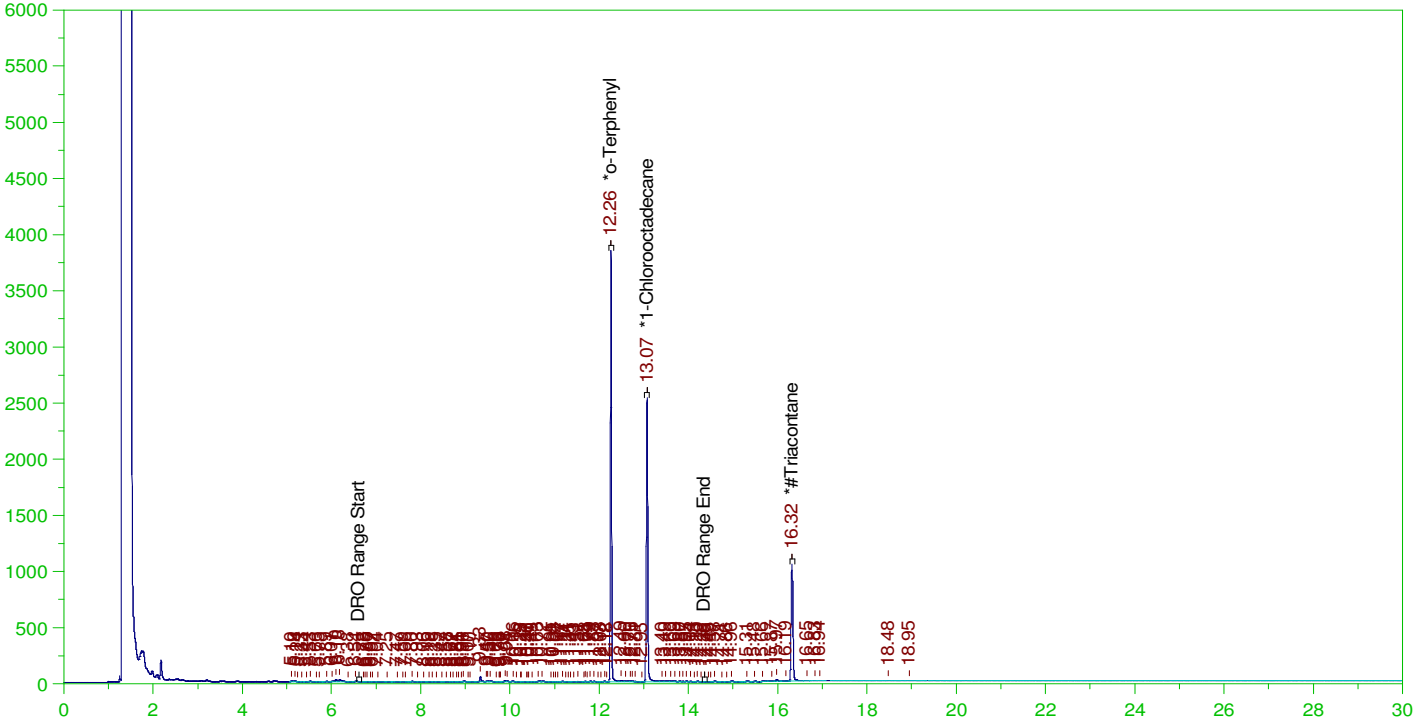
RRO Area:162930.2 RRO AMOUNT: 5.596427E-03

ERH1888 (RHSF)

Batch ID: 161122

G:\org\HP5\DAT\HP5111121_b\1111HP5.0010.RAW

B21110712-006A ;1111HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21110712-006A ;1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0010.RAW
Date & Time Acquired: 11/11/2021 11:13:55 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IB-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19

Rt range for Diesel Range Organics: 6.57 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.263	.19	.196	103.04	-
*1-Chlorooctadecane	13.068	.19	.149	78.4	-
*#Triacontane	16.317	.19	.092	48.04	-

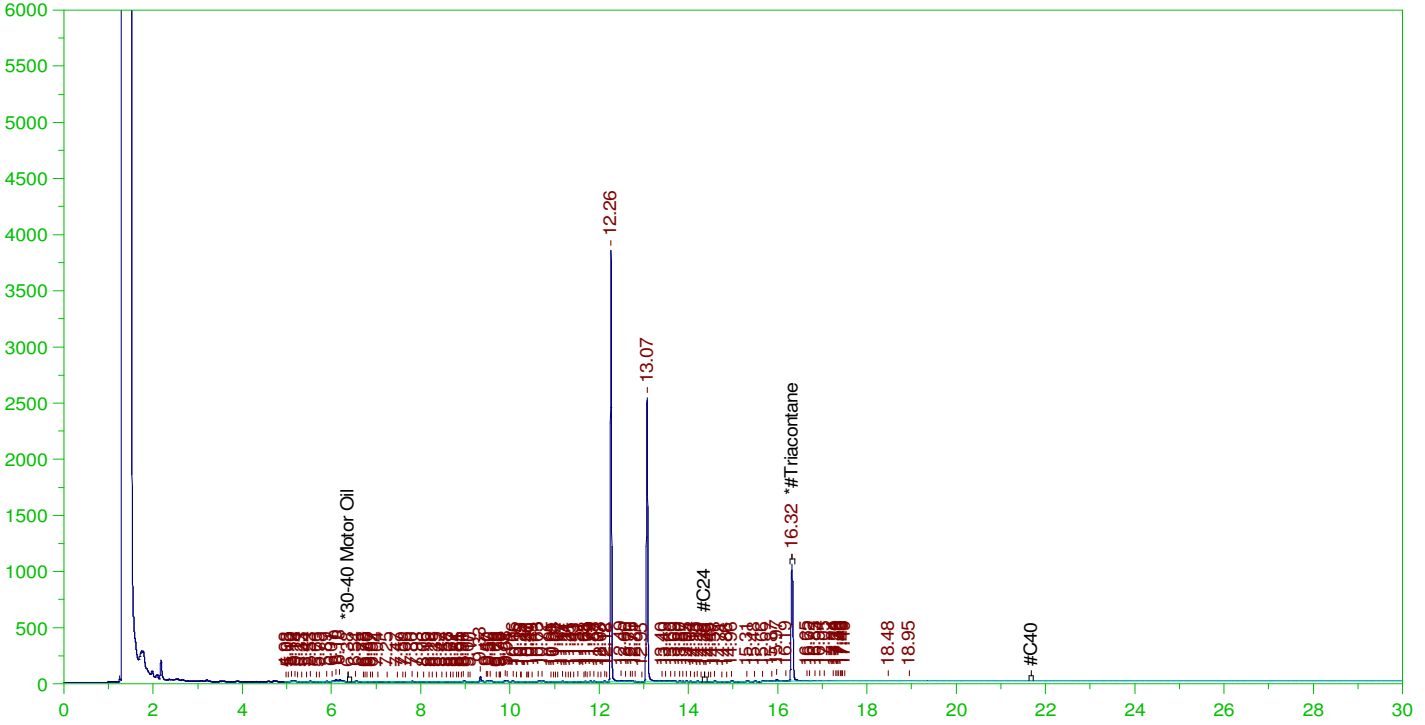
DRO Area:716120.9 DRO Amount: 2.175281E-02
TEH Area:1107045 TEH Amount: 3.362748E-02

