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

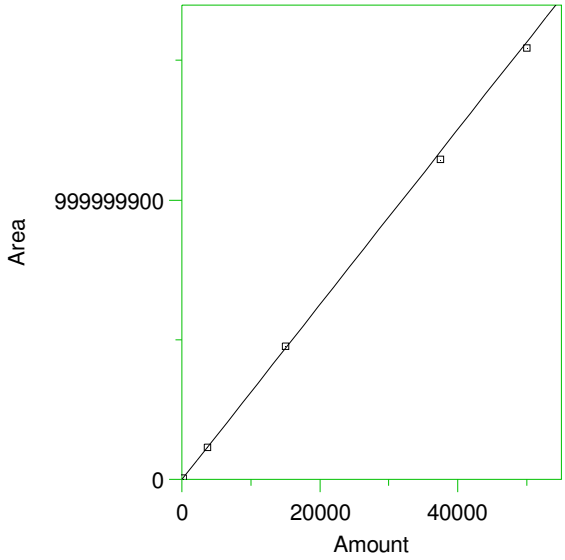
Creator: AMN 11/02/2021
Description: 8015C-DRO. New ICal Per 1102HP5 (2021)-2 uL Inj.; COD added using OTP RFs
Reason for change:

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

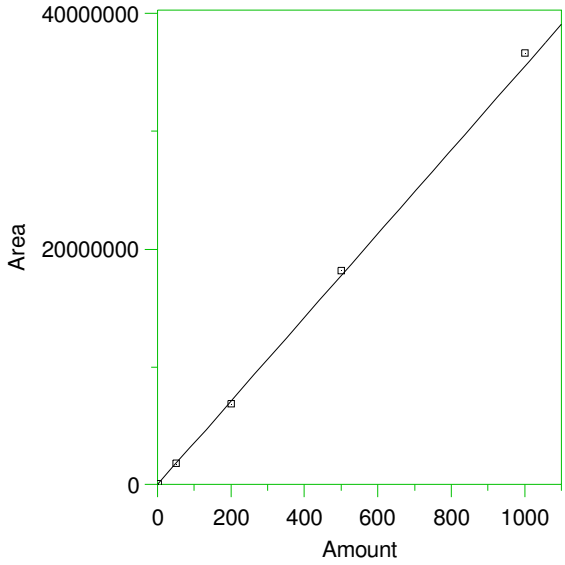
Y = 31353.19 X + 0

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

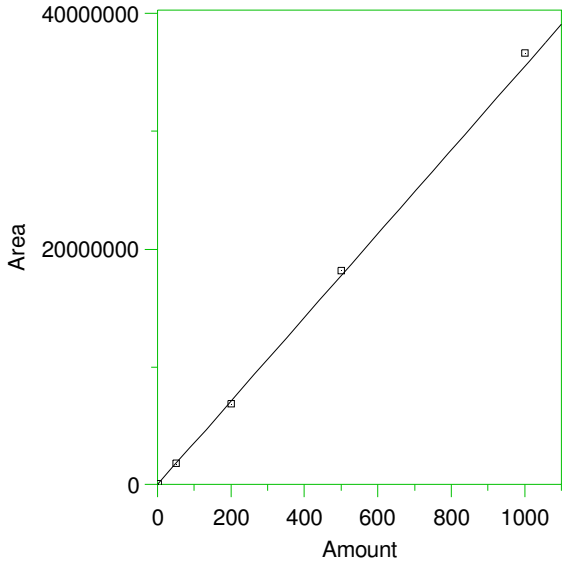
Y = 35509.21 X + 0

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

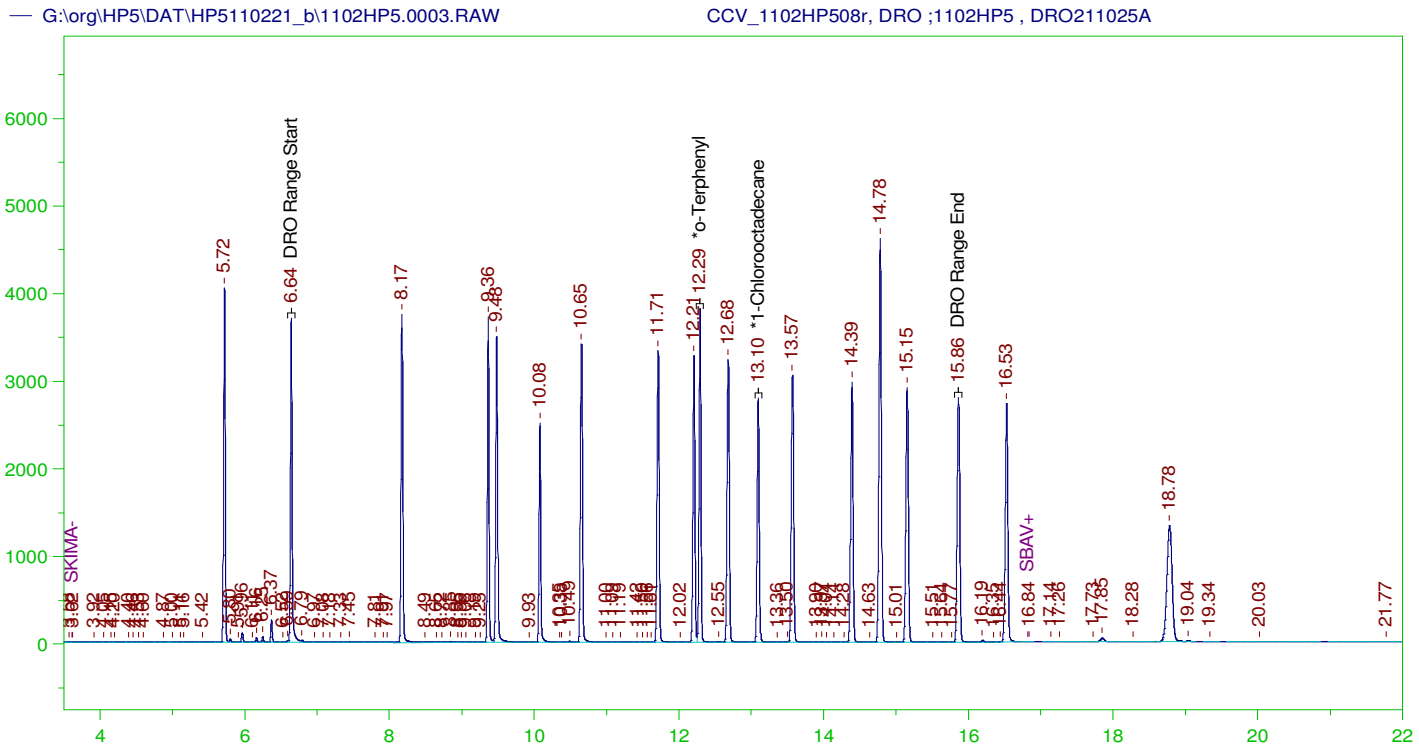
Single peak quantification by area

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

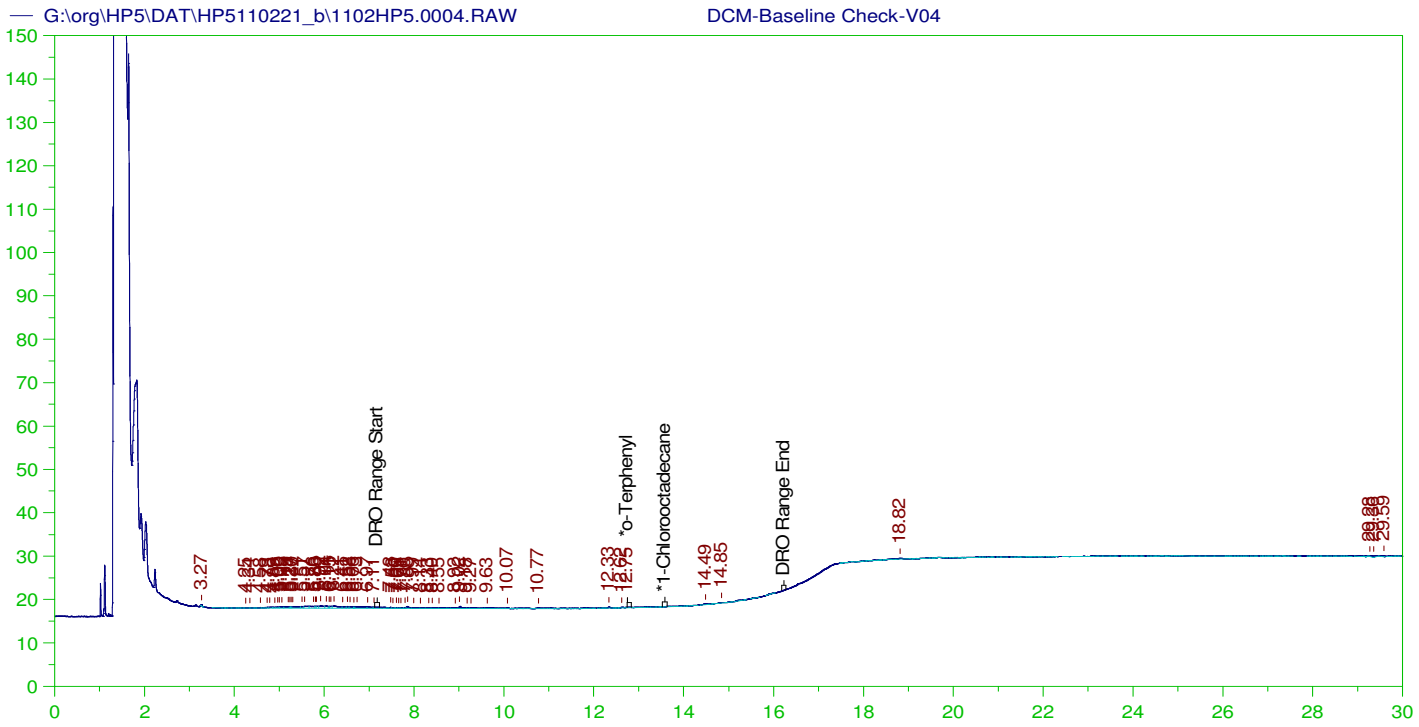
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.292	200.	201.539	100.77	-
*1-Chlorooctadecane	13.095	200.	163.573	81.79	-

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



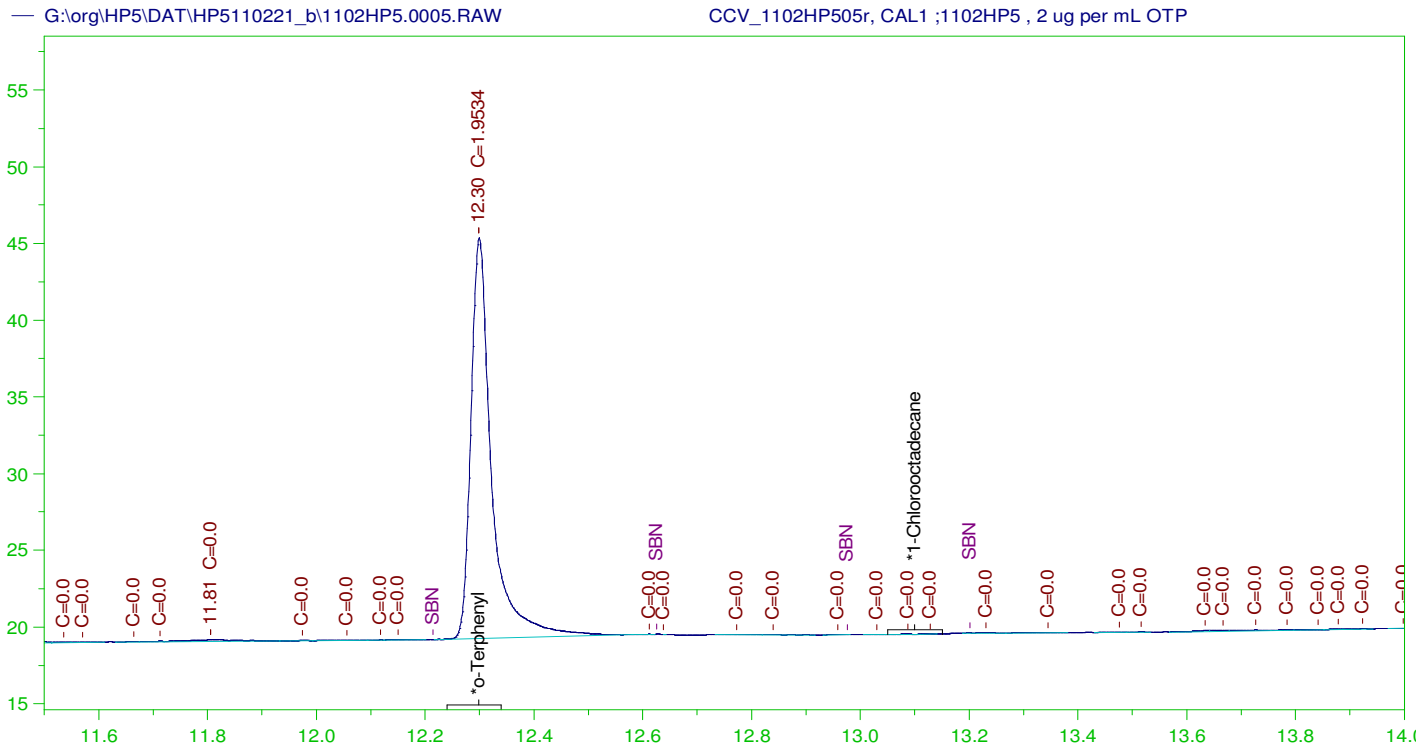
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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

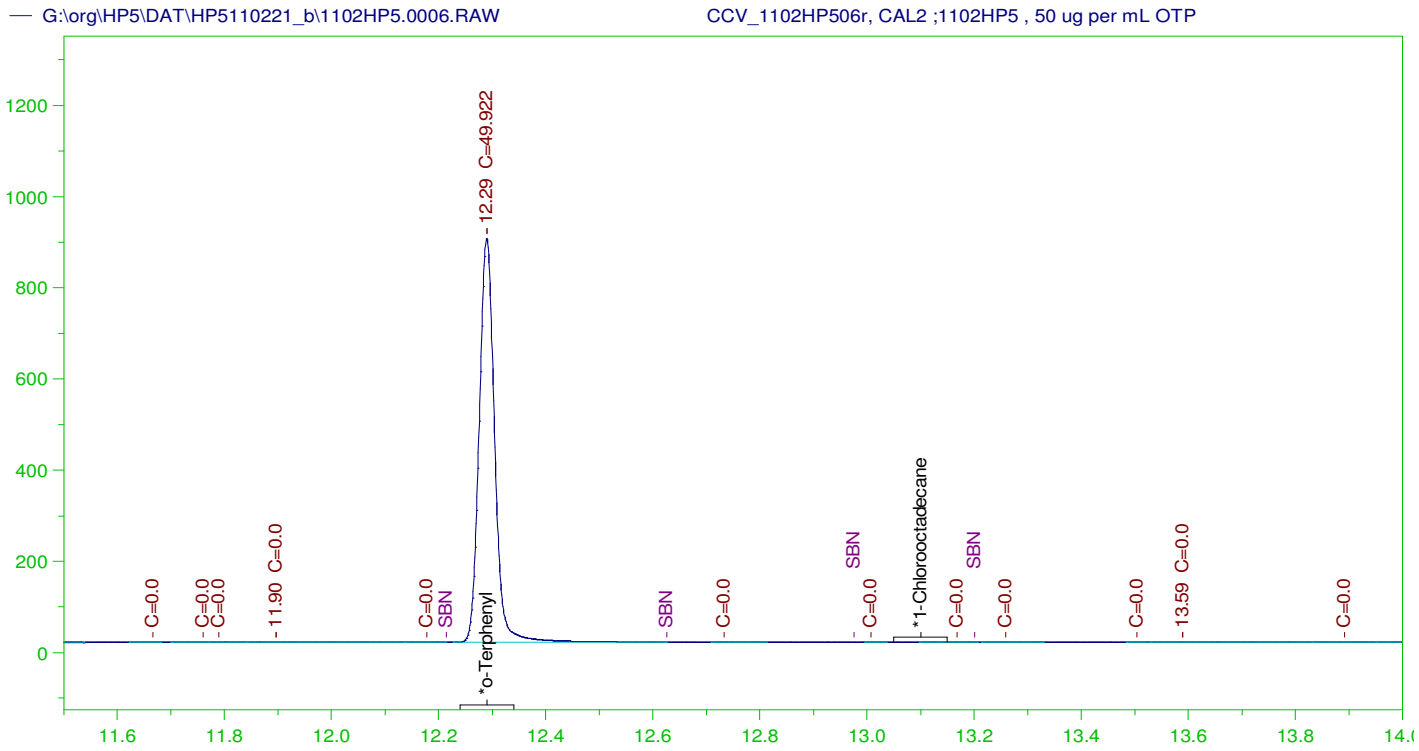
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.299	200.	1.953	.98	-
*1-Chlorooctadecane	15.561	200.	.	.	-

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

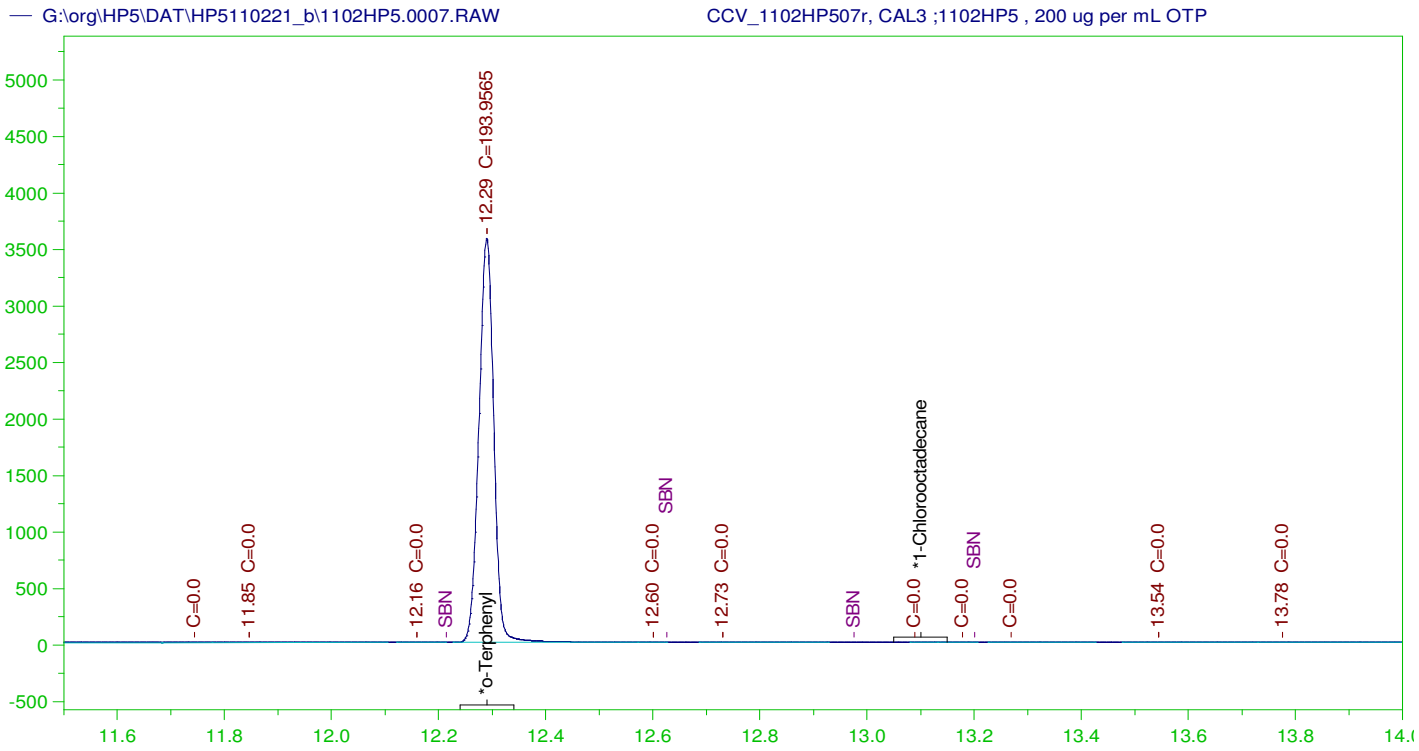
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.29	200.	49.922	24.96	-
*1-Chlorooctadecane	15.697	200.	.	.	-

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

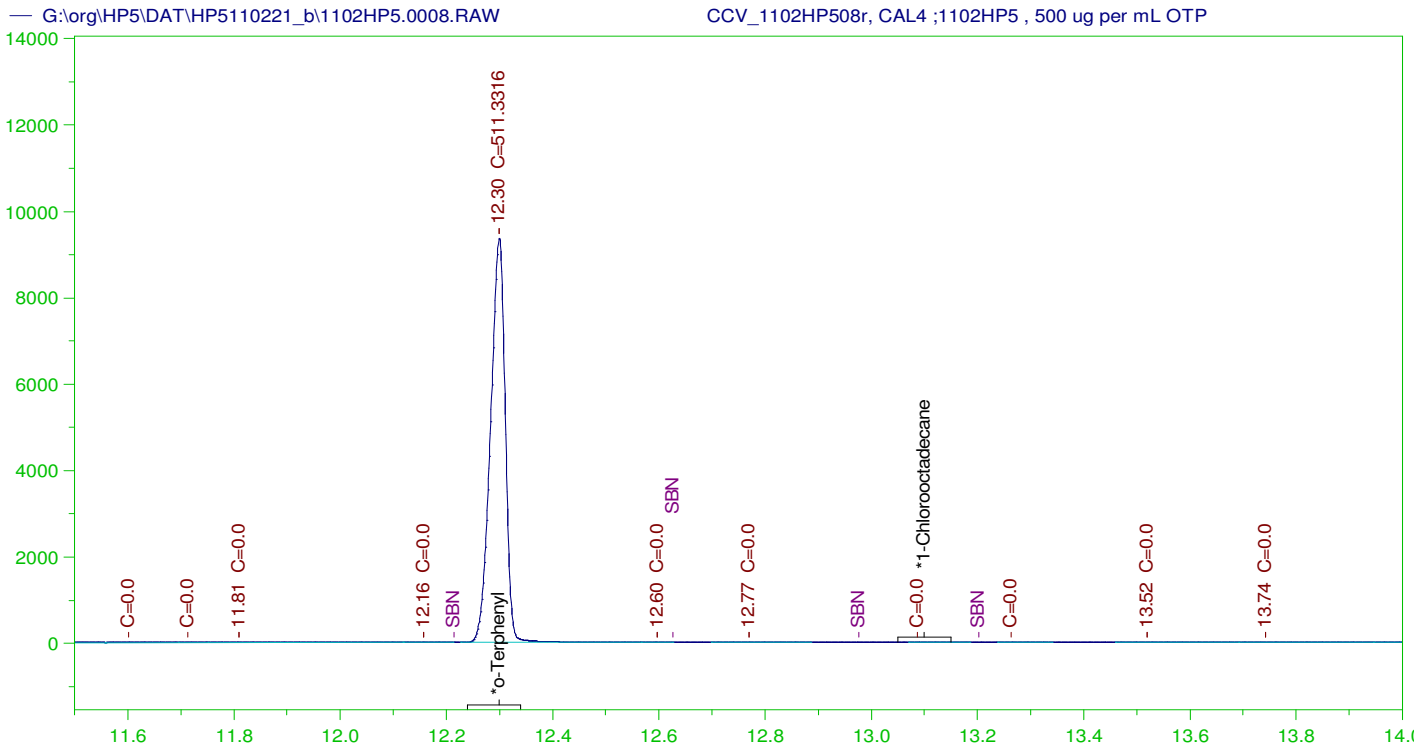
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.29	200.	193.957	96.98	-
*1-Chlorooctadecane	15.779	200.	.	.	-

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

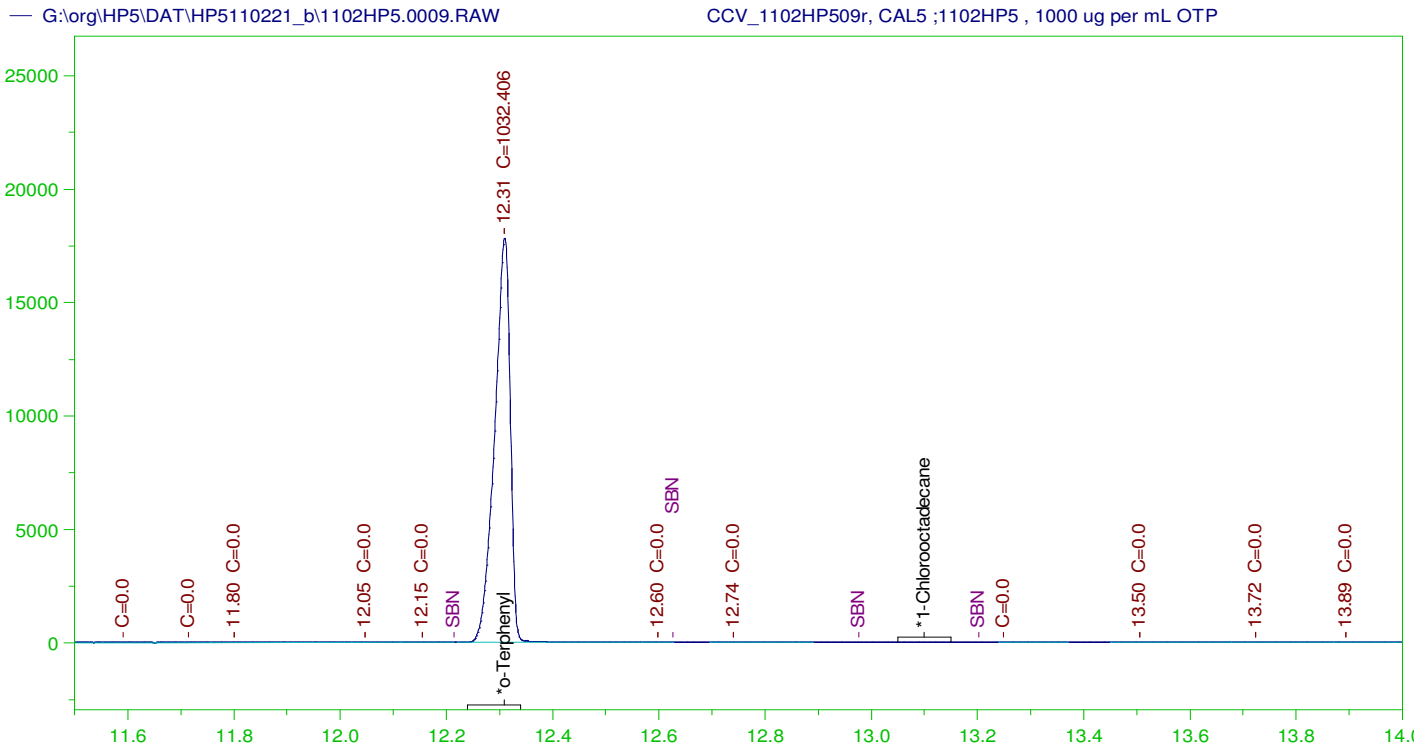
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.3	200.	511.332	255.67	-
*1-Chlorooctadecane	15.798	200.	.	.	-

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

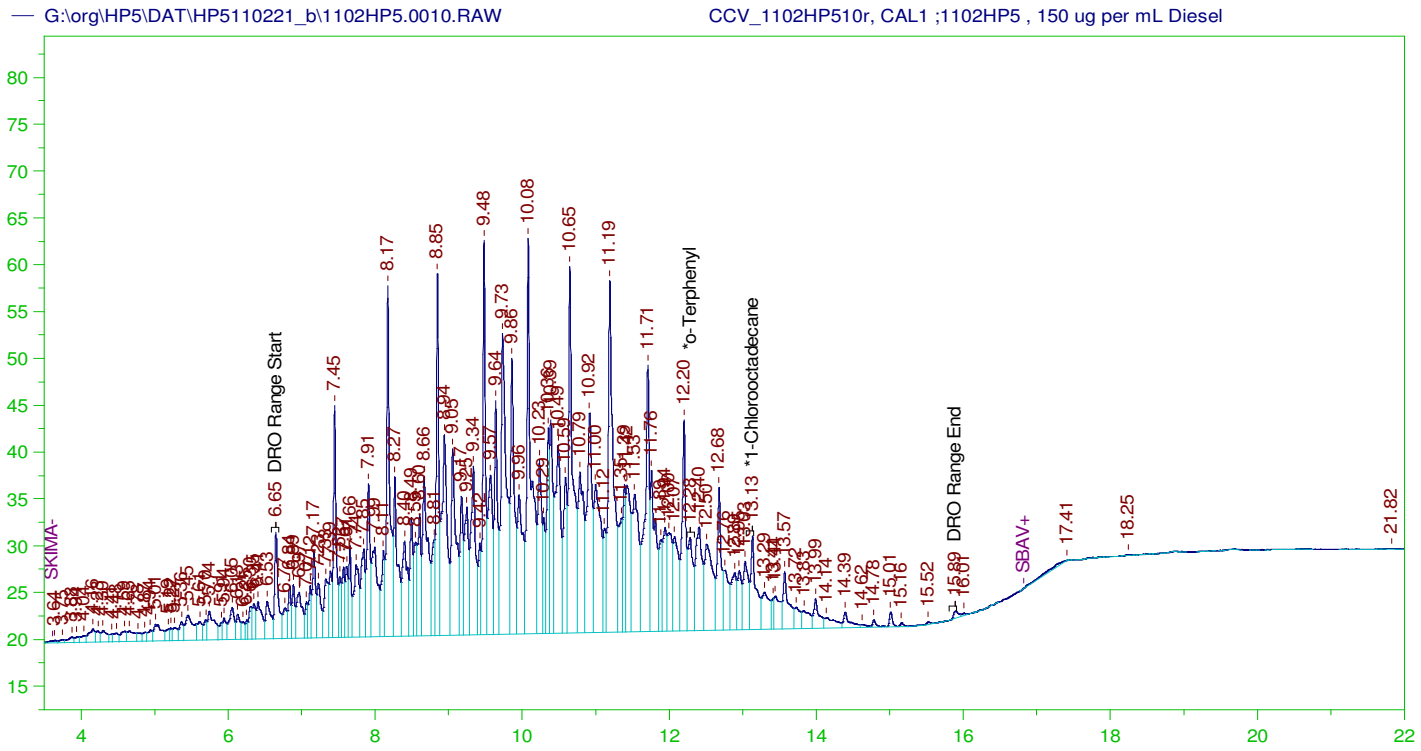
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.31	200.	1032.406	516.2	-
*1-Chlorooctadecane	15.803	200.	.	.	-

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

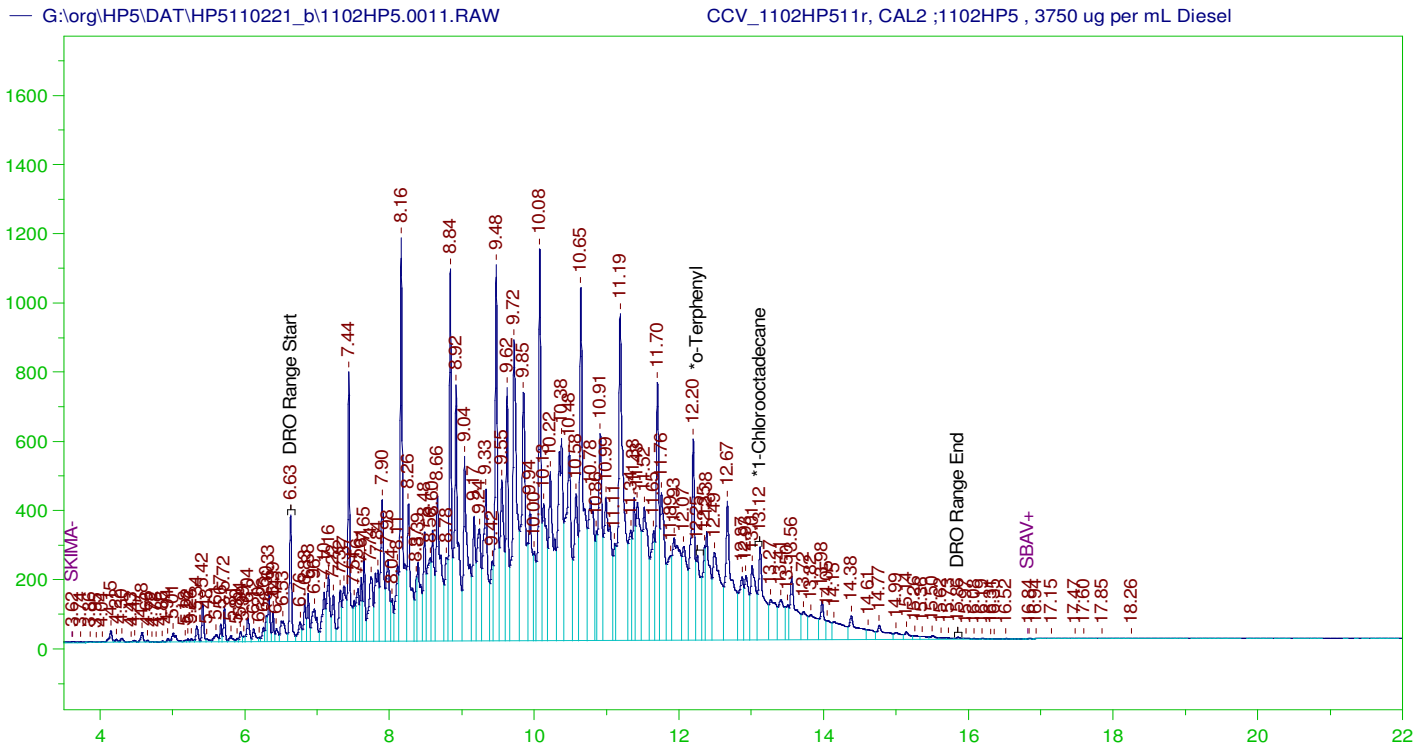
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.285	200.	1.416	.71	-
*1-Chlorooctadecane	13.13	200.	1.44	.72	-

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



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

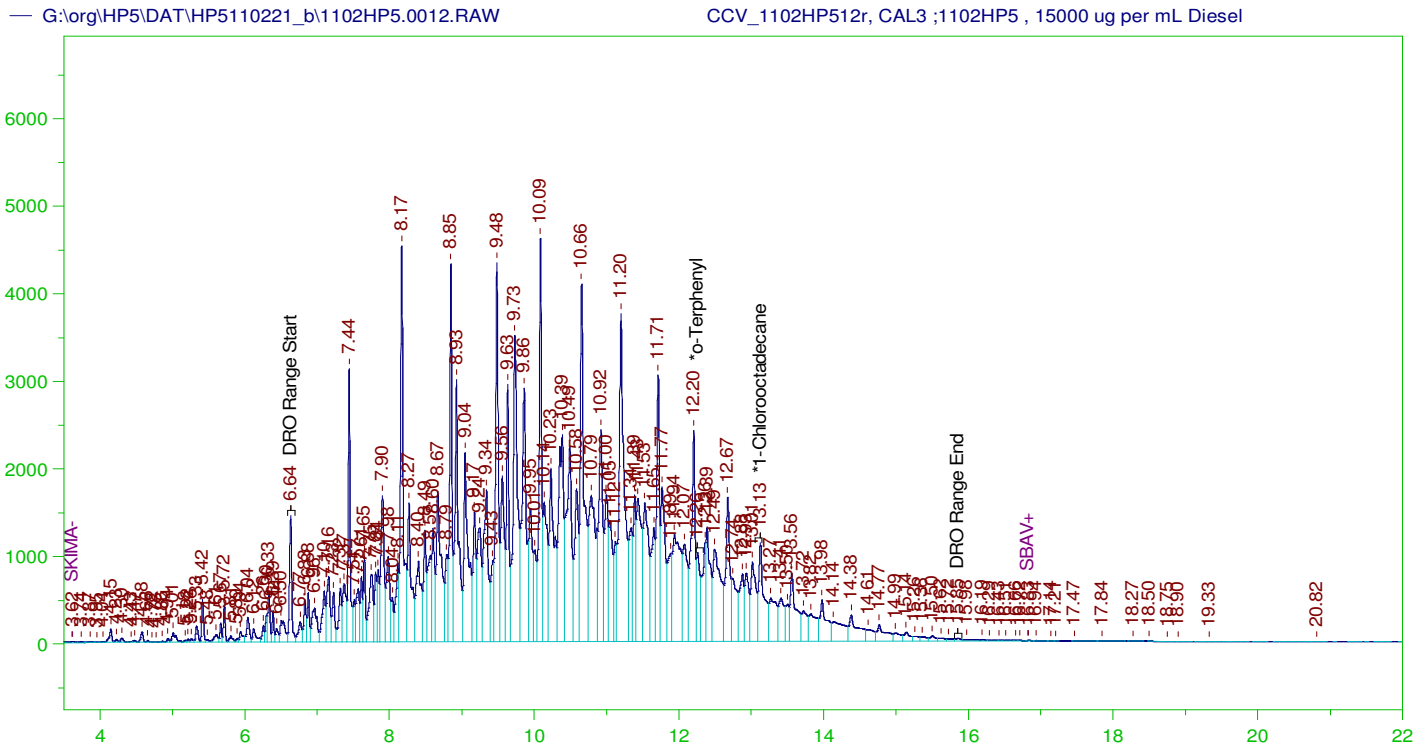
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.252	200.	28.988	14.49	-
*1-Chlorooctadecane	13.122	200.	39.19	19.59	-

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

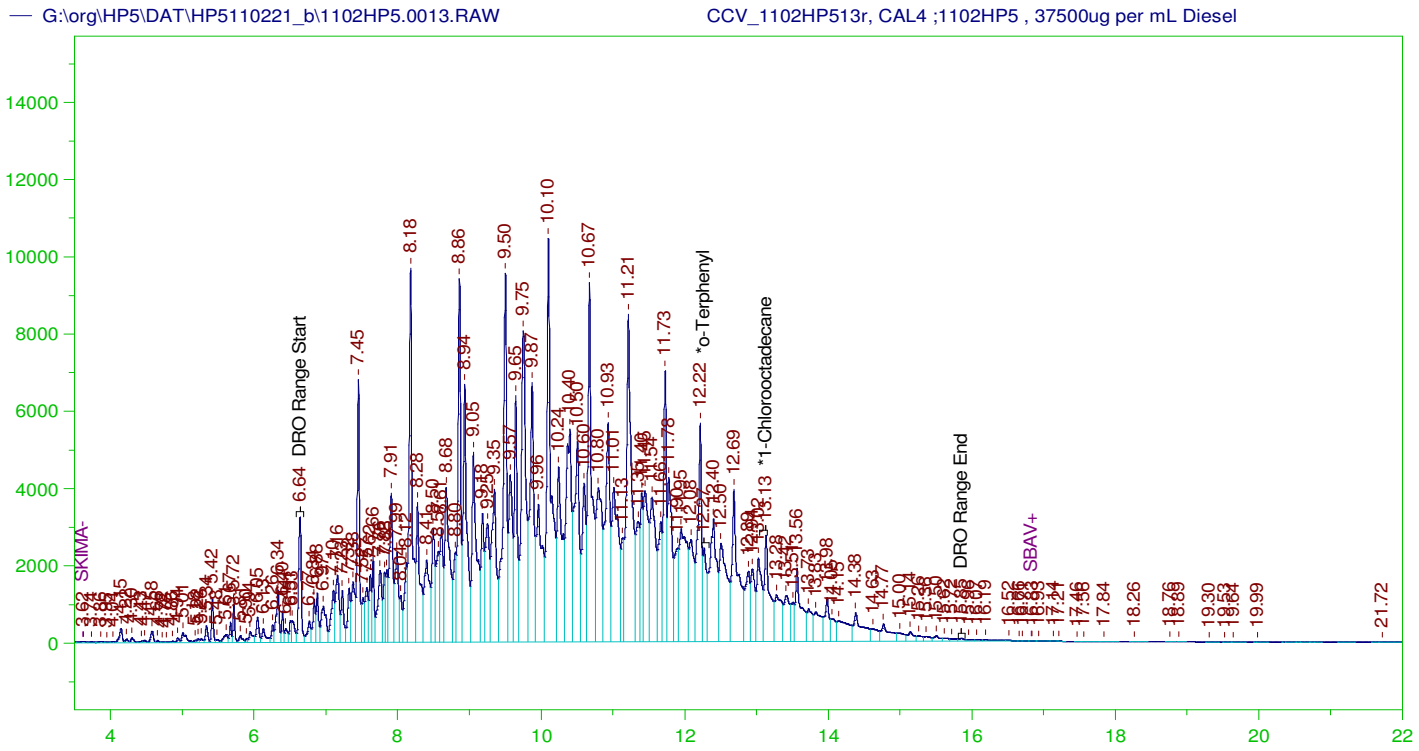
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.257	200.	92.35	46.18	-
*1-Chlorooctadecane	13.125	200.	158.994	79.5	-

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.	-

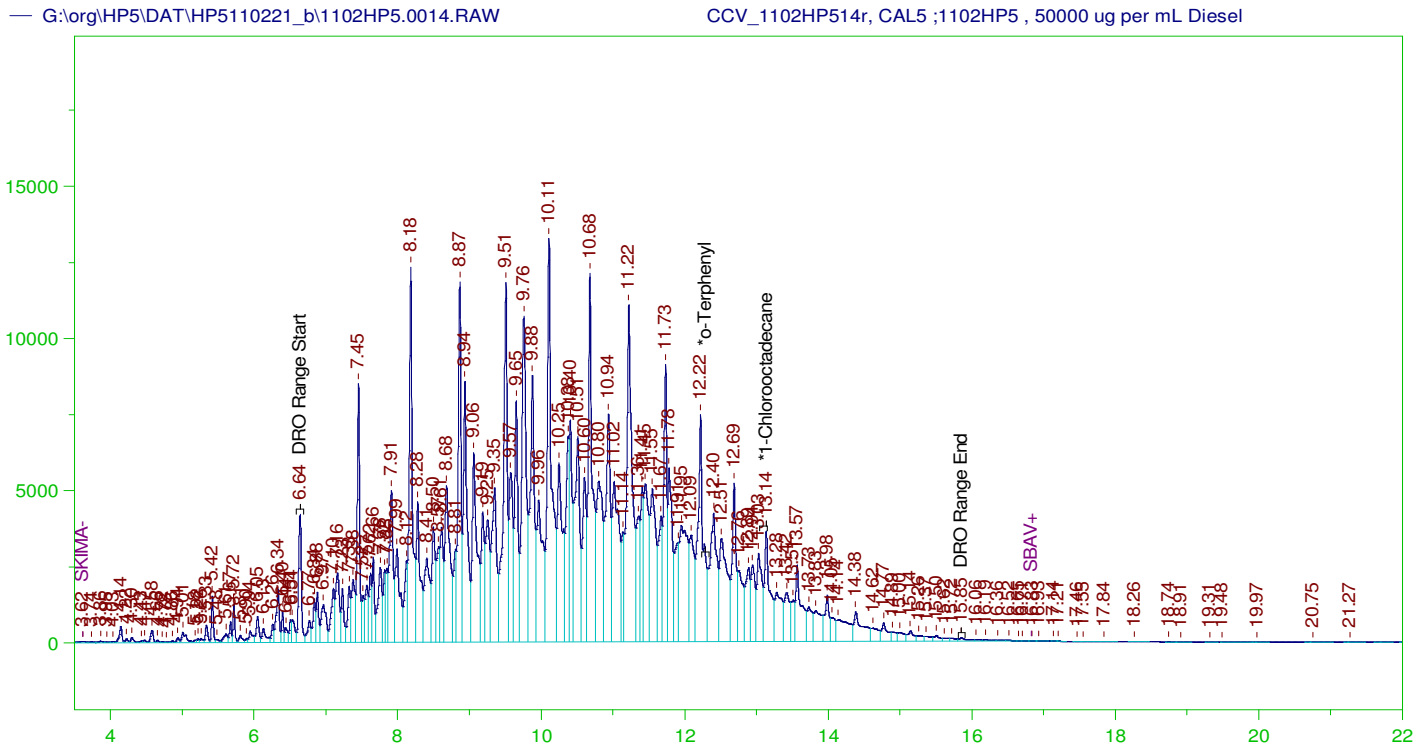
DRO Area:1.118993E+09 DRO Amount: 35689.91
TEH Area:1.14732E+09 TEH Amount: 36593.41

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

G:\org\HP5\dat\HP5110221_b\Review\013_CCV_1102HP513r_DC_8015-IA-L%.xls



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	-

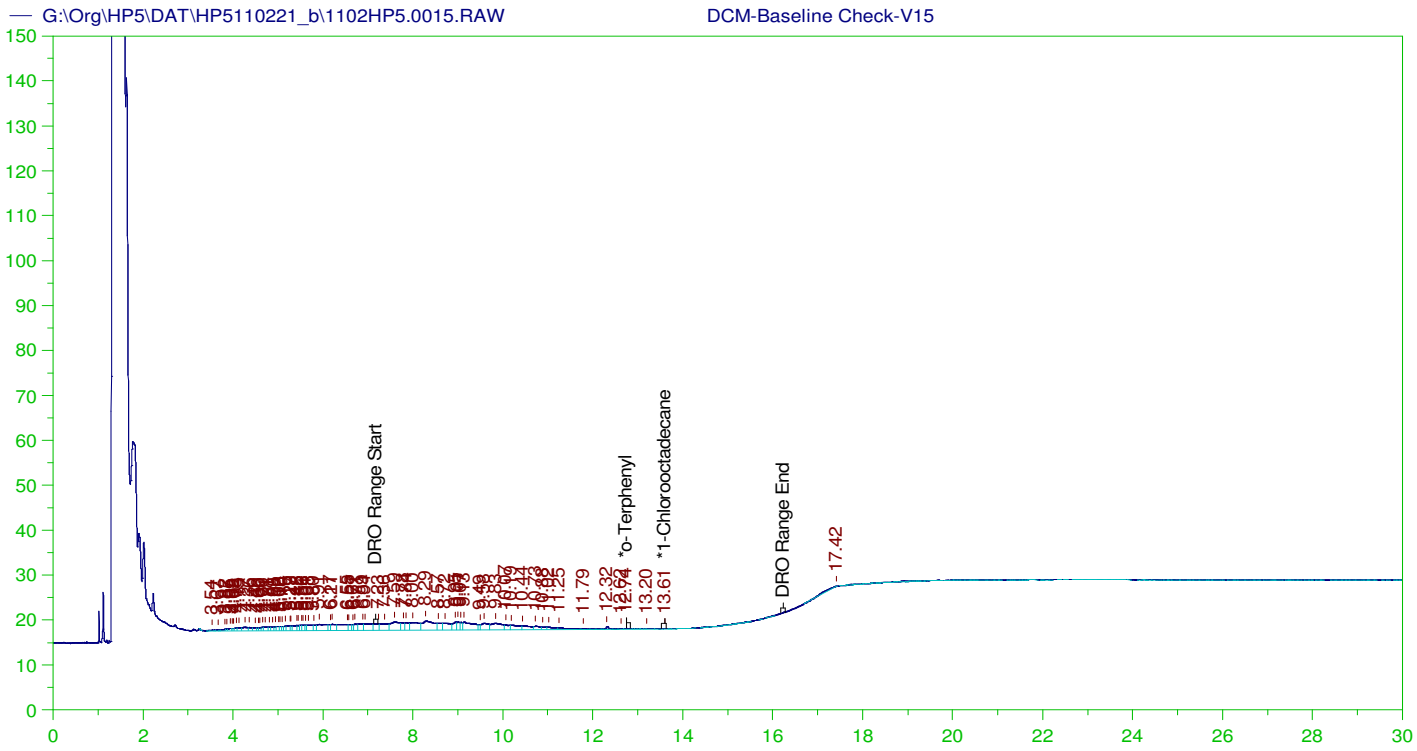
DRO Area:1.507978E+09 DRO Amount: 48096.49
TEH Area:1.54564E+09 TEH Amount: 49297.7

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



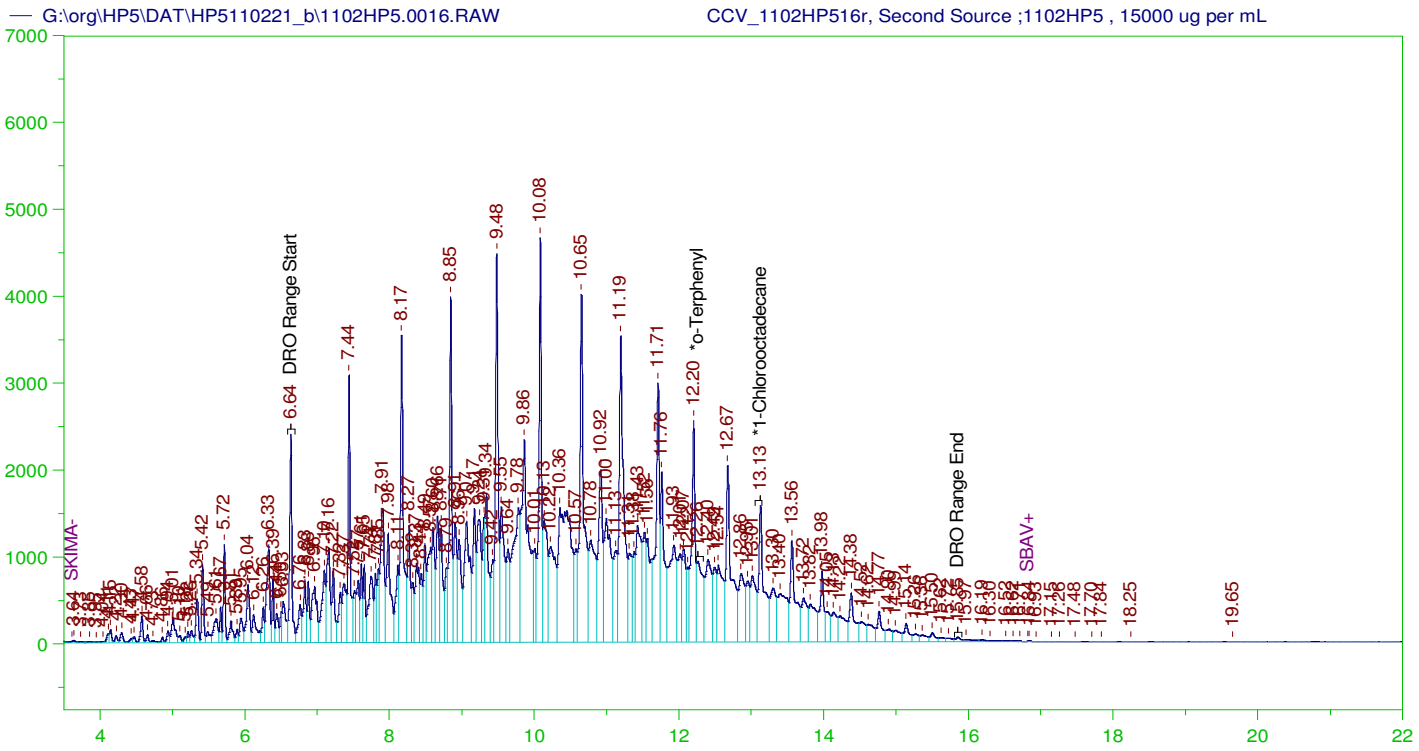
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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

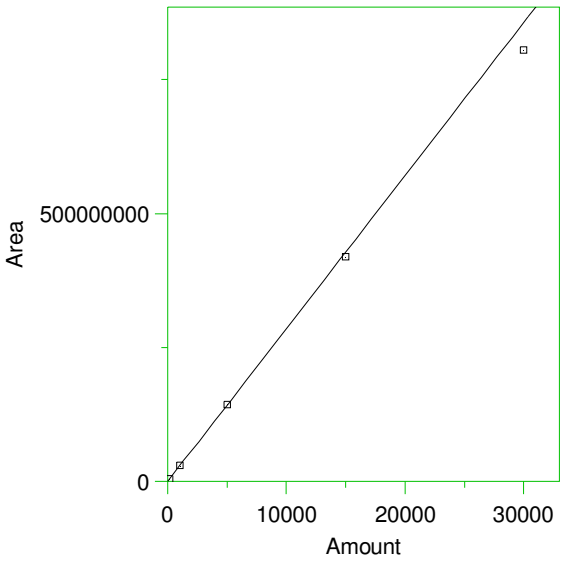
Creator: AMN 3/31/2021
Description: DRO-8015-Oil range. New ICal Per 0218HP5 (2021)-2 uL Inj.; COD added using OTP RFs
Reason for change:

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

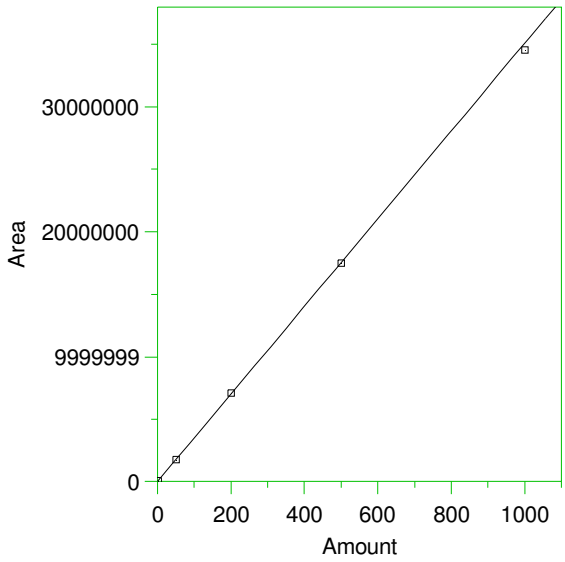
Y = 28542.41 X + 0

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

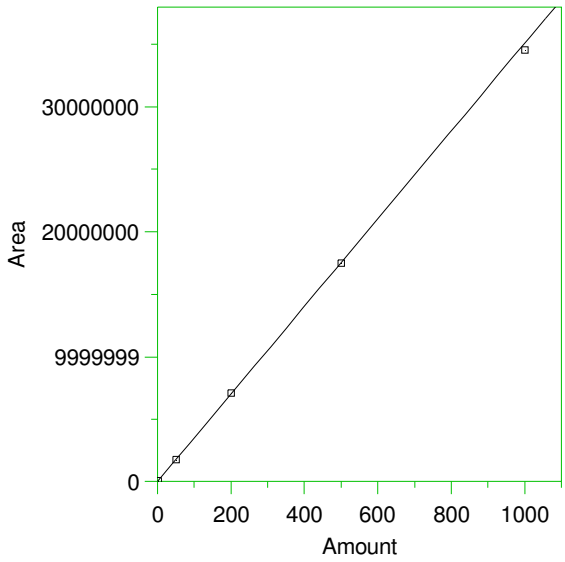
Y = 35071.26 X + 0

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

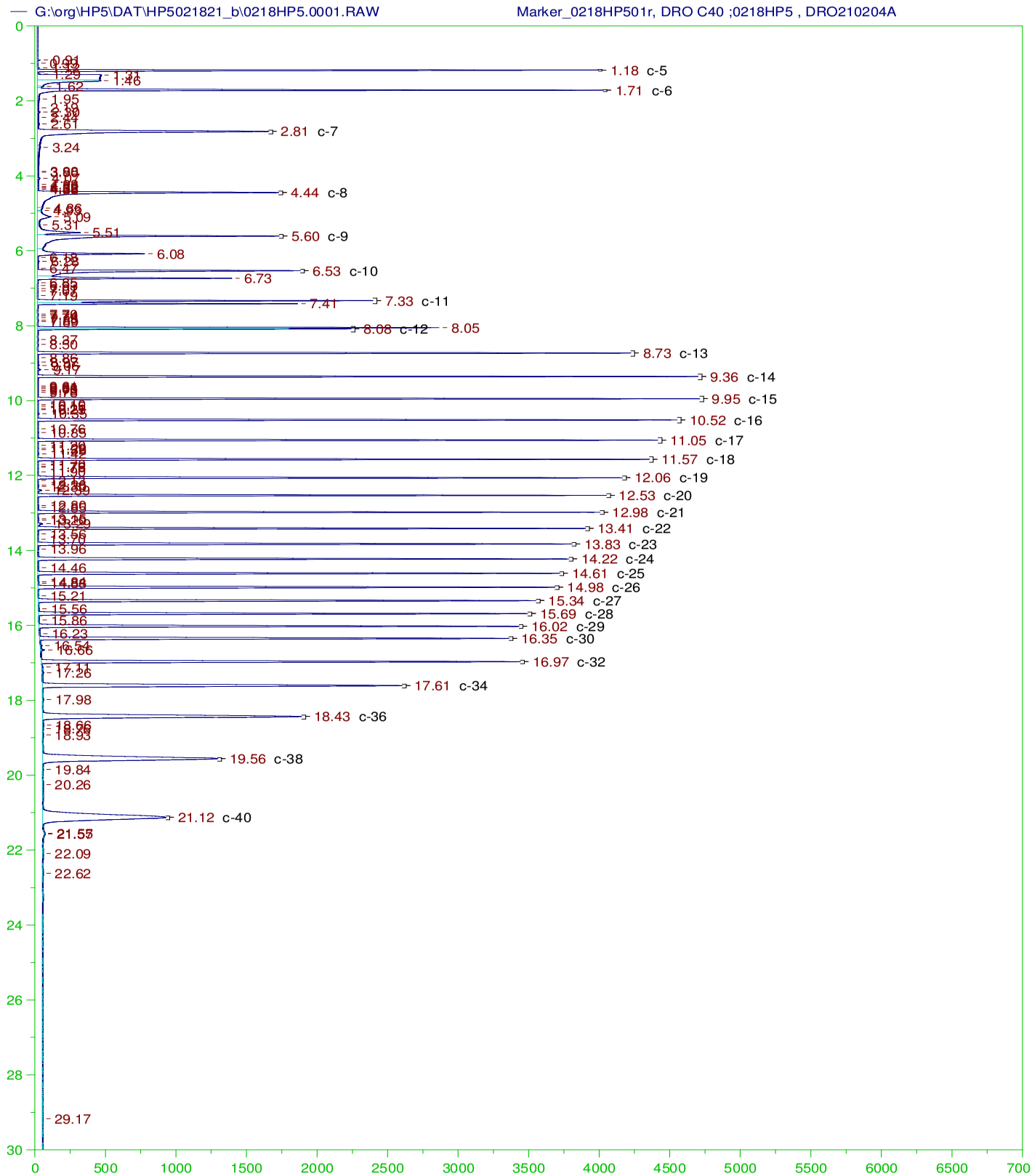
Single peak quantification by area

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\0218HP5.0001.RAW
Marker_0218HP501r, DRO C40 ;0218HP5 , DRO210204A
1.18 c-5
1.71 c-6
2.81 c-7
4.44 c-8
5.60 c-9
6.53 c-10
7.33 c-11
8.05
8.73 c-13
9.36 c-14
9.95 c-15
10.52 c-16
11.05 c-17
11.57 c-18
12.06 c-19
12.53 c-20
12.98 c-21
13.41 c-22
13.83 c-23
14.22 c-24
14.61 c-25
14.98 c-26
15.34 c-27
15.69 c-28
16.02 c-29
16.35 c-30
16.97 c-32
17.61 c-34
18.43 c-36
19.56 c-38
21.12 c-40
29.17
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500 6000 6500 700
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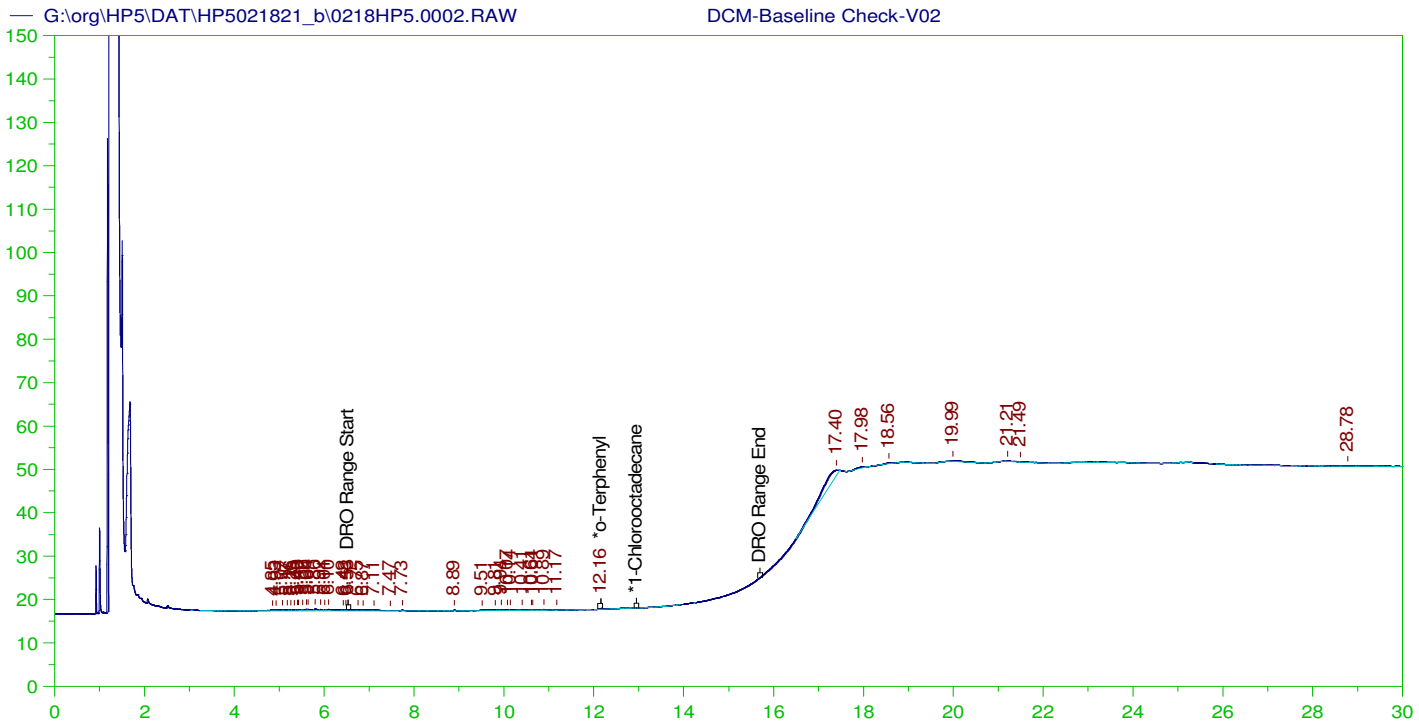


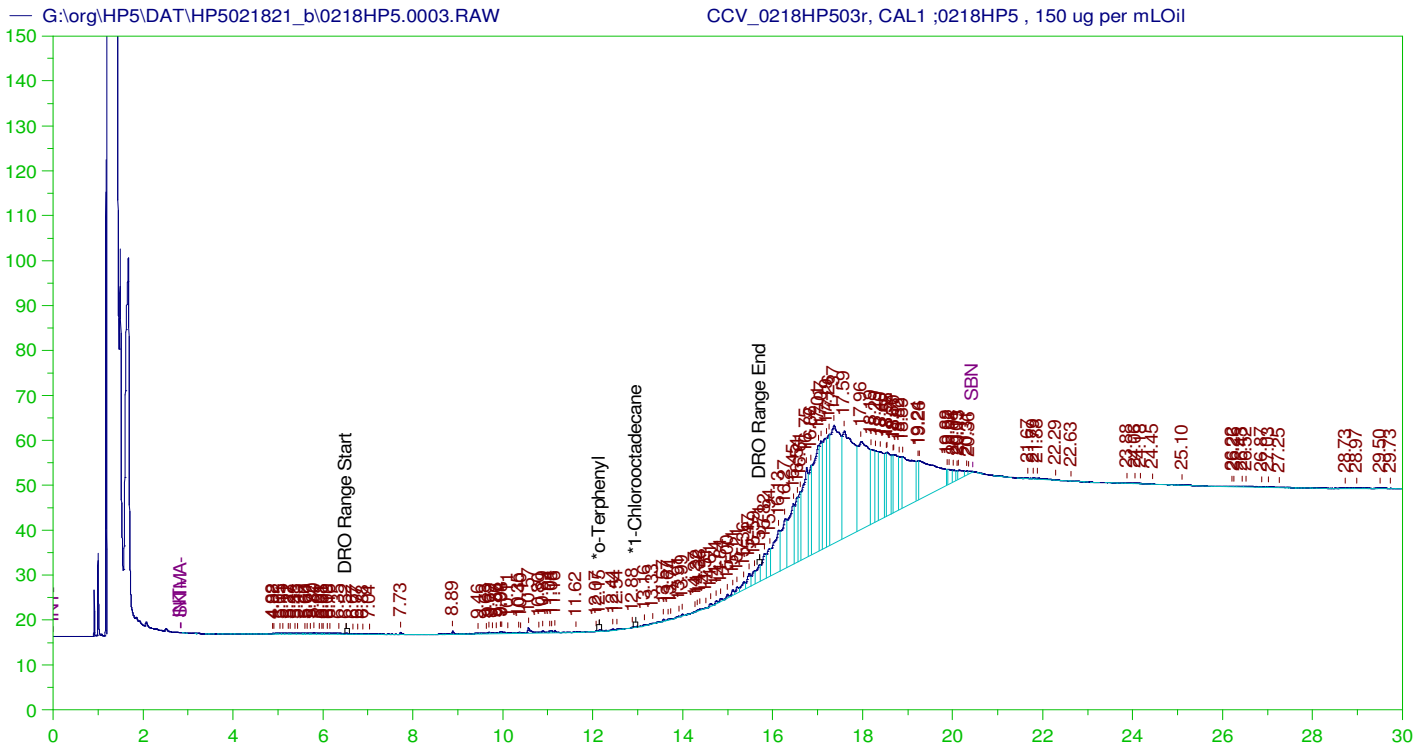
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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.	.	.	-

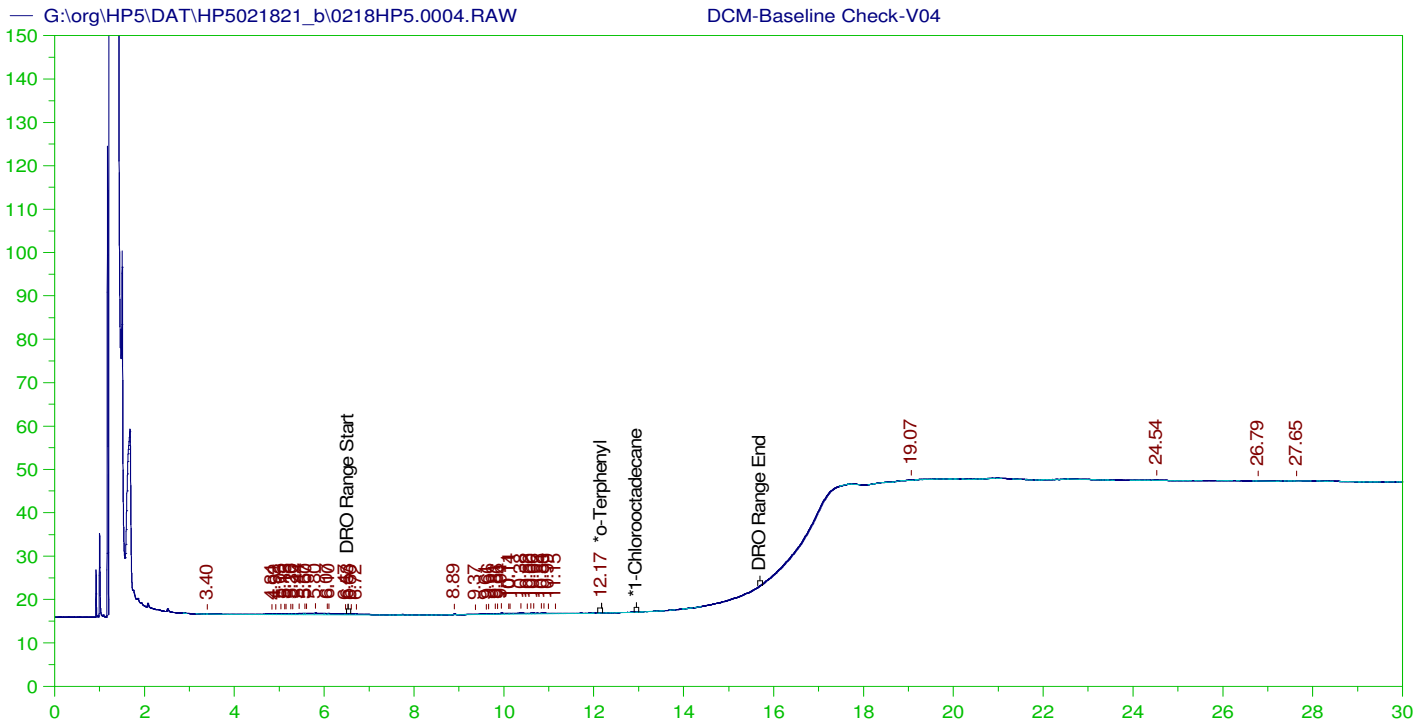
DRO Area:141843.8 DRO Amount: 4.969579
TEH Area:3766485 TEH Amount: 131.961

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

G:\org\HP5\dat\HP5021821_b\Review\003_CCV_0218HP503r_DR_OIL-021803-AA-L0.xls



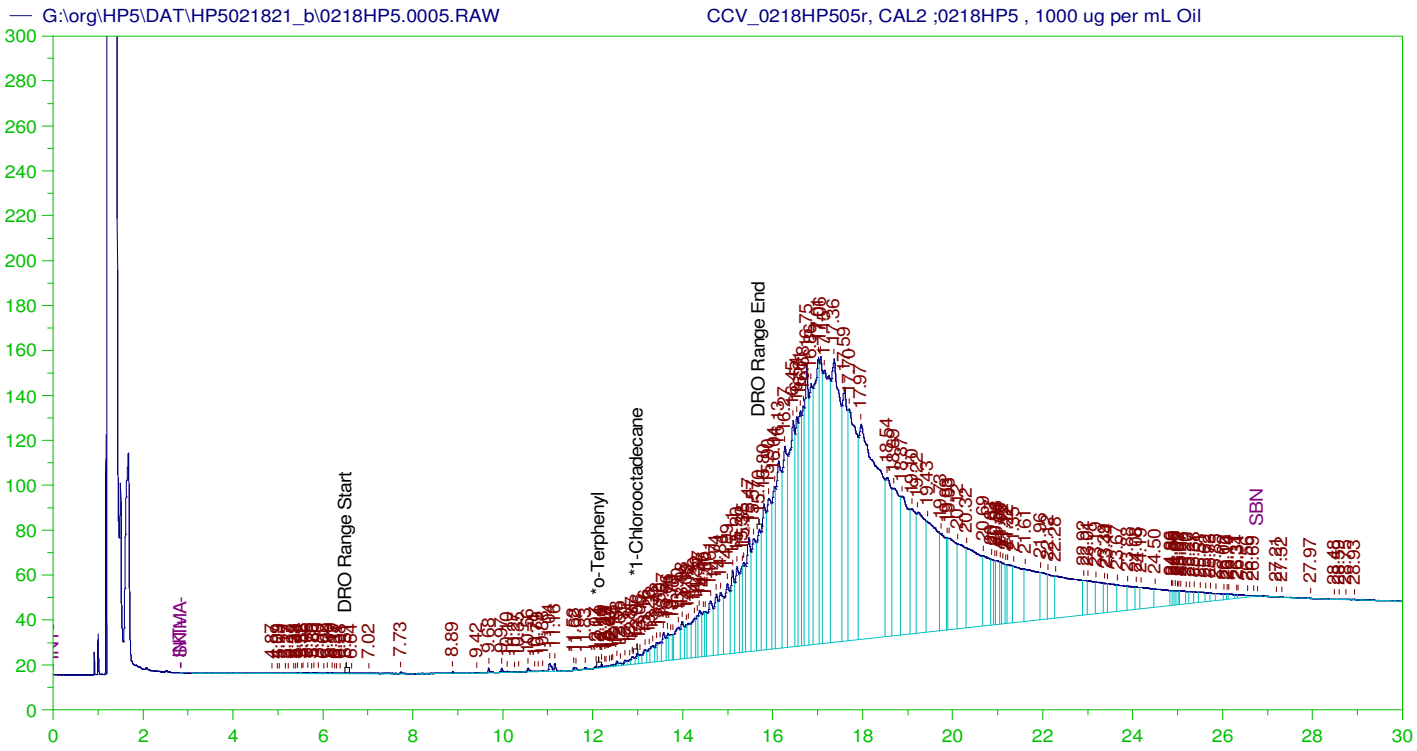
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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	-

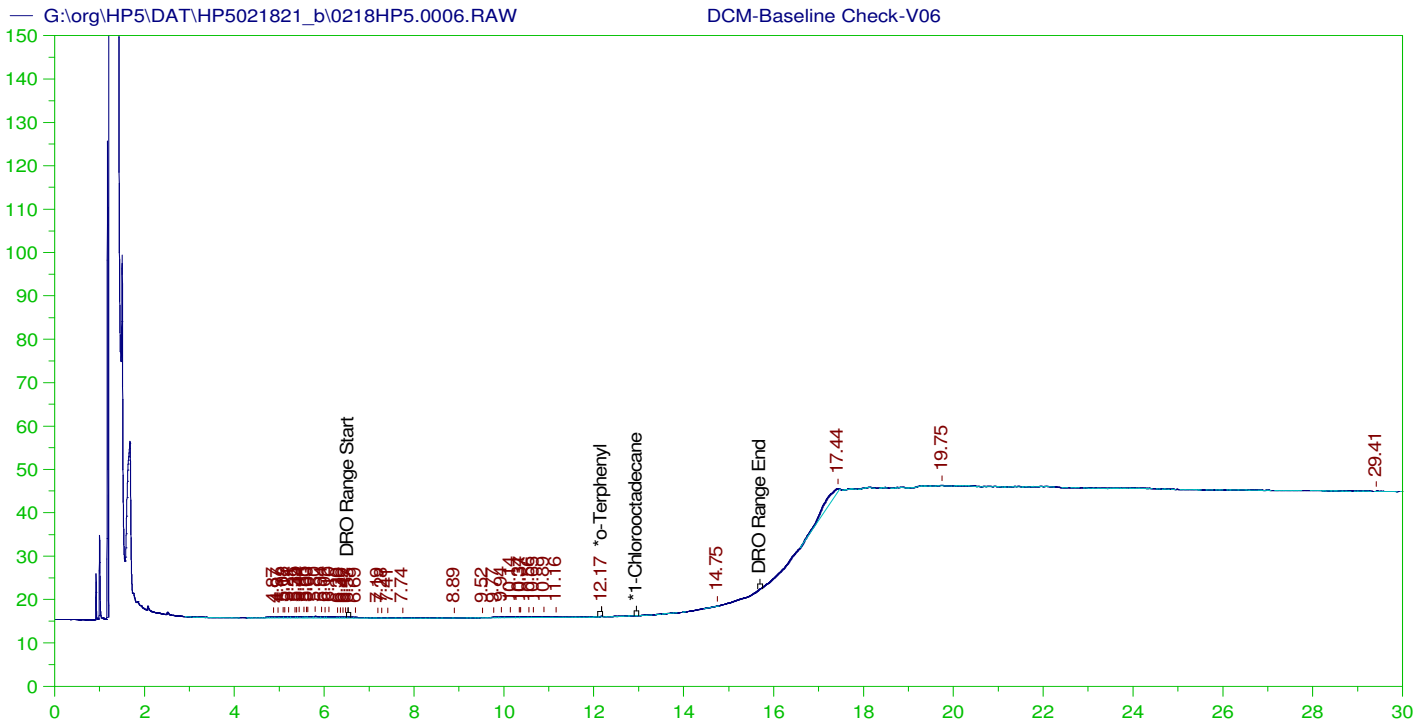
DRO Area:3721460 DRO Amount: 130.3835
TEH Area:3.03352E+07 TEH Amount: 1062.811

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

G:\org\HP5\dat\HP5021821_b\Review\005_CCV_0218HP505r_DR_OIL-021805-AA-L0.xls



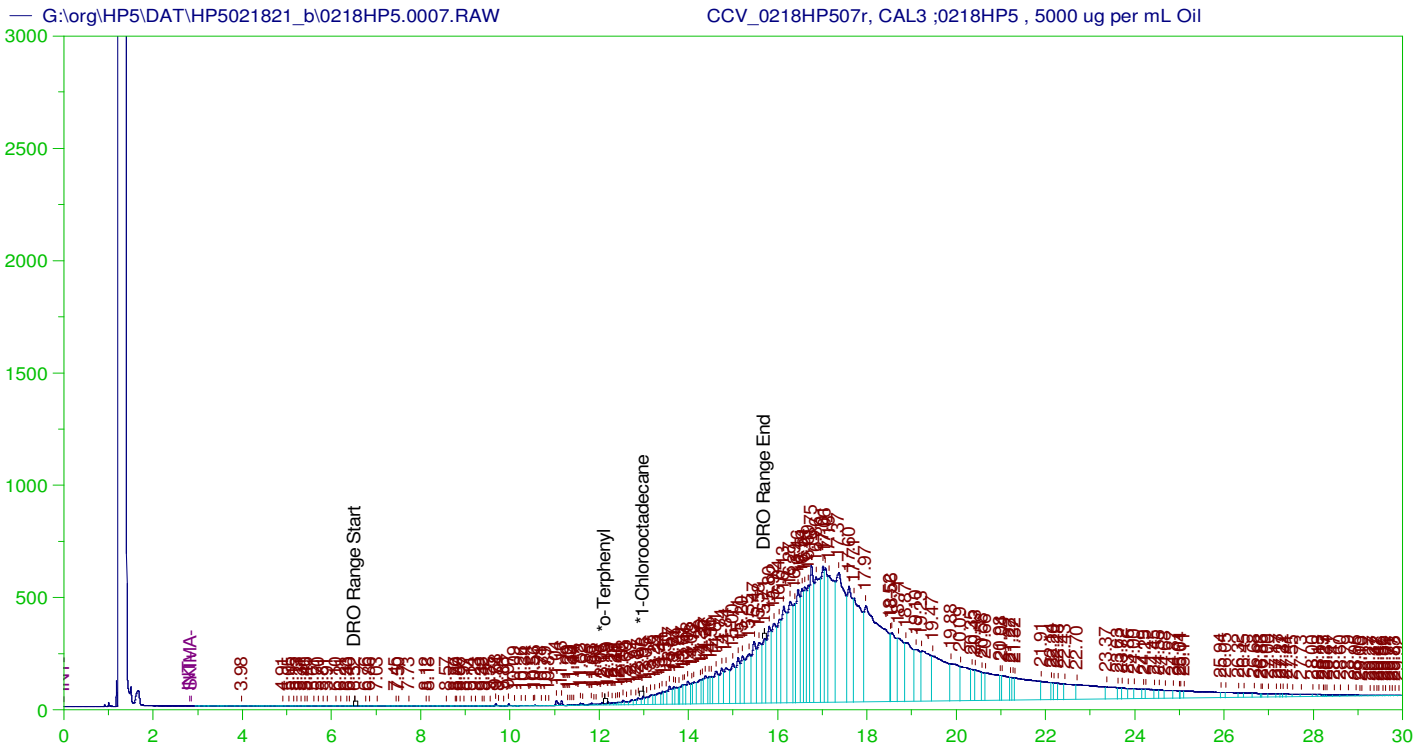
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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	-

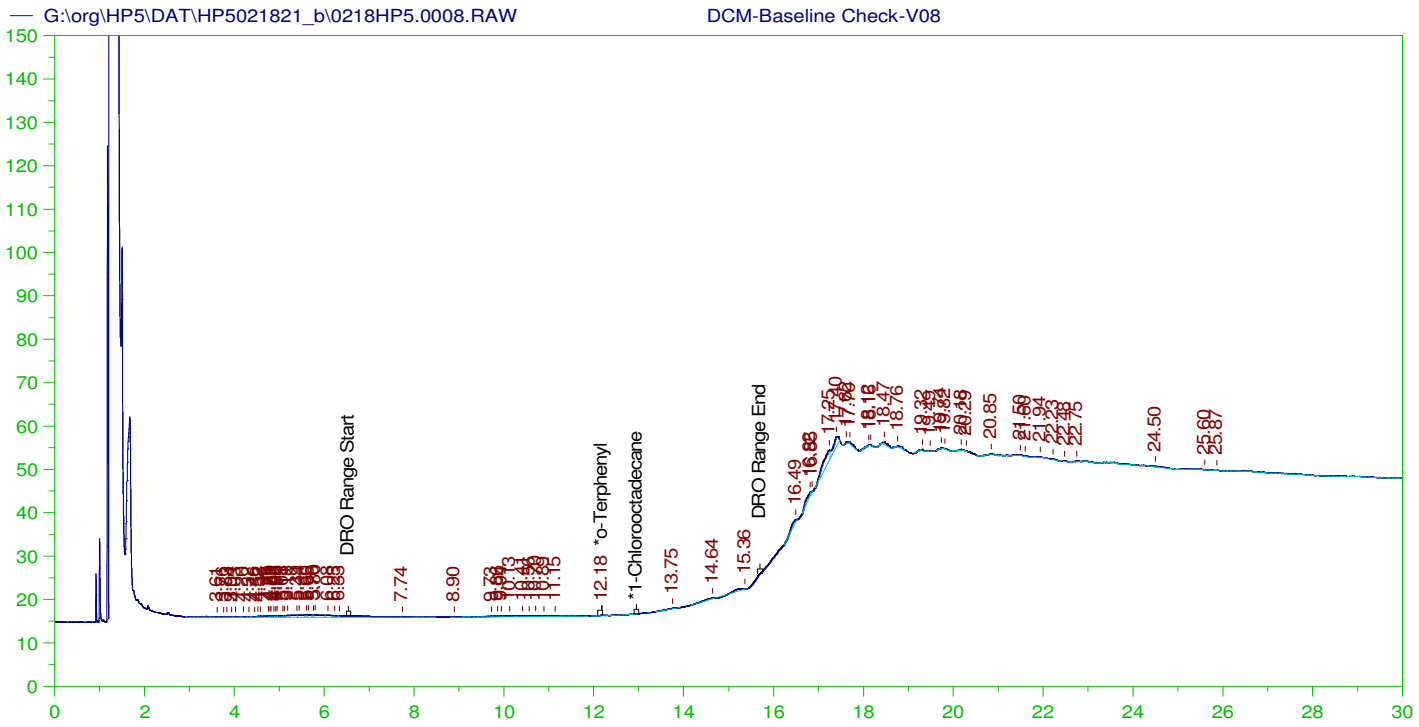
DRO Area:2.19239E+07 DRO Amount: 768.1166
TEH Area:1.437314E+08 TEH Amount: 5035.713

