Energy Laboratories Inc

ANALYTICAL RUN Summary

03-Nov-21

Run ID GCFID-HP5-B_211102A

Run Start Date:	11/2/2021
Analyst:	Ann Nebel
Ical:	
Column ID:	
Comments:	ICAL for 8015C_DRO211002IA

Std ID	Std Name	Std Amount	Std Units	Samp Amount	Samp Units	SampType	Expiration Date
DRO211012A	Diesel Fuel #2 50,000 ug/mL in DCM					CAL-DIESE	4/30/2023
DRO211012B	#2 Diesel in Acetone 150,000 ug/mL					SECOND S	11/5/2023
DRO211025A	ALI CCV Mix-200ug/mL					MARKER	5/31/2022
DRO211101A	OTP-4000 ug/mL DCM					CAL-SURR	9/30/2024

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822192	CCV_1102HP50	HC-8015-DRO-	CCV		11/2/2021 8:31:3	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Total Extractable Hydrocarbons	A	mg/L		3.665751		15	0	0	0.0749	0.3	50	24%	80	120	0%	S
o-Terphenyl	S	mg/L		0.2015393		0.2	0	0	0.000429	0.002	0	101%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822193	CCV_1102HP50	HC-8015-DRO-	CAL1		11/2/2021 9:57:0	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl	S	mg/L		0.00195342		0.002	0	0	0.000429	0.002	0	98%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822194	CCV_1102HP50	HC-8015-DRO-	CAL2		11/2/2021 10:39:	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl	S	mg/L		0.04992196		0.05	0	0	0.000429	0.002	0	100%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822195	CCV_1102HP50	HC-8015-DRO-	CAL3		11/2/2021 11:22:	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl	S	mg/L		0.1939565		0.2	0	0	0.000429	0.002	0	97%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822196	CCV_1102HP50	HC-8015-DRO-	CAL4		11/2/2021 12:05:	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl	S	mg/L		0.5113316		0.5	0	0	0.000429	0.002	0	102%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822197	CCV_1102HP50	HC-8015-DRO-	CAL5		11/2/2021 12:49:	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl	S	mg/L		1.032406		1	0	0	0.000429	0.002	0	103%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822198	CCV_1102HP51	HC-8015-DRO-	CAL1		11/2/2021 1:32:0	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Total Extractable Hydrocarbons	A	mg/L		0.1551854		0.15	0	0	0.0749	0.3	50	103%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822199	CCV_1102HP51	HC-8015-DRO-	CAL2		11/2/2021 2:15:0	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Total Extractable Hydrocarbons	A	mg/L		3.698073		3.75	0	0	0.0749	0.3	50	99%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822200	CCV_1102HP51	HC-8015-DRO-	CAL3		11/2/2021 2:58:2	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Total Extractable Hydrocarbons	A	mg/L		15.26249		15	0	0	0.0749	0.3	50	102%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822201	CCV_1102HP51	HC-8015-DRO-	CAL4		11/2/2021 3:41:3	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Total Extractable Hydrocarbons	A	mg/L		36.59341		37.5	0	0	0.0749	0.3	50	98%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822202	CCV_1102HP51	HC-8015-DRO-	CAL5		11/2/2021 4:24:5	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Total Extractable Hydrocarbons	A	mg/L		49.2977		50	0	0	0.0749	0.3	50	99%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14822203	CCV_1102HP51	HC-8015-DRO-	ICV		11/2/2021 5:51:3	1	R369667		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Total Extractable Hydrocarbons	A	mg/L		14.98994		15	0	0	0.0749	0.3	50	100%	80	120	0%	

Write Sequence	Insert Entries(Have the first cell for entries selecte						
Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
:\org\HP5\DAT\HP5110221_b\1102HP5.03r	CCV_1102HP508r, DRO ;1102HP5 , DRO211025A	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.04r	DCM-Baseline Check-V04	G:\Org\HP5\Methods\DR_8015-HP-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.05r	CCV_1102HP505r, CAL1 ;1102HP5 , 2 ug per mL OTP (10 uL of Cal3 + 990 uL DCM(14408)	G:\Org\HP5\Methods\DS_8015-IA-L#.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.06r	CCV_1102HP506r, CAL2 ;1102HP5 , 50 ug per mL OTP (100 uL Cal4 + 900 uL of DCM(14408)	G:\Org\HP5\Methods\DS_8015-IA-L#.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.07r	CCV_1102HP507r, CAL3 ;1102HP5 , 200 ug per mL OTP (100uL of Cal5 + 400 uL DCM(14408)	G:\Org\HP5\Methods\DS_8015-IA-L#.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.08r	CCV_1102HP508r, CAL4 ;1102HP5 , 500 ug per mL OTP (250uL of Cal5 + 250 uL DCM(14408)	G:\Org\HP5\Methods\DS_8015-IA-L#.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.09r	CCV_1102HP509r, CAL5 ;1102HP5 , 1000 ug per mL OTP (250 uL 4000 ug/mL OTP DRO211101A + 750 DCM(14408)	G:\Org\HP5\Methods\DS_8015-IA-L#.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.10r	CCV_1102HP510r, CAL1 ;1102HP5 , 150 ug per mL Diesel (10 uL of Cal3 + 990 uL DCM(14408),	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.11r	CCV_1102HP511r, CAL2 ;1102HP5 , 3750 ug per mL Diesel (100 uL Cal4 + 900 uL of DCM(14408)	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.12r	CCV_1102HP512r, CAL3 ;1102HP5 , 15000 ug per mL Diesel (300 uL of DRO211012A + 700 uL DCM(14408)	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.13r	CCV_1102HP513r, CAL4 ;1102HP5 , 37500ug per mL Diesel (750 uL of DRO211012A + 250 uL DCM(14408)	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.14r	CCV_1102HP514r, CAL5 ;1102HP5 , 50000 ug per mL Diesel (200 uL of DRO211012A)	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.15r	DCM-Baseline Check-V15	G:\Org\HP5\Methods\DR_8015-HP-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5110221_b\1102HP5.16r	CCV_1102HP516r, Second Source ;1102HP5 , 15000 ug per mL (100uL of DRO211012B + 900uL DCM(14408)	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0

File Name: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Version: 14

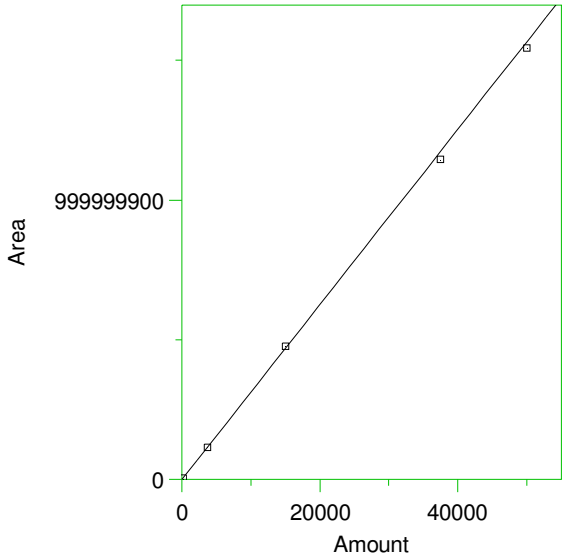
Creator: AMN 11/02/2021
Description: 8015C-DRO. New ICal Per 1102HP5 (2021)-2 uL Inj.; COD added using OTP RFs
Reason for change:

External standard calibration
Standard injection volume: 1
Standard sample weight: 1
Area reject threshold: 500
Reference peak area reject threshold: 500
Amount units: nanograms
No default component

Method of calculating data point averages: Equal weight for all updates
No calibration update report

All levels are normal data points.

1 DRO Range Start



Expected retention time:	6.64 minutes
Search window:	0.05 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0

Single peak quantification by area

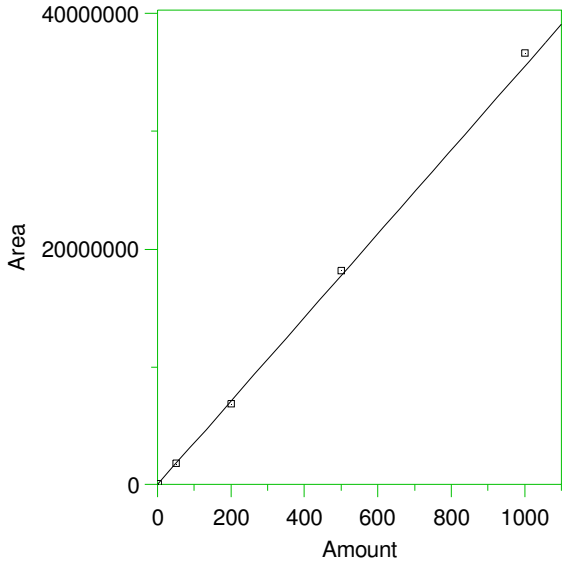
Y = 31353.19 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9992341
Average error:	2.083%
Average CF:	31353.19
RSD:	2.487%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	150	4865557	32437.05	3.457	Manual	11/3/2021 6:44:55 AM
2	3750	1.159464E+08	30919.04	-1.385	Manual	11/3/2021 6:45:31 AM
3	15000	4.785279E+08	31901.86	1.750	Manual	11/3/2021 6:46:08 AM
4	37500	1.14732E+09	30595.2	-2.418	Manual	11/3/2021 6:45:45 AM
5	50000	1.54564E+09	30912.8	-1.405	Manual	11/3/2021 6:45:18 AM

2 *o-Terphenyl



Expected retention time: 12.29 minutes
Search window: 0.05 minutes
No retention time reference component
Group number: 0

High alarm limit: 0
Low alarm limit: 0
Component constant: 0

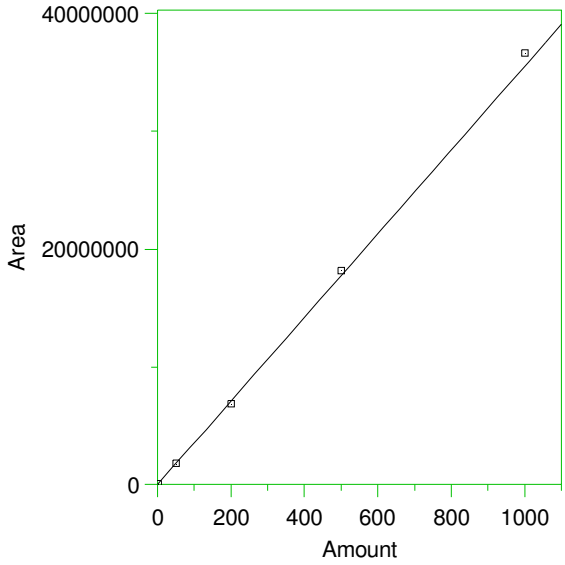
Single peak quantification by area

Y = 35509.21 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9983284
Average error: 2.203%
Average CF: 35509.21
RSD: 2.749%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2	69364.34	34682.17	-2.329	G:\Org\HP5\DAT\HP5110221_b\1102HP5.0005.BND	11/2/2021 2:21:29 PM
2	50	1772689	35453.78	-0.156	G:\Org\HP5\DAT\HP5110221_b\1102HP5.0006.BND	11/2/2021 2:21:35 PM
3	200	6887244	34436.22	-3.022	G:\Org\HP5\DAT\HP5110221_b\1102HP5.0007.BND	11/2/2021 2:21:41 PM
4	500	1.815698E+07	36313.96	2.266	G:\Org\HP5\DAT\HP5110221_b\1102HP5.0008.BND	11/2/2021 2:21:47 PM
5	1000	3.665993E+07	36659.93	3.241	G:\Org\HP5\DAT\HP5110221_b\1102HP5.0009.BND	11/2/2021 2:21:52 PM

3 *1-Chlorooctadecane



Expected retention time:	13.1 minutes
Search window:	0.05 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0

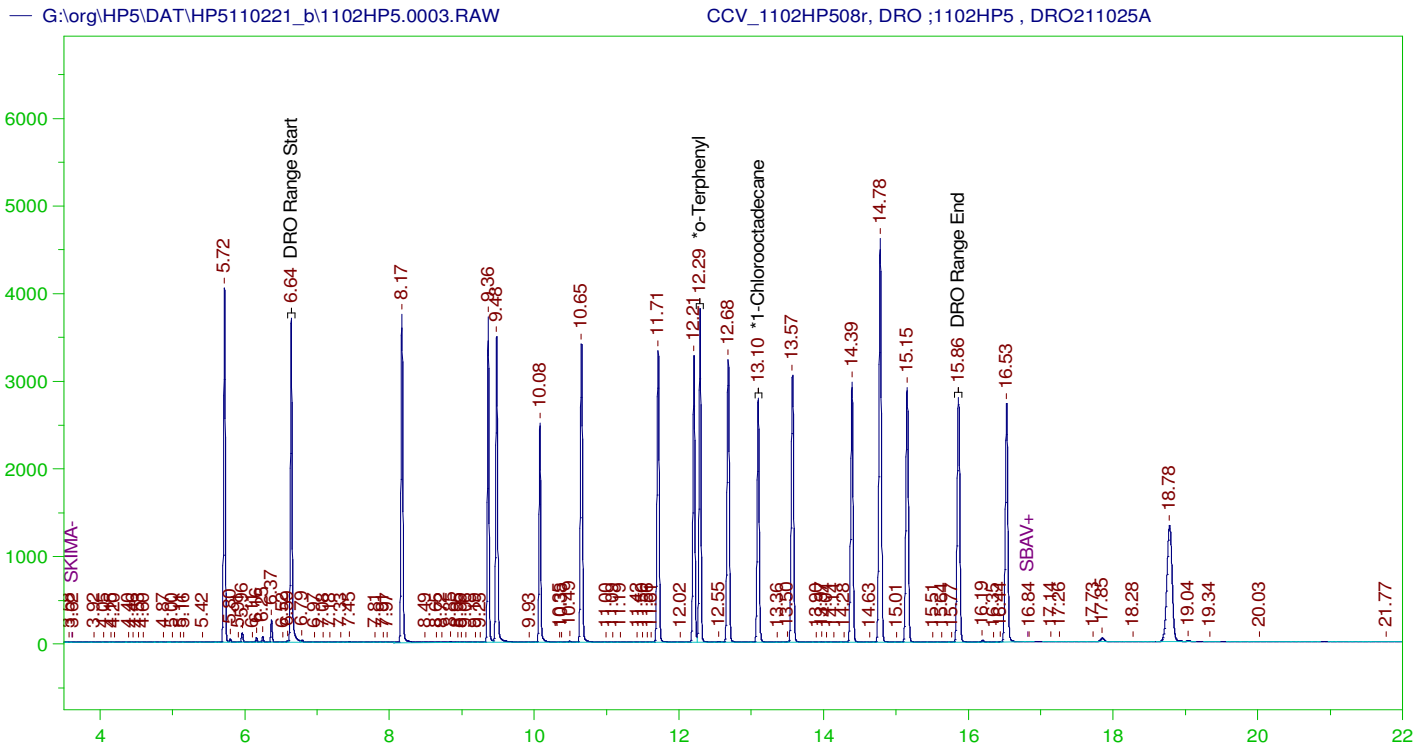
Single peak quantification by area

Y = 35509.21 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9983284
Average error:	2.203%
Average CF:	35509.21
RSD:	2.749%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2	69364.34	34682.17	-2.329	Manual	11/2/2021 2:21:57 PM
2	50	1772689	35453.78	-0.156	Manual	11/2/2021 2:21:58 PM
3	200	6887244	34436.22	-3.022	Manual	11/2/2021 2:22:00 PM
4	500	1.815698E+07	36313.96	2.266	Manual	11/2/2021 2:22:02 PM
5	1000	3.665993E+07	36659.93	3.241	Manual	11/2/2021 2:22:04 PM



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1102HP508r, DRO ;1102HP5 , DRO211025A
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0003.RAW
Date & Time Acquired: 11/2/2021 8:31:35 AM
Method File: G:\Org\HP5\Methods\DC_8015-IA-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

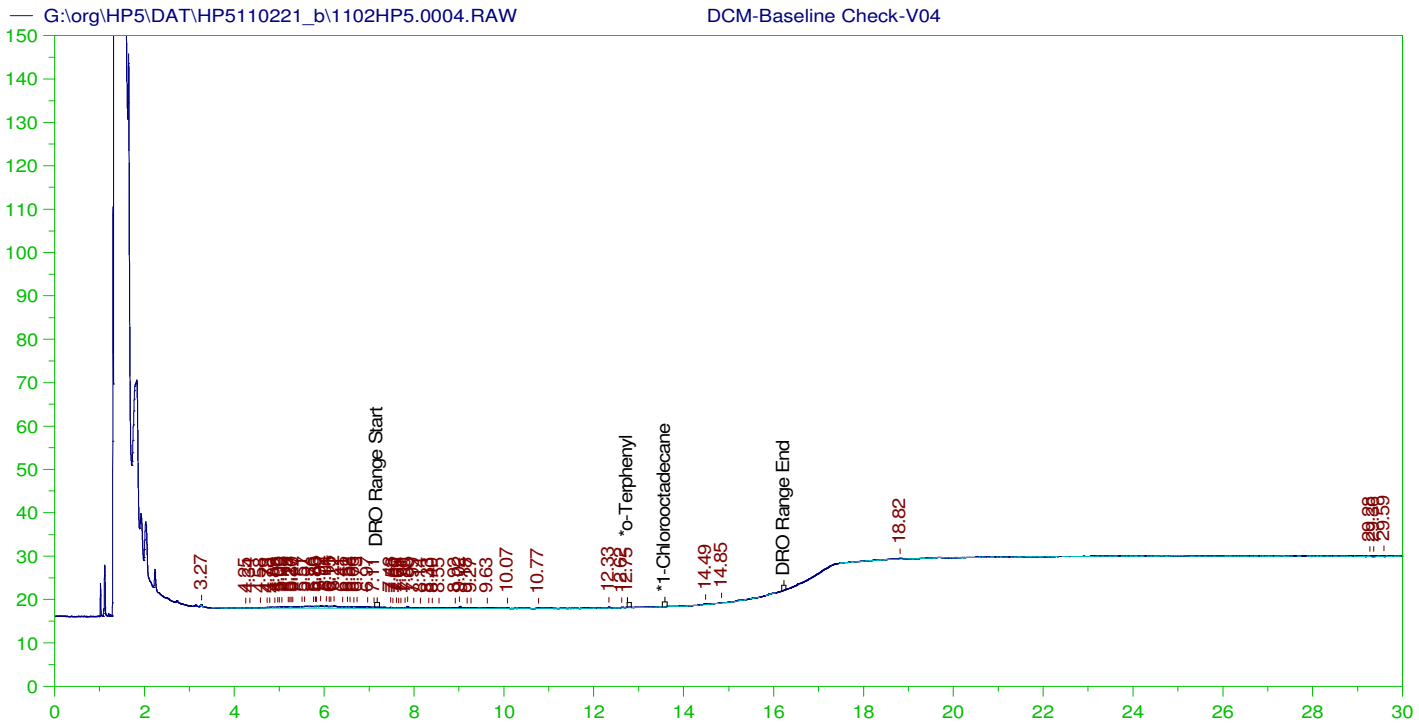
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.292	200.	201.539	100.77	-
*1-Chlorooctadecane	13.095	200.	163.573	81.79	-

DRO Area:9.38791E+07 DRO Amount: 2994.244
TEH Area:1.14933E+08 TEH Amount: 3665.75

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0003.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	3665.75	24.44	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.292	200.	201.539	100.77	85-115
*1-Chlorooctadecane	13.095	200.	163.573	81.79	85-115



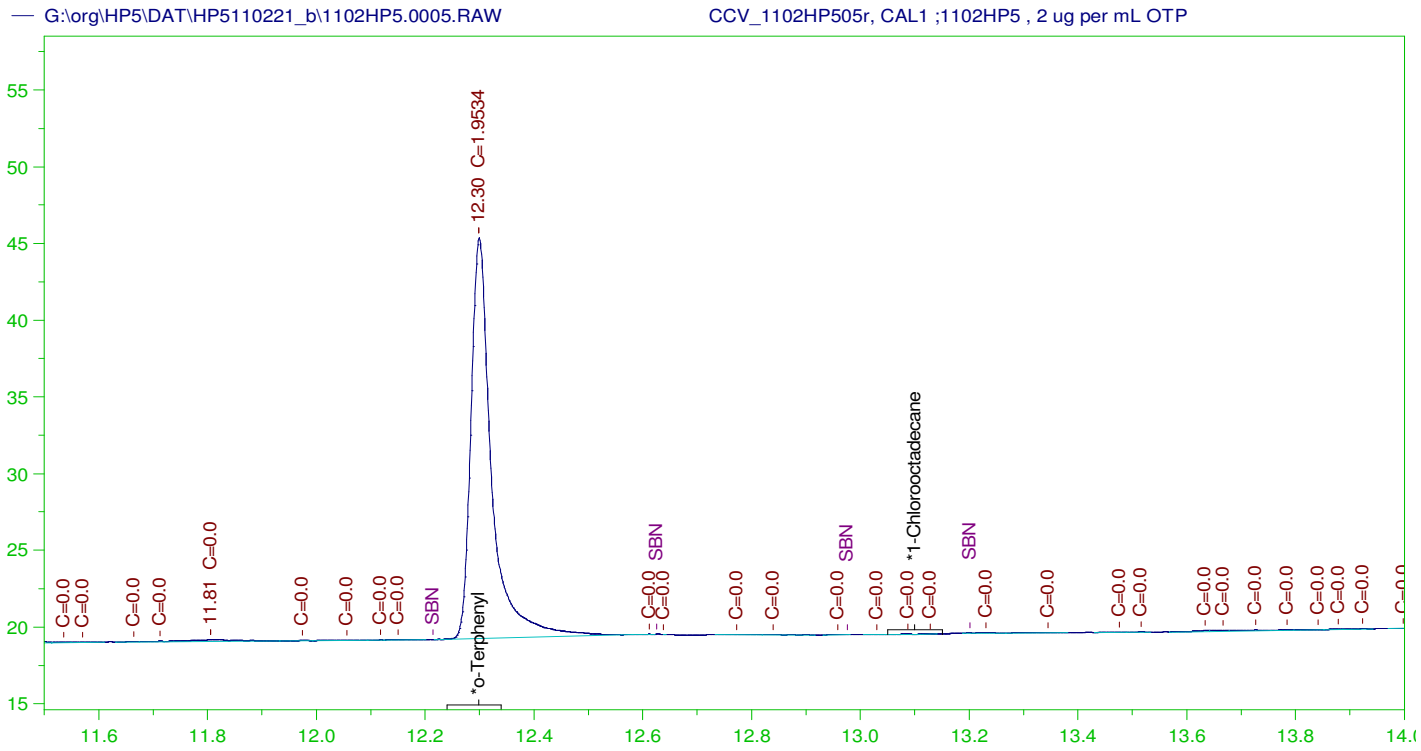
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V04
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0004.RAW
Date & Time Acquired: 11/2/2021 9:14:27 AM
Method File: G:\Org\HP5\Methods\DR_8015-HP-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108HP.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 7.125 to 16.28

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.746	200.	.026	.01	-
*1-Chlorooctadecane	29.929	200.	.	.	-

DRO Area:35138 DRO Amount: 1.192844
TEH Area:110269.4 TEH Amount: 3.74336



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1102HP505r, CAL1 ;1102HP5 , 2 ug per mL OTP
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0005.RAW
Date & Time Acquired: 11/2/2021 9:57:01 AM
Method File: G:\Org\HP5\Methods\DS_8015-IA-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

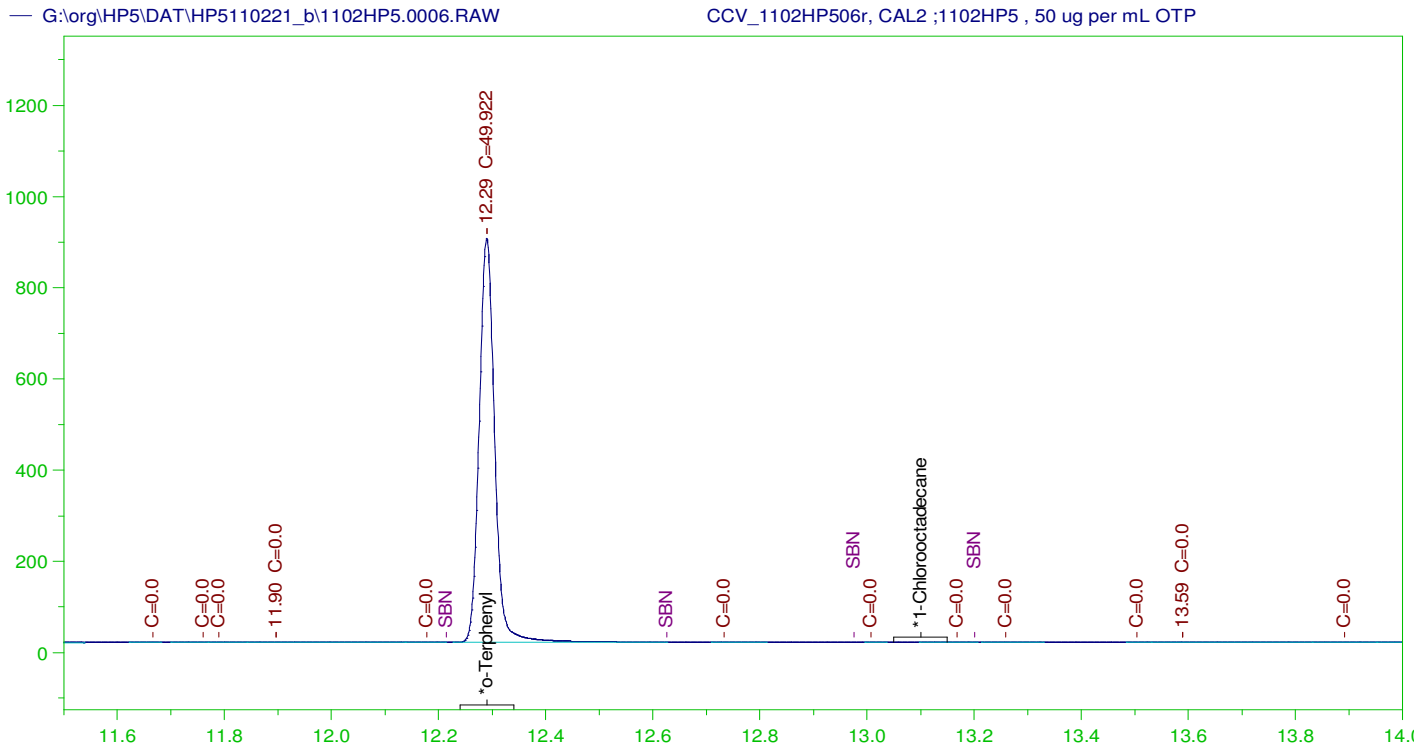
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.299	200.	1.953	.98	-
*1-Chlorooctadecane	15.561	200.	.	.	-

DRO Area:37026.36 DRO Amount: 1.180944
TEH Area:88429.33 TEH Amount: 2.820425

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	.	.	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.299	200.	1.953	.98	85-115
*1-Chlorooctadecane	15.561	200.	.	.	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1102HP506r, CAL2 ;1102HP5 , 50 ug per mL OTP
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0006.RAW
Date & Time Acquired: 11/2/2021 10:39:43 AM
Method File: G:\Org\HP5\Methods\DS_8015-IA-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

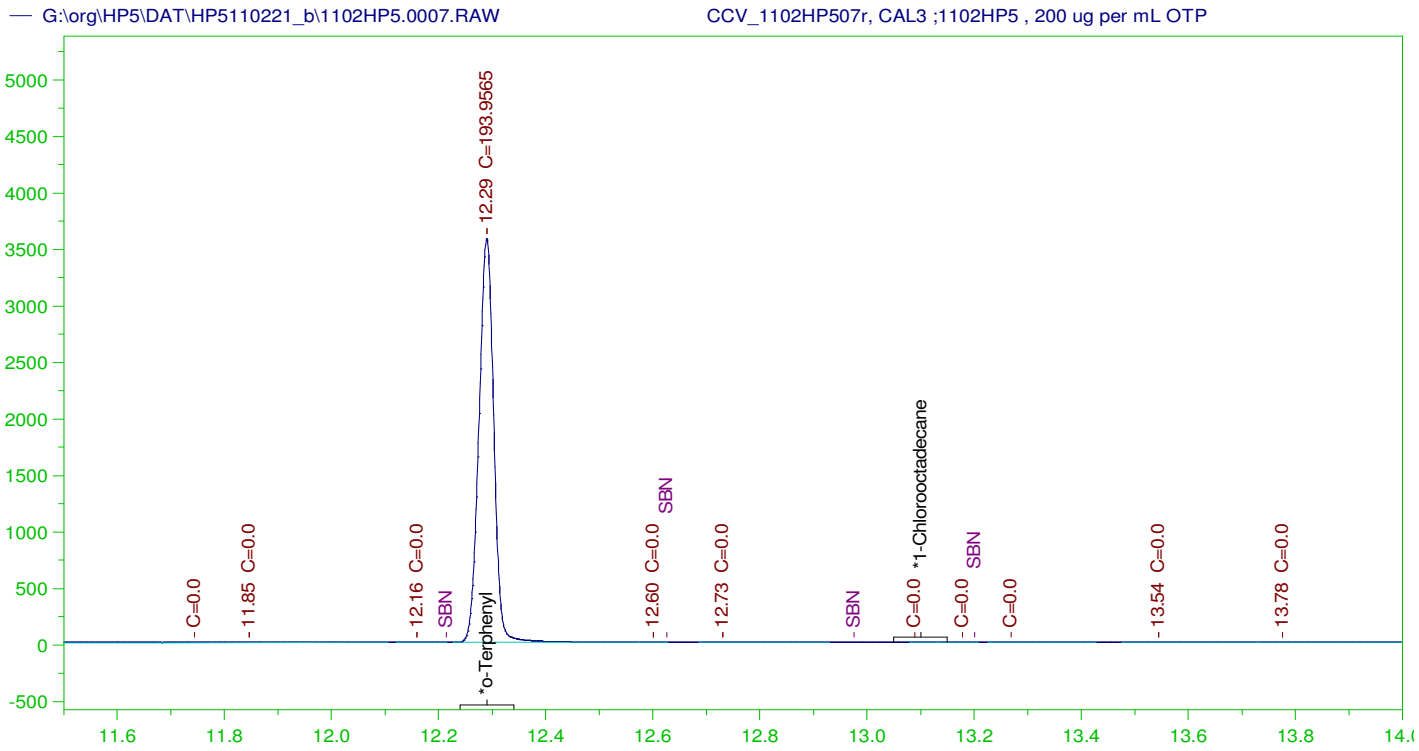
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.29	200.	49.922	24.96	-
*1-Chlorooctadecane	15.697	200.	.	.	-

DRO Area:141449.5 DRO Amount: 4.511485
TEH Area:310030.7 TEH Amount: 9.88833

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0006.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	.	.	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.29	200.	49.922	24.96	85-115
*1-Chlorooctadecane	15.697	200.	.	.	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1102HP507r, CAL3 ;1102HP5 , 200 ug per mL OTP
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0007.RAW
Date & Time Acquired: 11/2/2021 11:22:37 AM
Method File: G:\Org\HP5\Methods\DS_8015-IA-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

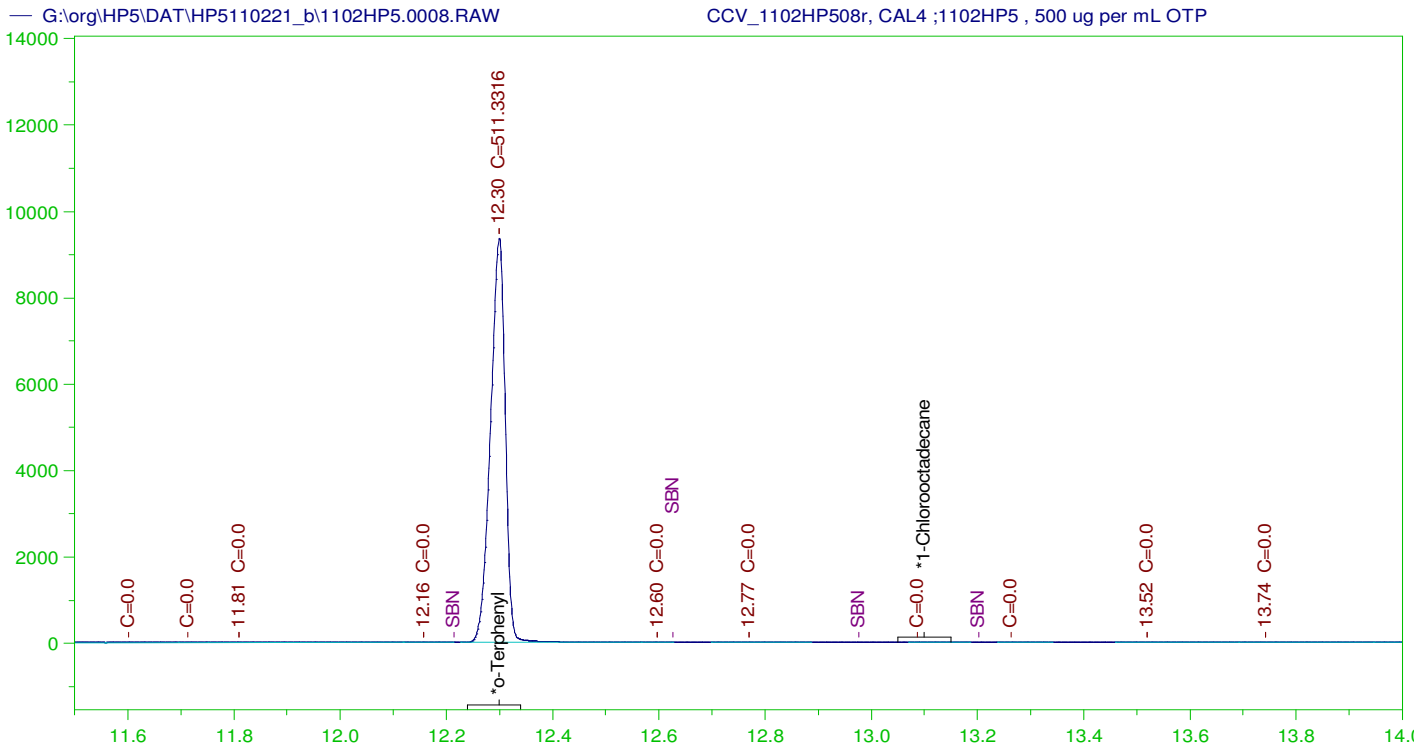
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.29	200.	193.957	96.98	-
*1-Chlorooctadecane	15.779	200.	.	.	-

DRO Area:338082.7 DRO Amount: 10.78304
TEH Area:638415.8 TEH Amount: 20.36207

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0007.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	20.36	.14	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.29	200.	193.957	96.98	85-115
*1-Chlorooctadecane	15.779	200.	.	.	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1102HP508r, CAL4 ;1102HP5 , 500 ug per mL OTP
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0008.RAW
Date & Time Acquired: 11/2/2021 12:05:44 PM
Method File: G:\Org\HP5\Methods\DS_8015-IA-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

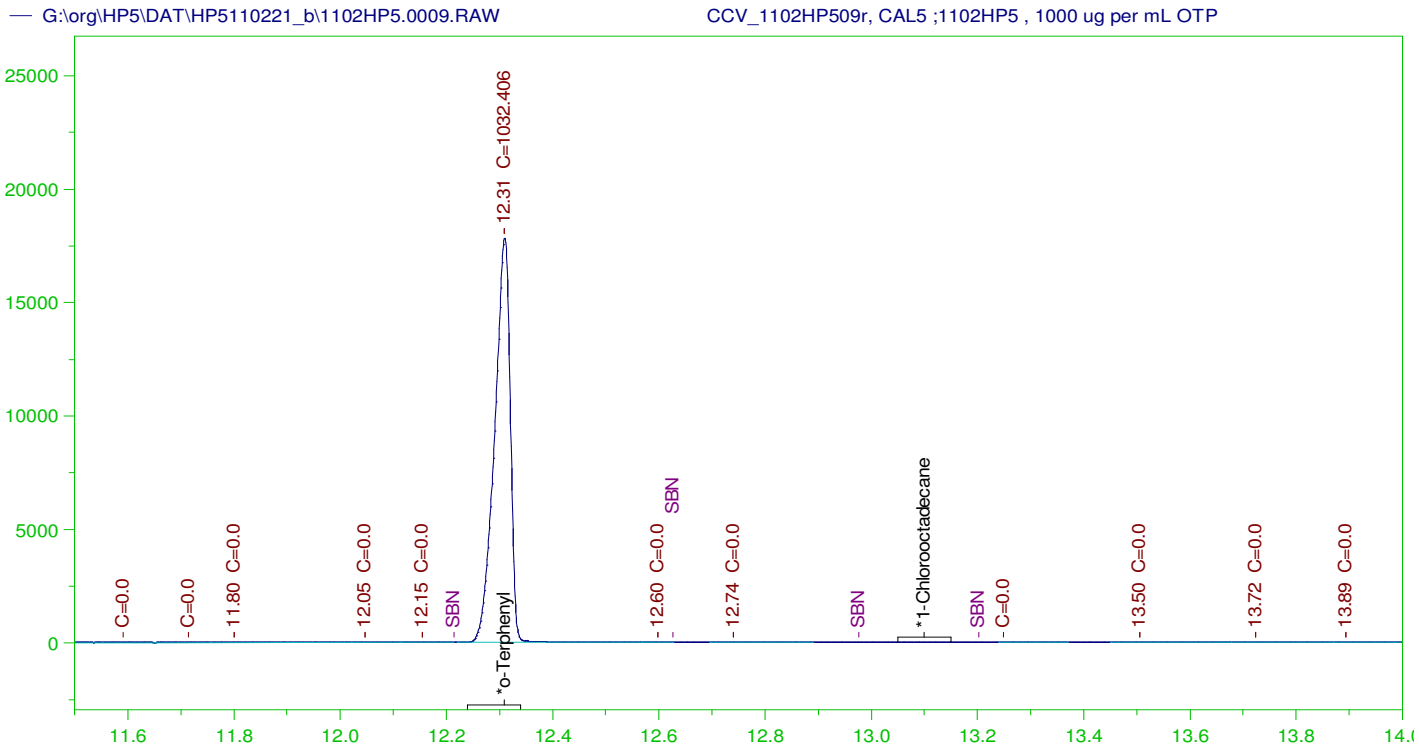
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.3	200.	511.332	255.67	-
*1-Chlorooctadecane	15.798	200.	.	.	-

DRO Area:456992 DRO Amount: 14.57561
TEH Area:825752.1 TEH Amount: 26.3371

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0008.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	26.34	.18	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.3	200.	511.332	255.67	85-115
*1-Chlorooctadecane	15.798	200.	.	.	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1102HP509r, CAL5 ;1102HP5 , 1000 ug per mL OTP
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0009.RAW
Date & Time Acquired: 11/2/2021 12:49:02 PM
Method File: G:\Org\HP5\Methods\DS_8015-IA-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

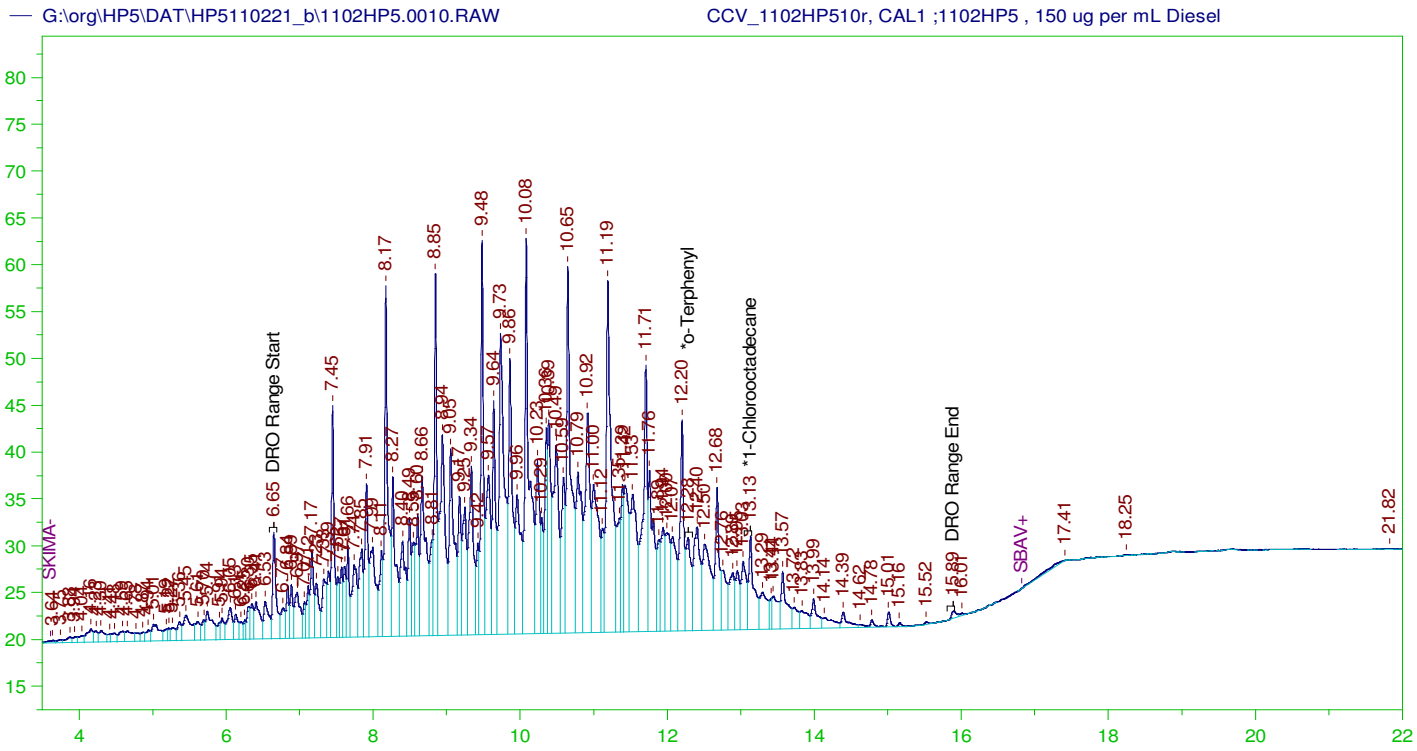
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.31	200.	1032.406	516.2	-
*1-Chlorooctadecane	15.803	200.	.	.	-

DRO Area:461032.4 DRO Amount: 14.70448
TEH Area:724020.4 TEH Amount: 23.0924

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0009.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	23.09	.15	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.31	200.	1032.406	516.2	85-115
*1-Chlorooctadecane	15.803	200.	.	.	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1102HP510r, CAL1 ;1102HP5 , 150 ug per mL Diesel
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0010.RAW
Date & Time Acquired: 11/2/2021 1:32:06 PM
Method File: G:\Org\HP5\Methods\DC_8015-IA-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.285	200.	1.416	.71	-
*1-Chlorooctadecane	13.13	200.	1.44	.72	-

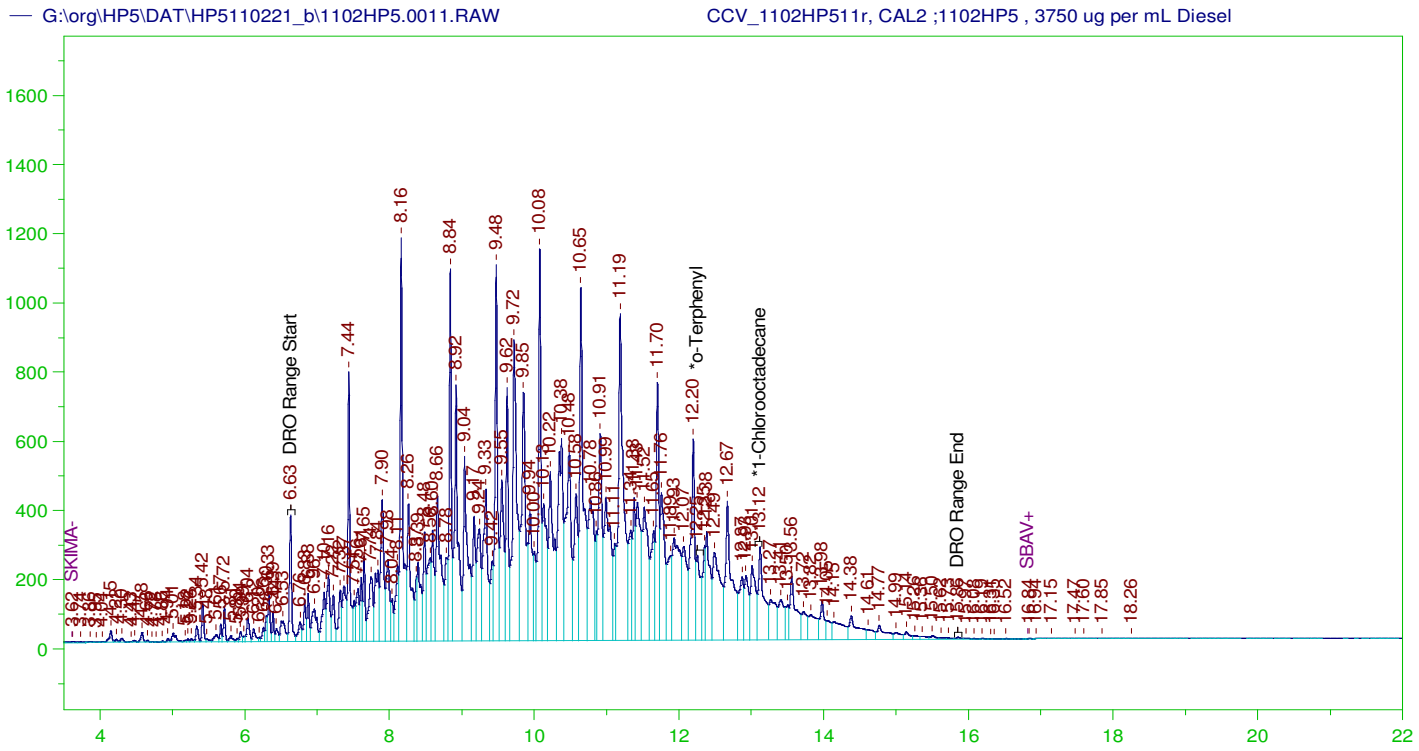
DRO Area:4571415 DRO Amount: 145.8038
TEH Area:4865557 TEH Amount: 155.1854

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0010.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	155.19	1.03	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.285	200.	1.416	.71	85-115
*1-Chlorooctadecane	13.13	200.	1.44	.72	85-115

G:\org\HP5\dat\HP5110221_b\Review\010_CCV_1102HP510r_DC_8015-IA-L%.xls



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1102HP511r, CAL2 ;1102HP5 , 3750 ug per mL Diesel
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0011.RAW
Date & Time Acquired: 11/2/2021 2:15:08 PM
Method File: G:\Org\HP5\Methods\DC_8015-IA-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

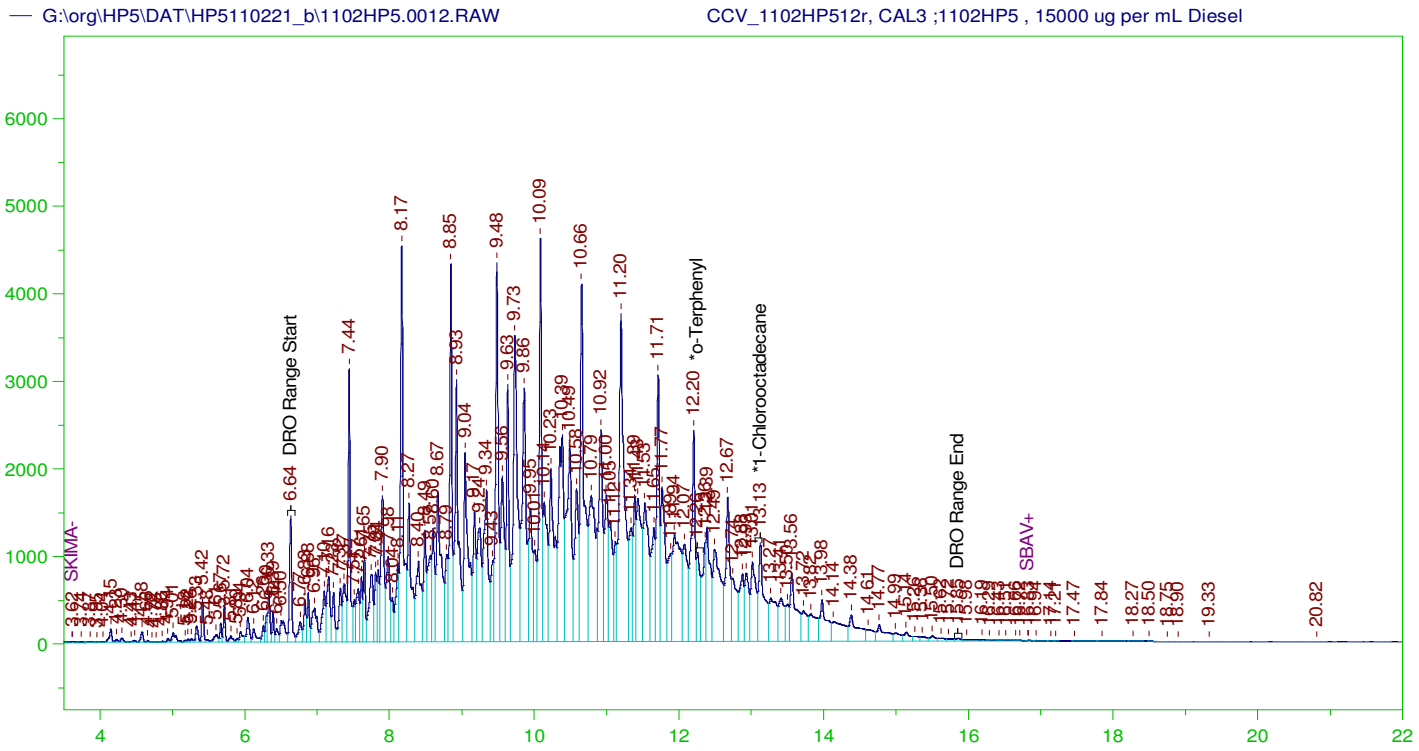
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.252	200.	28.988	14.49	-
*1-Chlorooctadecane	13.122	200.	39.19	19.59	-

DRO Area:1.131291E+08 DRO Amount: 3608.216
TEH Area:1.159464E+08 TEH Amount: 3698.073

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0011.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	3698.07	24.65	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.252	200.	28.988	14.49	85-115
*1-Chlorooctadecane	13.122	200.	39.19	19.59	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1102HP512r, CAL3 ;1102HP5 , 15000 ug per mL Diesel
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0012.RAW
Date & Time Acquired: 11/2/2021 2:58:26 PM
Method File: G:\Org\HP5\Methods\DC_8015-IA-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

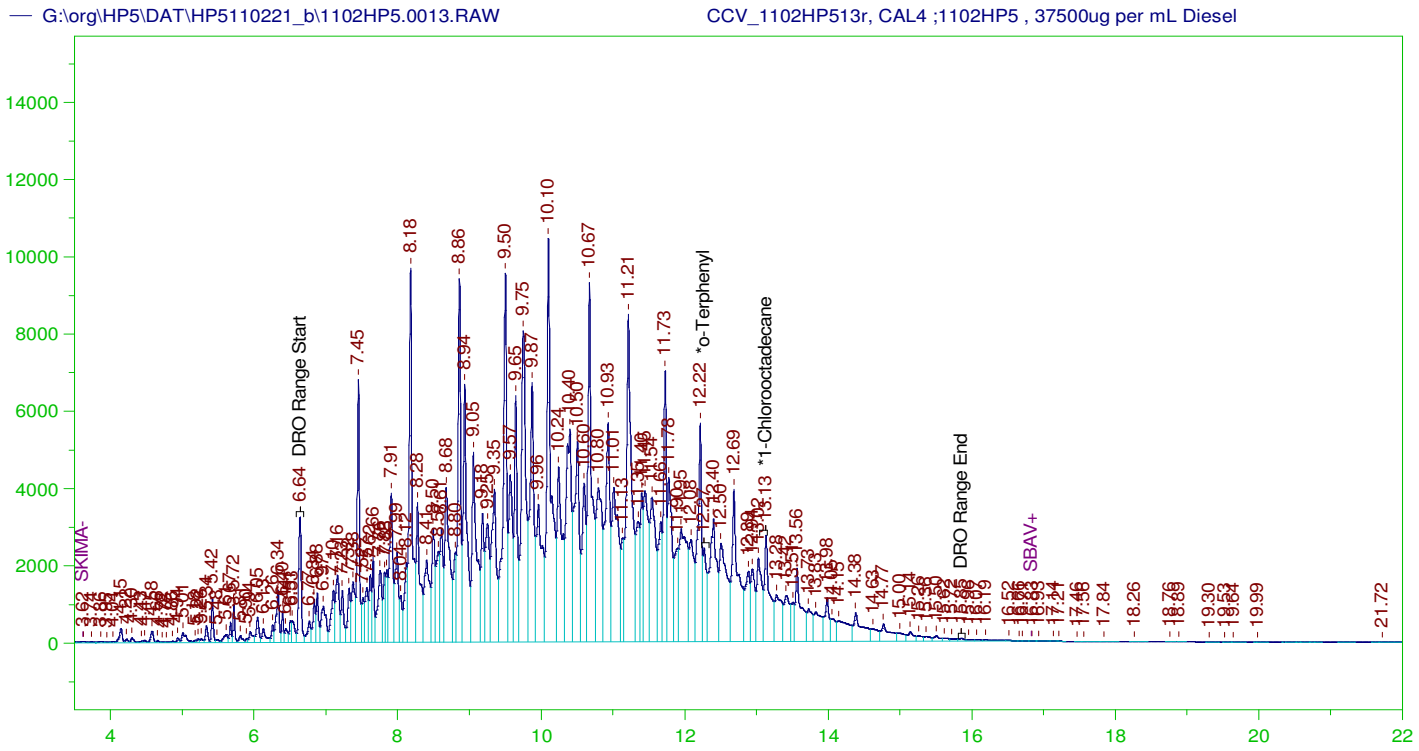
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.257	200.	92.35	46.18	-
*1-Chlorooctadecane	13.125	200.	158.994	79.5	-

DRO Area:4.667999E+08 DRO Amount: 14888.43
TEH Area:4.785279E+08 TEH Amount: 15262.49

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0012.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15262.49	101.75	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.257	200.	92.35	46.18	85-115
*1-Chlorooctadecane	13.125	200.	158.994	79.5	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1102HP513r, CAL4 ;1102HP5 , 37500ug per mL Diesel
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0013.RAW
Date & Time Acquired: 11/2/2021 3:41:37 PM
Method File: G:\Org\HP5\Methods\DC_8015-IA-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

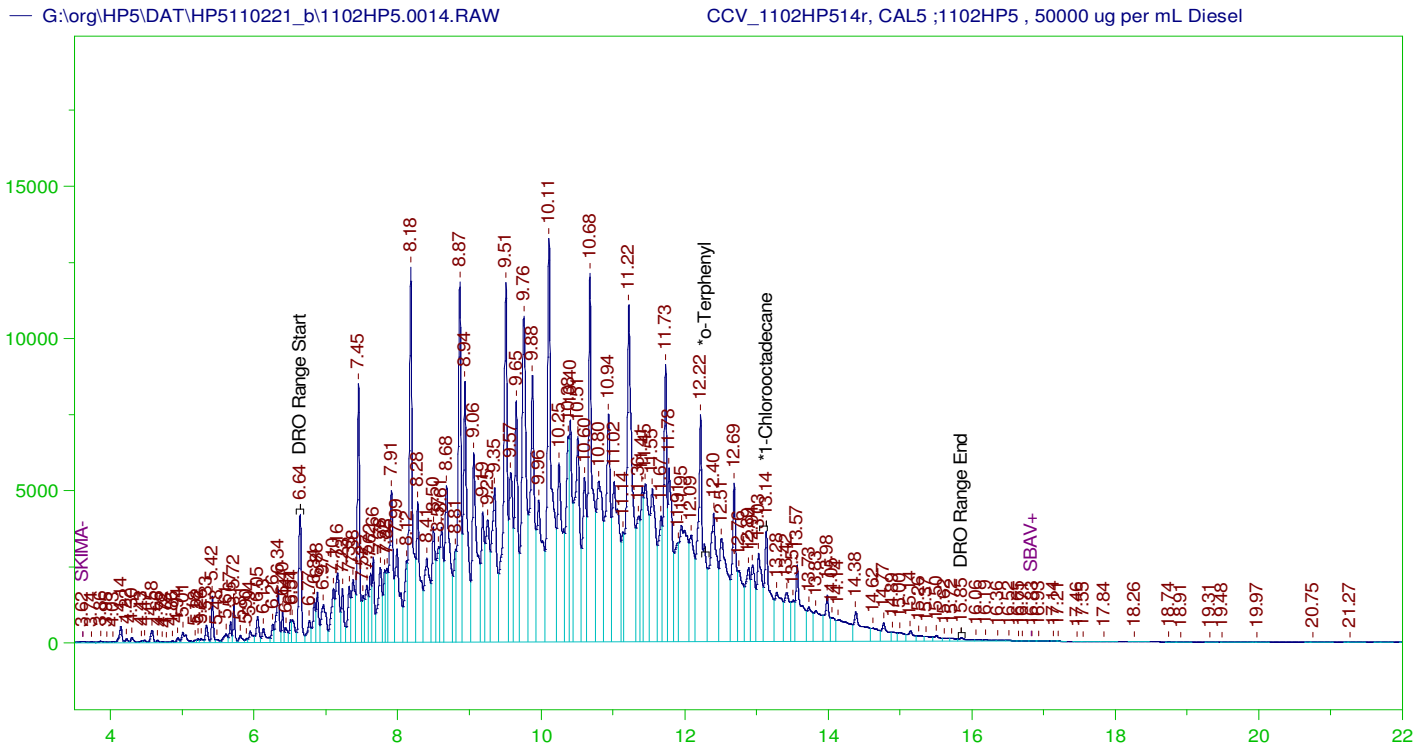
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.268	200.	238.956	119.48	-
*1-Chlorooctadecane	13.133	200.	386.008	193.	-

DRO Area:1.118993E+09 DRO Amount: 35689.91
TEH Area:1.14732E+09 TEH Amount: 36593.41

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0013.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	36593.41	243.96	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.268	200.	238.956	119.48	85-115
*1-Chlorooctadecane	13.133	200.	386.008	193.	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1102HP514r, CAL5 ;1102HP5 , 50000 ug per mL Diesel
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0014.RAW
Date & Time Acquired: 11/2/2021 4:24:53 PM
Method File: G:\Org\HP5\Methods\DC_8015-IA-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	29.921	200.	.	.	-
*1-Chlorooctadecane	13.135	200.	512.63	256.31	-

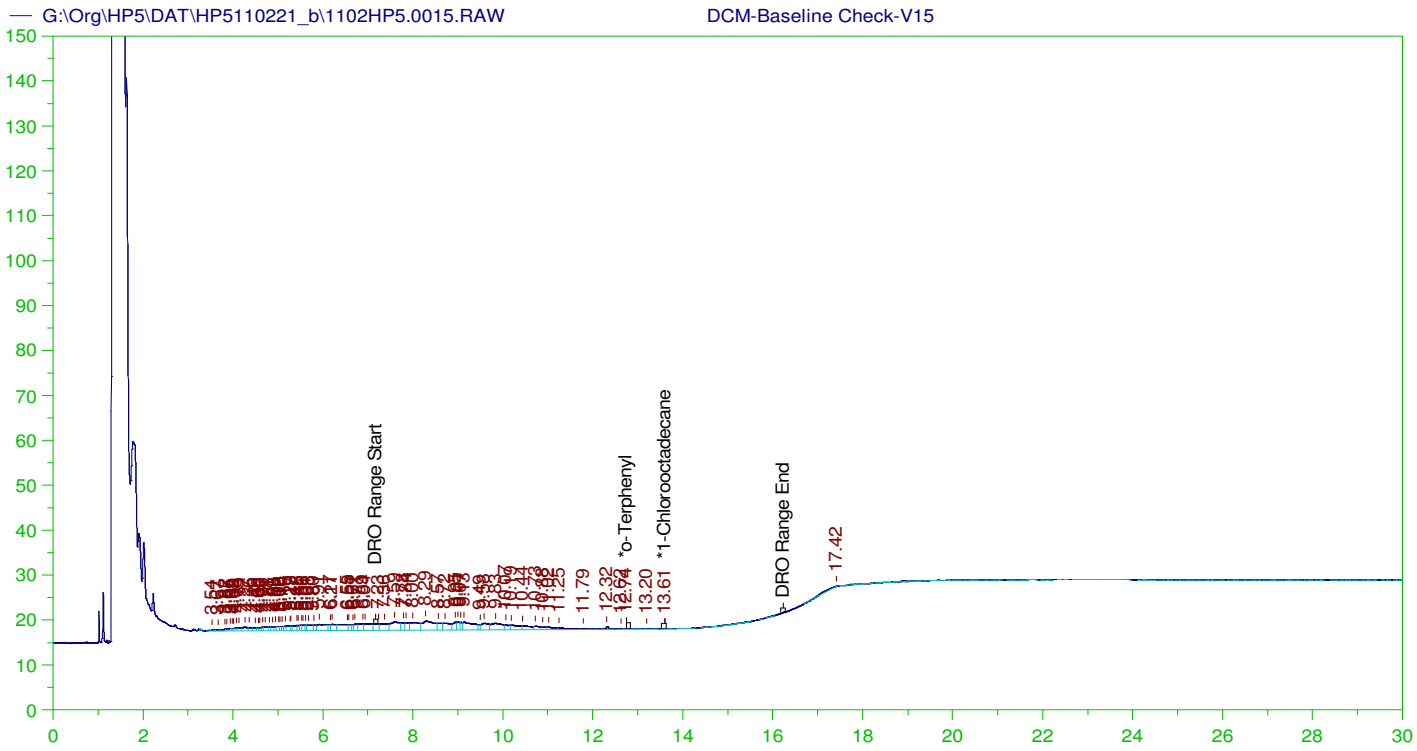
DRO Area:1.507978E+09 DRO Amount: 48096.49
TEH Area:1.54564E+09 TEH Amount: 49297.7

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0014.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	49297.7	328.65	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	29.921	200.	.	.	85-115
*1-Chlorooctadecane	13.135	200.	512.63	256.31	85-115

G:\org\HP5\dat\HP5110221_b\Review\014_CCV_1102HP514r_DC_8015-IA-L%.xls



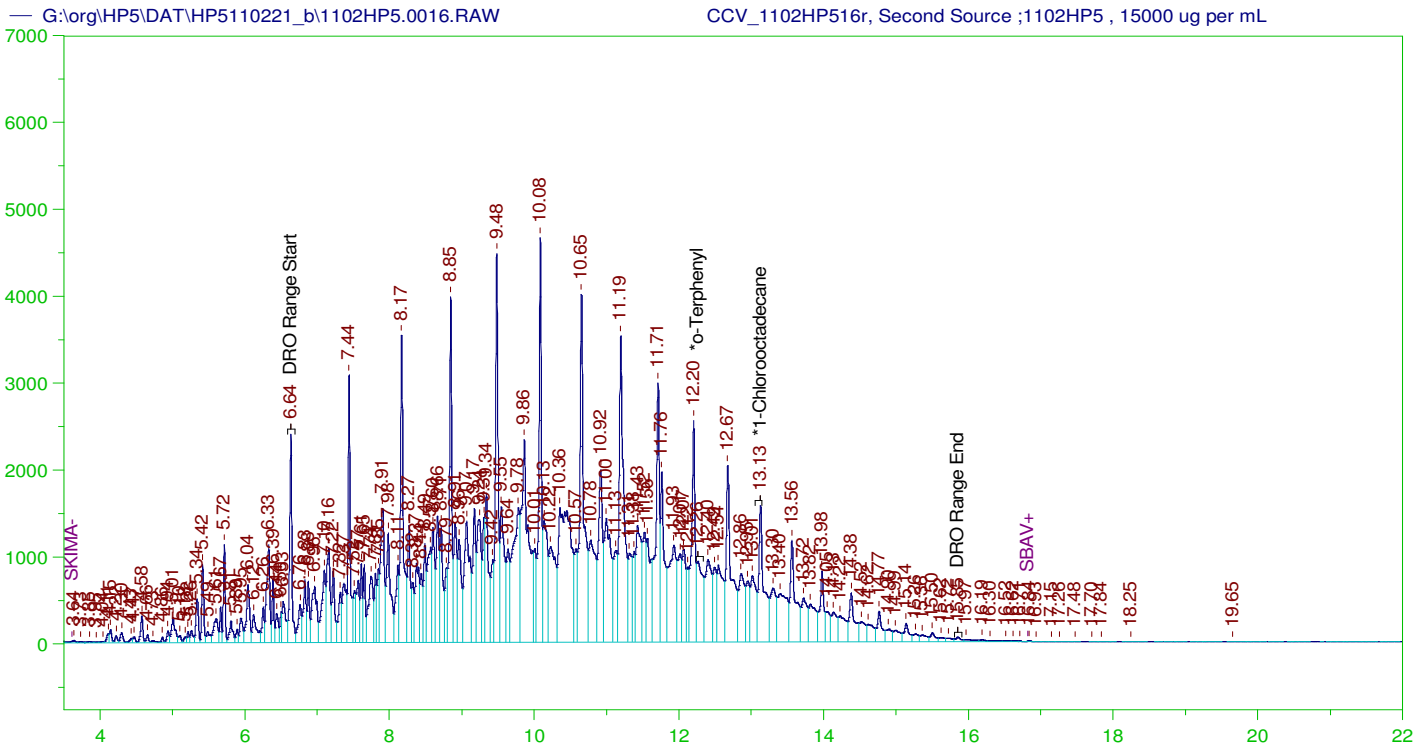
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V15
Raw File: G:\Org\HP5\DAT\HP5110221_b\1102HP5.0015.RAW
Date & Time Acquired: 11/2/2021 5:08:11 PM
Method File: G:\Org\HP5\Methods\DR_8015-HP-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108HP.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 7.125 to 16.28

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.744	200.	.041	.02	-
*1-Chlorooctadecane	13.606	200.	.017	.01	-

DRO Area:305831.5 DRO Amount: 10.38219
TEH Area:517467.1 TEH Amount: 17.56667



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1102HP516r, Second Source ;1102HP5 , 15000 ug per mL
Raw File: G:\org\HP5\DAT\HP5110221_b\1102HP5.0016.RAW
Date & Time Acquired: 11/2/2021 5:51:31 PM
Method File: G:\Org\HP5\Methods\DC_8015-IA-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.59 to 15.91

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.261	200.	146.398	73.2	-
*1-Chlorooctadecane	13.127	200.	209.876	104.94	-

DRO Area:4.432555E+08 DRO Amount: 14137.49
TEH Area:4.699825E+08 TEH Amount: 14989.94

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5110221_b\1102HP5.0016.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	14989.94	99.93	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.261	200.	146.398	73.2	85-115
*1-Chlorooctadecane	13.127	200.	209.876	104.94	85-115

Write Sequence / Data File	Insert Entries(Have the first cell for entries selecte / Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manul Integrations
G:\org\HP5\DAT\HP5110221_b\1102HP5.03r	CCV_1102HP508r, DRO ;1102HP5 , DRO211025A	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5110221_b\1102HP5.04r	DCM-Baseline Check-V04	G:\Org\HP5\Methods\DR_8015-HP-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5110221_b\1102HP5.05r	CCV_1102HP505r, CAL1 ;1102HP5 , 2 ug per mL OTP (10 uL of Cal3 + 990 uL DCM(14408)	G:\Org\HP5\Methods\DS_8015-IA-L#.met	1	1	1	1	0	Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.21 and slightly after the surrogate peak at 12.63 and scaling showing surrogate peak from 11.5-14.
G:\org\HP5\DAT\HP5110221_b\1102HP5.06r	CCV_1102HP506r, CAL2 ;1102HP5 , 50 ug per mL OTP (100 uL Cal4 + 900 uL of DCM(14408)	G:\Org\HP5\Methods\DS_8015-IA-L#.met	1	1	1	1	0	Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.21 and slightly after the surrogate peak at 12.63 and scaling showing surrogate peak from 11.5-14.
G:\org\HP5\DAT\HP5110221_b\1102HP5.07r	CCV_1102HP507r, CAL3 ;1102HP5 , 200 ug per mL OTP (100uL of Cal5 + 400 uL DCM(14408)	G:\Org\HP5\Methods\DS_8015-IA-L#.met	1	1	1	1	0	Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.21 and slightly after the surrogate peak at 12.63 and scaling showing surrogate peak from 11.5-14.
G:\org\HP5\DAT\HP5110221_b\1102HP5.08r	CCV_1102HP508r, CAL4 ;1102HP5 , 500 ug per mL OTP (250uL of Cal5 + 250 uL DCM(14408)	G:\Org\HP5\Methods\DS_8015-IA-L#.met	1	1	1	1	0	Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.21 and slightly after the surrogate peak at 12.63 and scaling showing surrogate peak from 11.5-14.
G:\org\HP5\DAT\HP5110221_b\1102HP5.09r	CCV_1102HP509r, CAL5 ;1102HP5 , 1000 ug per mL OTP (250 uL 4000 ug/mL OTP DRO211101A + 750 DCM(14408)	G:\Org\HP5\Methods\DS_8015-IA-L#.met	1	1	1	1	0	Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.21 and slightly after the surrogate peak at 12.63 and scaling showing surrogate peak from 11.5-14.
G:\org\HP5\DAT\HP5110221_b\1102HP5.10r	CCV_1102HP510r, CAL1 ;1102HP5 , 150 ug per mL Diesel (10 uL of Cal3 + 990 uL DCM(14408),	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83
G:\org\HP5\DAT\HP5110221_b\1102HP5.11r	CCV_1102HP511r, CAL2 ;1102HP5 , 3750 ug per mL Diesel (100 uL Cal4 + 900 uL of DCM(14408)	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.5
G:\org\HP5\DAT\HP5110221_b\1102HP5.12r	CCV_1102HP512r, CAL3 ;1102HP5 , 15000 ug per mL Diesel (300 uL of DRO211012A + 700 uL DCM(14408)	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.5
G:\org\HP5\DAT\HP5110221_b\1102HP5.13r	CCV_1102HP513r, CAL4 ;1102HP5 , 37500ug per mL Diesel (750 uL of DRO211012A + 250 uL DCM(14408)	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.5
G:\org\HP5\DAT\HP5110221_b\1102HP5.14r	CCV_1102HP514r, CAL5 ;1102HP5 , 50000 ug per mL Diesel (200 uL of DRO211012A)	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.5
G:\org\HP5\DAT\HP5110221_b\1102HP5.15r	DCM-Baseline Check-V15	G:\Org\HP5\Methods\DR_8015-HP-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5110221_b\1102HP5.16r	CCV_1102HP516r, Second Source ;1102HP5 , 15000 ug per mL (100uL of DRO211012B + 900uL DCM(14408)	G:\Org\HP5\Methods\DC_8015-IA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.5

Ann Nebel

Digitally signed by
Ann Nebel
Date: 2021.11.09 12:32:44 -07:00

Energy Laboratories Inc

ANALYTICAL RUN Summary

31-Mar-21

Run ID GCFID-HP5-B_210218B

Run Start Date: 2/18/2021
Analyst: Ann Nebel
Ical:
Column ID:
Comments: 8015 OIL range calibration
SW8015_OIL210218

Std ID	Std Name	Std Amount	Std Units	Samp Amount	Samp Units	SampType	Expiration Date
DRO180918C	50,000 ug/mL Oil Std For AK103 RRO-In DCM					CAL	8/31/2025
DRO210204A	Carbon Scan STD					MARKER	3/5/2028
DRO210217A	20,000 ug/mL Oil Std For AK103 RRO-In DCM					ICV	8/23/2021

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14282665	CCV_0218HP50	HC-8015-DRO-	CAL1		2/18/2021 12:03:	1	R356533		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		0.1468323		0.15	0	0	0	0.3	0	98%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14282666	CCV_0218HP50	HC-8015-DRO-	CAL2		2/18/2021 1:27:3	1	R356533		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		1.062811		1	0	0	0.15	0.3	0	106%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14282667	CCV_0218HP50	HC-8015-DRO-	CAL3		2/18/2021 2:51:0	1	R356533		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		5.035713		5	0	0	0.15	0.3	0	101%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14282668	CCV_0218HP50	HC-8015-DRO-	CAL4		2/18/2021 4:14:3	1	R356533		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		14.69295		15	0	0	0.15	0.3	0	98%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14282669	CCV_0218HP51	HC-8015-DRO-	CAL5		2/18/2021 5:38:3	1	R356533		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		28.20769		30	0	0	0.15	0.3	0	94%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14282670	CCV_0218HP51	HC-8015-DRO-	ICV		2/18/2021 8:27:3	1	R356533		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		5.474465		5	0	0	0.15	0.3	0	109%	80	120	0%	

Write Sequence	Data File	Sample Nam	Insert Entries(Have the first cell for entries selected	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
g:\org\HP5\DAT\HP5021821_b\0218HP5.01r	Marker_0218HP501r, DRO C40 ;0218HP5 , DRO210204A			g:\org\HP5\Methods\\CSC210212.met	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.02r	DCM-Baseline Check-V02			G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.03r	CCV_0218HP503r, CAL1 ;0218HP5 , 150 ug per mLOil (10 uL of Cal4 + 990 uL DCM(13510)			G:\Org\HP5\Methods\DR_OIL-021803-AA-L0.MET	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.04r	DCM-Baseline Check-V04			G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.05r	CCV_0218HP505r, CAL2 ;0218HP5 , 1000 ug per mL Oil (200 uL of Cal 3 +800 uL DCM(13510)			G:\Org\HP5\Methods\DR_OIL-021805-AA-L0.MET	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.06r	DCM-Baseline Check-V06			G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.07r	CCV_0218HP507r, CAL3 ;0218HP5 , 5000 ug per mL Oil (100 uL of DRO180918C + 900 uL DCM(13510)			G:\Org\HP5\Methods\DR_OIL-021807-AA-L0.MET	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.08r	DCM-Baseline Check-V08			G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.09r	CCV_0218HP509r, CAL4 ;0218HP5 , 15000 ug per mL Oil (200 uL of CAL5 + 200 uL DCM(13510)			G:\Org\HP5\Methods\DR_OIL-021807-AA-L0.MET	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.10r	DCM-Baseline Check-V10			G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.11r	CCV_0218HP511r, CAL5 ;0218HP5 , 30000 ug per mL Oil (600 uL of DRO180918C + 400 uL of DCM)			G:\Org\HP5\Methods\DR_OIL-021811-AA-L0.MET	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.12r	DCM-Baseline Check-V12			G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.13r	DCM-Baseline Check-V13			G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.14r	DCM-Baseline Check-V14			G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0
g:\org\HP5\DAT\HP5021821_b\0218HP5.15r	CCV_0218HP515r, Second Source ;0218HP5 , 5000 ug per mL (100uL of DRO210217A + 300uL DCM(13510)			G:\Org\HP5\Methods\DR_OIL-021811-AA-L0.MET	1	1	1	1	0

File Name: G:\Org\HP5\Cals\SW8015C_OIL210218AA.CAL
Version: 4

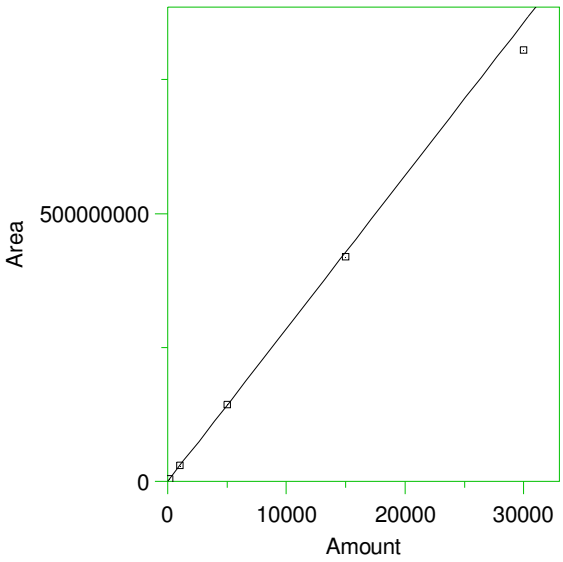
Creator: AMN 3/31/2021
Description: DRO-8015-Oil range. New ICal Per 0218HP5 (2021)-2 uL Inj.; COD added using OTP RFs
Reason for change:

External standard calibration
Standard injection volume: 1
Standard sample weight: 1
Area reject threshold: 500
Reference peak area reject threshold: 500
Amount units: nanograms
No default component

Method of calculating data point averages: Equal weight for all updates
No calibration update report

All levels are normal data points.

1 DRO Range Start



Expected retention time:	6.54 minutes
Search window:	0.05 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0

Single peak quantification by area

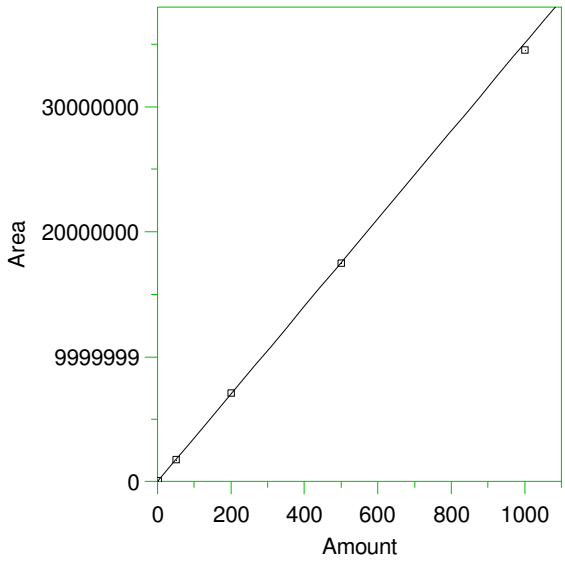
Y = 28542.41 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9940317
Average error:	3.209%
Average CF:	28542.41
RSD:	4.497%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	150	4325287	28835.25	1.026	Manual	3/30/2021 11:50:57 AM
2	1000	3.03352E+07	30335.2	6.281	Manual	3/30/2021 11:51:41 AM
3	5000	1.437314E+08	28746.28	0.714	Manual	3/30/2021 11:52:00 AM
4	15000	4.193721E+08	27958.14	-2.047	Manual	3/30/2021 11:52:55 AM
5	30000	8.051155E+08	26837.18	-5.974	Manual	3/30/2021 11:52:32 AM

2 *o-Terphenyl



Expected retention time: 12.14 minutes
Search window: 0.05 minutes
No retention time reference component
Group number: 0

High alarm limit: 0
Low alarm limit: 0
Component constant: 0

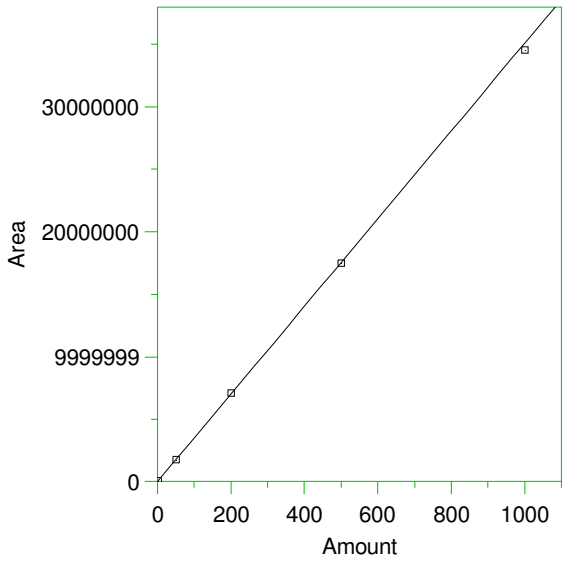
Single peak quantification by area

Y = 35071.26 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9996535
Average error: 0.838%
Average CF: 35071.26
RSD: 1.097%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2	70648.41	35324.2	0.721	G:\Org\HP5\DAT\HP5010821_b\0108HP5.0011.BND	1/11/2021 9:44:43 AM
2	50	1746406	34928.12	-0.408	G:\Org\HP5\DAT\HP5010821_b\0108HP5.0012.BND	1/11/2021 9:44:50 AM
3	200	7110604	35553.02	1.374	G:\Org\HP5\DAT\HP5010821_b\0108HP5.0013.BND	1/11/2021 9:44:58 AM
4	500	1.749965E+07	34999.3	-0.205	G:\Org\HP5\DAT\HP5010821_b\0108HP5.0014.BND	1/11/2021 9:45:02 AM
5	1000	3.455164E+07	34551.64	-1.482	G:\Org\HP5\DAT\HP5010821_b\0108HP5.0015.BND	1/11/2021 9:45:07 AM

3 *1-Chlorooctadecane



Expected retention time:	12.95 minutes
Search window:	0.05 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0

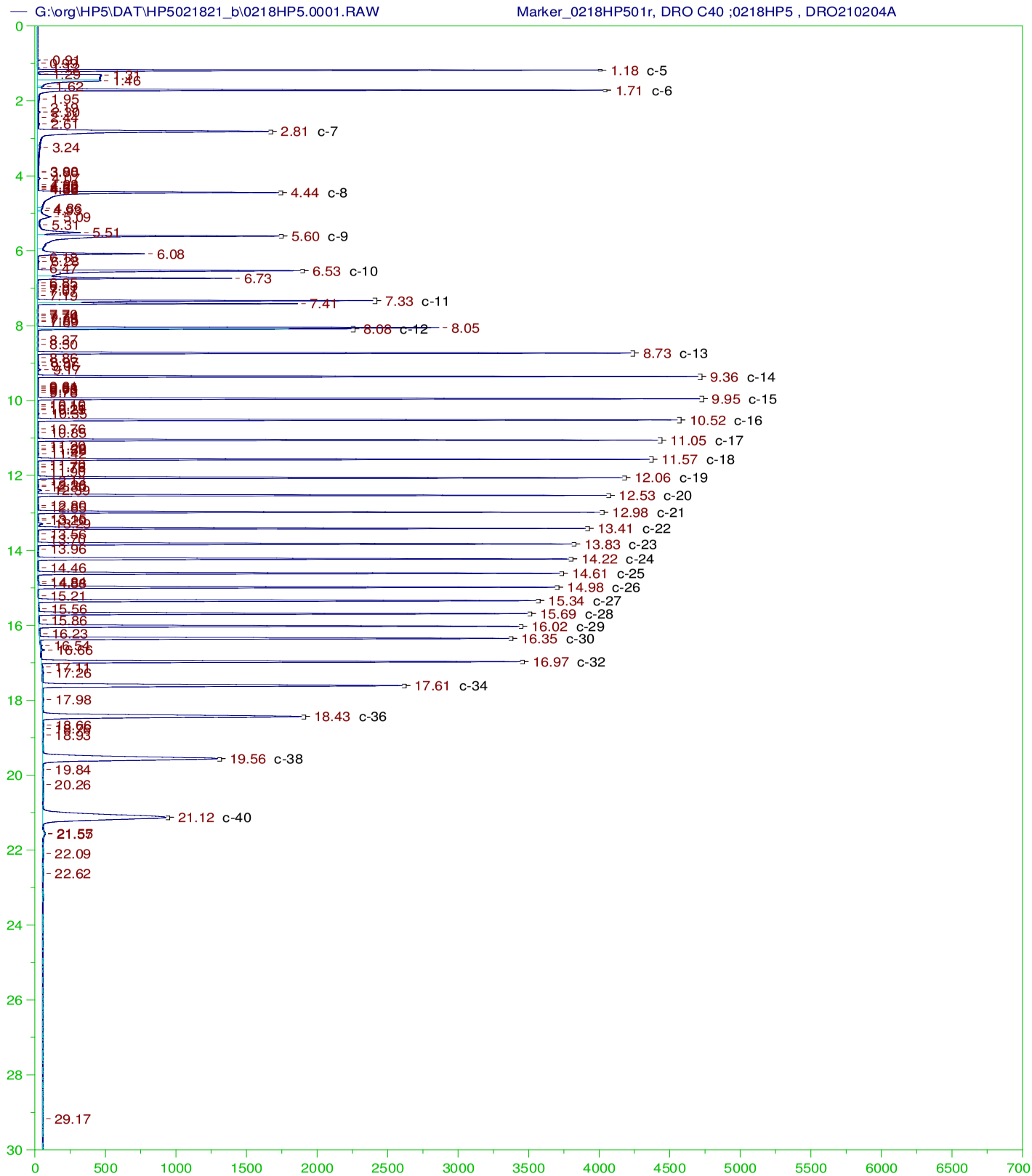
Single peak quantification by area

Y = 35071.26 X + 0

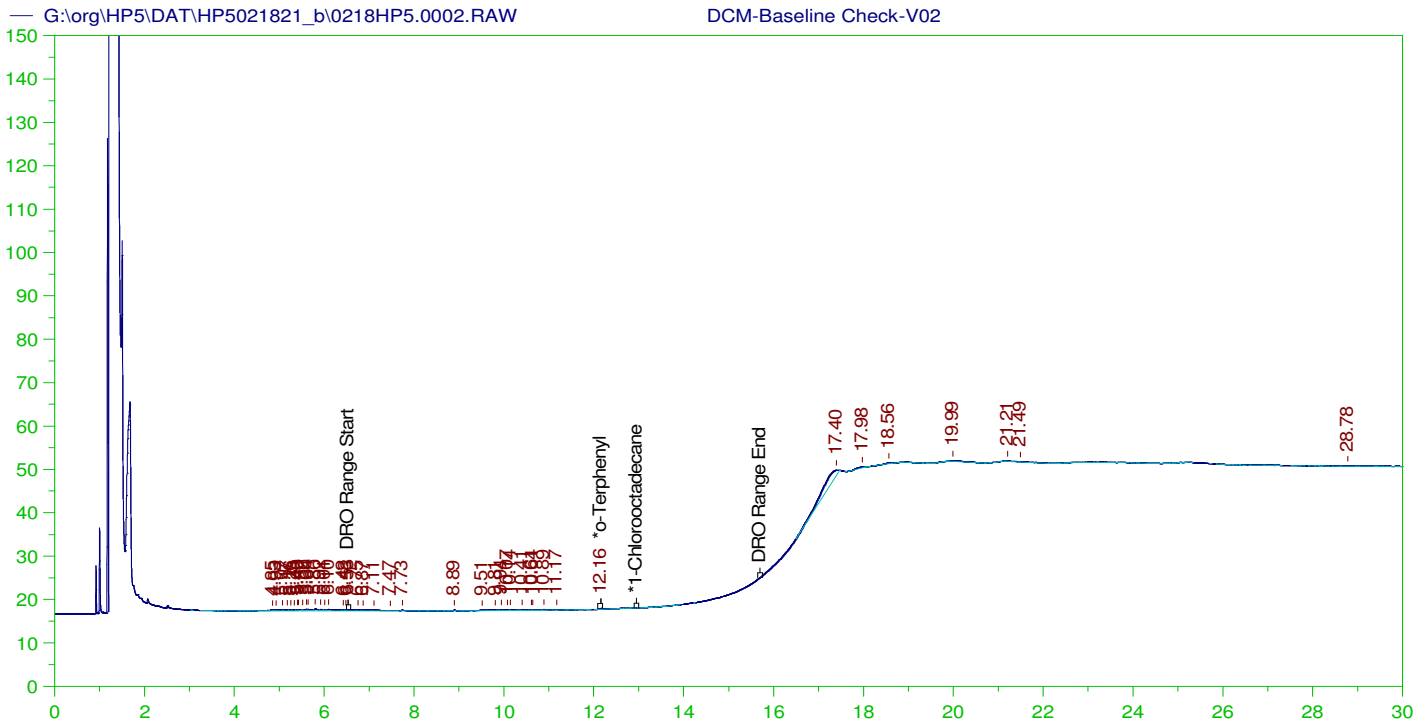
Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9996535
Average error:	0.838%
Average CF:	35071.26
RSD:	1.097%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2	70648.41	35324.2	0.721	Manual	1/11/2021 9:45:13 AM
2	50	1746406	34928.12	-0.408	Manual	1/11/2021 9:45:15 AM
3	200	7110604	35553.02	1.374	Manual	1/11/2021 9:45:17 AM
4	500	1.749965E+07	34999.3	-0.205	Manual	1/11/2021 9:45:19 AM
5	1000	3.455164E+07	34551.64	-1.482	Manual	1/11/2021 9:45:21 AM



G:\org\HP5\dat\HP5021821_b\Review\001_Marker_0218HP501r_CSC210212.xls



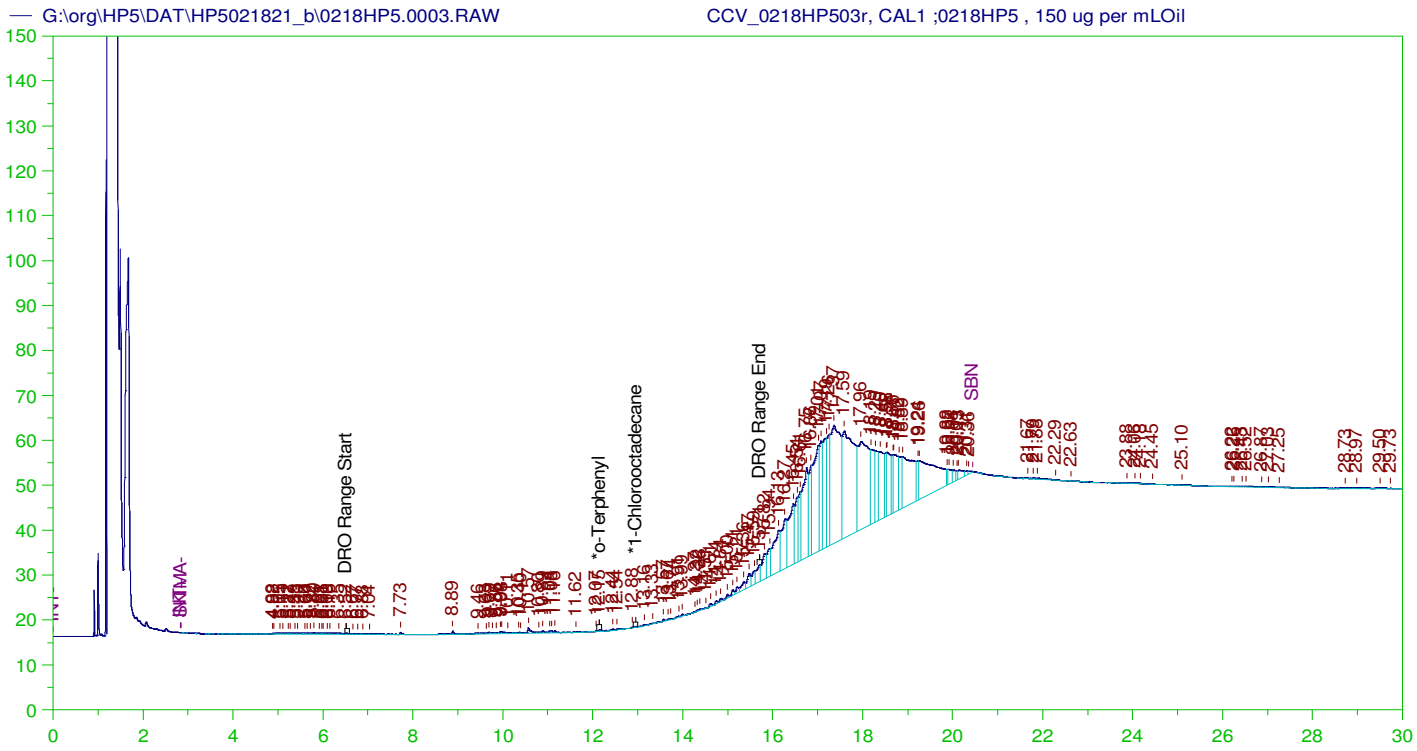
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V02
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0002.RAW
Date & Time Acquired: 2/18/2021 11:21:40 AM
Method File: G:\Org\HP5\Methods\DR_8015-HE-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108HE.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.49 to 15.75

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.158	200.	.034	.02	-
*1-Chlorooctadecane	29.927	200.	.	.	-

DRO Area:29553.31 DRO Amount: 1.003258
TEH Area:144057.3 TEH Amount: 4.890373



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_0218HP503r, CAL1 ;0218HP5 , 150 ug per mLOil
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0003.RAW
Date & Time Acquired: 2/18/2021 12:03:33 PM
Method File: G:\ORG\HP5\METHODS\DR_OIL-021803-AA-L0.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_OIL210218AA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 28542.41
Rt range for Diesel Range Organics: 6.49 to 15.75

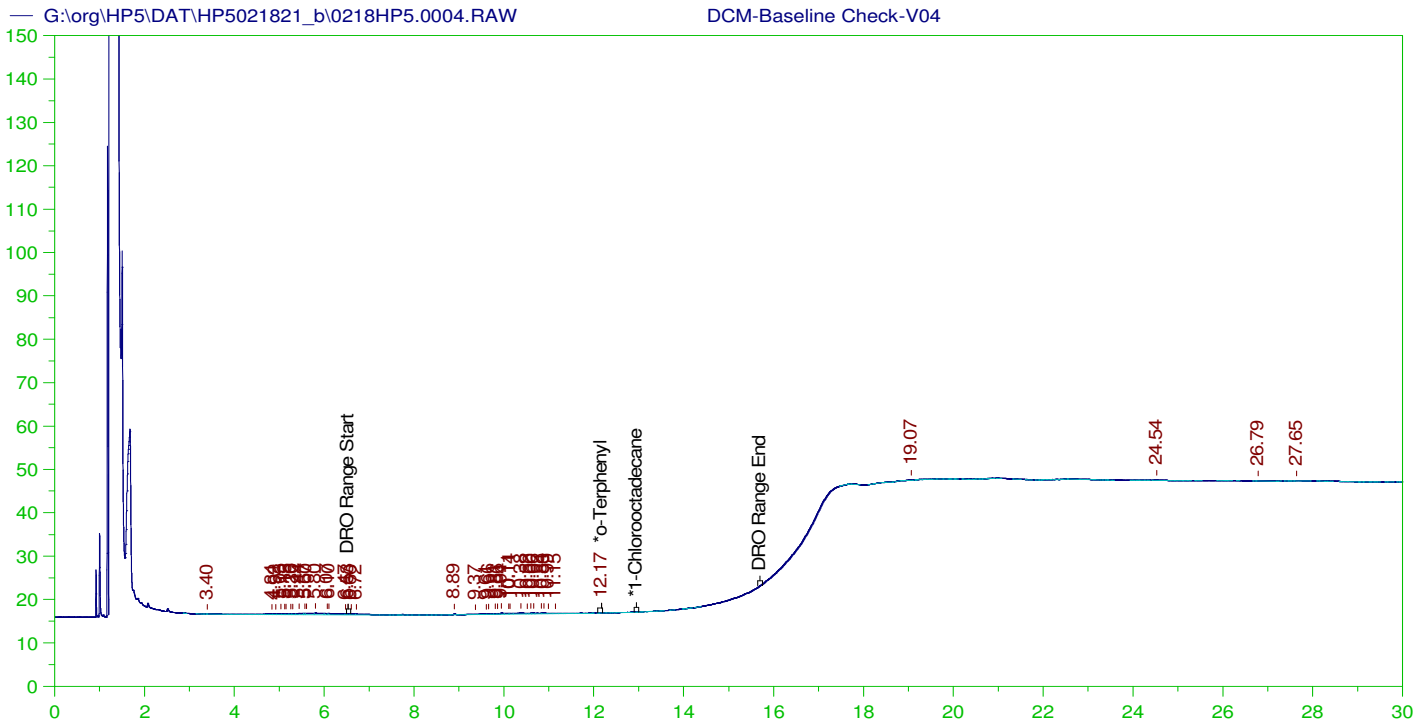
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.146	200.	.02	.01	-
*1-Chlorooctadecane	29.979	200.	.	.	-

DRO Area:141843.8 DRO Amount: 4.969579
TEH Area:3766485 TEH Amount: 131.961

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5021821_b\0218HP5.0003.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	5000.	131.96	2.64	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.146	200.	.02	.01	85-115
*1-Chlorooctadecane	29.979	200.	.	.	85-115



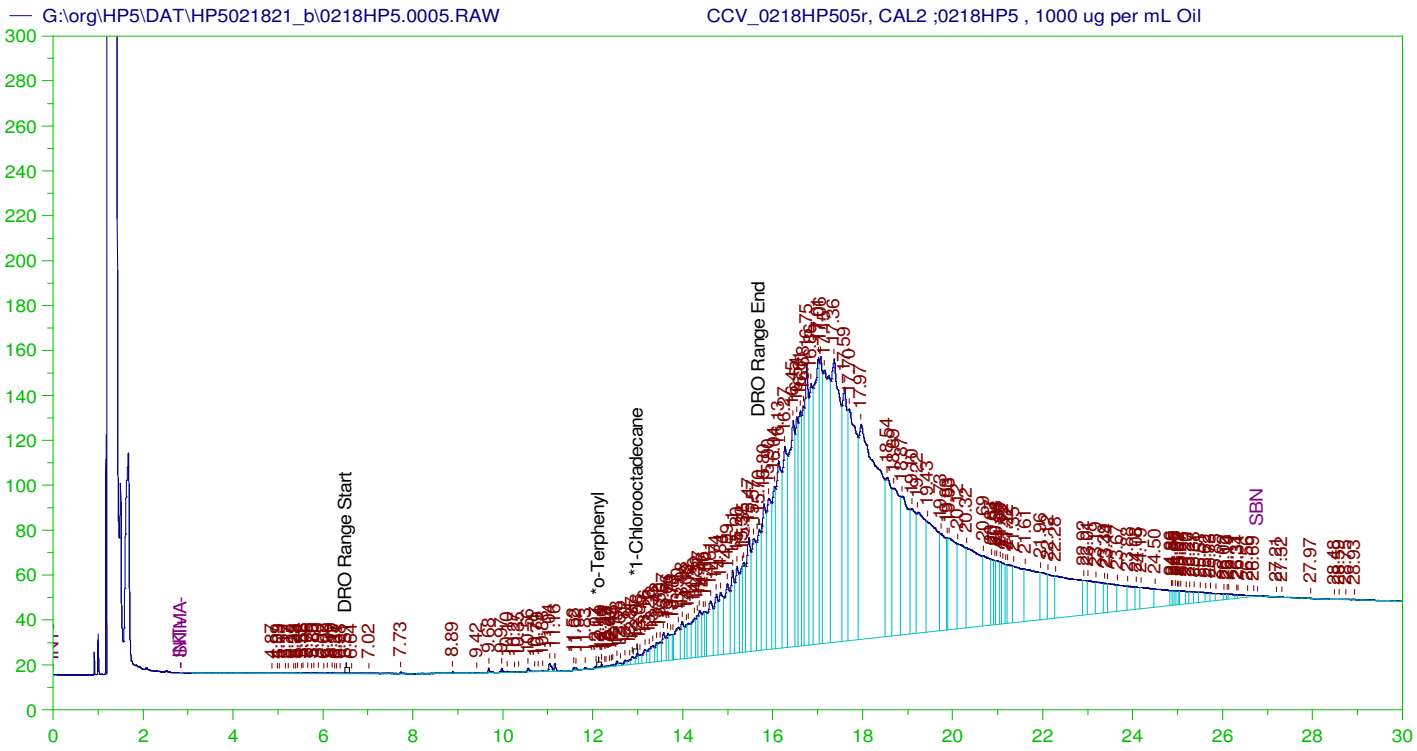
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V04
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0004.RAW
Date & Time Acquired: 2/18/2021 12:45:36 PM
Method File: G:\Org\HP5\Methods\DR_8015-HE-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108HE.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.49 to 15.75

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.171	200.	.017	.01	-
*1-Chlorooctadecane	29.958	200.	.	.	-

DRO Area:27245.38 DRO Amount: 0.9249101
TEH Area:63574.01 TEH Amount: 2.158173



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_0218HP505r, CAL2 ;0218HP5 , 1000 ug per mL Oil
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0005.RAW
Date & Time Acquired: 2/18/2021 1:27:30 PM
Method File: G:\ORG\HP5\METHODS\DR_OIL-021805-AA-L0.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_OIL210218AA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 28542.41
Rt range for Diesel Range Organics: 6.49 to 15.75

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.136	200.	.034	.02	-
*1-Chlorooctadecane	12.983	200.	.496	.25	-

DRO Area:3721460 DRO Amount: 130.3835
TEH Area:3.03352E+07 TEH Amount: 1062.811

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5021821_b\0218HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	5000.	1062.81	21.26	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.136	200.	.034	.02	85-115
*1-Chlorooctadecane	12.983	200.	.496	.25	85-115

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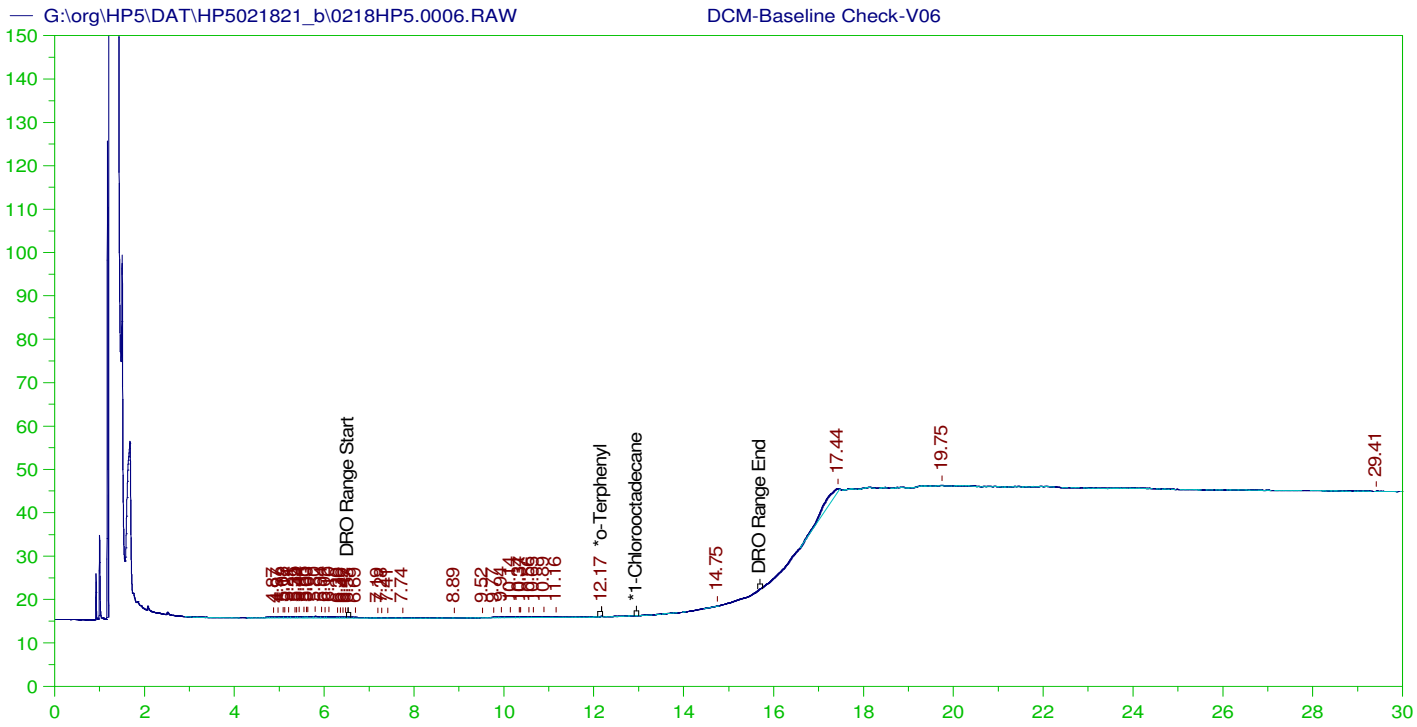


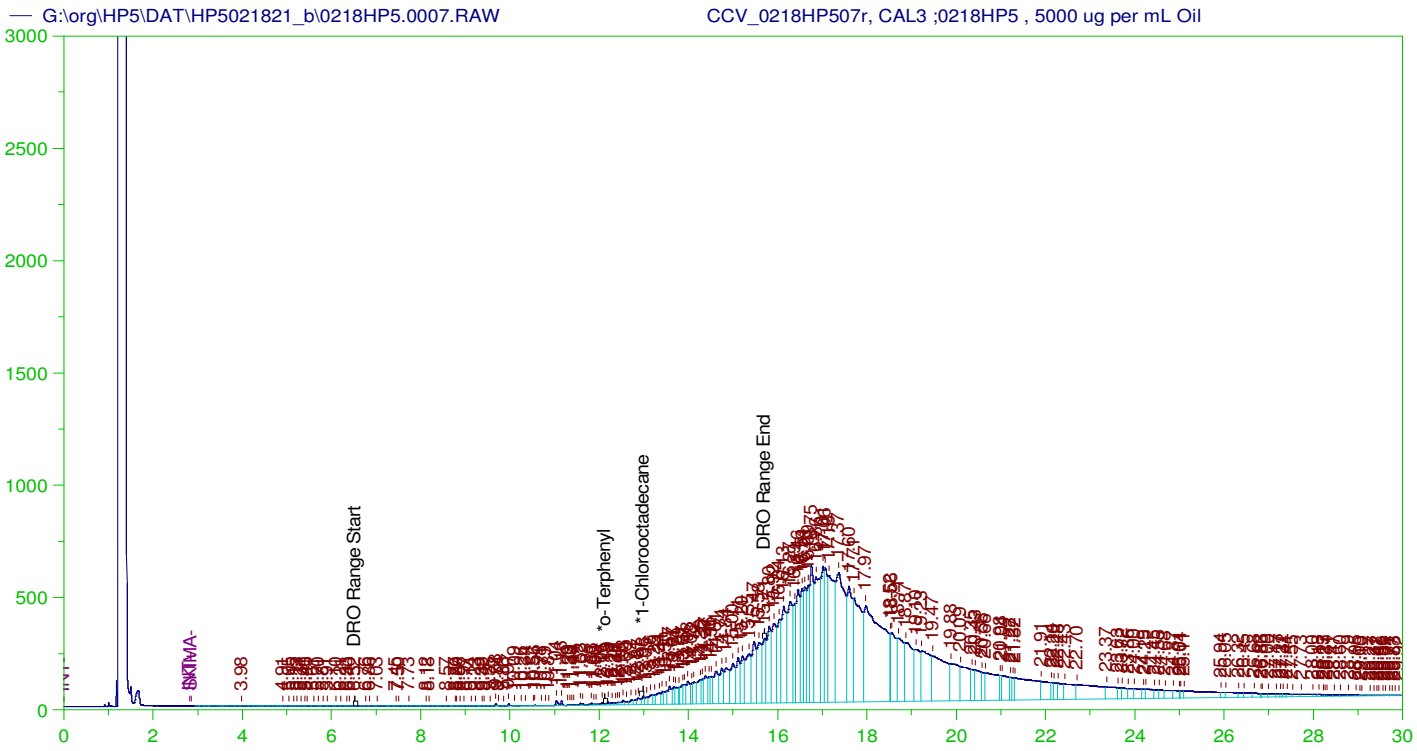
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V06
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0006.RAW
Date & Time Acquired: 2/18/2021 2:09:12 PM
Method File: G:\Org\HP5\Methods\DR_8015-HE-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108HE.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.49 to 15.75

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.17	200.	.017	.01	-
*1-Chlorooctadecane	29.977	200.	.	.	-

DRO Area:29249.25 DRO Amount: 0.9929362
TEH Area:123949.1 TEH Amount: 4.20775



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_0218HP507r, CAL3 ;0218HP5 , 5000 ug per mL Oil
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0007.RAW
Date & Time Acquired: 2/18/2021 2:51:00 PM
Method File: G:\ORG\HP5\METHODS\DR_OIL-021807-AA-L0.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_OIL210218AA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 28542.41
Rt range for Diesel Range Organics: 6.49 to 15.75

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.129	200.	.538	.27	-
*1-Chlorooctadecane	12.981	200.	4.244	2.12	-

DRO Area:2.19239E+07 DRO Amount: 768.1166
TEH Area:1.437314E+08 TEH Amount: 5035.713

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5021821_b\0218HP5.0007.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	5000.	5035.71	100.71	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.129	200.	.538	.27	85-115
*1-Chlorooctadecane	12.981	200.	4.244	2.12	85-115

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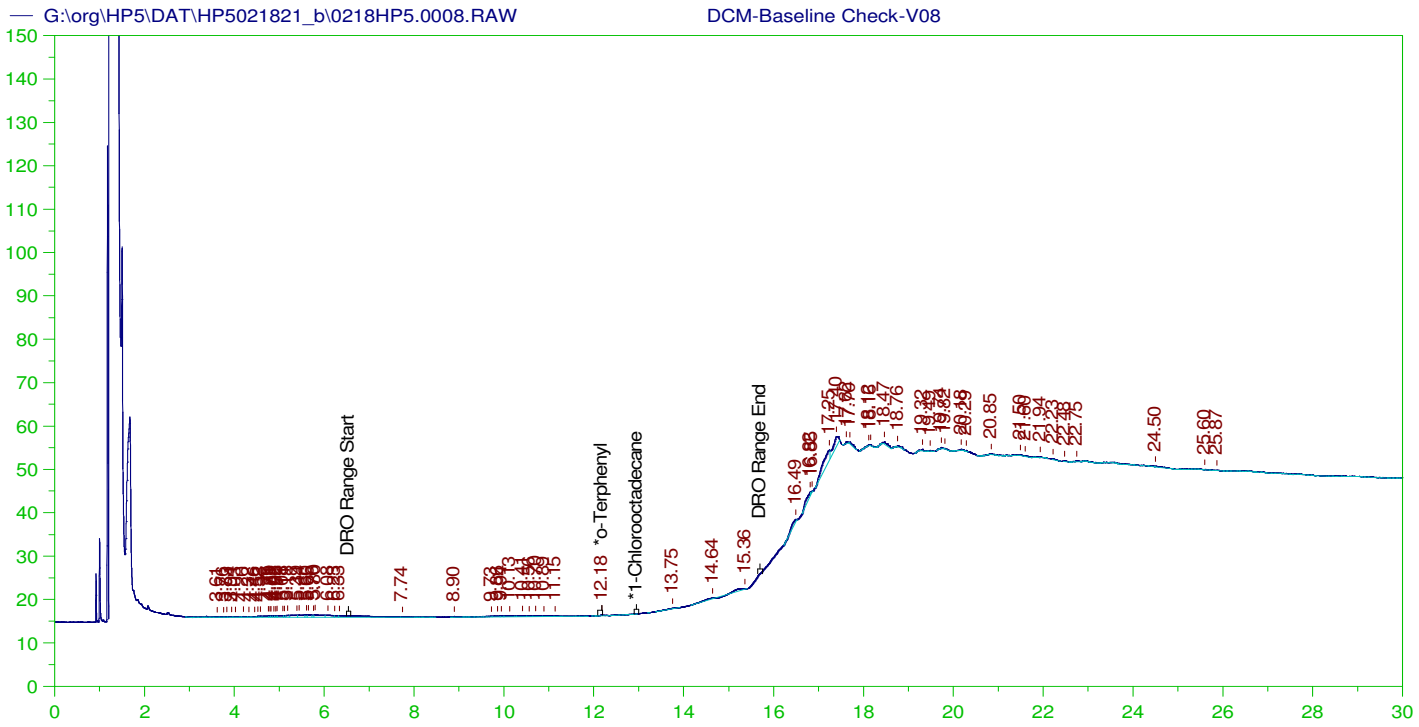


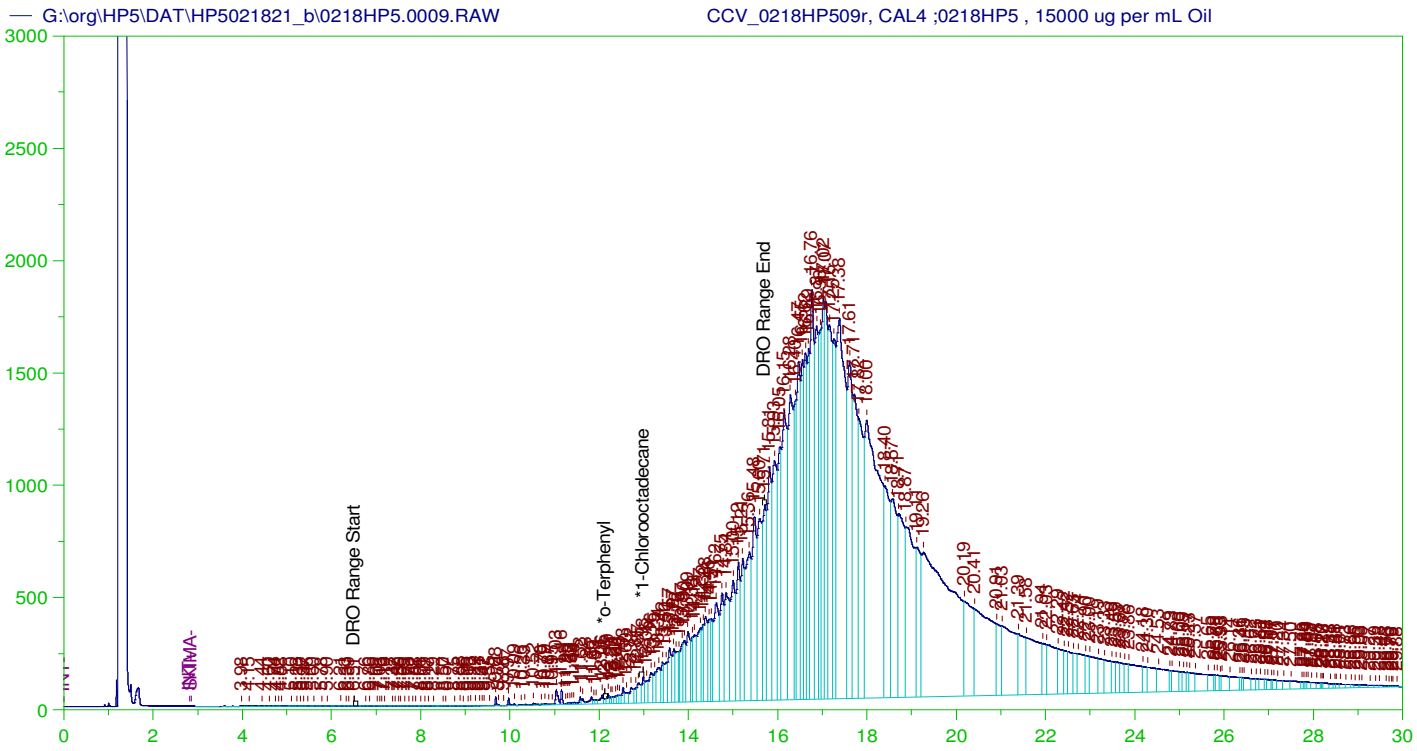
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V08
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0008.RAW
Date & Time Acquired: 2/18/2021 3:32:46 PM
Method File: G:\Org\HP5\Methods\DR_8015-HE-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108HE.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.49 to 15.75

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.176	200.	.026	.01	-
*1-Chlorooctadecane	29.982	200.	.	.	-

DRO Area:30717.07 DRO Amount: 1.042765
TEH Area:223672.8 TEH Amount: 7.593112



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_0218HP509r, CAL4 ;0218HP5 , 15000 ug per mL Oil
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0009.RAW
Date & Time Acquired: 2/18/2021 4:14:34 PM
Method File: G:\ORG\HP5\METHODS\DR_OIL-021807-AA-L0.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_OIL210218AA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 28542.41
Rt range for Diesel Range Organics: 6.49 to 15.75