ERH1888 (RHSF)

Batch ID: 161122

G:\org\HP5\DAT\HP5111121_b\1111HP5.0010.RAW

B21110712-006A ;1111HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21110712-006A ;1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0010.RAW
Date & Time Acquired: 11/11/2021 11:13:55 AM
Method File: G:\Org\HP5\Methods\DR_OROS-AD-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AD-SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.32 to 21.73

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.317	.476	.092	19.24

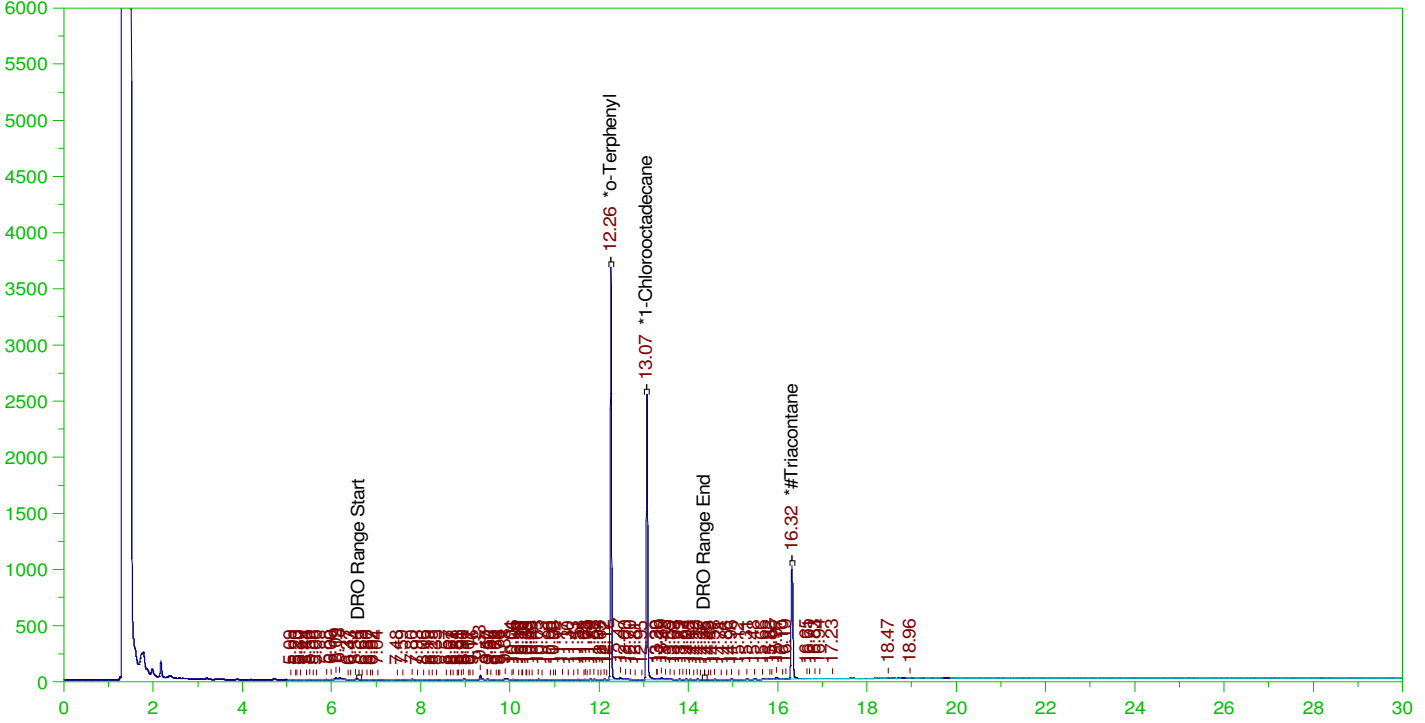
RRO Area:200150.9 RRO AMOUNT: 6.67848E-03

ERH1890 (RHSF)

Batch ID: 161122

G:\Org\HP5\DAT\HP5111121_b\1111HP5.0009.RAW

B21110712-007A ; 1111HP5 , \$HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21110712-007A ; 1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5111121_b\1111HP5.0009.RAW
Date & Time Acquired: 11/11/2021 10:31:07 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IB-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB-24-Tri.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19

Rt range for Diesel Range Organics: 6.57 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.262	.194	.192	98.68	-
*1-Chlorooctadecane	13.065	.194	.153	78.78	-
*#Triacontane	16.316	.194	.091	46.99	-