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

G:\org\HP5\dat\HP5021821_b\Review\007_CCV_0218HP507r_DR_OIL-021807-AA-L0.xls



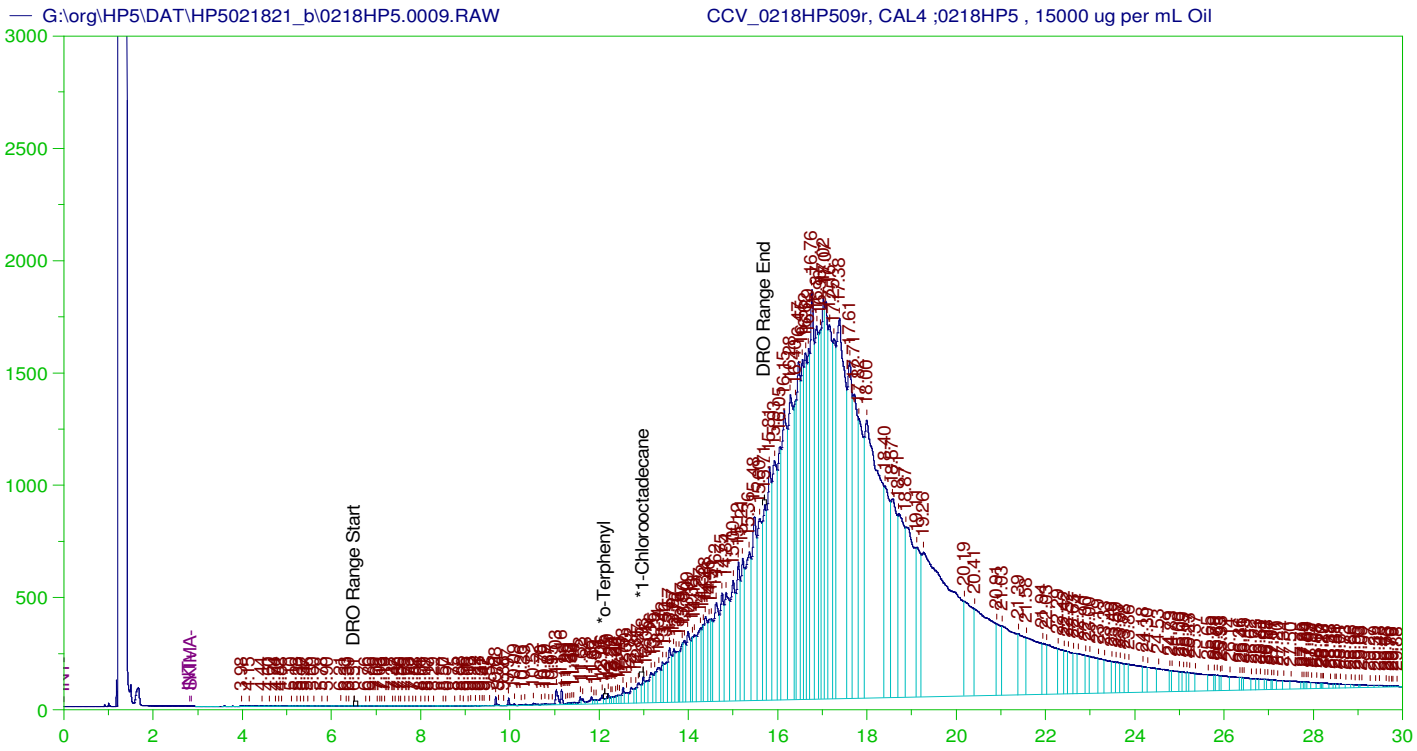
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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

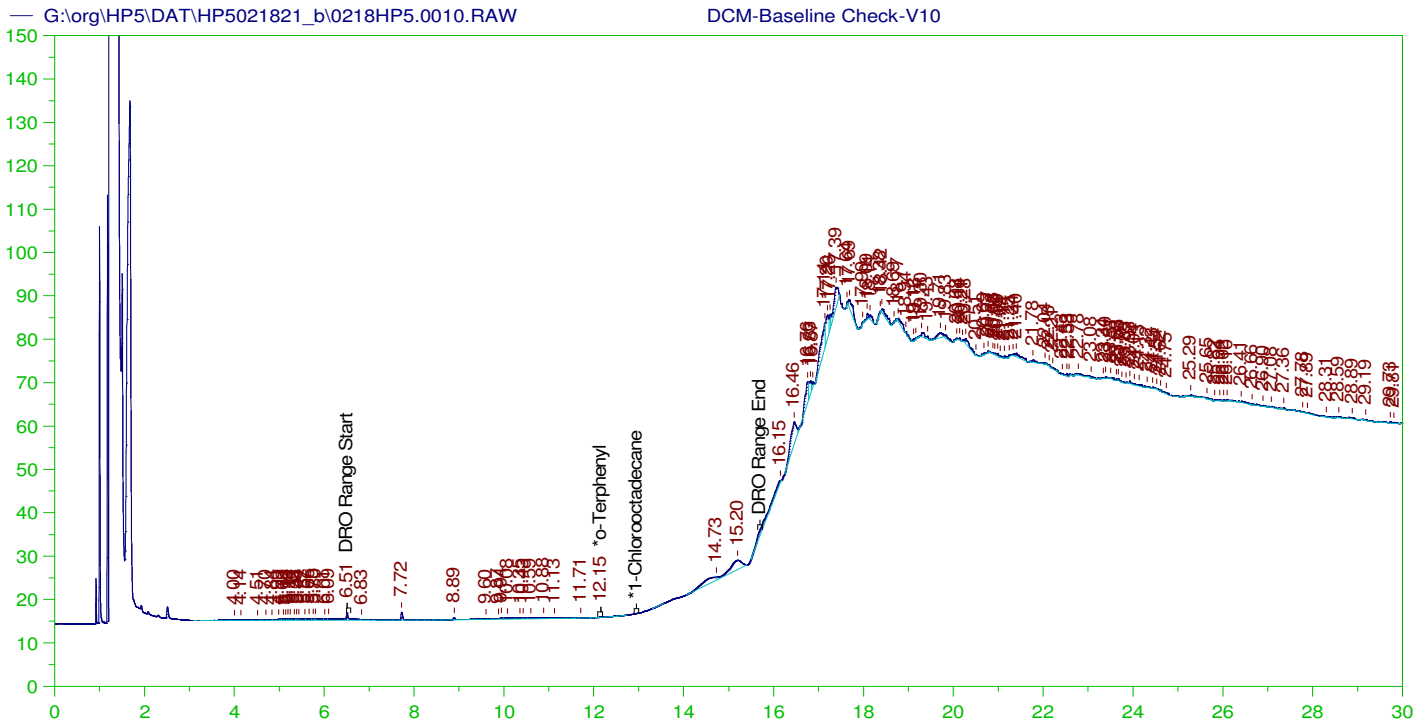
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.124	200.	1.888	.94	-
*1-Chlorooctadecane	12.984	200.	13.129	6.56	-

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



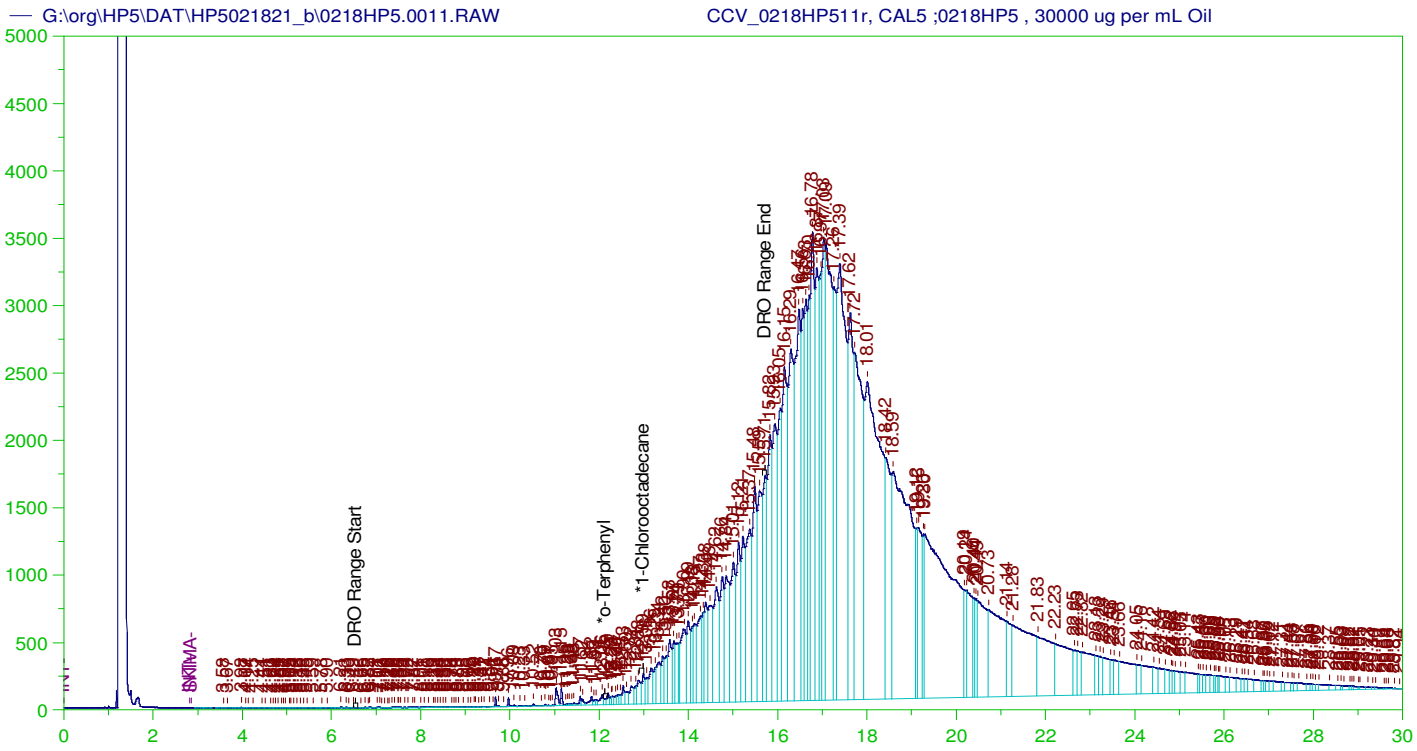
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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	-

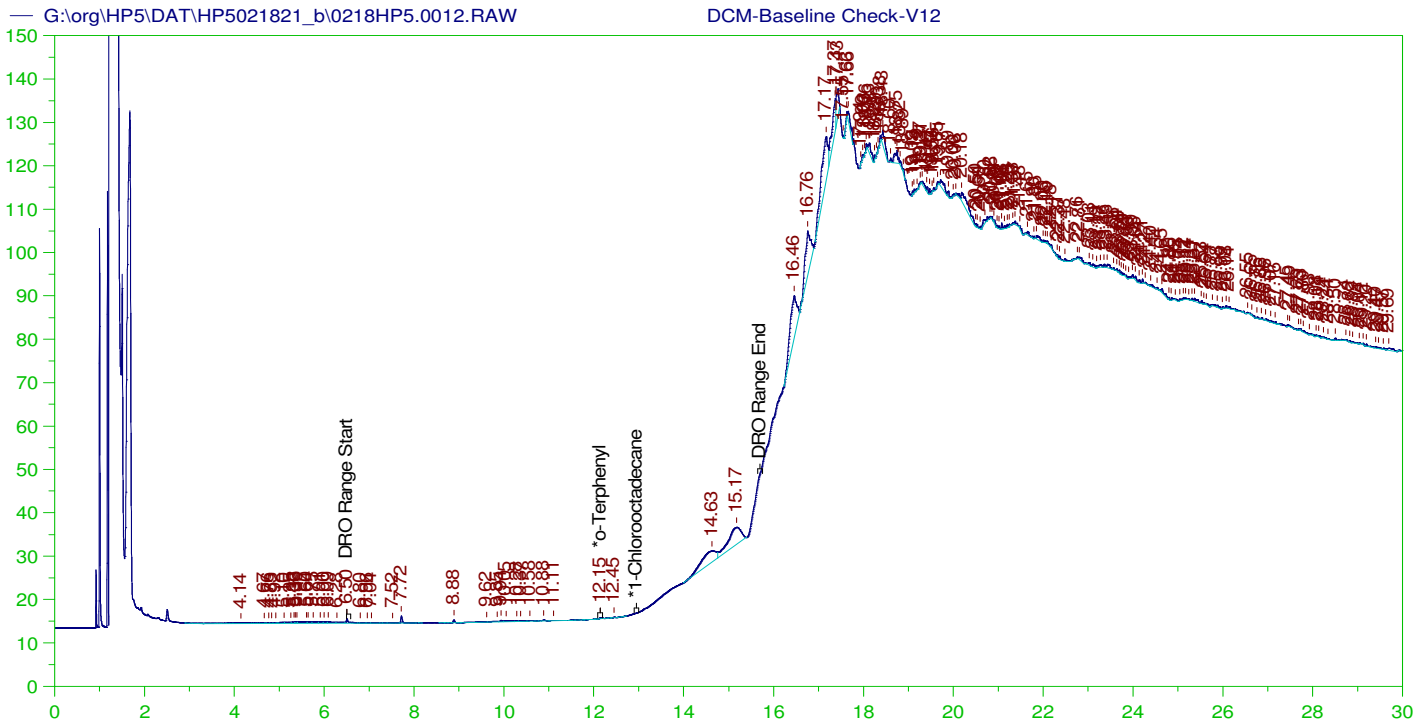
DRO Area:1.319327E+08 DRO Amount: 4622.338
TEH Area:8.051155E+08 TEH Amount: 28207.69

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

G:\org\HP5\dat\HP5021821_b\Review\011_CCV_0218HP511r_DR_OIL-021811-AA-L0.xls



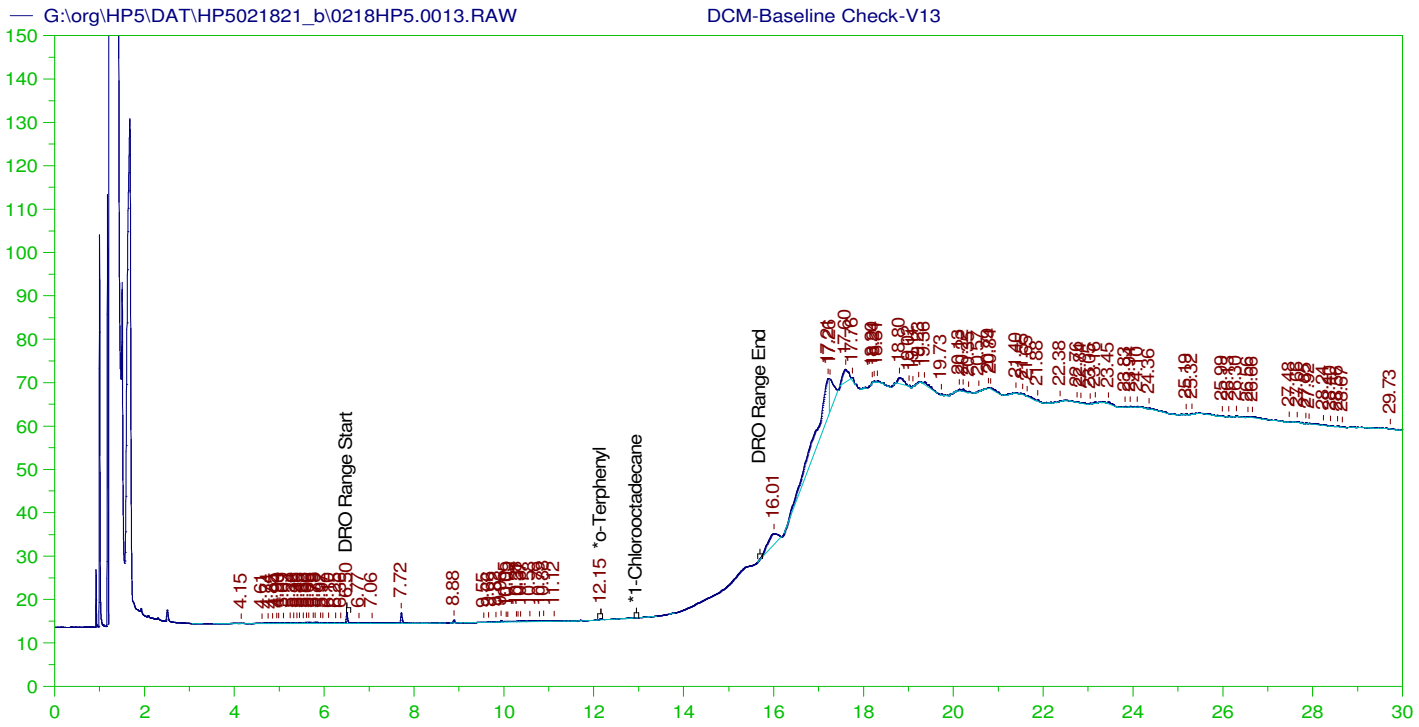
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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



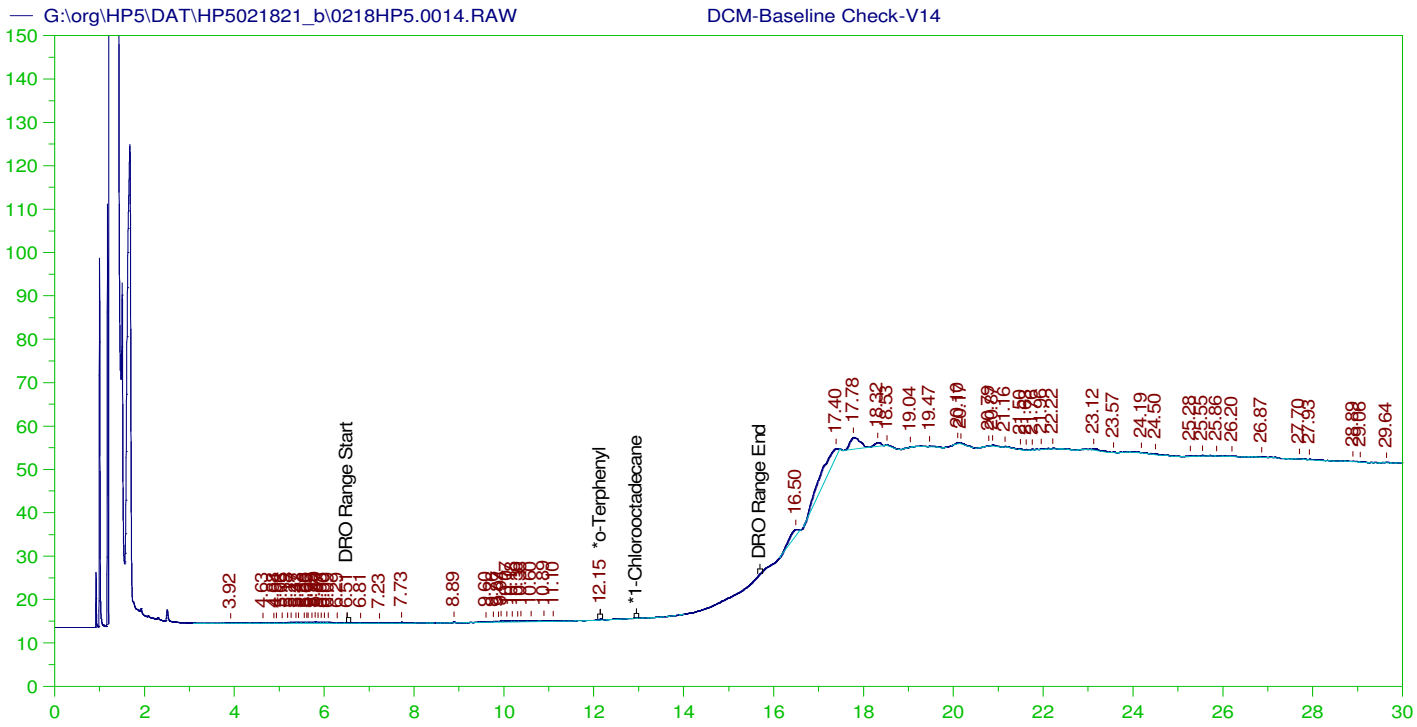
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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



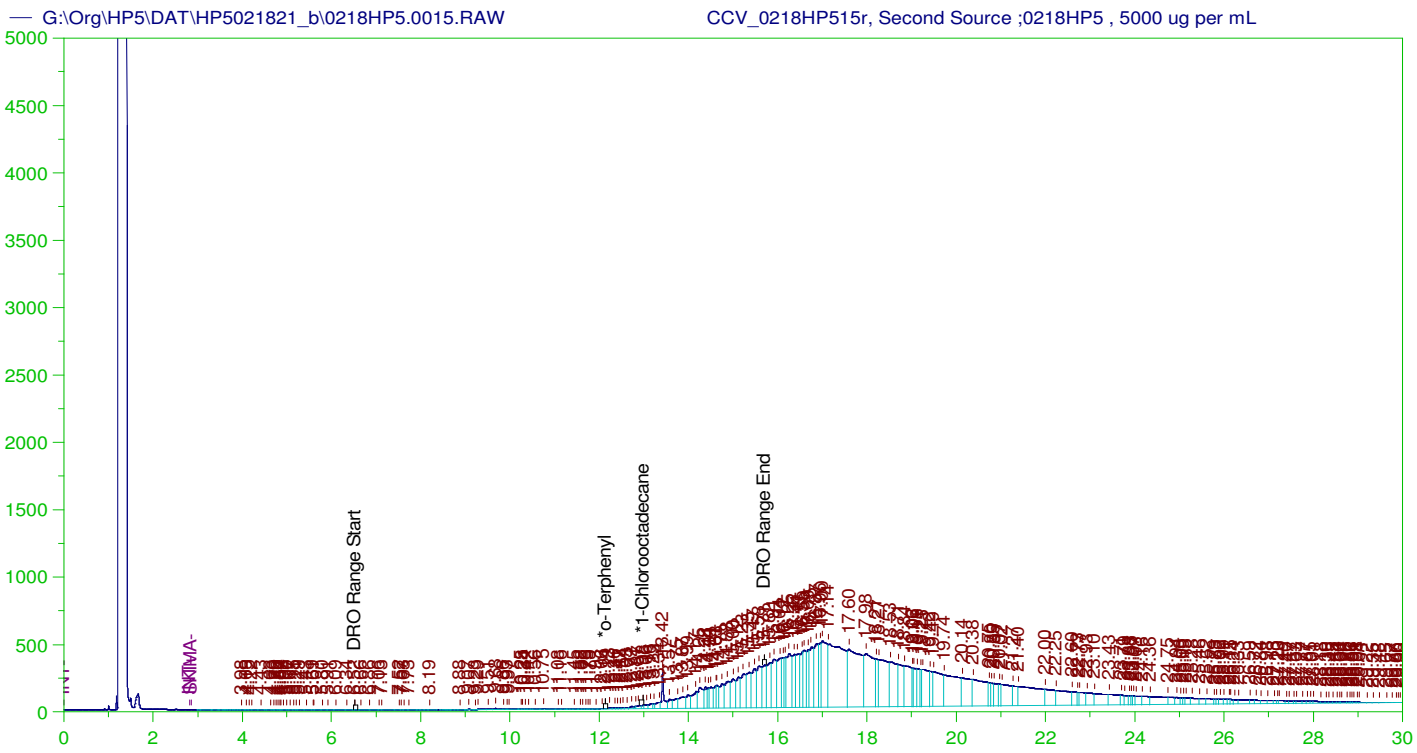
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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

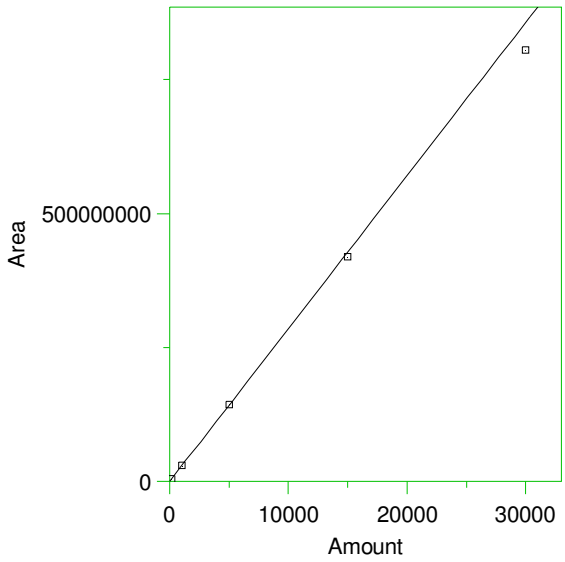
Creator: AMN
Description: 8015C-Oil Range. New ICal Per 1017HP5 (2021)-2 uL Inj.; RRO copied from 8015 cal for Oil
Reason for change:

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

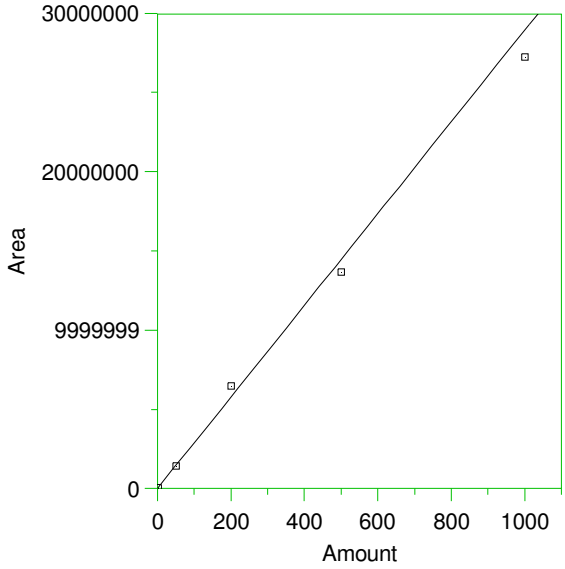
Y = 28542.41 X + 0

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

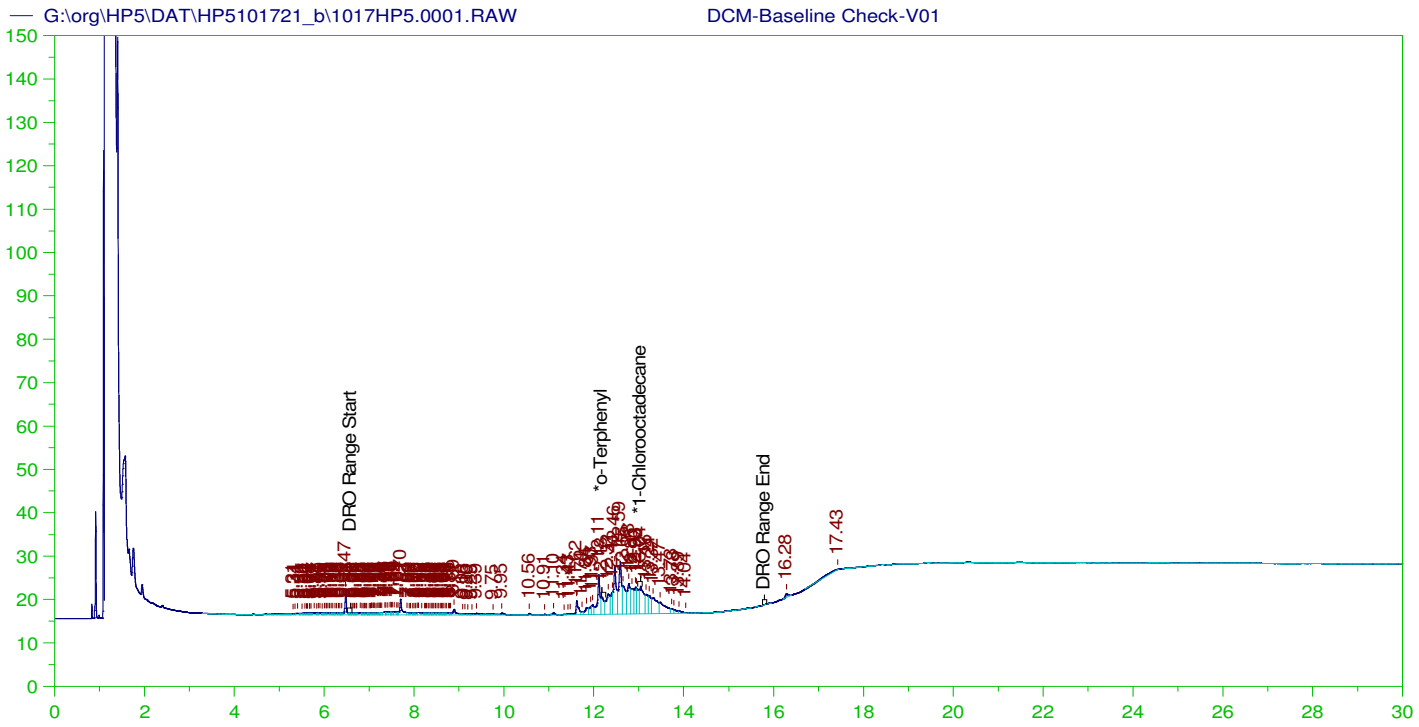
Single peak quantification by area

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



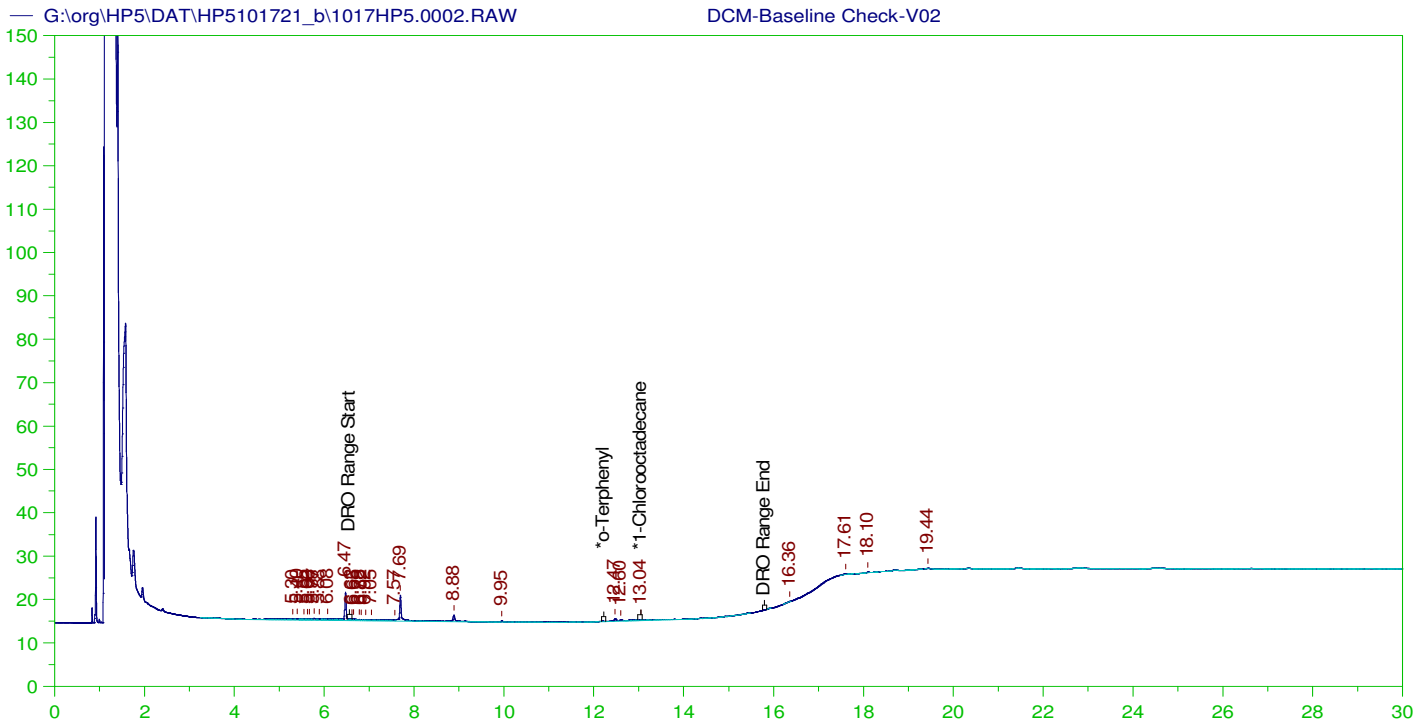
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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



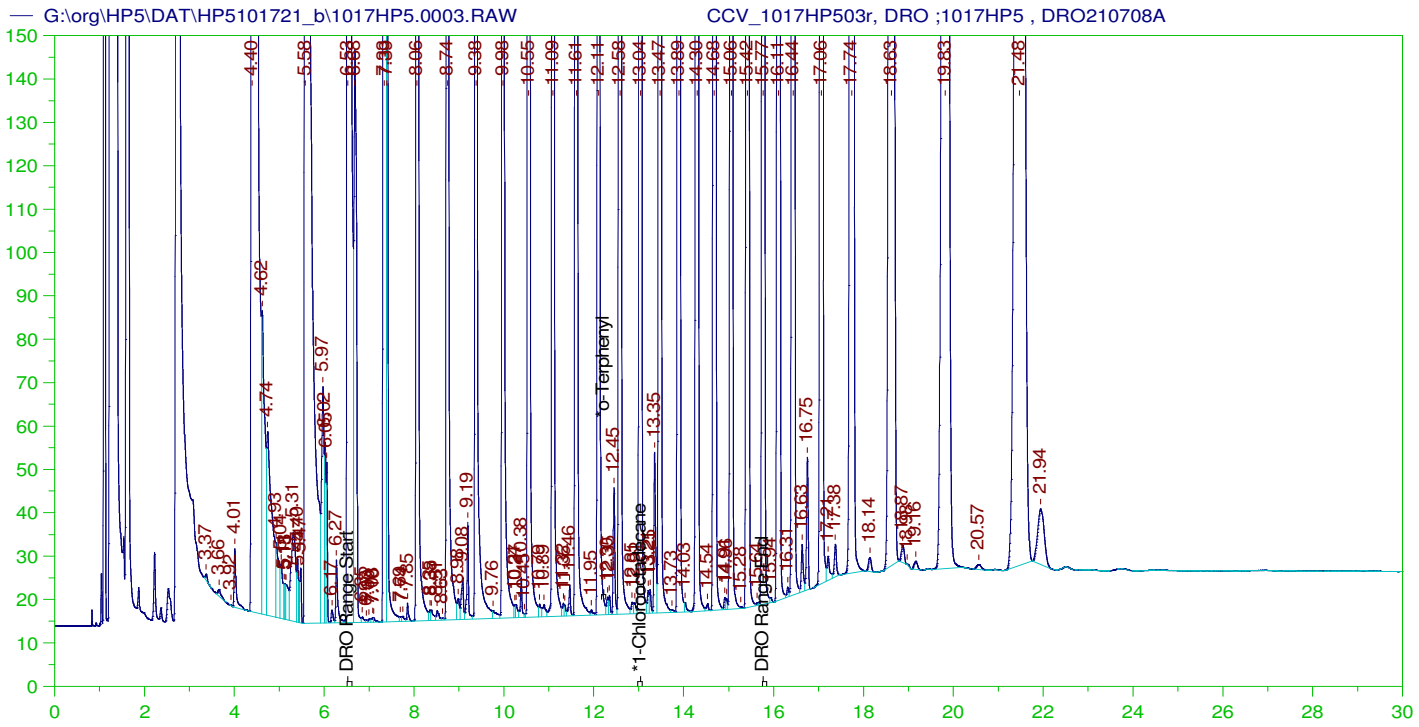
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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

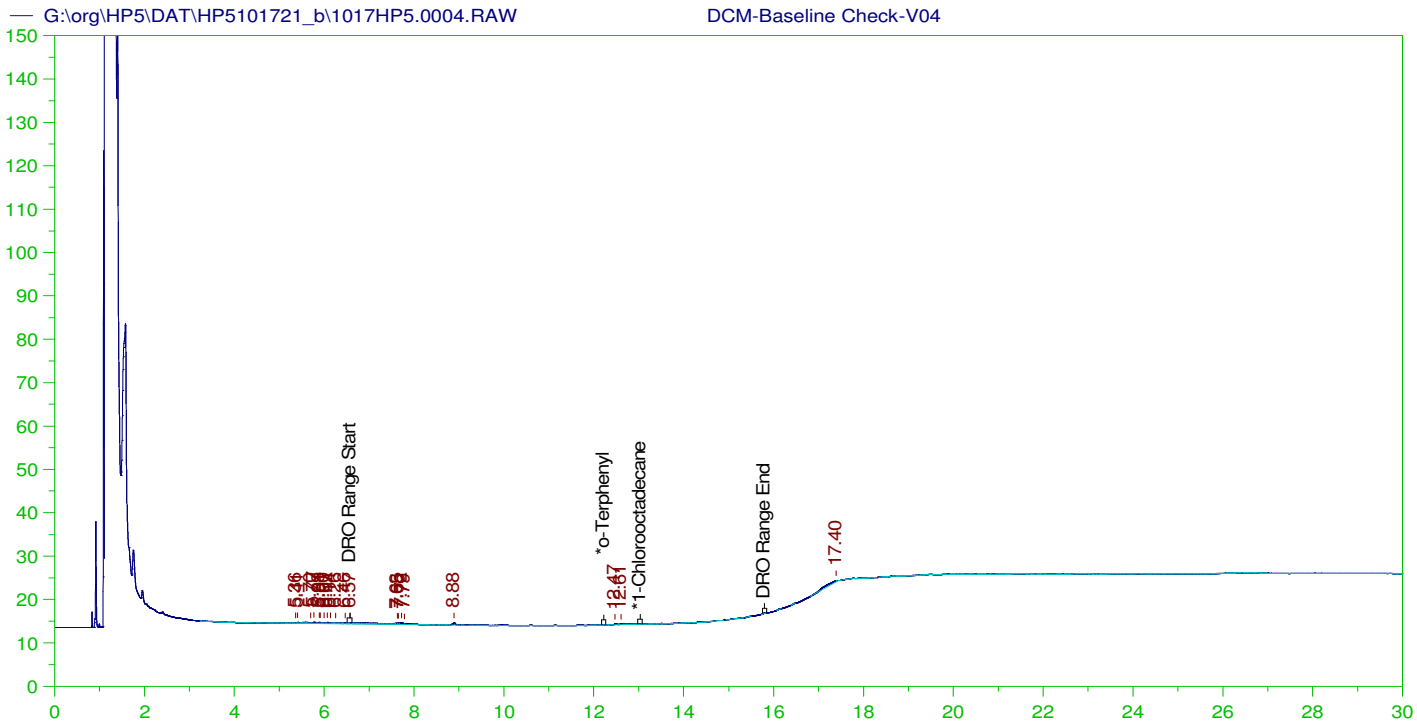
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	29.982	200.	.	.	-
*1-Chlorooctadecane	13.037	200.	255.634	127.82	-

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



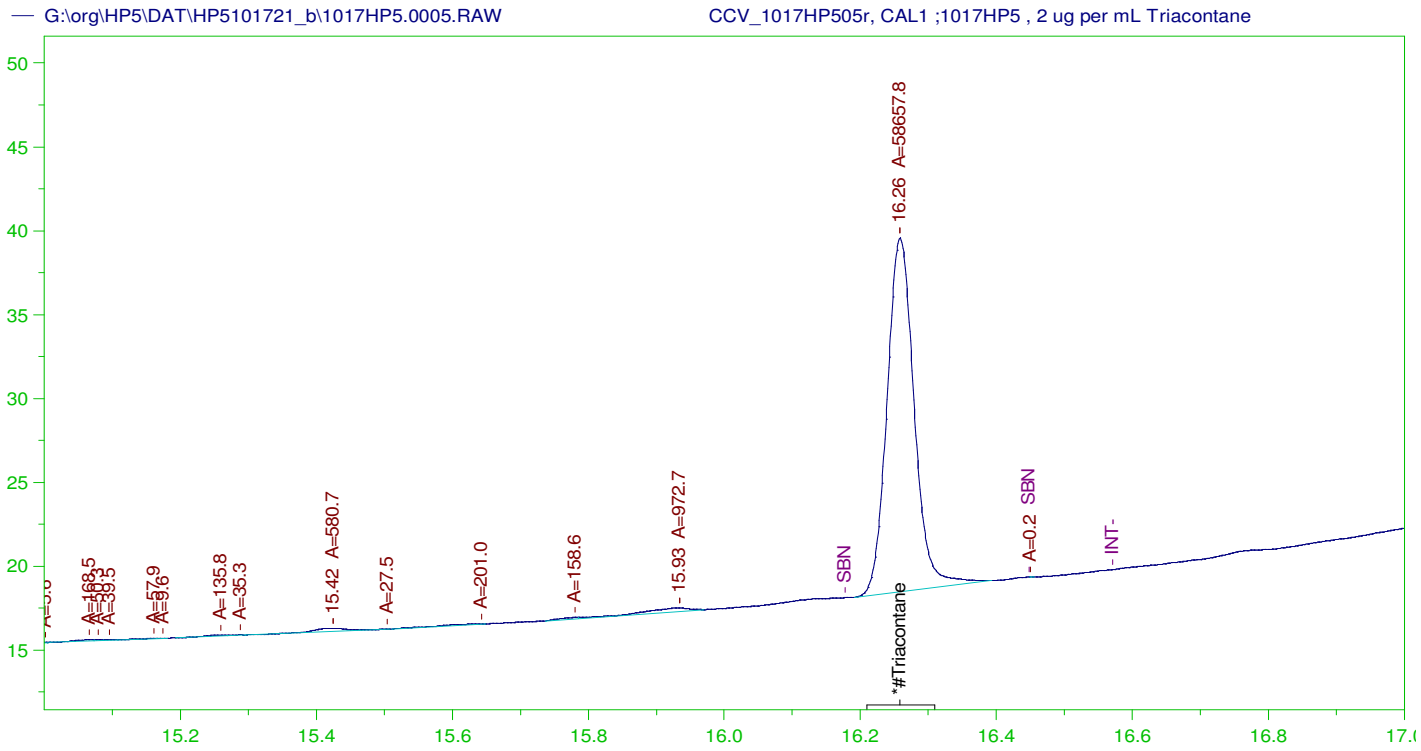
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

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

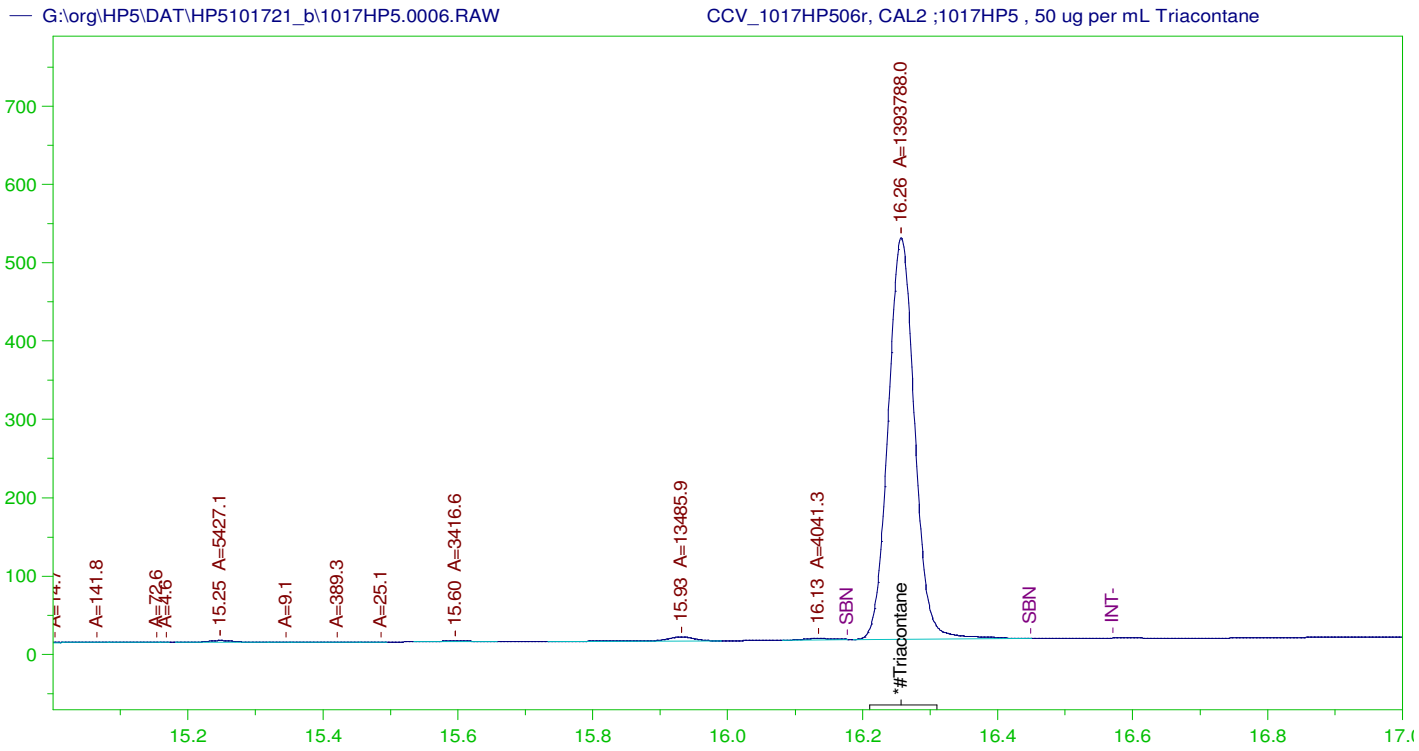
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.258	500.	2.028	.41	-

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

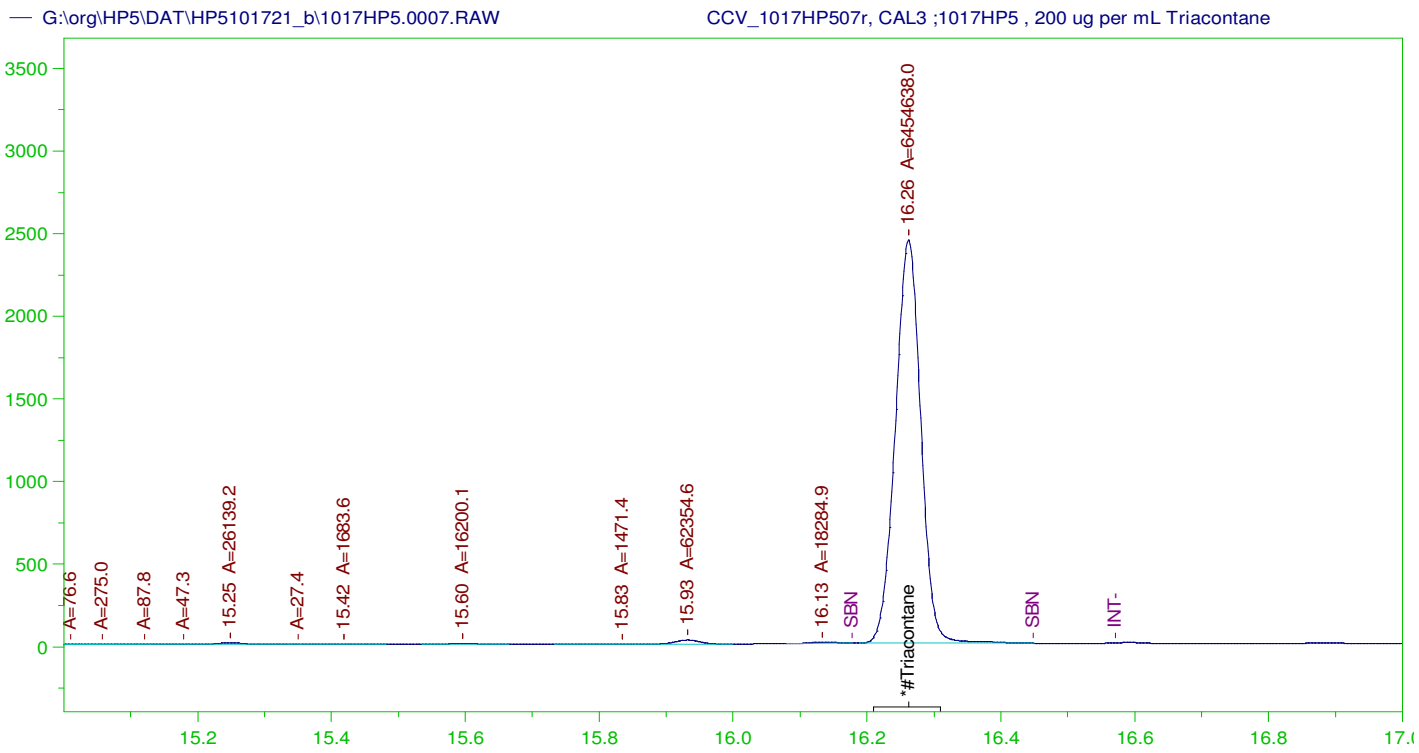
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.257	500.	48.178	9.64	-

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

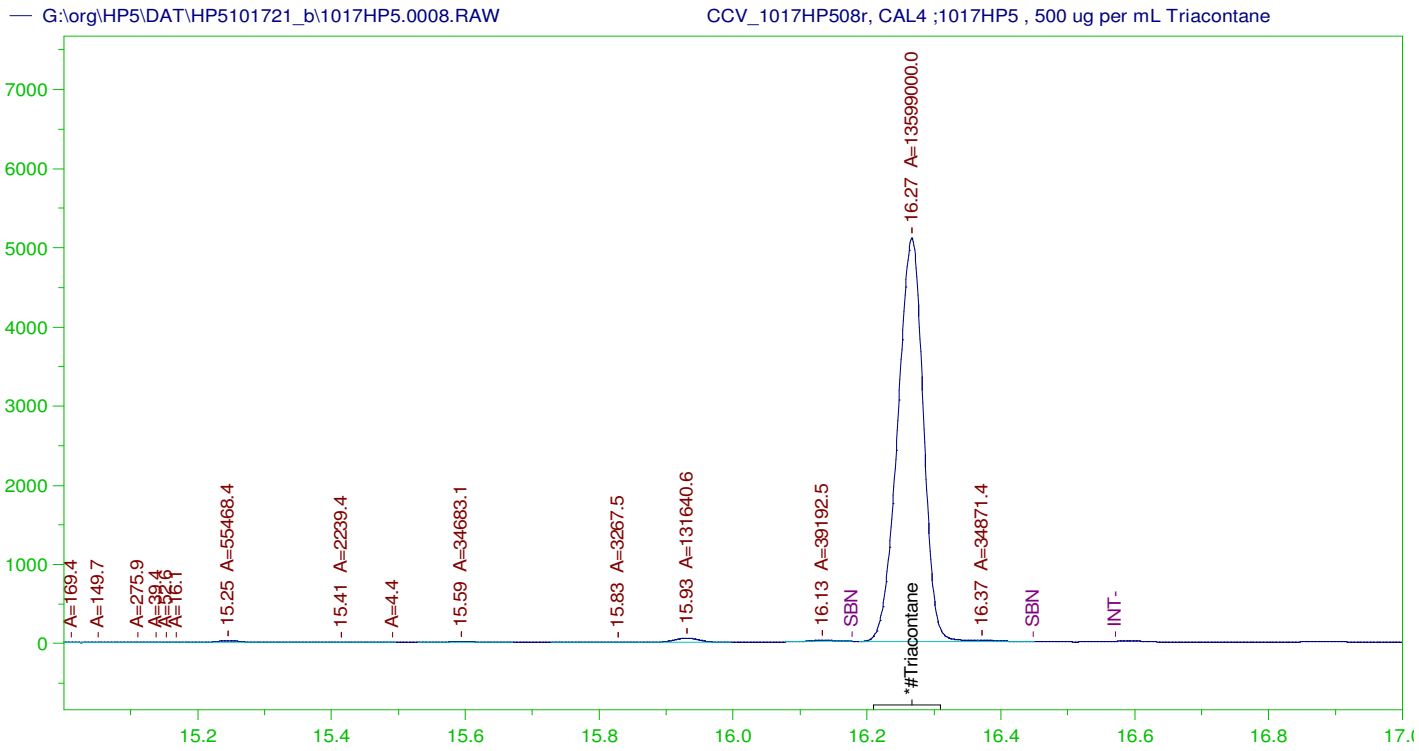
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.262	500.	223.111	44.62	-

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

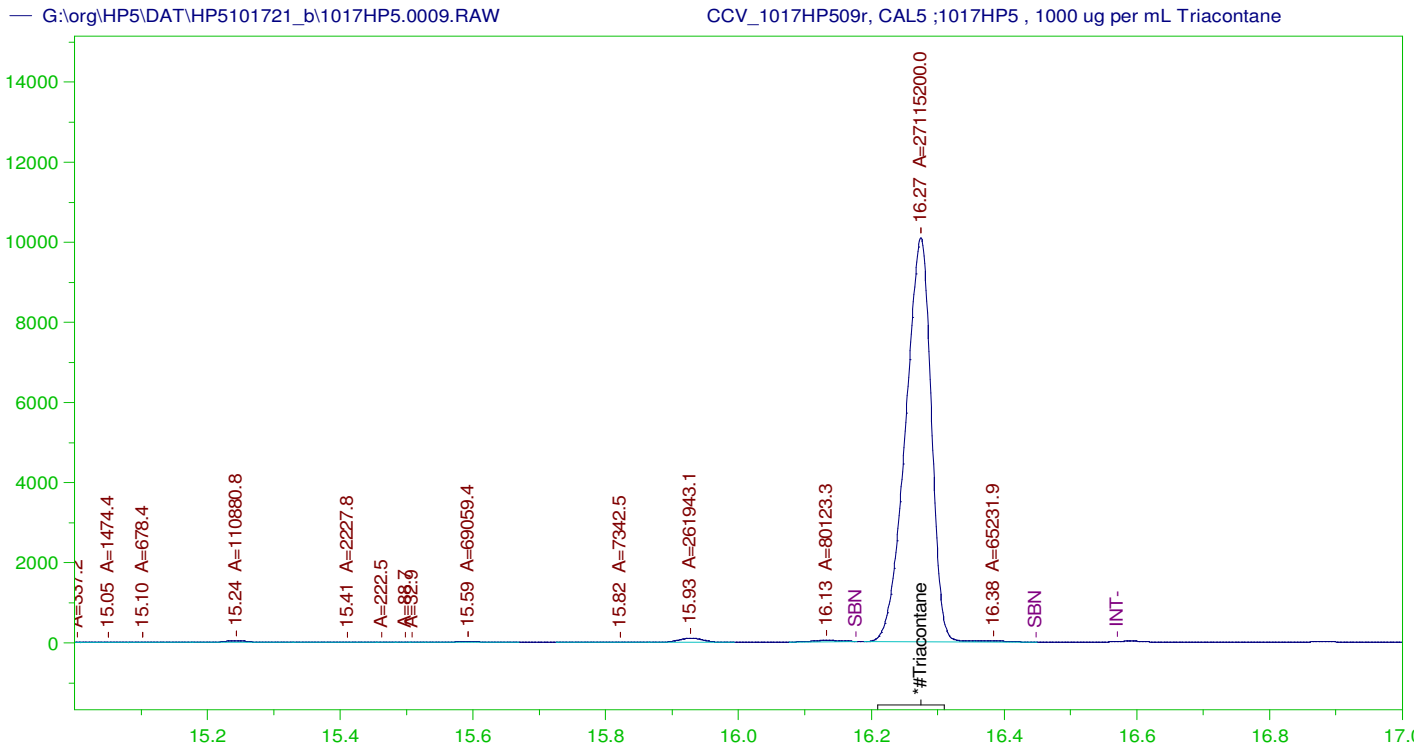
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.267	500.	470.063	94.01	-

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: **11/23/2021 12:58:04 P**

Prep Batch **161631** Prep Temp: **NA °C** Batch Units: **ML** Prep End Date: **11/24/2021 12:02:00 P**

Sample ID	Matrix	pH	Initial Samp Amt	Sol Added	Sol Recovered	Final Vol (mL)	Factor	Balance	Prep Start Date	Prep End Date
MB-161631			1000	0	0	1.00	0.001		11/23/2021	11/24/2021
Start time: 12:30 PM, 11/23/2021. End time: 11/24/2021 at 6:50 AM. SGT on remaining sample by ALN on 11/29/2021										
LCS-161631			1000	0	0	1.00	0.001		11/23/2021	11/24/2021
All bottles were completely used, defaced and disposed of on 11/23/2021. SGT on remaining sample by ALN on 11/29/2021										
LCSD-161631			1000	0	0	1.00	0.001		11/23/2021	11/24/2021
SGT on remaining sample by ALN on 11/29/2021										
LCS-161631-RRO			1000	0	0	1.00	0.001		11/23/2021	11/24/2021
SGT on remaining sample by ALN on 11/29/2021										
LCSD-161631-RRO			1000	0	0	1.00	0.001		11/23/2021	11/24/2021
SGT on remaining sample by ALN on 11/29/2021										
B21111928-003A	Ground Water	2	990	0	0	1.00	0.00101		11/23/2021	11/24/2021
Bottle 1/2. Clear. SGT on remaining sample by ALN on 11/29/2021										
B21111928-003AMS	Ground Water	2	1010	0	0	1.00	0.00099		11/23/2021	11/24/2021
Bottle 2/2. Clear. SGT on remaining sample by ALN on 11/29/2021										
B21111928-004A	Ground Water	2	1040	0	0	1.00	0.000962		11/23/2021	11/24/2021
Bottle 1/2. Clear, sediment. SGT on remaining sample by ALN on 11/29/2021										
B21111928-004AMS-RRO	Ground Water	2	1030	0	0	1.00	0.000971		11/23/2021	11/24/2021
Bottle 2/2. Clear, sediment. SGT on remaining sample by ALN on 11/29/2021										
B21111880-002B	Ground Water	2	1050	0	0	1.00	0.000952		11/23/2021	11/24/2021
Bottle 1/2. Clear.										
B21111880-003B	Ground Water	2	1030	0	0	1.00	0.000971		11/23/2021	11/24/2021
Bottle 1/1. Clear. Removed water from extract using sodium sulfate.										
B21111910-001B	Ground Water	2	1020	0	0	1.00	0.00098		11/23/2021	11/24/2021
Bottle 1/2. Clear. SGT on remaining sample by ALN on 11/29/2021										
B21111928-001A	Ground Water	2	1000	0	0	1.00	0.001		11/23/2021	11/24/2021
Bottle 1/2. Clear, sediment. SGT on remaining sample by ALN on 11/29/2021										
B21111928-002A	Ground Water	2	1020	0	0	1.00	0.00098		11/23/2021	11/24/2021
Bottle 1/2. Clear, sediment. SGT on remaining sample by ALN on 11/29/2021										

Number	Reagent Name	Exp Date	
11	Carbon Filter Water	1/1/2023	
13379	PTFE Boiling Stones 27463755	12/30/2025	
14181	4ML, Amber Vial, 24166704	8/17/2026	
14206	pH-indicator Strips 0-14 HC160347	8/26/2026	
14518	Dichloromethane EC735	10/14/2023	

Spk ID	Spike Name	SampType	AmtAdd	Exp Date
FP211118 14446	DCM RINSED FILTER PAPER	all	1	4/6/2026
SG211117(13376)	Baked Silica Gel	all	5g	2/28/2030
Sulfate 11/12/21 (	Baked Sodium Sulfate	all	Varies	11/12/2026
DRO211115A	Triacontane SURR 1000 ug/mL	all except LCS/D,	100 uL	4/6/2026
DRO211012J	OTP/COD SURR 2000 ug/mL	All except RRO-L	100 uL	9/30/2024
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: **11/23/2021 12:58:04 P**

Prep Batch **161631** Prep Temp: **NA °C** Batch Units: **ML** Prep End Date: **11/24/2021 12:02:00 P**

Sample ID	Matrix	pH	Initial Samp Amt	Sol Added	Sol Recovered	Final Vol (mL)	Factor	Balance	Prep Start Date	Prep End Date
B21111928-005A	Ground Water	2	1040	0	0	1.00	0.000962		11/23/2021	11/24/2021
Bottle 1/2. Clear. SGT on remaining sample by ALN on 11/29/2021										
B21111928-006A	Drinking Water	2	1040	0	0	1.00	0.000962		11/23/2021	11/24/2021
Bottle 1/2. Clear. SGT on remaining sample by ALN on 11/29/2021										
B21111928-007A	Drinking Water	2	1040	0	0	1.00	0.000957		11/23/2021	11/24/2021
Bottle 1/2. Clear. SGT on remaining sample by ALN on 11/29/2021										
B21111928-008A	Drinking Water	2	1040	0	0	1.00	0.000962		11/23/2021	11/24/2021
Bottle 1/2. Clear. SGT on remaining sample by ALN on 11/30/2021										

Number	Reagent Name	Exp Date	
11	Carbon Filter Water	1/1/2023	
13379	PTFE Boiling Stones 27463755	12/30/2025	
14181	4ML, Amber Vial, 24166704	8/17/2026	
14206	pH-indicator Strips 0-14 HC160347	8/26/2026	
14518	Dichloromethane EC735	10/14/2023	

Spk ID	Spike Name	SampType	AmtAdd	Exp Date
FP211118 14446	DCM RINSED FILTER PAPER	all	1	4/6/2026
SG211117(13376)	Baked Silica Gel	all	5g	2/28/2030
Sulfate 11/12/21 (	Baked Sodium Sulfate	all	Varies	11/12/2026
DRO211115A	Triacontane SURR 1000 ug/mL	all except LCS/D,	100 uL	4/6/2026
DRO211012J	OTP/COD SURR 2000 ug/mL	All except RRO-L	100 uL	9/30/2024
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: **Ann Nebel** Prep Start Date: **12/1/2021 4:29:17 PM**

Prep Batch **161809** Prep Temp: **NA °C** Batch Units: **ML** Prep End Date: **12/2/2021 1:25:00 PM**

Sample ID	Matrix	pH	Initial Samp Amt	Sol Added	Sol Recovered	Final Vol (mL)	Factor	Balance	Prep Start Date	Prep End Date
MB-161809			1000	0	0	1.00	0.001		12/1/2021	12/2/2021
	Start time: 4:20 PM, 12/01/2021. End time: 12/02/2021 at AM. SGT on remaining sample by ALN on 12/6/2021									
LCS-161809			1000	0	0	1.00	0.001		12/1/2021	12/2/2021
	All bottles were completely used, defaced and disposed of on 12/01/2021 SGT on remaining sample by ALN on 12/6/2021									
LCSD-161809			1000	0	0	1.00	0.001		12/1/2021	12/2/2021
	Insufficient sample amount for MS/MSD due to these being reextracts. SGT on remaining sample by ALN on 12/6/2021									
LCS-161809-RRO			1000	0	0	1.00	0.001		12/1/2021	12/2/2021
	SGT on remaining sample by ALN on 12/6/2021									
LCSD-161809-RRO			1000	0	0	1.00	0.001		12/1/2021	12/2/2021
	SGT on remaining sample by ALN on 12/6/2021									
B21111928-006B	Drinking Water		1000	0	0	1.00	0.001		12/1/2021	12/2/2021
	Bottle 2/2 Reextract Clear.									
B21111928-007B	Drinking Water		1000	0	0	1.00	0.001		12/1/2021	12/2/2021
	Bottle 2/2 Reextract Clear.									
B21111928-008B	Drinking Water		1000	0	0	1.00	0.001		12/1/2021	12/2/2021
	Bottle 2/2 Reextract Clear. SGT on remaining sample by ALN on 12/6/2021									

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	
14518	Dichloromethane EC735	10/14/2023	
14563	4ML, Amber Vial, 171001407106	11/30/2022	

Spk ID	Spike Name	SampType	AmtAdd	Exp Date
FP211130 14446	DCM RINSED FILTER PAPER	all	1	4/6/2026
Sulfate 11/21/21 (	Baked Sodium Sulfate	all	Varies	11/19/2026
DRO211129A	Triacontane SURR 1000 ug/mL	all except LCS/D,	100 uL	4/6/2026
DRO211012J	OTP/COD SURR 2000 ug/mL	All except RRO-L	100 uL	9/30/2024
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
SG211201(13376)	Baked Silica Gel	SGT	5g	2/28/2030

Energy Laboratories Inc

ANALYTICAL RUN Summary

30-Nov-21

Run ID GCFID-HP5-B_211124A

Run Start Date: 11/24/2021
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
DRO211103B	ALASKA MARKER-200ug/mL					MARKER	5/31/2022
DRO211108A	5,000 ug/mL RRO CCV 200 ug/mL Triacontane					CCV-RRO	4/6/2026
DRO211110A	Carbon Scan STD-Marker					MARKER	3/5/2028
DRO211116B	8015 CCV-15,000ug/mL + 200 OTP					CCV-DRO	4/30/2023

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889375	MARKER_1124	HC-8015-DRO-	SAMP		11/24/2021 8:53:	1	R370905		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		2.185739		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		3.408895		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.2000936		0.2	0	0	0.000429	0.002	0	100%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		2.185739		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889376	CCV_1124HP50	HC-8015-DRO-	CCV		11/24/2021 9:35:	1	R370905		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		4.68473047		5	0	0	0.0879	0.3	0	94%	80	120	0%	
n-Triacontane	S	mg/L		0.198954		0.2	0	0	0.000336	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
14889377	CCV_1124HP50	HC-8015-DRO-	CCV		11/24/2021 10:1	1	R370905		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		14.56995		15	0	0	0.0389	0.3	0	97%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.11544		15	0	0	0.0749	0.3	50	101%	80	120	0%	
o-Terphenyl	S	mg/L		0.2305169		0.2	0	0	0.000429	0.002	0	115%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889378	LCS-161631	HC-8015-DRO-	LCS-DOD		11/24/2021 11:4	1	161631	11/23/2021	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		12.9264		15	0	0	0.0389	0.3	0	86%	36	132	0%	
Total Extractable Hydrocarbons	A	mg/L		13.79566		15	0	0	0.0749	0.3	50	92%	60	132	0%	
o-Terphenyl	S	mg/L		0.204611		0.2	0	0	0.000429	0.002	0	102%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889379	LCSD-161631	HC-8015-DRO-	LCSD-DOD		11/24/2021 12:2	1	161631	11/23/2021	0	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		13.20956		15	0	12.9264	0.0389	0.3	0	88%	36	132	2%	
Total Extractable Hydrocarbons	A	mg/L		14.11277		15	0	13.79566	0.0749	0.3	50	94%	60	132	2%	
o-Terphenyl	S	mg/L		0.20165		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
14889380	MB-161631	HC-8015-DRO-	MBLK		11/24/2021 1:10:	1	161631	11/23/2021	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		0.0992		0.1	0	0	0.000336	0.002	0	99%	50	150	0%	
o-Terphenyl	S	mg/L		0.2017486		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
14889381	B21111928-006	HC-8015-DRO-	SAMP		11/24/2021 1:53:	1	161631	11/23/2021	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
14889381	B21111928-006	HC-8015-DRO-	SAMP		11/24/2021 1:53:	1	161631	11/23/2021	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		0.2136753		0	0	0	0.0374218	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.38896066		0	0	0	0.0845598	0.3	0	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		0.6733084		0	0	0	0.0720538	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0883		0.0962	0	0	0.0003232	0.001924	0	92%	50	150	0%	
o-Terphenyl	S	mg/L		0.1855893		0.1924	0	0	0.0004127	0.002	0	96%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889382	B21111928-007	HC-8015-DRO-	SAMP		11/24/2021 2:36:	1	161631	11/23/2021	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		0.03950207		0	0	0	0.0372273	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.2279813		0	0	0	0.0841203	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		0.3330267		0	0	0	0.0716793	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0906		0.0957	0	0	0.0003216	0.001914	0	95%	50	150	0%	
o-Terphenyl	S	mg/L		0.1851179		0.1914	0	0	0.0004106	0.002	0	97%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889384	B21111928-005	HC-8015-DRO-	SAMP		11/24/2021 4:01:	1	161631	11/23/2021	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		0.08744805		0	0	0	0.0374218	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.36771876		0	0	0	0.0845598	0.3	0	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		0.541378		0	0	0	0.0720538	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0896		0.0962	0	0	0.0003232	0.001924	0	93%	50	150	0%	
o-Terphenyl	S	mg/L		0.1860494		0.1924	0	0	0.0004127	0.002	0	97%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889385	B21111880-002	HC-8015-DRO-	SAMP		11/24/2021 4:43:	1	161631	11/23/2021	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	0.0370328	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0		0	0	0	0.0836808	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.0713048	0.3	50	0%	0	0	0%	U
n-Triacontane	S	mg/L		0.0893		0.0952	0	0	0.0003199	0.001904	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
14889385	B21111880-002	HC-8015-DRO-	SAMP		11/24/2021 4:43:	1	161631	11/23/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl	S	mg/L		0.1860581		0.1904	0	0	0.0004084	0.002	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
14889386	B21111880-003	HC-8015-DRO-	SAMP		11/24/2021 5:26:	1	161631	11/23/2021	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	0.0377719	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0		0	0	0	0.0853509	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.0727279	0.3	50	0%	0	0	0%	U
n-Triacontane	S	mg/L		0.074		0.0971	0	0	0.0003263	0.001942	0	76%	50	150	0%	
o-Terphenyl	S	mg/L		0.1509685		0.1942	0	0	0.0004166	0.002	0	78%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889387	MARKER_1124	HC-8015-DRO-	SAMP		11/24/2021 6:52:	1	R370905		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		2.178636		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		3.392453		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.1994983		0.2	0	0	0.000429	0.002	0	100%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		2.178636		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889388	CCV_1124HP51	HC-8015-DRO-	CCV		11/24/2021 7:35:	1	R370905		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		4.78868018		5	0	0	0.0879	0.3	0	96%	80	120	0%	
n-Triacontane	S	mg/L		0.2032827		0.2	0	0	0.000336	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
14889389	CCV_1124HP51	HC-8015-DRO-	CCV		11/24/2021 8:17:	1	R370905		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
14889389	CCV_1124HP51	HC-8015-DRO-	CCV		11/24/2021 8:17:	1	R370905		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		14.5405		15	0	0	0.0389	0.3	0	97%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.04253		15	0	0	0.0749	0.3	50	100%	80	120	0%	
o-Terphenyl	S	mg/L		0.1976057		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
14889390	MARKER_1124	HC-8015-DRO-	SAMP		11/27/2021 9:20:	1	R370905		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		2.219123		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		3.452753		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.2033532		0.2	0	0	0.000429	0.002	0	102%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		2.219123		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889391	CCV_1124HP52	HC-8015-DRO-	CCV		11/27/2021 10:0	1	R370905		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		4.77833398		5	0	0	0.0879	0.3	0	96%	80	120	0%	
n-Triacontane	S	mg/L		0.2007168		0.2	0	0	0.000336	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
14889392	CCV_1124HP52	HC-8015-DRO-	CCV		11/27/2021 10:4	1	R370905		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		14.37447		15	0	0	0.0389	0.3	0	96%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		14.86771		15	0	0	0.0749	0.3	50	99%	80	120	0%	
o-Terphenyl	S	mg/L		0.1955837		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
14889393	B21111928-004	HC-8015-DRO-	SAMP		11/27/2021 12:1	1	161631	11/23/2021	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
14889393	B21111928-004	HC-8015-DRO-	SAMP		11/27/2021 12:1	1	161631	11/23/2021	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		0.08095048		0	0	0	0.0374218	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.16758285		0	0	0	0.0845598	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		0.3513041		0	0	0	0.0720538	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0956		0.0962	0	0	0.0003232	0.001924	0	99%	50	150	0%	
o-Terphenyl	S	mg/L		0.1895041		0.1924	0	0	0.0004127	0.002	0	98%	56	125	0%	
TEH(Oil Range)	X	mg/L		0.30869126		0	0	0	0.0845598	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889394	B21111928-003	HC-8015-DRO-	MS-DOD		11/27/2021 1:36:	1	161631	11/23/2021	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		13.57041		14.85	0.1222804	0	0.038511	0.3	0	91%	36	132	0%	
Total Extractable Hydrocarbons	A	mg/L		15.23164		14.85	0.5502037	0	0.074151	0.3	50	99%	60	132	0%	
o-Terphenyl	S	mg/L		0.1641746		0.198	0	0	0.0004247	0.002	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
14889395	B21111928-001	HC-8015-DRO-	SAMP		11/27/2021 3:43:	1	161631	11/23/2021	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		0.529893		0	0	0	0.0389	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.20044413		0	0	0	0.0879	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		0.8114815		0	0	0	0.0749	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0984		0.1	0	0	0.000336	0.002	0	98%	50	150	0%	
o-Terphenyl	S	mg/L		0.2004002		0.2	0	0	0.000429	0.002	0	100%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889396	B21111928-002	HC-8015-DRO-	SAMP		11/27/2021 5:51:	1	161631	11/23/2021	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		2.541644		0	0	0	0.038122	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.33257541		0	0	0	0.086142	0.3	0	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		2.982348		0	0	0	0.073402	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0945		0.098	0	0	0.0003293	0.00196	0	96%	50	150	0%	
o-Terphenyl	S	mg/L		0.1453172		0.196	0	0	0.0004204	0.002	0	74%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889397	B21111928-004	HC-8015-DRO-	MS-DOD		11/27/2021 7:16:	1	161631	11/23/2021	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		5.22453117		4.855	0.3086913	0	0.0853509	0.3	0	101%	41	113	0%	
n-Triacontane	S	mg/L		0.0907		0.0971	0	0	0.0003263	0.002	0	93%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889398	MARKER_1124	HC-8015-DRO-	SAMP		11/27/2021 8:42:	1	R370905		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		2.21478		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		3.446286		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.2025874		0.2	0	0	0.000429	0.002	0	101%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		2.21478		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889399	CCV_1124HP54	HC-8015-DRO-	CCV		11/27/2021 9:24:	1	R370905		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		5.00559473		5	0	0	0.0879	0.3	0	100%	80	120	0%	
n-Triacontane	S	mg/L		0.2085783		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
14889400	CCV_1124HP54	HC-8015-DRO-	CCV		11/27/2021 10:0	1	R370905		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		14.440305		15	0	0	0.0389	0.3	0	96%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		14.89409		15	0	0	0.0749	0.3	50	99%	80	120	0%	
o-Terphenyl	S	mg/L		0.1961041		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
14889401	B21111910-001	HC-8015-DRO-	SAMP		11/27/2021 11:3	1	161631	11/23/2021	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		0.05567216		0	0	0	0.038122	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.24006186		0	0	0	0.086142	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		0.3511227		0	0	0	0.073402	0.3	50	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889401	B21111910-001	HC-8015-DRO-	SAMP		11/27/2021 11:3	1	161631	11/23/2021	0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane	S	mg/L		0.0956		0.098	0	0	0.0003293	0.00196	0	98%	50	150	0%	
o-Terphenyl	S	mg/L		0.189953		0.196	0	0	0.0004204	0.002	0	97%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889402	LCS-161631-RR	HC-8015-DRO-	LCS-DOD		11/28/2021 1:41:	1	161631	11/23/2021	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		5.00746250		5	0	0	0.0879	0.3	0	100%	41	113	0%	
n-Triacontane	S	mg/L		0.0975		0.1	0	0	0.000336	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
14889403	LCSD-161631-R	HC-8015-DRO-	LCSD-DOD		11/28/2021 3:07:	1	161631	11/23/2021	0	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		4.77473021		5	0	5.0074625	0.0879	0.3	0	95%	41	113	5%	
n-Triacontane	S	mg/L		0.0928		0.1	0	0	0.000336	0.002	0	93%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889404	MARKER_1124	HC-8015-DRO-	SAMP		11/28/2021 4:33:	1	R370905		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		2.407722		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		3.7448		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.2206775		0.2	0	0	0.000429	0.002	0	110%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		2.407722		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14889405	CCV_1124HP55	HC-8015-DRO-	CCV		11/28/2021 5:16:	1	R370905		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		4.78625635		5	0	0	0.0879	0.3	0	96%	80	120	0%	
n-Triacontane	S	mg/L		0.2022275		0.2	0	0	0.000336	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
14889406	CCV_1124HP55	HC-8015-DRO-	CCV		11/28/2021 5:59:	1	R370905		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		15.03931		15	0	0	0.0389	0.3	0	100%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.5779		15	0	0	0.0749	0.3	50	104%	80	120	0%	
o-Terphenyl	S	mg/L		0.2051649		0.2	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
14891145	B21111928-008	HC-8015-DRO-	SAMP		11/24/2021 3:18:	1	161631	11/23/2021	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		0.2616987		0	0	0	0.0374218	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.53387469		0	0	0	0.0845598	0.3	0	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		0.8822244		0	0	0	0.0720538	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0913		0.0962	0	0	0.0003232	0.001924	0	95%	50	150	0%	
o-Terphenyl	S	mg/L		0.194733		0.1924	0	0	0.0004127	0.002	0	101%	56	125	0%	

Energy Laboratories Inc

ANALYTICAL RUN Summary

30-Nov-21

Run ID GCFID-HP5-B_211129A

Run Start Date: 11/29/2021
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
DRO211103B	ALASKA MARKER-200ug/mL					MARKER	5/31/2022
DRO211108A	5,000 ug/mL RRO CCV 200 ug/mL Triacontane					CCV-RRO	4/6/2026
DRO211110A	Carbon Scan STD-Marker					MARKER	3/5/2028
DRO211116B	8015 CCV-15,000ug/mL + 200 OTP					CCV-DRO	4/30/2023

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14890176	MARKER_1129	HC-8015-DRO-	SAMP		11/29/2021 11:0	1	R370937		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		3196.501		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		4966.432		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		293.6765		0.2	0	0	0.000429	0.002	0	146838%	50	150	0%	S
Diesel Range Organics (C10 to C24)	X	mg/L		3196.501		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14890177	CCV_1129HP50	HC-8015-DRO-	CCV		11/29/2021 11:4	1	R370937		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		4.77808691		5	0	0	0.0879	0.3	0	96%	80	120	0%	
n-Triacontane	S	mg/L		0.2013112		0.2	0	0	0.000336	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
14890178	CCV_1129HP50	HC-8015-DRO-	CCV		11/29/2021 12:2	1	R370937		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		14.59335		15	0	0	0.0389	0.3	0	97%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.09661		15	0	0	0.0749	0.3	50	101%	80	120	0%	
o-Terphenyl	S	mg/L		0.1981455		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
14890179	B21111928-003	HC-8015-DRO-	SAMP		11/29/2021 1:50:	1	161631	11/23/2021	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		0.1222804		0	0	0	0.039289	0.303	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0.35446459		0	0	0	0.088779	0.303	0	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		0.5502037		0	0	0	0.075649	0.303	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.1046		0.101	0	0	0.0003394	0.00202	0	104%	50	150	0%	
o-Terphenyl	S	mg/L		0.1494509		0.202	0	0	0.0004333	0.00202	0	74%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892426	MARKER_1129	HC-8015-DRO-	SAMP		11/29/2021 6:50:	1	R370937		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		3.233292		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		5.022844		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.2969357		0.2	0	0	0.000429	0.002	0	148%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		3.233292		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892427	CCV_1129HP51	HC-8015-DRO-	CCV		11/29/2021 8:16:	1	R370937		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		4.82865479		5	0	0	0.0879	0.3	0	97%	80	120	0%	
n-Triacontane	S	mg/L		0.2008735		0.2	0	0	0.000336	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
14892428	CCV_1129HP51	HC-8015-DRO-	CCV		11/29/2021 8:58:	1	R370937		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
14892428	CCV_1129HP51	HC-8015-DRO-	CCV		11/29/2021 8:58:	1	R370937		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		15.08307		15	0	0	0.0389	0.3	0	101%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.6018		15	0	0	0.0749	0.3	50	104%	80	120	0%	
o-Terphenyl	S	mg/L		0.2049707		0.2	0	0	0.000429	0.002	0	102%	80	120	0%	

Energy Laboratories Inc

ANALYTICAL RUN Summary

15-Dec-21

Run ID GCFID-HP5-B_211129B

Run Start Date: 11/29/2021
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
DRO211103B	ALASKA MARKER-200ug/mL					MARKER	5/31/2022
DRO211108A	5,000 ug/mL RRO CCV 200 ug/mL Triacontane					CCV-RRO	4/6/2026
DRO211110A	Carbon Scan STD-Marker					MARKER	3/5/2028
DRO211116B	8015 CCV-15,000ug/mL + 200 OTP					CCV-DRO	4/30/2023

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892393	MARKER_1129	HC-8015-DRO-	SAMP		11/29/2021 11:0	1	R370979		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		3196.501		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		4966.432		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		293.6765		0.2	0	0	0.000429	0.002	0	146838%	50	150	0%	S
Diesel Range Organics (C10 to C24)	X	mg/L		3196.501		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892394	CCV_1129HP50	HC-8015-DRO-	CCV		11/29/2021 11:4	1	R370979		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		4.77808691		5	0	0	0.0879	0.3	0	96%	80	120	0%	
n-Triacontane	S	mg/L		0.2013112		0.2	0	0	0.000336	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
14892395	CCV_1129HP50	HC-8015-DRO-	CCV		11/29/2021 12:2	1	R370979		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		14.59335		15	0	0	0.0389	0.3	0	97%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.09661		15	0	0	0.0749	0.3	50	101%	80	120	0%	
o-Terphenyl	S	mg/L		0.1981455		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
14892396	LCS-161631	HC-8015-DRO-	LCS-DOD		11/29/2021 3:15:	1	161631	11/23/2021	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		12.97752		15	0	0	0.0389	0.3	0	87%	36	132	0%	
Total Extractable Hydrocarbons (SGT	A	mg/L		13.81149		15	0	0	0.0329	0.3	0	92%	60	132	0%	
o-Terphenyl (SGT)	S	mg/L		0.2087865		0.2	0	0	0.000429	0.002	0	104%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892397	LCSD-161631	HC-8015-DRO-	LCSD-DOD		11/29/2021 3:58:	1	161631	11/23/2021	0	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		13.03839		15	0	12.97752	0.0389	0.3	0	87%	36	132	0%	
Total Extractable Hydrocarbons (SGT	A	mg/L		13.91795		15	0	13.81149	0.0329	0.3	0	93%	60	132	1%	
o-Terphenyl (SGT)	S	mg/L		0.2037225		0.2	0	0	0.000429	0.002	0	102%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892398	MB-161631	HC-8015-DRO-	MBLK		11/29/2021 4:40:	1	161631	11/23/2021	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		0.0899		0.1	0	0	0.000336	0.002	0	90%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1912212		0.2	0	0	0.000429	0.002	0	96%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892399	B21111910-001	HC-8015-DRO-	SAMP		11/29/2021 5:23:	1	161631	11/23/2021	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
14892399	B21111910-001	HC-8015-DRO-	SAMP		11/29/2021 5:23:	1	161631	11/23/2021	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	0.038122	0.3	0	0%	0	0	0%	U
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		0	0	0	0.032242	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.078		0.098	0	0	0.0003293	0.00196	0	80%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1657814		0.196	0	0	0.0004204	0.00196	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
14892400	B21111928-007	HC-8015-DRO-	SAMP		11/29/2021 6:07:	1	161631	11/23/2021	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	0.0372273	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0841203	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.0314853	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.0762		0.0957	0	0	0.0003216	0.001914	0	80%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1610666		0.1914	0	0	0.0004106	0.001914	0	84%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892401	MARKER_1129	HC-8015-DRO-	SAMP		11/29/2021 6:50:	1	R370979		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		3.233292		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		5.022844		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.2969357		0.2	0	0	0.000429	0.002	0	148%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		3.233292		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892402	CCV_1129HP51	HC-8015-DRO-	CCV		11/29/2021 8:16:	1	R370979		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		4.82865479		5	0	0	0.0879	0.3	0	97%	80	120	0%	
n-Triacontane	S	mg/L		0.2008735		0.2	0	0	0.000336	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
14892403	CCV_1129HP51	HC-8015-DRO-	CCV		11/29/2021 8:58:	1	R370979		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		15.08307		15	0	0	0.0389	0.3	0	101%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.6018		15	0	0	0.0749	0.3	50	104%	80	120	0%	
o-Terphenyl	S	mg/L		0.2049707		0.2	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
14892404	B21111928-005	HC-8015-DRO-	SAMP		11/29/2021 10:2	1	161631	11/23/2021	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	0.0374218	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0845598	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.0316498	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.0787		0.0962	0	0	0.0003232	0.001924	0	82%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1675006		0.1924	0	0	0.0004127	0.001924	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
14892405	B21111928-006	HC-8015-DRO-	SAMP		11/29/2021 11:0	1	161631	11/23/2021	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	0.0374218	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0845598	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.0316498	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.0839		0.0962	0	0	0.0003232	0.001924	0	87%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1814205		0.1924	0	0	0.0004127	0.001924	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
14892406	B21111928-003	HC-8015-DRO-	SAMP		11/29/2021 11:5	1	161631	11/23/2021	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		0.06304887		0	0	0	0.033229	0.303	0	0%	0	0	0%	J
n-Triacontane (SGT)	S	mg/L		0.0799		0.101	0	0	0.0003394	0.00202	0	79%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1224489		0.202	0	0	0.0004333	0.00202	0	61%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892407	B21111928-004	HC-8015-DRO-	SAMP		11/30/2021 1:16:	1	161631	11/23/2021	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	0.0374218	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0845598	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.0316498	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.0744		0.0962	0	0	0.0003232	0.001924	0	77%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1548725		0.1924	0	0	0.0004127	0.001924	0	80%	56	125	0%	
TEH (SGT-Oil Range)	X	mg/L		0		0	0	0	0.0845598	0.2886	0	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
14892408	B21111928-001	HC-8015-DRO-	SAMP		11/30/2021 2:41:	1	161631	11/23/2021	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		0.1045036		0	0	0	0.0389	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0879	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0.1125669		0	0	0	0.0329	0.3	0	0%	0	0	0%	J
n-Triacontane (SGT)	S	mg/L		0.0794		0.1	0	0	0.000336	0.002	0	79%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1710823		0.2	0	0	0.000429	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
14892409	B21111928-002	HC-8015-DRO-	SAMP		11/30/2021 3:24:	1	161631	11/23/2021	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		0.5187062		0	0	0	0.038122	0.3	0	0%	0	0	0%	
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		0.5382087		0	0	0	0.032242	0.3	0	0%	0	0	0%	
n-Triacontane (SGT)	S	mg/L		0.0809		0.098	0	0	0.0003293	0.00196	0	83%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1313704		0.196	0	0	0.0004204	0.00196	0	67%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892410	B21111928-003	HC-8015-DRO-	MS-DOD		11/30/2021 4:50:	1	161631	11/23/2021	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		12.0003		14.85	0	0	0.038511	0.3	0	81%	36	132	0%	
Total Extractable Hydrocarbons (SGT	A	mg/L		12.94631		14.85	0.0630489	0	0.032571	0.3	0	87%	60	132	0%	
o-Terphenyl (SGT)	S	mg/L		0.1523707		0.198	0	0	0.0004247	0.002	0	77%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892412	B21111928-004	HC-8015-DRO-	MS-DOD		11/30/2021 5:33:	1	161631	11/23/2021	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		4.43148184		4.855	0	0	0.0853509	0.3	0	91%	41	113	0%	
n-Triacontane (SGT)	S	mg/L		0.0793		0.0971	0	0	0.0003263	0.002	0	82%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892413	MARKER_1129	HC-8015-DRO-	SAMP		11/30/2021 6:59:	1	R370979		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		3.827668		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		5.964949		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.352033		0.2	0	0	0.000429	0.002	0	176%	50	150	0%	S
Diesel Range Organics (C10 to C24)	X	mg/L		3.827668		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14892414	CCV_1129HP53	HC-8015-DRO-	CCV		11/30/2021 7:41:	1	R370979		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		5.02031055		5	0	0	0.0879	0.3	0	100%	80	120	0%	
n-Triacontane	S	mg/L		0.2110632		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
14892415	CCV_1129HP53	HC-8015-DRO-	CCV		11/30/2021 8:24:	1	R370979		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		15.22045		15	0	0	0.0389	0.3	0	101%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.76925		15	0	0	0.0749	0.3	50	105%	80	120	0%	
o-Terphenyl	S	mg/L		0.2073805		0.2	0	0	0.000429	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
14893573	LCS-161631-RR	HC-8015-DRO-	LCS-DOD		11/30/2021 9:50:	1	161631	11/23/2021		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		4.6563015		5	0	0	0.0879	0.3	0	93%	41	113	0%	
n-Triacontane (SGT)	S	mg/L		0.0836		0.1	0	0	0.000336	0.002	0	84%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14893574	LCSD-161631-R	HC-8015-DRO-	LCSD-DOD		11/30/2021 11:1	1	161631	11/23/2021	0	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		4.42733717		5	0	4.6563015	0.0879	0.3	0	89%	41	113	5%	
n-Triacontane (SGT)	S	mg/L		0.0774		0.1	0	0	0.000336	0.002	0	77%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14893575	B21111928-008	HC-8015-DRO-	SAMP		11/30/2021 1:24:	1	161631	11/23/2021	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	0.0374218	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0845598	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.0316498	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.0739		0.0962	0	0	0.0003232	0.001924	0	77%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1674381		0.1924	0	0	0.0004127	0.001924	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
14927562	MARKER_1129	HC-8015-DRO-	SAMP		11/30/2021 6:24:	1	R370979		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		2.196772		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		3.41638		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.2006552		0.2	0	0	0.000429	0.002	0	100%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		2.196772		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14927563	CCV_1129HP54	HC-8015-DRO-	CCV		11/30/2021 7:07:	1	R370979		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		4.94300098		5	0	0	0.0879	0.3	0	99%	80	120	0%	
n-Triacontane	S	mg/L		0.2100321		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
14927564	CCV_1129HP54	HC-8015-DRO-	CCV		11/30/2021 7:50:	1	R370979		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
14927564	CCV_1129HP54	HC-8015-DRO-	CCV		11/30/2021 7:50:	1	R370979		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		15.09568		15	0	0	0.0389	0.3	0	101%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.64306		15	0	0	0.0749	0.3	50	104%	80	120	0%	
o-Terphenyl	S	mg/L		0.2056126		0.2	0	0	0.000429	0.002	0	103%	80	120	0%	