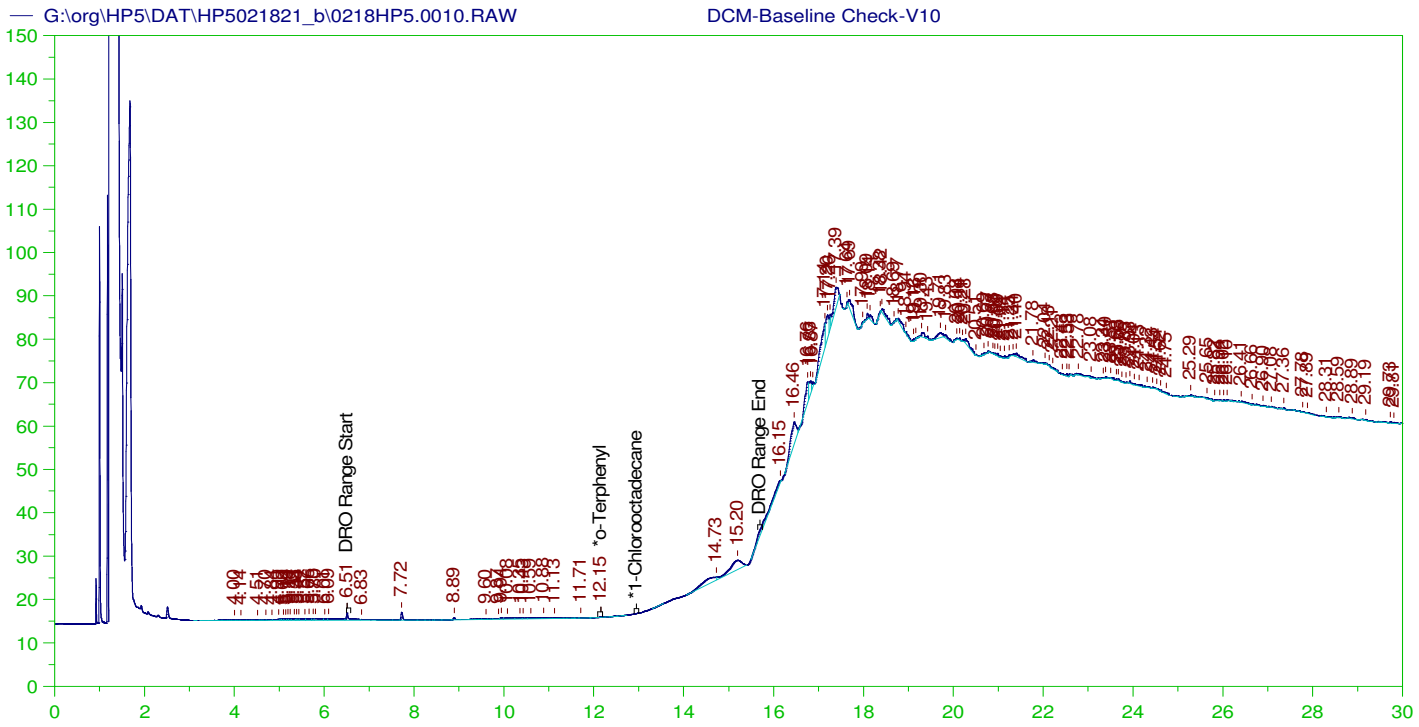
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.124	200.	1.888	.94	-
*1-Chlorooctadecane	12.984	200.	13.129	6.56	-

DRO Area:6.73131E+07 DRO Amount: 2358.354
TEH Area:4.193721E+08 TEH Amount: 14692.95

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5021821_b\0218HP5.0009.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	5000.	14692.95	293.86	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.124	200.	1.888	.94	85-115
*1-Chlorooctadecane	12.984	200.	13.129	6.56	85-115



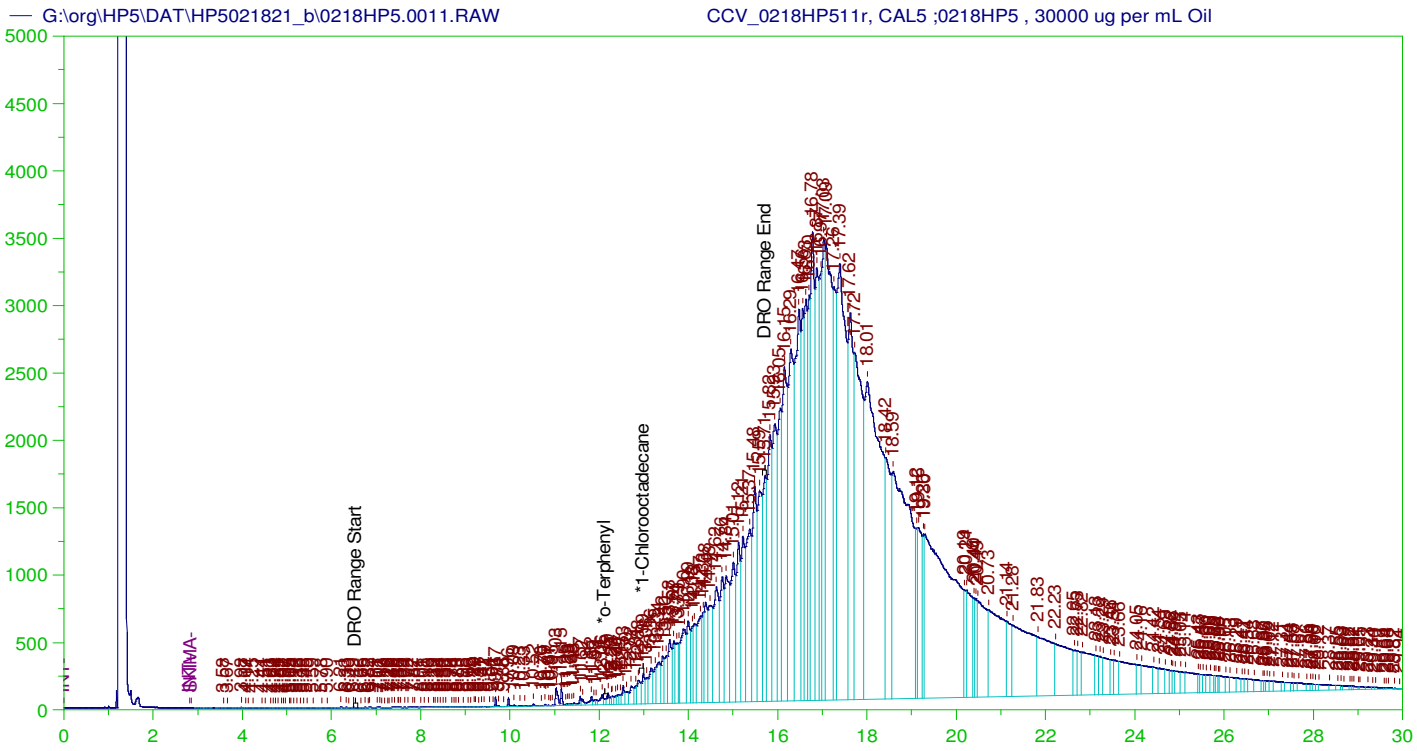
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V10
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0010.RAW
Date & Time Acquired: 2/18/2021 4:56:16 PM
Method File: G:\Org\HP5\Methods\DR_8015-HE-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108HE.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.49 to 15.75

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.153	200.	.023	.01	-
*1-Chlorooctadecane	29.957	200.	.	.	-

DRO Area:108629.1 DRO Amount: 3.687675
TEH Area:543425.7 TEH Amount: 18.44789



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_0218HP511r, CAL5 ;0218HP5 , 30000 ug per mL Oil
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0011.RAW
Date & Time Acquired: 2/18/2021 5:38:33 PM
Method File: G:\ORG\HP5\METHODS\DR_OIL-021811-AA-L0.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_OIL210218AA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 28542.41
Rt range for Diesel Range Organics: 6.49 to 15.75

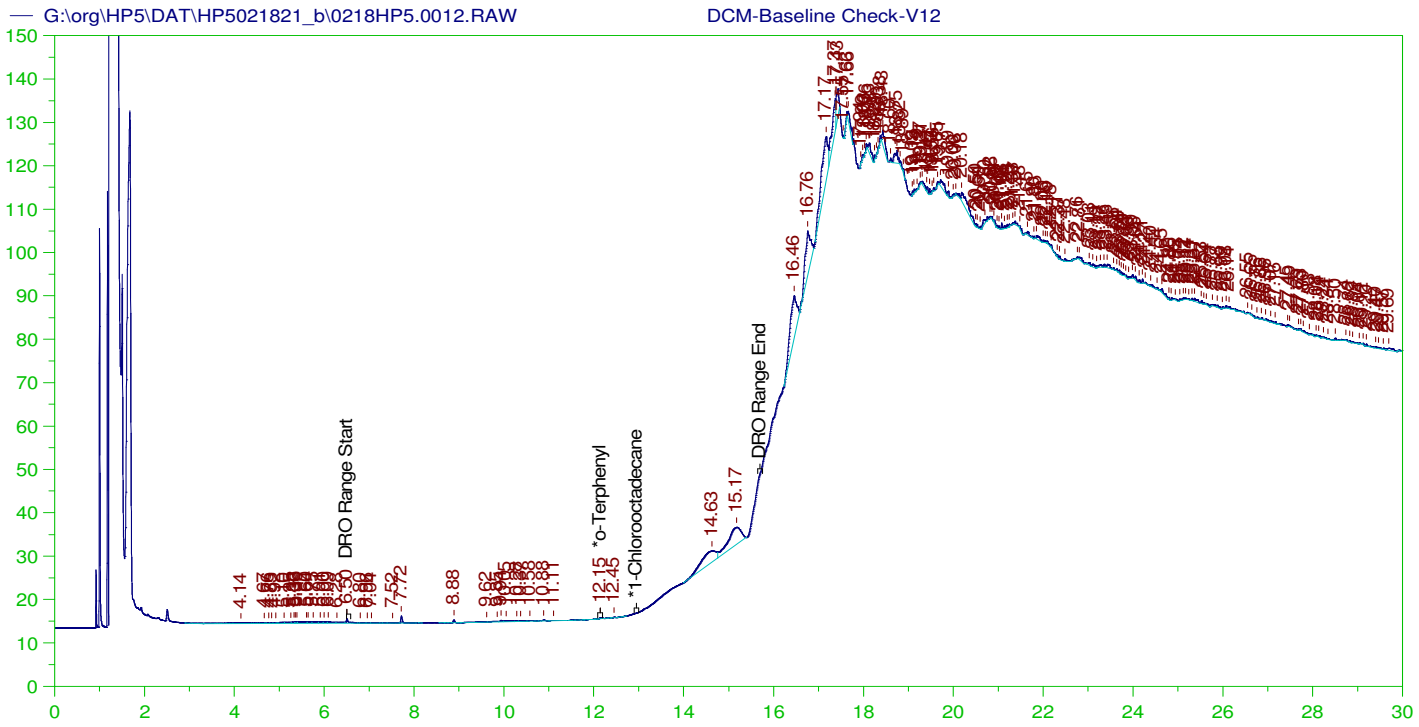
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.128	200.	3.828	1.91	-
*1-Chlorooctadecane	12.985	200.	28.22	14.11	-

DRO Area:1.319327E+08 DRO Amount: 4622.338
TEH Area:8.051155E+08 TEH Amount: 28207.69

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5021821_b\0218HP5.0011.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	5000.	28207.69	564.15	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.128	200.	3.828	1.91	85-115
*1-Chlorooctadecane	12.985	200.	28.22	14.11	85-115



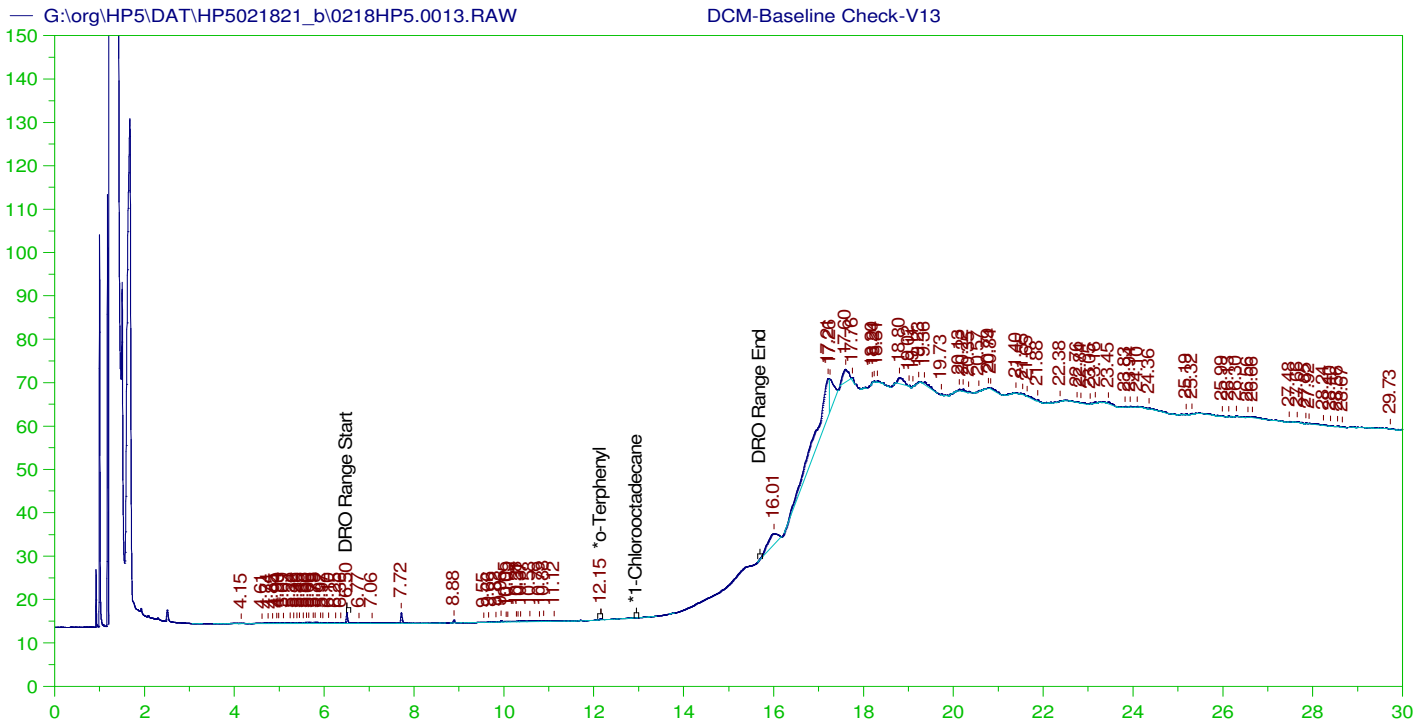
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V12
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0012.RAW
Date & Time Acquired: 2/18/2021 6:20:48 PM
Method File: G:\Org\HP5\Methods\DR_8015-HE-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108HE.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.49 to 15.75

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.146	200.	.024	.01	-
*1-Chlorooctadecane	29.981	200.	.	.	-

DRO Area:186033.1 DRO Amount: 6.31534
TEH Area:888262.2 TEH Amount: 30.1542

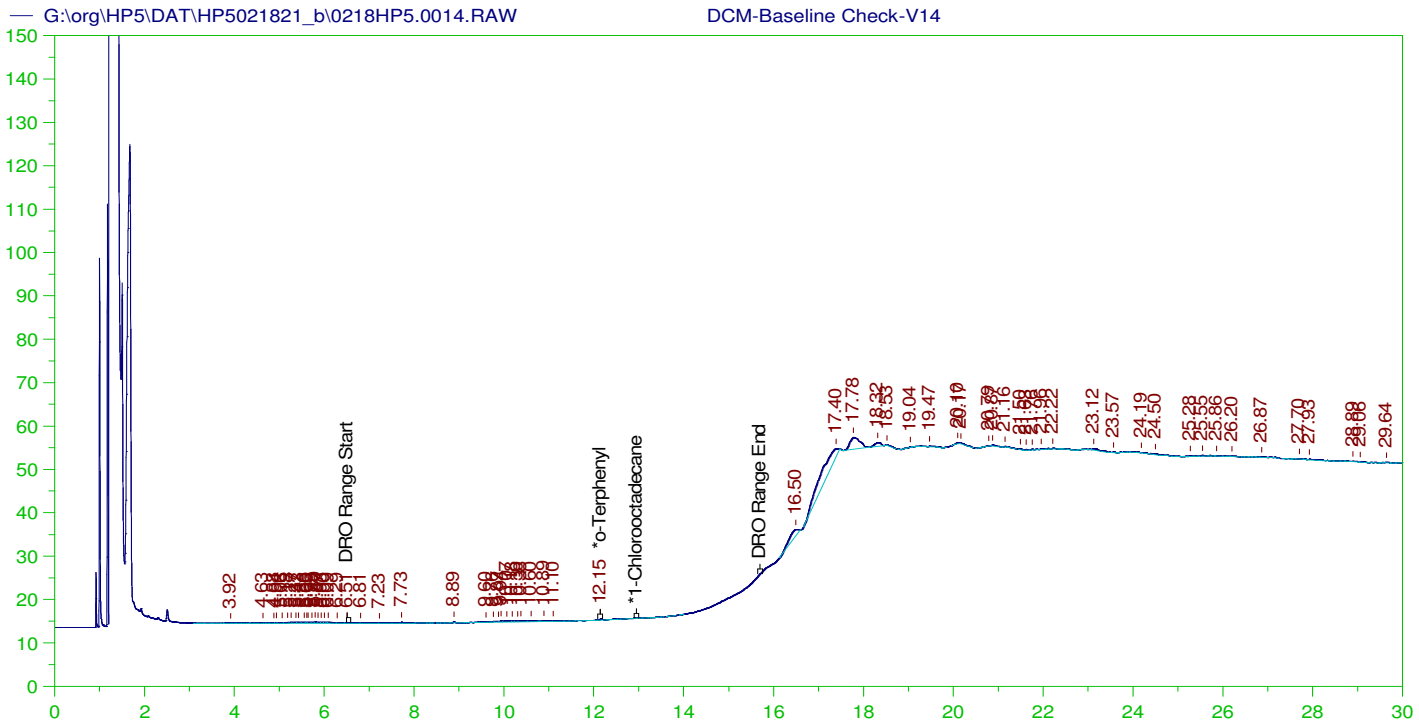


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V13
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0013.RAW
Date & Time Acquired: 2/18/2021 7:03:01 PM
Method File: G:\Org\HP5\Methods\DR_8015-HE-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108HE.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.49 to 15.75

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.152	200.	.033	.02	-
*1-Chlorooctadecane	29.967	200.	.	.	-

DRO Area:40824.55 DRO Amount: 1.385888
TEH Area:476705.3 TEH Amount: 16.18291



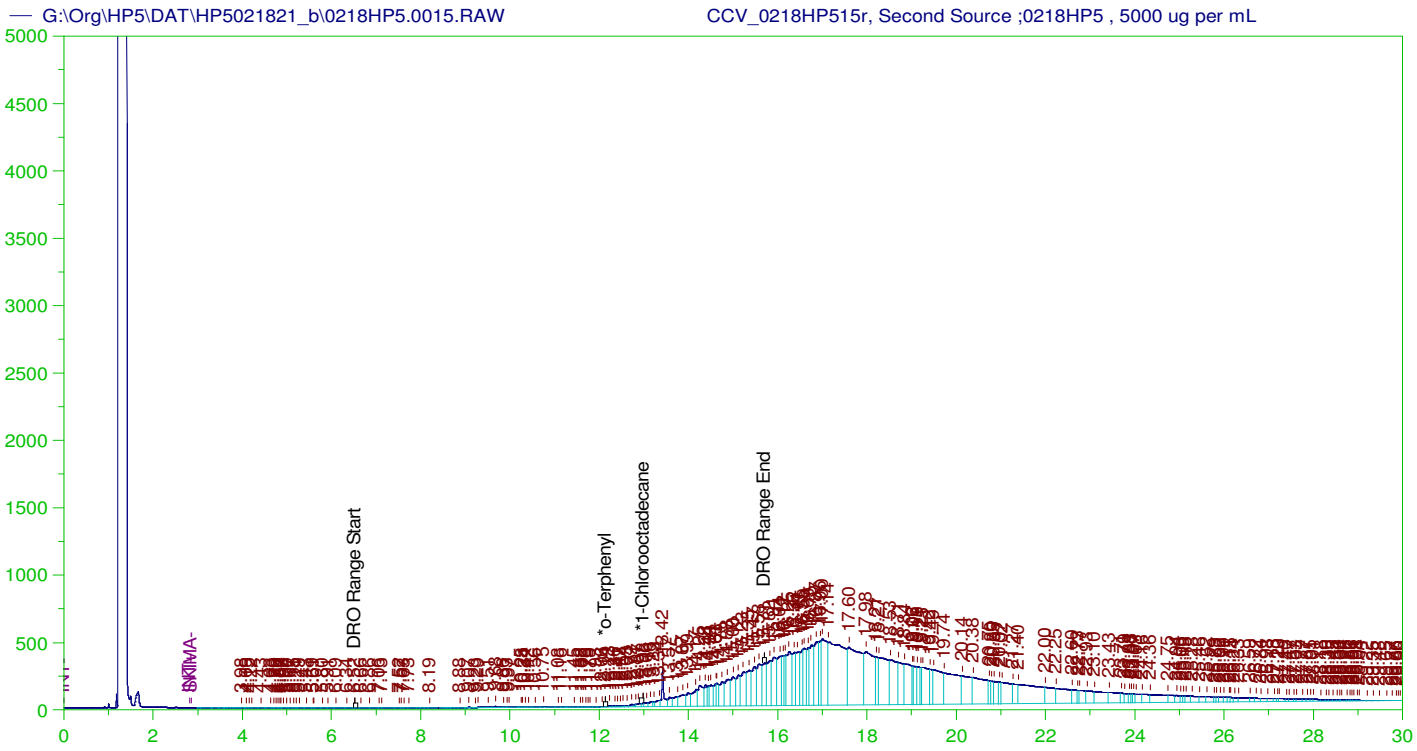
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V14
Raw File: G:\org\HP5\DAT\HP5021821_b\0218HP5.0014.RAW
Date & Time Acquired: 2/18/2021 7:45:21 PM
Method File: G:\Org\HP5\Methods\DR_8015-HE-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108HE.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.49 to 15.75

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.148	200.	.03	.01	-
*1-Chlorooctadecane	29.949	200.	.	.	-

DRO Area:30445.24 DRO Amount: 1.033537
TEH Area:297634.4 TEH Amount: 10.10392



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_0218HP515r, Second Source ;0218HP5 , 5000 ug per mL
Raw File: G:\Org\HP5\DAT\HP5021821_b\0218HP5.0015.RAW
Date & Time Acquired: 2/18/2021 8:27:37 PM
Method File: G:\ORG\HP5\METHODS\DR_OIL-021811-AA-L0.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_OIL210218AA.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 28542.41
Rt range for Diesel Range Organics: 6.49 to 15.75

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.137	.2	.19	-	
*1-Chlorooctadecane	12.984	.2	.003	1.62	-

DRO Area:2.558549E+07 DRO Amount: 0.8964027
TEH Area:1.562544E+08 TEH Amount: 5.474465

CONTINUING CALIBRATION REPORT: G:\Org\HP5\DAT\HP5021821_b\0218HP5.0015.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	5000.	5.47	.11	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.137	.2	.19	85-115	
*1-Chlorooctadecane	12.984	.2	.003	1.62	85-115

G:\org\HP5\dat\HP5021821_b\Review\015_CCV_0218HP515r_DR_OIL-021811-AA-L0.xls

Write Sequence	Data File	Sample Nan	Insert Entries(Have the first cell for entries selecte	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manual Integration
	:\org\HP5\DAT\HP5021821_b\0218HP5.01r	Marker_0218HP501r, DRO C40 ;0218HP5 , DRO210204A		g:\org\HP5\Methods\\CSC210212.met	1	1	1	1	0	No Integration
	:\org\HP5\DAT\HP5021821_b\0218HP5.02r	DCM-Baseline Check-V02		G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0	No Integration
	:\org\HP5\DAT\HP5021821_b\0218HP5.03r	CCV_0218HP503r, CAL1 ;0218HP5 , 150 ug per mLOil (10 uL of Cal4 + 990 uL DCM(13510)		G:\Org\HP5\Methods\DR_OIL-021803-AA-L0.MET	1	1	1	1	0	The integration of Total Extractable Hydrocarbons (OIL) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 20.91 changed peak width and scale was set at 150 for the Yaxis.
	:\org\HP5\DAT\HP5021821_b\0218HP5.04r	DCM-Baseline Check-V04		G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0	No Integration
	:\org\HP5\DAT\HP5021821_b\0218HP5.05r	CCV_0218HP505r, CAL2 ;0218HP5 , 1000 ug per mL Oil (200 uL of Cal 3 +800 uL DCM(13510)		G:\Org\HP5\Methods\DR_OIL-021805-AA-L0.MET	1	1	1	1	0	The integration of Total Extractable Hydrocarbons (OIL) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 26.79 changed peak width and scale was set at 300 for the Yaxis.
	:\org\HP5\DAT\HP5021821_b\0218HP5.06r	DCM-Baseline Check-V06		G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0	No Integration
	:\org\HP5\DAT\HP5021821_b\0218HP5.07r	CCV_0218HP507r, CAL3 ;0218HP5 , 5000 ug per mL Oil (100 uL of DRO180918C + 900 uL DCM(13510)		G:\Org\HP5\Methods\DR_OIL-021807-AA-L0.MET	1	1	1	1	0	The integration of Total Extractable Hydrocarbons (OIL) is the hydrocarbon response with reference to the basline. Scale was set at 3000 for the Yaxis.
	:\org\HP5\DAT\HP5021821_b\0218HP5.08r	DCM-Baseline Check-V08		G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0	No Integration
	:\org\HP5\DAT\HP5021821_b\0218HP5.09r	CCV_0218HP509r, CAL4 ;0218HP5 , 15000 ug per mL Oil (200 uL of CAL5 + 200 uL DCM(13510)		G:\Org\HP5\Methods\DR_OIL-021807-AA-L0.MET	1	1	1	1	0	The integration of Total Extractable Hydrocarbons (OIL) is the hydrocarbon response with reference to the basline. Scale was set at 3000 for the Yaxis.
	:\org\HP5\DAT\HP5021821_b\0218HP5.10r	DCM-Baseline Check-V10		G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0	No Integration
	:\org\HP5\DAT\HP5021821_b\0218HP5.11r	CCV_0218HP511r, CAL5 ;0218HP5 , 30000 ug per mL Oil (600 uL of DRO180918C + 400 uL of DCM)		G:\Org\HP5\Methods\DR_OIL-021811-AA-L0.MET	1	1	1	1	0	The integration of Total Extractable Hydrocarbons (OIL) is the hydrocarbon response with reference to the basline. Scale was set at 5000 for the Yaxis.
	:\org\HP5\DAT\HP5021821_b\0218HP5.12r	DCM-Baseline Check-V12		G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0	No Integration
	:\org\HP5\DAT\HP5021821_b\0218HP5.13r	DCM-Baseline Check-V13		G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0	No Integration
	:\org\HP5\DAT\HP5021821_b\0218HP5.14r	DCM-Baseline Check-V14		G:\Org\HP5\Methods\DR_8015-HE-LEXP.met	1	1	1	1	0	No Integration
	:\org\HP5\DAT\HP5021821_b\0218HP5.15r	CCV_0218HP515r, Second Source ;0218HP5 , 5000 ug per mL (100uL of DRO210217A + 300uL DCM(13510)		G:\Org\HP5\Methods\DR_OIL-021811-AA-L0.MET	1	1	1	1	0	The integration of Total Extractable Hydrocarbons (OIL) is the hydrocarbon response with reference to the basline. Scale was set at 5000 for the Yaxis.

Ann Nebel

Digitally signed by
Ann Nebel
Date: 2021.10.29 12:03:40 -06:00

Energy Laboratories Inc

ANALYTICAL RUN Summary

25-Oct-21

Run ID GCFID-HP5-B_211017A

Run Start Date: 10/17/2021
Analyst: Ann Nebel
Ical:
Column ID:
Comments: Triacontane ICAL

Std ID	Std Name	Std Amount	Std Units	Samp Amount	Samp Units	SampType	Expiration Date
DRO211006A	Triacontane SURR 2000 ug/mL					SURR	4/6/2026

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14777567	CCV_1017HP50	HC-8015-DRO-	CAL1		10/17/2021 3:30:	1	R368813		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane	S	mg/L		0.00202757		0.002	0	0	0.002	0.002	0	101%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14777568	CCV_1017HP50	HC-8015-DRO-	CAL2		10/17/2021 4:12:	1	R368813		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane	S	mg/L		0.04817772		0.05	0	0	0.002	0.002	0	96%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14777569	CCV_1017HP50	HC-8015-DRO-	CAL3		10/17/2021 4:55:	1	R368813		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane	S	mg/L		0.2231112		0.2	0	0	0.002	0.002	0	112%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14777570	CCV_1017HP50	HC-8015-DRO-	CAL4		10/17/2021 5:38:	1	R368813		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane	S	mg/L		0.4700634		0.5	0	0	0.002	0.002	0	94%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist				
14777571	CCV_1017HP50	HC-8015-DRO-	CAL5		10/17/2021 6:20:	1	R368813		0	0					

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane	S	mg/L		0.9372648		1	0	0	0.002	0.002	0	94%	80	120	0%	

Write Sequence	Insert Entries(Have the first cell for entries selecte						
Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
G:\org\HP5\DAT\HP5101721_b\1017HP5.01r	DCM-Baseline Check-V01	G:\Org\HP5\Methods\DR_8015-HS-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5101721_b\1017HP5.02r	DCM-Baseline Check-V02	G:\Org\HP5\Methods\DR_8015-HS-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5101721_b\1017HP5.03r	CCV_1017HP503r, DRO ;1017HP5 , DRO210708A	G:\Org\HP5\Methods\DR_8015-HS-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5101721_b\1017HP5.04r	DCM-Baseline Check-V04	G:\Org\HP5\Methods\DR_8015-HS-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5101721_b\1017HP5.05r	CCV_1017HP505r, CAL1 ;1017HP5 , 2 ug per mL Triacontane (10 uL of Cal3 + 990 uL DCM(14354)	G:\Org\HP5\Methods\DS_ORO-AA-L0.met	1	1	1	1	0
G:\org\HP5\DAT\HP5101721_b\1017HP5.06r	CCV_1017HP506r, CAL2 ;1017HP5 , 50 ug per mL Triacontane (100 uL Cal4 + 900 uL of DCM(14354)	G:\Org\HP5\Methods\DS_ORO-AA-L0.met	1	1	1	1	0
G:\org\HP5\DAT\HP5101721_b\1017HP5.07r	CCV_1017HP507r, CAL3 ;1017HP5 , 200 ug per mL Triacontane (100uL of Cal5 + 400 uL DCM(14354)	G:\Org\HP5\Methods\DS_ORO-AA-L0.met	1	1	1	1	0
G:\org\HP5\DAT\HP5101721_b\1017HP5.08r	CCV_1017HP508r, CAL4 ;1017HP5 , 500 ug per mL Triacontane (250uL of Cal5 + 250 uL DCM(14354)	G:\Org\HP5\Methods\DS_ORO-AA-L0.met	1	1	1	1	0
G:\org\HP5\DAT\HP5101721_b\1017HP5.09r	CCV_1017HP509r, CAL5 ;1017HP5 , 1000 ug per mL Triacontane (500 uL 2000 ug/mL Triacontane DRO211006A + 500 DCM(14354)	G:\Org\HP5\Methods\DS_ORO-AA-L0.met	1	1	1	1	0

File Name: G:\Org\HP5\Cals\SW8015C_ORO211017AA.CAL
Version: 11

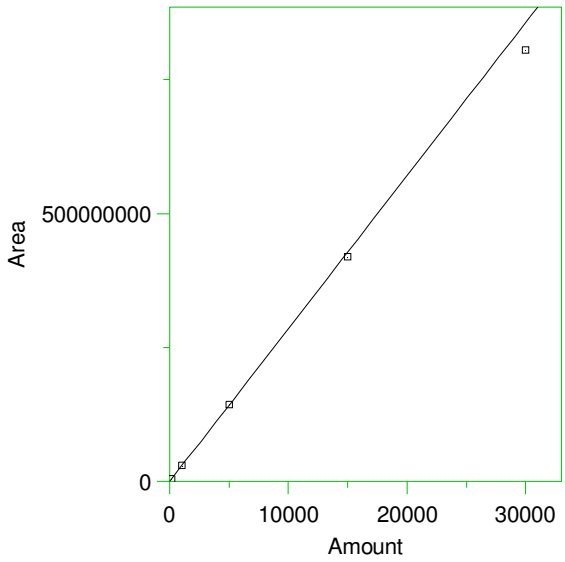
Creator: AMN
Description: 8015C-Oil Range. New ICal Per 1017HP5 (2021)-2 uL Inj.; RRO copied from 8015 cal for Oil
Reason for change:

External standard calibration
Standard injection volume: 1
Standard sample weight: 1
Area reject threshold: 500
Reference peak area reject threshold: 500
Amount units: nanograms
No default component

Method of calculating data point averages: Equal weight for all updates
No calibration update report

All levels are normal data points.

1 *30-40 Motor Oil



Expected retention time: 6.4 minutes
Search window: 0.05 minutes
No retention time reference component
Group number: 0

High alarm limit: 0
Low alarm limit: 0
Component constant: 0

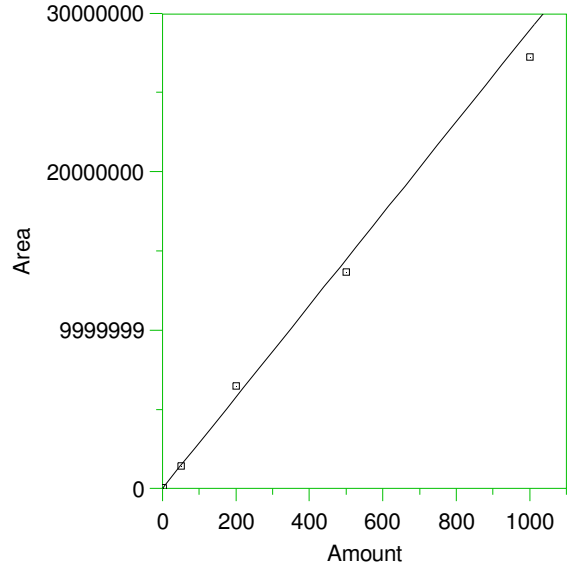
Single peak quantification by area

Y = 28542.41 X + 0

Average CF fit with equal weighting, forced to origin
Coefficient of determination: 0.9940317
Average error: 3.209%
Average CF: 28542.41
RSD: 4.497%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	150	4325287	28835.25	1.026	Manual	10/18/2021 2:26:35 PM
2	1000	3.03352E+07	30335.2	6.281	Manual	10/18/2021 2:26:39 PM
3	5000	1.437314E+08	28746.28	0.714	Manual	10/18/2021 2:26:42 PM
4	15000	4.193721E+08	27958.14	-2.047	Manual	10/18/2021 2:26:45 PM
5	30000	8.051155E+08	26837.18	-5.974	Manual	10/18/2021 2:26:47 PM

3 *#Triacontane



Expected retention time:	16.26 minutes
Search window:	0.05 minutes
No retention time reference component	
Group number:	0
High alarm limit:	0
Low alarm limit:	0
Component constant:	0

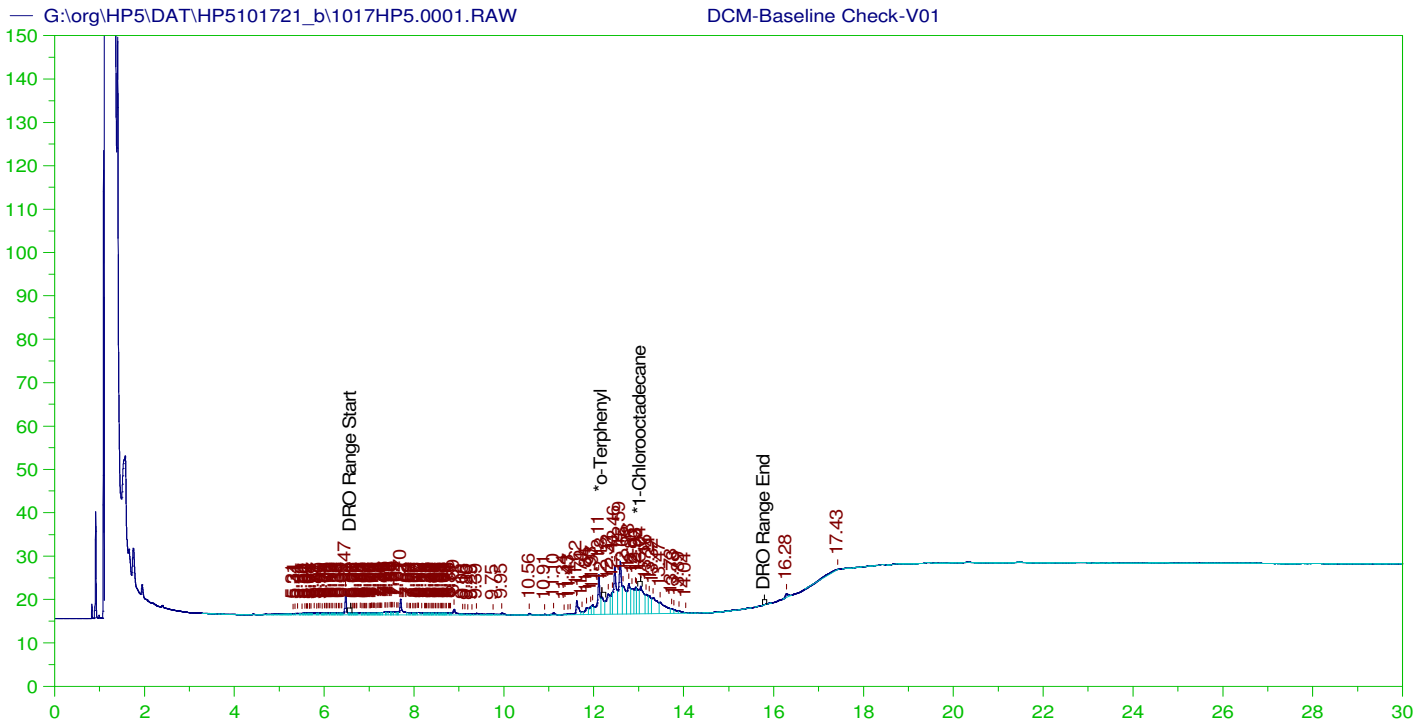
Single peak quantification by area

Y = 28930.14 X + 0

Average CF fit with equal weighting, forced to origin

Coefficient of determination:	0.9919451
Average error:	5.737%
Average CF:	28930.14
RSD:	7.577%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2	59020.1	29510.05	2.005	Manual	10/18/2021 2:42:38 PM
2	50	1403134	28062.68	-2.998	G:\Org\HP4\DAT\HP4100621_b\1006HP4.0015.BND	10/7/2021 12:47:26 PM
3	200	6499949	32499.74	12.339	G:\Org\HP4\DAT\HP4100621_b\1006HP4.0017.BND	10/7/2021 12:47:56 PM
4	500	1.366713E+07	27334.26	-5.516	Manual	10/18/2021 2:44:43 PM
5	1000	2.724398E+07	27243.98	-5.828	Manual	10/18/2021 2:43:45 PM



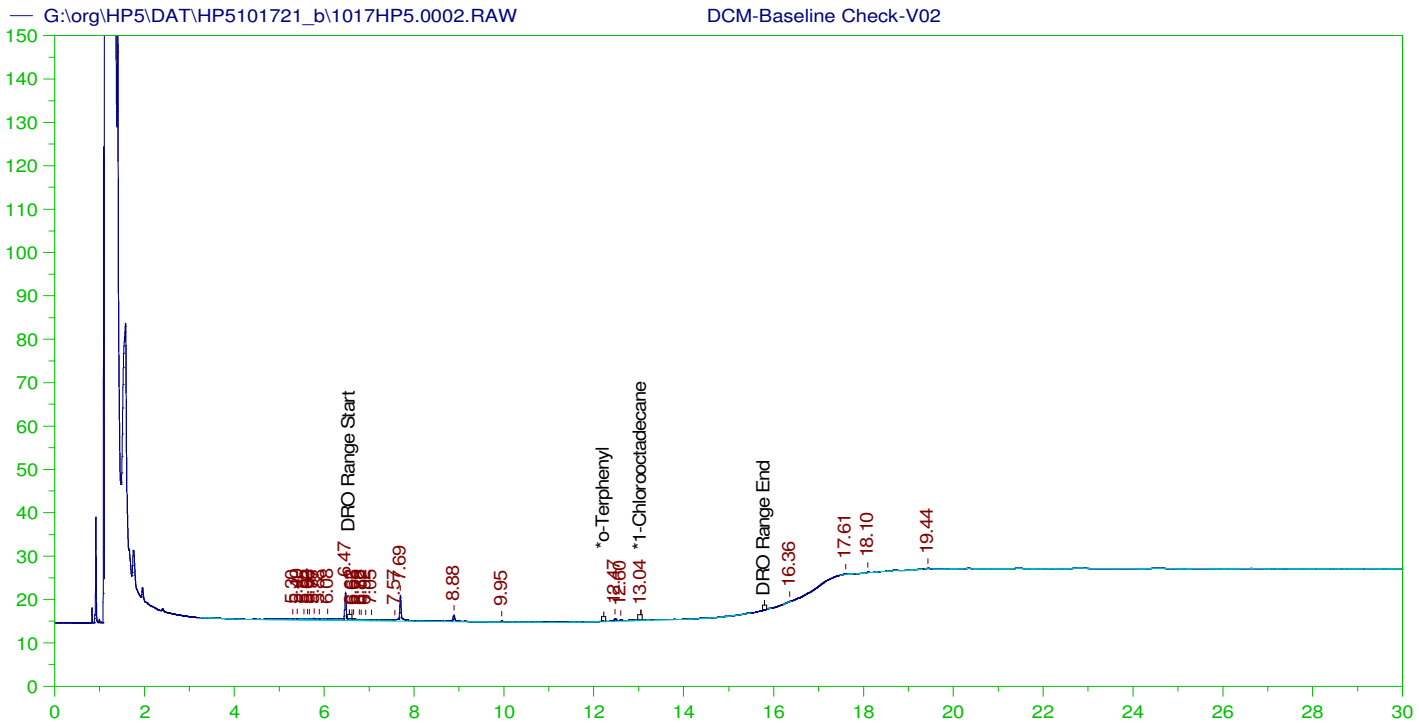
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V01
Raw File: G:\org\HP5\DAT\HP5101721_b\1017HP5.0001.RAW
Date & Time Acquired: 10/17/2021 12:40:02 PM
Method File: G:\Org\HP5\Methods\DR_8015-HS-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108Hs.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.51 to 15.85

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.178	200.	.522	.26	-
*1-Chlorooctadecane	13.04	200.	1.235	.62	-

DRO Area:571771.5 DRO Amount: 19.41016
TEH Area:639555.1 TEH Amount: 21.71124

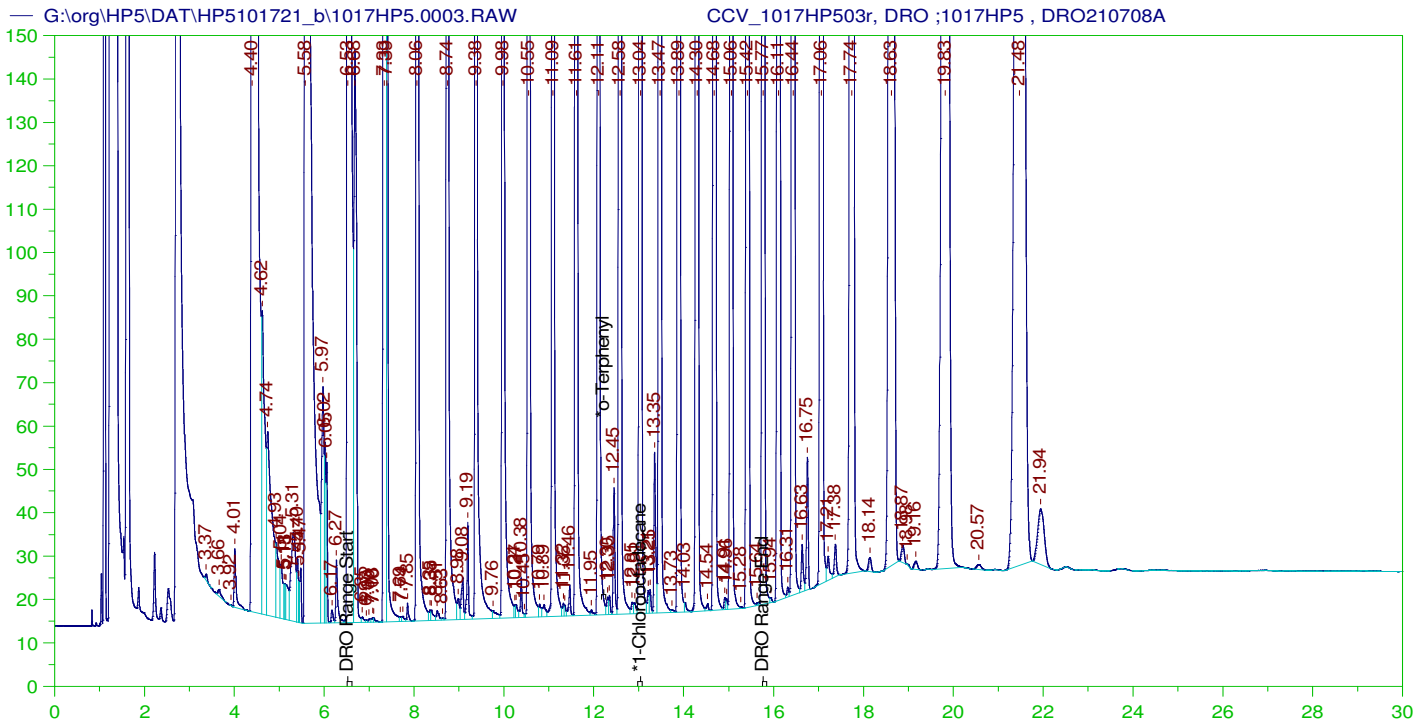


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V02
Raw File: G:\org\HP5\DAT\HP5101721_b\1017HP5.0002.RAW
Date & Time Acquired: 10/17/2021 1:22:21 PM
Method File: G:\Org\HP5\Methods\DR_8015-HS-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108Hs.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.51 to 15.85

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.973	200.	.	. -
*1-Chlorooctadecane	13.043	200.	.018	.01 -

DRO Area:58862.56 DRO Amount: 1.998231
TEH Area:105899.4 TEH Amount: 3.595009



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1017HP503r, DRO ;1017HP5 , DRO210708A
Raw File: G:\org\HP5\DAT\HP5101721_b\1017HP5.0003.RAW
Date & Time Acquired: 10/17/2021 2:04:53 PM
Method File: G:\Org\HP5\Methods\DR_8015-HS-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108Hs.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.51 to 15.85

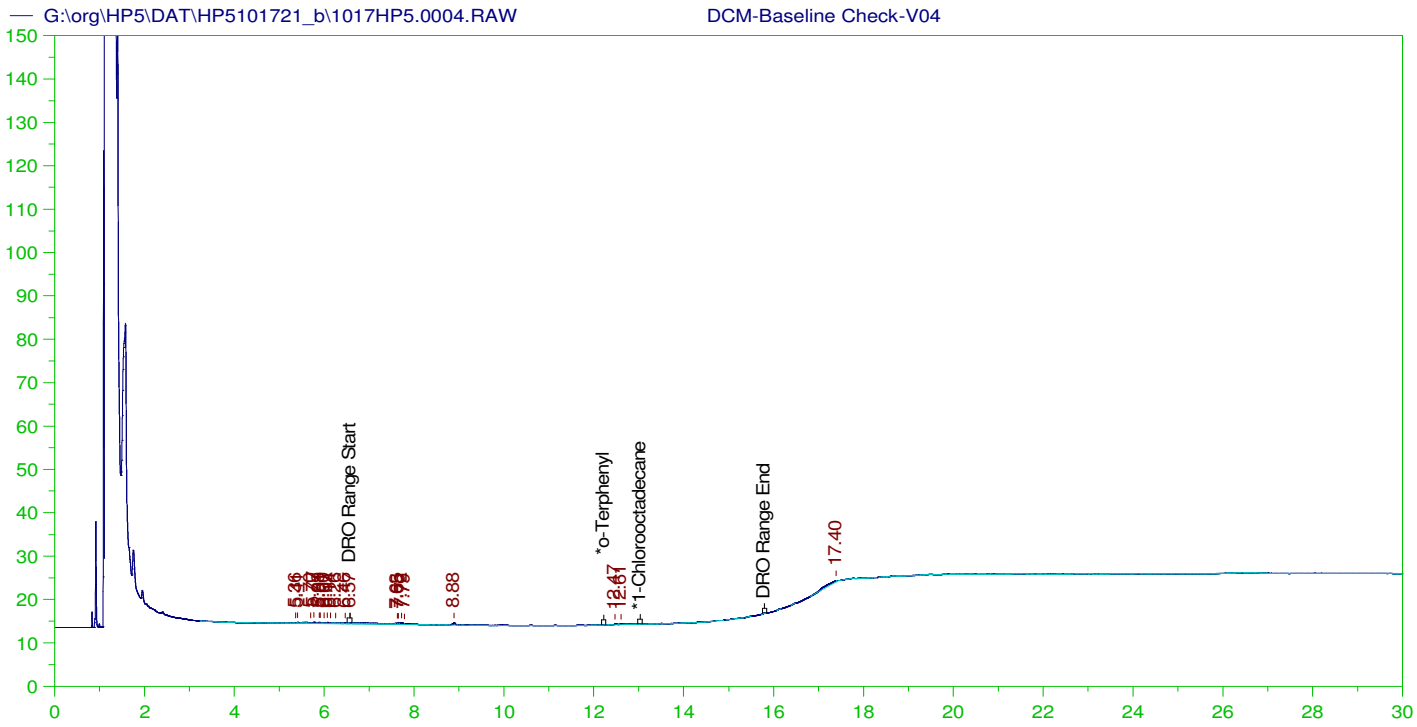
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	29.982	200.	.	.	-
*1-Chlorooctadecane	13.037	200.	255.634	127.82	-

DRO Area:1.592713E+08 DRO Amount: 5406.847
TEH Area:2.370861E+08 TEH Amount: 8048.458

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5101721_b\1017HP5.0003.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8048.46	53.66	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	29.982	200.	.	.	85-115
*1-Chlorooctadecane	13.037	200.	255.634	127.82	85-115



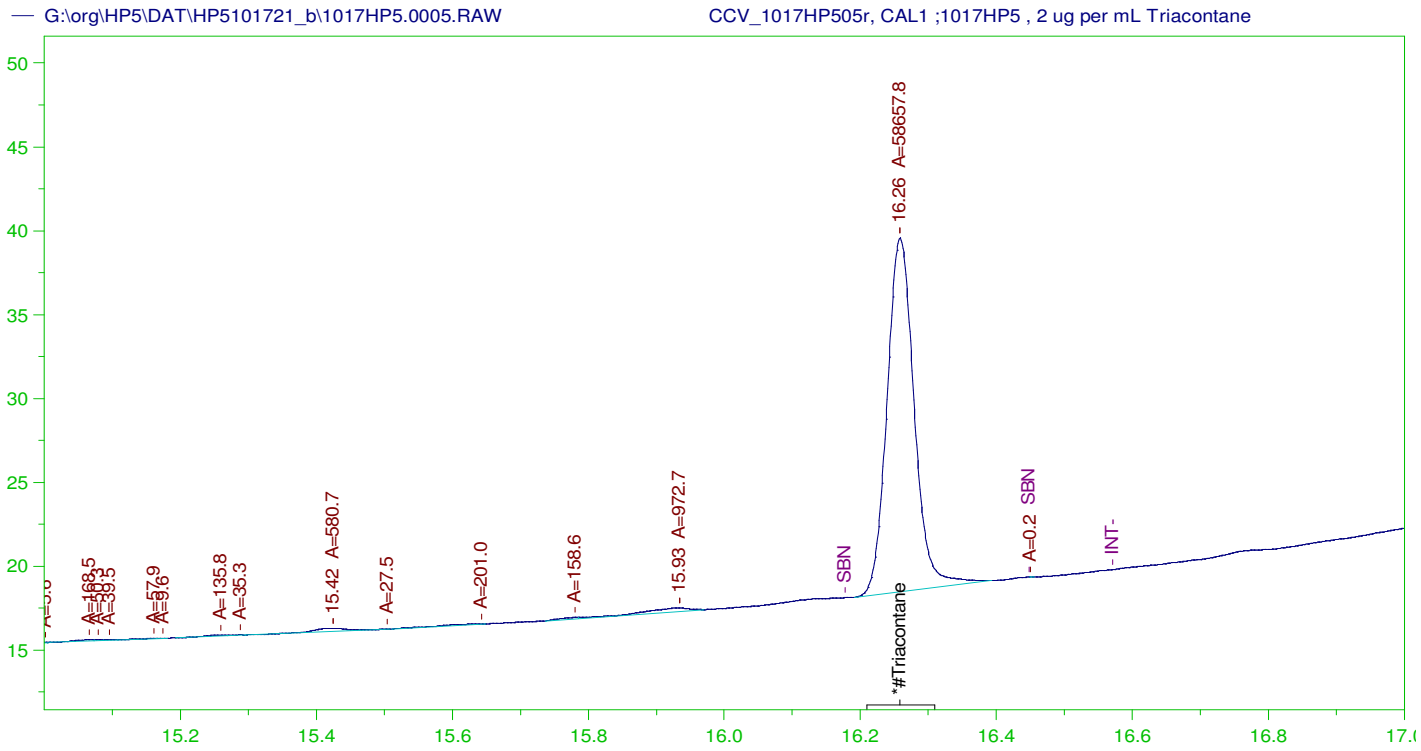
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V04
Raw File: G:\org\HP5\DAT\HP5101721_b\1017HP5.0004.RAW
Date & Time Acquired: 10/17/2021 2:47:29 PM
Method File: G:\Org\HP5\Methods\DR_8015-HS-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO210108Hs.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29457.33
Rt range for Diesel Range Organics: 6.51 to 15.85

SURROGATE COMPOUND	RT	ACTUAL	MEASURED		%REC
*o-Terphenyl	29.987	200.	.	.	-
*1-Chlorooctadecane	29.987	200.	.	.	-

DRO Area:32637.46 DRO Amount: 1.107957
TEH Area:75218.02 TEH Amount: 2.553457



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1017HP505r, CAL1 ;1017HP5 , 2 ug per mL Triacontane
Raw File: G:\org\HP5\DAT\HP5101721_b\1017HP5.0005.RAW
Date & Time Acquired: 10/17/2021 3:30:16 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AA-L0.met
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.53 to 30.05

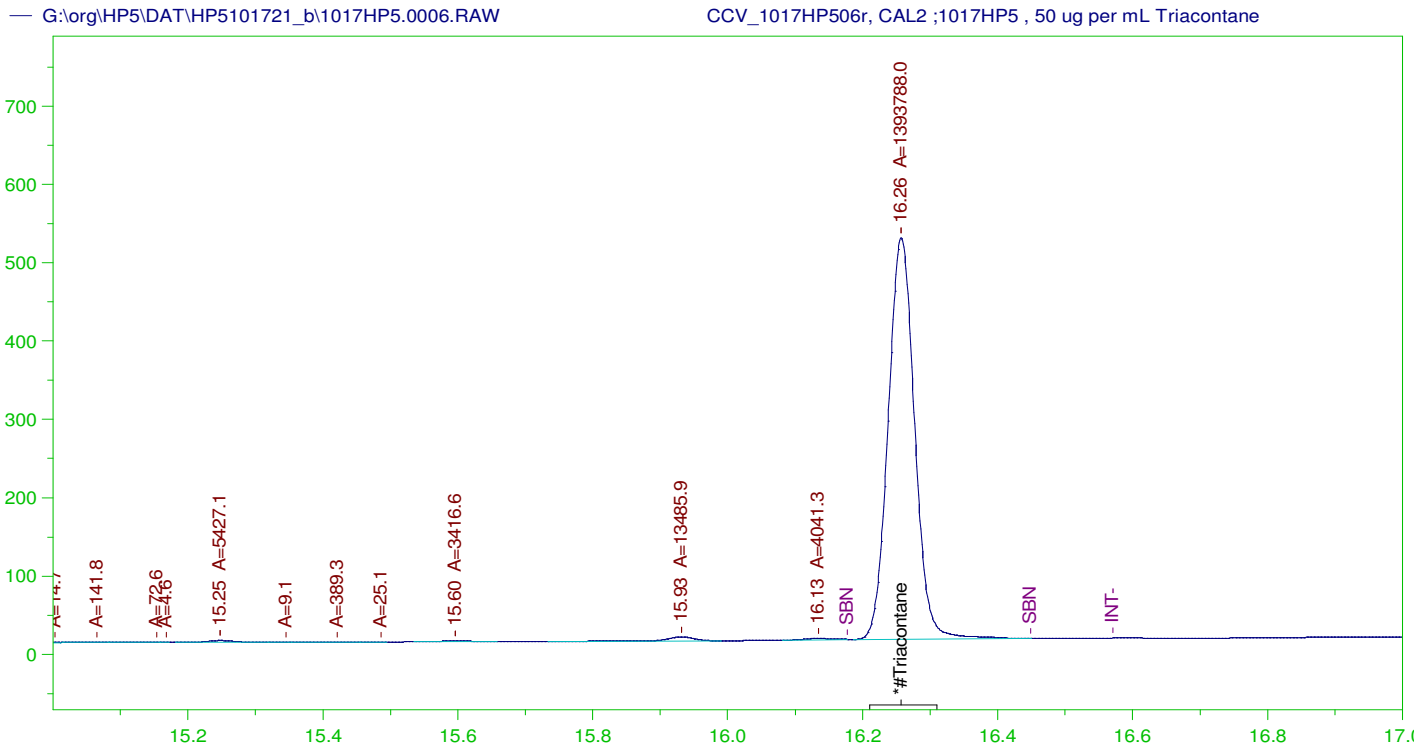
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.258	500.	2.028	.41	-

RRO Area:2747.039 RRO AMOUNT: 9.624412E-02

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5101721_b\1017HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.258	200.	2.028	1.01	75-125



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1017HP506r, CAL2 ;1017HP5 , 50 ug per mL Triacontane
Raw File: G:\org\HP5\DAT\HP5101721_b\1017HP5.0006.RAW
Date & Time Acquired: 10/17/2021 4:12:57 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AA-L0.met
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.53 to 30.05

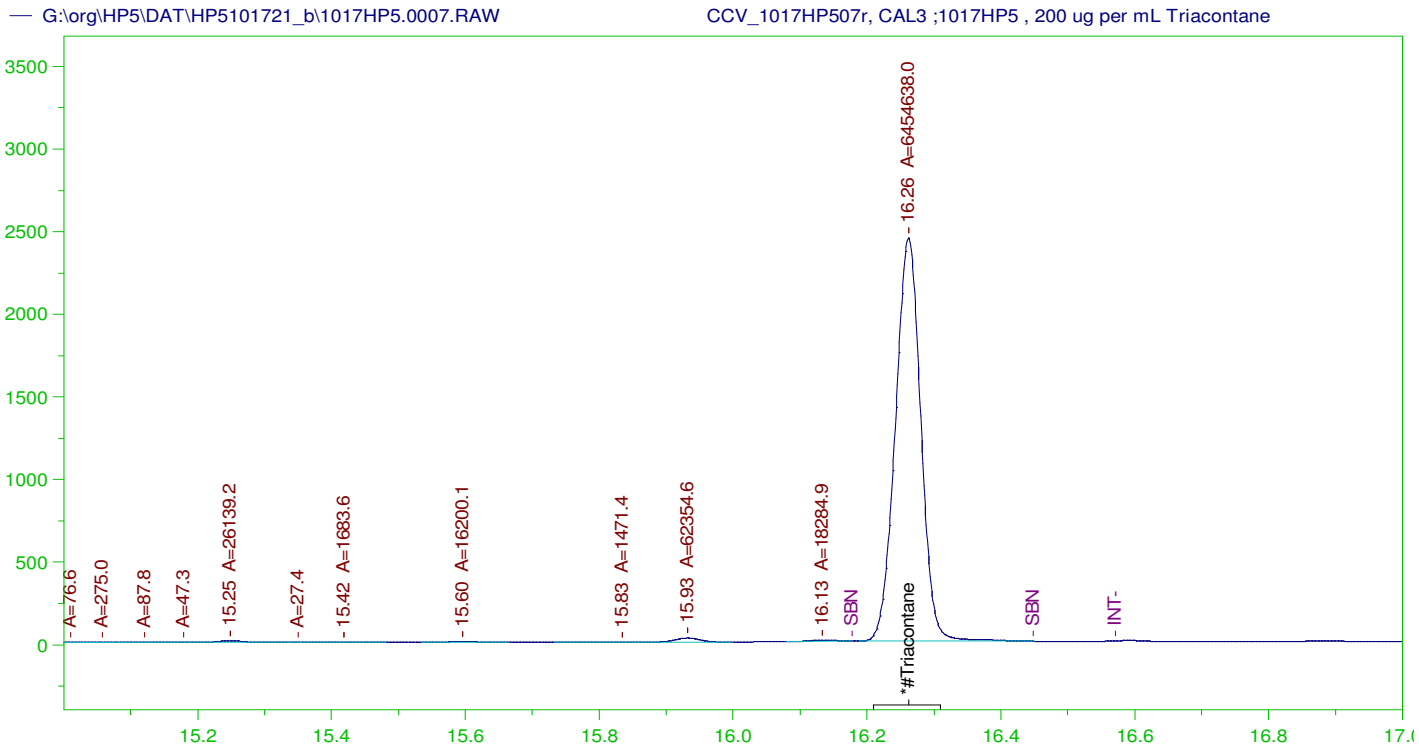
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.257	500.	48.178	9.64	-

RRO Area:45902.25 RRO AMOUNT: 1.608212

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5101721_b\1017HP5.0006.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.257	200.	48.178	24.09	75-125



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1017HP507r, CAL3 ;1017HP5 , 200 ug per mL Triacontane
Raw File: G:\org\HP5\DAT\HP5101721_b\1017HP5.0007.RAW
Date & Time Acquired: 10/17/2021 4:55:33 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AA-L0.met
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.53 to 30.05

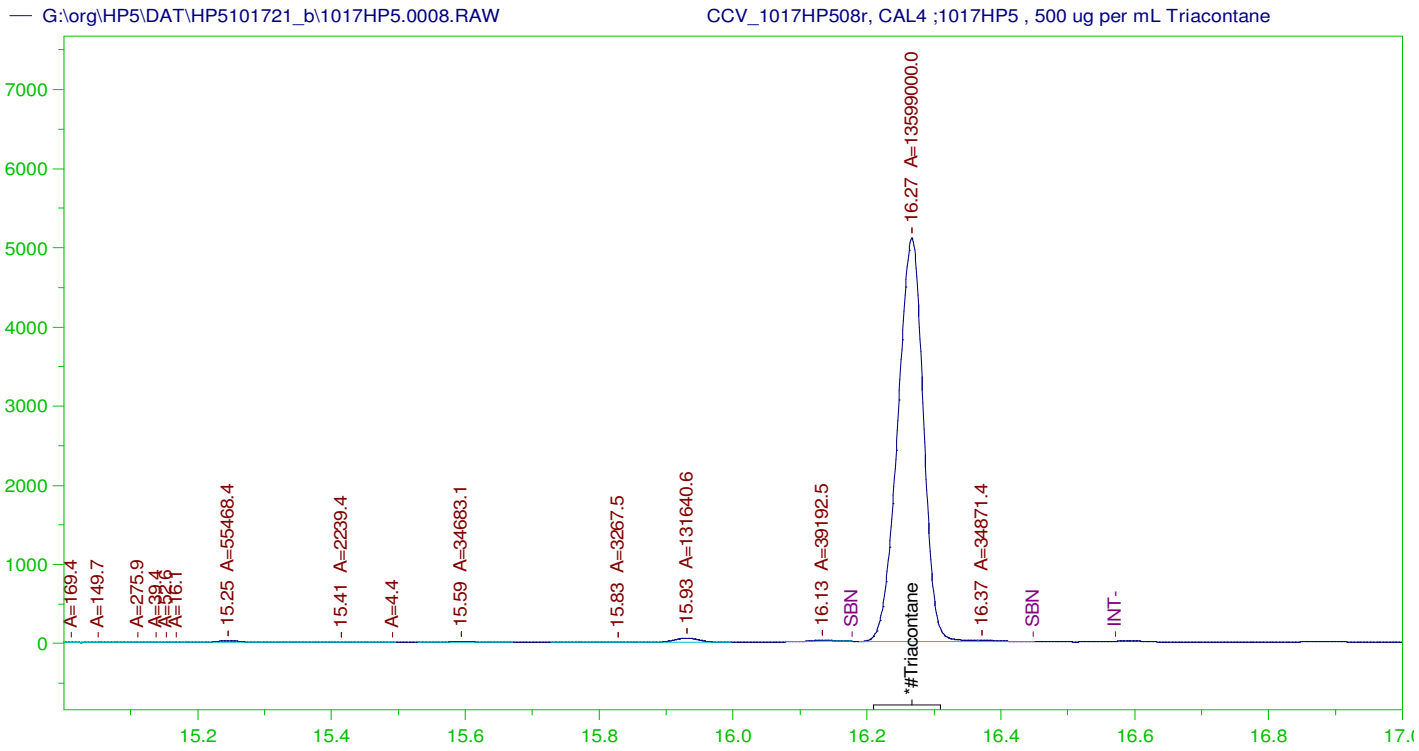
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.262	500.	223.111	44.62	-

RRO Area:219754.5 RRO AMOUNT: 7.699227

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5101721_b\1017HP5.0007.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.262	200.	223.111	111.56	75-125



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1017HP508r, CAL4 ;1017HP5 , 500 ug per mL Triacontane
Raw File: G:\org\HP5\DAT\HP5101721_b\1017HP5.0008.RAW
Date & Time Acquired: 10/17/2021 5:38:10 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AA-L0.met
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.53 to 30.05

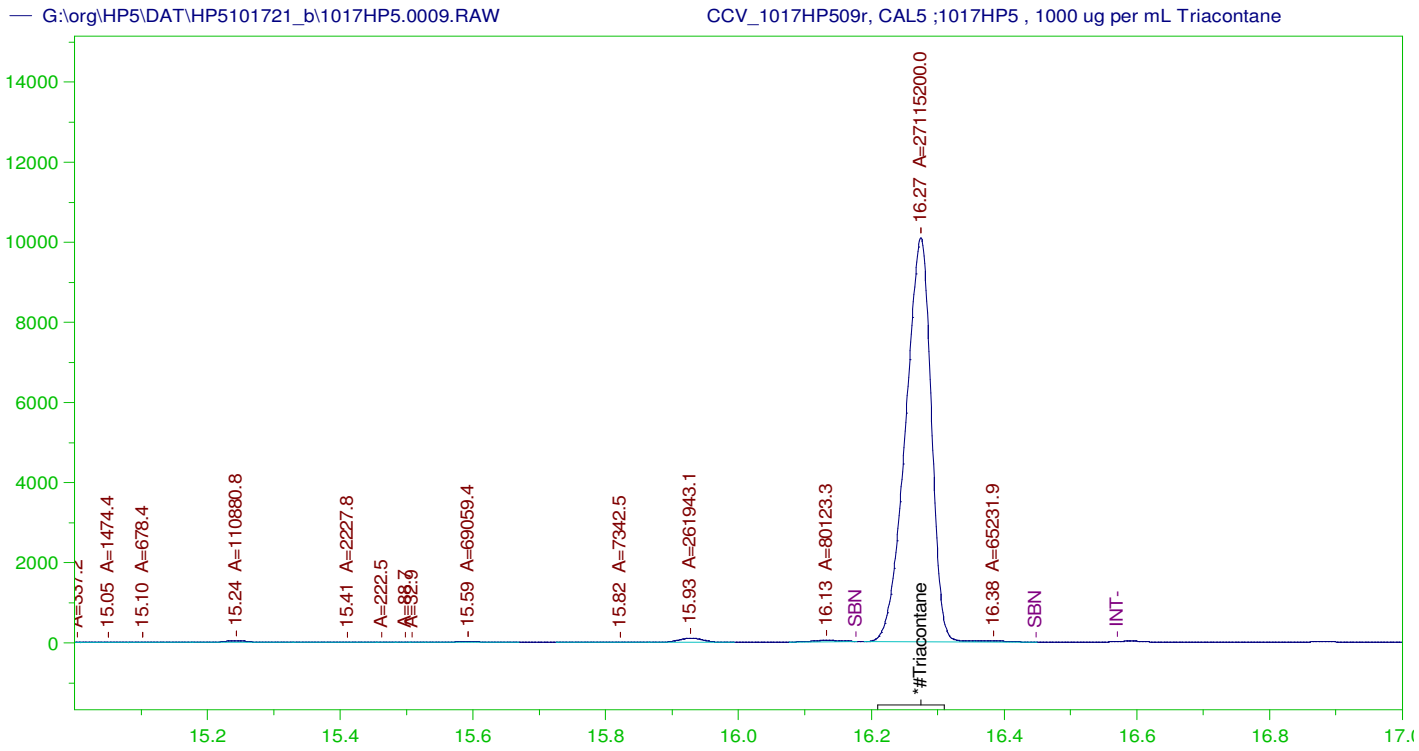
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.267	500.	470.063	94.01	-

RRO Area:496538.4 RRO AMOUNT: 17.39651

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5101721_b\1017HP5.0008.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.267	200.	470.063	235.03	75-125



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1017HP509r, CAL5 ;1017HP5 , 1000 ug per mL Triacontane
Raw File: G:\org\HP5\DAT\HP5101721_b\1017HP5.0009.RAW
Date & Time Acquired: 10/17/2021 6:20:57 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AA-L0.met
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AA.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.53 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.275	500.	937.265	187.45	-

RRO Area:979213.9 RRO AMOUNT: 34.30733

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5101721_b\1017HP5.0009.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.275	200.	937.265	468.63	75-125

Write Sequence	Insert Entries(Have the first cell for entries selecte								
Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manual Integration
G:\org\HP5\DAT\HP5101721_b\1017HP5.01r	DCM-Baseline Check-V01	G:\Org\HP5\Methods\DR_8015-HS-LEXP.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5101721_b\1017HP5.02r	DCM-Baseline Check-V02	G:\Org\HP5\Methods\DR_8015-HS-LEXP.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5101721_b\1017HP5.03r	CCV_1017HP503r, DRO ;1017HP5 , DRO210708A	G:\Org\HP5\Methods\DR_8015-HS-LEXP.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5101721_b\1017HP5.04r	DCM-Baseline Check-V04	G:\Org\HP5\Methods\DR_8015-HS-LEXP.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5101721_b\1017HP5.05r	CCV_1017HP505r, CAL1 ;1017HP5 , 2 ug per mL Triacontane (10 uL of Cal3 + 990 uL DCM(14354)	G:\Org\HP5\Methods\DS_ORO-AA-L0.met	1	1	1	1	0	Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 and slightly after the surrogate peak at 16.45 and scaling showing surrogate peak from 15.0-17.0
G:\org\HP5\DAT\HP5101721_b\1017HP5.06r	CCV_1017HP506r, CAL2 ;1017HP5 , 50 ug per mL Triacontane (100 uL Cal4 + 900 uL of DCM(14354)	G:\Org\HP5\Methods\DS_ORO-AA-L0.met	1	1	1	1	0	Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 and slightly after the surrogate peak at 16.45 and scaling showing surrogate peak from 15.0-17.0
G:\org\HP5\DAT\HP5101721_b\1017HP5.07r	CCV_1017HP507r, CAL3 ;1017HP5 , 200 ug per mL Triacontane (100uL of Cal5 + 400 uL DCM(14354)	G:\Org\HP5\Methods\DS_ORO-AA-L0.met	1	1	1	1	0	Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 and slightly after the surrogate peak at 16.45 and scaling showing surrogate peak from 15.0-17.0
G:\org\HP5\DAT\HP5101721_b\1017HP5.08r	CCV_1017HP508r, CAL4 ;1017HP5 , 500 ug per mL Triacontane (250uL of Cal5 + 250 uL DCM(14354)	G:\Org\HP5\Methods\DS_ORO-AA-L0.met	1	1	1	1	0	Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 and slightly after the surrogate peak at 16.45 and scaling showing surrogate peak from 15.0-17.0
G:\org\HP5\DAT\HP5101721_b\1017HP5.09r	CCV_1017HP509r, CAL5 ;1017HP5 , 1000 ug per mL Triacontane (500 uL 2000 ug/mL Triacontane DRO211006A + 500 DCM(14354)	G:\Org\HP5\Methods\DS_ORO-AA-L0.met	1	1	1	1	0	Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 and slightly after the surrogate peak at 16.45 and scaling showing surrogate peak from 15.0-17.0

Digitally signed by
Ann Nebel
Date: 2021.10.25 17:42:58 -06:00

PREP BATCH REPORT

Prep Code: **HC-3520-DRO** Technician: **Jillian L Bostwick** Prep Start Date: **12/20/2021 12:09:03 P**

Prep Batch **162352** Prep Temp **NA °C** Batch Units: **ML** Prep End Date: **12/21/2021 1:43:00 P**

Sample ID	Matrix	pH	Initial Samp Amt	Sol Added	Sol Recovered	Final Vol (mL)	Factor	Balance	Prep Start Date	Prep End Date
MB-162352			1000	0	0	1.00	0.001		12/20/2021	12/21/2021
Lines 1-13 Start time: 12:05 PM, 12/20/2021. End time: 12/21/2021 at 6:05 AM.SGT was performed on remaining samples. amn 12/23/2021										
LCS-162352			1000	0	0	1.00	0.001		12/20/2021	12/21/2021
All bottles were completely used, defaced and disposed of on 12/16/2021. SGT was performed on remaining samples. amn 12/23/2021										
LCS-162352-RRO			1000	0	0	1.00	0.001		12/20/2021	12/21/2021
SGT was performed on remaining samples. amn 12/23/2021										
B21121613-001B	Ground Water	2	990	0	0	1.00	0.00101		12/20/2021	12/21/2021
Bottle 1/6. Clear, orange sediment. SGT was performed on remaining samples. amn 12/23/2021										
B21121613-001BMS	Ground Water	2	990	0	0	1.00	0.00101		12/20/2021	12/21/2021
Bottle 2/6. Clear, orange sediment. SGT was performed on remaining samples. amn 12/23/2021										
B21121613-001BMSD	Ground Water	2	1040	0	0	1.00	0.000962		12/20/2021	12/21/2021
Bottle 3/6. Clear, orange sediment. SGT was performed on remaining samples. amn 12/23/2021										
B21121613-001BMS-RRO	Ground Water	2	1040	0	0	1.00	0.000957		12/20/2021	12/21/2021
Bottle 4/6. Clear, orange sediment. SGT was performed on remaining samples. amn 12/23/2021										
B21121613-001BMSD-RRO	Ground Water	2	1060	0	0	1.00	0.000948		12/20/2021	12/21/2021
Bottle 5/6. Clear, orange sediment. SGT was performed on remaining samples. amn 12/23/2021										
B21121605-001A	Ground Water	2	1050	0	0	1.00	0.000952		12/20/2021	12/21/2021
Bottle 1/2. Clear.SGT was performed on remaining samples. amn 12/23/2021										
B21121605-002A	Ground Water	2	1050	0	0	1.00	0.000952		12/20/2021	12/21/2021
Bottle 1/2. Clear.SGT was performed on remaining samples. amn 12/23/2021										
B21121605-003A	Ground Water	2	1010	0	0	1.00	0.00099		12/20/2021	12/21/2021
Bottle 1/2. Clear.SGT was performed on remaining samples. amn 12/23/2021										
B21121609-001C	Ground Water	2	1060	0	0	1.00	0.000943		12/20/2021	12/21/2021
Bottle 1/1. Clear, light sediment.SGT was performed on remaining samples. amn 12/23/2021										
B21121611-001B	Ground Water	2	1030	0	0	1.00	0.000971		12/20/2021	12/21/2021
Bottle 1/2. Clear.SGT was performed on remaining samples. amn 12/23/2021										
B21121616-001C	Ground Water	2	990	0	0	1.00	0.00101		12/20/2021	12/21/2021
Bottle 1/2. Clear. Lines 14-18 Start time: 3:55 PM, 12/20/2021. End time: 12/21/2021 at 9:55 AM.SGT was performed on remaining samples. amn 12/23/2021										

Number	Reagent Name	Exp Date	
11	Carbon Filter Water	1/1/2023	
13379	PTFE Boiling Stones 27463755	12/30/2025	
14206	pH-indicator Strips 0-14 HC160347	8/26/2026	
14563	4ML, Amber Vial, 171001407106	11/30/2022	
14596	Dichloromethane EC757	10/20/2023	

Spk ID	Spike Name	SampType	AmtAdd	Exp Date
FP211207 14244	DCM RINSED FILTER PAPER	all	1	4/6/2026
Sulfate 12/10/21 (	Baked Sodium Sulfate	all	Varies	11/29/2026
DRO211129A	Triacontane SURR 1000 ug/mL	all except LCS/D,	100 uL	4/6/2026
DRO211213A	OTP only SURR 2000 ug/mL	All except RRO-L	100 uL	9/30/2024
SG211217(13376)	Baked Silica Gel	ALL-SGT	5 g	2/28/2030
DRO211012B	#2 Diesel in Acetone 150,000 ug/mL	LCS, LCSD, MS	100 uL	11/5/2023
DRO210902A	50,000 ug/mL Oil Std for RRO-In D	LCS/D-RRO, MS-	100 uL	9/1/2026

PREP BATCH REPORT

Prep Code: **HC-3520-DRO** Technician: **Jillian L Bostwick** Prep Start Date: **12/20/2021 12:09:03 P**

Prep Batch **162352** Prep Temp **NA °C** Batch Units: **ML** Prep End Date: **12/21/2021 1:43:00 P**

Sample ID	Matrix	pH	Initial Samp Amt	Sol Added	Sol Recovered	Final Vol (mL)	Factor	Balance	Prep Start Date	Prep End Date
B21121622-001B	Ground Water	2	960	0	0	1.00	0.00104		12/20/2021	12/21/2021
Bottle 1/2. Clear.SGT was performed on remaining samples. amn 12/23/2021										
B21121622-002B	Ground Water	2	1050	0	0	1.00	0.000952		12/20/2021	12/21/2021
Bottle 1/2. Clear.SGT was performed on remaining samples. amn 12/23/2021										
B21121622-003B	Ground Water	2	900	0	0	1.00	0.00111		12/20/2021	12/21/2021
Bottle 1/2. Clear.										
B21121623-001C	Ground Water	2	1020	0	0	1.00	0.00098		12/20/2021	12/21/2021
Bottle 1/2. Clear.SGT was performed on remaining samples. amn 12/23/2021										
B21121613-002B	Ground Water	2	1020	0	0	1.00	0.00098		12/20/2021	12/21/2021
Bottle 1/2. Clear. Lines 19 Start time: 4:55 PM, 12/20/2021. End time: 12/21/2021 at AM.										

Number	Reagent Name	Exp Date	
11	Carbon Filter Water	1/1/2023	
13379	PTFE Boiling Stones 27463755	12/30/2025	
14206	pH-indicator Strips 0-14 HC160347	8/26/2026	
14563	4ML, Amber Vial, 171001407106	11/30/2022	
14596	Dichloromethane EC757	10/20/2023	

Spk ID	Spike Name	SampType	AmtAdd	Exp Date
FP211207 14244	DCM RINSED FILTER PAPER	all	1	4/6/2026
Sulfate 12/10/21 (	Baked Sodium Sulfate	all	Varies	11/29/2026
DRO211129A	Triacontane SURR 1000 ug/mL	all except LCS/D,	100 uL	4/6/2026
DRO211213A	OTP only SURR 2000 ug/mL	All except RRO-L	100 uL	9/30/2024
SG211217(13376)	Baked Silica Gel	ALL-SGT	5 g	2/28/2030
DRO211012B	#2 Diesel in Acetone 150,000 ug/mL	LCS, LCSD, MS	100 uL	11/5/2023
DRO210902A	50,000 ug/mL Oil Std for RRO-In D	LCS/D-RRO, MS-	100 uL	9/1/2026

Energy Laboratories Inc

ANALYTICAL RUN Summary

23-Dec-21

Run ID GCFID-HP5-B_211221A

Run Start Date: 12/21/2021
Analyst: Ann Nebel
Ical:
Column ID:
Comments: DRO-8015-ICAL information is in Index GCFID-HP5-B_211102A 8015C OIL range calibration GCFID-HP5-B_210218B

Std ID	Std Name	Std Amount	Std Units	Samp Amount	Samp Units	SampType	Expiration Date
DRO211207A	Carbon Scan STD-Marker					MARKER	3/5/2028
DRO211220A	8015 CCV-15,000ug/mL + 200 OTP					CCV	4/30/2023
DRO211220C	5,000 ug/mL RRO CCV 200 ug/mL Triacontane					CCV	4/6/2026

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943612	CCV_1221HP50	HC-8015-DRO-	CCV		12/21/2021 4:25:	1	R372230		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		4.73827734		5	0	0	0.0879	0.3	0	95%	80	120	0%	
n-Triacontane	S	mg/L		0.2138702		0.2	0	0	0.000336	0.002	0	107%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943613	CCV_1221HP50	HC-8015-DRO-	CCV		12/21/2021 5:08:	1	R372230		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		14.67219		15	0	0	0.0389	0.3	0	98%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.2203		15	0	0	0.0749	0.3	50	101%	80	120	0%	
o-Terphenyl	S	mg/L		0.1961226		0.2	0	0	0.000429	0.002	0	98%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943614	LCS-162352	HC-8015-DRO-	LCS-DOD		12/21/2021 6:35:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943614	LCS-162352	HC-8015-DRO-	LCS-DOD		12/21/2021 6:35:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		13.31435		15	0	0	0.0389	0.3	0	89%	36	132	0%	
Total Extractable Hydrocarbons	A	mg/L		14.26188		15	0	0	0.0749	0.3	50	95%	60	132	0%	
o-Terphenyl	S	mg/L		0.1873054		0.2	0	0	0.000429	0.002	0	94%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943615	MB-162352	HC-8015-DRO-	MBLK		12/21/2021 7:18:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		0		0	0	0	0.0389	0.15	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0		0	0	0	0.0879	0.15	0	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.0749	0.15	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0944		0.1	0	0	0.000336	0.002	0	94%	50	150	0%	
o-Terphenyl	S	mg/L		0.1830072		0.2	0	0	0.000429	0.002	0	92%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943616	B21121613-001	HC-8015-DRO-	SAMP		12/21/2021 8:01:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		0		0	0	0	0.039289	0.303	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0		0	0	0	0.088779	0.303	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.075649	0.303	50	0%	0	0	0%	U
n-Triacontane	S	mg/L		0.0923		0.101	0	0	0.0003394	0.00202	0	91%	50	150	0%	
o-Terphenyl	S	mg/L		0.1715049		0.202	0	0	0.0004333	0.00202	0	85%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943617	B21121613-001	HC-8015-DRO-	MS-DOD		12/21/2021 8:44:	1	162352	12/20/2021	1E+07	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		13.80946		15.15	0	0	0.039289	0.303	0	91%	36	132	0%	
Total Extractable Hydrocarbons	A	mg/L		14.83788		15.15	0	0	0.075649	0.303	50	98%	60	132	0%	
o-Terphenyl	S	mg/L		0.1836434		0.202	0	0	0.0004333	0.00202	0	91%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943618	B21121613-001	HC-8015-DRO-	MSD-DOD		12/21/2021 9:28:	1	162352	12/20/2021	1E+07	1E+07	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		12.21048		14.43	0	13.80946	0.0374218	0.3	0	85%	36	132	12%	
Total Extractable Hydrocarbons	A	mg/L		13.10213		14.43	0	14.83788	0.0720538	0.3	50	91%	60	132	12%	
o-Terphenyl	S	mg/L		0.1690977		0.1924	0	0	0.0004127	0.002	0	88%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943619	B21121613-002	HC-8015-DRO-	SAMP		12/21/2021 10:5	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		0		0	0	0	0.038122	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0		0	0	0	0.086142	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.073402	0.3	50	0%	0	0	0%	U
n-Triacontane	S	mg/L		0.0898		0.098	0	0	0.0003293	0.00196	0	92%	50	150	0%	
o-Terphenyl	S	mg/L		0.1661896		0.196	0	0	0.0004204	0.002	0	85%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943620	B21121609-001	HC-8015-DRO-	SAMP		12/22/2021 12:2	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		4.656794		0	0	0	0.0366827	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.37599784		0	0	0	0.0828897	0.3	0	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		5.139189		0	0	0	0.0706307	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0843		0.0943	0	0	0.0003168	0.001886	0	89%	50	150	0%	
o-Terphenyl	S	mg/L		0.1517489		0.1886	0	0	0.0004045	0.002	0	80%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943621	B21121611-001	HC-8015-DRO-	SAMP		12/22/2021 1:46:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		0.1643919		0	0	0	0.0377719	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.29179561		0	0	0	0.0853509	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		0.6027129		0	0	0	0.0727279	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0938		0.0971	0	0	0.0003263	0.001942	0	97%	50	150	0%	
o-Terphenyl	S	mg/L		0.1730123		0.1942	0	0	0.0004166	0.002	0	89%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943622	B21121616-001	HC-8015-DRO-	SAMP		12/22/2021 2:30:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		1.215285		0	0	0	0.039289	0.303	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.26310992		0	0	0	0.088779	0.303	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		1.655497		0	0	0	0.075649	0.303	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.1		0.101	0	0	0.0003394	0.00202	0	99%	50	150	0%	
o-Terphenyl	S	mg/L		0.1523631		0.202	0	0	0.0004333	0.00202	0	75%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943623	CCV_1221HP52	HC-8015-DRO-	CCV		12/22/2021 3:56:	1	R372230		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		4.80260889		5	0	0	0.0879	0.3	0	96%	80	120	0%	
n-Triacontane	S	mg/L		0.2118513		0.2	0	0	0.000336	0.002	0	106%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943624	CCV_1221HP52	HC-8015-DRO-	CCV		12/22/2021 4:39:	1	R372230		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		14.86623		15	0	0	0.0389	0.3	0	99%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.39986		15	0	0	0.0749	0.3	50	103%	80	120	0%	
o-Terphenyl	S	mg/L		0.198526		0.2	0	0	0.000429	0.002	0	99%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943625	B21121623-001	HC-8015-DRO-	SAMP		12/22/2021 7:44:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		0.1946039		0	0	0	0.038122	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0		0	0	0	0.086142	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0.3643004		0	0	0	0.073402	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0964		0.098	0	0	0.0003293	0.00196	0	98%	50	150	0%	
o-Terphenyl	S	mg/L		0.1681939		0.196	0	0	0.0004204	0.002	0	86%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943626	B21121605-001	HC-8015-DRO-	SAMP		12/22/2021 9:10:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		0.1463492		0	0	0	0.0370328	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.10364144		0	0	0	0.0836808	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		0.2733932		0	0	0	0.0713048	0.3	50	0%	0	0	0%	J
n-Triacontane	S	mg/L		0.0856		0.0952	0	0	0.0003199	0.001904	0	90%	50	150	0%	
o-Terphenyl	S	mg/L		0.1648605		0.1904	0	0	0.0004084	0.002	0	87%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943627	B21121605-002	HC-8015-DRO-	SAMP		12/22/2021 10:3	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		1.537647		0	0	0	0.0370328	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.17544827		0	0	0	0.0836808	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		1.808759		0	0	0	0.0713048	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0944		0.0952	0	0	0.0003199	0.001904	0	99%	50	150	0%	
o-Terphenyl	S	mg/L		0.1767315		0.1904	0	0	0.0004084	0.002	0	93%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943628	B21121605-003	HC-8015-DRO-	SAMP		12/22/2021 11:1	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		1.759276		0	0	0	0.038511	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.17849281		0	0	0	0.087021	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		2.009793		0	0	0	0.074151	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0965		0.099	0	0	0.0003326	0.00198	0	97%	50	150	0%	
o-Terphenyl	S	mg/L		0.184375		0.198	0	0	0.0004247	0.002	0	93%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943629	B21121622-002	HC-8015-DRO-	SAMP		12/22/2021 1:27:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		0.3060482		0	0	0	0.0370328	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.38883811		0	0	0	0.0836808	0.3	0	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		0.7950797		0	0	0	0.0713048	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0955		0.0952	0	0	0.0003199	0.001904	0	100%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943629	B21121622-002	HC-8015-DRO-	SAMP		12/22/2021 1:27:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl	S	mg/L		0.1789114		0.1904	0	0	0.0004084	0.002	0	94%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943770	CCV_1221HP53	HC-8015-DRO-	CCV		12/22/2021 3:35:	1	R372230		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		4.68422070		5	0	0	0.0879	0.3	0	94%	80	120	0%	
n-Triacontane	S	mg/L		0.2093559		0.2	0	0	0.000336	0.002	0	105%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14943771	CCV_1221HP53	HC-8015-DRO-	CCV		12/22/2021 4:18:	1	R372230		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		14.01734		15	0	0	0.0389	0.3	0	93%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		14.5345		15	0	0	0.0749	0.3	50	97%	80	120	0%	
o-Terphenyl	S	mg/L		0.1871337		0.2	0	0	0.000429	0.002	0	94%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14944673	B21121622-001	HC-8015-DRO-	SAMP		12/22/2021 6:29:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		0		0	0	0	0.040456	0.312	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.10430708		0	0	0	0.091416	0.312	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		0.1345782		0	0	0	0.077896	0.312	50	0%	0	0	0%	J
n-Triacontane	S	mg/L		0.1016		0.104	0	0	0.0003494	0.00208	0	98%	50	150	0%	
o-Terphenyl	S	mg/L		0.1943547		0.208	0	0	0.0004462	0.00208	0	93%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14944674	B21121622-003	HC-8015-DRO-	SAMP		12/22/2021 7:13:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		0		0	0	0	0.043179	0.333	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0		0	0	0	0.097569	0.333	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.083139	0.333	50	0%	0	0	0%	U

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14944674	B21121622-003	HC-8015-DRO-	SAMP		12/22/2021 7:13:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane	S	mg/L		0.1055		0.111	0	0	0.000373	0.00222	0	95%	50	150	0%	
o-Terphenyl	S	mg/L		0.1998307		0.222	0	0	0.0004762	0.00222	0	90%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14944675	B21121613-001	HC-8015-DRO-	MS-DOD		12/22/2021 8:39:	1	162352	12/20/2021	1E+07	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		4.48855734		4.785	0	0	0.0841203	0.3	0	94%	41	113	0%	
n-Triacontane	S	mg/L		0.0913		0.0957	0	0	0.0003216	0.002	0	95%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14944676	B21121613-001	HC-8015-DRO-	MSD-DOD		12/22/2021 10:0	1	162352	12/20/2021	1E+07	1E+07	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		4.49660873		4.74	0	4.4885573	0.0833292	0.3	0	95%	41	113	0%	
n-Triacontane	S	mg/L		0.0895		0.0948	0	0	0.0003185	0.002	0	94%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14944677	LCS-162352-RR	HC-8015-DRO-	LCS-DOD		12/22/2021 10:4	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		4.64328671		5	0	0	0.0879	0.3	0	93%	41	113	0%	
n-Triacontane	S	mg/L		0.09		0.1	0	0	0.000336	0.002	0	90%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14944678	CCV_1221HP54	HC-8015-DRO-	CCV		12/23/2021 12:1	1	R372230		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		4.67174316		5	0	0	0.0879	0.3	0	93%	80	120	0%	
n-Triacontane	S	mg/L		0.207587		0.2	0	0	0.000336	0.002	0	104%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14944679	CCV_1221HP54	HC-8015-DRO-	CCV		12/23/2021 12:5	1	R372230		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		14.33879		15	0	0	0.0389	0.3	0	96%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		14.83493		15	0	0	0.0749	0.3	50	99%	80	120	0%	
o-Terphenyl	S	mg/L		0.1912967		0.2	0	0	0.000429	0.002	0	96%	80	120	0%	

Energy Laboratories Inc

ANALYTICAL RUN Summary

28-Dec-21

Run ID GCFID-HP5-B_211226A

Run Start Date: 12/26/2021
Analyst: Ann Nebel
Ical:
Column ID:
Comments: DRO-8015-ICAL information is in Index GCFID-HP5-B_211102A 8015C OIL range calibration GCFID-HP5-B_210218B

Std ID	Std Name	Std Amount	Std Units	Samp Amount	Samp Units	SampType	Expiration Date
DRO211207A	Carbon Scan STD-Marker					MARKER	3/5/2028
DRO211220A	8015 CCV-15,000ug/mL + 200 OTP					CCV	4/30/2023
DRO211220C	5,000 ug/mL RRO CCV 200 ug/mL Triacontane					CCV	4/6/2026

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948157	CCV_1226HP50	HC-8015-DRO-	CCV		12/26/2021 1:24:	1	R372351		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		5.07259375		5	0	0	0.0879	0.3	0	101%	80	120	0%	
n-Triacontane	S	mg/L		0.2313521		0.2	0	0	0.000336	0.002	0	116%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948158	CCV_1226HP50	HC-8015-DRO-	CCV		12/26/2021 2:07:	1	R372351		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		15.84015		15	0	0	0.0389	0.3	0	106%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		16.4279		15	0	0	0.0749	0.3	50	110%	80	120	0%	
o-Terphenyl	S	mg/L		0.2132998		0.2	0	0	0.000429	0.002	0	107%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948159	MB-162352	HC-8015-DRO-	MBLK		12/26/2021 4:16:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948159	MB-162352	HC-8015-DRO-	MBLK		12/26/2021 4:16:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		0		0	0	0	0.0389	0.15	0	0%	0	0	0%	
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0879	0.15	0	0%	0	0	0%	
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.0329	0.15	0	0%	0	0	0%	
n-Triacontane (SGT)	S	mg/L		0.1176		0.1	0	0	0.000336	0.002	0	118%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.2176667		0.2	0	0	0.000429	0.002	0	109%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948160	B21121613-001	HC-8015-DRO-	SAMP		12/26/2021 4:59:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		0		0	0	0	0.039289	0.303	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.088779	0.303	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.033229	0.303	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.0829		0.101	0	0	0.0003394	0.00202	0	82%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.153843		0.202	0	0	0.0004333	0.00202	0	76%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948161	B21121613-001	HC-8015-DRO-	MS-DOD		12/26/2021 5:42:	1	162352	12/20/2021	1E+07	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		15.84011		15.15	0	0	0.039289	0.303	0	105%	36	132	0%	
Total Extractable Hydrocarbons (SGT	A	mg/L		16.83423		15.15	0	0	0.033229	0.303	0	111%	60	132	0%	
o-Terphenyl (SGT)	S	mg/L		0.2156087		0.202	0	0	0.0004333	0.00202	0	107%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948162	B21121613-001	HC-8015-DRO-	MSD-DOD		12/26/2021 6:25:	1	162352	12/20/2021	1E+07	1E+07	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		14.5995		14.43	0	15.84011	0.0374218	0.3	0	101%	36	132	8%	
Total Extractable Hydrocarbons (SGT	A	mg/L		15.5177		14.43	0	16.83423	0.0316498	0.3	0	108%	60	132	8%	
o-Terphenyl (SGT)	S	mg/L		0.2096413		0.1924	0	0	0.0004127	0.002	0	109%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948163	B21121622-001	HC-8015-DRO-	SAMP		12/26/2021 7:51:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		0		0	0	0	0.040456	0.312	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.091416	0.312	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.034216	0.312	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.1008		0.104	0	0	0.0003494	0.00208	0	97%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1898372		0.208	0	0	0.0004462	0.00208	0	91%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948164	B21121605-001	HC-8015-DRO-	SAMP		12/26/2021 8:34:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		0.0597298		0	0	0	0.0370328	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0836808	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0.06545574		0	0	0	0.0313208	0.3	0	0%	0	0	0%	J
n-Triacontane (SGT)	S	mg/L		0.0815		0.0952	0	0	0.0003199	0.001904	0	86%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1577361		0.1904	0	0	0.0004084	0.001904	0	83%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948165	B21121623-001	HC-8015-DRO-	SAMP		12/26/2021 9:17:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		0.05812604		0	0	0	0.038122	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.086142	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0.06626495		0	0	0	0.032242	0.3	0	0%	0	0	0%	J
n-Triacontane (SGT)	S	mg/L		0.1113		0.098	0	0	0.0003293	0.00196	0	114%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1920631		0.196	0	0	0.0004204	0.00196	0	98%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948166	B21121611-001	HC-8015-DRO-	SAMP		12/26/2021 10:4	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		0		0	0	0	0.0377719	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0853509	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0.04004378		0	0	0	0.0319459	0.3	0	0%	0	0	0%	J
n-Triacontane (SGT)	S	mg/L		0.1055		0.0971	0	0	0.0003263	0.001942	0	109%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948166	B21121611-001	HC-8015-DRO-	SAMP		12/26/2021 10:4	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl (SGT)	S	mg/L		0.1996854		0.1942	0	0	0.0004166	0.001942	0	103%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948167	B21121622-002	HC-8015-DRO-	SAMP		12/26/2021 11:2	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		0		0	0	0	0.0370328	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0836808	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.0313208	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.0829		0.0952	0	0	0.0003199	0.001904	0	87%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1551555		0.1904	0	0	0.0004084	0.001904	0	81%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948168	CCV_1226HP50	HC-8015-DRO-	CCV		12/27/2021 12:5	1	R372351		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		4.88013965		5	0	0	0.0879	0.3	0	98%	80	120	0%	
n-Triacontane	S	mg/L		0.2220504		0.2	0	0	0.000336	0.002	0	111%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948169	CCV_1226HP50	HC-8015-DRO-	CCV		12/27/2021 1:34:	1	R372351		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		15.86322		15	0	0	0.0389	0.3	0	106%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		16.45564		15	0	0	0.0749	0.3	50	110%	80	120	0%	
o-Terphenyl	S	mg/L		0.2124378		0.2	0	0	0.000429	0.002	0	106%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948170	B21121616-001	HC-8015-DRO-	SAMP		12/27/2021 3:43:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		0.2567575		0	0	0	0.039289	0.303	0	0%	0	0	0%	J
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.088779	0.303	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0.2700363		0	0	0	0.033229	0.303	0	0%	0	0	0%	J

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948170	B21121616-001	HC-8015-DRO-	SAMP		12/27/2021 3:43:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane (SGT)	S	mg/L		0.0962		0.101	0	0	0.0003394	0.00202	0	95%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1451255		0.202	0	0	0.0004333	0.00202	0	72%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948171	B21121605-002	HC-8015-DRO-	SAMP		12/27/2021 4:26:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		1.257842		0	0	0	0.0370328	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0.10345144		0	0	0	0.0836808	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons (SGT	A	mg/L		1.385268		0	0	0	0.0313208	0.3	0	0%	0	0	0%	
n-Triacontane (SGT)	S	mg/L		0.0986		0.0952	0	0	0.0003199	0.001904	0	104%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1885758		0.1904	0	0	0.0004084	0.001904	0	99%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948172	B21121605-003	HC-8015-DRO-	SAMP		12/27/2021 5:09:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		1.397764		0	0	0	0.038511	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.087021	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		1.502644		0	0	0	0.032571	0.3	0	0%	0	0	0%	
n-Triacontane (SGT)	S	mg/L		0.0929		0.099	0	0	0.0003326	0.00198	0	94%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1816916		0.198	0	0	0.0004247	0.00198	0	92%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948173	B21121609-001	HC-8015-DRO-	SAMP		12/27/2021 5:51:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		3.977403		0	0	0	0.0366827	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0.17698956		0	0	0	0.0828897	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons (SGT	A	mg/L		4.198934		0	0	0	0.0310247	0.3	0	0%	0	0	0%	
n-Triacontane (SGT)	S	mg/L		0.0955		0.0943	0	0	0.0003168	0.001886	0	101%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1784275		0.1886	0	0	0.0004045	0.001886	0	95%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948174	B21121613-001	HC-8015-DRO-	MS-DOD		12/27/2021 6:34:	1	162352	12/20/2021	1E+07	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH (SGT-Oil Range)	A	mg/L		4.7792449		4.785	0	0	0.0841203	0.3	0	100%	41	113	0%	
n-Triacontane (SGT)	S	mg/L		0.0924		0.0957	0	0	0.0003216	0.002	0	97%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948175	LCS-162352	HC-8015-DRO-	LCS-DOD		12/27/2021 8:00:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (SGT-C10 to	A	mg/L		14.89724		15	0	0	0.0389	0.3	0	99%	36	132	0%	
Total Extractable Hydrocarbons (SGT	A	mg/L		15.84407		15	0	0	0.0329	0.3	0	106%	60	132	0%	
o-Terphenyl (SGT)	S	mg/L		0.2019174		0.2	0	0	0.000429	0.002	0	101%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948176	B21121613-001	HC-8015-DRO-	MSD-DOD		12/27/2021 8:43:	1	162352	12/20/2021	1E+07	1E+07	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH (SGT-Oil Range)	A	mg/L		4.87512207		4.74	0	4.7792449	0.0833292	0.3	0	103%	41	113	2%	
n-Triacontane (SGT)	S	mg/L		0.0938		0.0948	0	0	0.0003185	0.002	0	99%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948178	CCV_1226HP53	HC-8015-DRO-	CCV		12/27/2021 10:5	1	R372351		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		4.77245410		5	0	0	0.0879	0.3	0	95%	80	120	0%	
n-Triacontane	S	mg/L		0.2152825		0.2	0	0	0.000336	0.002	0	108%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14948179	CCV_1226HP53	HC-8015-DRO-	CCV		12/27/2021 11:3	1	R372351		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		14.891		15	0	0	0.0389	0.3	0	99%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.44637		15	0	0	0.0749	0.3	50	103%	80	120	0%	
o-Terphenyl	S	mg/L		0.1995018		0.2	0	0	0.000429	0.002	0	100%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14950319	CCV_1226HP55	HC-8015-DRO-	CCV		12/27/2021 10:2	1	R372351		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		5.13239502		5	0	0	0.0879	0.3	0	103%	80	120	0%	
n-Triacontane	S	mg/L		0.2173307		0.2	0	0	0.000336	0.002	0	109%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14950320	CCV_1226HP55	HC-8015-DRO-	CCV		12/27/2021 11:0	1	R372351		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		15.44586		15	0	0	0.0389	0.3	0	103%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.95357		15	0	0	0.0749	0.3	50	106%	80	120	0%	
o-Terphenyl	S	mg/L		0.212485		0.2	0	0	0.000429	0.002	0	106%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14950321	LCS-162352-RR	HC-8015-DRO-	LCS-DOD		12/28/2021 3:25:	1	162352	12/20/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH (SGT-Oil Range)	A	mg/L		5.67233229		5	0	0	0.0879	0.3	0	113%	41	113	0%	
n-Triacontane (SGT)	S	mg/L		0.1133		0.1	0	0	0.000336	0.002	0	113%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14950322	CCV_1226HP56	HC-8015-DRO-	CCV		12/28/2021 6:17:	1	R372351		0	0	

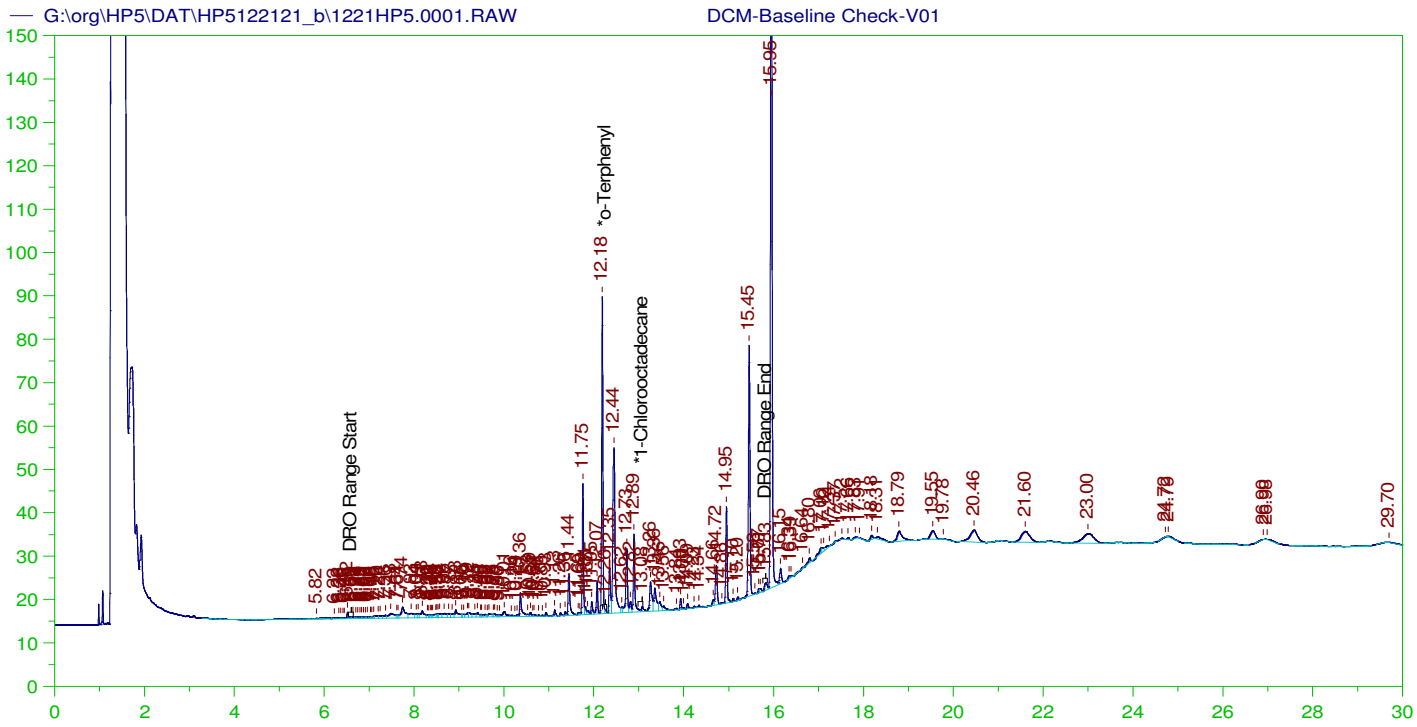
Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		5.55641016		5	0	0	0.0879	0.3	0	111%	80	120	0%	
n-Triacontane	S	mg/L		0.2231189		0.2	0	0	0.000336	0.002	0	112%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14950323	CCV_1226HP56	HC-8015-DRO-	CCV		12/28/2021 7:00:	1	R372351		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		15.843		15	0	0	0.0389	0.3	0	106%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		16.35379		15	0	0	0.0749	0.3	50	109%	80	120	0%	
o-Terphenyl	S	mg/L		0.2145115		0.2	0	0	0.000429	0.002	0	107%	80	120	0%	

Write Sequence	Insert Entries(Have the first cell for entries selecte							
Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
:\org\HP5\DAT\HP5122121_b\1221HP5.01r	DCM-Baseline Check-V01	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.02r	DCM-Baseline Check-V02	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.03r	MARKER_1220HP503r, C40 ;1220HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211221.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.04r	CCV_1221HP504r, RRO ;1221HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.05r	CCV_1221HP505r, DRO ;1221HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.06r	DCM-Baseline Check-V06	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.07r	LCS-162352 ;1221HP5 ,	G:\Org\HP5\Methods\D3_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1000	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.08r	MB-162352 ;1221HP5 ,	G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met G:\Org\HP5\Methods\DR_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	1000	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.09r	B21121613-001B ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met G:\Org\HP5\Methods\DR_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	990	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.10r	B21121613-001BMS ;1221HP5 ,	G:\Org\HP5\Methods\D3_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	990	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.11r	B21121613-001BMSD ;1221HP5 ,	G:\Org\HP5\Methods\D3_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1040	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.12r	DCM-Baseline Check-V12	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.13r	B21121613-002B ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met G:\Org\HP5\Methods\DR_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	1020	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.14r	DCM-Baseline Check-V14	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.15r	B21121609-001C ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met G:\Org\HP5\Methods\D3_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-122115-IK-L#.met	1060	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.16r	DCM-Baseline Check-V16	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.17r	B21121611-001B ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met G:\Org\HP5\Methods\D3_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-122117-IK-L#.met	1030	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.18r	B21121616-001C ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met G:\Org\HP5\Methods\D3_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-122115-IK-L#.met	990	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.19r	MARKER_1220HP519r, C40 ;1220HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211221.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.20r	CCV_1221HP520r, RRO ;1221HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.21r	CCV_1221HP521r, DRO ;1221HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.22r	DCM-Baseline Check-V22	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.23r	B21121623-001C ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-122123-IK-L%.met G:\Org\HP5\Methods\D3_OROS-122123-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	1020	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.24r	DCM-Baseline Check-V24	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.25r	B21121605-001A ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-122123-IK-L%.met G:\Org\HP5\Methods\D3_OROS-122123-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	1050	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.26r	DCM-Baseline Check-V26	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.27r	B21121605-002A ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met G:\Org\HP5\Methods\D3_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-122127-IK-L#.met	1050	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.28r	B21121605-003A ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met G:\Org\HP5\Methods\D3_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-122127-IK-L#.met	1010	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.29r	DCM-Baseline Check-V29	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.30r	B21121622-001B ;1221HP5 , $HC-8015-DRO-W, due to baseline	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	960	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.31r	B21121622-002B ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-122131-IK-L%.met G:\Org\HP5\Methods\D3_OROS-122131-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	1050	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.32r	B21121622-003B ;1221HP5 , $HC-8015-DRO-W, need rerun to verify no carryover	G:\Org\HP5\Methods\DR_8015-C24T-IJ-L0.met	900	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.33r	MARKER_1220HP535r, C40 ;1220HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211221.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.34r	CCV_1221HP536r, RRO ;1221HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.35r	CCV_1221HP537r, DRO ;1221HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.36r	DCM-Baseline Check-V36	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.37r	DCM-Baseline Check-V37	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.38r	B21121622-001B ;1221HP5 , $HC-8015-DRO-W, rr	G:\Org\HP5\Methods\DR_8015-122138-IK-L%.met G:\Org\HP5\Methods\D3_OROS-122138-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	960	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.39r	B21121622-003B ;1221HP5 , $HC-8015-DRO-W, rr	G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met G:\Org\HP5\Methods\DR_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	900	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.40r	DCM-Baseline Check-V40	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.41r	B21121613-001BMS-RRO ;1221HP5 ,	G:\Org\HP5\Methods\D3_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1045	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.42r	DCM-Baseline Check-V42	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.43r	B21121613-001BMSD-RRO ;1221HP5 ,	G:\Org\HP5\Methods\D3_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1055	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.44r	LCS-162352-RRO ;1221HP5 ,	G:\Org\HP5\Methods\D3_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1000	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.45r	MARKER_1220HP546r, C40 ;1220HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211221.met	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.46r	CCV_1221HP547r, RRO ;1221HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1	1	1	1	0
:\org\HP5\DAT\HP5122121_b\1221HP5.47r	CCV_1221HP548r, DRO ;1221HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1	1	1	1	0

Write Sequence	Insert Entries(Have the first cell for entries selecte							
Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
G:\org\HP5\DAT\HP5122621_b\1226HP5.01r	DCM-Baseline Check-V01	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.02r	DCM-Baseline Check-V02	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.03r	MARKER_1226HP503r, C40 ;1226HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211226.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.04r	CCV_1226HP504r, RRO ;1226HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.05r	CCV_1226HP505r, DRO ;1226HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.06r	DCM-Baseline Check-V06	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.07r	LCS-162352 ;1226HP5 , Needs RR GC vial cap was loose and sample may have concentrated.	G:\Org\HP5\Methods\D3_8015-24-IL-L0.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.08r	MB-162352 ;1226HP5 , SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.09r	B21121613-001B ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	990	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.10r	B21121613-001BMS ;1226HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	990	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.11r	B21121613-001BMSD ;1226HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1040	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.12r	DCM-Baseline Check-V12	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.13r	B21121622-001B ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	960	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.14r	B21121605-001A ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1050	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.15r	B21121623-001C ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1020	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.16r	DCM-Baseline Check-V16	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.17r	B21121611-001B ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1030	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.18r	B21121622-002B ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1050	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.19r	MARKER_1226HP503r, C40 ;1226HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211226.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.20r	CCV_1226HP504r, RRO ;1226HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.21r	CCV_1226HP505r, DRO ;1226HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.22r	DCM-Baseline Check-V22	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.23r	DCM-Baseline Check-V23	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.24r	B21121616-001C ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	990	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.25r	B21121605-002A ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\D3_8015-C24T-IL-L%.met G:\Org\HP5\Methods\D3_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1050	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.26r	B21121605-003A ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\D3_8015-122626-IL-L%.met G:\Org\HP5\Methods\D3_OROS-122626-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1010	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.27r	B21121609-001C ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\D3_8015-122627-IL-L%.met G:\Org\HP5\Methods\D3_OROS-122627-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1060	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.28r	B21121613-001BMS-RRO ;1226HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1045	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.29r	DCM-Baseline Check-V29	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.30r	LCS-162352 ;1226HP5 , RR-SGT	G:\Org\HP5\Methods\D3_8015-122630-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.31r	B21121613-001BMSD-RRO ;1226HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1055	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.32r	LCS-162352-RRO ;1226HP5 , NEEDS RR	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.33r	MARKER_1226HP533r, C40 ;1226HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211226.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.34r	CCV_1226HP534r, RRO ;1226HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.35r	CCV_1226HP535r, DRO ;1226HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.36r	DCM-Baseline Check-V36	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.49r	MARKER_1226HP549r, C40 ;1226HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211226.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.50r	CCV_1226HP550r, RRO ;1226HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.51r	CCV_1226HP551r, DRO ;1226HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.52r	DCM-Baseline Check-V52	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.56r	DCM-Baseline Check-V56	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.57r	LCS-162352-RRO ;1226HP5 , RR-SGT	G:\Org\HP5\Methods\D3_ORO- AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.60r	MARKER_1226HP560r, C40 ;1226HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211226.met	1	1	1	1	0
G:\org\HP5\DAT\HP5122621_b\1226HP5.61r	CCV_1226HP561r, RRO ;1226HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1	1	1	1	0



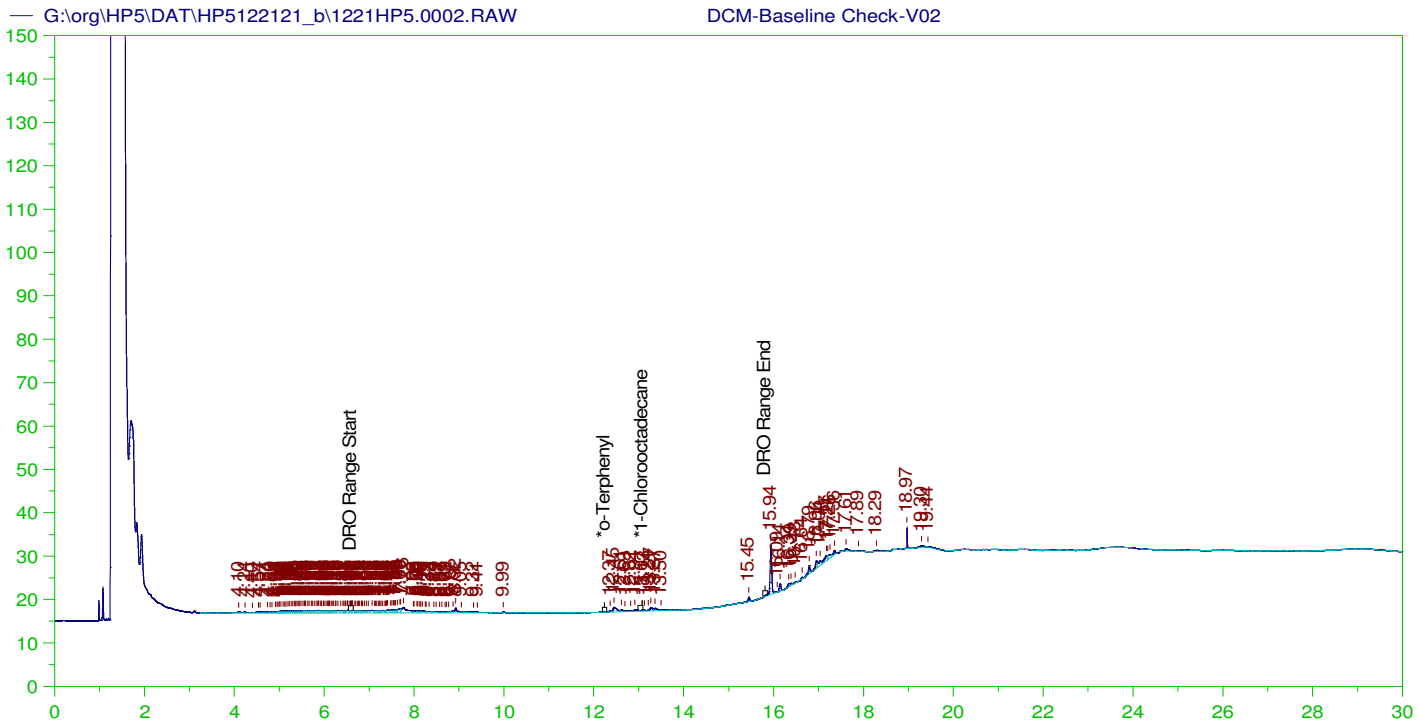
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V01
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0001.RAW
Date & Time Acquired: 12/21/2021 2:17:37 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.259	200.	.055	.03	-
*1-Chlorooctadecane	13.076	200.	.134	.07	-