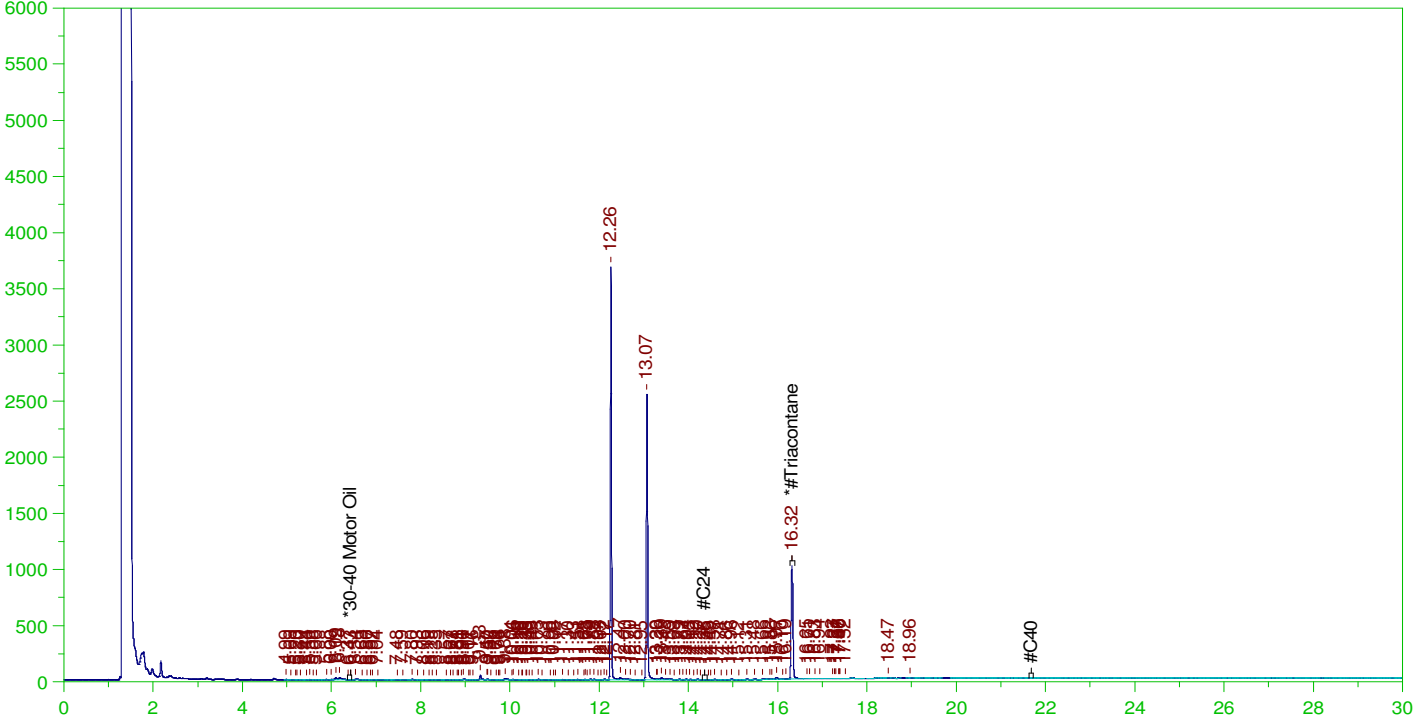
DRO Area: 677380.7 DRO Amount: 2.097557E-02
TEH Area: 1066758 TEH Amount: 3.303293E-02

ERH1890 (RHSF)

G:\org\HP5\DAT\HP5111121_b\1111HP5.0009.RAW

Batch ID: 161122

B21110712-007A ;1111HP5 , \$HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21110712-007A ;1111HP5 , \$HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0009.RAW
Date & Time Acquired: 11/11/2021 10:31:07 AM
Method File: G:\Org\HP5\Methods\DR_OROS-AD-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AD-SAMP.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.32 to 21.73

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.316	.485	.091	18.79

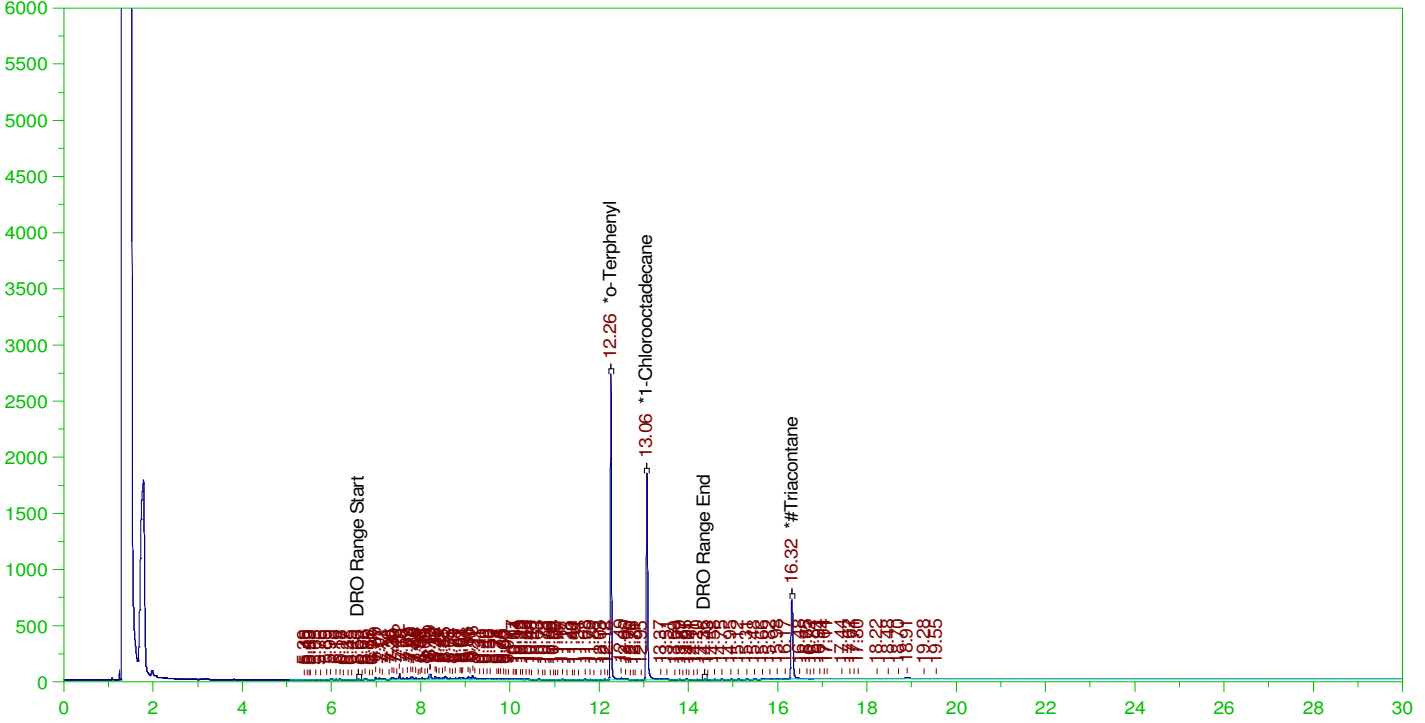
RRO Area:189160.7 RRO AMOUNT: 6.434327E-03