Energy Laboratories Inc

ANALYTICAL RUN Summary

09-Dec-21

Run ID GCFID-HP5-B_211202B

Run Start Date: 12/2/2021
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
DRO211103B	ALASKA MARKER-200ug/mL					MARKER	5/31/2022
DRO211108A	5,000 ug/mL RRO CCV 200 ug/mL Triacontane					CCV-RRO	4/6/2026
DRO211110A	Carbon Scan STD-Marker					MARKER	3/5/2028
DRO211124A	8015 CCV-15,000ug/mL + 200 OTP					CCV-DRO	4/30/2023

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14908981	MARKER_1129	HC-8015-DRO-	SAMP		12/3/2021 4:54:3	1	R371382		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		2.4455		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		3.829393		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.2233616		0.2	0	0	0.000429	0.002	0	112%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		2.4455		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14908982	CCV_1202HP53	HC-8015-DRO-	CCV		12/3/2021 5:37:4	1	R371382		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		4.77851660		5	0	0	0.0879	0.3	0	96%	80	120	0%	
n-Triacontane	S	mg/L		0.2049938		0.2	0	0	0.000336	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
14908983	CCV_1202HP53	HC-8015-DRO-	CCV		12/3/2021 6:20:4	1	R371382		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		15.59567		15	0	0	0.0389	0.3	0	104%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		16.1296		15	0	0	0.0749	0.3	50	108%	80	120	0%	
o-Terphenyl	S	mg/L		0.2115825		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
14908984	LCS-161809	HC-8015-DRO-	LCS-DOD		12/3/2021 7:46:1	1	161809	12/1/2021 4:	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		12.98458		15	0	0	0.0389	0.3	0	87%	36	132	0%	
Total Extractable Hydrocarbons	A	mg/L		13.90736		15	0	0	0.0749	0.3	50	93%	60	132	0%	
o-Terphenyl	S	mg/L		0.1985798		0.2	0	0	0.000429	0.002	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
14908985	LCSD-161809	HC-8015-DRO-	LCSD-DOD		12/3/2021 8:29:0	1	161809	12/1/2021 4:	0	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		13.23966		15	0	12.98458	0.0389	0.3	0	88%	36	132	2%	
Total Extractable Hydrocarbons	A	mg/L		14.16294		15	0	13.90736	0.0749	0.3	50	94%	60	132	2%	
o-Terphenyl	S	mg/L		0.2062416		0.2	0	0	0.000429	0.002	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
14908986	MB-161809	HC-8015-DRO-	MBLK		12/3/2021 9:11:4	1	161809	12/1/2021 4:	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		0.0953		0.1	0	0	0.000336	0.002	0	95%	50	150	0%	
o-Terphenyl	S	mg/L		0.2038721		0.2	0	0	0.000429	0.002	0	102%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14908987	B21111928-007	HC-8015-DRO-	SAMP		12/3/2021 9:54:3	1	161809	12/1/2021 4:	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
14908987	B21111928-007	HC-8015-DRO-	SAMP		12/3/2021 9:54:3	1	161809	12/1/2021 4:	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	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0		0	0	0	0.0879	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.0749	0.3	50	0%	0	0	0%	U
n-Triacontane	S	mg/L		0.0997		0.1	0	0	0.000336	0.002	0	100%	50	150	0%	
o-Terphenyl	S	mg/L		0.2121816		0.2	0	0	0.000429	0.002	0	106%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14908988	B21111928-006	HC-8015-DRO-	SAMP		12/3/2021 10:37:	1	161809	12/1/2021 4:	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	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0		0	0	0	0.0879	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.0749	0.3	50	0%	0	0	0%	U
n-Triacontane	S	mg/L		0.1003		0.1	0	0	0.000336	0.002	0	100%	50	150	0%	
o-Terphenyl	S	mg/L		0.2150566		0.2	0	0	0.000429	0.002	0	108%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14908989	B21111928-008	HC-8015-DRO-	SAMP		12/3/2021 12:03:	1	161809	12/1/2021 4:	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		0.06369817		0	0	0	0.0389	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40	A	mg/L		0		0	0	0	0.0879	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0.1299909		0	0	0	0.0749	0.3	50	0%	0	0	0%	J
n-Triacontane	S	mg/L		0.1002		0.1	0	0	0.000336	0.002	0	100%	50	150	0%	
o-Terphenyl	S	mg/L		0.2130642		0.2	0	0	0.000429	0.002	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
14908990	LCS-161809-RR	HC-8015-DRO-	LCS-DOD		12/3/2021 1:28:1	1	161809	12/1/2021 4:	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		4.49879360		5	0	0	0.0879	0.3	0	90%	41	113	0%	
n-Triacontane	S	mg/L		0.0918		0.1	0	0	0.000336	0.002	0	92%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14908991	LCSD-161809-R	HC-8015-DRO-	LCSD-DOD		12/3/2021 2:53:4	1	161809	12/1/2021 4:	0	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		4.56942654		5	0	4.4987936	0.0879	0.3	0	91%	41	113	2%	
n-Triacontane	S	mg/L		0.0887		0.1	0	0	0.000336	0.002	0	89%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14908992	MARKER_1129	HC-8015-DRO-	SAMP		12/3/2021 4:19:2	1	R371382		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		2.555133		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		3.997563		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.232895		0.2	0	0	0.000429	0.002	0	116%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		2.555133		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14908993	CCV_1202HP54	HC-8015-DRO-	CCV		12/3/2021 5:02:2	1	R371382		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		4.61014502		5	0	0	0.0879	0.3	0	92%	80	120	0%	
n-Triacontane	S	mg/L		0.1992986		0.2	0	0	0.000336	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
14908994	CCV_1202HP54	HC-8015-DRO-	CCV		12/3/2021 5:45:3	1	R371382		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		14.59674		15	0	0	0.0389	0.3	0	97%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.12005		15	0	0	0.0749	0.3	50	101%	80	120	0%	
o-Terphenyl	S	mg/L		0.2000311		0.2	0	0	0.000429	0.002	0	100%	80	120	0%	

Energy Laboratories Inc

ANALYTICAL RUN Summary

09-Dec-21

Run ID GCFID-HP5-B_211207A

Run Start Date: 12/7/2021
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
DRO211110A	Carbon Scan STD-Marker					MARKER	3/5/2028
DRO211201A	5,000 ug/mL RRO CCV 200 ug/mL Triacontane					CCV-RRO	4/6/2026
DRO211203A	8015 CCV-15,000ug/mL + 200 OTP					CCV-DRO	4/30/2023
DRO211203B	ALASKA MARKER-200ug/mL					MARKER	5/31/2022

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14910003	MARKER_1207	HC-8015-DRO-	SAMP		12/7/2021 1:16:0	1	R371405		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		2.085021		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		3.411535		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.2011106		0.2	0	0	0.000429	0.002	0	101%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		2.085021		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14910004	CCV_1207HP50	HC-8015-DRO-	CCV		12/7/2021 1:59:1	1	R371405		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		4.697301758		5	0	0	0.0879	0.3	0	94%	80	120	0%	
n-Triacontane	S	mg/L		0.2031024		0.2	0	0	0.000336	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
14910005	CCV_1207HP50	HC-8015-DRO-	CCV		12/7/2021 2:42:1	1	R371405		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		15.00947		15	0	0	0.0389	0.3	0	100%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.55233		15	0	0	0.0749	0.3	50	104%	80	120	0%	
o-Terphenyl	S	mg/L		0.20529		0.2	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
14910006	LCS-161809	HC-8015-DRO-	LCS-DOD		12/7/2021 4:08:2	1	161809	12/1/2021 4:	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		12.63361		15	0	0	0.0389	0.3	0	84%	36	132	0%	
Total Extractable Hydrocarbons (SGT	A	mg/L		13.44516		15	0	0	0.0329	0.3	0	90%	60	132	0%	
o-Terphenyl (SGT)	S	mg/L		0.1987697		0.2	0	0	0.000429	0.002	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
14910007	LCSD-161809	HC-8015-DRO-	LCSD-DOD		12/7/2021 4:51:2	1	161809	12/1/2021 4:	0	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		12.51228		15	0	12.63361	0.0389	0.3	0	83%	36	132	1%	
Total Extractable Hydrocarbons (SGT	A	mg/L		13.31121		15	0	13.44516	0.0329	0.3	0	89%	60	132	1%	
o-Terphenyl (SGT)	S	mg/L		0.1991958		0.2	0	0	0.000429	0.002	0	100%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14910008	MB-161809	HC-8015-DRO-	MBLK		12/7/2021 5:34:3	1	161809	12/1/2021 4:	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		0.0867		0.1	0	0	0.000336	0.002	0	87%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.191845		0.2	0	0	0.000429	0.002	0	96%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14910009	B21111928-008	HC-8015-DRO-	SAMP		12/7/2021 6:18:0	1	161809	12/1/2021 4:	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
14910009	B21111928-008	HC-8015-DRO-	SAMP		12/7/2021 6:18:0	1	161809	12/1/2021 4:	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	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0879	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.0329	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.0886		0.1	0	0	0.000336	0.002	0	89%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1984379		0.2	0	0	0.000429	0.002	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
14910010	LCS-161809-RR	HC-8015-DRO-	LCS-DOD		12/7/2021 7:01:1	1	161809	12/1/2021 4:	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		4.363313198		5	0	0	0.0879	0.3	0	87%	41	113	0%	
n-Triacontane (SGT)	S	mg/L		0.0863		0.1	0	0	0.000336	0.002	0	86%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14910011	LCSD-161809-R	HC-8015-DRO-	LCSD-DOD		12/7/2021 8:27:4	1	161809	12/1/2021 4:	0	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		4.664259911		5	0	4.3633132	0.0879	0.3	0	93%	41	113	7%	
n-Triacontane (SGT)	S	mg/L		0.0876		0.1	0	0	0.000336	0.002	0	88%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14910012	MARKER_1207	HC-8015-DRO-	SAMP		12/7/2021 9:54:0	1	R371405		0	0	

Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (DRO)	A	mg/L		2.198142		0	0	0	0.0389	0.3	50	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		3.59144		0	0	0	0.0749	0.3	50	0%	0	0	0%	
o-Terphenyl	S	mg/L		0.2119295		0.2	0	0	0.000429	0.002	0	106%	50	150	0%	
Diesel Range Organics (C10 to C24)	X	mg/L		2.198142		0	0	0	0.0389	0.3	0	0%	0	0	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
14910013	CCV_1207HP51	HC-8015-DRO-	CCV		12/7/2021 10:37:	1	R371405		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
14910013	CCV_1207HP51	HC-8015-DRO-	CCV		12/7/2021 10:37:	1	R371405		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		4.864100098		5	0	0	0.0879	0.3	0	97%	80	120	0%	
n-Triacontane	S	mg/L		0.2109013		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
14910014	CCV_1207HP51	HC-8015-DRO-	CCV		12/7/2021 11:20:	1	R371405		0	0	

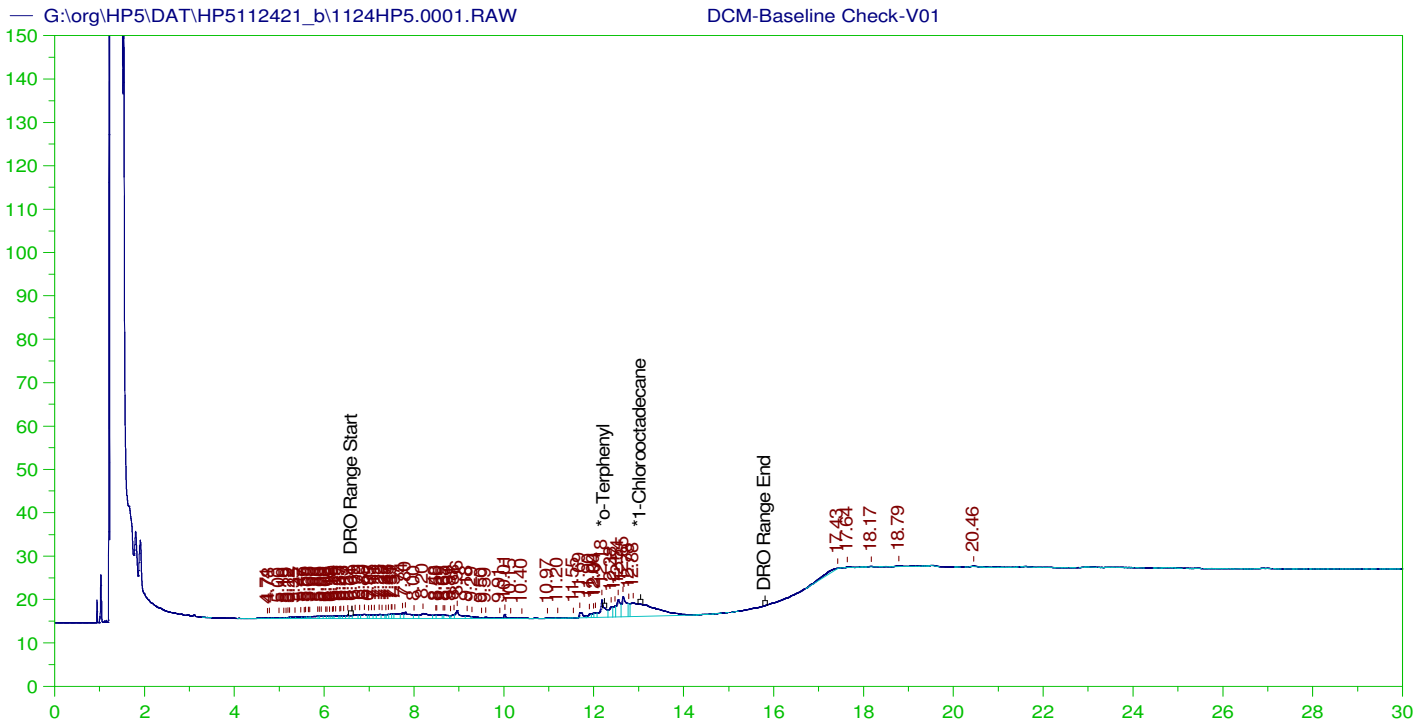
Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		15.13212		15	0	0	0.0389	0.3	0	101%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.65601		15	0	0	0.0749	0.3	50	104%	80	120	0%	
o-Terphenyl	S	mg/L		0.2057686		0.2	0	0	0.000429	0.002	0	103%	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\HP5112421_b\1124HP5.01r	DCM-Baseline Check-V01	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.02r	MARKER_1124HP502r, C40 ;1124HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.03r	MARKER_1124HP503r, DRO ;1124HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.04r	CCV_1124HP504r, RRO ;1124HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.05r	CCV_1124HP505r, DRO ;1124HP5 , DRO211116B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.06r	DCM-Baseline Check-V06	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.07r	LCS-161631 ;1124HP5 ,	G:\Org\HP5\Methods\D3_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.08r	LCSD-161631 ;1124HP5 ,	G:\Org\HP5\Methods\D3_8015-112408-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.09r	MB-161631 ;1124HP5 ,	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.10r	B21111928-006A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-112410-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-112410-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.11r	B21111928-007A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1045	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.12r	B21111928-008A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.13r	B21111928-005A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-112413-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-112413-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.14r	B21111880-002B ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1050	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.15r	B21111880-003B ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1030	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.16r	MARKER_1124HP516r, C40 ;1124HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.17r	MARKER_1124HP517r, DRO ;1124HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.18r	CCV_1124HP518r, DRO ;1124HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.19r	CCV_1124HP519r, DRO ;1124HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.25r	DCM-Baseline Check-V25	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.26r	MARKER_1124HP526r, C40 ;1124HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.27r	MARKER_1124HP527r, DRO ;1124HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.28r	CCV_1124HP528r, DRO ;1124HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.29r	CCV_1124HP529r, DRO ;1124HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.30r	DCM-Baseline Check-V30	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.31r	B21111928-004A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-112431-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-112431-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.32r	B21111928-003A ;1124HP5 , $HC-8015-DRO-W, Needs rr low poke	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	990	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.33r	B21111928-003AMS ;1124HP5 ,	G:\Org\HP5\Methods\D3_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1010	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.34r	DCM-Baseline Check-V34	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.35r	DCM-Baseline Check-V35	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.36r	B21111928-001A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-112436-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-112436-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.37r	DCM-Baseline Check-V37	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.38r	DCM-Baseline Check-V38	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.39r	B21111928-002A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1020	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.40r	DCM-Baseline Check-V40	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.41r	B21111928-004AMS-RRO ;1124HP5 ,	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1030	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.42r	MARKER_1124HP542r, C40 ;1124HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.43r	MARKER_1124HP543r, DRO ;1124HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.44r	CCV_1124HP544r, DRO ;1124HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.45r	CCV_1124HP545r, DRO ;1124HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.46r	DCM-Baseline Check-V46	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.47r	B21111910-001B ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-24T-ID-L#.met	1020	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.48r	DCM-Baseline Check-V47	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.49r	DCM-Baseline Check-V48	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.50r	LCS-161631-RRO ;1124HP5 ,	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.51r	DCM-Baseline Check-V51	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.52r	LCSD-161631-RRO ;1124HP5 ,	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.53r	MARKER_1124HP553r, C40 ;1124HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.54r	MARKER_1124HP554r, DRO ;1124HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.55r	CCV_1124HP5565r, DRO ;1124HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5112421_b\1124HP5.56r	CCV_1124HP556r, DRO ;1124HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1	1	1	1	0

Write Sequence / Data File	Insert Entries(Have the first cell for entries selected) / Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
G:\org\HP5\DAT\HP5112921_b\1129HP5.01r	DCM-Baseline Check-V01	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.02r	MARKER_1129HP502r, C40 ;1129HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.03r	MARKER_1129HP503r, DRO ;1129HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.04r	CCV_1129HP504r, RRO ;1129HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.05r	CCV_1129HP505r, DRO ;1129HP5 , DRO211116B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.06r	DCM-Baseline Check-V06	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.07r	B21111928-003A ;1129HP5 , $HC-8015-DRO-W, RR	G:\Org\HP5\Methods\DR_8015-112907-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-112907-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	990	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.08r	DCM-Baseline Check-V08	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.09r	LCS-161631 ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.10r	LCSD-161631 ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_8015-112910-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.11r	MB-161631 ;1129HP5 , SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.12r	B21111910-001B ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1020	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.13r	B21111928-007A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1045	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.14r	MARKER_1129HP514r, DRO ;1129HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.15r	MARKER_1129HP515r, C40 ;1129HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.16r	CCV_1129HP516r, RRO ;1129HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.17r	CCV_1129HP517r, DRO ;1129HP5 , DRO211116B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.18r	DCM-Baseline Check-V18	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.19r	B21111928-005A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.20r	B21111928-006A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.21r	B21111928-003A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-112921-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-112921-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	990	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.22r	DCM-Baseline Check-V22	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.23r	B21111928-004A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.24r	DCM-Baseline Check-V24	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.25r	B21111928-001A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.26r	B21111928-002A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1020	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.27r	DCM-Baseline Check-V27	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.28r	B21111928-003AMS ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1010	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.29r	B21111928-004AMS-RRO ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1030	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.30r	MARKER_1129HP530r, C40 ;1129HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.31r	MARKER_1129HP531r, DRO ;1129HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.32r	CCV_1129HP532r, RRO ;1129HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.33r	CCV_1129HP533r, DRO ;1129HP5 , DRO211116B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.34r	DCM-Baseline Check-V34	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.35r	LCS-161631-RRO ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.36r	DCM-Baseline Check-V36	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.37r	LCSD-161631-RRO ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.38r	DCM-Baseline Check-V38	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.39r	DCM-Baseline Check-V39	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.40r	B21111928-008A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.46r	MARKER_1129HP546r, C40 ;1129HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.47r	MARKER_1129HP547r, DRO ;1129HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.48r	CCV_1129HP548r, RRO ;1129HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5112921_b\1129HP5.49r	CCV_1129HP549r, DRO ;1129HP5 , DRO211116B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1	1	1	1	0

Write Sequence Data File	Insert Entries(Have the first cell for entries selected Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
G:\org\HP5\DAT\HP5120221_b\1202HP5.30r	MARKER_1202HP30r, C40 ;1202HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211202.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.31r	MARKER_1129HP31r, DRO ;1202HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.32r	CCV_1202HP532r, RRO ;1202HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.33r	CCV_1202HP533r, DRO ;1202HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.34r	DCM-Baseline Check-V34	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.35r	LCS-161809 ;1202HP5 ,	G:\Org\HP5\Methods\D3_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-L#.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.36r	LCSD-161809 ;1202HP5 ,	G:\Org\HP5\Methods\D3_8015-120236-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-L#.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.37r	MB-161809 ;1202HP5 ,	G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met G:\Org\HP5\Methods\DR_OROS-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.38r	B21111928-007B ;1202HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met G:\Org\HP5\Methods\DR_OROS-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.39r	B21111928-006B ;1202HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met G:\Org\HP5\Methods\DR_OROS-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.40r	DCM-Baseline Check-V40	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.41r	B21111928-008B ;1202HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-120241-IE-L%.met G:\Org\HP5\Methods\DR_OROS-120241-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.42r	DCM-Baseline Check-V42	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.43r	LCS-161809-RRO ;1202HP5 ,	G:\Org\HP5\Methods\D3_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-L%.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.44r	DCM-Baseline Check-V44	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.45r	LCSD-161809-RRO ;1202HP5 ,	G:\Org\HP5\Methods\D3_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-L%.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.46r	MARKER_1202HP46r, C40 ;1202HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211202.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.47r	MARKER_1129HP47r, DRO ;1202HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.48r	CCV_1202HP548r, RRO ;1202HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5120221_b\1202HP5.49r	CCV_1202HP549r, DRO ;1202HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-L#.met	1	1	1	1	0

Write Sequence / Data File	Sample Name (Insert Entries(Have the first cell for entries selected))	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
G:\org\HP5\DAT\HP5120721_b\1207HP5.01r	DCM-Baseline Check-V02	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.02r	DCM-Baseline Check-V02	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.03r	MARKER_1207HP503r, C40 ;1207HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211207.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.04r	MARKER_1207HP504r, DRO ;1207HP5 , DRO211203B	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.05r	CCV_1207HP505r, DRO ;1207HP5 , DRO211201A	G:\Org\HP5\Methods\DC_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.06r	CCV_1207HP506r, DRO ;1207HP5 , DRO211203A	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-L#.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.07r	DCM-Baseline Check-V07	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.08r	LCS-161809 ;1207HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-L#.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.09r	LCSD-161809 ;1207HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-L#.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.10r	MB-161809 ;1207HP5 , SGT	G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met G:\Org\HP5\Methods\DR_OROS-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.11r	B21111928-008B ;1207HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met G:\Org\HP5\Methods\DR_OROS-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.12r	LCS-161809-RRO ;1207HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-L%.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.13r	DCM-Baseline Check-V13	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.14r	LCSD-161809-RRO ;1207HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-L%.MET	1000	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.15r	MARKER_1207HP515r, C40 ;1207HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211207.met	1	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.16r	MARKER_1207HP516r, DRO ;1207HP5 , DRO211203B	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met	1000	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.17r	CCV_1207HP517r, DRO ;1207HP5 , DRO211201A	G:\Org\HP5\Methods\DC_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-L%.MET	1	1	1	1	0
G:\org\HP5\DAT\HP5120721_b\1207HP5.18r	CCV_1207HP518r, DRO ;1207HP5 , DRO211203A	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-L#.met	1	1	1	1	0



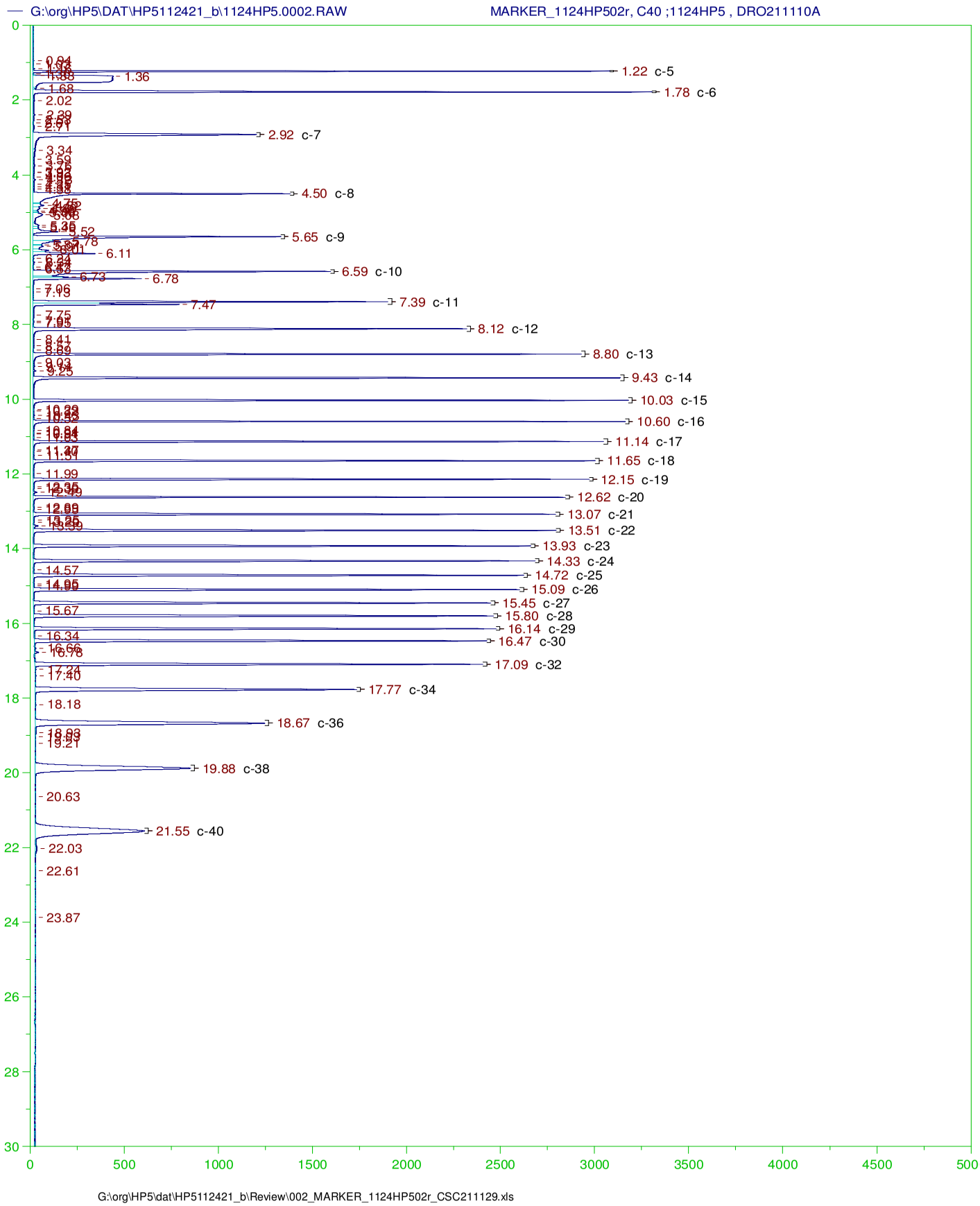
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V01
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0001.RAW
Date & Time Acquired: 11/24/2021 7:28:16 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	29.909	200.	.	.	-
*1-Chlorooctadecane	29.909	200.	.	.	-

DRO Area:420367.1 DRO Amount: 13.40747
TEH Area:497272.8 TEH Amount: 15.86036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MARKER_1124HP502r, C40 ;1124HP5 , DRO211110A
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1.36
1.78 c-6
2.92 c-7
4.50 c-8
5.65 c-9
6.11
6.59 c-10
6.78
7.39 c-11
7.47
8.12 c-12
8.80 c-13
9.43 c-14
10.03 c-15
10.60 c-16
11.14 c-17
11.65 c-18
11.99
12.15 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
15.45 c-27
15.67
15.80 c-28
16.14 c-29
16.34
16.47 c-30
17.09 c-32
17.77 c-34
18.18
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19.21
19.88 c-38
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21.55 c-40
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23.87
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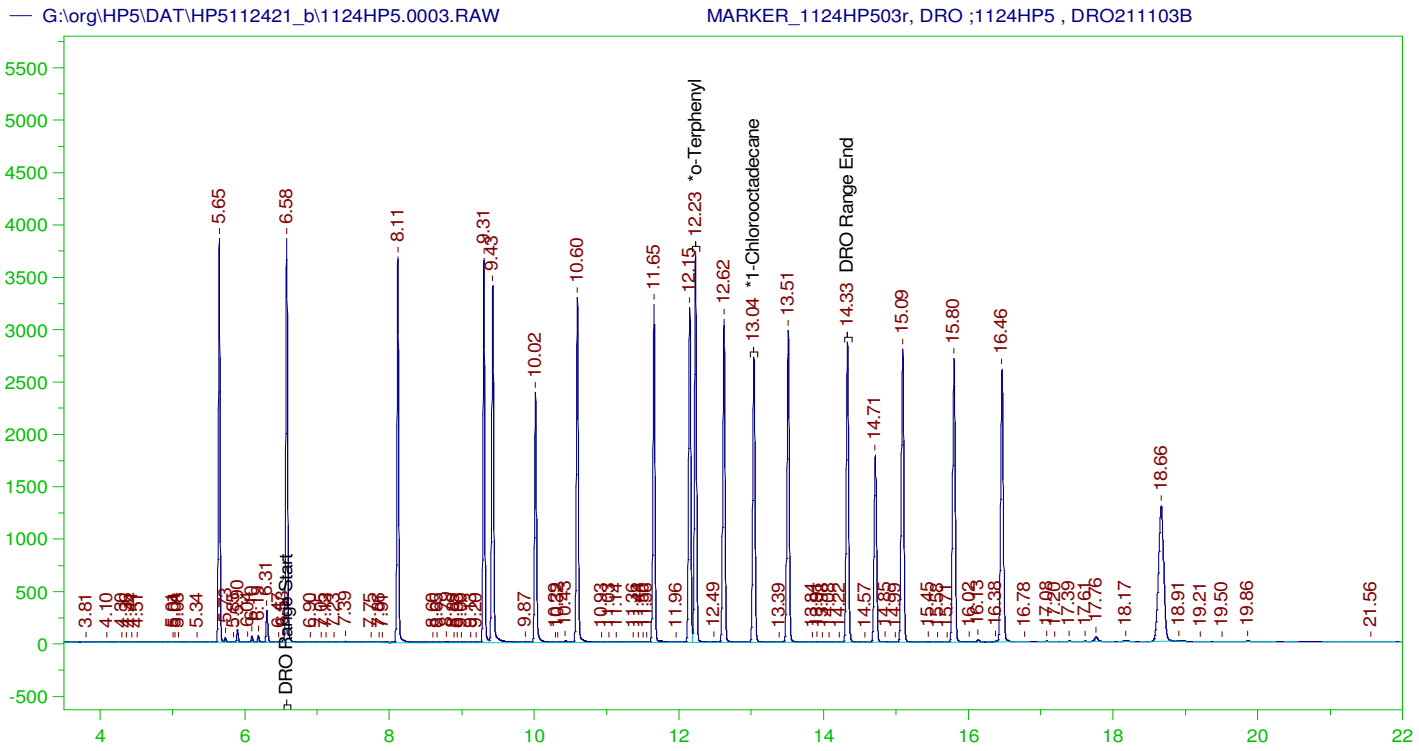


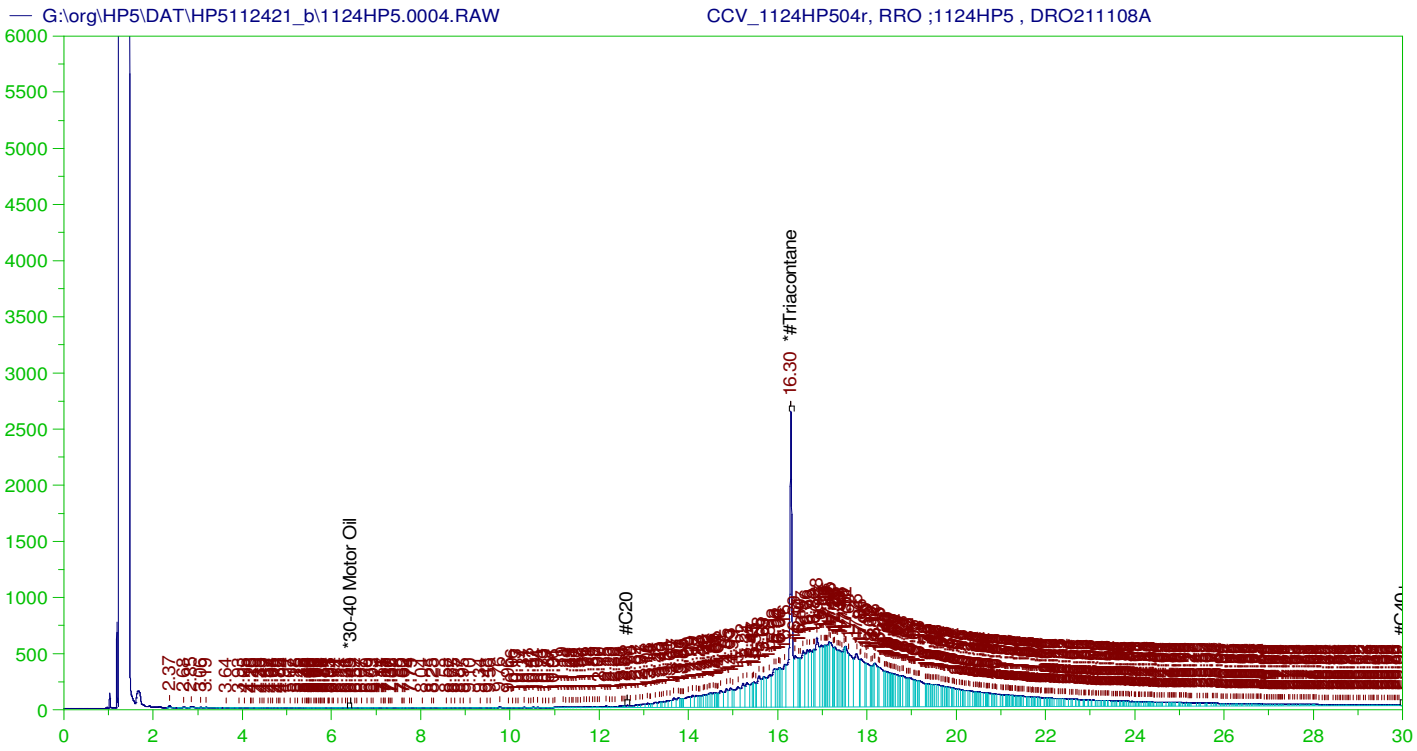
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1124HP503r, DRO ;1124HP5 , DRO211103B
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0003.RAW
Date & Time Acquired: 11/24/2021 8:53:19 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.23	.2	.2	100.05	-
*1-Chlorooctadecane	13.035	.2	.162	80.96	-

DRO Area:6.85299E+07 DRO Amount: 2.185739
TEH Area:1.068797E+08 TEH Amount: 3.408895



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1124HP504r, RRO ;1124HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0004.RAW
Date & Time Acquired: 11/24/2021 9:35:51 AM
Method File: G:\Org\HP5\Methods\DC_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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	16.295	500.	339.07	67.81	-

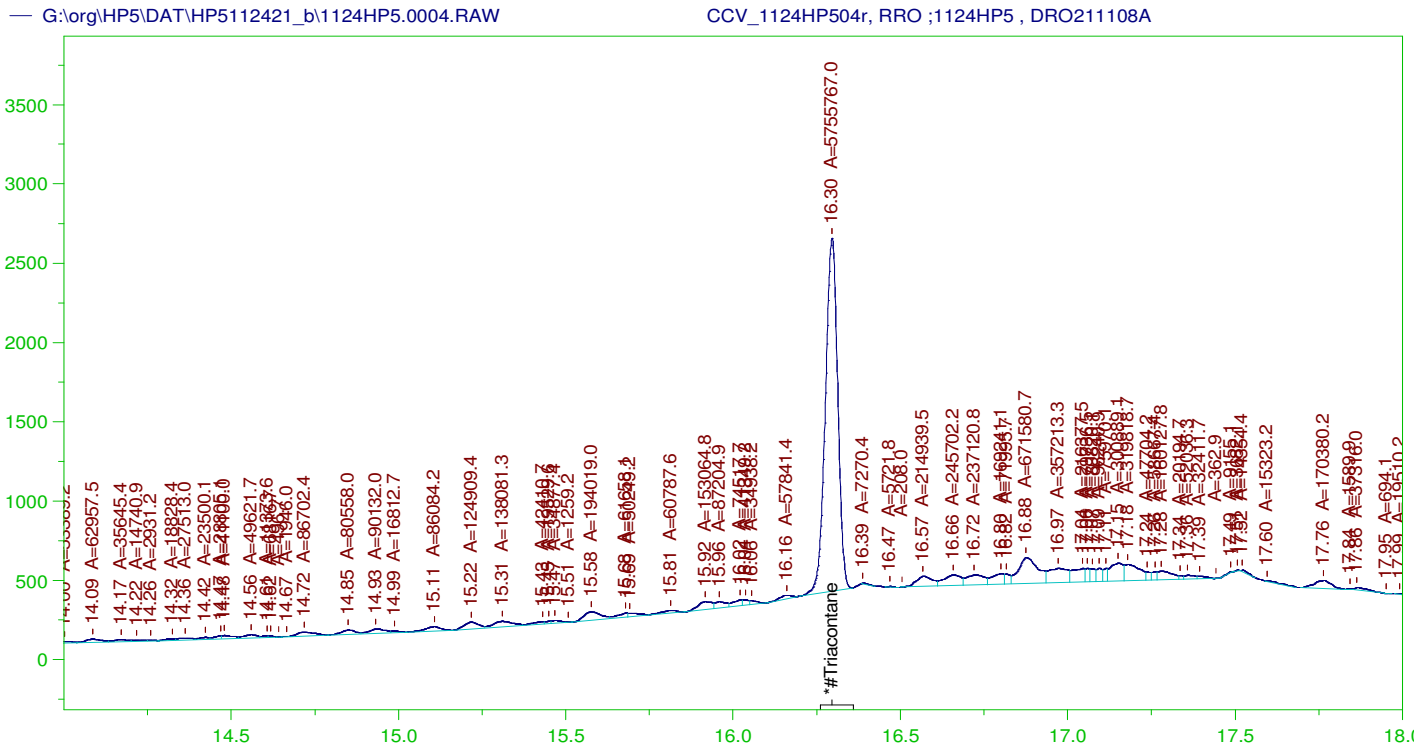
~~RRO~~ TEH (Oil Range) Area:1.337135E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4684.73

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0004.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.032	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.295	200.	339.07	169.54	75-125

AMN 12/14/2021



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1124HP504r, RRO ;1124HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0004.RAW
Date & Time Acquired: 11/24/2021 9:35:51 AM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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

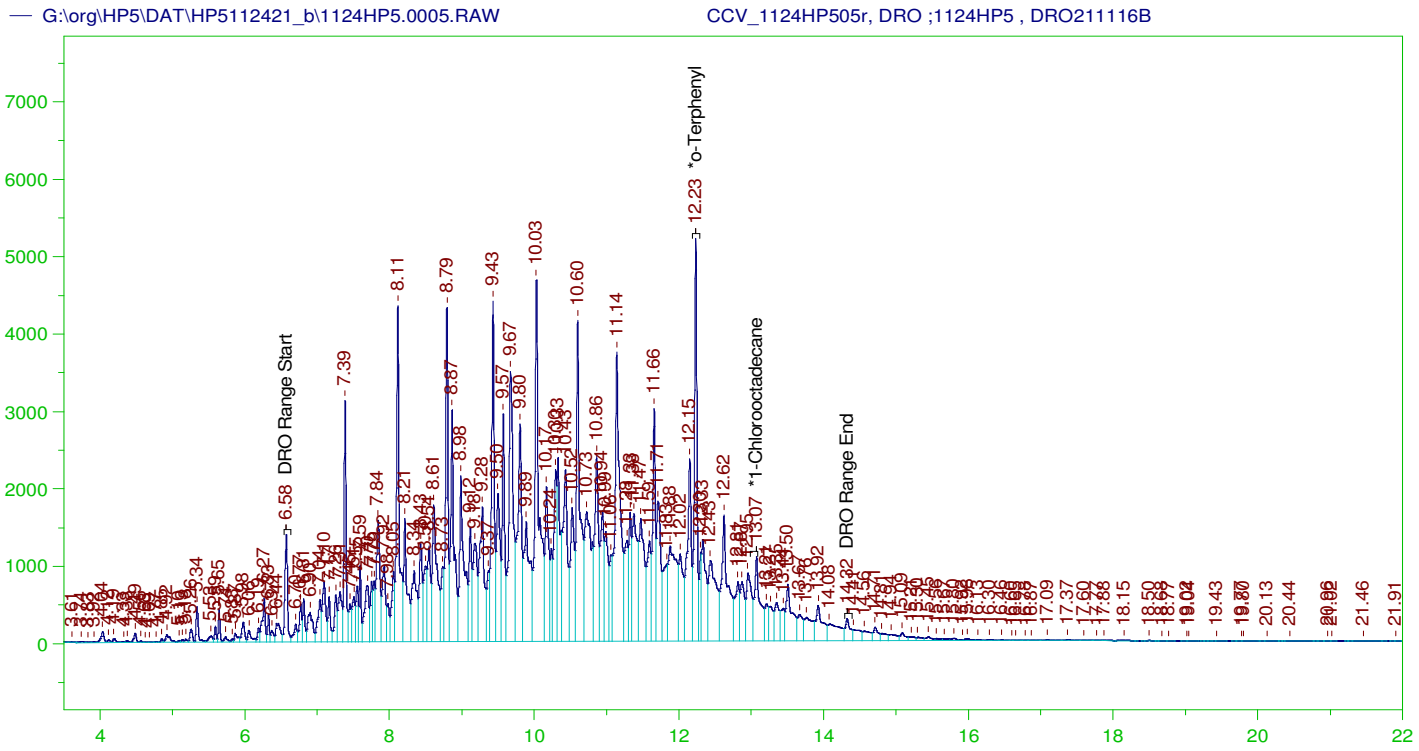
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.295	500.	198.954	39.79	-

RRO Area:6433992 RRO AMOUNT: 225.4186

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0004.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.032	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.295	200.	198.954	99.48	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1124HP505r, DRO ;1124HP5 , DRO211116B
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0005.RAW
Date & Time Acquired: 11/24/2021 10:18:23 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

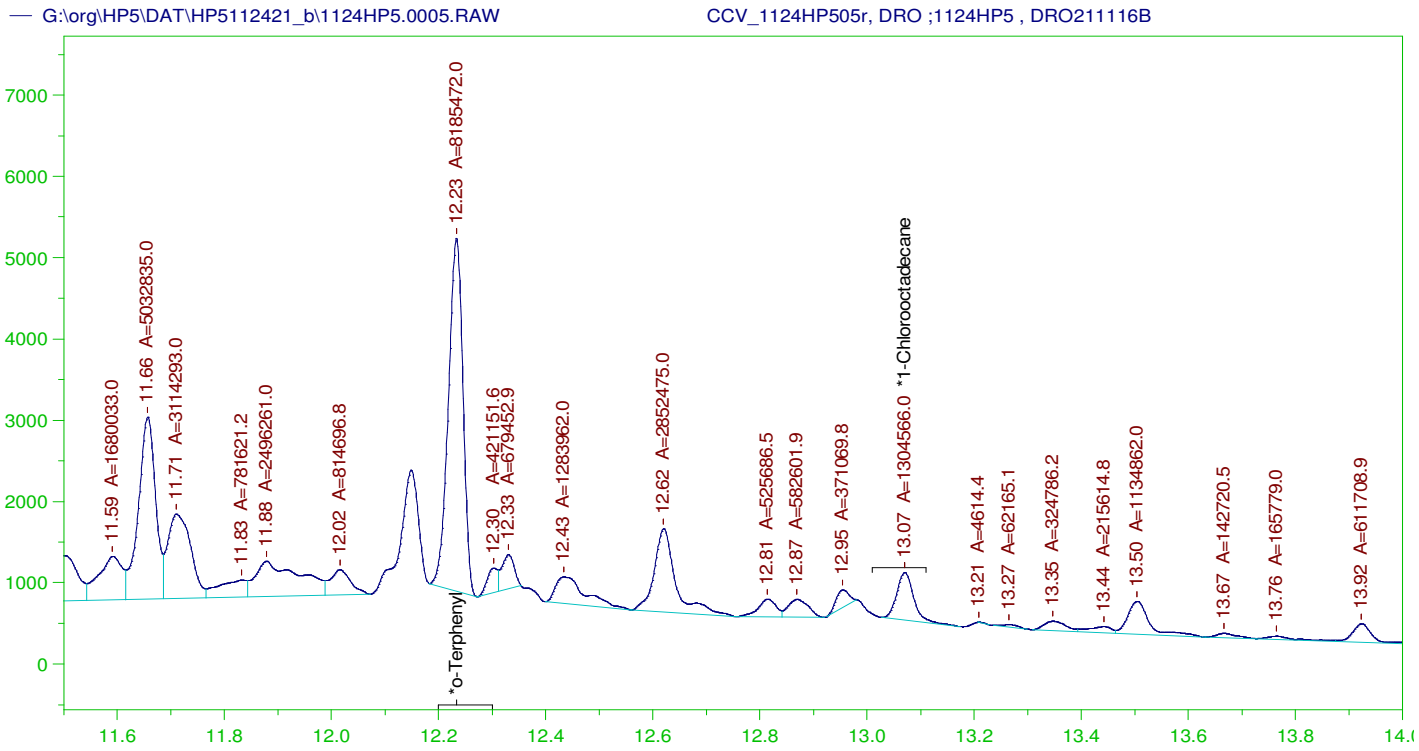
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.233	200.	362.07	181.03	-
*1-Chlorooctadecane	13.07	200.	158.39	79.19	-

DRO Area:4.568143E+08 DRO Amount: 14569.95
TEH Area:4.739172E+08 TEH Amount: 15115.44

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15115.44	100.77	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.233	200.	362.07	181.03	85-115
*1-Chlorooctadecane	13.07	200.	158.39	79.19	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1124HP505r, DRO ;1124HP5 , DRO211116B
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0005.RAW
Date & Time Acquired: 11/24/2021 10:18:23 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

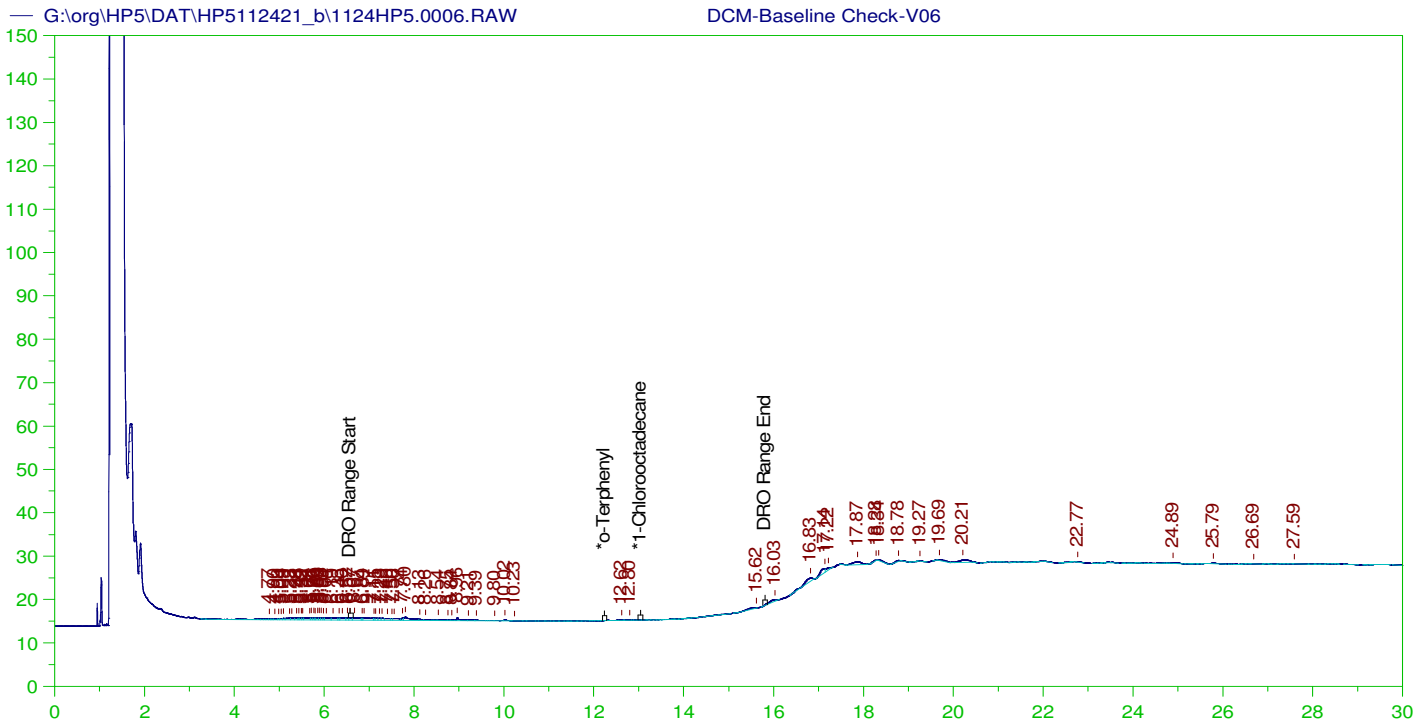
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.233	200.	230.517	115.26	-
*1-Chlorooctadecane	13.07	200.	36.739	18.37	-

DRO Area:2.546401E+08 DRO Amount: 8121.665
TEH Area:6.630516E+08 TEH Amount: 21147.82

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	21147.82	140.99	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.233	200.	230.517	115.26	85-115
*1-Chlorooctadecane	13.07	200.	36.739	18.37	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

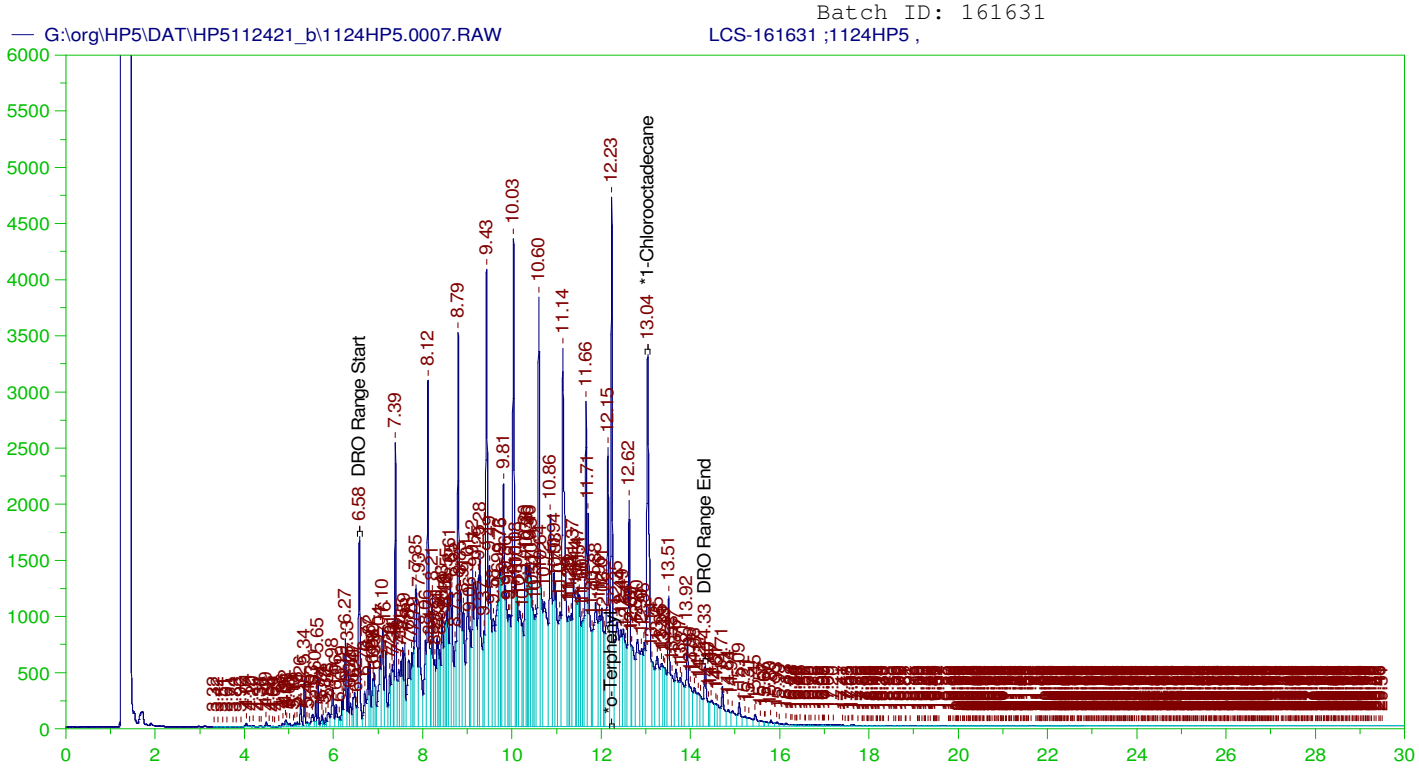
Sample Name: DCM-Baseline Check-V06
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0006.RAW
Date & Time Acquired: 11/24/2021 11:00:57 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

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	29.807	200.	.	.	-
*1-Chlorooctadecane	29.807	200.	.	.	-

DRO Area:68737.64 DRO Amount: 2.192365
TEH Area:186646 TEH Amount: 5.953015

Batch ID: 161631



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

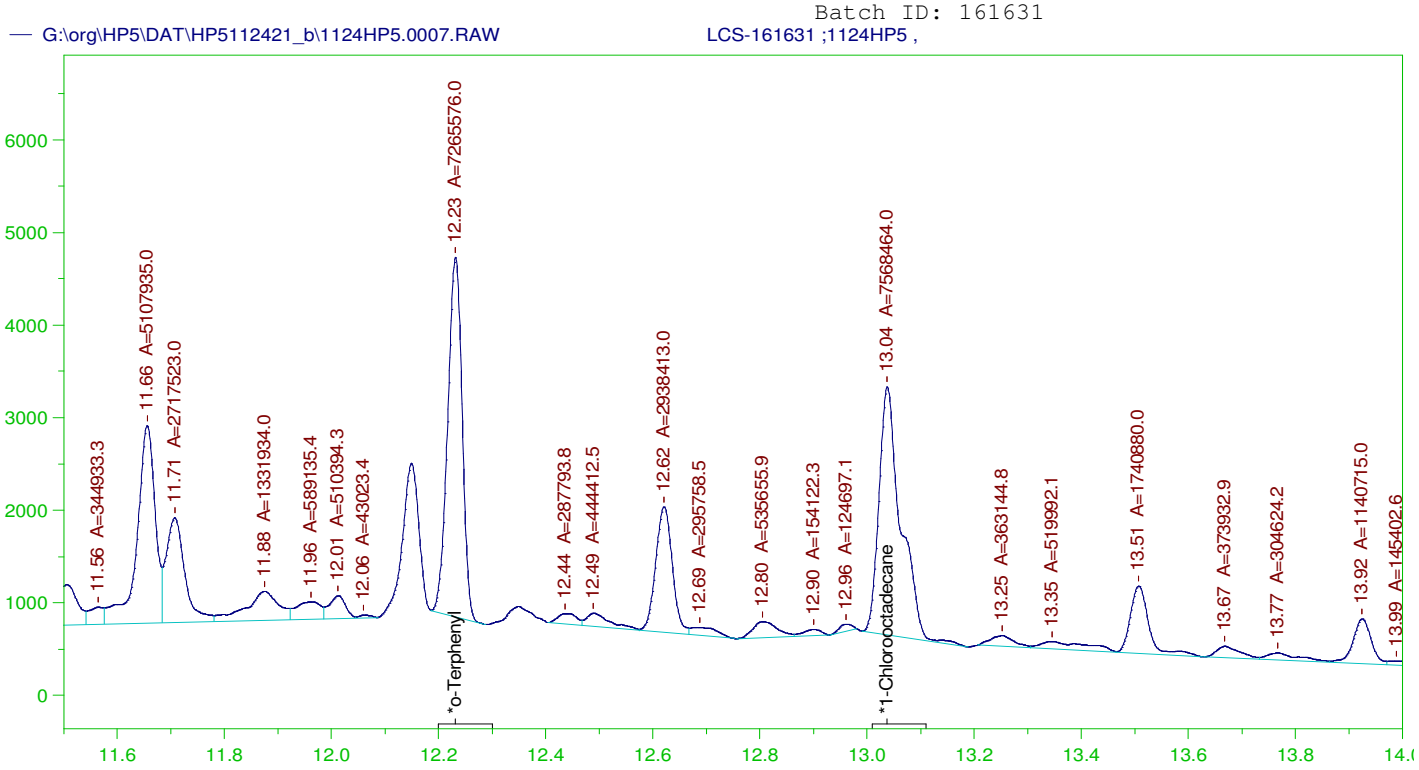
Sample Name: LCS-161631 ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0007.RAW
Date & Time Acquired: 11/24/2021 11:43:36 AM
Method File: G:\Org\HP5\Methods\D3_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.231	.2	.348	173.92	-
*1-Chlorooctadecane	13.038	.2	.355	177.7	-

DRO Area:4.052841E+08 DRO Amount: 12.9264
TEH Area:4.32538E+08 TEH Amount: 13.79566

Batch ID: 161631



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

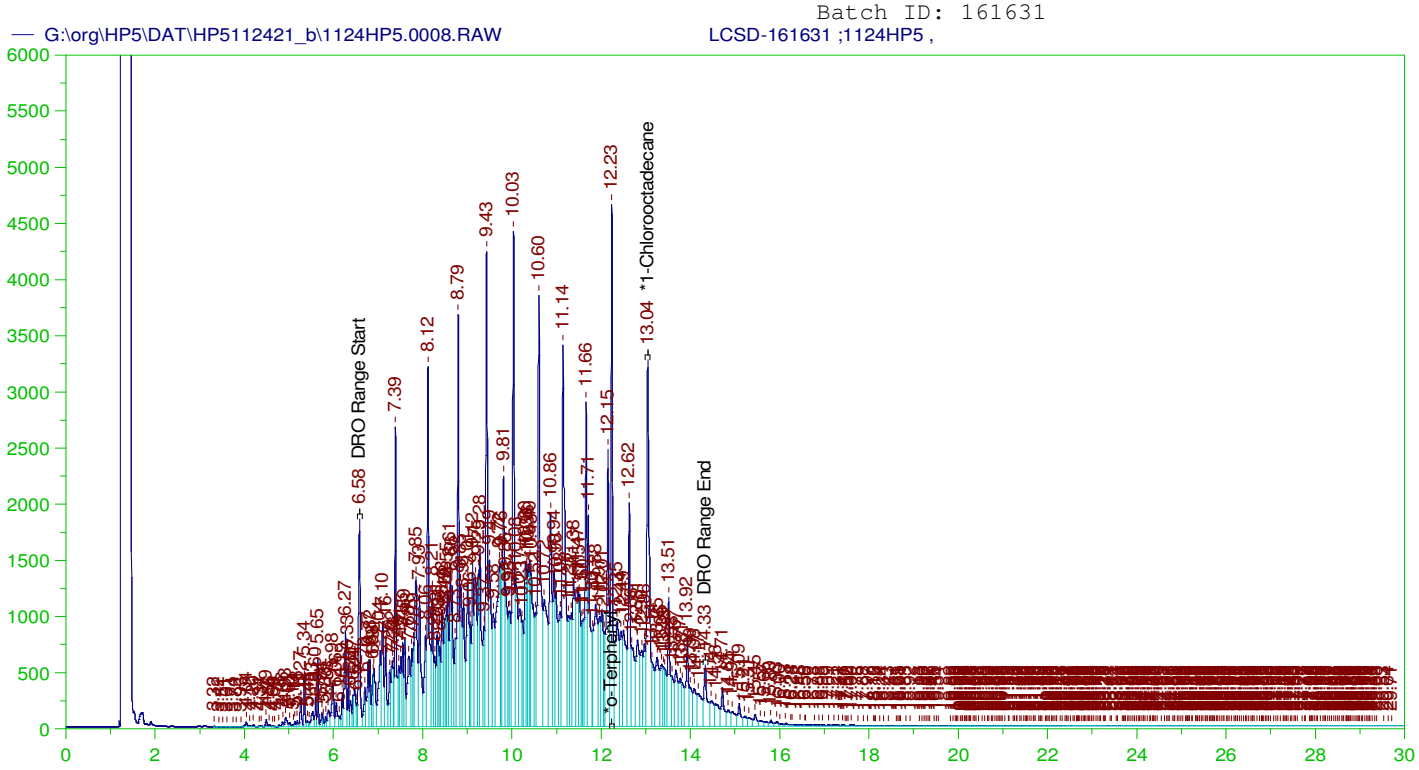
Sample Name: LCS-161631 ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0007.RAW
Date & Time Acquired: 11/24/2021 11:43:36 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.231	.2	.205	102.31	-
*1-Chlorooctadecane	13.038	.2	.213	106.57	-

DRO Area:1.929093E+08 DRO Amount: 6.152781
TEH Area:2.050692E+08 TEH Amount: 6.540618

Batch ID: 161631



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

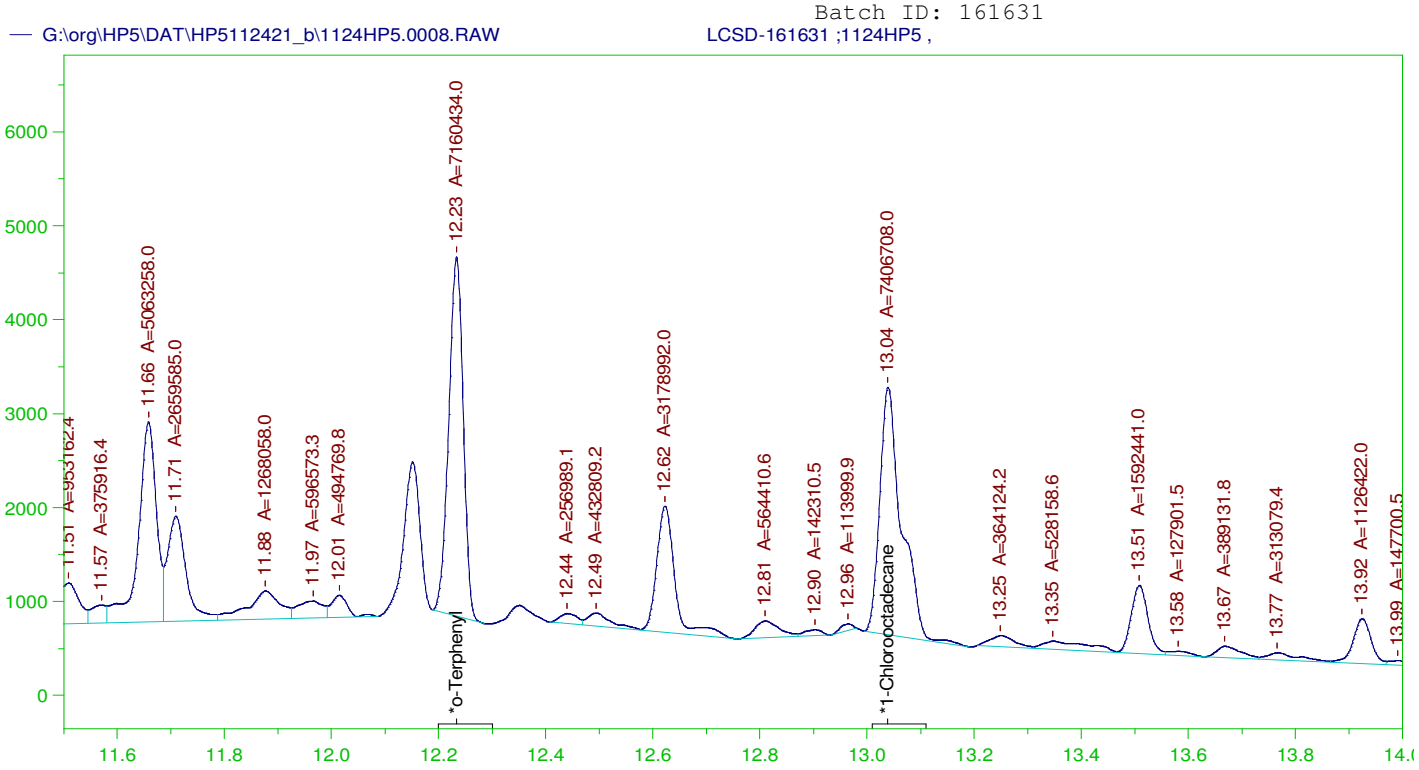
Sample Name: LCSD-161631 ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0008.RAW
Date & Time Acquired: 11/24/2021 12:26:18 PM
Method File: G:\Org\HP5\Methods\D3_8015-112408-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.233	.2	.35	174.89	-
*1-Chlorooctadecane	13.039	.2	.346	173.22	-

DRO Area:4.141617E+08 DRO Amount: 13.20956
TEH Area:4.424803E+08 TEH Amount: 14.11277

Batch ID: 161631



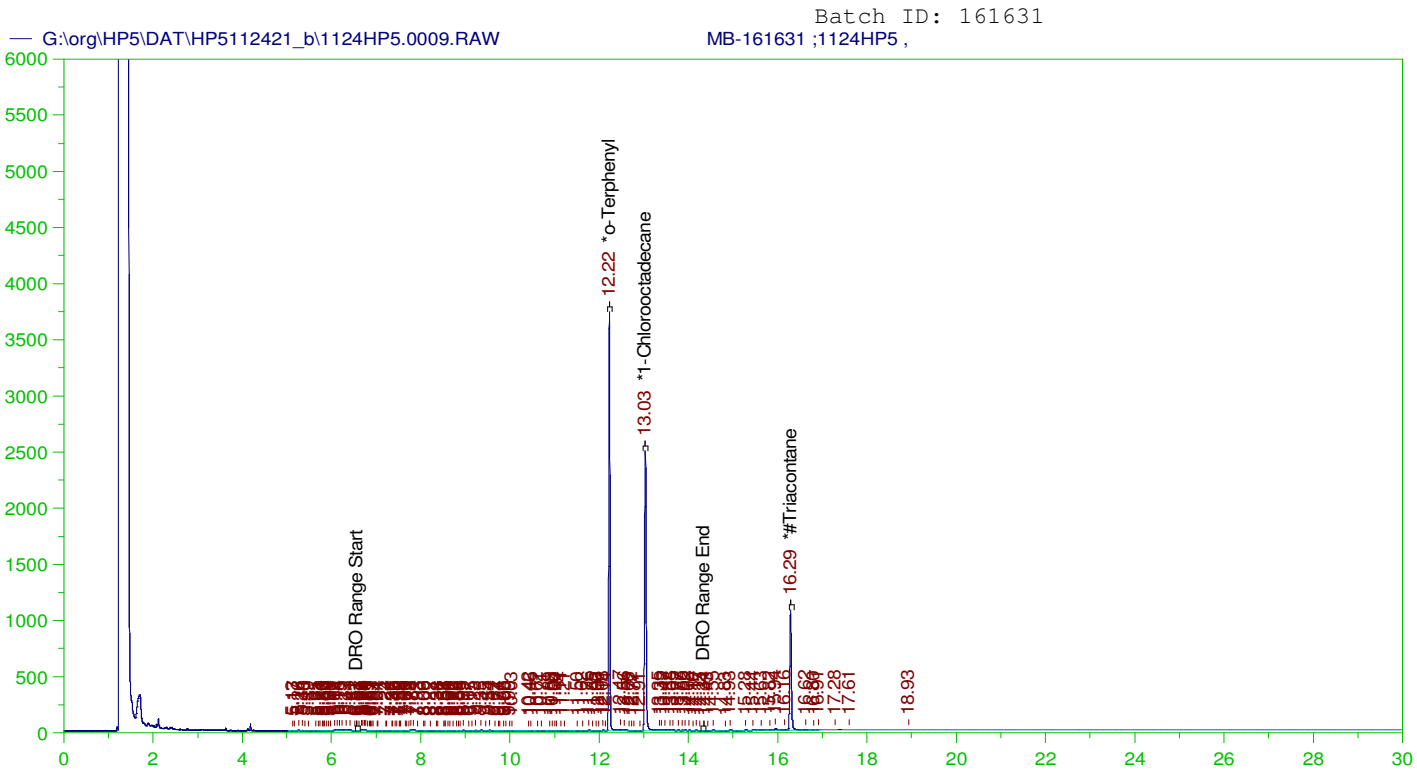
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: LCSD-161631 ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0008.RAW
Date & Time Acquired: 11/24/2021 12:26:18 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.233	.2	.202	100.83	-
*1-Chlorooctadecane	13.039	.2	.209	104.29	-

DRO Area:2.01585E+08 DRO Amount: 6.42949
TEH Area:2.154108E+08 TEH Amount: 6.870458

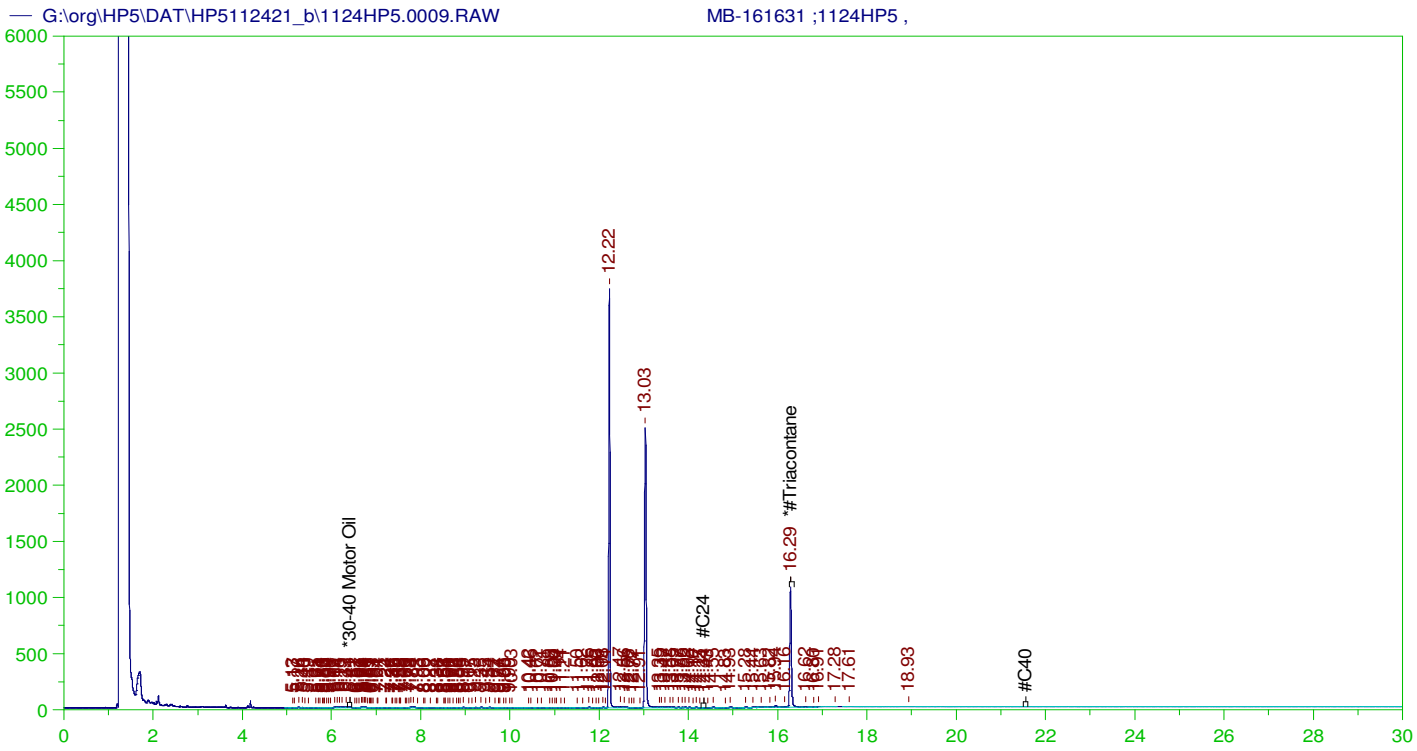


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: MB-161631 ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0009.RAW
Date & Time Acquired: 11/24/2021 1:10:50 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.224	.2	.203	101.3	-
*1-Chlorooctadecane	13.031	.2	.159	79.42	-
*#Triacontane	16.285	.2	.1	50.	-

DRO Area:506574.7 DRO Amount: 1.615704E-02
TEH Area:785983.1 TEH Amount: 2.506868E-02



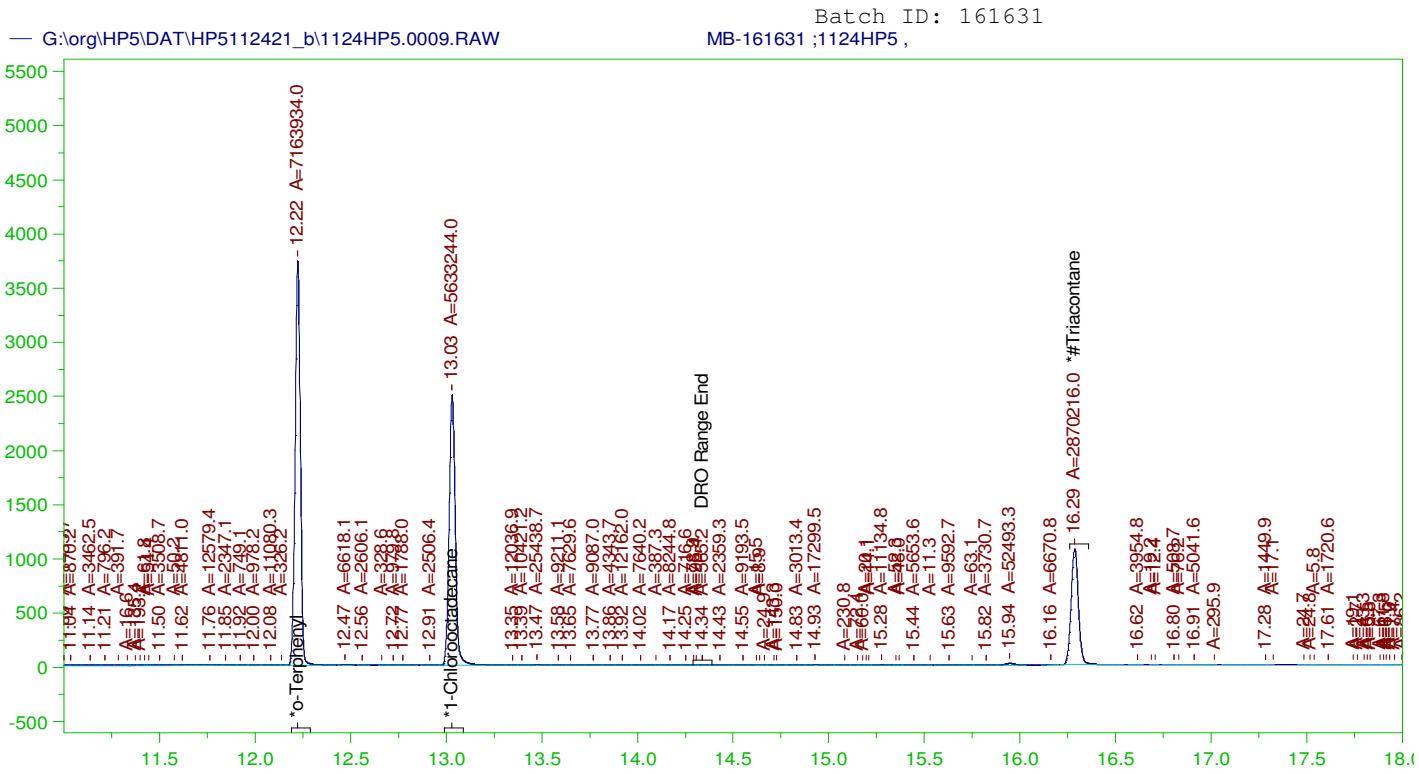
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: MB-161631 ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0009.RAW
Date & Time Acquired: 11/24/2021 1:10:50 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-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 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.285	.5	.1	20.	-

RRO Area:160751.7 RRO AMOUNT: 5.632029E-03



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MB-161631 ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0009.RAW
Date & Time Acquired: 11/24/2021 1:10:50 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.224	.2	.202	100.87	-
*1-Chlorooctadecane	13.031	.2	.159	79.32	-
*#Triacontane	16.285	.2	.099	49.61	-

DRO Area:496733.8 DRO Amount: 1.584317E-02
TEH Area:1030909 TEH Amount: 3.288051E-02

ERH1934 (RHSF) Batch ID: 161631

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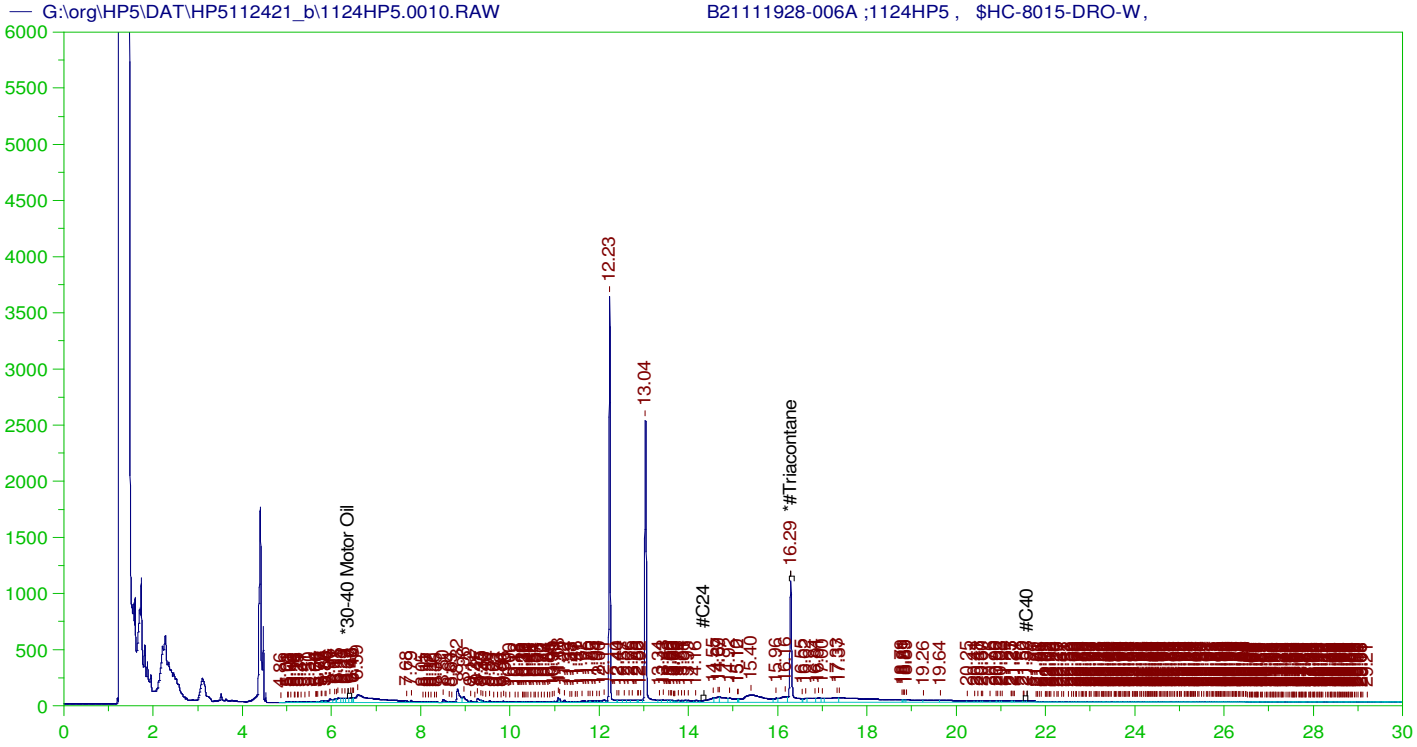