DRO Area:1009653 DRO Amount: 32.20255
TEH Area:1709678 TEH Amount: 54.52963



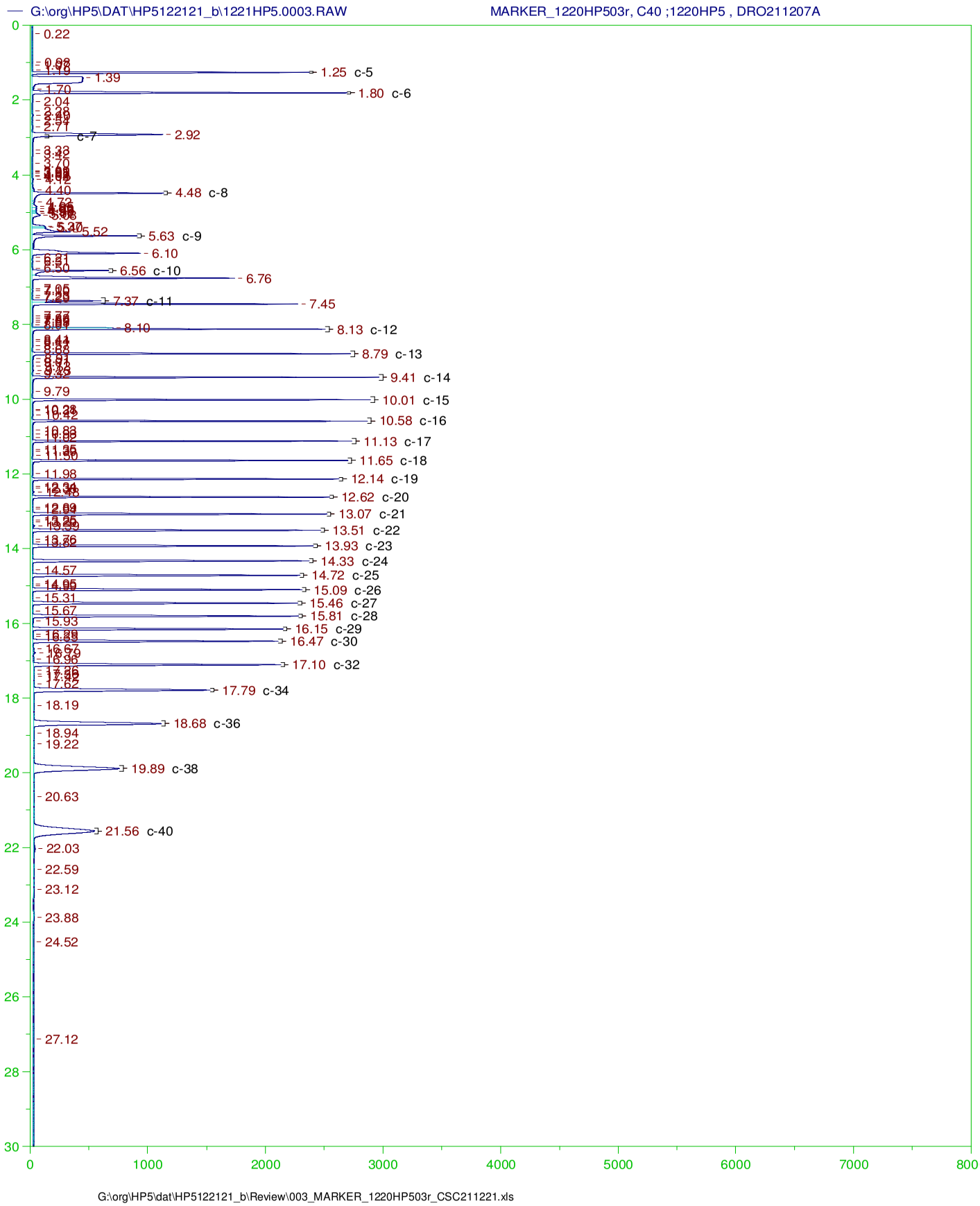
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V02
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0002.RAW
Date & Time Acquired: 12/21/2021 3:00:29 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.964	200.	.	. -
*1-Chlorooctadecane	13.074	200.	.027	.01 -

DRO Area:124973.6 DRO Amount: 3.985994
TEH Area:294331.7 TEH Amount: 9.387614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MARKER_1220HP503r, C40 ;1220HP5 , DRO211207A
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1.25 c-5
1.39
1.70
1.80 c-6
2.04
2.92
c-7
4.40
4.48 c-8
5.52
5.63 c-9
6.10
6.50
6.56 c-10
6.76
7.37 c-11
7.45
8.10
8.13 c-12
8.79 c-13
9.41 c-14
9.79
10.01 c-15
10.58 c-16
11.13 c-17
11.65 c-18
11.98
12.14 c-19
12.62 c-20
13.07 c-21
13.51 c-22
13.93 c-23
14.33 c-24
14.57
14.72 c-25
15.09 c-26
15.31
15.46 c-27
15.67
15.81 c-28
15.93
16.15 c-29
16.47 c-30
16.96
17.10 c-32
17.62
17.79 c-34
18.19
18.68 c-36
18.94
19.22
19.89 c-38
20.63
21.56 c-40
22.03
22.59
23.12
23.88
24.52
27.12
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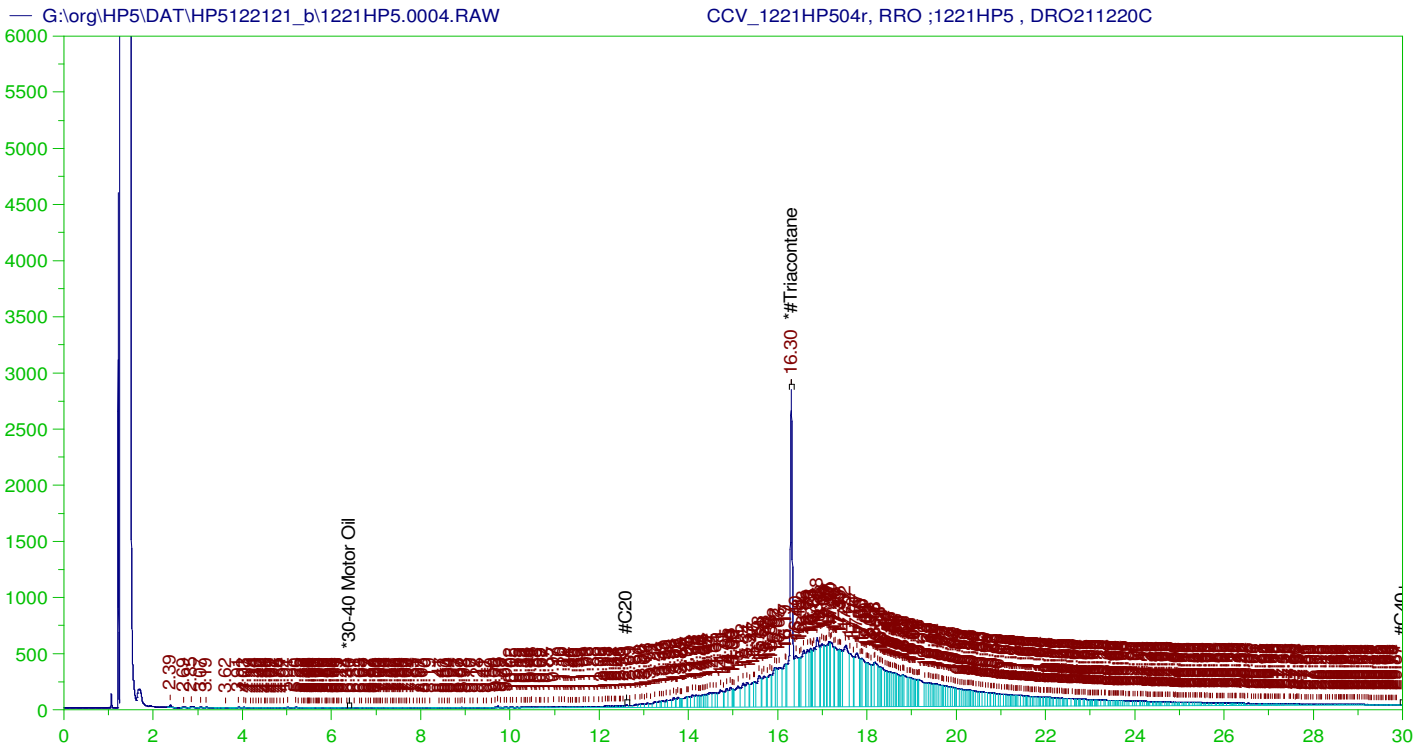

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1221HP504r, RRO ;1221HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0004.RAW
Date & Time Acquired: 12/21/2021 4:25:45 PM
Method File: G:\Org\HP5\Methods\DC_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.304	500.	348.356	69.67	-

~~RRO~~ TEH (Oil Range) Area:1.352419E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4738.277

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0004.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.065	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.304	200.	348.356	174.18	75-125

AMN 01/11/2022

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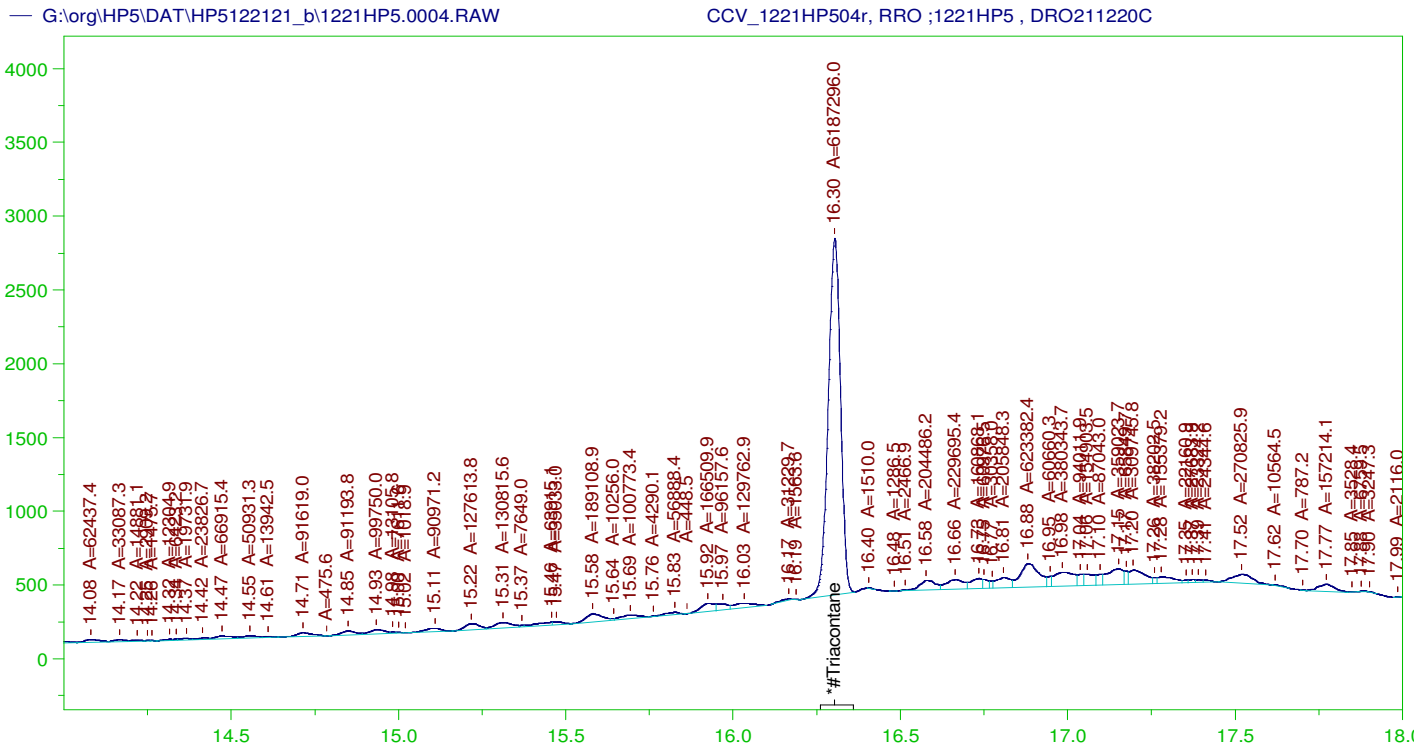


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1221HP504r, RRO ;1221HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0004.RAW
Date & Time Acquired: 12/21/2021 4:25:45 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.58 to 30.05

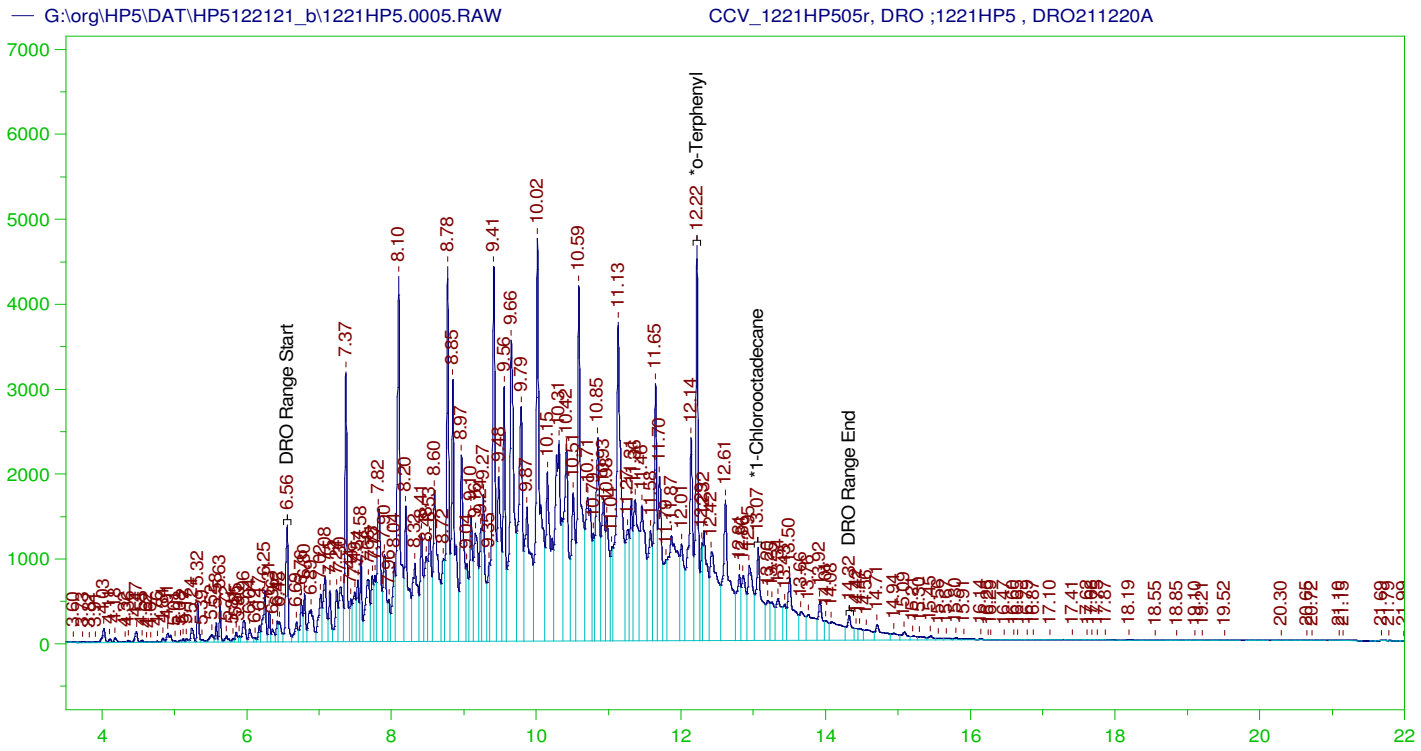
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.304	500.	213.87	42.77	-

RRO Area:6404931 RRO AMOUNT: 224.4005

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0004.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.065	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.304	200.	213.87	106.94	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1221HP505r, DRO ;1221HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0005.RAW
Date & Time Acquired: 12/21/2021 5:08:55 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Ik-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

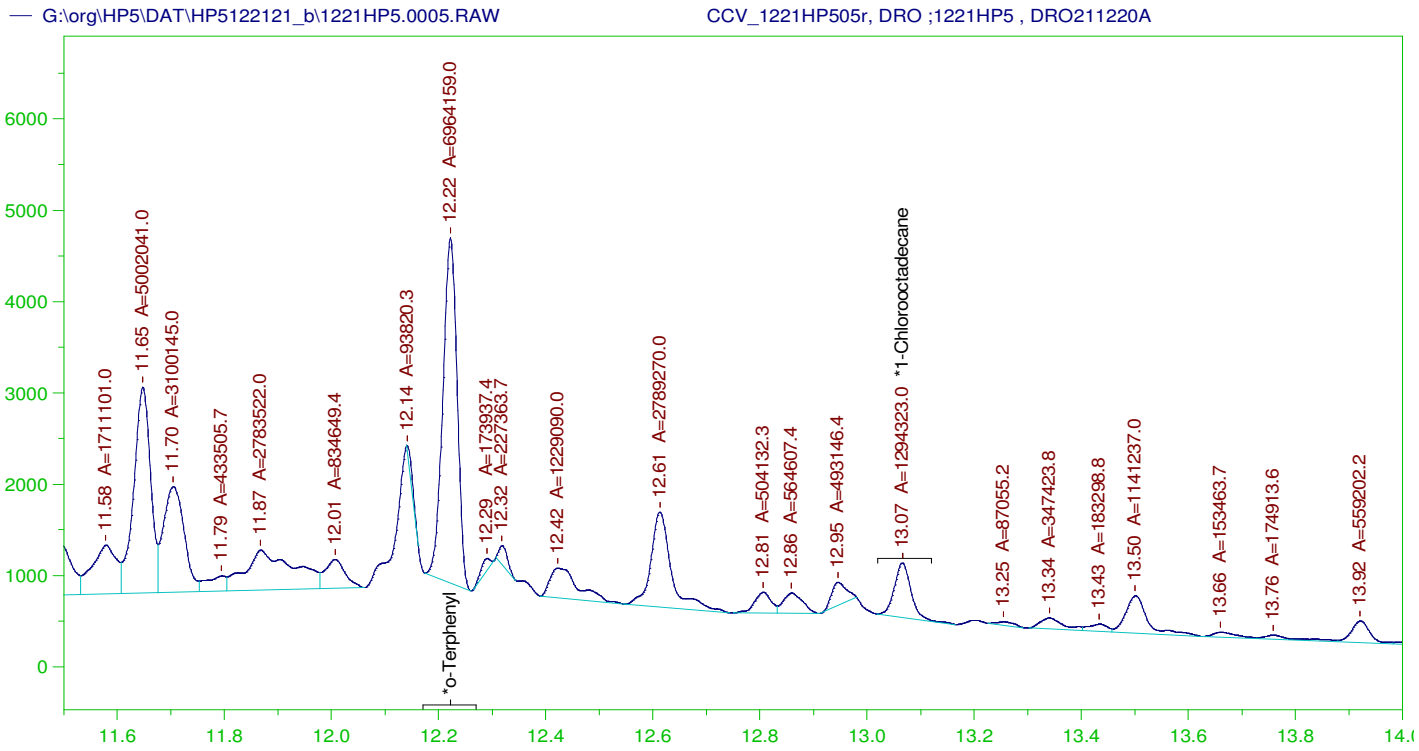
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	200.	325.217	162.61	-
*1-Chlorooctadecane	13.066	200.	155.538	77.77	-

DRO Area:4.600201E+08 DRO Amount: 14672.19
TEH Area:4.772049E+08 TEH Amount: 15220.3

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15220.3	101.47	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.222	200.	325.217	162.61	85-115
*1-Chlorooctadecane	13.066	200.	155.538	77.77	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1221HP505r, DRO ;1221HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0005.RAW
Date & Time Acquired: 12/21/2021 5:08:55 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Ik-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

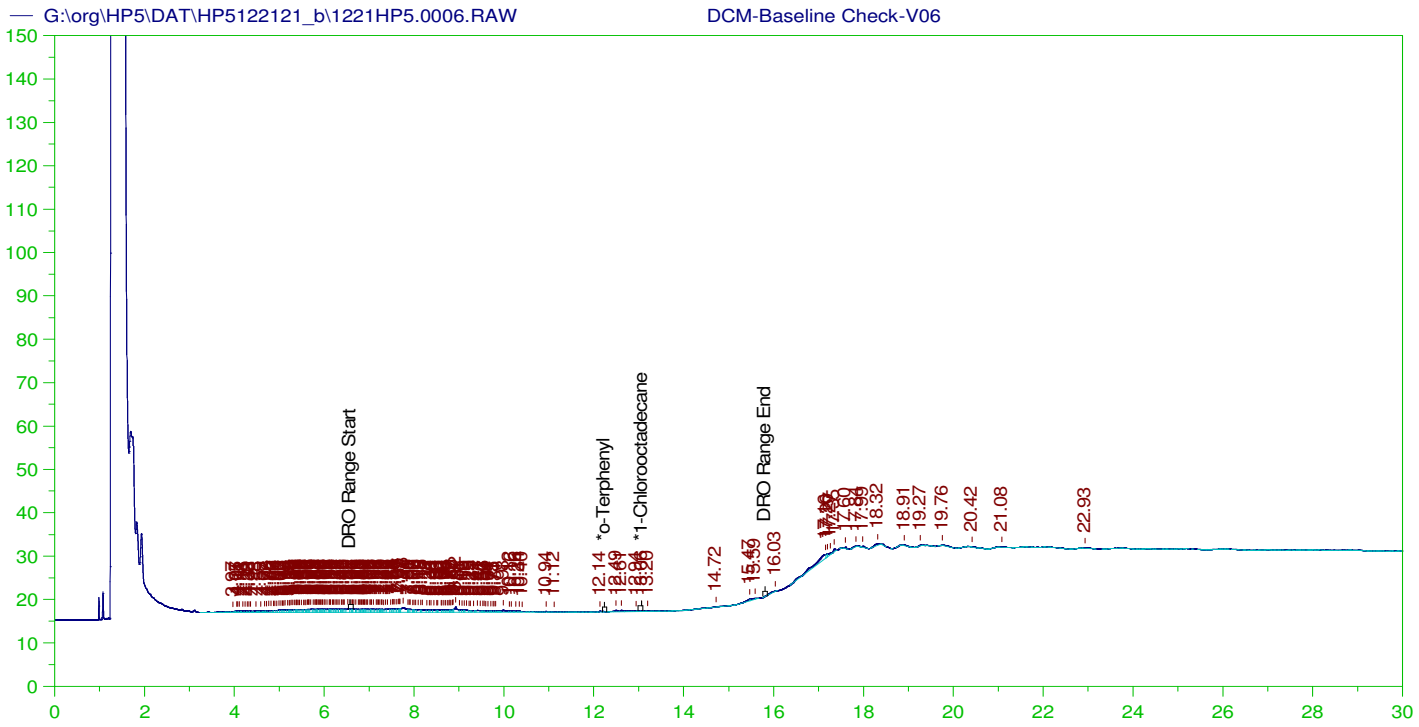
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	200.	196.123	98.06	-
*1-Chlorooctadecane	13.066	200.	36.45	18.23	-

DRO Area:2.553877E+08 DRO Amount: 8145.508
TEH Area:2.661105E+08 TEH Amount: 8487.508

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8487.51	56.58	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.222	200.	196.123	98.06	85-115
*1-Chlorooctadecane	13.066	200.	36.45	18.23	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V06
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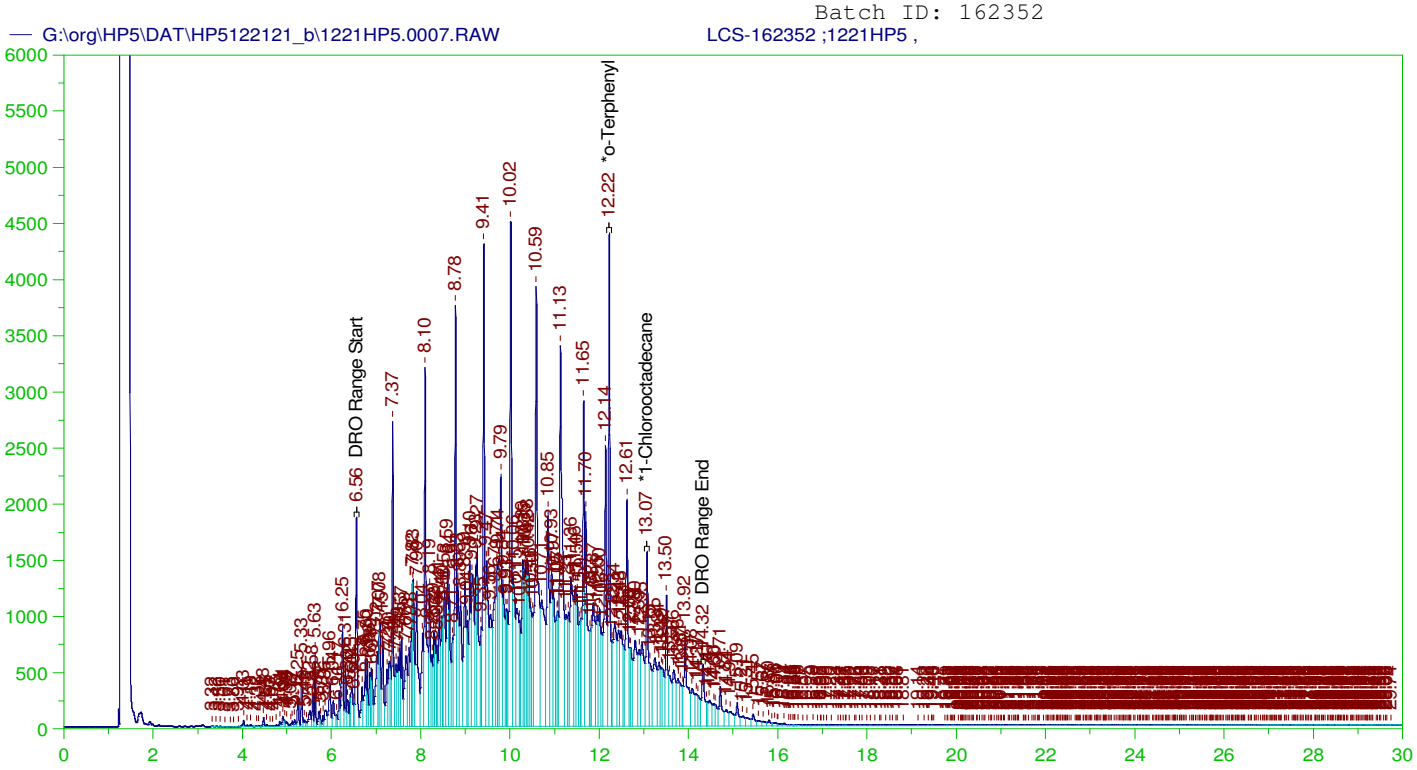
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.974	200.	.	-
*1-Chlorooctadecane	13.064	200.	.019	.01 -

DRO Area:145099.7 DRO Amount: 4.627907
TEH Area:284114.4 TEH Amount: 9.061737

Batch ID: 162352



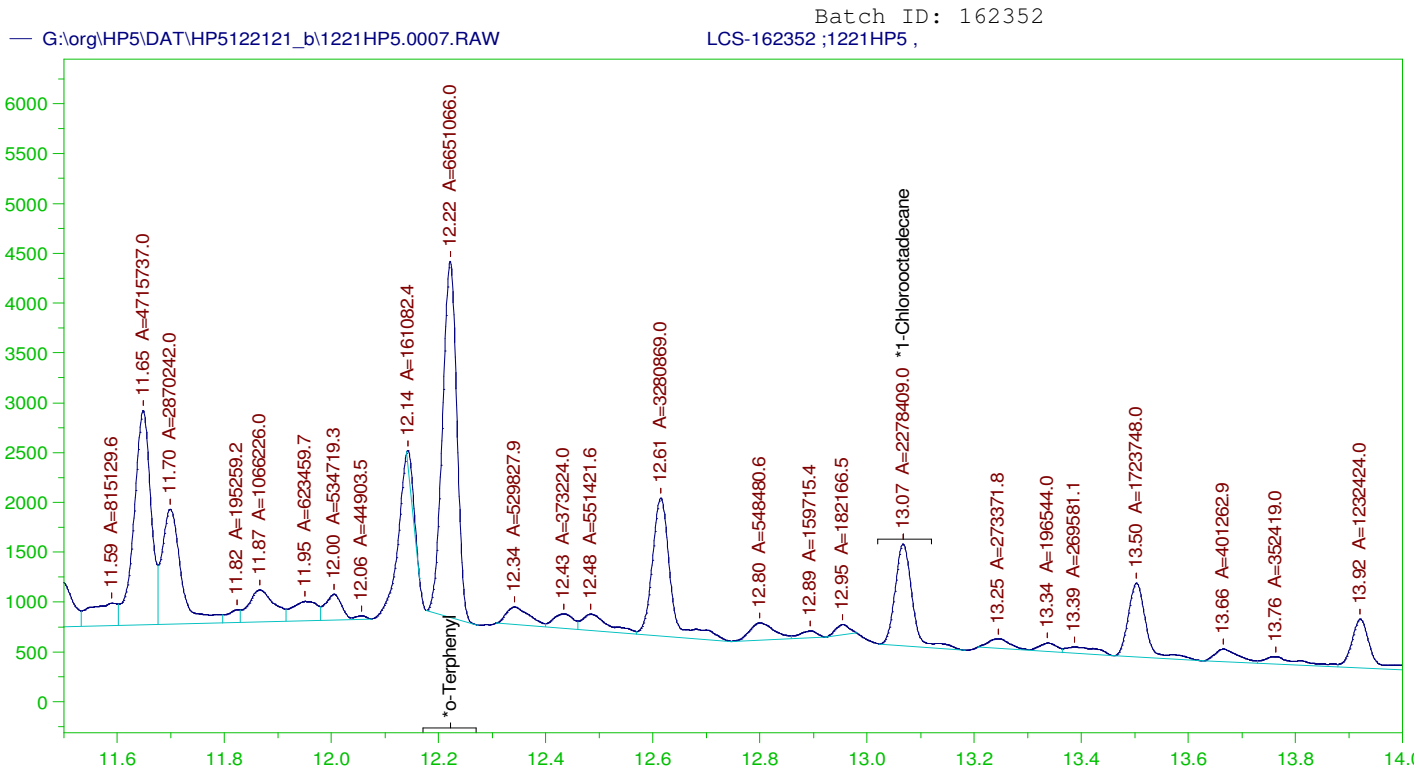
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: LCS-162352 ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0007.RAW
Date & Time Acquired: 12/21/2021 6:35:14 PM
Method File: G:\Org\HP5\Methods\D3_8015-24-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.2	.324	161.91	-
*1-Chlorooctadecane	13.067	.2	.152	76.05	-

DRO Area:4.174475E+08 DRO Amount: 13.31435
TEH Area:4.471555E+08 TEH Amount: 14.26188

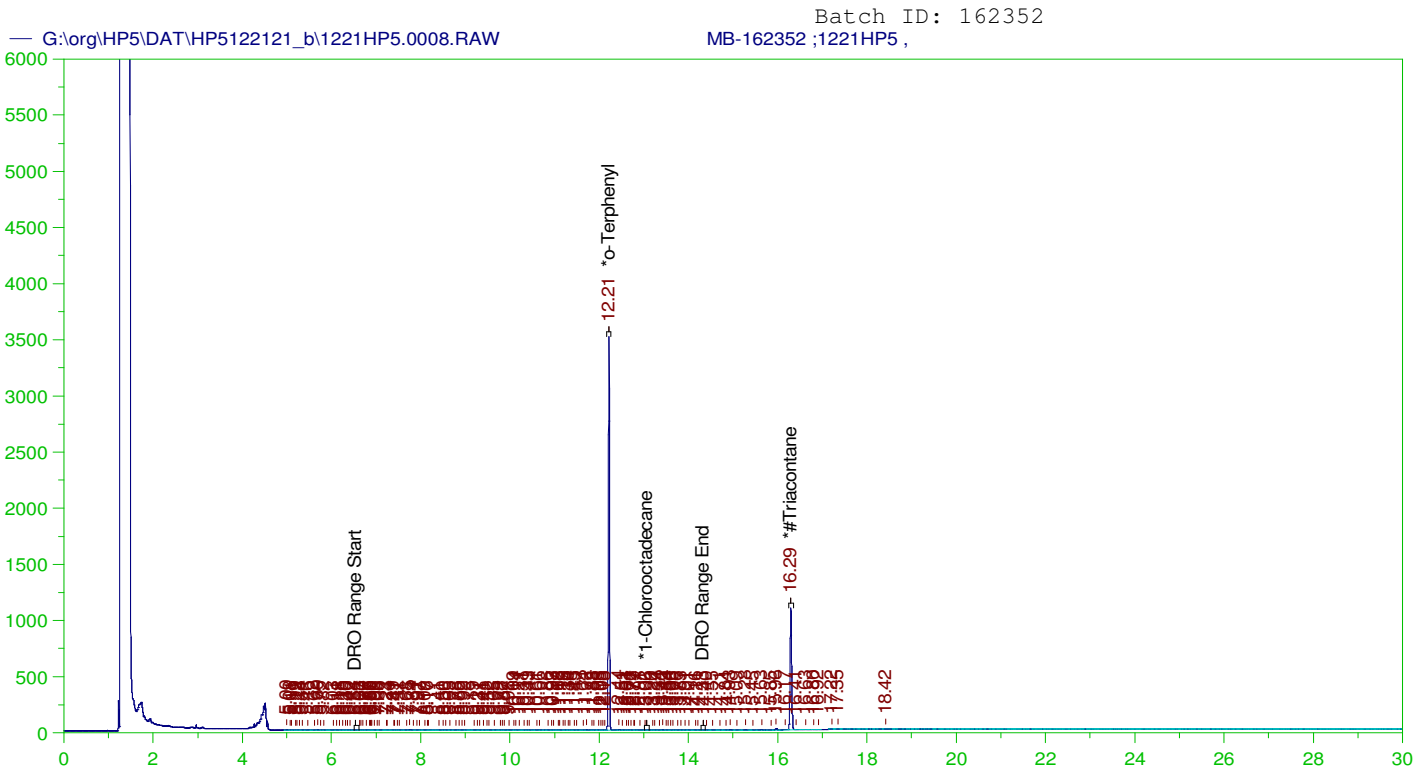


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: LCS-162352 ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0007.RAW
Date & Time Acquired: 12/21/2021 6:35:14 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Ik-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.2	.187	93.65	-
*1-Chlorooctadecane	13.067	.2	.064	32.08	-

DRO Area:2.060904E+08 DRO Amount: 6.573185
TEH Area:2.205345E+08 TEH Amount: 7.033879

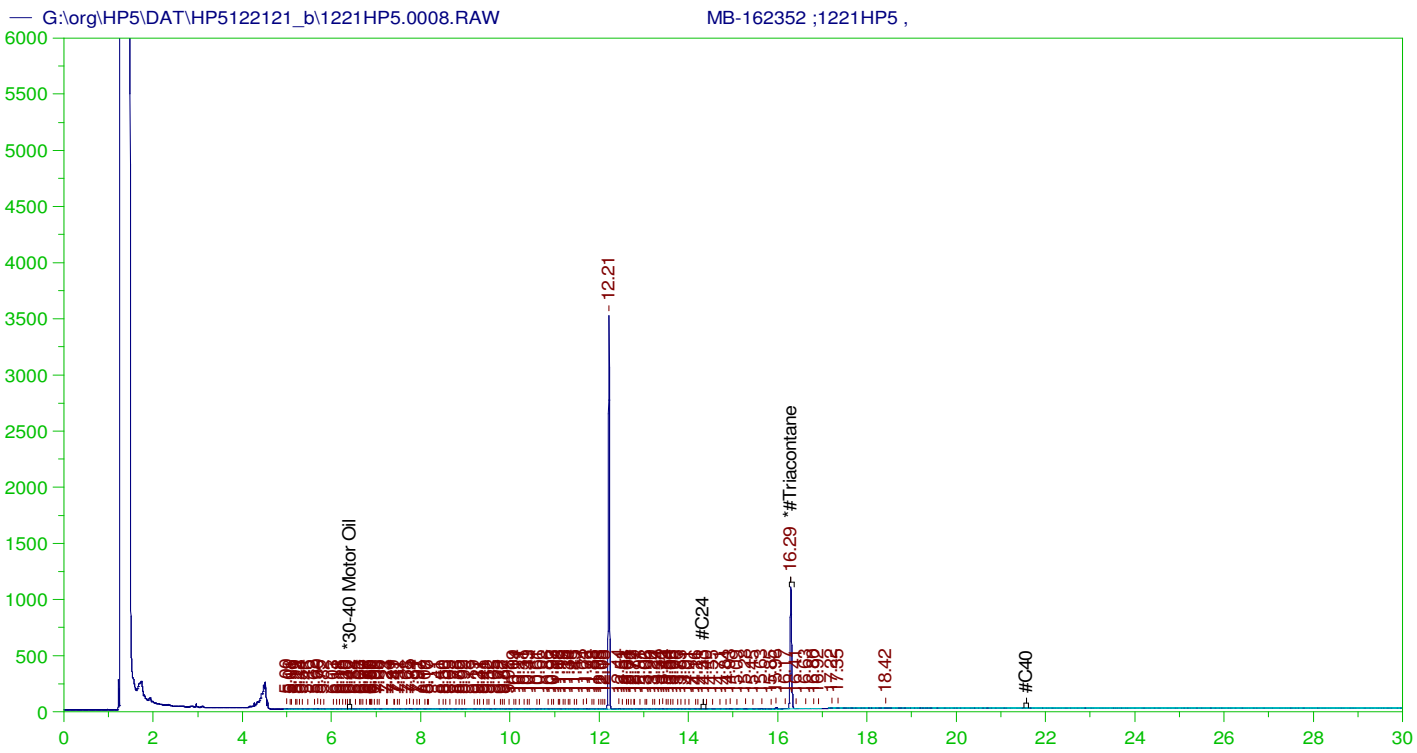


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: MB-162352 ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0008.RAW
Date & Time Acquired: 12/21/2021 7:18:27 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.215	.2	.183	91.66	-
*1-Chlorooctadecane	13.059	.2	.04		-
*#Triacontane	16.293	.2	.095	47.54	-

DRO Area:334103.8 DRO Amount: 1.065613E-02
TEH Area:580763.4 TEH Amount: 1.852326E-02



RESIDUAL RANGE ORGANICS CHROMATOGRAM

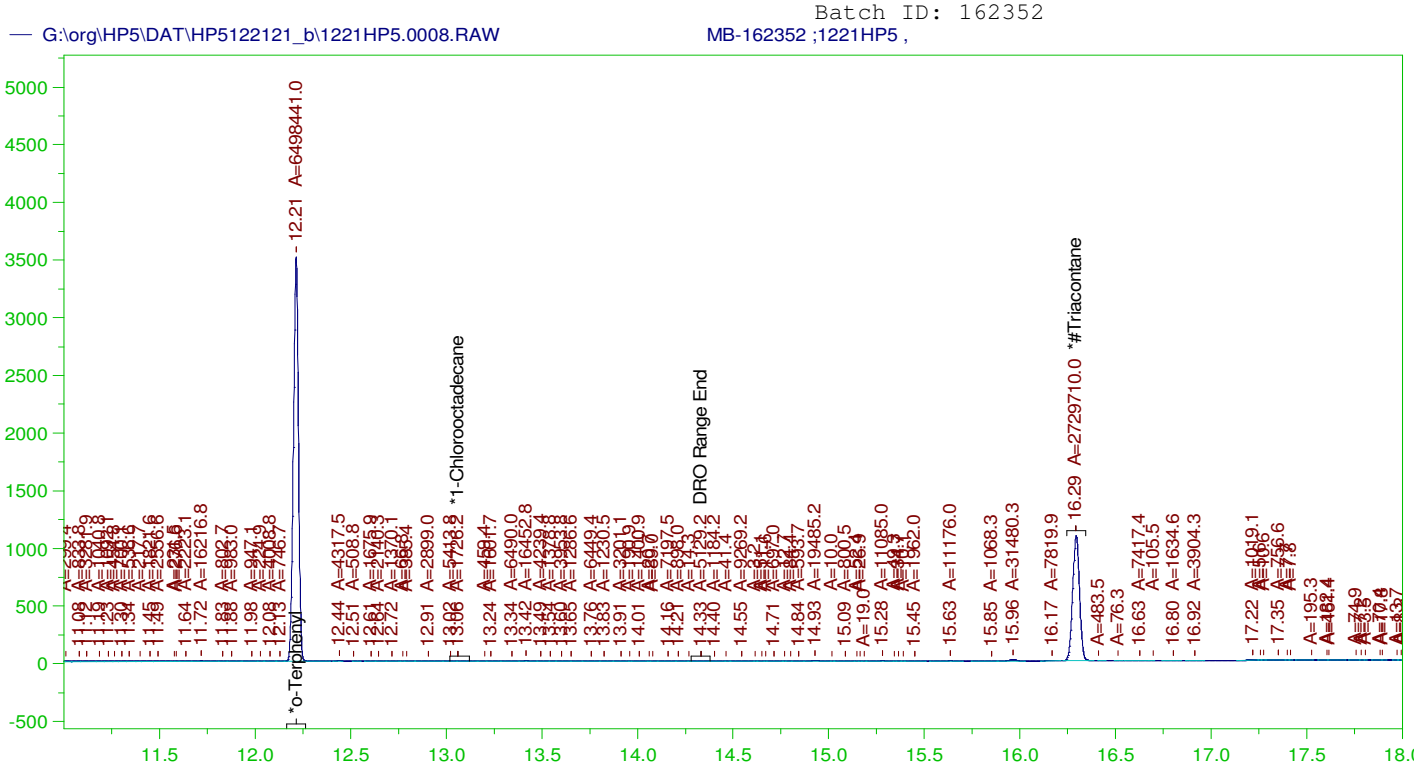
Sample Name: MB-162352 ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0008.RAW
Date & Time Acquired: 12/21/2021 7:18:27 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-SAMP.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.293	.5	.095	19.02	-

RRO Area:141137.4 RRO AMOUNT: 4.944833E-03

Batch ID: 162352



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MB-162352 ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0008.RAW
Date & Time Acquired: 12/21/2021 7:18:27 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

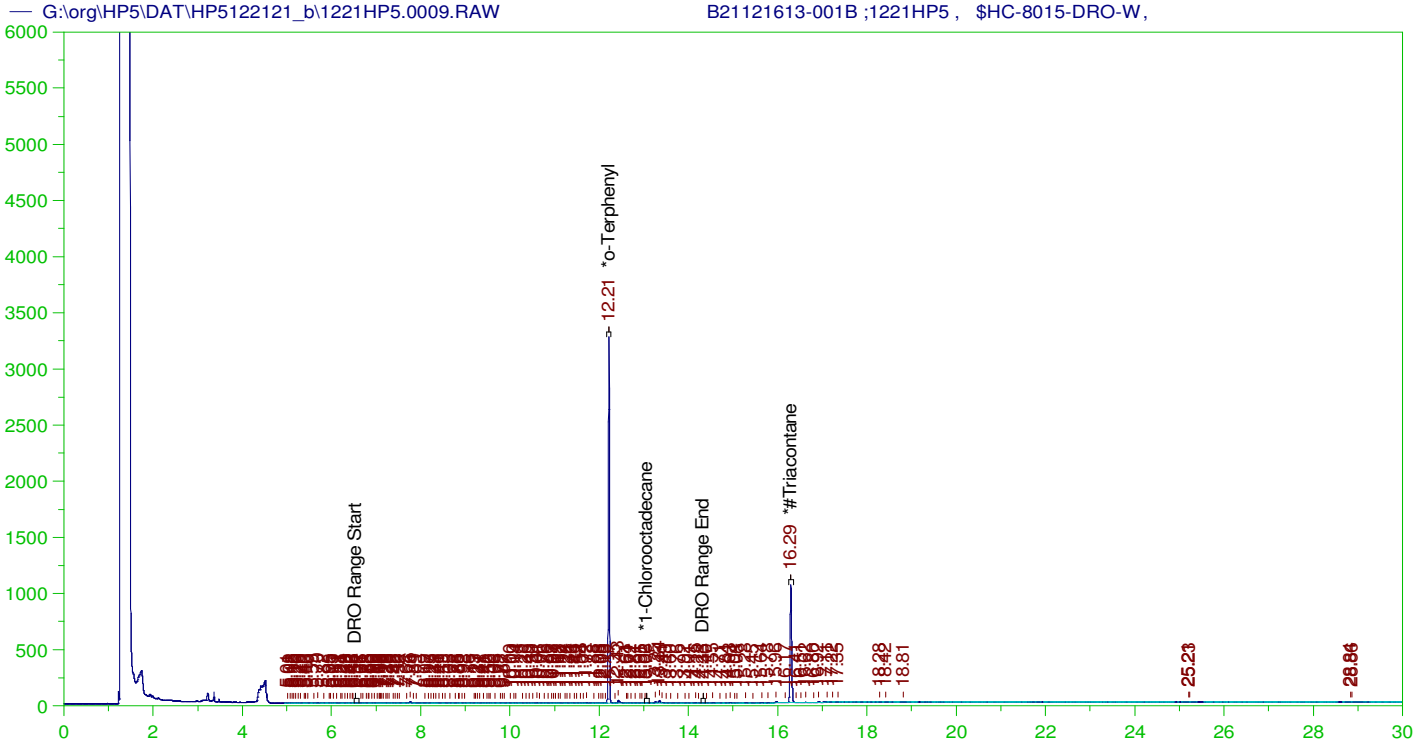
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.215	.2	.183	91.5	-
*1-Chlorooctadecane	13.059	.2	.	.02	-
*#Triacontane	16.293	.2	.094	47.18	-

DRO Area:312933.7 DRO Amount: 9.98092E-03
TEH Area:2935838 TEH Amount: 9.363762E-02

ERH2184 (RHMW05) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0009.RAW B21121613-001B ;1221HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121613-001B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0009.RAW
Date & Time Acquired: 12/21/2021 8:01:38 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

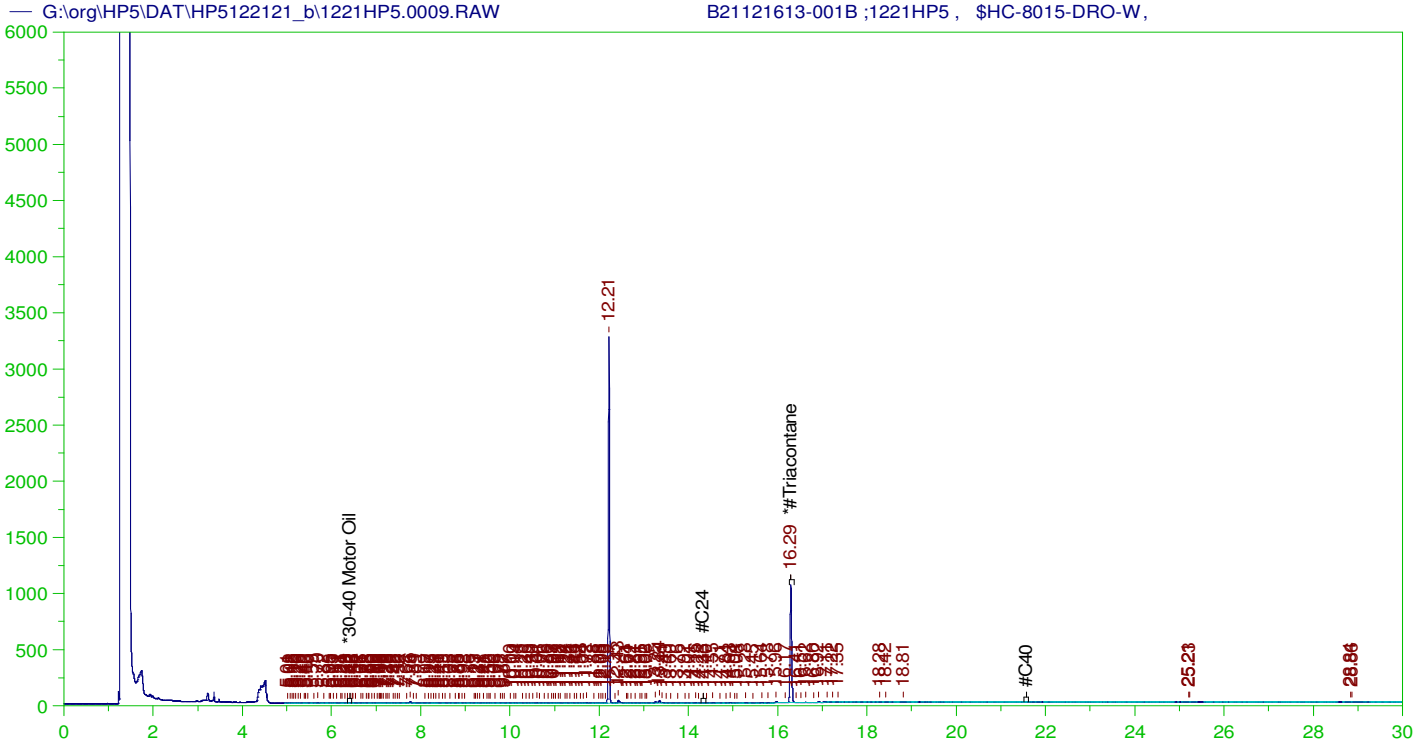
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.202	.172	84.99	-
*1-Chlorooctadecane	13.063	.202	.	.04	-
*#Triacontane	16.292	.202	.093	46.03	-

DRO Area:587625.2 DRO Amount: 1.893143E-02
TEH Area:822057.5 TEH Amount: 0.0264841

ERH2184 (RHMW05) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0009.RAW B21121613-001B ;1221HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121613-001B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0009.RAW
Date & Time Acquired: 12/21/2021 8:01:38 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-SAMP.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

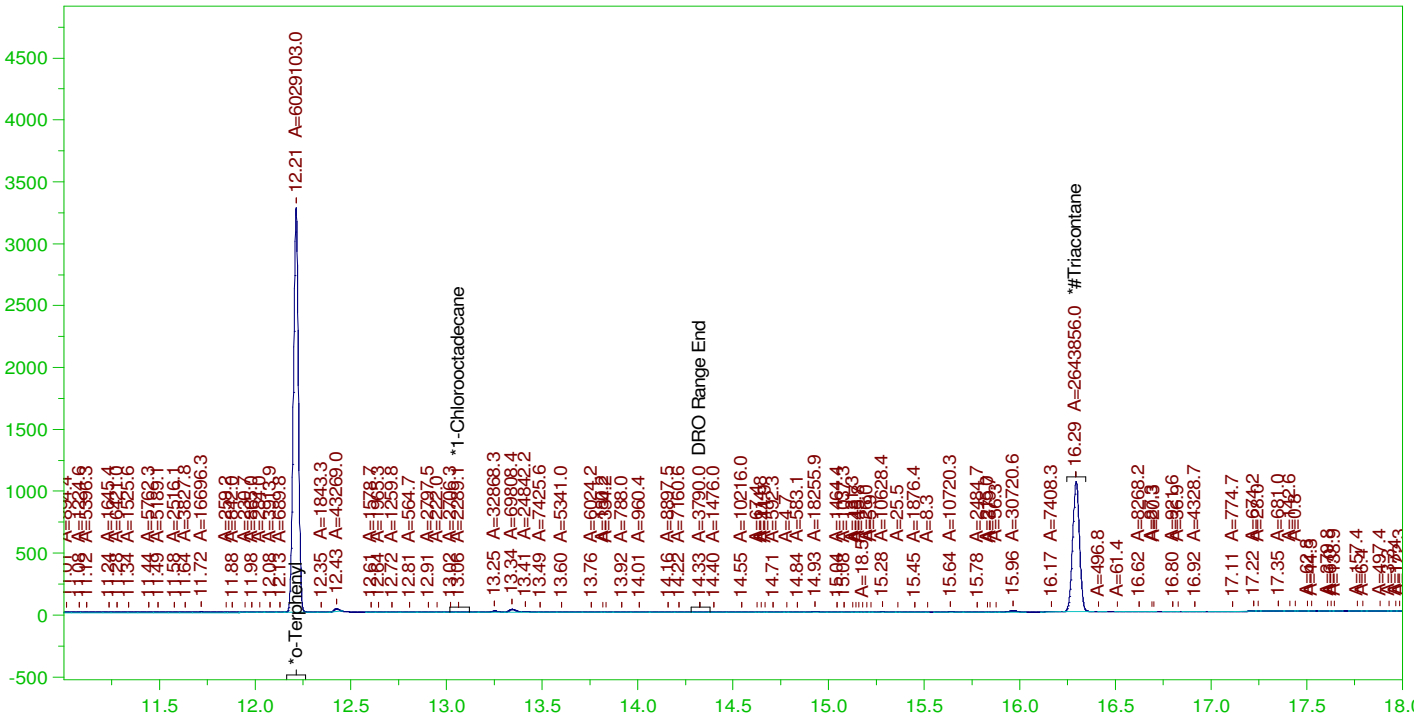
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.292	.505	.093	18.41	-

RRO Area:144972.6 RRO AMOUNT: 5.130504E-03

ERH2184 (RHMW05) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0009.RAW B21121613-001B ;1221HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

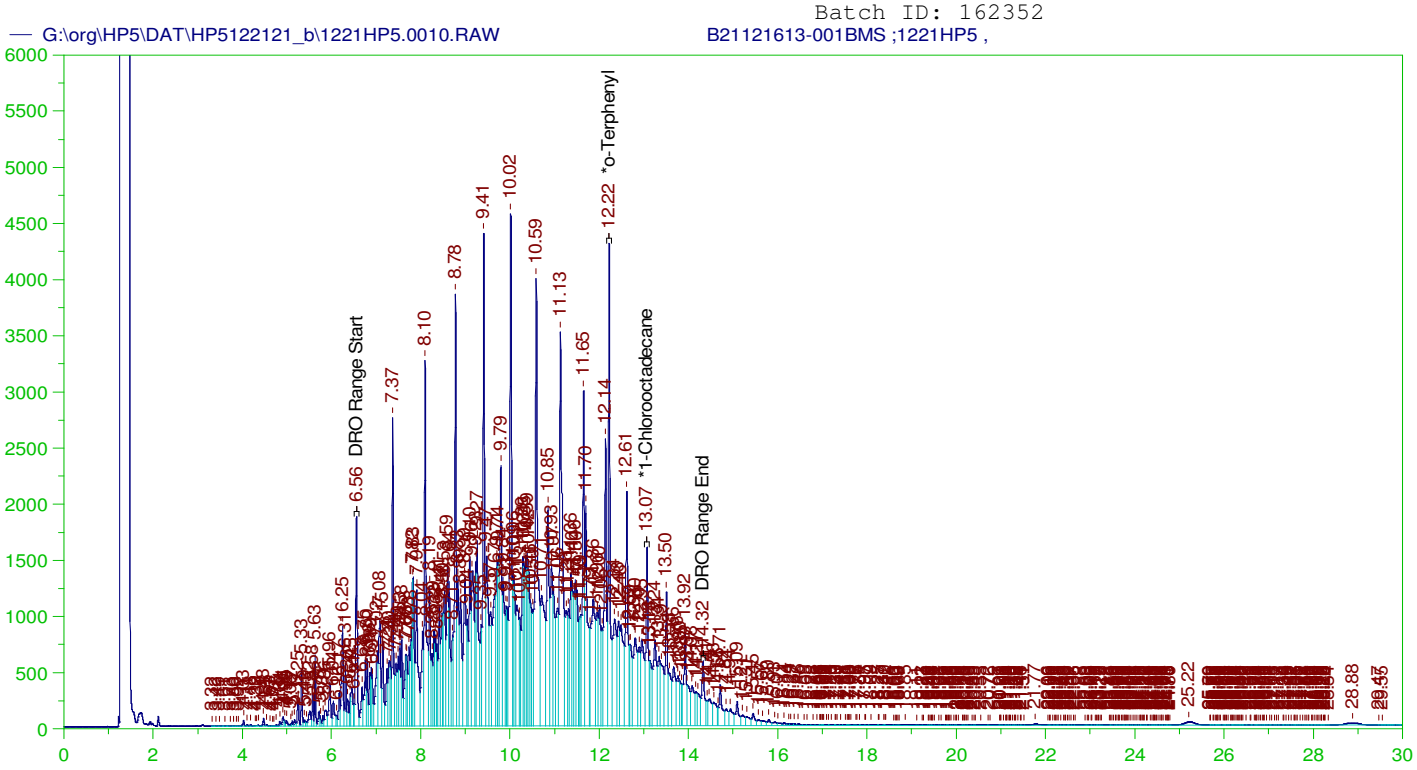
Sample Name: B21121613-001B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0009.RAW
Date & Time Acquired: 12/21/2021 8:01:38 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.202	.172	84.89	-
*1-Chlorooctadecane	13.063	.202	.	.03	-
*#Triacontane	16.292	.202	.092	45.69	-

DRO Area:547150.2 DRO Amount: 1.762745E-02
TEH Area:2952943 TEH Amount: 9.513452E-02

Batch ID: 162352



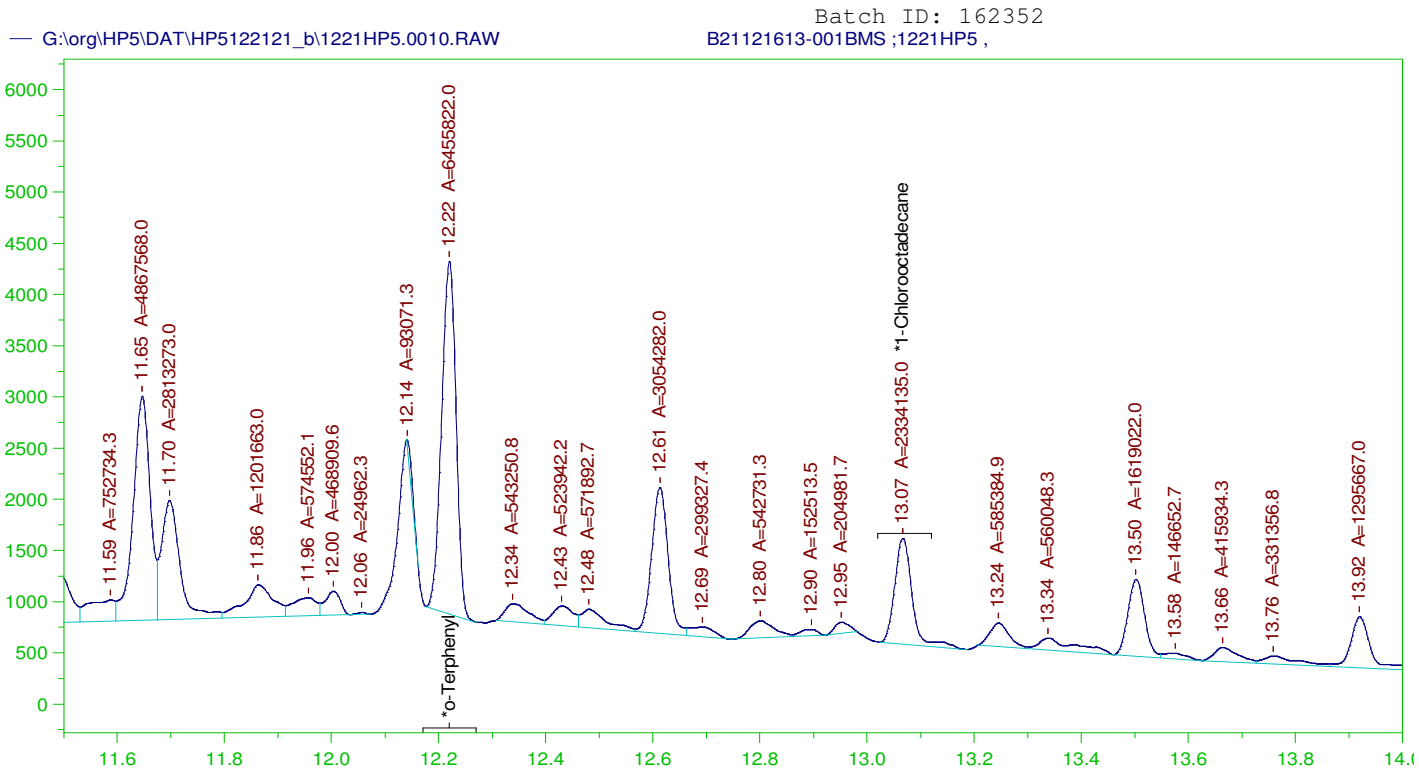
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121613-001BMS ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0010.RAW
Date & Time Acquired: 12/21/2021 8:44:53 PM
Method File: G:\Org\HP5\Methods\D3_8015-24-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.22	.202	.341	168.93	-
*1-Chlorooctadecane	13.067	.202	.152	75.3	-

DRO Area:4.286411E+08 DRO Amount: 13.80946
TEH Area:4.605626E+08 TEH Amount: 14.83788



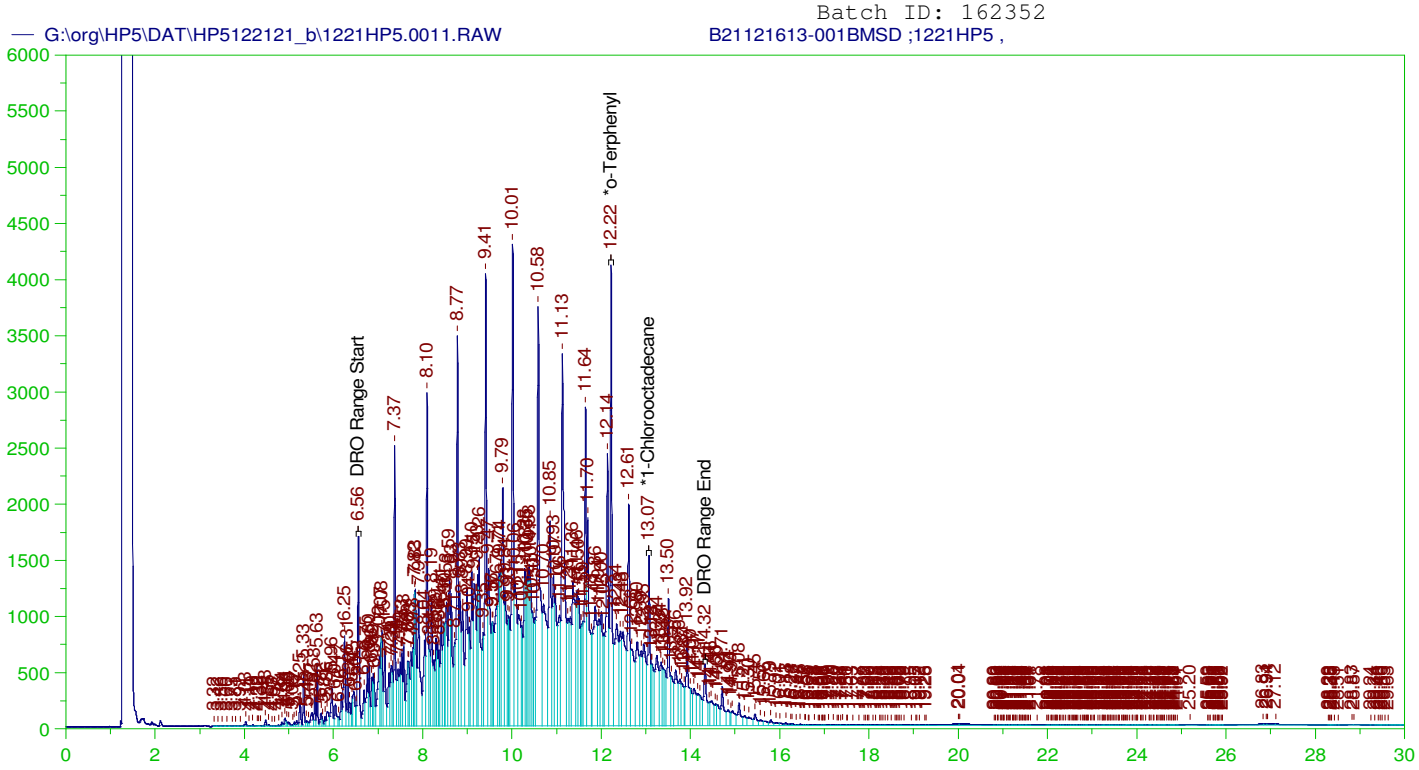
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: B21121613-001BMS ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0010.RAW
Date & Time Acquired: 12/21/2021 8:44:53 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Ik-24.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.22	.202	.184	90.9	-
*1-Chlorooctadecane	13.067	.202	.066	32.87	-

DRO Area:2.076382E+08 DRO Amount: 6.689449
TEH Area:2.217393E+08 TEH Amount: 7.143741

Batch ID: 162352



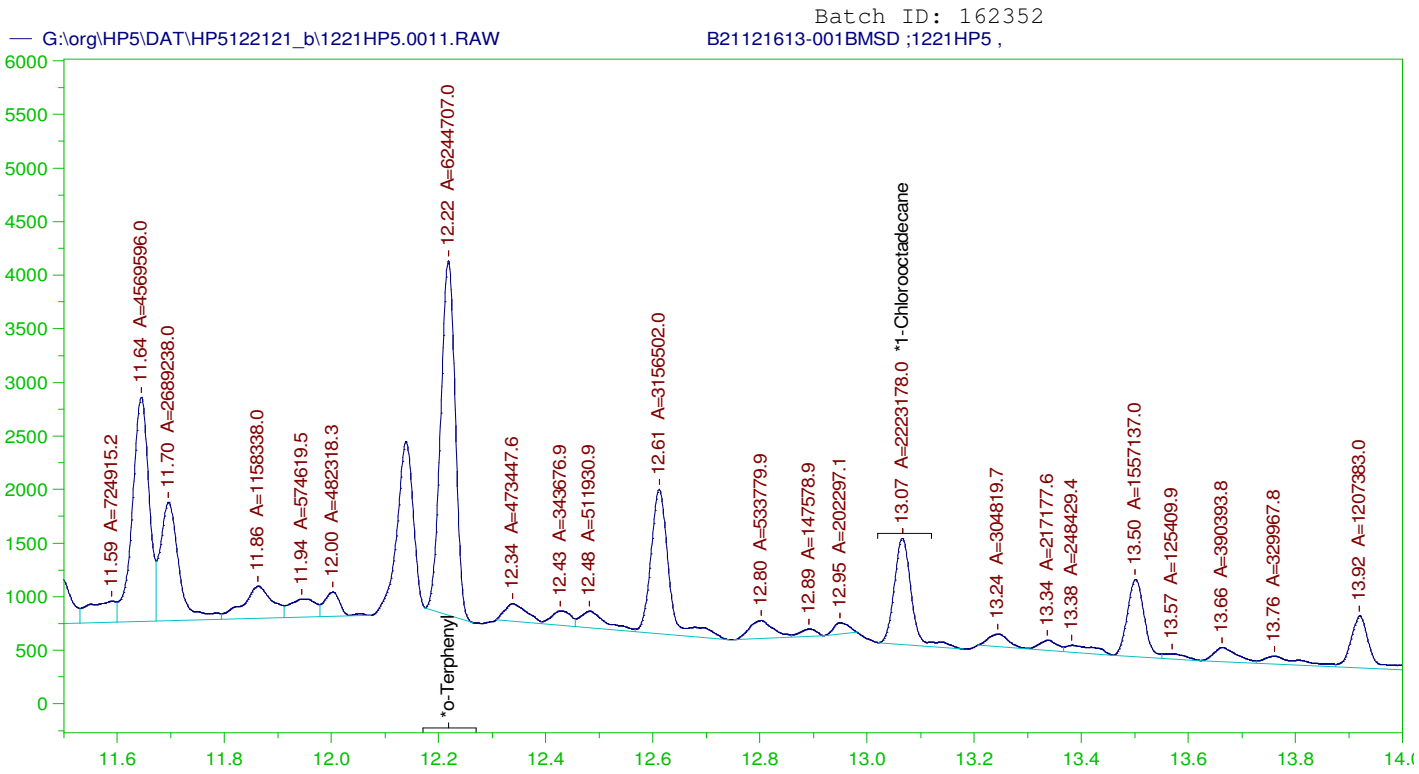
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121613-001BMSD ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0011.RAW
Date & Time Acquired: 12/21/2021 9:28:03 PM
Method File: G:\Org\HP5\Methods\D3_8015-24-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.218	.192	.305	158.7	-
*1-Chlorooctadecane	13.066	.192	.134	69.84	-

DRO Area:3.981509E+08 DRO Amount: 12.21048
TEH Area:4.272252E+08 TEH Amount: 13.10213



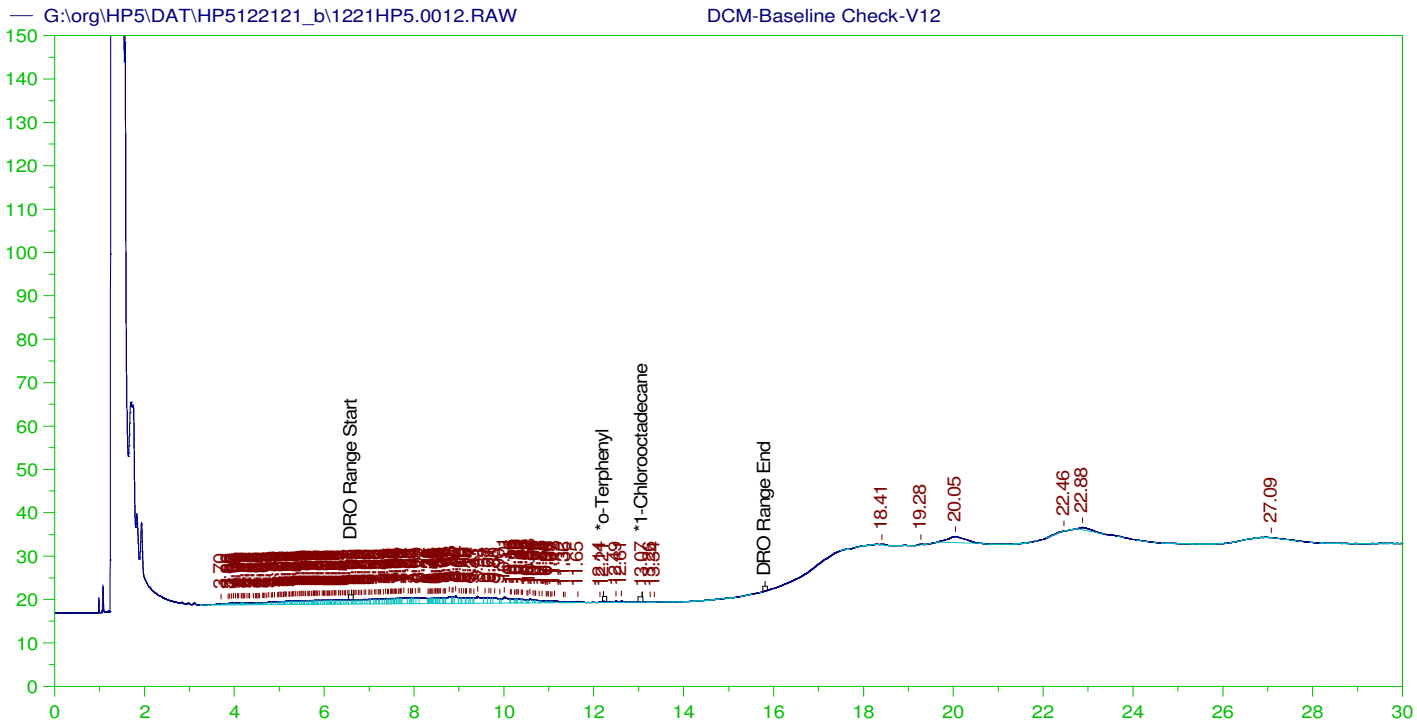
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121613-001BMSD ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0011.RAW
Date & Time Acquired: 12/21/2021 9:28:03 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Ik-24.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.218	.192	.169	87.93	-
*1-Chlorooctadecane	13.066	.192	.06	31.3	-

DRO Area:1.900481E+08 DRO Amount: 5.828388
TEH Area:2.029181E+08 TEH Amount: 6.223084



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V12
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0012.RAW
Date & Time Acquired: 12/21/2021 10:11:15 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	200.	.022	.01	-
*1-Chlorooctadecane	13.075	200.	.019	.01	-

DRO Area:311077.7 DRO Amount: 9.921722
TEH Area:484036.6 TEH Amount: 15.43819

ERH2201 (RHMW13) Batch ID: 162352

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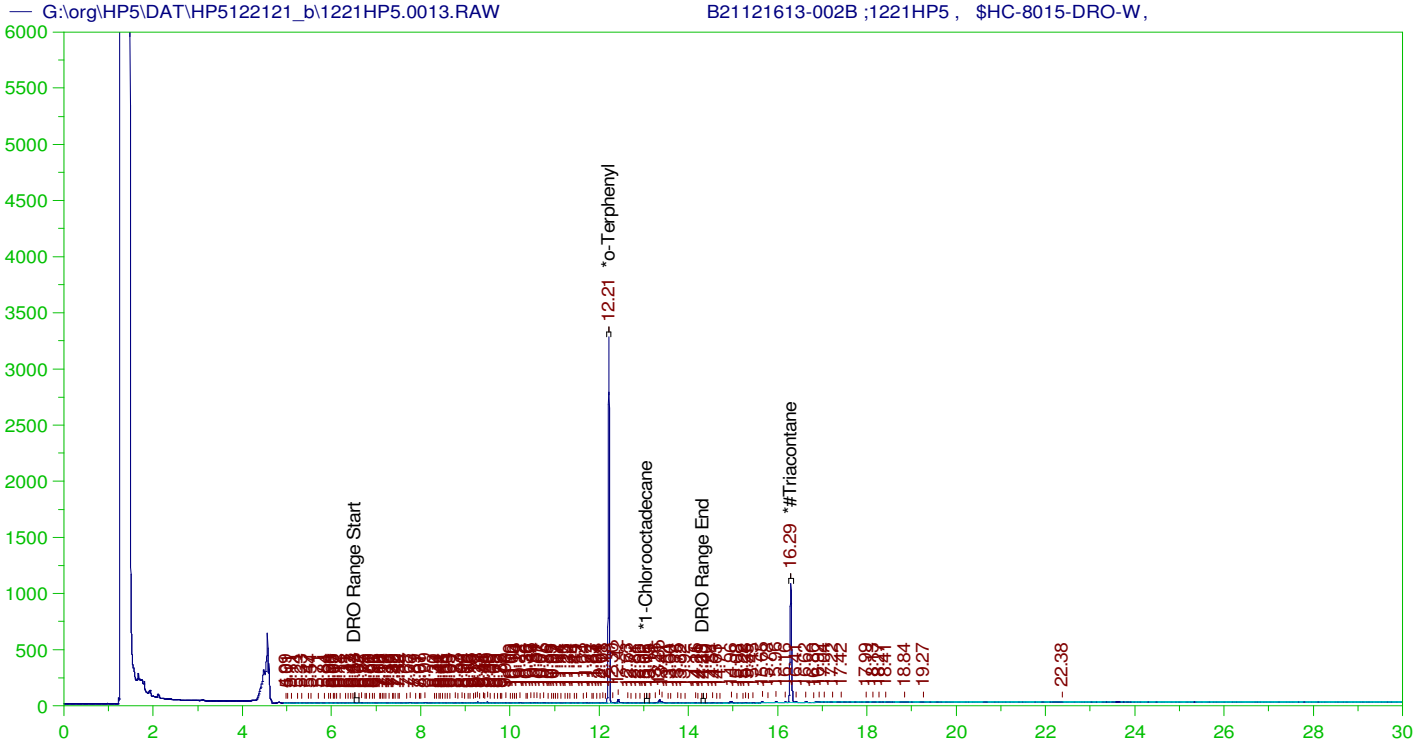


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121613-002B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0013.RAW
Date & Time Acquired: 12/21/2021 10:54:18 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

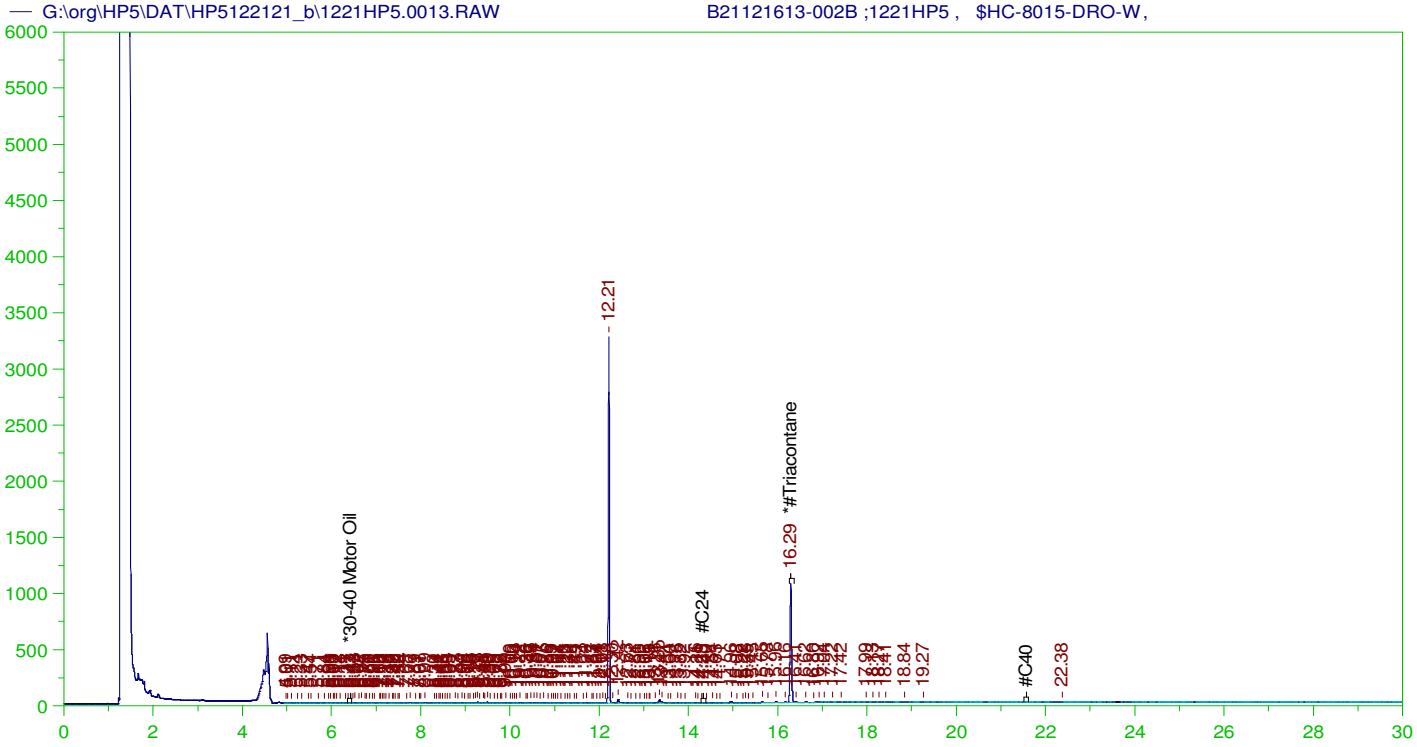
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.196	.166	84.86	-
*1-Chlorooctadecane	13.065	.196	.	.04	-
*#Triacontane	16.291	.196	.09	46.15	-

DRO Area:868001 DRO Amount: 2.714178E-02
TEH Area:1171759 TEH Amount: 3.664007E-02

ERH2201 (RHMW13) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0013.RAW B21121613-002B ;1221HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121613-002B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0013.RAW
Date & Time Acquired: 12/21/2021 10:54:18 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-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: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.291	.49	.09	18.46	-

RRO Area:213874.8 RRO AMOUNT: 7.346302E-03

ERH2201 (RHMW13) Batch ID: 162352

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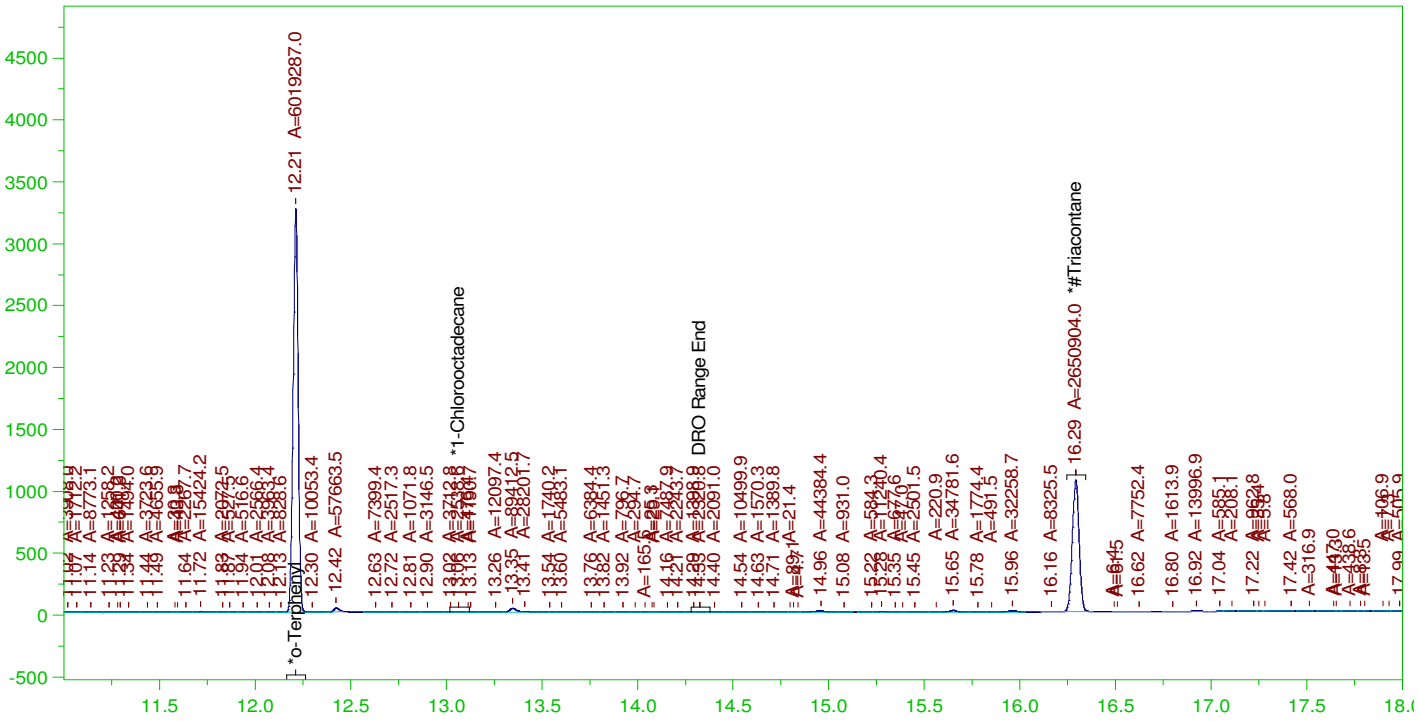


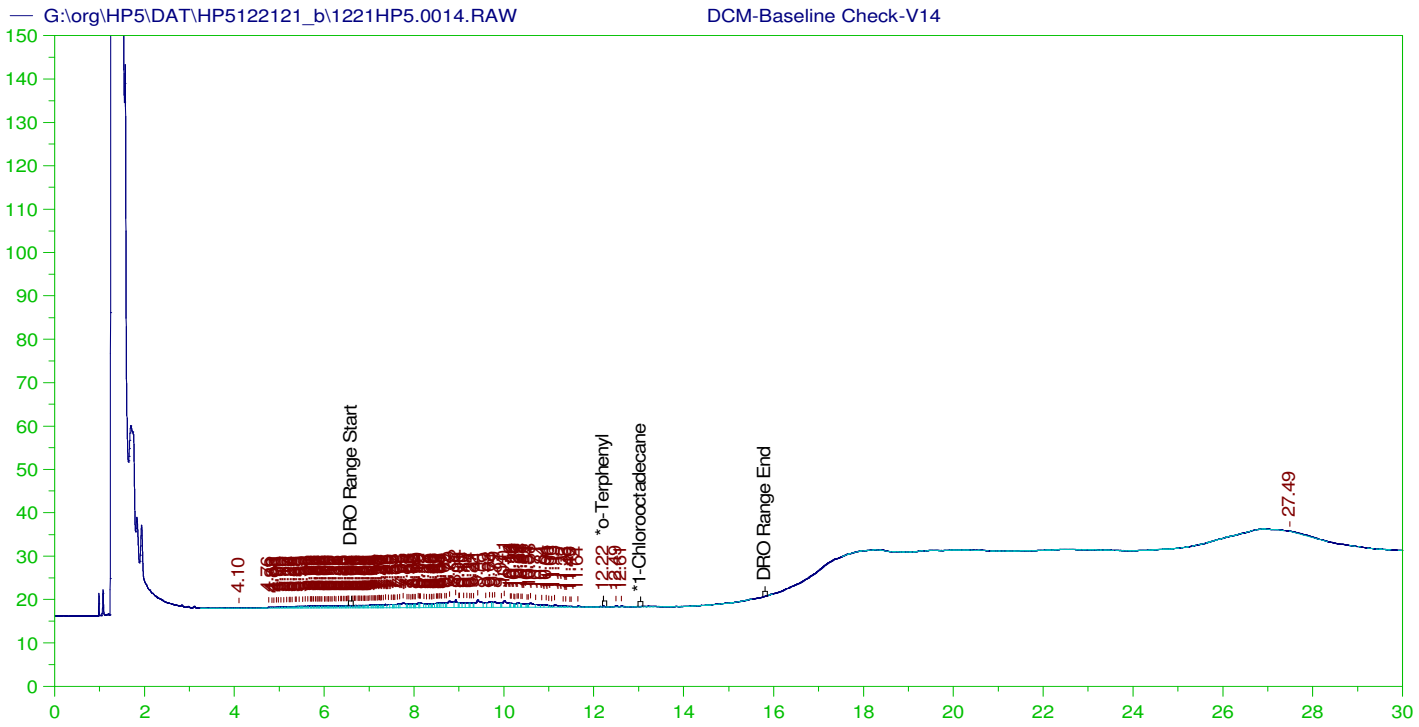
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121613-002B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0013.RAW
Date & Time Acquired: 12/21/2021 10:54:18 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.196	.166	84.76	-
*1-Chlorooctadecane	13.065	.196	.	.04	-
*#Triacontane	16.291	.196	.09	45.82	-

DRO Area:790954 DRO Amount: 2.473257E-02
TEH Area:5707875 TEH Amount: 0.1784812



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V14
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0014.RAW
Date & Time Acquired: 12/21/2021 11:37:27 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

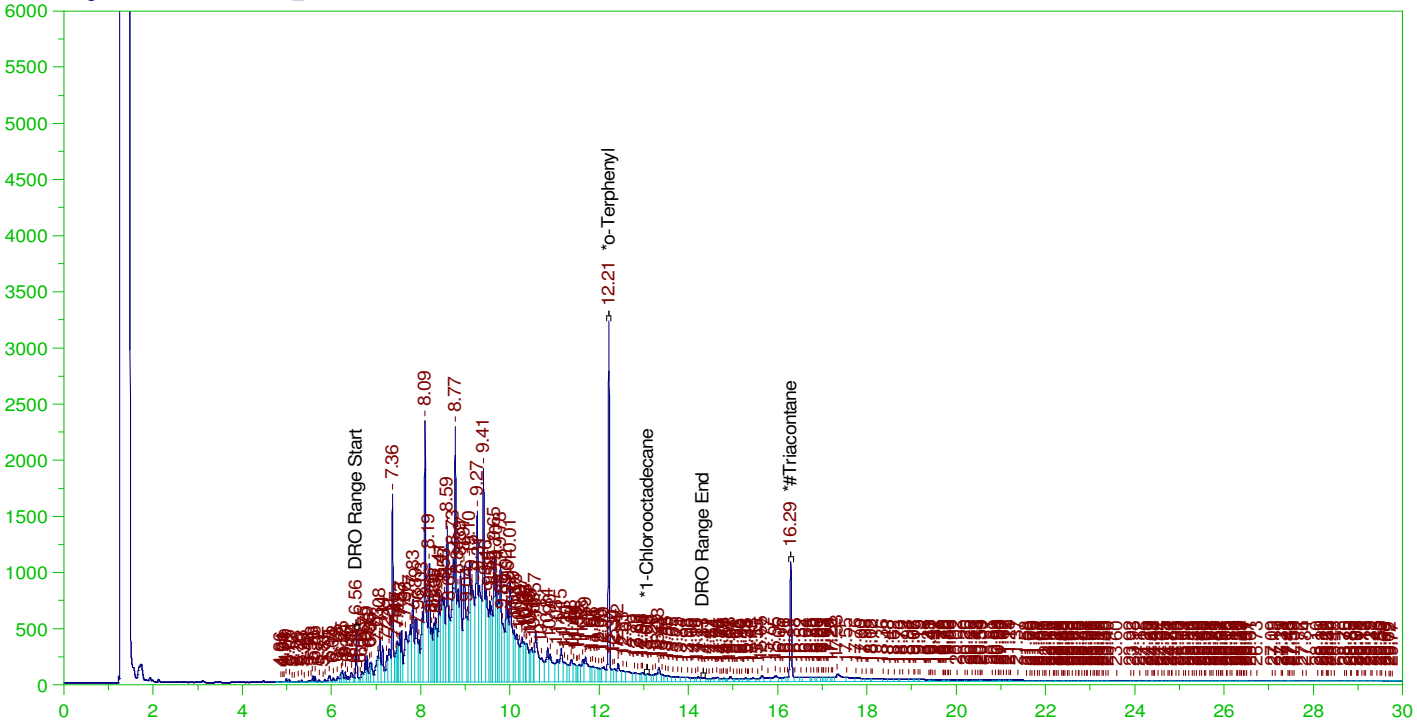
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.216	200.	.021	.01	-
*1-Chlorooctadecane	29.98	200.	.	.	-

DRO Area:259222 DRO Amount: 8.267801
TEH Area:322606.3 TEH Amount: 10.28943

ERH2230 (Sump Adit 3) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0015.RAW B21121609-001C ;1221HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121609-001C ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0015.RAW
Date & Time Acquired: 12/22/2021 12:20:36 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

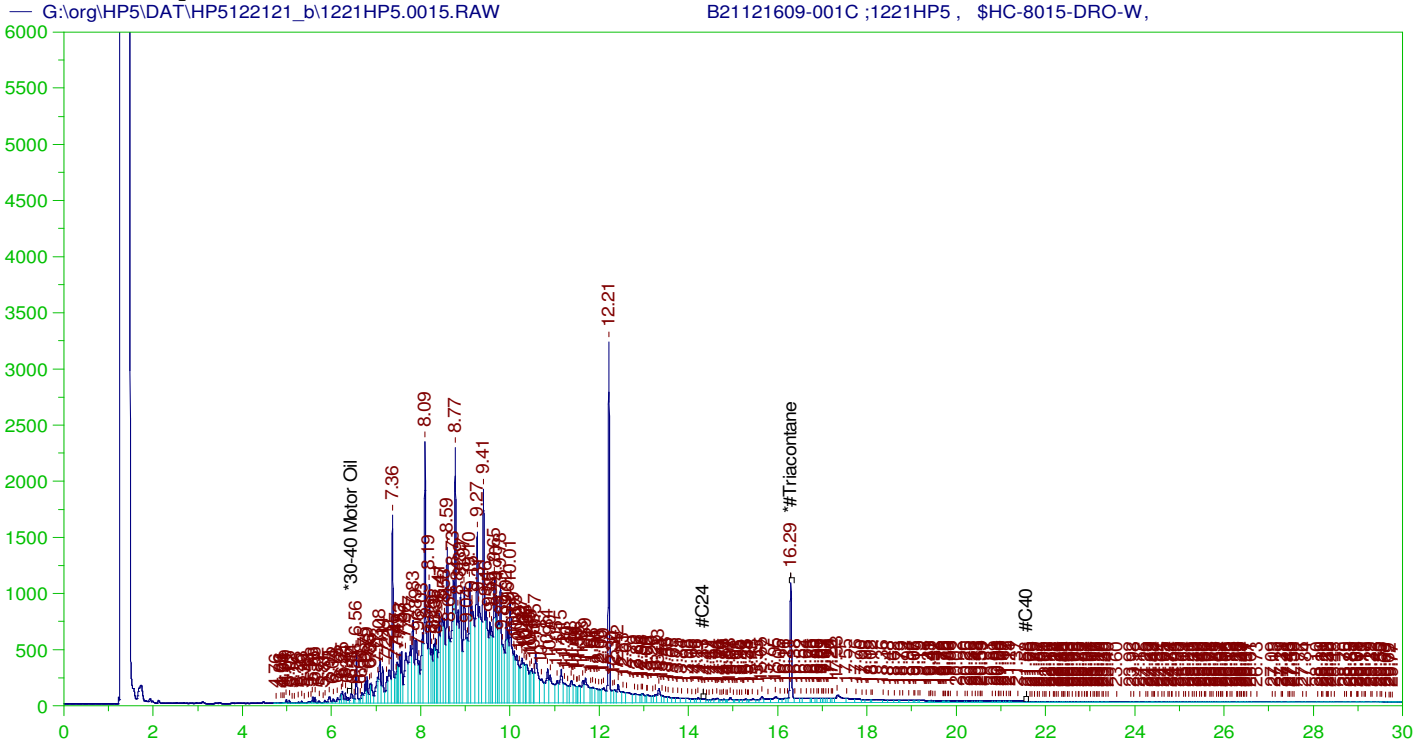
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.189	.17	90.31	-
*1-Chlorooctadecane	13.081	.189	.01	5.47	-
*#Triacontane	16.29	.189	.095	50.37	-

DRO Area:1.547657E+08 DRO Amount: 4.656794
TEH Area:1.707978E+08 TEH Amount: 5.139189

ERH2230 (Sump Adit 3) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0015.RAW B21121609-001C ;1221HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121609-001C ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0015.RAW
Date & Time Acquired: 12/22/2021 12:20:36 AM
Method File: G:\Org\HP5\Methods\D3_OROS-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-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: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.29	.472	.095	20.15	-

RRO Area:1.13758E+07 RRO AMOUNT: 0.3759978

ERH2230 (Sump Adit 3) Batch ID: 162352

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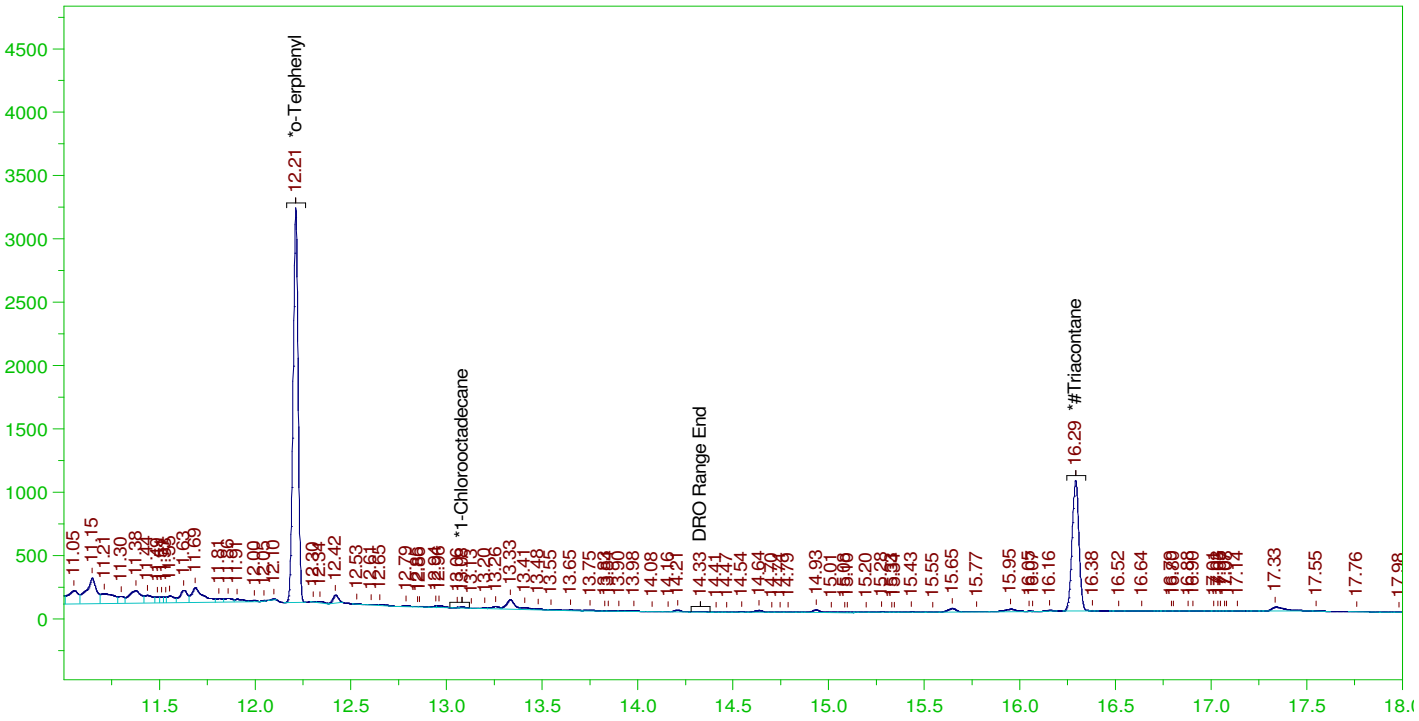


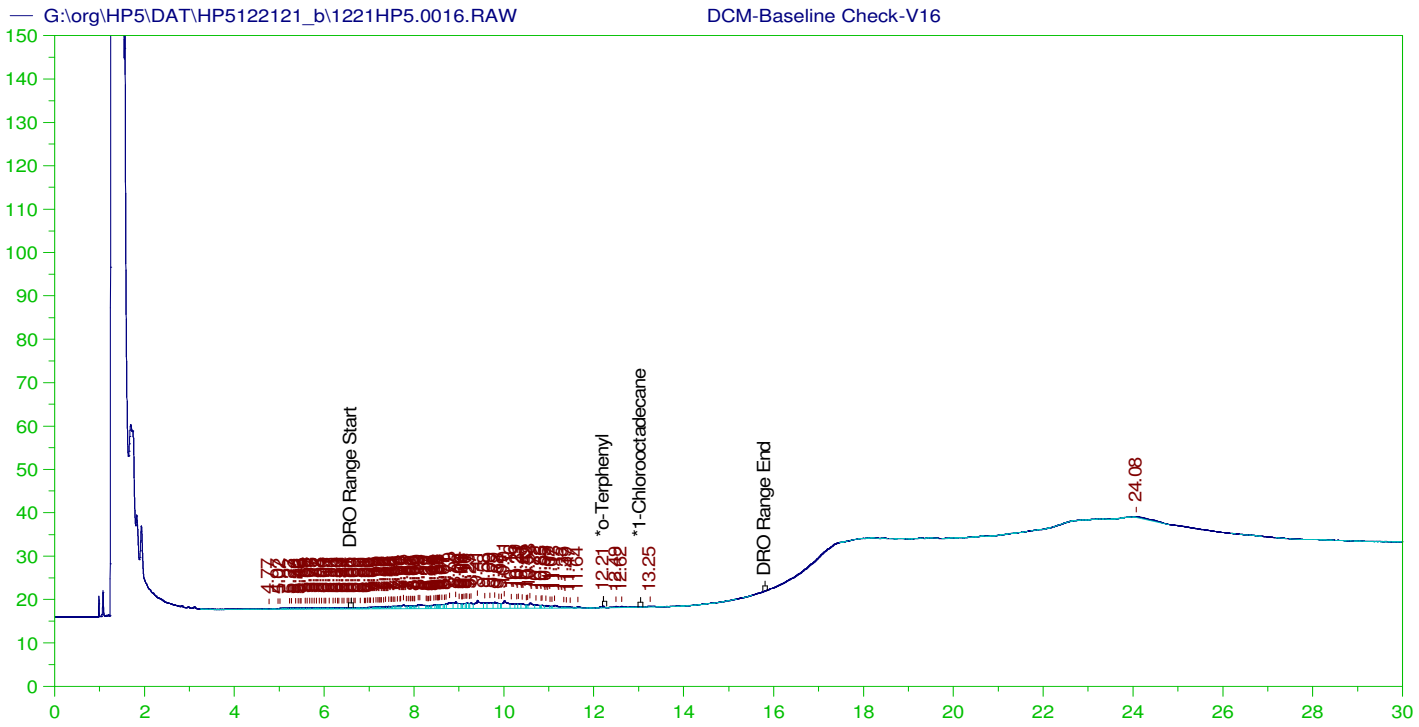
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121609-001C ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0015.RAW
Date & Time Acquired: 12/22/2021 12:20:36 AM
Method File: G:\Org\HP5\Methods\DS_8015-122115-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.189	.152	80.43	-
*1-Chlorooctadecane	13.081	.189	.	.22	-
*#Triacontane	16.29	.189	.084	44.67	-

DRO Area:1.245673E+08 DRO Amount: 3.748147
TEH Area:1.272026E+08 TEH Amount: 3.827441



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V16
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0016.RAW
Date & Time Acquired: 12/22/2021 1:03:48 AM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	200.	.028	.01	-
*1-Chlorooctadecane	29.972	200.	.	.	-

DRO Area:240423.9 DRO Amount: 7.668243
TEH Area:282585.8 TEH Amount: 9.012982

ERH2182 (RHMW03) Batch ID: 162352

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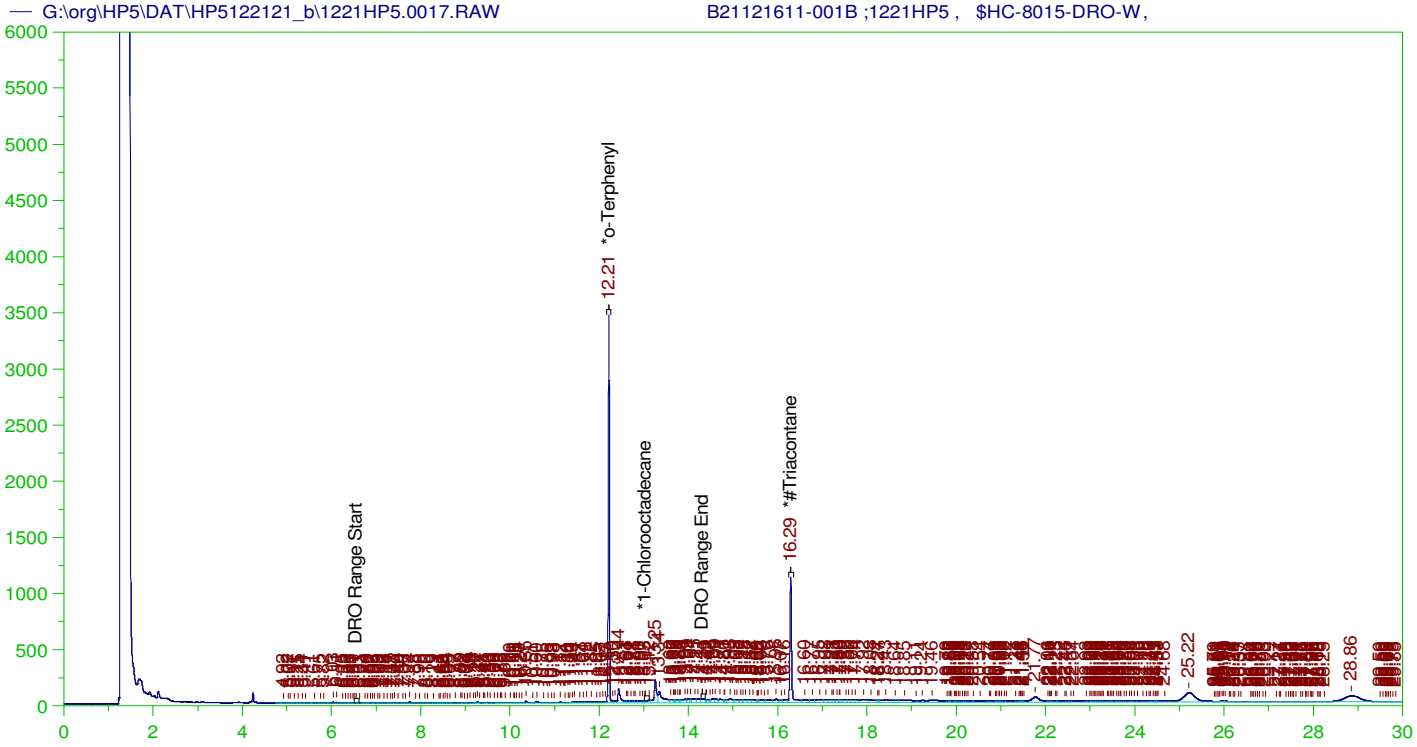


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121611-001B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0017.RAW
Date & Time Acquired: 12/22/2021 1:46:53 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

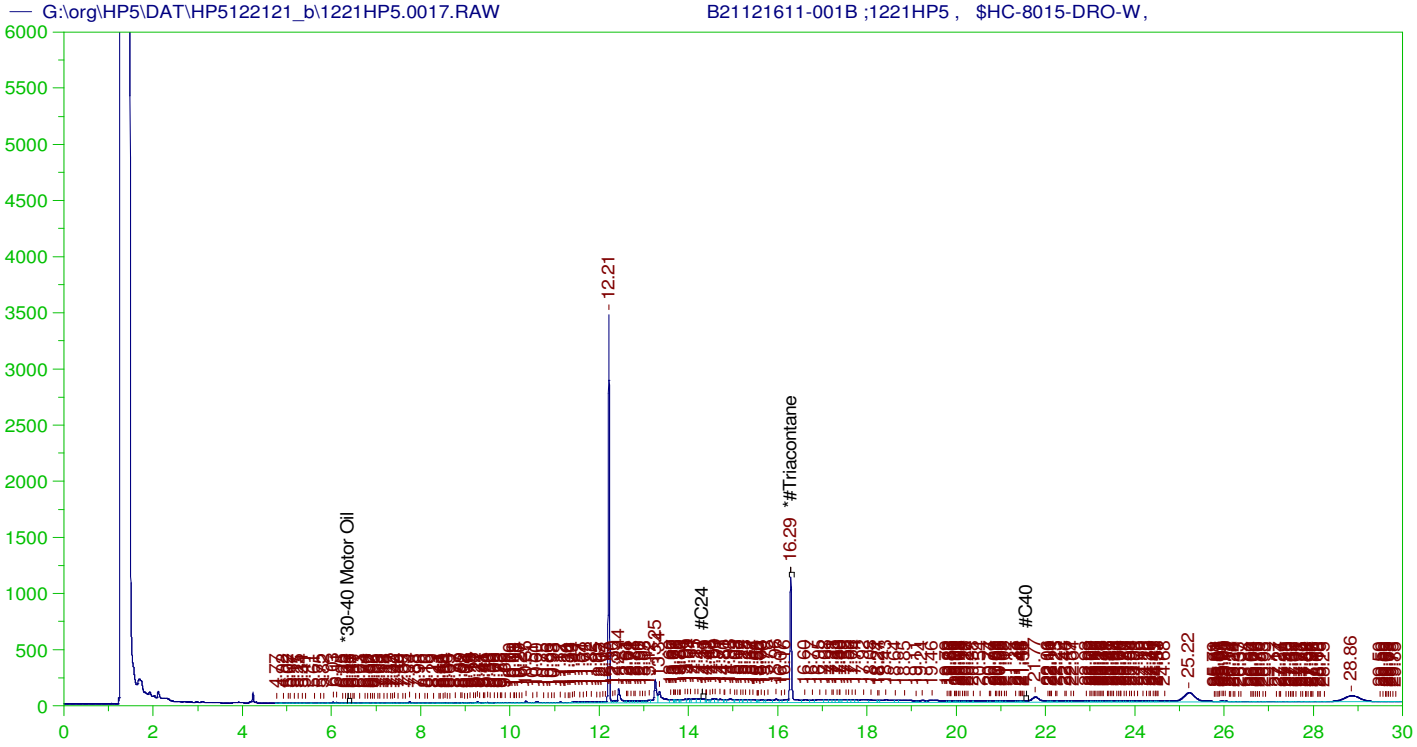
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.194	.176	90.51	-
*1-Chlorooctadecane	13.028	.194	.001	.76	-
*#Triacontane	16.289	.194	.109	56.12	-

DRO Area:5308837 DRO Amount: 0.1643919
TEH Area:1.946388E+07 TEH Amount: 0.6027129

ERH2182 (RHMW03) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0017.RAW B21121611-001B ;1221HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121611-001B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0017.RAW
Date & Time Acquired: 12/22/2021 1:46:53 AM
Method File: G:\Org\HP5\Methods\D3_OROS-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-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: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.289	.485	.109	22.45	-

RRO Area:8578406 RRO AMOUNT: 0.2917956

ERH2182 (RHMW03) Batch ID: 162352

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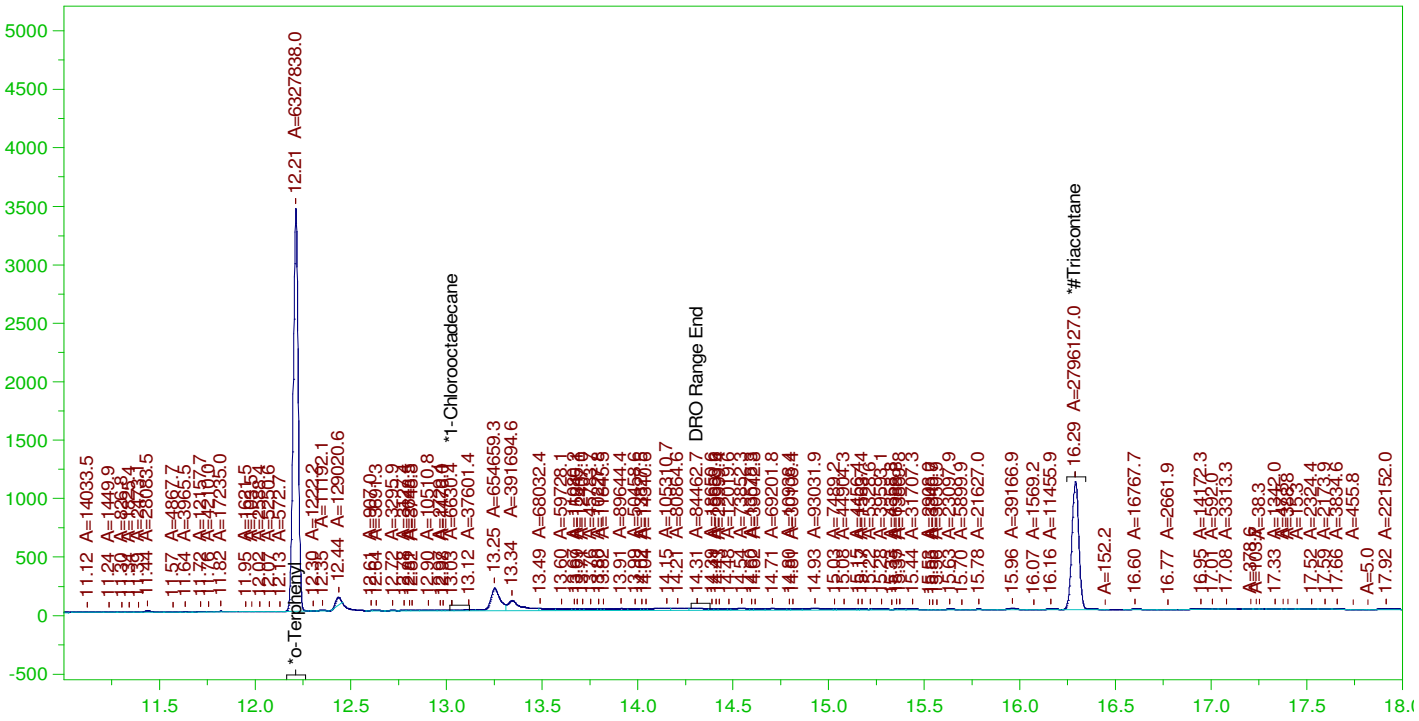

DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121611-001B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0017.RAW
Date & Time Acquired: 12/22/2021 1:46:53 AM
Method File: G:\Org\HP5\Methods\DS_8015-122117-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.194	.173	89.1	-
*1-Chlorooctadecane	13.028	.194	.	.09	-
*#Triacontane	16.289	.194	.094	48.33	-

DRO Area:2406410 DRO Amount: 0.0745162
TEH Area:6452488 TEH Amount: 0.1998059

ERH2180 (RHMW02) Batch ID: 162352

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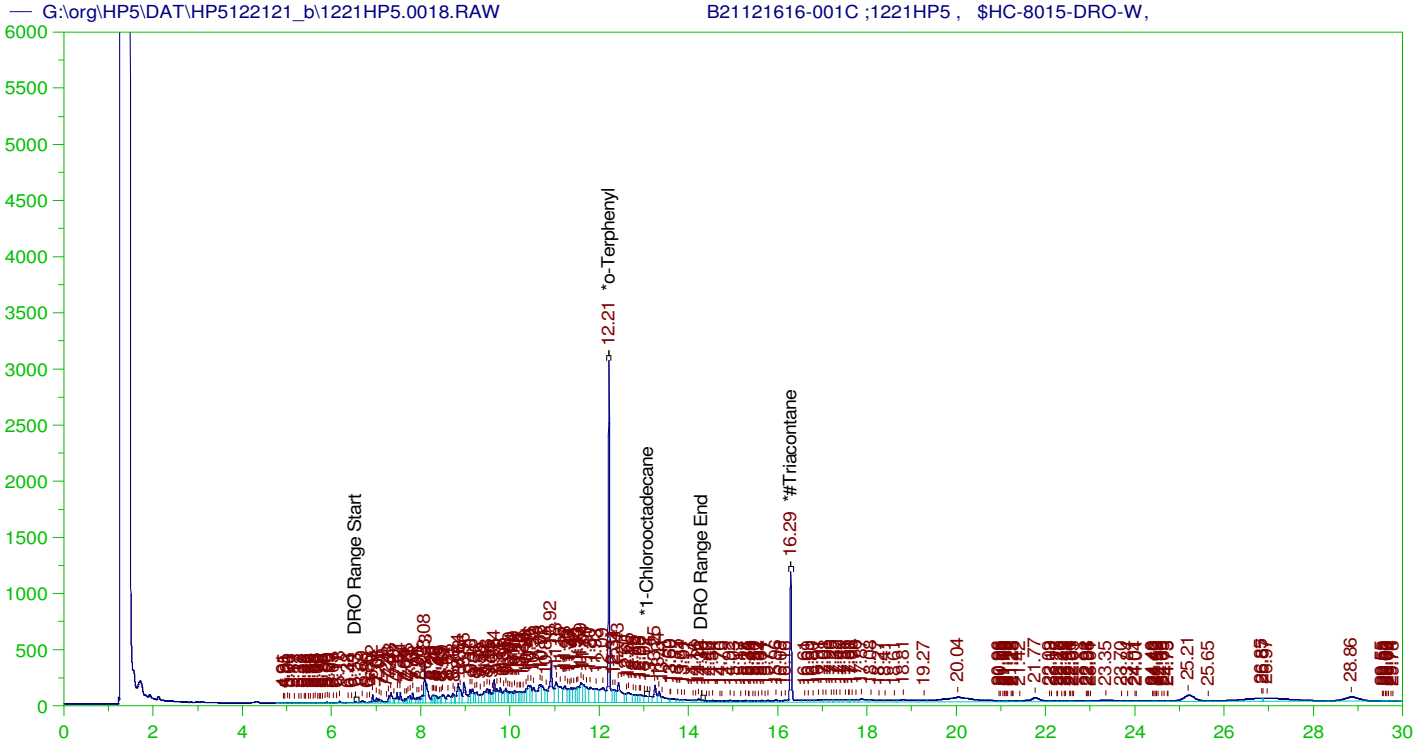

DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121616-001C ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0018.RAW
Date & Time Acquired: 12/22/2021 2:30:01 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.202	.178	88.08	-
*1-Chlorooctadecane	29.984	.202	.	.	-
*#Triacontane	16.289	.202	.111	55.1	-

DRO Area:3.772203E+07 DRO Amount: 1.215285
TEH Area:5.138606E+07 TEH Amount: 1.655497