ERH1873 (RHMW01R)

G:\org\HP5\DAT\HP5111121_b\1111HP5.0041.RAW

Batch ID: 161122

B21110712-001A ; 1111HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21110712-001A ; 1111HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0041.RAW
 Date & Time Acquired: 11/12/2021 11:23:43 AM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-IB-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB-24-Tri.CAL
 Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19

Rt range for Diesel Range Organics: 6.57 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.261	.194	.143	73.87	-
*1-Chlorooctadecane	13.065	.194	.118	60.51	-
*#Triacontane	16.315	.194	.069	35.33	-

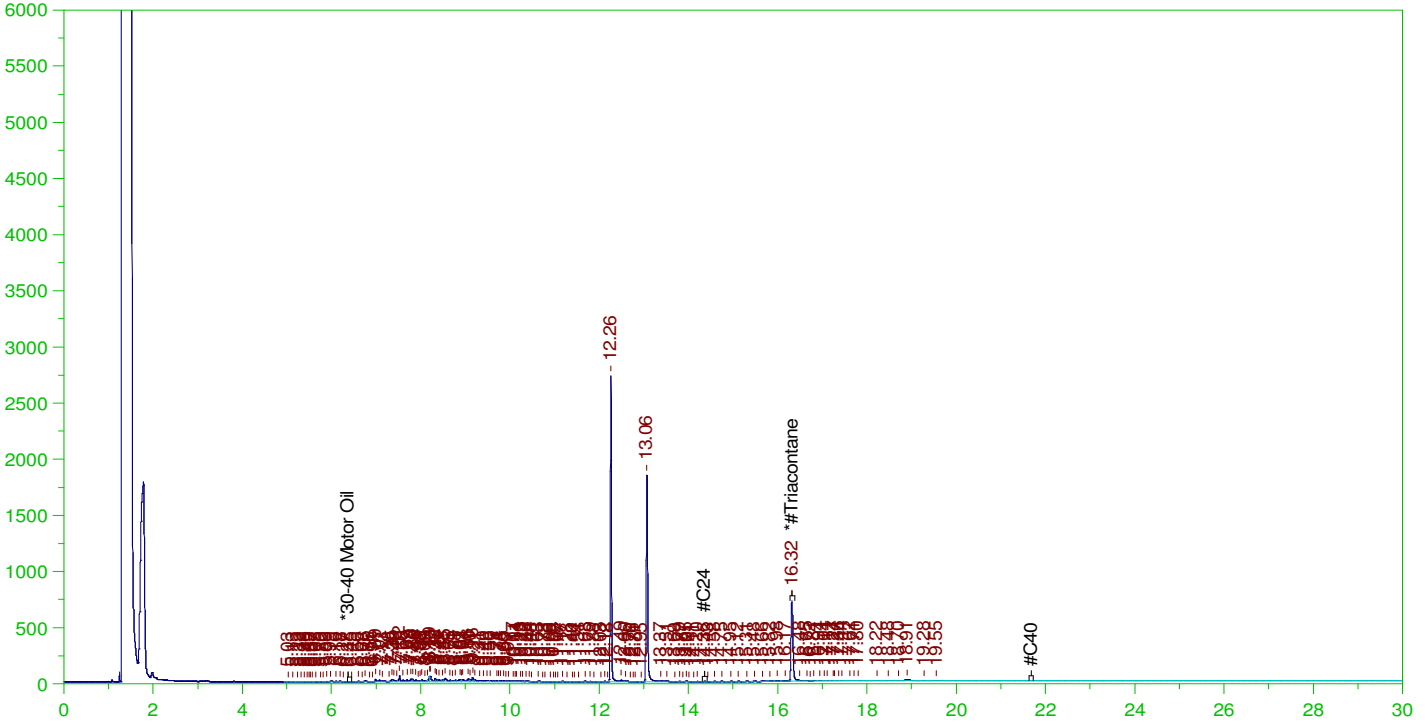
DRO Area: 2531149 DRO Amount: 7.837881E-02
 TEH Area: 2809725 TEH Amount: 8.700512E-02

ERH1873 (RHMW01R)

G:\org\HP5\DAT\HP5111121_b\1111HP5.0041.RAW

Batch ID: 161122

B21110712-001A ; 1111HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21110712-001A ; 1111HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0041.RAW
 Date & Time Acquired: 11/12/2021 11:23:43 AM
 Method File: G:\Org\HP5\Methods\DR_OROS-AD-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AD-SAMP.CAL
 Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
 Rt range for Residual Range Organics: 14.32 to 21.73