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-006A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0010.RAW
Date & Time Acquired: 11/24/2021 1:53:32 PM
Method File: G:\Org\HP5\Methods\D3_OROS-112410-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.289	.481	.112	23.39	-

RRO Area:1.154595E+07 RRO AMOUNT: 0.3889607

ERH1934 (RHSF) Batch ID: 161631

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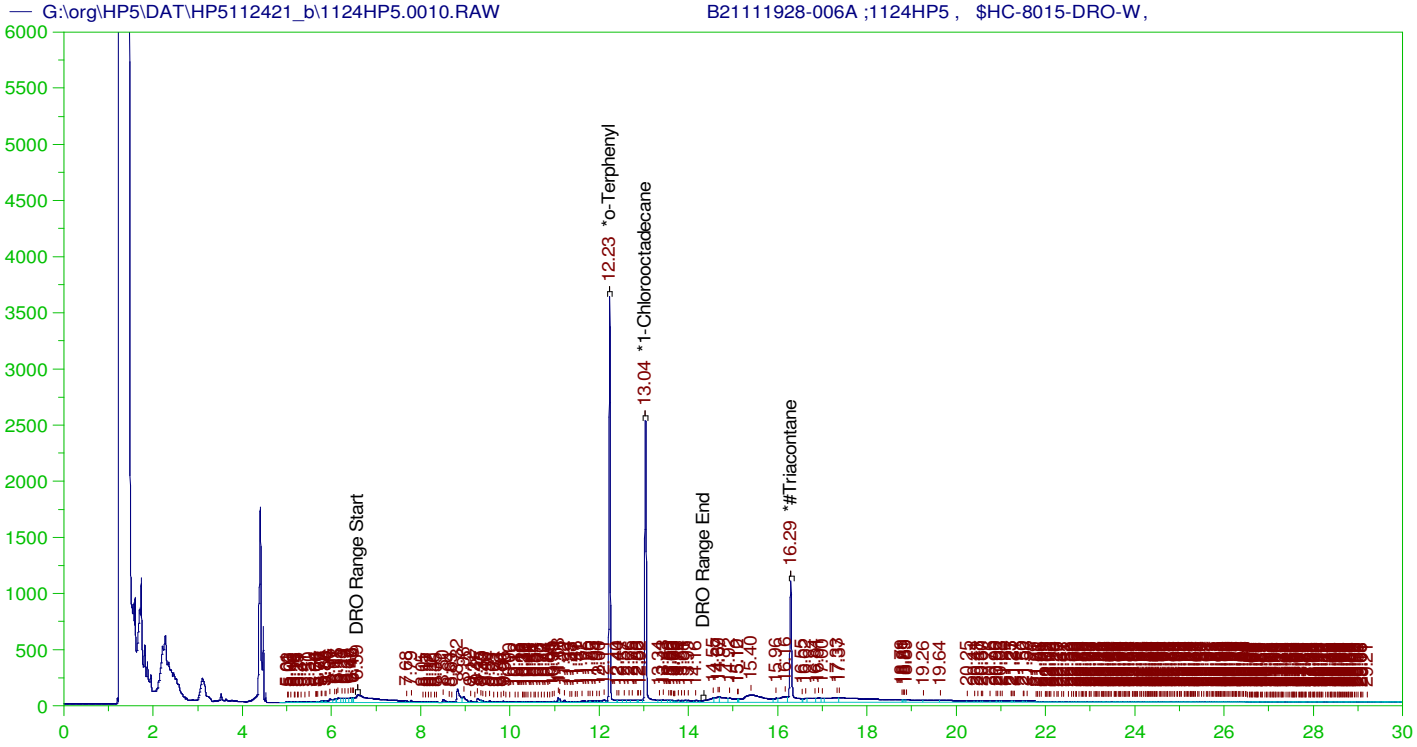

DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-006A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0010.RAW
Date & Time Acquired: 11/24/2021 1:53:32 PM
Method File: G:\Org\HP5\Methods\DR_8015-112410-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.231	.192	.191	99.49	-
*1-Chlorooctadecane	13.035	.192	.156	81.3	-
*#Triacontane	16.289	.192	.112	58.47	-

DRO Area:6967379 DRO Amount: 0.2136753
TEH Area:2.195478E+07 TEH Amount: 0.6733084

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ERH1934 (RHSF) Batch ID: 161631

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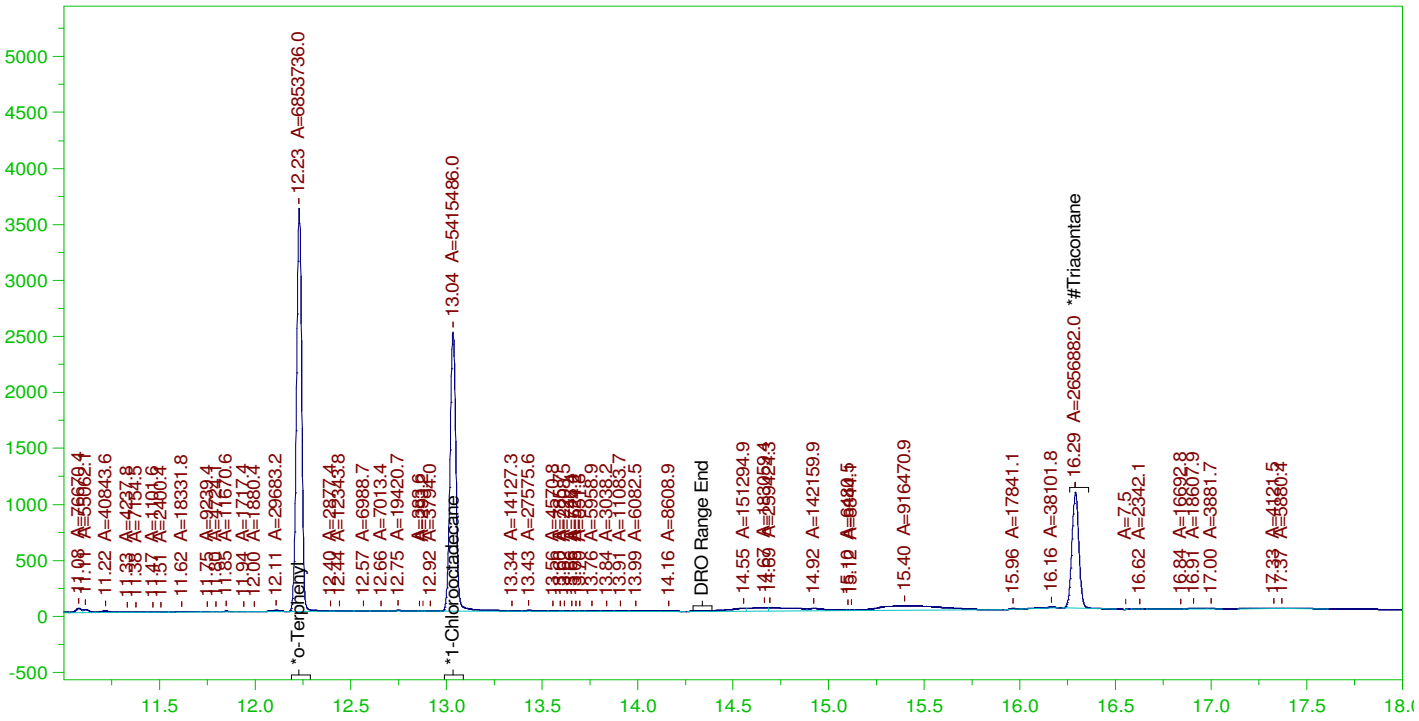

DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-006A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0010.RAW
Date & Time Acquired: 11/24/2021 1:53:32 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.231	.192	.186	96.51	-
*1-Chlorooctadecane	13.035	.192	.147	76.25	-
*#Triacontane	16.289	.192	.088	45.92	-

DRO Area:4536327 DRO Amount: 0.1391199
TEH Area:1.51137E+07 TEH Amount: 0.4635062

ERH1936 (RHSF) Batch ID: 161631

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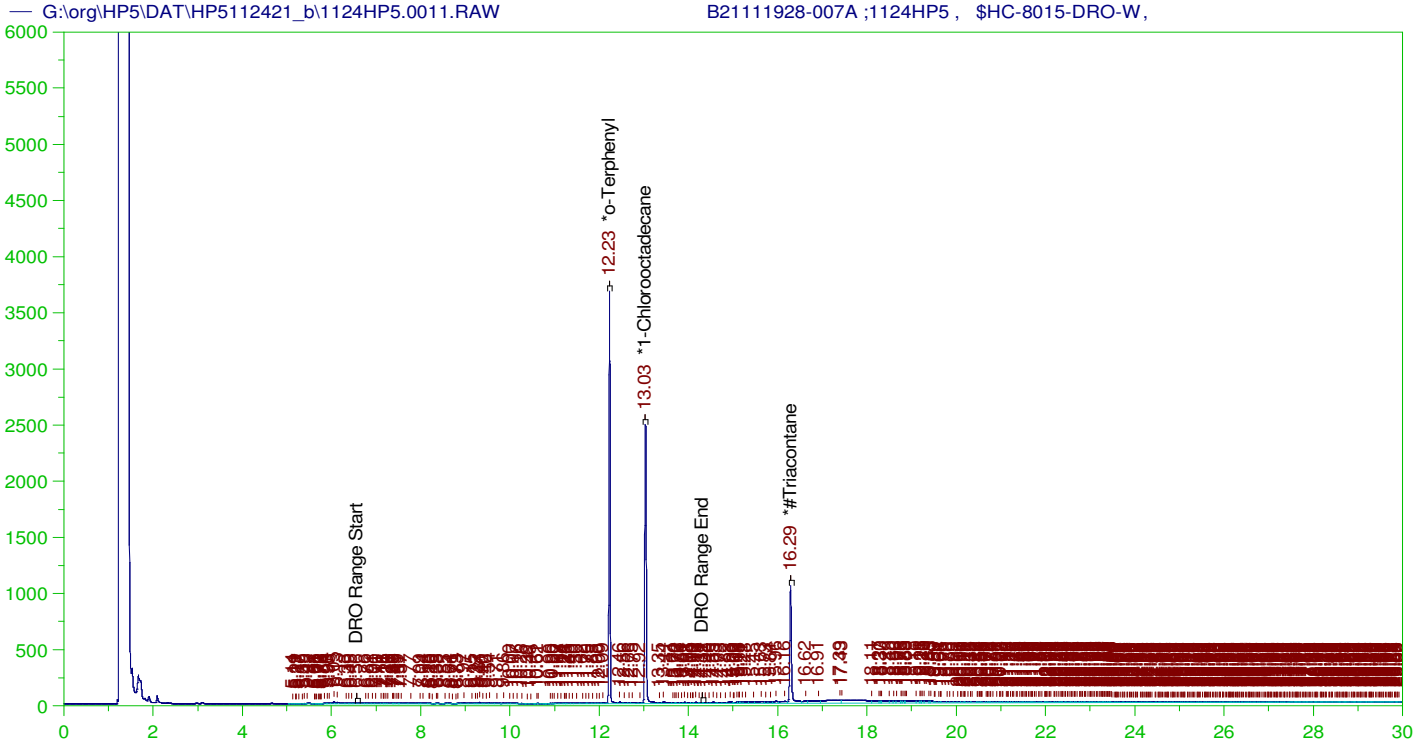


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-007A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0011.RAW
Date & Time Acquired: 11/24/2021 2:36:02 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Id-24-Tri.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

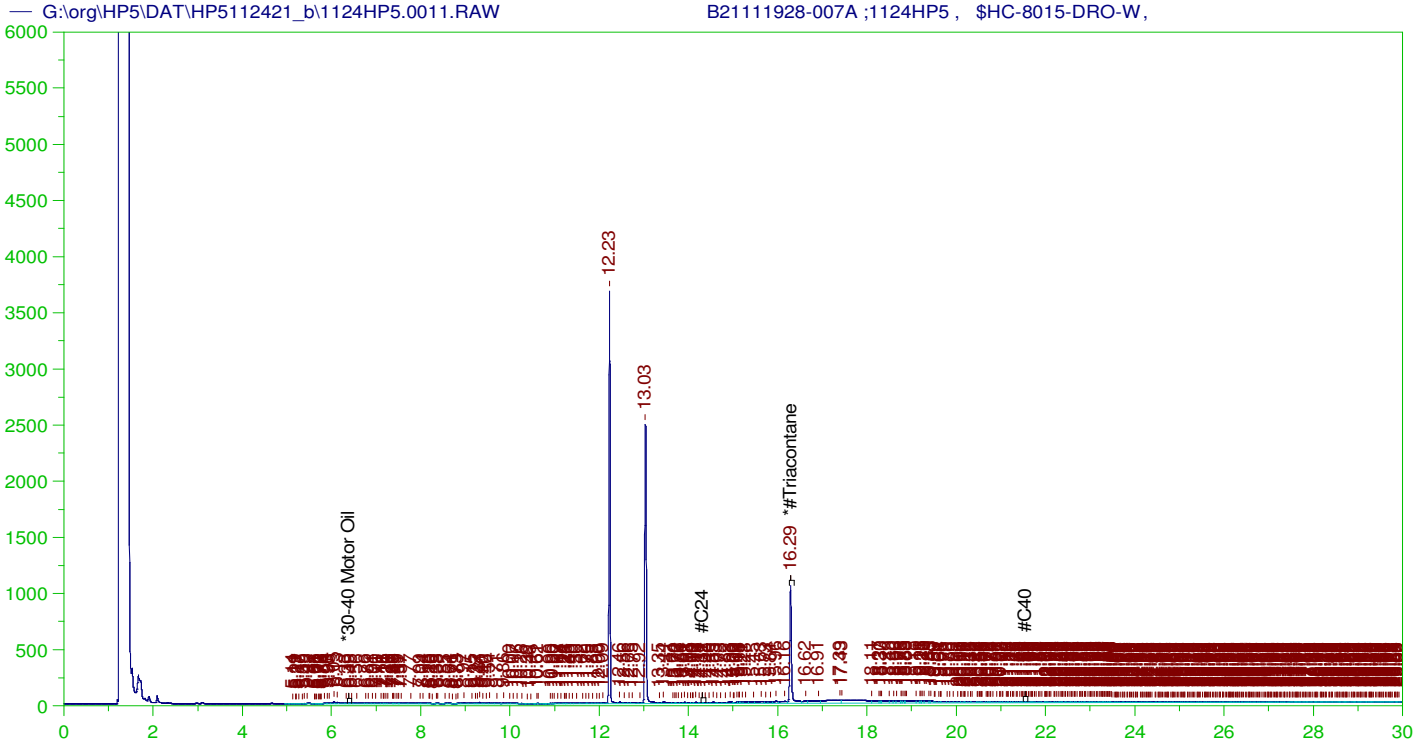
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.228	.191	.187	97.66	-
*1-Chlorooctadecane	13.034	.191	.149	77.87	-
*#Triacontane	16.286	.191	.102	53.21	-

DRO Area:1294249 DRO Amount: 3.950207E-02
TEH Area:1.091131E+07 TEH Amount: 0.3330267

ERH1936 (RHSF) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0011.RAW B21111928-007A ;1124HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-007A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0011.RAW
Date & Time Acquired: 11/24/2021 2:36:02 PM
Method File: G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.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: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.286	.478	.102	21.28	-

RRO Area:6799957 RRO AMOUNT: 0.2279813

ERH1936 (RHSF) Batch ID: 161631

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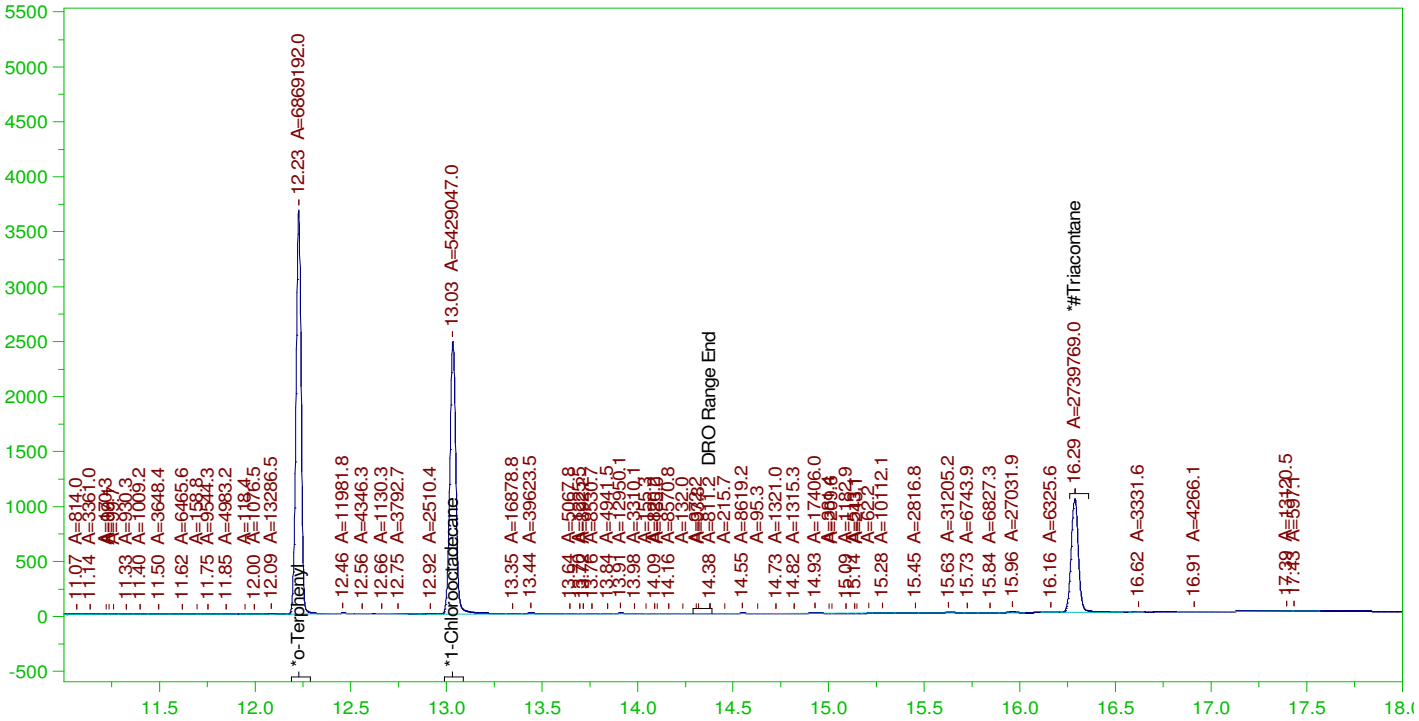


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-007A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0011.RAW
Date & Time Acquired: 11/24/2021 2:36:02 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

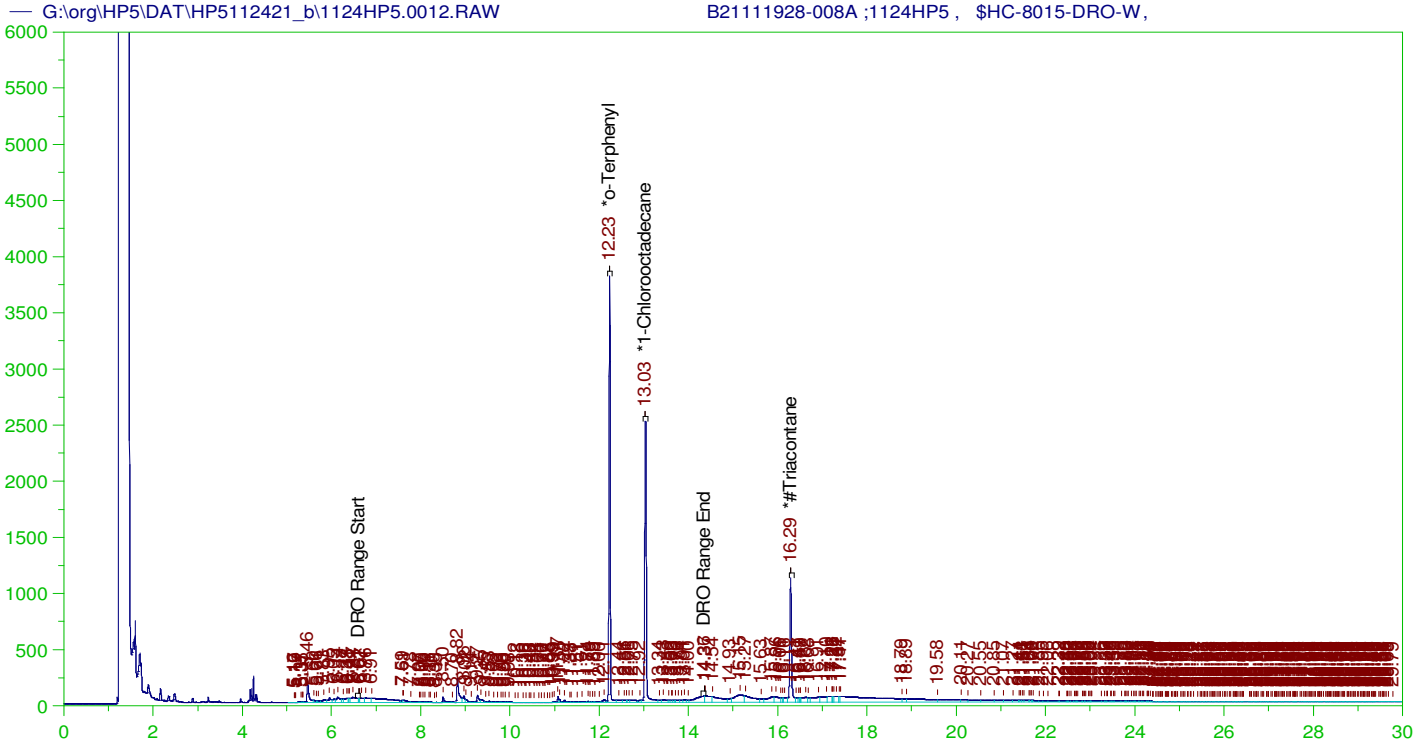
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.228	.191	.185	96.72	-
*1-Chlorooctadecane	13.034	.191	.146	76.45	-
*#Triacontane	16.286	.191	.091	47.35	-

DRO Area:787725.3 DRO Amount: 2.404234E-02
TEH Area:1349579 TEH Amount: 0.0411908

ERH1938 (Post-chlorination) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0012.RAW B21111928-008A ;1124HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-008A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0012.RAW
Date & Time Acquired: 11/24/2021 3:18:27 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Id-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.23	.192	.201	104.43	-
*1-Chlorooctadecane	13.035	.192	.159	82.56	-
*#Triacontane	16.288	.192	.105	54.72	-

DRO Area:8533294 DRO Amount: 0.2616987
TEH Area:2.876697E+07 TEH Amount: 0.8822244

ERH1938 (Post-chlorination) Batch ID: 161631

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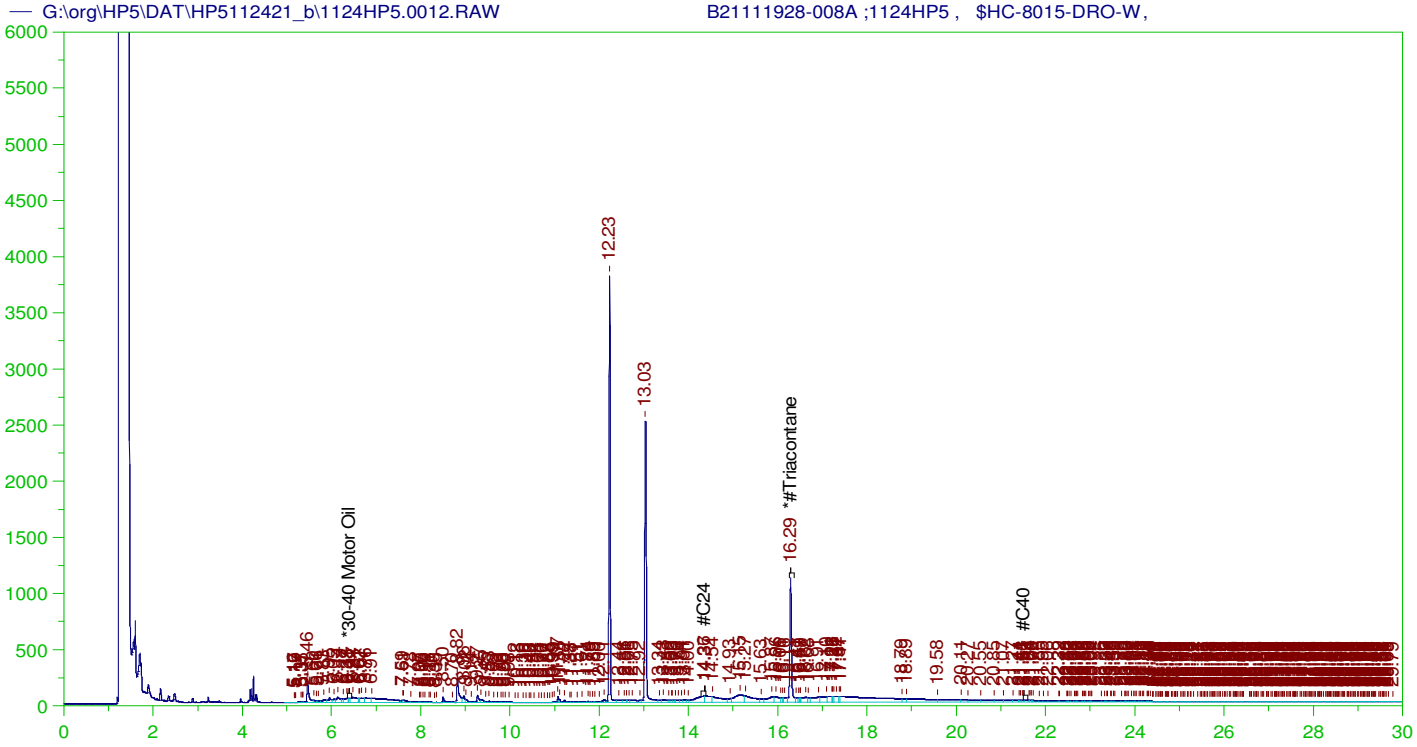


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-008A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0012.RAW
Date & Time Acquired: 11/24/2021 3:18:27 PM
Method File: G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

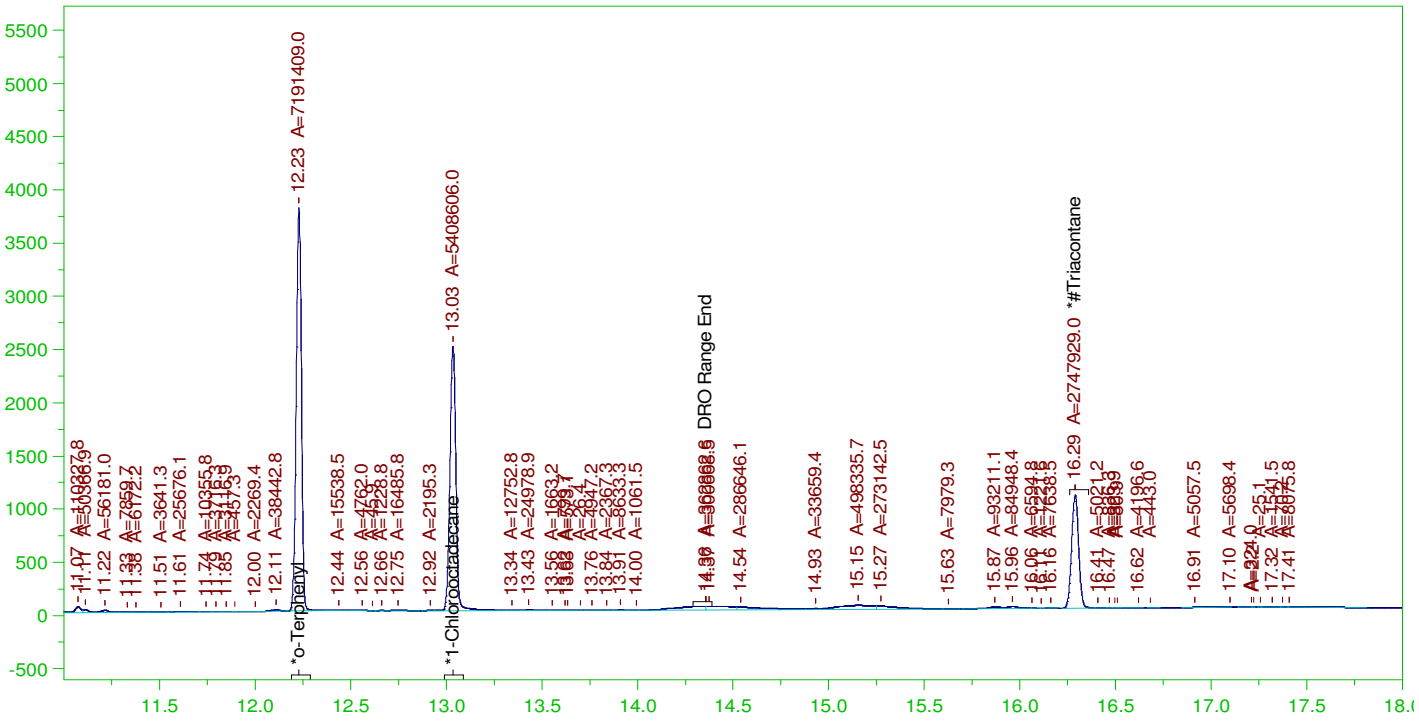
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.288	.481	.105	21.89	-

RRO Area:1.584759E+07 RRO AMOUNT: 0.5338747

ERH1938 (Post-chlorination) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0012.RAW B21111928-008A ;1124HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-008A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0012.RAW
Date & Time Acquired: 11/24/2021 3:18:27 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.23	.192	.195	101.26	-
*1-Chlorooctadecane	13.035	.192	.146	76.16	-
*#Triacontane	16.288	.192	.091	47.49	-

DRO Area:5644428 DRO Amount: 0.1731031
TEH Area:1.06305E+07 TEH Amount: 0.3260159

ERH1931 (RHMW2254-01) Batch ID: 161631

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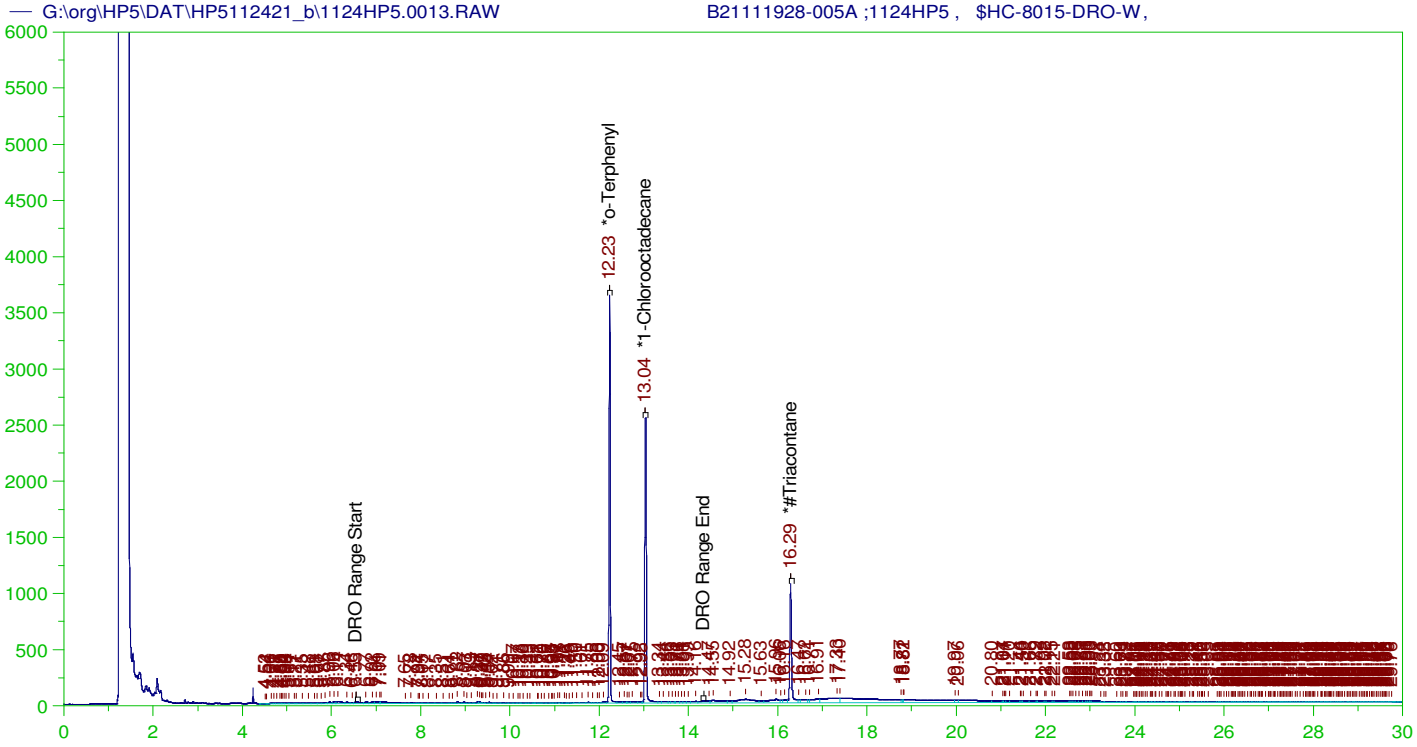

DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-005A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0013.RAW
Date & Time Acquired: 11/24/2021 4:01:08 PM
Method File: G:\Org\HP5\Methods\D3_8015-112413-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Id-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.231	.192	.189	98.52	-
*1-Chlorooctadecane	13.036	.192	.153	79.51	-
*#Triacontane	16.288	.192	.103	53.56	-

DRO Area:2851446 DRO Amount: 8.744805E-02
TEH Area:1.765288E+07 TEH Amount: 0.541378

ERH1931 (RHMW2254-01) Batch ID: 161631

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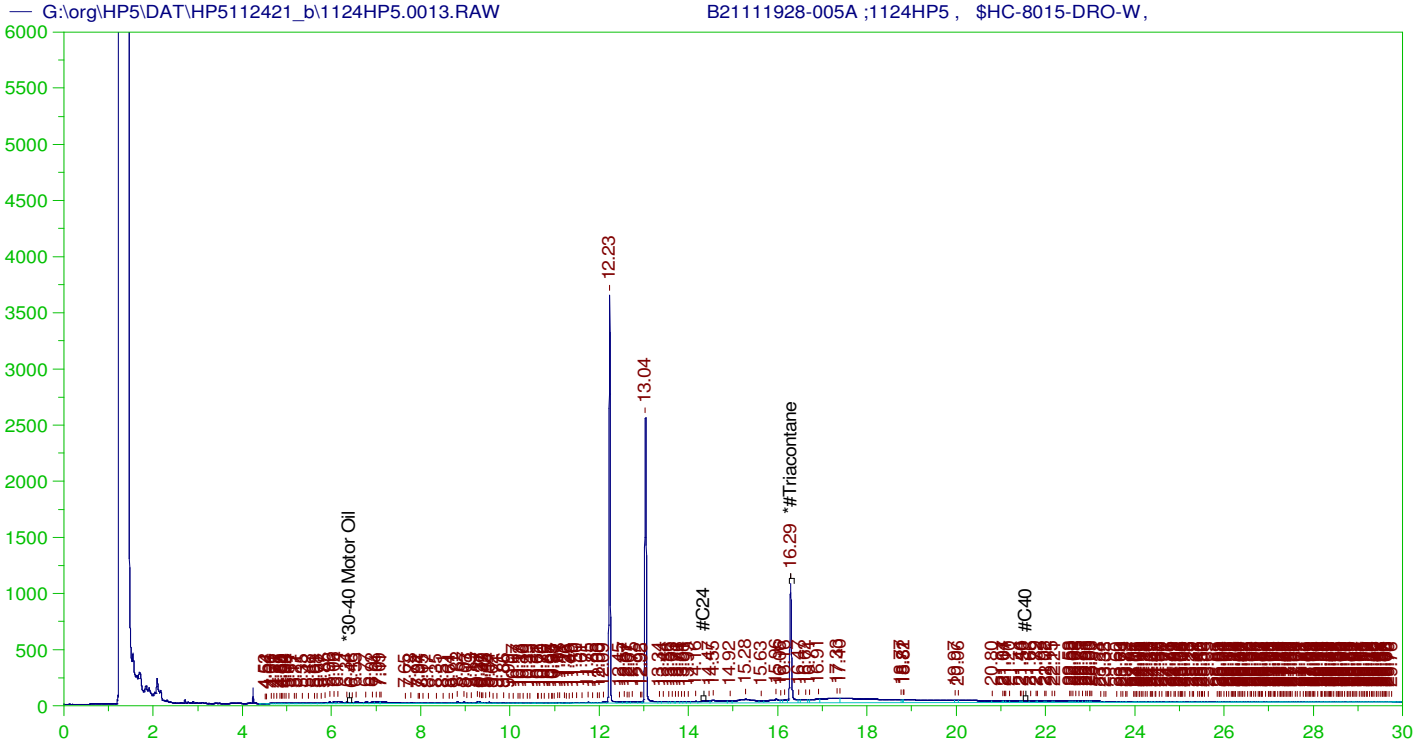

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-005A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0013.RAW
Date & Time Acquired: 11/24/2021 4:01:08 PM
Method File: G:\Org\HP5\Methods\D3_OROS-112413-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.288	.481	.103	21.42	-

RRO Area:1.09154E+07 RRO AMOUNT: 0.3677188

ERH1931 (RHMW2254-01) Batch ID: 161631

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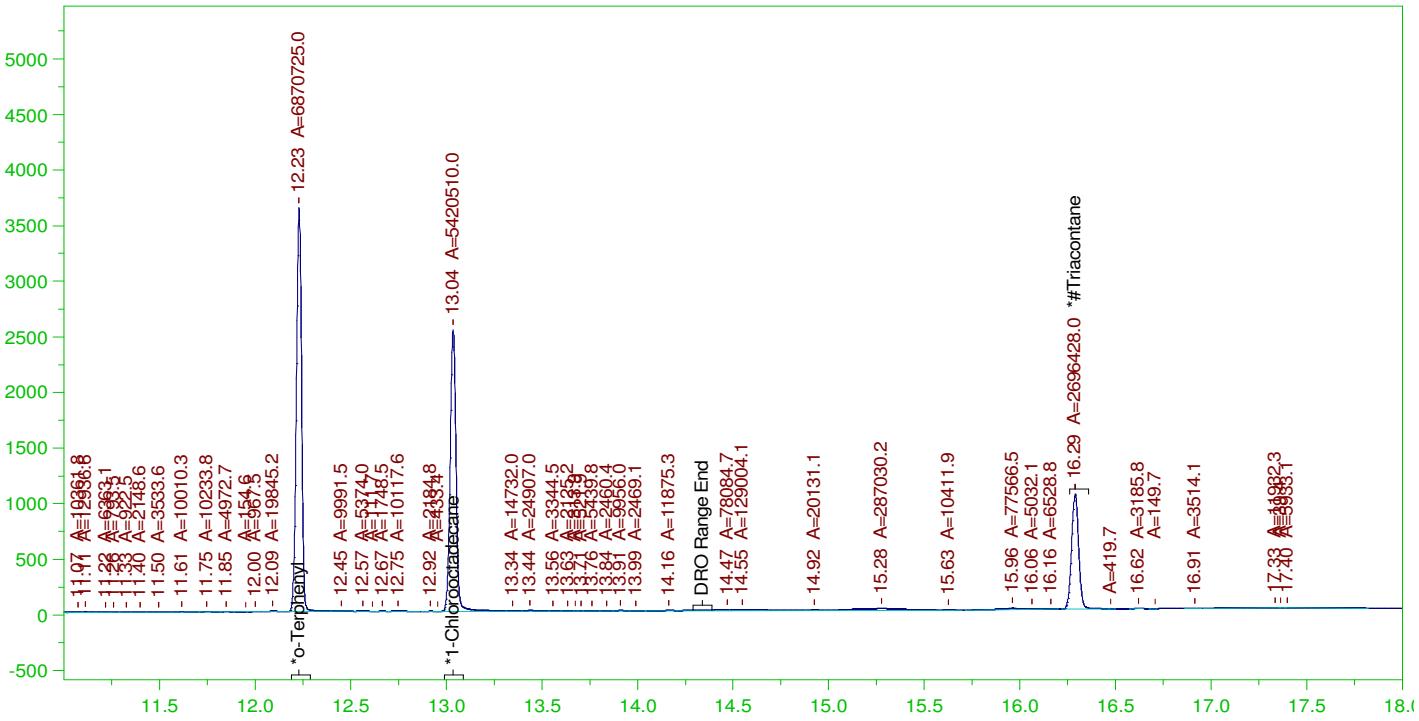


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-005A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0013.RAW
Date & Time Acquired: 11/24/2021 4:01:08 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

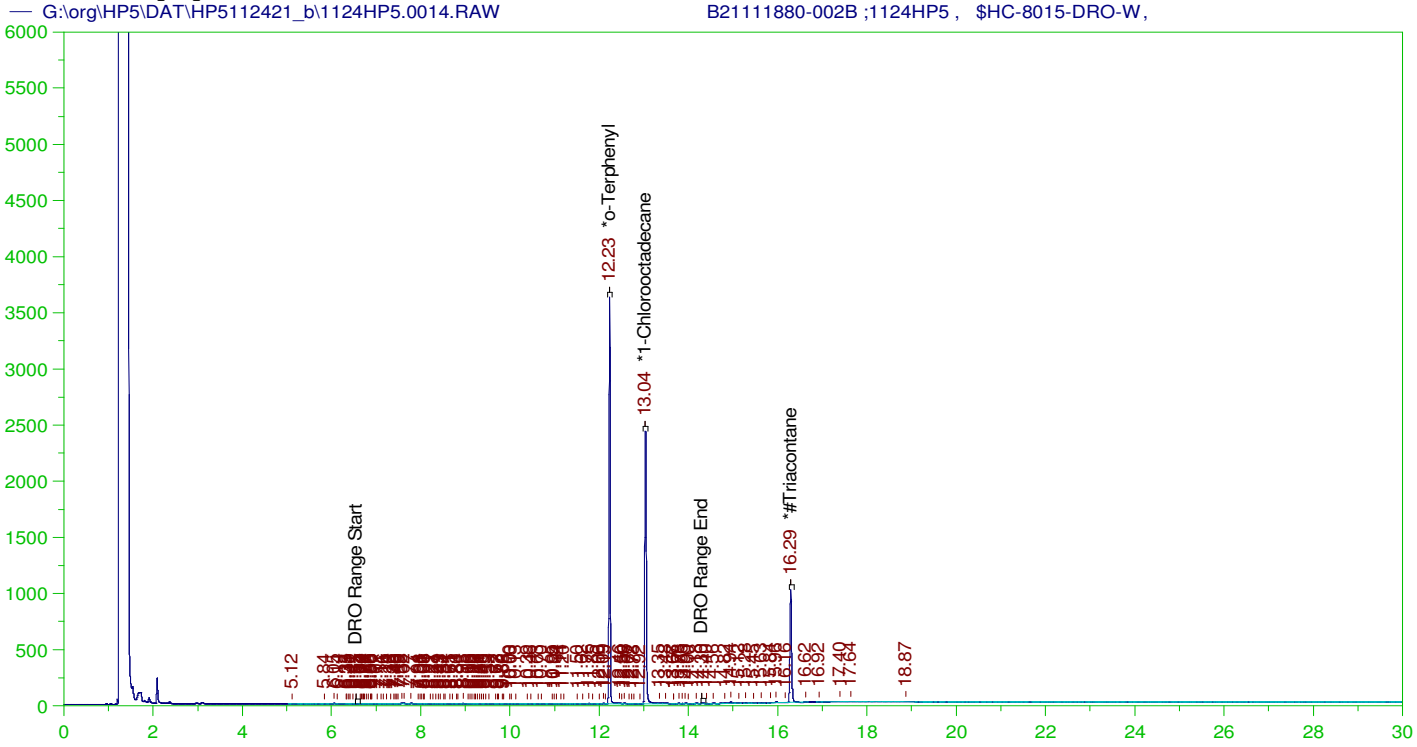
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.231	.192	.186	96.75	-
*1-Chlorooctadecane	13.036	.192	.147	76.33	-
*#Triacontane	16.288	.192	.09	46.6	-

DRO Area:1507257 DRO Amount: 4.622449E-02
TEH Area:3123790 TEH Amount: 9.580027E-02

ERH1727 (Equipment Blank) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0014.RAW B21111880-002B ;1124HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111880-002B ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0014.RAW
Date & Time Acquired: 11/24/2021 4:43:47 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.23	.19	.187	97.96	-
*1-Chlorooctadecane	13.035	.19	.146	76.86	-
*#Triacontane	16.289	.19	.09	47.18	-

DRO Area:382384.5 DRO Amount: 1.161527E-02
TEH Area:585412.5 TEH Amount: 1.778242E-02

ERH1727 (Equipment Blank) Batch ID: 161631

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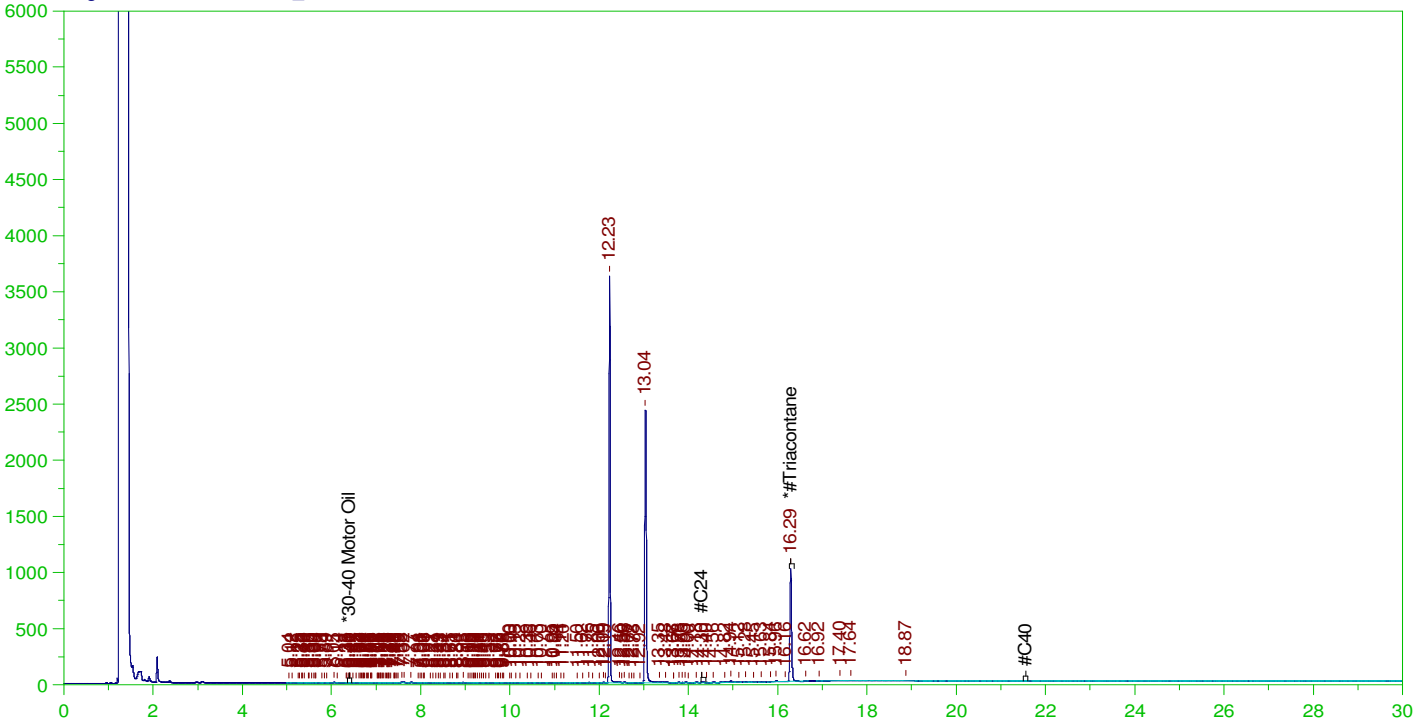

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111880-002B ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0014.RAW
Date & Time Acquired: 11/24/2021 4:43:47 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-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 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.289	.476	.09	18.87	-

RRO Area:163239.7 RRO AMOUNT: 5.446855E-03

ERH1727 (Equipment Blank) Batch ID: 161631

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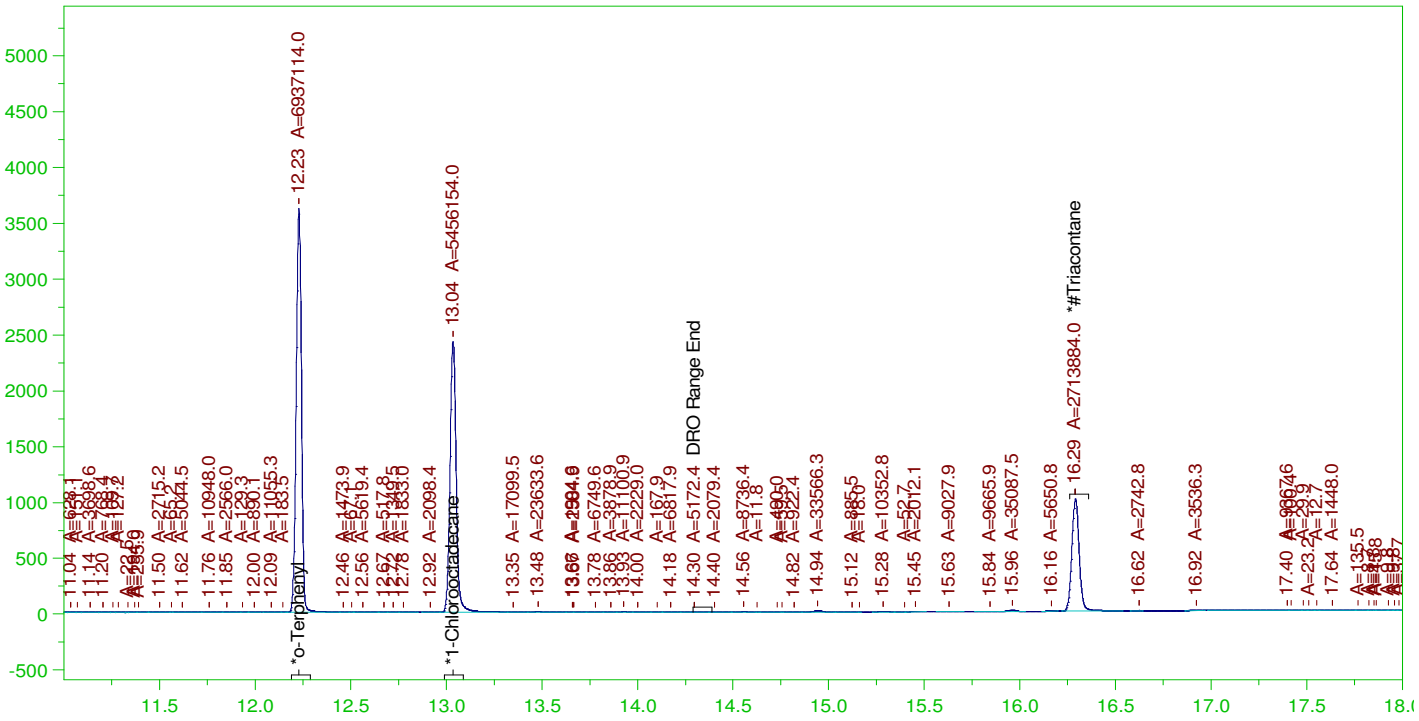

DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111880-002B ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0014.RAW
Date & Time Acquired: 11/24/2021 4:43:47 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.23	.19	.186	97.68	-
*1-Chlorooctadecane	13.035	.19	.146	76.83	-
*#Triacontane	16.289	.19	.089	46.9	-

DRO Area:444034.8 DRO Amount: 1.348795E-02
TEH Area:752910.7 TEH Amount: 2.287033E-02

ERH1728 (Field Blank) Batch ID: 161631

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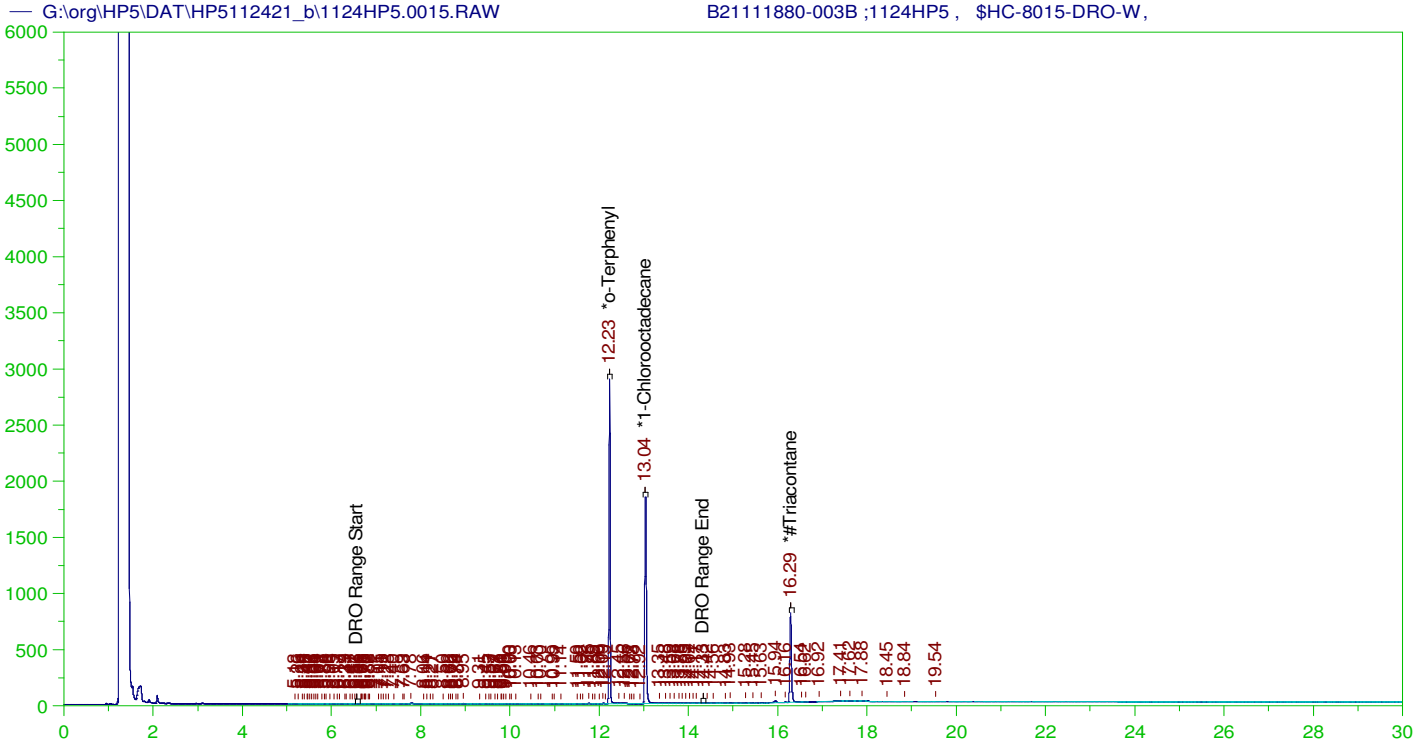

DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111880-003B ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0015.RAW
Date & Time Acquired: 11/24/2021 5:26:37 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.228	.194	.151	78.	-
*1-Chlorooctadecane	13.035	.194	.116	59.9	-
*#Triacontane	16.286	.194	.074	38.25	-

DRO Area:306961.6 DRO Amount: 9.505282E-03
TEH Area:529685.1 TEH Amount: 1.640208E-02

ERH1728 (Field Blank) Batch ID: 161631

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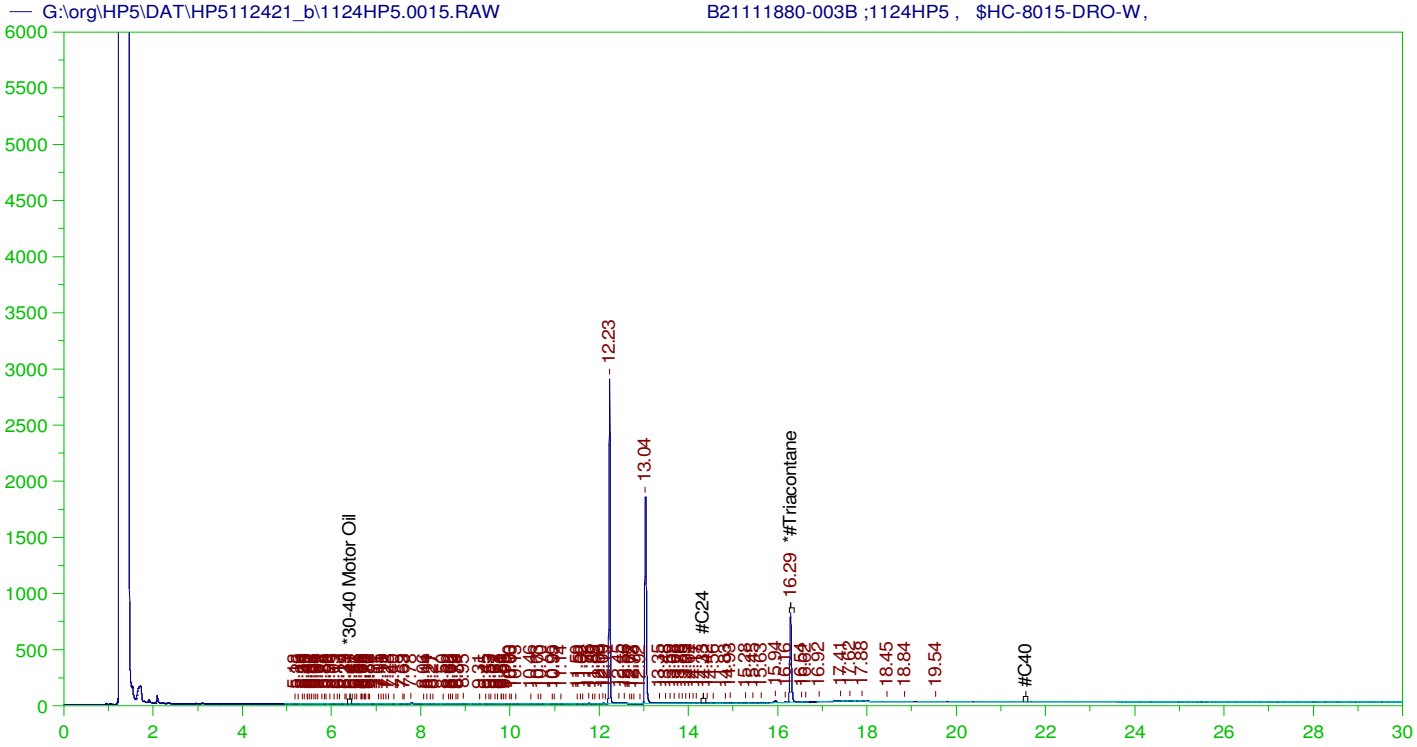

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111880-003B ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0015.RAW
Date & Time Acquired: 11/24/2021 5:26:37 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-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 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.286	.485	.074	15.3	-

RRO Area:177352.8 RRO AMOUNT: 6.032676E-03

ERH1728 (Field Blank) Batch ID: 161631

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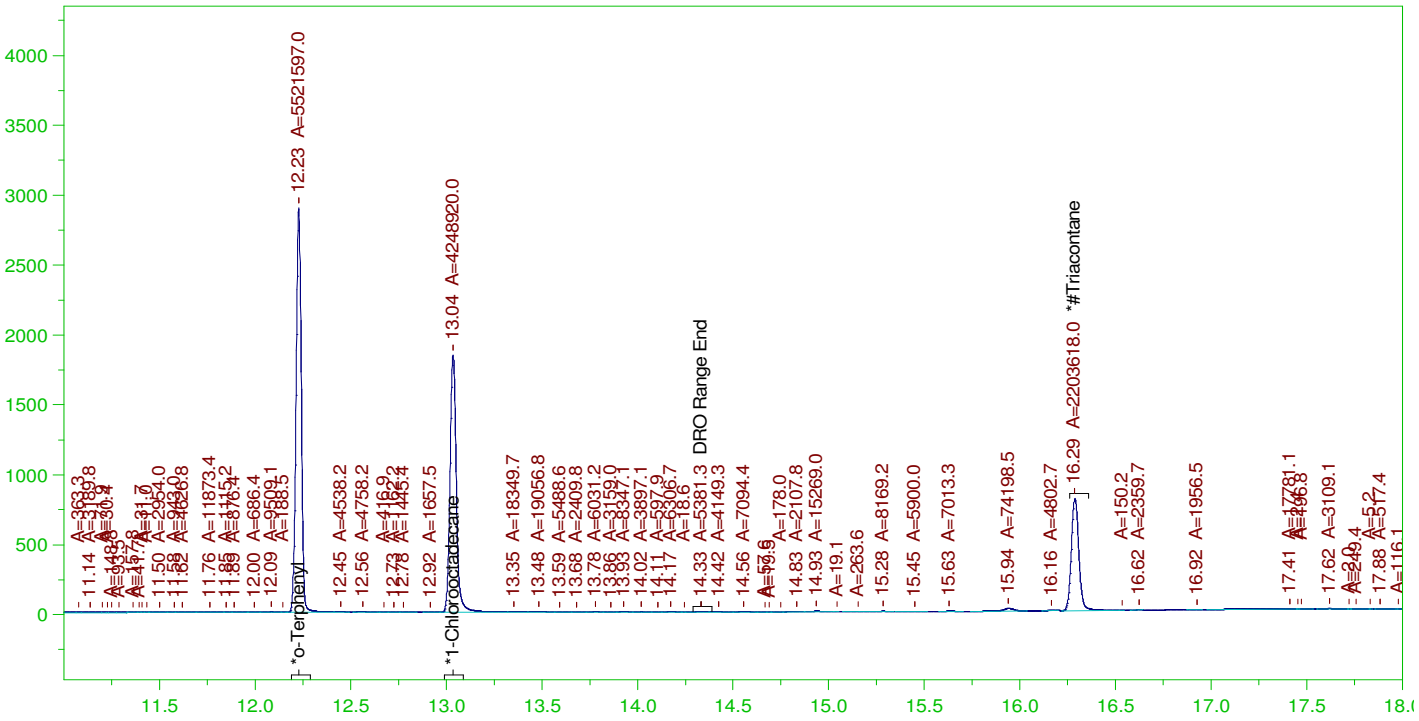


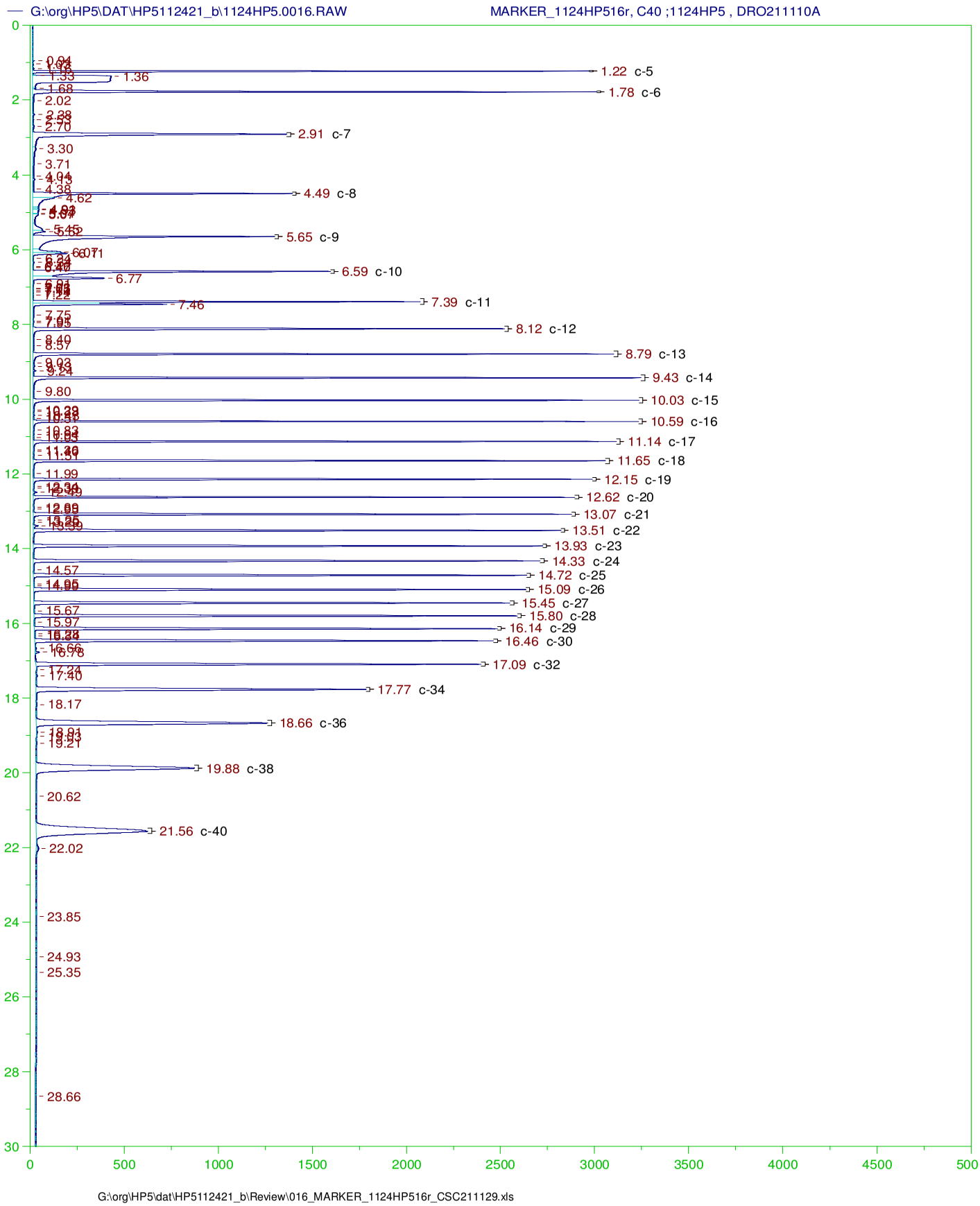
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111880-003B ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0015.RAW
Date & Time Acquired: 11/24/2021 5:26:37 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.228	.194	.151	77.75	-
*1-Chlorooctadecane	13.035	.194	.116	59.83	-
*#Triacontane	16.286	.194	.074	38.09	-

DRO Area:272699.7 DRO Amount: 8.444338E-03
TEH Area:549182.4 TEH Amount: 1.700582E-02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1.78 c-6
2.91 c-7
4.49 c-8
5.65 c-9
6.59 c-10
6.77
7.39 c-11
7.46
8.12 c-12
8.79 c-13
9.43 c-14
9.80
10.03 c-15
10.59 c-16
11.14 c-17
11.65 c-18
11.99
12.15 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
15.45 c-27
15.67
15.80 c-28
15.97
16.14 c-29
16.46 c-30
17.09 c-32
17.77 c-34
18.17
18.66 c-36
19.88 c-38
20.62
21.56 c-40
22.02
23.85
24.93
25.35
28.66
0
500
1000
1500
2000
2500
3000
3500
4000
4500
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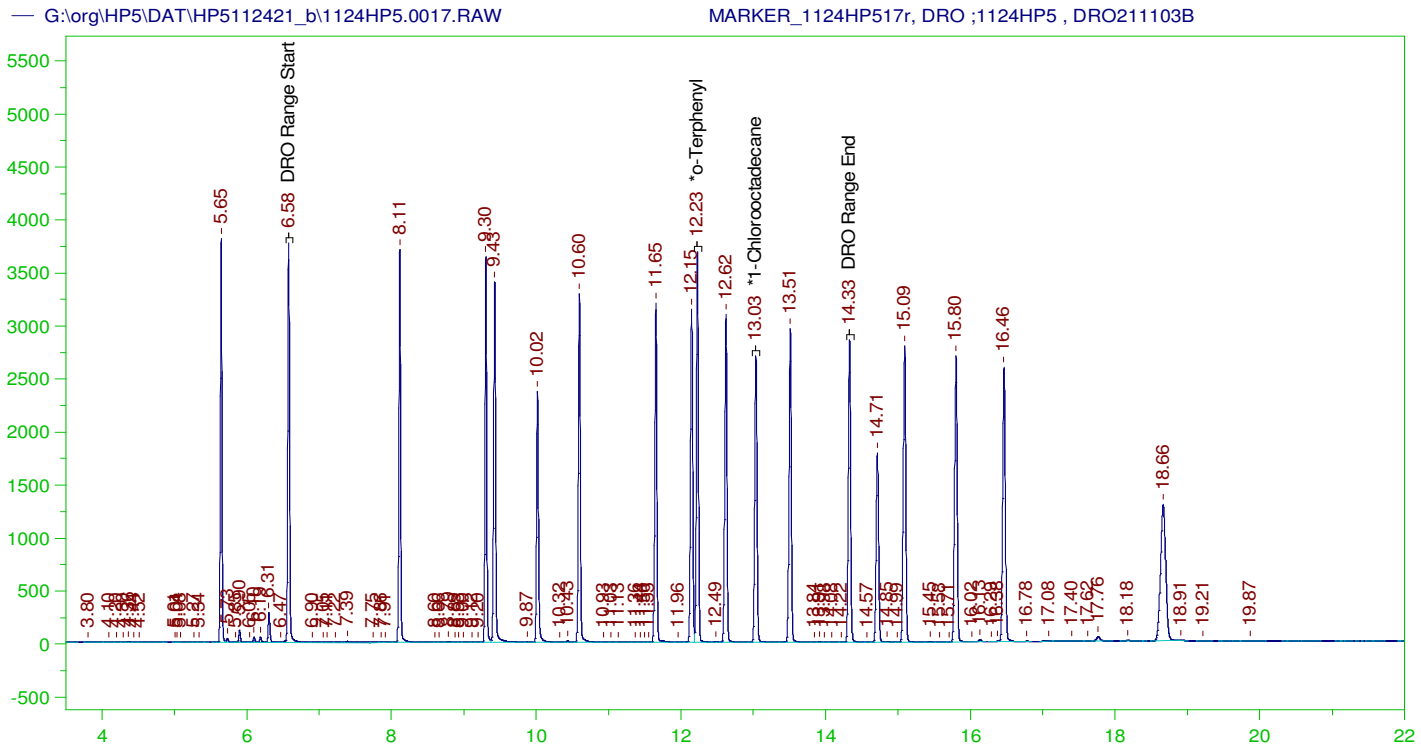


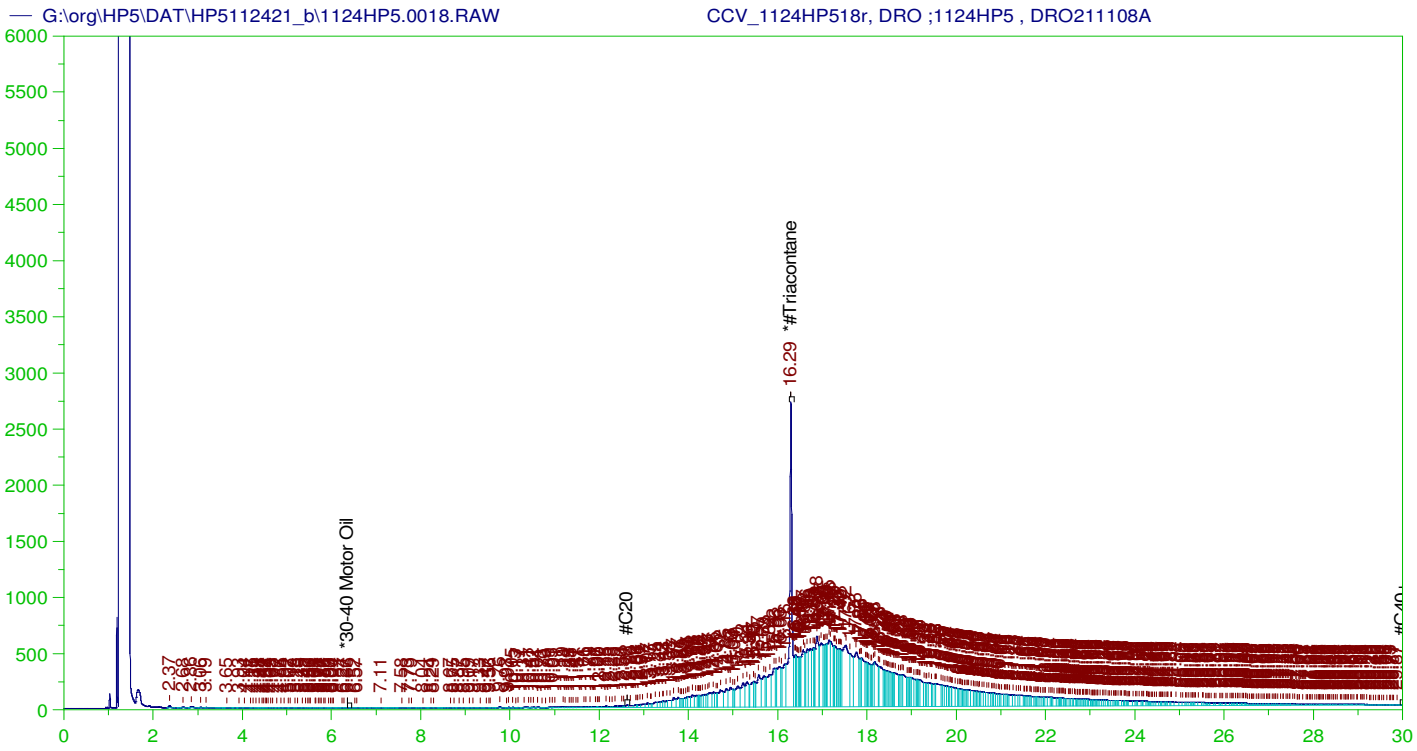
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1124HP517r, DRO ;1124HP5 , DRO211103B
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0017.RAW
Date & Time Acquired: 11/24/2021 6:52:19 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.229	.2	.199	99.75	-
*1-Chlorooctadecane	13.035	.2	.161	80.72	-

DRO Area:6.830718E+07 DRO Amount: 2.178636
TEH Area:1.063642E+08 TEH Amount: 3.392453



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1124HP518r, DRO ;1124HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0018.RAW
Date & Time Acquired: 11/24/2021 7:35:09 PM
Method File: G:\Org\HP5\Methods\DC_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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	16.294	500.	337.018	67.4	-

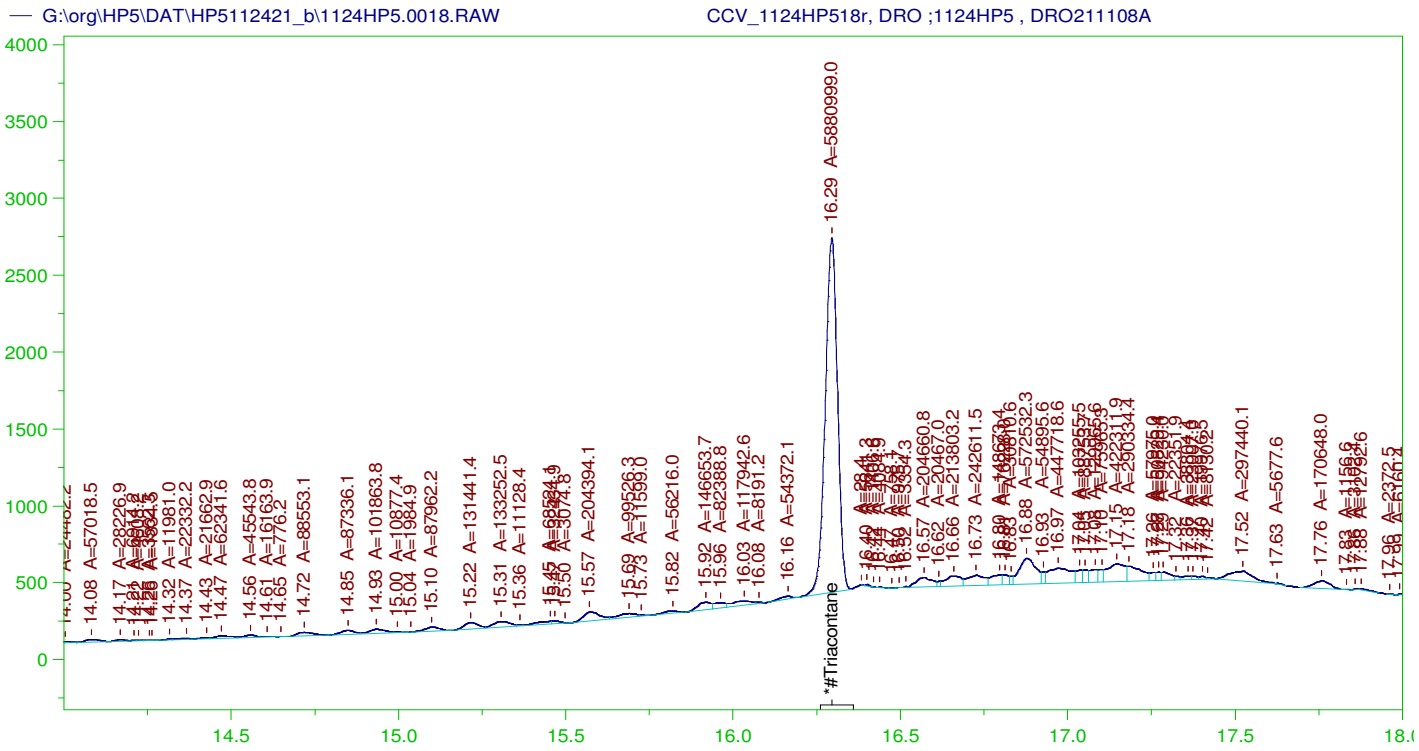
~~RRO~~ TEH (Oil Range) Area:1.366805E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4788.68

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0018.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.026	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.294	200.	337.018	168.51	75-125

AMN 12/14/2021



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1124HP518r, DRO ;1124HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0018.RAW
Date & Time Acquired: 11/24/2021 7:35:09 PM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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

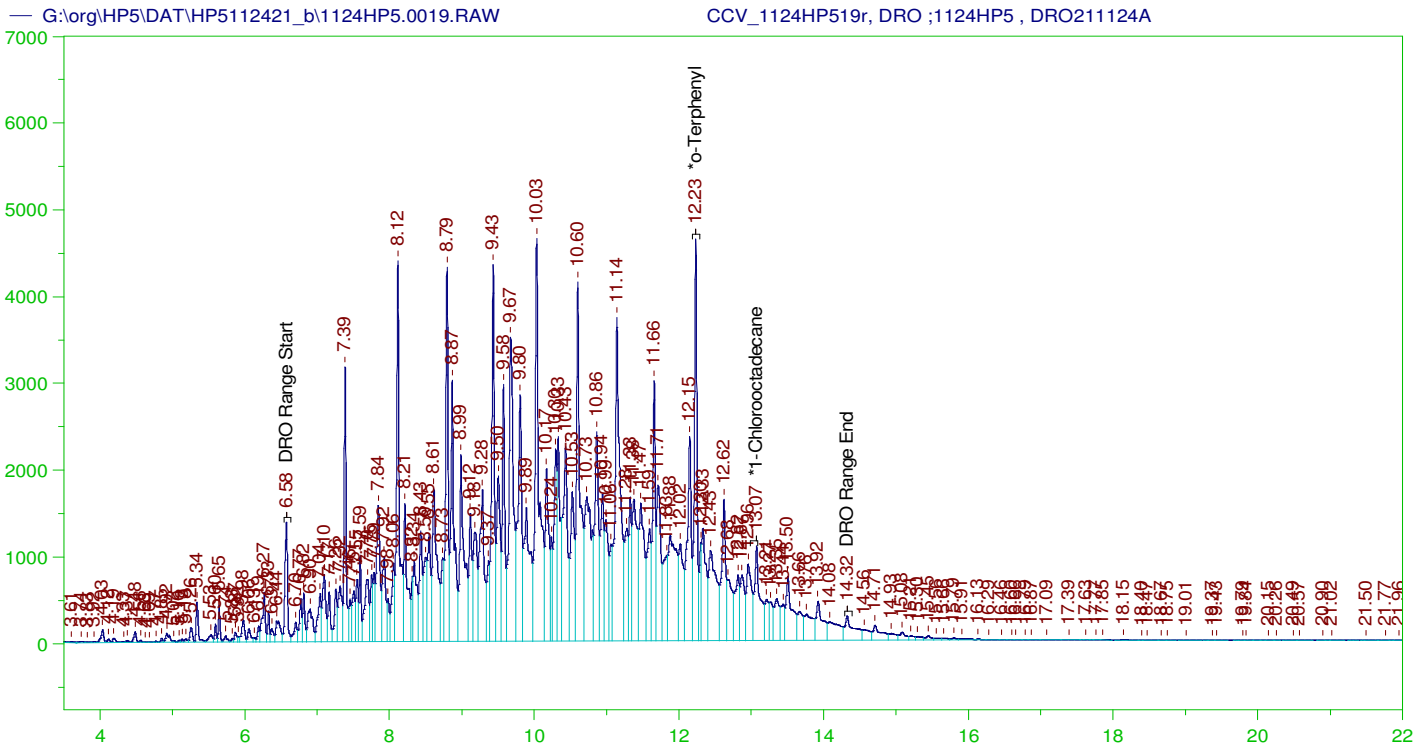
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.294	500.	203.283	40.66	-

RRO Area:6485313 RRO AMOUNT: 227.2167

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0018.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.026	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.294	200.	203.283	101.64	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1124HP519r, DRO ;1124HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0019.RAW
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Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