ERH2180 (RHMW02) Batch ID: 162352

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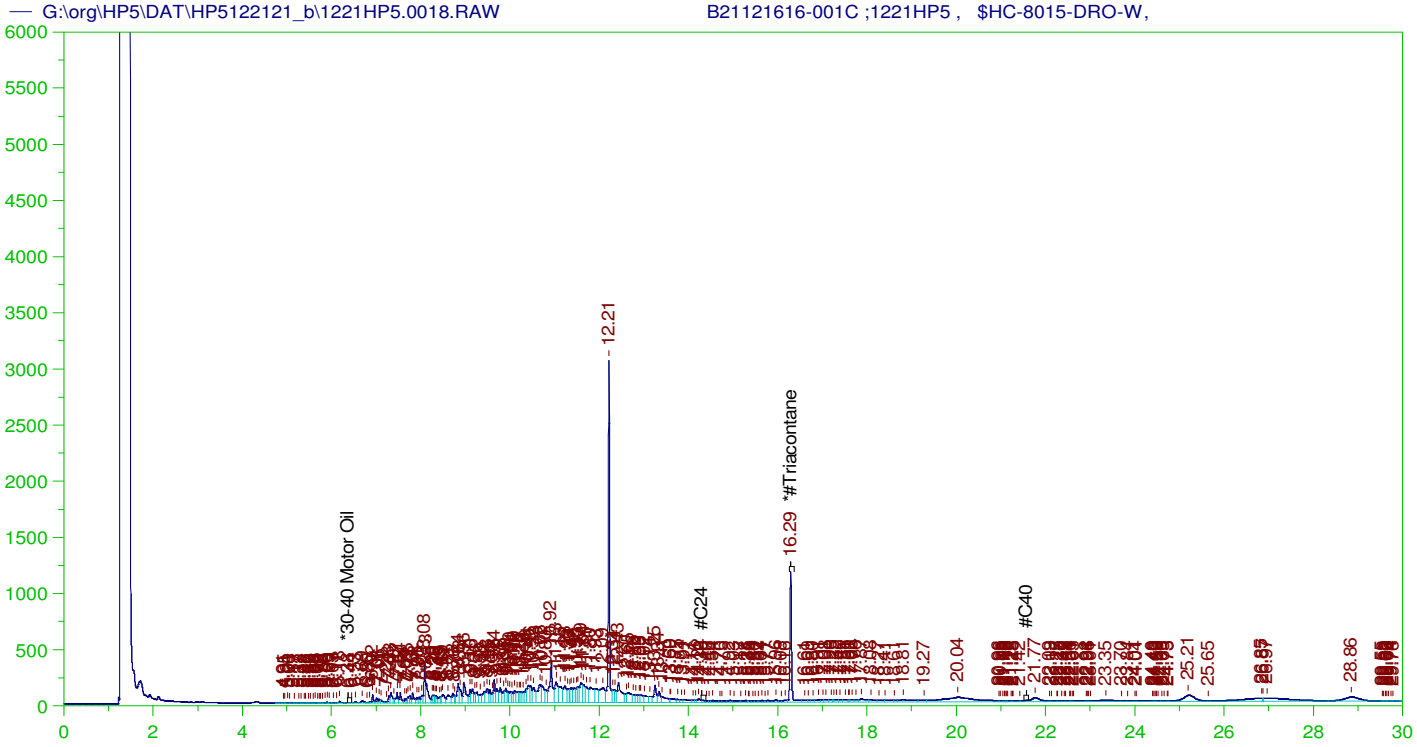

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121616-001C ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0018.RAW
Date & Time Acquired: 12/22/2021 2:30:01 AM
Method File: G:\Org\HP5\Methods\D3_OROS-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-SAMP.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.289	.505	.111	22.04	-

RRO Area:7434693 RRO AMOUNT: 0.2631099

ERH2180 (RHMW02) Batch ID: 162352

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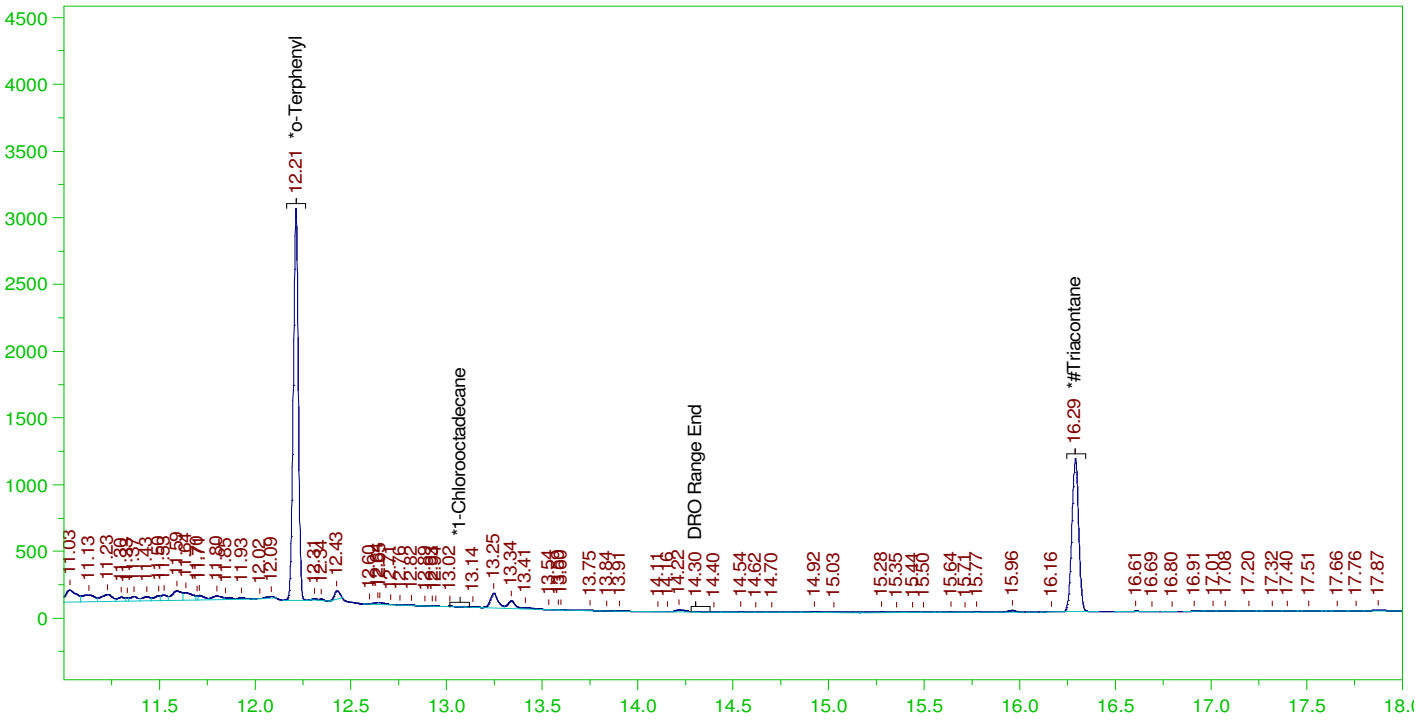


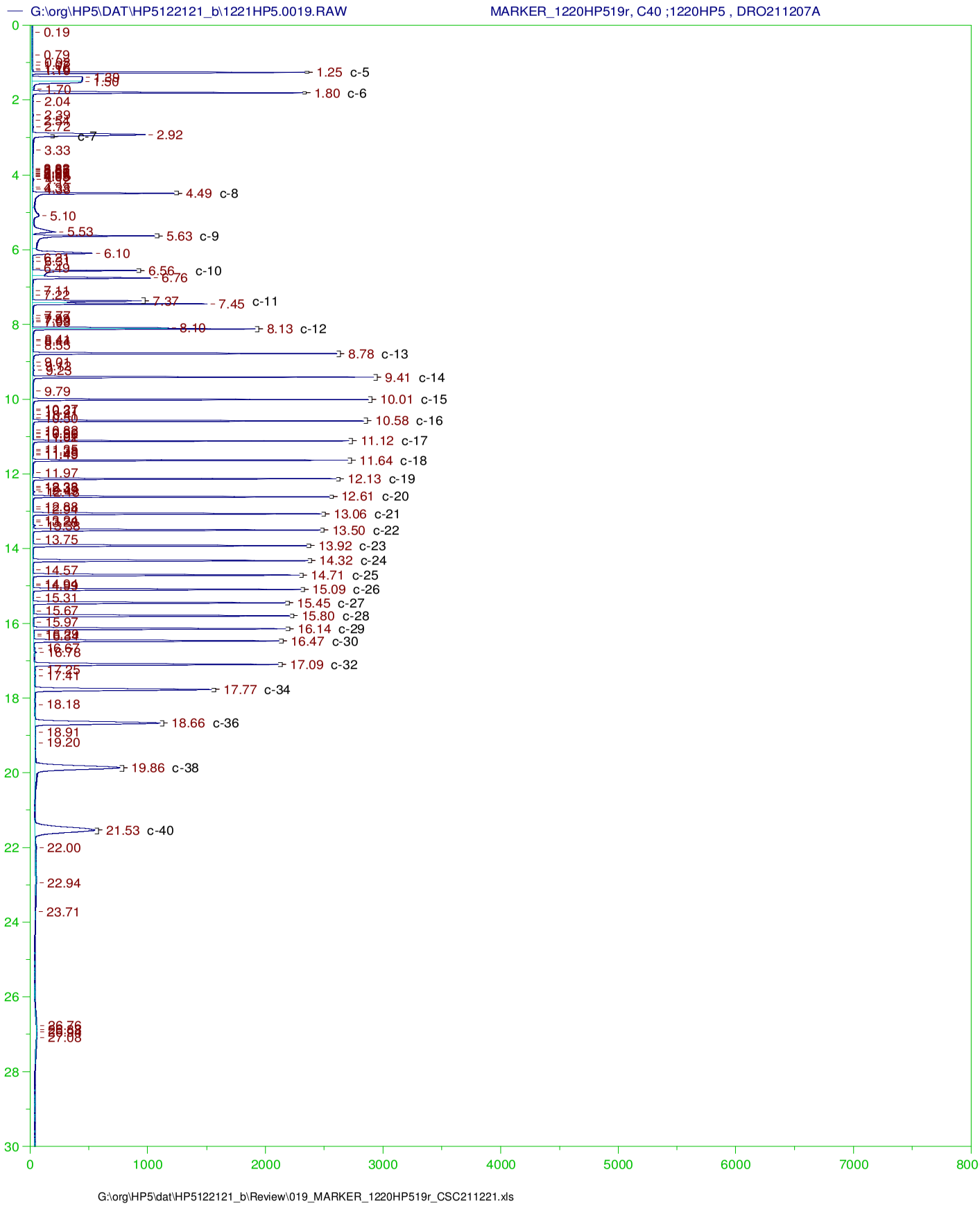
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121616-001C ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0018.RAW
Date & Time Acquired: 12/22/2021 2:30:01 AM
Method File: G:\Org\HP5\Methods\DS_8015-122115-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.202	.152	75.42	-
*1-Chlorooctadecane	29.984	.202	.	.	-
*#Triacontane	16.289	.202	.1	49.51	-

DRO Area:1.264122E+07 DRO Amount: 0.4072601
TEH Area:1.548429E+07 TEH Amount: 0.4988549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MARKER_1220HP519r, C40 ;1220HP5 , DRO211207A
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1.25 c-5
1.50
1.70
1.80 c-6
2.04
2.72
c-7
2.92
3.33
4.49 c-8
5.10
5.53
5.63 c-9
6.10
6.56 c-10
6.76
7.37
7.45 c-11
8.10
8.13 c-12
8.78 c-13
9.41 c-14
9.79
10.01 c-15
10.58 c-16
11.12 c-17
11.64 c-18
11.97
12.13 c-19
12.61 c-20
13.06 c-21
13.50 c-22
13.75
13.92 c-23
14.32 c-24
14.57
14.71 c-25
15.09 c-26
15.31
15.45 c-27
15.67
15.80 c-28
15.97
16.14 c-29
16.47 c-30
16.78
17.09 c-32
17.41
17.77 c-34
18.18
18.66 c-36
18.91
19.20
19.86 c-38
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22.94
23.71
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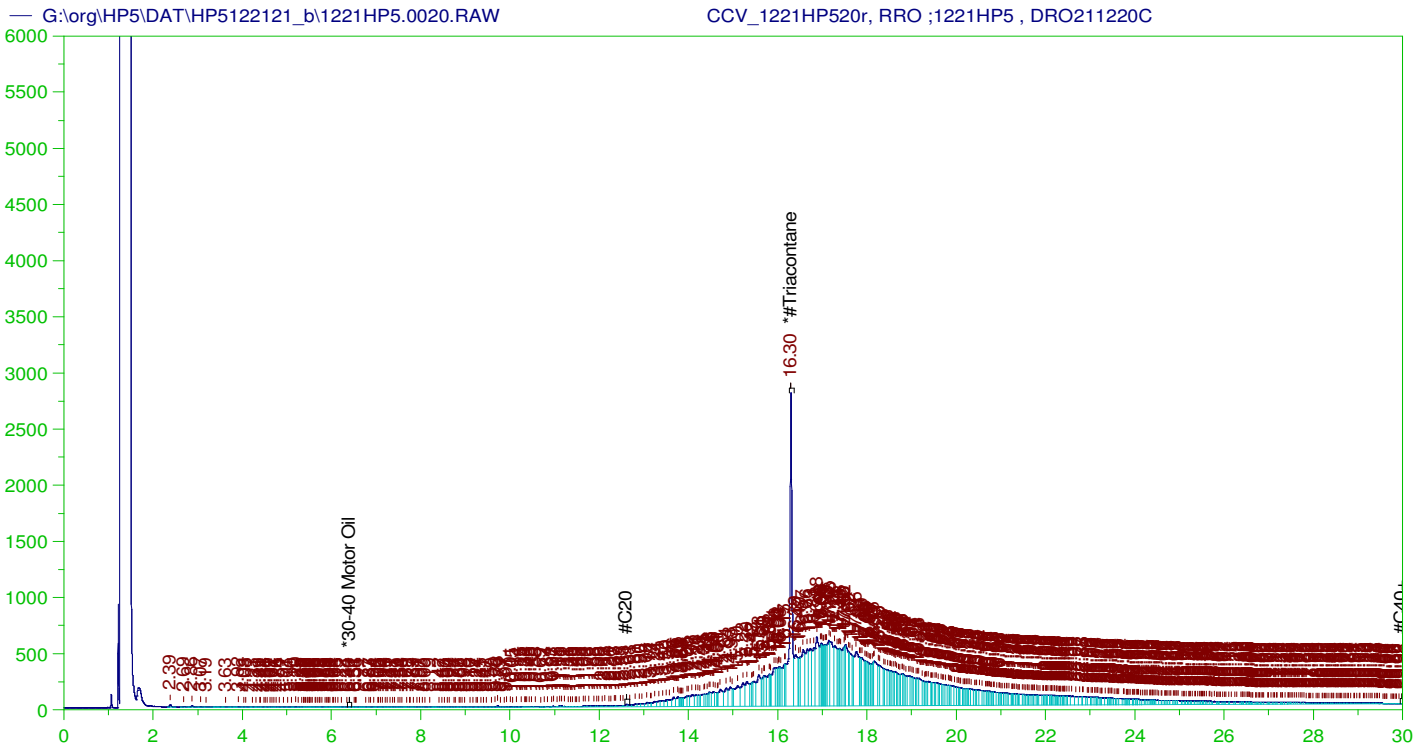


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1221HP520r, RRO ;1221HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0020.RAW
Date & Time Acquired: 12/22/2021 3:56:16 AM
Method File: G:\Org\HP5\Methods\DC_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.296	500.	349.556	69.91	-

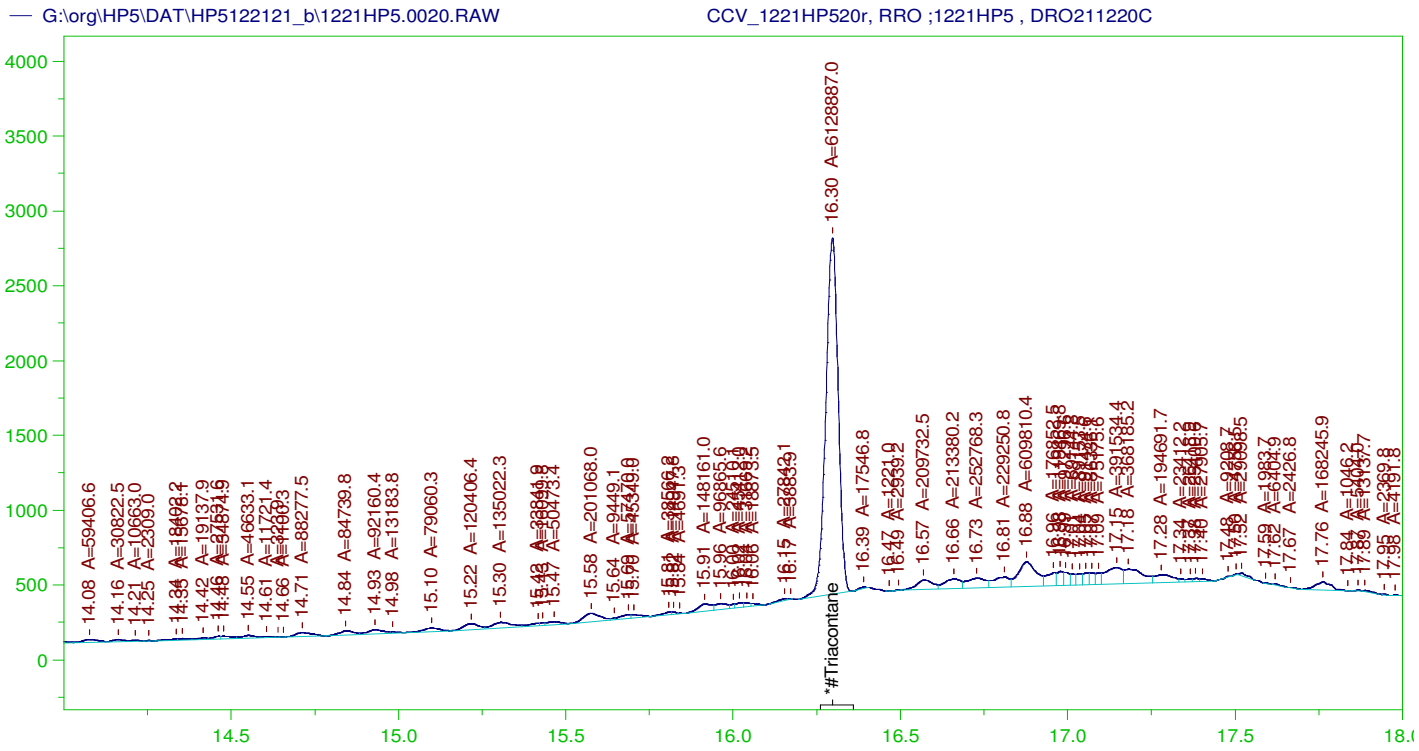
~~RRO~~ TEH (Oil Range)Area:1.37078E+08 ~~RRO~~ TEH (Oil Range)AMOUNT: 4802.609

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0020.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.043	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.296	200.	349.556	174.78	75-125

AMN 01/11/2022



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1221HP520r, RRO ;1221HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0020.RAW
Date & Time Acquired: 12/22/2021 3:56:16 AM
Method File: G:\Org\HP5\Methods\DS_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.58 to 30.05

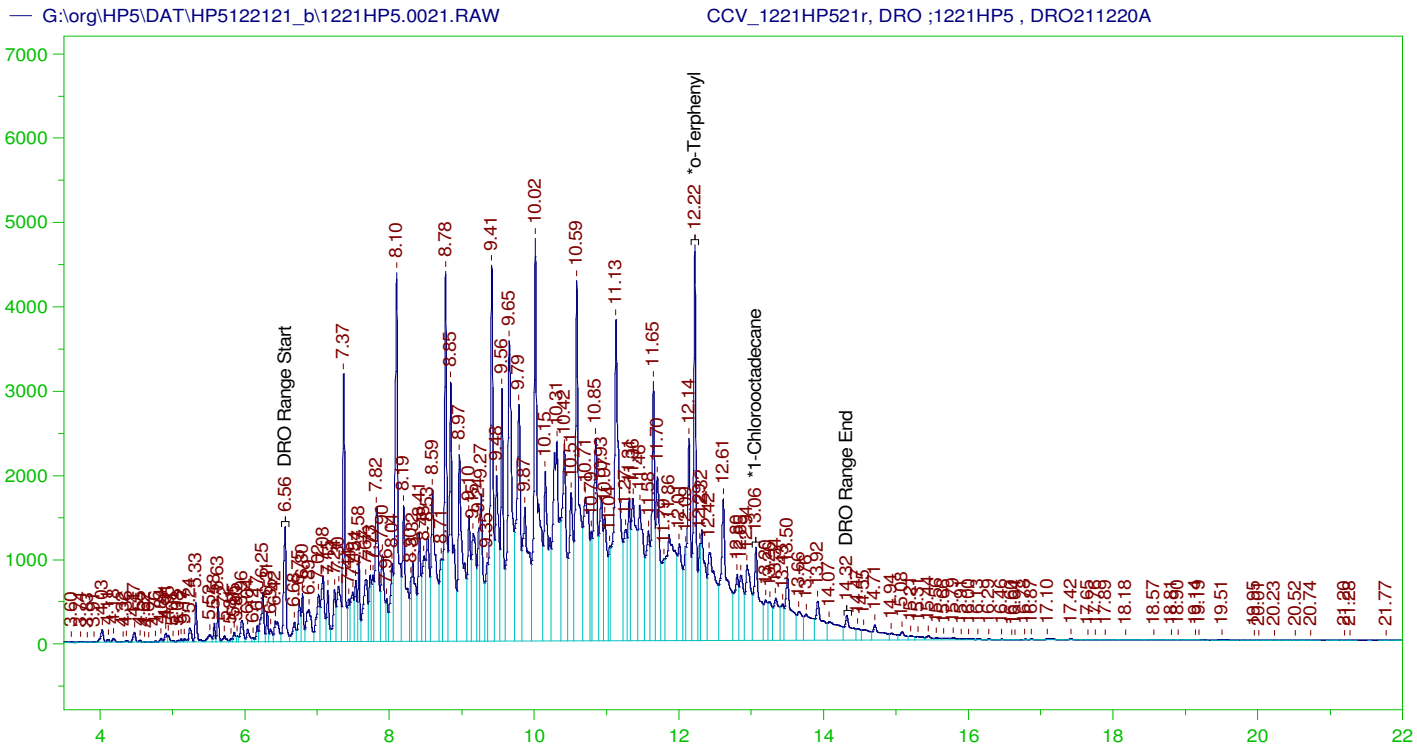
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.296	500.	211.851	42.37	-

RRO Area:6182796 RRO AMOUNT: 216.6179

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0020.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.043	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.296	200.	211.851	105.93	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1221HP521r, DRO ;1221HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0021.RAW
Date & Time Acquired: 12/22/2021 4:39:23 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Ik-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	200.	327.331	163.67	-
*1-Chlorooctadecane	13.063	200.	158.207	79.1	-

DRO Area:4.661037E+08 DRO Amount: 14866.23
TEH Area:4.828347E+08 TEH Amount: 15399.86

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0021.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15399.86	102.67	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.221	200.	327.331	163.67	85-115
*1-Chlorooctadecane	13.063	200.	158.207	79.1	85-115

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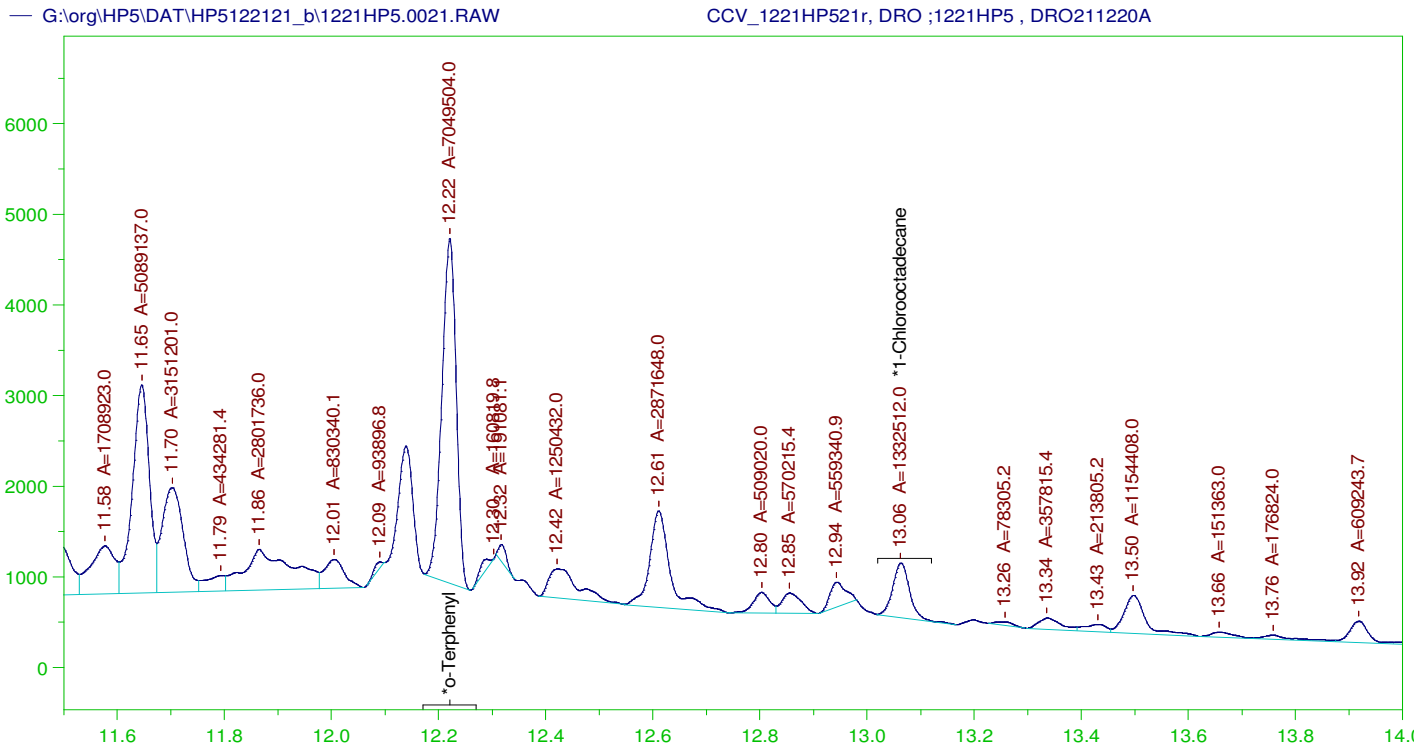


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1221HP521r, DRO ;1221HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0021.RAW
Date & Time Acquired: 12/22/2021 4:39:23 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Ik-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

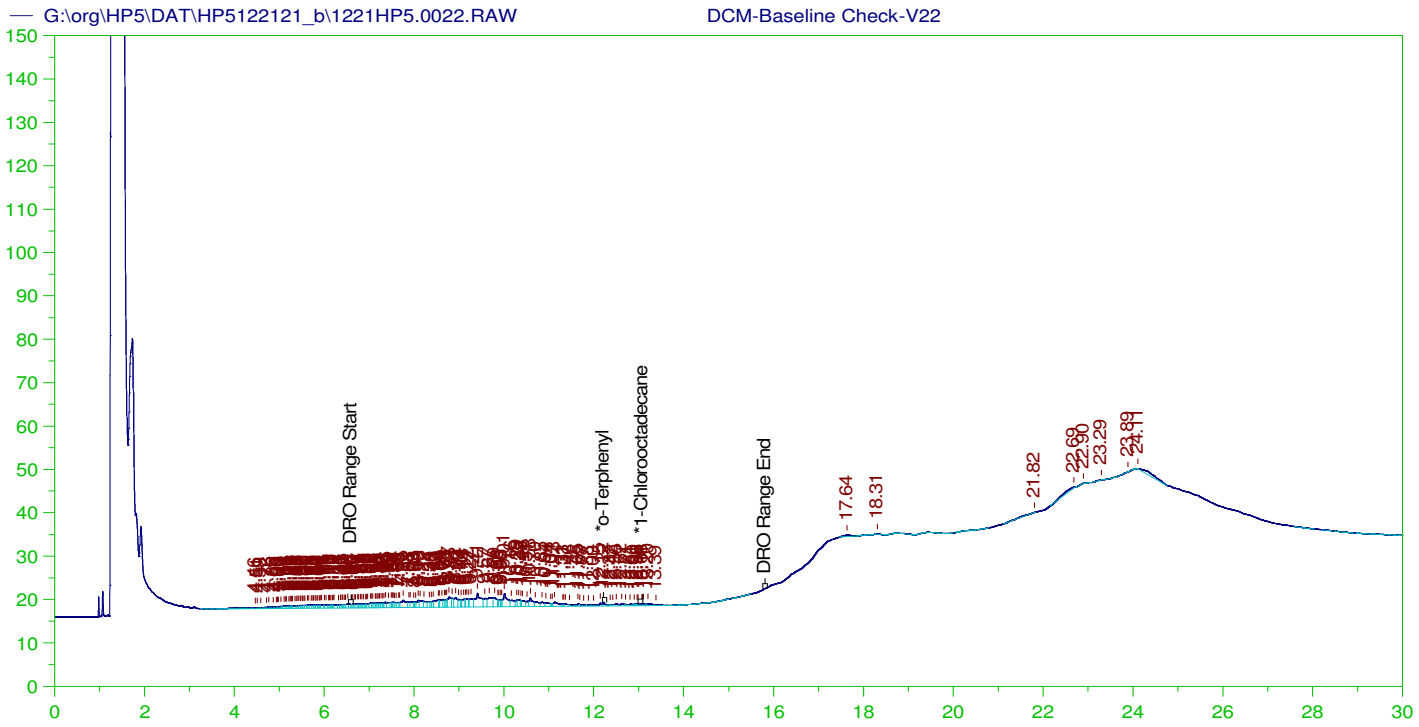
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	200.	198.526	99.26	-
*1-Chlorooctadecane	13.063	200.	37.526	18.76	-

DRO Area:2.583275E+08 DRO Amount: 8239.272
TEH Area:2.689115E+08 TEH Amount: 8576.846

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0021.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8576.85	57.18	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.221	200.	198.526	99.26	85-115
*1-Chlorooctadecane	13.063	200.	37.526	18.76	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V22
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0022.RAW
Date & Time Acquired: 12/22/2021 7:02:09 AM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

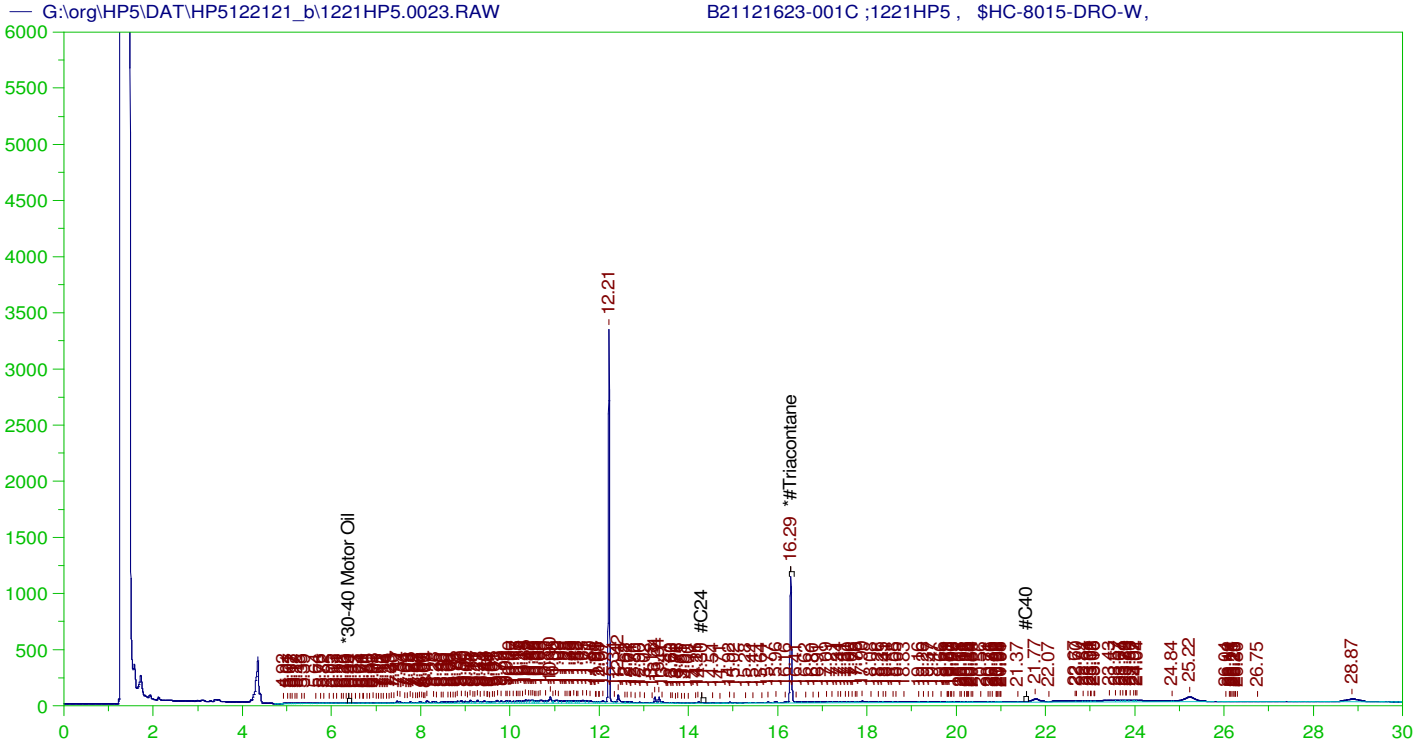
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.217	200.	.094	.05	-
*1-Chlorooctadecane	13.077	200.	.042	.02	-

DRO Area:425246.2 DRO Amount: 13.56309
TEH Area:545316.9 TEH Amount: 17.39271

ERH2178 (RHMW01R) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0023.RAW B21121623-001C ;1221HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121623-001C ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0023.RAW
Date & Time Acquired: 12/22/2021 7:44:43 AM
Method File: G:\Org\HP5\Methods\D3_OROS-122123-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-SAMP.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

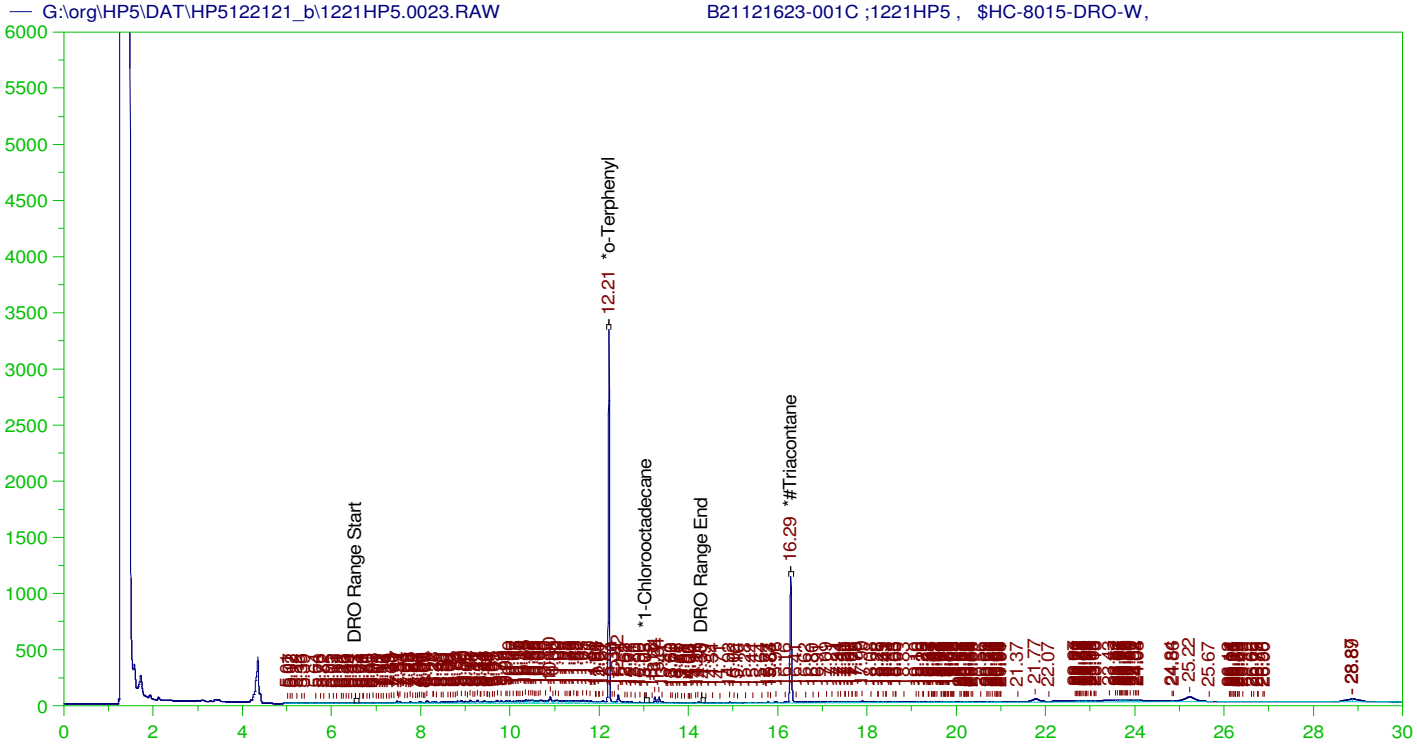
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.29	.49	.099	20.11	-

RRO Area:2271961 RRO AMOUNT: 7.803871E-02

ERH2178 (RHMW01R) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0023.RAW B21121623-001C ;1221HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121623-001C ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0023.RAW
Date & Time Acquired: 12/22/2021 7:44:43 AM
Method File: G:\Org\HP5\Methods\DR_8015-122123-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

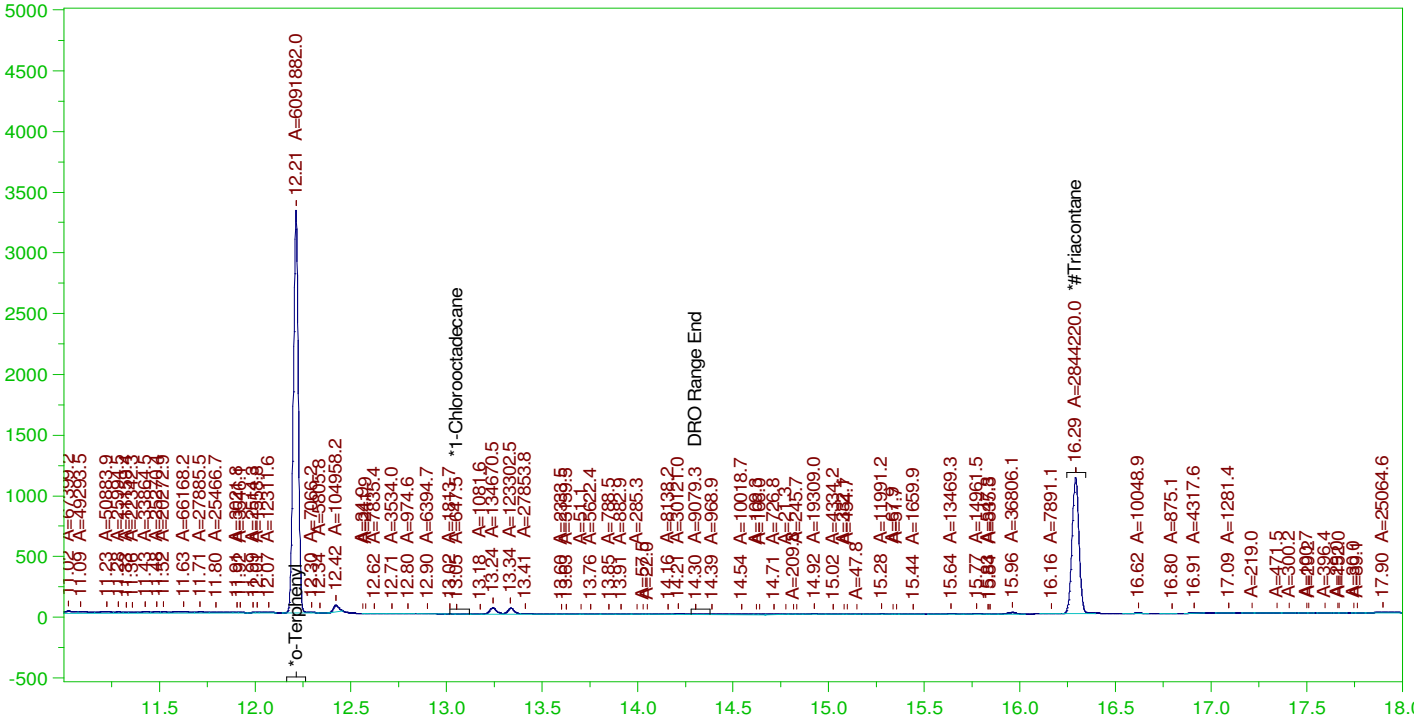
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.196	.172	87.6	-
*1-Chlorooctadecane	13.052	.196	.001	.33	-
*#Triacontane	16.29	.196	.099	50.26	-

DRO Area:6223481 DRO Amount: 0.1946039
TEH Area:1.165042E+07 TEH Amount: 0.3643004

ERH2178 (RHMW01R) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0023.RAW B21121623-001C ;1221HP5 , $HC-8015-DRO-W,



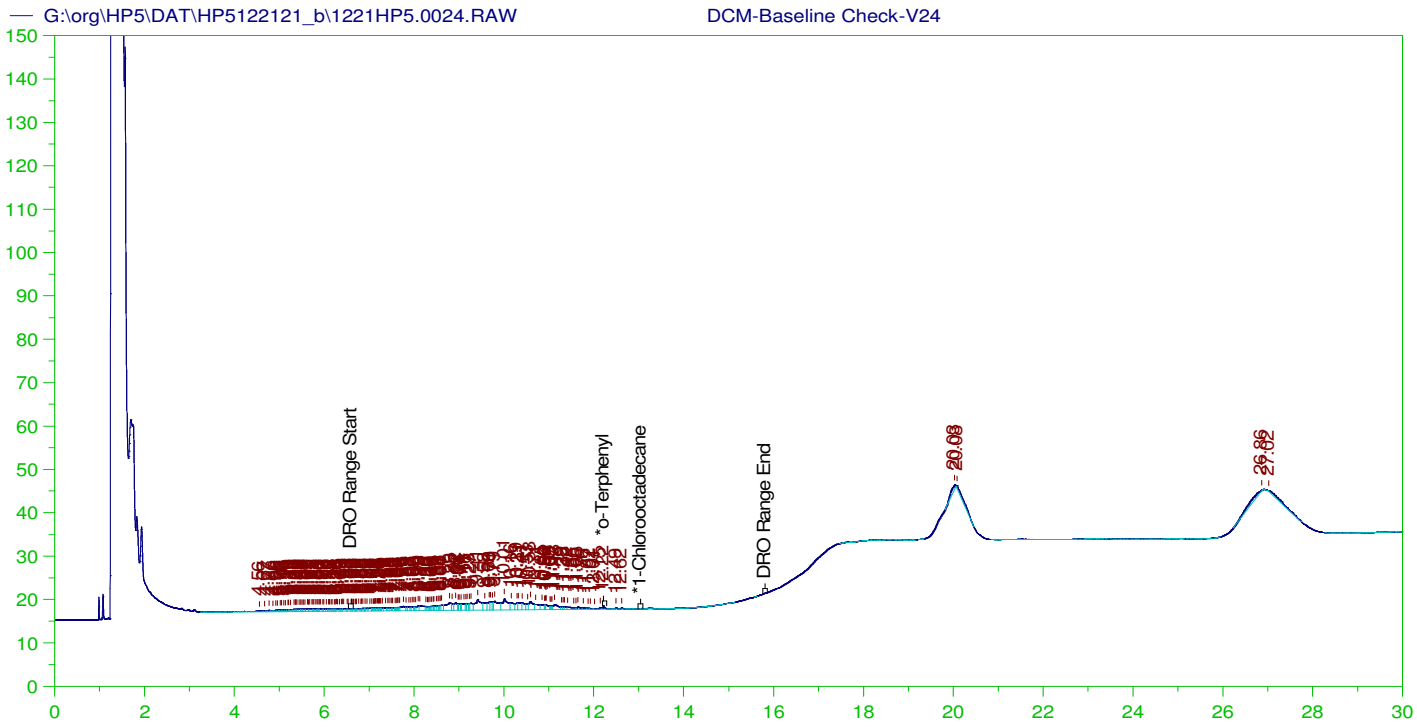
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121623-001C ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0023.RAW
Date & Time Acquired: 12/22/2021 7:44:43 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.196	.168	85.78	-
*1-Chlorooctadecane	13.052	.196	.	.01	-
*#Triacontane	16.29	.196	.096	49.16	-

DRO Area:3023054 DRO Amount: 9.452877E-02
TEH Area:6626082 TEH Amount: 0.2071929



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V24
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0024.RAW
Date & Time Acquired: 12/22/2021 8:27:37 AM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

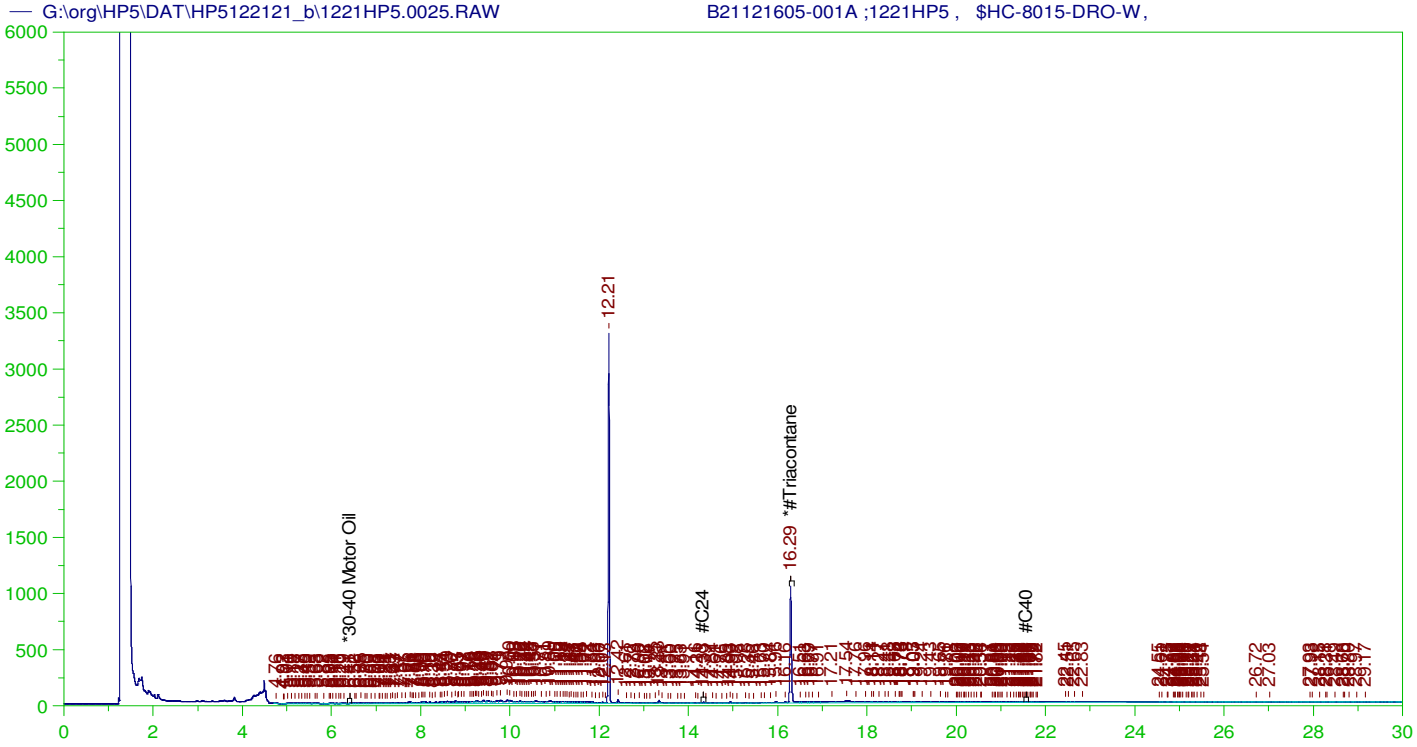
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.217	200.	.076	.04	-
*1-Chlorooctadecane	29.958	200.	.	.	-

DRO Area:355771 DRO Amount: 11.3472
TEH Area:479438.5 TEH Amount: 15.29154

ERH2175 (RHMW2254-001) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0025.RAW B21121605-001A ;1221HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121605-001A ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0025.RAW
Date & Time Acquired: 12/22/2021 9:10:20 AM
Method File: G:\Org\HP5\Methods\D3_OROS-122123-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

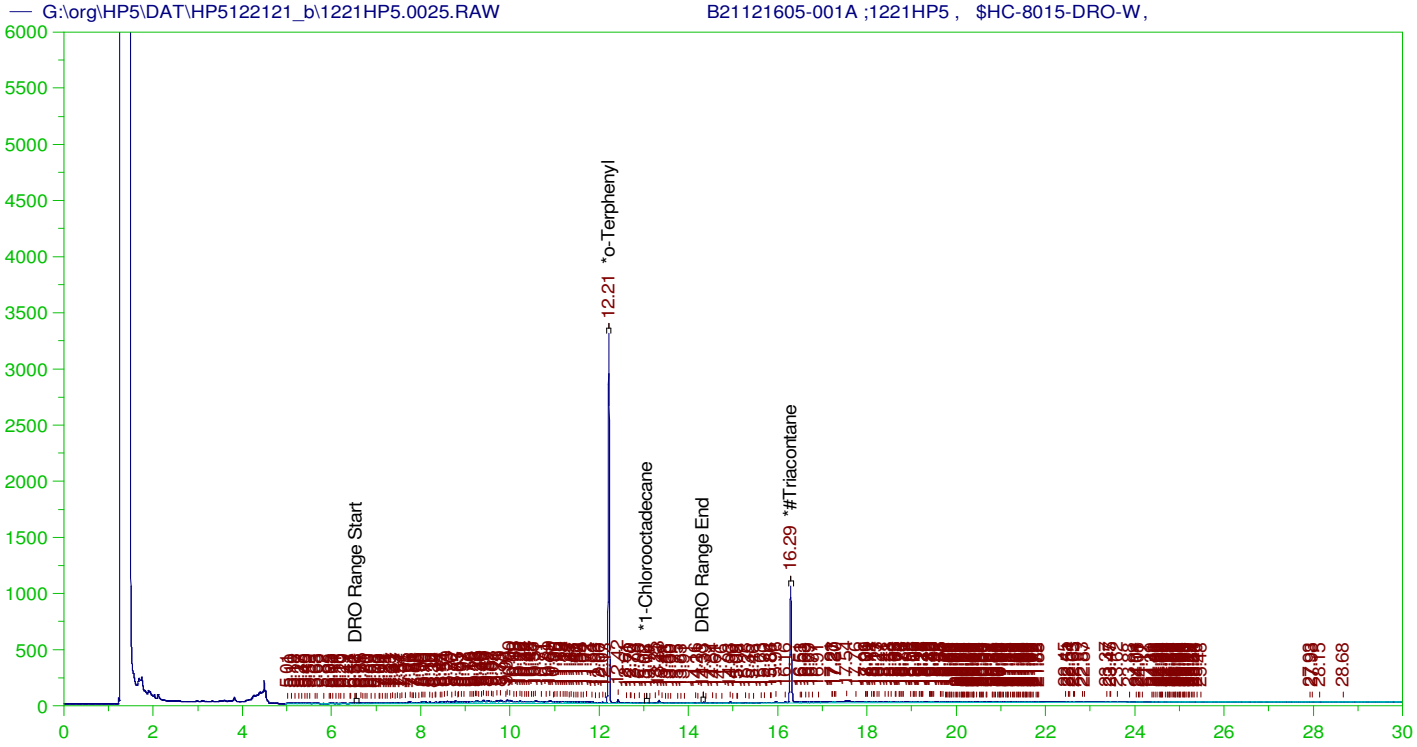
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.288	.476	.089	18.75	-

RRO Area:3106085 RRO AMOUNT: 0.1036414

ERH2175 (RHMW2254-001) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0025.RAW B21121605-001A ;1221HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-001A ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0025.RAW
Date & Time Acquired: 12/22/2021 9:10:20 AM
Method File: G:\Org\HP5\Methods\DR_8015-122123-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

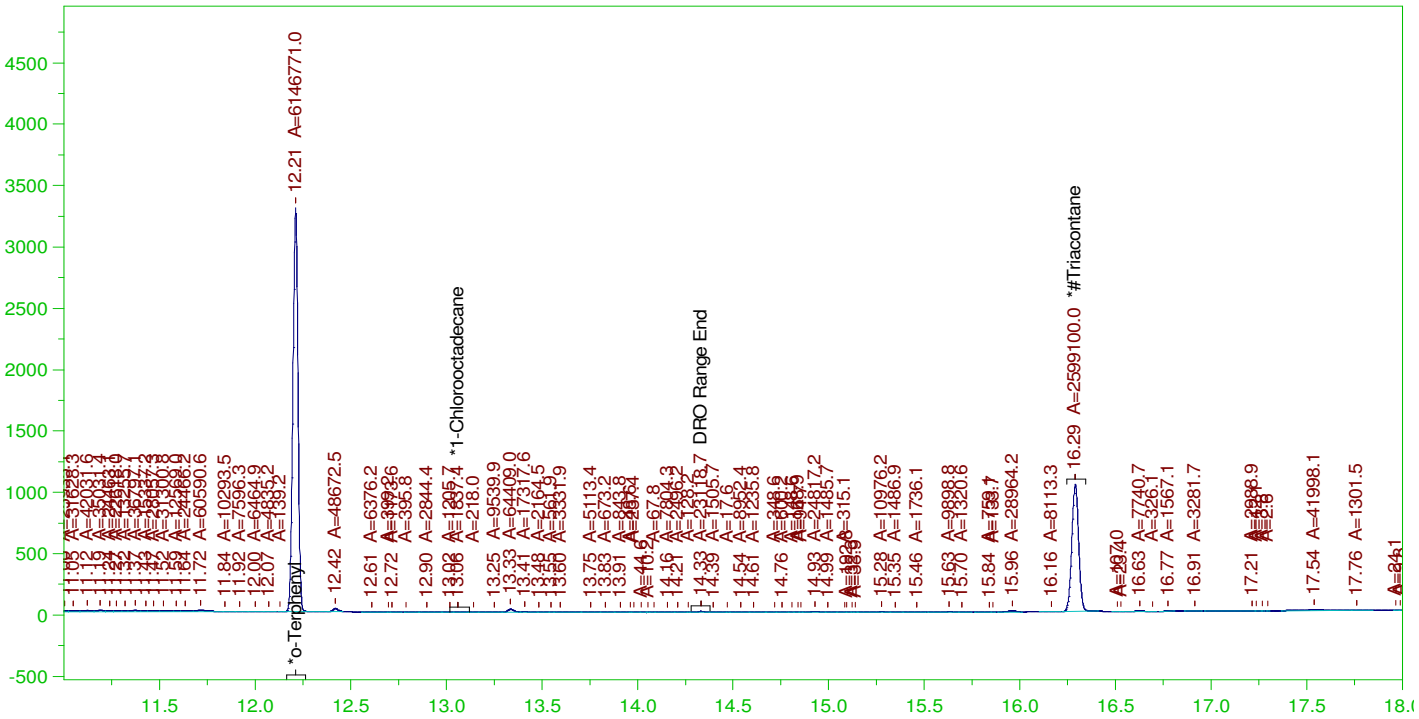
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	.19	.167	87.79	-
*1-Chlorooctadecane	13.06	.19	.	.13	-
*#Triacontane	16.288	.19	.089	46.88	-

DRO Area:4817939 DRO Amount: 0.1463492
TEH Area:9000337 TEH Amount: 0.2733932

ERH2175 (RHMW2254-001) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0025.RAW B21121605-001A ;1221HP5 , $HC-8015-DRO-W,



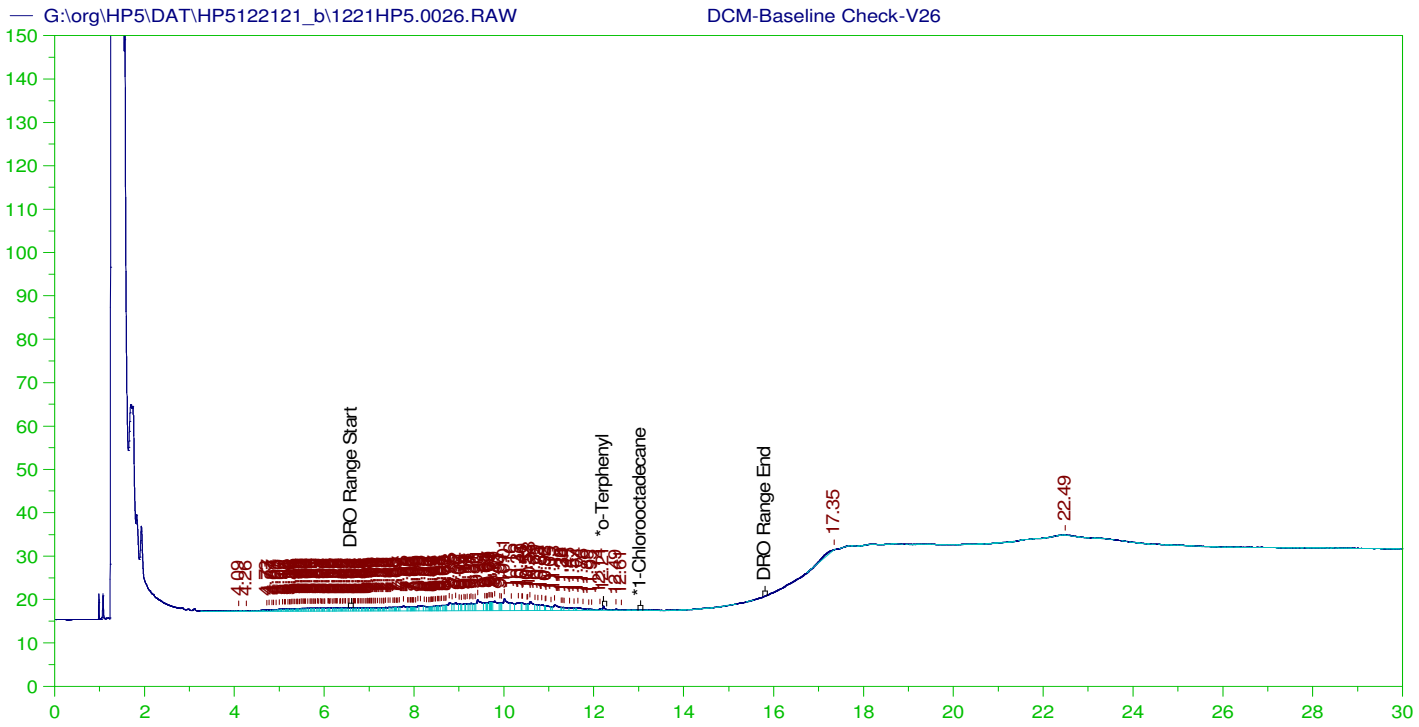
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-001A ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0025.RAW
Date & Time Acquired: 12/22/2021 9:10:20 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	.19	.165	86.55	-
*1-Chlorooctadecane	13.06	.19	.	.03	-
*#Triacontane	16.288	.19	.086	44.92	-

DRO Area:3396285 DRO Amount: 0.1031651
TEH Area:6202406 TEH Amount: 0.1884036



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V26
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0026.RAW
Date & Time Acquired: 12/22/2021 9:53:10 AM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

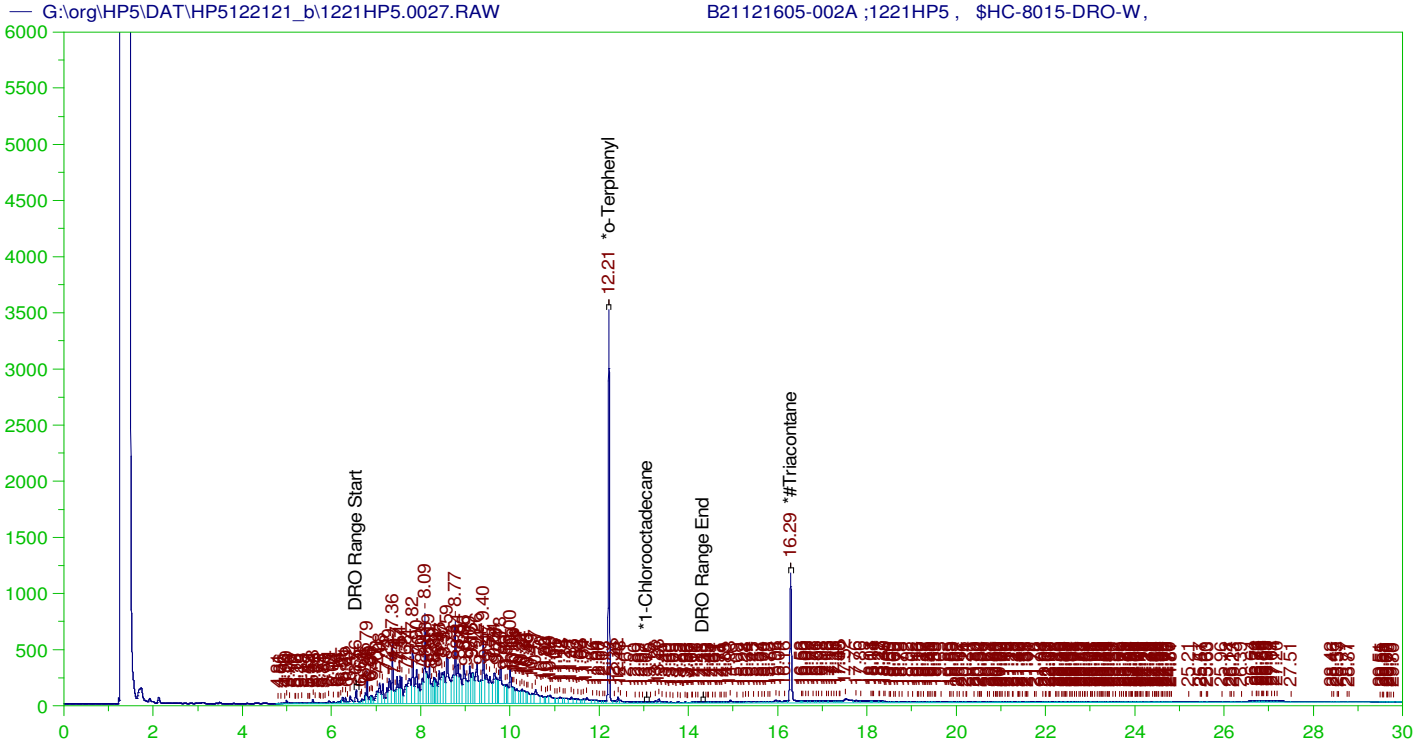
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.215	200.	.096	.05	-
*1-Chlorooctadecane	29.94	200.	.	.	-

DRO Area:377188.1 DRO Amount: 12.03029
TEH Area:465741 TEH Amount: 14.85466

ERH2206 (RHMW2254-01) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0027.RAW B21121605-002A ;1221HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-002A ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0027.RAW
Date & Time Acquired: 12/22/2021 10:36:02 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

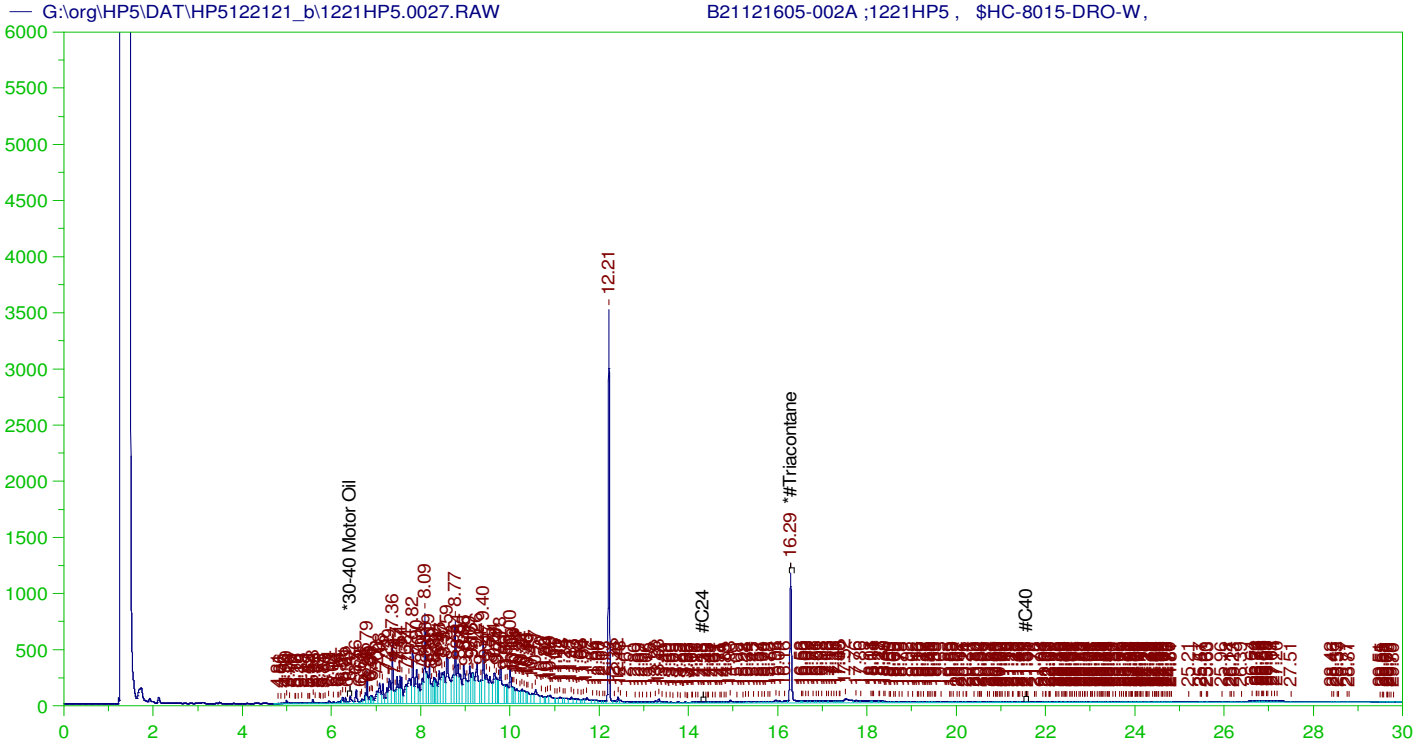
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.19	.181	95.06	-
*1-Chlorooctadecane	13.06	.19	.001	.56	-
*#Triacontane	16.288	.19	.104	54.41	-

DRO Area:5.062064E+07 DRO Amount: 1.537647
TEH Area:5.954589E+07 TEH Amount: 1.808759

ERH2206 (RHMW2254-01) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0027.RAW B21121605-002A ;1221HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121605-002A ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0027.RAW
Date & Time Acquired: 12/22/2021 10:36:02 AM
Method File: G:\Org\HP5\Methods\D3_OROS-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-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: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.288	.476	.104	21.78	-

RRO Area:5258103 RRO AMOUNT: 0.1754483

ERH2206 (RHMW2254-01) Batch ID: 162352

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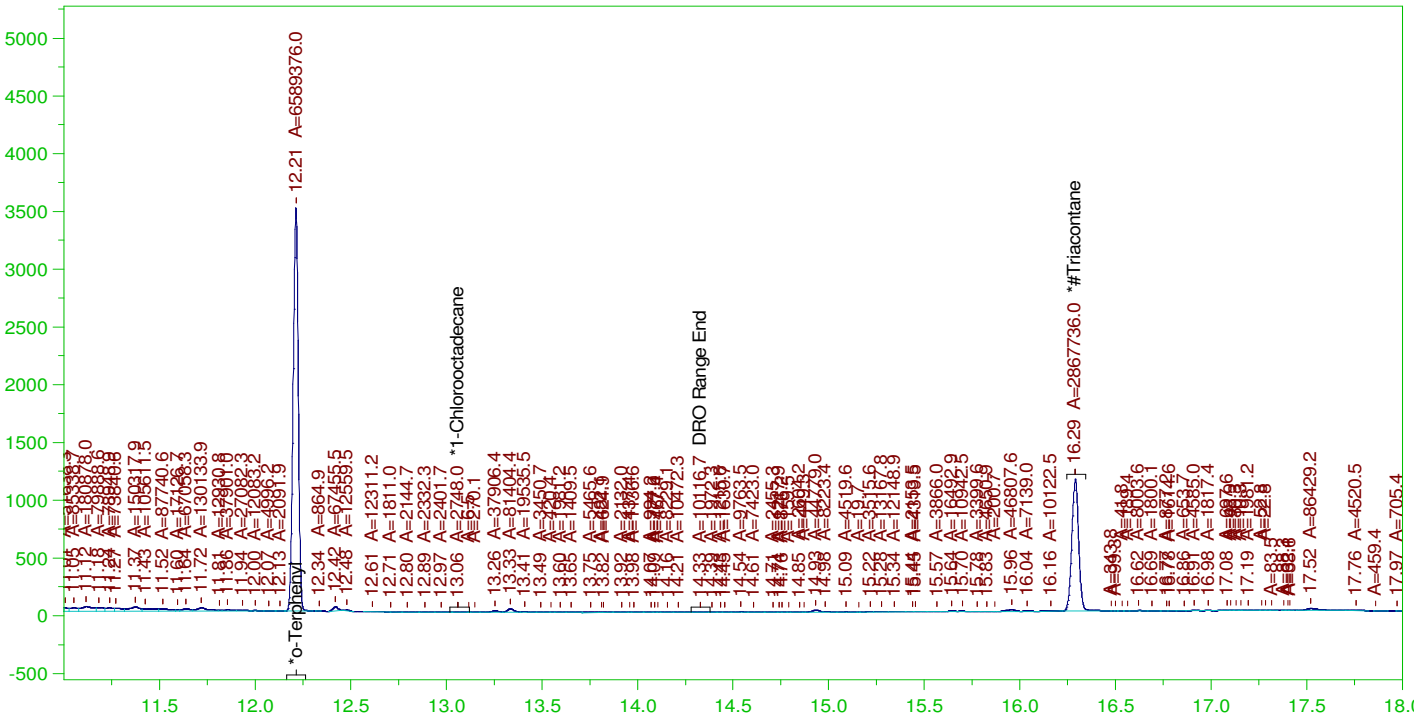


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-002A ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0027.RAW
Date & Time Acquired: 12/22/2021 10:36:02 AM
Method File: G:\Org\HP5\Methods\DS_8015-122127-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

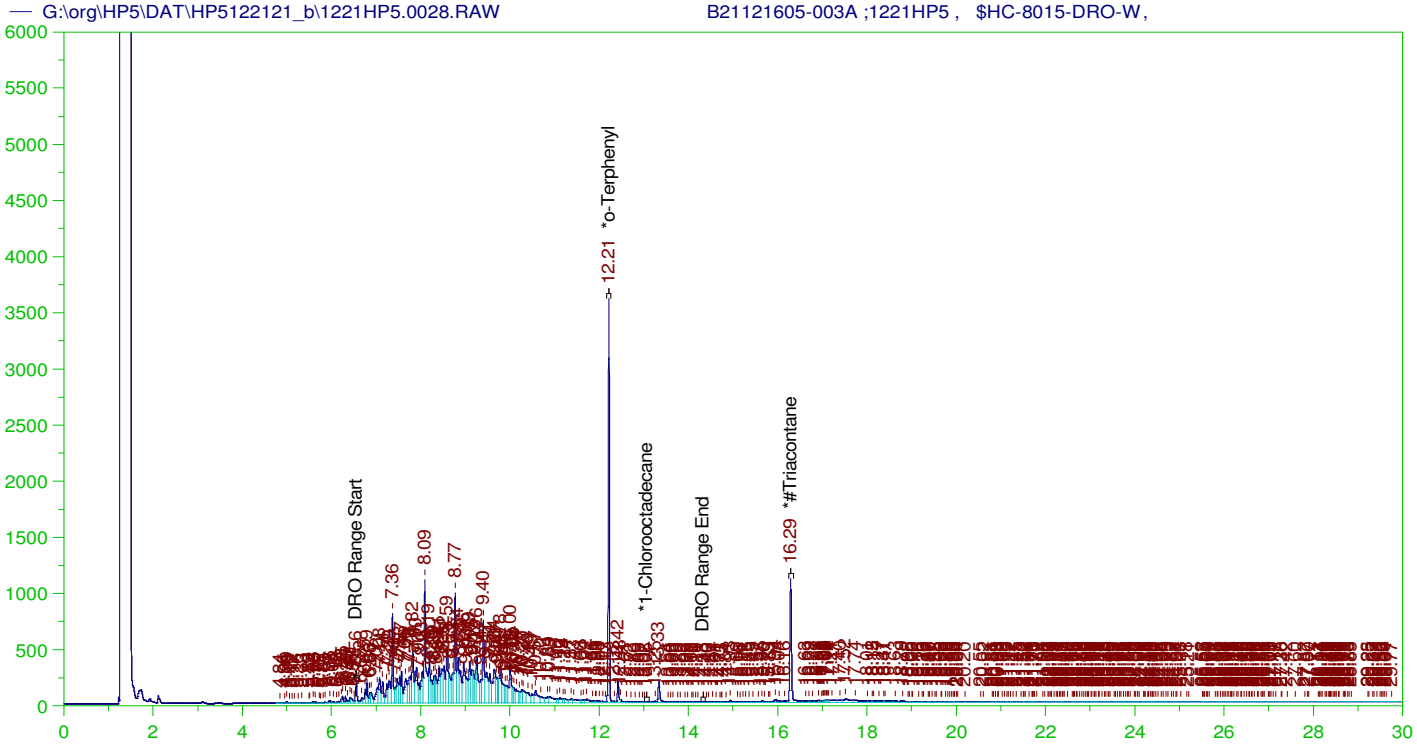
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.19	.177	92.78	-
*1-Chlorooctadecane	13.06	.19	.	.04	-
*#Triacontane	16.288	.19	.094	49.56	-

DRO Area:4.603533E+07 DRO Amount: 1.398364
TEH Area:4.740095E+07 TEH Amount: 1.439846

ERH2176 (RHMW2254-01) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0028.RAW B21121605-003A ;1221HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-003A ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0028.RAW
Date & Time Acquired: 12/22/2021 11:19:14 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

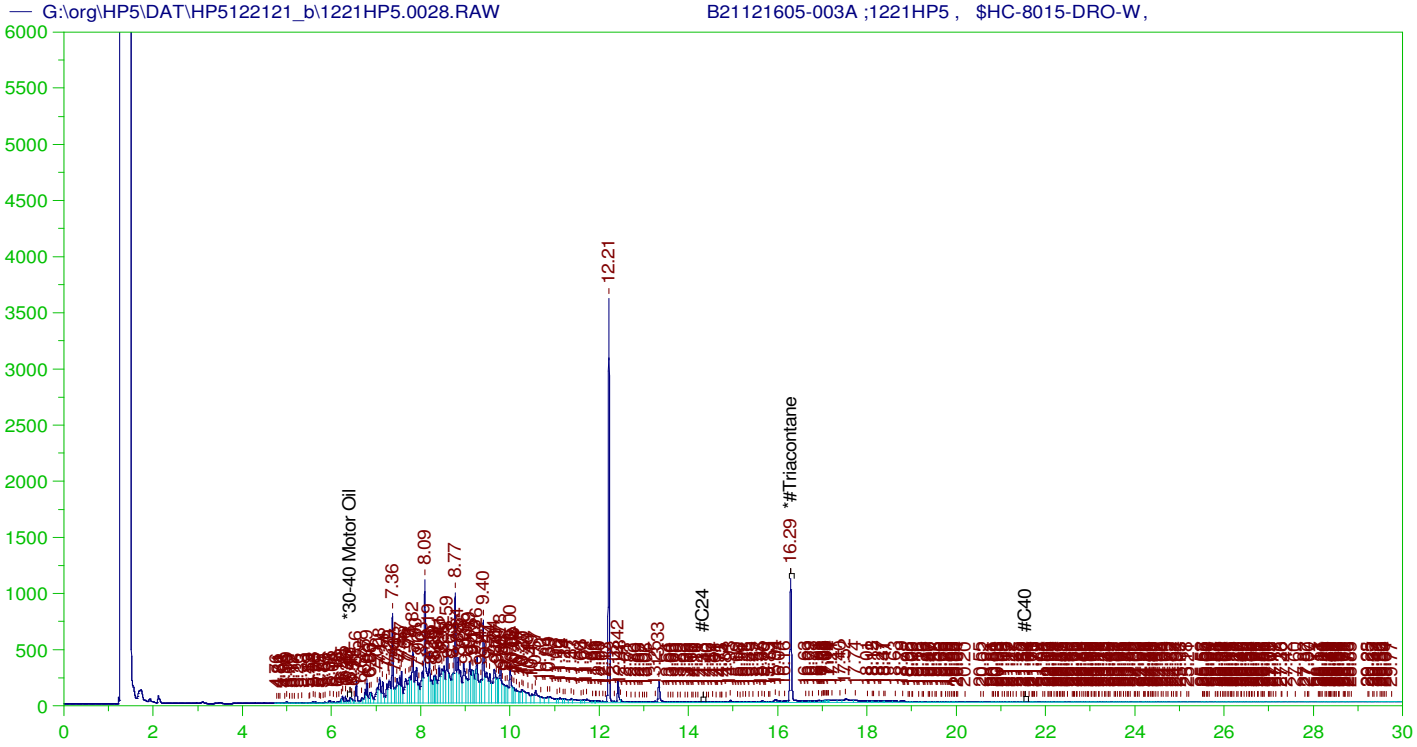
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.198	.188	94.92	-
*1-Chlorooctadecane	13.062	.198	.001	.56	-
*#Triacontane	16.289	.198	.107	54.11	-

DRO Area:5.57105E+07 DRO Amount: 1.759276
TEH Area:6.364356E+07 TEH Amount: 2.009793

ERH2176 (RHMW2254-01) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0028.RAW B21121605-003A ;1221HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121605-003A ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0028.RAW
Date & Time Acquired: 12/22/2021 11:19:14 AM
Method File: G:\Org\HP5\Methods\D3_OROS-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-SAMP.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

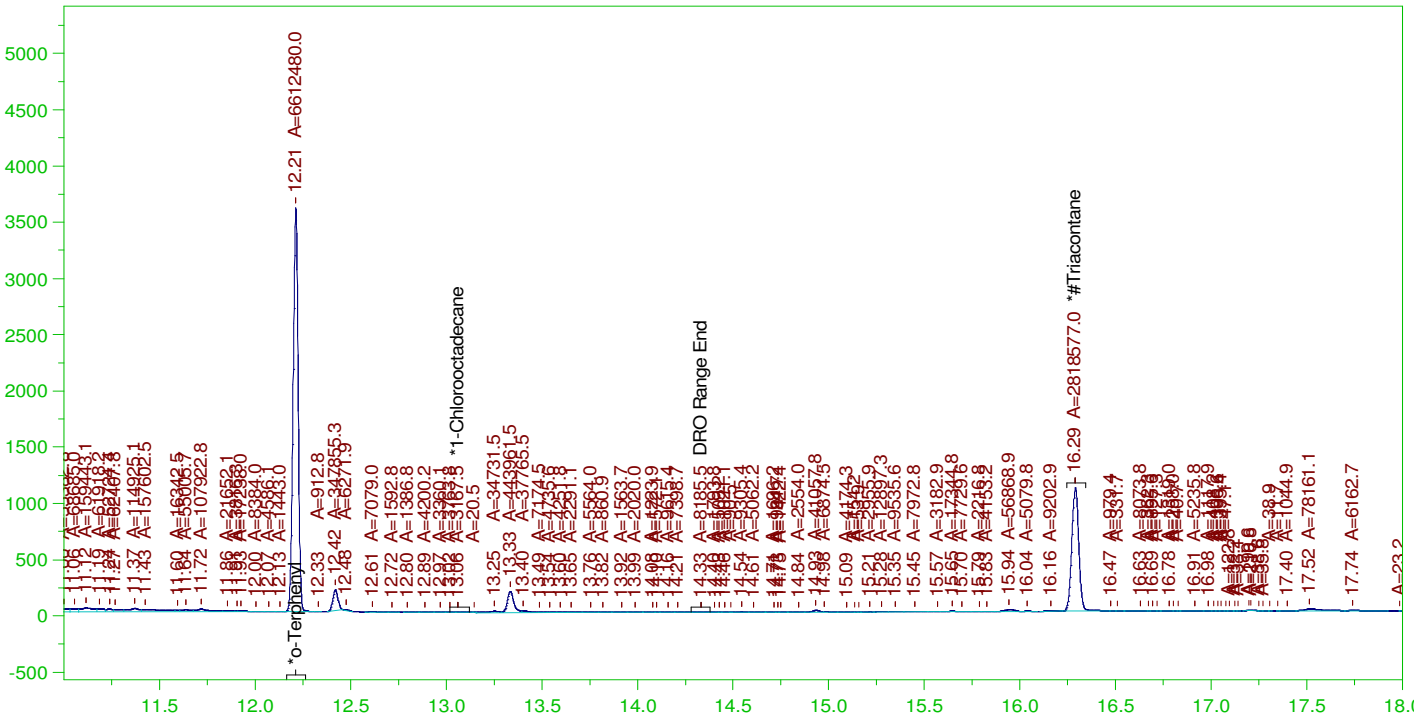
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.289	.495	.107	21.65	-

RRO Area:5145561 RRO AMOUNT: 0.1784928

ERH2176 (RHMW2254-01) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0028.RAW B21121605-003A ;1221HP5 , $HC-8015-DRO-W,



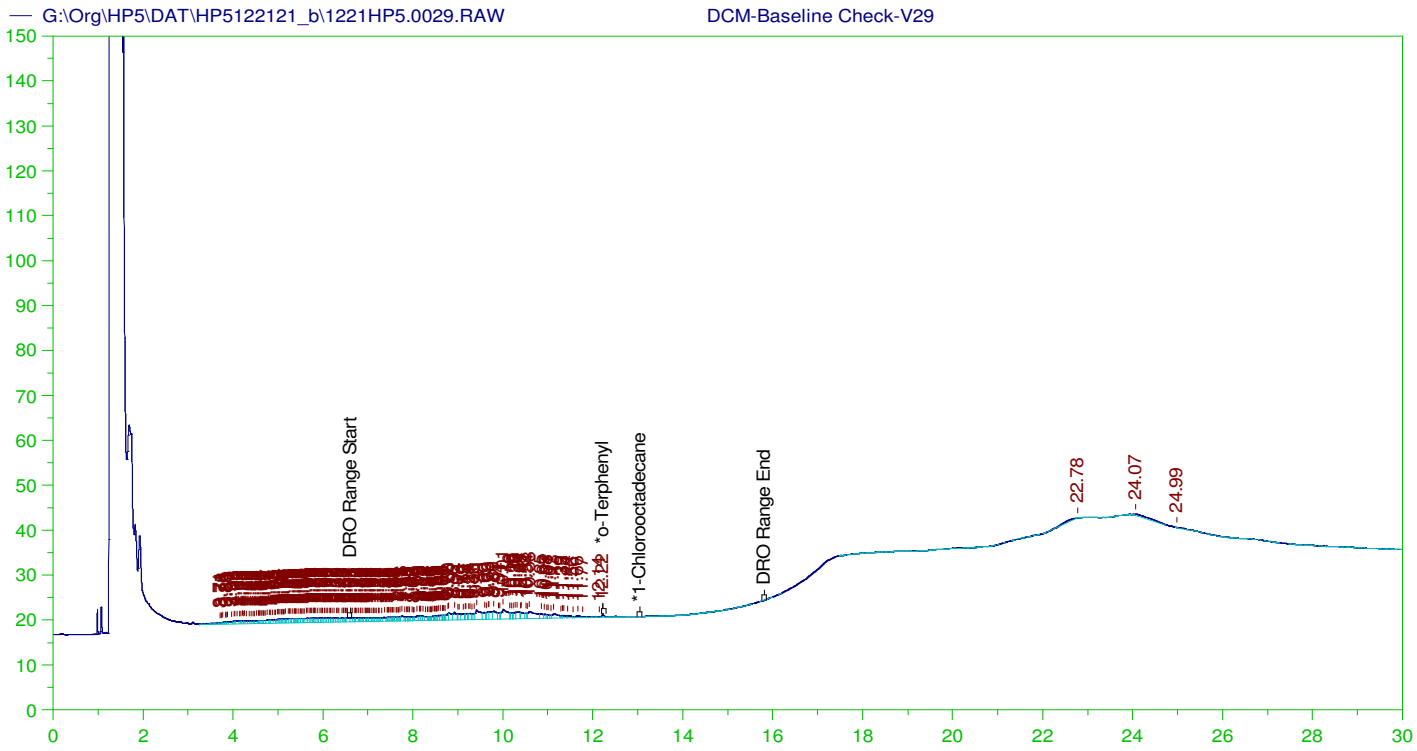
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-003A ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0028.RAW
Date & Time Acquired: 12/22/2021 11:19:14 AM
Method File: G:\Org\HP5\Methods\DS_8015-122127-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.198	.184	93.11	-
*1-Chlorooctadecane	13.062	.198	. .04		-
*#Triacontane	16.289	.198	.096	48.71	-

DRO Area:5.194986E+07 DRO Amount: 1.640519
TEH Area:5.338243E+07 TEH Amount: 1.685758



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V29
Raw File: G:\Org\HP5\DAT\HP5122121_b\1221HP5.0029.RAW
Date & Time Acquired: 12/22/2021 12:01:53 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-Lexp.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

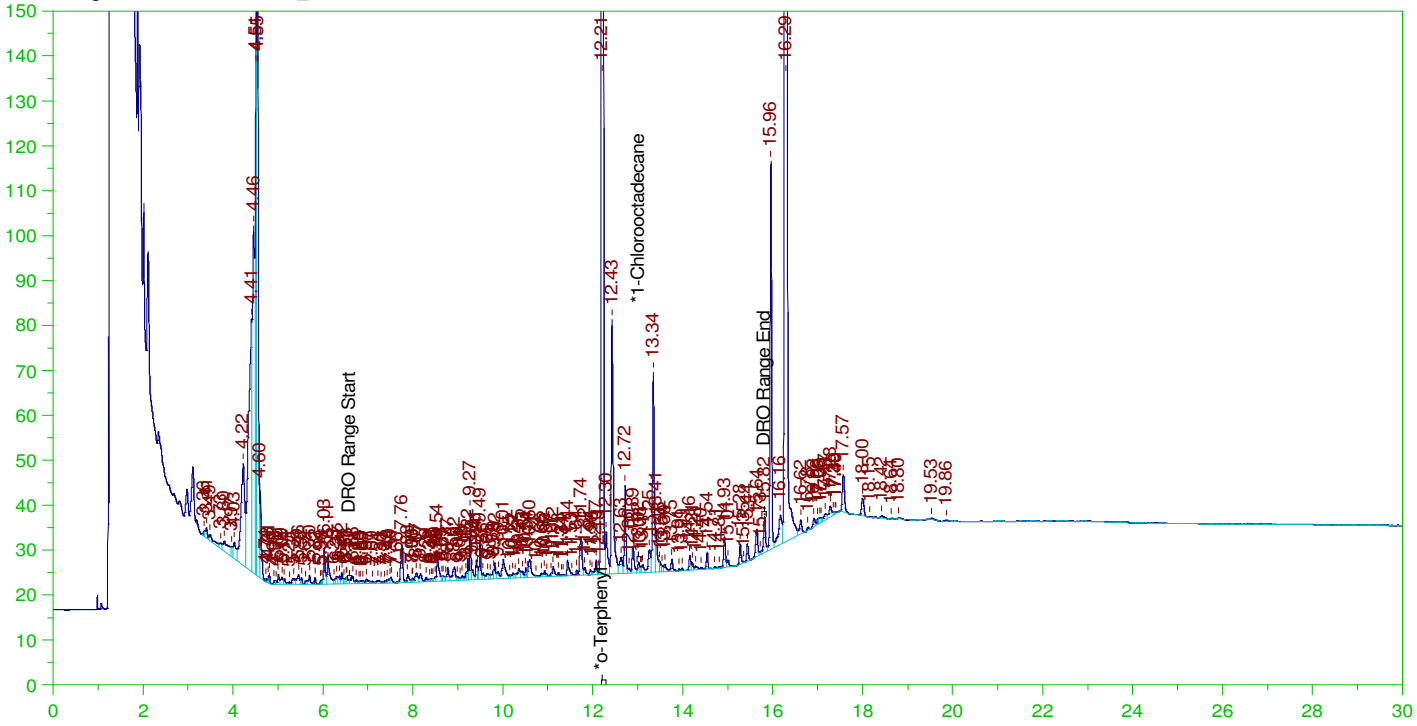
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.217	200.	.086	.04	-
*1-Chlorooctadecane	29.97	200.	.	.	-

DRO Area:334877.2 DRO Amount: 10.6808
TEH Area:493060.2 TEH Amount: 15.726

ERH2193 (RHMW12A) Batch ID: 162352

G:\Org\HP5\DAT\HP5122121_b\1221HP5.0030.RAW B21121622-001B ;1221HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-001B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5122121_b\1221HP5.0030.RAW
Date & Time Acquired: 12/22/2021 12:44:34 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-Lexp.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 960 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	.208	.187	89.87	-
*1-Chlorooctadecane	13.019	.208	. .1		-

DRO Area:1038049 DRO Amount: 3.448777E-02
TEH Area:5803344 TEH Amount: 0.1928081

ERH2195 (RHMW16) Batch ID: 162352

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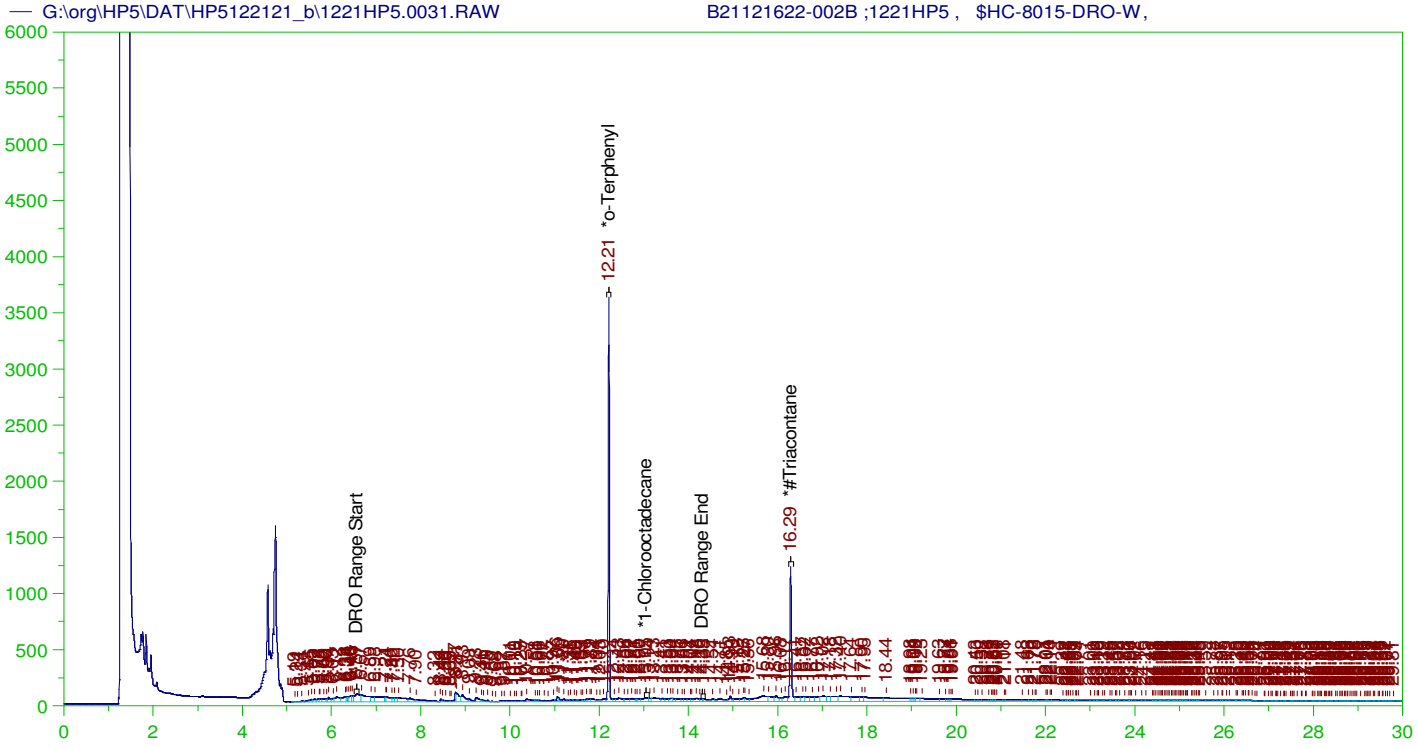

DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-002B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0031.RAW
Date & Time Acquired: 12/22/2021 1:27:19 PM
Method File: G:\Org\HP5\Methods\D3_8015-122131-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	.19	.184	96.4	-
*1-Chlorooctadecane	13.047	.19	.008	4.38	-
*#Triacontane	16.287	.19	.107	56.15	-

DRO Area:1.007537E+07 DRO Amount: 0.3060482
TEH Area:2.61747E+07 TEH Amount: 0.7950797

ERH2195 (RHMW16) Batch ID: 162352

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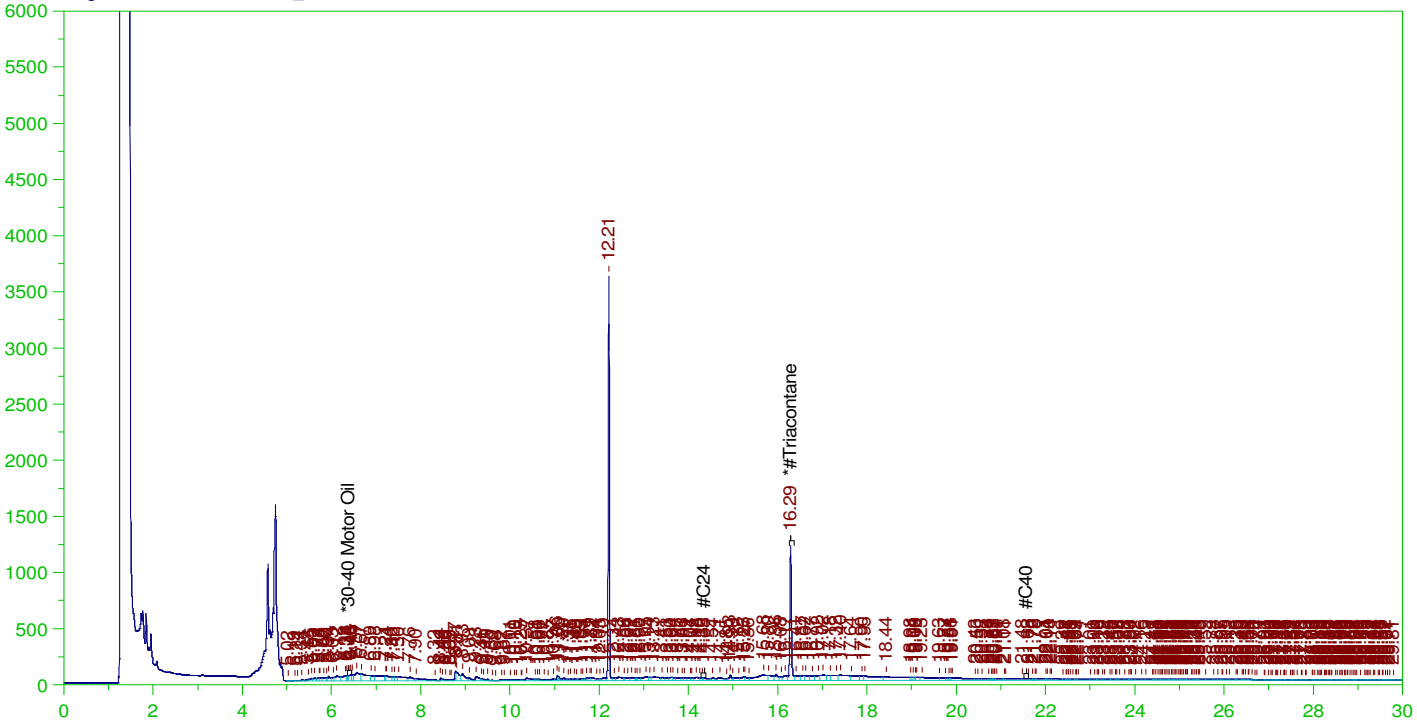

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121622-002B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0031.RAW
Date & Time Acquired: 12/22/2021 1:27:19 PM
Method File: G:\Org\HP5\Methods\D3_OROS-122131-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-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: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.287	.476	.107	22.47	-

RRO Area:1.16533E+07 RRO AMOUNT: 0.3888381

ERH2195 (RHMW16) Batch ID: 162352

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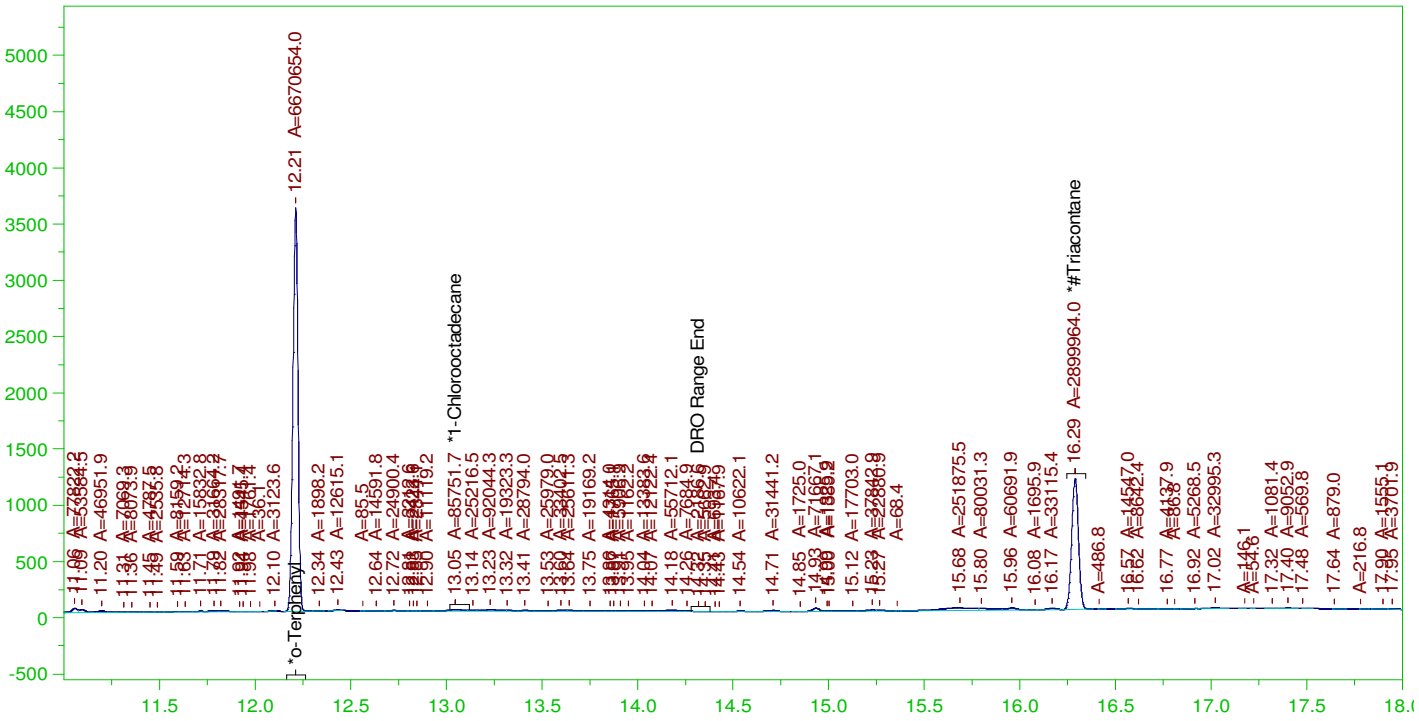

DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-002B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0031.RAW
Date & Time Acquired: 12/22/2021 1:27:19 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	.19	.179	93.93	-
*1-Chlorooctadecane	13.047	.19	.002	1.21	-
*#Triacontane	16.287	.19	.095	50.12	-

DRO Area:5942135 DRO Amount: 0.1804976
TEH Area:2.337826E+07 TEH Amount: 0.7101353

ERH2205 (RHMW15-05) Batch ID: 162352

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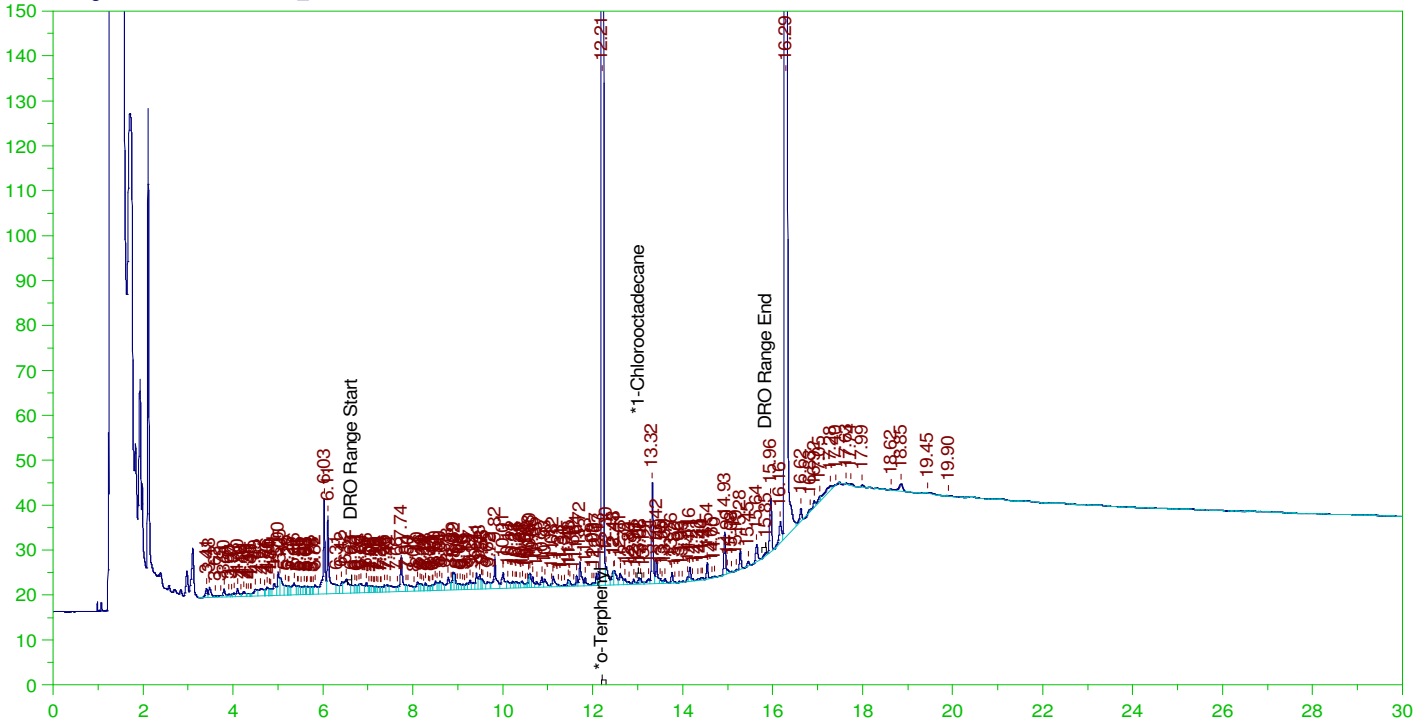


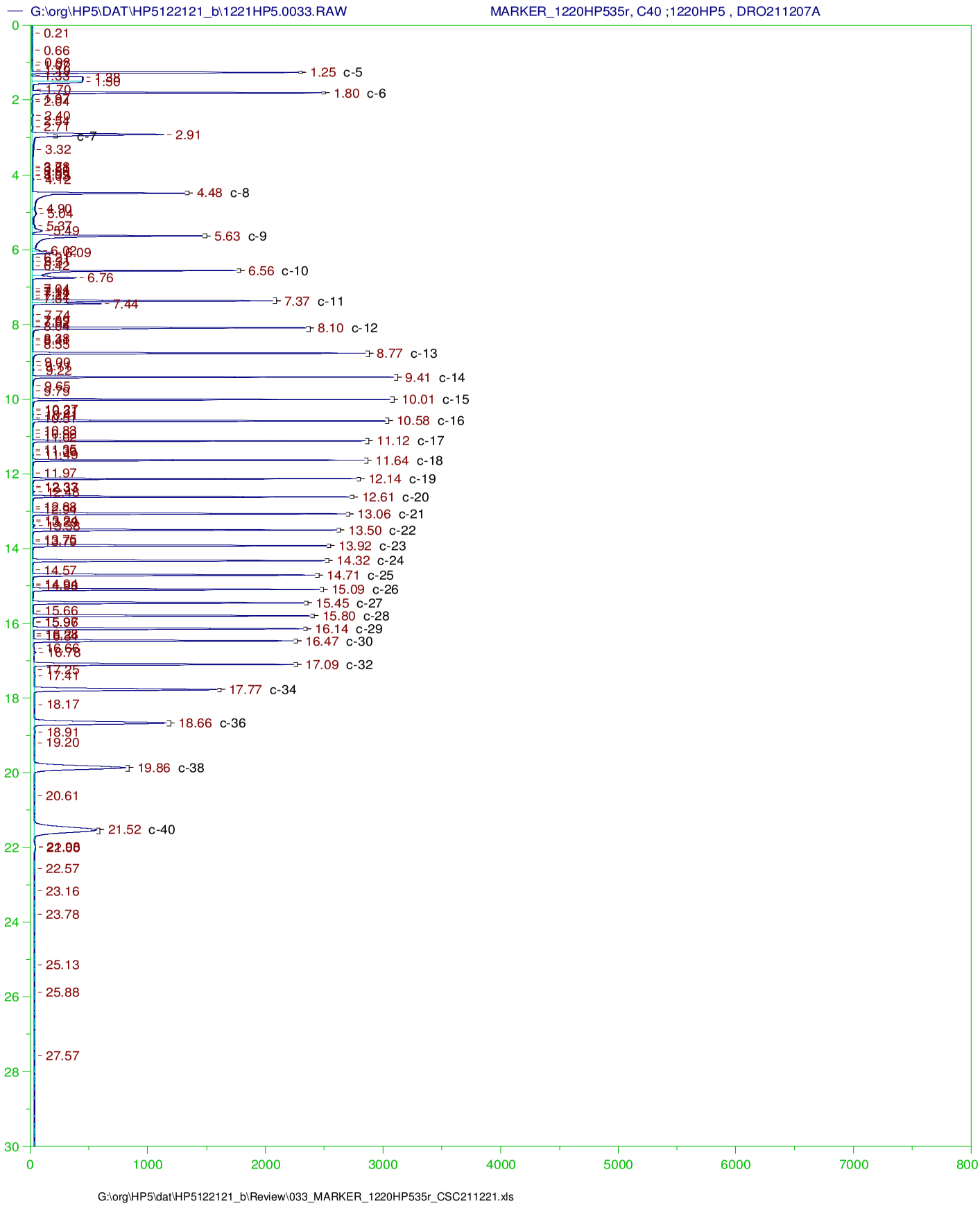
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-003B ;1221HP5 , $HC-8015-DRO-W,
Raw File: G:\Org\HP5\DAT\HP5122121_b\1221HP5.0032.RAW
Date & Time Acquired: 12/22/2021 2:10:15 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-Lexp.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 900 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	.222	.191	85.82	-
*1-Chlorooctadecane	13.023	.222	.	.04	-

DRO Area:734614.3 DRO Amount: 2.603365E-02
TEH Area:3911347 TEH Amount: 0.1386124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0.21
0.66
1.25 c-5
1.80 c-6
2.91
c-7
3.32
4.48 c-8
5.63 c-9
6.56 c-10
6.76
7.37 c-11
7.44
8.10 c-12
8.77 c-13
9.41 c-14
10.01 c-15
10.58 c-16
11.12 c-17
11.64 c-18
11.97
12.14 c-19
12.61 c-20
13.06 c-21
13.50 c-22
13.92 c-23
14.32 c-24
14.57
14.71 c-25
15.09 c-26
15.45 c-27
15.66
15.80 c-28
16.14 c-29
16.47 c-30
17.09 c-32
17.77 c-34
18.17
18.66 c-36
18.91
19.20
19.86 c-38
20.61
21.52 c-40
22.57
23.16
23.78
25.13
25.88
27.57
0
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2000
3000
4000
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6000
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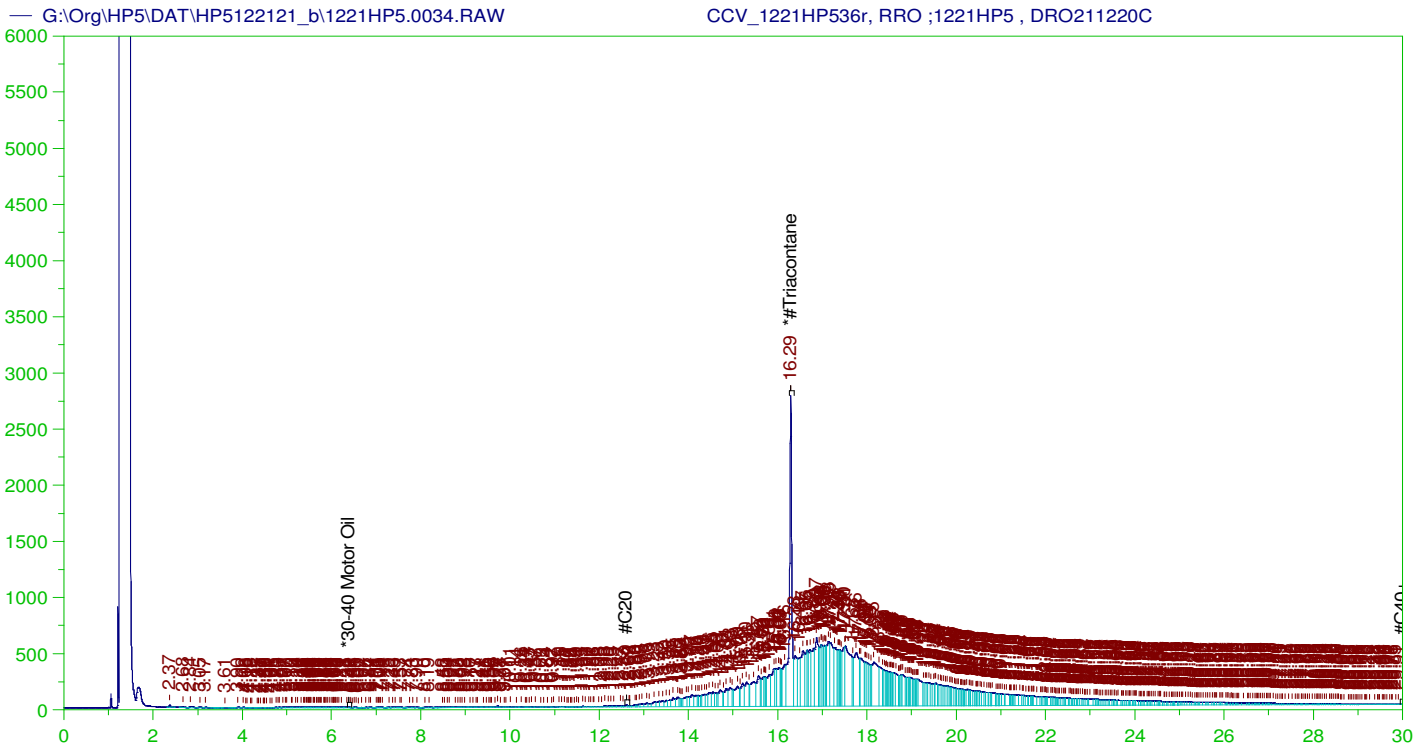


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1221HP536r, RRO ;1221HP5 , DRO211220C
Raw File: G:\Org\HP5\DAT\HP5122121_b\1221HP5.0034.RAW
Date & Time Acquired: 12/22/2021 3:35:47 PM
Method File: G:\Org\HP5\Methods\DC_ORO-AK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.291	500.	348.211	69.64	-

~~RRO~~ TEH (Oil Range) Area:1.336989E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4684.221

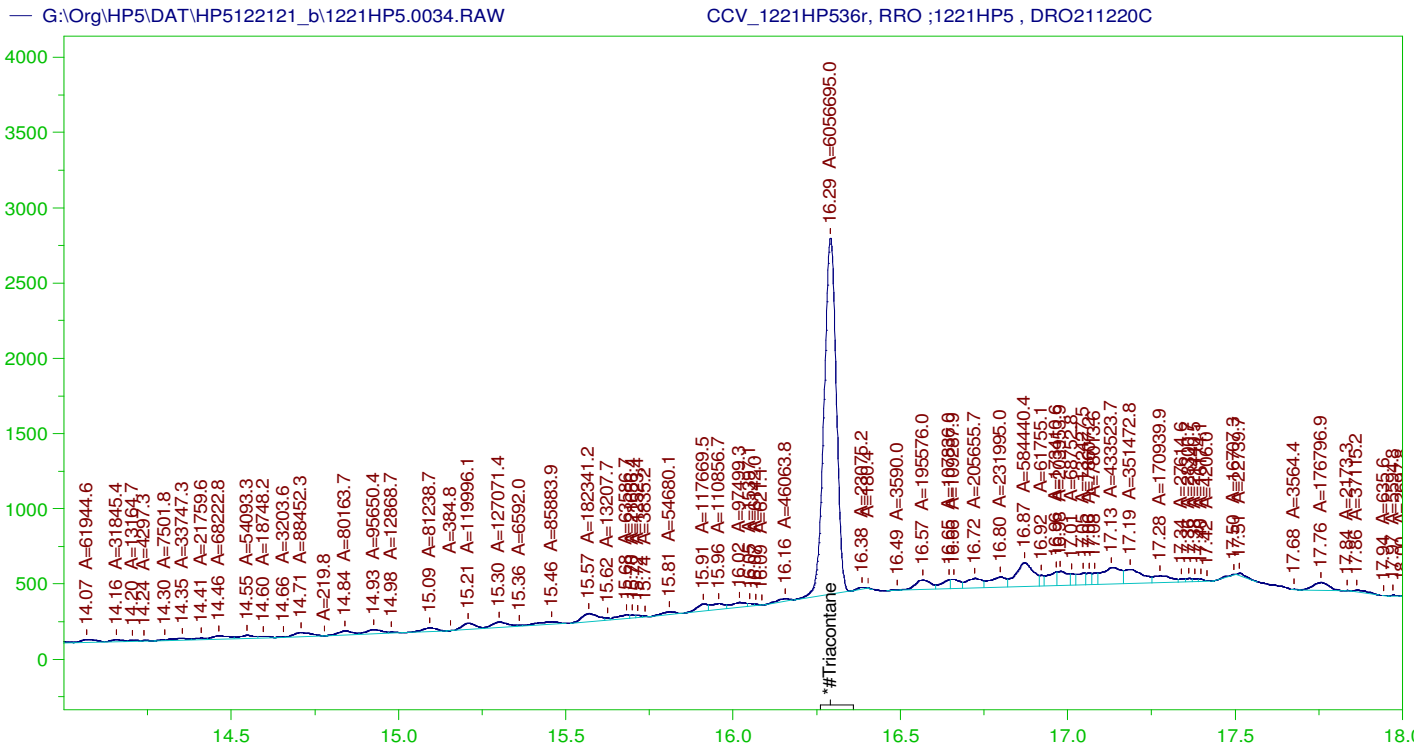
CONTINUING CALIBRATION REPORT: G:\Org\HP5\DAT\HP5122121_b\1221HP5.0034.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.056	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.291	200.	348.211	174.11	75-125

AMN 01/11/2022

G:\org\HP5\dat\HP5122121_b\Review\034_CCV_1221HP536r_DC_ORO-AK-L%.xls



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1221HP536r, RRO ;1221HP5 , DRO211220C
Raw File: G:\Org\HP5\DAT\HP5122121_b\1221HP5.0034.RAW
Date & Time Acquired: 12/22/2021 3:35:47 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.58 to 30.05

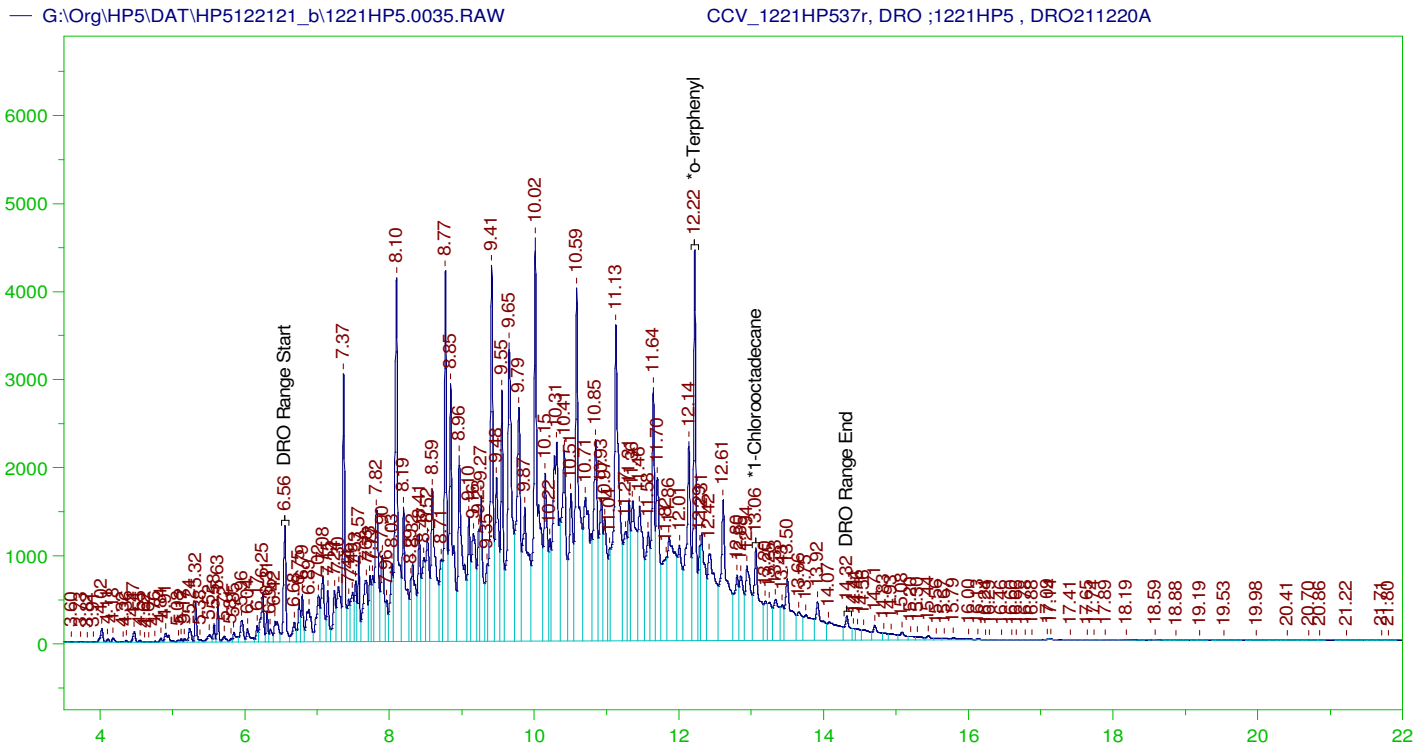
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.291	500.	209.356	41.87	-