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.315	.485	.069	14.14

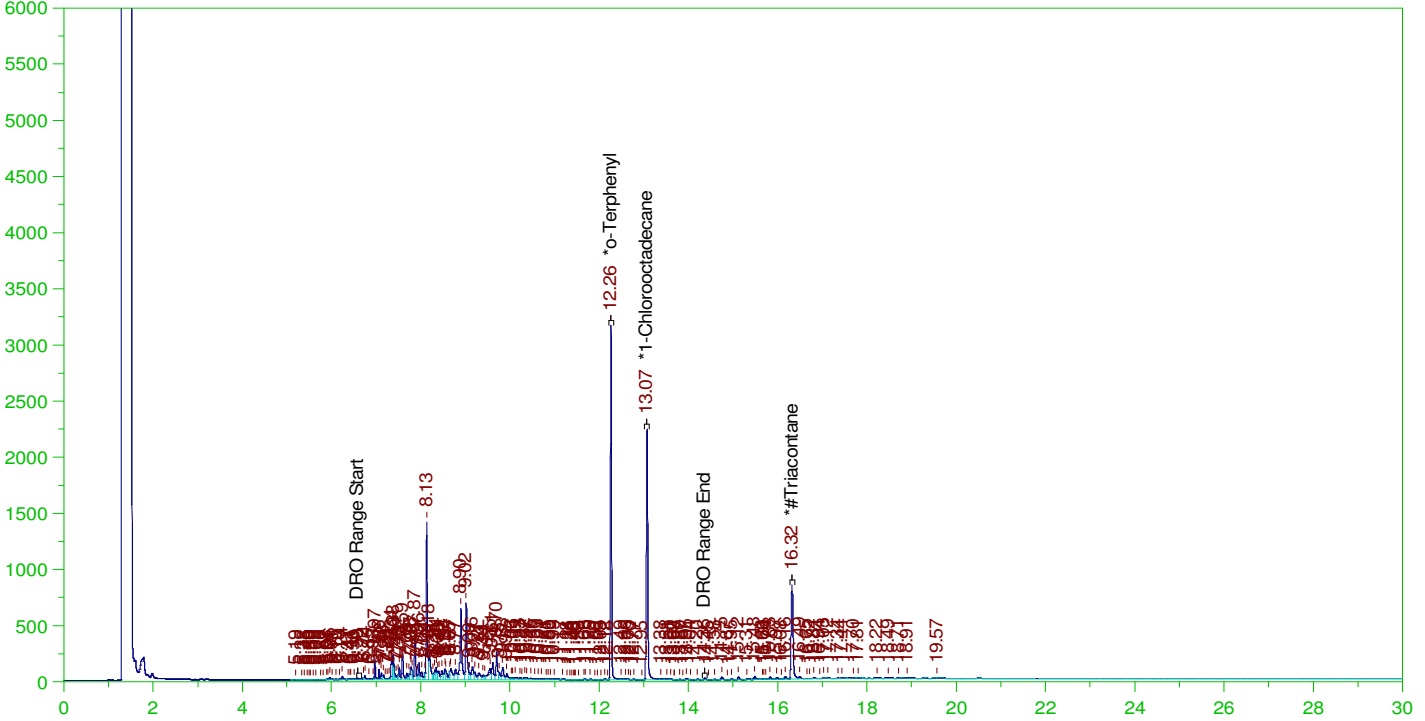
RRO Area: 251162.3 RRO AMOUNT: 8.543318E-03

ERH1876 (RHMW02)

Batch ID: 161122

G:\org\HP5\DAT\HP5111121_b\1111HP5.0049.RAW

B21110712-002A ; 1111HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21110712-002A ; 1111HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0049.RAW
 Date & Time Acquired: 11/12/2021 5:05:29 PM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-IB-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB-24-Tri.CAL
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19

Rt range for Diesel Range Organics: 6.57 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.263	.189	.162	85.88	-
*1-Chlorooctadecane	13.067	.189	.136	71.9	-
*#Triacontane	16.318	.189	.078	41.16	-

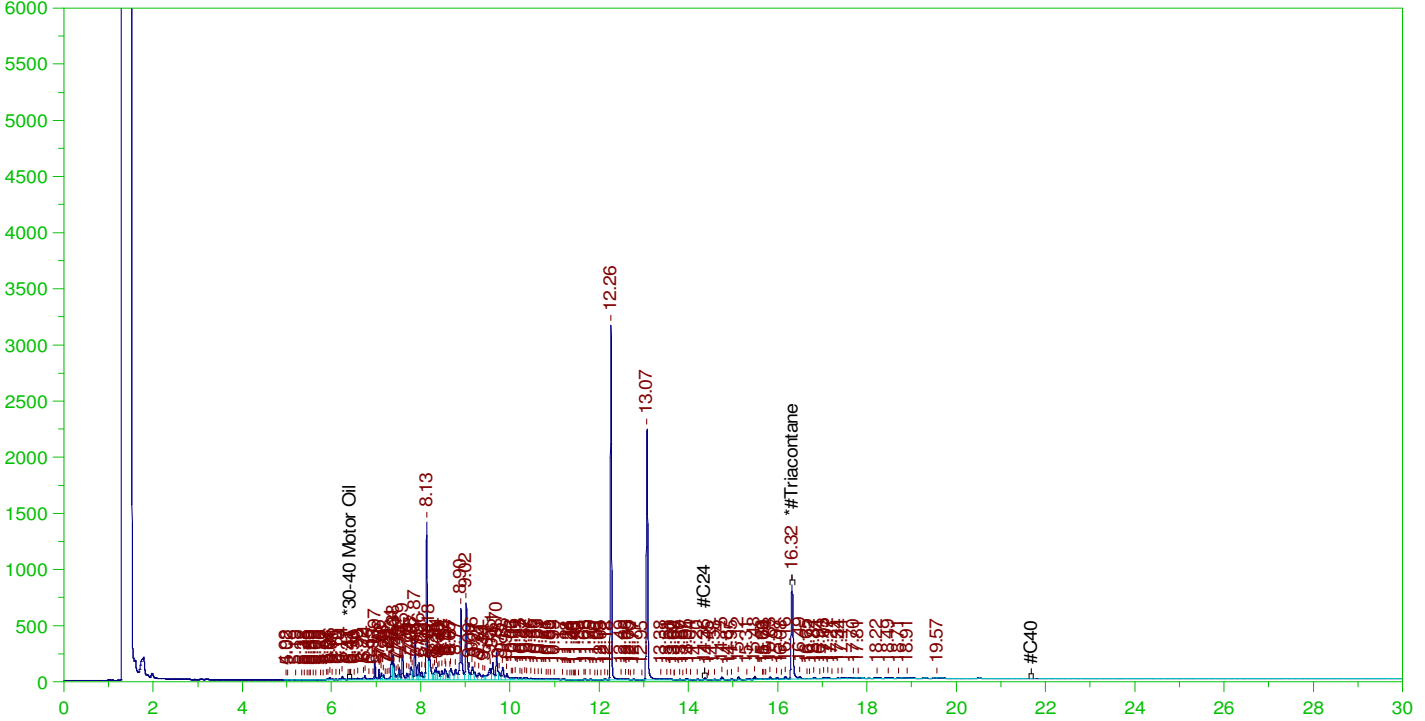
DRO Area: 1.73948E+07 DRO Amount: 0.5233978
 TEH Area: 1.831887E+07 TEH Amount: 0.5512023