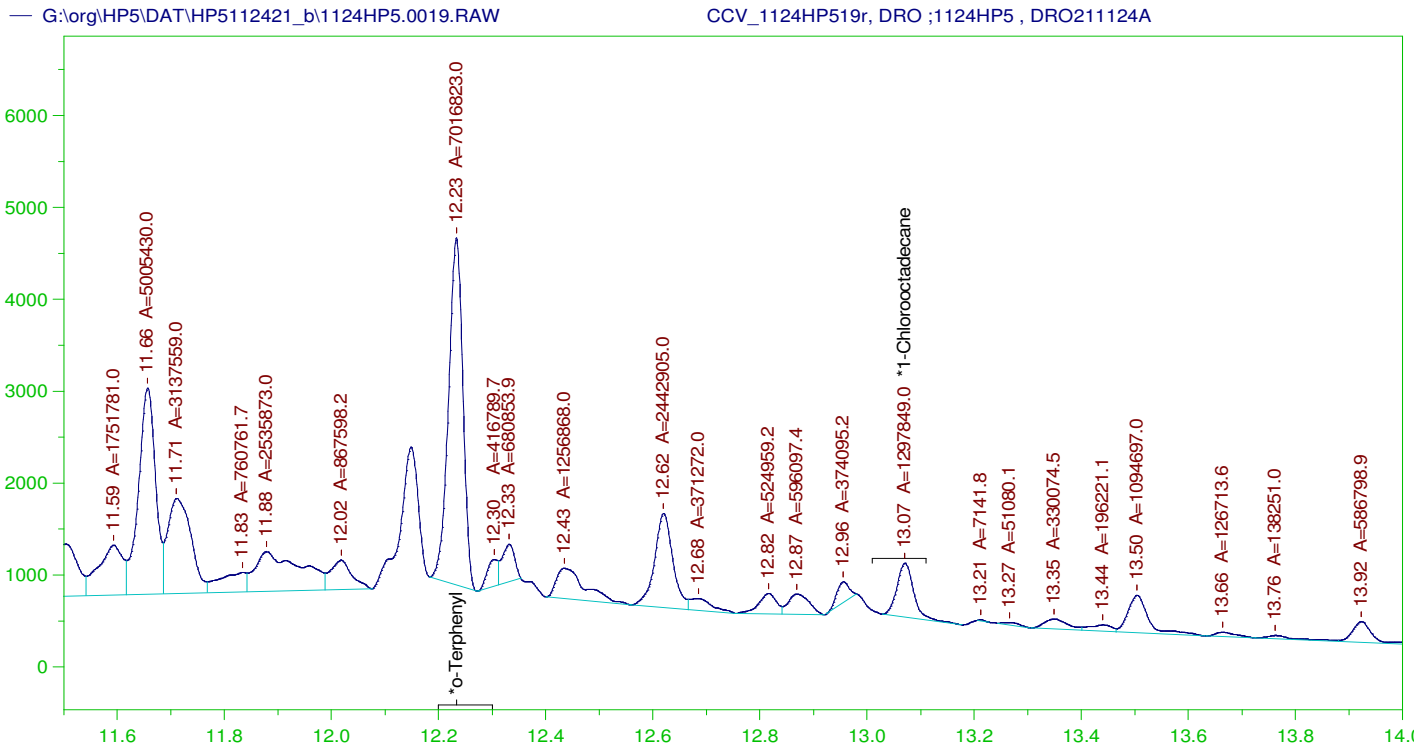
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.233	200.	326.298	163.15	-
*1-Chlorooctadecane	13.071	200.	156.694	78.35	-

DRO Area:4.558909E+08 DRO Amount: 14540.5
TEH Area:4.716313E+08 TEH Amount: 15042.53

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0019.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15042.53	100.28	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.233	200.	326.298	163.15	85-115
*1-Chlorooctadecane	13.071	200.	156.694	78.35	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1124HP519r, DRO ;1124HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0019.RAW
Date & Time Acquired: 11/24/2021 8:17:58 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

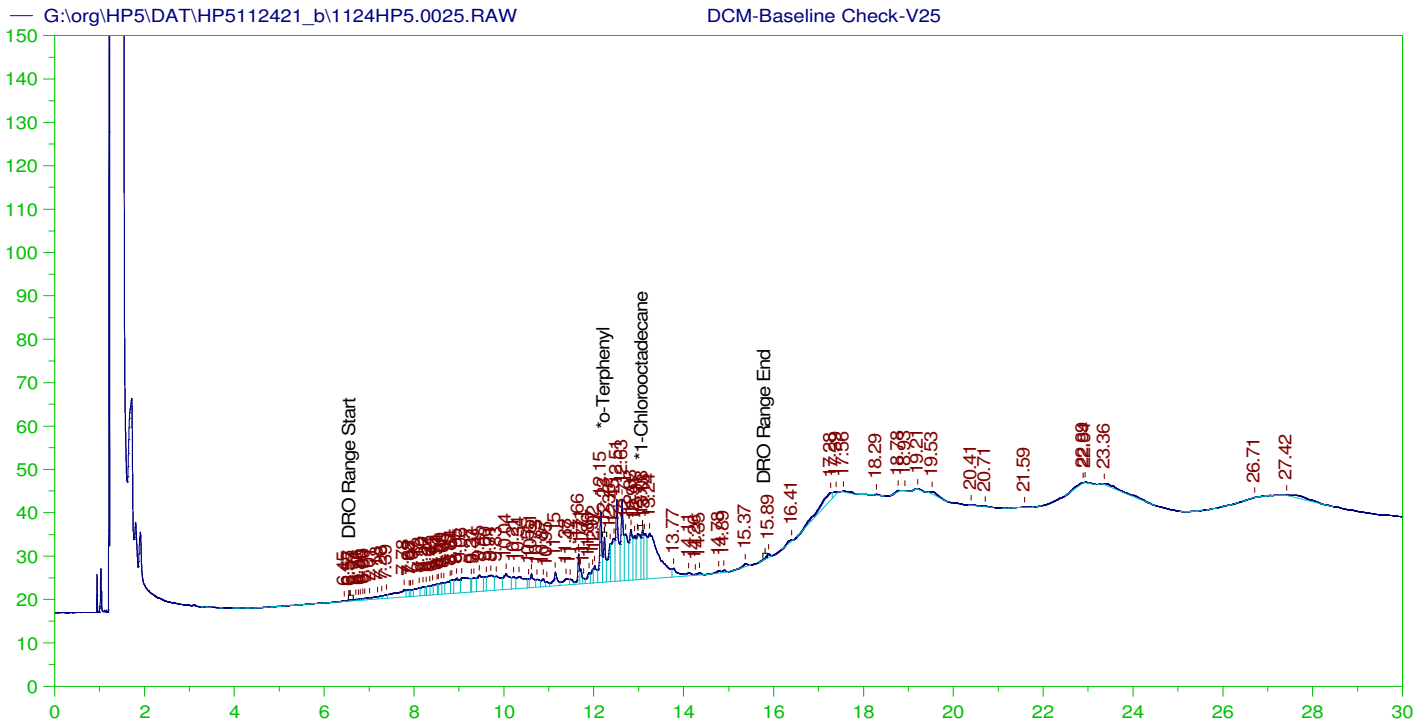
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.233	200.	197.606	98.8	-
*1-Chlorooctadecane	13.071	200.	36.55	18.27	-

DRO Area:2.546078E+08 DRO Amount: 8120.635
TEH Area:2.651831E+08 TEH Amount: 8457.931

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0019.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8457.93	56.39	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.233	200.	197.606	98.8	85-115
*1-Chlorooctadecane	13.071	200.	36.55	18.27	85-115



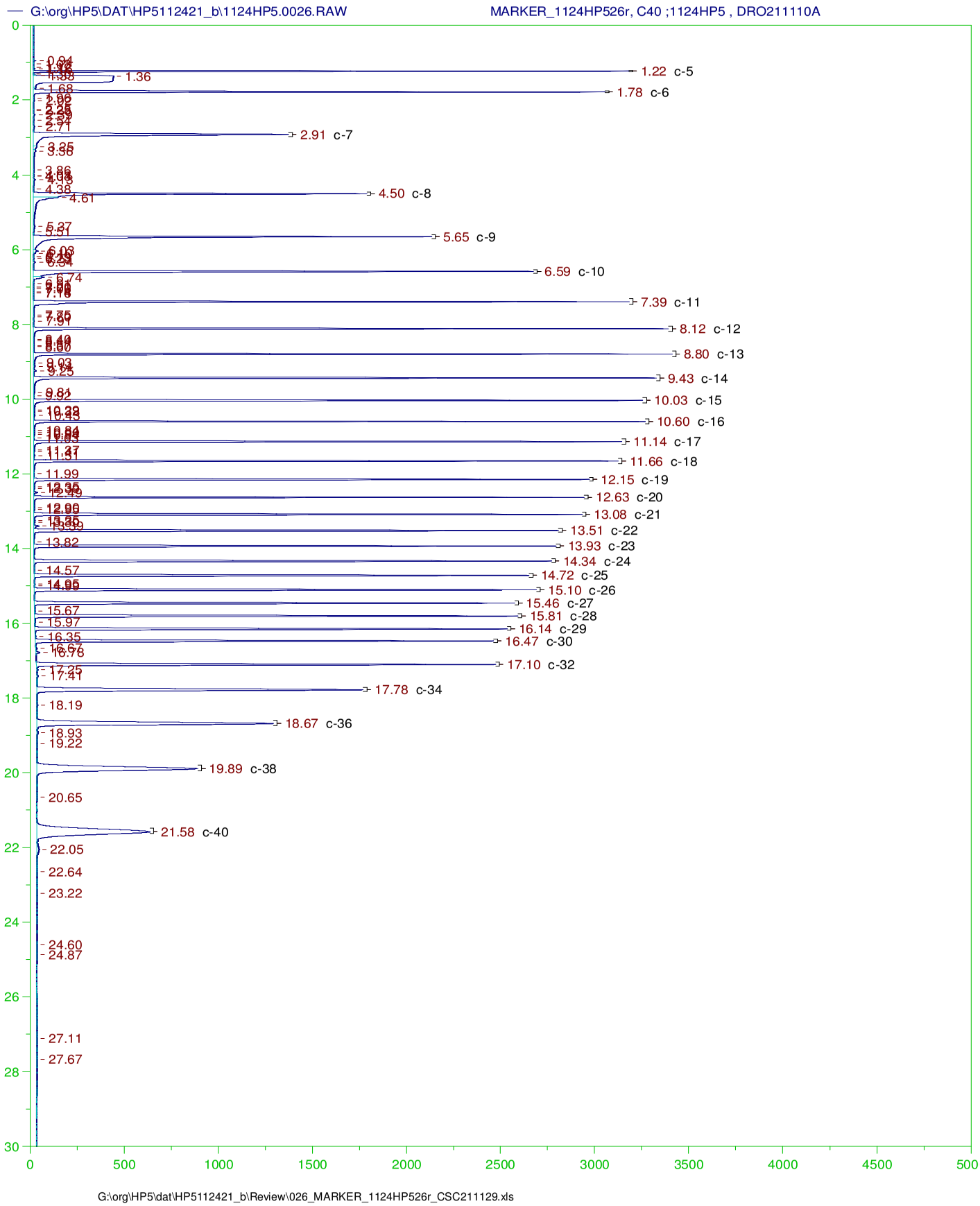
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V25
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0025.RAW
Date & Time Acquired: 11/27/2021 7:55:42 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	12.235	200.	1.124	.56	-
*1-Chlorooctadecane	13.083	200.	1.113	.56	-

DRO Area:1453091 DRO Amount: 46.34586
TEH Area:1579710 TEH Amount: 50.38433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6.59 c-10
7.39 c-11
8.12 c-12
8.80 c-13
9.43 c-14
10.03 c-15
10.60 c-16
11.14 c-17
11.66 c-18
11.99
12.15 c-19
12.63 c-20
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13.51 c-22
13.82
13.93 c-23
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14.72 c-25
15.10 c-26
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15.67
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15.97
16.14 c-29
16.35
16.47 c-30
16.78
17.10 c-32
17.41
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18.19
18.67 c-36
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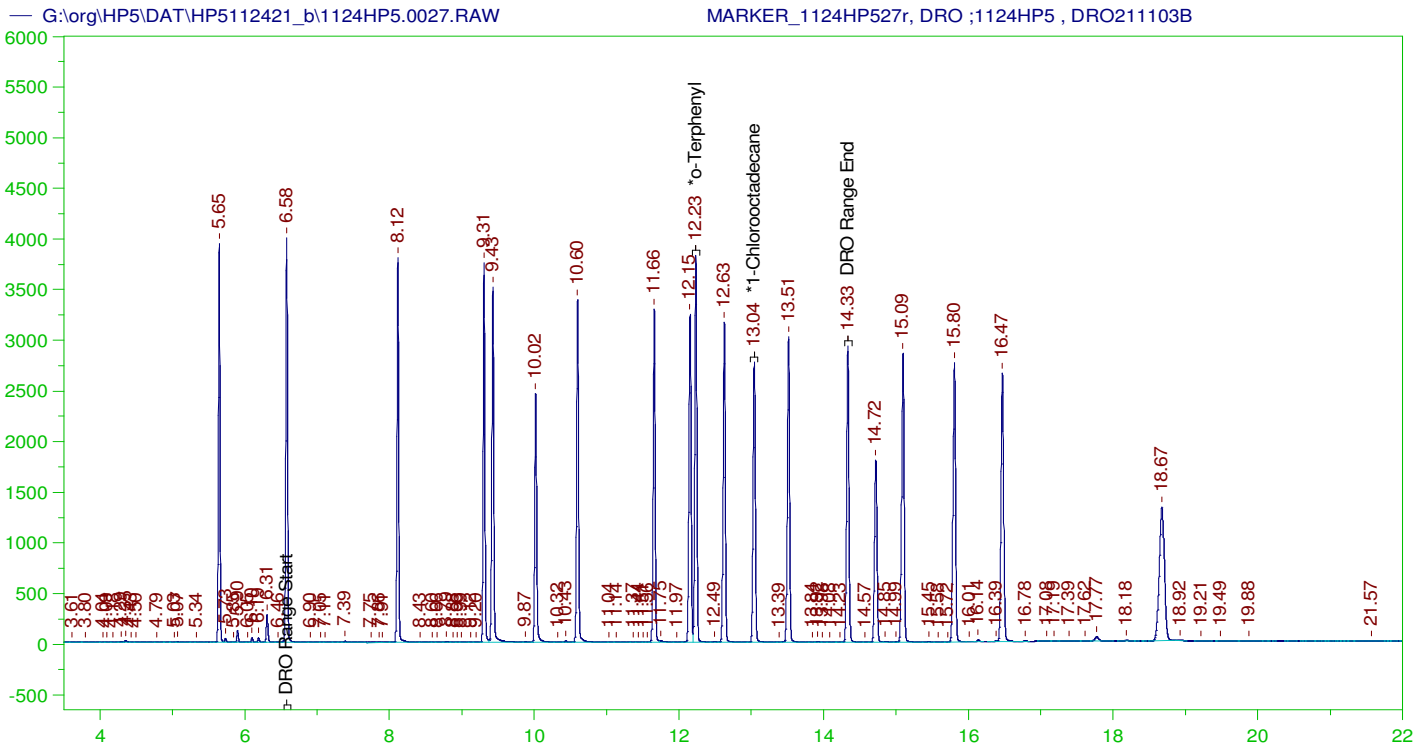

DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1124HP527r, DRO ;1124HP5 , DRO211103B
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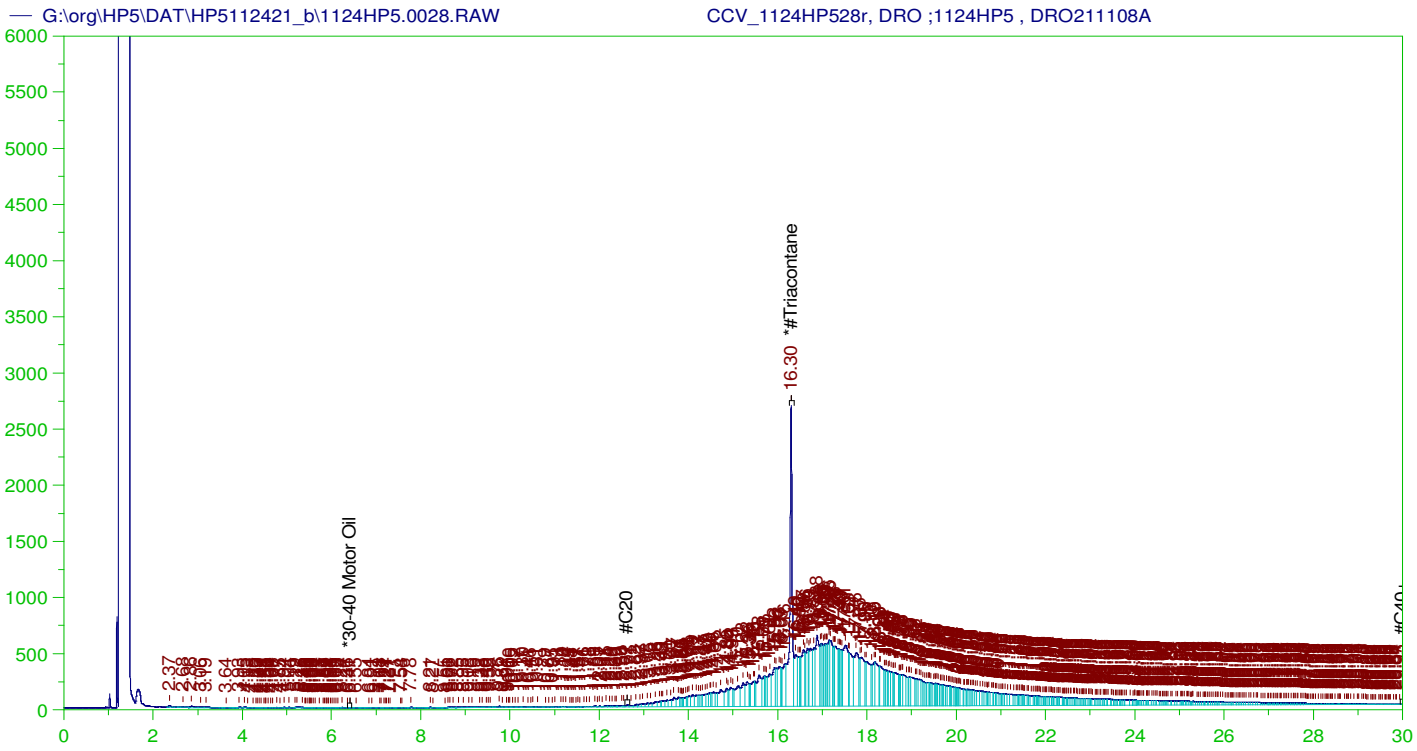
Date & Time Acquired: 11/27/2021 9:20:42 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.234	.2	.203	101.68	-
*1-Chlorooctadecane	13.04	.2	.164	82.11	-

DRO Area:6.957658E+07 DRO Amount: 2.219123
TEH Area:1.082548E+08 TEH Amount: 3.452753



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1124HP528r, DRO ;1124HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0028.RAW
Date & Time Acquired: 11/27/2021 10:03:22 AM
Method File: G:\Org\HP5\Methods\DC_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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	16.299	500.	342.313	68.46	-

~~RRO~~ TEH (Oil Range) Area:1.363852E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4778.334

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0028.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.025	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.299	200.	342.313	171.16	75-125

AMN 12/14/2021

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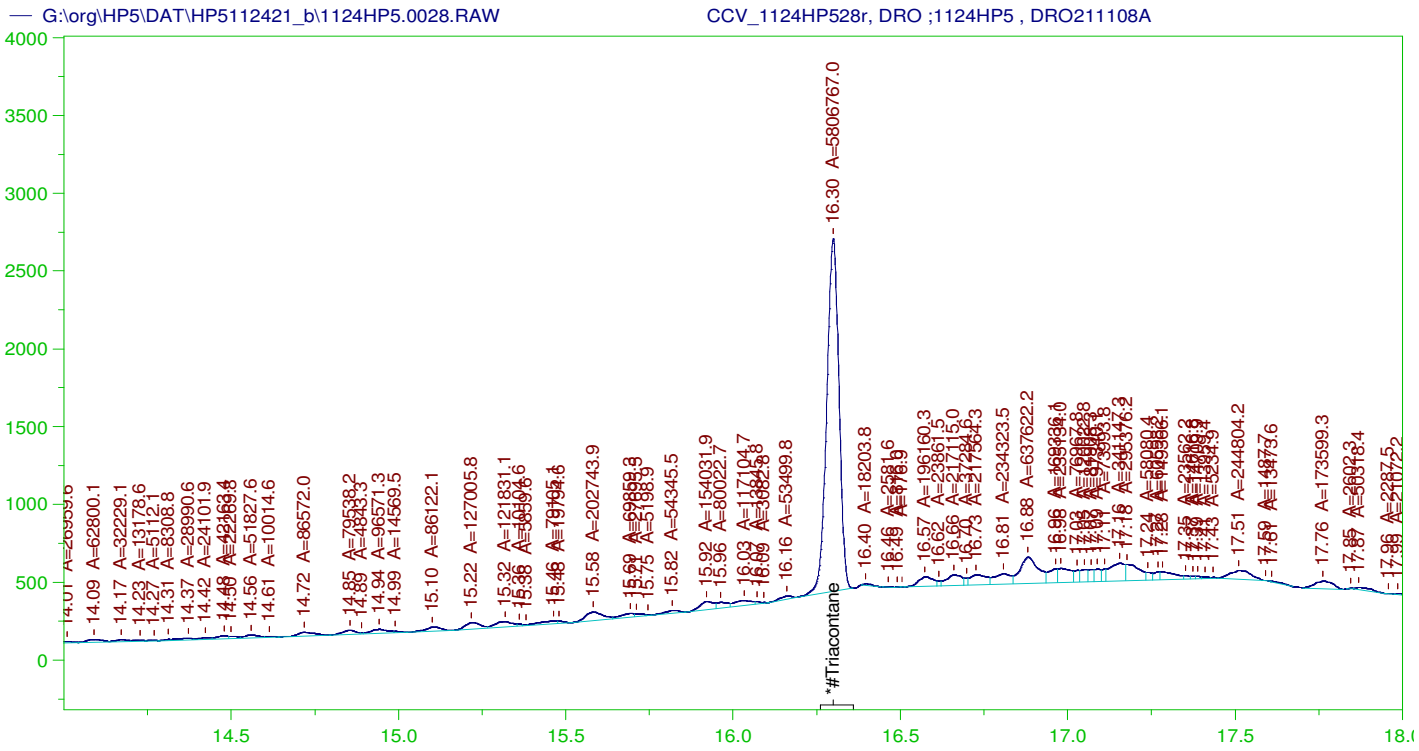


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1124HP528r, DRO ;1124HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0028.RAW
Date & Time Acquired: 11/27/2021 10:03:22 AM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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

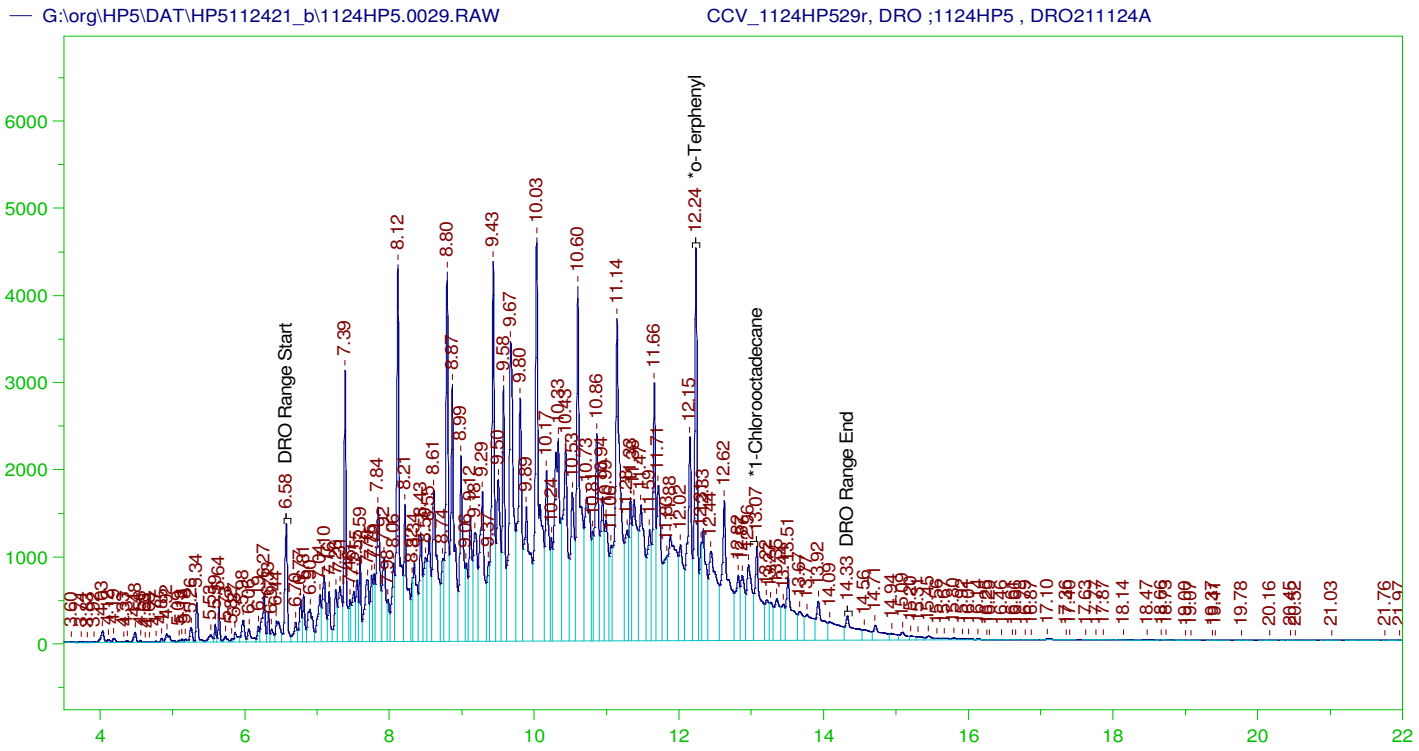
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.299	500.	200.717	40.14	-

RRO Area:6480315 RRO AMOUNT: 227.0416

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0028.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.025	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.299	200.	200.717	100.36	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1124HP529r, DRO ;1124HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0029.RAW
Date & Time Acquired: 11/27/2021 10:45:58 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

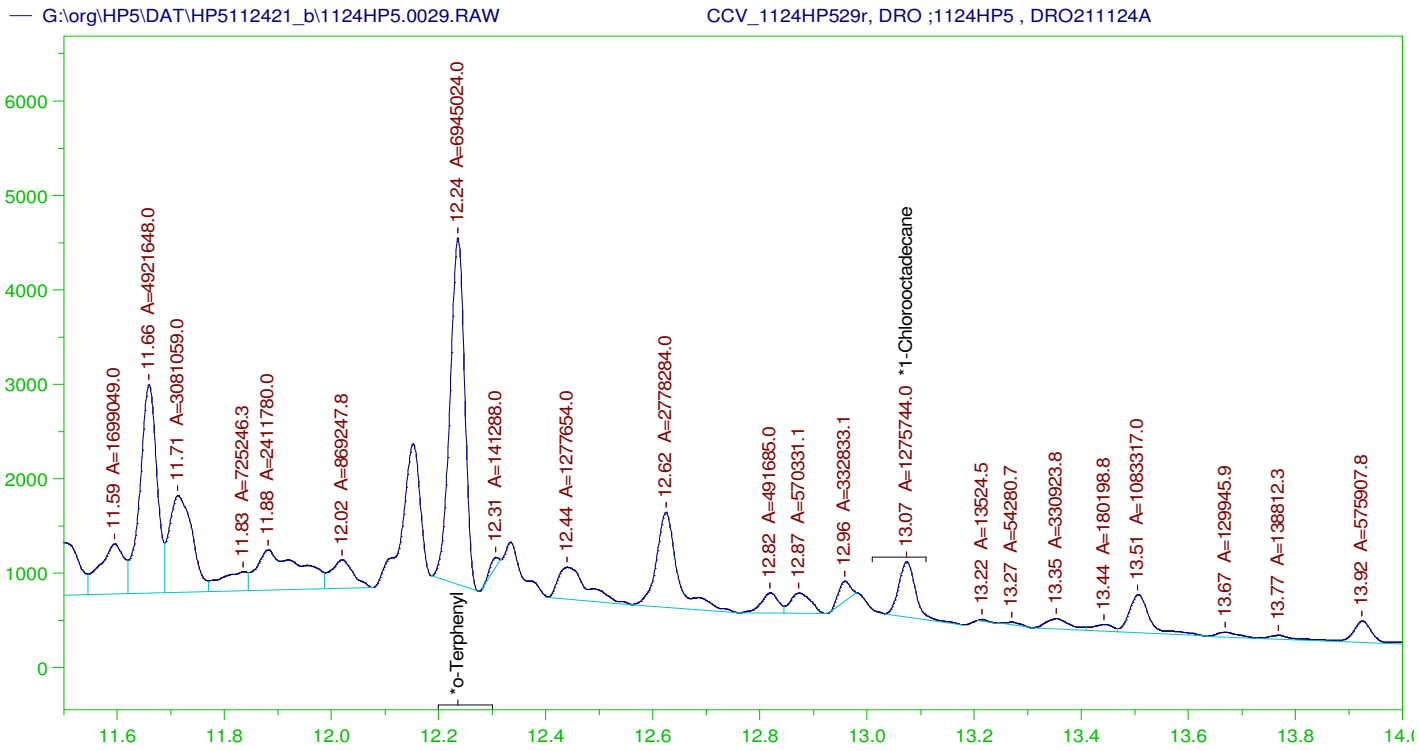
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.236	200.	322.393	161.2	-
*1-Chlorooctadecane	13.074	200.	150.921	75.46	-

DRO Area:4.506856E+08 DRO Amount: 14374.47
TEH Area:4.6615E+08 TEH Amount: 14867.71

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0029.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	14867.71	99.12	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.236	200.	322.393	161.2	85-115
*1-Chlorooctadecane	13.074	200.	150.921	75.46	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1124HP529r, DRO ;1124HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0029.RAW
Date & Time Acquired: 11/27/2021 10:45:58 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

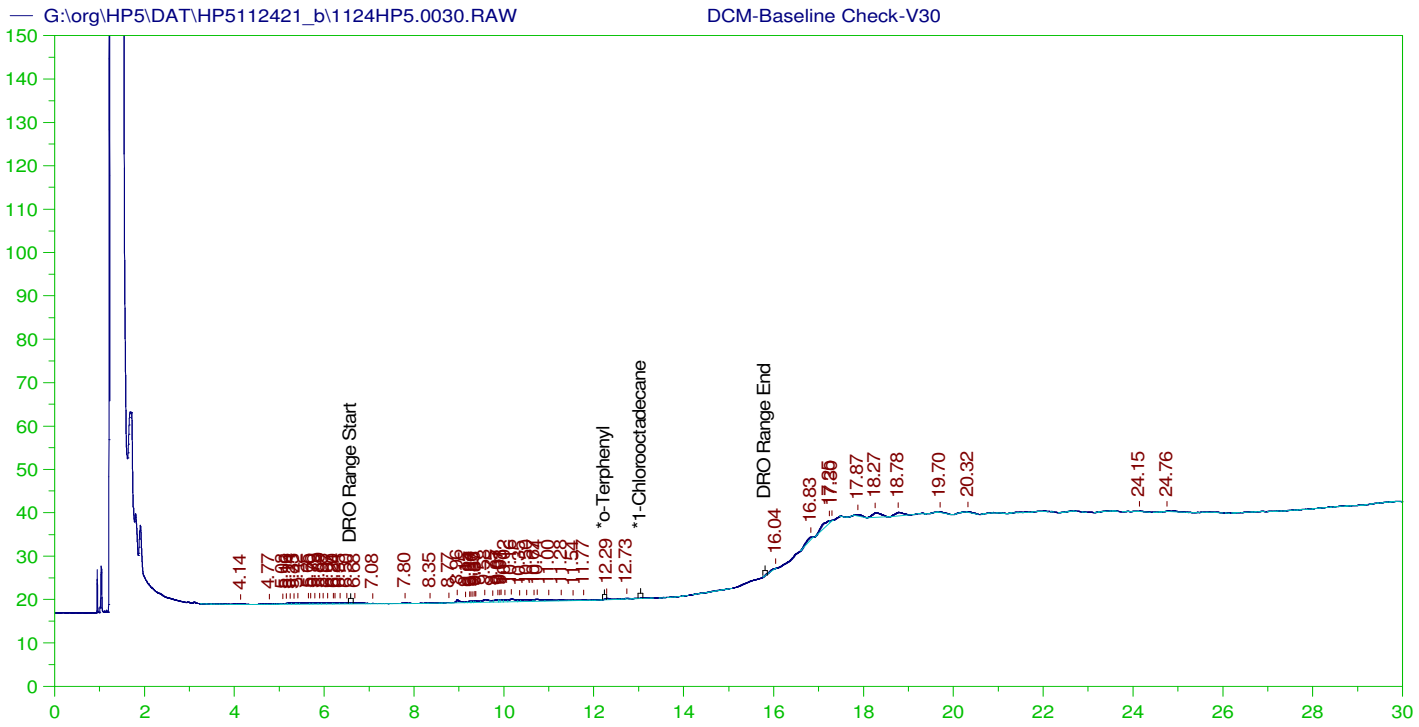
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.236	200.	195.584	97.79	-
*1-Chlorooctadecane	13.074	200.	35.927	17.96	-

DRO Area:2.498763E+08 DRO Amount: 7969.726
TEH Area:2.602911E+08 TEH Amount: 8301.899

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0029.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8301.9	55.35	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.236	200.	195.584	97.79	85-115
*1-Chlorooctadecane	13.074	200.	35.927	17.96	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V30
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0030.RAW
Date & Time Acquired: 11/27/2021 11:28:32 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	29.868	200.	.	.	-
*1-Chlorooctadecane	29.868	200.	.	.	-

DRO Area:75275.72 DRO Amount: 2.400895
TEH Area:174005.4 TEH Amount: 5.549847

ERH1928 (RHMW05) Batch ID: 161631

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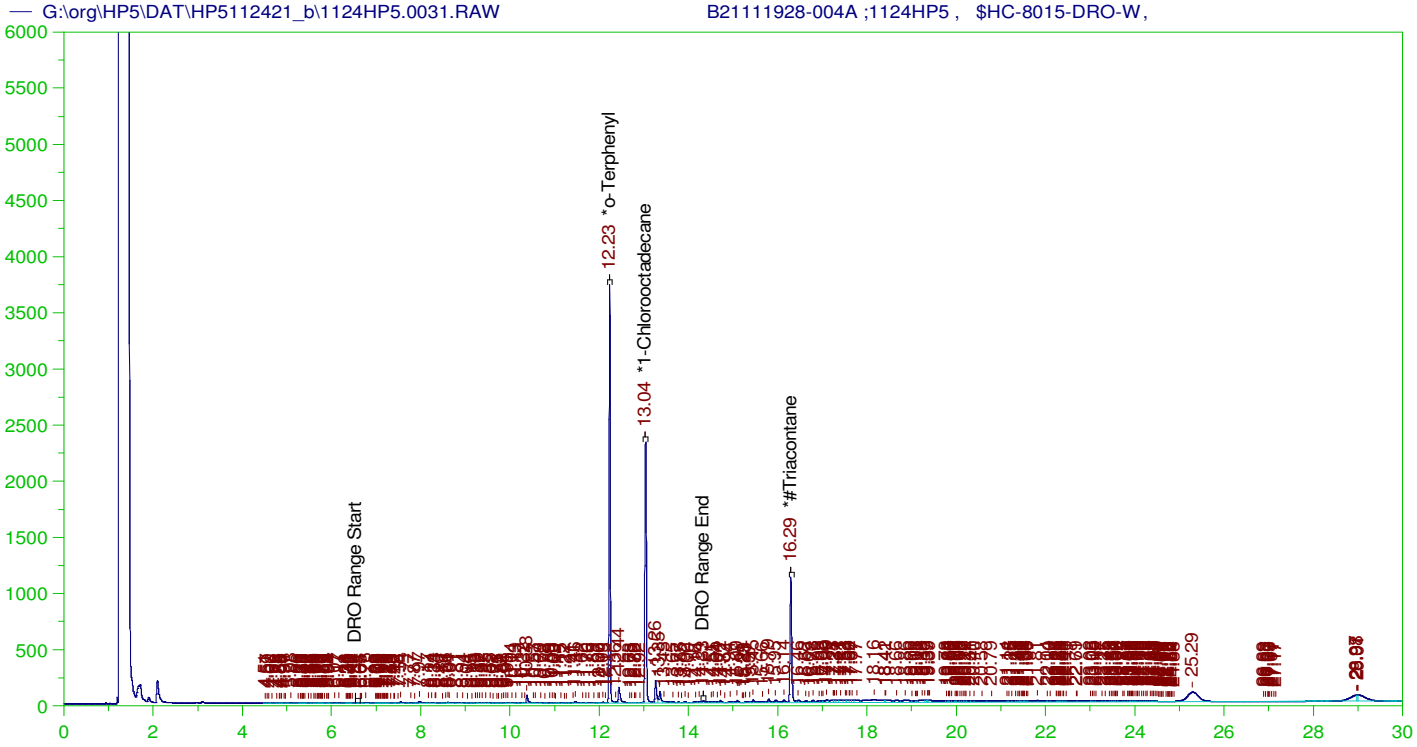

DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-004A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0031.RAW
Date & Time Acquired: 11/27/2021 12:11:12 PM
Method File: G:\Org\HP5\Methods\DR_8015-112431-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.231	.192	.19	98.93	-
*1-Chlorooctadecane	13.037	.192	.138	71.69	-
*#Triacontane	16.292	.192	.099	51.43	-

DRO Area:2639578 DRO Amount: 8.095048E-02
TEH Area:1.145509E+07 TEH Amount: 0.3513041

ERH1928 (RHMW05) Batch ID: 161631

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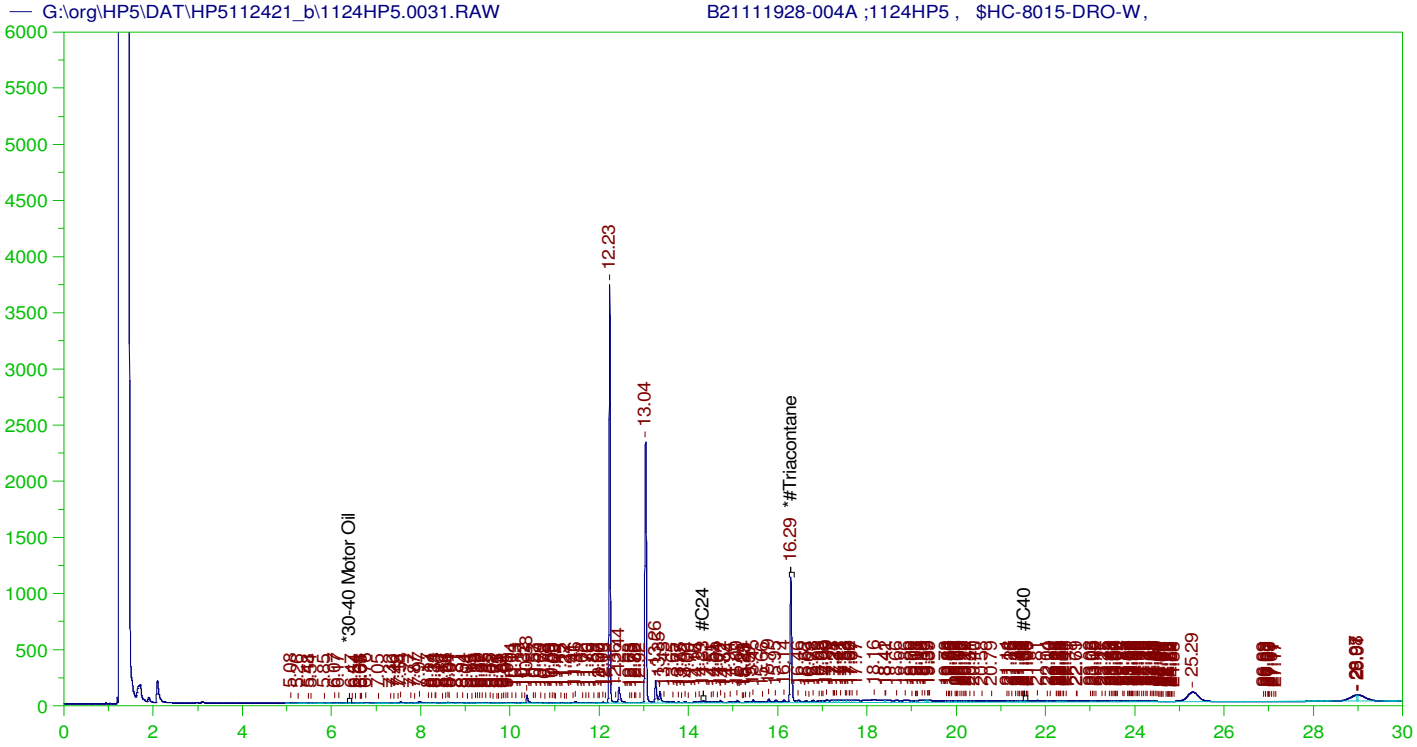


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-004A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0031.RAW
Date & Time Acquired: 11/27/2021 12:11:12 PM
Method File: G:\Org\HP5\Methods\DR_OROS-112431-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

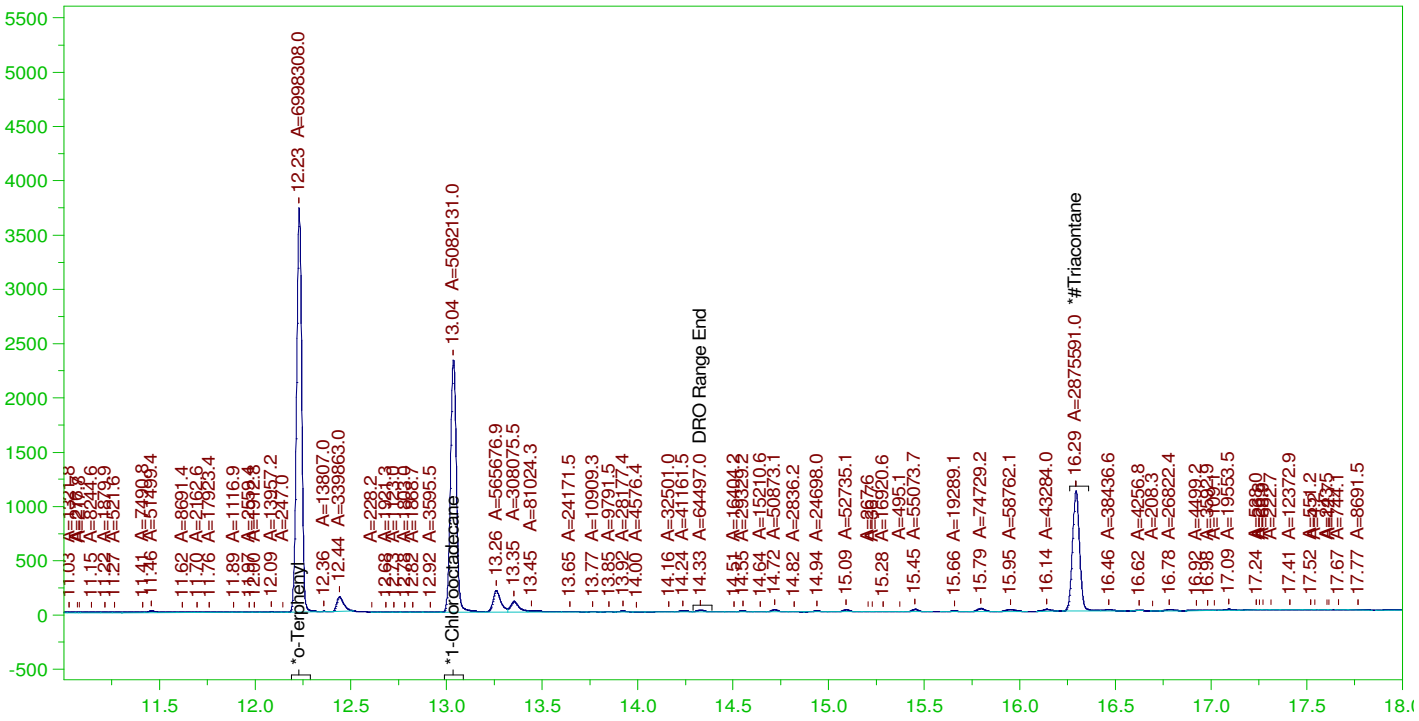
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.292	.481	.099	20.57	-

RRO Area:4974547 RRO AMOUNT: 0.1675829

ERH1928 (RHMW05) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0031.RAW B21111928-004A ;1124HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-004A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0031.RAW
Date & Time Acquired: 11/27/2021 12:11:12 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

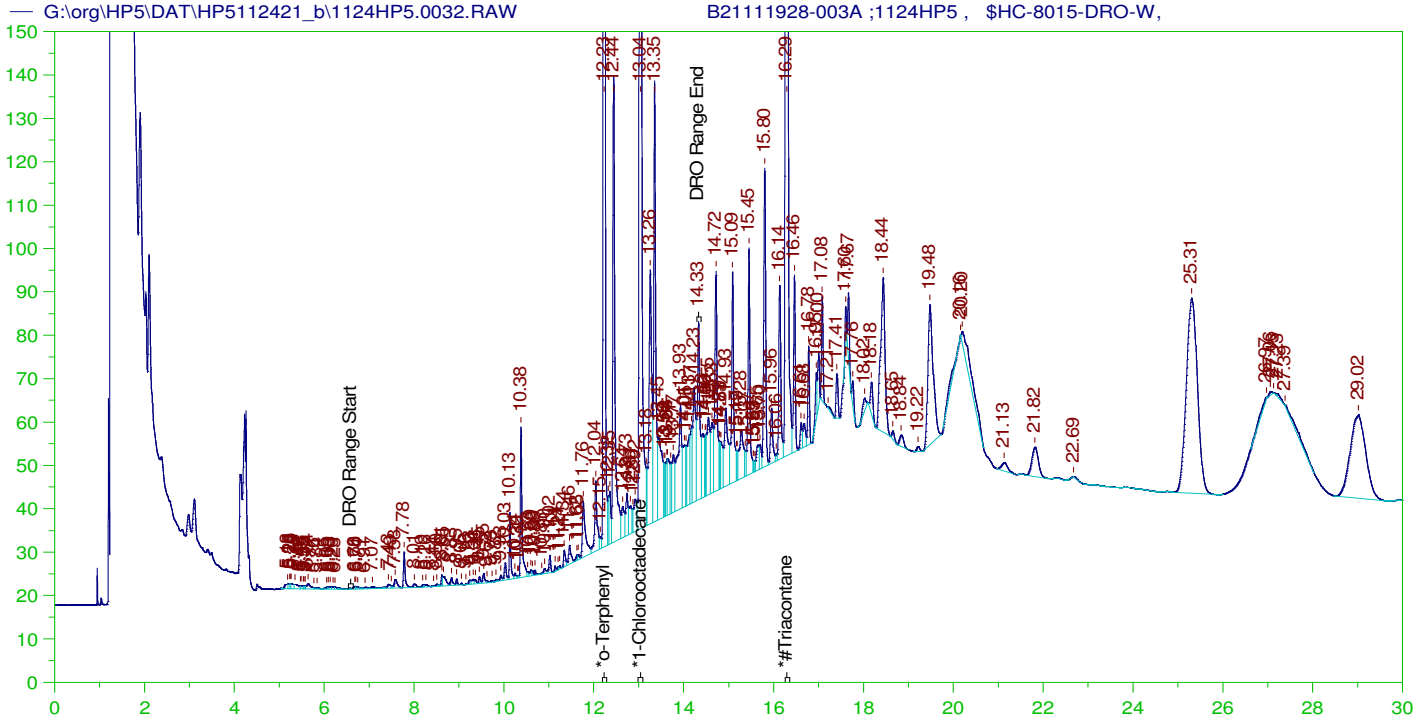
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.231	.192	.19	98.54	-
*1-Chlorooctadecane	13.037	.192	.138	71.56	-
*#Triacontane	16.292	.192	.096	49.7	-

DRO Area:2417424 DRO Amount: 7.413746E-02
TEH Area:4911417 TEH Amount: 0.1506231

G:\org\HP5\dat\HP5112421_b\Review\031_B21111928-004A_DS_8015-C24T-ID-L#.xls

ERH1925 (RHMW03) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0032.RAW B21111928-003A ;1124HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

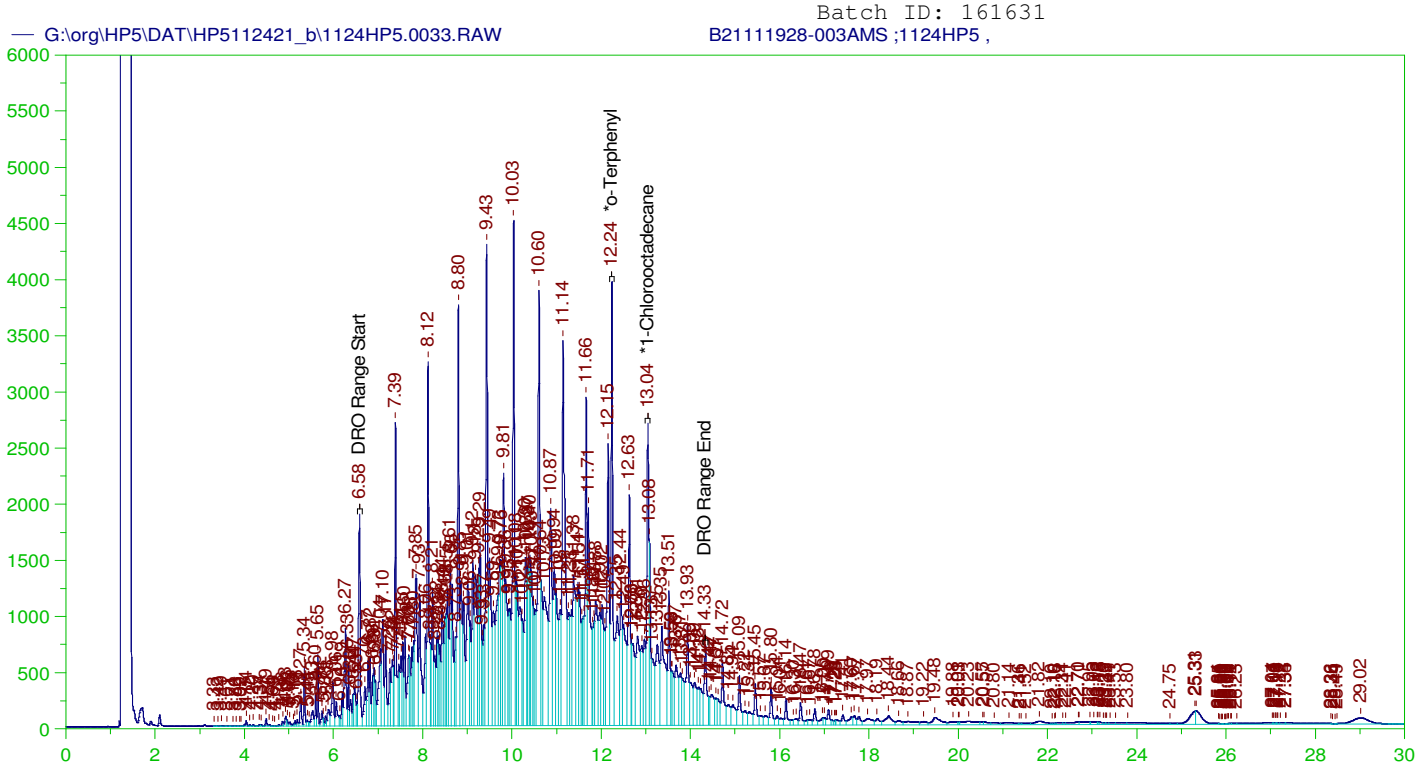
Sample Name: B21111928-003A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0032.RAW
Date & Time Acquired: 11/27/2021 12:53:42 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L0.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.229	.202	.102	50.33	-
*1-Chlorooctadecane	13.036	.202	.083	41.2	-
*#Triacontane	16.291	.202	.101	49.88	-

DRO Area:2554127 DRO Amount: 0.0822859
TEH Area:6586166 TEH Amount: 0.2121855

Batch ID: 161631



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-003AMS ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0033.RAW
Date & Time Acquired: 11/27/2021 1:36:11 PM
Method File: G:\Org\HP5\Methods\D3_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.236	.198	.307	154.79	-
*1-Chlorooctadecane	13.042	.198	.202	102.11	-

DRO Area:4.297305E+08 DRO Amount: 13.57041
TEH Area:4.823362E+08 TEH Amount: 15.23164

Batch ID: 161631

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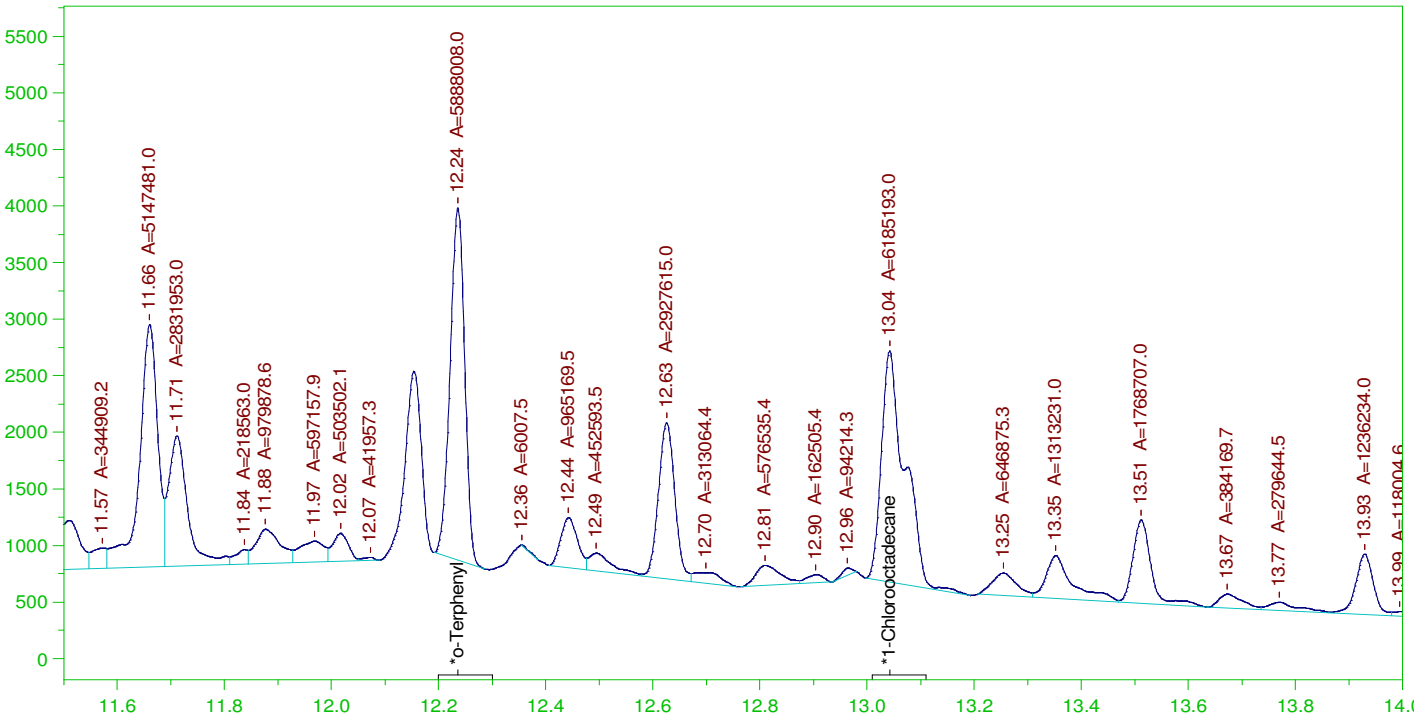


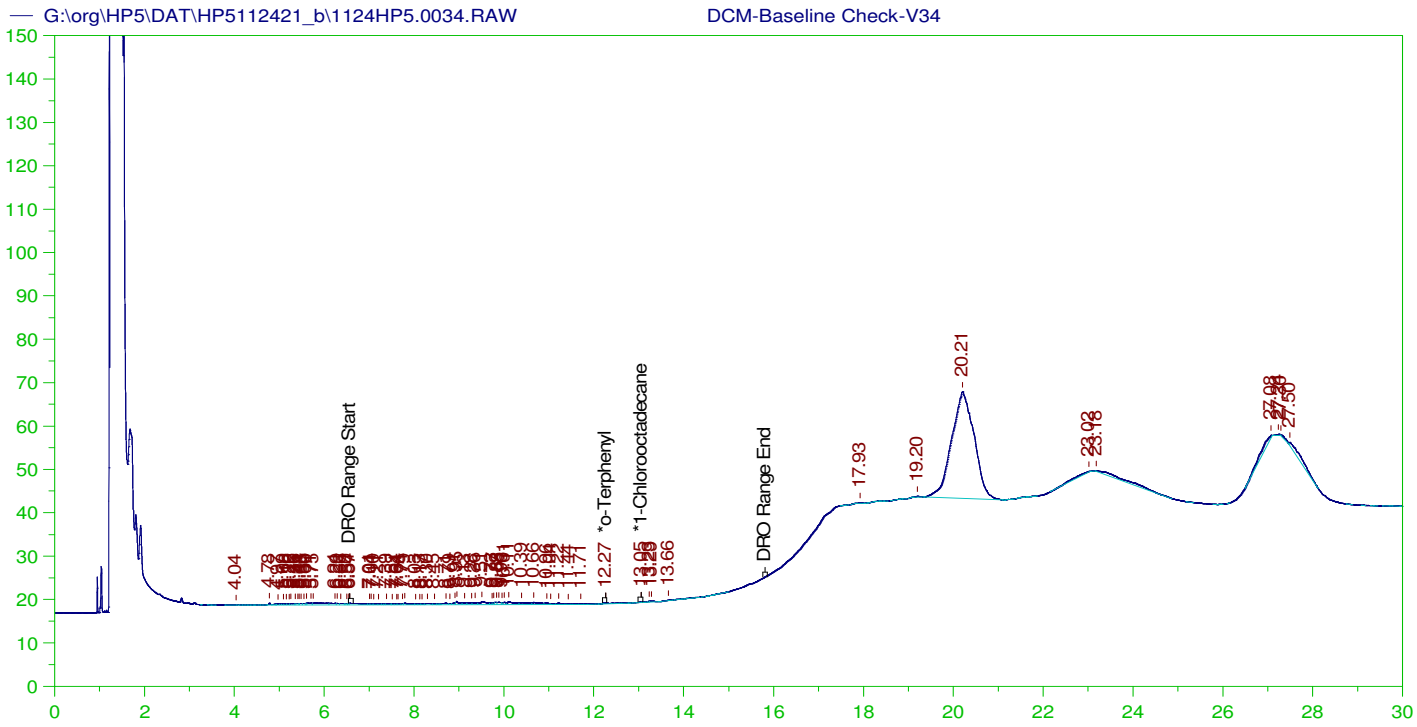
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-003AMS ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0033.RAW
Date & Time Acquired: 11/27/2021 1:36:11 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.236	.198	.164	82.91	-
*1-Chlorooctadecane	13.042	.198	.172	87.09	-

DRO Area:2.056691E+08 DRO Amount: 6.494802
TEH Area:2.217186E+08 TEH Amount: 7.001626



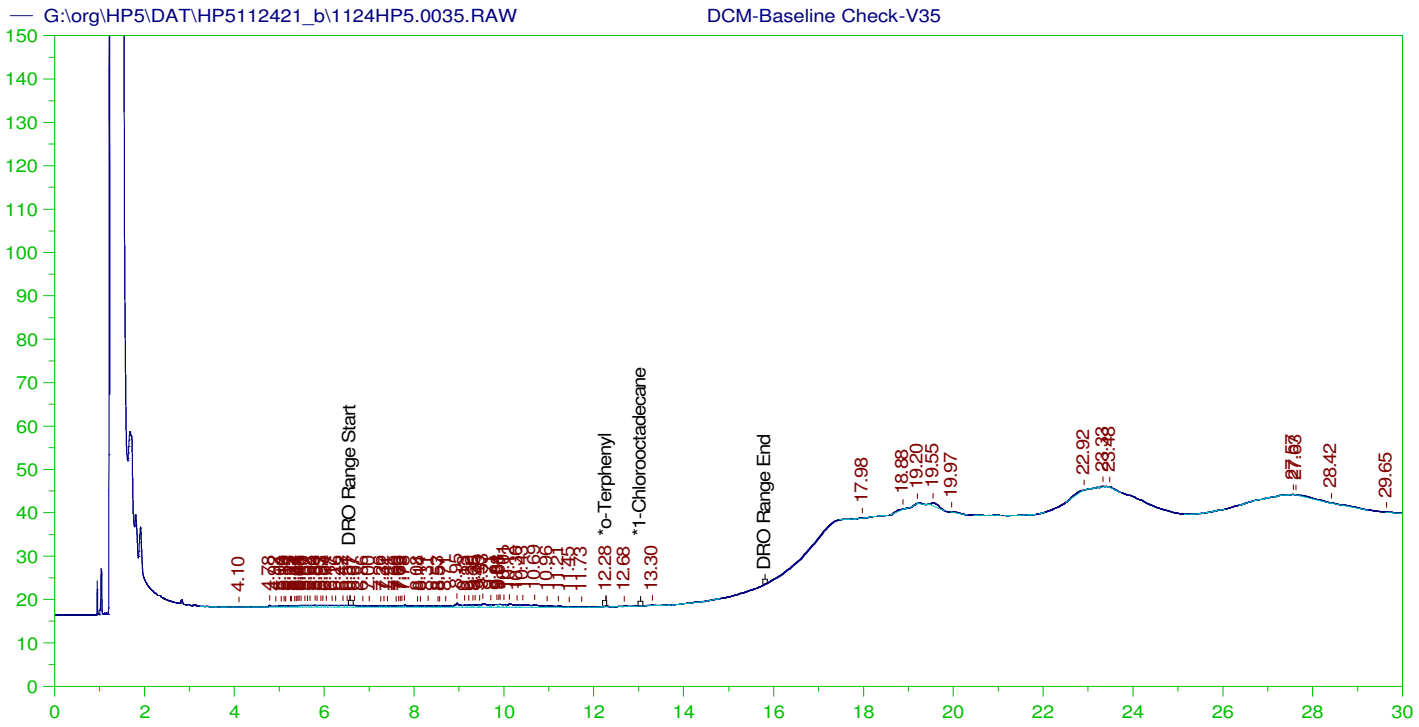
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V34
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0034.RAW
Date & Time Acquired: 11/27/2021 2:18:32 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	12.266	200.	.034	.02	-
*1-Chlorooctadecane	13.054	200.	.02	.01	-

DRO Area:97418.2 DRO Amount: 3.107122
TEH Area:1110623 TEH Amount: 35.42295



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V35
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0035.RAW
Date & Time Acquired: 11/27/2021 3:00:50 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

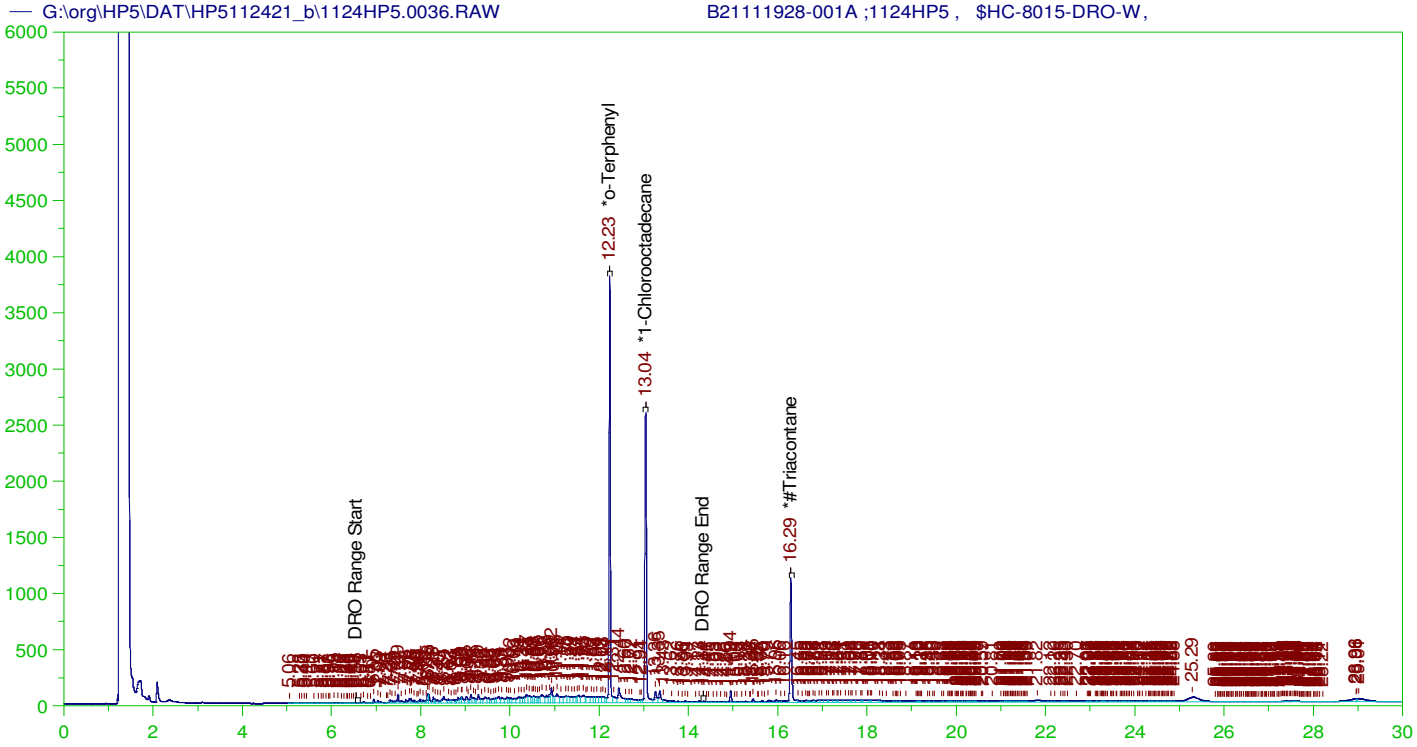
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.275	200.	.031	.02	-
*1-Chlorooctadecane	29.646	200.	.	.	-

DRO Area:114854.6 DRO Amount: 3.663251
TEH Area:192133.6 TEH Amount: 6.12804

ERH1919 (RHMW01R) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0036.RAW B21111928-001A ;1124HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-001A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0036.RAW
Date & Time Acquired: 11/27/2021 3:43:09 PM
Method File: G:\Org\HP5\Methods\DR_8015-112436-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

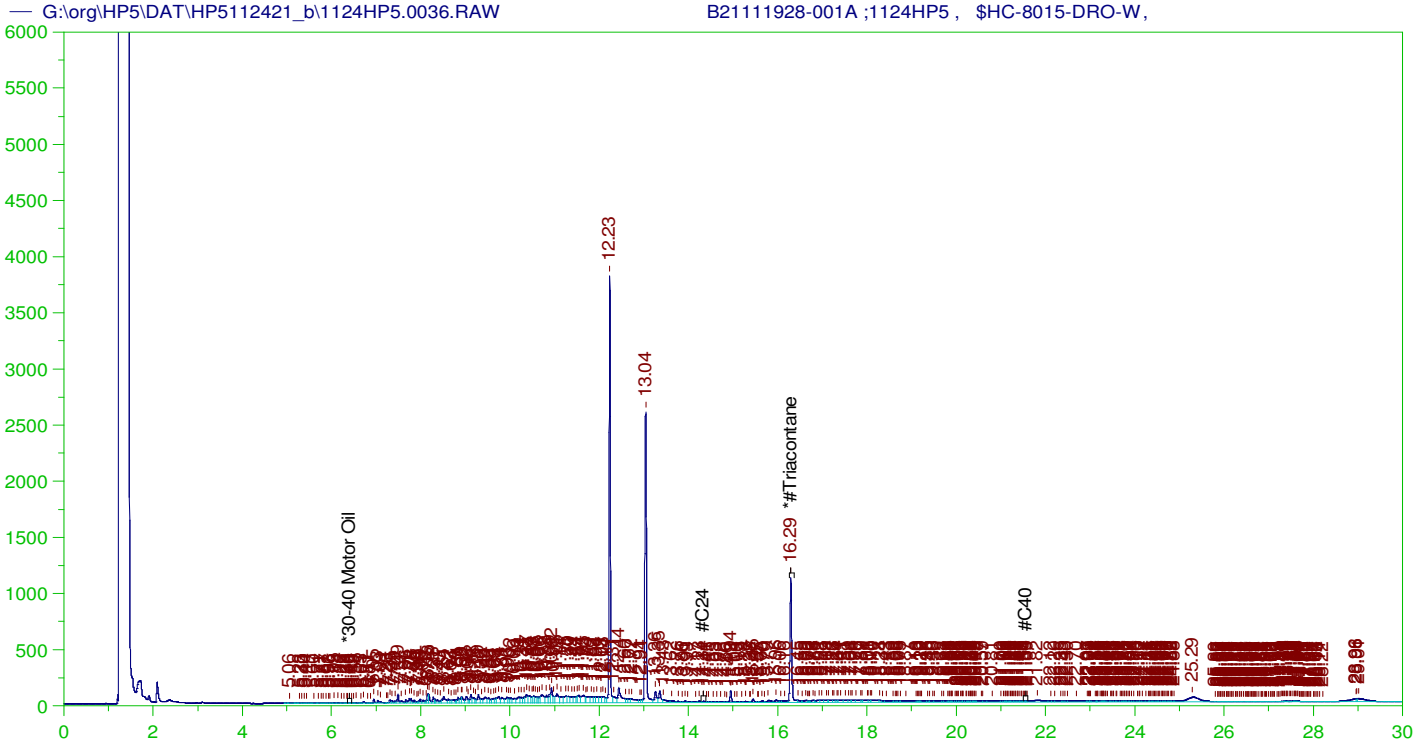
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.233	.2	.211	105.66	-
*1-Chlorooctadecane	13.037	.2	.163	81.74	-
*#Triacontane	16.292	.2	.105	52.62	-

DRO Area:1.661384E+07 DRO Amount: 0.529893
TEH Area:2.544253E+07 TEH Amount: 0.8114815

ERH1919 (RHMW01R) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0036.RAW B21111928-001A ;1124HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-001A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0036.RAW
Date & Time Acquired: 11/27/2021 3:43:09 PM
Method File: G:\Org\HP5\Methods\DR_OROS-112436-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

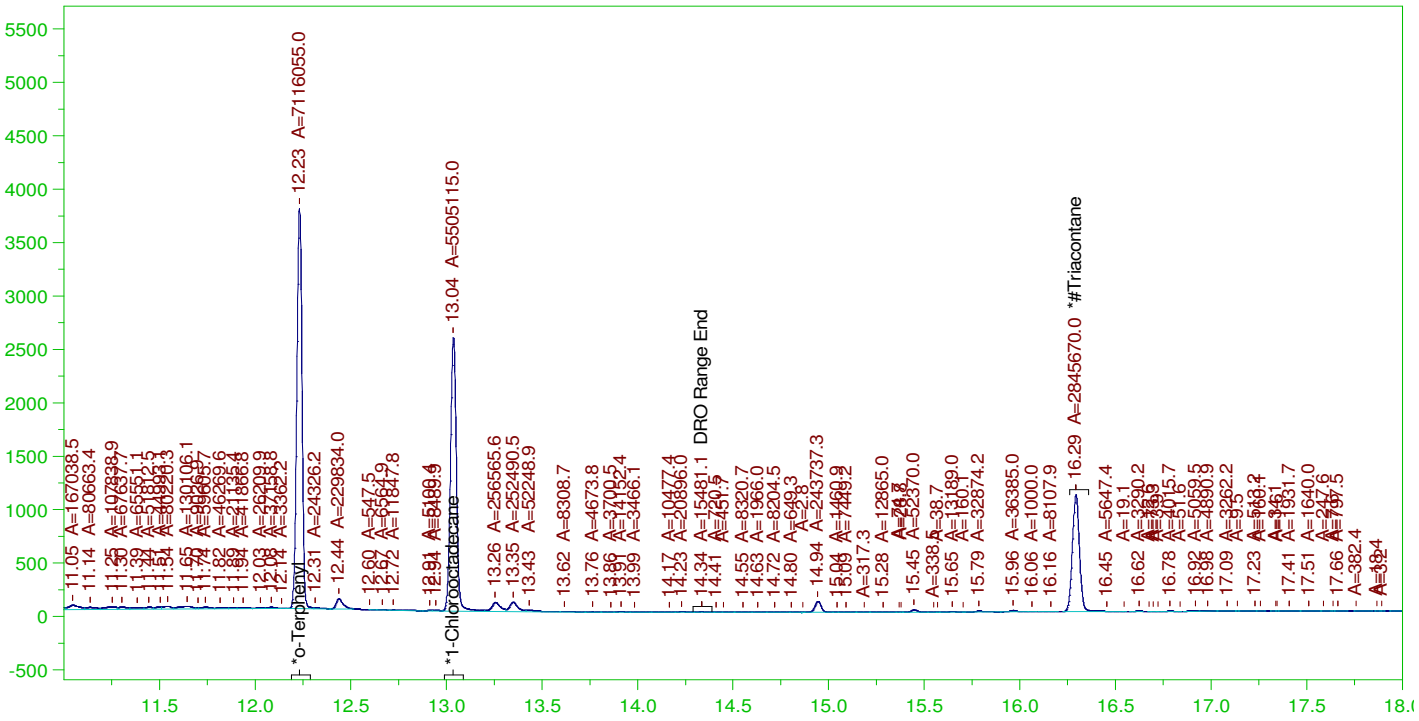
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.292	.5	.105	21.05	-

RRO Area:5721159 RRO AMOUNT: 0.2004441

ERH1919 (RHMW01R) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0036.RAW B21111928-001A ;1124HP5 , $HC-8015-DRO-W,



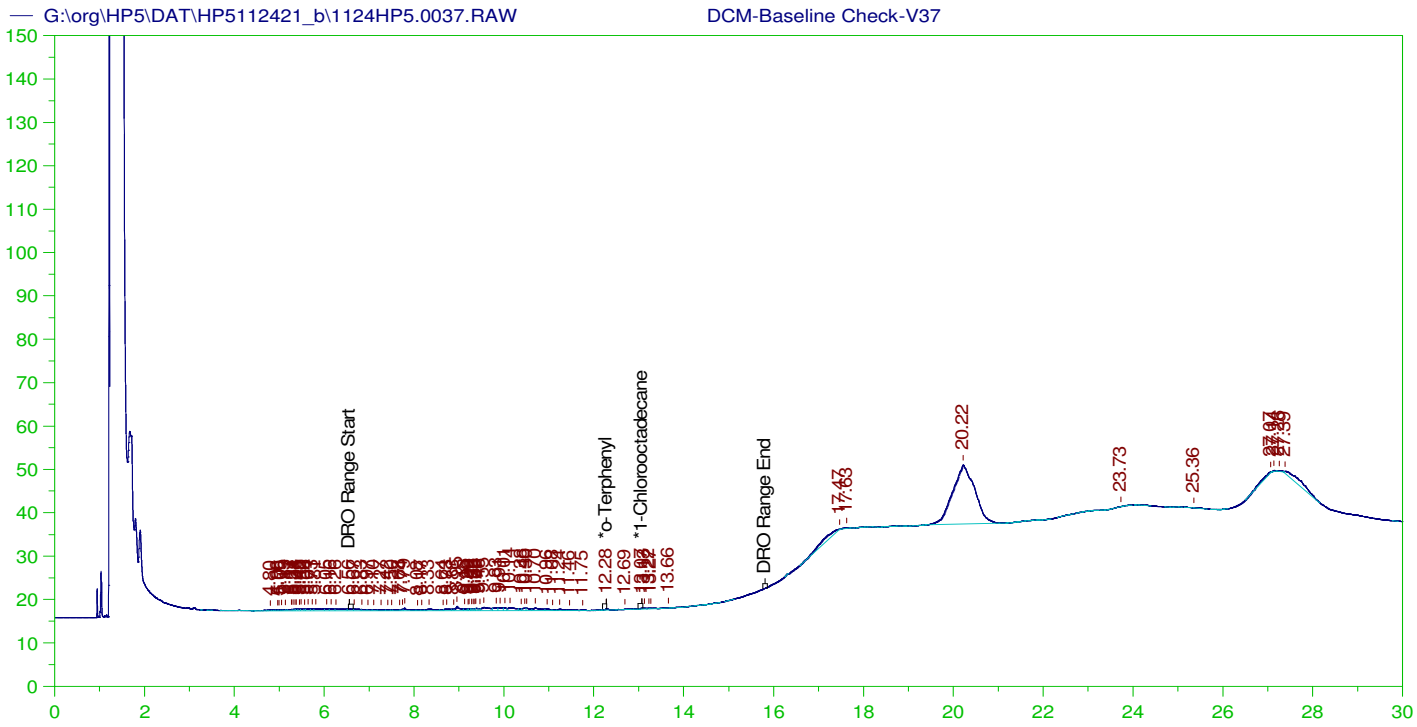
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-001A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0036.RAW
Date & Time Acquired: 11/27/2021 3:43:09 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.233	.2	.2	100.2	-
*1-Chlorooctadecane	13.037	.2	.155	77.52	-
*#Triacontane	16.292	.2	.098	49.18	-

DRO Area:6900558 DRO Amount: 0.2200911
TEH Area:8343949 TEH Amount: 0.2661276

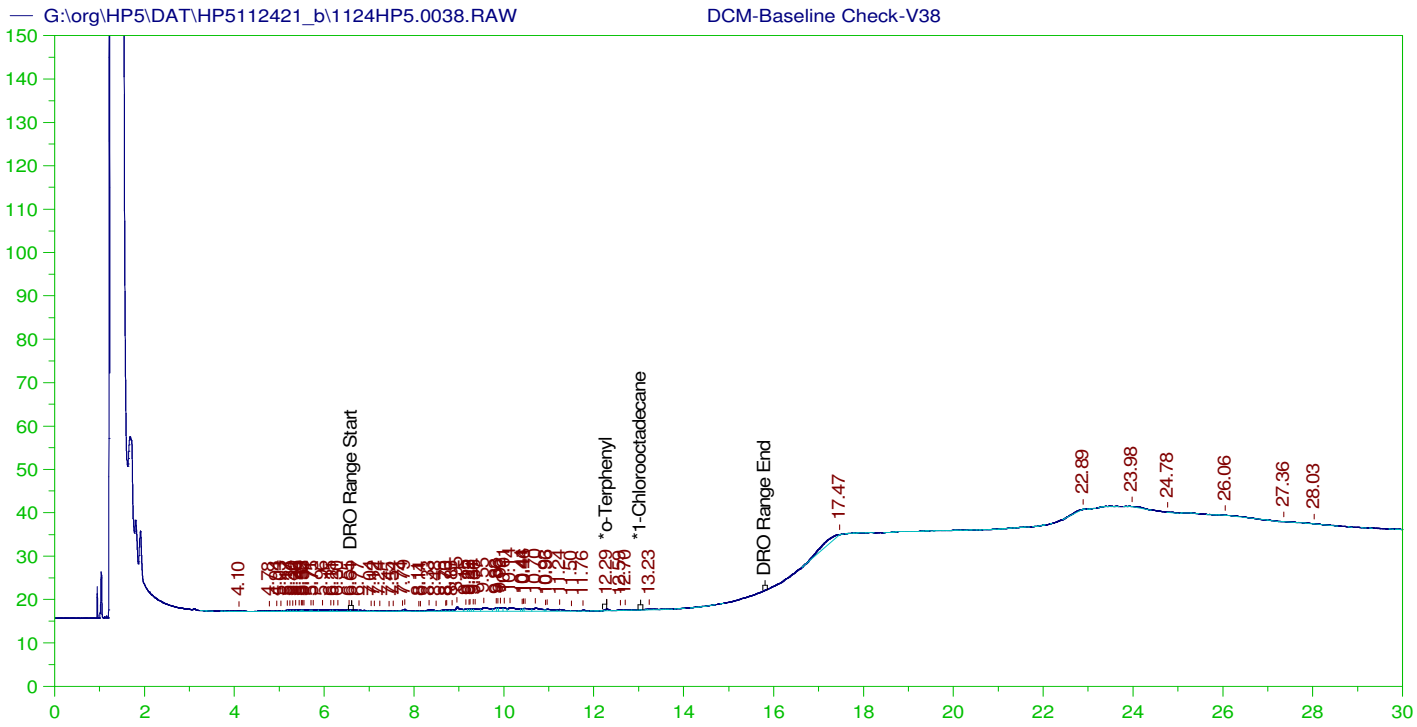


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V37
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0037.RAW
Date & Time Acquired: 11/27/2021 4:25:26 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 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	12.283	200.	.045	.02	-
*1-Chlorooctadecane	13.069	200.	.02	.01	-

DRO Area:105290.5 DRO Amount: 3.358207
TEH Area:690708.7 TEH Amount: 22.02993



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V38
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0038.RAW
Date & Time Acquired: 11/27/2021 5:08:08 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

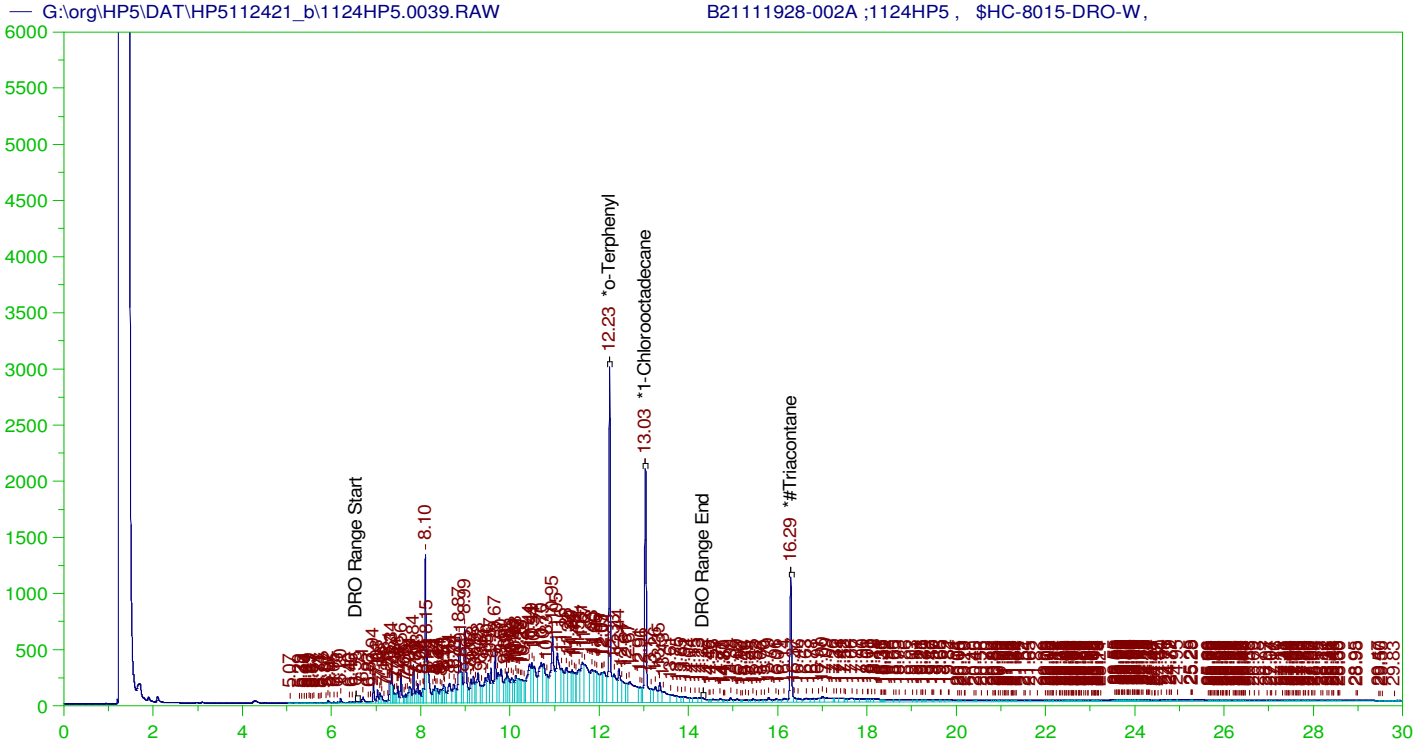
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.288	200.	.048	.02	-
*1-Chlorooctadecane	29.928	200.	.	.	-

DRO Area:106590.6 DRO Amount: 3.399674
TEH Area:189183.3 TEH Amount: 6.03394

ERH1922 (RHMW02) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0039.RAW B21111928-002A ;1124HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-002A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0039.RAW
Date & Time Acquired: 11/27/2021 5:51:05 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Id-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