RRO Area:6197081 RRO AMOUNT: 217.1183

CONTINUING CALIBRATION REPORT: G:\Org\HP5\DAT\HP5122121_b\1221HP5.0034.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.056	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.291	200.	209.356	104.68	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1221HP537r, DRO ;1221HP5 , DRO211220A
Raw File: G:\Org\HP5\DAT\HP5122121_b\1221HP5.0035.RAW
Date & Time Acquired: 12/22/2021 4:18:49 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Ik-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

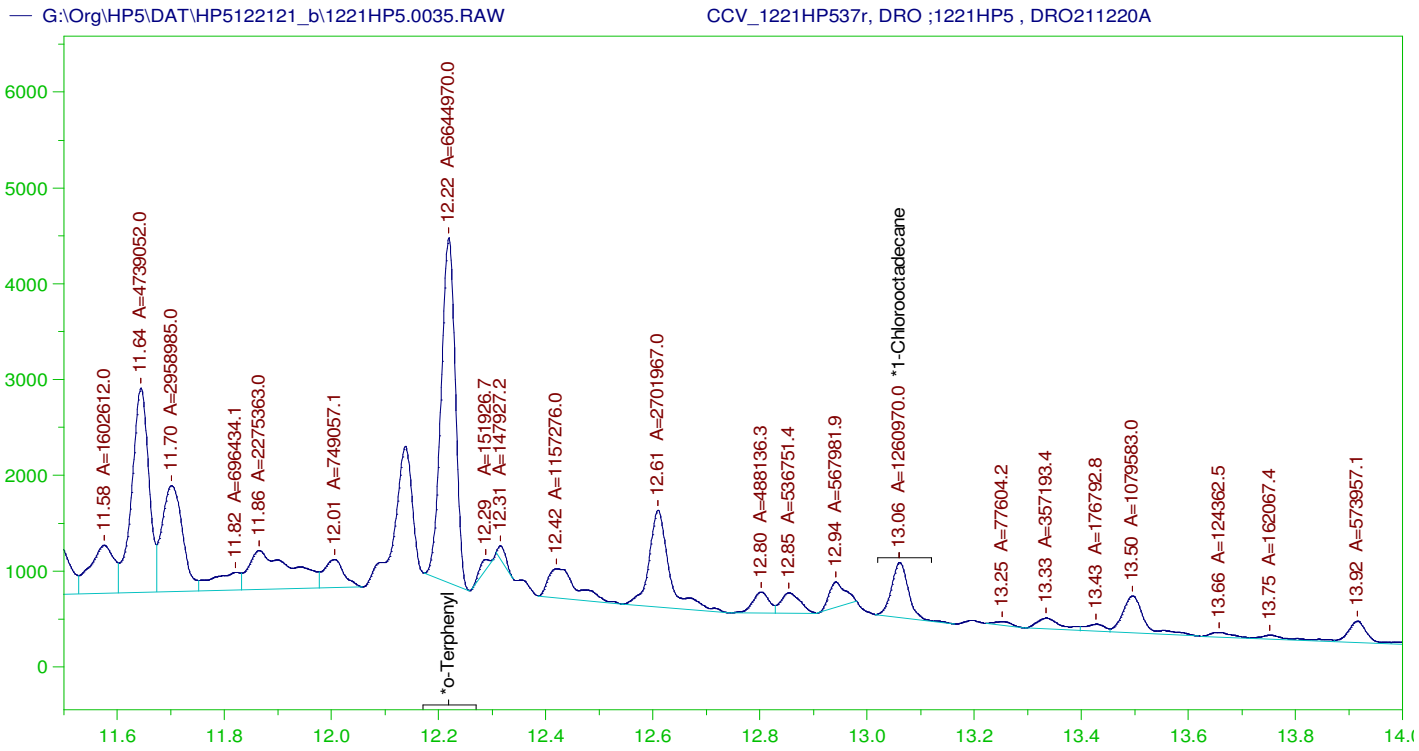
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.219	200.	307.877	153.94	-
*1-Chlorooctadecane	13.061	200.	150.6	75.3	-

DRO Area:4.394882E+08 DRO Amount: 14017.34
TEH Area:4.55703E+08 TEH Amount: 14534.5

CONTINUING CALIBRATION REPORT: G:\Org\HP5\DAT\HP5122121_b\1221HP5.0035.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	14534.5	96.9	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.219	200.	307.877	153.94	85-115
*1-Chlorooctadecane	13.061	200.	150.6	75.3	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1221HP537r, DRO ;1221HP5 , DRO211220A
Raw File: G:\Org\HP5\DAT\HP5122121_b\1221HP5.0035.RAW
Date & Time Acquired: 12/22/2021 4:18:49 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Ik-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.219	200.	187.134	93.57	-
*1-Chlorooctadecane	13.061	200.	35.511	17.76	-

DRO Area:2.42773E+08 DRO Amount: 7743.167
TEH Area:2.529474E+08 TEH Amount: 8067.676

CONTINUING CALIBRATION REPORT: G:\Org\HP5\DAT\HP5122121_b\1221HP5.0035.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8067.68	53.78	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.219	200.	187.134	93.57	85-115
*1-Chlorooctadecane	13.061	200.	35.511	17.76	85-115

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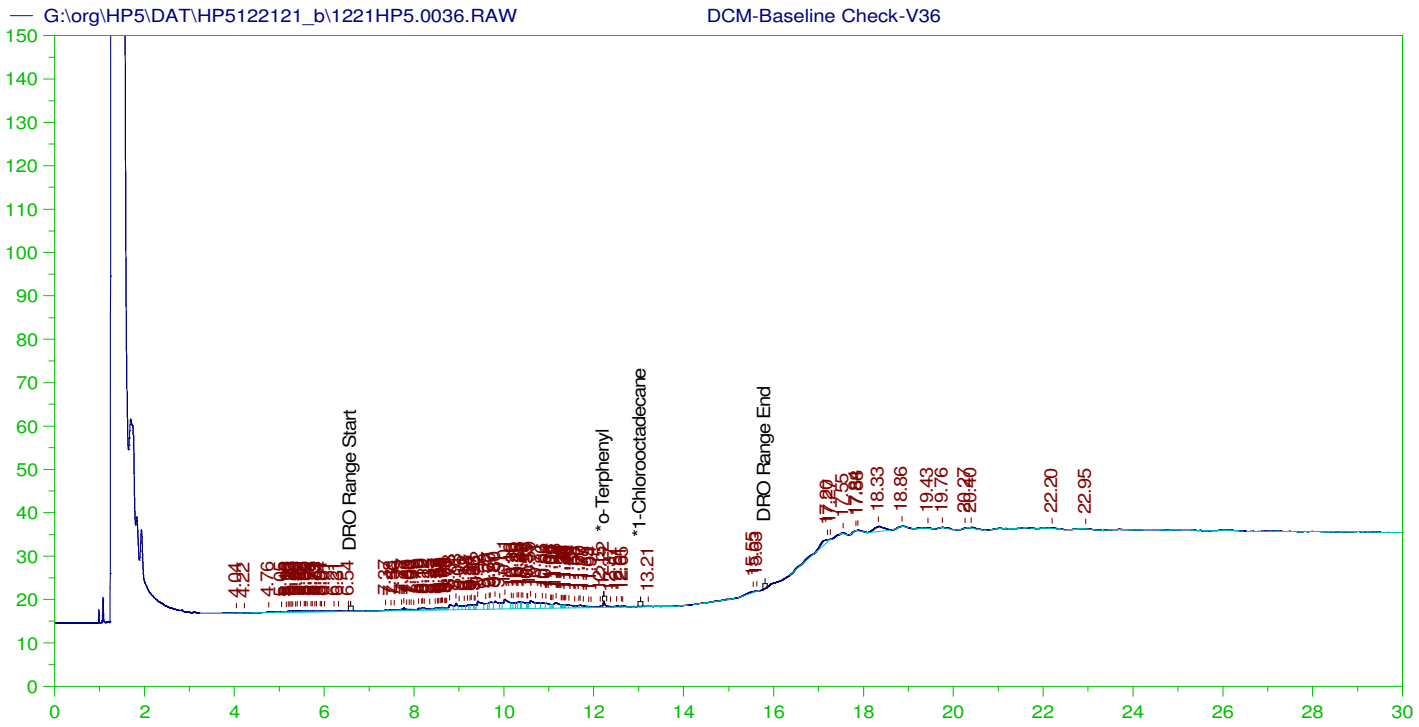


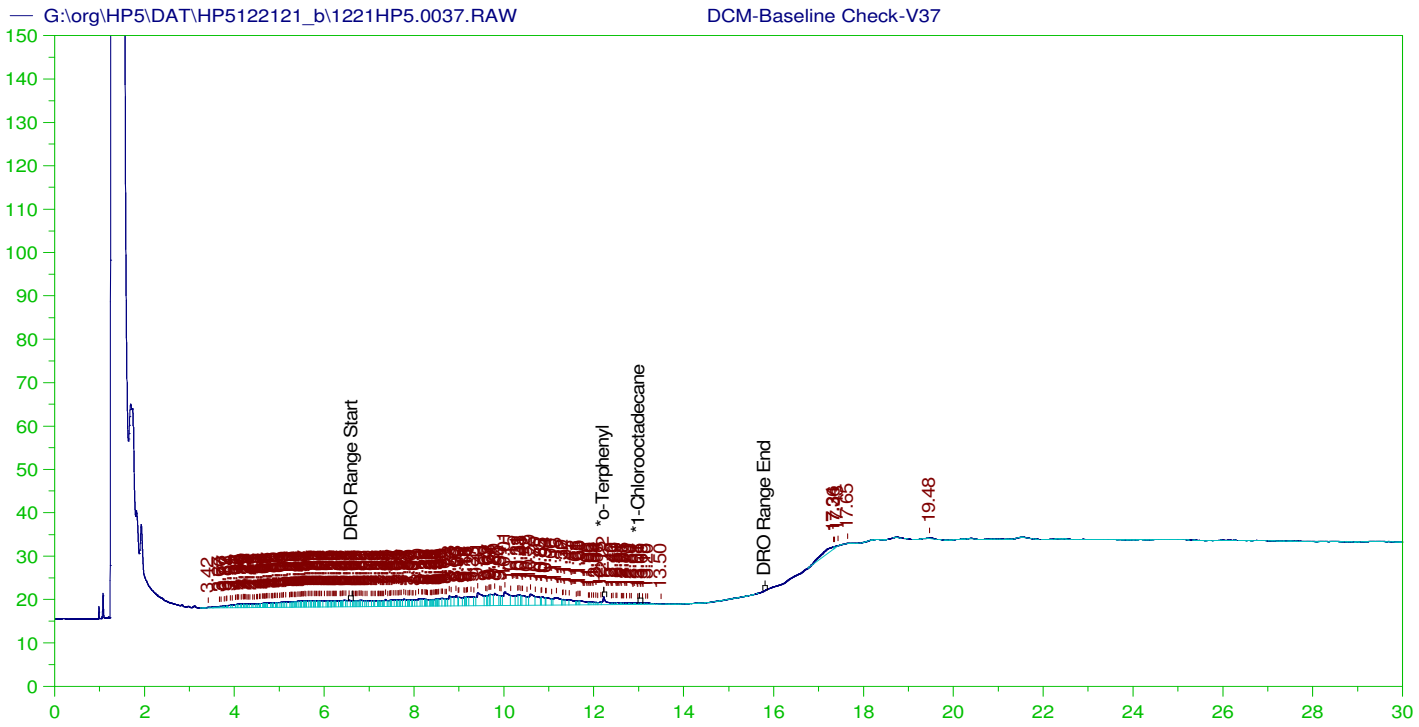
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V36
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0036.RAW
Date & Time Acquired: 12/22/2021 5:02:18 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.22	200.	.182	.09	-
*1-Chlorooctadecane	29.978	200.	.	.	-

DRO Area:266088.9 DRO Amount: 8.48682
TEH Area:358649.6 TEH Amount: 11.43902



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V37
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0037.RAW
Date & Time Acquired: 12/22/2021 5:46:06 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

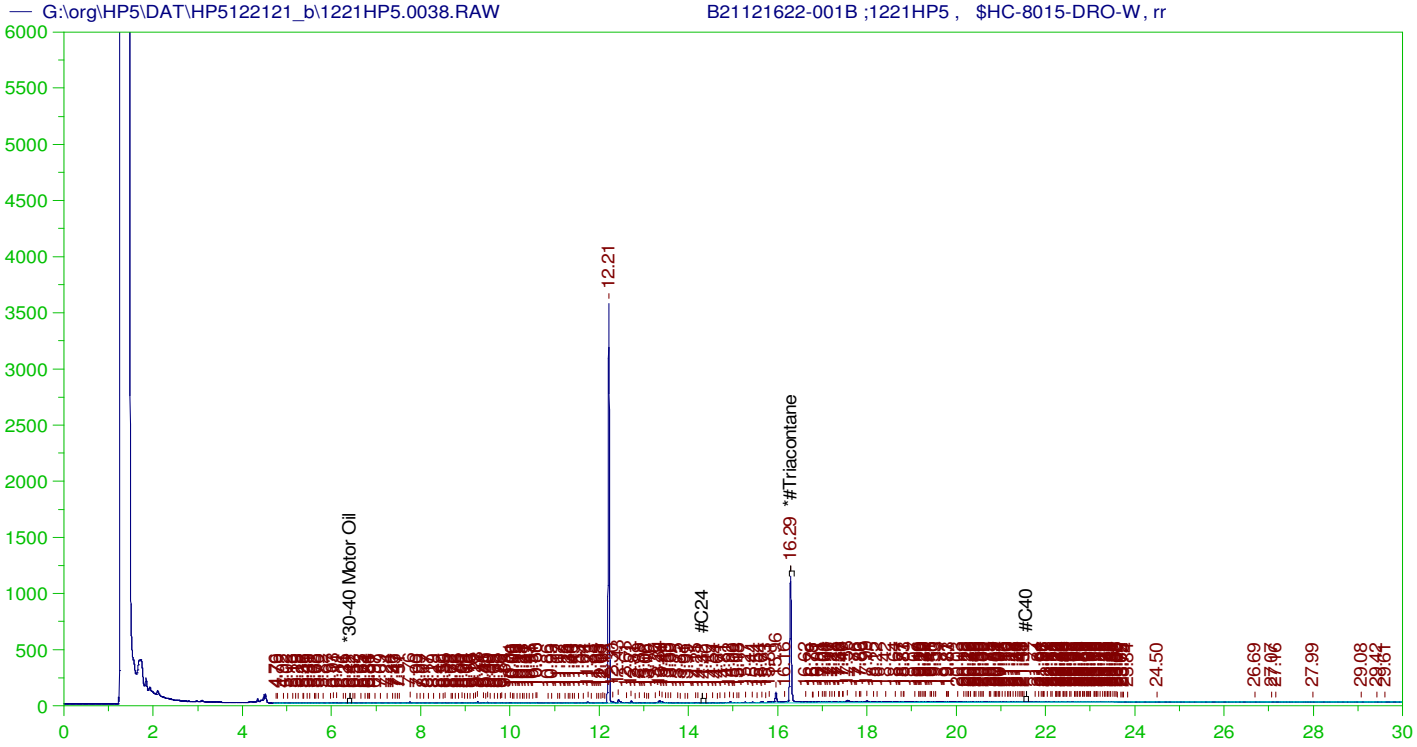
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.219	200.	.312	.16	-
*1-Chlorooctadecane	13.008	200.	.019	.01	-

DRO Area:582158 DRO Amount: 18.56774
TEH Area:803733.5 TEH Amount: 25.63482

ERH2193 (RHMW12A) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0038.RAW B21121622-001B ;1221HP5 , $HC-8015-DRO-W, rr



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121622-001B ;1221HP5 , $HC-8015-DRO-W, rr
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0038.RAW
Date & Time Acquired: 12/22/2021 6:29:38 PM
Method File: G:\Org\HP5\Methods\D3_OROS-122138-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-SAMP.CAL
Sample Weight: 960 Dilution: 1 S.A.: 1

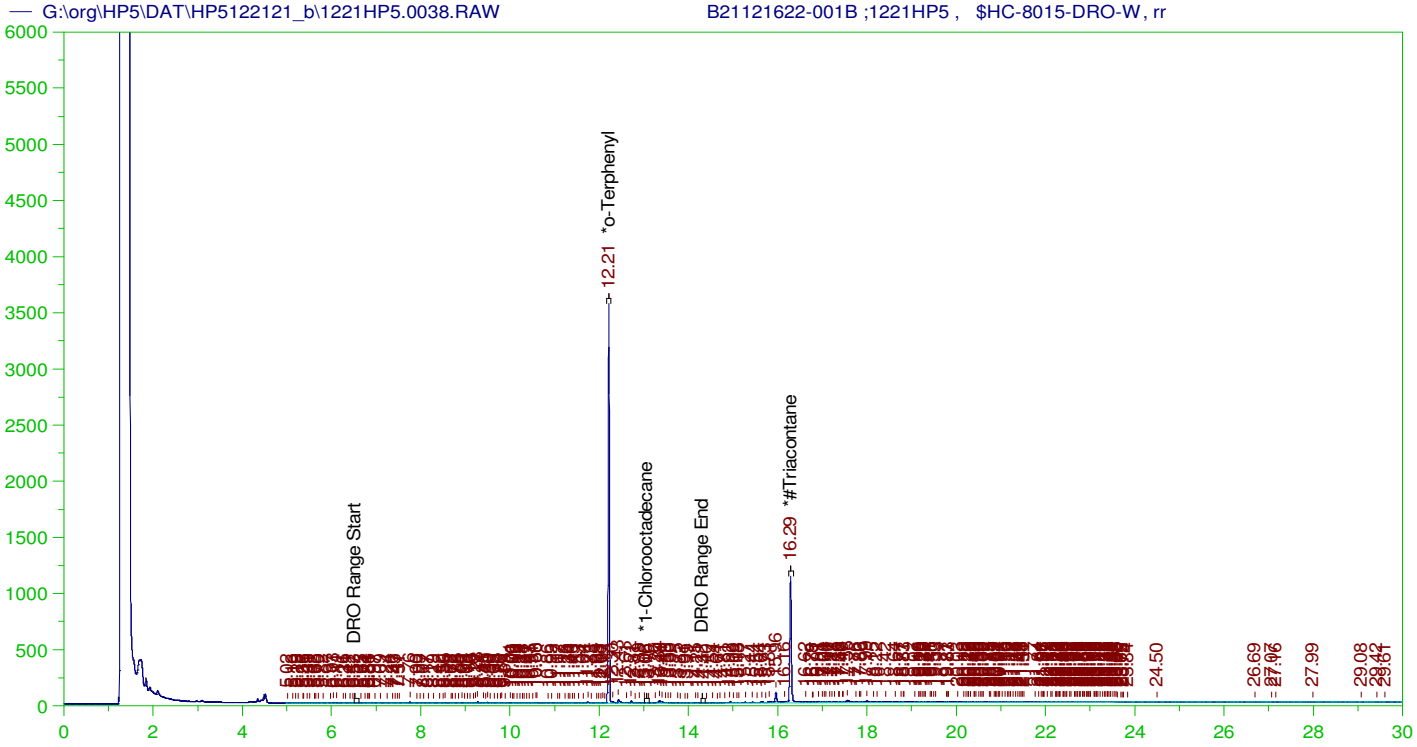
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.286	.521	.109	21.01	-

RRO Area:2858089 RRO AMOUNT: 0.1043071

ERH2193 (RHMW12A) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0038.RAW B21121622-001B ;1221HP5 , $HC-8015-DRO-W, rr



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-001B ;1221HP5 , $HC-8015-DRO-W, rr
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0038.RAW
Date & Time Acquired: 12/22/2021 6:29:38 PM
Method File: G:\Org\HP5\Methods\DR_8015-122138-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 960 Dilution: 1 S.A.: 1

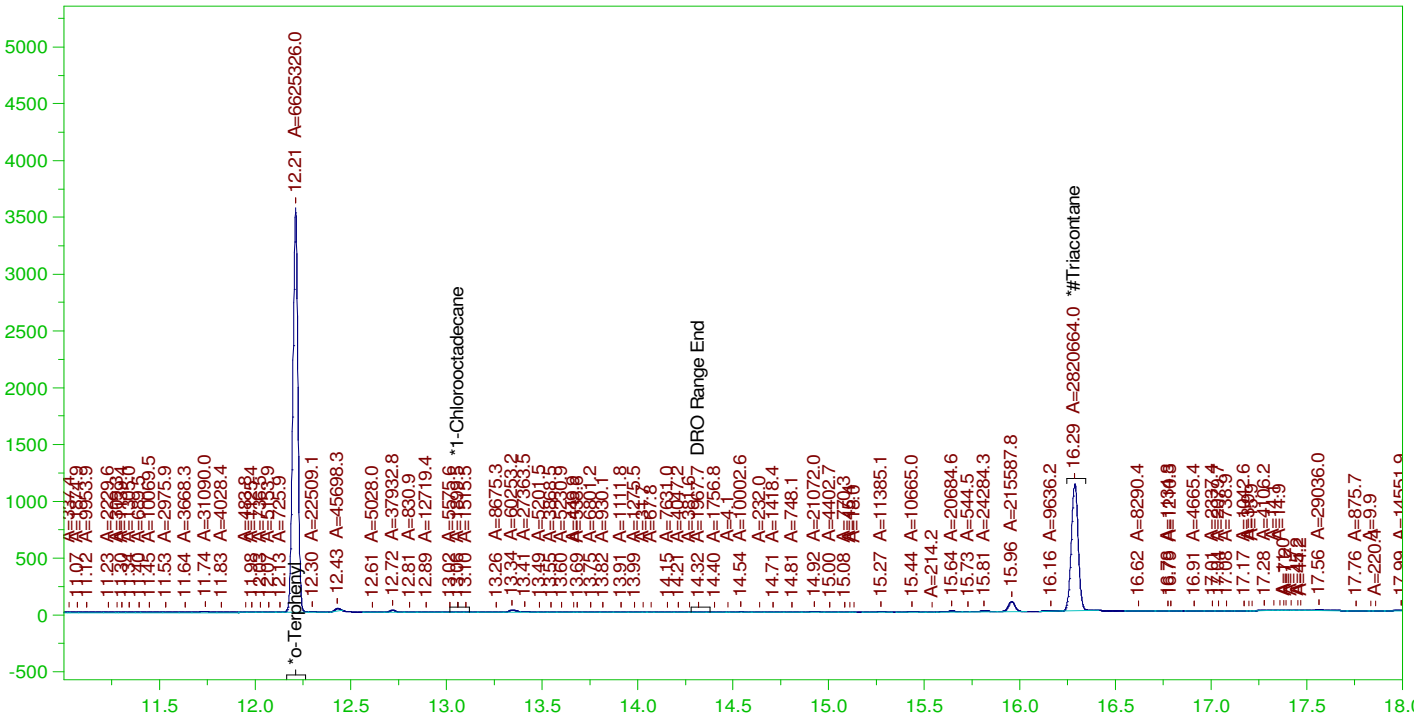
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	.208	.195	93.41	-
*1-Chlorooctadecane	13.06	.208	.	.04	-
*#Triacontane	16.286	.208	.109	52.51	-

DRO Area:861031.2 DRO Amount: 2.860658E-02
TEH Area:4050678 TEH Amount: 0.1345782

ERH2193 (RHMW12A) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0038.RAW B21121622-001B ;1221HP5 , $HC-8015-DRO-W, rr



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-001B ;1221HP5 , $HC-8015-DRO-W, rr
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0038.RAW
Date & Time Acquired: 12/22/2021 6:29:38 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 960 Dilution: 1 S.A.: 1

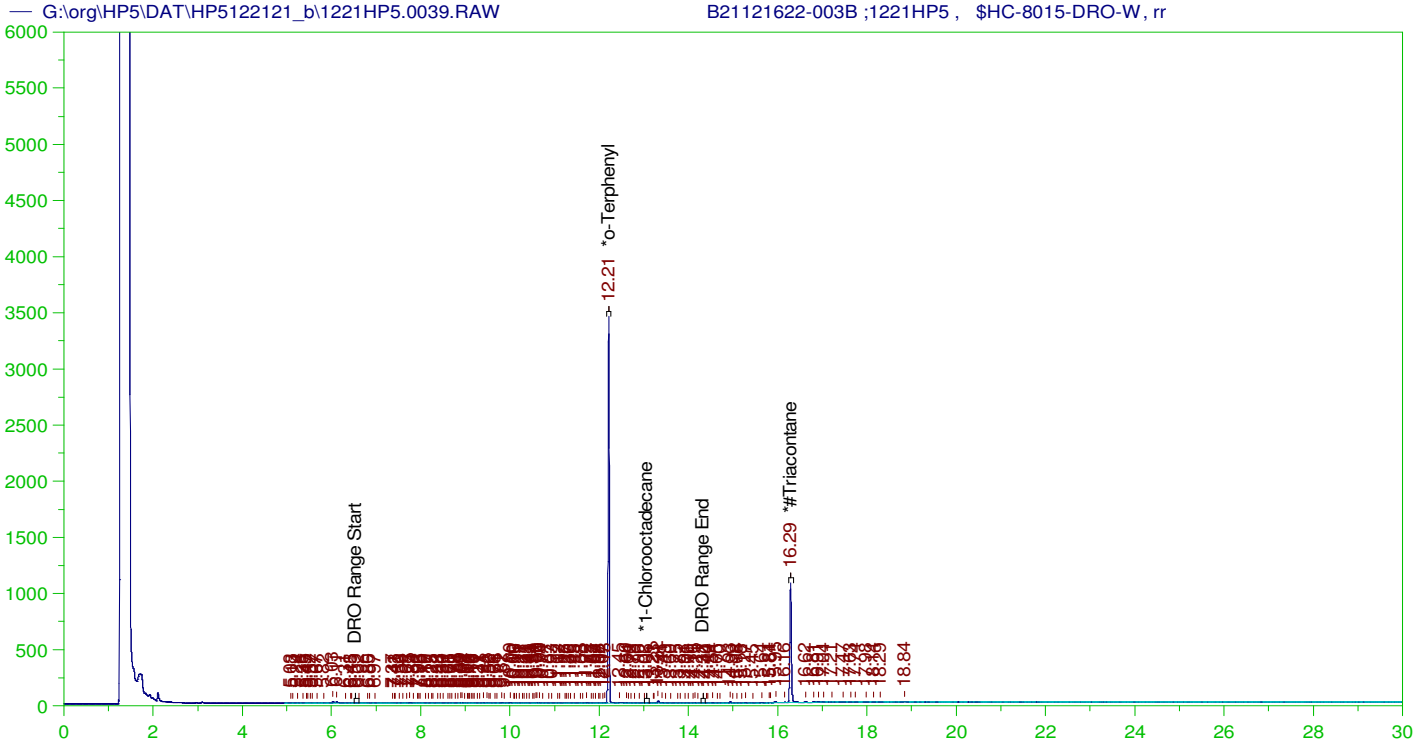
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	.208	.194	93.29	-
*1-Chlorooctadecane	13.06	.208	. .03		-
*#Triacontane	16.286	.208	.102	48.75	-

DRO Area:734578.2 DRO Amount: 2.440535E-02
TEH Area:1963439 TEH Amount: 6.523256E-02

ERH2205 (RHMW15-05) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0039.RAW B21121622-003B ;1221HP5 , $HC-8015-DRO-W, rr



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-003B ;1221HP5 , $HC-8015-DRO-W, rr
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0039.RAW
Date & Time Acquired: 12/22/2021 7:13:02 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 900 Dilution: 1 S.A.: 1

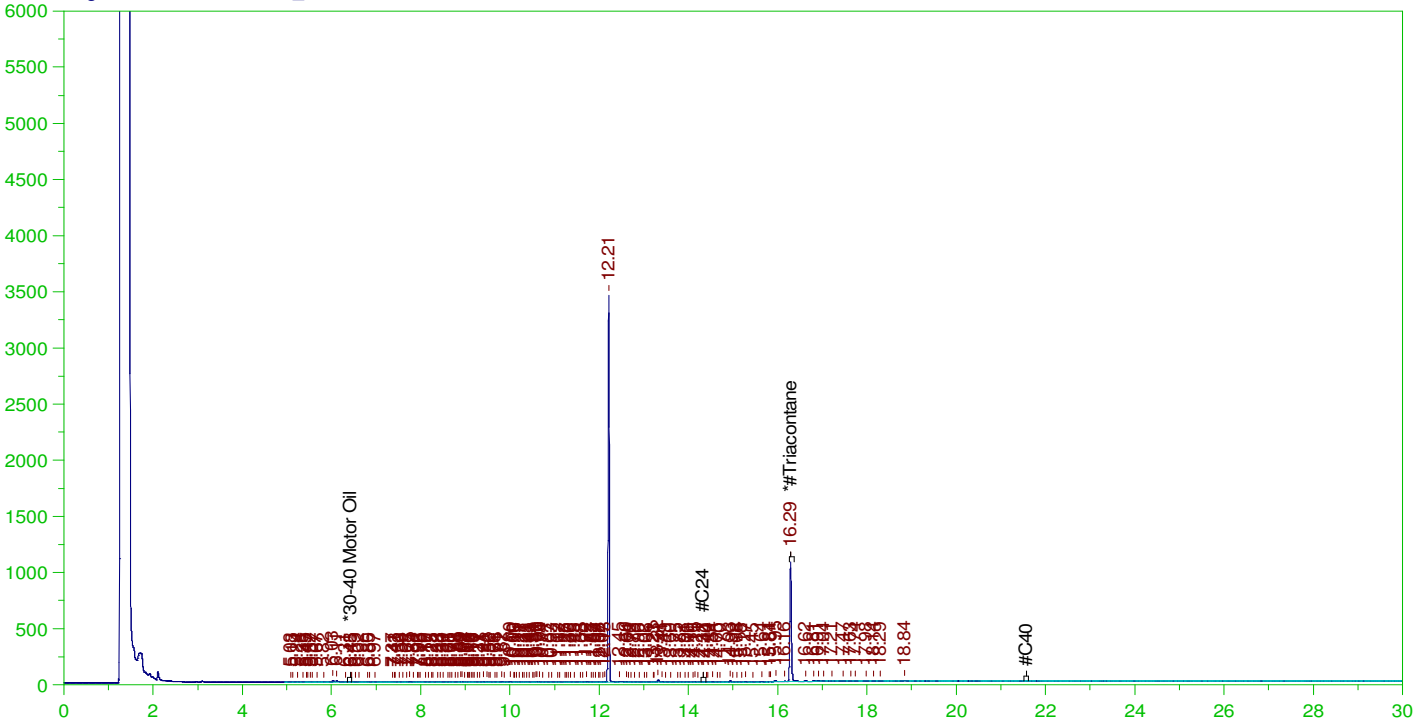
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.21	.222	.201	90.25	-
*1-Chlorooctadecane	13.057	.222	.	.07	-
*#Triacontane	16.287	.222	.108	48.53	-

DRO Area:660509.8 DRO Amount: 0.0234075
TEH Area:1004612 TEH Amount: 3.560196E-02

ERH2205 (RHMW15-05) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0039.RAW B21121622-003B ;1221HP5 , $HC-8015-DRO-W, rr



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121622-003B ;1221HP5 , $HC-8015-DRO-W, rr
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0039.RAW
Date & Time Acquired: 12/22/2021 7:13:02 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK-SAMP.CAL
Sample Weight: 900 Dilution: 1 S.A.: 1

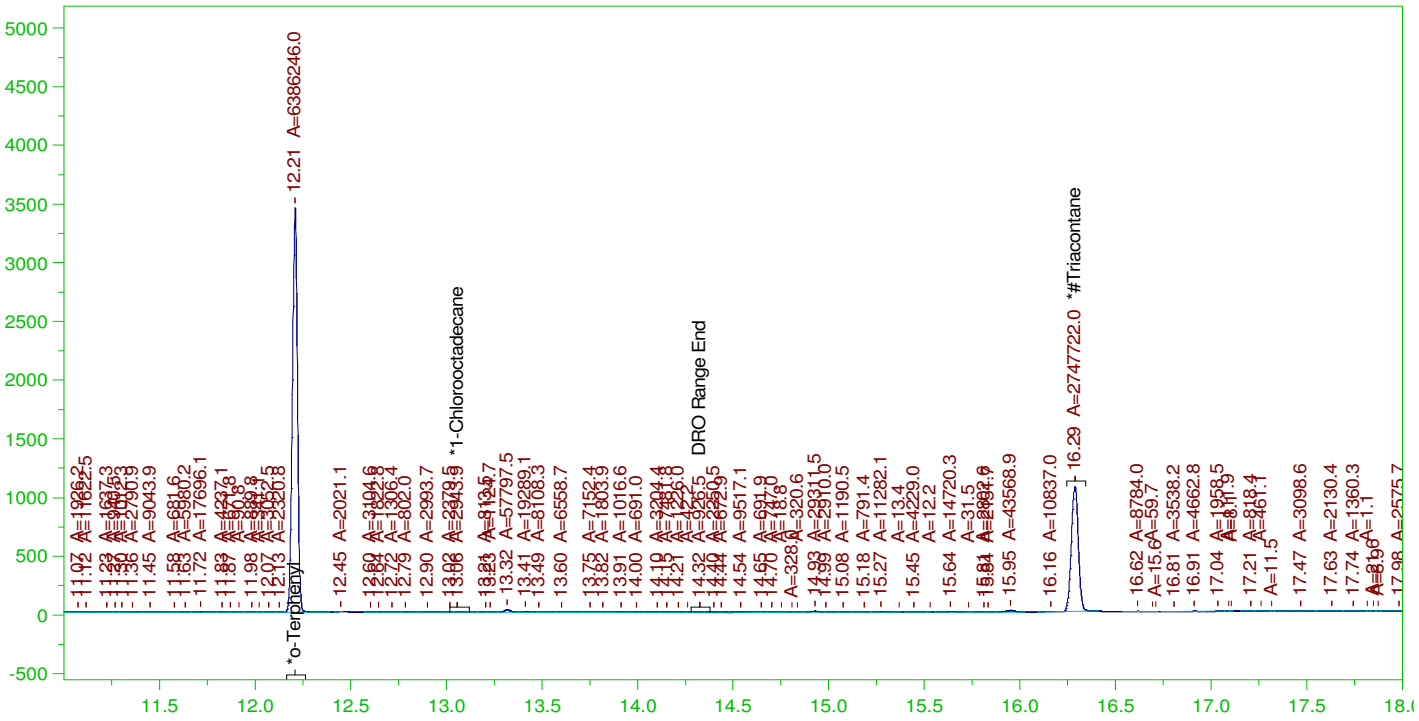
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.62

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.287	.556	.108	19.41	-

RRO Area:193839.2 RRO AMOUNT: 7.545855E-03

ERH2205 (RHMW15-05) Batch ID: 162352

G:\org\HP5\DAT\HP5122121_b\1221HP5.0039.RAW B21121622-003B ;1221HP5 , $HC-8015-DRO-W, rr



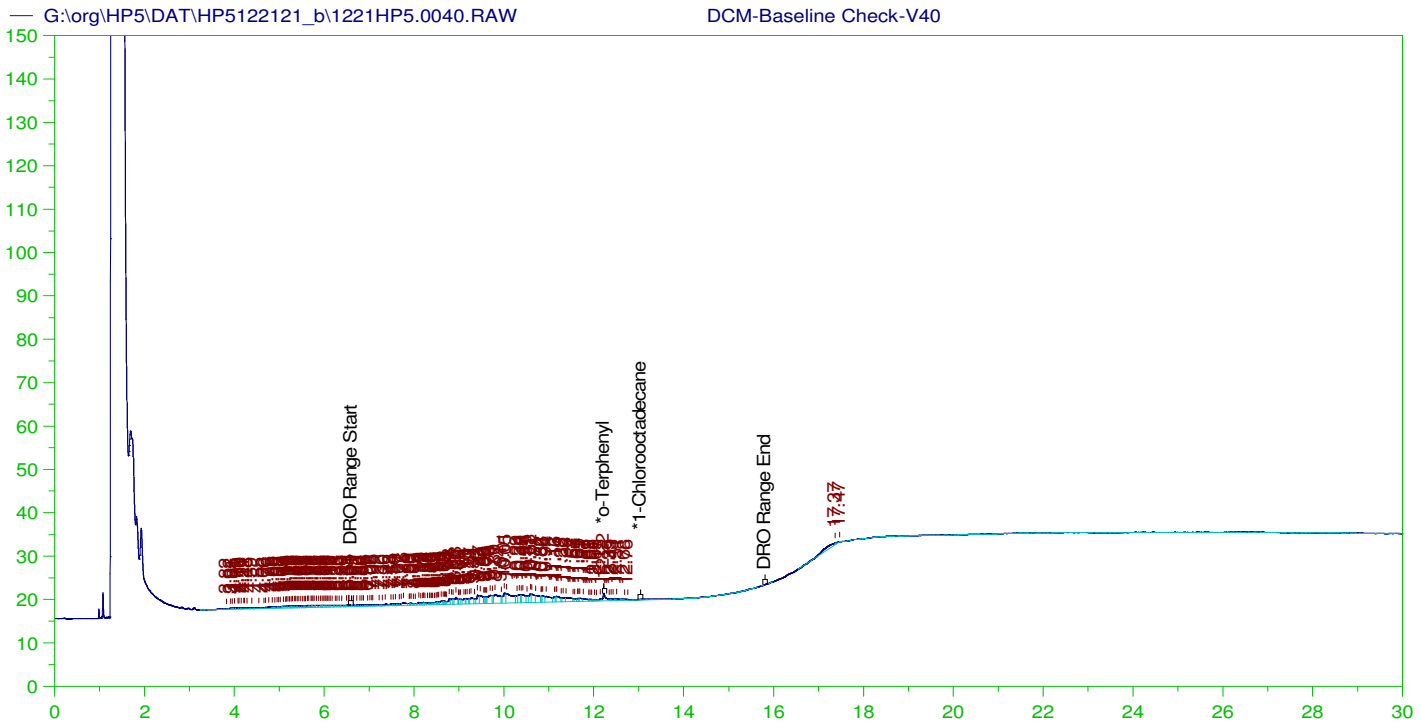
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-003B ;1221HP5 , $HC-8015-DRO-W, rr
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0039.RAW
Date & Time Acquired: 12/22/2021 7:13:02 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24-Tri.CAL
Sample Weight: 900 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.21	.222	.2	89.92	-
*1-Chlorooctadecane	13.057	.222	.	.04	-
*#Triacontane	16.287	.222	.106	47.49	-

DRO Area:610374.4 DRO Amount: 2.163078E-02
TEH Area:1074221 TEH Amount: 0.0380688

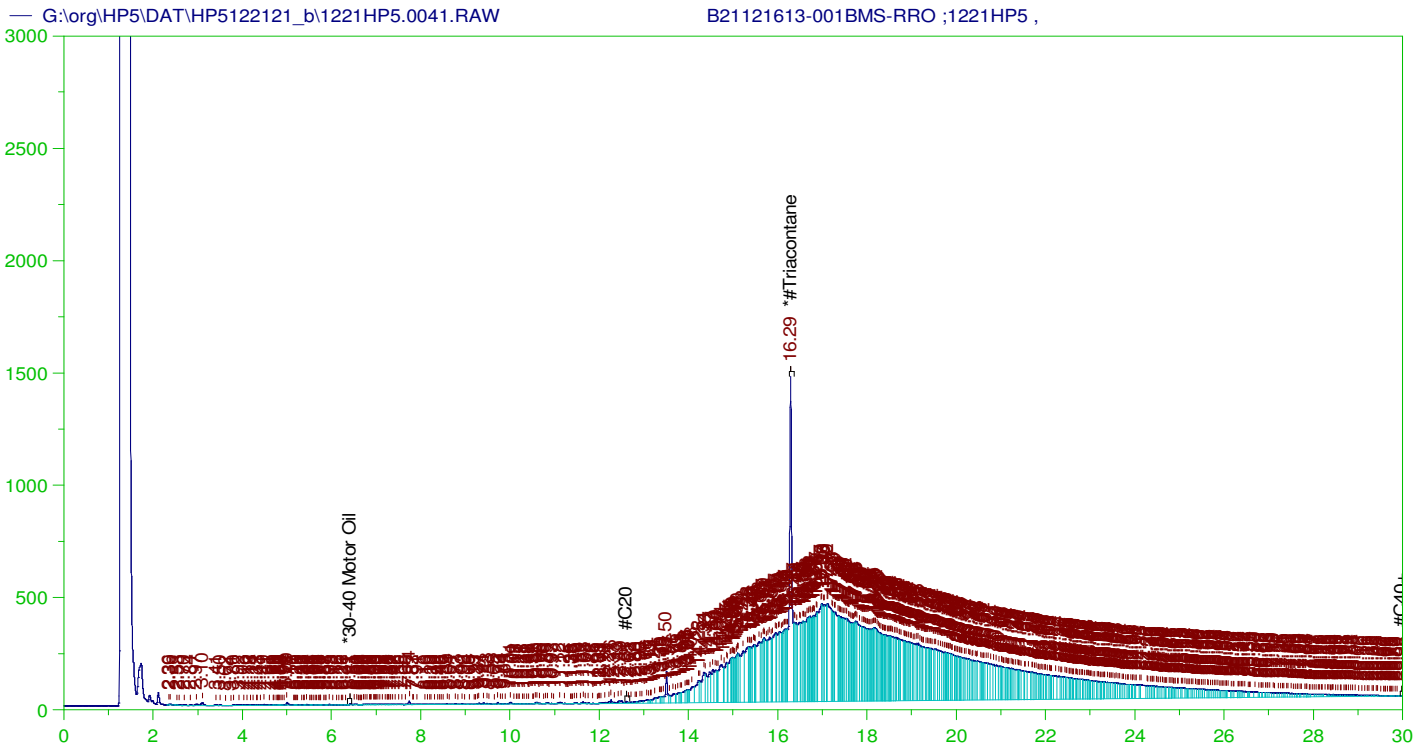


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V40
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0040.RAW
Date & Time Acquired: 12/22/2021 7:56:20 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	200.	.223	.11	-
*1-Chlorooctadecane	29.928	200.	.	.	-

DRO Area:323035.9 DRO Amount: 10.30313
TEH Area:410978.2 TEH Amount: 13.10802



RESIDUAL RANGE ORGANICS CHROMATOGRAM

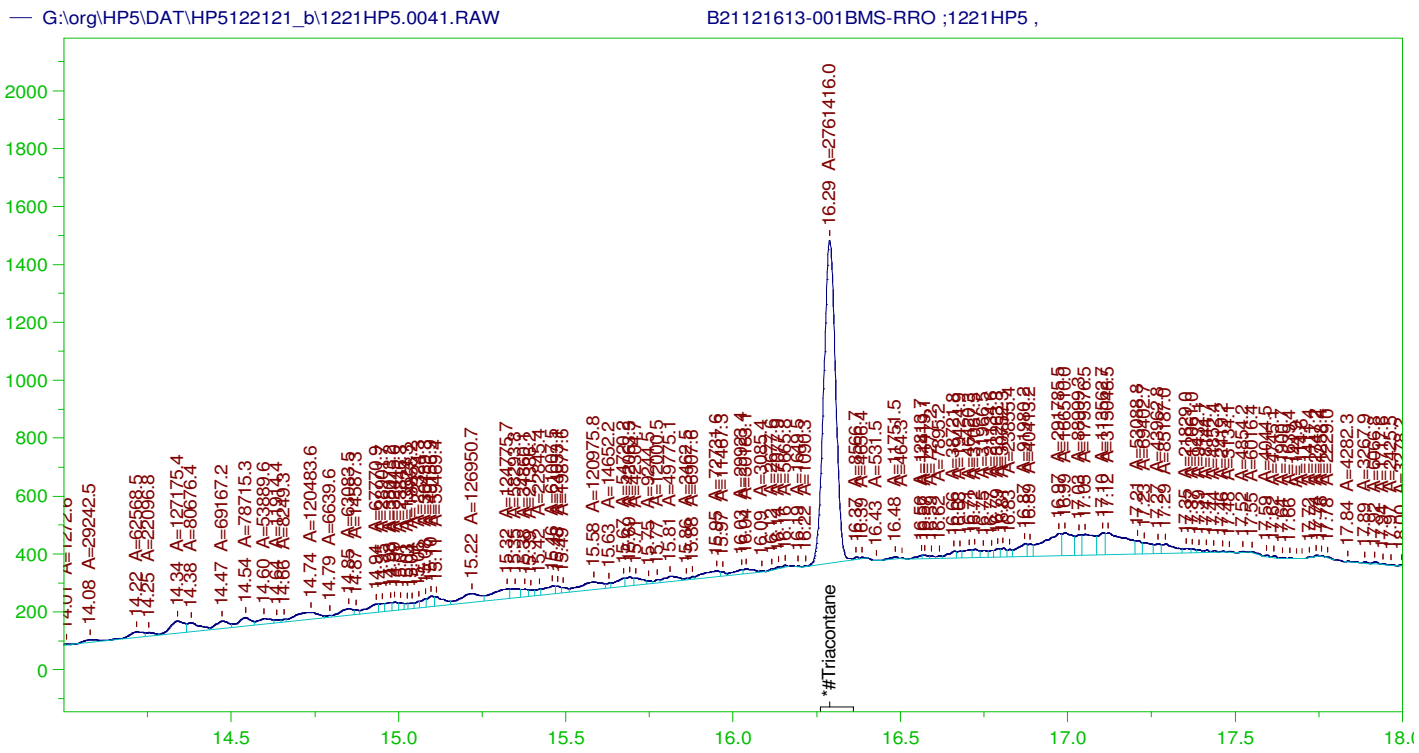
Sample Name: B21121613-001BMS-RRO ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0041.RAW
Date & Time Acquired: 12/22/2021 8:39:40 PM
Method File: G:\Org\HP5\Methods\D3_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.288	.478	.18	37.6	-

~~RRO~~ TEH (Oil Range) Area:1.338794E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.488557

AMN 01/11/2022



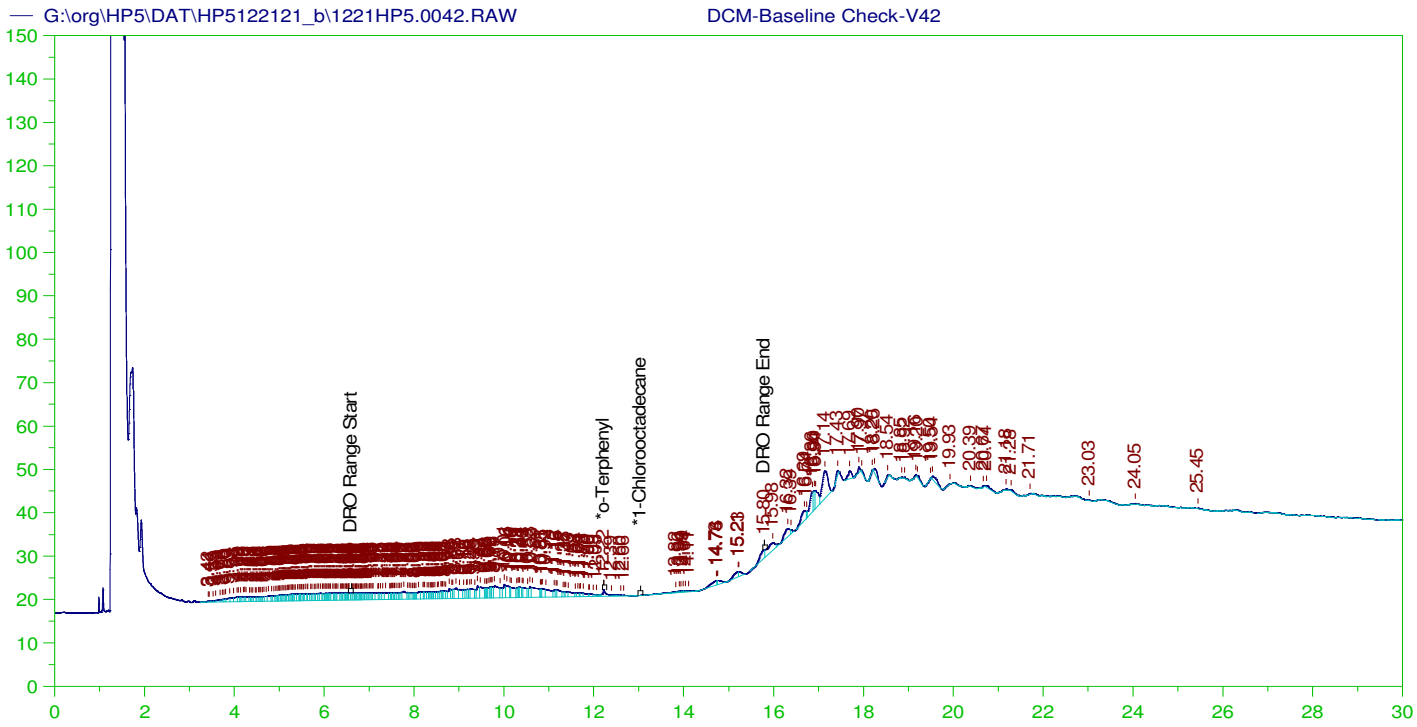
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121613-001BMS-RRO ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0041.RAW
Date & Time Acquired: 12/22/2021 8:39:40 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.288	.478	.091	19.09	-

RRO Area:4832993 RRO AMOUNT: 0.1620351



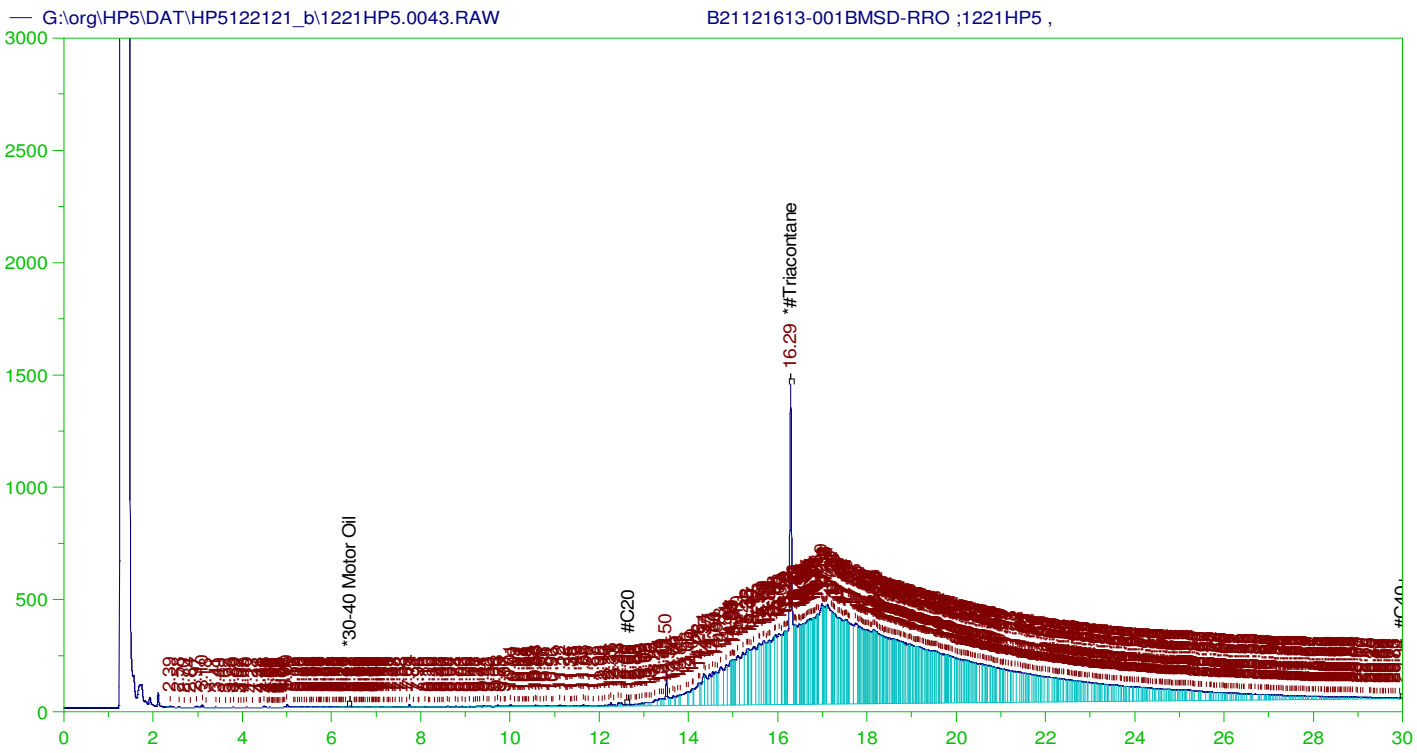
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V42
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0042.RAW
Date & Time Acquired: 12/22/2021 9:22:56 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.22	200.	.228	.11	-
*1-Chlorooctadecane	29.943	200.	.	.	-

DRO Area:634204.5 DRO Amount: 20.22775
TEH Area:1122381 TEH Amount: 35.79798



RESIDUAL RANGE ORGANICS CHROMATOGRAM

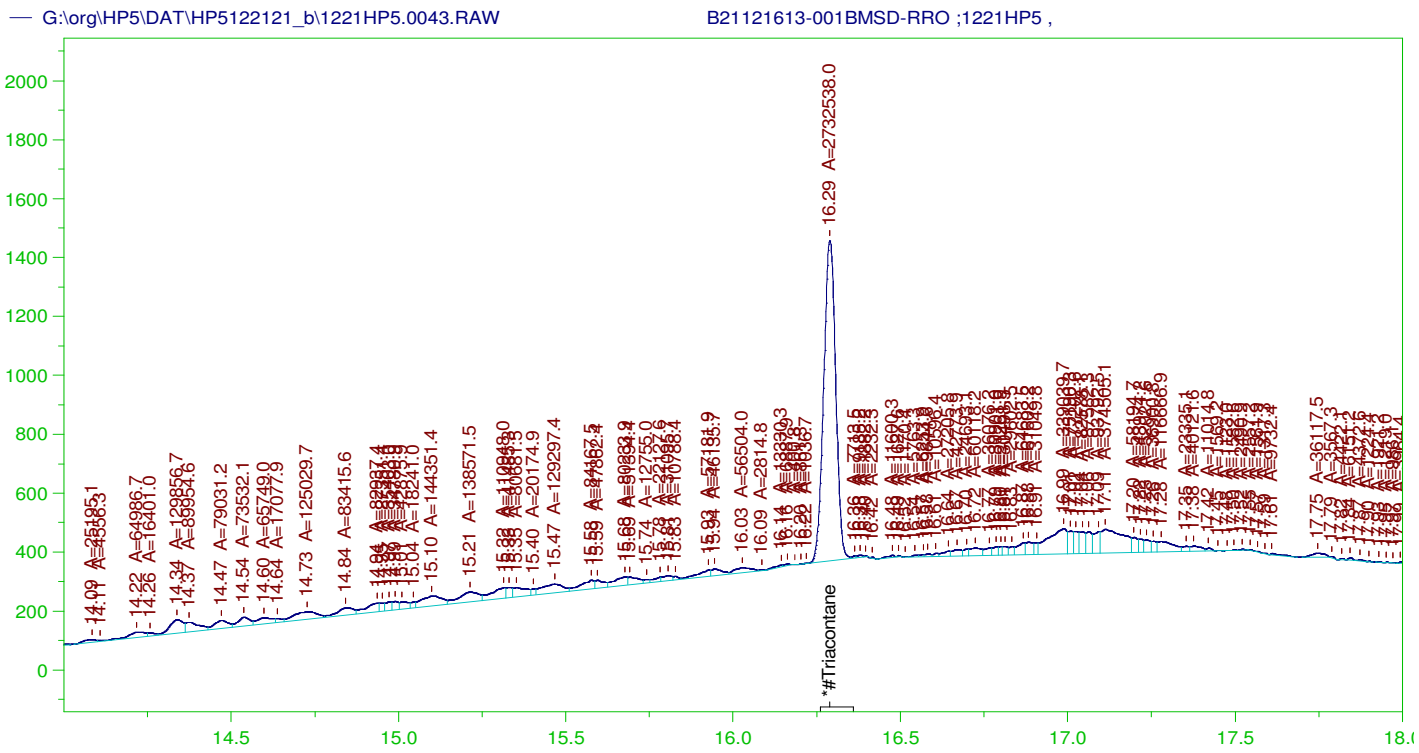
Sample Name: B21121613-001BMSD-RRO ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0043.RAW
Date & Time Acquired: 12/22/2021 10:06:14 PM
Method File: G:\Org\HP5\Methods\D3_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1055 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.289	.474	.174	36.77	-

~~RRO~~ TEH (Oil Range) Area:1.35403E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.496609

AMN 01/11/2022



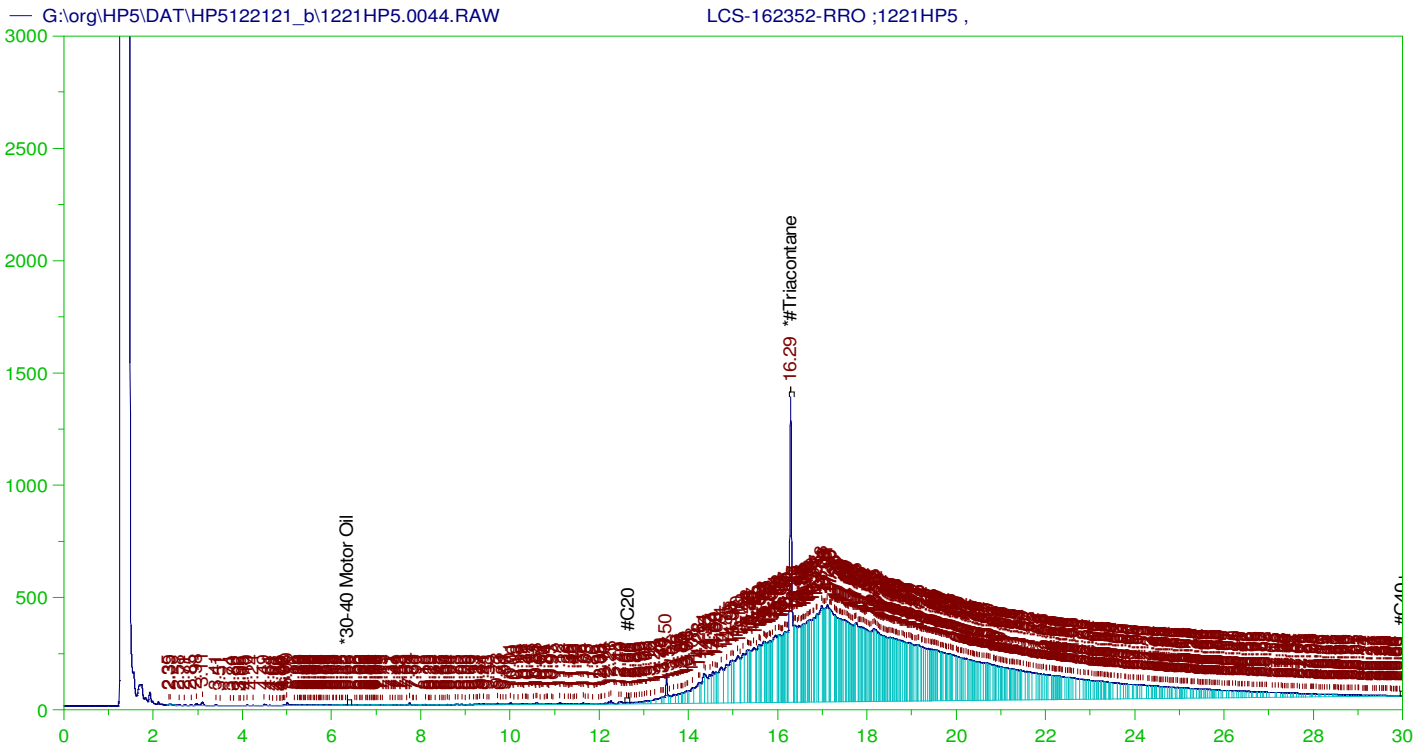
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121613-001BMSD-RRO ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0043.RAW
Date & Time Acquired: 12/22/2021 10:06:14 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.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: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.289	.474	.09	18.89	-

RRO Area:5022230 RRO AMOUNT: 0.1667837



RESIDUAL RANGE ORGANICS CHROMATOGRAM

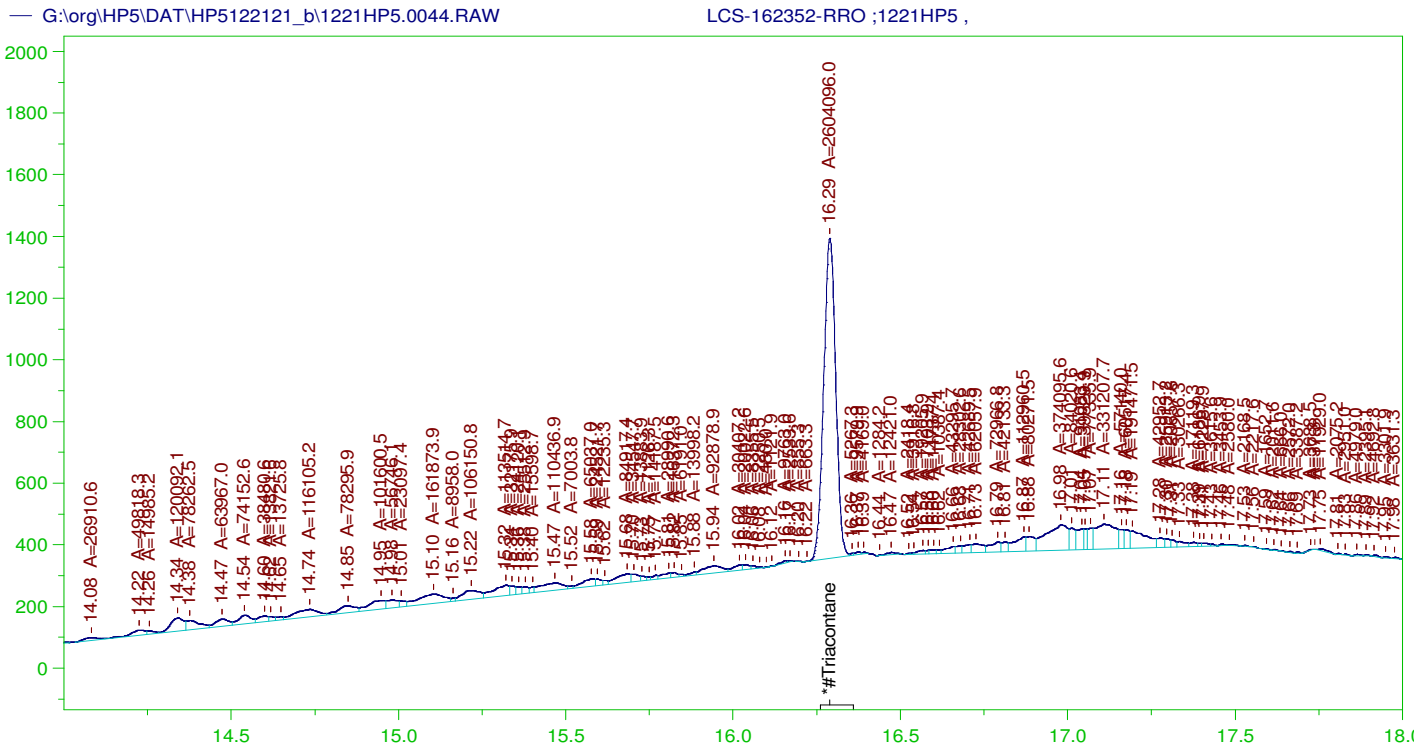
Sample Name: LCS-162352-RRO ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0044.RAW
Date & Time Acquired: 12/22/2021 10:49:23 PM
Method File: G:\Org\HP5\Methods\D3_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.288	.5	.171	34.22	-

~~RRO~~ TEH (Oil Range) Area:1.325306E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.643287

AMN 01/11/2022



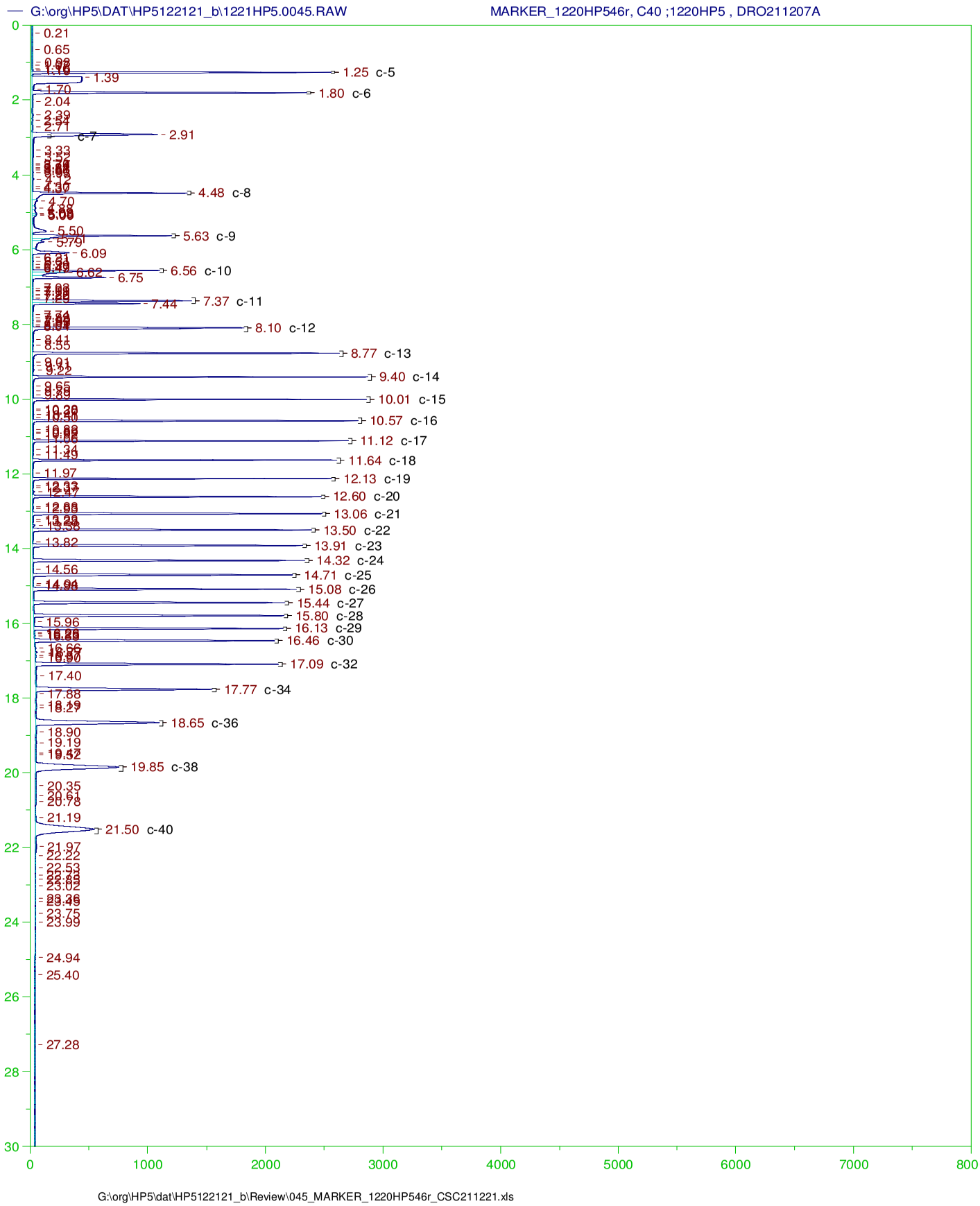
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: LCS-162352-RRO ;1221HP5 ,
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0044.RAW
Date & Time Acquired: 12/22/2021 10:49:23 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.288	.5	.09	18. -

RRO Area:4765972 RRO AMOUNT: 0.1669786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MARKER_1220HP546r, C40 ;1220HP5 , DRO211207A
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1.80 c-6
2.91 c-7
4.48 c-8
5.63 c-9
6.56 c-10
7.37 c-11
8.10 c-12
8.77 c-13
9.40 c-14
10.01 c-15
10.57 c-16
11.12 c-17
11.64 c-18
12.13 c-19
12.60 c-20
13.06 c-21
13.50 c-22
13.91 c-23
14.32 c-24
14.71 c-25
15.08 c-26
15.44 c-27
15.80 c-28
16.13 c-29
16.46 c-30
17.09 c-32
17.77 c-34
18.65 c-36
19.85 c-38
21.50 c-40
0
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6000
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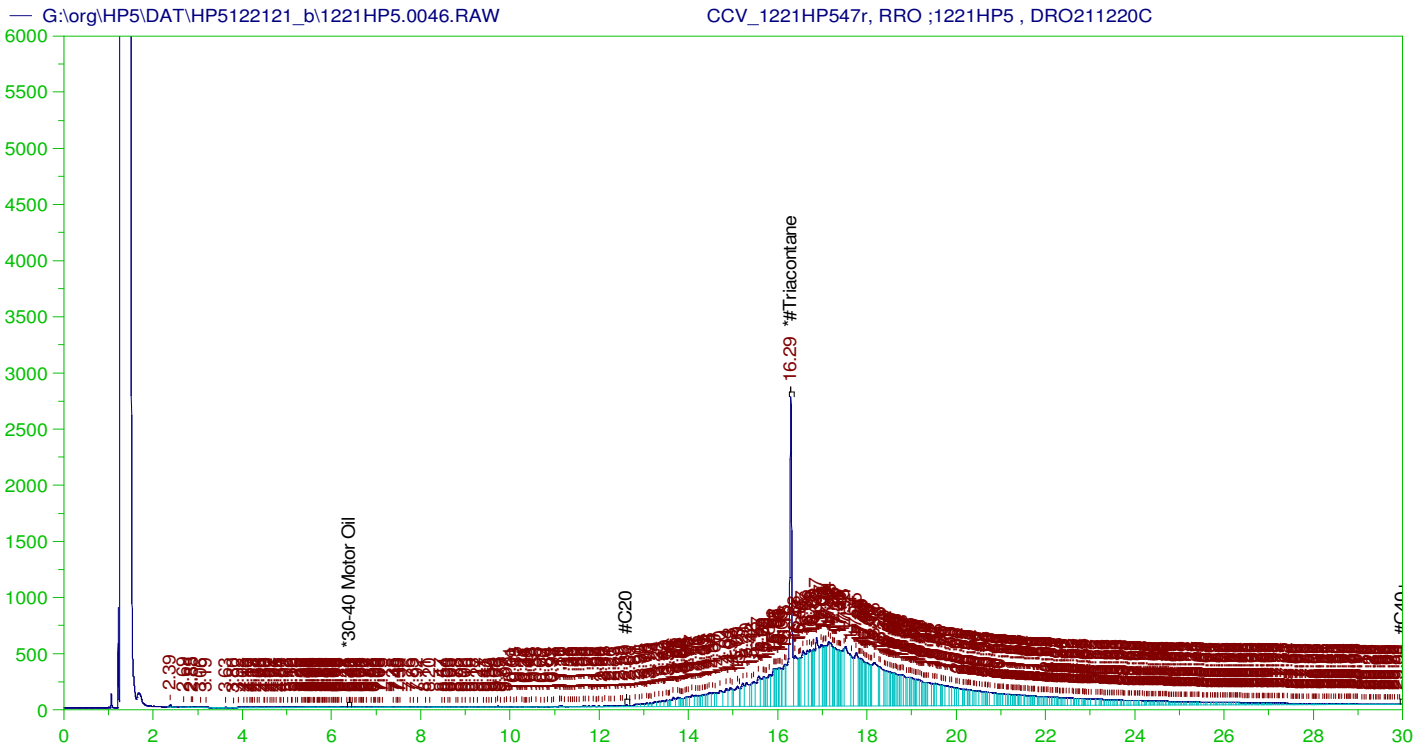

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1221HP547r, RRO ;1221HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0046.RAW
Date & Time Acquired: 12/23/2021 12:15:45 AM
Method File: G:\Org\HP5\Methods\DC_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.292	500.	337.08	67.42	-

~~RRO~~ TEH (Oil Range) Area:1.333428E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4671.743

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0046.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.03	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.292	200.	337.08	168.54	75-125

AMN 01/11/2022

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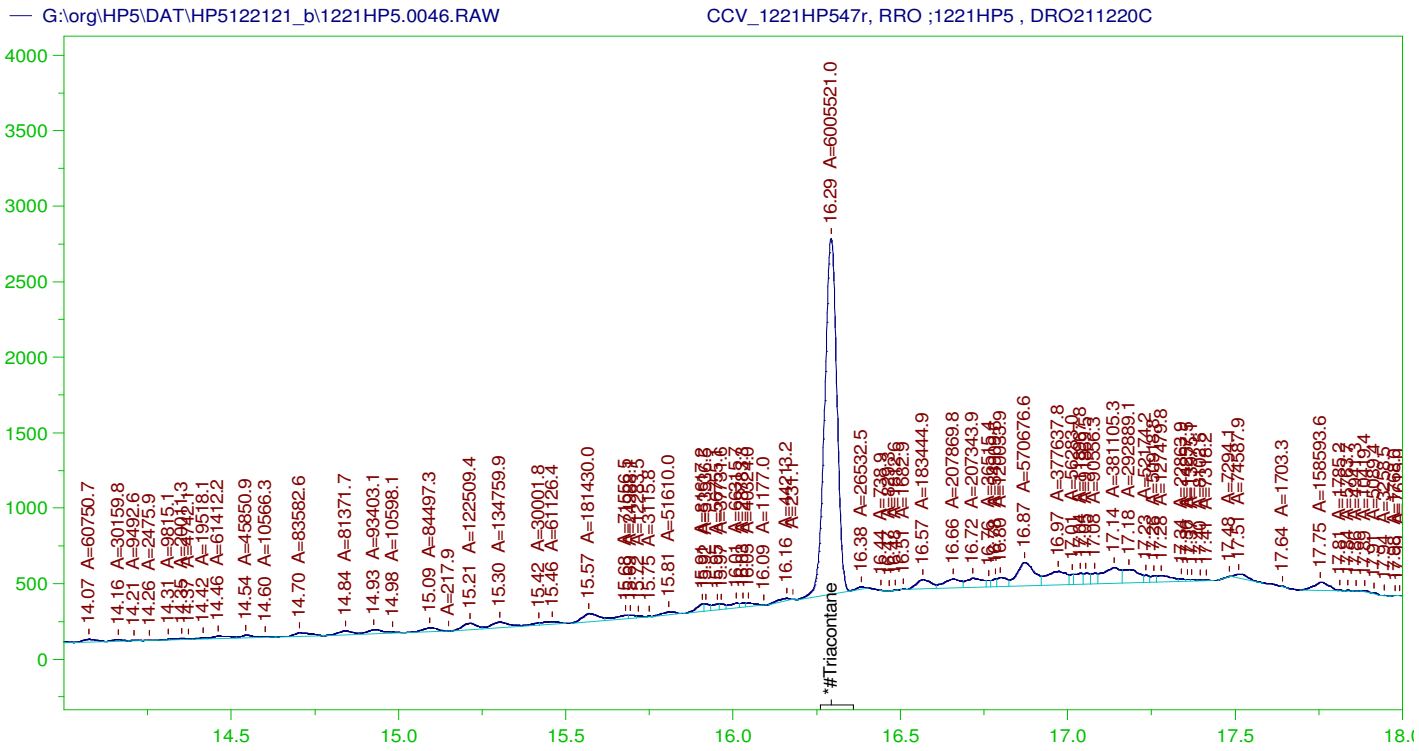


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1221HP547r, RRO ;1221HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0046.RAW
Date & Time Acquired: 12/23/2021 12:15:45 AM
Method File: G:\Org\HP5\Methods\DS_ORO-AK-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.58 to 30.05

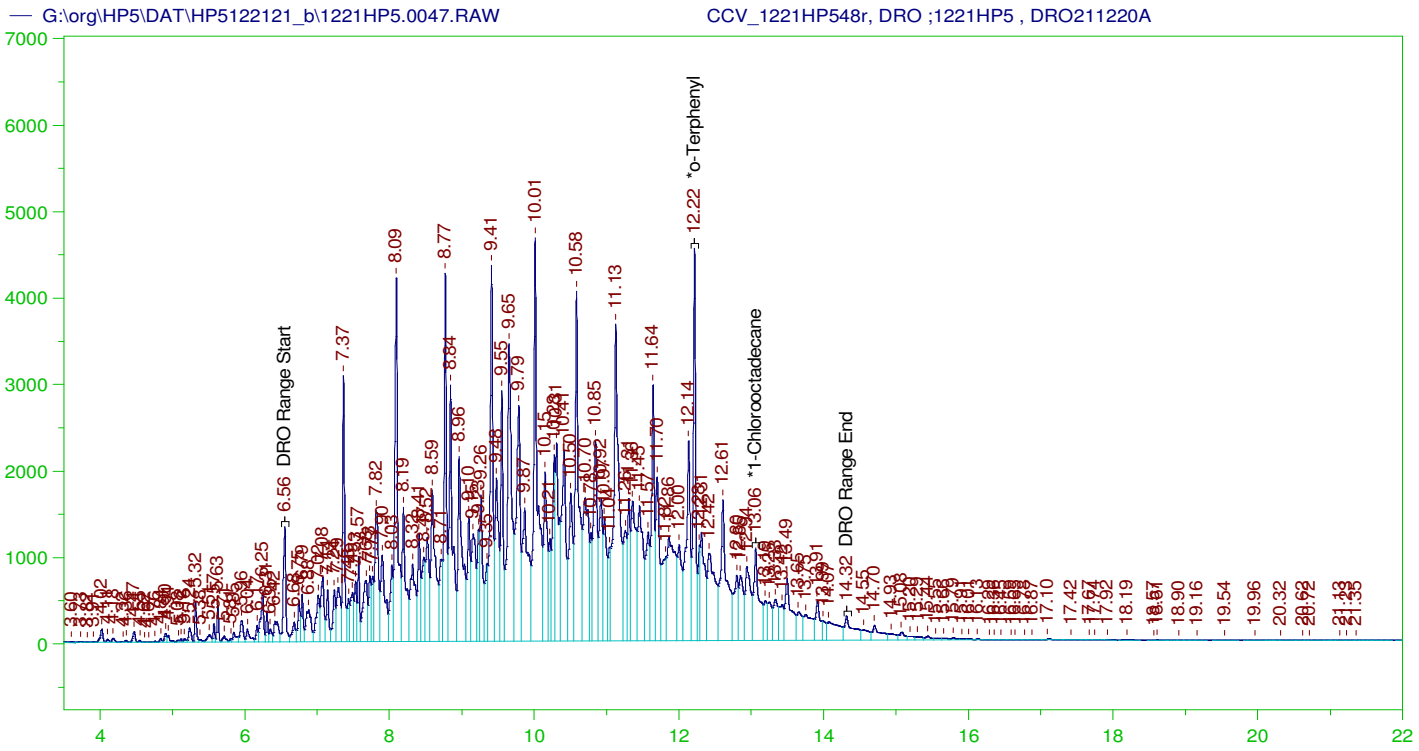
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.292	500.	207.587	41.52	-

RRO Area:5995935 RRO AMOUNT: 210.0711

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0046.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.03	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.292	200.	207.587	103.79	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1221HP548r, DRO ;1221HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0047.RAW
Date & Time Acquired: 12/23/2021 12:59:02 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-IK-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Ik-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.216	200.	315.942	157.97	-
*1-Chlorooctadecane	13.059	200.	154.909	77.45	-

DRO Area:4.495668E+08 DRO Amount: 14338.79
TEH Area:4.651225E+08 TEH Amount: 14834.93

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0047.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	14834.93	98.9	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.216	200.	315.942	157.97	85-115
*1-Chlorooctadecane	13.059	200.	154.909	77.45	85-115

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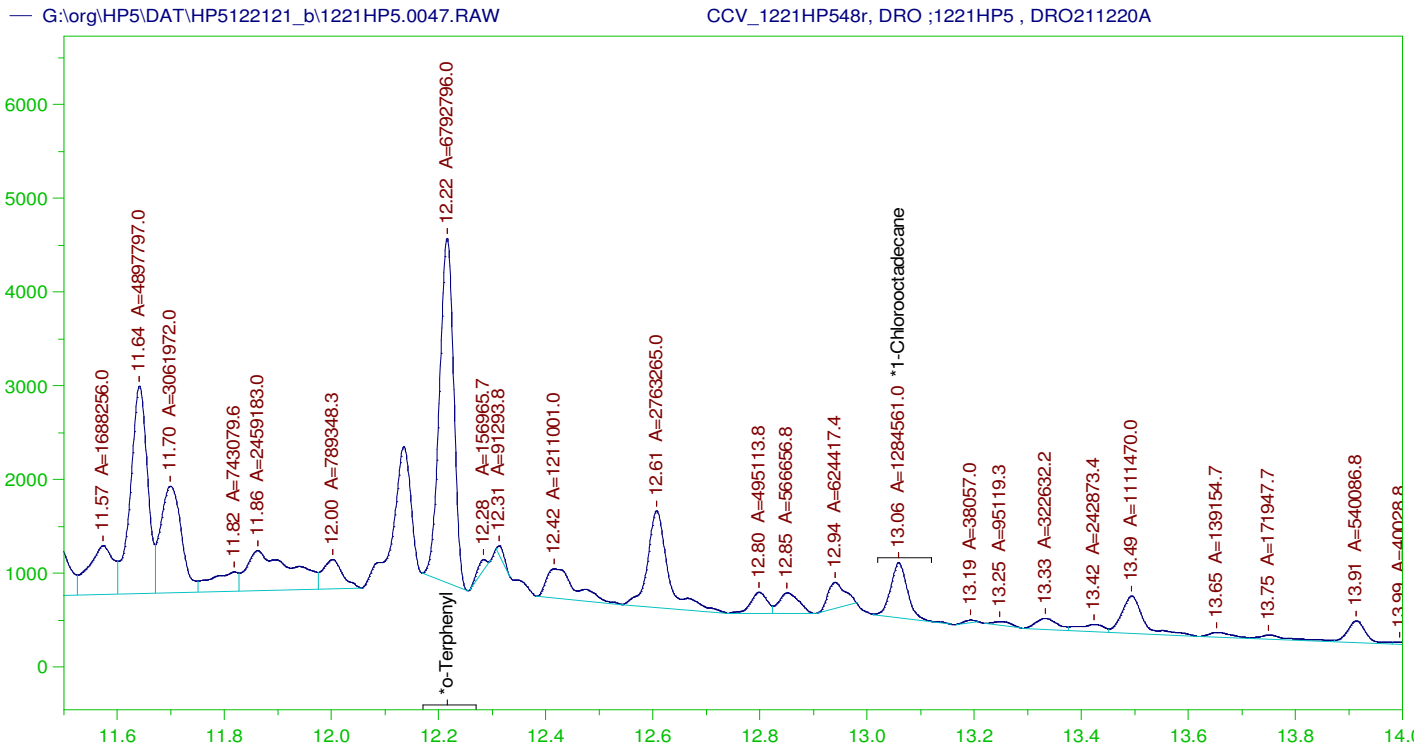


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1221HP548r, DRO ;1221HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122121_b\1221HP5.0047.RAW
Date & Time Acquired: 12/23/2021 12:59:02 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-IK-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Ik-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

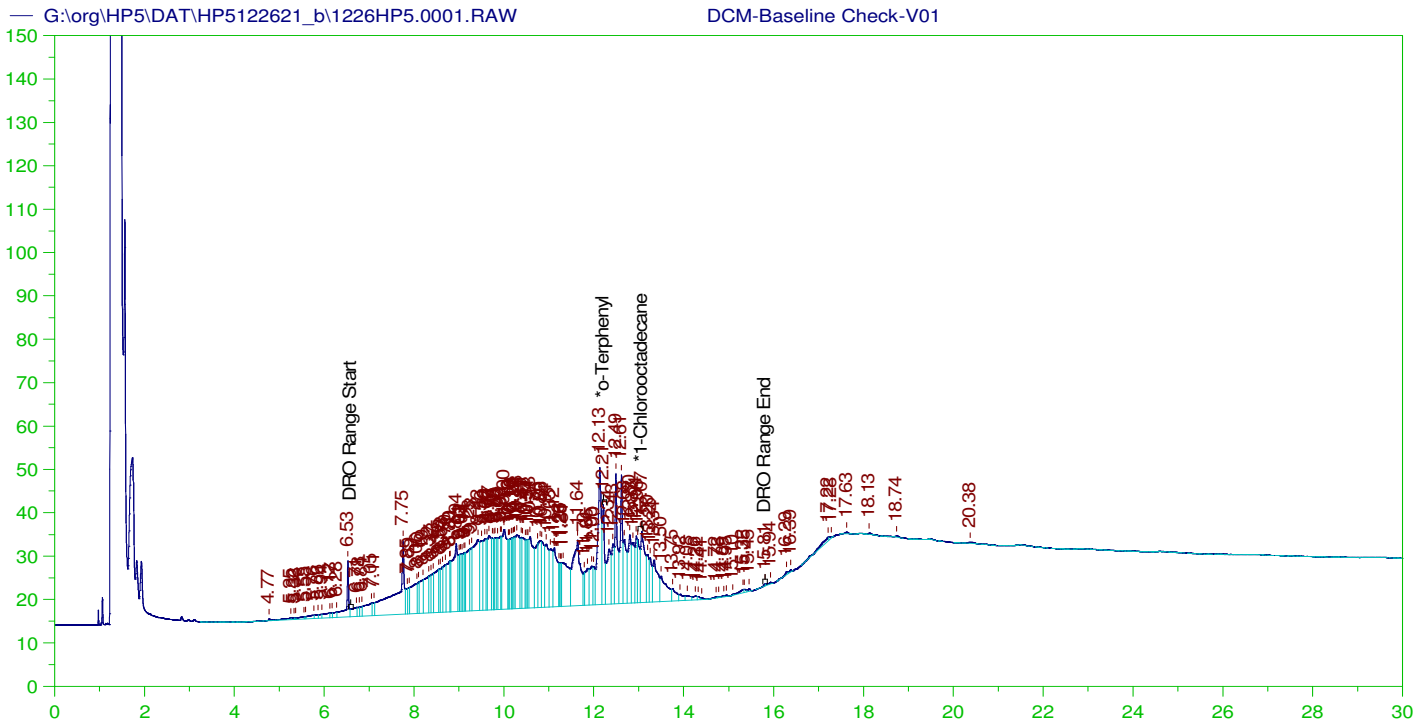
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.216	200.	191.297	95.65	-
*1-Chlorooctadecane	13.059	200.	36.175	18.09	-

DRO Area:2.494623E+08 DRO Amount: 7956.519
TEH Area:2.596854E+08 TEH Amount: 8282.583

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122121_b\1221HP5.0047.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8282.58	55.22	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.216	200.	191.297	95.65	85-115
*1-Chlorooctadecane	13.059	200.	36.175	18.09	85-115



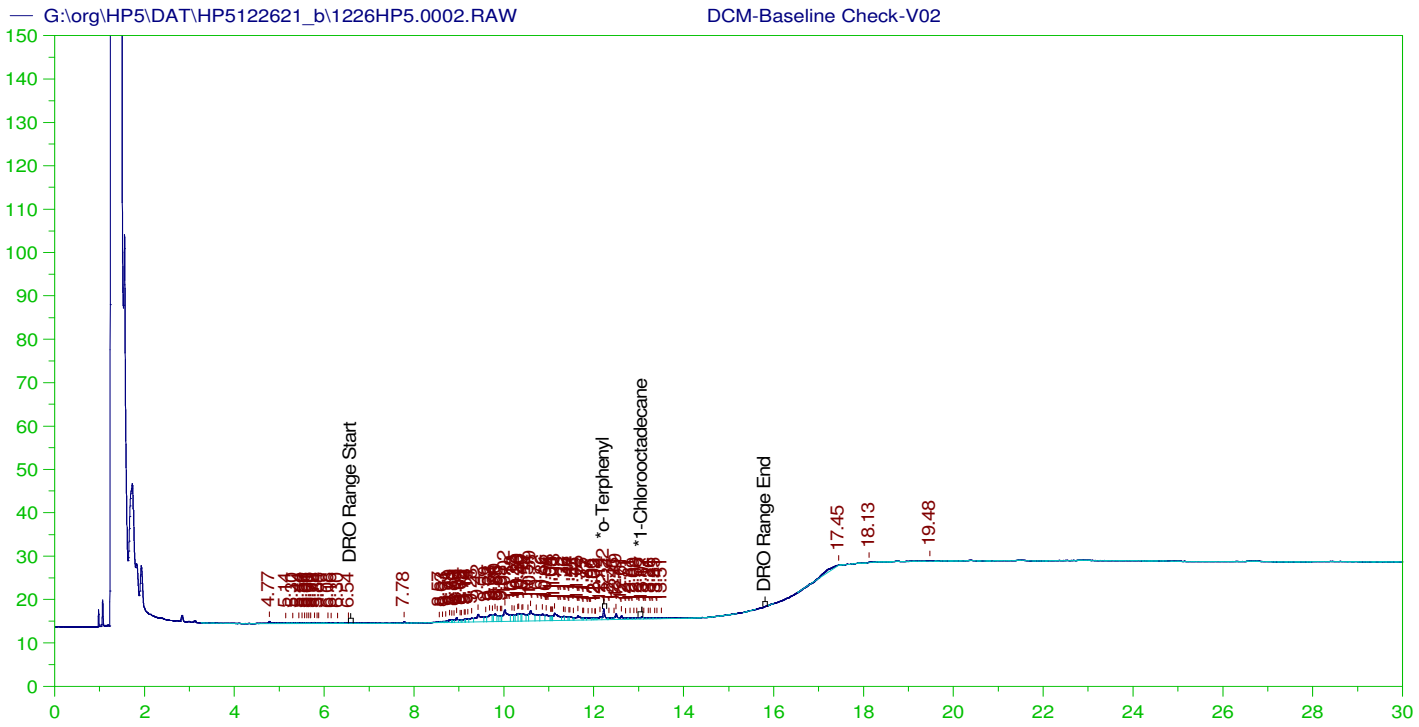
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V01
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0001.RAW
Date & Time Acquired: 12/26/2021 11:16:04 AM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.211	200.	2.352	1.18	-
*1-Chlorooctadecane	13.066	200.	3.042	1.52	-

DRO Area:4547303 DRO Amount: 145.0348
TEH Area:4689133 TEH Amount: 149.5584



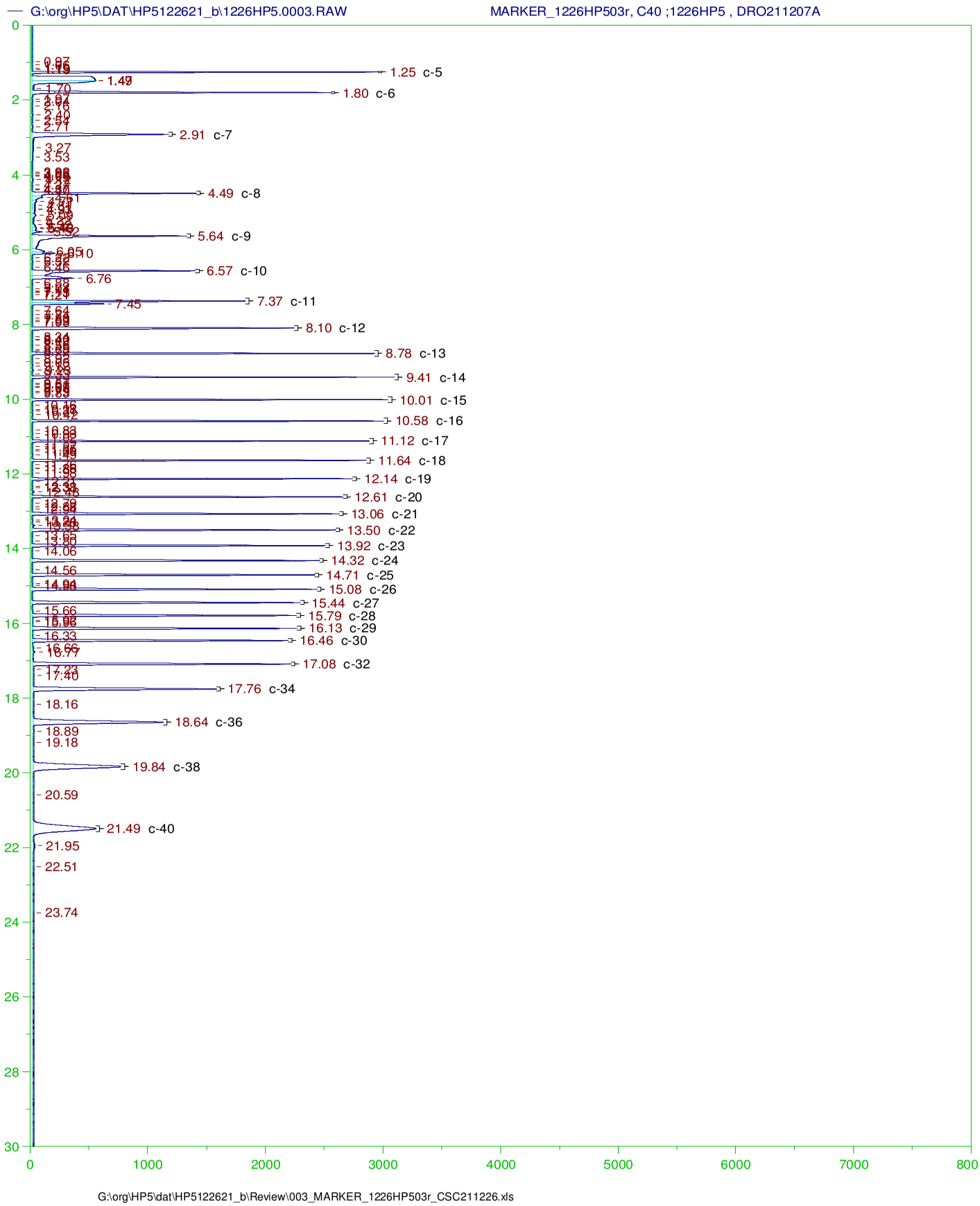
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V02
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0002.RAW
Date & Time Acquired: 12/26/2021 11:58:52 AM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.219	200.	.233	.12	-
*1-Chlorooctadecane	13.066	200.	.063	.03	-

DRO Area:264991.9 DRO Amount: 8.451831
TEH Area:313974.9 TEH Amount: 10.01413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MARKER_1226HP503r, C40 ;1226HP5 , DRO211207A
1.25 c-5
1.80 c-6
2.91 c-7
4.49 c-8
5.64 c-9
6.57 c-10
7.37 c-11
8.10 c-12
8.78 c-13
9.41 c-14
10.01 c-15
10.58 c-16
11.12 c-17
11.64 c-18
12.14 c-19
12.61 c-20
13.06 c-21
13.50 c-22
13.92 c-23
14.32 c-24
14.71 c-25
15.08 c-26
15.44 c-27
15.79 c-28
16.13 c-29
16.46 c-30
17.08 c-32
17.76 c-34
18.64 c-36
19.84 c-38
21.49 c-40
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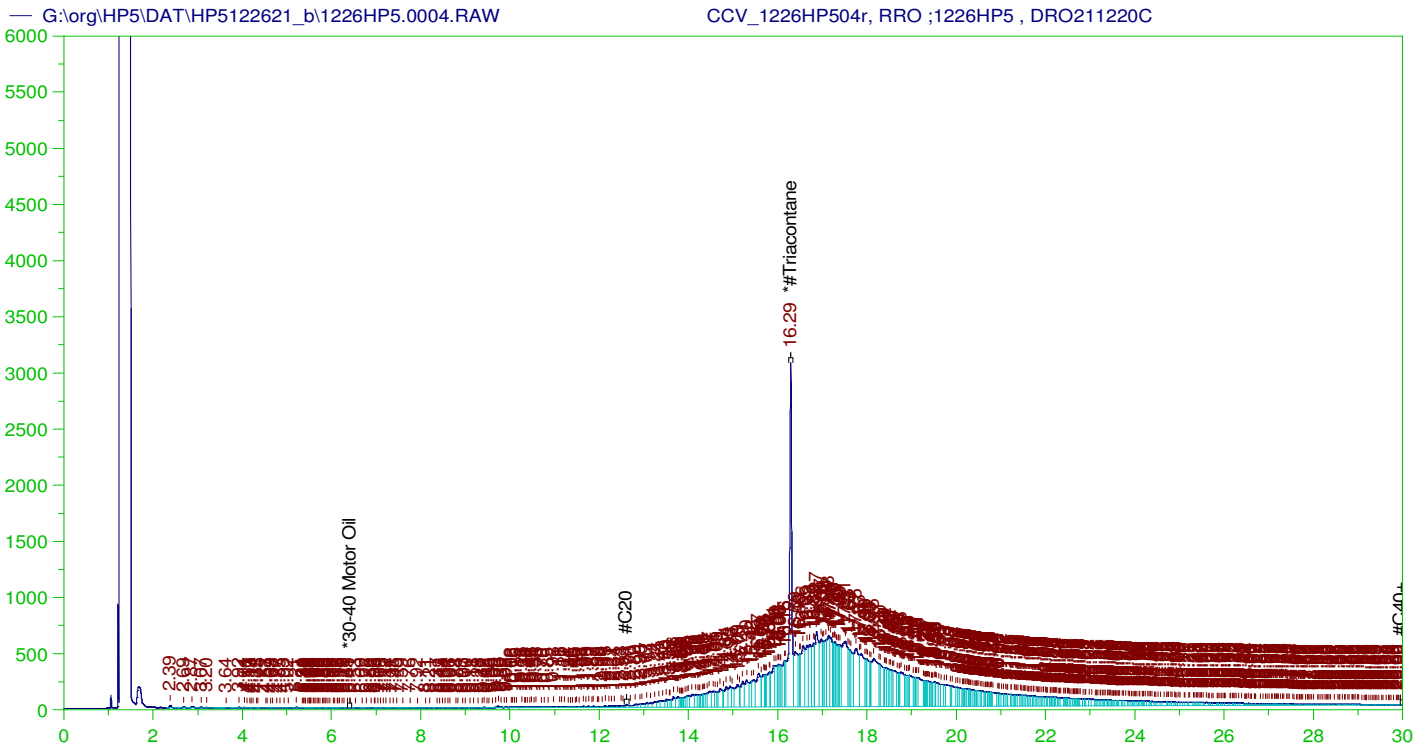


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1226HP504r, RRO ;1226HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0004.RAW
Date & Time Acquired: 12/26/2021 1:24:41 PM
Method File: G:\Org\HP5\Methods\DC_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.29	500.	379.474	75.89	-

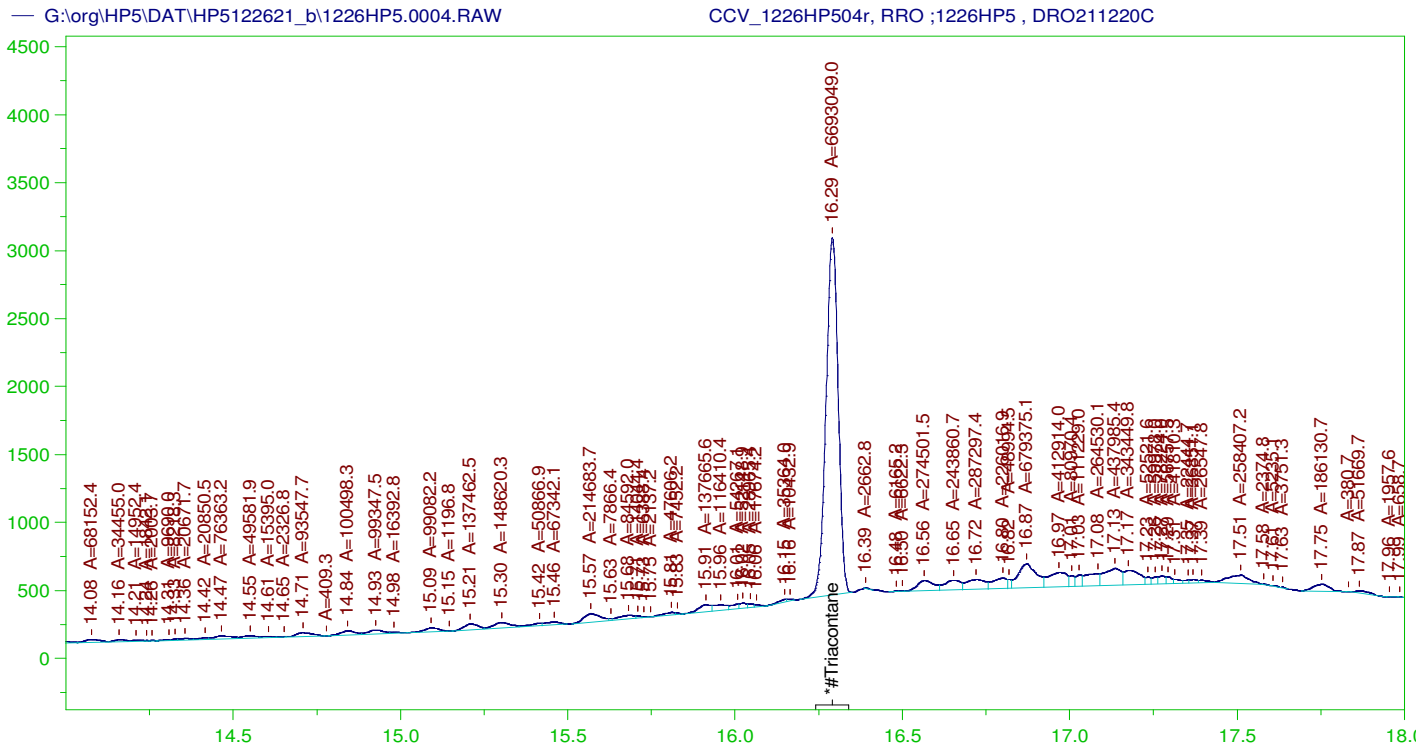
~~RRO~~ TEH (Oil Range) Area:1.44784E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 5072.594

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0004.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.048	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.29	200.	379.474	189.74	75-125

AMN 01/11/2022



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1226HP504r, RRO ;1226HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0004.RAW
Date & Time Acquired: 12/26/2021 1:24:41 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.56 to 30.05

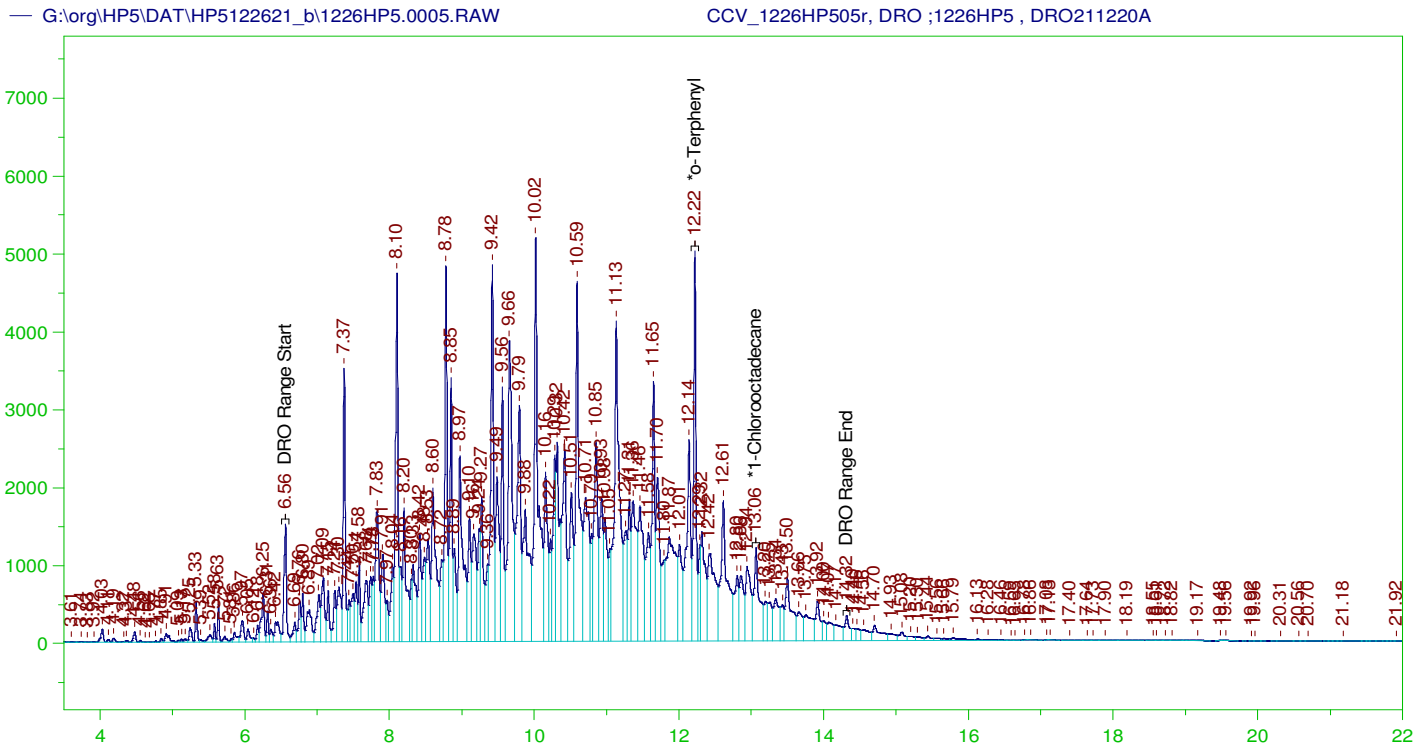
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.29	500.	231.352	46.27	-

RRO Area:7208120 RRO AMOUNT: 252.5407

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0004.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.048	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.29	200.	231.352	115.68	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1226HP505r, DRO ;1226HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0005.RAW
Date & Time Acquired: 12/26/2021 2:07:41 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

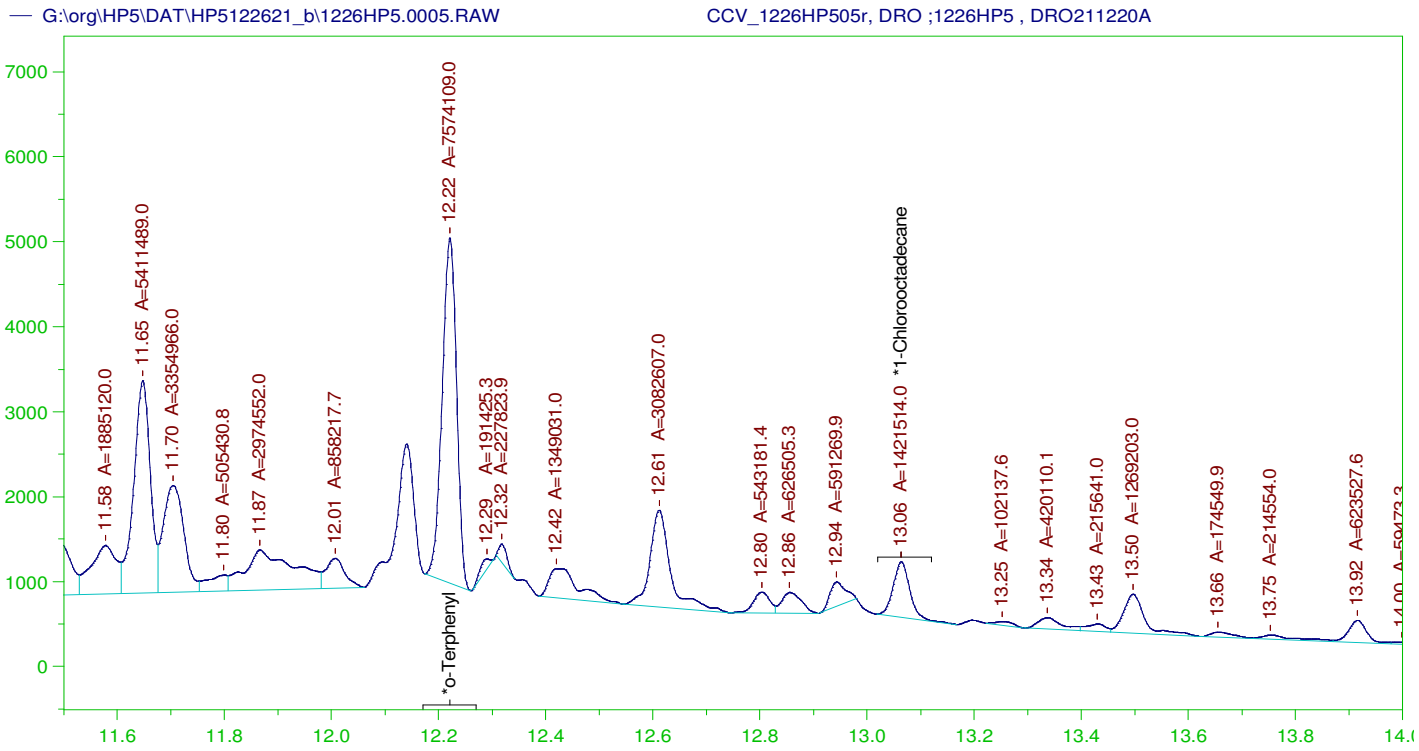
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	200.	351.824	175.91	-
*1-Chlorooctadecane	13.064	200.	170.308	85.15	-

DRO Area:4.966392E+08 DRO Amount: 15840.15
TEH Area:5.150671E+08 TEH Amount: 16427.9

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	16427.9	109.52	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.221	200.	351.824	175.91	85-115
*1-Chlorooctadecane	13.064	200.	170.308	85.15	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1226HP505r, DRO ;1226HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0005.RAW
Date & Time Acquired: 12/26/2021 2:07:41 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

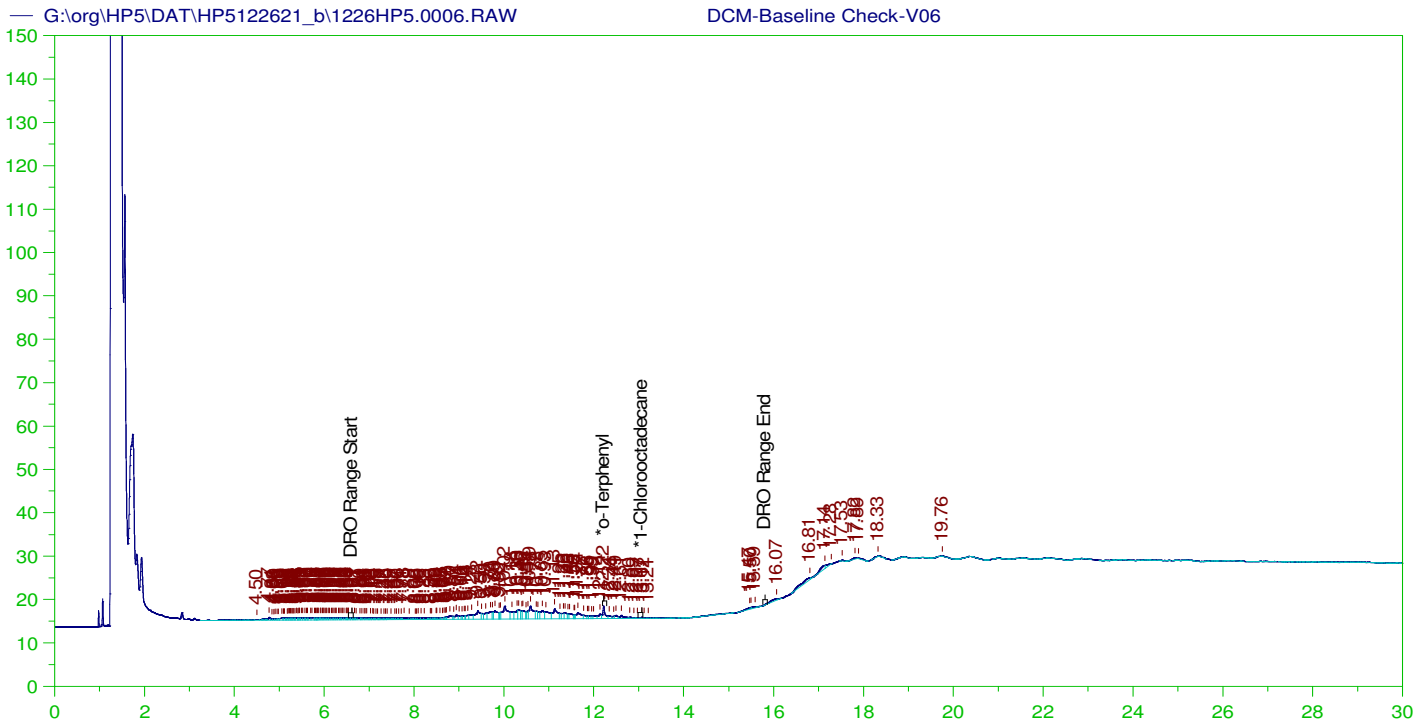
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	200.	213.3	106.65	-
*1-Chlorooctadecane	13.064	200.	40.032	20.02	-

DRO Area:2.765112E+08 DRO Amount: 8819.237
TEH Area:2.879809E+08 TEH Amount: 9185.059

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	9185.06	61.23	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.221	200.	213.3	106.65	85-115
*1-Chlorooctadecane	13.064	200.	40.032	20.02	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

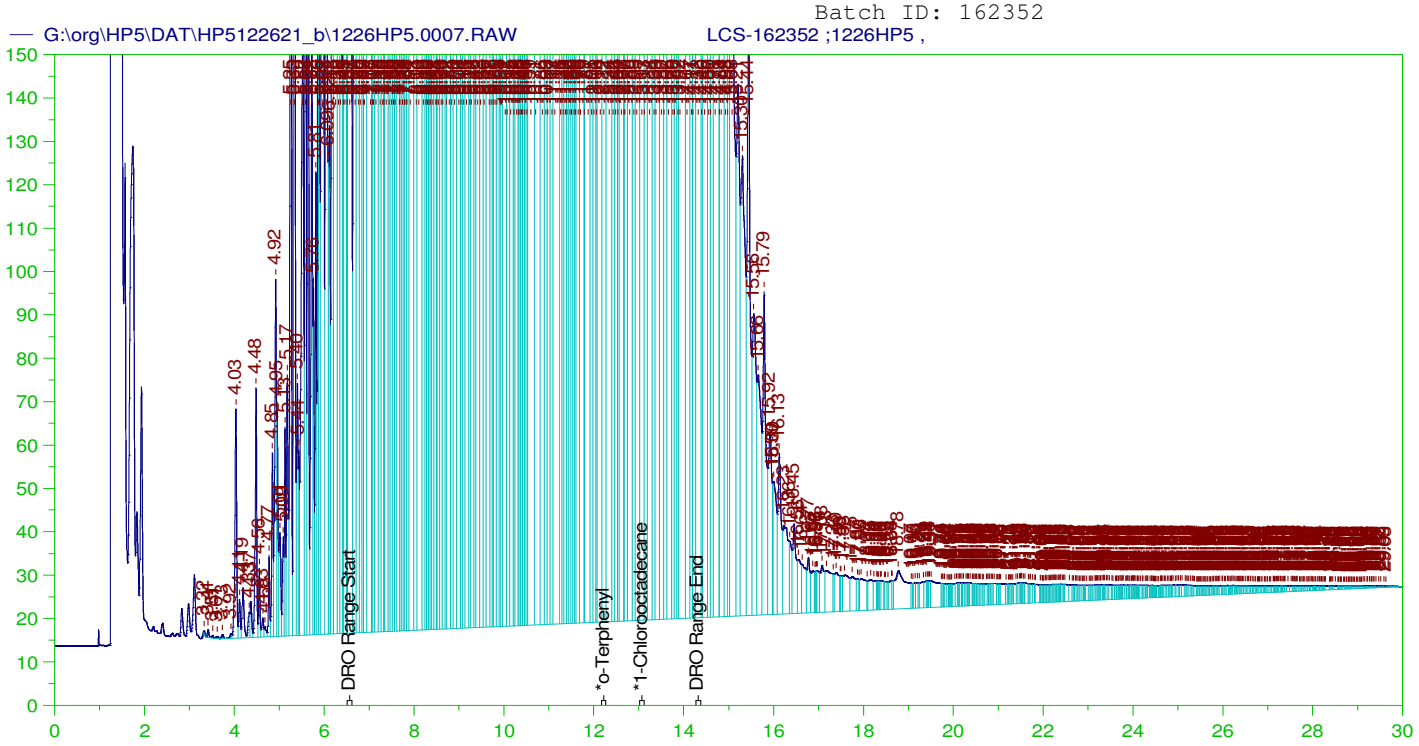
Sample Name: DCM-Baseline Check-V06
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0006.RAW
Date & Time Acquired: 12/26/2021 2:50:40 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.218	200.	.313	.16	-
*1-Chlorooctadecane	13.066	200.	.038	.02	-