ERH1876 (RHMW02)

Batch ID: 161122

G:\org\HP5\DAT\HP5111121_b\1111HP5.0049.RAW

B21110712-002A ;1111HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21110712-002A ;1111HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0049.RAW
 Date & Time Acquired: 11/12/2021 5:05:29 PM
 Method File: G:\Org\HP5\Methods\DR_OROS-AD-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AD-SAMP.CAL
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
 Rt range for Residual Range Organics: 14.32 to 21.73

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.318	.472	.078	16.48

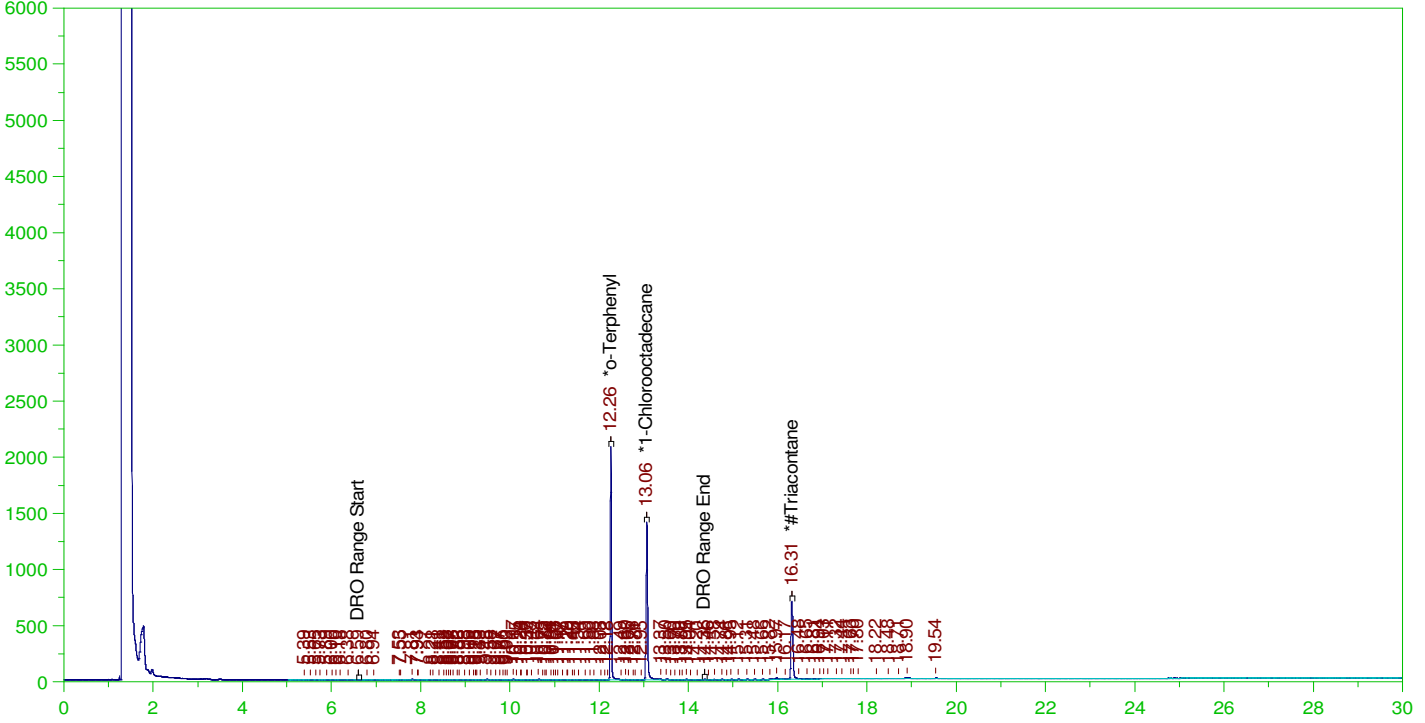
RRO Area:782253.7 RRO AMOUNT: 2.585539E-02

ERH1879 (RHMW03)

G:\org\HP5\DAT\HP5111121_b\1111HP5.0039.RAW

Batch ID: 161122

B21110712-003A ; 1111HP5 , \$HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21110712-003A ; 1111HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0039.RAW
 Date & Time Acquired: 11/12/2021 9:55:34 AM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-IB-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB-24-Tri.CAL
 Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19

Rt range for Diesel Range Organics: 6.57 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.259	.196	.113	57.58	-
*1-Chlorooctadecane	13.063	.196	.09	46.14	-
*#Triacontane	16.314	.196	.066	33.75	-