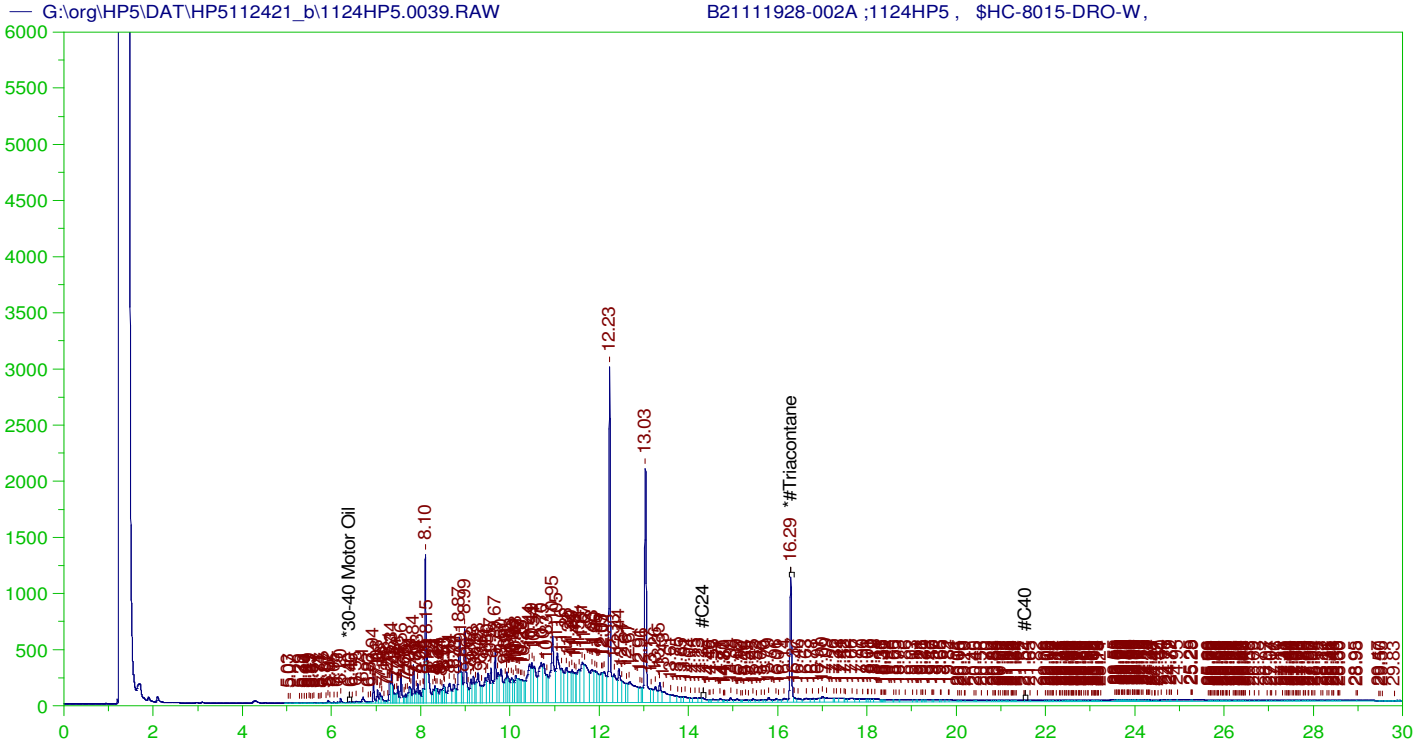
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.229	.196	.195	99.21	-
*1-Chlorooctadecane	13.033	.196	.151	76.91	-
*#Triacontane	16.29	.196	.102	51.83	-

DRO Area:8.128242E+07 DRO Amount: 2.541644
TEH Area:9.537626E+07 TEH Amount: 2.982348

ERH1922 (RHMW02) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0039.RAW B21111928-002A ;1124HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-002A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0039.RAW
Date & Time Acquired: 11/27/2021 5:51:05 PM
Method File: G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-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 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.29	.49	.102	20.73	-

RRO Area:9682354 RRO AMOUNT: 0.3325754

ERH1922 (RHMW02) Batch ID: 161631

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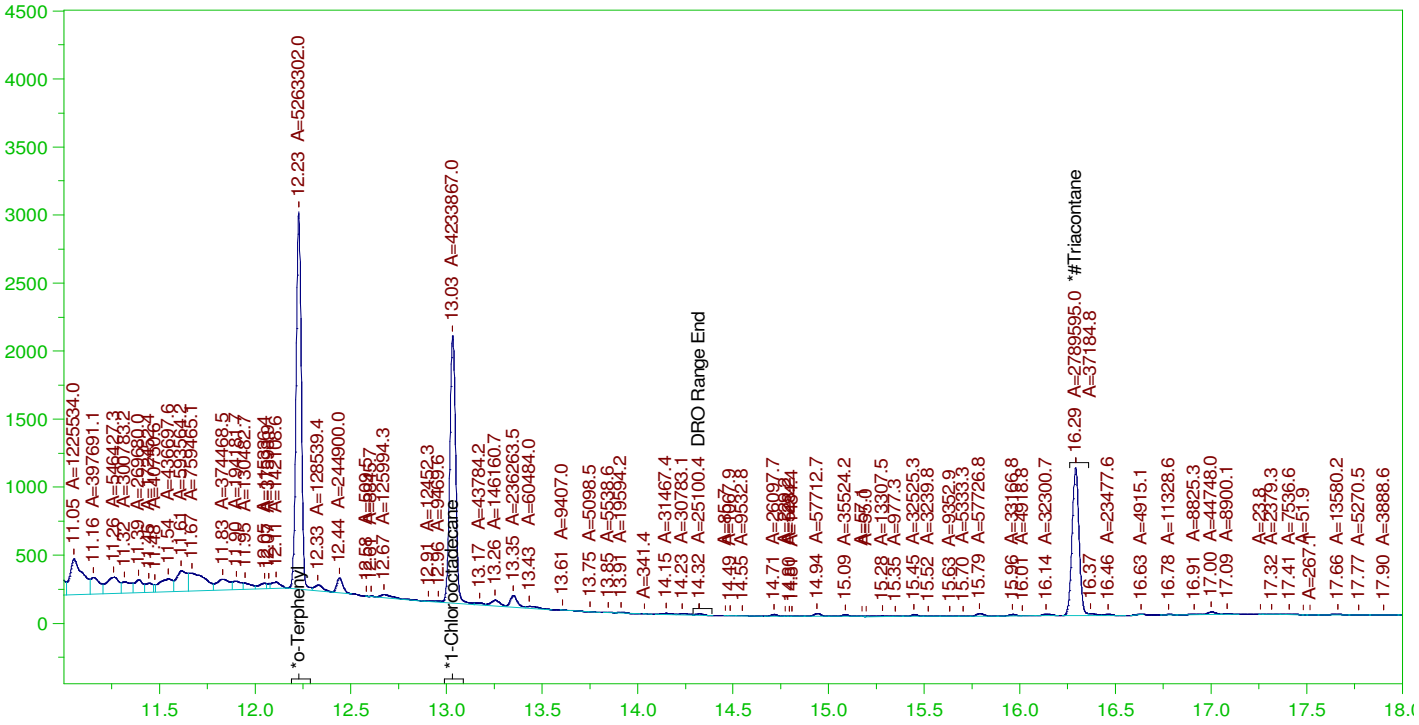


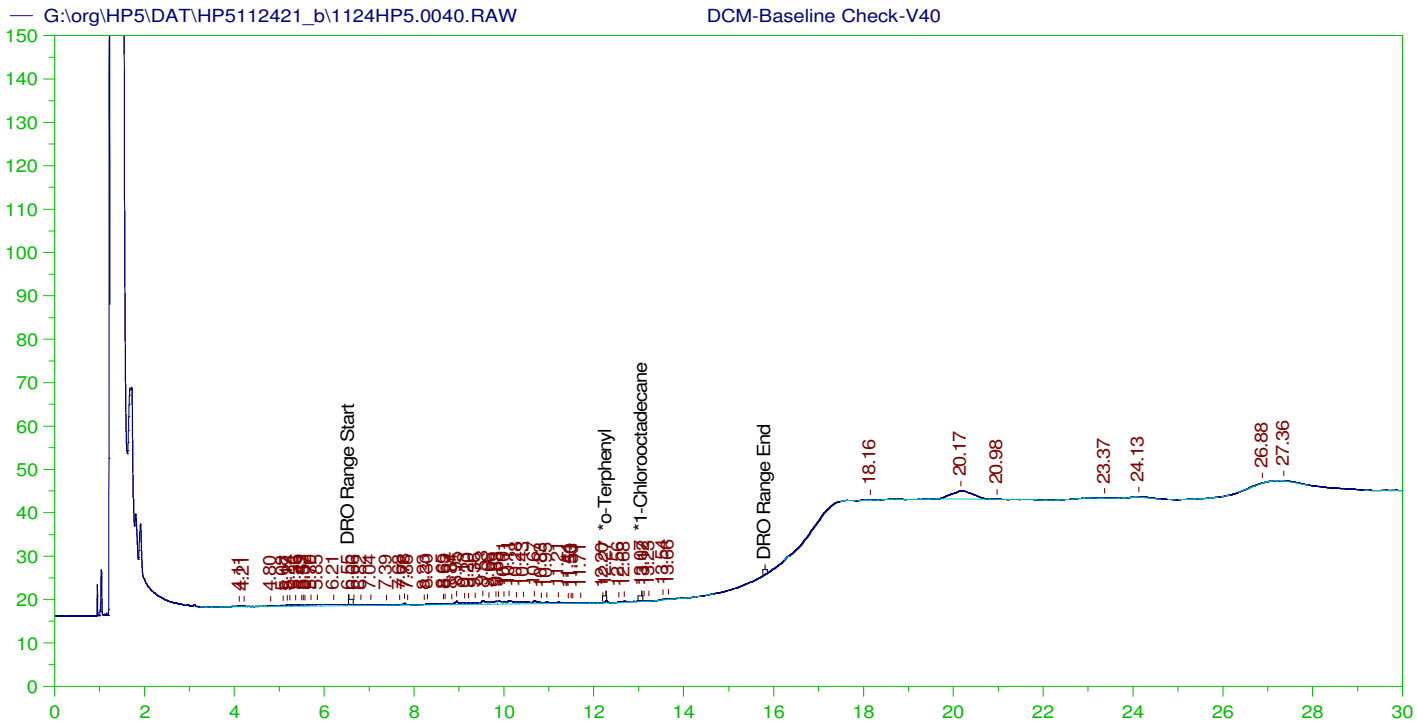
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-002A ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0039.RAW
Date & Time Acquired: 11/27/2021 5:51:05 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.229	.196	.145	74.11	-
*1-Chlorooctadecane	13.033	.196	.117	59.62	-
*#Triacontane	16.29	.196	.095	48.21	-

DRO Area:3.234252E+07 DRO Amount: 1.011328
TEH Area:3.353986E+07 TEH Amount: 1.048768

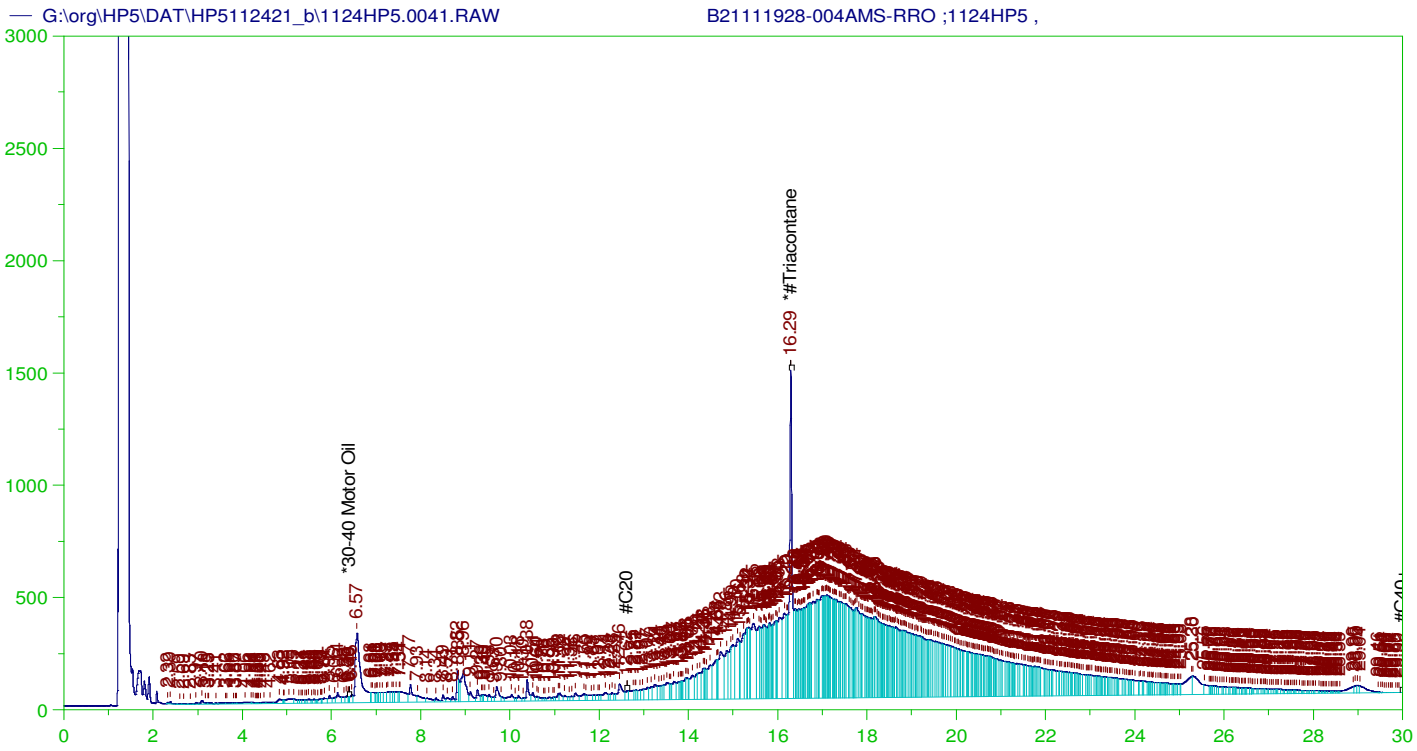


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V40
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0040.RAW
Date & Time Acquired: 11/27/2021 6:33:51 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 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	12.271	200.	.053	.03	-
*1-Chlorooctadecane	13.072	200.	.031	.02	-

DRO Area:104160 DRO Amount: 3.322151
TEH Area:214593 TEH Amount: 6.844376



RESIDUAL RANGE ORGANICS CHROMATOGRAM

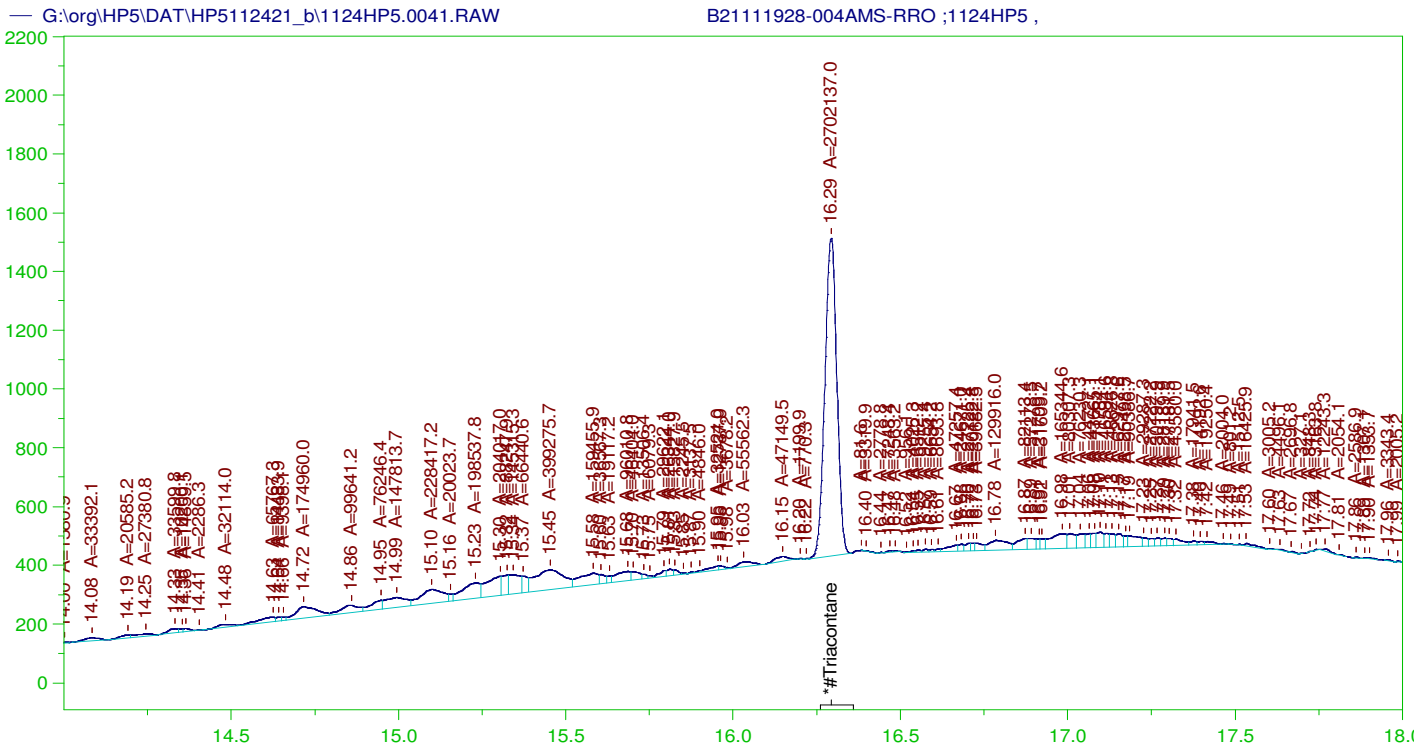
Sample Name: B21111928-004AMS-RRO ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0041.RAW
Date & Time Acquired: 11/27/2021 7:16:40 PM
Method File: G:\Org\HP5\Methods\D3_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

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	16.293	.485	.186	38.4	-

~~RRO~~ TEH (Oil Range) Area:1.535943E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 5.224531

AMN 12/14/2021



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-004AMS-RRO ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0041.RAW
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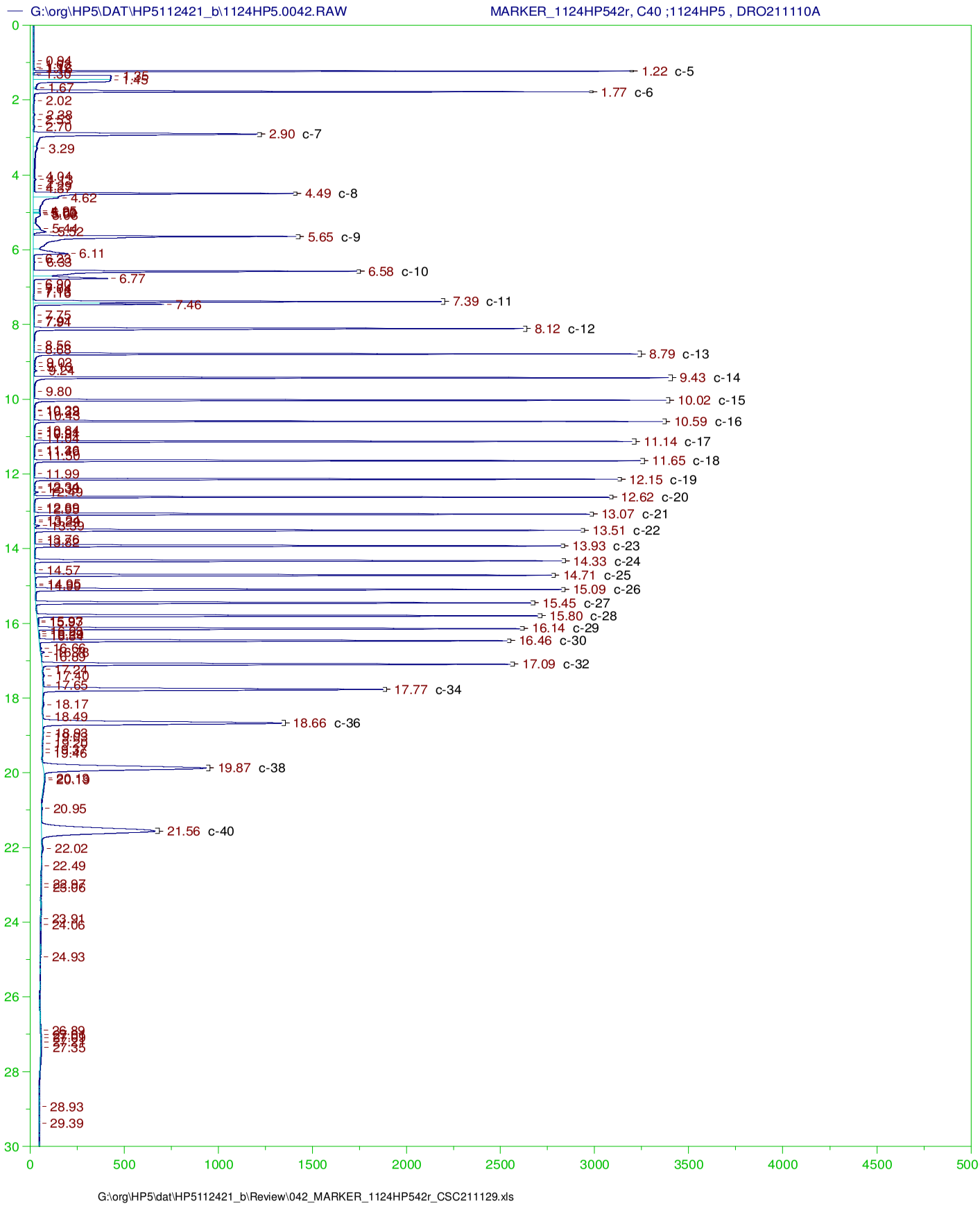
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.293	.485	.091	18.68	-

RRO Area:5007650 RRO AMOUNT: 0.1703359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MARKER_1124HP542r, C40 ;1124HP5 , DRO211110A
1.22 c-5
1.77 c-6
2.90 c-7
4.49 c-8
5.65 c-9
6.58 c-10
7.39 c-11
8.12 c-12
8.79 c-13
9.43 c-14
10.02 c-15
10.59 c-16
11.14 c-17
11.65 c-18
12.15 c-19
12.62 c-20
13.07 c-21
13.51 c-22
13.93 c-23
14.33 c-24
14.71 c-25
15.09 c-26
15.45 c-27
15.80 c-28
16.14 c-29
16.46 c-30
17.09 c-32
17.77 c-34
18.66 c-36
19.87 c-38
21.56 c-40
0
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1000
1500
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3500
4000
4500
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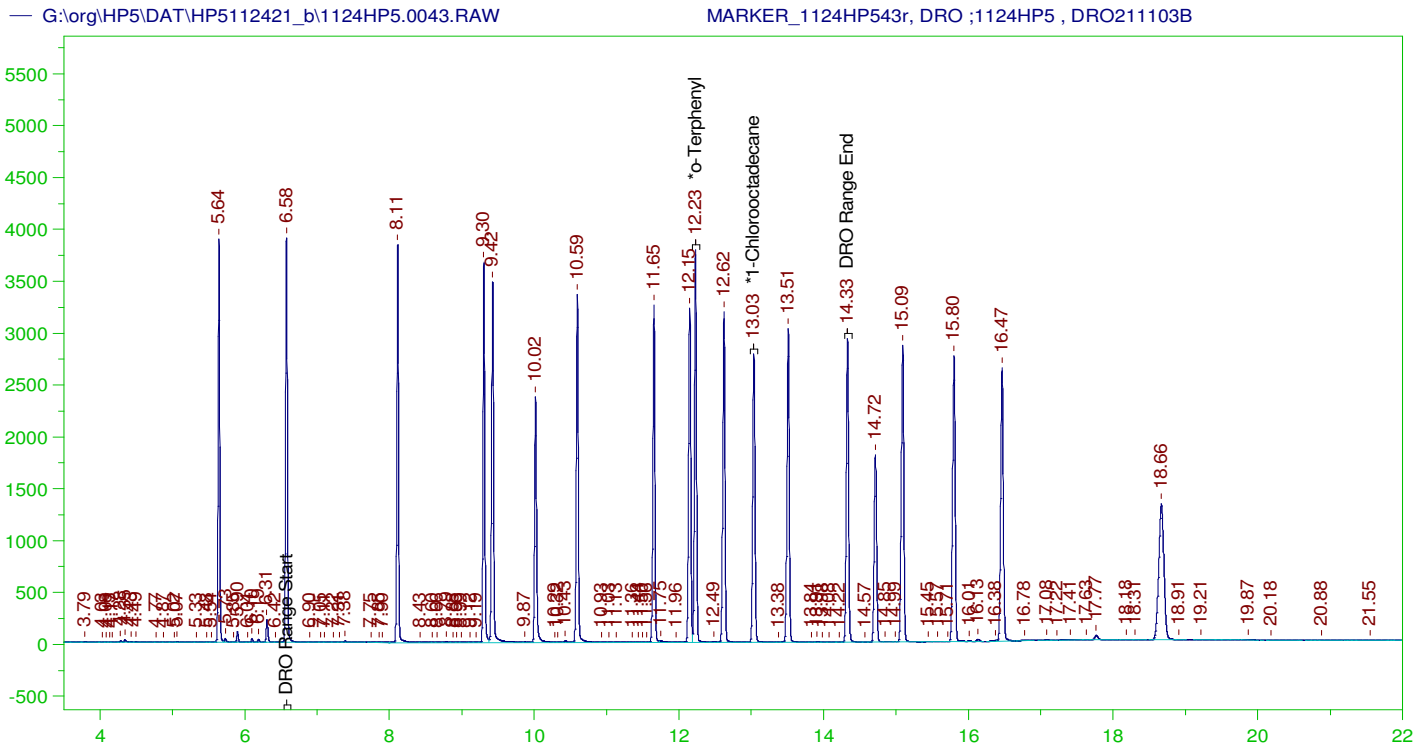


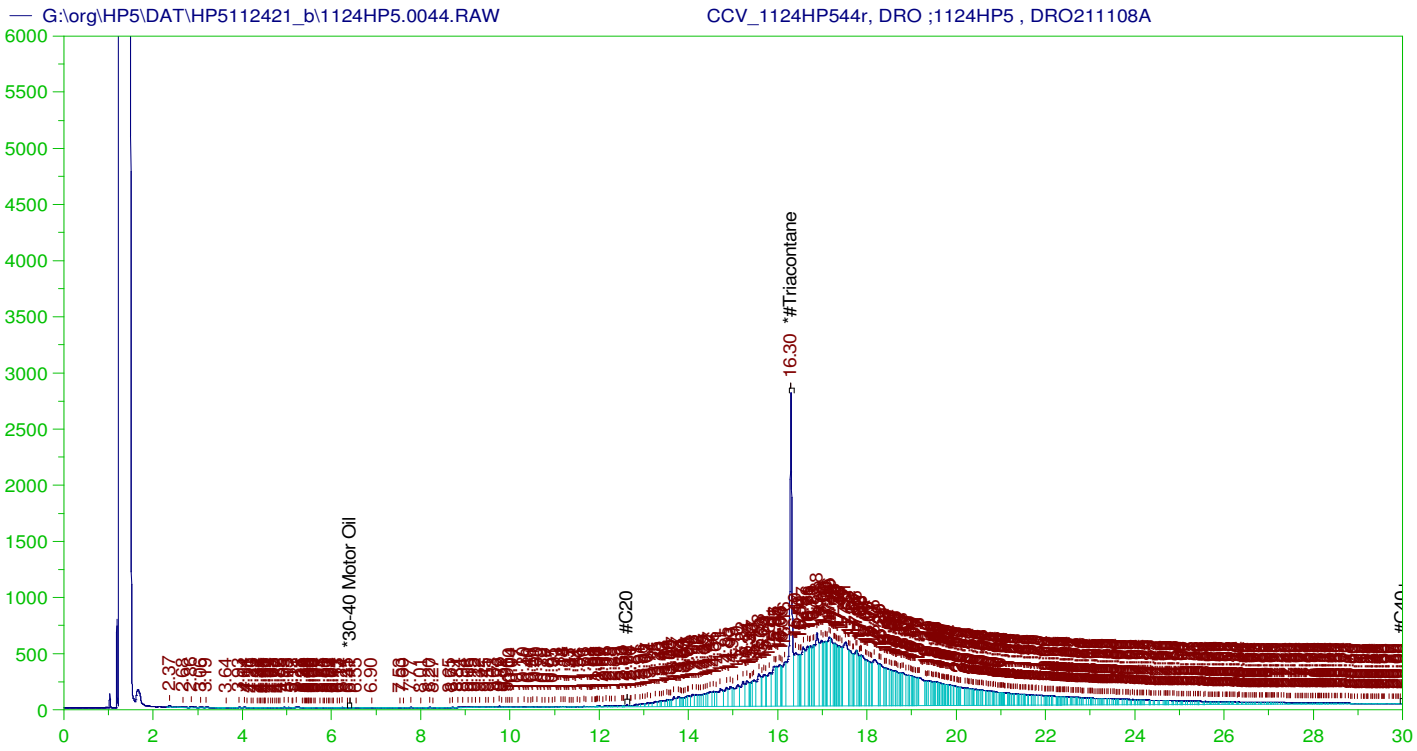
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1124HP543r, DRO ;1124HP5 , DRO211103B
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0043.RAW
Date & Time Acquired: 11/27/2021 8:42:13 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.229	.2	.203	101.29	-
*1-Chlorooctadecane	13.035	.2	.164	81.89	-

DRO Area:6.944043E+07 DRO Amount: 2.21478
TEH Area:1.080521E+08 TEH Amount: 3.446286



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1124HP544r, DRO ;1124HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0044.RAW
Date & Time Acquired: 11/27/2021 9:24:52 PM
Method File: G:\Org\HP5\Methods\DC_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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.	352.222	70.44	-

~~RRO~~ TEH (Oil Range) Area:1.428717E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 5005.595

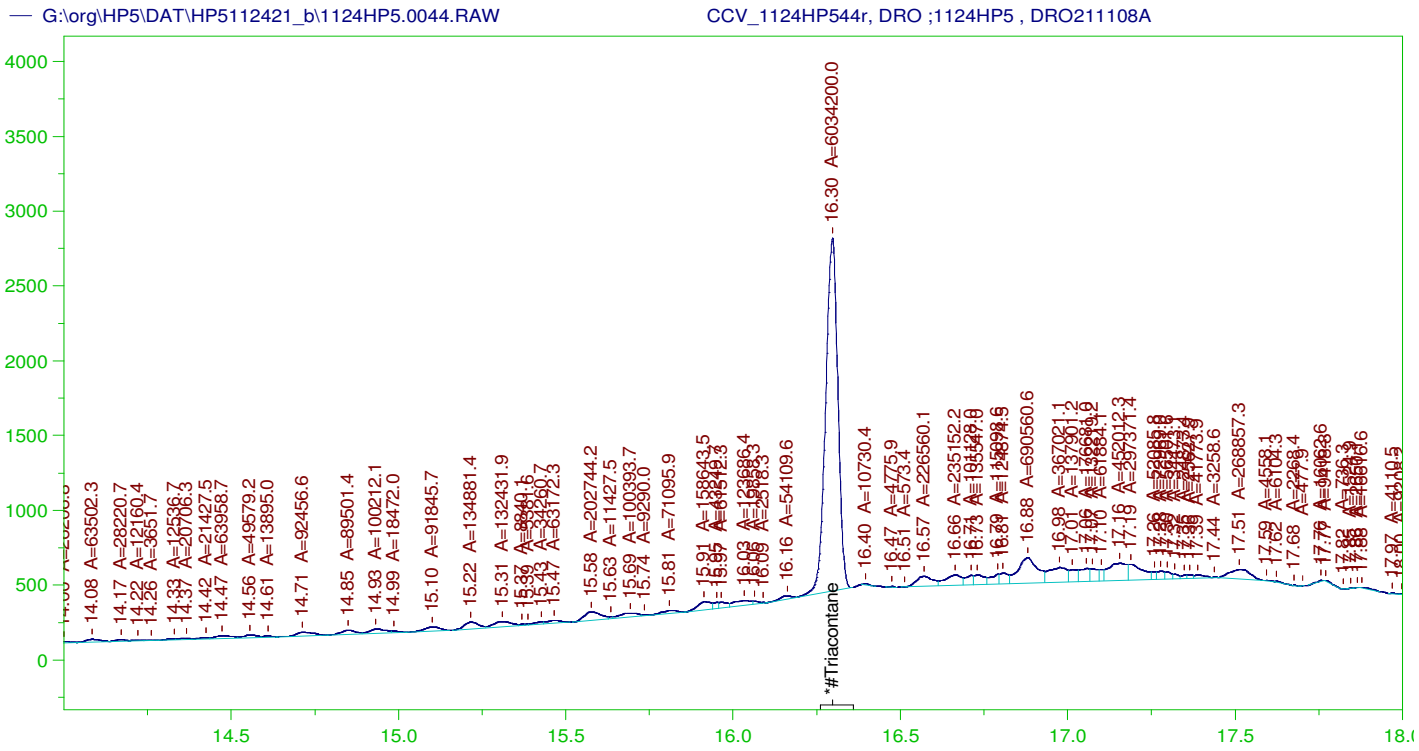
CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0044.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.025	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.296	200.	352.222	176.11	75-125

AMN 12/14/2021

G:\org\HP5\dat\HP5112421_b\Review\044_CCV_1124HP544r_DC_ORO-AF-L%.xls



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1124HP544r, DRO ;1124HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0044.RAW
Date & Time Acquired: 11/27/2021 9:24:52 PM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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

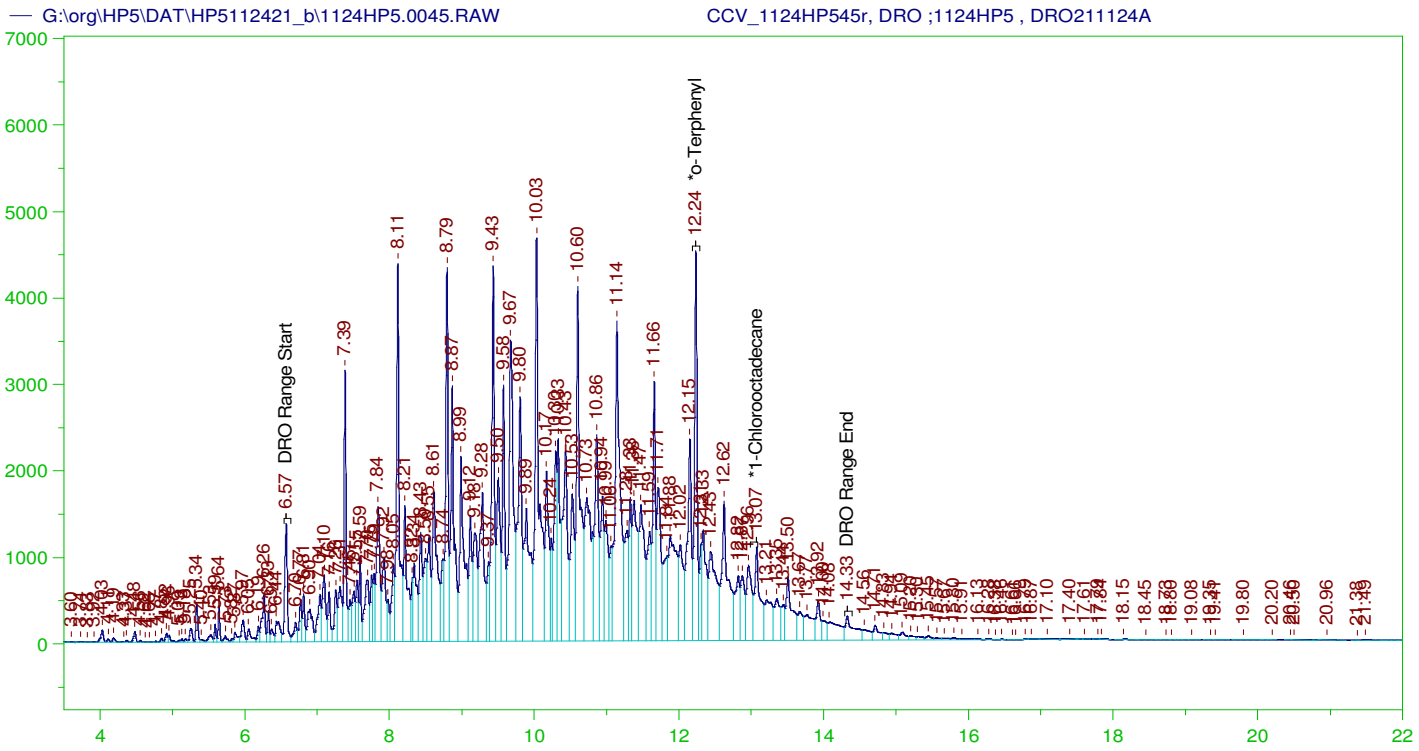
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.296	500.	208.578	41.72	-

RRO Area:6693918 RRO AMOUNT: 234.5253

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0044.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.025	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.296	200.	208.578	104.29	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1124HP545r, DRO ;1124HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0045.RAW
Date & Time Acquired: 11/27/2021 10:07:39 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

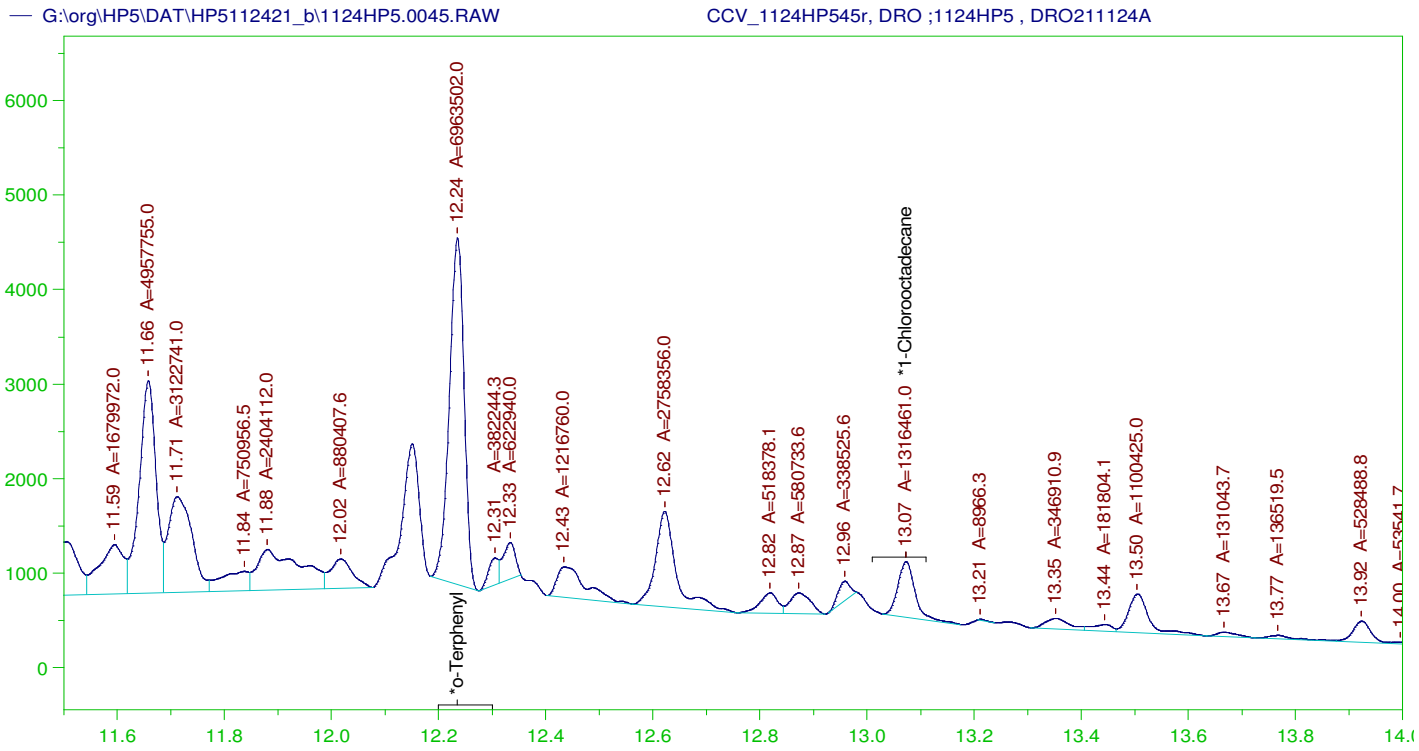
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.235	200.	325.421	162.71	-
*1-Chlorooctadecane	13.073	200.	152.736	76.37	-

DRO Area:4.515816E+08 DRO Amount: 14403.05
TEH Area:4.669773E+08 TEH Amount: 14894.09

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0045.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	14894.09	99.29	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.235	200.	325.421	162.71	85-115
*1-Chlorooctadecane	13.073	200.	152.736	76.37	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1124HP545r, DRO ;1124HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0045.RAW
Date & Time Acquired: 11/27/2021 10:07:39 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

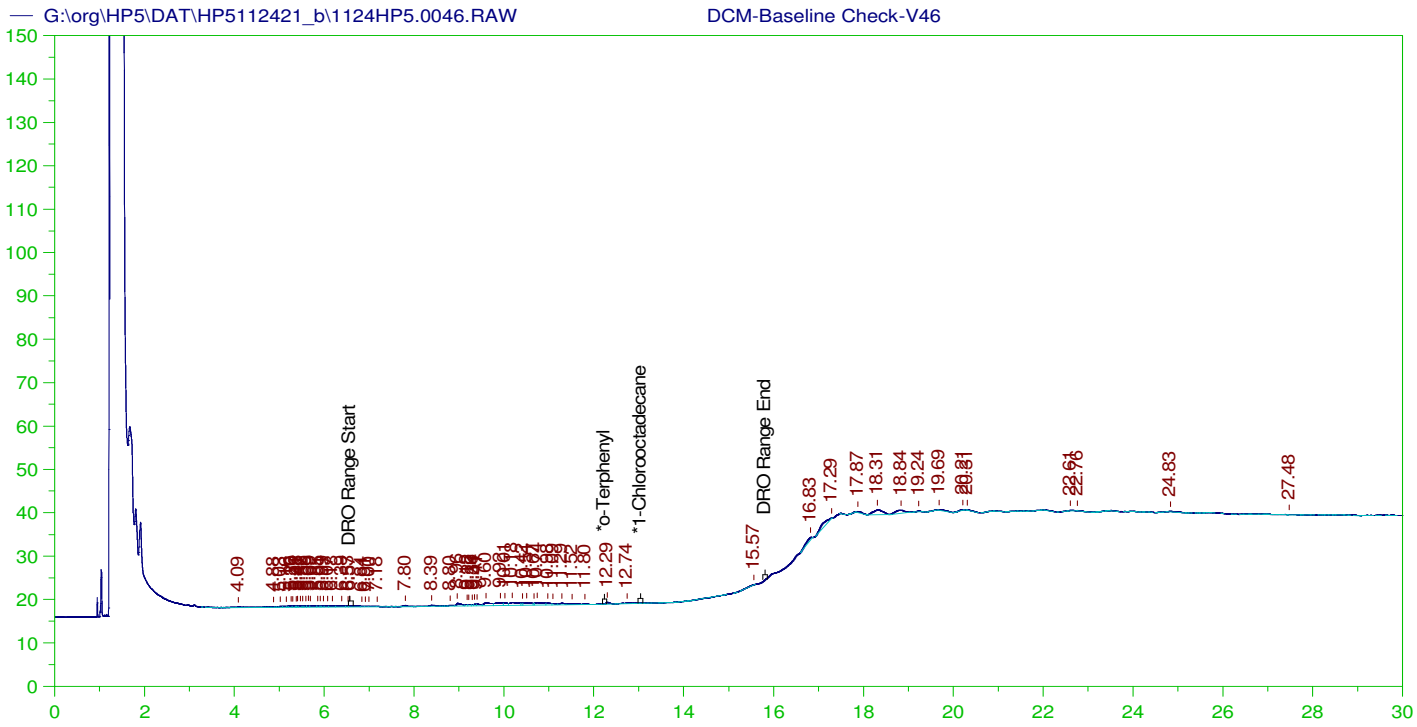
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.235	200.	196.104	98.05	-
*1-Chlorooctadecane	13.073	200.	37.074	18.54	-

DRO Area:2.517495E+08 DRO Amount: 8029.469
TEH Area:2.621768E+08 TEH Amount: 8362.044

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0045.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8362.04	55.75	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.235	200.	196.104	98.05	85-115
*1-Chlorooctadecane	13.073	200.	37.074	18.54	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V46
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0046.RAW
Date & Time Acquired: 11/27/2021 10:50:22 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

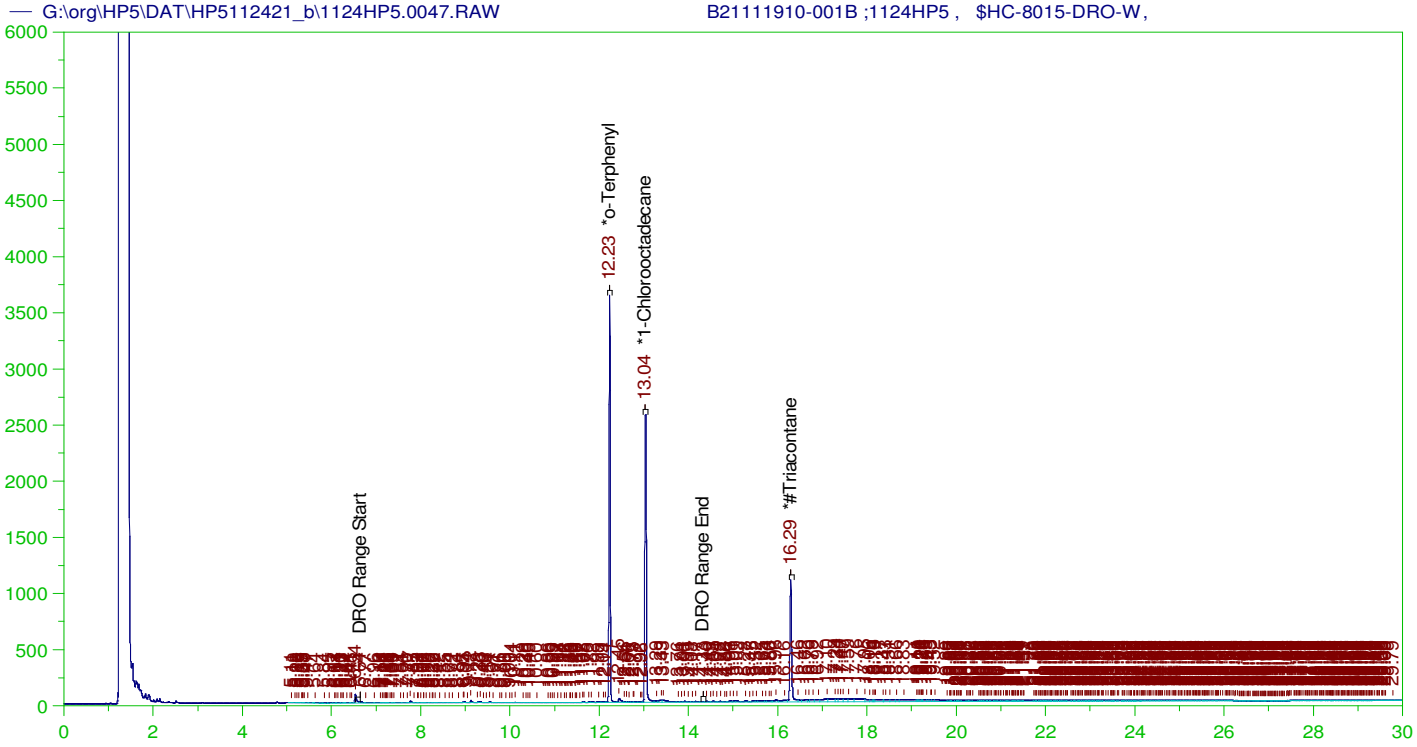
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED		%REC
*o-Terphenyl	29.772	200.	.	.	-
*1-Chlorooctadecane	29.772	200.	.	.	-

DRO Area:89543.99 DRO Amount: 2.855977
TEH Area:186019.1 TEH Amount: 5.933019

ERH1725 (RHMW15 Zone 5) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0047.RAW B21111910-001B ;1124HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111910-001B ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0047.RAW
Date & Time Acquired: 11/27/2021 11:33:09 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102Id-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

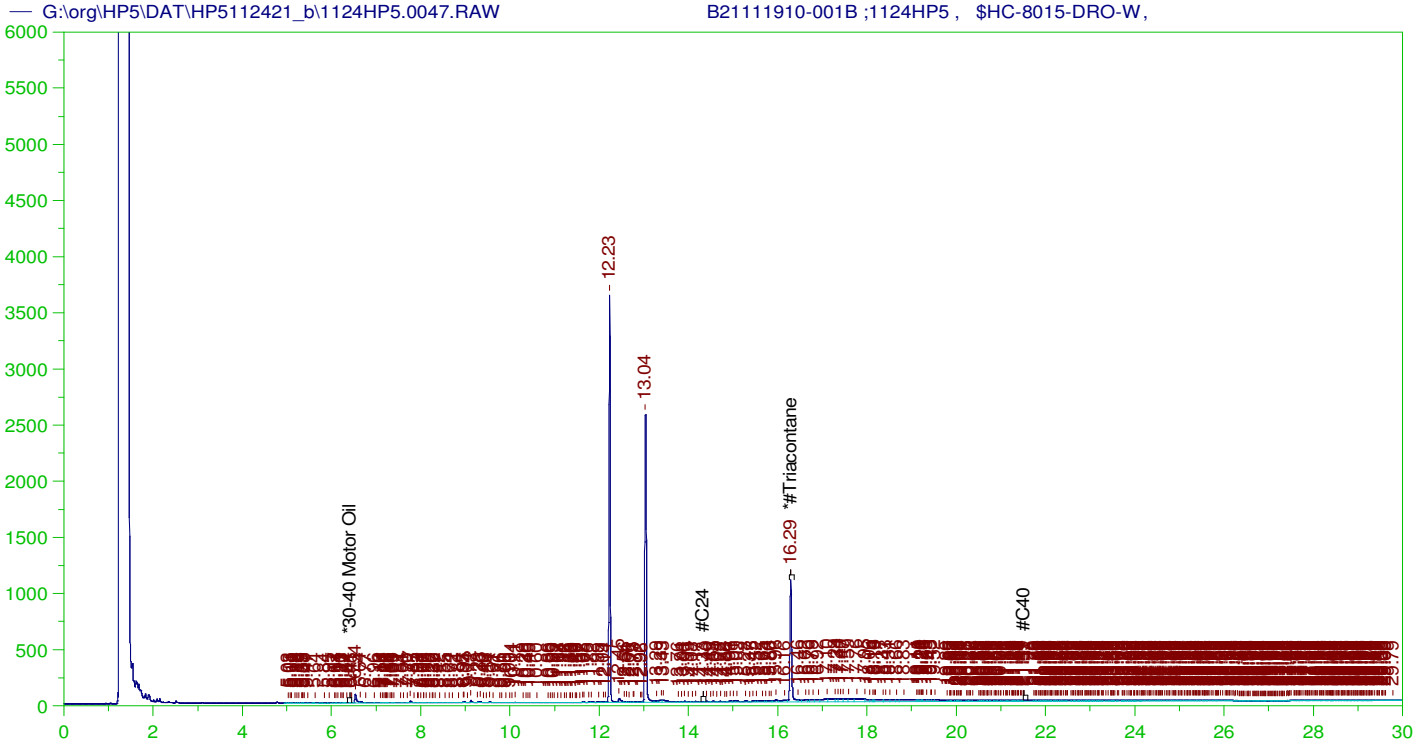
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.23	.196	.192	97.87	-
*1-Chlorooctadecane	13.036	.196	.156	79.76	-
*#Triacontane	16.289	.196	.103	52.76	-

DRO Area:1780410 DRO Amount: 5.567216E-02
TEH Area:1.122899E+07 TEH Amount: 0.3511227

ERH1725 (RHMW15 Zone 5) Batch ID: 161631

G:\org\HP5\DAT\HP5112421_b\1124HP5.0047.RAW B21111910-001B ;1124HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111910-001B ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0047.RAW
Date & Time Acquired: 11/27/2021 11:33:09 PM
Method File: G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-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 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.289	.49	.103	21.1	-

RRO Area:6988983 RRO AMOUNT: 0.2400619

ERH1725 (RHMW15 Zone 5) Batch ID: 161631

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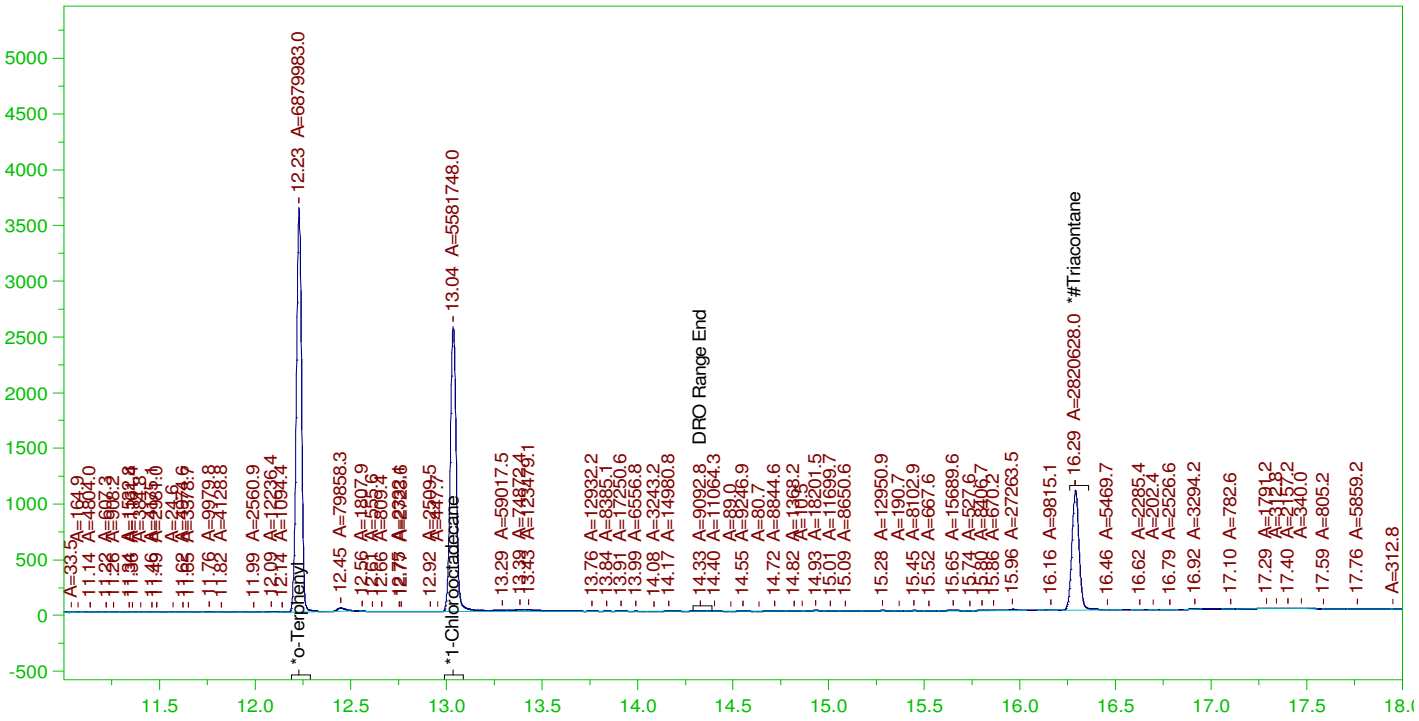


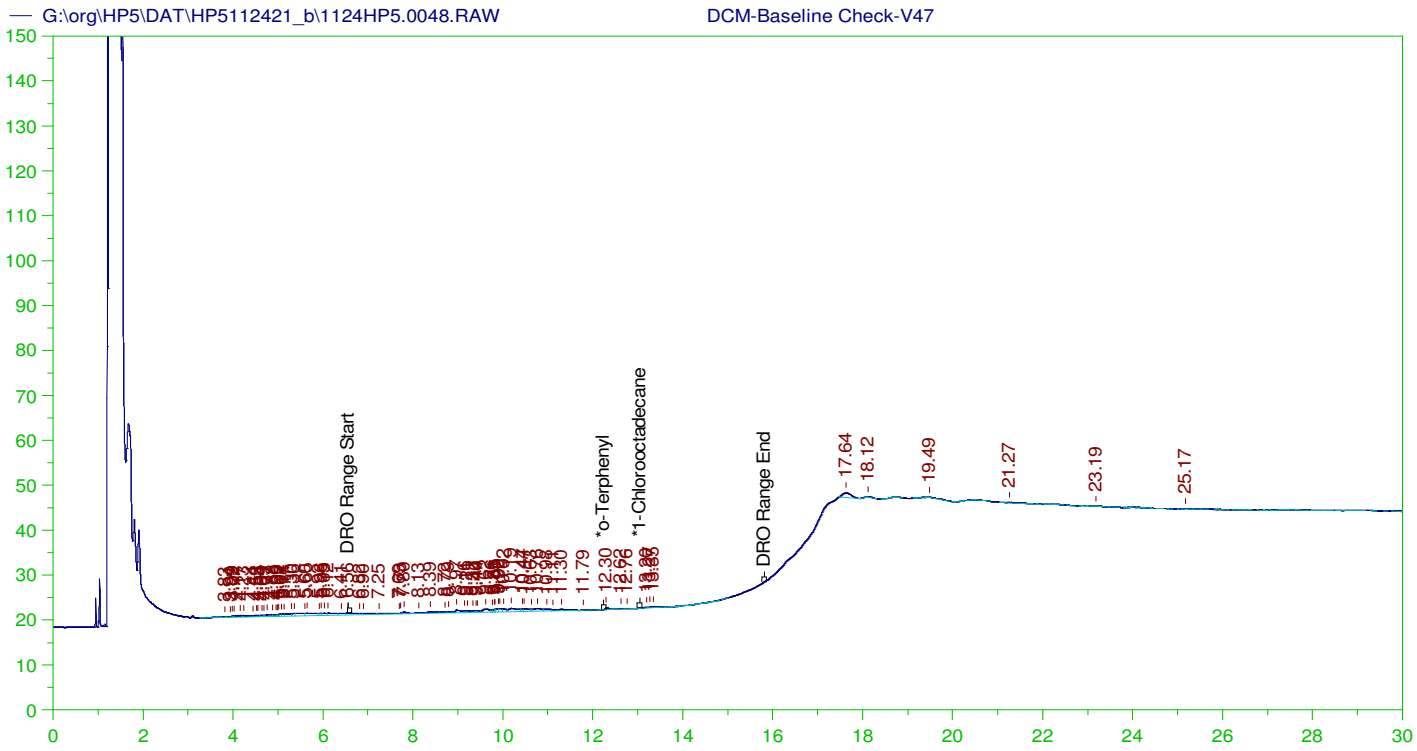
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111910-001B ;1124HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0047.RAW
Date & Time Acquired: 11/27/2021 11:33:09 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.23	.196	.19	96.88	-
*1-Chlorooctadecane	13.036	.196	.154	78.6	-
*#Triacontane	16.289	.196	.096	48.75	-

DRO Area:1172902 DRO Amount: 3.667582E-02
TEH Area:1984182 TEH Amount: 6.204397E-02



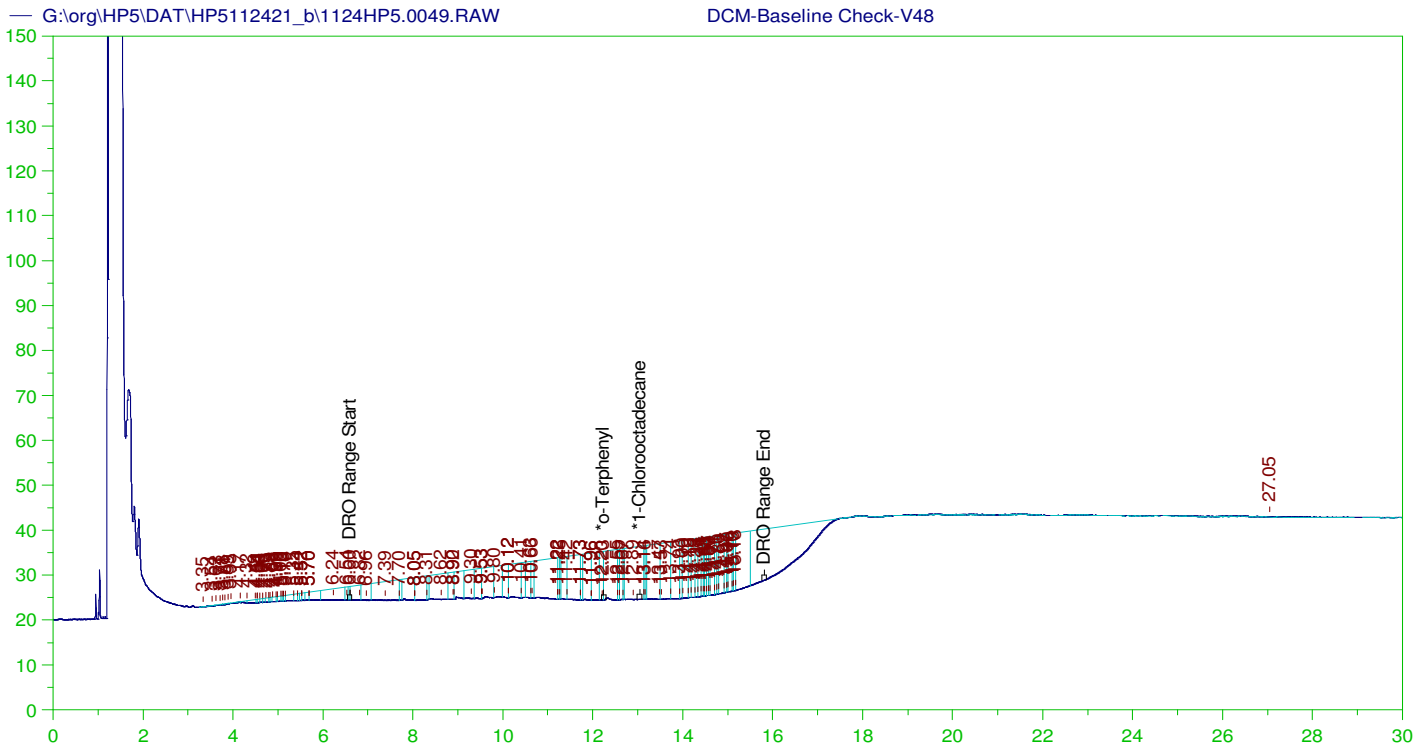
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V47
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0048.RAW
Date & Time Acquired: 11/28/2021 12:15:48 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	29.776	200.	.	.	-
*1-Chlorooctadecane	29.776	200.	.	.	-

DRO Area:113635.3 DRO Amount: 3.624362
TEH Area:207867.9 TEH Amount: 6.62988



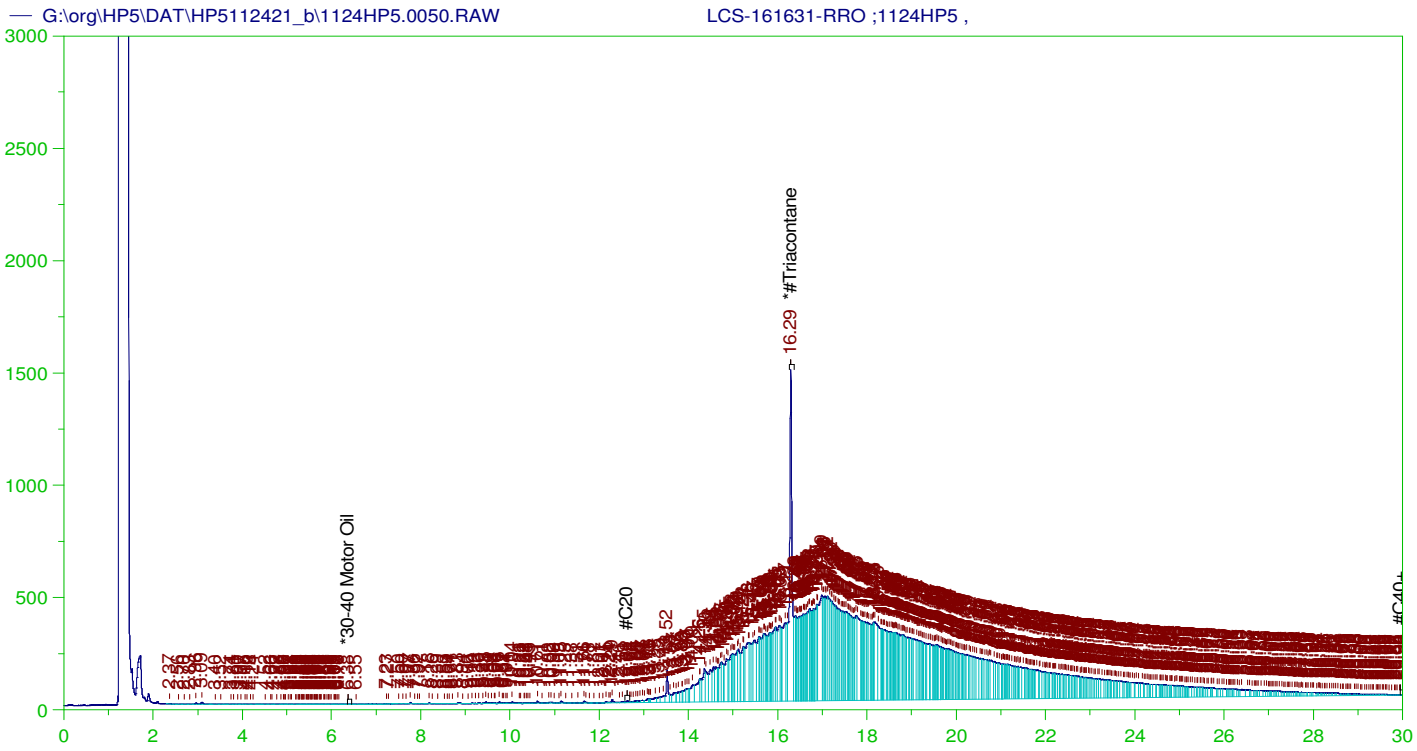
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V48
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0049.RAW
Date & Time Acquired: 11/28/2021 12:58:35 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	12.231	200.	5.833	2.92	-
*1-Chlorooctadecane	29.939	200.	.	.	-

DRO Area:4461198 DRO Amount: 142.2885
TEH Area:3887251 TEH Amount: 123.9826



RESIDUAL RANGE ORGANICS CHROMATOGRAM

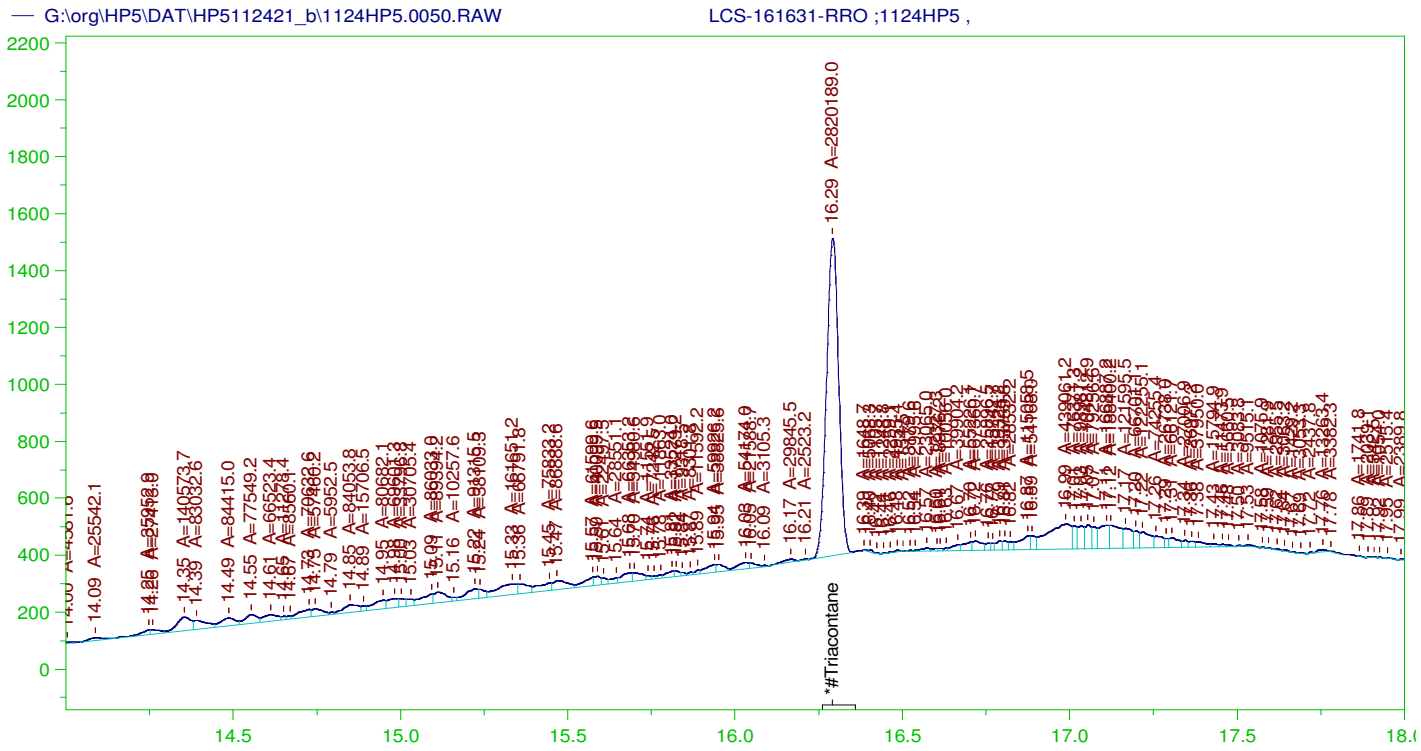
Sample Name: LCS-161631-RRO ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0050.RAW
Date & Time Acquired: 11/28/2021 1:41:28 AM
Method File: G:\Org\HP5\Methods\D3_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	16.292	.5	.194	38.85	-

~~RRO~~ TEH (Oil Range) Area:1.42925E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 5.007463

AMN 12/14/2021



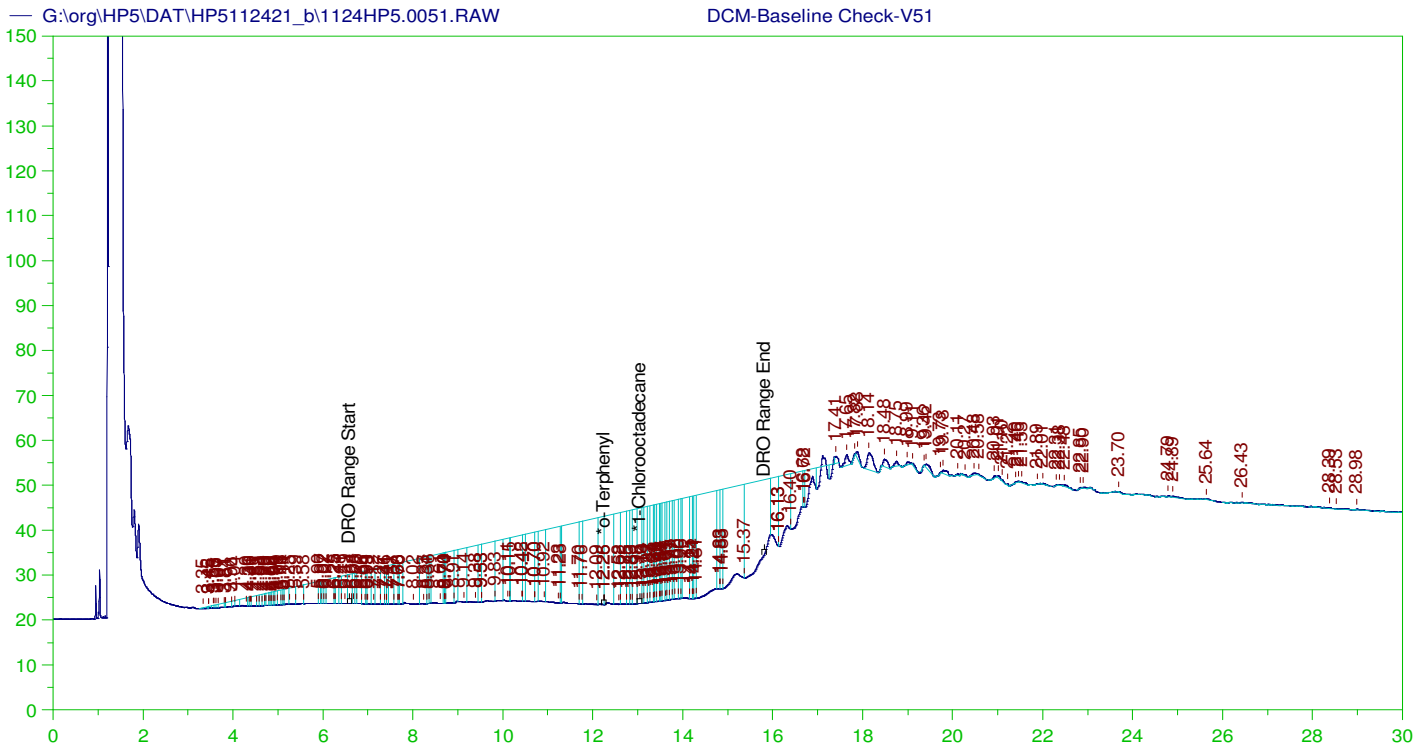
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: LCS-161631-RRO ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0050.RAW
Date & Time Acquired: 11/28/2021 1:41:28 AM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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	16.292	.5	.097	19.5	-

RRO Area:5466772 RRO AMOUNT: 0.1915316



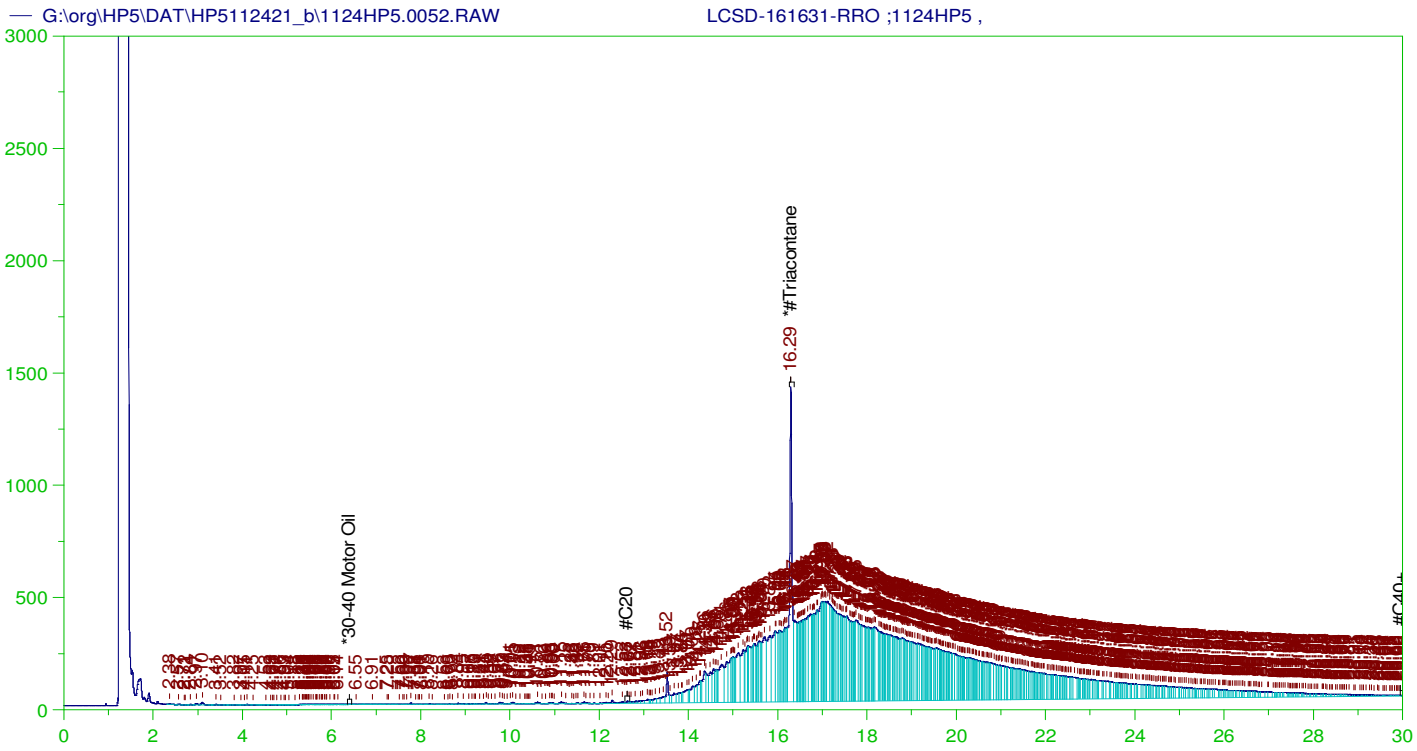
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V51
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0051.RAW
Date & Time Acquired: 11/28/2021 2:24:17 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	12.254	200.	4.692	2.35	-
*1-Chlorooctadecane	29.951	200.	.	.	-

DRO Area:8850781 DRO Amount: 282.2928
TEH Area:1.019446E+07 TEH Amount: 325.1491



RESIDUAL RANGE ORGANICS CHROMATOGRAM

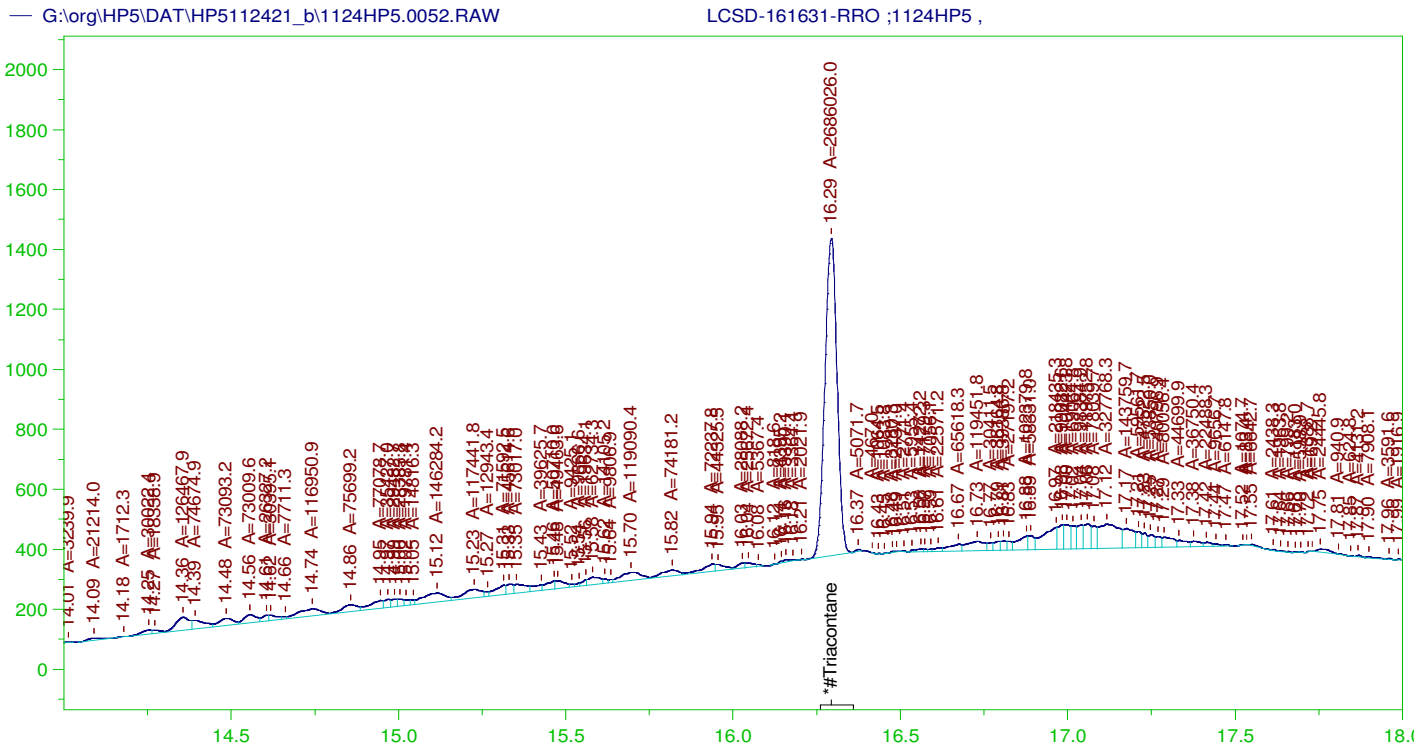
Sample Name: LCSD-161631-RRO ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0052.RAW
Date & Time Acquired: 11/28/2021 3:07:16 AM
Method File: G:\Org\HP5\Methods\D3_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	16.293	.5	.192	38.36	-

~~RRO~~ TEH (Oil Range) Area:1.362823E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.77473

AMN 12/14/2021



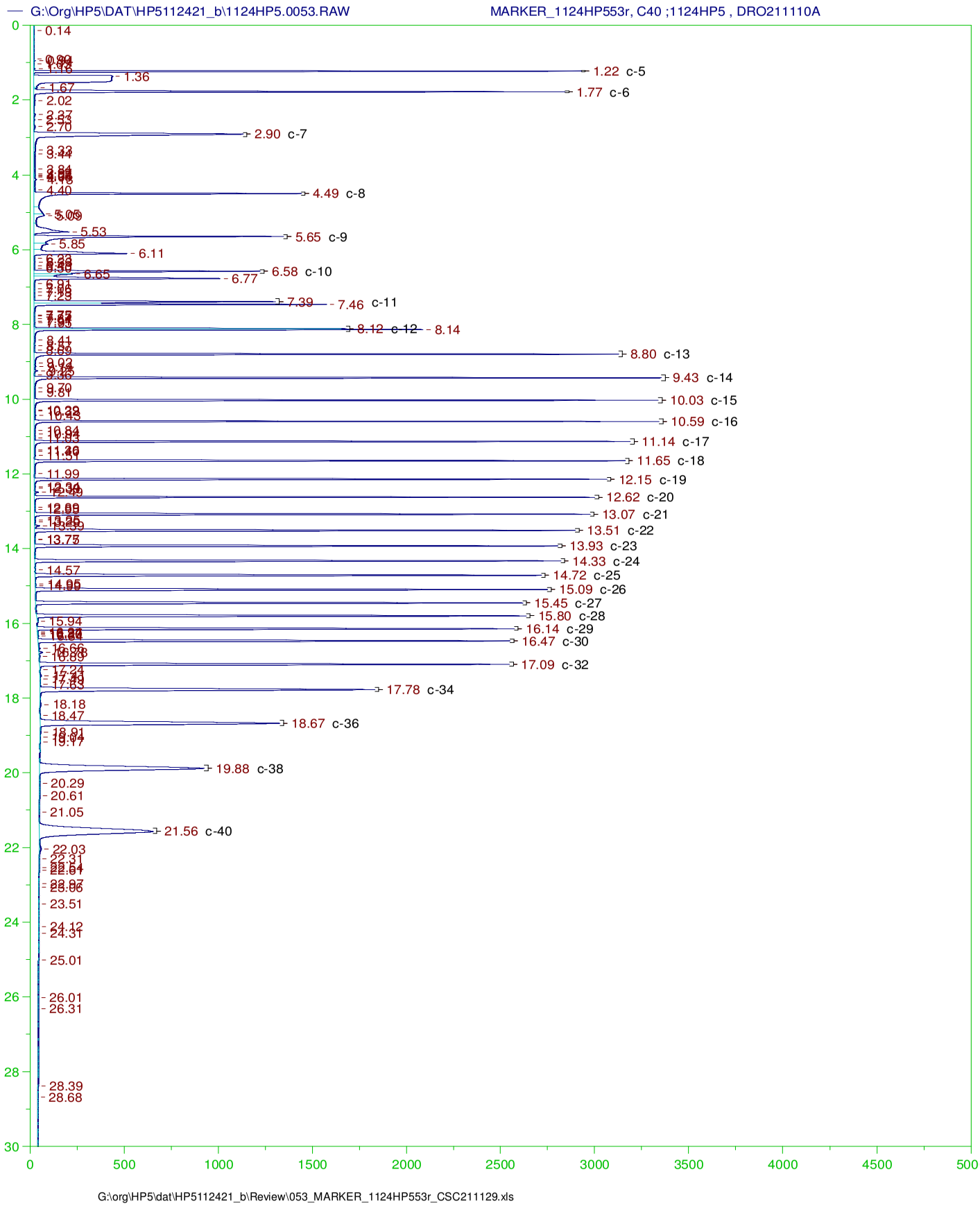
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: LCSD-161631-RRO ;1124HP5 ,
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0052.RAW
Date & Time Acquired: 11/28/2021 3:07:16 AM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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	16.293	.5	.093	18.57	-