DRO Area:355889.2 DRO Amount: 11.35097
TEH Area:464188.4 TEH Amount: 14.80514

Batch ID: 162352



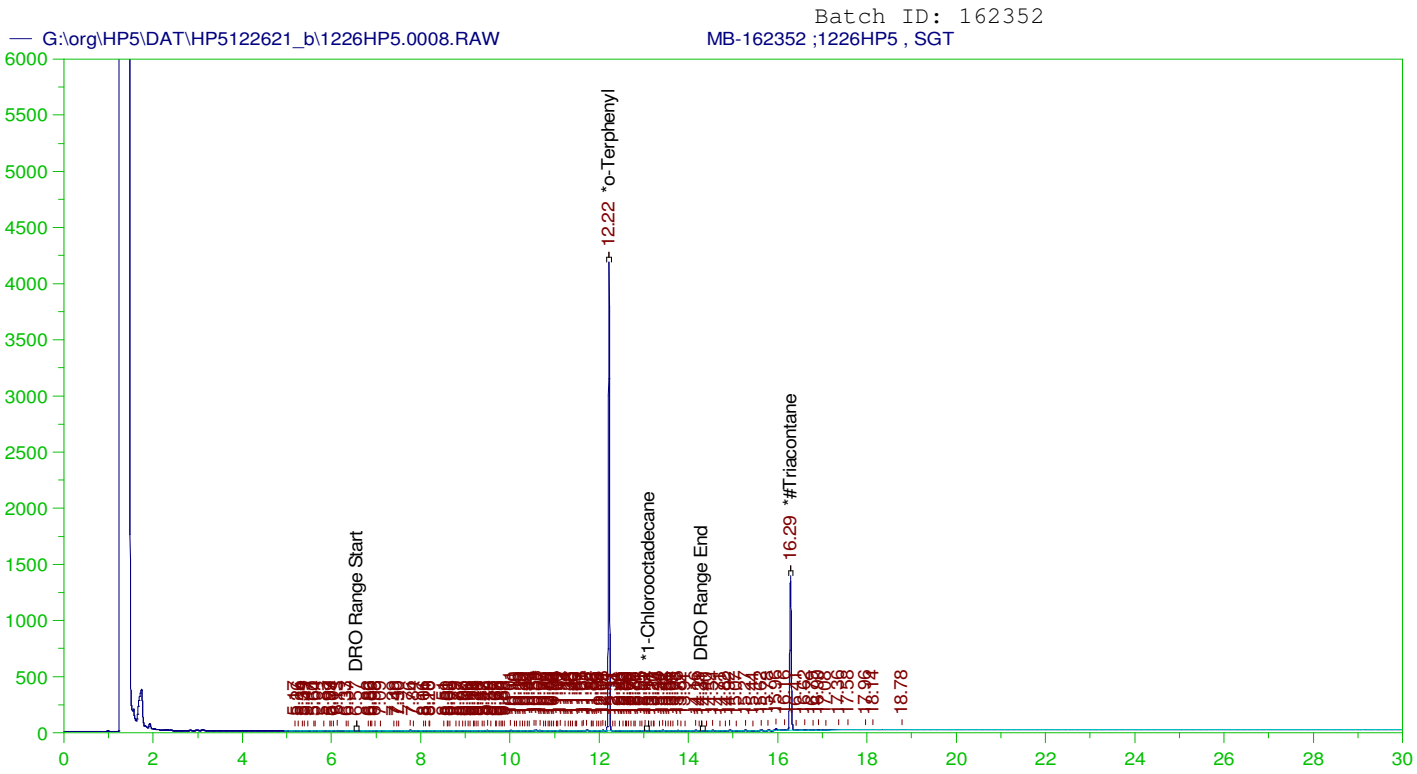
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: LCS-162352 ;1226HP5 ,
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0007.RAW
Date & Time Acquired: 12/26/2021 3:33:41 PM
Method File: G:\Org\HP5\Methods\D3_8015-24-IK-L0.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IK-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.38

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.224	.2	.437	218.63	-
*1-Chlorooctadecane	13.067	.2	.206	102.93	-

DRO Area:5.396852E+08 DRO Amount: 17.21309
TEH Area:5.738488E+08 TEH Amount: 18.30272



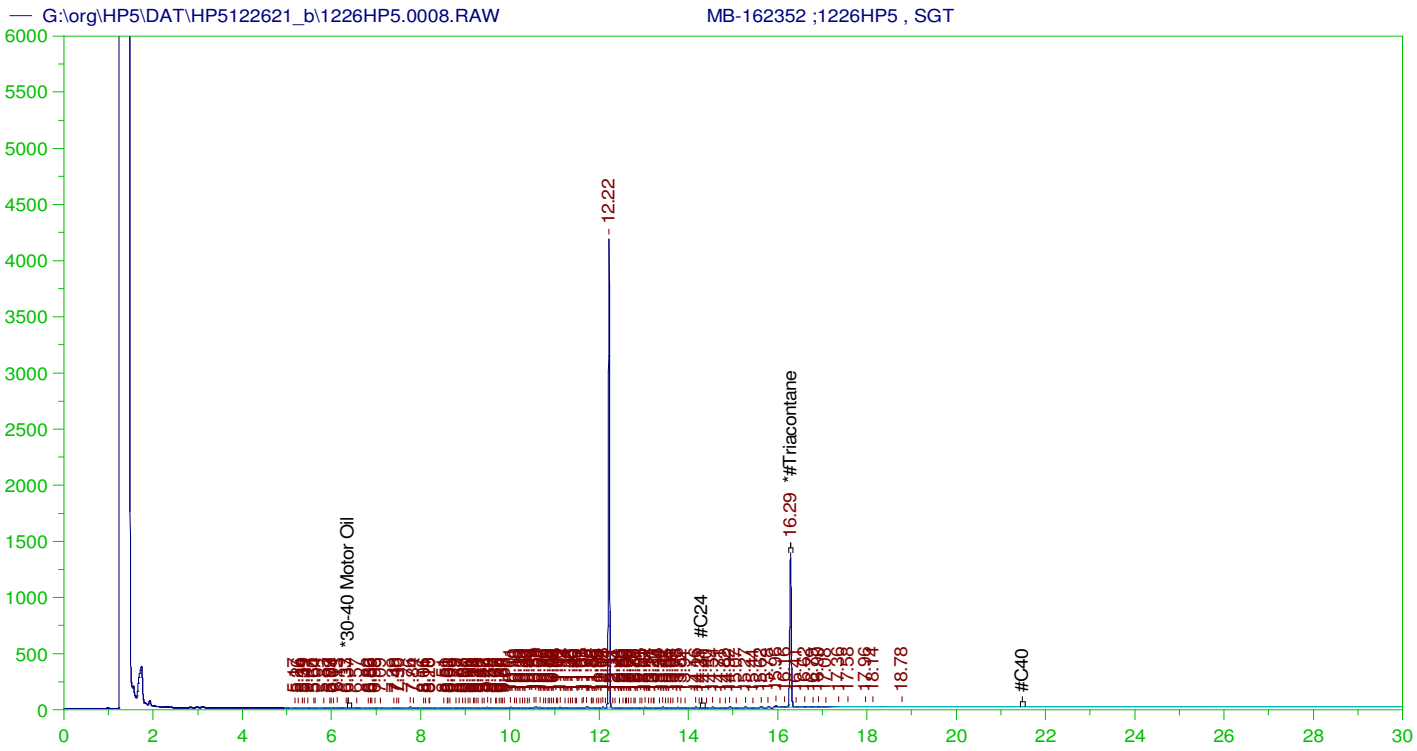
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MB-162352 ;1226HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0008.RAW
Date & Time Acquired: 12/26/2021 4:16:38 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.215	.2	.218	109.05	-
*1-Chlorooctadecane	13.106	.2	.03		-
*#Triacontane	16.285	.2	.118	59.03	-

DRO Area:493325.4 DRO Amount: 1.573446E-02
TEH Area:730344.6 TEH Amount: 2.329411E-02



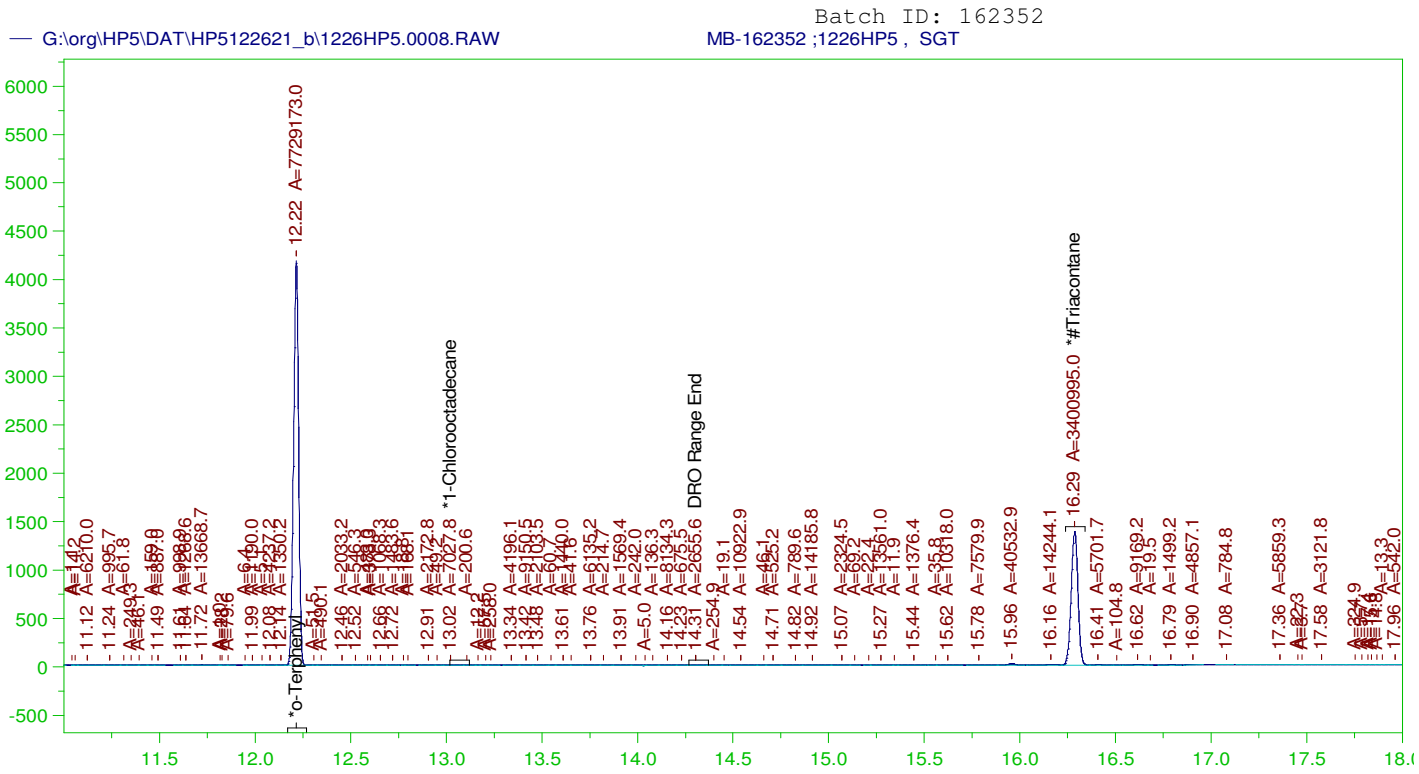
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: MB-162352 ;1226HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0008.RAW
Date & Time Acquired: 12/26/2021 4:16:38 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL-SAMP.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.27 to 21.54

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.285	.5	.118	23.61	-

RRO Area:189282.5 RRO AMOUNT: 6.631623E-03



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MB-162352 ;1226HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0008.RAW
Date & Time Acquired: 12/26/2021 4:16:38 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

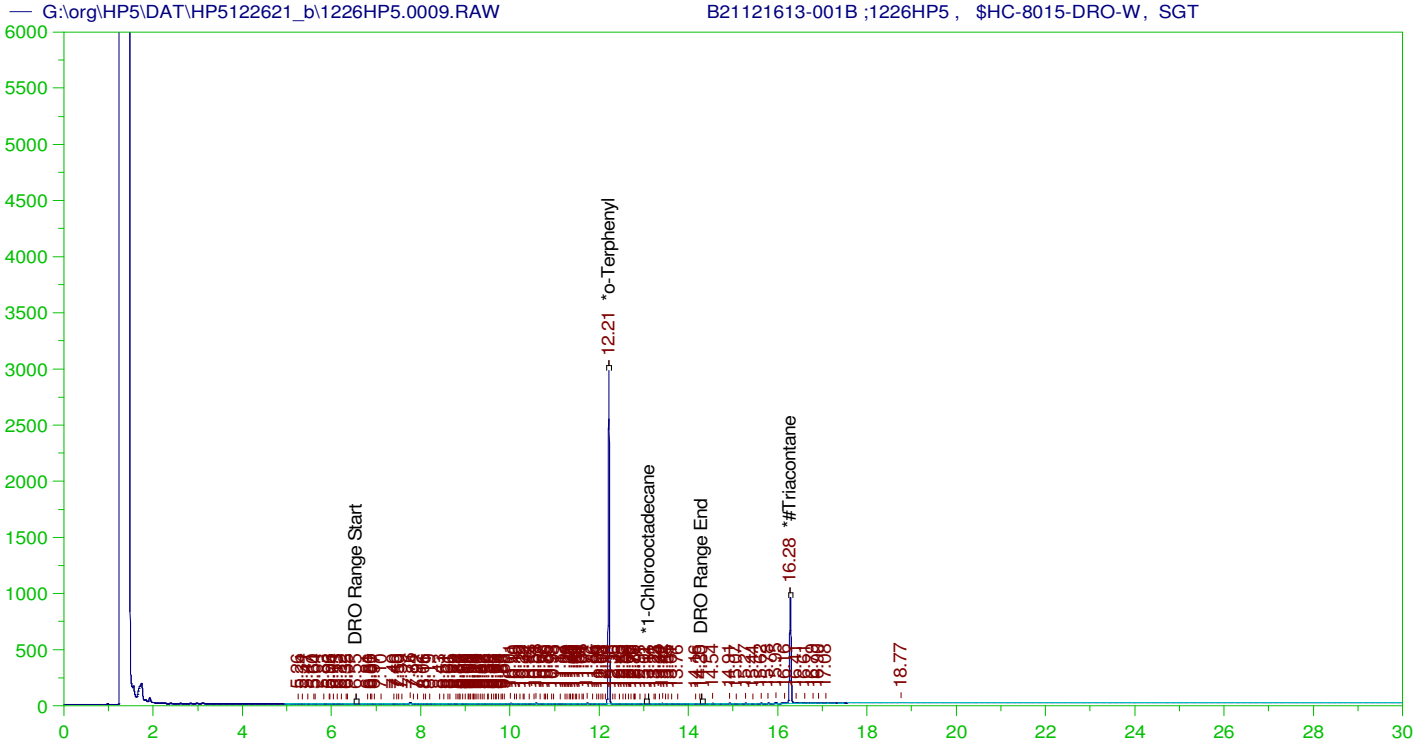
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.215	.2	.218	108.83	-
*1-Chlorooctadecane	13.022	.2	.1		-
*#Triacontane	16.285	.2	.118	58.78	-

DRO Area:206228.3 DRO Amount: 6.577585E-03
TEH Area:471035.9 TEH Amount: 1.502354E-02

ERH2184 (RHMW05) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0009.RAW B21121613-001B ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121613-001B ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0009.RAW
Date & Time Acquired: 12/26/2021 4:59:41 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

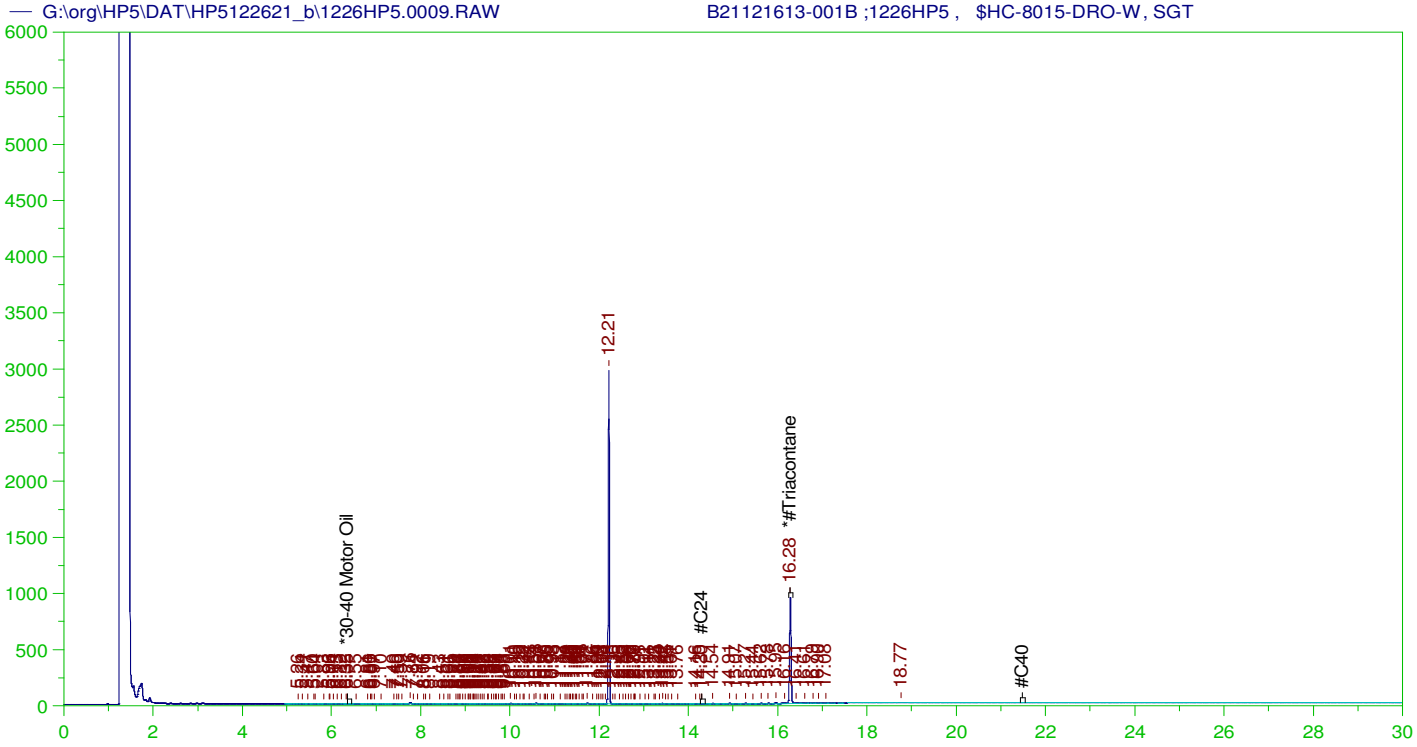
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.202	.154	76.36	-
*1-Chlorooctadecane	13.106	.202	.	.02	-
*#Triacontane	16.28	.202	.083	41.2	-

DRO Area:471021.8 DRO Amount: 1.517484E-02
TEH Area:634403.6 TEH Amount: 2.043848E-02

ERH2184 (RHMW05) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0009.RAW B21121613-001B ;1226HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121613-001B ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0009.RAW
Date & Time Acquired: 12/26/2021 4:59:41 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL-SAMP.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.27 to 21.54

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.28	.505	.083	16.48	-

RRO Area:129915.1 RRO AMOUNT: 4.597627E-03

ERH2184 (RHMW05) Batch ID: 162352

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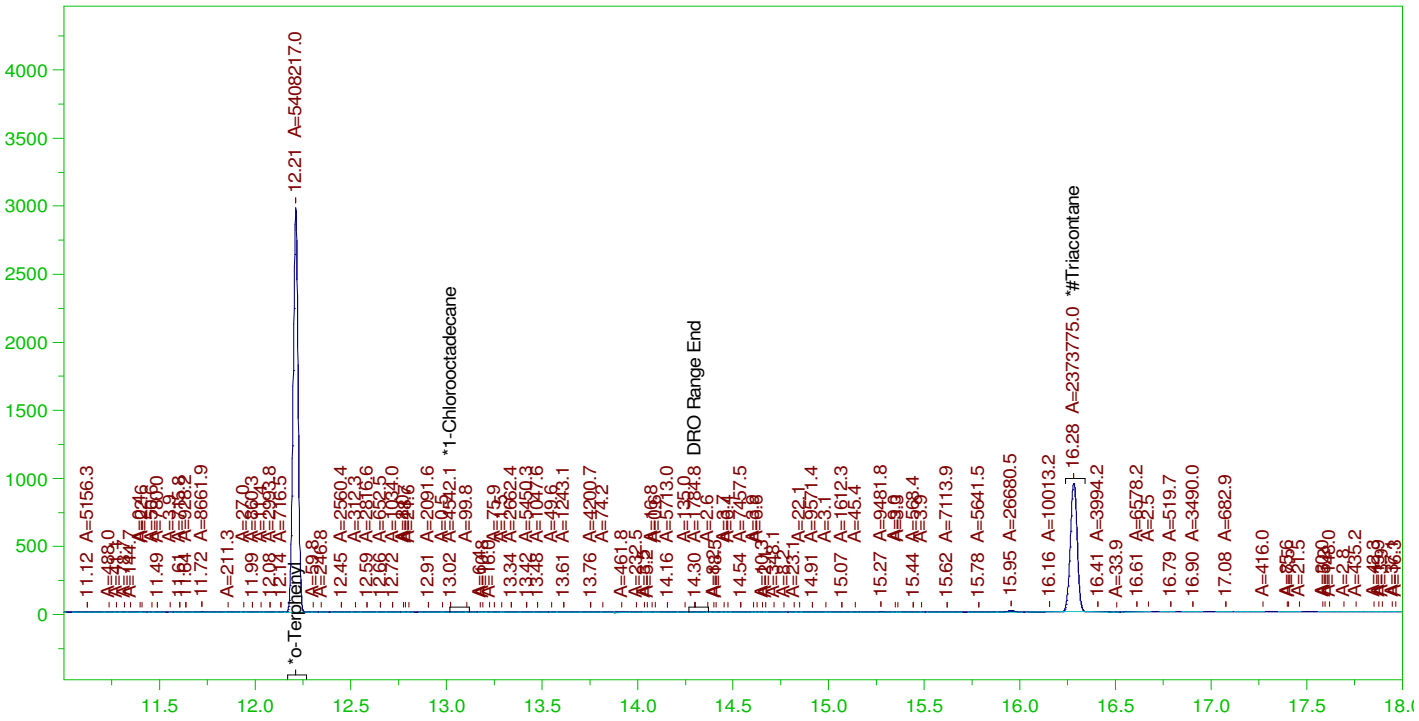


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

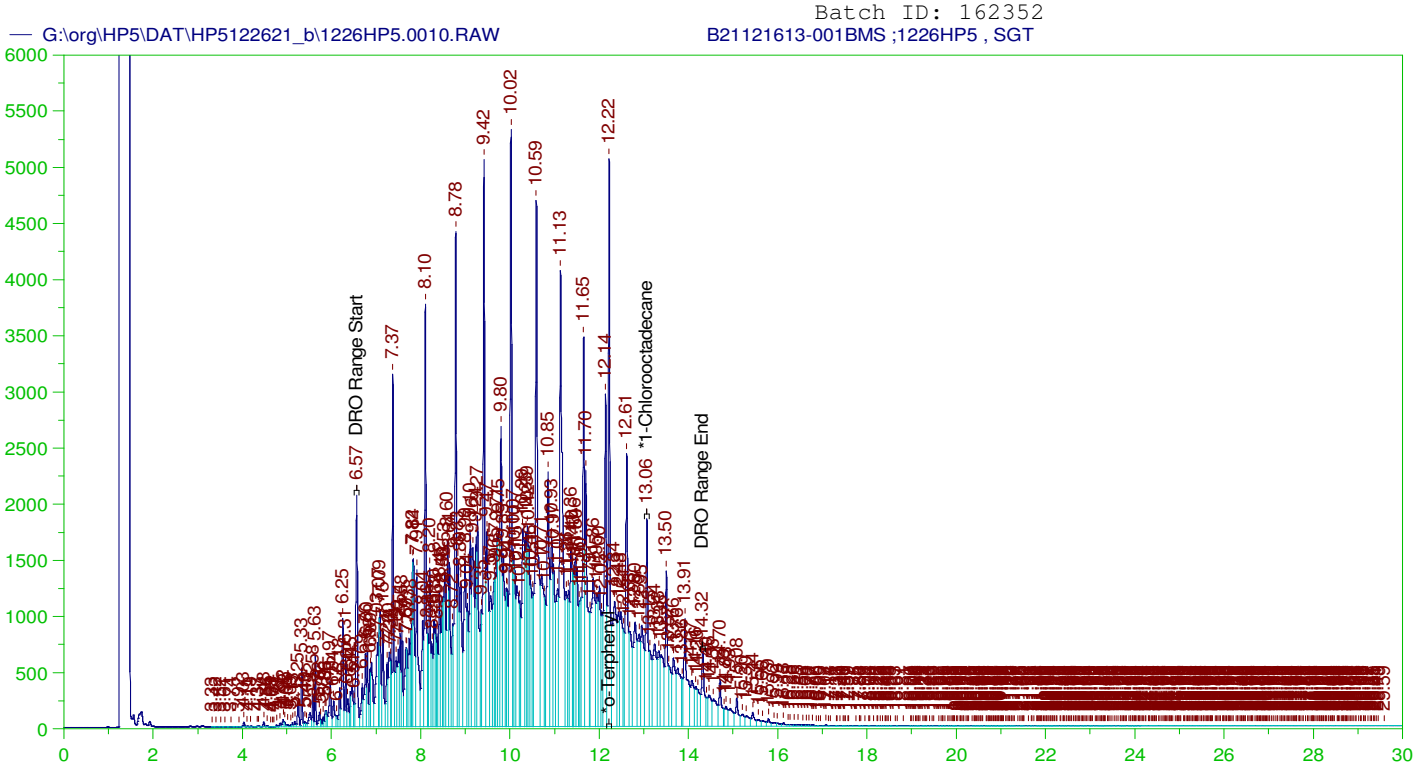
Sample Name: B21121613-001B ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0009.RAW
Date & Time Acquired: 12/26/2021 4:59:41 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.202	.154	76.15	-
*1-Chlorooctadecane	13.022	.202	.	.06	-
*#Triacontane	16.28	.202	.083	41.03	-

DRO Area:180099.7 DRO Amount: 5.802245E-03
TEH Area:369090 TEH Amount: 1.189092E-02

Batch ID: 162352



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121613-001BMS ;1226HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0010.RAW
Date & Time Acquired: 12/26/2021 5:42:41 PM
Method File: G:\Org\HP5\Methods\D3_8015-24-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

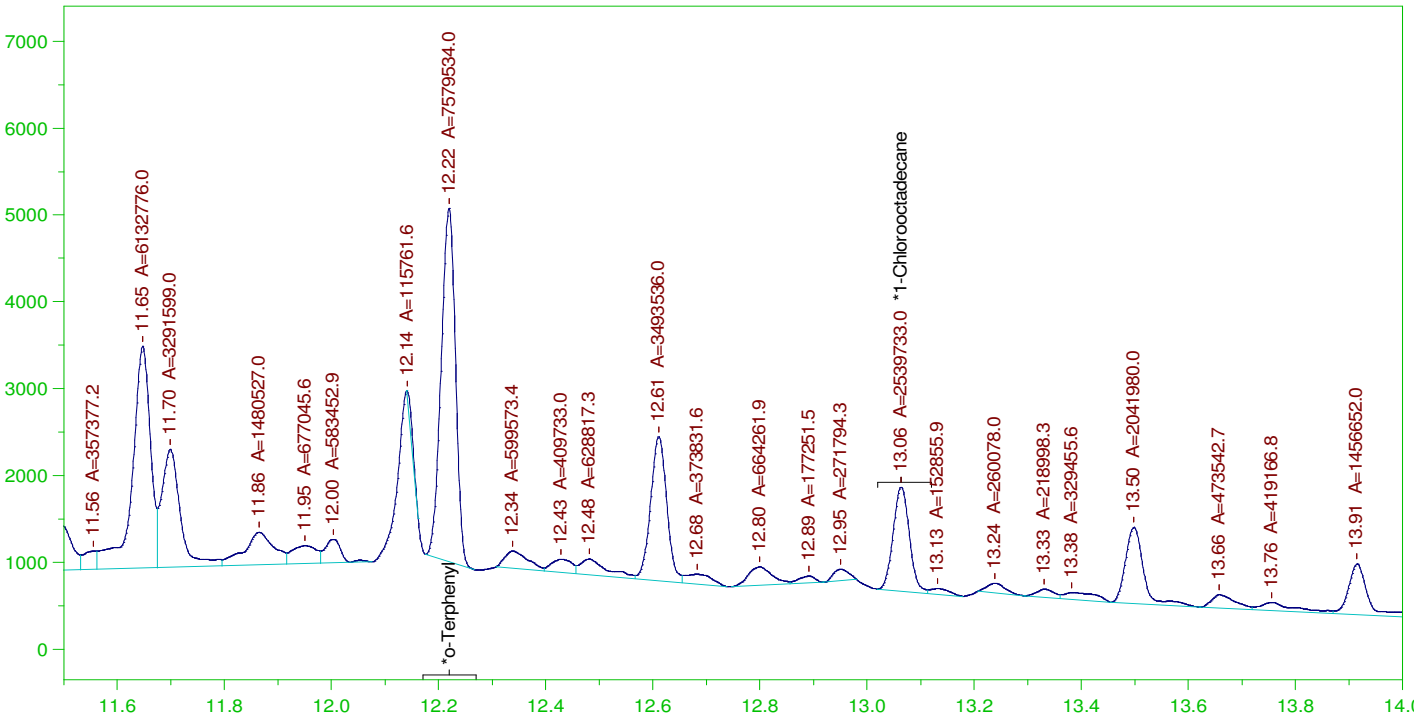
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.219	.202	.376	186.21	-
*1-Chlorooctadecane	13.064	.202	.178	88.2	-

DRO Area:4.916715E+08 DRO Amount: 15.84011
TEH Area:5.225287E+08 TEH Amount: 16.83423

Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0010.RAW B21121613-001BMS ;1226HP5 , SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

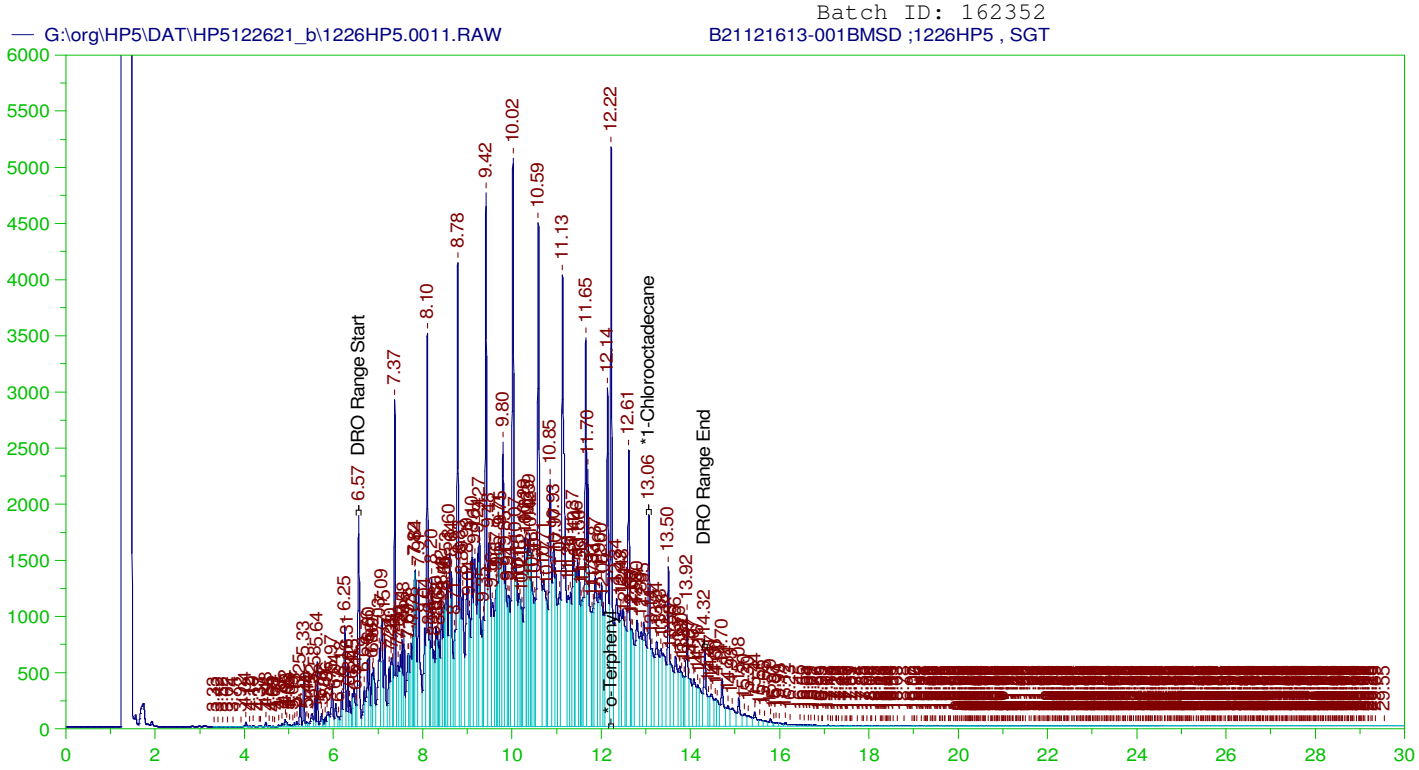
Sample Name: B21121613-001BMS ;1226HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0010.RAW
Date & Time Acquired: 12/26/2021 5:42:41 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.219	.202	.216	106.73	-
*1-Chlorooctadecane	13.064	.202	.072	35.76	-

DRO Area:2.379687E+08 DRO Amount: 7.666602
TEH Area:2.525714E+08 TEH Amount: 8.137053

Batch ID: 162352



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

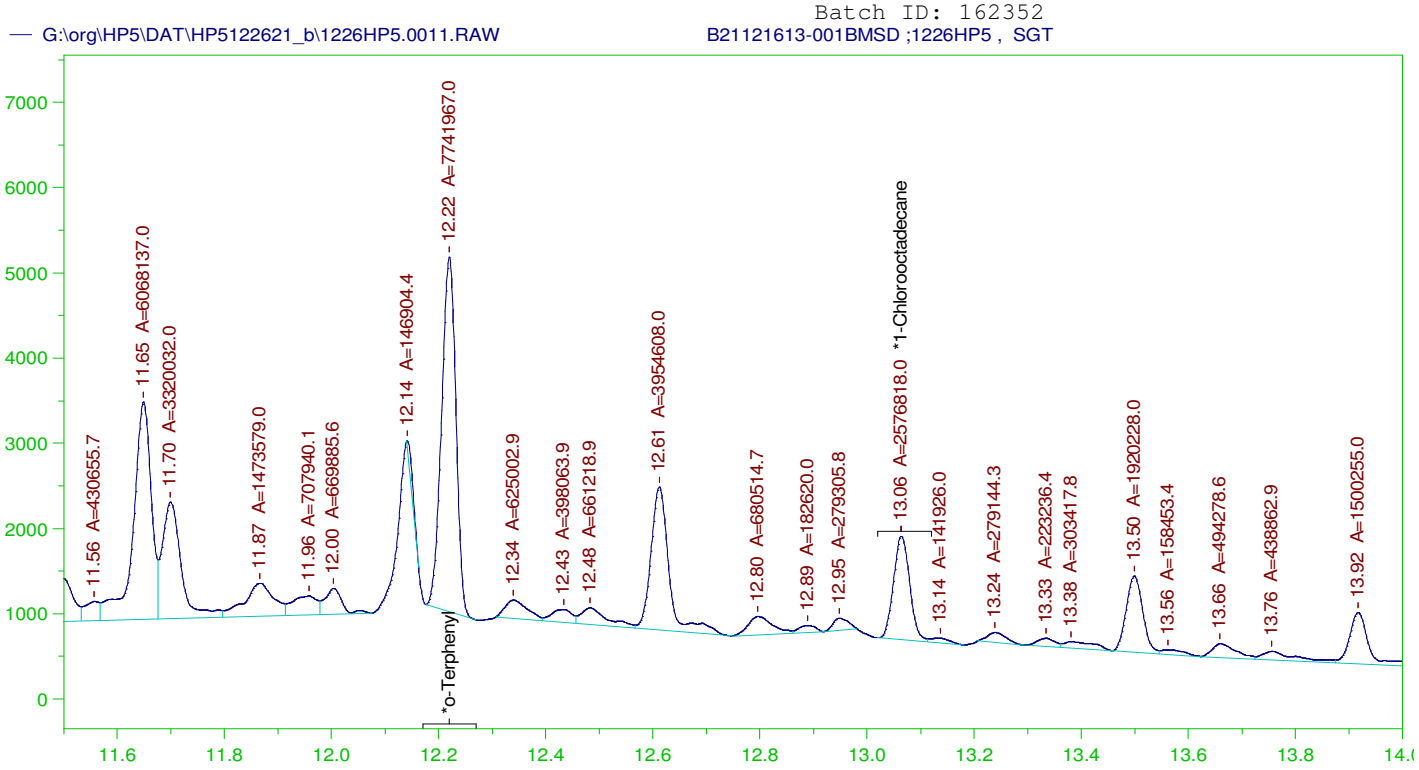
Sample Name: B21121613-001BMSD ;1226HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0011.RAW
Date & Time Acquired: 12/26/2021 6:25:39 PM
Method File: G:\Org\HP5\Methods\D3_8015-24-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.22	.192	.37	192.2	-
*1-Chlorooctadecane	13.064	.192	.172	89.36	-

DRO Area:4.760504E+08 DRO Amount: 14.5995
TEH Area:5.059904E+08 TEH Amount: 15.5177

Batch ID: 162352



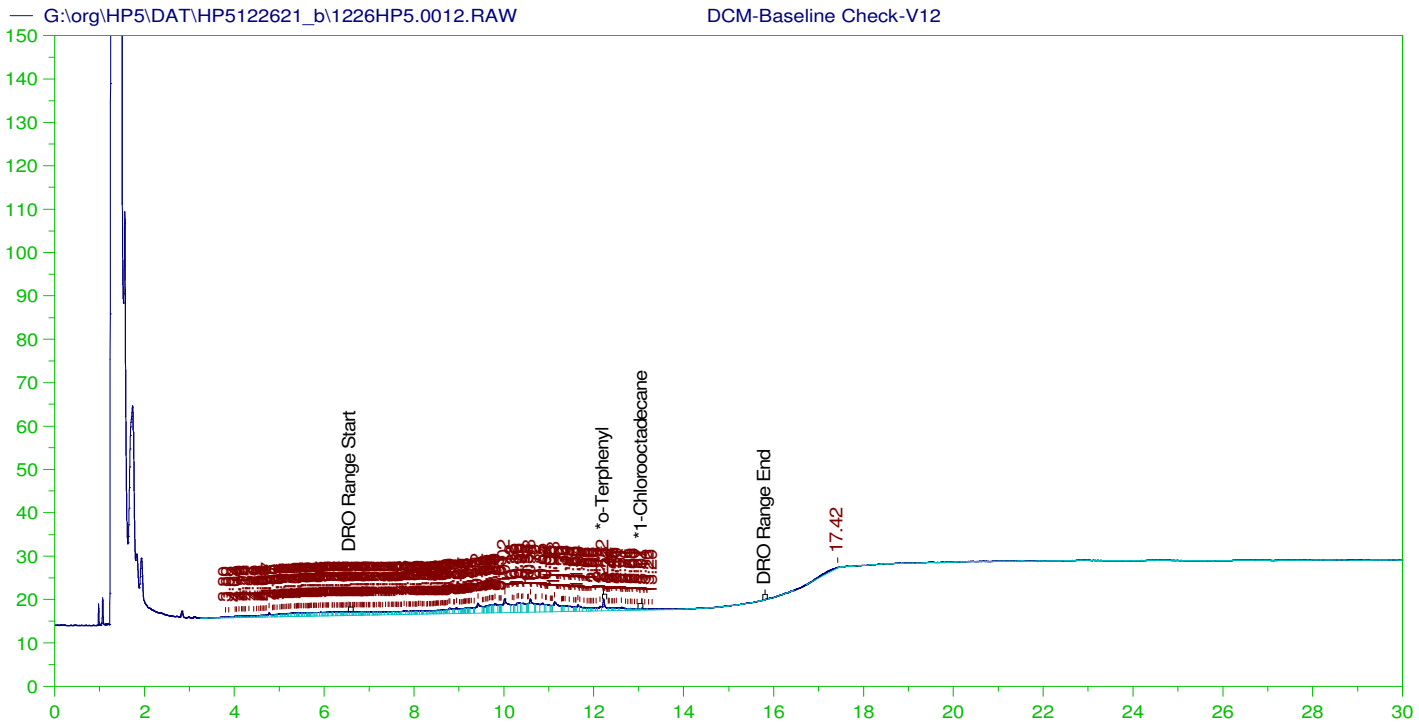
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121613-001BMSD ;1226HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0011.RAW
Date & Time Acquired: 12/26/2021 6:25:39 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.22	.192	.21	109.01	-
*1-Chlorooctadecane	13.064	.192	.07	36.28	-

DRO Area:2.214392E+08 DRO Amount: 6.791088
TEH Area:2.351863E+08 TEH Amount: 7.212684



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V12
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0012.RAW
Date & Time Acquired: 12/26/2021 7:08:39 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

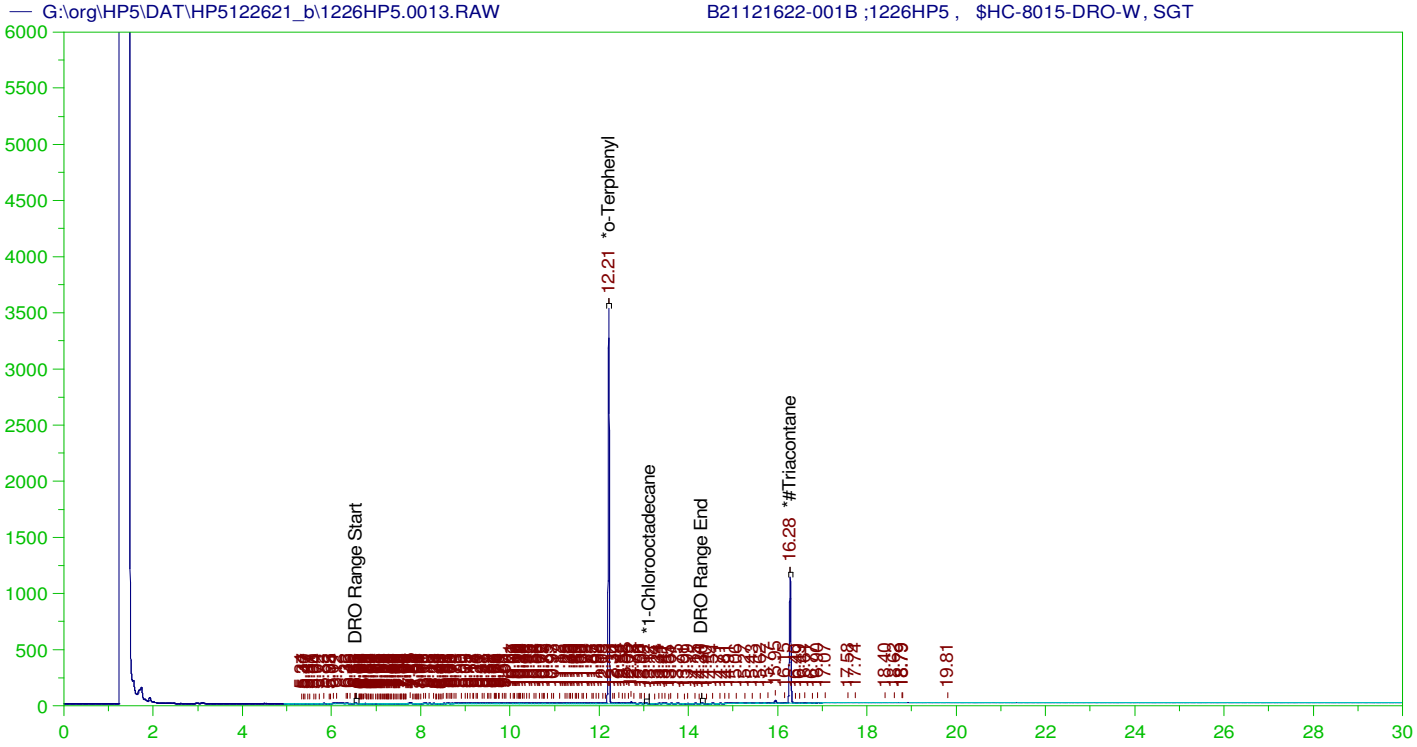
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.215	200.	.298	.15	-
*1-Chlorooctadecane	13.069	200.	.042	.02	-

DRO Area:426971.7 DRO Amount: 13.61812
TEH Area:551501.4 TEH Amount: 17.58996

ERH2193 (RHMW12A) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0013.RAW B21121622-001B ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-001B ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0013.RAW
Date & Time Acquired: 12/26/2021 7:51:32 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 960 Dilution: 1 S.A.: 1

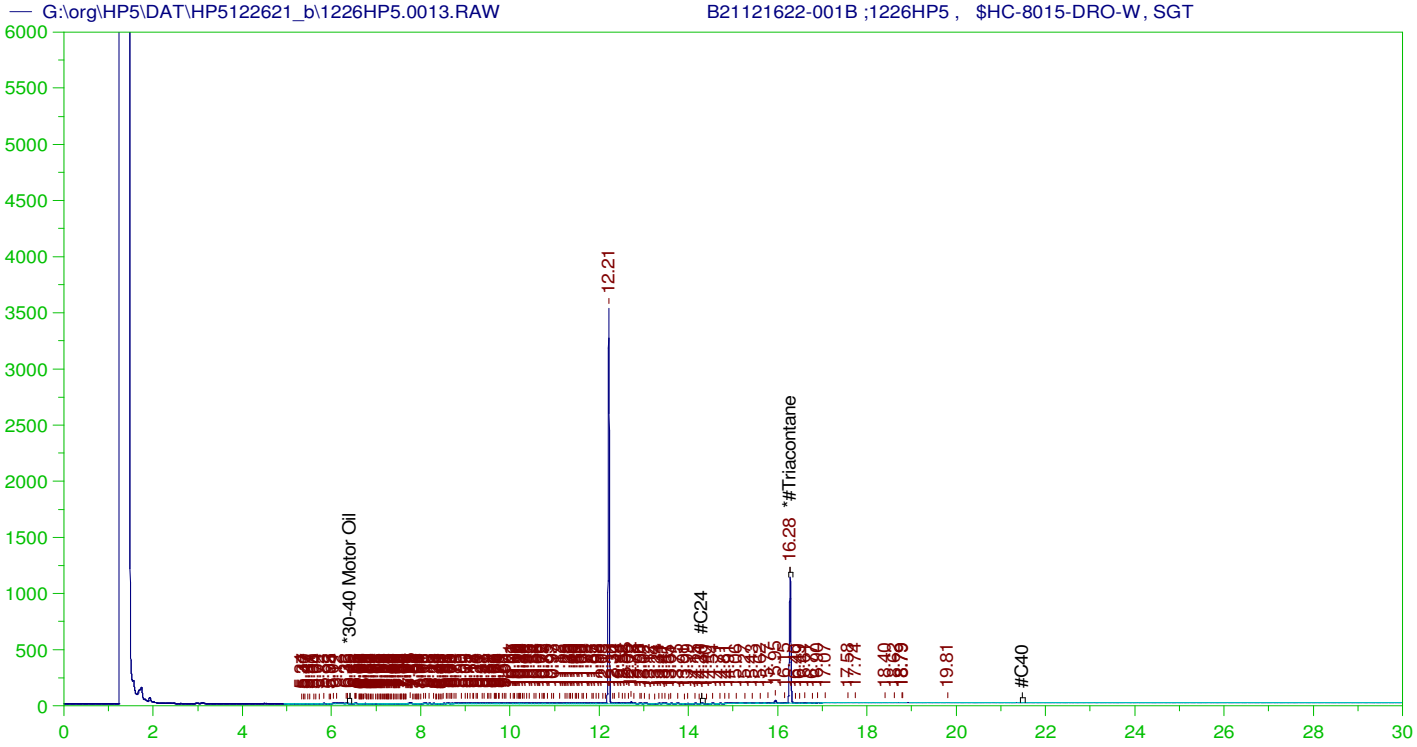
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.211	.208	.19	91.34	-
*1-Chlorooctadecane	13.117	.208	.01		-
*#Triacontane	16.276	.208	.101	48.65	-

DRO Area:680582.4 DRO Amount: 2.261142E-02
TEH Area:995765.7 TEH Amount: 3.308295E-02

ERH2193 (RHMW12A) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0013.RAW B21121622-001B ;1226HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121622-001B ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0013.RAW
Date & Time Acquired: 12/26/2021 7:51:32 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL-SAMP.CAL
Sample Weight: 960 Dilution: 1 S.A.: 1

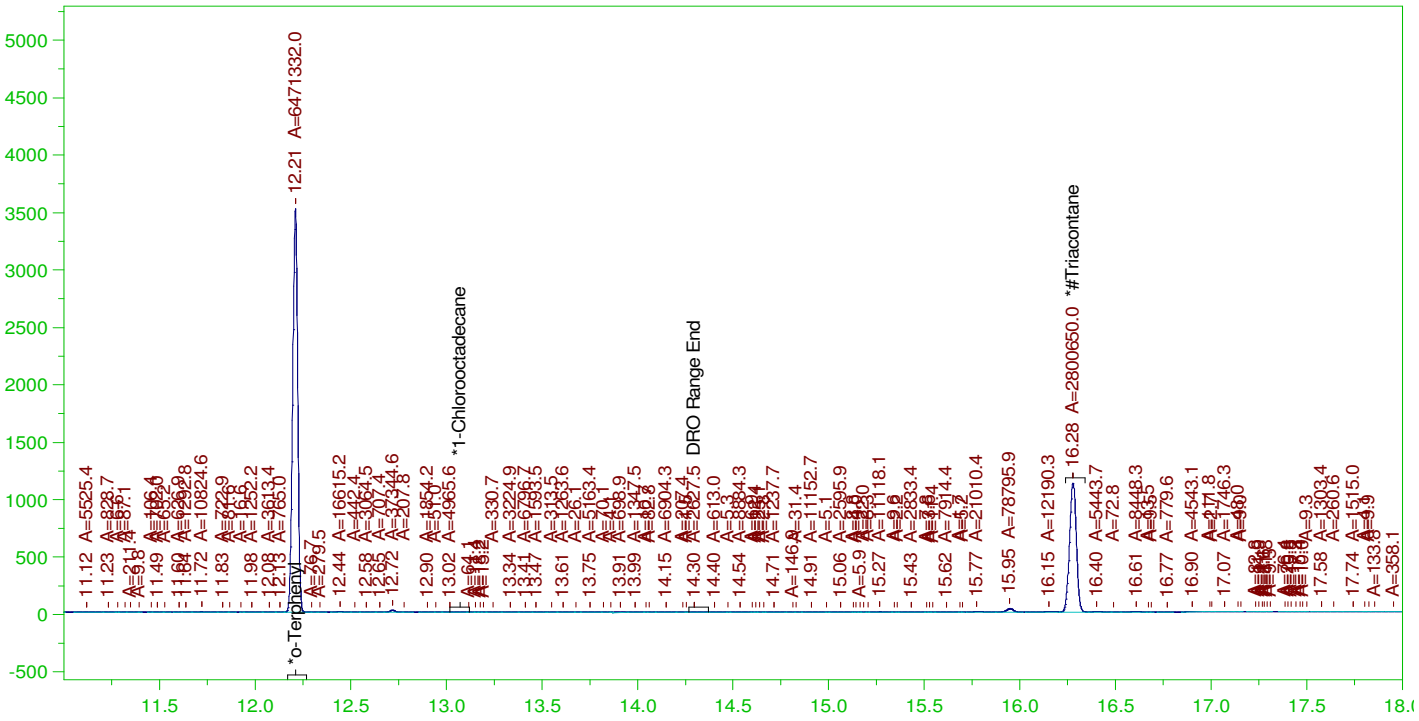
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.27 to 21.54

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.276	.521	.101	19.46	-

RRO Area:218408 RRO AMOUNT: 7.970887E-03

ERH2193 (RHMW12A) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0013.RAW B21121622-001B ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-001B ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0013.RAW
Date & Time Acquired: 12/26/2021 7:51:32 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 960 Dilution: 1 S.A.: 1

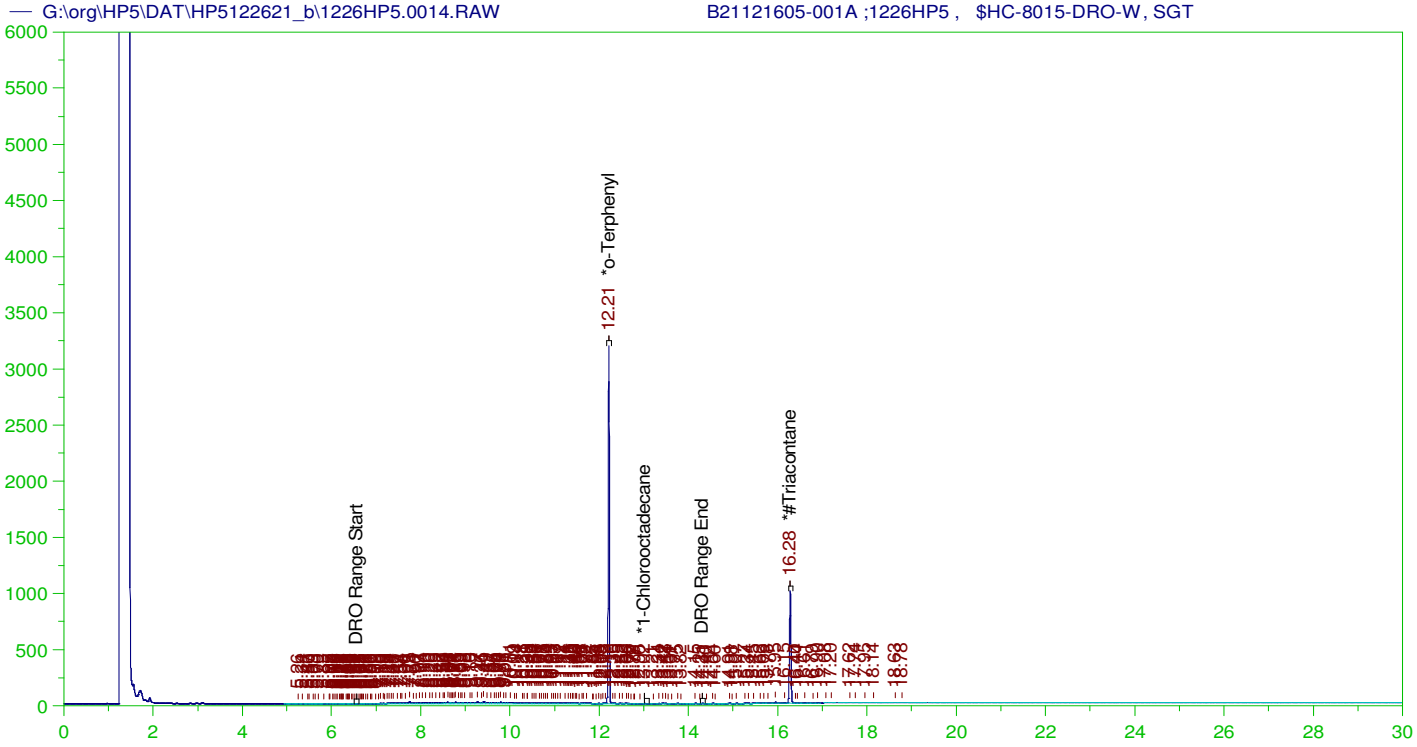
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.211	.208	.19	91.12	-
*1-Chlorooctadecane	29.978	.208	.	.	-
*#Triacontane	16.276	.208	.101	48.4	-

DRO Area:287369.7 DRO Amount: 9.547462E-03
TEH Area:615266.6 TEH Amount: 2.044139E-02

ERH2175 (RHMW2254-001) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0014.RAW B21121605-001A ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-001A ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0014.RAW
Date & Time Acquired: 12/26/2021 8:34:21 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

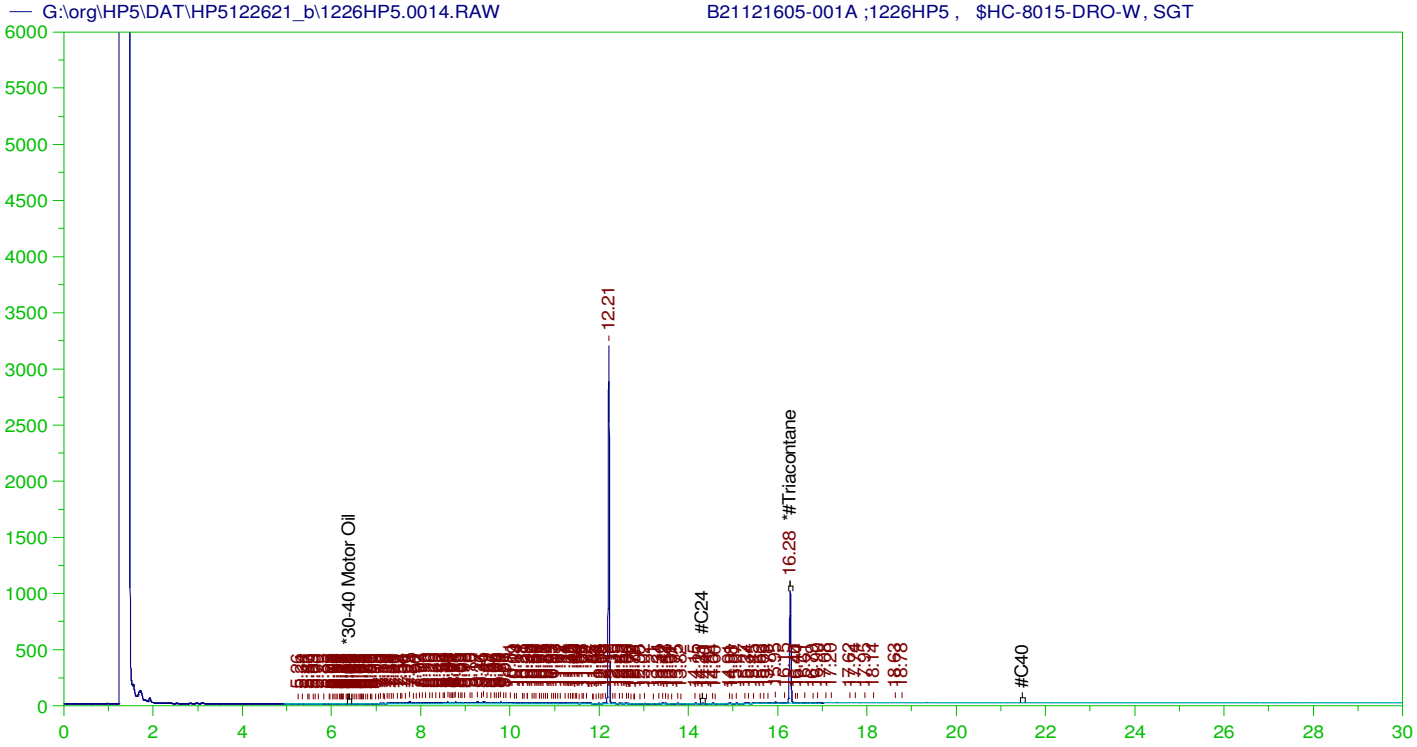
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	.19	.158	83.06	-
*1-Chlorooctadecane	13.022	.19	.	.11	-
*#Triacontane	16.277	.19	.082	43.03	-

DRO Area:1966356 DRO Amount: 0.0597298
TEH Area:2154859 TEH Amount: 6.545574E-02

ERH2175 (RHMW2254-001) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0014.RAW B21121605-001A ;1226HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121605-001A ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0014.RAW
Date & Time Acquired: 12/26/2021 8:34:21 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL-SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

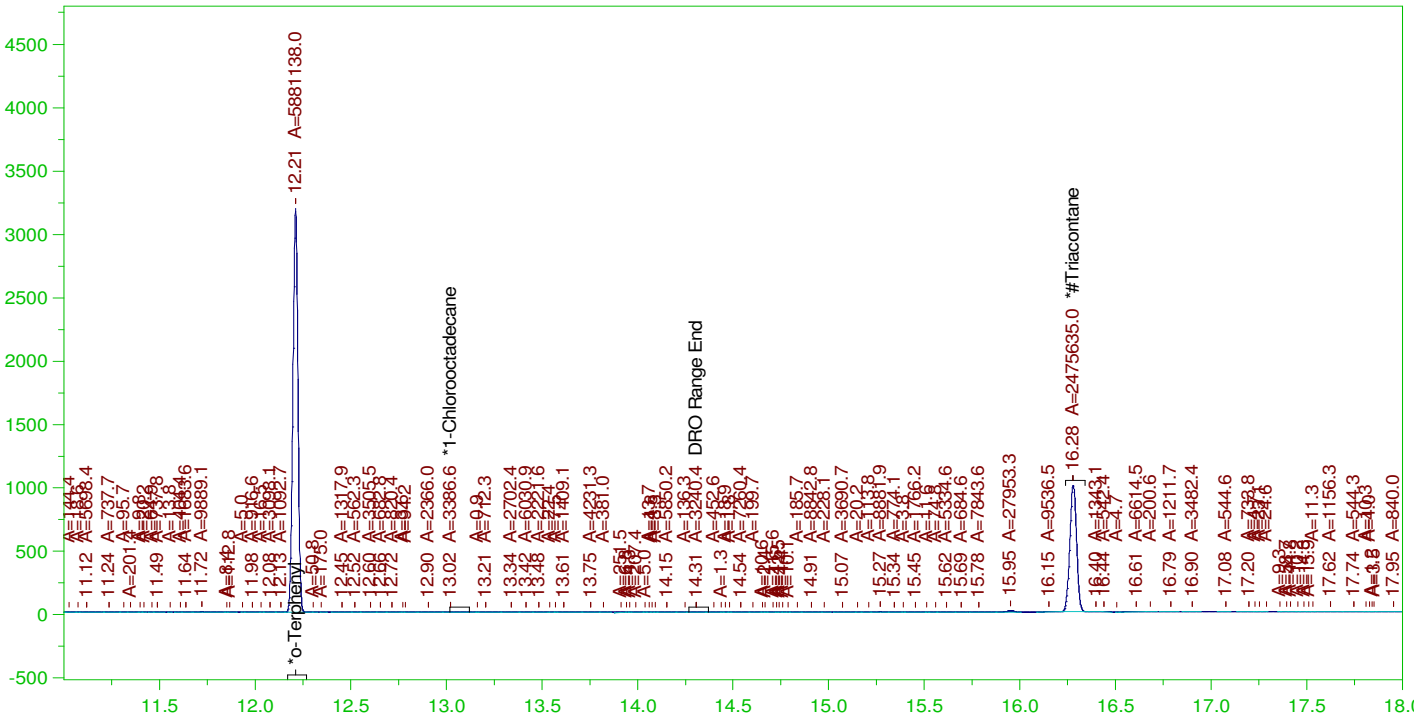
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.27 to 21.54

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.277	.476	.082	17.21	-

RRO Area:146590.7 RRO AMOUNT: 4.891324E-03

ERH2175 (RHMW2254-001) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0014.RAW B21121605-001A ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-001A ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0014.RAW
Date & Time Acquired: 12/26/2021 8:34:21 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

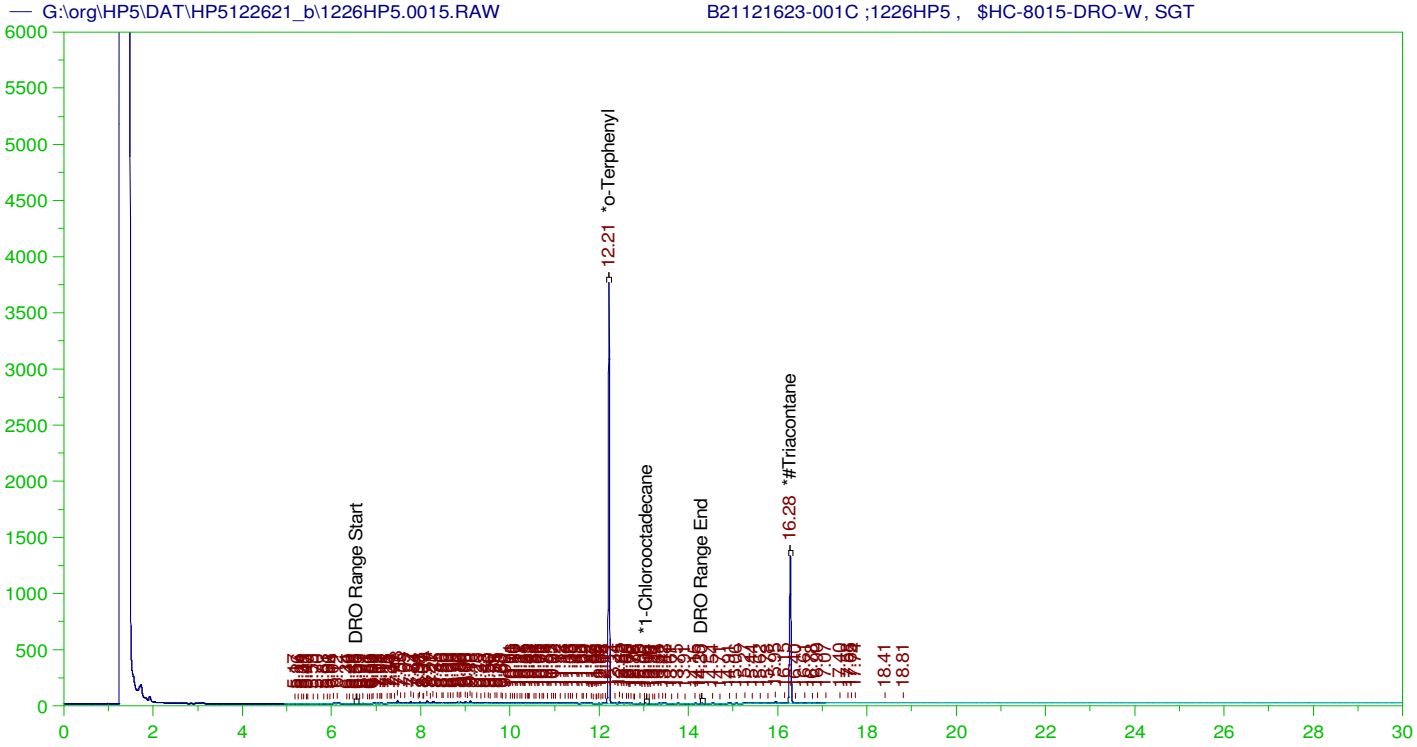
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	.19	.158	82.81	-
*1-Chlorooctadecane	13.022	.19	.	.05	-
*#Triacontane	16.277	.19	.081	42.79	-

DRO Area:1280950 DRO Amount: 0.03891
TEH Area:1452287 TEH Amount: 4.411451E-02

ERH2178 (RHMW01R) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0015.RAW B21121623-001C ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121623-001C ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0015.RAW
Date & Time Acquired: 12/26/2021 9:17:18 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

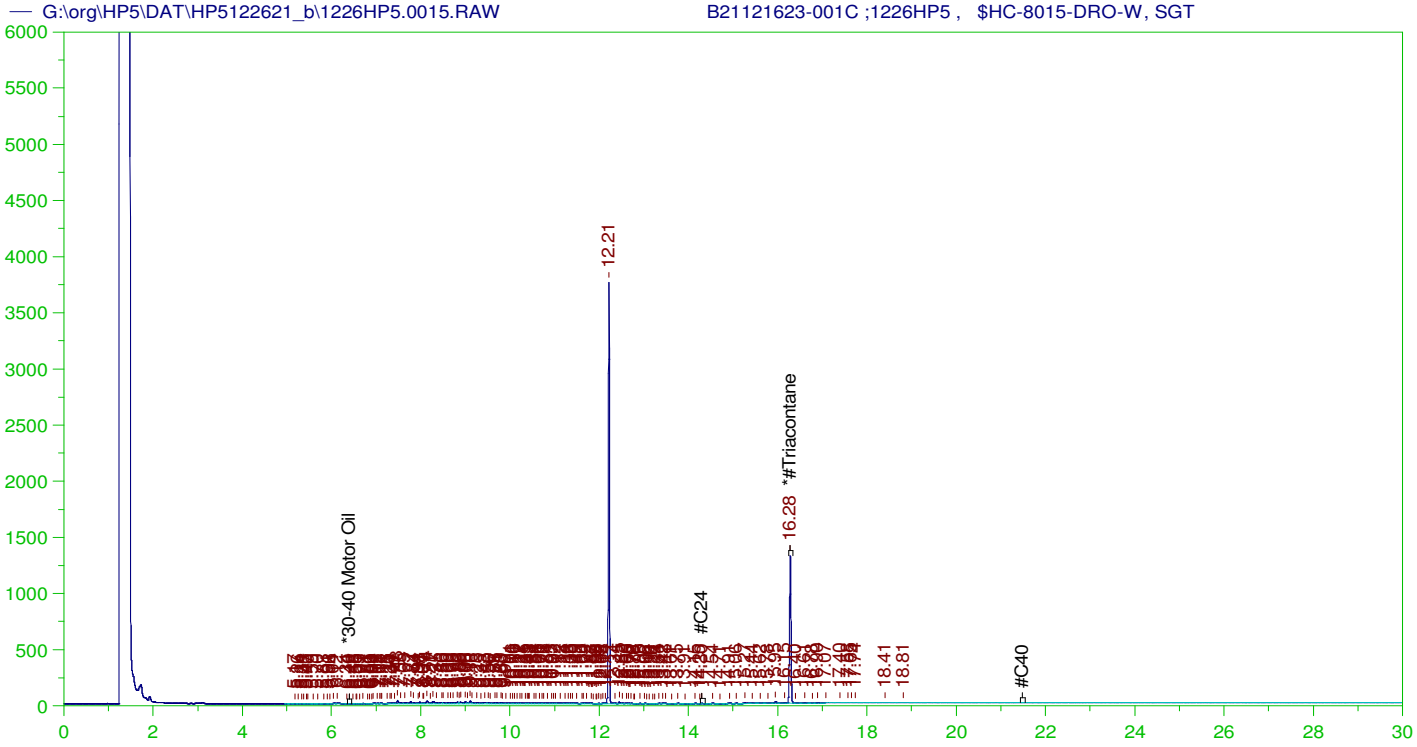
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.196	.193	98.2	-
*1-Chlorooctadecane	13.056	.196	.	.04	-
*#Triacontane	16.279	.196	.112	57.05	-

DRO Area:1858886 DRO Amount: 5.812604E-02
TEH Area:2119170 TEH Amount: 6.626495E-02

ERH2178 (RHMW01R) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0015.RAW B21121623-001C ;1226HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121623-001C ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0015.RAW
Date & Time Acquired: 12/26/2021 9:17:18 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL-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: 14.27 to 21.54

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.279	.49	.112	22.82	-

RRO Area:179215.4 RRO AMOUNT: 0.0061558

ERH2178 (RHMW01R) Batch ID: 162352

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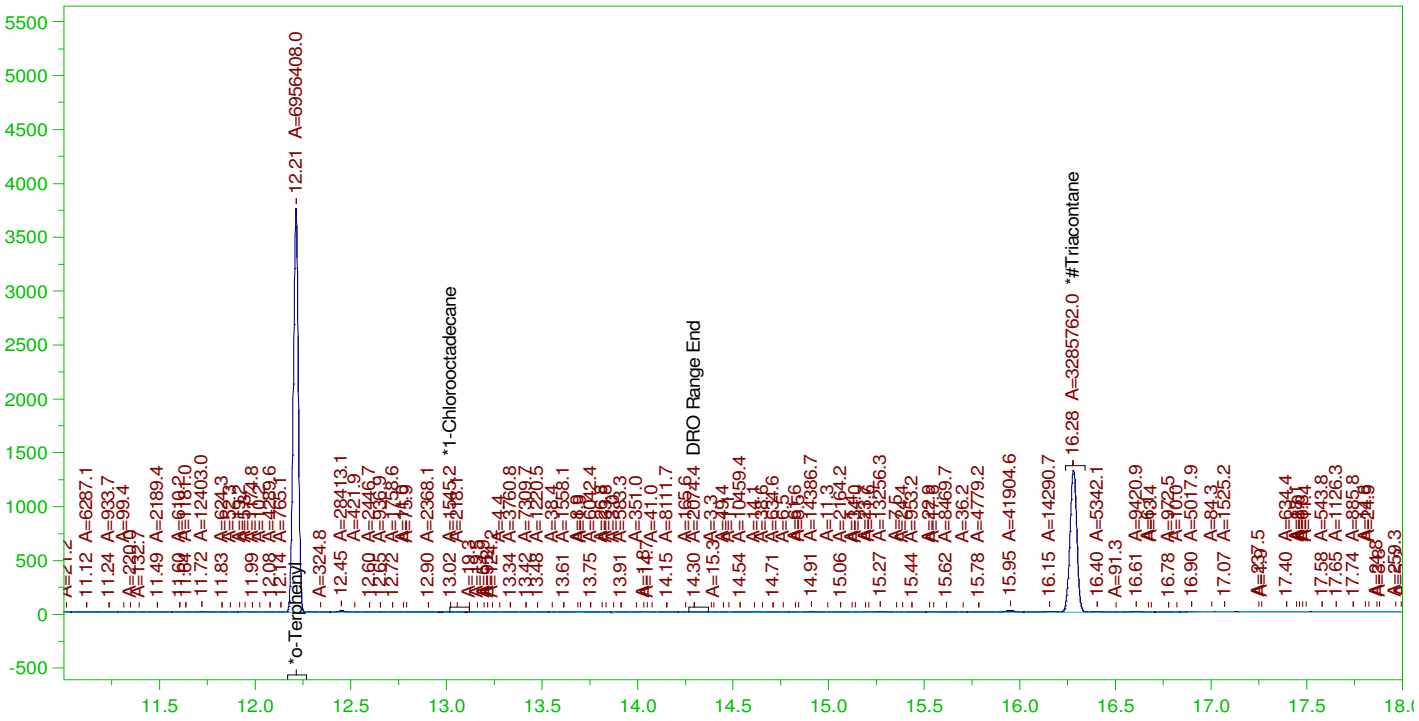


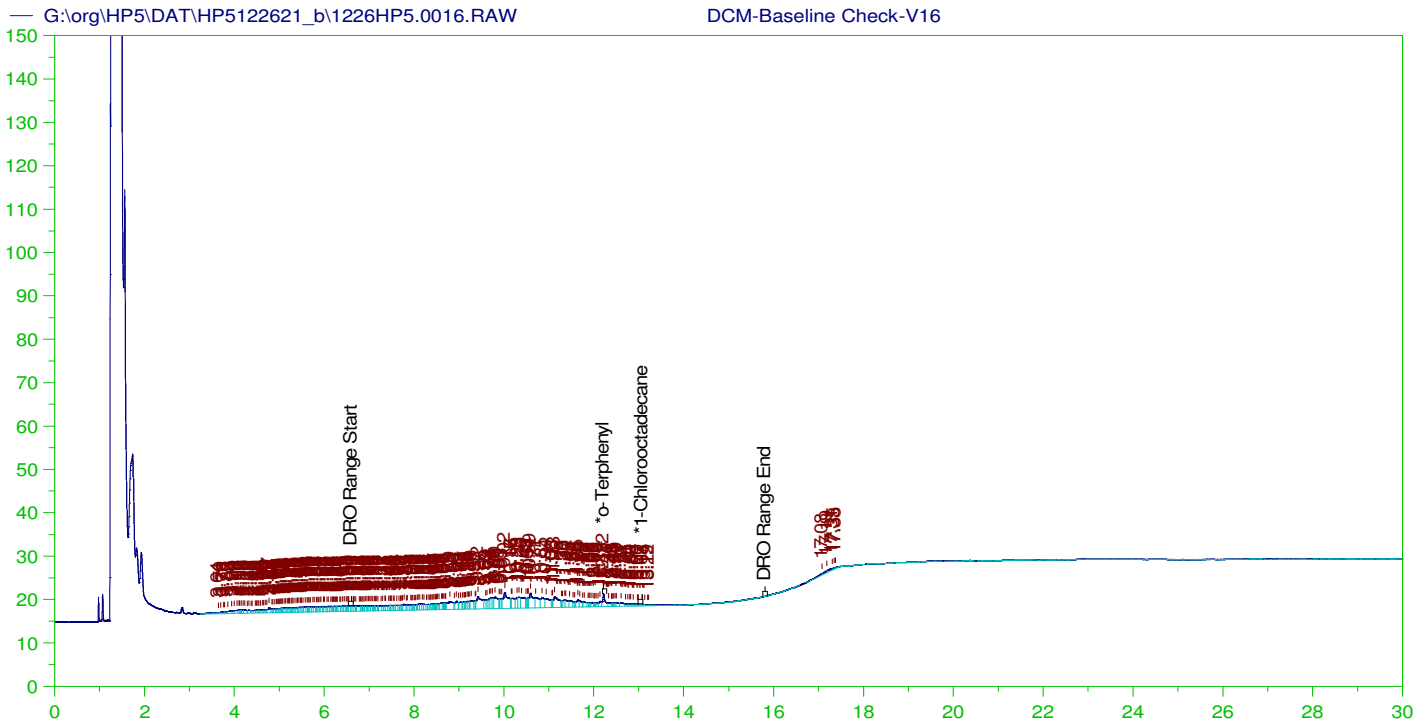
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121623-001C ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0015.RAW
Date & Time Acquired: 12/26/2021 9:17:18 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.196	.192	97.95	-
*1-Chlorooctadecane	13.022	.196	. .02		-
*#Triacontane	16.279	.196	.111	56.79	-

DRO Area:1364879 DRO Amount: 4.267881E-02
TEH Area:1628100 TEH Amount: 5.090954E-02



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V16
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0016.RAW
Date & Time Acquired: 12/26/2021 10:00:07 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

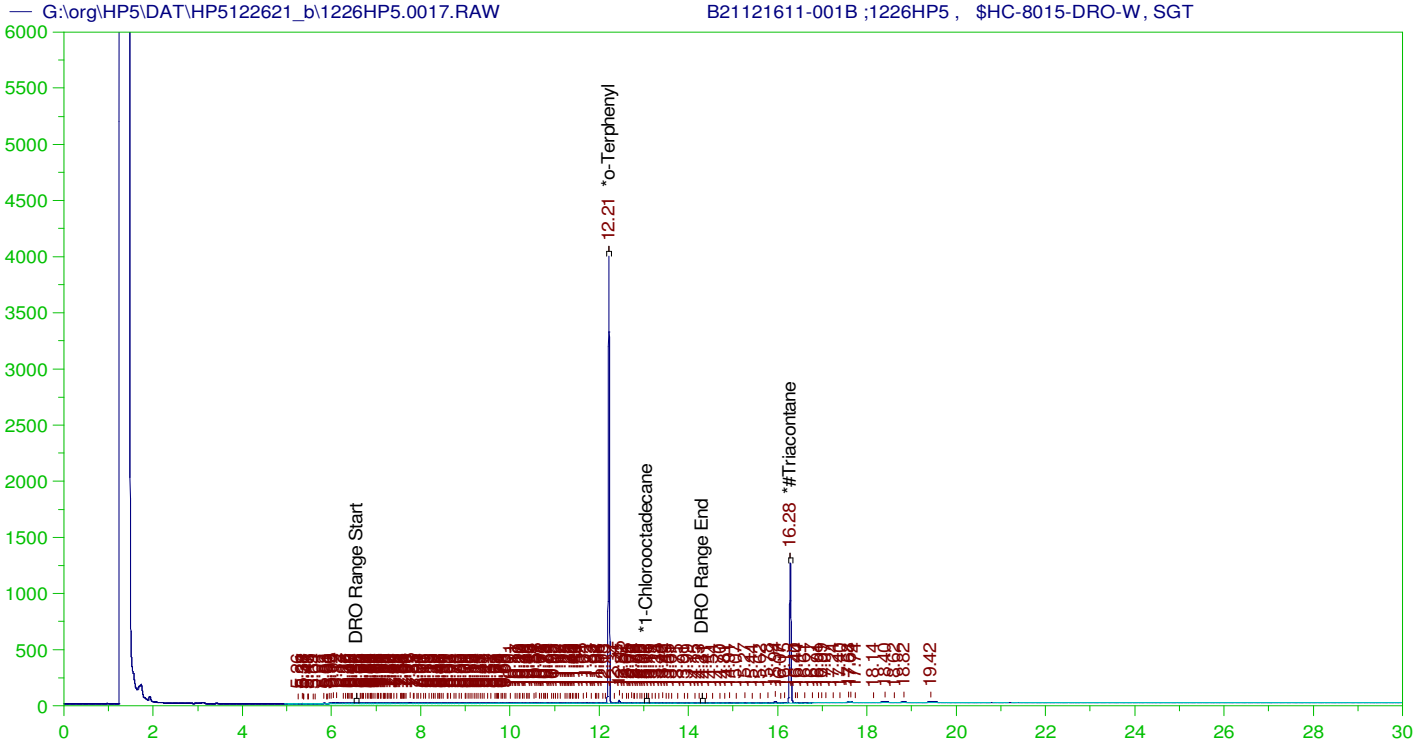
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.215	200.	.365	.18	-
*1-Chlorooctadecane	13.074	200.	.022	.01	-

DRO Area:576114.7 DRO Amount: 18.37499
TEH Area:754904.2 TEH Amount: 24.07743

ERH2182 (RHMW03) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0017.RAW B21121611-001B ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121611-001B ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0017.RAW
Date & Time Acquired: 12/26/2021 10:43:04 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

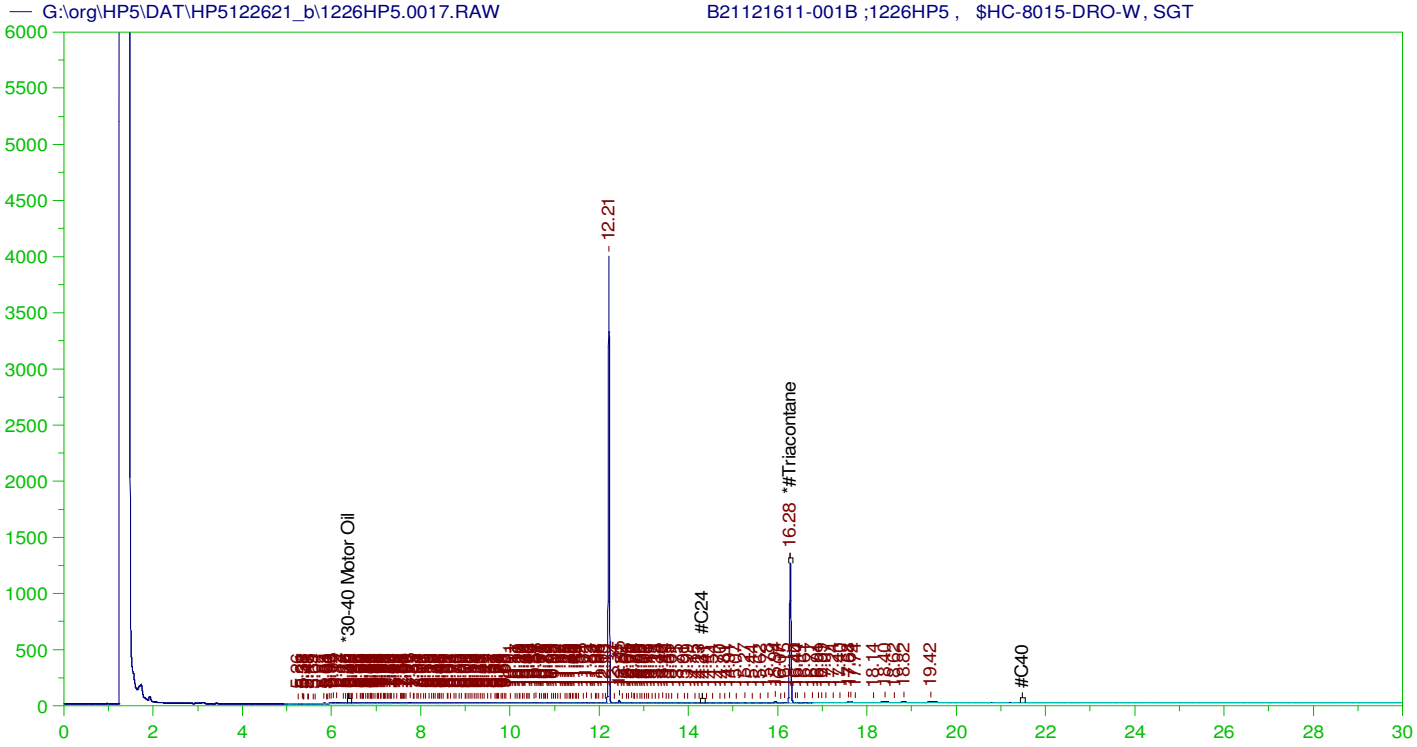
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.194	.2	103.14	-
*1-Chlorooctadecane	13.059	.194	.	.08	-
*#Triacontane	16.279	.194	.106	54.63	-

DRO Area:815550.4 DRO Amount: 2.525409E-02
TEH Area:1293165 TEH Amount: 4.004378E-02

ERH2182 (RHMW03) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0017.RAW B21121611-001B ;1226HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121611-001B ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0017.RAW
Date & Time Acquired: 12/26/2021 10:43:04 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL-SAMP.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

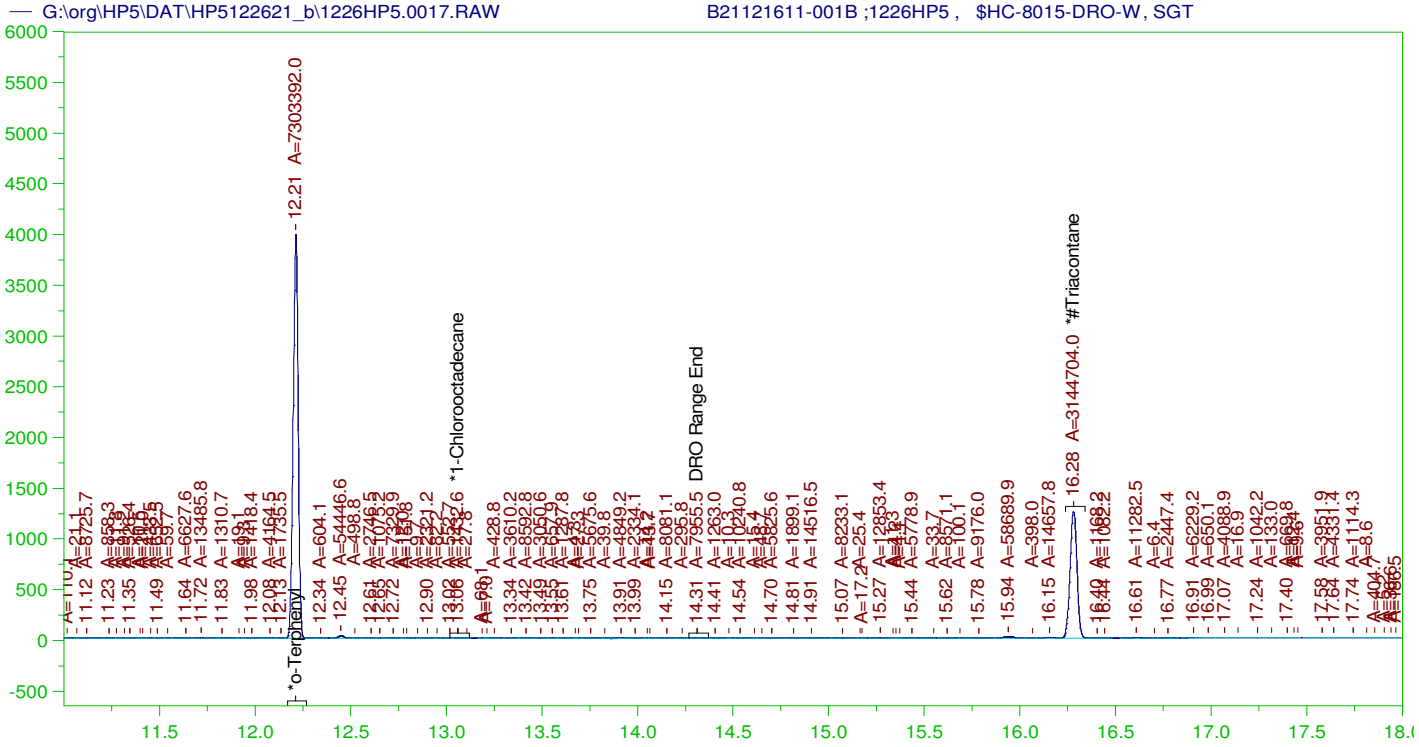
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.27 to 21.54

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.279	.485	.106	21.85	-

RRO Area:377598.7 RRO AMOUNT: 1.284407E-02

ERH2182 (RHMW03) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0017.RAW B21121611-001B ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121611-001B ;1226HP5 , $HC-8015-DRO-W, SGT
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Date & Time Acquired: 12/26/2021 10:43:04 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

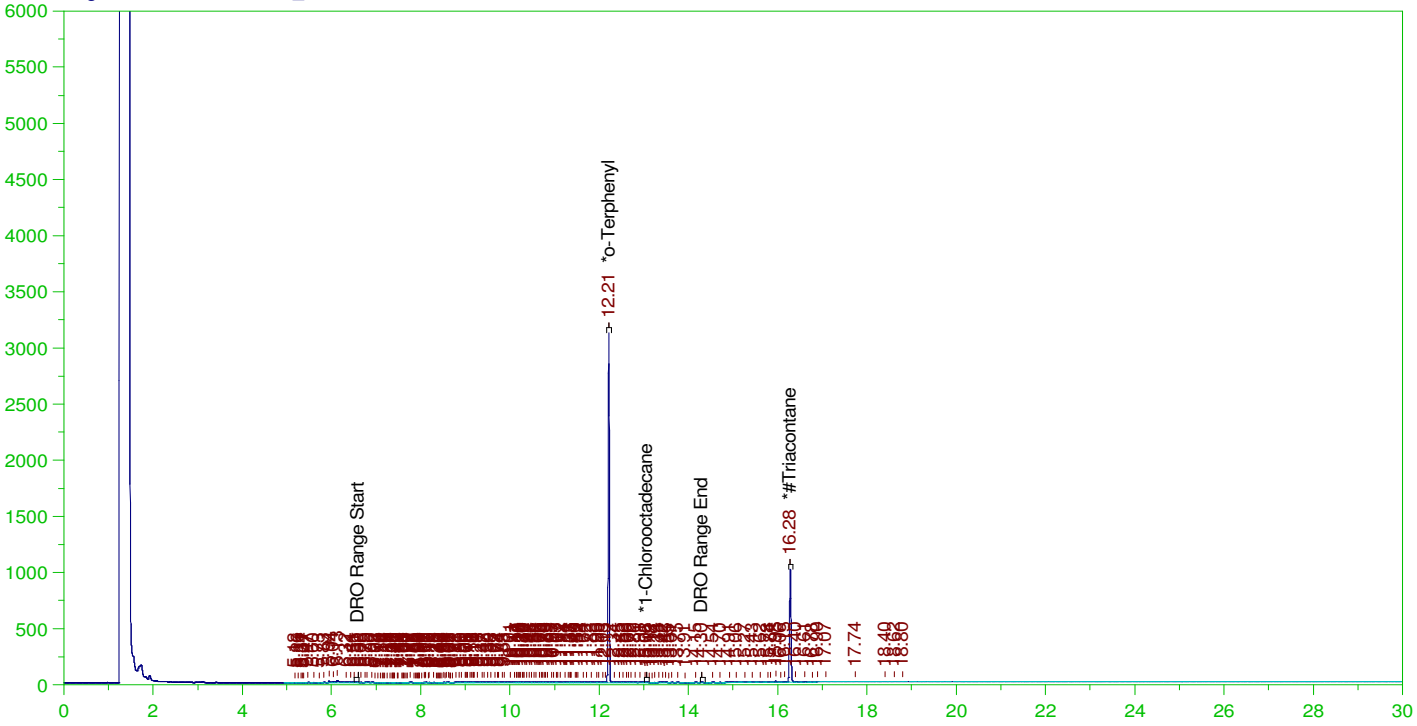
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	.194	.2	102.84	-
*1-Chlorooctadecane	13.059	.194	.	.02	-
*#Triacontane	16.279	.194	.106	54.35	-

DRO Area:347881.4 DRO Amount: 1.077239E-02
TEH Area:819693.3 TEH Amount: 2.538238E-02

ERH2195 (RHMW16) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0018.RAW B21121622-002B ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-002B ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0018.RAW
Date & Time Acquired: 12/26/2021 11:25:55 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.211	.19	.156	81.7	-
*1-Chlorooctadecane	13.058	.19	.	.05	-
*#Triacontane	16.279	.19	.083	43.8	-

DRO Area:646287.3 DRO Amount: 1.963155E-02
TEH Area:1010775 TEH Amount: 3.070318E-02

ERH2195 (RHMW16) Batch ID: 162352

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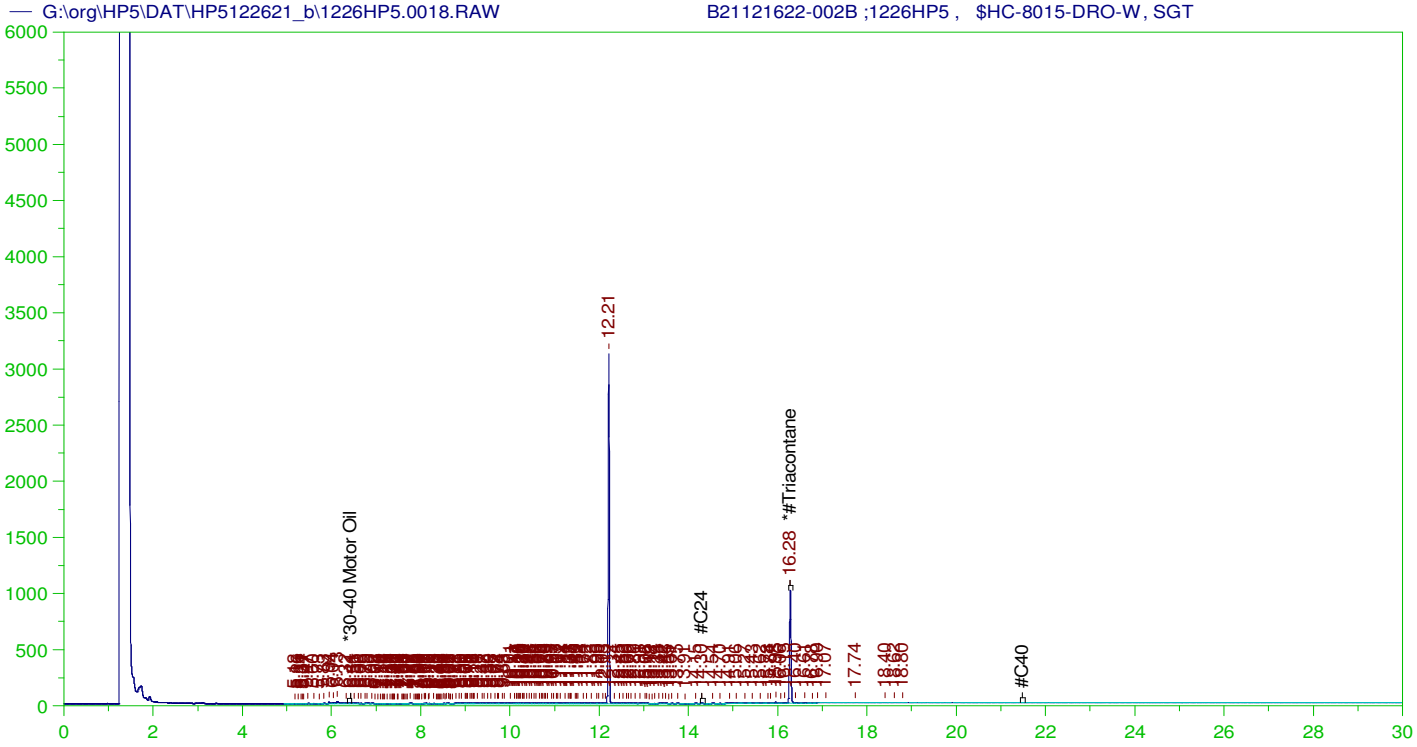

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121622-002B ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0018.RAW
Date & Time Acquired: 12/26/2021 11:25:55 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL-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: 14.27 to 21.54

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.279	.476	.083	17.52	-

RRO Area:129004.1 RRO AMOUNT: 4.304509E-03

ERH2195 (RHMW16) Batch ID: 162352

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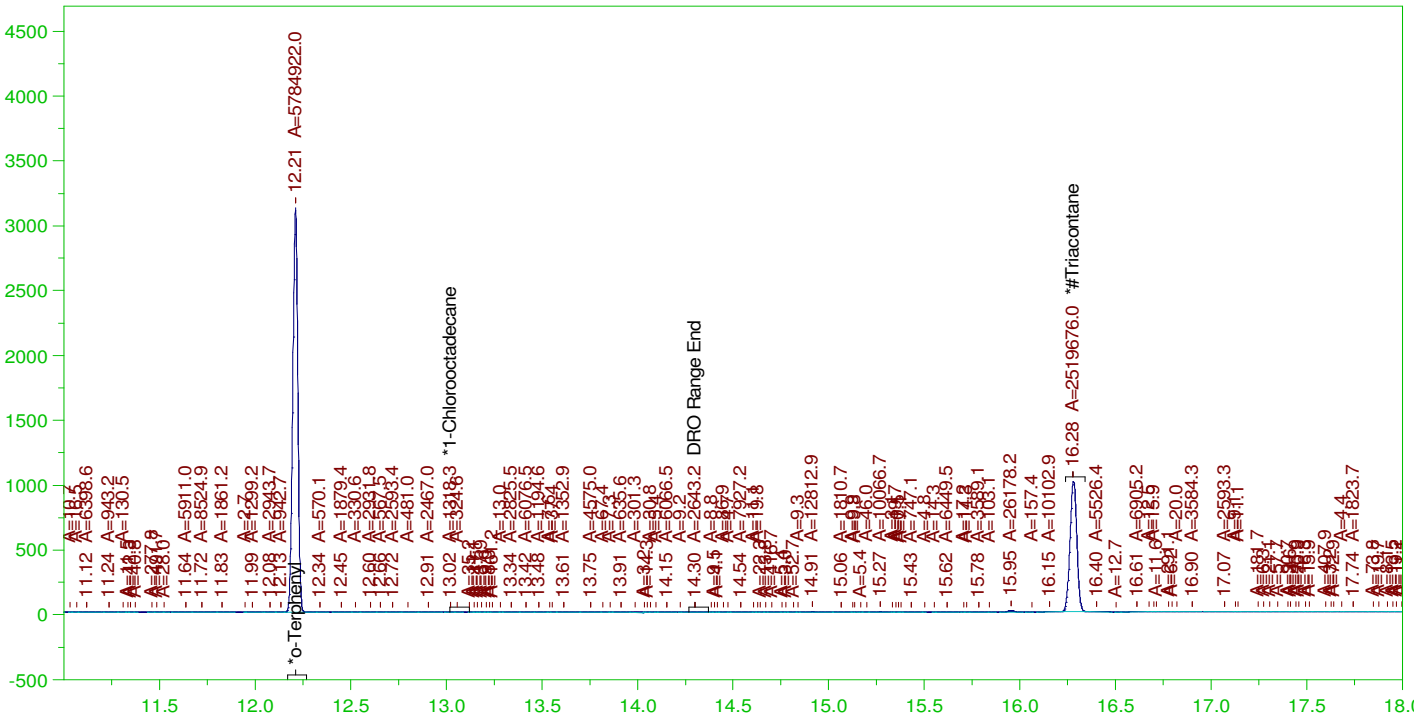


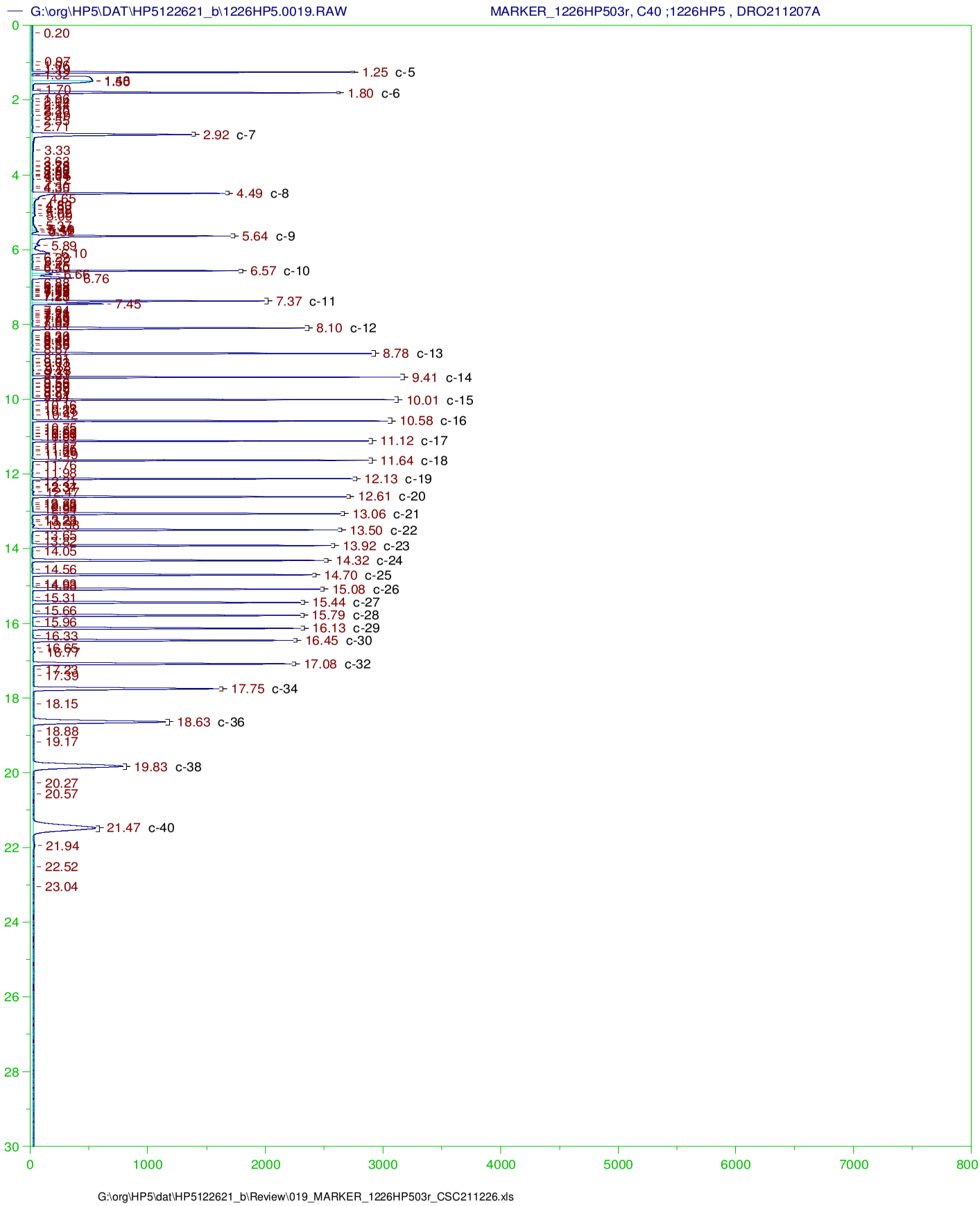
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121622-002B ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0018.RAW
Date & Time Acquired: 12/26/2021 11:25:55 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.211	.19	.155	81.46	-
*1-Chlorooctadecane	13.022	.19	.	.02	-
*#Triacontane	16.279	.19	.083	43.55	-

DRO Area:248425.1 DRO Amount: 7.546134E-03
TEH Area:620805.1 TEH Amount: 0.0188575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MARKER_1226HP503r, C40 ;1226HP5 , DRO211207A
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1.25 c-5
1.80 c-6
2.92 c-7
3.33
4.49 c-8
5.64 c-9
5.89
6.57 c-10
7.37 c-11
7.45
8.10 c-12
8.78 c-13
9.41 c-14
10.01 c-15
10.58 c-16
11.12 c-17
11.64 c-18
12.13 c-19
12.61 c-20
13.06 c-21
13.50 c-22
13.92 c-23
14.05
14.32 c-24
14.56
14.70 c-25
15.08 c-26
15.31
15.44 c-27
15.66
15.79 c-28
15.96
16.13 c-29
16.33
16.45 c-30
16.77
17.08 c-32
17.39
17.75 c-34
18.15
18.63 c-36
18.88
19.17
19.83 c-38
20.27
20.57
21.47 c-40
21.94
22.52
23.04
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6000
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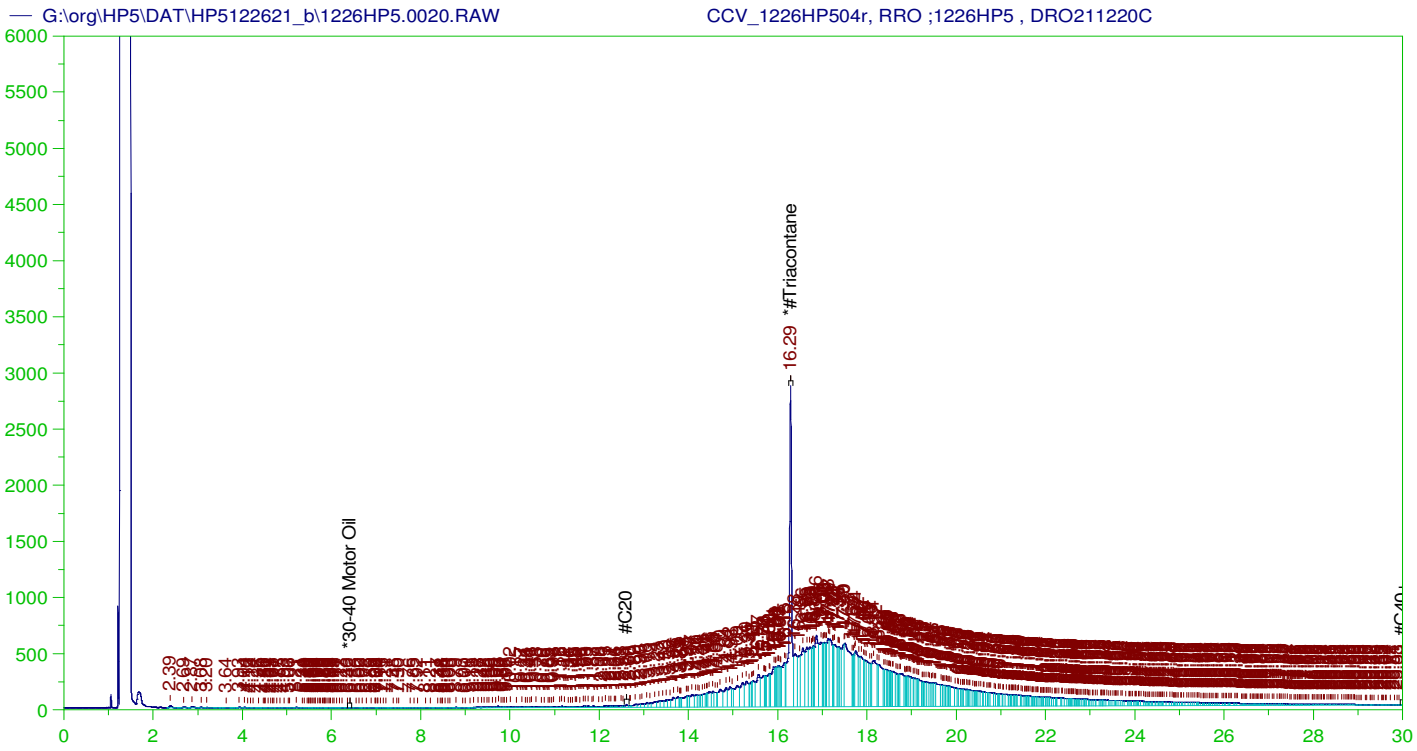


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1226HP504r, RRO ;1226HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0020.RAW
Date & Time Acquired: 12/27/2021 12:51:35 AM
Method File: G:\Org\HP5\Methods\DC_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.287	500.	362.188	72.44	-

~~RRO~~ TEH (Oil Range) Area:1.392909E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4880.14

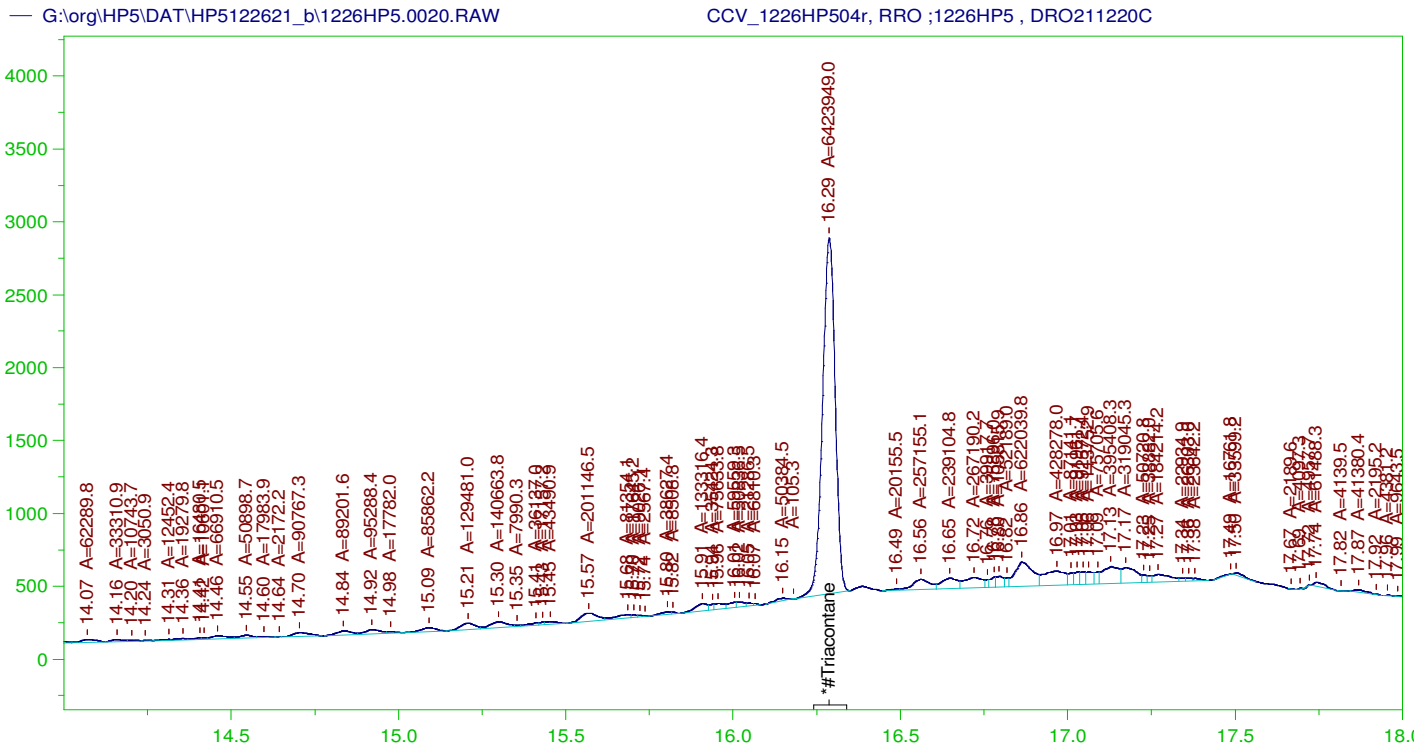
CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0020.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.063	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.287	200.	362.188	181.09	75-125

AMN 01/11/2022

G:\org\HP5\dat\HP5122621_b\Review\020_CCV_1226HP504r_DC_ORO-AL-L%.xls



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1226HP504r, RRO ;1226HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0020.RAW
Date & Time Acquired: 12/27/2021 12:51:35 AM
Method File: G:\Org\HP5\Methods\DS_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.56 to 30.05

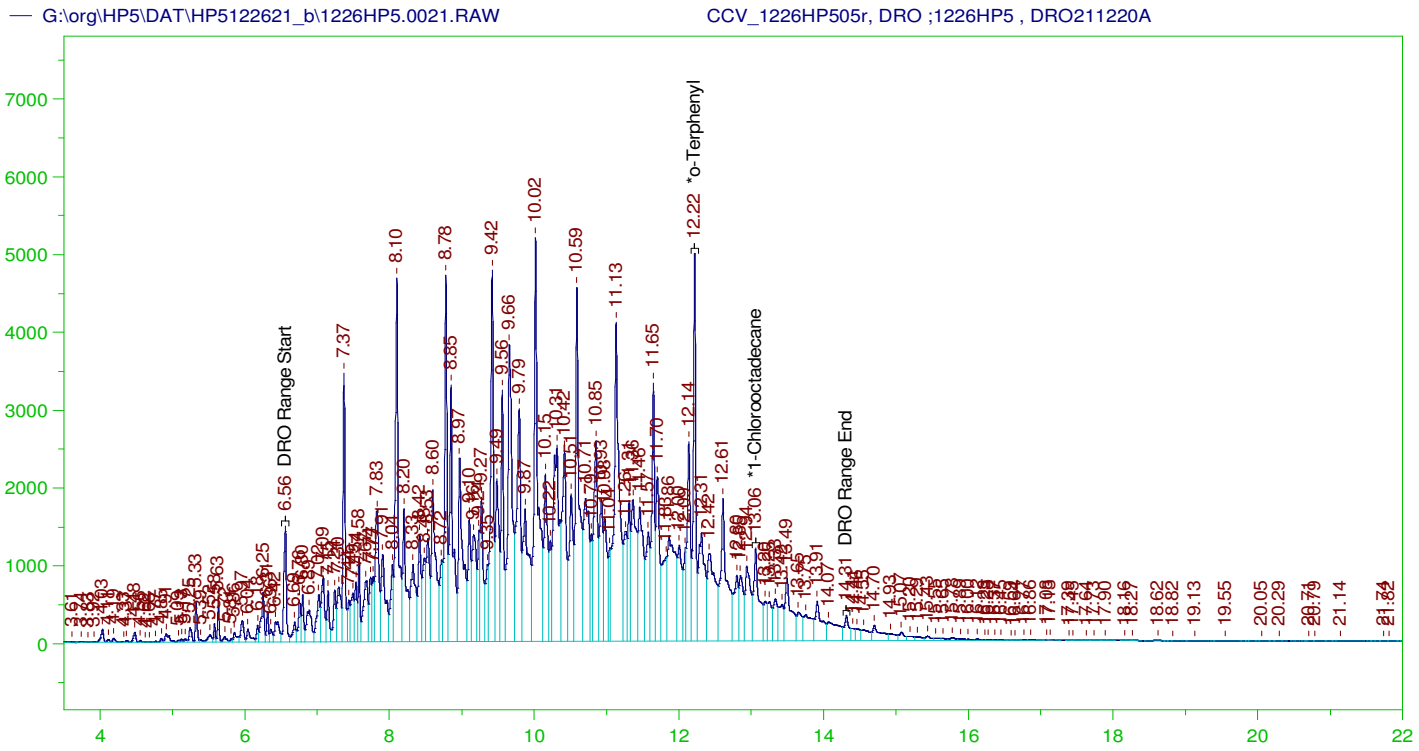
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.287	500.	222.05	44.41	-

RRO Area:6503688 RRO AMOUNT: 227.8605

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0020.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.063	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.287	200.	222.05	111.03	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1226HP505r, DRO ;1226HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0021.RAW
Date & Time Acquired: 12/27/2021 1:34:33 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