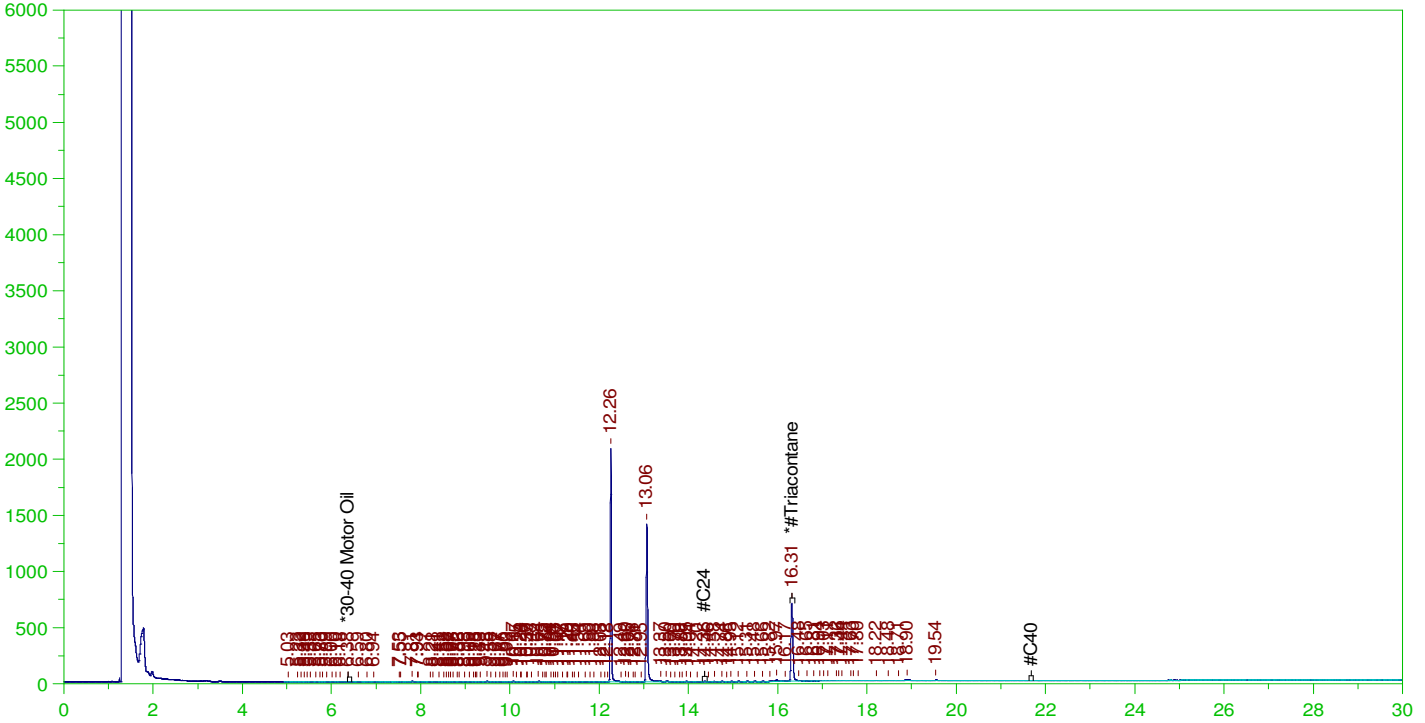
DRO Area: 409112.7 DRO Amount: 1.279267E-02
 TEH Area: 678725.6 TEH Amount: 2.122327E-02

ERH1879 (RHMW03)

G:\org\HP5\DAT\HP5111121_b\1111HP5.0039.RAW

Batch ID: 161122

B21110712-003A ; 1111HP5 , \$HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21110712-003A ; 1111HP5 , \$HC-8015-DRO-W, SGT
 Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0039.RAW
 Date & Time Acquired: 11/12/2021 9:55:34 AM
 Method File: G:\Org\HP5\Methods\DR_OROS-AD-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AD-SAMP.CAL
 Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
 Rt range for Residual Range Organics: 14.32 to 21.73