RRO Area:4995506 RRO AMOUNT: 0.1750204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1.77 c-6
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2.90 c-7
4.40
4.49 c-8
5.53
5.65 c-9
5.85
6.11
6.58 c-10
6.65
6.77
7.39
7.46 c-11
8.12 c-12
8.14
8.80 c-13
9.43 c-14
9.70
9.81
10.03 c-15
10.59 c-16
11.14 c-17
11.65 c-18
11.99
12.15 c-19
12.62 c-20
13.07 c-21
13.51 c-22
13.75
13.93 c-23
14.33 c-24
14.57
14.72 c-25
15.09 c-26
15.45 c-27
15.80 c-28
15.94
16.14 c-29
16.47 c-30
17.09 c-32
17.78 c-34
18.18
18.47
18.67 c-36
19.88 c-38
20.29
20.61
21.05
21.56 c-40
22.03
23.51
24.12
24.31
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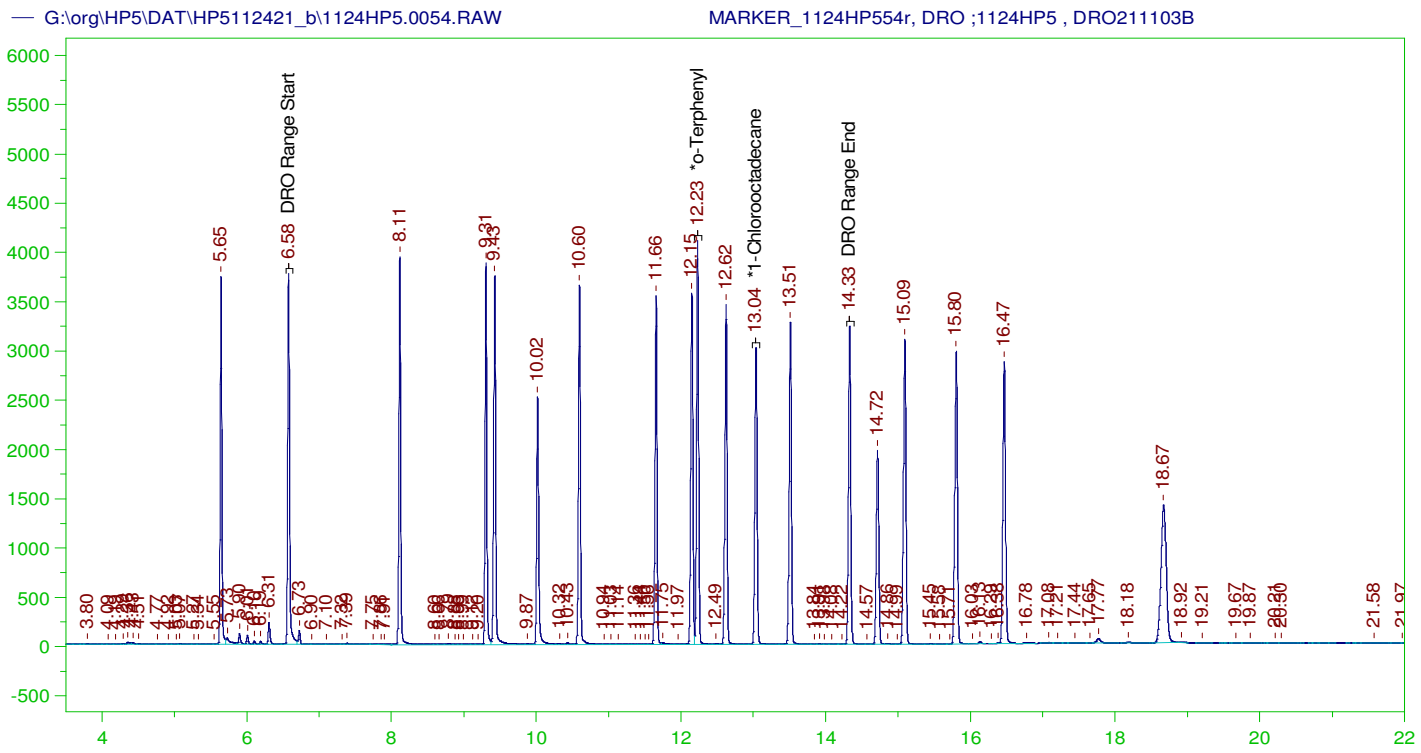


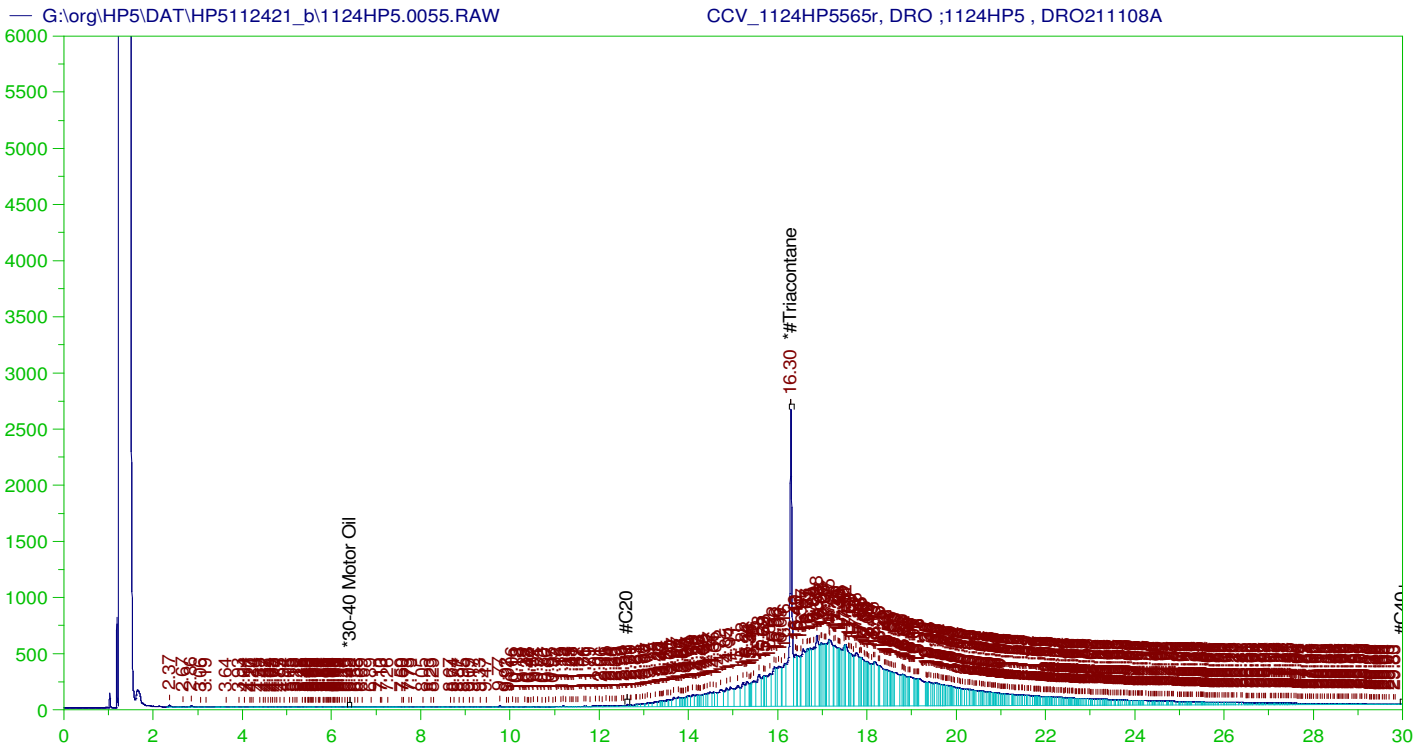
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1124HP554r, DRO ;1124HP5 , DRO211103B
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0054.RAW
Date & Time Acquired: 11/28/2021 4:33:09 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.231	.2	.221	110.34	-
*1-Chlorooctadecane	13.037	.2	.179	89.49	-

DRO Area:7.548978E+07 DRO Amount: 2.407722
TEH Area:1.174114E+08 TEH Amount: 3.7448



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1124HP5565r, DRO ;1124HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0055.RAW
Date & Time Acquired: 11/28/2021 5:16:09 AM
Method File: G:\Org\HP5\Methods\DC_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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	16.295	500.	339.396	67.88	-

~~RRO~~ TEH (Oil Range) Area:1.366113E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4786.256

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0055.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.037	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.295	200.	339.396	169.7	75-125

AMN 12/14/2021

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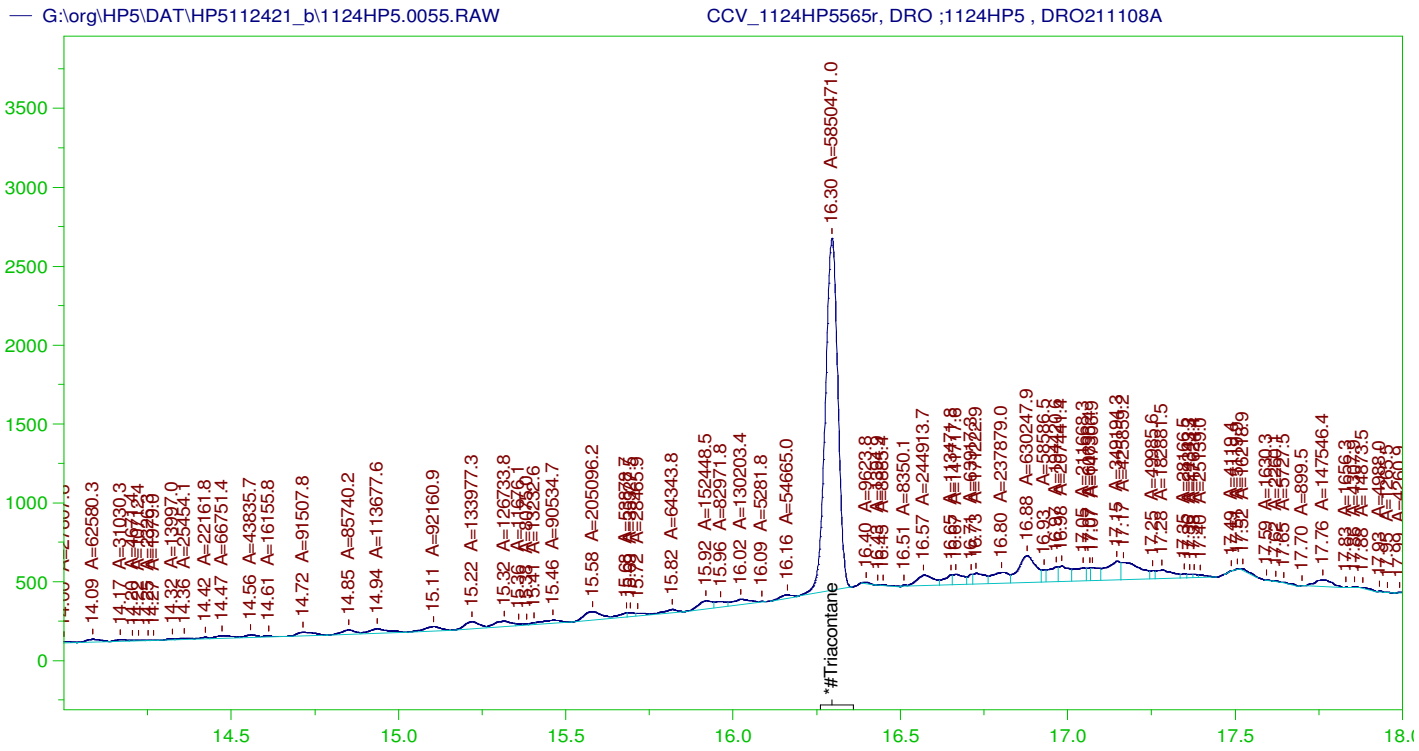


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1124HP5565r, DRO ;1124HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0055.RAW
Date & Time Acquired: 11/28/2021 5:16:09 AM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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

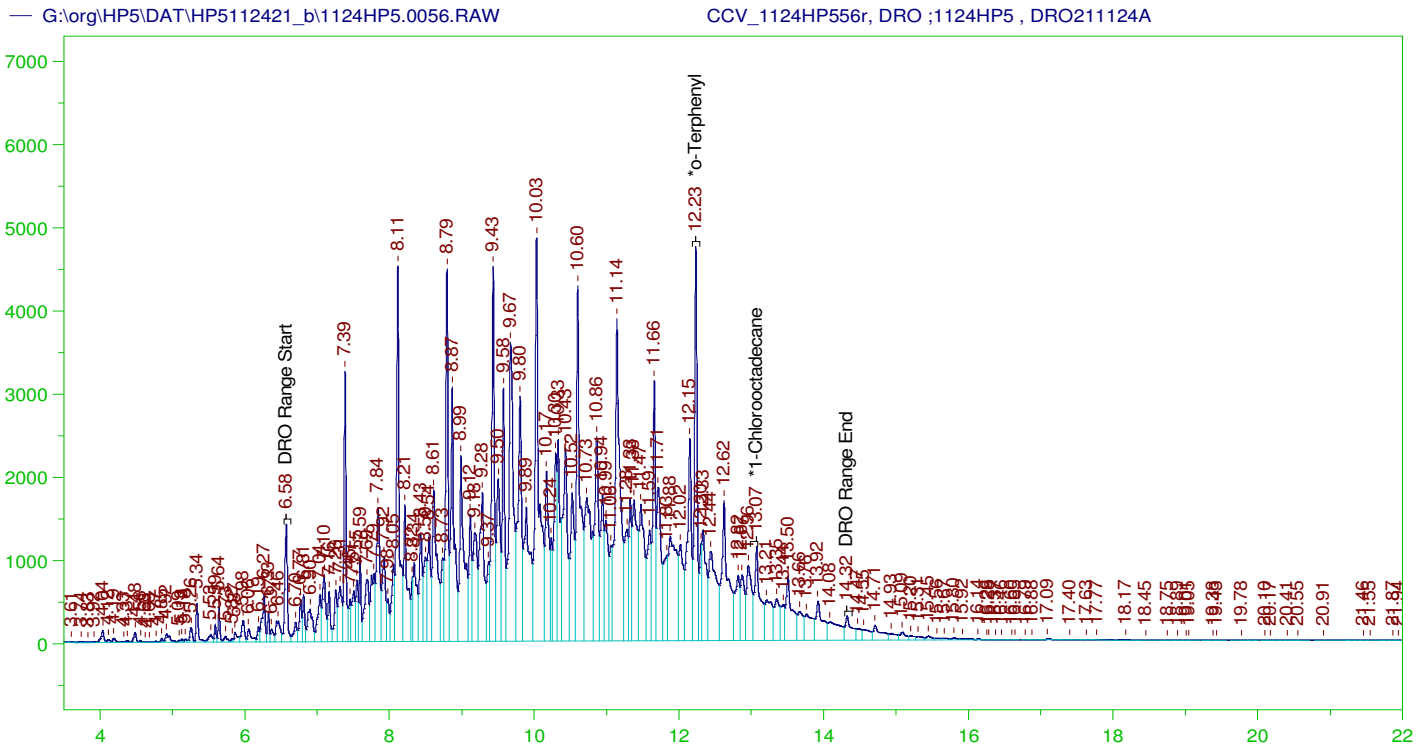
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.295	500.	202.228	40.45	-

RRO Area:6413068 RRO AMOUNT: 224.6856

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0055.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.037	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.295	200.	202.228	101.11	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1124HP556r, DRO ;1124HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0056.RAW
Date & Time Acquired: 11/28/2021 5:59:10 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

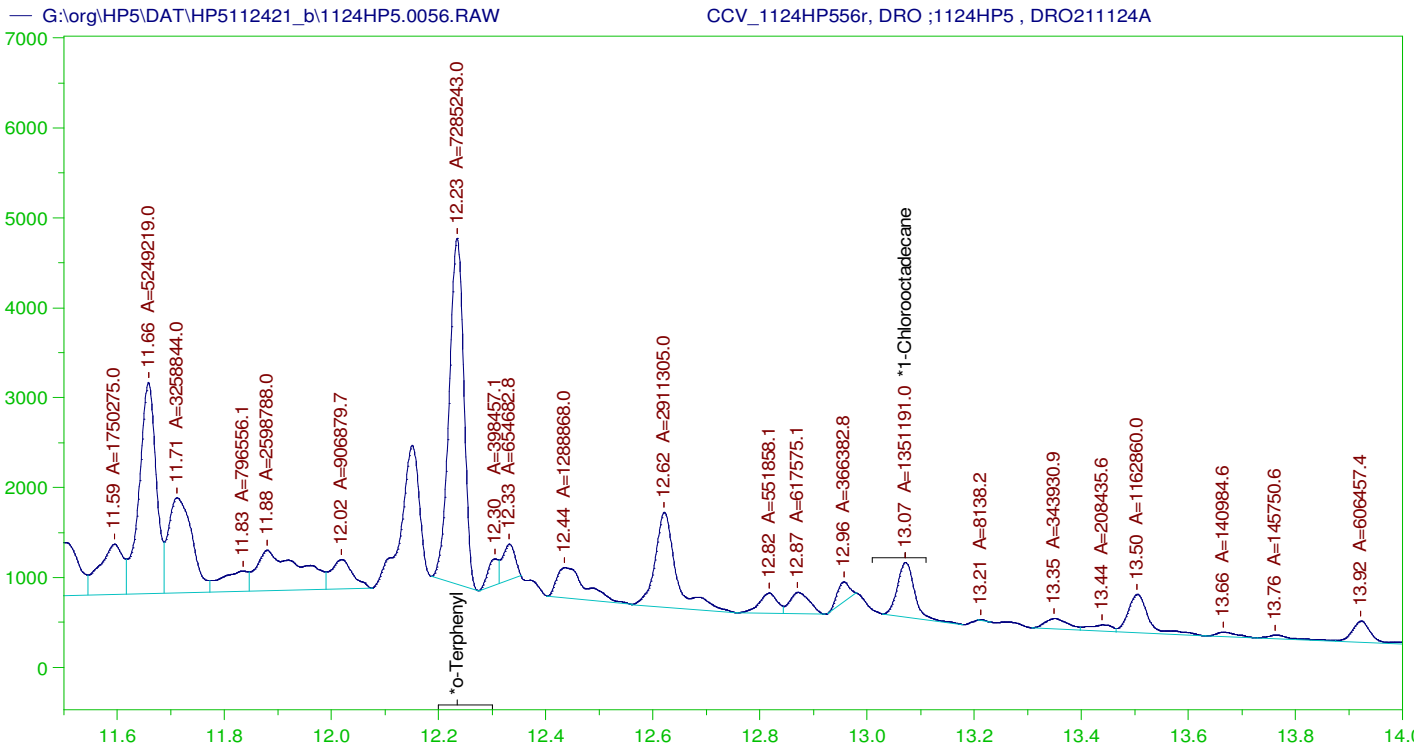
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.234	200.	337.063	168.53	-
*1-Chlorooctadecane	13.072	200.	163.221	81.61	-

DRO Area:4.715303E+08 DRO Amount: 15039.31
TEH Area:4.884169E+08 TEH Amount: 15577.9

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0056.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15577.9	103.85	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.234	200.	337.063	168.53	85-115
*1-Chlorooctadecane	13.072	200.	163.221	81.61	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1124HP556r, DRO ;1124HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5112421_b\1124HP5.0056.RAW
Date & Time Acquired: 11/28/2021 5:59:10 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.234	200.	205.165	102.58	-
*1-Chlorooctadecane	13.072	200.	38.052	19.03	-

DRO Area:2.635032E+08 DRO Amount: 8404.351
TEH Area:2.742577E+08 TEH Amount: 8747.362

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112421_b\1124HP5.0056.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8747.36	58.32	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.234	200.	205.165	102.58	85-115
*1-Chlorooctadecane	13.072	200.	38.052	19.03	85-115

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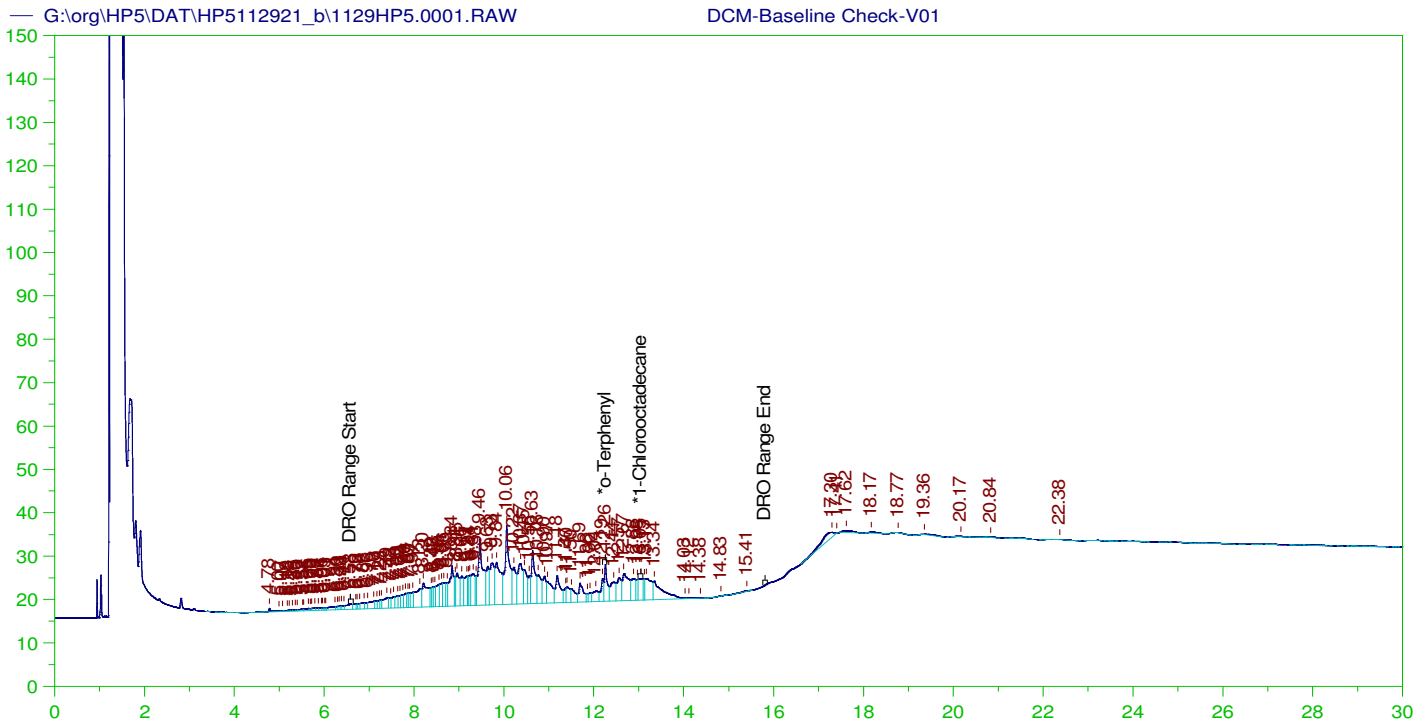
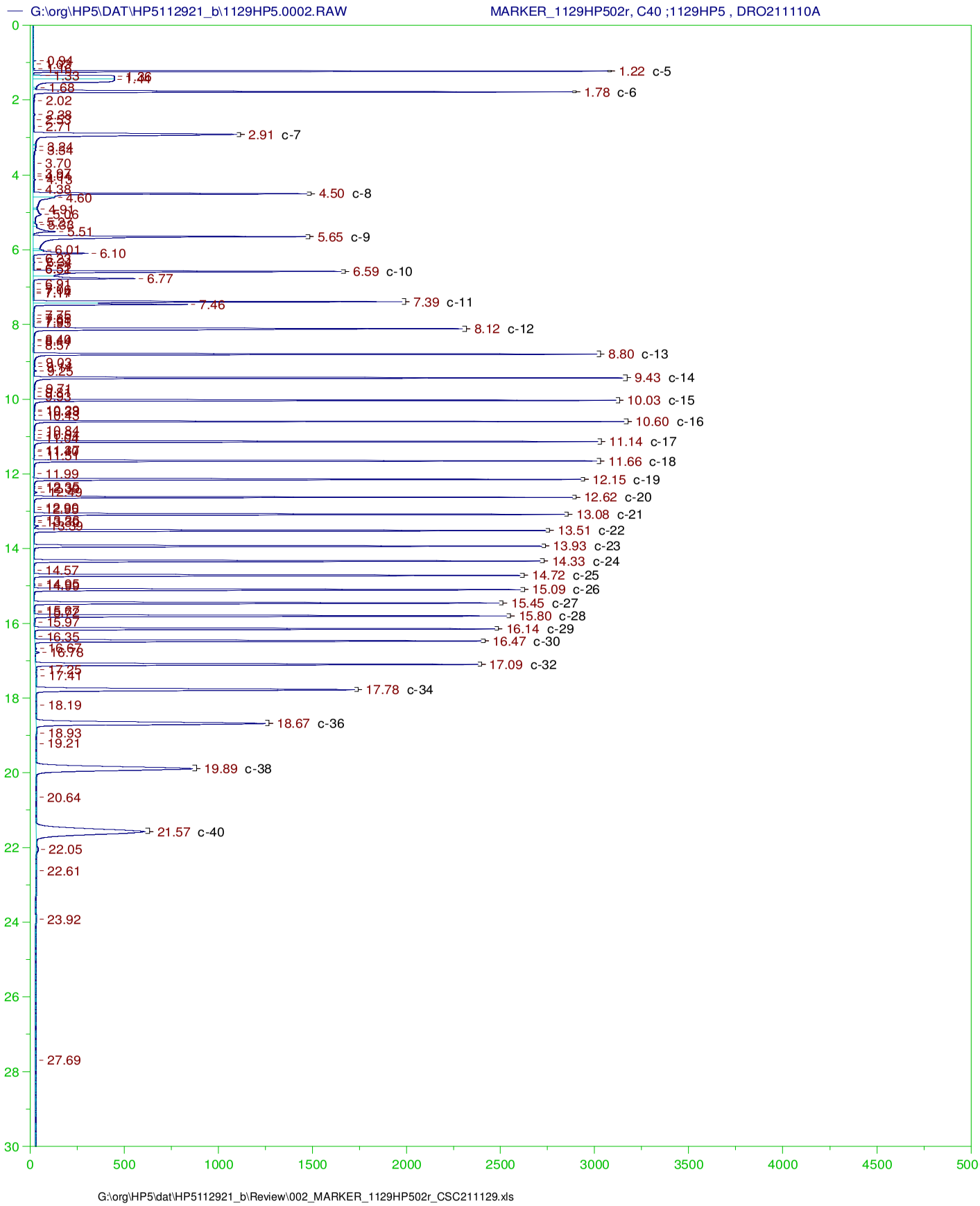


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V01
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0001.RAW
Date & Time Acquired: 11/29/2021 9:36:32 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 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	12.256	200.	1.112	.56	-
*1-Chlorooctadecane	13.05	200.	.963	.48	-

DRO Area:1997590 DRO Amount: 63.71251
TEH Area:2105423 TEH Amount: 67.15179


G:\org\HP5\DAT\HP5112921_b\1129HP5.0002.RAW
MARKER_1129HP502r, C40 ;1129HP5 , DRO211110A
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6.59 c-10
7.39 c-11
8.12 c-12
8.80 c-13
9.43 c-14
10.03 c-15
10.60 c-16
11.14 c-17
11.66 c-18
12.15 c-19
12.62 c-20
13.08 c-21
13.51 c-22
13.93 c-23
14.33 c-24
14.72 c-25
15.09 c-26
15.45 c-27
15.80 c-28
16.14 c-29
16.47 c-30
17.09 c-32
17.78 c-34
18.67 c-36
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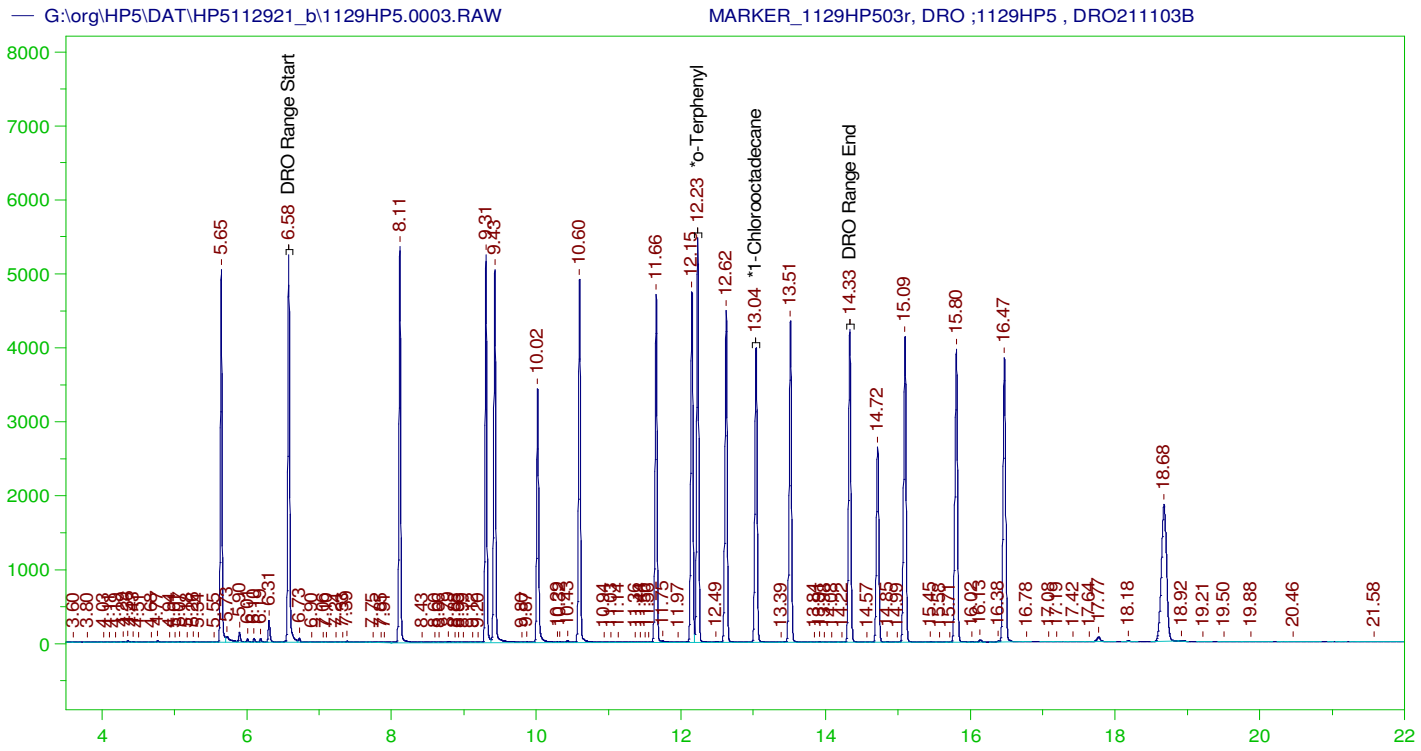


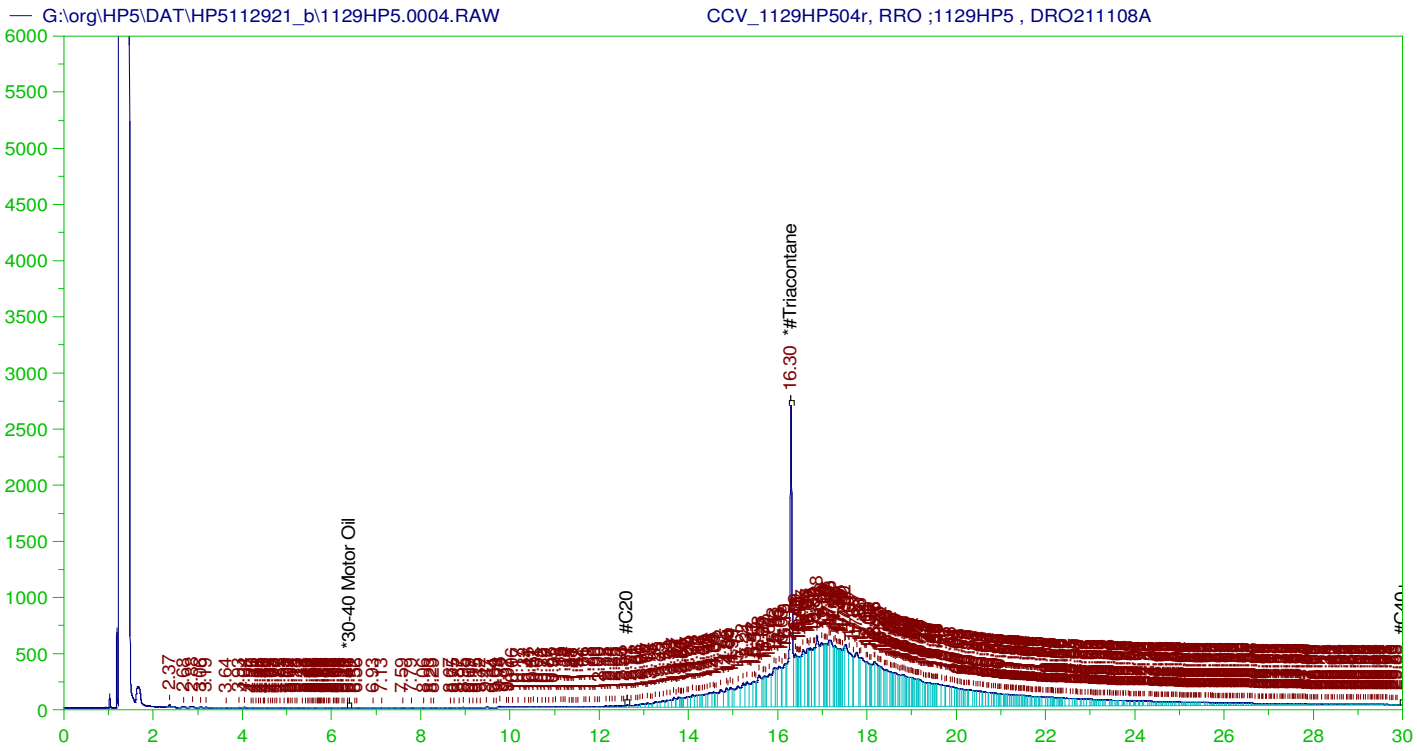
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1129HP503r, DRO ;1129HP5 , DRO211103B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0003.RAW
Date & Time Acquired: 11/29/2021 11:01:14 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.232	200.	293.677	146.84	-
*1-Chlorooctadecane	13.038	200.	237.793	118.9	-

DRO Area:1.002205E+08 DRO Amount: 3196.501
TEH Area:1.557135E+08 TEH Amount: 4966.432



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1129HP504r, RRO ;1129HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0004.RAW
Date & Time Acquired: 11/29/2021 11:43:36 AM
Method File: G:\Org\HP5\Methods\DC_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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	16.297	500.	338.799	67.76	-

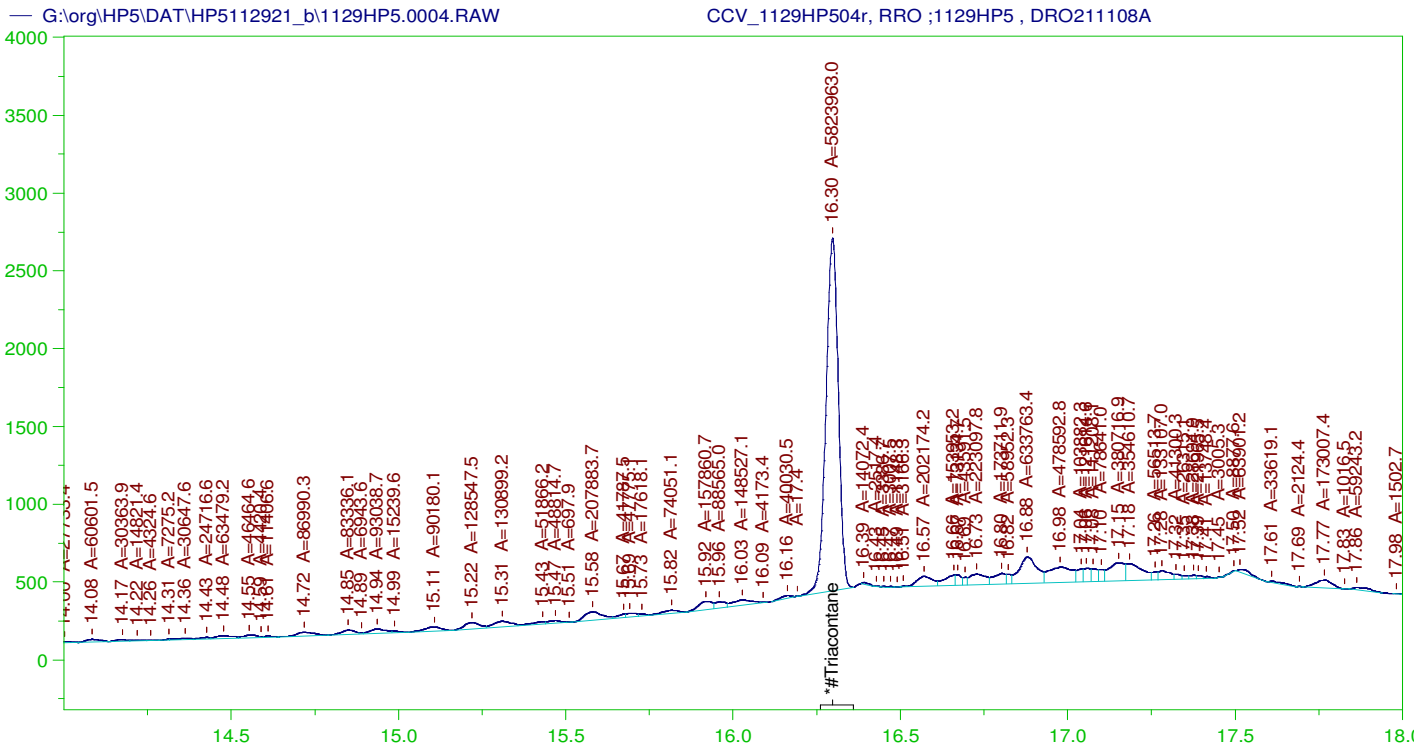
~~RRO~~ TEH (Oil Range)Area:1.363781E+08 ~~RRO~~ TEH (Oil Range)AMOUNT: 4778.087

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0004.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.031	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.297	200.	338.799	169.4	75-125

AMN 12/14/2021



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1129HP504r, RRO ;1129HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0004.RAW
Date & Time Acquired: 11/29/2021 11:43:36 AM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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

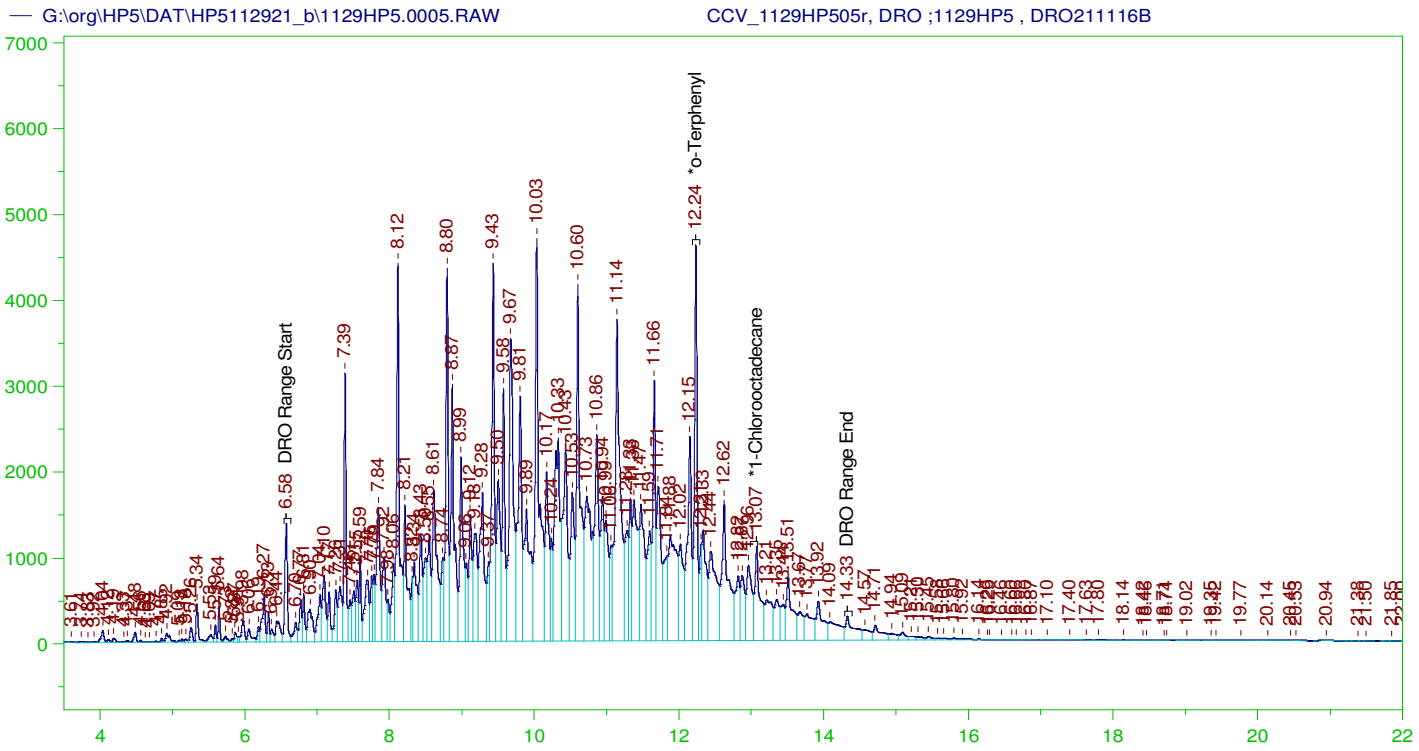
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.297	500.	201.311	40.26	-

RRO Area:6489520 RRO AMOUNT: 227.3641

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0004.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.031	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.297	200.	201.311	100.66	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1129HP505r, DRO ;1129HP5 , DRO211116B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0005.RAW
Date & Time Acquired: 11/29/2021 12:26:03 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

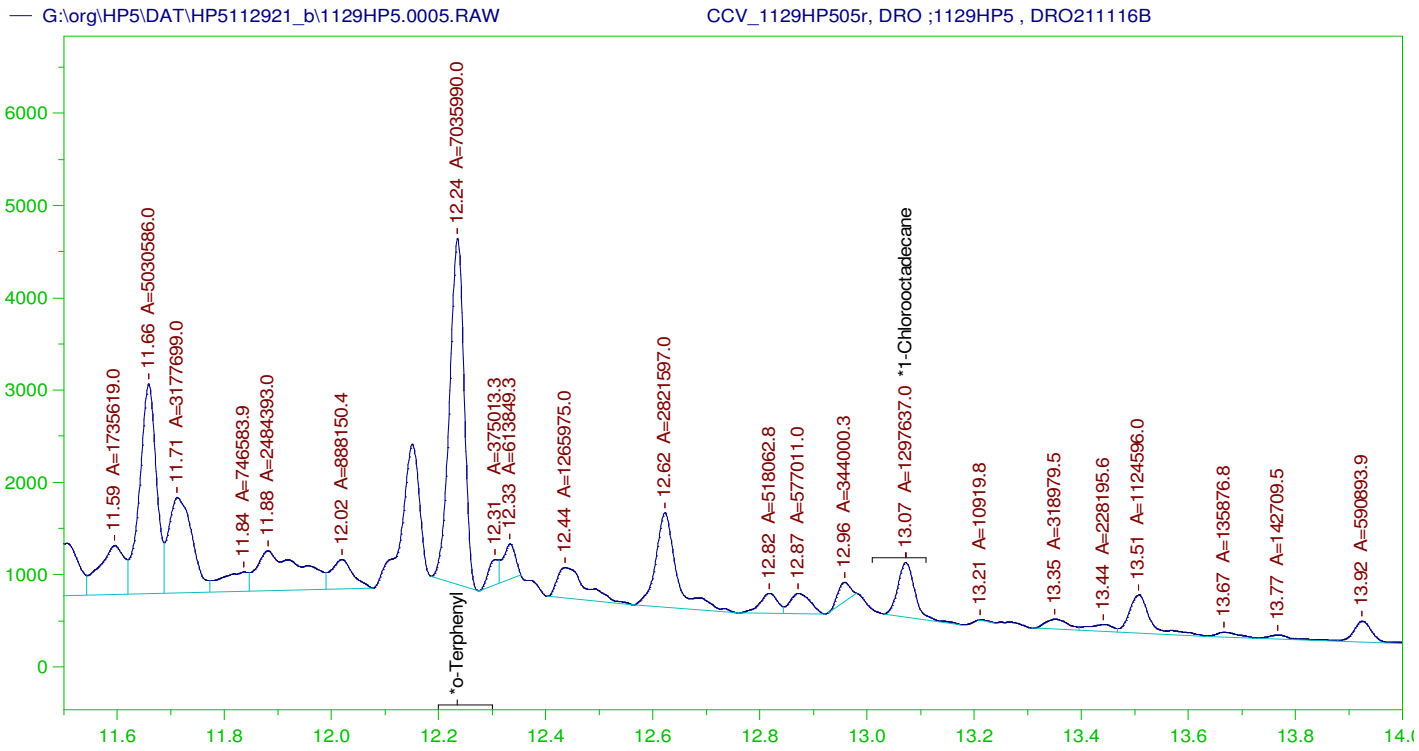
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.235	200.	328.623	164.31	-
*1-Chlorooctadecane	13.072	200.	154.11	77.05	-

DRO Area:4.575482E+08 DRO Amount: 14593.35
TEH Area:4.733269E+08 TEH Amount: 15096.61

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15096.61	100.64	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.235	200.	328.623	164.31	85-115
*1-Chlorooctadecane	13.072	200.	154.11	77.05	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1129HP505r, DRO ;1129HP5 , DRO211116B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0005.RAW
Date & Time Acquired: 11/29/2021 12:26:03 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.235	200.	198.146	99.07	-
*1-Chlorooctadecane	13.072	200.	36.544	18.27	-

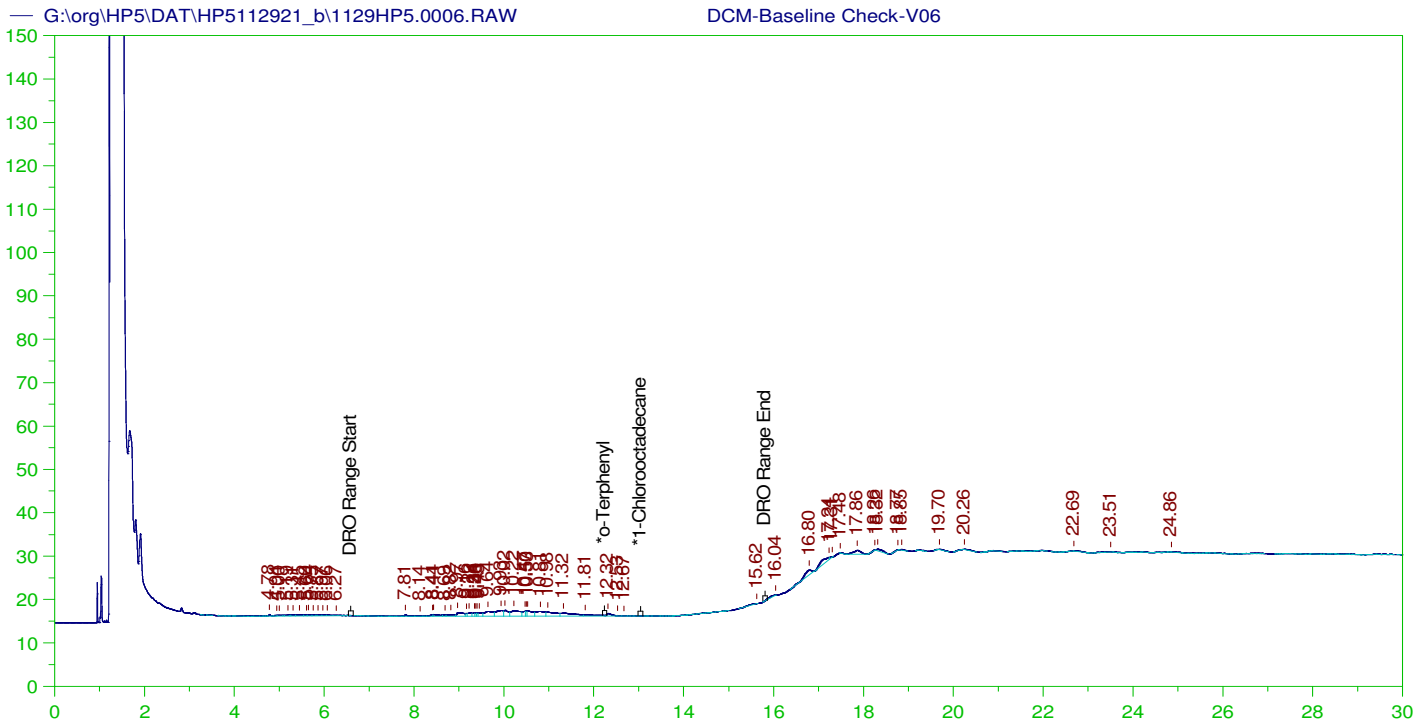
DRO Area:2.547731E+08 DRO Amount: 8125.907
TEH Area:2.652851E+08 TEH Amount: 8461.182

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8461.18	56.41	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.235	200.	198.146	99.07	85-115
*1-Chlorooctadecane	13.072	200.	36.544	18.27	85-115

G:\org\HP5\dat\HP5112921_b\Review\005_CCV_1129HP505r_DS_8015-24-ID-L#.xls



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V06
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0006.RAW
Date & Time Acquired: 11/29/2021 1:08:35 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

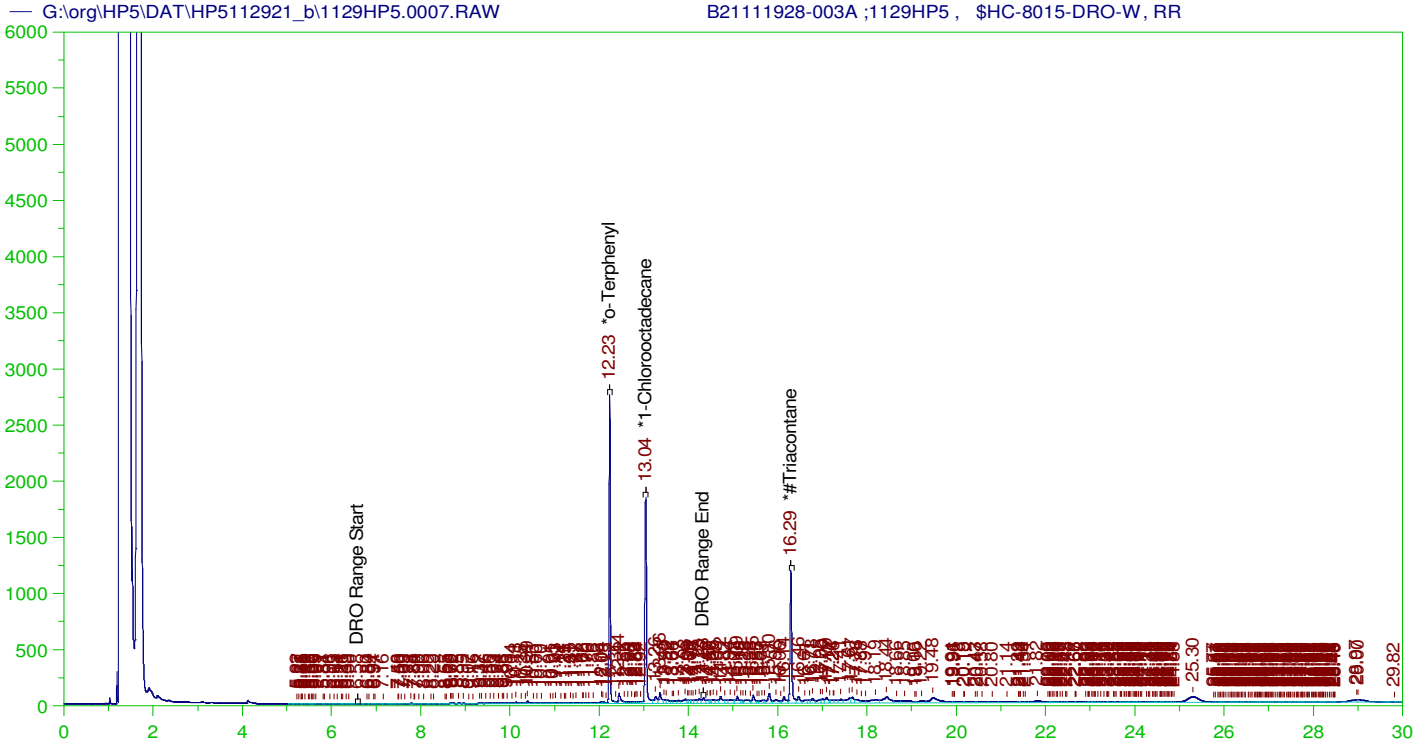
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED		%REC
*o-Terphenyl	29.909	200.	.	.	-
*1-Chlorooctadecane	29.909	200.	.	.	-

DRO Area:179225 DRO Amount: 5.716323
TEH Area:264772.6 TEH Amount: 8.444836

ERH1925 (RHMW03) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0007.RAW B21111928-003A ;1129HP5 , $HC-8015-DRO-W, RR



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-003A ;1129HP5 , $HC-8015-DRO-W, RR
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0007.RAW
Date & Time Acquired: 11/29/2021 1:50:52 PM
Method File: G:\Org\HP5\Methods\DR_8015-112907-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

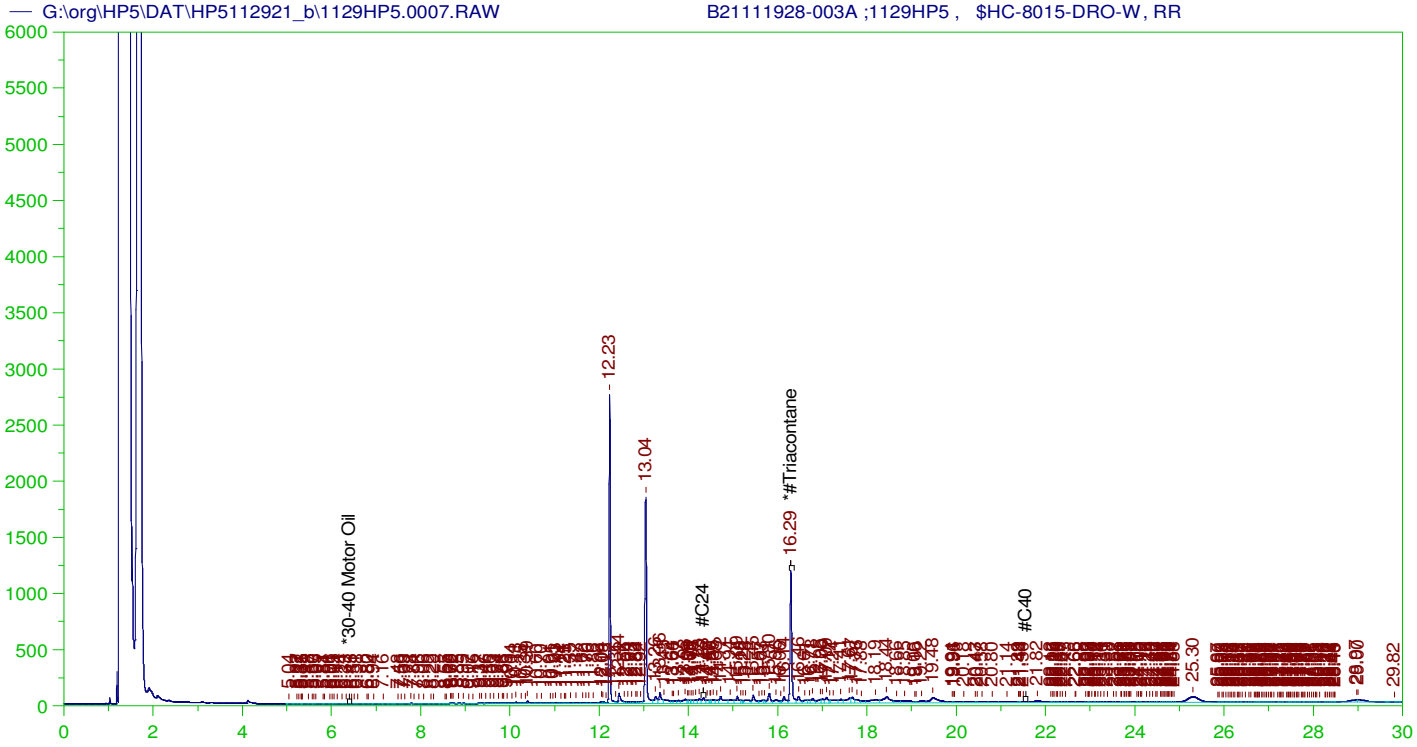
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.231	.202	.153	75.56	-
*1-Chlorooctadecane	13.038	.202	.124	61.28	-
*#Triacontane	16.293	.202	.114	56.22	-

DRO Area:3795541 DRO Amount: 0.1222804
TEH Area:1.707813E+07 TEH Amount: 0.5502037

ERH1925 (RHMW03) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0007.RAW B21111928-003A ;1129HP5 , $HC-8015-DRO-W, RR



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-003A ;1129HP5 , $HC-8015-DRO-W, RR
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0007.RAW
Date & Time Acquired: 11/29/2021 1:50:52 PM
Method File: G:\Org\HP5\Methods\DR_OROS-112907-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

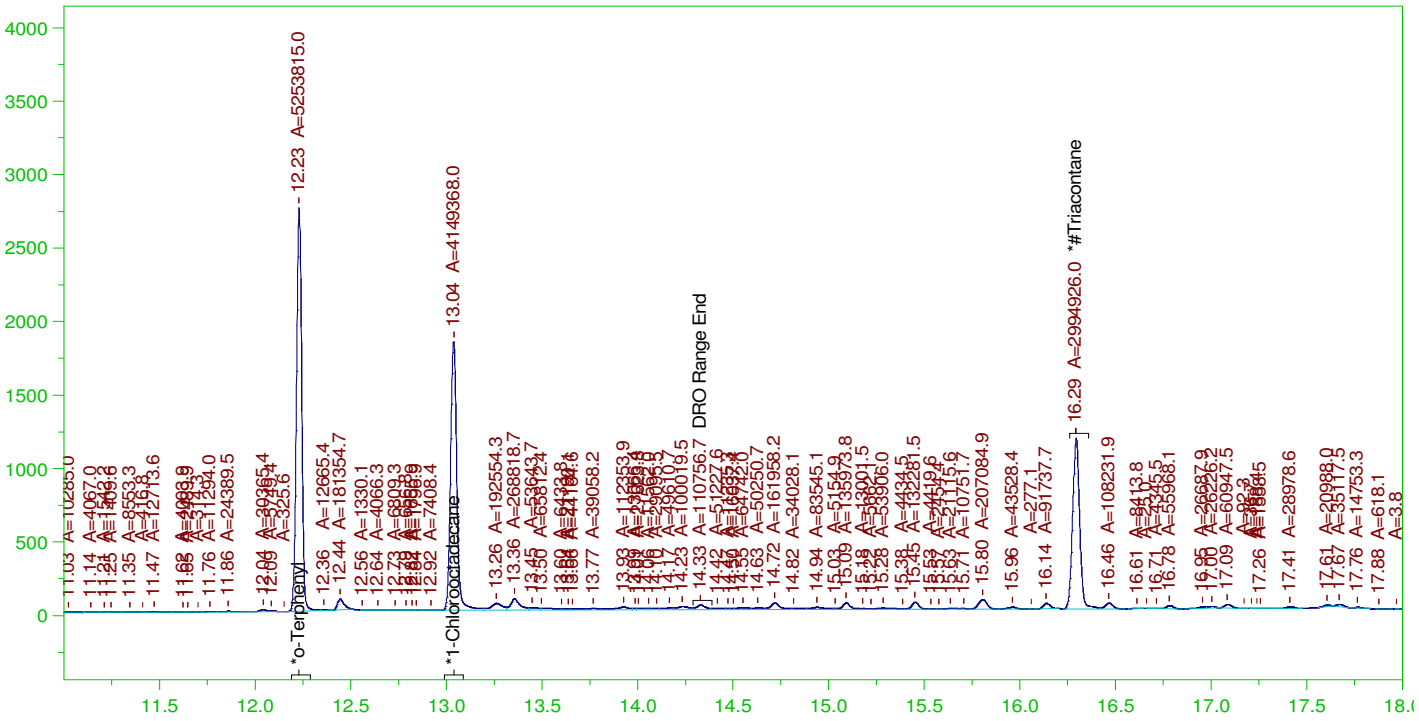
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.293	.505	.114	22.49	-

RRO Area:1.00161E+07 RRO AMOUNT: 0.3544646

ERH1925 (RHMW03) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0007.RAW B21111928-003A ;1129HP5 , $HC-8015-DRO-W, RR



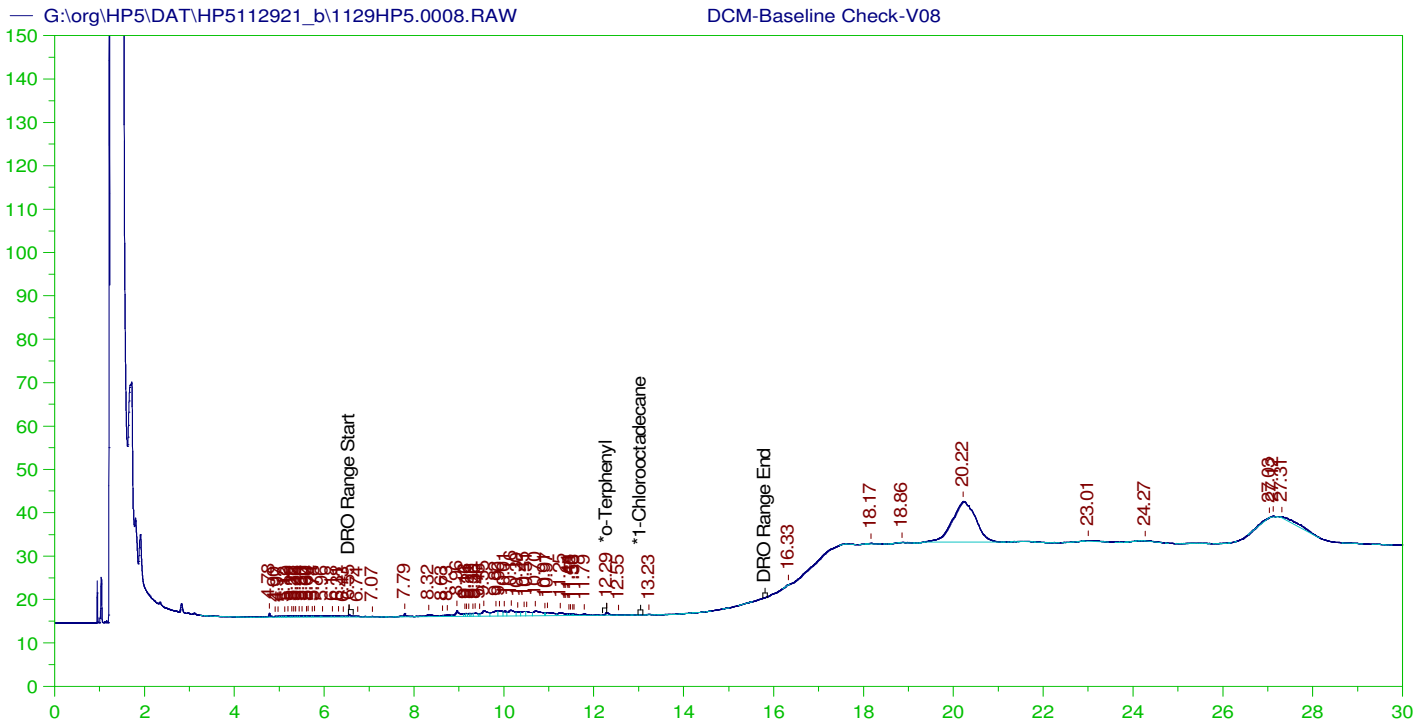
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-003A ;1129HP5 , $HC-8015-DRO-W, RR
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0007.RAW
Date & Time Acquired: 11/29/2021 1:50:52 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.231	.202	.149	73.98	-
*1-Chlorooctadecane	13.038	.202	.118	58.43	-
*#Triacontane	16.293	.202	.105	51.76	-

DRO Area:1731890 DRO Amount: 5.579605E-02
TEH Area:5116447 TEH Amount: 0.1648358



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

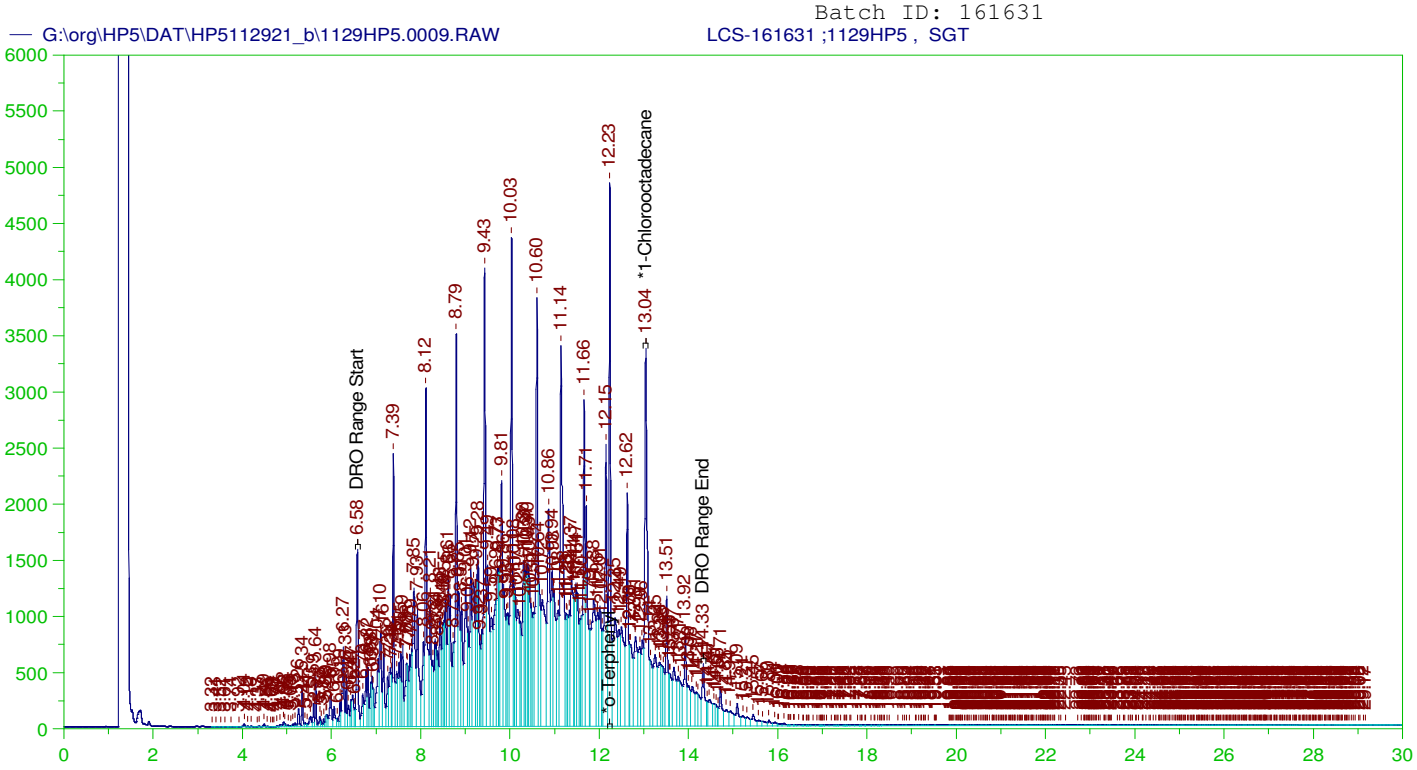
Sample Name: DCM-Baseline Check-V08
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0008.RAW
Date & Time Acquired: 11/29/2021 2:33:18 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

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	12.287	200.	.098	.05	-
*1-Chlorooctadecane	29.646	200.	.	.	-

DRO Area:154270.5 DRO Amount: 4.920407
TEH Area:555145.6 TEH Amount: 17.70619

Batch ID: 161631



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

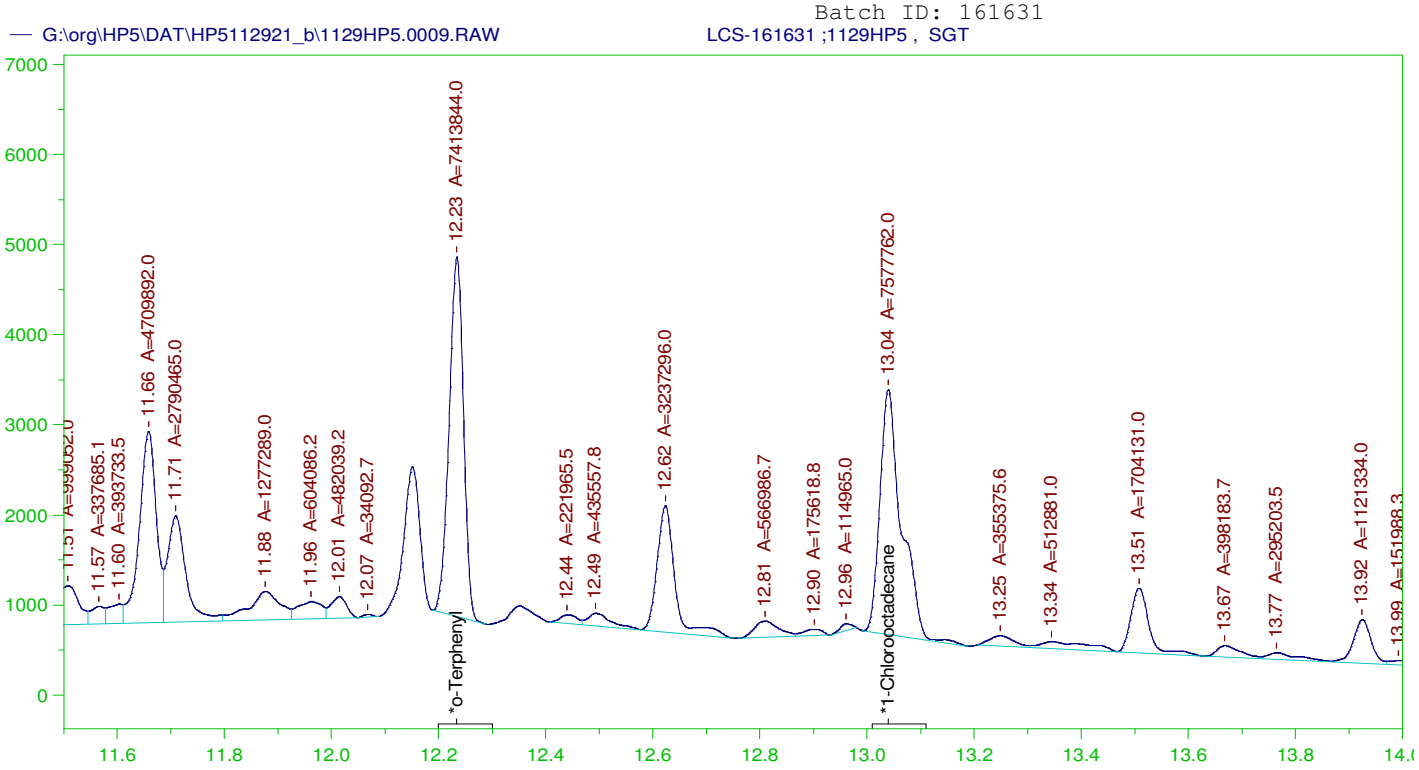
Sample Name: LCS-161631 ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0009.RAW
Date & Time Acquired: 11/29/2021 3:15:43 PM
Method File: G:\Org\HP5\Methods\D3_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.234	.2	.355	177.73	-
*1-Chlorooctadecane	13.039	.2	.362	181.25	-

DRO Area:4.068868E+08 DRO Amount: 12.97752
TEH Area:4.330344E+08 TEH Amount: 13.81149

Batch ID: 161631



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

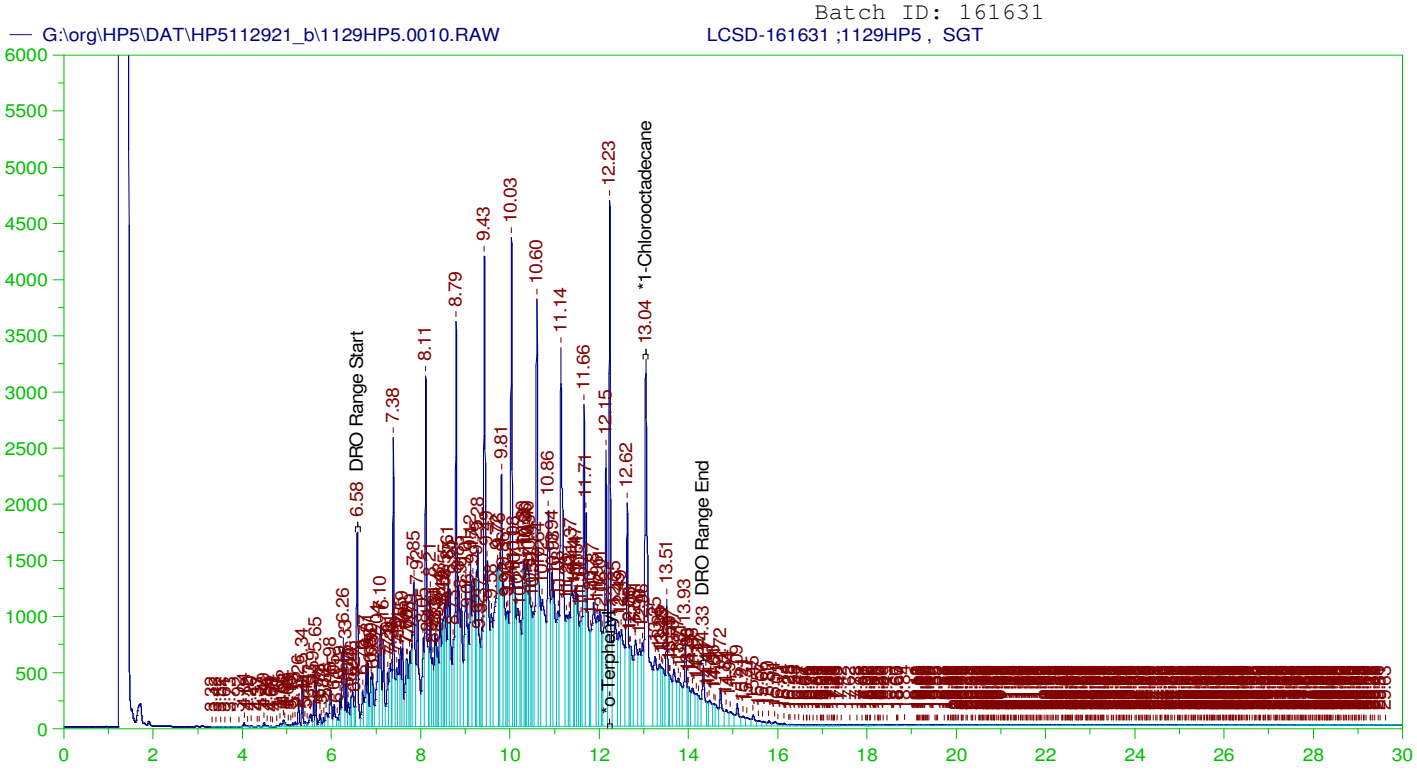
Sample Name: LCS-161631 ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0009.RAW
Date & Time Acquired: 11/29/2021 3:15:43 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.234	.2	.209	104.39	-
*1-Chlorooctadecane	13.039	.2	.213	106.7	-

DRO Area:1.903863E+08 DRO Amount: 6.07231
TEH Area:2.010924E+08 TEH Amount: 6.413776

Batch ID: 161631



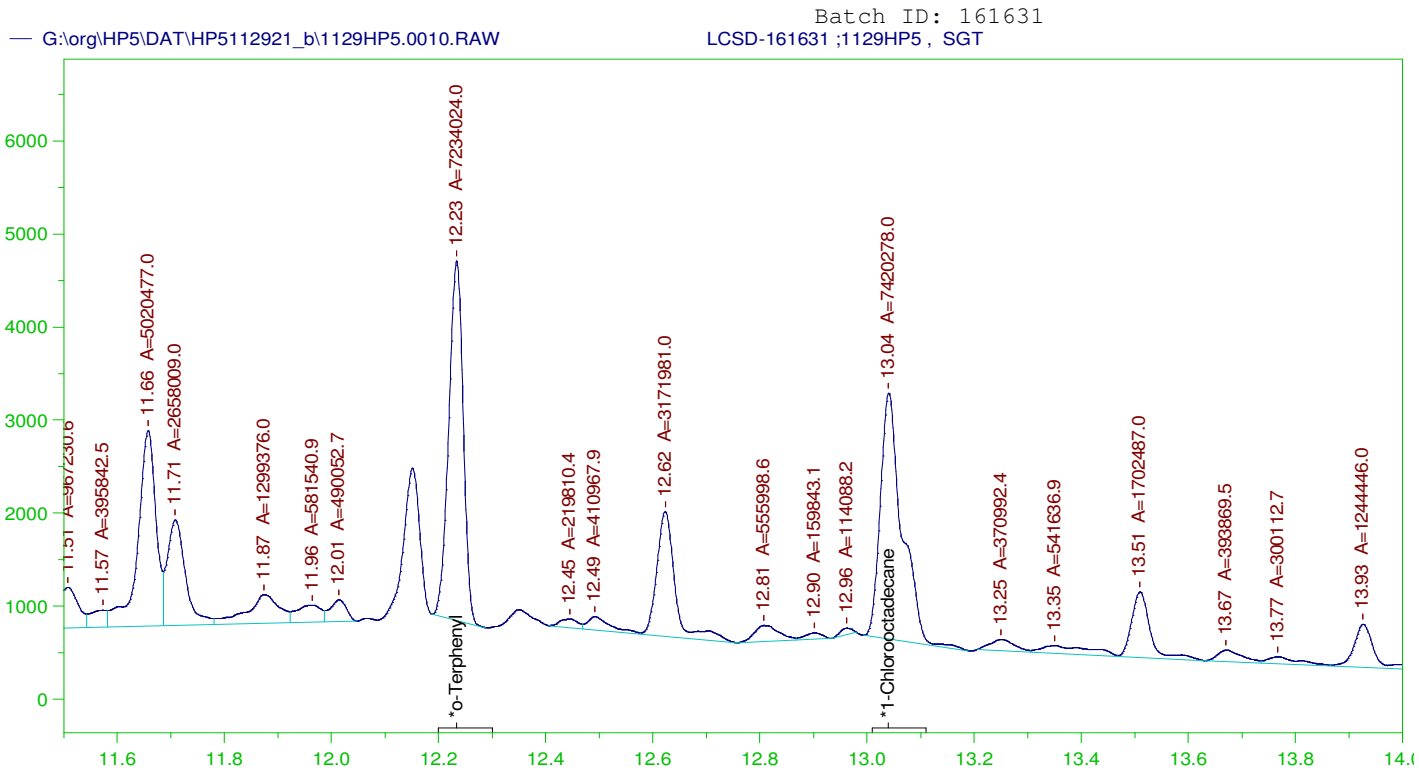
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: LCSD-161631 ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0010.RAW
Date & Time Acquired: 11/29/2021 3:58:17 PM
Method File: G:\Org\HP5\Methods\D3_8015-112910-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.234	.2	.347	173.57	-
*1-Chlorooctadecane	13.04	.2	.405	202.61	-

DRO Area:4.087952E+08 DRO Amount: 13.03839
TEH Area:4.363722E+08 TEH Amount: 13.91795



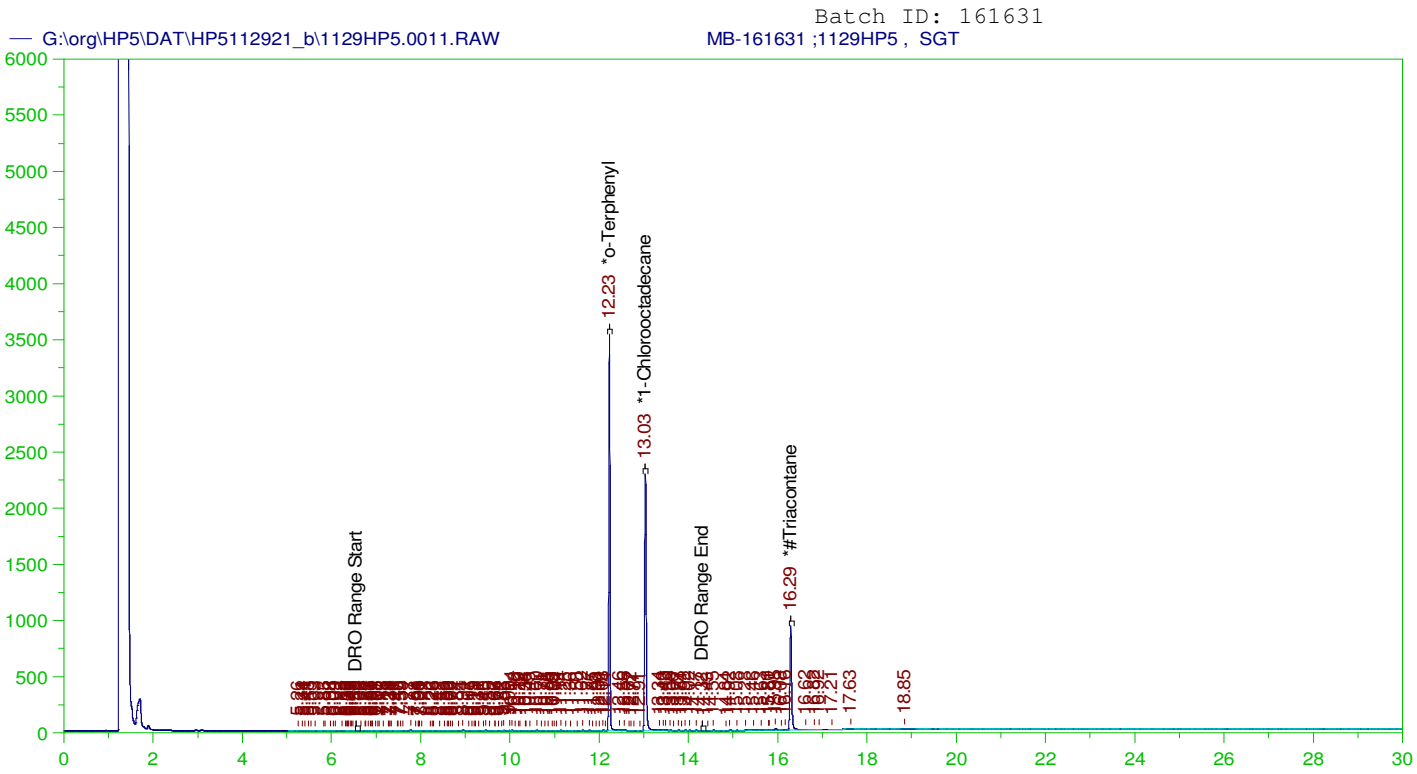
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: LCSD-161631 ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0010.RAW
Date & Time Acquired: 11/29/2021 3:58:17 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.234	.2	.204	101.86	-
*1-Chlorooctadecane	13.04	.2	.209	104.48	-