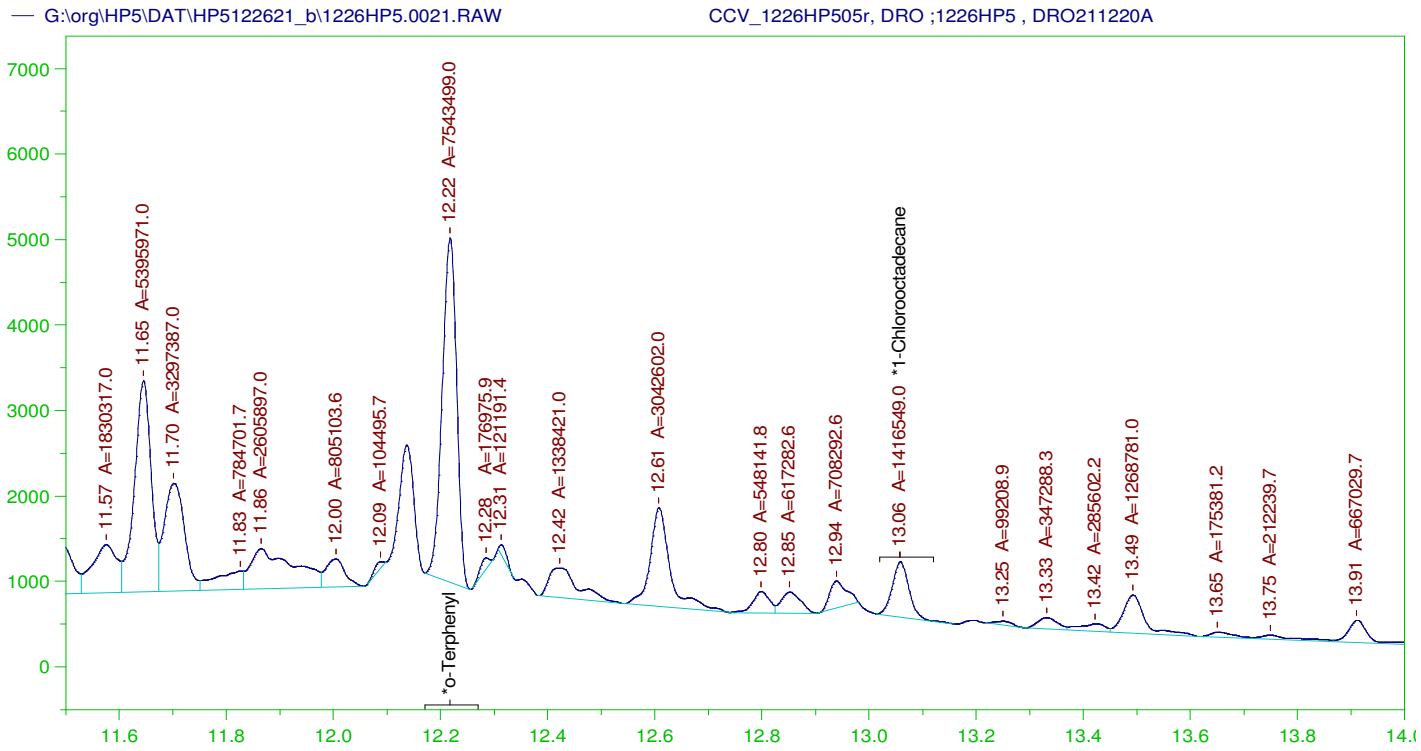
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.218	200.	350.91	175.45	-
*1-Chlorooctadecane	13.058	200.	170.747	85.37	-

DRO Area:4.973627E+08 DRO Amount: 15863.22
TEH Area:5.159366E+08 TEH Amount: 16455.63

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0021.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	16455.63	109.7	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.218	200.	350.91	175.45	85-115
*1-Chlorooctadecane	13.058	200.	170.747	85.37	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1226HP505r, DRO ;1226HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0021.RAW
Date & Time Acquired: 12/27/2021 1:34:33 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

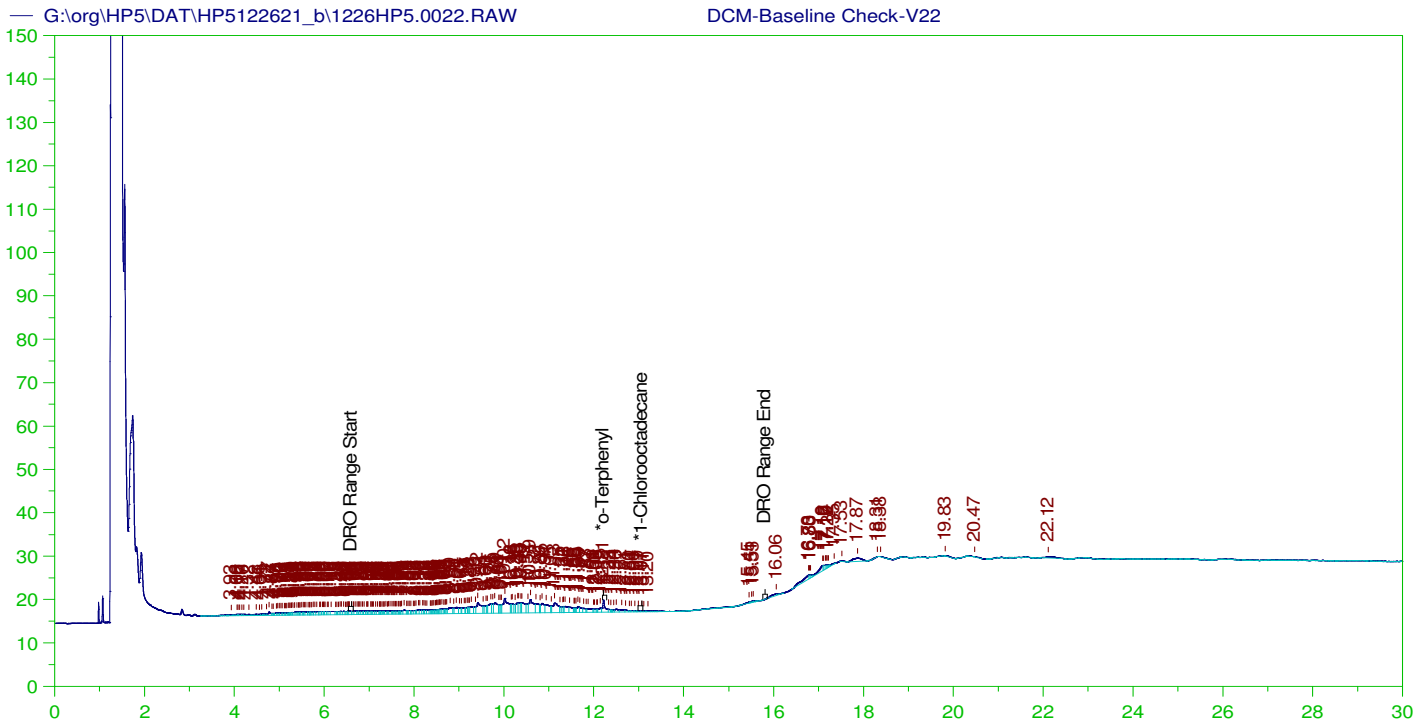
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.218	200.	212.438	106.22	-
*1-Chlorooctadecane	13.058	200.	39.892	19.95	-

DRO Area:2.749491E+08 DRO Amount: 8769.412
TEH Area:2.863747E+08 TEH Amount: 9133.829

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0021.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	9133.83	60.89	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.218	200.	212.438	106.22	85-115
*1-Chlorooctadecane	13.058	200.	39.892	19.95	85-115



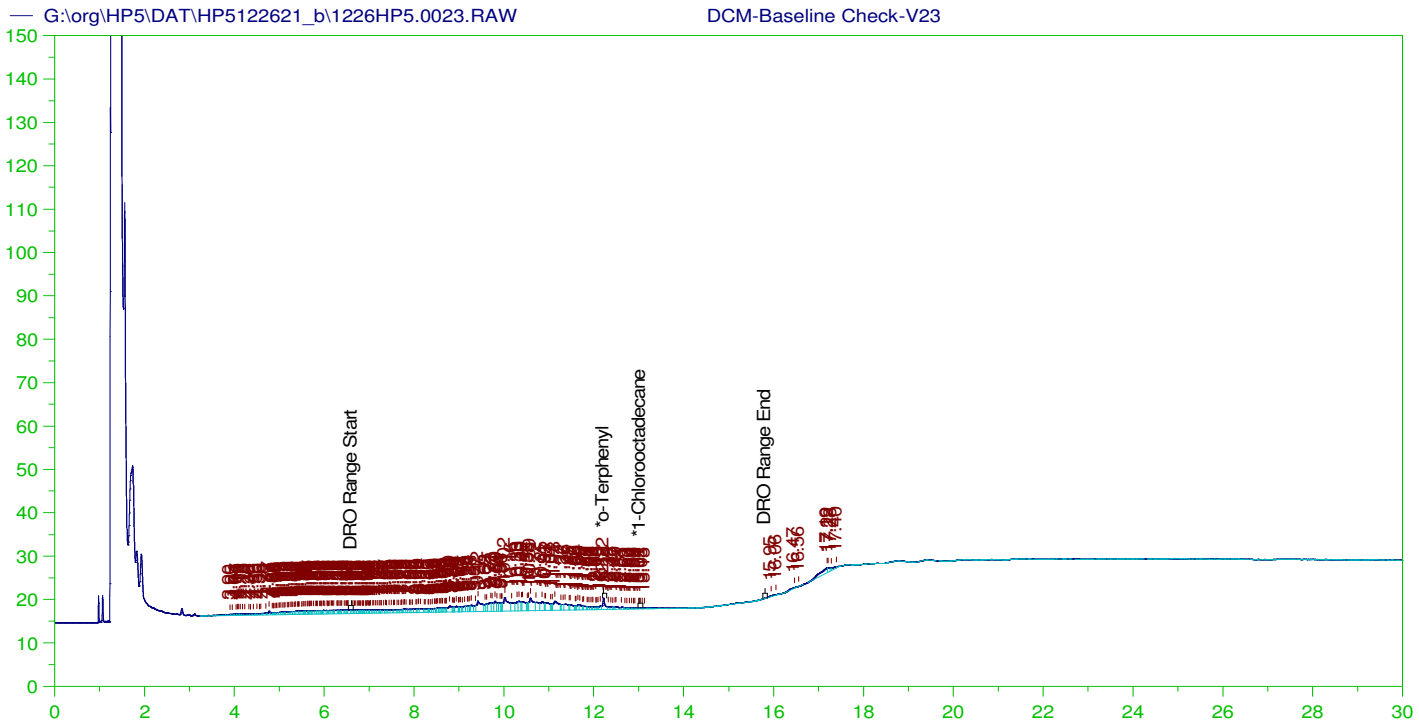
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V22
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0022.RAW
Date & Time Acquired: 12/27/2021 2:17:25 AM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.214	200.	.317	.16	-
*1-Chlorooctadecane	13.067	200.	.024	.01	-

DRO Area:468725.9 DRO Amount: 14.94986
TEH Area:629374.6 TEH Amount: 20.0737



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V23
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0023.RAW
Date & Time Acquired: 12/27/2021 3:00:22 AM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

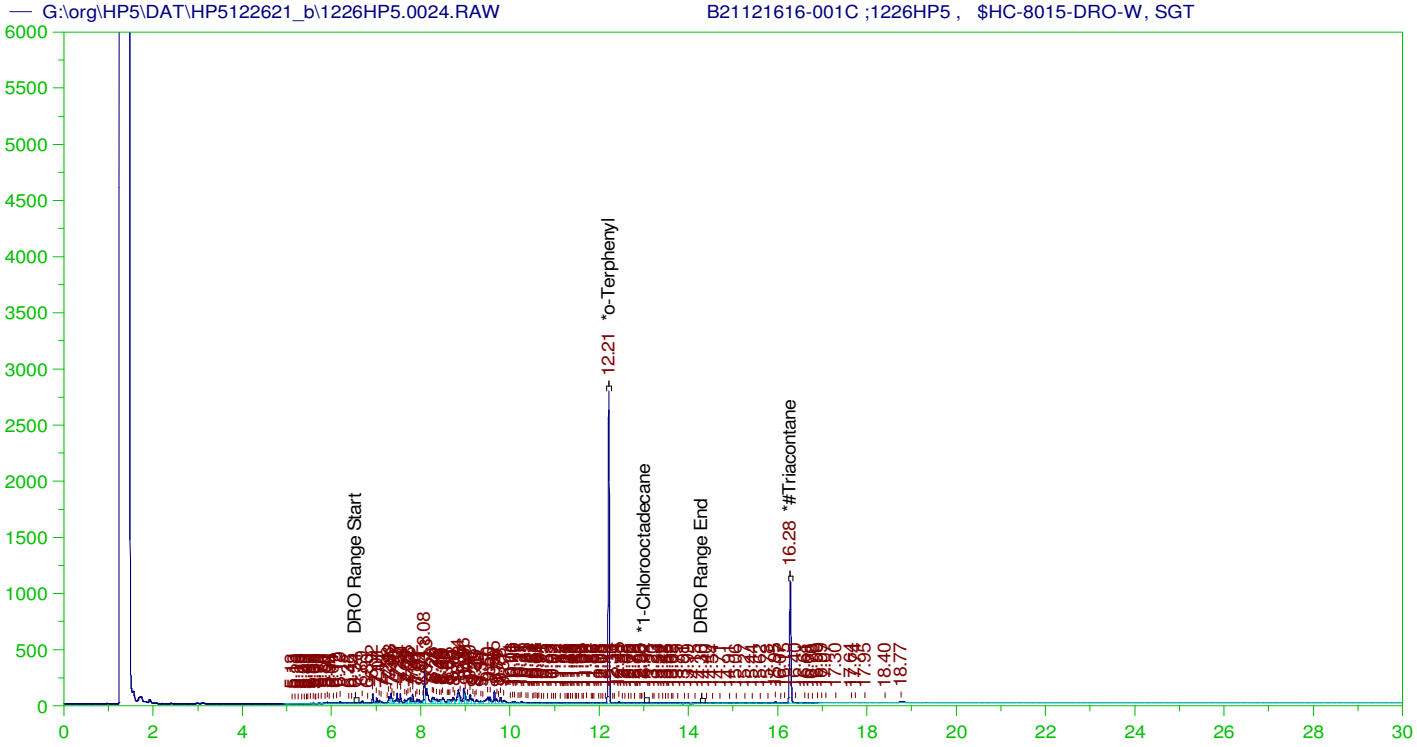
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.216	200.	.296	.15	-
*1-Chlorooctadecane	13.021	200.	.027	.01	-

DRO Area:446954.4 DRO Amount: 14.25547
TEH Area:585899.8 TEH Amount: 18.68709

ERH2180 (RHMW02) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0024.RAW B21121616-001C ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121616-001C ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0024.RAW
Date & Time Acquired: 12/27/2021 3:43:15 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.21	.202	.146	72.04	-
*1-Chlorooctadecane	13.02	.202	.001	.28	-
*#Triacontane	16.278	.202	.097	47.94	-

DRO Area:7969666 DRO Amount: 0.2567575
TEH Area:8381835 TEH Amount: 0.2700363

ERH2180 (RHMW02) Batch ID: 162352

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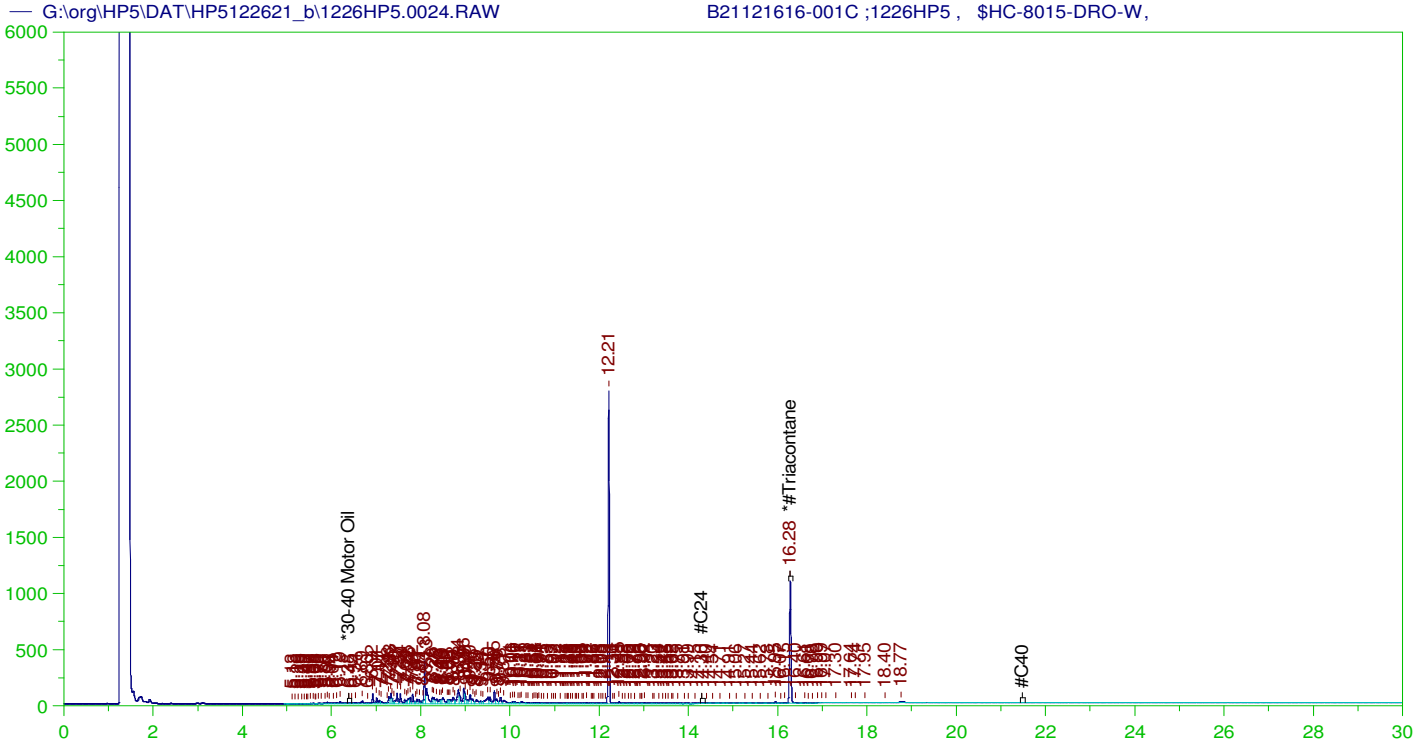

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121616-001C ;1226HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0024.RAW
Date & Time Acquired: 12/27/2021 3:43:15 AM
Method File: G:\Org\HP5\Methods\DR_OROS-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL-SAMP.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.27 to 21.54

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.278	.505	.097	19.18	-

RRO Area:209556 RRO AMOUNT: 7.416076E-03

ERH2180 (RHMW02) Batch ID: 162352

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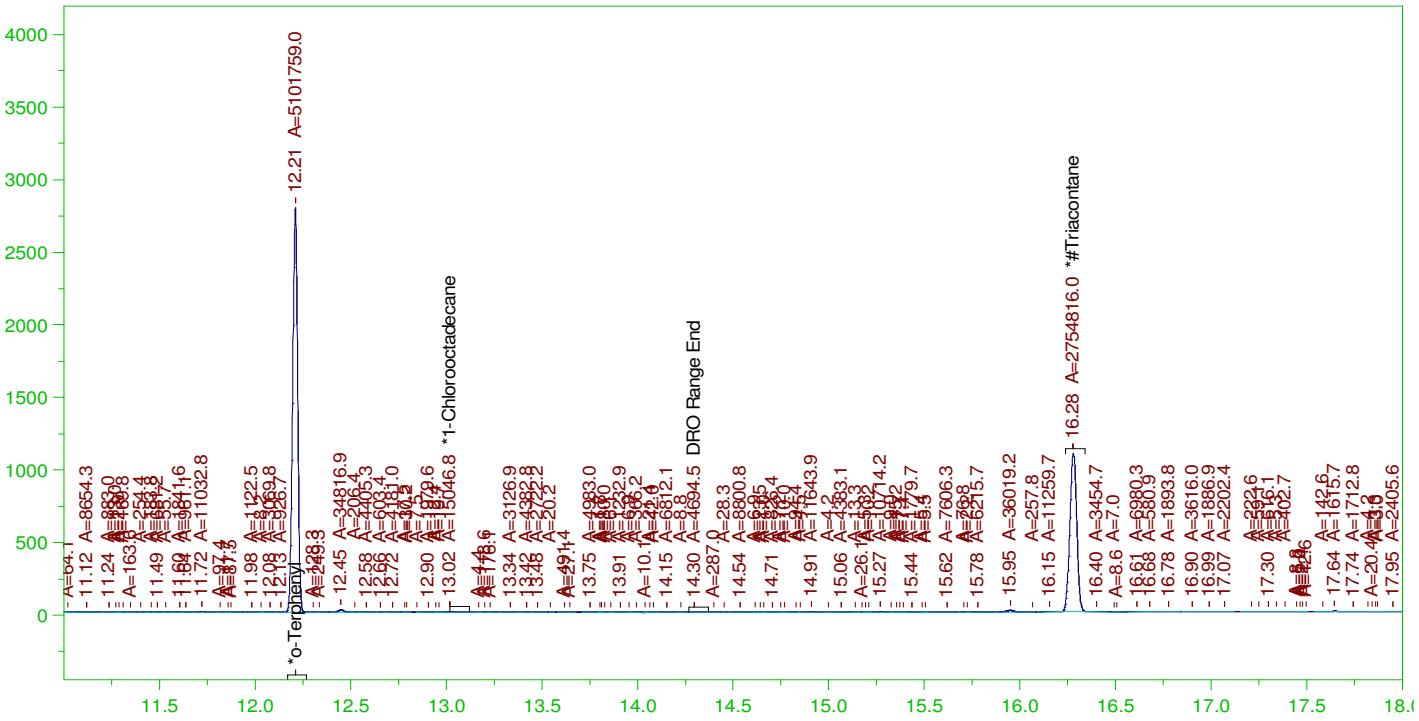


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121616-001C ;1226HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0024.RAW
Date & Time Acquired: 12/27/2021 3:43:15 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

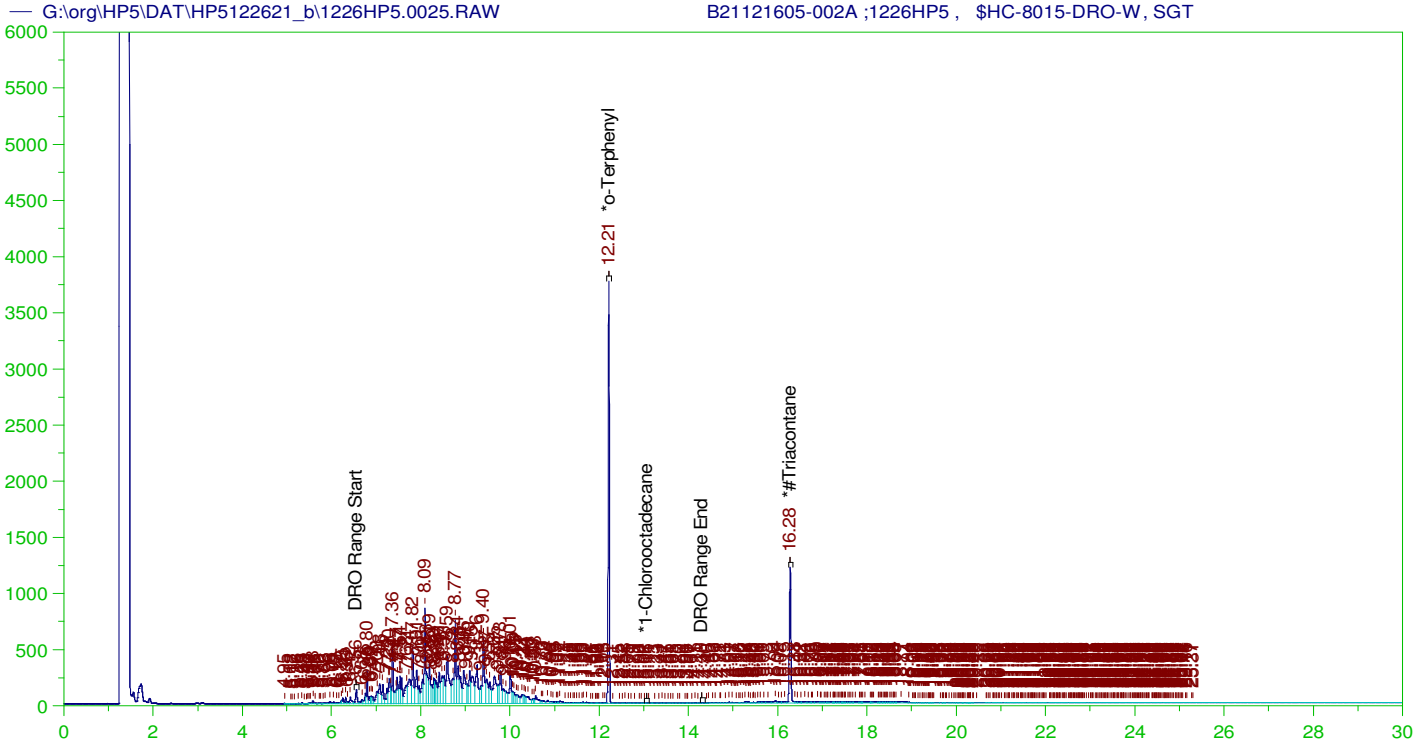
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.21	.202	.145	71.84	-
*1-Chlorooctadecane	13.02	.202	. .21		-
*#Triacontane	16.278	.202	.096	47.61	-

DRO Area:7265083 DRO Amount: 0.2340581
TEH Area:7652590 TEH Amount: 0.2465423

ERH2206 (RHMW2254-01) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0025.RAW B21121605-002A ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-002A ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0025.RAW
Date & Time Acquired: 12/27/2021 4:26:07 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

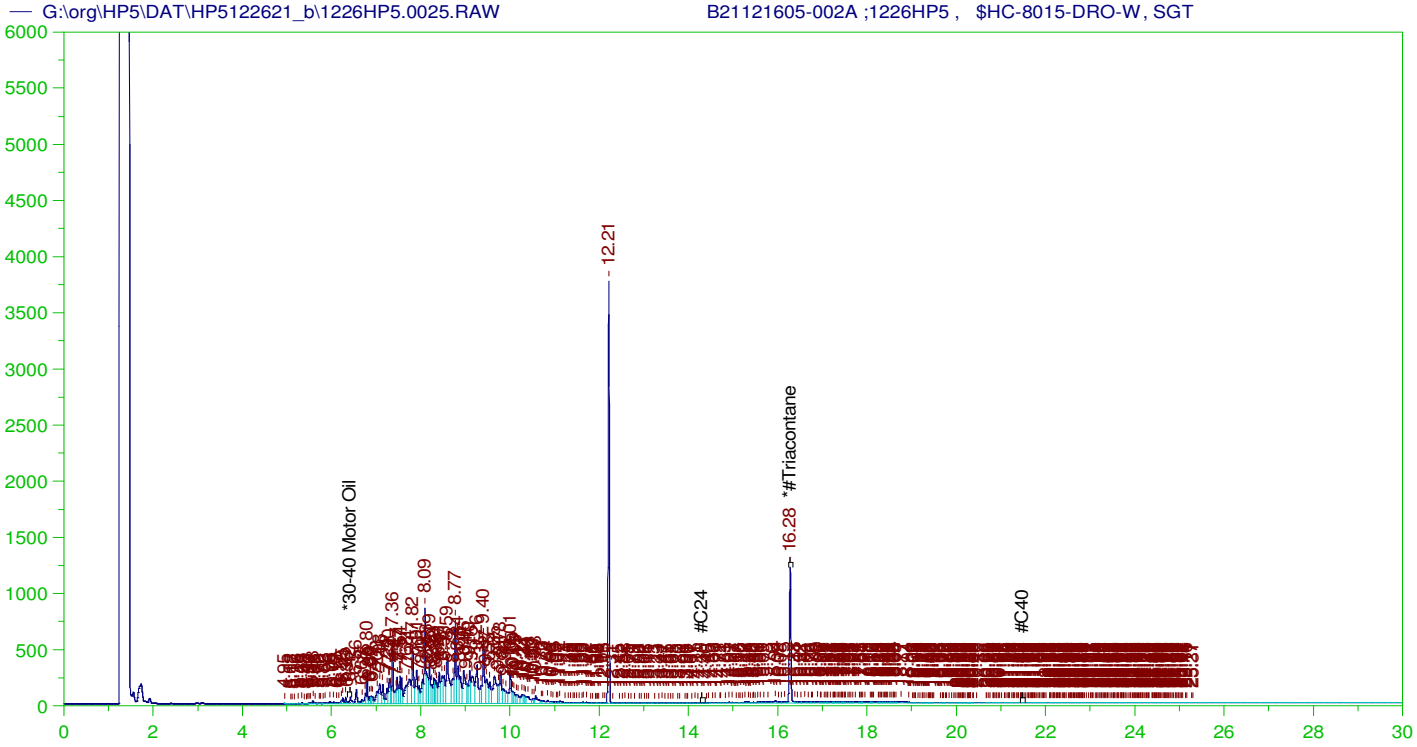
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.211	.19	.189	99.3	-
*1-Chlorooctadecane	13.057	.19	.	.05	-
*#Triacontane	16.276	.19	.103	54.06	-

DRO Area:4.140924E+07 DRO Amount: 1.257842
TEH Area:4.56042E+07 TEH Amount: 1.385268

ERH2206 (RHMW2254-01) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0025.RAW B21121605-002A ;1226HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121605-002A ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0025.RAW
Date & Time Acquired: 12/27/2021 4:26:07 AM
Method File: G:\Org\HP5\Methods\D3_OROS-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL-SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

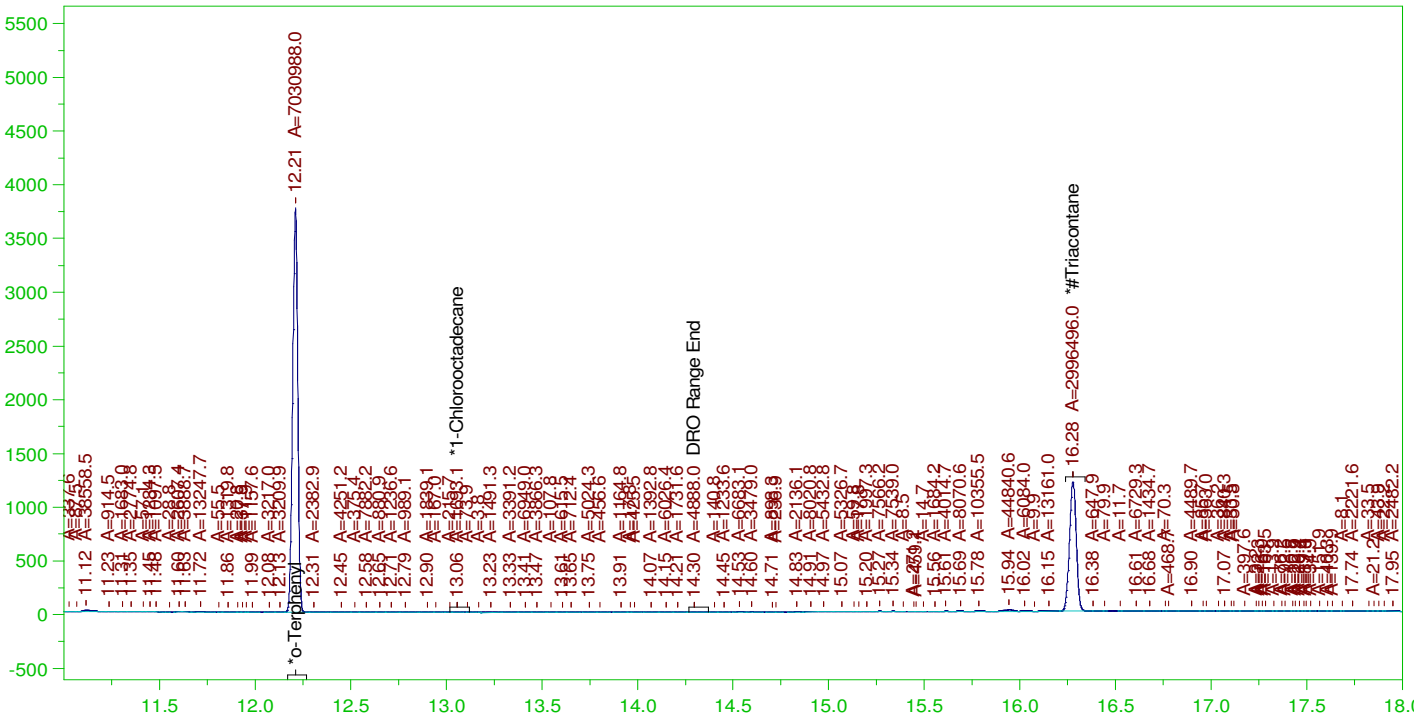
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.27 to 21.54

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.276	.476	.103	21.62	-

RRO Area:3100391 RRO AMOUNT: 0.1034514

ERH2206 (RHMW2254-01) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0025.RAW B21121605-002A ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-002A ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0025.RAW
Date & Time Acquired: 12/27/2021 4:26:07 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

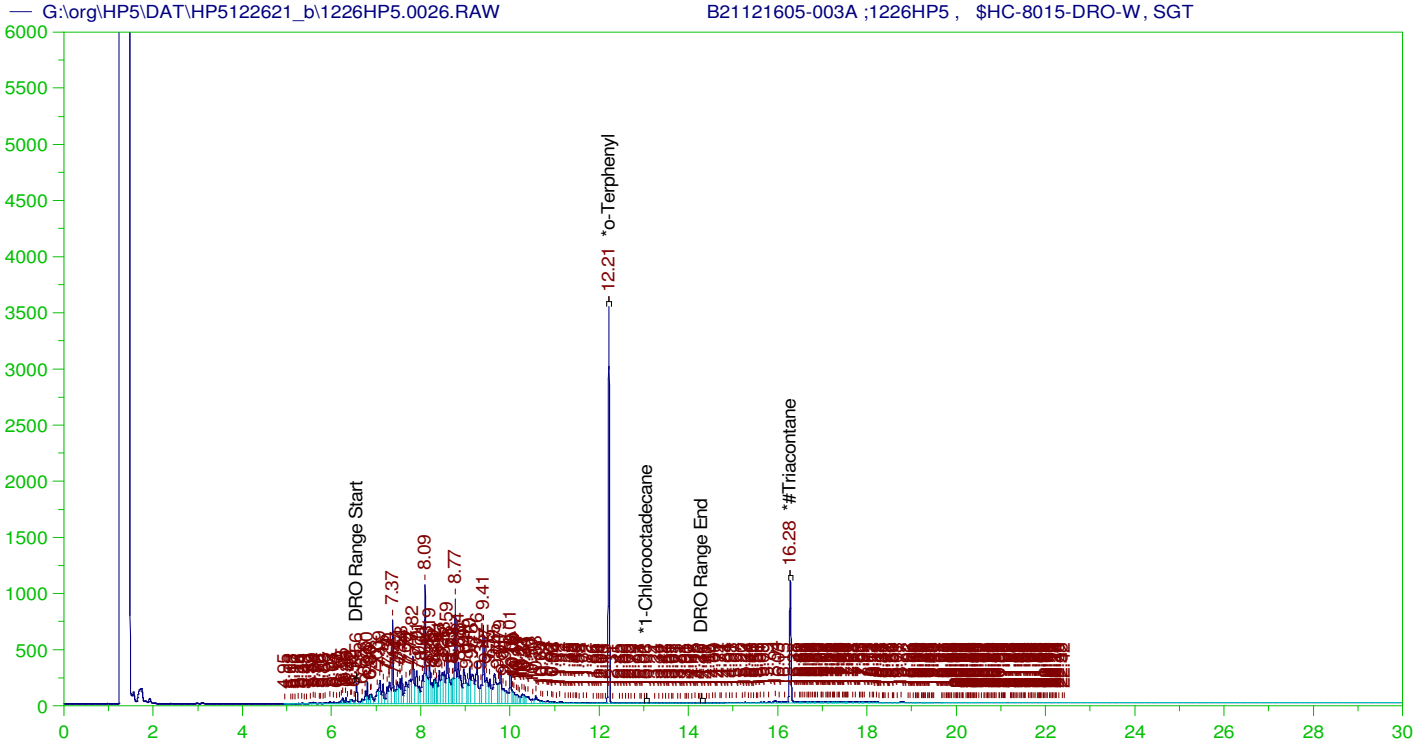
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.211	.19	.189	99.	-
*1-Chlorooctadecane	13.057	.19	.	.02	-
*#Triacontane	16.276	.19	.099	51.79	-

DRO Area:3.710659E+07 DRO Amount: 1.127145
TEH Area:3.79839E+07 TEH Amount: 1.153795

ERH2176 (RHMW2254-01) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0026.RAW B21121605-003A ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-003A ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0026.RAW
Date & Time Acquired: 12/27/2021 5:09:00 AM
Method File: G:\Org\HP5\Methods\D3_8015-122626-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.198	.182	91.98	-
*1-Chlorooctadecane	13.058	.198	.03		-
*#Triacontane	16.278	.198	.097	48.87	-

DRO Area:4.426259E+07 DRO Amount: 1.397764
TEH Area:4.758381E+07 TEH Amount: 1.502644

ERH2176 (RHMW2254-01) Batch ID: 162352

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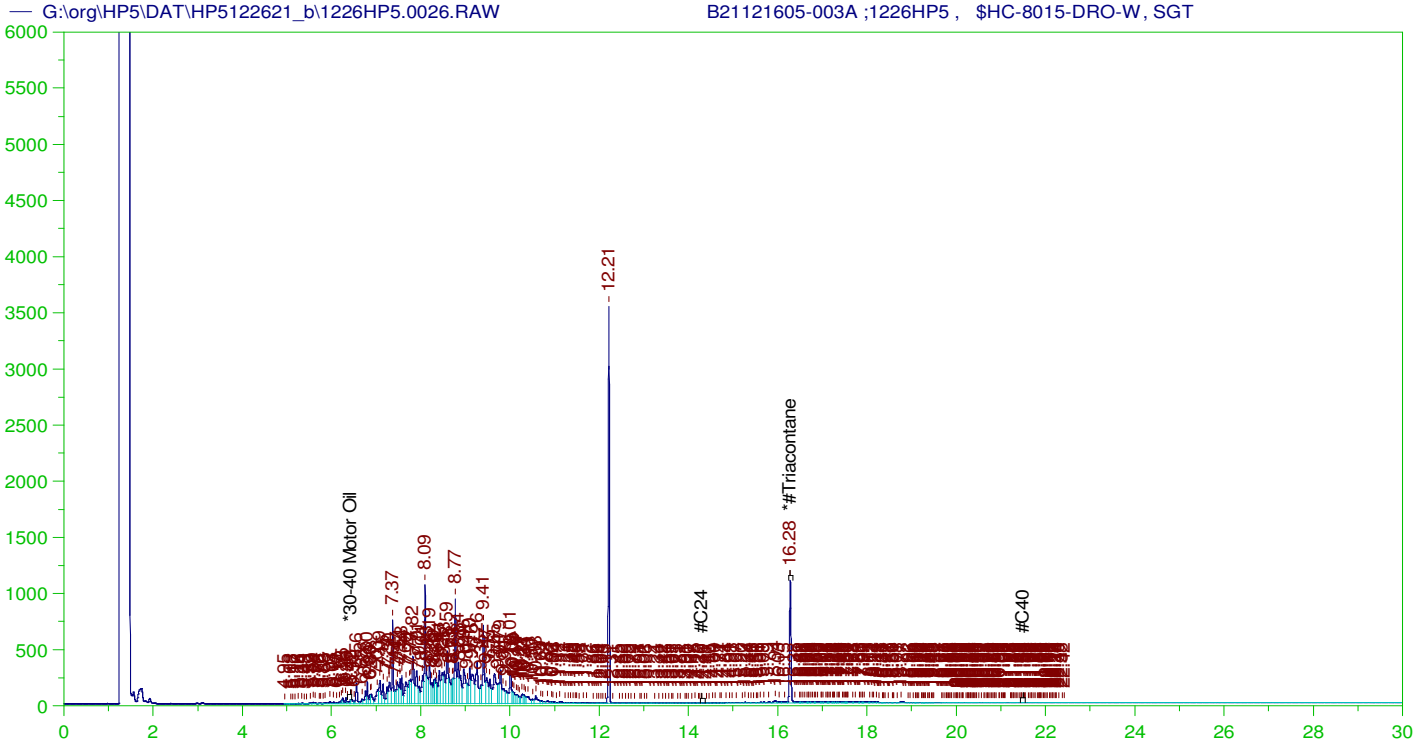


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121605-003A ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0026.RAW
Date & Time Acquired: 12/27/2021 5:09:00 AM
Method File: G:\Org\HP5\Methods\D3_OROS-122626-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL-SAMP.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

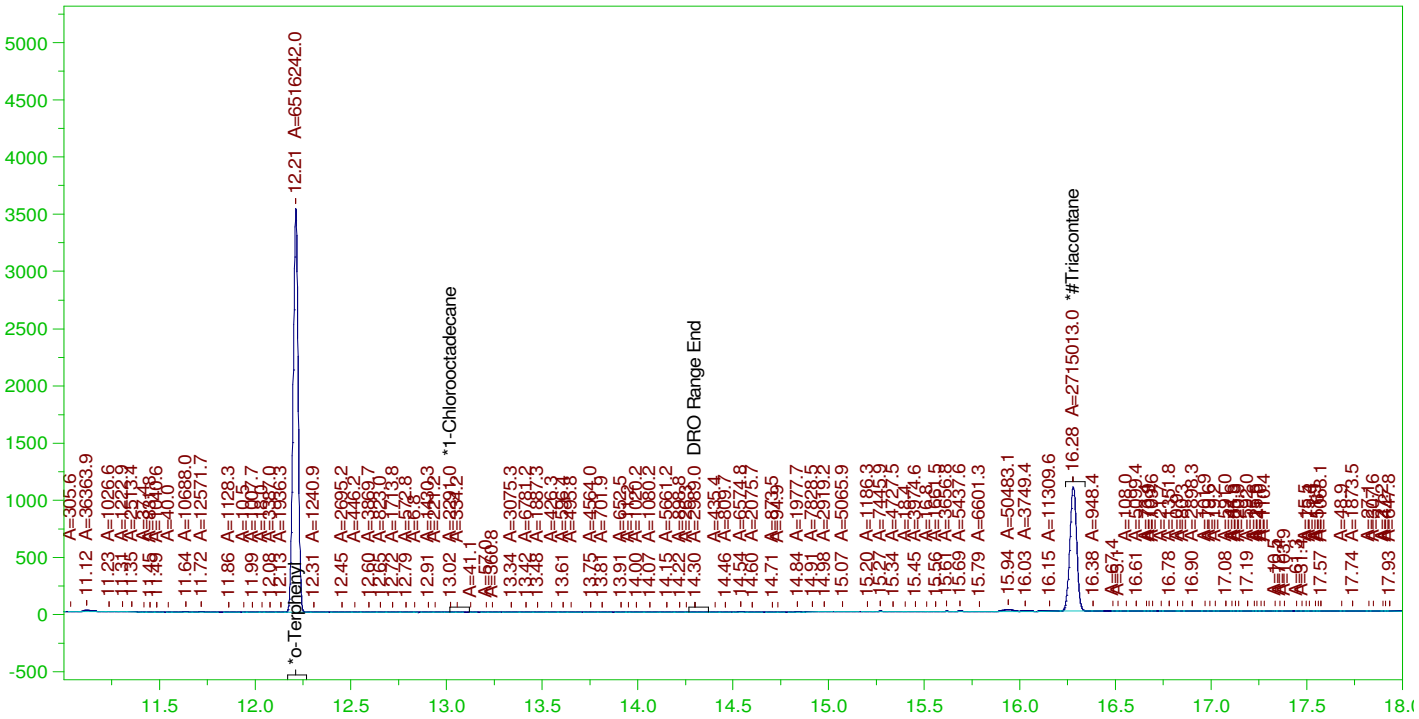
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.27 to 21.54

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.278	.495	.097	19.55	-

RRO Area:2488046 RRO AMOUNT: 8.630706E-02

ERH2176 (RHMW2254-01) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0026.RAW B21121605-003A ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121605-003A ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0026.RAW
Date & Time Acquired: 12/27/2021 5:09:00 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

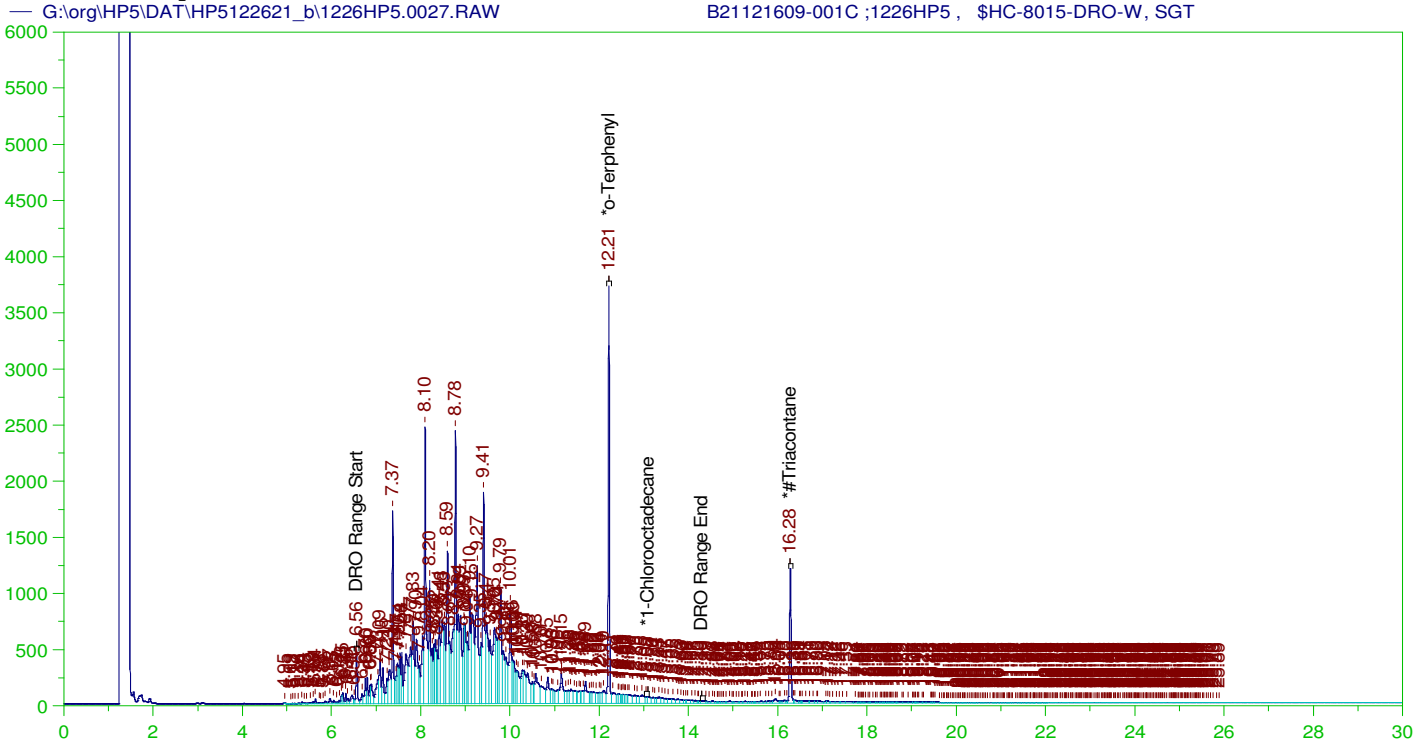
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.198	.182	91.75	-
*1-Chlorooctadecane	13.022	.198	.	.03	-
*#Triacontane	16.278	.198	.093	46.92	-

DRO Area:4.033741E+07 DRO Amount: 1.273811
TEH Area:4.118676E+07 TEH Amount: 1.300632

ERH2230 (Sump Adit 3) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0027.RAW B21121609-001C ;1226HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121609-001C ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0027.RAW
Date & Time Acquired: 12/27/2021 5:51:47 AM
Method File: G:\Org\HP5\Methods\D3_8015-122627-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

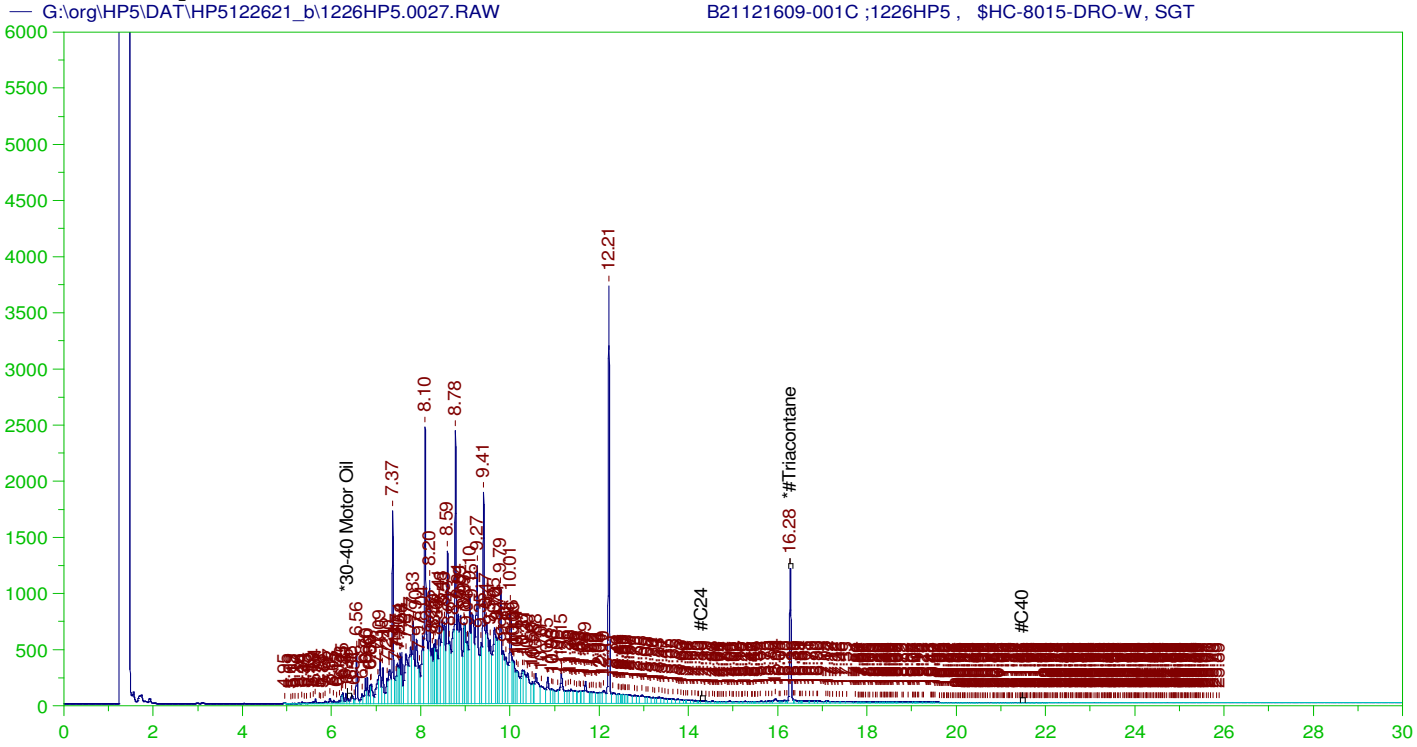
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.189	.194	102.82	-
*1-Chlorooctadecane	13.084	.189	.009	4.53	-
*#Triacontane	16.28	.189	.102	54.15	-

DRO Area:1.321865E+08 DRO Amount: 3.977403
TEH Area:1.39549E+08 TEH Amount: 4.198934

ERH2230 (Sump Adit 3) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0027.RAW B21121609-001C ;1226HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121609-001C ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0027.RAW
Date & Time Acquired: 12/27/2021 5:51:47 AM
Method File: G:\Org\HP5\Methods\D3_OROS-122627-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL-SAMP.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

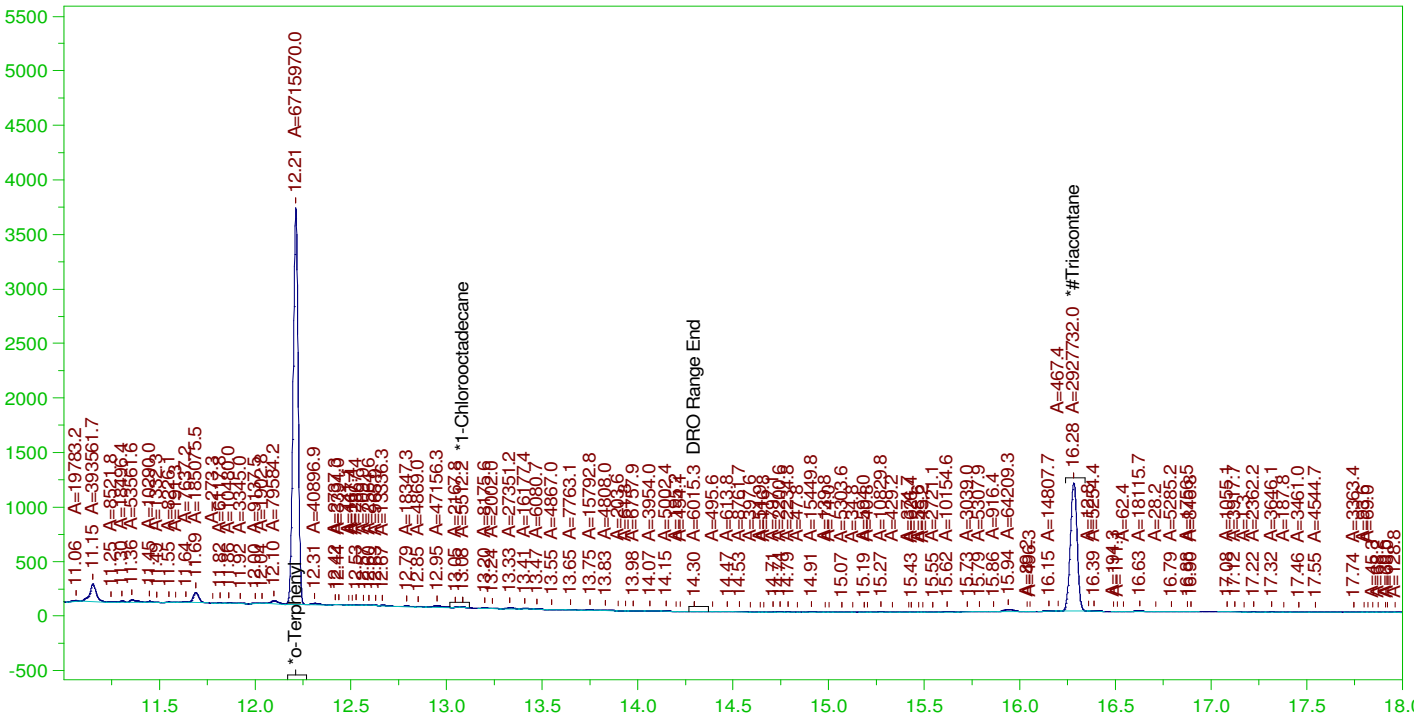
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.27 to 21.54

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.28	.472	.102	21.66	-

RRO Area:5354811 RRO AMOUNT: 0.1769896

ERH2230 (Sump Adit 3) Batch ID: 162352

G:\org\HP5\DAT\HP5122621_b\1226HP5.0027.RAW B21121609-001C ;1226HP5 , $HC-8015-DRO-W, SGT



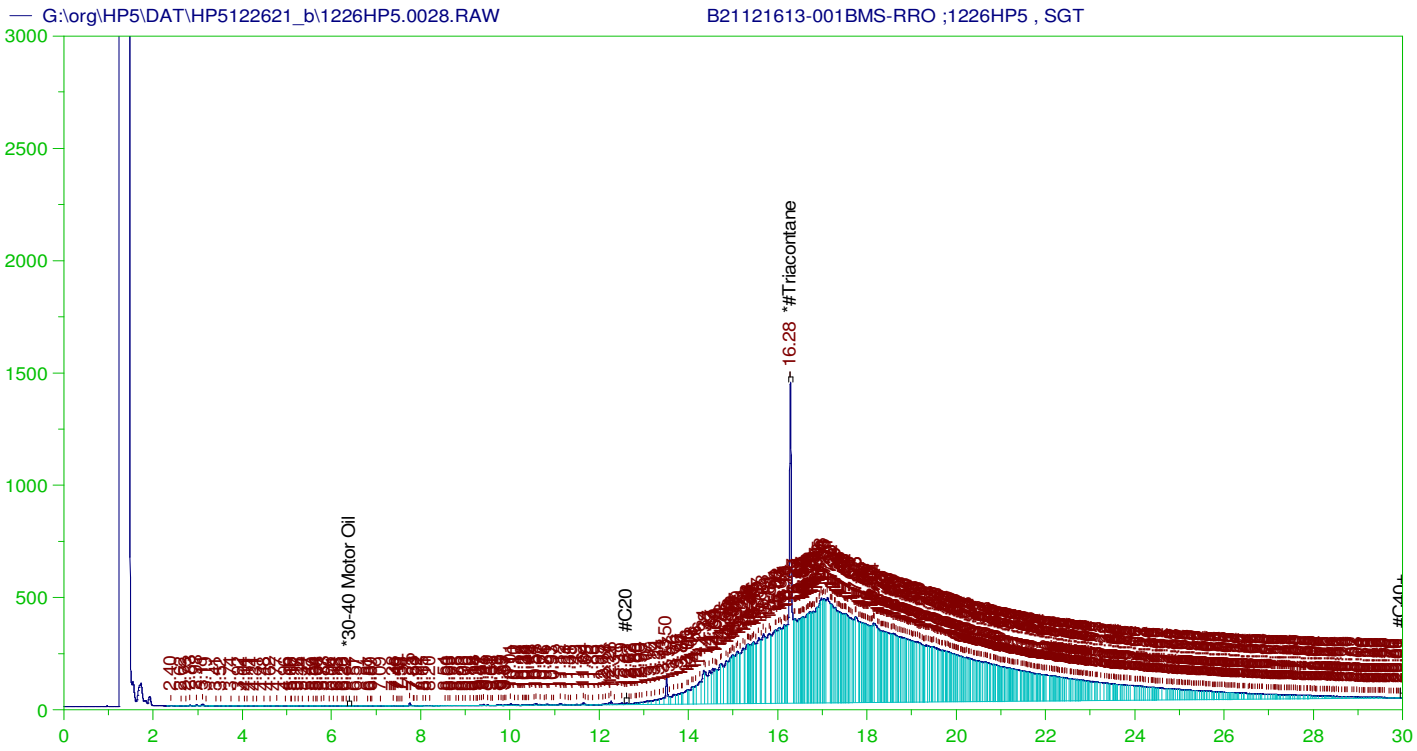
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21121609-001C ;1226HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0027.RAW
Date & Time Acquired: 12/27/2021 5:51:47 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24-Tri.CAL
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	.189	.178	94.57	-
*1-Chlorooctadecane	13.084	.189	.	.08	-
*#Triacontane	16.28	.189	.095	50.6	-

DRO Area:9.555618E+07 DRO Amount: 2.875221
TEH Area:9.704482E+07 TEH Amount: 2.920012



RESIDUAL RANGE ORGANICS CHROMATOGRAM

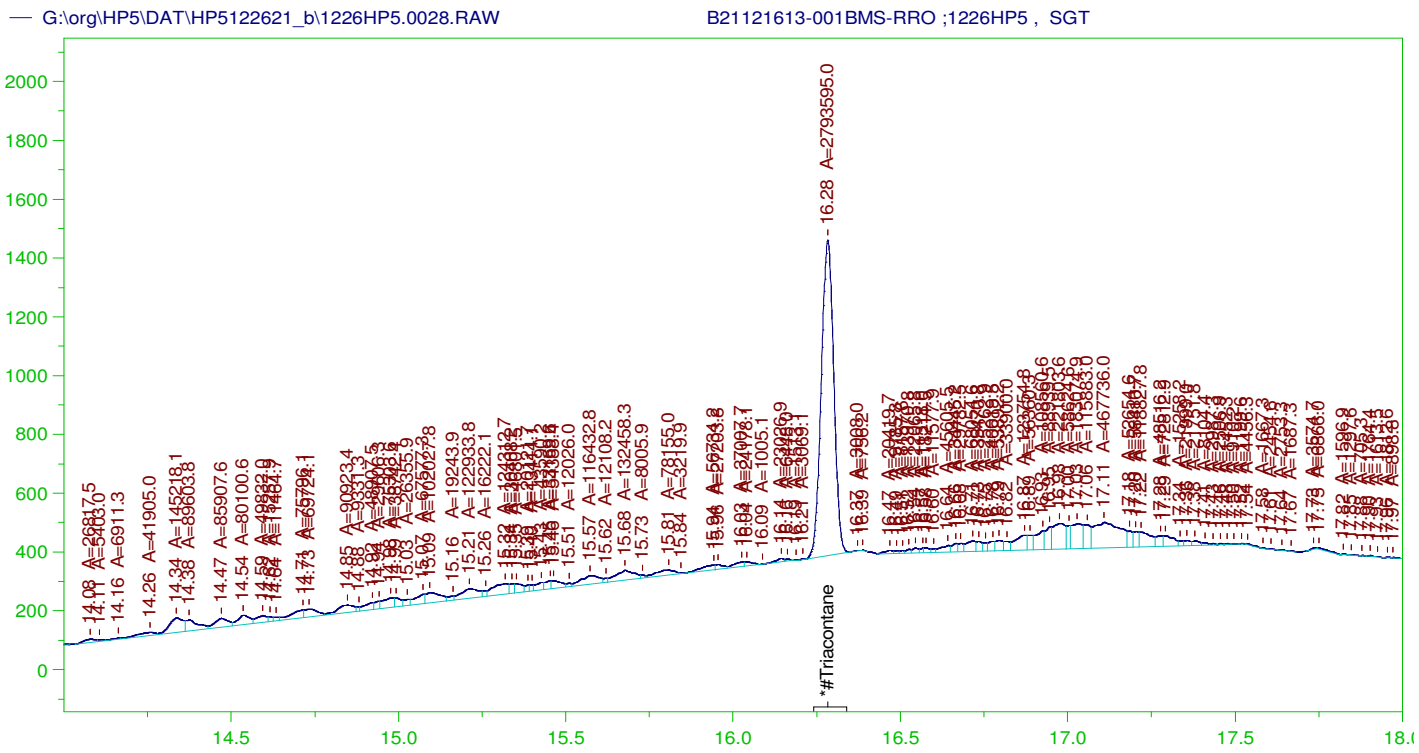
Sample Name: B21121613-001BMS-RRO ;1226HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0028.RAW
Date & Time Acquired: 12/27/2021 6:34:35 AM
Method File: G:\Org\HP5\Methods\D3_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.283	.478	.185	38.61	-

~~RRO~~ TEH (Oil Range) Area:1.425497E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.779245

AMN 01/11/2022



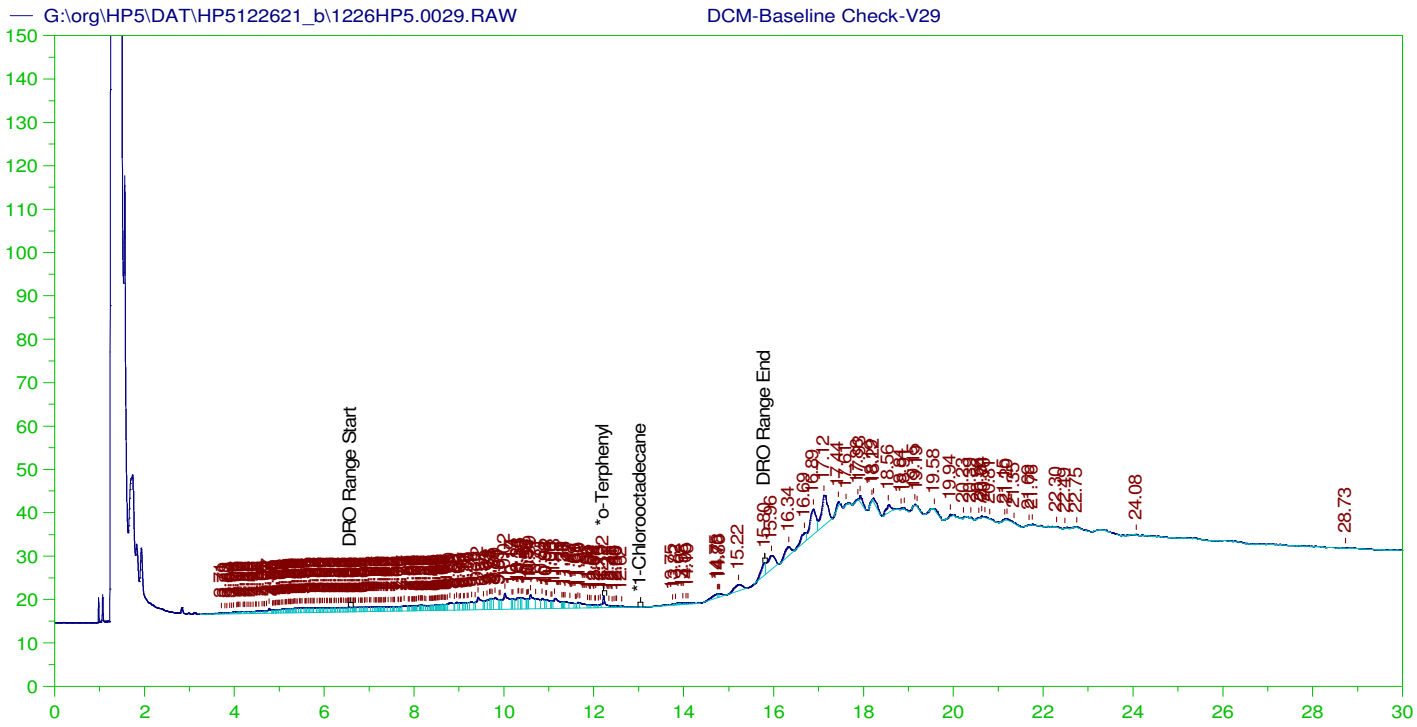
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121613-001BMS-RRO ;1226HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0028.RAW
Date & Time Acquired: 12/27/2021 6:34:35 AM
Method File: G:\Org\HP5\Methods\DS_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.283	.478	.092	19.31	-

RRO Area:5297075 RRO AMOUNT: 0.1775943



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

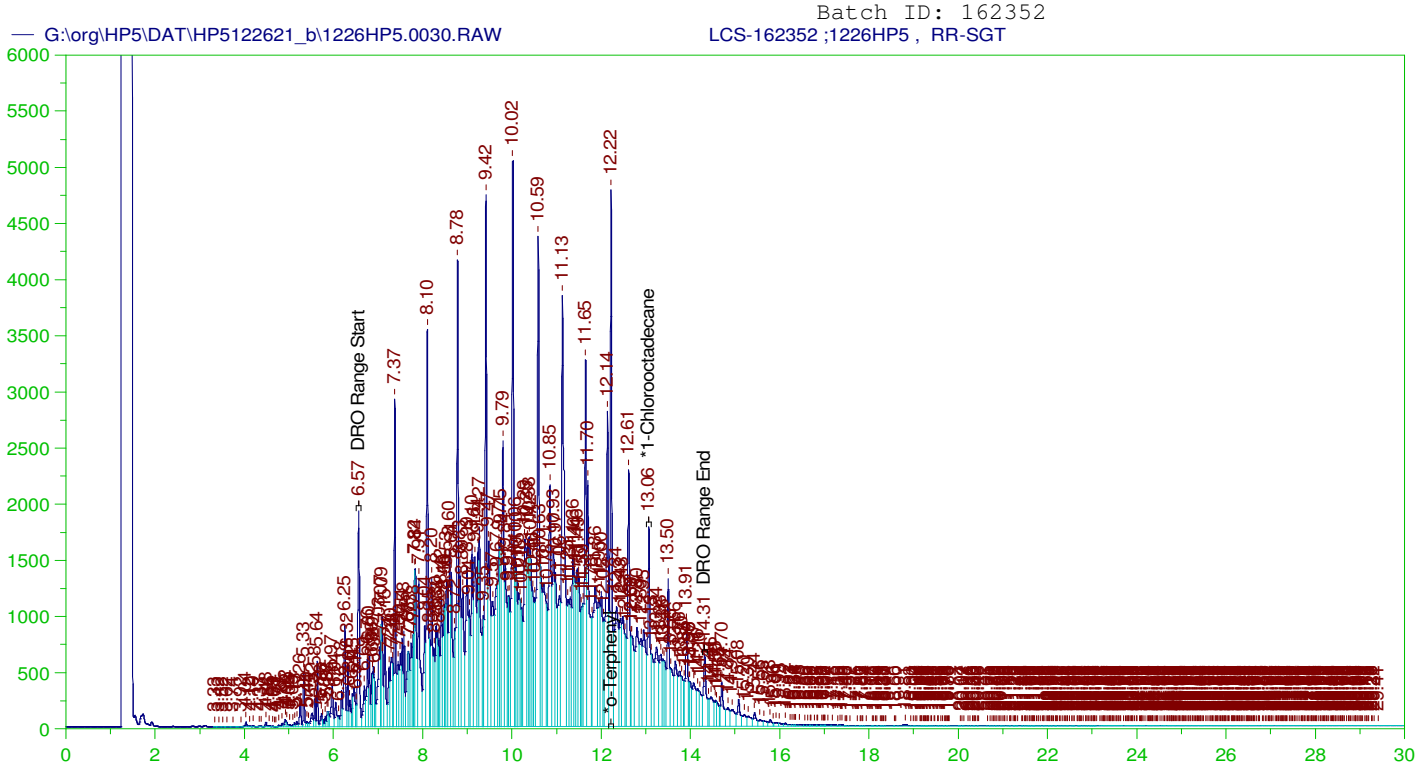
Sample Name: DCM-Baseline Check-V29
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0029.RAW
Date & Time Acquired: 12/27/2021 7:17:33 AM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.217	200.	.303	.15	-
*1-Chlorooctadecane	29.925	200.	.	.	-

DRO Area:587752.8 DRO Amount: 18.74619
TEH Area:1014402 TEH Amount: 32.35403

Batch ID: 162352



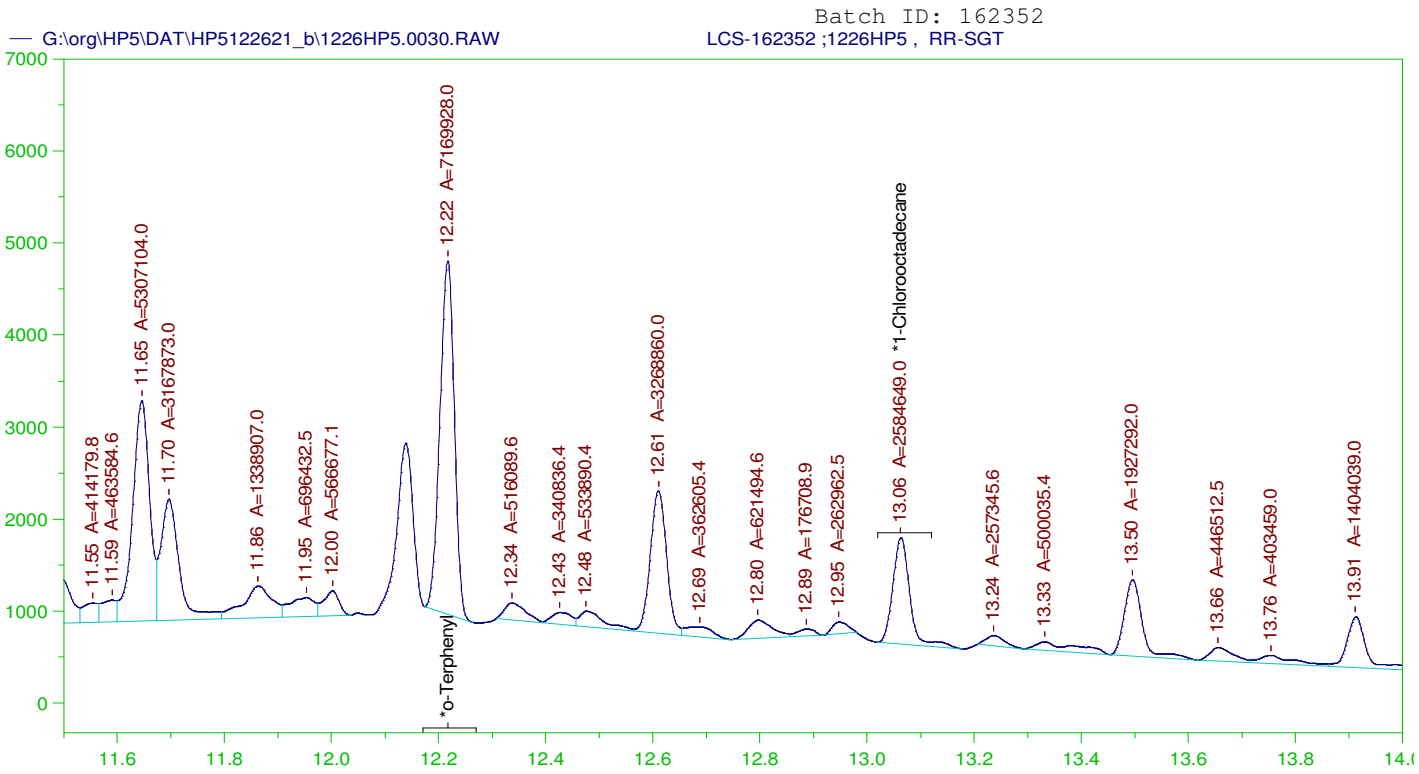
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: LCS-162352 ;1226HP5 , RR-SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0030.RAW
Date & Time Acquired: 12/27/2021 8:00:26 AM
Method File: G:\Org\HP5\Methods\D3_8015-122630-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.217	.2	.365	182.68	-
*1-Chlorooctadecane	13.063	.2	.171	85.29	-

DRO Area:4.67076E+08 DRO Amount: 14.89724
TEH Area:4.96762E+08 TEH Amount: 15.84407



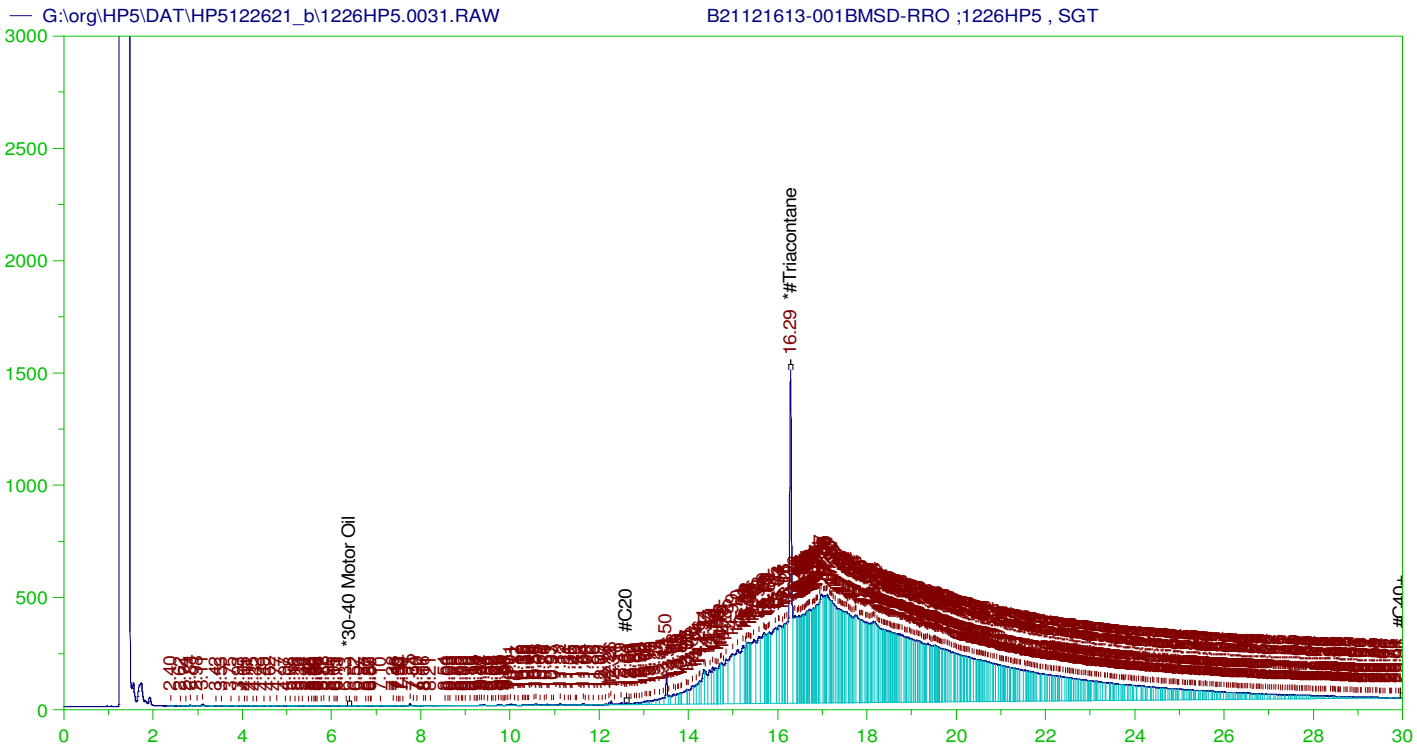
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: LCS-162352 ;1226HP5 , RR-SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0030.RAW
Date & Time Acquired: 12/27/2021 8:00:26 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.217	.2	.202	100.96	-
*1-Chlorooctadecane	13.063	.2	.073	36.39	-

DRO Area:2.254774E+08 DRO Amount: 7.191529
TEH Area:2.392939E+08 TEH Amount: 7.632204



RESIDUAL RANGE ORGANICS CHROMATOGRAM

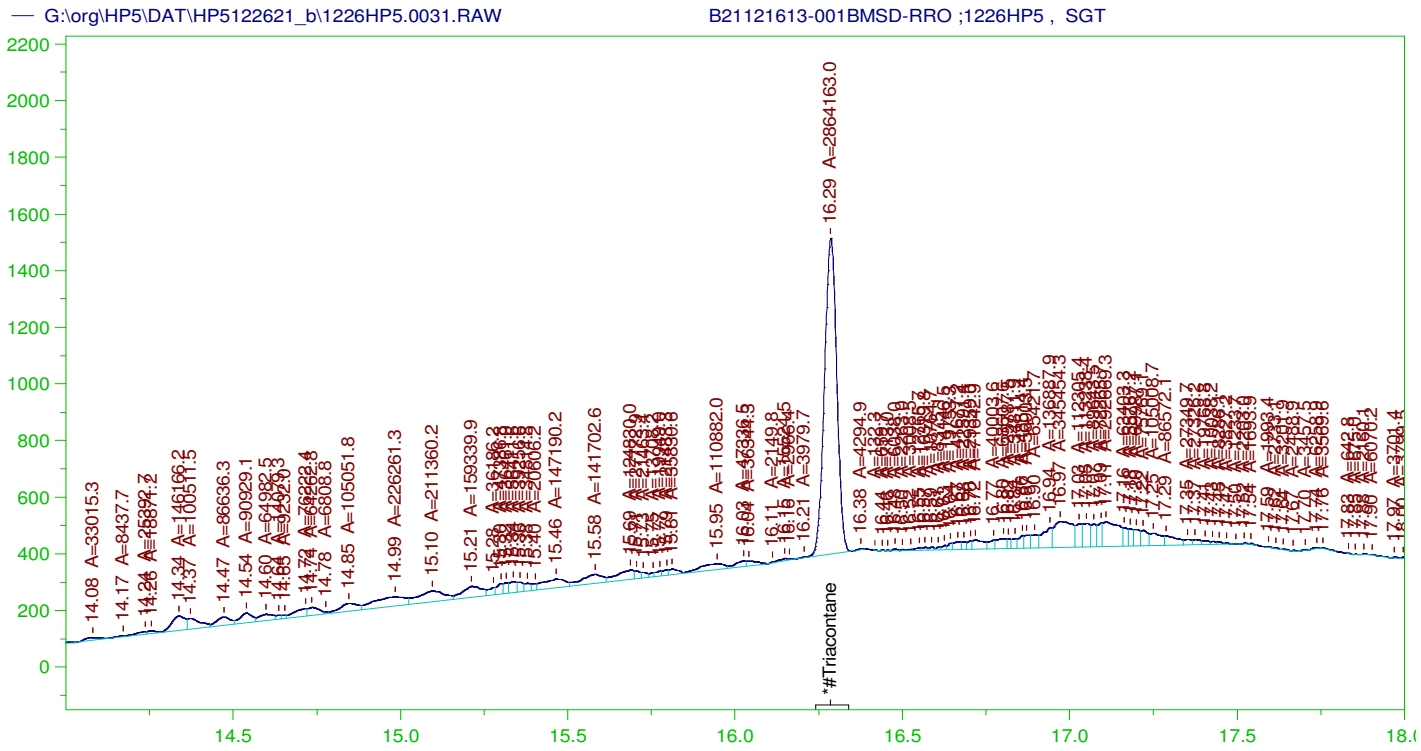
Sample Name: B21121613-001BMSD-RRO ;1226HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0031.RAW
Date & Time Acquired: 12/27/2021 8:43:15 AM
Method File: G:\Org\HP5\Methods\D3_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1055 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.286	.474	.189	39.84	-

~~RRO~~ TEH (Oil Range) Area:1.468009E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.875122

AMN 01/11/2022



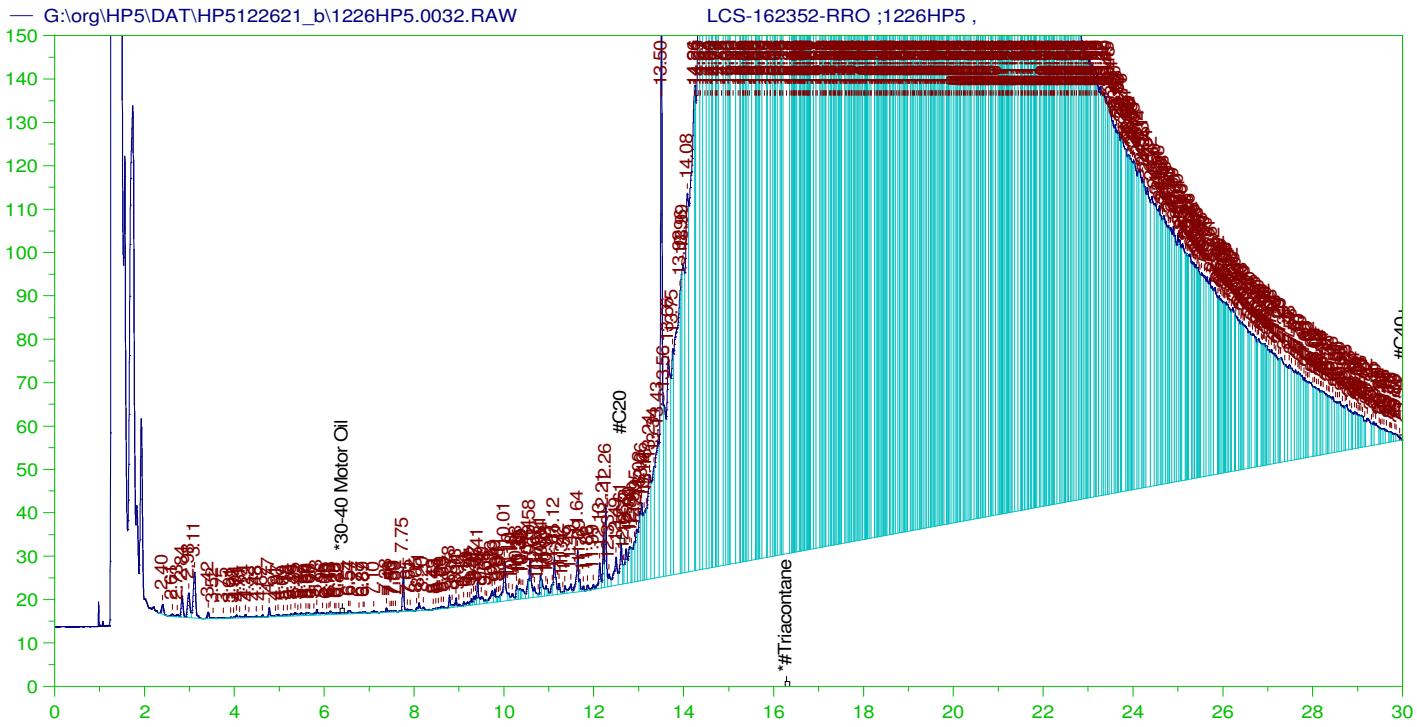
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21121613-001BMSD-RRO ;1226HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0031.RAW
Date & Time Acquired: 12/27/2021 8:43:15 AM
Method File: G:\Org\HP5\Methods\DS_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.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: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.286	.474	.094	19.8	-

RRO Area:5556087 RRO AMOUNT: 0.1845125



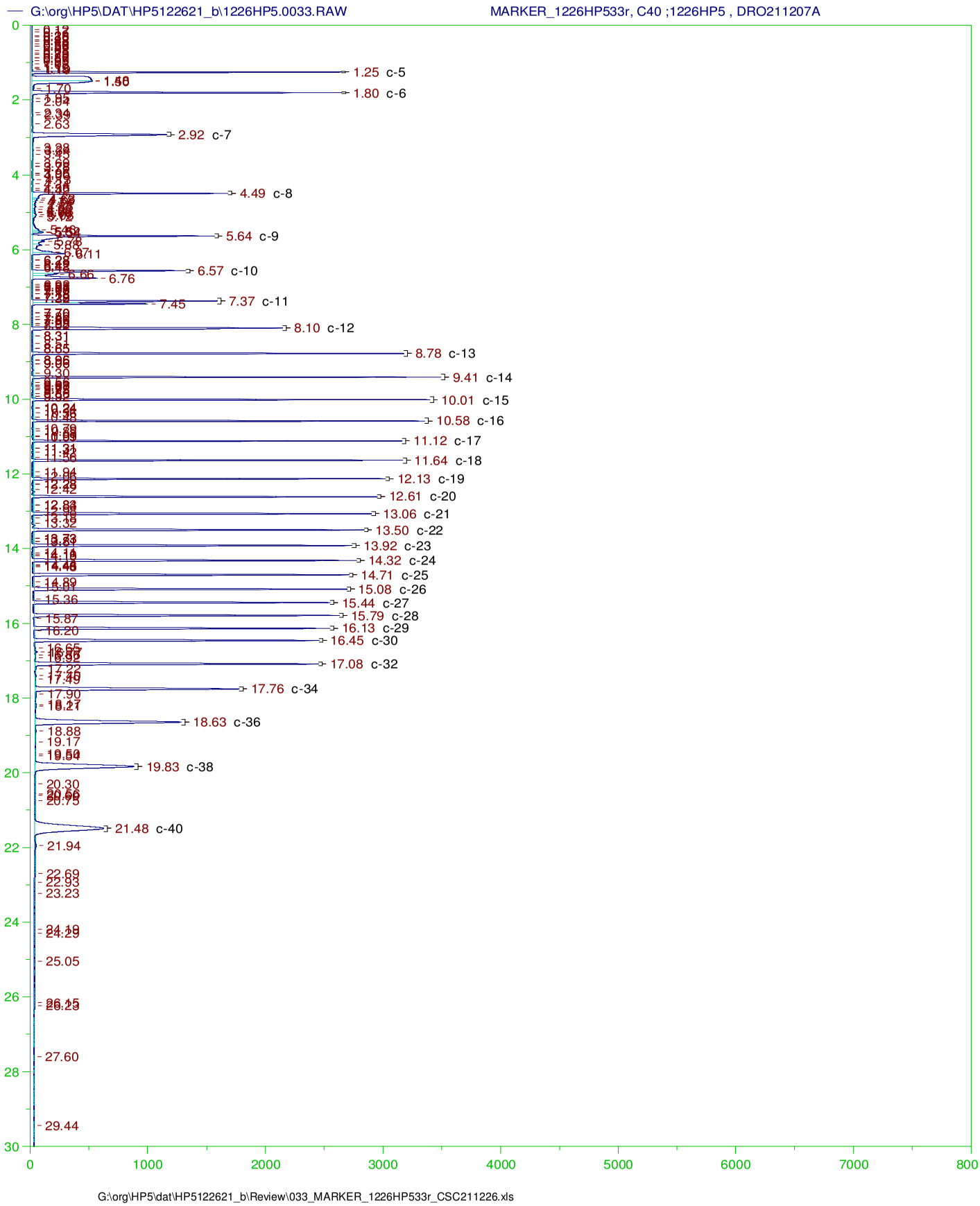
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: LCS-162352-RRO ;1226HP5 ,
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0032.RAW
Date & Time Acquired: 12/27/2021 9:26:27 AM
Method File: G:\Org\HP5\Methods\D3_ORO-AK-L0.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AK.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.284	.5	.231	46.14	-

RRO Area:1.63749E+08 RRO AMOUNT: 5.737041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1.80 c-6
2.92 c-7
4.49 c-8
5.64 c-9
6.57 c-10
7.37 c-11
8.10 c-12
8.78 c-13
9.41 c-14
10.01 c-15
10.58 c-16
11.12 c-17
11.64 c-18
12.13 c-19
12.61 c-20
13.06 c-21
13.50 c-22
13.92 c-23
14.32 c-24
14.71 c-25
15.08 c-26
15.44 c-27
15.79 c-28
16.13 c-29
16.45 c-30
17.08 c-32
17.76 c-34
18.63 c-36
19.83 c-38
21.48 c-40
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29.44
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7000
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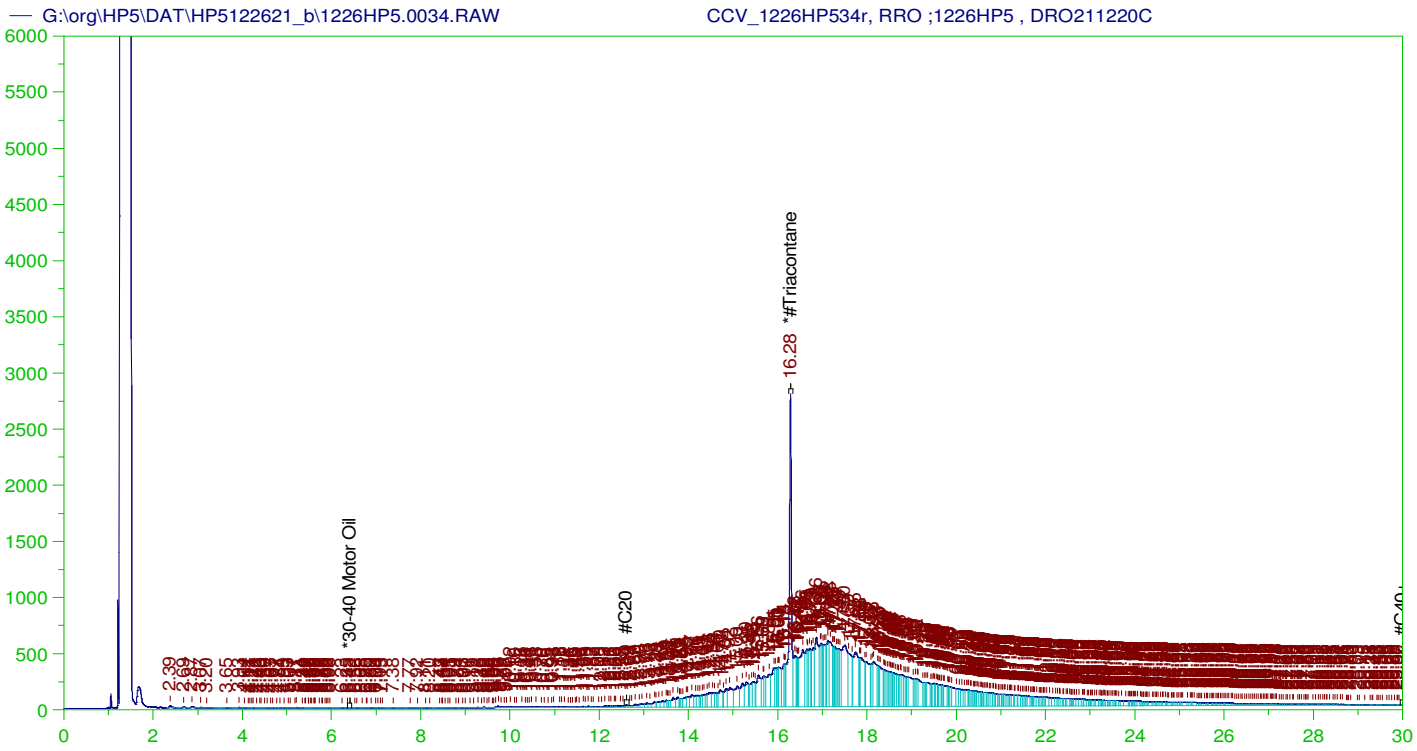


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1226HP534r, RRO ;1226HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0034.RAW
Date & Time Acquired: 12/27/2021 10:52:16 AM
Method File: G:\Org\HP5\Methods\DC_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.284	500.	351.055	70.21	-

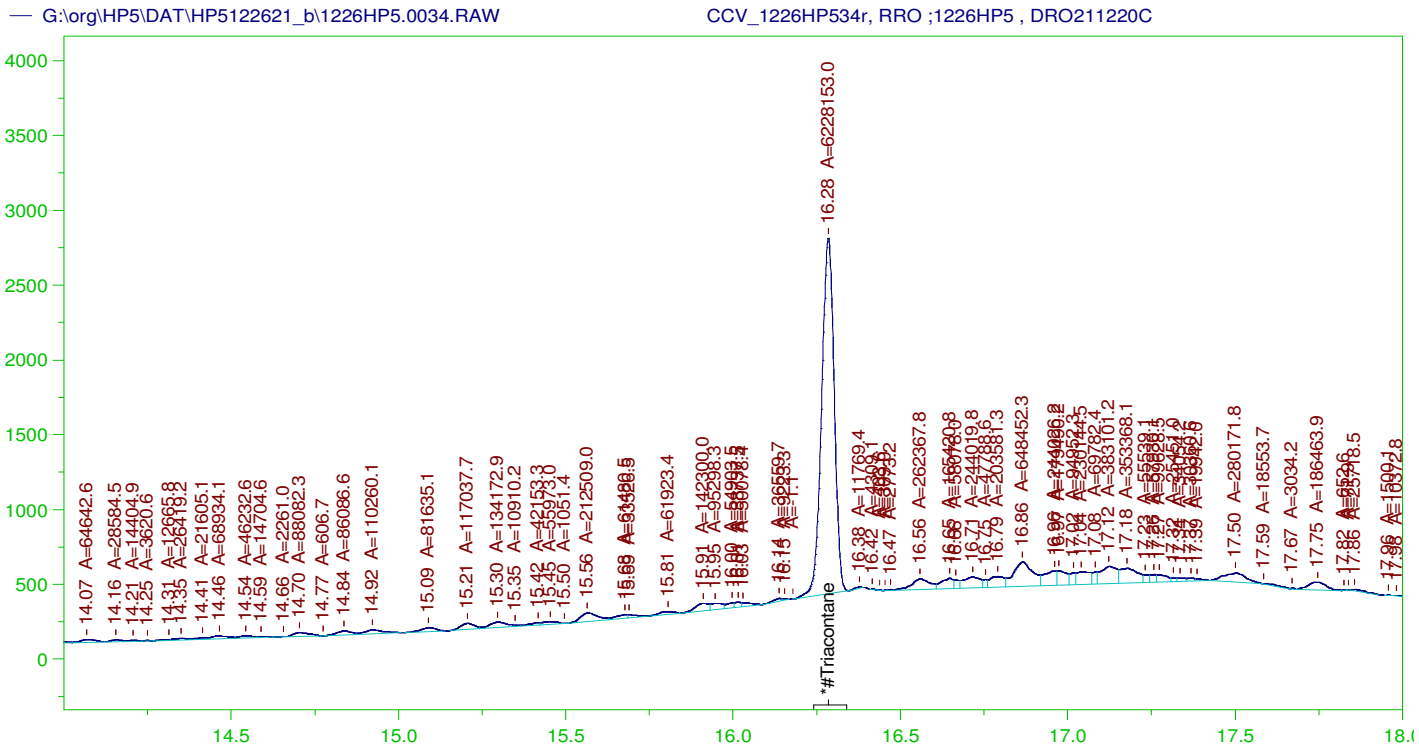
~~RRO~~ TEH (Oil Range) Area:1.362173E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4772.454

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0034.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.029	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.284	200.	351.055	175.53	75-125

AMN 01/11/2022



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1226HP534r, RRO ;1226HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0034.RAW
Date & Time Acquired: 12/27/2021 10:52:16 AM
Method File: G:\Org\HP5\Methods\DS_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.56 to 30.05

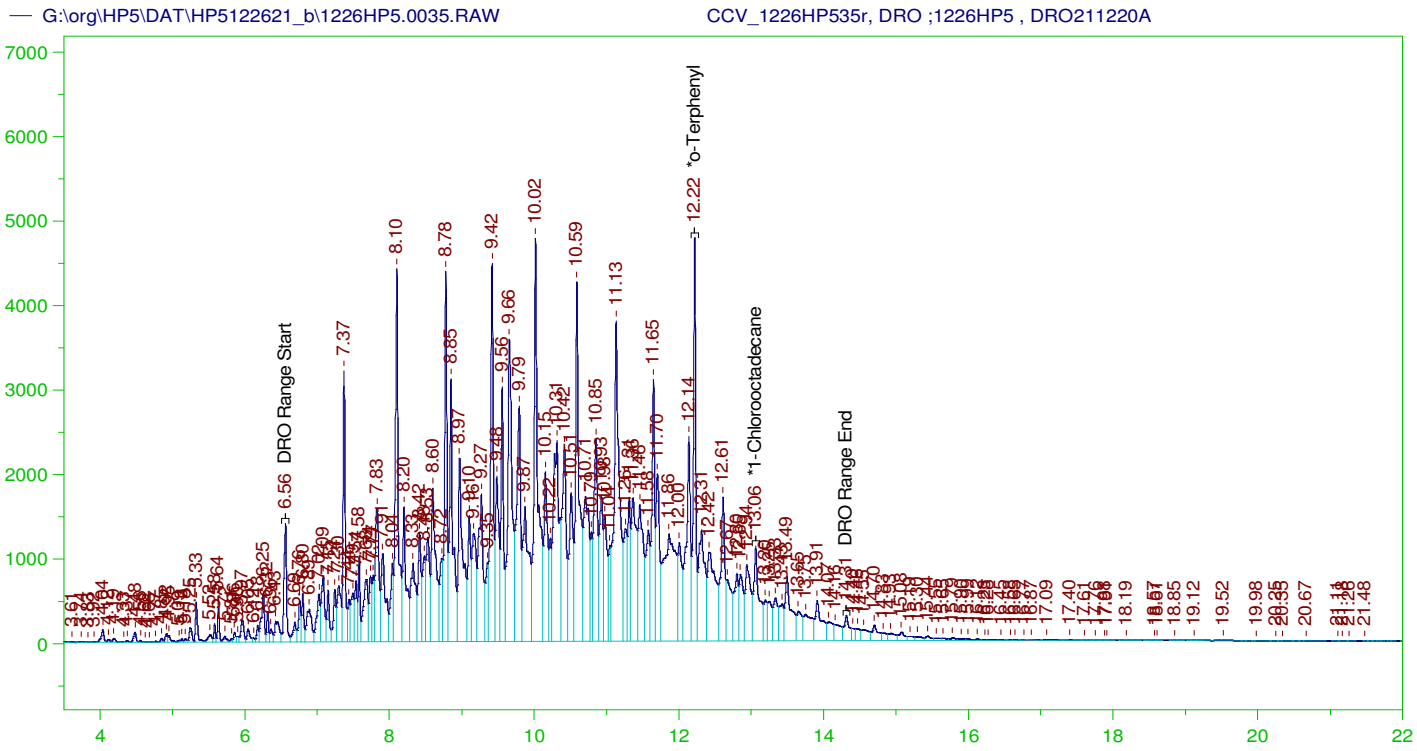
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.284	500.	215.283	43.06	-

RRO Area:6614671 RRO AMOUNT: 231.7488

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0034.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.029	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.284	200.	215.283	107.64	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1226HP535r, DRO ;1226HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0035.RAW
Date & Time Acquired: 12/27/2021 11:35:09 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

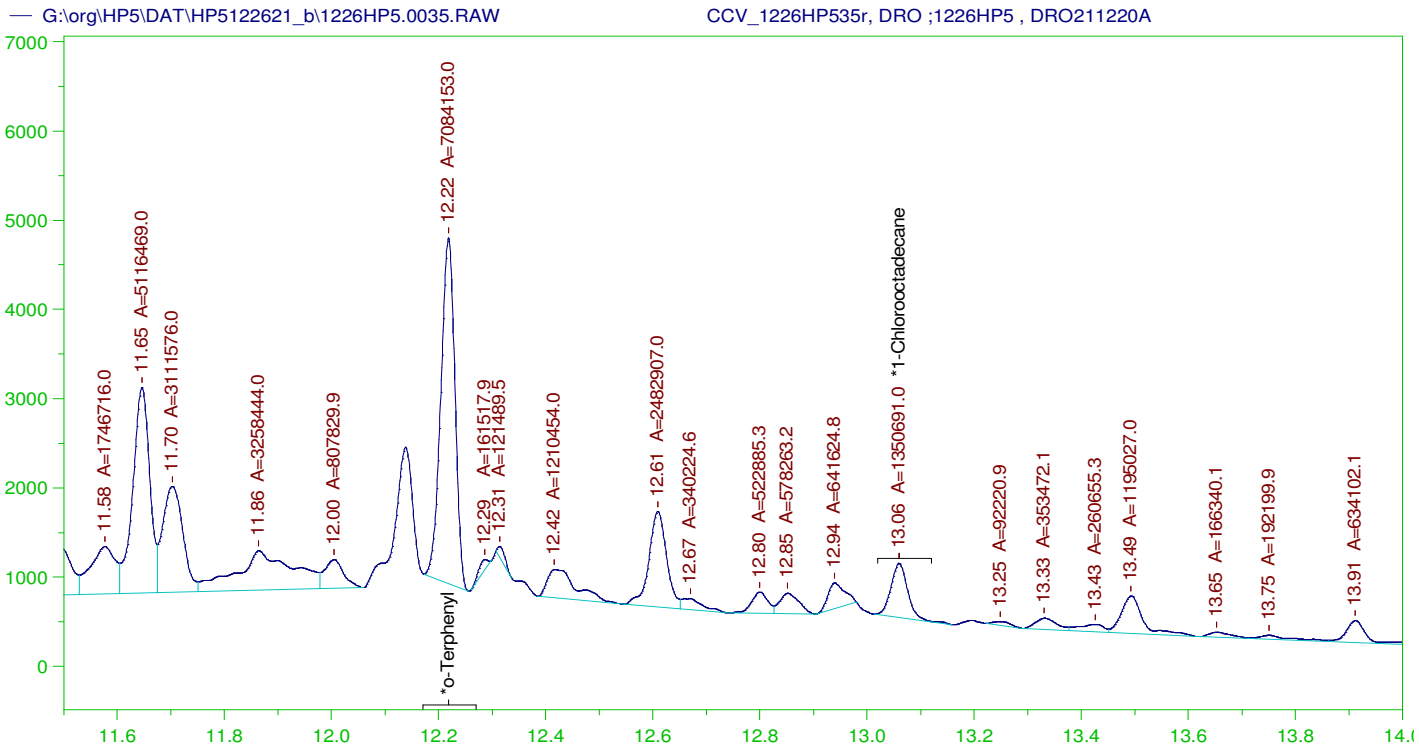
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.218	200.	326.58	163.29	-
*1-Chlorooctadecane	13.06	200.	159.338	79.67	-

DRO Area:4.668803E+08 DRO Amount: 14891
TEH Area:4.842929E+08 TEH Amount: 15446.37

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0035.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15446.37	102.98	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.218	200.	326.58	163.29	85-115
*1-Chlorooctadecane	13.06	200.	159.338	79.67	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1226HP535r, DRO ;1226HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0035.RAW
Date & Time Acquired: 12/27/2021 11:35:09 AM
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Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

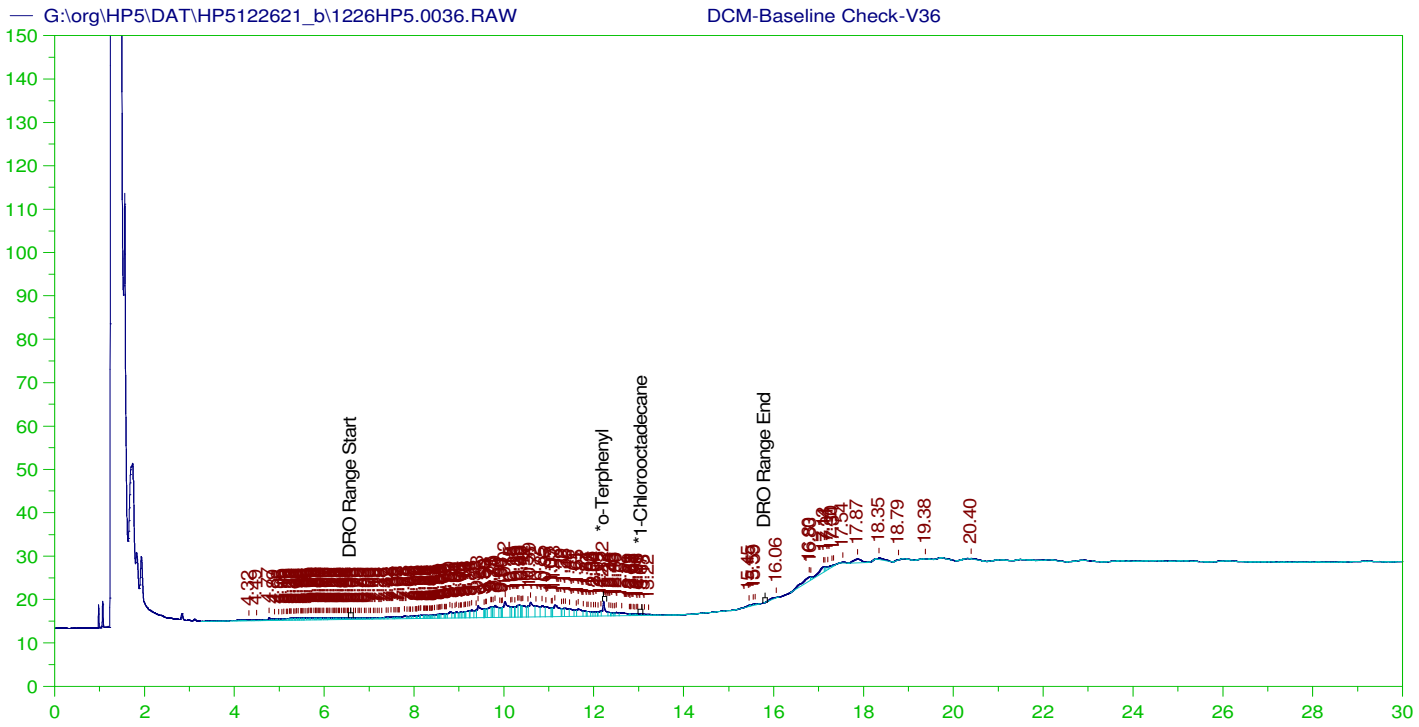
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.218	200.	199.502	99.75	-
*1-Chlorooctadecane	13.06	200.	38.038	19.02	-

DRO Area:2.589707E+08 DRO Amount: 8259.787
TEH Area:2.696968E+08 TEH Amount: 8601.894

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0035.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8601.89	57.35	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.218	200.	199.502	99.75	85-115
*1-Chlorooctadecane	13.06	200.	38.038	19.02	85-115



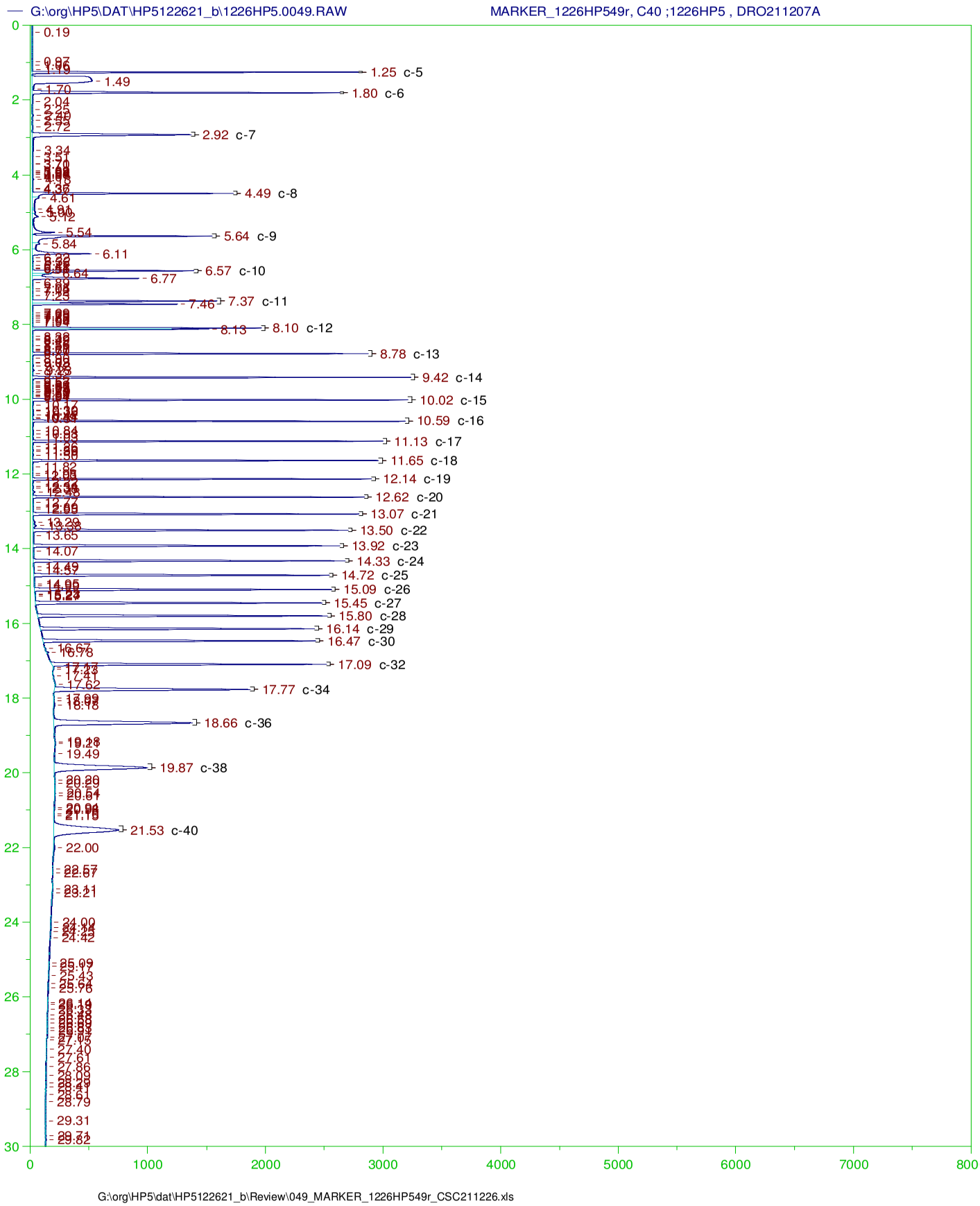
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V36
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0036.RAW
Date & Time Acquired: 12/27/2021 12:18:05 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.216	200.	.41	.2	-
*1-Chlorooctadecane	13.073	200.	.033	.02	-

DRO Area:505658.4 DRO Amount: 16.12781
TEH Area:627625.6 TEH Amount: 20.01792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1.80 c-6
2.92 c-7
4.49 c-8
5.64 c-9
6.11
6.57 c-10
6.77
7.37 c-11
8.10 c-12
8.78 c-13
9.42 c-14
10.02 c-15
10.59 c-16
11.13 c-17
11.65 c-18
12.14 c-19
12.62 c-20
13.07 c-21
13.50 c-22
13.92 c-23
14.33 c-24
14.72 c-25
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15.45 c-27
15.80 c-28
16.14 c-29
16.47 c-30
17.09 c-32
17.77 c-34
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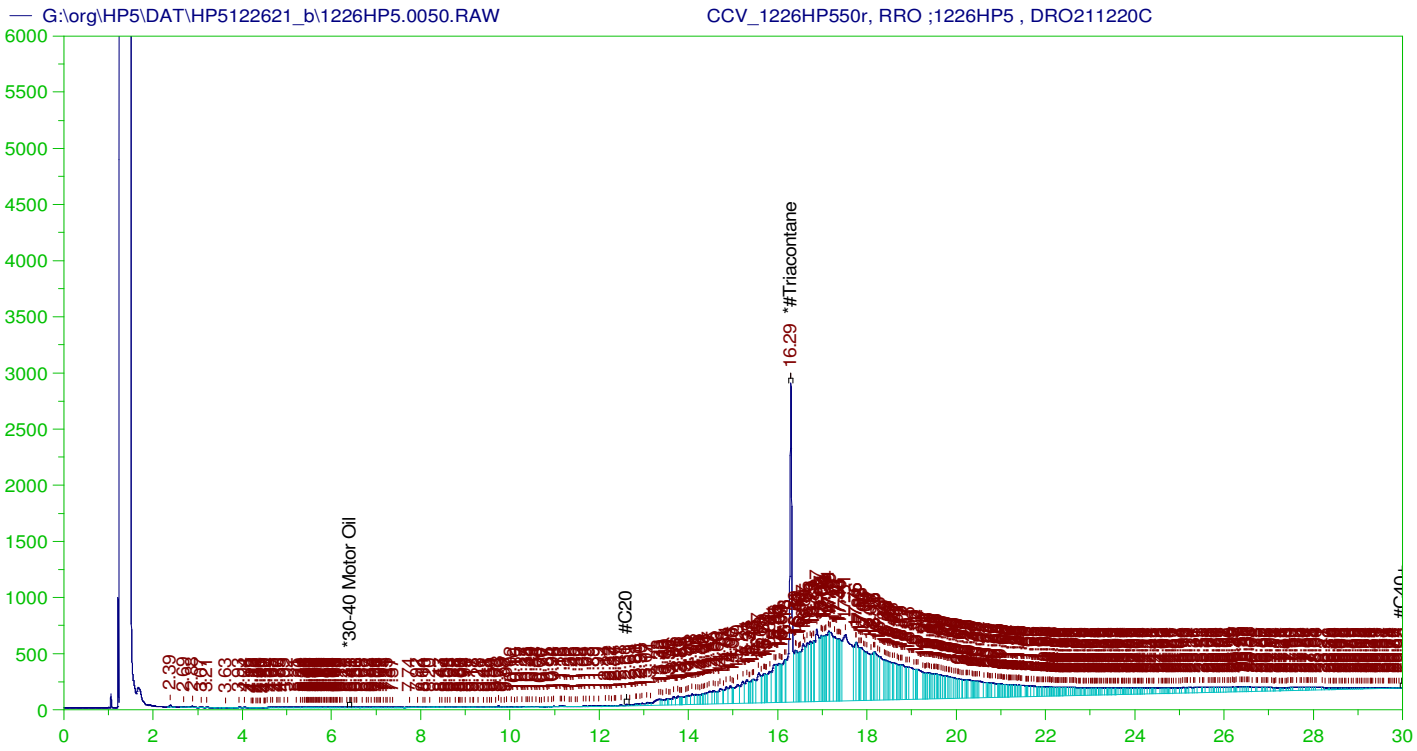


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1226HP550r, RRO ;1226HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0050.RAW
Date & Time Acquired: 12/27/2021 10:24:33 PM
Method File: G:\Org\HP5\Methods\DC_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.294	500.	353.668	70.73	-