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.314	.49	.066	13.5

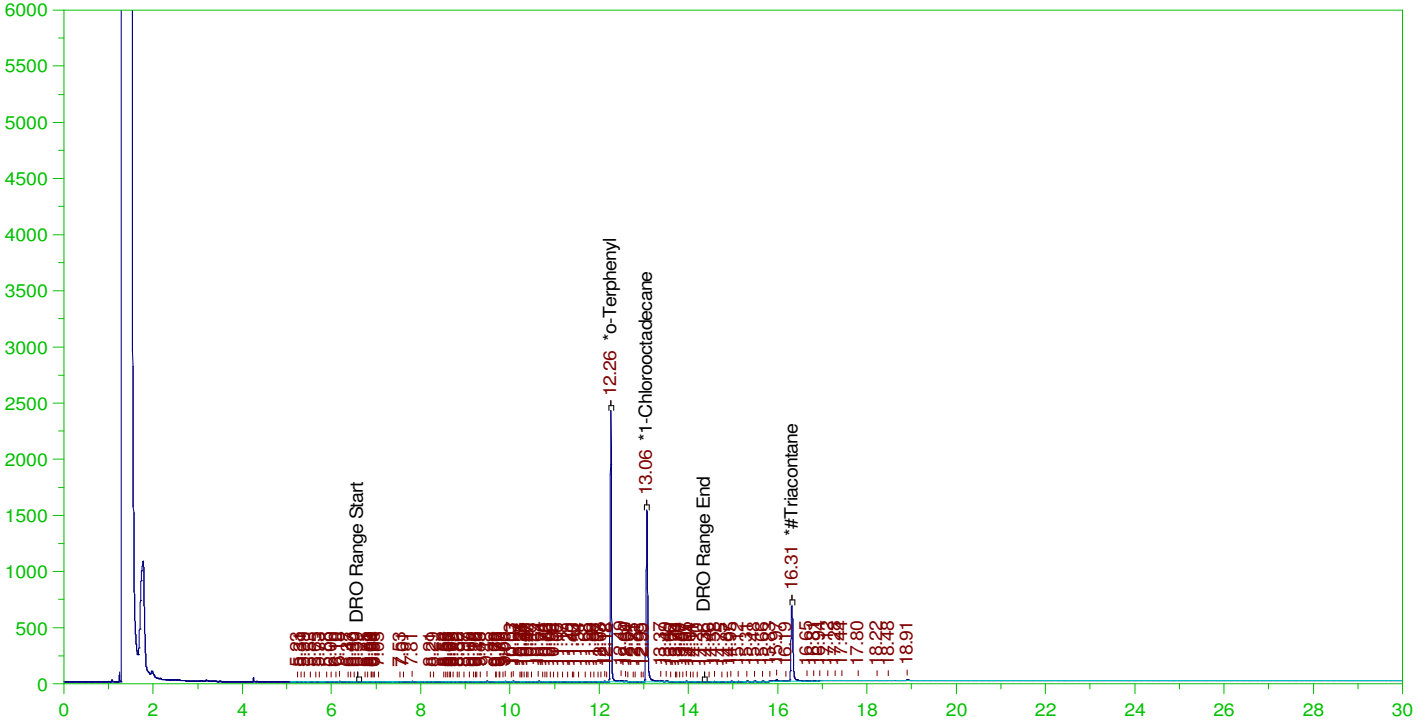
RRO Area:256613 RRO AMOUNT: 0.0088143

ERH1882 (RHMW05)

Batch ID: 161122

G:\Org\HP5\DAT\HP5111121_b\1111HP5.0042.RAW

B21110712-004A ;1111HP5 , \$HC-8015-DRO-W, RR



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21110712-004A ;1111HP5 , \$HC-8015-DRO-W, RR
 Raw File: G:\Org\HP5\DAT\HP5111121_b\1111HP5.0042.RAW
 Date & Time Acquired: 11/12/2021 12:06:23 PM
 Method File: G:\Org\HP5\Methods\DR_8015-C24T-IB-L%.met
 Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB-24-Tri.CAL
 Sample Weight: 1055 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19

Rt range for Diesel Range Organics: 6.57 to 14.42

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.259	.19	.125	65.85	-
*1-Chlorooctadecane	13.064	.19	.099	52.13	-
*#Triacontane	16.315	.19	.065	34.19	-

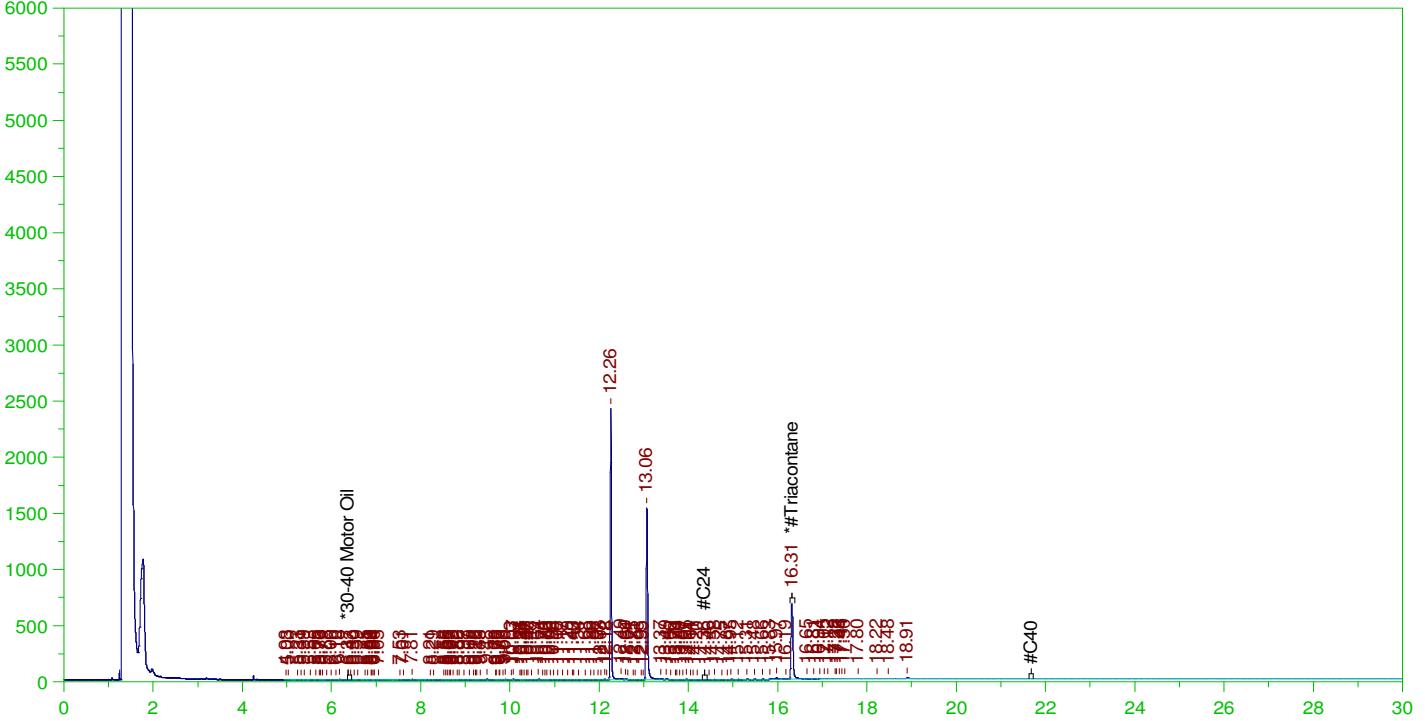
DRO Area:426995.4 DRO Amount: 1.290889E-02
 TEH Area:637970.8 TEH Amount: 1.928708E-02

ERH1882 (RHMW05)

G:\org\HP5\DAT\HP5111121_b\1111HP5.0042.RAW

Batch ID: 161122

B21110712-004A ;1111HP5 , \$HC-8015-DRO-W, RR



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21110712-004A ;1111HP5 , \$HC-8015-DRO-W, RR
 Raw File: G:\org\HP5\DAT\HP5111121_b\1111HP5.0042.RAW
 Date & Time Acquired: 11/12/2021 12:06:23 PM
 Method File: G:\Org\HP5\Methods\DR_OROS-AD-L%.MET
 Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AD-SAMP.CAL
 Sample Weight: 1055 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
 Rt range for Residual Range Organics: 14.32 to 21.73

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.315	.474	.065	13.68

RRO Area:182285.4 RRO AMOUNT: 6.05353E-03