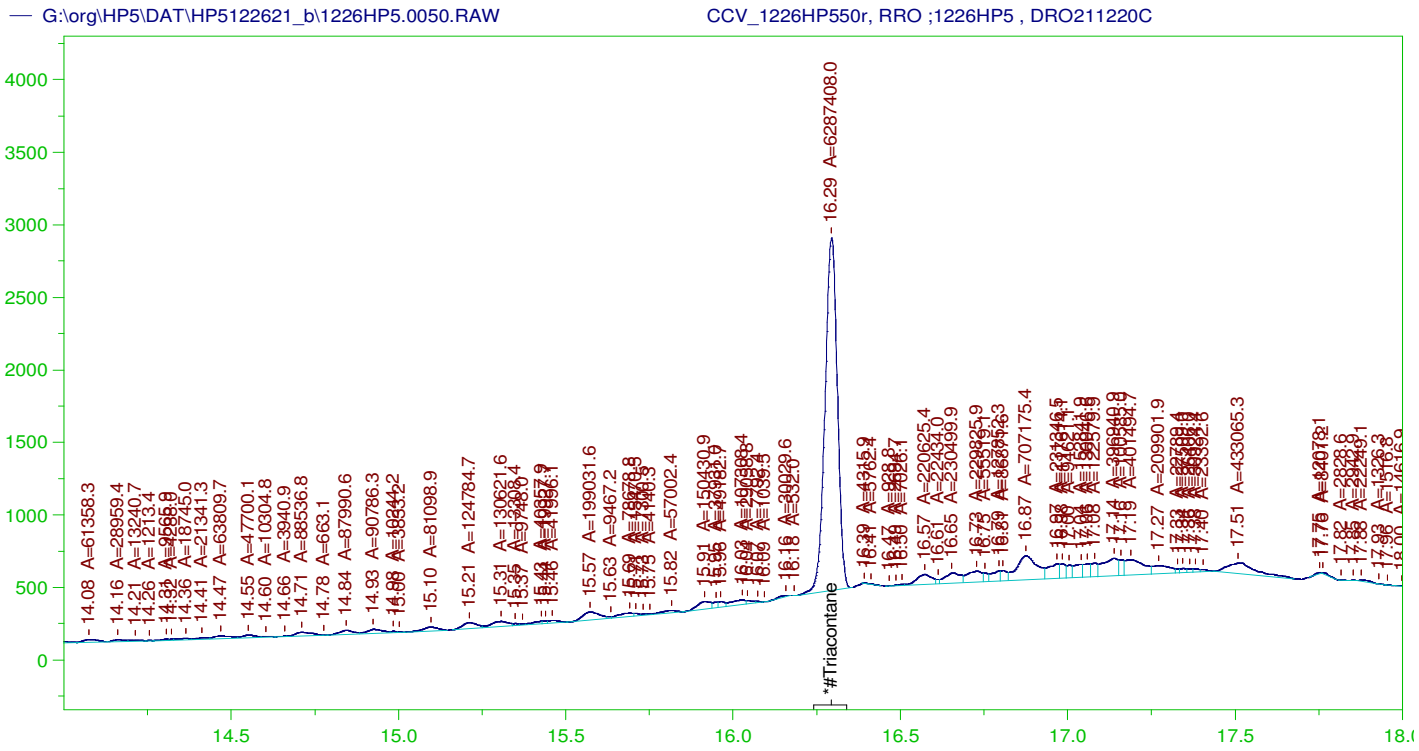
~~RRO~~ TEH (Oil Range) Area:1.464909E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 5132.395

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0050.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.065	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.294	200.	353.668	176.83	75-125

AMN 01/11/2022



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1226HP550r, RRO ;1226HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0050.RAW
Date & Time Acquired: 12/27/2021 10:24:33 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.56 to 30.05

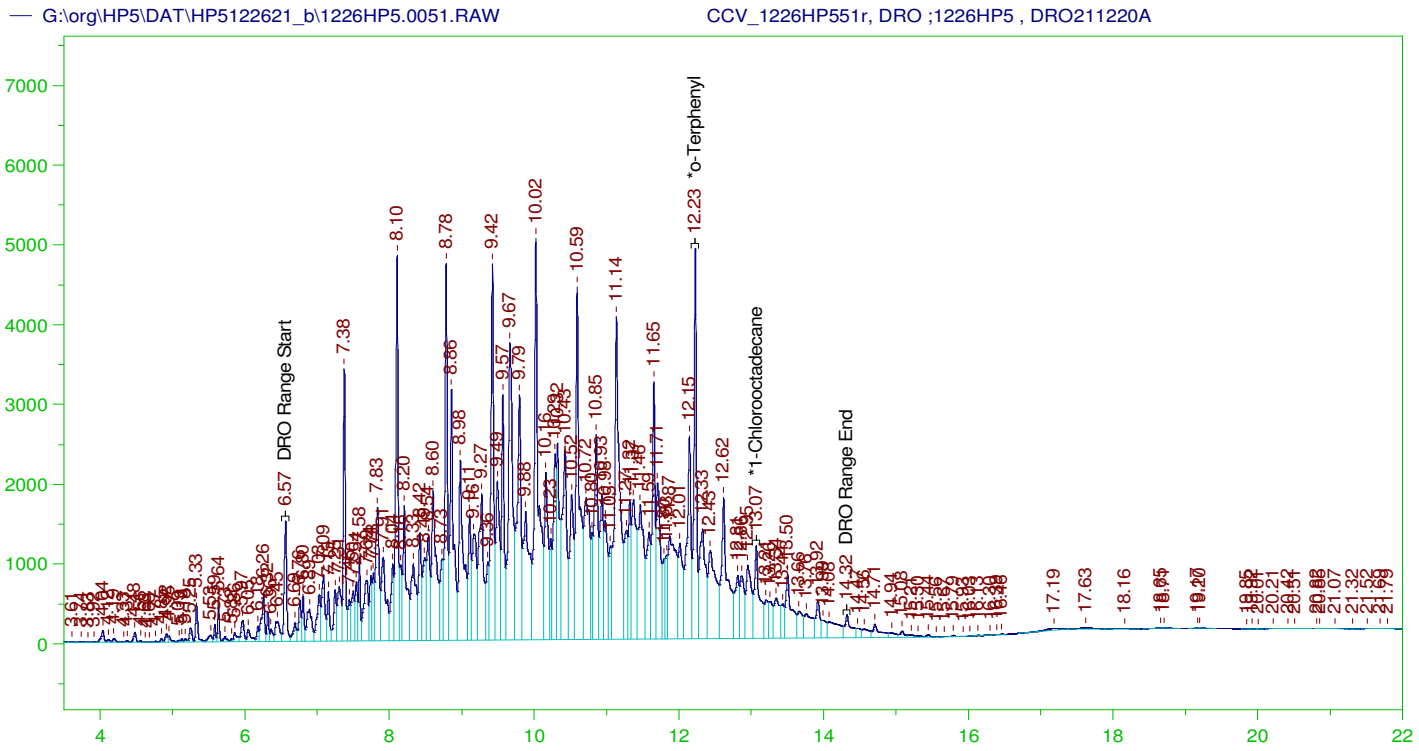
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.294	500.	217.331	43.47	-

RRO Area:6985090 RRO AMOUNT: 244.7267

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0050.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.065	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.294	200.	217.331	108.67	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1226HP551r, DRO ;1226HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0051.RAW
Date & Time Acquired: 12/27/2021 11:07:32 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-IL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

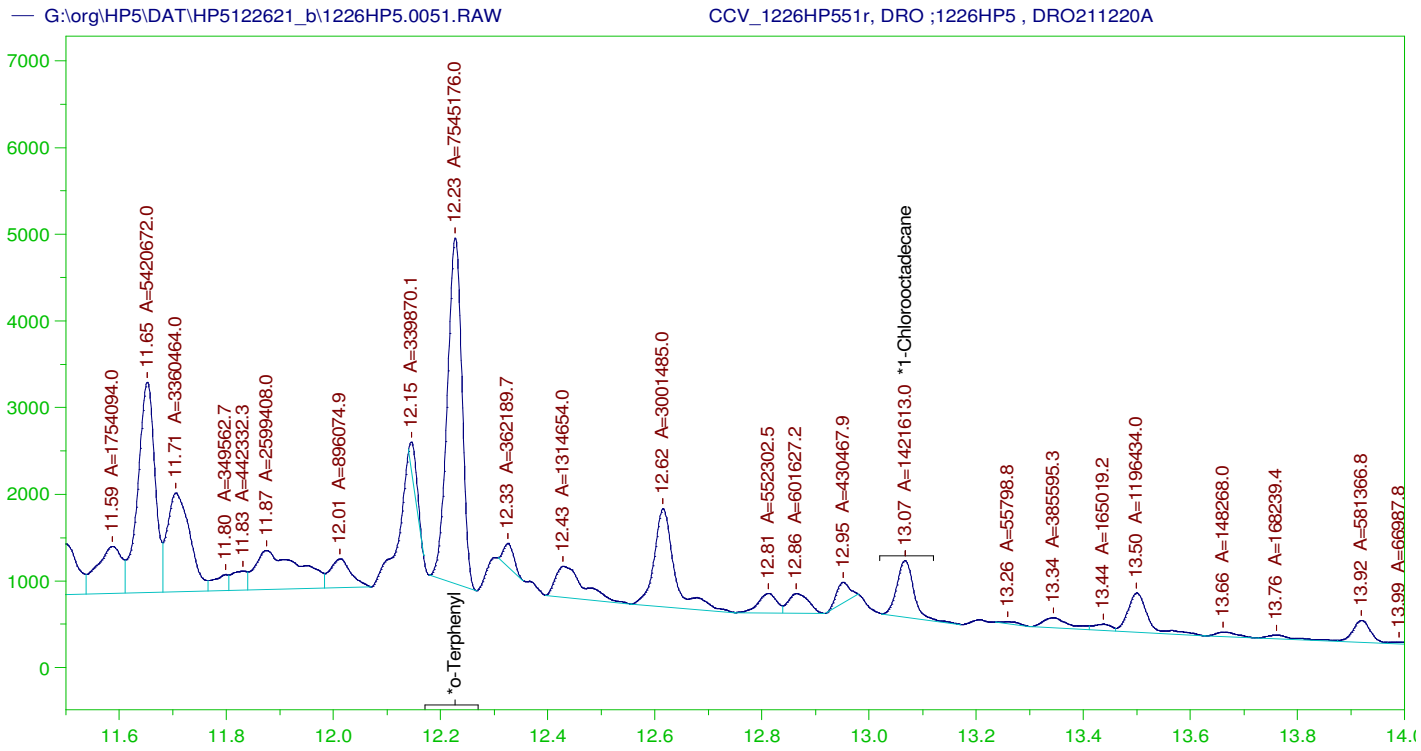
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.227	200.	347.264	173.63	-
*1-Chlorooctadecane	13.067	200.	162.652	81.33	-

DRO Area:4.842769E+08 DRO Amount: 15445.86
TEH Area:5.001953E+08 TEH Amount: 15953.57

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0051.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15953.57	106.36	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.227	200.	347.264	173.63	85-115
*1-Chlorooctadecane	13.067	200.	162.652	81.33	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1226HP551r, DRO ;1226HP5 , DRO211220A
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0051.RAW
Date & Time Acquired: 12/27/2021 11:07:32 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IL-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IL-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

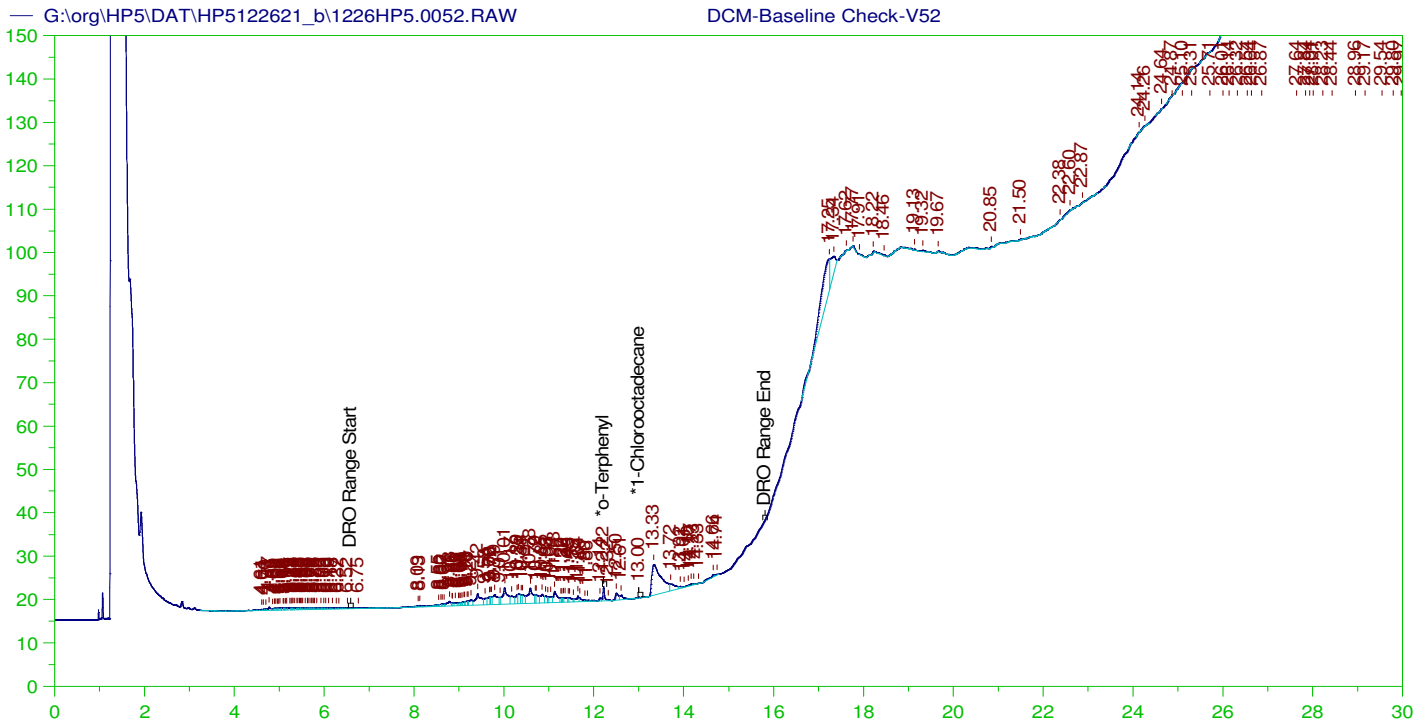
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.227	200.	212.485	106.24	-
*1-Chlorooctadecane	13.067	200.	40.035	20.02	-

DRO Area:2.73378E+08 DRO Amount: 8719.302
TEH Area:2.844651E+08 TEH Amount: 9072.922

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0051.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	9072.92	60.49	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.227	200.	212.485	106.24	85-115
*1-Chlorooctadecane	13.067	200.	40.035	20.02	85-115

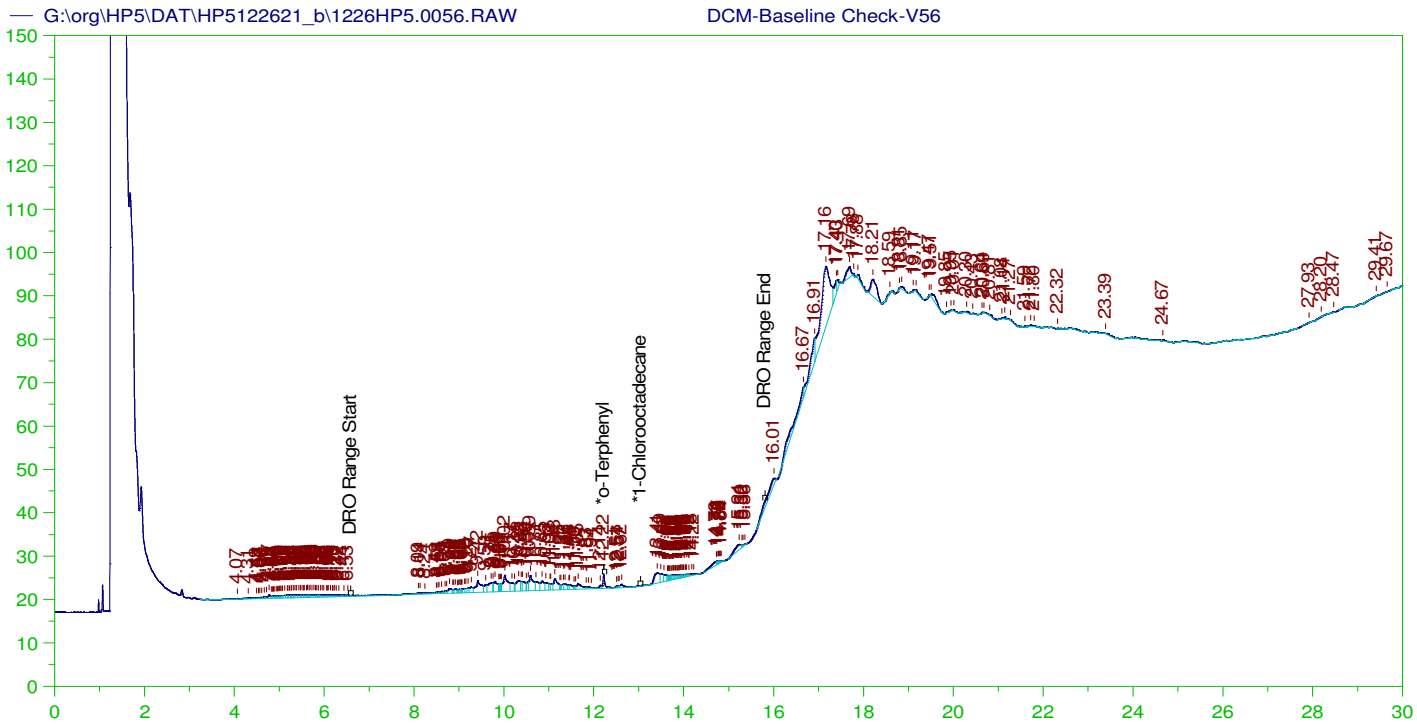


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V52
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0052.RAW
Date & Time Acquired: 12/27/2021 11:50:28 PM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.217	200.	.251	.13	-
*1-Chlorooctadecane	13.001	200.	.017	.01	-

DRO Area:429180.7 DRO Amount: 13.68858
TEH Area:747937.4 TEH Amount: 23.85522

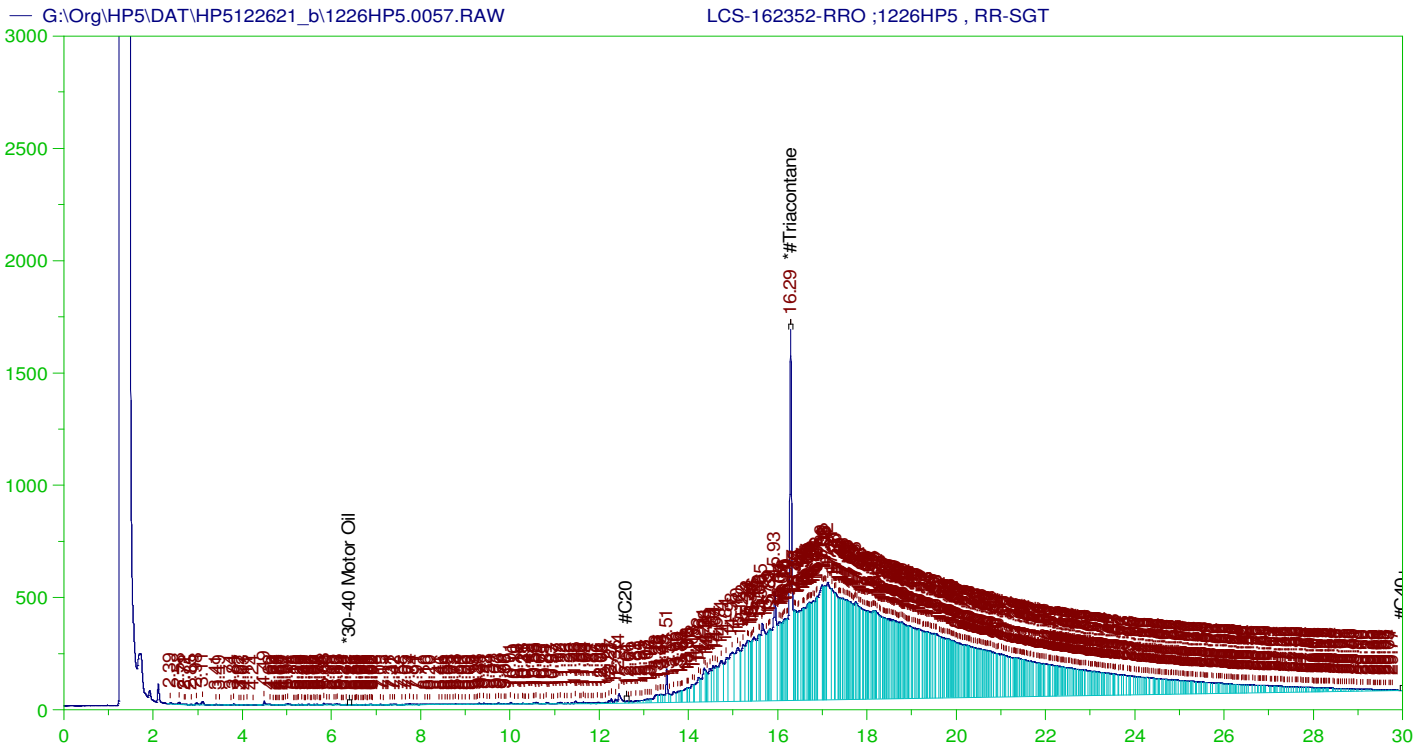


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V56
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0056.RAW
Date & Time Acquired: 12/28/2021 2:42:24 AM
Method File: G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.218	200.	.265	.13	-
*1-Chlorooctadecane	29.99	200.	.	.	-

DRO Area:415776.2 DRO Amount: 13.26105
TEH Area:960770.3 TEH Amount: 30.64346



RESIDUAL RANGE ORGANICS CHROMATOGRAM

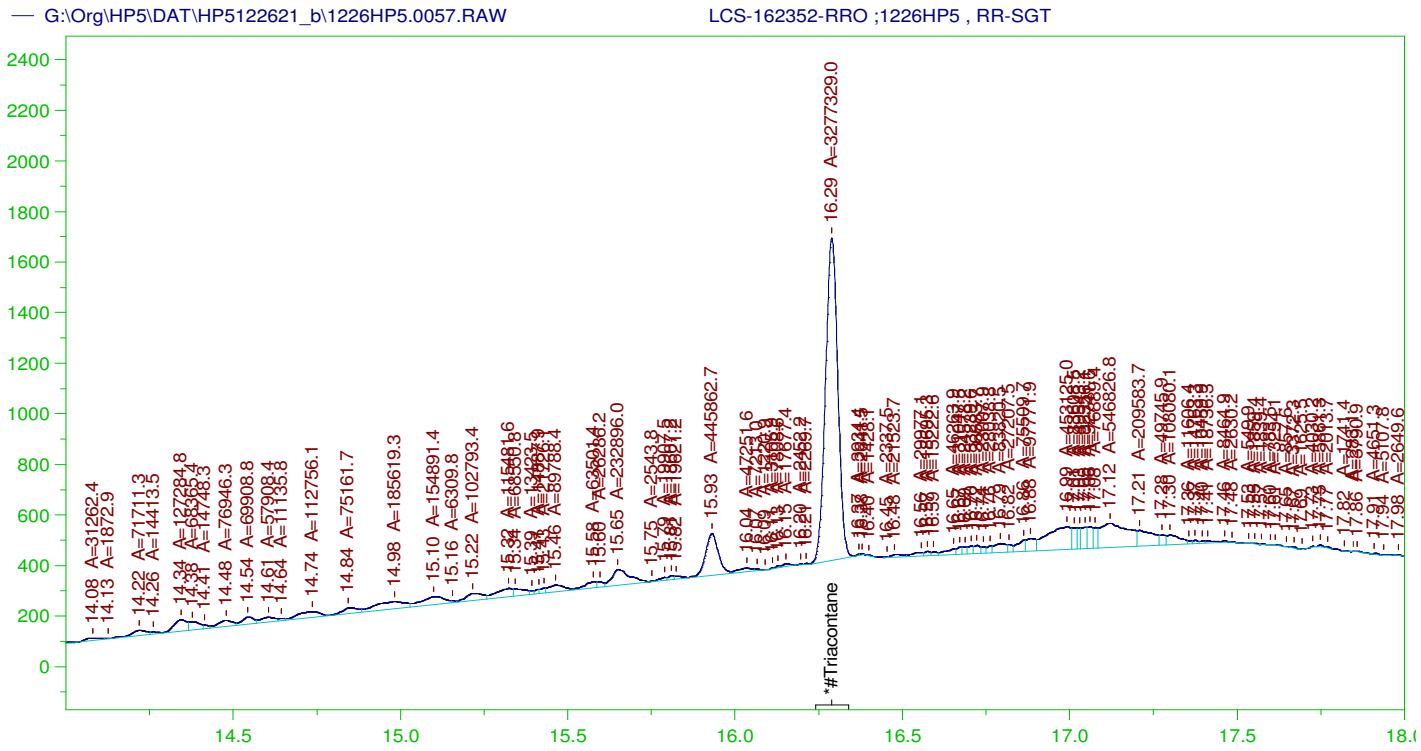
Sample Name: LCS-162352-RRO ;1226HP5 , RR-SGT
Raw File: G:\Org\HP5\DAT\HP5122621_b\1226HP5.0057.RAW
Date & Time Acquired: 12/28/2021 3:25:24 AM
Method File: G:\Org\HP5\Methods\D3_ORO- AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.288	.5	.217	43.41	-

~~RRO~~ TEH (Oil Range) Area:1.61902E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 5.672332

AMN 01/11/2022



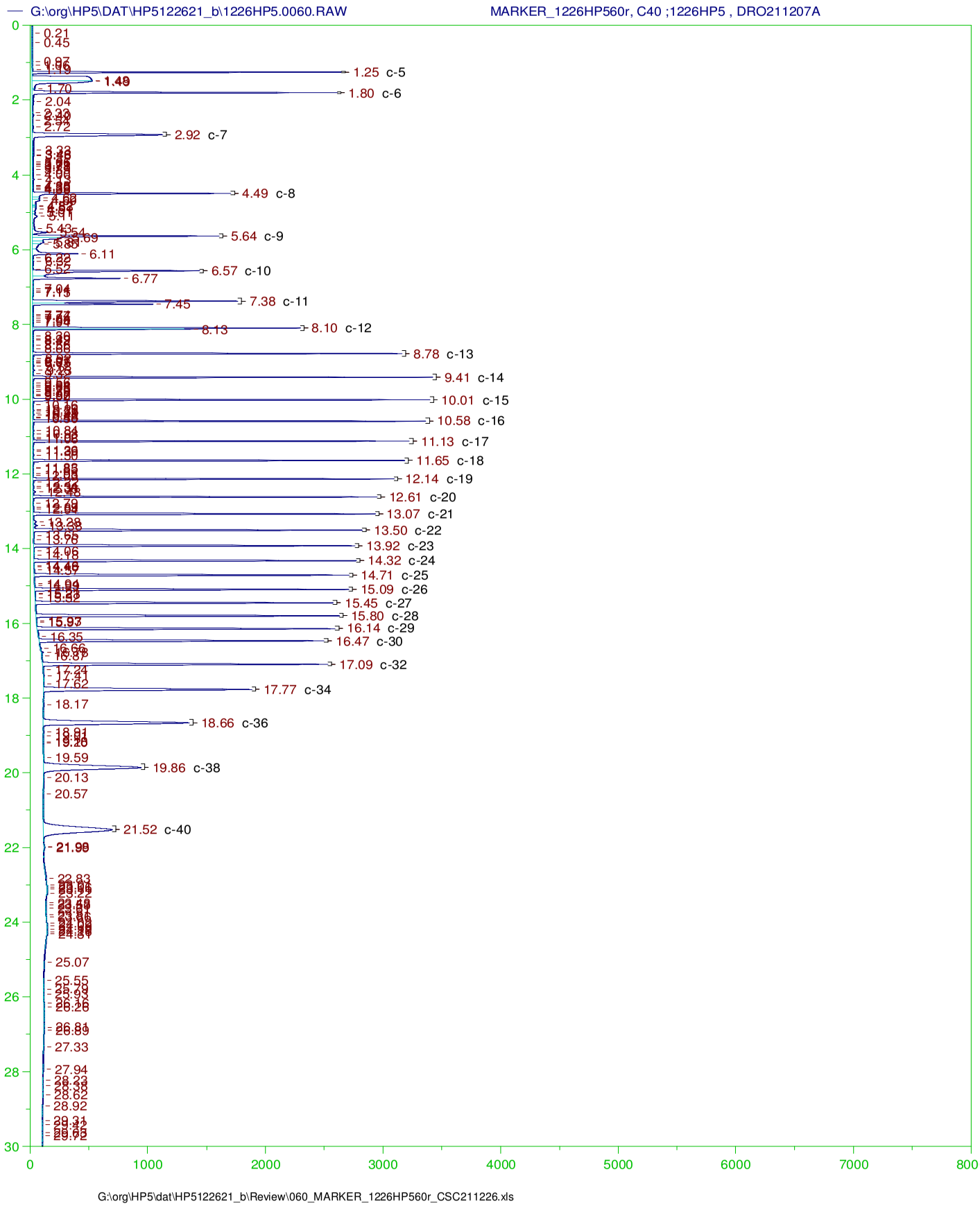
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: LCS-162352-RRO ;1226HP5 , RR-SGT
Raw File: G:\Org\HP5\DAT\HP5122621_b\1226HP5.0057.RAW
Date & Time Acquired: 12/28/2021 3:25:24 AM
Method File: G:\Org\HP5\Methods\DS_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.288	.5	.113	22.66	-

RRO Area:5707735 RRO AMOUNT: 0.1999738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4.49 c-8
5.64 c-9
6.57 c-10
7.38 c-11
8.10 c-12
8.78 c-13
9.41 c-14
10.01 c-15
10.58 c-16
11.13 c-17
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12.14 c-19
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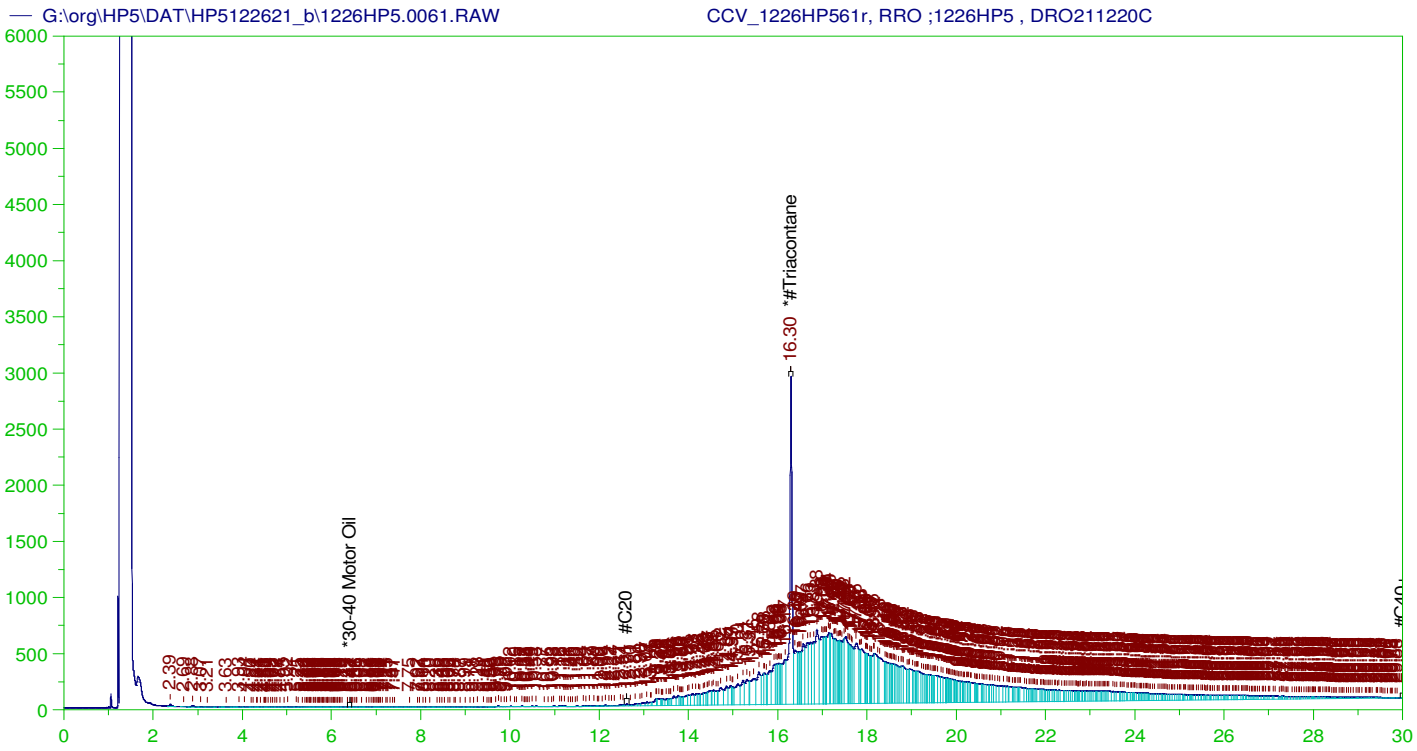


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1226HP561r, RRO ;1226HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0061.RAW
Date & Time Acquired: 12/28/2021 6:17:22 AM
Method File: G:\Org\HP5\Methods\DC_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 28542.41
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.296	500.	373.382	74.68	-

~~RRO~~ TEH (Oil Range) Area:1.585933E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 5556.41

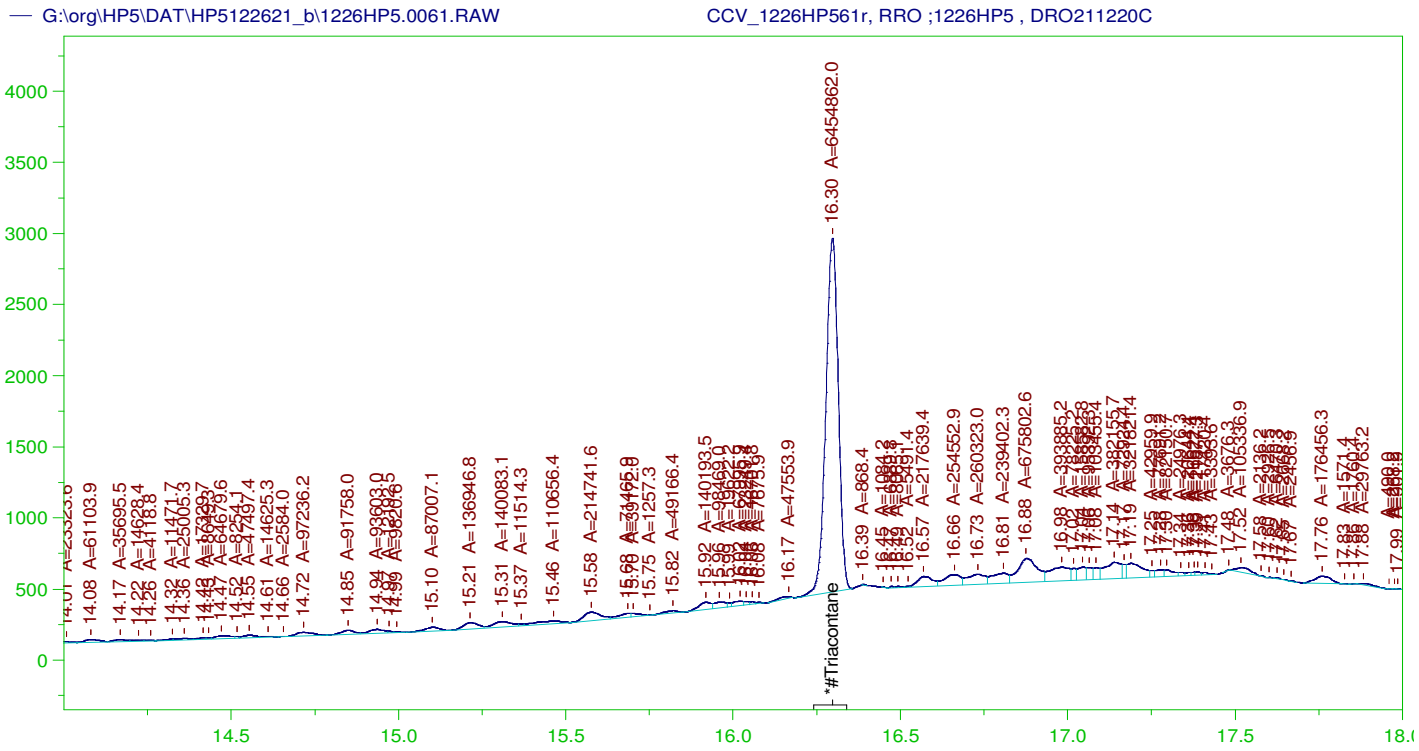
CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0061.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.054	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.296	200.	373.382	186.69	75-125

AMN 01/11/2022

G:\org\HP5\dat\HP5122621_b\Review\061_CCV_1226HP561r_DC_ORO-AL-L%.xls



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1226HP561r, RRO ;1226HP5 , DRO211220C
Raw File: G:\org\HP5\DAT\HP5122621_b\1226HP5.0061.RAW
Date & Time Acquired: 12/28/2021 6:17:22 AM
Method File: G:\Org\HP5\Methods\DS_ORO-AL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AL.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 12.56 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.296	500.	223.119	44.62	-

RRO Area:6751890 RRO AMOUNT: 236.5564

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5122621_b\1226HP5.0061.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.054	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.296	200.	223.119	111.56	75-125

Write Sequence / Data File	Insert Entries(Have the first cell for entries selected) / Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manual Integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.01r	DCM-Baseline Check-V01	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.02r	DCM-Baseline Check-V02	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.03r	MARKER_1220HP503r, C40 ;1220HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211221.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.04r	CCV_1221HP504r, RRO ;1221HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.05r	CCV_1221HP505r, DRO ;1221HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.06r	DCM-Baseline Check-V06	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.07r	LCS-162352 ;1221HP5 ,	G:\Org\HP5\Methods\D3_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1000	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.08r	MB-162352 ;1221HP5 ,	G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met G:\Org\HP5\Methods\DR_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	1000	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.46 and 16.41 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.09r	B21121613-001B ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met G:\Org\HP5\Methods\DR_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	990	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.46 and 16.41 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.10r	B21121613-001BMS ;1221HP5 ,	G:\Org\HP5\Methods\D3_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	990	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.11r	B21121613-001BMSD ;1221HP5 ,	G:\Org\HP5\Methods\D3_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1040	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.12r	DCM-Baseline Check-V12	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.13r	B21121613-002B ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met G:\Org\HP5\Methods\DR_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	1020	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.46 and 16.41 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.14r	DCM-Baseline Check-V14	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.15r	B21121609-001C ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met G:\Org\HP5\Methods\D3_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-122115-IK-L#.met	1060	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.29 and 16.41 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.16r	DCM-Baseline Check-V16	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.17r	B21121611-001B ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met G:\Org\HP5\Methods\D3_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-122117-IK-L#.met	1030	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.29 and 16.47 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.

G:\org\HP5\DAT\HP5122121_b\1221HP5.18r	B21121616-001C ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met G:\Org\HP5\Methods\D3_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-122115-IK-L#.met	990	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.29 and 16.41 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.19r	MARKER_1220HP519r, C40 ;1220HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211221.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.20r	CCV_1221HP520r, RRO ;1221HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.21r	CCV_1221HP521r, DRO ;1221HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.22r	DCM-Baseline Check-V22	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.23r	B21121623-001C ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-122123-IK-L%.met G:\Org\HP5\Methods\D3_OROS-122123-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	1020	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline with Set Baseline Now at 25.75 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.46 and 16.41 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.24r	DCM-Baseline Check-V24	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.25r	B21121605-001A ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-122123-IK-L%.met G:\Org\HP5\Methods\D3_OROS-122123-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	1050	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline with Set Baseline Now at 25.75 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.46 and 16.41 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.26r	DCM-Baseline Check-V26	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.27r	B21121605-002A ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met G:\Org\HP5\Methods\D3_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-122127-IK-L#.met	1050	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.34 and 16.54 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.28r	B21121605-003A ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-IK-L%.met G:\Org\HP5\Methods\D3_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-122127-IK-L#.met	1010	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.34 and 16.54 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.29r	DCM-Baseline Check-V29	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.30r	B21121622-001B ;1221HP5 , $HC-8015-DRO-W, due to baseline	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	960	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.31r	B21121622-002B ;1221HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-122131-IK-L%.met G:\Org\HP5\Methods\D3_OROS-122131-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	1050	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline with peak weak adjusted. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.46 and 16.41 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.32r	B21121622-003B ;1221HP5 , $HC-8015-DRO-W, need rerun to verify no carryover	G:\Org\HP5\Methods\DR_8015-C24T-IJ-L0.met	900	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.33r	MARKER_1220HP535r, C40 ;1220HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211221.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.34r	CCV_1221HP536r, RRO ;1221HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.35r	CCV_1221HP537r, DRO ;1221HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.36r	DCM-Baseline Check-V36	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.37r	DCM-Baseline Check-V37	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations

G:\org\HP5\DAT\HP5122121_b\1221HP5.38r	B21121622-001B ;1221HP5 , $HC-8015-DRO-W, rr	G:\Org\HP5\Methods\DR_8015-122138-IK-L%.met G:\Org\HP5\Methods\D3_OROS-122138-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	960	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline with Set Baseline Now at 23.94 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.46 and 16.41 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.39r	B21121622-003B ;1221HP5 , $HC-8015-DRO-W, rr	G:\Org\HP5\Methods\DR_8015-C24T-IK-L%.met G:\Org\HP5\Methods\DR_OROS-AK-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IK-L#.met	900	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.11 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.46 and 16.41 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.40r	DCM-Baseline Check-V40	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.41r	B21121613-001BMS-RRO ;1221HP5 ,	G:\Org\HP5\Methods\D3_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1045	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.42r	DCM-Baseline Check-V42	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.43r	B21121613-001BMSD-RRO ;1221HP5 ,	G:\Org\HP5\Methods\D3_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1055	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.44r	LCS-162352-RRO ;1221HP5 ,	G:\Org\HP5\Methods\D3_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1000	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.45r	MARKER_1220HP546r, C40 ;1220HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211221.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5122121_b\1221HP5.46r	CCV_1221HP547r, RRO ;1221HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AK-L%.MET G:\Org\HP5\Methods\DS_ORO-AK-L%.MET	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122121_b\1221HP5.47r	CCV_1221HP548r, DRO ;1221HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IK-L%.met G:\Org\HP5\Methods\DS_8015-24-IK-L#.met	1	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.

Ann Nebel

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Ann Nebel
Date: 2022.01.11 13:09:01 -07:00

Write Sequence	Insert Entries(Have the first cell for entries selected							
Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manual Integrations
G:\org\HP5\DAT\HP5122621_b\1226HP5.01r	DCM-Baseline Check-V01	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5122621_b\1226HP5.02r	DCM-Baseline Check-V02	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5122621_b\1226HP5.03r	MARKER_1226HP503r, C40 ;1226HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211226.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5122621_b\1226HP5.04r	CCV_1226HP504r, RRO ;1226HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.05r	CCV_1226HP505r, DRO ;1226HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.06r	DCM-Baseline Check-V06	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5122621_b\1226HP5.07r	LCS-162352 ;1226HP5 , Needs RR GC vial cap was loose and sample may have concentrated.	G:\Org\HP5\Methods\D3_8015-24-IL-L0.met	1000	1	1	1	0	No integration
G:\org\HP5\DAT\HP5122621_b\1226HP5.08r	MB-162352 ;1226HP5 , SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1000	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline All Valleys on at 10.78 minutes and X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.09r	B21121613-001B ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	990	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline All Valleys on at 10.78 minutes and X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.10r	B21121613-001BMS ;1226HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	990	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.11r	B21121613-001BMSD ;1226HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1040	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.12r	DCM-Baseline Check-V12	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5122621_b\1226HP5.13r	B21121622-001B ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	960	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline All Valleys on at 10.78 minutes and X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.14r	B21121605-001A ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1050	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline All Valleys on at 10.78 minutes and X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.15r	B21121623-001C ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1020	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline All Valleys on at 10.78 minutes and X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.16r	DCM-Baseline Check-V16	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No intregration
G:\org\HP5\DAT\HP5122621_b\1226HP5.17r	B21121611-001B ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1030	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline All Valleys on at 10.78 minutes and X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.18r	B21121622-002B ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1050	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline All Valleys on at 10.78 minutes and X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.19r	MARKER_1226HP503r, C40 ;1226HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211226.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5122621_b\1226HP5.20r	CCV_1226HP504r, RRO ;1226HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.21r	CCV_1226HP505r, DRO ;1226HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.22r	DCM-Baseline Check-V22	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5122621_b\1226HP5.23r	DCM-Baseline Check-V23	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No integration
G:\org\HP5\DAT\HP5122621_b\1226HP5.24r	B21121616-001C ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IL-L%.met G:\Org\HP5\Methods\DR_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	990	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 17.12 minutes. Surrogates are integrated using a valley to valley integration using Set Basline All Valleys on at 10.78 minutes and X-axis scaling showing surrogate peak from 11-18 minutes.

G:\org\HP5\DAT\HP5122621_b\1226HP5.25r	B21121605-002A ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\D3_8015-C24T-IL-L%.met G:\Org\HP5\Methods\D3_OROS-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1050	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline All Valleys on at 10.78 minutes and X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.26r	B21121605-003A ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\D3_8015-122626-IL-L%.met G:\Org\HP5\Methods\D3_OROS-122626-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1010	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Now at 22.87 minutes. Surrogates are integrated using a valley to valley integration using Set Basline All Valleys on at 10.78 minutes and X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.27r	B21121609-001C ;1226HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\D3_8015-122627-IL-L%.met G:\Org\HP5\Methods\D3_OROS-122627-AL-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IL-L#.met	1060	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the basline. Assigned Set Now at 26.45 minutes. Surrogates are integrated using a valley to valley integration using Set Basline All Valleys on at 10.78 minutes and X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.28r	B21121613-001BMS-RRO ;1226HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1045	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.29r	DCM-Baseline Check-V29	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No intregration
G:\org\HP5\DAT\HP5122621_b\1226HP5.30r	LCS-162352 ;1226HP5 , RR-SGT	G:\Org\HP5\Methods\D3_8015-122630-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1000	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline with peak width adjusted. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.31r	B21121613-001BMSD-RRO ;1226HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1055	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.32r	LCS-162352-RRO ;1226HP5 , NEEDS RR	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1000	1	1	1	0	No intregration
G:\org\HP5\DAT\HP5122621_b\1226HP5.33r	MARKER_1226HP533r, C40 ;1226HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211226.met	1	1	1	1	0	No intregration
G:\org\HP5\DAT\HP5122621_b\1226HP5.34r	CCV_1226HP534r, RRO ;1226HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.35r	CCV_1226HP535r, DRO ;1226HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.36r	DCM-Baseline Check-V36	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No intregration
G:\org\HP5\DAT\HP5122621_b\1226HP5.49r	MARKER_1226HP549r, C40 ;1226HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211226.met	1	1	1	1	0	No intregration
G:\org\HP5\DAT\HP5122621_b\1226HP5.50r	CCV_1226HP550r, RRO ;1226HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.51r	CCV_1226HP551r, DRO ;1226HP5 , DRO211220A	G:\Org\HP5\Methods\DC_8015-24-IL-L%.met G:\Org\HP5\Methods\DS_8015-24-IL-L#.met	1	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the basline. Assigned Set Baseline All Valley on at 16.83 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.14 minutes and slightly after the surrogate peak at 12.31 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.52r	DCM-Baseline Check-V52	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No intregration
G:\org\HP5\DAT\HP5122621_b\1226HP5.56r	DCM-Baseline Check-V56	G:\Org\HP5\Methods\DR_8015-IBb-LEXP.met	1	1	1	1	0	No intregration
G:\org\HP5\DAT\HP5122621_b\1226HP5.57r	LCS-162352-RRO ;1226HP5 , RR-SGT	G:\Org\HP5\Methods\D3_ORO- AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1000	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.
G:\org\HP5\DAT\HP5122621_b\1226HP5.60r	MARKER_1226HP560r, C40 ;1226HP5 , DRO211207A	g:\org\HP5\Methods\\CSC211226.met	1	1	1	1	0	No intregration
G:\org\HP5\DAT\HP5122621_b\1226HP5.61r	CCV_1226HP561r, RRO ;1226HP5 , DRO211220C	G:\Org\HP5\Methods\DC_ORO-AL-L%.MET G:\Org\HP5\Methods\DS_ORO-AL-L%.MET	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the basline. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 16.18 minutes slightly after the surrogate peak at 16.4 minutes and X-axis scaling showing surrogate peak from 14-18 minutes.

Ann Nebel

Digitally signed by
Ann Nebel
Date: 2022.01.11 13:09:31 -07:00

Energy Laboratories Inc

Spike LOG

Standard ID:	DRO211101A		
Standard Name	OTP-4000 ug/mL DCM	Type:	Secondary
Date Prepared	11/1/2021	BY:	Ann Nebel
Date Expires:	9/30/2024		
Department	dropr	Status:	Open
Vendor:			
Lot Number:			
Balance ID:	BAL-DRO		
Comments:	Used to Prep DRO-8015 ICAL and CCV Solutions		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC328	14408	25	mL	8/19/

Final Volume: 25 mL

Stock Source		**Base Units**	**Amount Added**
DRO200430B	O-Terphenyl	ug/mL	0.1012 g

Analytes		**CAS**	Conc:	**ug/mL**
A	O-Terphenyl	84-15-1		4000

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO200430B		
Standard Name	O-Terphenyl	Type:	Neat
Date Prepared	4/30/2020	BY:	Ann Nebel
Date Expires:	9/30/2024		
Department	dropr	Status:	New
Vendor:	Chemservice		
Lot Number:	9972100		
Balance ID:			
Comments:	ID#: 6271		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
o-Terphenyl	12650	500	mg	9/30/

Final Volume: mL

Stock Source **Base Units** **Amount Added**

Analytes		**CAS**	Conc:	**ug/mL**
A	O-Terphenyl	84-15-1		1

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

o-Terphenyl

CATALOG NUMBER	N-12693-500MG
LOT NUMBER	9972100
DATE CERTIFIED	09/23/19
EXPIRATION DATE	09/30/24
CAS NUMBER	84-15-1
MOLECULAR FORMULA	C18H14
MOLECULAR WEIGHT	230.32
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

Analytical Test	Value
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
GC/MS SPECTRA ID	MATCHES NIST DATABASE
MELTING POINT (°C)	57.1
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

ID #: 12650
Opened:
o-Terphenyl
Expires: 9/30/2024
Rec'd: 4/30/2020
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015

PJLA Reference Material Producer
PJLA Testing

COA Form
Revision 3 (3/2015)

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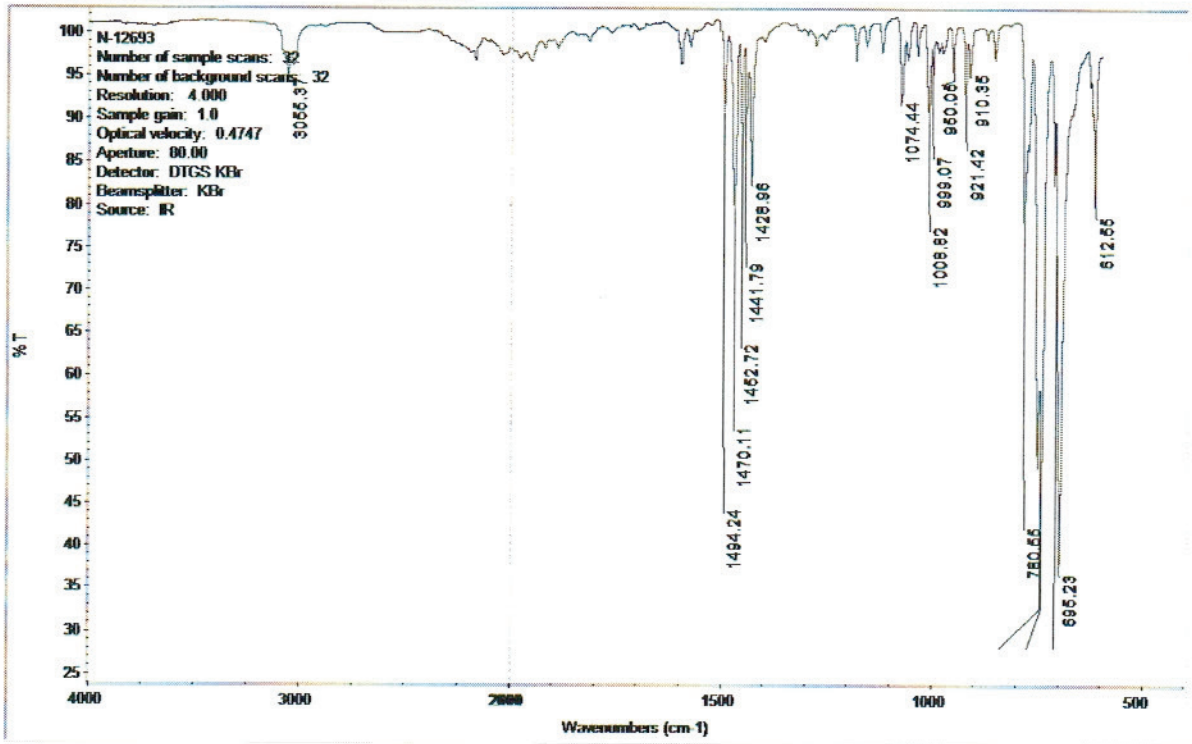
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015
PJLA Reference Material Producer
PJLA Testing

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24

Chem Service Inc Area Percent Report

Data File: D:\msdchem\2019 DATA\0919\0923-01.D
Acq On : 23 Sep 2019 10:40
Operator :
Sample : n-12693
Misc :
ALS Vial : 95

Integration Parameters: autoint1.e
Integrator: ChemStation

DataAcq Meth:SCREEN.M
Method : D:\msdchem\2019 DATA\0919\0903-09.D\ERIN.M

Signal : TIC: 0923-01.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	11.844	1597	1606	1613	BB	32038221	432253484	100.00%	100.000%

Sum of corrected areas: 432253484

ERIN.M Mon Sep 23 10:55:51 2019

Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015

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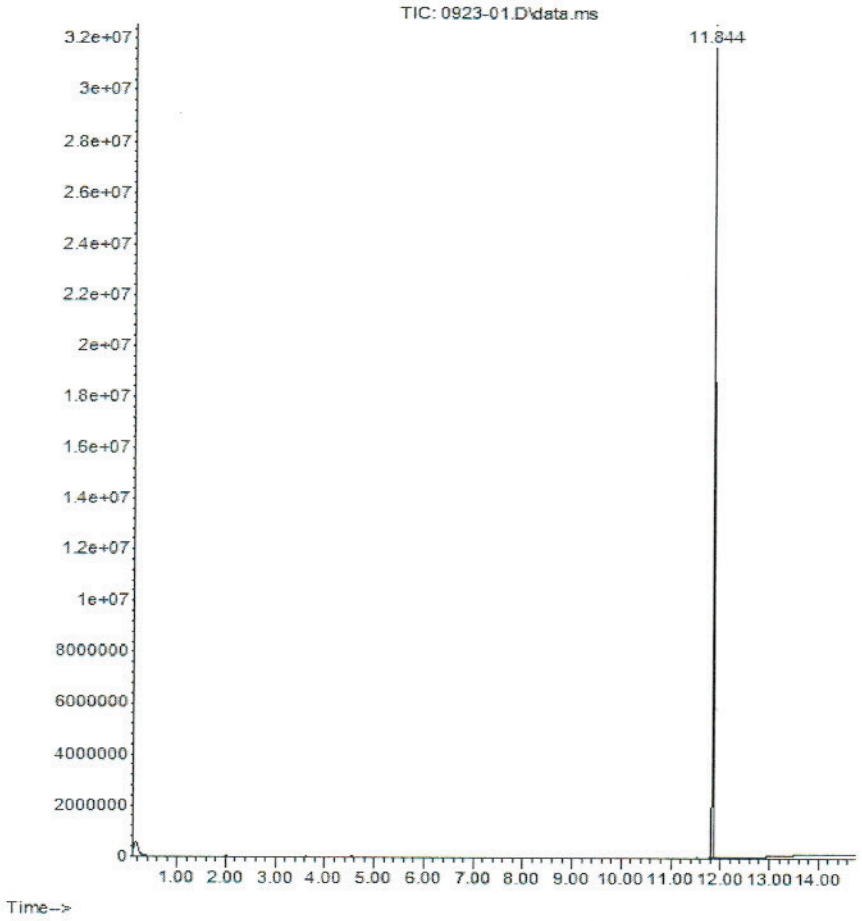
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



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1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
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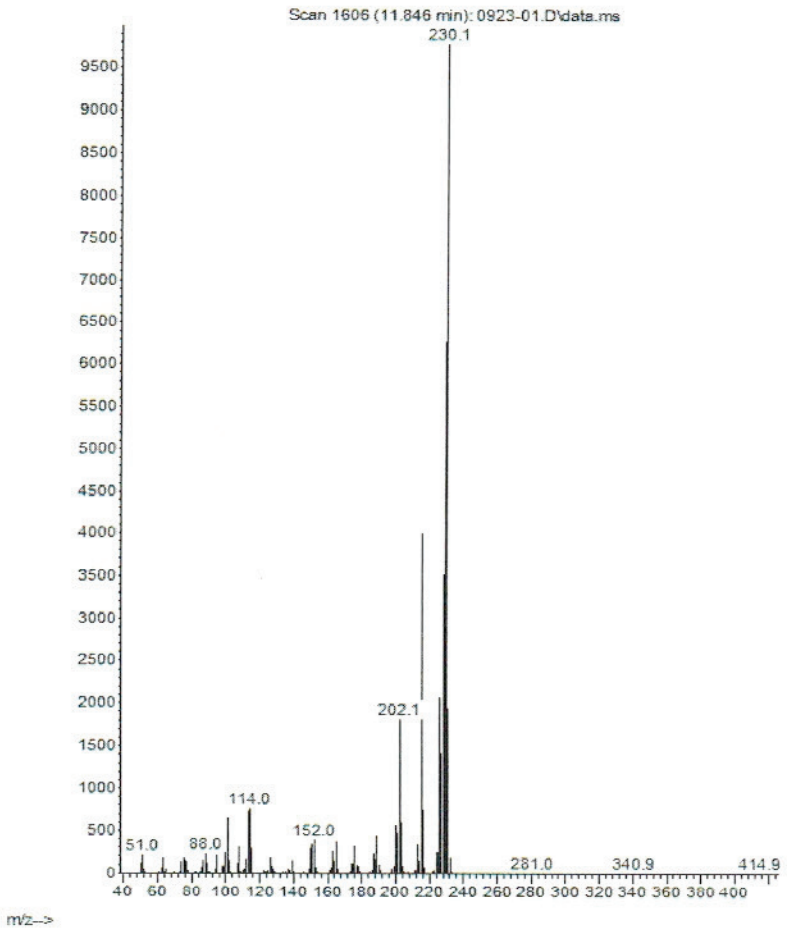
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015

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1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24

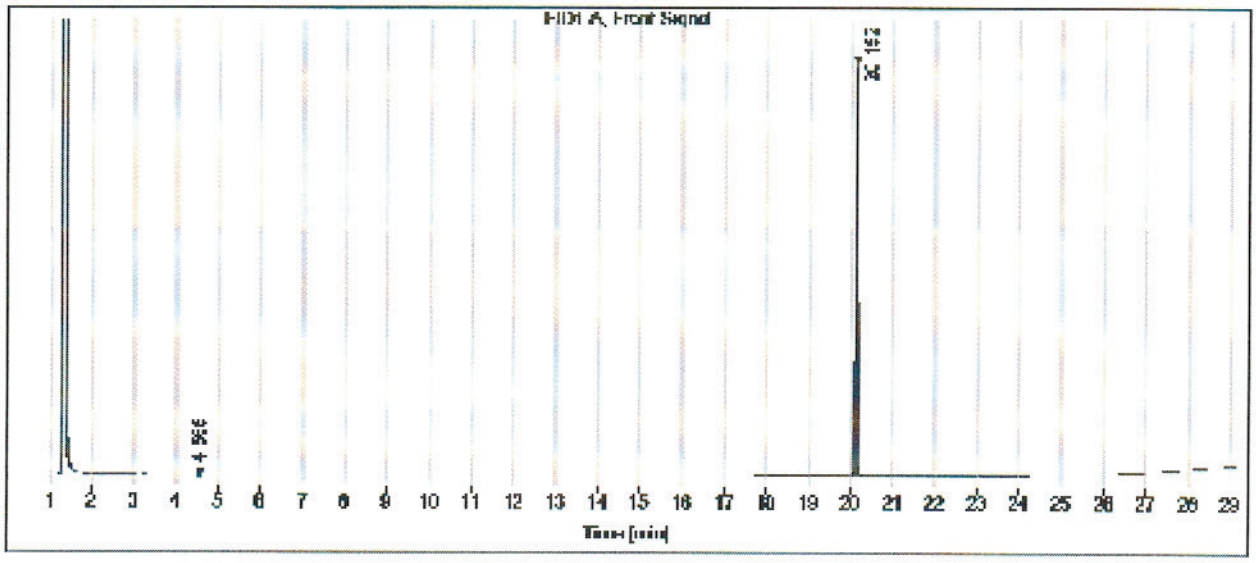
Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

Gas

CERTIFICATE OF ANALYSIS

Data file:	C:\CHEM3\		
Sample name:	N-12693		
Instrument:	GC 2	**Sample type:**	Sample
Injection date:	9/23/2019 9:56:34 AM	**Location:**	Vial 141
Acq. method:	SCREEN.M	**Injection volume:**	1.0uL
Column name:	HP-5		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
4.565	BB	0.0305	1.2408	0.5122	0.11
20.152	BB	0.0391	1171.9556	439.4599	99.89
		Sum	1173.1963		

Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015

PJLA Reference Material Producer

PJLA Testing

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211012A		
Standard Name	Diesel Fuel #2 50,000 ug/mL in DCM	Type:	Primary
Date Prepared	10/12/2021	BY:	Ann Nebel
Date Expires:	4/30/2023		
Department	dropr	Status:	New
Vendor:	Sigma-Aldrich		
Lot Number:	LRAC6316		
Balance ID:			
Comments:	Diesel Fuel #2 For CCVs.		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Diesel Fuel No. 2	14376	1	mL	4/30/

Final Volume: mL

Stock Source	**Base Units**	**Amount Added**	
Analytes	**CAS**	Conc:	**ug/mL**
Diesel Fuel #2			0

Certificate of Analysis

Diesel Fuel No. 2

Certified Reference Material

Description

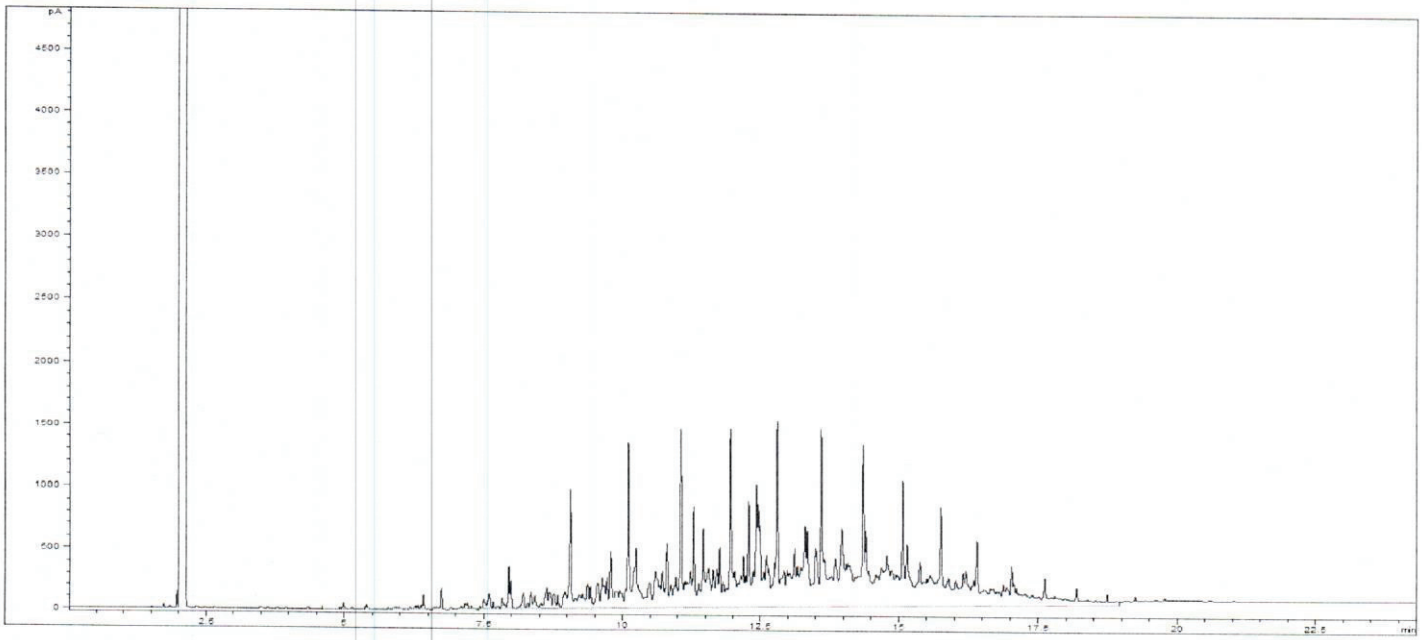
Product ID UST148
Lot **LRAC6316**
Expiration Date April 2023
Manufacturing Date April 2020
Storage Conditions Room Temperature
Solvent/Matrix DICHLOROMETHANE

ID #: 14376
Opened:
Diesel Fuel No. 2
Expires: 4/30/2023
Rec'd: 10/12/2021
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

Certified Values

Analyte	*Certified Value* [1,4]	*Units*	*Raw Material Purity,%*	*Raw Material Lot*	*CAS*
NO.2 FUEL OIL	50001 ± 2770	µg/mL	100.0	LA80505	68476-34-6

Informational Values



Additional Information:

Analytical Method Parameters:
Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #214)
Carrier Gas: H2, Flow: 4.0 mL/min
Inlet Temperature: 250 °C, Injection Volume: 1.0 µL
Injection Mode: Split, Split Ratio: 10: 1
Temperature Program: 40 °C (Hold 2 min) @ 15 °C/min to 300 °C (Hold 5 min)
Detector: FID
Detector Temperature: 300 °C

ANAB ACCREDITED 5017/2014 REFERENCE MATERIAL PRODUCER

SIGMA-ALDRICH®
2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@milliporesigma.com www.sigma-aldrich.com

Description

Lot LRAC6316
Expiration Date April 2023
Manufacturing Date April 2020
Storage Conditions Room Temperature
Solvent/Matrix DICHLOROMETHANE

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

k: Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date April 30, 2020
Version 0-4302020

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO180918C		
Standard Name	50,000 ug/mL Oil Std For AK103 RRO-In DC	Type:	Primary
Date Prepared	9/18/2018	BY:	Ann Nebel
Date Expires:	8/31/2025		
Department	dropr	Status:	Open
Vendor:	Restek		
Lot Number:	A0140080		
Balance ID:	Sartorius 4 place balance		

Comments:

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Residual Range Cailbration Standard	10787	1	mL	8/31/

Final Volume: 1 mL

Stock Source	**Base Units**	**Amount Added**
Analytes	**CAS**	Conc: **ug/mL**

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31817 **Lot No.:** A0140080

Description : Residual Range Calibration Standard (RCS)

Residual Range Calib Std (RCS) 50,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2025 **Storage:** 25°C nominal

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Motor Oil SAE30 & SAE40 Blend (Pennzoil)	50,113.0 µg/mL	+/- 293.4226	µg/mL	Gravimetric
	CAS # 64742-65-0.F (Lot A0126386)		+/- 1,492.4284	µg/mL	Unstressed
	Purity ----%		+/- 1,591.6738	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

ID #: 10787
Opened:
Residual Range Calibration Standard
Expires: 8/31/2025
Rec'd: 9/18/2018
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

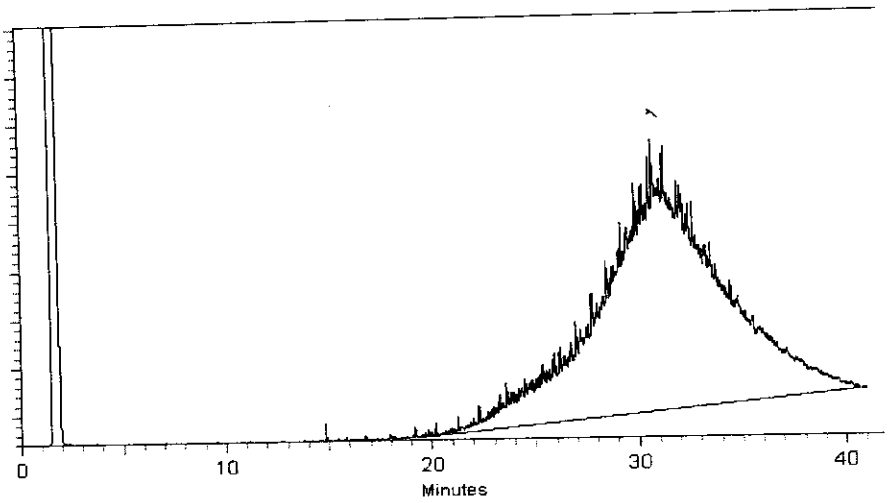
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 28-Jul-2018 **Balance:** B345965662

Diane Shaffer - Operations Tech-ARM QC

Date Passed: 30-Jul-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211006A		
Standard Name	Triacontane SURR 2000 ug/mL	Type:	Secondary
Date Prepared	10/6/2021	BY:	Jillian L Bostwick
Date Expires:	4/6/2026		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:	BAL-DRO		
Comments:	Triacontane SURR 2000 ug/mL		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Acetone DZ509	13553	50	mL	7/22/

Final Volume: 50 mL

Stock Source		**Base Units**	**Amount Added**
DRO210406A	Triacontane-d62 Surr For AK103 RRO	ug/mL	0.1001 g

Analytes		**CAS**	Conc:	**ug/mL**
A	Triacontane-d62			2000

Page: *1 of 1*

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO210406A		
Standard Name	Triacontane-d62 Surr For AK103 RRO	Type:	Neat
Date Prepared	4/6/2021	BY:	Ann Nebel
Date Expires:	4/6/2026		
Department	dropr	Status:	New
Vendor:	Sigma-Aldrich		
Lot Number:	MBBC4347		
Balance ID:			
Comments:	Alaska surr [for AK103 RRO]		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Triacontane-d62-98 atom % D	13736		mL	4/6/2

Final Volume: mL

Stock Source	**Base Units**	**Amount Added**
Analytes	**CAS**	Conc: **ug/mL**
A Triacontane-d62		1

Page: *1 of 1*

SIGMA-ALDRICH®

sigma-aldrich.com

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Triacontane-d62 - 98 atom % D

$CD_3(CD_2)_{28}CD_3$

Product Number:	**451789**
Batch Number:	**MBBC4347**
Brand:	ALDRICH
CAS Number:	93952-07-9
MDL Number:	MFCD00209794
Formula:	C30D62
Formula Weight:	485.20 g/mol
Quality Release Date:	27 APR 2018

ID #: 13736
Opened:
Triacontane-d62-98 atom % D
Expires: 4/6/2026
Rec'd: 4/6/2021
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

Test	Specification	Result
Purity (HPLC)	≥ 99.0 %	99.0 %
Proton NMR Spectrum	Conforms to Structure	Conforms
D Enrichment	≥ 98.0 %	99.0 %
Initial Melting Point		60.0 °C
Final Melting Point		62.0 °C

Greg Abernathy, Supervisor
Quality Control
Miamisburg, Ohio US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Version Number: 1

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211012B		
Standard Name	#2 Diesel in Acetone 150,000 ug/mL	Type:	Secondary
Date Prepared	10/12/2021	BY:	Ann Nebel
Date Expires:	11/5/2023		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:	BAL-DRO		
Comments:	#2 Diesel in Acetone 150,000 ug/mL.		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Acetone EA662	14050	25	mL	1/7/2

Final Volume: 25 mL

Stock Source		**Base Units**	**Amount Added**
DRO181105A	#2 Diesel (NEAT)	ug/mL	3.7507 g

Analytes		**CAS**	Conc:	**ug/mL**
A	#2 Diesel	68476-34-6		150000

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO181105A		
Standard Name	#2 Diesel (NEAT)	Type:	Neat
Date Prepared	11/5/2018	BY:	Ann Nebel
Date Expires:	11/5/2023		
Department	dropr	Status:	New
Vendor:	conoco		
Lot Number:			
Balance ID:			

Comments: -18 Cloud peak. (Conoco Gas Sation 1240 S. 27th Billings, MT) 2nd Source

Final Volume: 250 mL

Stock Source	Base Units	Amount Added	
Analytes	**CAS**	Conc:	**ug/mL**
A #2 Diesel	68476-34-6		1

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO210217A		
Standard Name	20,000 ug/mL Oil Std For AK103 RRO-In DC	Type:	Secondary
Date Prepared	2/17/2021	BY:	Ann Nebel
Date Expires:	8/23/2021		
Department	dropr	Status:	Expired
Vendor:			
Lot Number:			
Balance ID:	Sartorius 4 place balance		

Comments:

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EA342	13510	25	mL	11/17

Final Volume: 25 mL

Stock Source		Base Units	Amount Added
DRO160823C	30W Motor Oil-Valvoline	ug/mL	0.2501 g
DRO160823D	40W Motor Oil-Valvoline	ug/mL	0.2527 g

Analytes		CAS	Conc:	ug/mL
A	30W Motor Oil			10000
A	30W-Motor oil			0
A	40W Motor Oil			10000
A	40W-Motor oil			0

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO160823C		
Standard Name	30W Motor Oil-Valvoline	Type:	Primary
Date Prepared	8/23/2016	BY:	Todd C Cooper
Date Expires:	8/23/2021		
Department	dropr	Status:	Expired
Vendor:			
Lot Number:			
Balance ID:			

Comments: Used to make 2nd Source Standard for AK103 method.

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Valvoline SAE 30 Motor Oil	8637		mL	8/23/

Final Volume: mL

Stock Source	**Base Units**	**Amount Added**
Analytes	**CAS**	Conc: **ug/mL**
A 30W-Motor oil		1

Page: *1 of 1*

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO160823D		
Standard Name	40W Motor Oil-Valvoline	Type:	Primary
Date Prepared	8/23/2016	BY:	Todd C Cooper
Date Expires:	8/23/2021		
Department	dropr	Status:	Expired
Vendor:			
Lot Number:			
Balance ID:			

Comments: Used to Make 2nd Source Standards For Alaska AK103 RRO Method

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Valvoline SAE 40 Motor Oil	8638		mL	8/23/

Final Volume: mL

Stock Source	**Base Units**	**Amount Added**
Analytes	**CAS**	Conc: **ug/mL**
A 40W-Motor oil		1

Page: *1 of 1*

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211220A		
Standard Name	8015 CCV-15,000ug/mL + 200 OTP	Type:	Secondary
Date Prepared	12/20/2021	BY:	Ann Nebel
Date Expires:	4/30/2023		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:			
Comments:	8015DRO CCV MIX-15,000ug/mL +200 OTP #2 Diesel		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC757	14596	2.6	mL	10/20

Final Volume: 4 mL

Stock Source		Base Units	Amount Added
DRO211101A	OTP-4000 ug/mL DCM	ug/mL	0.2 mL
DRO211102B	Diesel Fuel #2 50,000 ug/mL in DCM	ug/mL	1.2 mL

	Analytes	CAS	Conc: ug/mL
A	#2 Diesel		15000
	Diesel Fuel #2		0
A	O-Terphenyl	84-15-1	200

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211102B		
Standard Name	Diesel Fuel #2 50,000 ug/mL in DCM	Type:	Primary
Date Prepared	11/2/2021	BY:	Ann Nebel
Date Expires:	4/30/2023		
Department	dropr	Status:	New
Vendor:	Sigma-Aldrich		
Lot Number:	LRAC6316		
Balance ID:			
Comments:	Diesel Fuel #2 For CCVs.		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Diesel Fuel No. 2	14478	1	mL	4/30/

Final Volume: mL

Stock Source	**Base Units**	**Amount Added**	
Analytes	**CAS**	Conc:	**ug/mL**
Diesel Fuel #2			0

Certificate of Analysis

Diesel Fuel No. 2

Certified Reference Material

Description

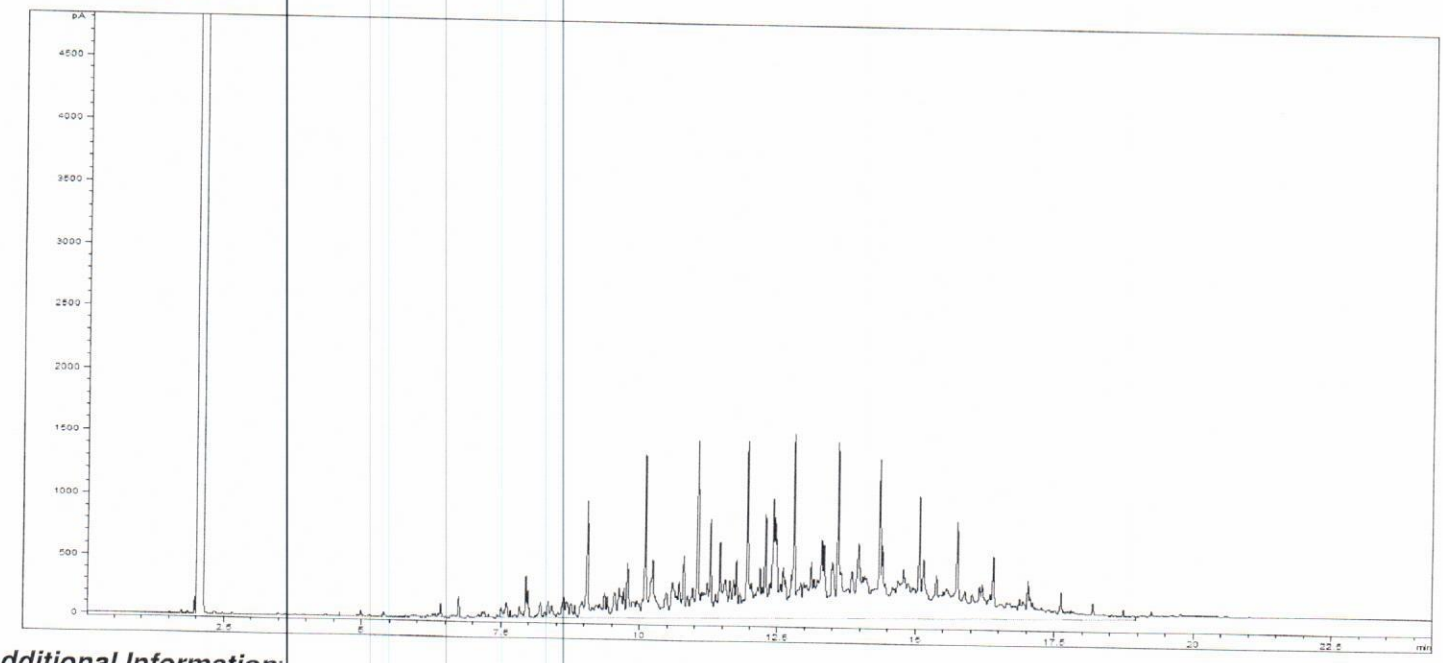
Product ID UST148
Lot **LRAC6316**
Expiration Date April 2023
Manufacturing Date April 2020
Storage Conditions Room Temperature
Solvent/Matrix DICHLOROMETHANE

ID #: 14478
Opened:_____
Diesel Fuel No. 2
Expires: 4/30/2023
Rec'd: 11/2/2021
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

Certified Values

Analyte	*Certified Value* [1,4]	*Units*	*Raw Material Purity,%*	*Raw Material Lot*	*CAS*
NO.2 FUEL OIL	50001 ± 2770	µg/mL	100.0	LA80505	68476-34-6

Informational Values



Additional Information:

Analytical Method Parameters:
Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #214)
Carrier Gas: H2, Flow: 4.0 mL/min
Inlet Temperature: 250 °C, Injection Volume: 1.0 µL
Injection Mode: Split, Split Ratio: 10: 1
Temperature Program: 40 °C (Hold 2 min) @ 15 °C/min to 300 °C (Hold 5 min)
Detector: FID
Detector Temperature: 300 °C

ANAB ACCREDITED
REFERENCE MATERIAL PRODUCER

SIGMA-ALDRICH
2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@millliporesigma.com www.sigma-aldrich.com

Description

Lot LRAC6316
Expiration Date April 2023
Manufacturing Date April 2020
Storage Conditions Room Temperature
Solvent/Matrix DICHLOROMETHANE

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

k: Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date April 30, 2020
Version 0-4302020

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Energy Laboratories Inc

Spike LOG

Standard ID:	DRO211101A		
Standard Name	OTP-4000 ug/mL DCM	Type:	Secondary
Date Prepared	11/1/2021	BY:	Ann Nebel
Date Expires:	9/30/2024		
Department	dropr	Status:	Open
Vendor:			
Lot Number:			
Balance ID:	BAL-DRO		
Comments:	Used to Prep DRO-8015 ICAL and CCV Solutions		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC328	14408	25	mL	8/19/

Final Volume: 25 mL

Stock Source		**Base Units**	**Amount Added**
DRO200430B	O-Terphenyl	ug/mL	0.1012 g

Analytes		**CAS**	Conc:	**ug/mL**
A	O-Terphenyl	84-15-1		4000

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO200430B		
Standard Name	O-Terphenyl	Type:	Neat
Date Prepared	4/30/2020	BY:	Ann Nebel
Date Expires:	9/30/2024		
Department	dropr	Status:	New
Vendor:	Chemservice		
Lot Number:	9972100		
Balance ID:			
Comments:	ID#: 6271		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
o-Terphenyl	12650	500	mg	9/30/

Final Volume: mL

Stock Source	**Base Units**	**Amount Added**
Analytes	**CAS**	Conc: **ug/mL**
A O-Terphenyl	84-15-1	1

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

o-Terphenyl

CATALOG NUMBER	N-12693-500MG
LOT NUMBER	9972100
DATE CERTIFIED	09/23/19
EXPIRATION DATE	09/30/24
CAS NUMBER	84-15-1
MOLECULAR FORMULA	C18H14
MOLECULAR WEIGHT	230.32
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

Analytical Test	Value
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
GC/MS SPECTRA ID	MATCHES NIST DATABASE
MELTING POINT (°C)	57.1
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

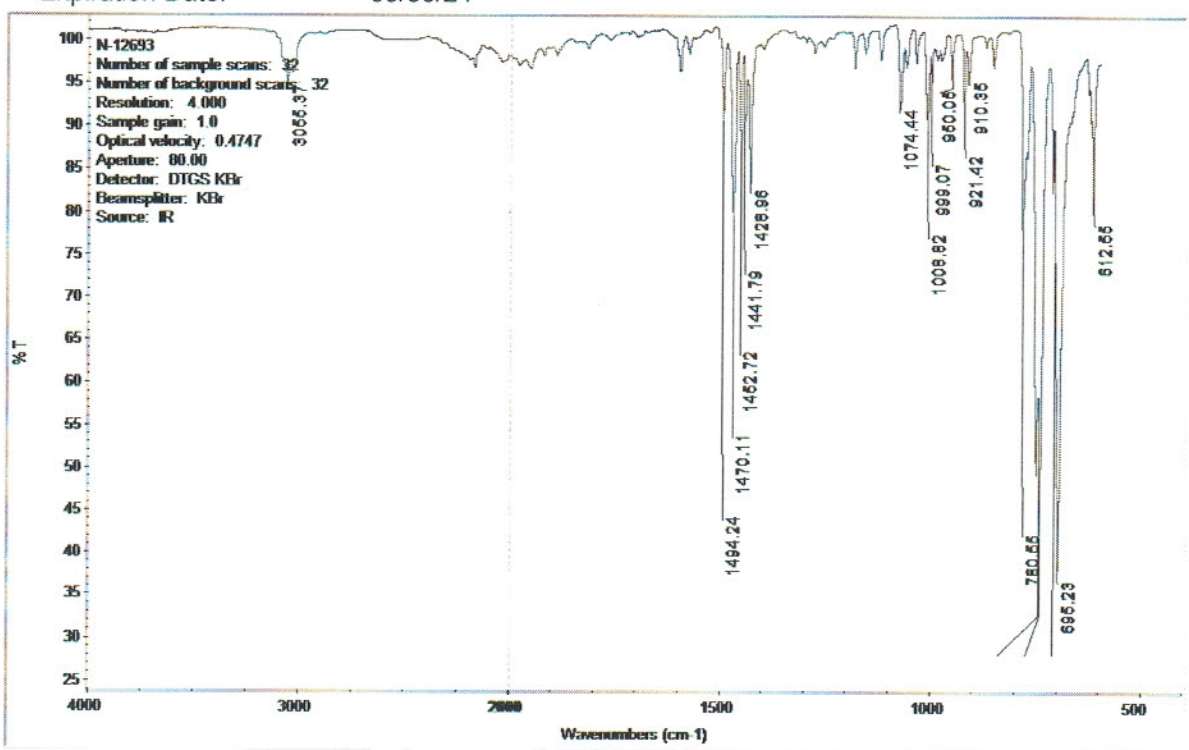
ID #: 12650
Opened:
o-Terphenyl
Expires: 9/30/2024
Rec'd: 4/30/2020
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015

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info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24

Chem Service Inc Area Percent Report

Data File: D:\msdchem\2019 DATA\0919\0923-01.D
Acq On : 23 Sep 2019 10:40
Operator :
Sample : n-12693
Misc :
ALS Vial : 95

Integration Parameters: autoint1.e
Integrator: ChemStation

DataAcq Meth:SCREEN.M
Method : D:\msdchem\2019 DATA\0919\0903-09.D\ERIN.M

Signal : TIC: 0923-01.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	11.844	1597	1606	1613	BB	32038221	432253484	100.00%	100.000%

Sum of corrected areas: 432253484

ERIN.M Mon Sep 23 10:55:51 2019

Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015
PJLA Reference Material Producer
PJLA Testing

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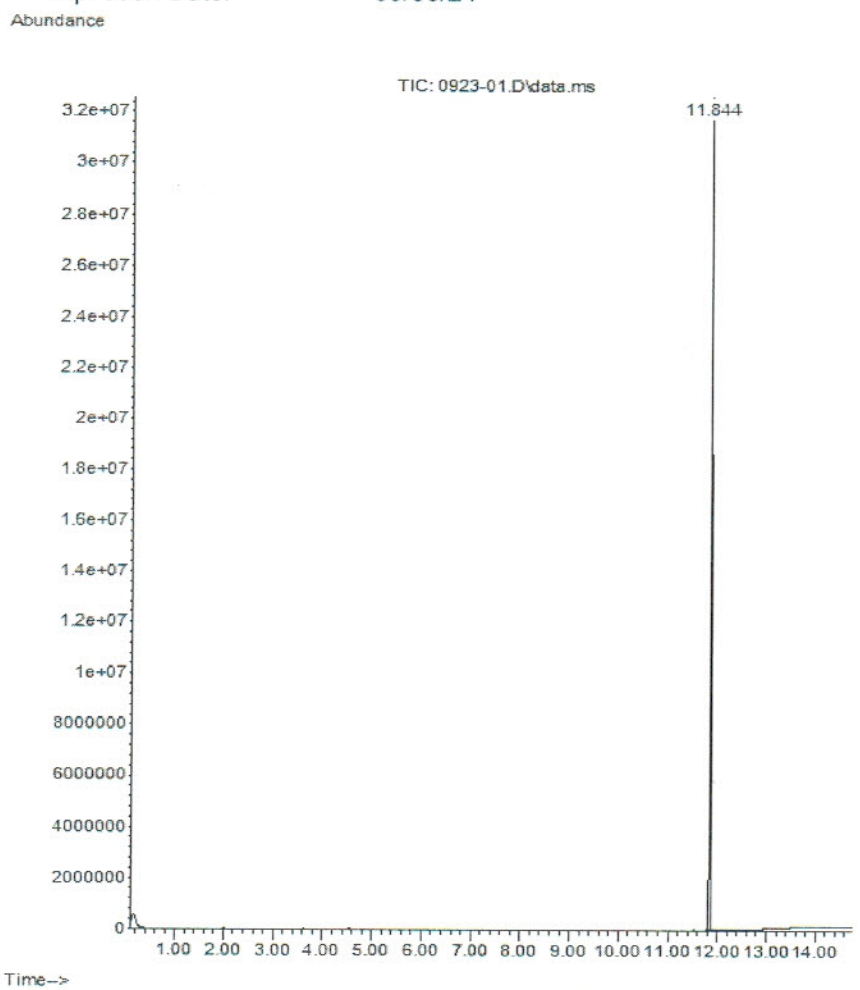
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



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PJLA Reference Material Producer
PJLA Testing

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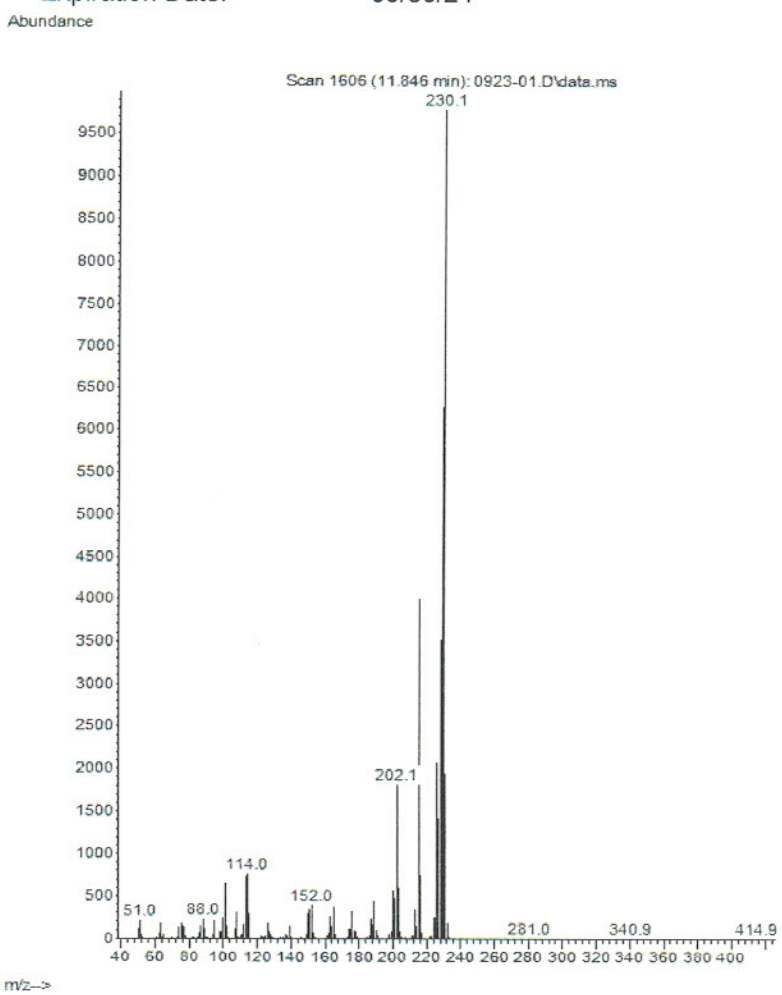
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



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PJLA Testing

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CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24

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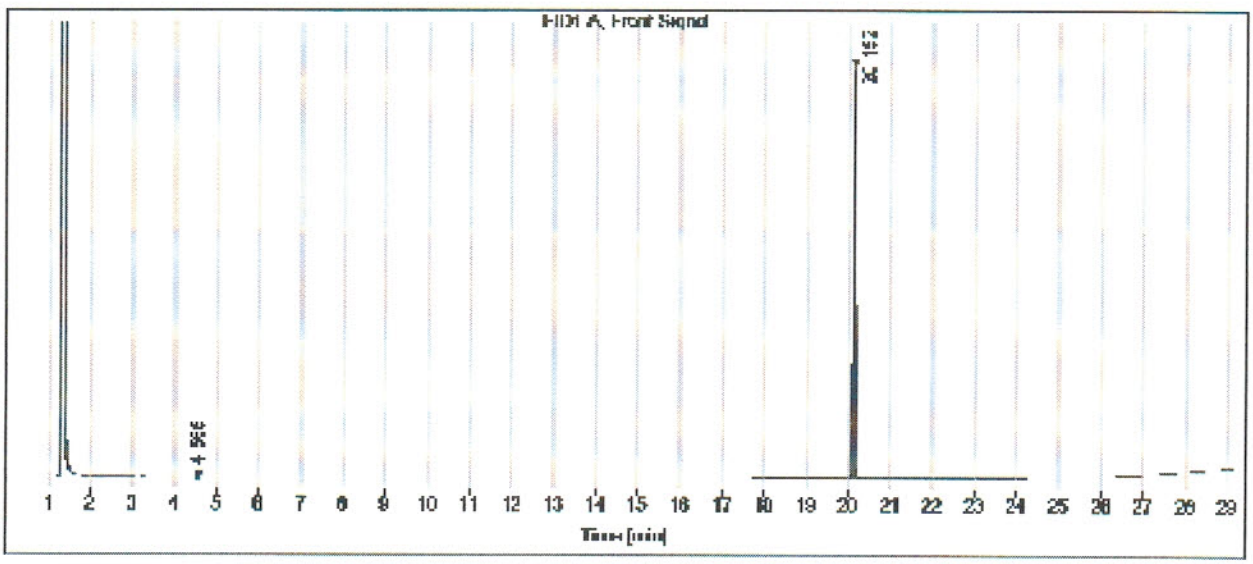
Gas

CERTIFICATE OF ANALYSIS

Data file:	C:\CHEM32		
Sample name:	N-12693		
Instrument:	GC 2	**Sample type:**	Sample
Injection date:	9/23/2019 9:56:34 AM	**Location:**	Vial 141
Acq. method:	SCREEN.M	**Injection volume:**	1.0uL
Column name:	HP-5		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
4.565	BB	0.0305	1.2408	0.5122	0.11
20.152	BB	0.0391	1171.9556	439.4599	99.89
		Sum	1173.1963		

Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015

PJLA Reference Material Producer
PJLA Testing

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211220C		
Standard Name	5,000 ug/mL RRO CCV 200 ug/mL Triaconta	Type:	Secondary
Date Prepared	12/20/2021	BY:	Ann Nebel
Date Expires:	4/6/2026		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:	Sartorius 4 place balance		
Comments:	CCV for AK102 and 8015C RRO.		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC757	14596	2.8	mL	10/20

Final Volume: 4 mL

Stock Source		Base Units	Amount Added
DRO210401B	50,000 ug/mL Oil Std For AK103 RRO-I	ug/mL	400 µL
DRO211129A	Triacontane SURR 1000 ug/mL	ug/mL	800 µL

Analytes		CAS	Conc:	ug/mL
A	30/40W Motor Oil			5000
A	Triacontane-d62			200

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO210401B		
Standard Name	50,000 ug/mL Oil Std For AK103 RRO-In DC	Type:	Primary
Date Prepared	4/1/2021	BY:	Ann Nebel
Date Expires:	1/31/2028		
Department	dropr	Status:	Open
Vendor:	Restek		
Lot Number:	A0166827		
Balance ID:	Sartorius 4 place balance		

Comments:

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Residual Range Calibration Standard (	13714	1	mL	1/31/

Final Volume: 1 mL

Stock Source	**Base Units**	**Amount Added**
Analytes	**CAS**	Conc: **ug/mL**

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31817 **Lot No.:** A0166827

Description : Residual Range Calibration Standard (RCS)

Residual Range Calib Std (RCS) 50,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2028 **Storage:** 25°C nominal

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Motor Oil SAE30 & SAE40 Blend (Pennzoil)	50,056.0 µg/mL	+/- 293.0889	µg/mL	Gravimetric
	CAS # 64742-65-0.F (Lot A0126386)		+/- 1,490.7309	µg/mL	Unstressed
	Purity ----%		+/- 1,589.8634	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

ID #: 13714
Opened:
Residual Range Calibration Standard (RCS)
Expires: 1/31/2028
Rec'd: 4/1/2021
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

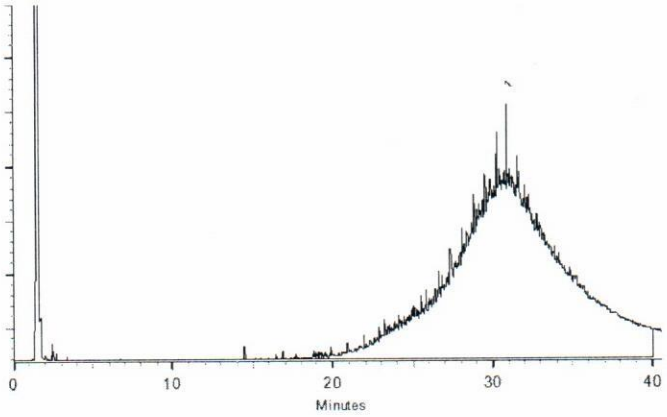
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kylie Struble - Operations Technician I

Date Mixed: 02-Dec-2020 **Balance:** 1128353505

Justine Albertson - Operations Tech-ARM QC

Date Passed: 07-Dec-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211129A		
Standard Name	Triacontane SURR 1000 ug/mL	Type:	Secondary
Date Prepared	11/29/2021	BY:	Jillian L Bostwick
Date Expires:	4/6/2026		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:	BAL-DRO		
Comments:	2X dilution of Triacontane SURR 2000 ug/mL		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC735	14518	5	mL	10/14

Final Volume: 10 mL

Stock Source		**Base Units**	**Amount Added**
DRO211006A	Triacontane SURR 2000 ug/mL	ug/mL	5 mL

Analytes		**CAS**	Conc:	**ug/mL**
A	Triacontane-d62			1000

Page: *1 of 1*

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211006A		
Standard Name	Triacontane SURR 2000 ug/mL	Type:	Secondary
Date Prepared	10/6/2021	BY:	Jillian L Bostwick
Date Expires:	4/6/2026		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:	BAL-DRO		
Comments:	Triacontane SURR 2000 ug/mL		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Acetone DZ509	13553	50	mL	7/22/

Final Volume: 50 mL

Stock Source		**Base Units**	**Amount Added**
DRO210406A	Triacontane-d62 Surr For AK103 RRO	ug/mL	0.1001 g

Analytes		**CAS**	Conc:	**ug/mL**
A	Triacontane-d62			2000

Page: *1 of 1*

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO210406A		
Standard Name	Triacontane-d62 Surr For AK103 RRO	Type:	Neat
Date Prepared	4/6/2021	BY:	Ann Nebel
Date Expires:	4/6/2026		
Department	dropr	Status:	New
Vendor:	Sigma-Aldrich		
Lot Number:	MBBC4347		
Balance ID:			
Comments:	Alaska surr [for AK103 RRO]		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Triacontane-d62-98 atom % D	13736		mL	4/6/2

Final Volume: mL

Stock Source **Base Units** **Amount Added**

Analytes **CAS** Conc: **ug/mL**

A Triacontane-d62

Page: *1 of 1*

SIGMA-ALDRICH®

sigma-aldrich.com

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Triacontane-d_{62} - 98 atom % D

$CD_3(CD_2)_{28}CD_3$

Product Number:	**451789**
Batch Number:	**MBBC4347**
Brand:	ALDRICH
CAS Number:	93952-07-9
MDL Number:	MFCD00209794
Formula:	C30D62
Formula Weight:	485.20 g/mol
Quality Release Date:	27 APR 2018

ID #: 13736
Opened:
Triacontane-d62-98 atom % D
Expires: 4/6/2026
Rec'd: 4/6/2021
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

Test	Specification	Result
Purity (HPLC)	≥ 99.0 %	99.0 %
Proton NMR Spectrum	Conforms to Structure	Conforms
D Enrichment	≥ 98.0 %	99.0 %
Initial Melting Point		60.0 °C
Final Melting Point		62.0 °C

Greg Abernathy, Supervisor
Quality Control
Miamisburg, Ohio US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211213A		
Standard Name	OTP only SURR 2000 ug/mL	Type:	Secondary
Date Prepared	12/13/2021	BY:	Jillian L Bostwick
Date Expires:	9/30/2024		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:	BAL-DRO		
Comments:	OTP SURR 2000 ug/mL		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Acetone DZ509	13553	100	mL	7/22/

Final Volume: 100 mL

Stock Source		Base Units	Amount Added
DRO200430B	O-Terphenyl	ug/mL	0.2015 g

Analytes		CAS	Conc:	ug/mL
A	1-Chlorooctadecane	3386-33-2		2000

Page: *1 of 1*

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO200430B		
Standard Name	O-Terphenyl	Type:	Neat
Date Prepared	4/30/2020	BY:	Ann Nebel
Date Expires:	9/30/2024		
Department	dropr	Status:	New
Vendor:	Chemservice		
Lot Number:	9972100		
Balance ID:			
Comments:	ID#: 6271		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
o-Terphenyl	12650	500	mg	9/30/

Final Volume: mL

Stock Source	**Base Units**	**Amount Added**
Analytes	**CAS**	Conc: **ug/mL**
A O-Terphenyl	84-15-1	1

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info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

o-Terphenyl

CATALOG NUMBER	N-12693-500MG
LOT NUMBER	9972100
DATE CERTIFIED	09/23/19
EXPIRATION DATE	09/30/24
CAS NUMBER	84-15-1
MOLECULAR FORMULA	C18H14
MOLECULAR WEIGHT	230.32
STORAGE	Store in a cool dry place.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

Analytical Test	Value
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
GC/MS SPECTRA ID	MATCHES NIST DATABASE
MELTING POINT (°C)	57.1
% PURITY (GC/FID)	99.5

Chem Service, Inc. guarantees the purity to be +/- 0.5% deviation prior to the expiration date shown on the label and exclusive of any customer contamination.

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

ID #: 12650
Opened:
o-Terphenyl
Expires: 9/30/2024
Rec'd: 4/30/2020
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

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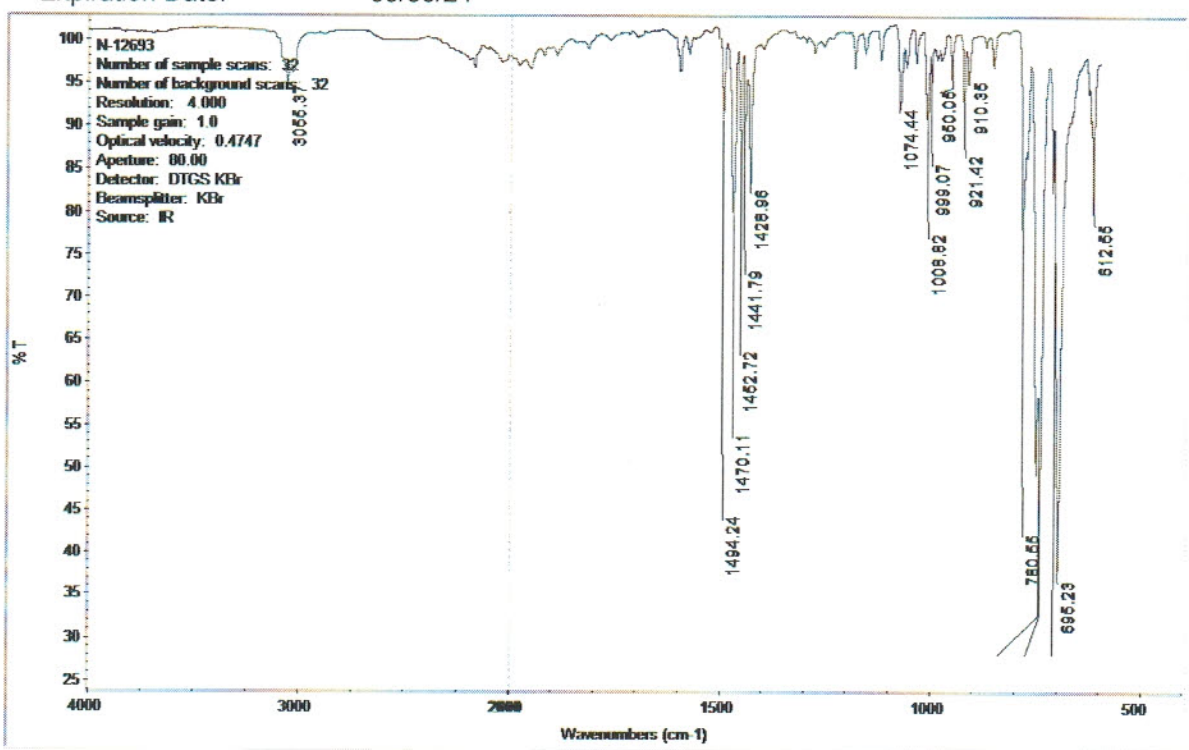
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015
PJLA Reference Material Producer
PJLA Testing

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1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24

Chem Service Inc Area Percent Report

Data File: D:\msdchem\2019 DATA\0919\0923-01.D
Acq On : 23 Sep 2019 10:40
Operator :
Sample : n-12693
Misc :
ALS Vial : 95

Integration Parameters: autoint1.e
Integrator: ChemStation

DataAcq Meth:SCREEN.M
Method : D:\msdchem\2019 DATA\0919\0903-09.D\ERIN.M

Signal : TIC: 0923-01.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	11.844	1597	1606	1613	BB	32038221	432253484	100.00%	100.000%

Sum of corrected areas: 432253484

ERIN.M Mon Sep 23 10:55:51 2019

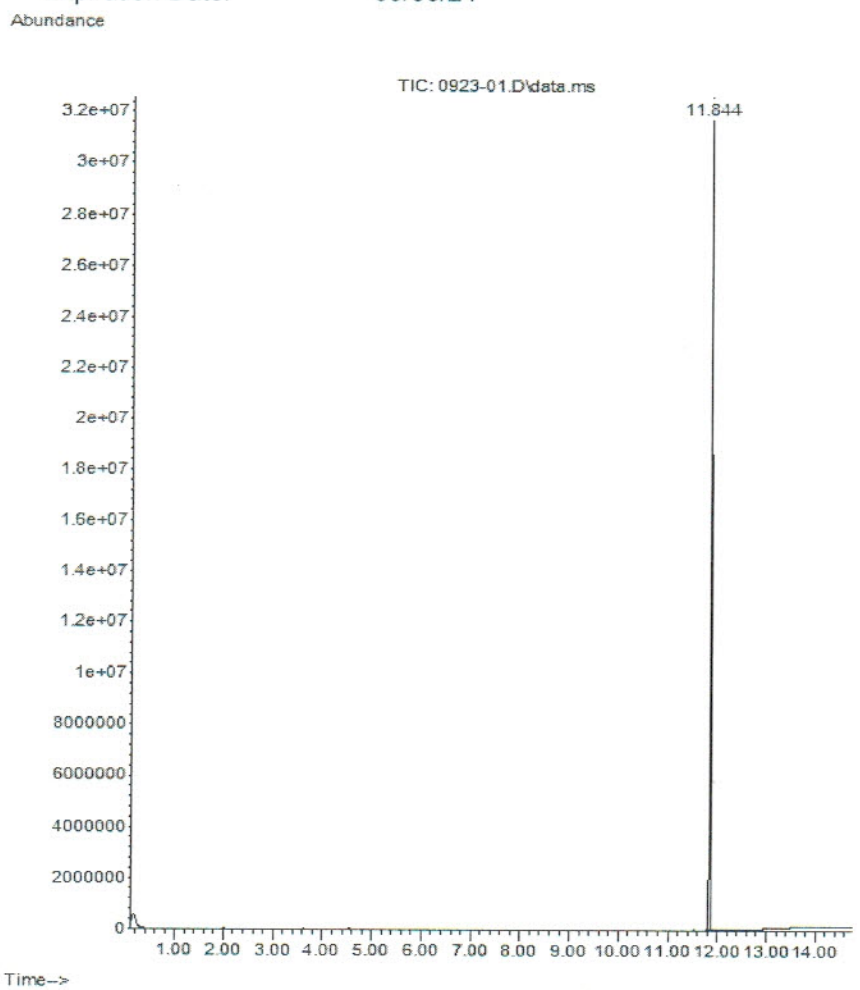
Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015
PJLA Reference Material Producer
PJLA Testing

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



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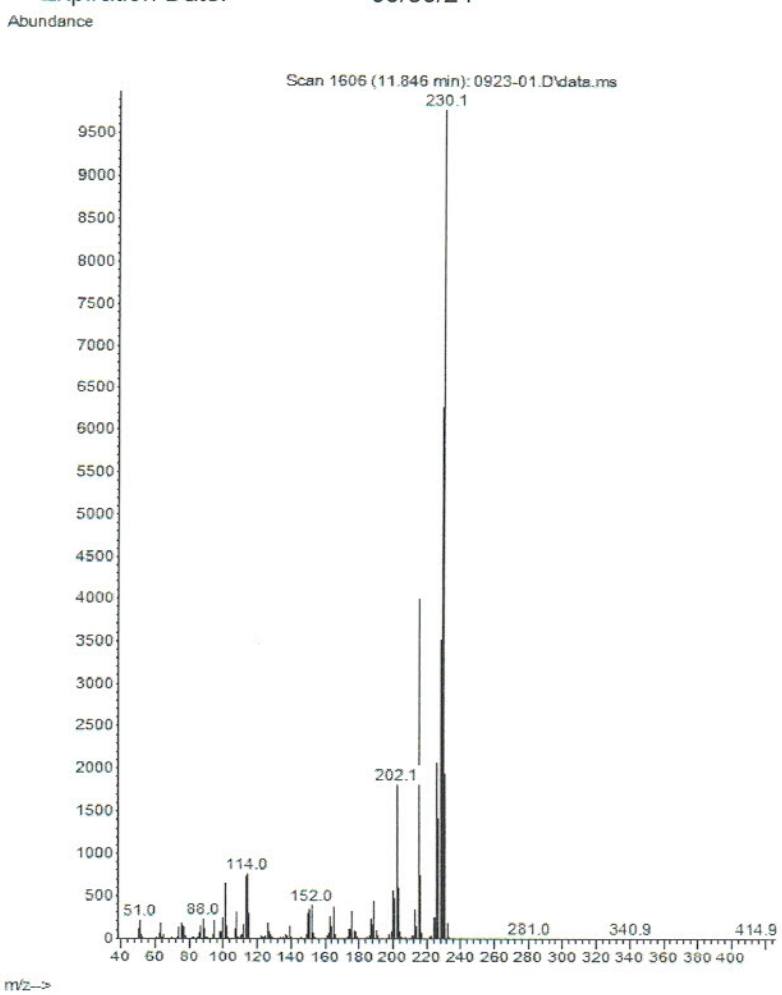

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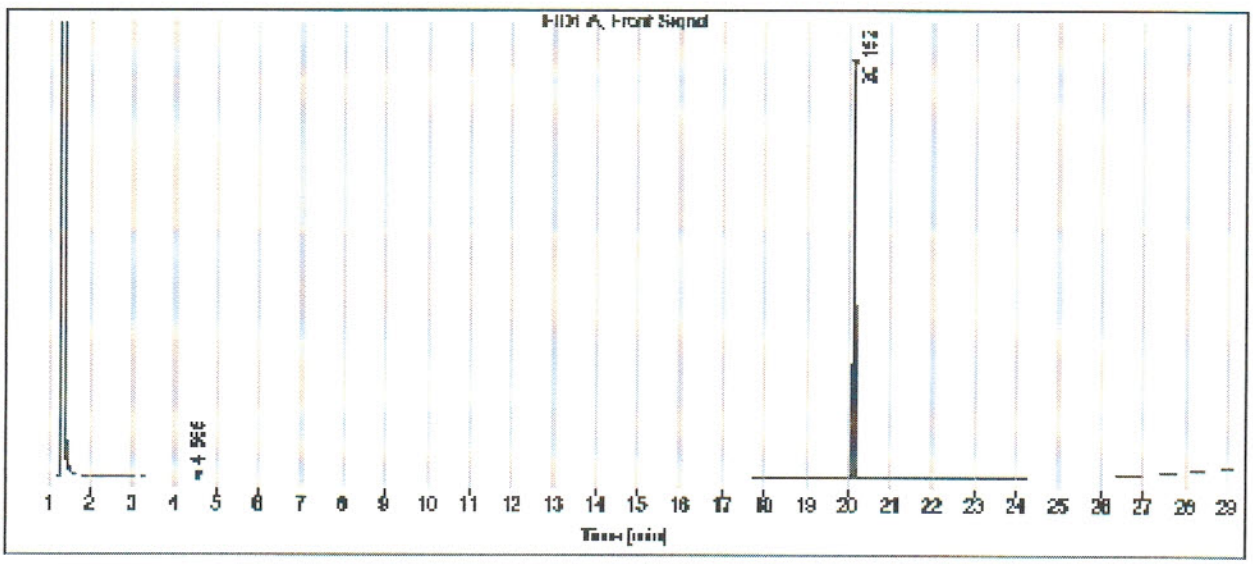
Gas

CERTIFICATE OF ANALYSIS

Data file:	C:\CHEM3\		
Sample name:	N-12693		
Instrument:	GC 2	**Sample type:**	Sample
Injection date:	9/23/2019 9:56:34 AM	**Location:**	Vial 141
Acq. method:	SCREEN.M	**Injection volume:**	1.0uL
Column name:	HP-5		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
4.565	BB	0.0305	1.2408	0.5122	0.11
20.152	BB	0.0391	1171.9556	439.4599	99.89
		Sum	1173.1963		

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PJLA Reference Material Producer
PJLA Testing

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO210902A		
Standard Name	50,000 ug/mL Oil Std for RRO-In DCM	Type:	Secondary
Date Prepared	9/2/2021	BY:	Jillian L Bostwick
Date Expires:	9/1/2026		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:	BAL-DRO		
Comments:	.625 g of 30W and 40 W each LCS for Oil range		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EB867	14196	25	mL	6/18/

Final Volume: 25 mL

Stock Source		Base Units	Amount Added
DRO210901B	40W Motor Oil-Valvoline	ug/mL	0.6261 g
DRO210901A	30W Motor Oil-Valvoline	ug/mL	0.6254 g

Analytes		CAS	Conc: ug/mL
A	30W Motor Oil		10000
A	30W-Motor oil		0
A	40W Motor Oil		10000
A	40W-Motor oil		0

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO210901B		
Standard Name	40W Motor Oil-Valvoline	Type:	Primary
Date Prepared	9/1/2021	BY:	Jillian L Bostwick
Date Expires:	9/1/2026		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:			

Comments: Used to Make 2nd Source Standards For Alaska AK103 RRO Method and Oil

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Valvoline SAE 40 Motor Oil	14231		mL	9/1/2

Final Volume: mL

Stock Source	**Base Units**	**Amount Added**
Analytes	**CAS**	Conc: **ug/mL**
A 40W-Motor oil		1

Page: *1 of 1*

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO210901A		
Standard Name	30W Motor Oil-Valvoline	Type:	Primary
Date Prepared	9/1/2021	BY:	Jillian L Bostwick
Date Expires:	9/1/2026		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:			

Comments: Used to make 2nd Source Standard for AK103 method.

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Valvoline SAE 30 Motor Oil	14232		mL	9/1/2

Final Volume: mL

Stock Source	**Base Units**	**Amount Added**
Analytes	**CAS**	Conc: **ug/mL**
A 30W-Motor oil		1

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Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211129A		
Standard Name	Triacontane SURR 1000 ug/mL	Type:	Secondary
Date Prepared	11/29/2021	BY:	Jillian L Bostwick
Date Expires:	4/6/2026		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:	BAL-DRO		
Comments:	2X dilution of Triacontane SURR 2000 ug/mL		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC735	14518	5	mL	10/14

Final Volume: 10 mL

Stock Source		**Base Units**	**Amount Added**
DRO211006A	Triacontane SURR 2000 ug/mL	ug/mL	5 mL

Analytes		**CAS**	Conc:	**ug/mL**
A	Triacontane-d62			1000

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Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211006A		
Standard Name	Triacontane SURR 2000 ug/mL	Type:	Secondary
Date Prepared	10/6/2021	BY:	Jillian L Bostwick
Date Expires:	4/6/2026		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:	BAL-DRO		
Comments:	Triacontane SURR 2000 ug/mL		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Acetone DZ509	13553	50	mL	7/22/

Final Volume: 50 mL

Stock Source		**Base Units**	**Amount Added**
DRO210406A	Triacontane-d62 Surr For AK103 RRO	ug/mL	0.1001 g

Analytes		**CAS**	Conc:	**ug/mL**
A	Triacontane-d62			2000

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO210406A		
Standard Name	Triacontane-d62 Surr For AK103 RRO	Type:	Neat
Date Prepared	4/6/2021	BY:	Ann Nebel
Date Expires:	4/6/2026		
Department	dropr	Status:	New
Vendor:	Sigma-Aldrich		
Lot Number:	MBBC4347		
Balance ID:			
Comments:	Alaska surr [for AK103 RRO]		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Triacontane-d62-98 atom % D	13736		mL	4/6/2

Final Volume: mL

Stock Source **Base Units** **Amount Added**

Analytes **CAS** Conc: **ug/mL**

A Triacontane-d62

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Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Triacontane-d_{62} - 98 atom % D

$CD_3(CD_2)_{28}CD_3$

Product Number:	**451789**
Batch Number:	**MBBC4347**
Brand:	ALDRICH
CAS Number:	93952-07-9
MDL Number:	MFCD00209794
Formula:	C30D62
Formula Weight:	485.20 g/mol
Quality Release Date:	27 APR 2018

ID #: 13736
Opened:
Triacontane-d62-98 atom % D
Expires: 4/6/2026
Rec'd: 4/6/2021
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

Test	Specification	Result
Purity (HPLC)	≥ 99.0 %	99.0 %
Proton NMR Spectrum	Conforms to Structure	Conforms
D Enrichment	≥ 98.0 %	99.0 %
Initial Melting Point		60.0 °C
Final Melting Point		62.0 °C

Greg Abernathy, Supervisor
Quality Control
Miamisburg, Ohio US

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Version Number: 1