DRO Area:1.982458E+08 DRO Amount: 6.322985
TEH Area:2.104271E+08 TEH Amount: 6.711505

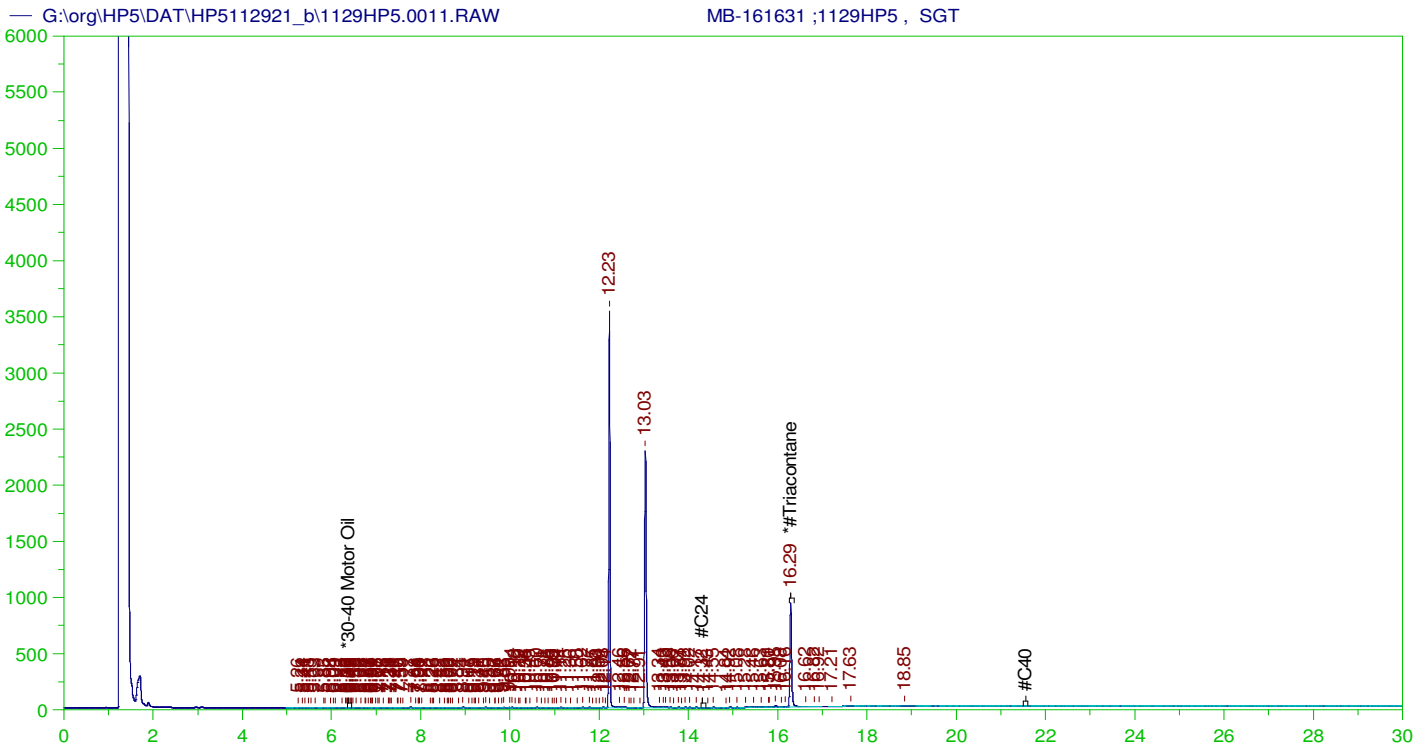


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: MB-161631 ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0011.RAW
Date & Time Acquired: 11/29/2021 4:40:48 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.225	.2	.192	95.79	-
*1-Chlorooctadecane	13.032	.2	.15	75.24	-
*#Triacontane	16.289	.2	.091	45.34	-

DRO Area:382071.8 DRO Amount: 1.218606E-02
TEH Area:571536.5 TEH Amount: 1.822897E-02



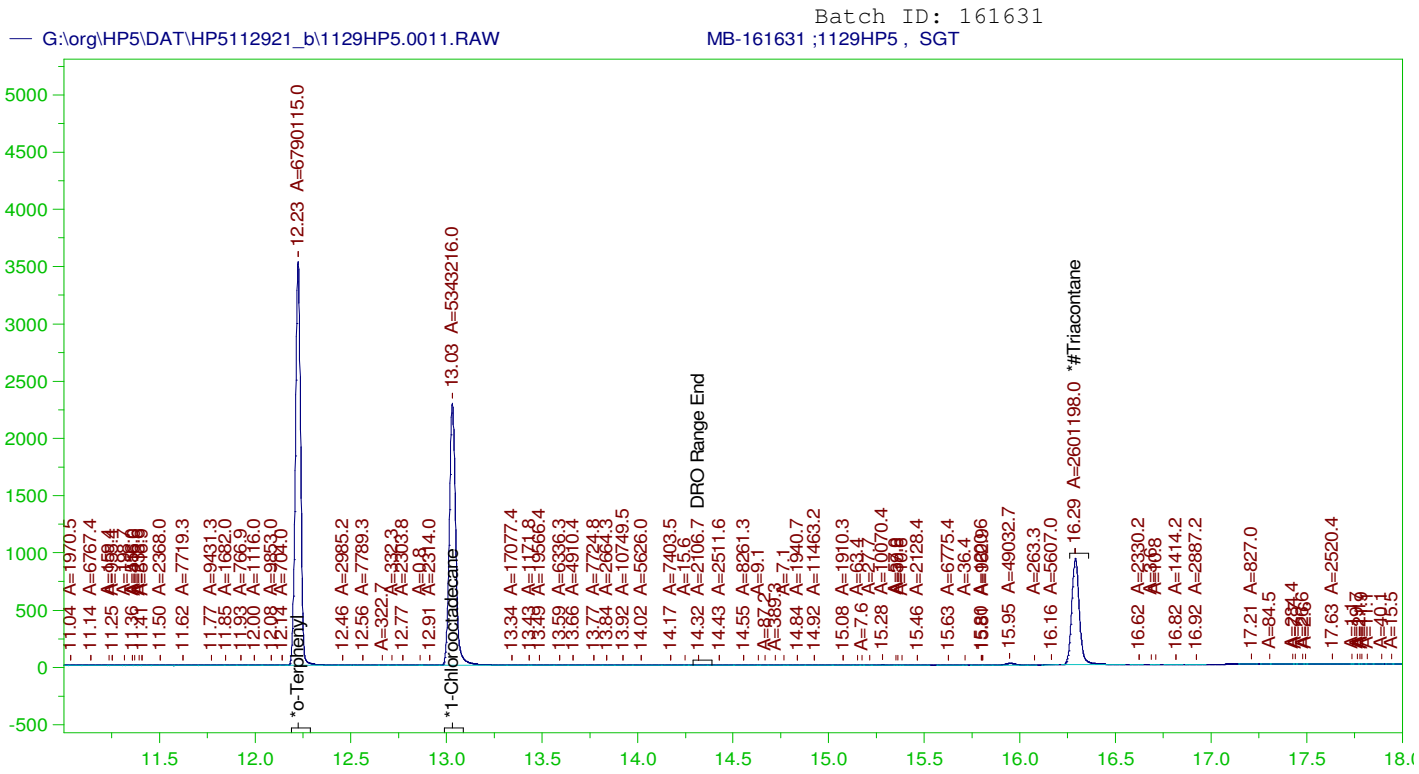
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: MB-161631 ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0011.RAW
Date & Time Acquired: 11/29/2021 4:40:48 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-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 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.289	.5	.091	18.14	-

RRO Area:141783.9 RRO AMOUNT: 4.967483E-03



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MB-161631 ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0011.RAW
Date & Time Acquired: 11/29/2021 4:40:48 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

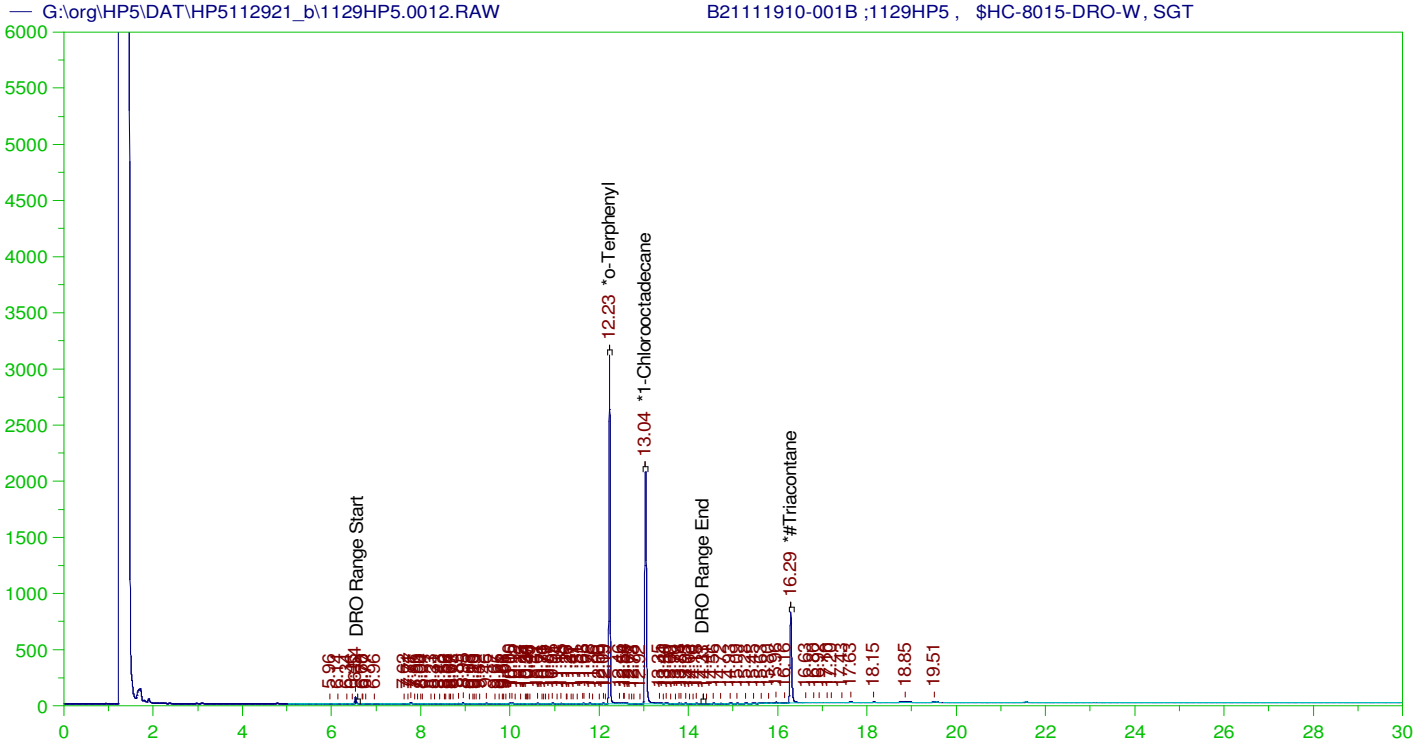
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.225	.2	.191	95.61	-
*1-Chlorooctadecane	13.032	.2	.15	75.24	-
*#Triacontane	16.289	.2	.09	44.96	-

DRO Area:387729.8 DRO Amount: 1.236652E-02
TEH Area:590135.9 TEH Amount: 0.0188222

ERH1725 (RHMW15 Zone 5) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0012.RAW B21111910-001B ;1129HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111910-001B ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0012.RAW
Date & Time Acquired: 11/29/2021 5:23:59 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.228	.196	.166	84.85	-
*1-Chlorooctadecane	13.036	.196	.134	68.26	-
*#Triacontane	16.29	.196	.079	40.11	-

DRO Area:476194.9 DRO Amount: 1.489028E-02
TEH Area:803809.8 TEH Amount: 2.513456E-02

ERH1725 (RHMW15 Zone 5) Batch ID: 161631

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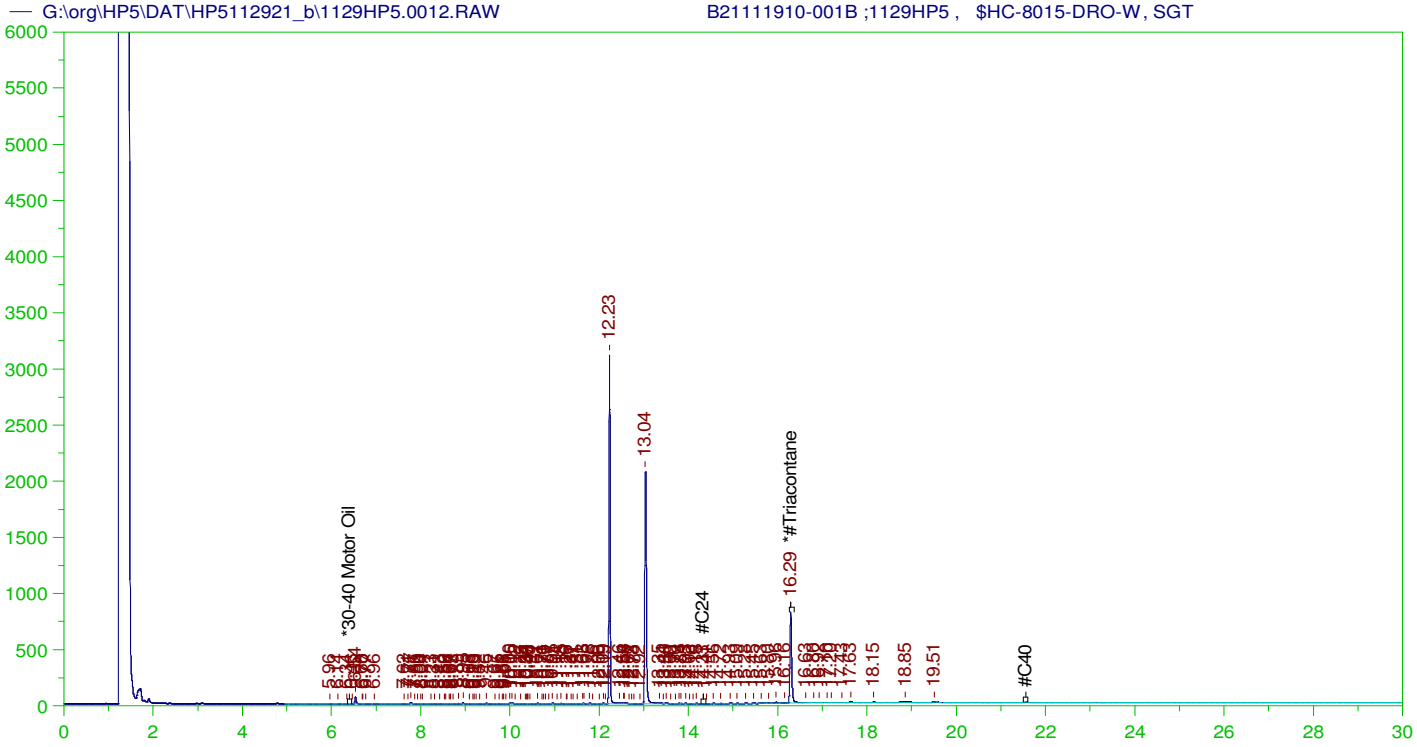


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111910-001B ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0012.RAW
Date & Time Acquired: 11/29/2021 5:23:59 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

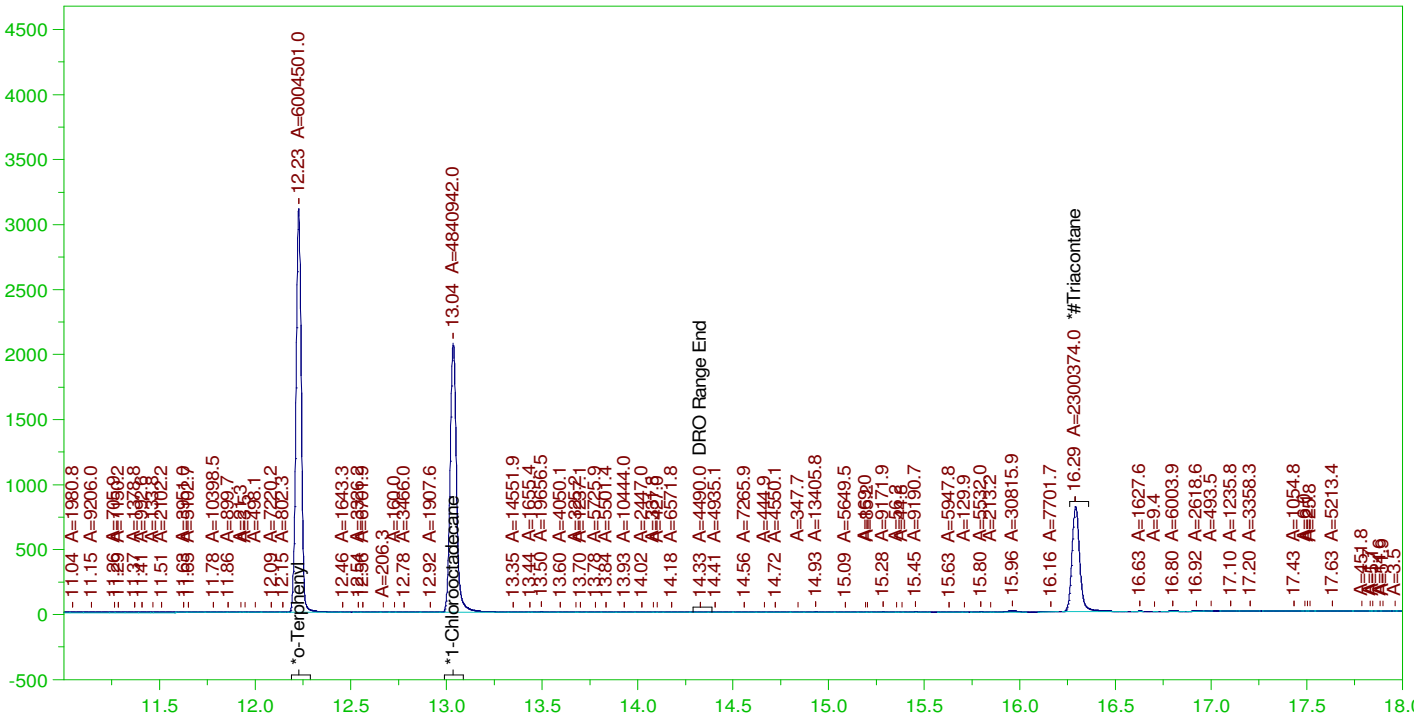
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.29	.49	.079	16.04	-

RRO Area:167885.4 RRO AMOUNT: 5.76663E-03

ERH1725 (RHMW15 Zone 5) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0012.RAW B21111910-001B ;1129HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111910-001B ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0012.RAW
Date & Time Acquired: 11/29/2021 5:23:59 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

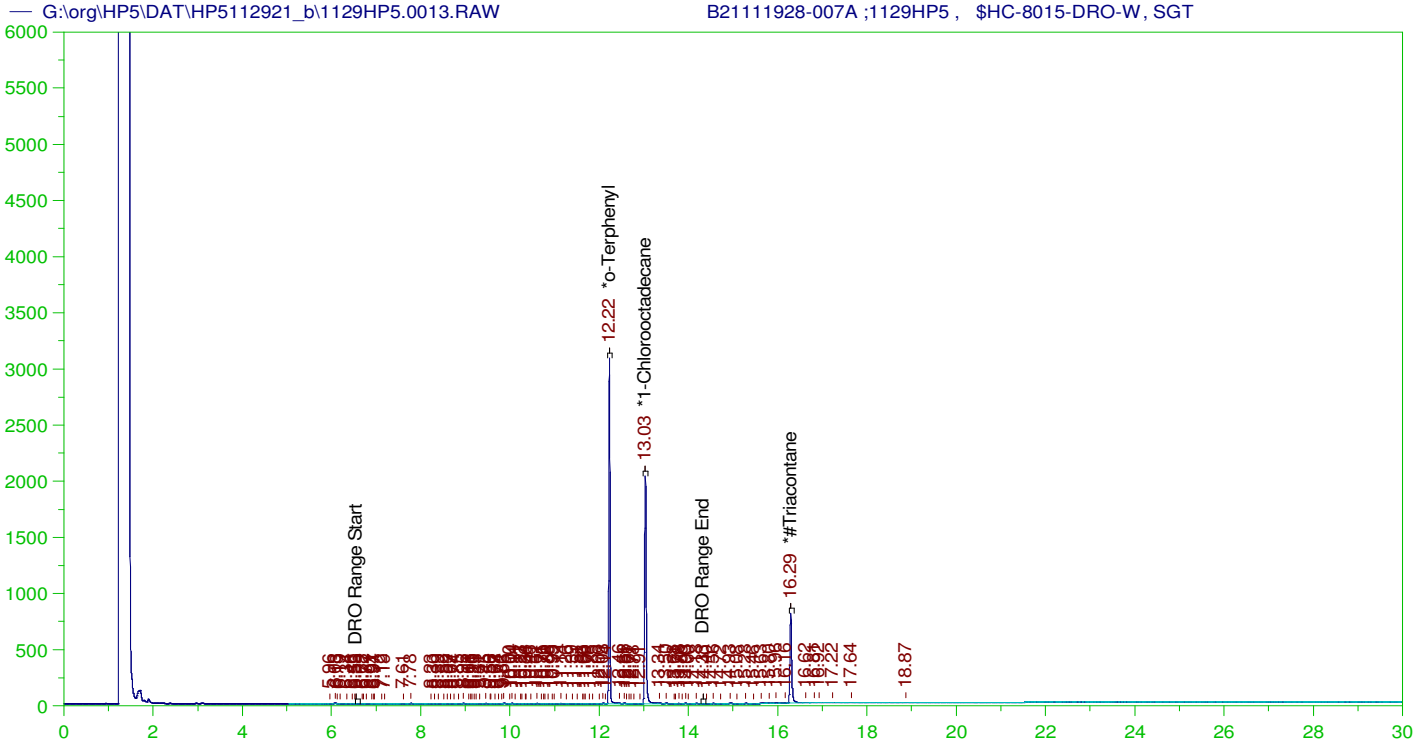
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.228	.196	.166	84.55	-
*1-Chlorooctadecane	13.036	.196	.134	68.16	-
*#Triacontane	16.29	.196	.078	39.76	-

DRO Area:399552.8 DRO Amount: 1.249373E-02
TEH Area:746348.9 TEH Amount: 0.0233378

ERH1936 (RHSF) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0013.RAW B21111928-007A ;1129HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-007A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0013.RAW
Date & Time Acquired: 11/29/2021 6:07:12 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

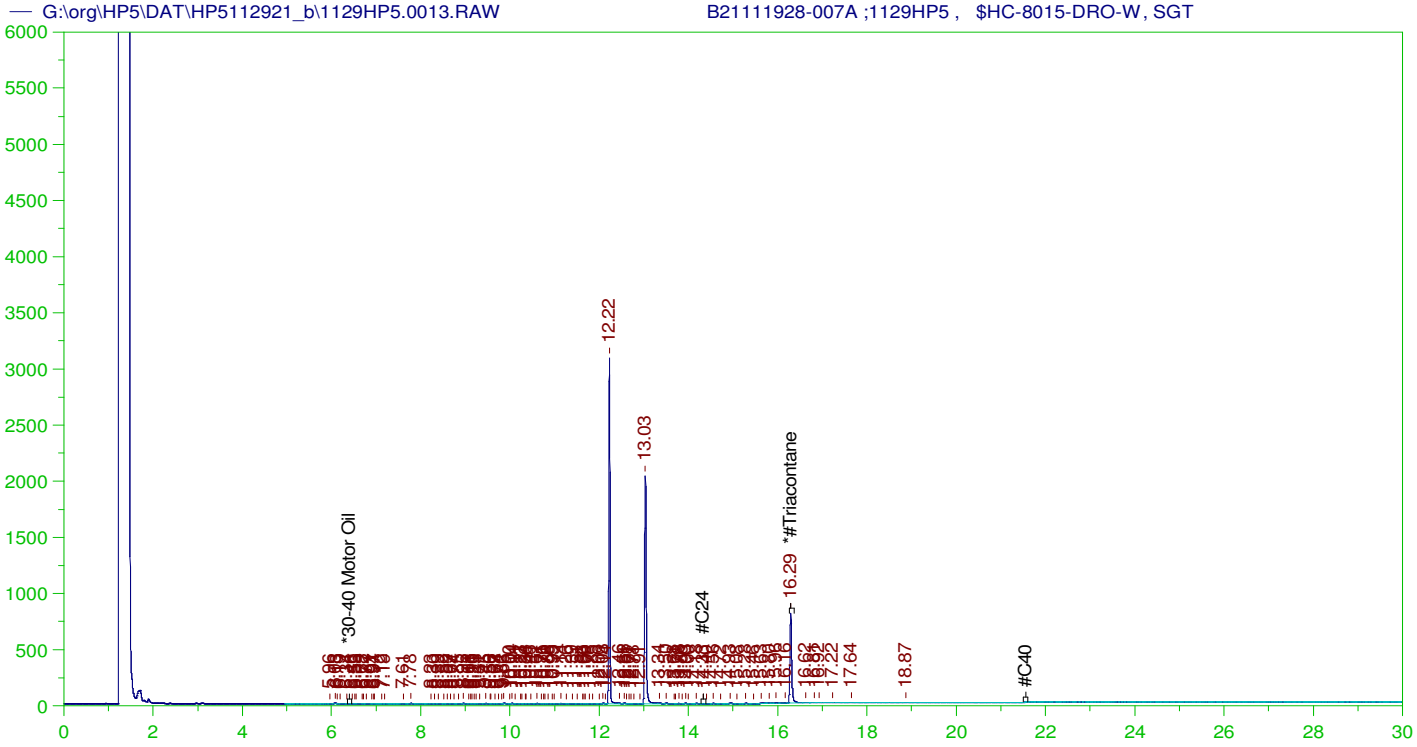
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.225	.191	.161	84.38	-
*1-Chlorooctadecane	13.031	.191	.128	67.04	-
*#Triacontane	16.29	.191	.077	40.24	-

DRO Area:392535.7 DRO Amount: 1.198067E-02
TEH Area:566417.6 TEH Amount: 1.728776E-02

ERH1936 (RHSF) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0013.RAW B21111928-007A ;1129HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-007A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0013.RAW
Date & Time Acquired: 11/29/2021 6:07:12 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

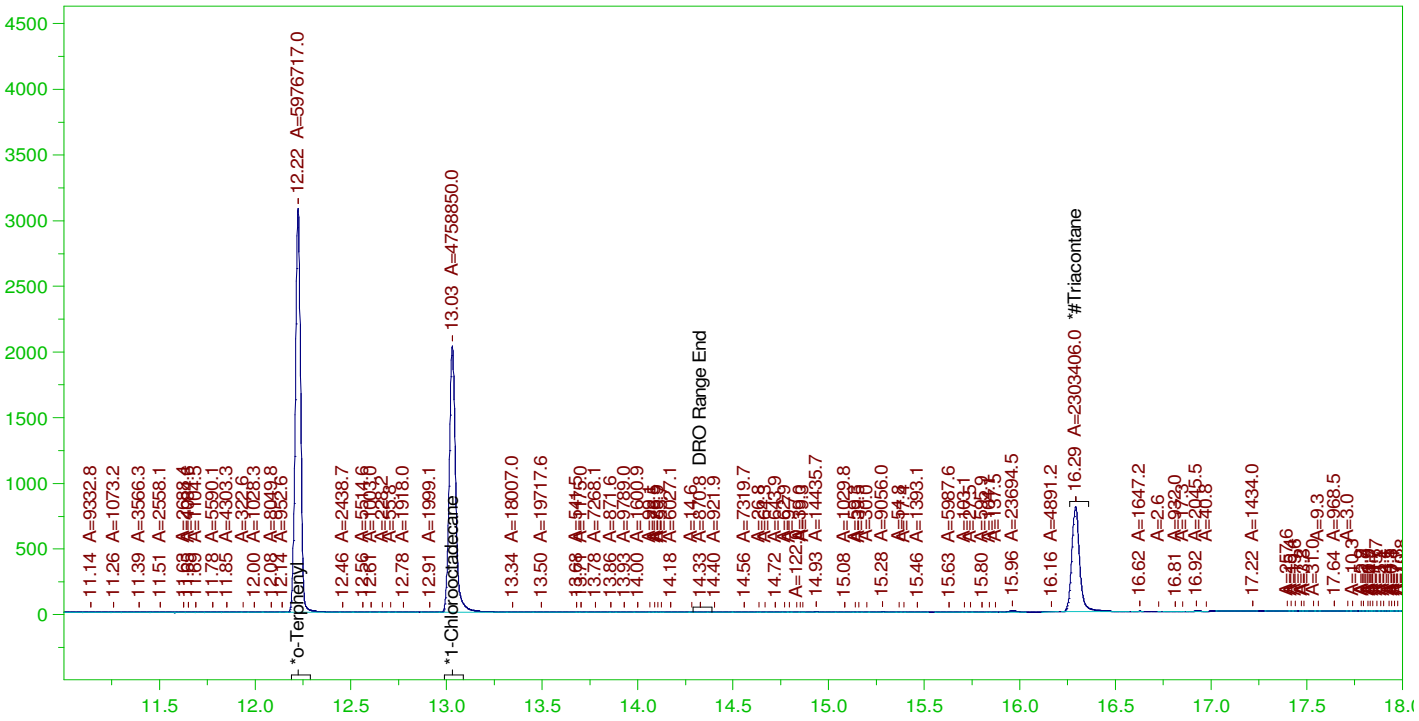
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.29	.478	.077	16.1	-

RRO Area:97903.08 RRO AMOUNT: 3.282384E-03

ERH1936 (RHSF) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0013.RAW B21111928-007A ;1129HP5 , $HC-8015-DRO-W, SGT



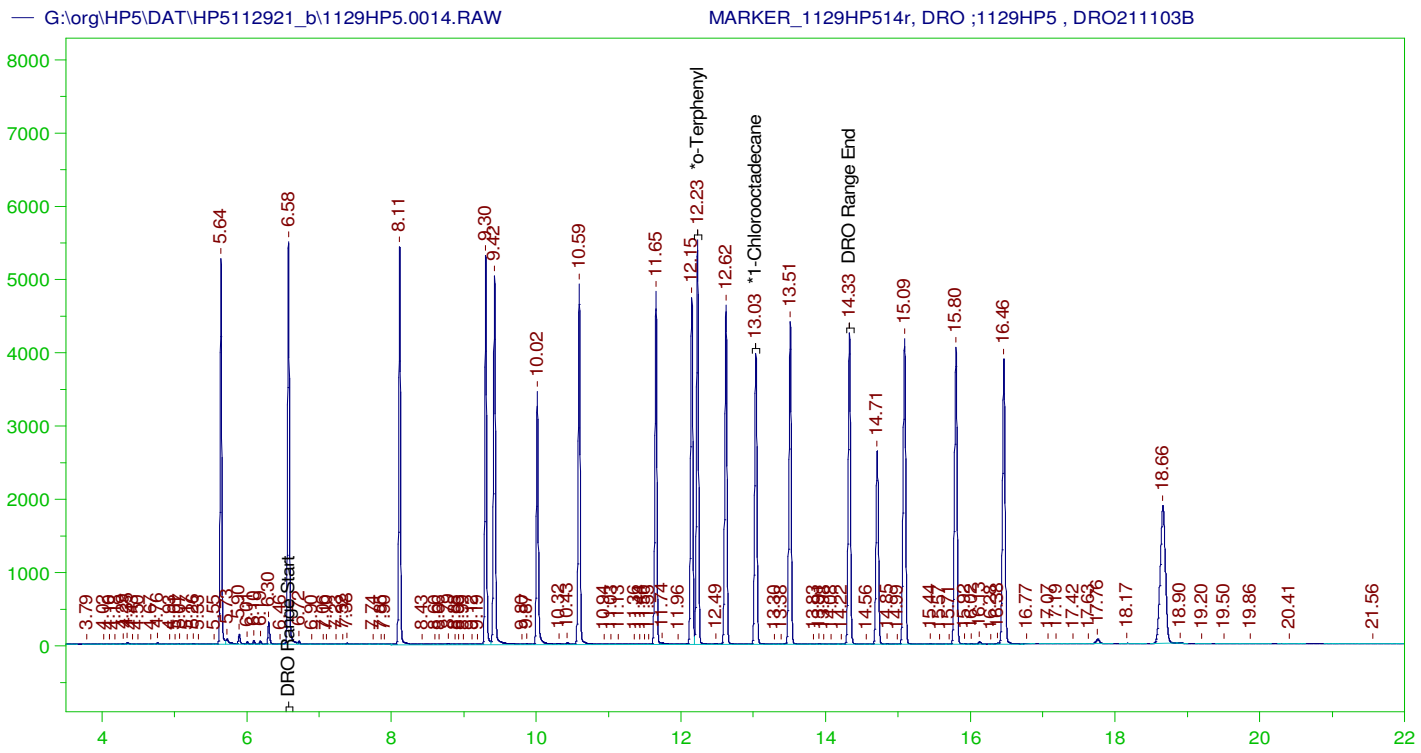
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-007A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0013.RAW
Date & Time Acquired: 11/29/2021 6:07:12 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1045 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.225	.191	.161	84.16	-
*1-Chlorooctadecane	13.031	.191	.128	67.01	-
*#Triacontane	16.29	.191	.076	39.81	-

DRO Area:360109.3 DRO Amount: 1.099098E-02
TEH Area:539262.4 TEH Amount: 1.645895E-02



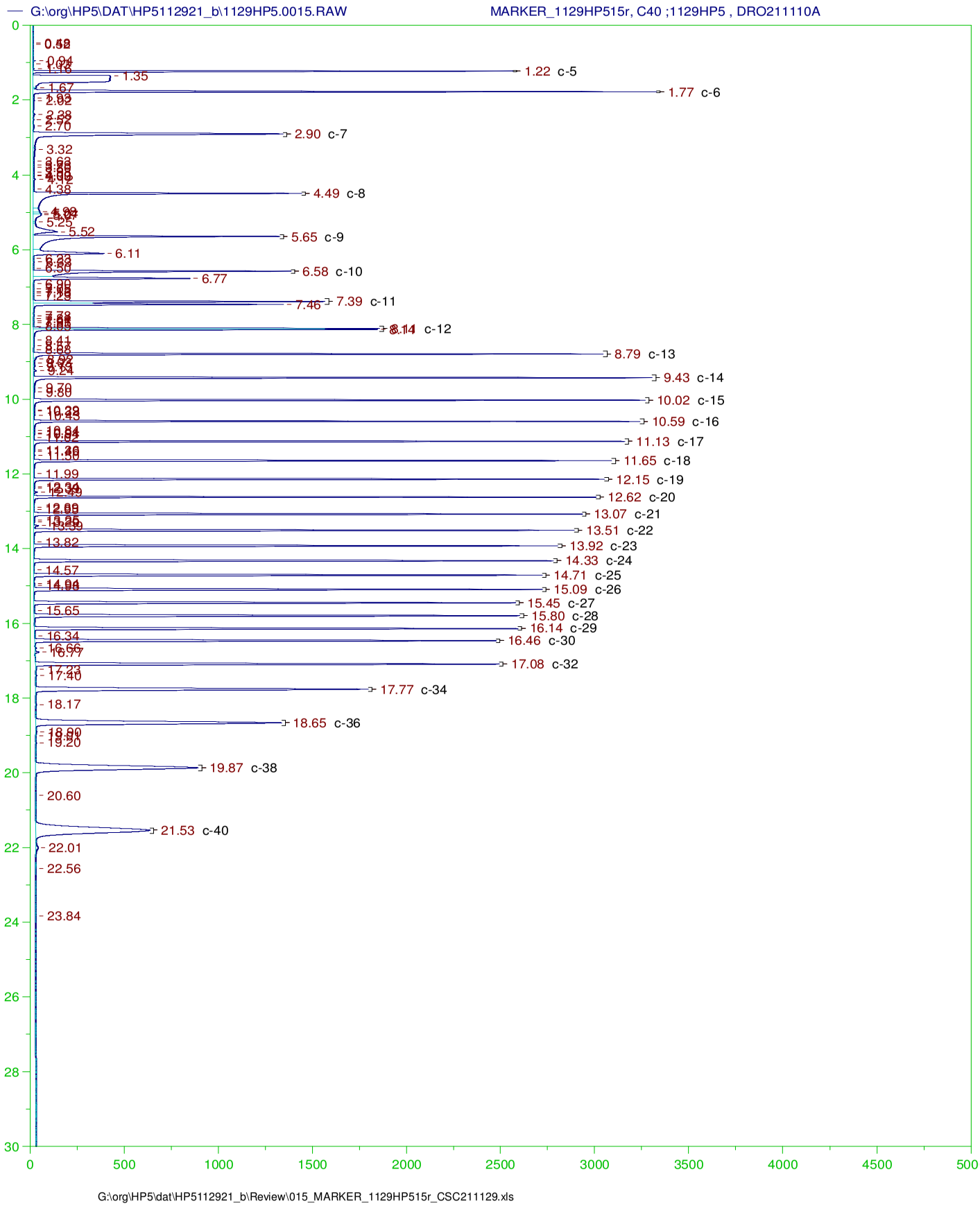
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1129HP514r, DRO ;1129HP5 , DRO211103B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0014.RAW
Date & Time Acquired: 11/29/2021 6:50:07 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.23	.2	.297	148.47	-
*1-Chlorooctadecane	13.035	.2	.24	120.12	-

DRO Area:1.01374E+08 DRO Amount: 3.233292
TEH Area:1.574822E+08 TEH Amount: 5.022844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MARKER_1129HP515r, C40 ;1129HP5 , DRO211110A
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1.35
1.77 c-6
2.90 c-7
4.49 c-8
5.52
5.65 c-9
6.11
6.58 c-10
6.77
7.39 c-11
7.46
8.14 c-12
8.79 c-13
9.43 c-14
10.02 c-15
10.59 c-16
11.13 c-17
11.65 c-18
11.99
12.15 c-19
12.62 c-20
13.07 c-21
13.51 c-22
13.82
13.92 c-23
14.33 c-24
14.57
14.71 c-25
15.09 c-26
15.45 c-27
15.65
15.80 c-28
16.14 c-29
16.34
16.46 c-30
16.77
17.08 c-32
17.40
17.77 c-34
18.17
18.65 c-36
19.20
19.87 c-38
20.60
21.53 c-40
22.01
22.56
23.84
0
500
1000
1500
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2500
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3500
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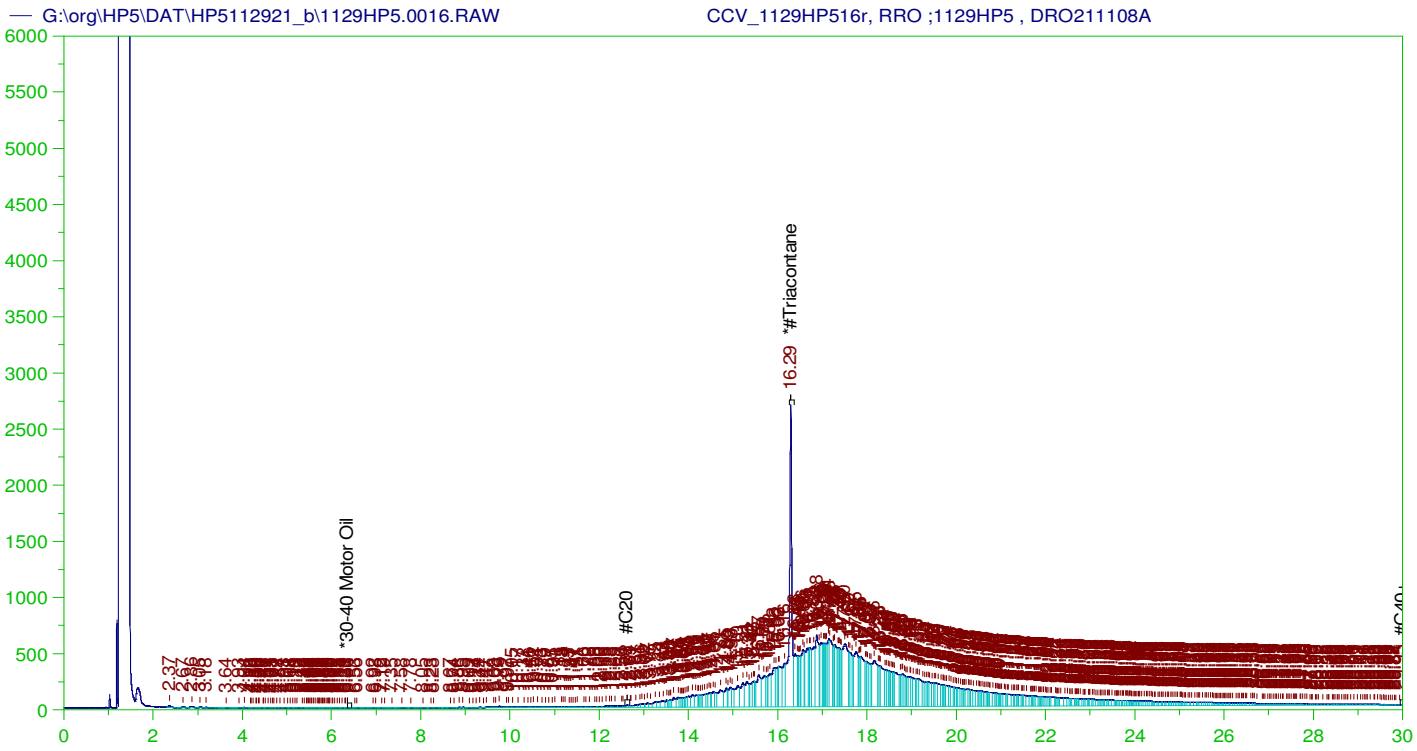


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1129HP516r, RRO ;1129HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0016.RAW
Date & Time Acquired: 11/29/2021 8:16:02 PM
Method File: G:\Org\HP5\Methods\DC_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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.	347.007	69.4	-

~~RRO~~ TEH (Oil Range) Area:1.378214E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4828.655

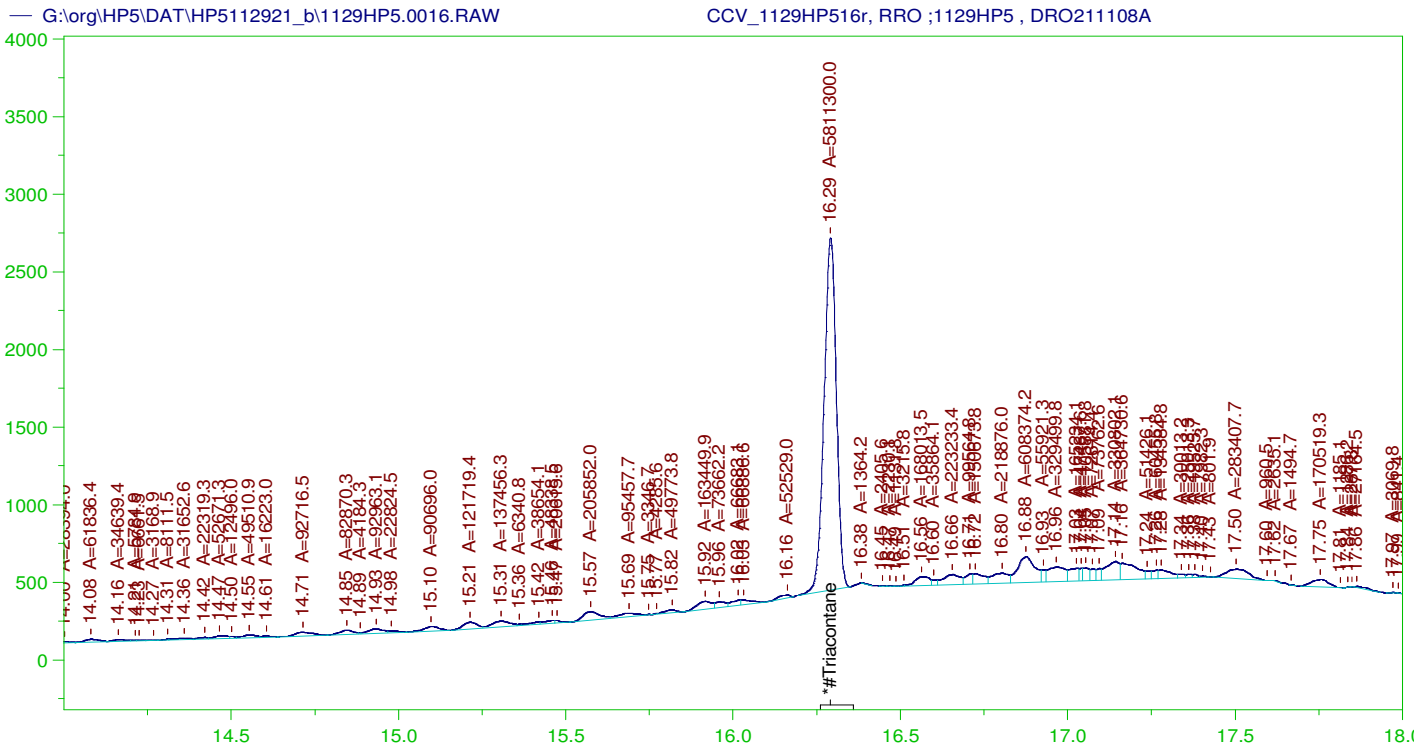
CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0016.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.067	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.291	200.	347.007	173.5	75-125

AMN 12/14/2021

G:\org\HP5\dat\HP5112921_b\Review\016_CCV_1129HP516r_DC_ORO-AF-L%.xls



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1129HP516r, RRO ;1129HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0016.RAW
Date & Time Acquired: 11/29/2021 8:16:02 PM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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

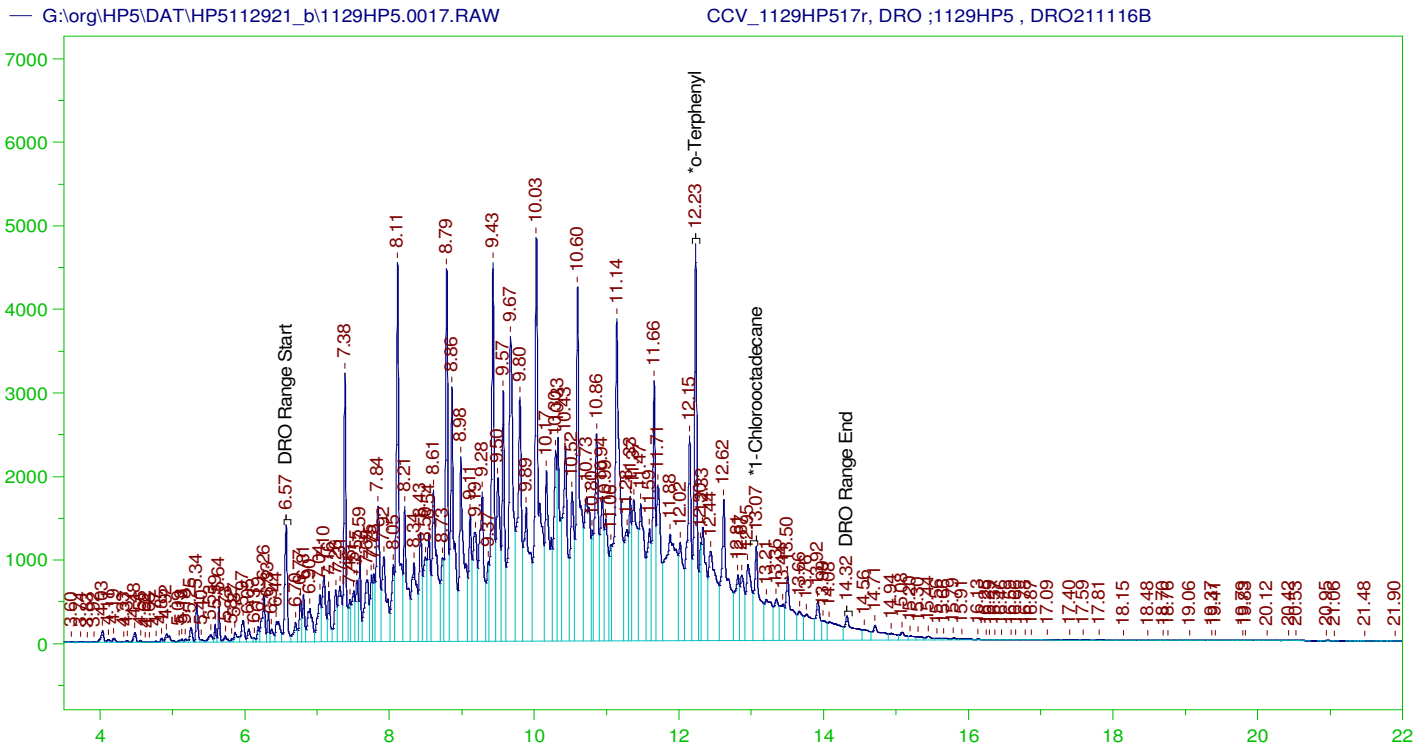
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.291	500.	200.874	40.17	-

RRO Area:6569396 RRO AMOUNT: 230.1626

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0016.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.067	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.291	200.	200.874	100.44	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1129HP517r, DRO ;1129HP5 , DRO211116B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0017.RAW
Date & Time Acquired: 11/29/2021 8:58:54 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

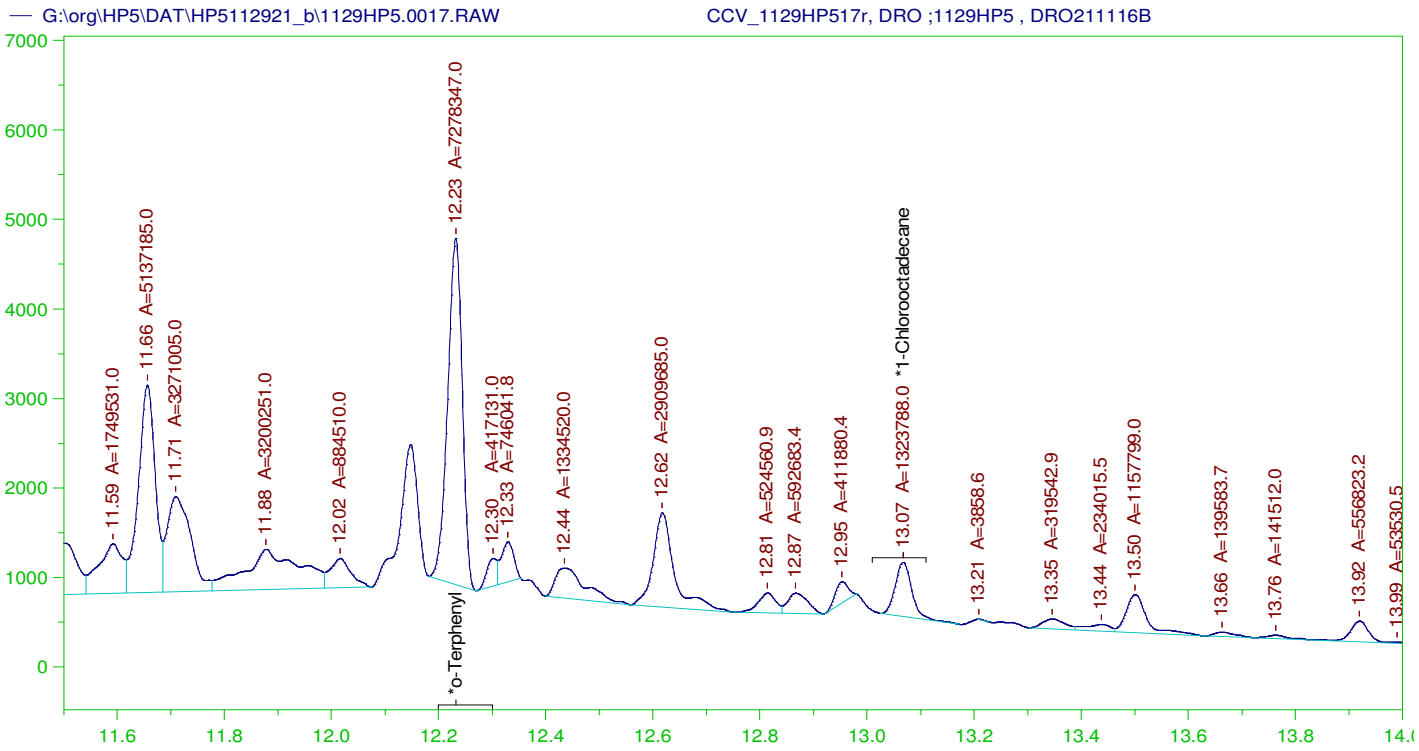
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.232	200.	339.752	169.88	-
*1-Chlorooctadecane	13.067	200.	162.245	81.12	-

DRO Area:4.729024E+08 DRO Amount: 15083.07
TEH Area:4.891662E+08 TEH Amount: 15601.8

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0017.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15601.8	104.01	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.232	200.	339.752	169.88	85-115
*1-Chlorooctadecane	13.067	200.	162.245	81.12	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1129HP517r, DRO ;1129HP5 , DRO211116B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0017.RAW
Date & Time Acquired: 11/29/2021 8:58:54 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

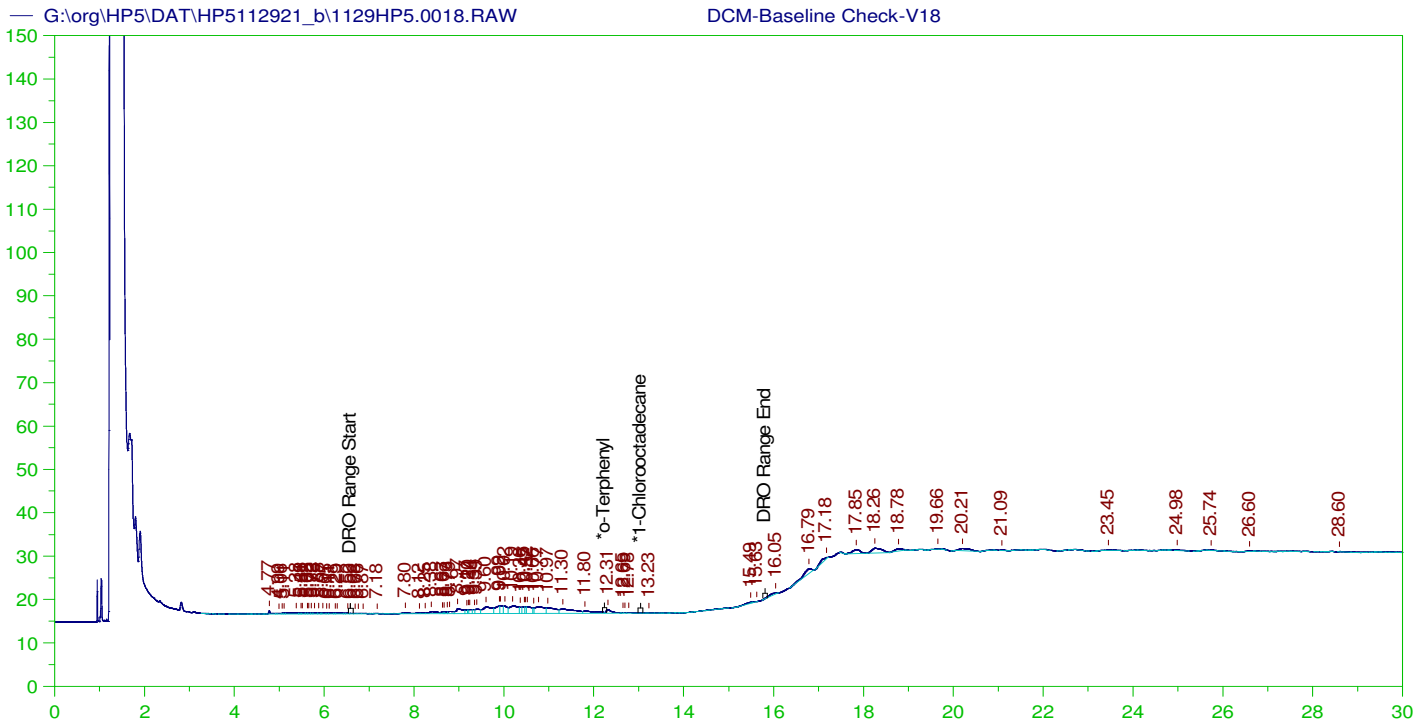
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.232	200.	204.971	102.49	-
*1-Chlorooctadecane	13.067	200.	37.28	18.64	-

DRO Area:2.617171E+08 DRO Amount: 8347.382
TEH Area:2.724317E+08 TEH Amount: 8689.122

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0017.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8689.12	57.93	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.232	200.	204.971	102.49	85-115
*1-Chlorooctadecane	13.067	200.	37.28	18.64	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V18
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0018.RAW
Date & Time Acquired: 11/29/2021 9:41:43 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

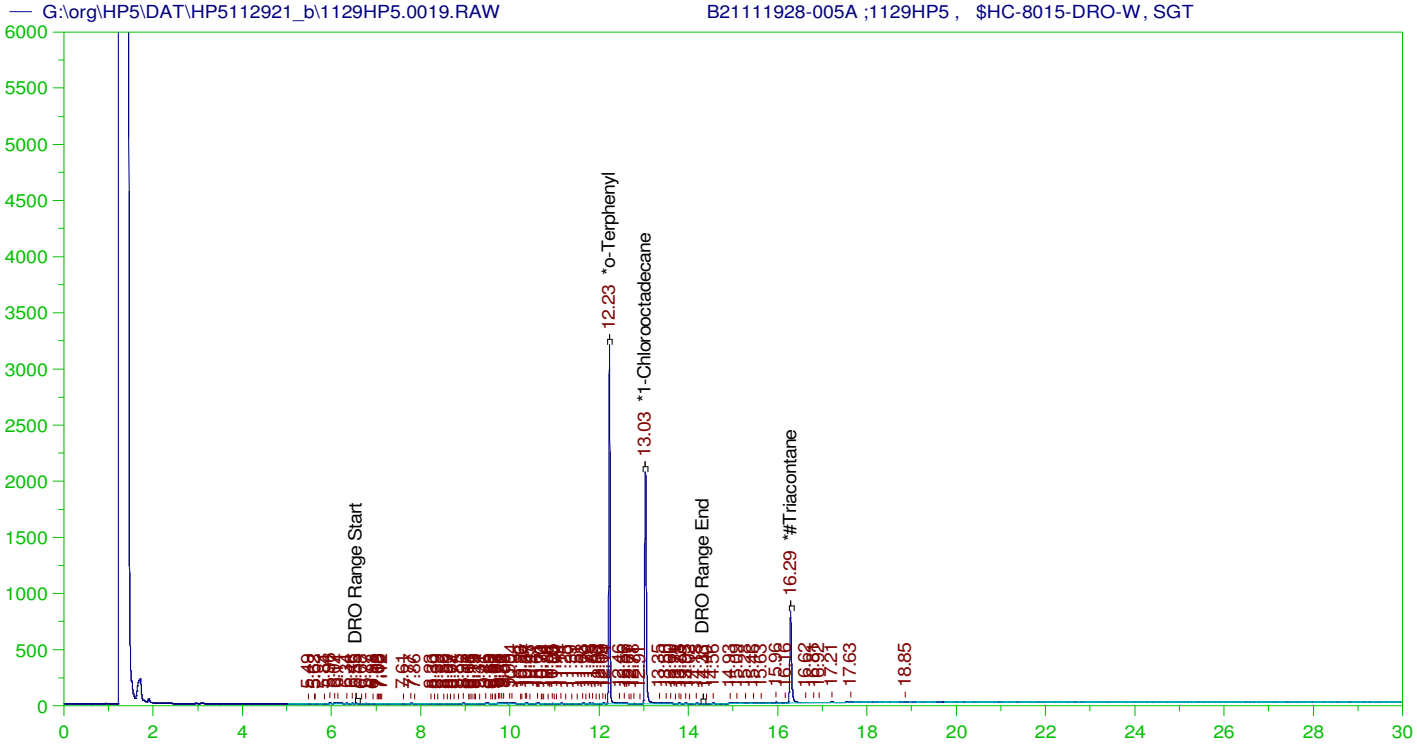
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED		%REC
*o-Terphenyl	29.877	200.	.	.	-
*1-Chlorooctadecane	29.877	200.	.	.	-

DRO Area:260267.4 DRO Amount: 8.301146
TEH Area:374283.3 TEH Amount: 11.93764

ERH1931 (RHMW2254-01) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0019.RAW B21111928-005A ;1129HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-005A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0019.RAW
Date & Time Acquired: 11/29/2021 10:24:36 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

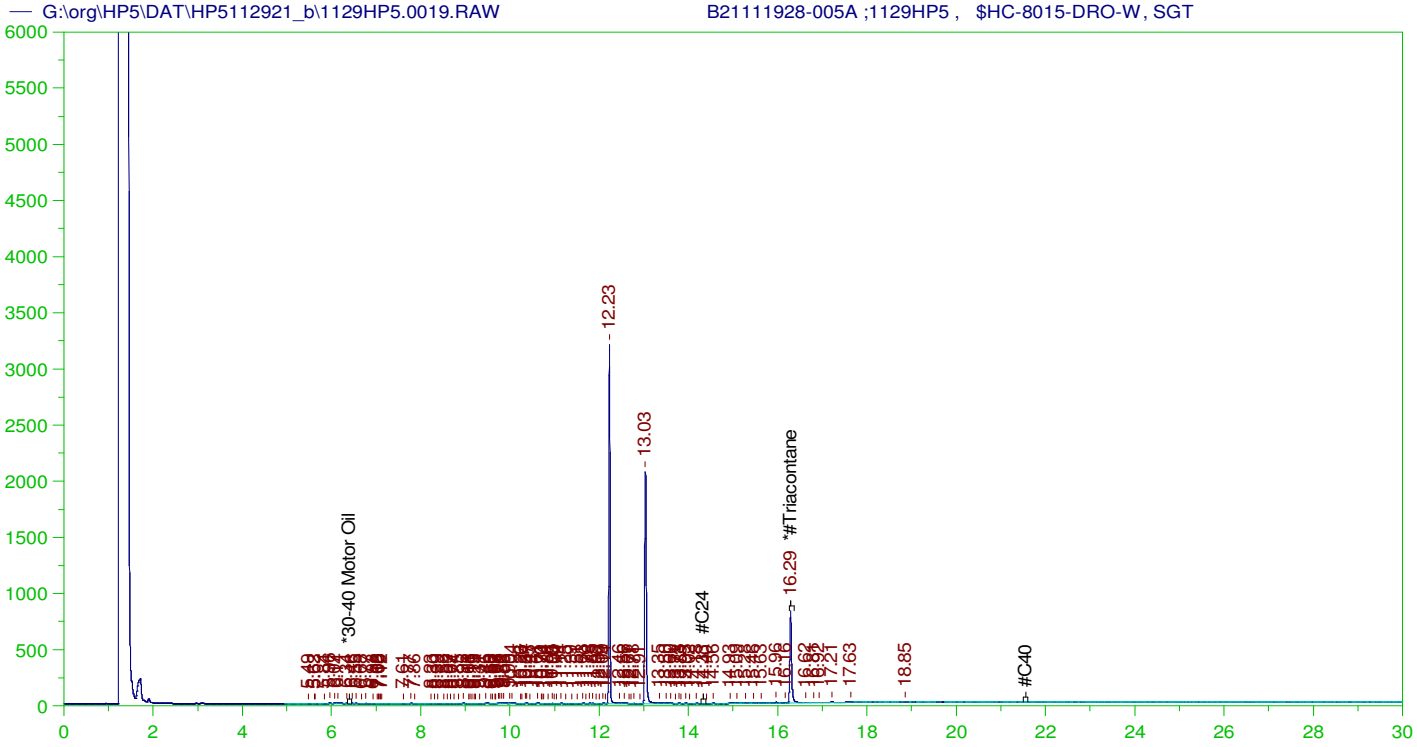
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.225	.192	.168	87.32	-
*1-Chlorooctadecane	13.033	.192	.133	69.06	-
*#Triacontane	16.287	.192	.08	41.39	-

DRO Area:418374.7 DRO Amount: 0.0128307
TEH Area:642242.9 TEH Amount: 1.969628E-02

ERH1931 (RHMW2254-01) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0019.RAW B21111928-005A ;1129HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-005A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0019.RAW
Date & Time Acquired: 11/29/2021 10:24:36 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

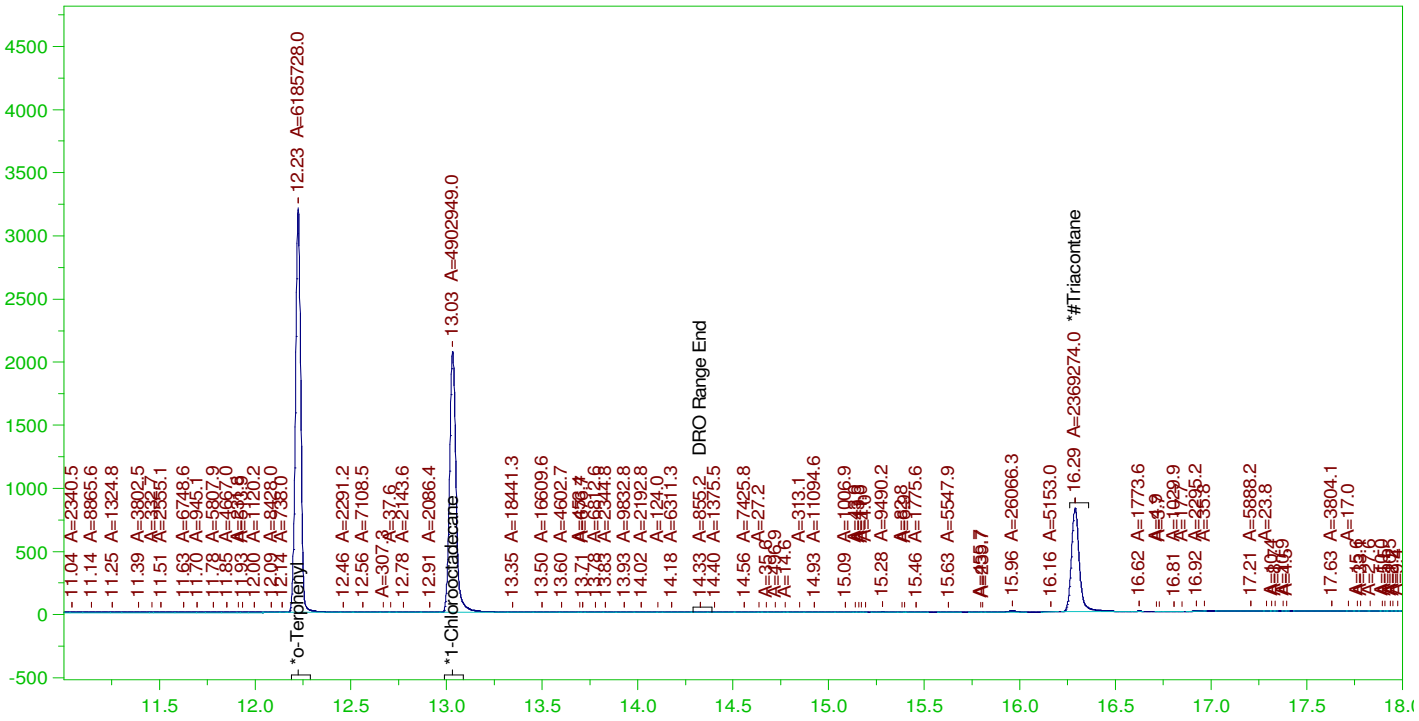
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.287	.481	.08	16.56	-

RRO Area:104471.8 RRO AMOUNT: 3.519452E-03

ERH1931 (RHMW2254-01) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0019.RAW B21111928-005A ;1129HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-005A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0019.RAW
Date & Time Acquired: 11/29/2021 10:24:36 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

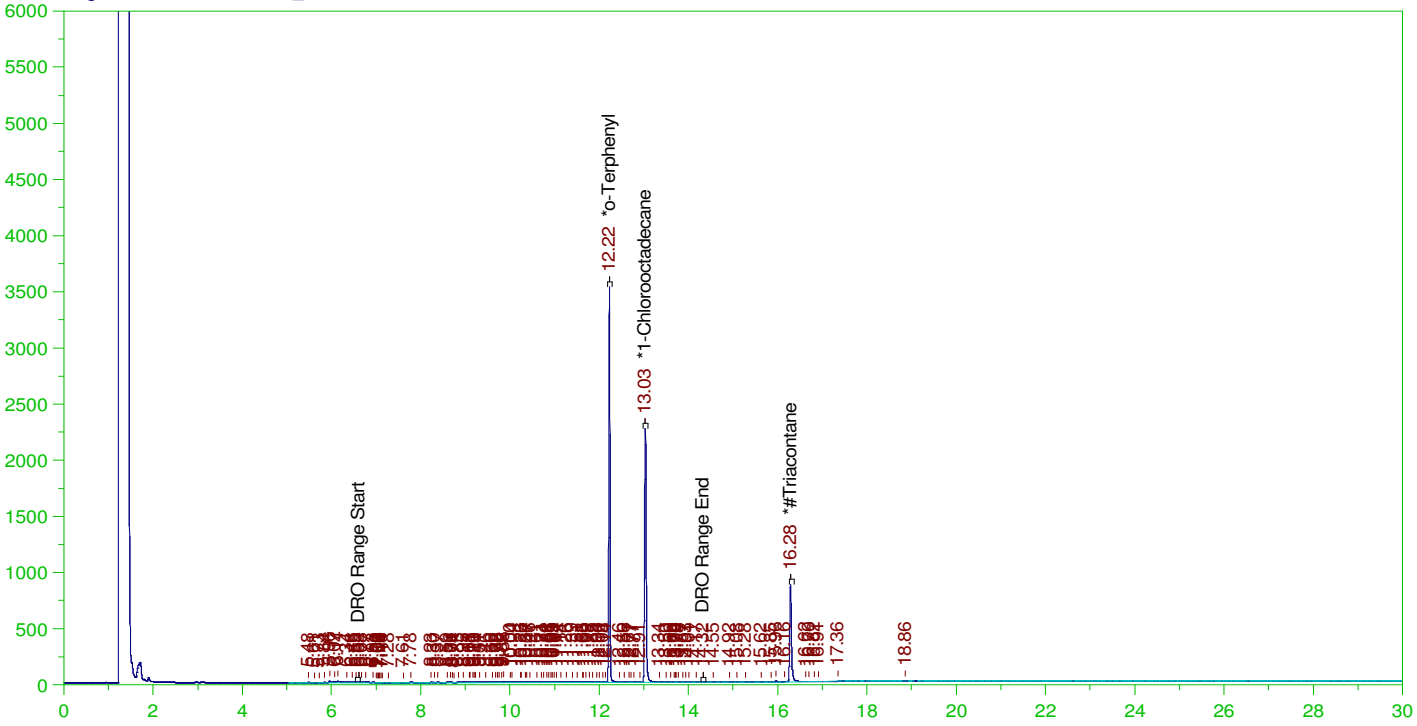
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.225	.192	.168	87.1	-
*1-Chlorooctadecane	13.033	.192	.133	69.04	-
*#Triacontane	16.287	.192	.079	40.95	-

DRO Area:392352.5 DRO Amount: 1.203265E-02
TEH Area:622744.9 TEH Amount: 1.909832E-02

ERH1934 (RHSF) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0020.RAW B21111928-006A ;1129HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-006A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0020.RAW
Date & Time Acquired: 11/29/2021 11:07:29 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.225	.192	.182	94.58	-
*1-Chlorooctadecane	13.031	.192	.144	74.76	-
*#Triacontane	16.284	.192	.085	44.14	-

DRO Area:455815.3 DRO Amount: 1.397893E-02
TEH Area:747663.9 TEH Amount: 2.292933E-02

ERH1934 (RHSF) Batch ID: 161631

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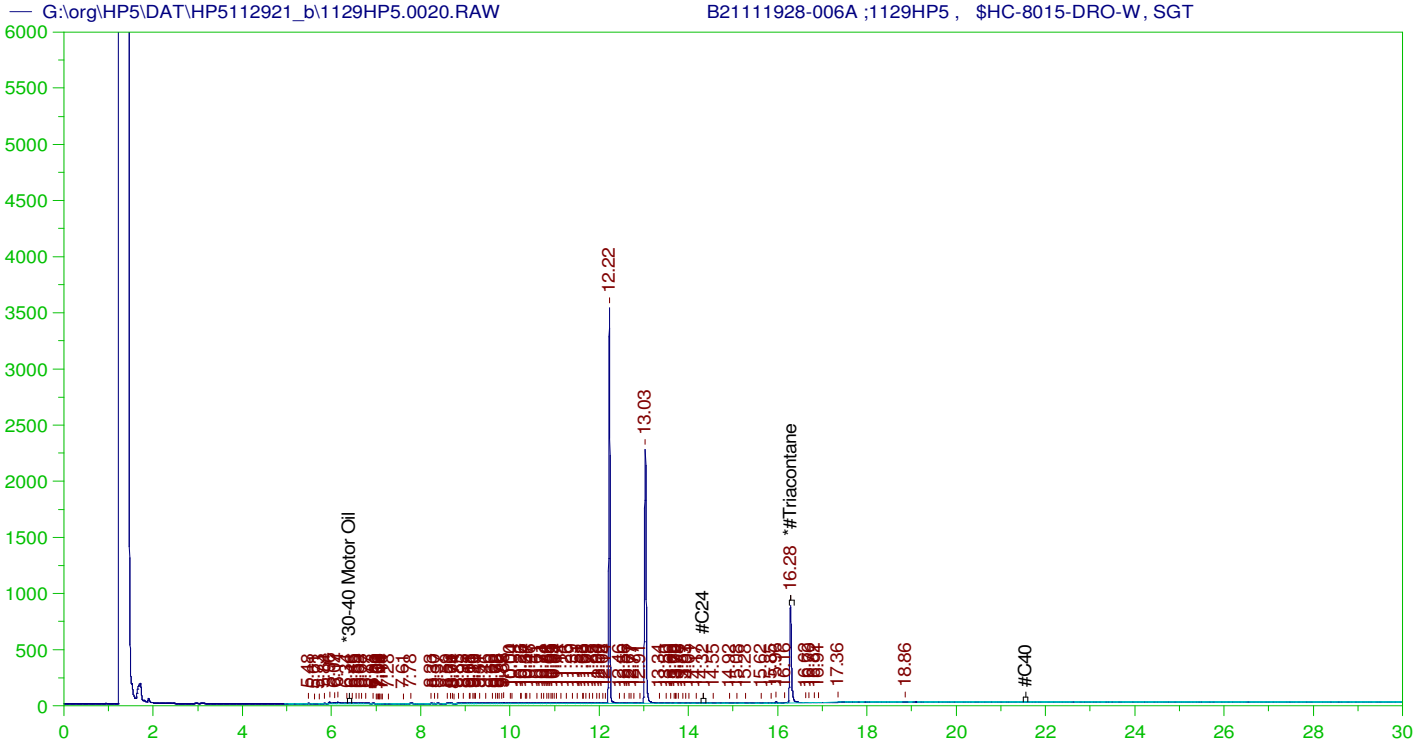

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-006A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0020.RAW
Date & Time Acquired: 11/29/2021 11:07:29 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.284	.481	.085	17.66	-

RRO Area:99071.06 RRO AMOUNT: 3.337512E-03

ERH1934 (RHSF) Batch ID: 161631

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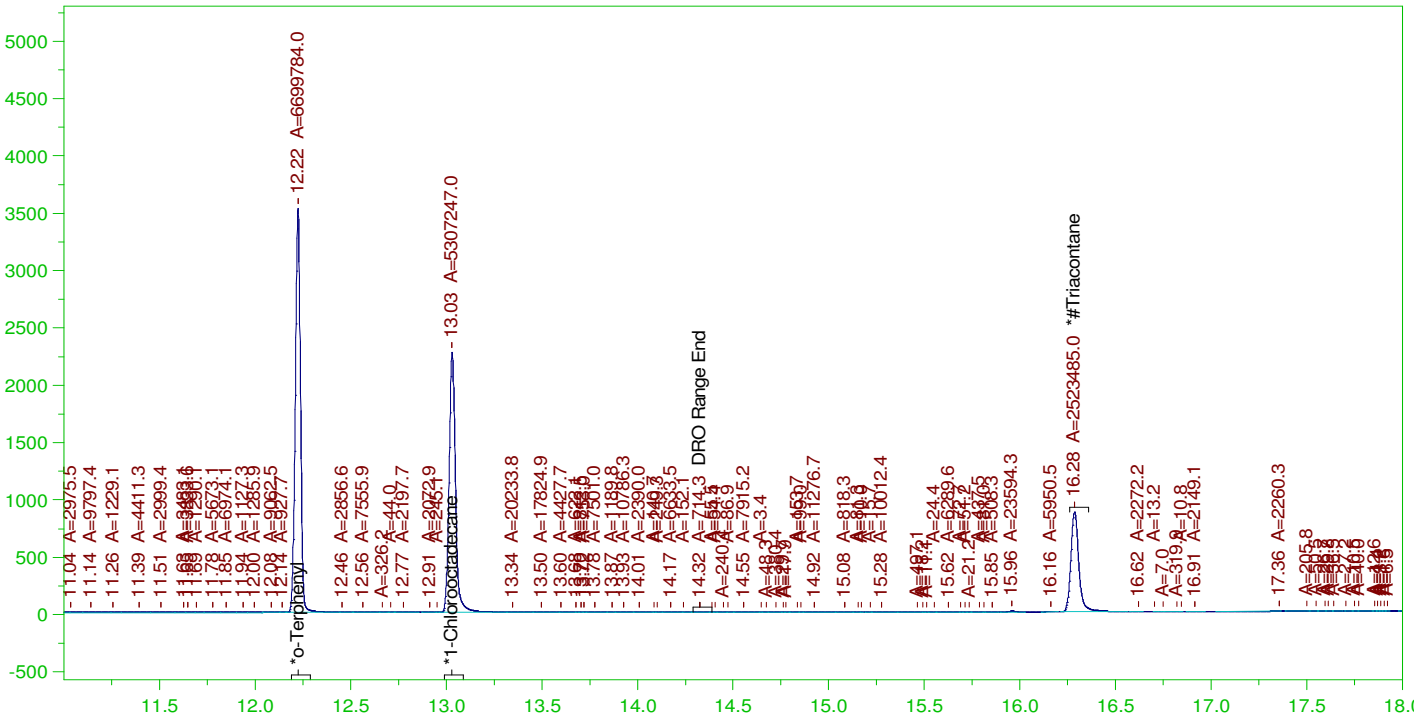


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-006A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0020.RAW
Date & Time Acquired: 11/29/2021 11:07:29 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

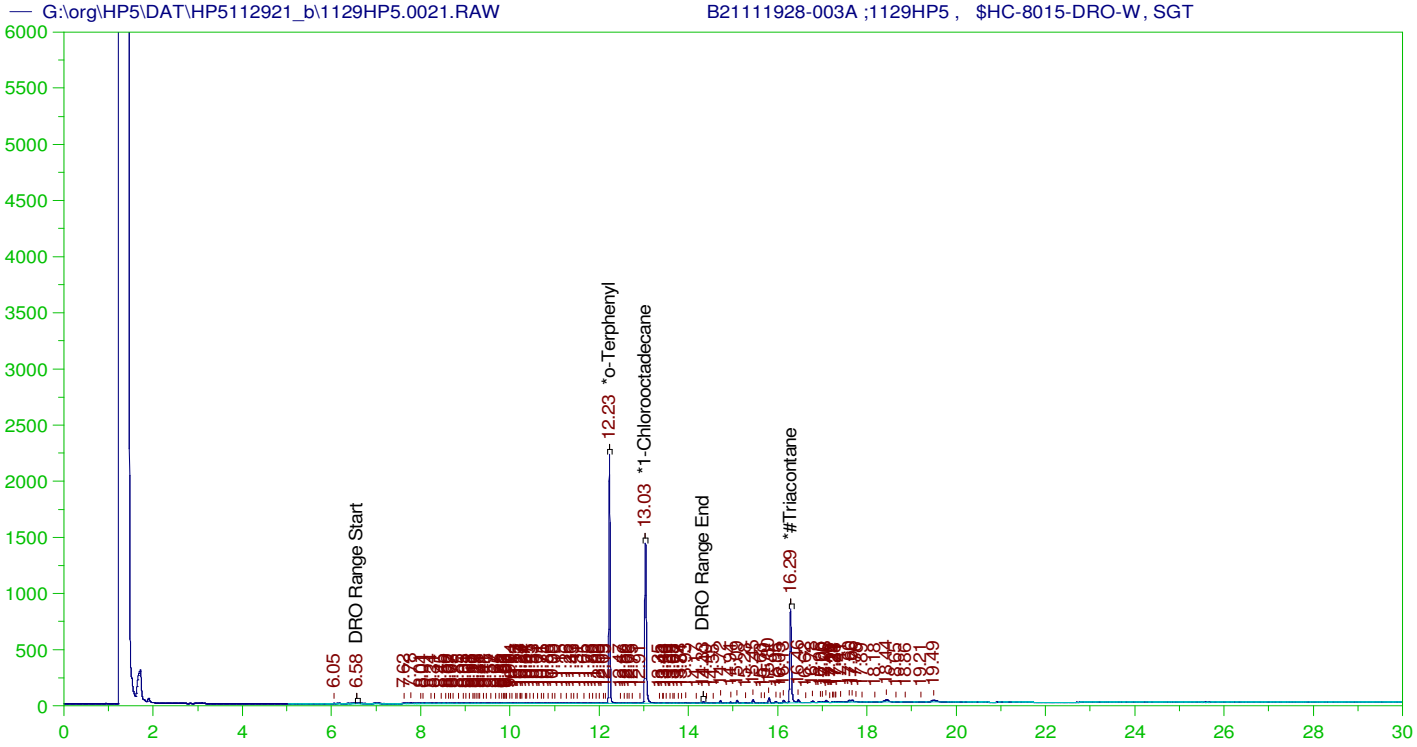
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.225	.192	.181	94.34	-
*1-Chlorooctadecane	13.031	.192	.144	74.73	-
*#Triacontane	16.284	.192	.084	43.61	-

DRO Area:436128.9 DRO Amount: 1.337519E-02
TEH Area:742422.1 TEH Amount: 2.276857E-02

ERH1925 (RHMW03) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0021.RAW B21111928-003A ;1129HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-003A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0021.RAW
Date & Time Acquired: 11/29/2021 11:50:30 PM
Method File: G:\Org\HP5\Methods\DR_8015-112921-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

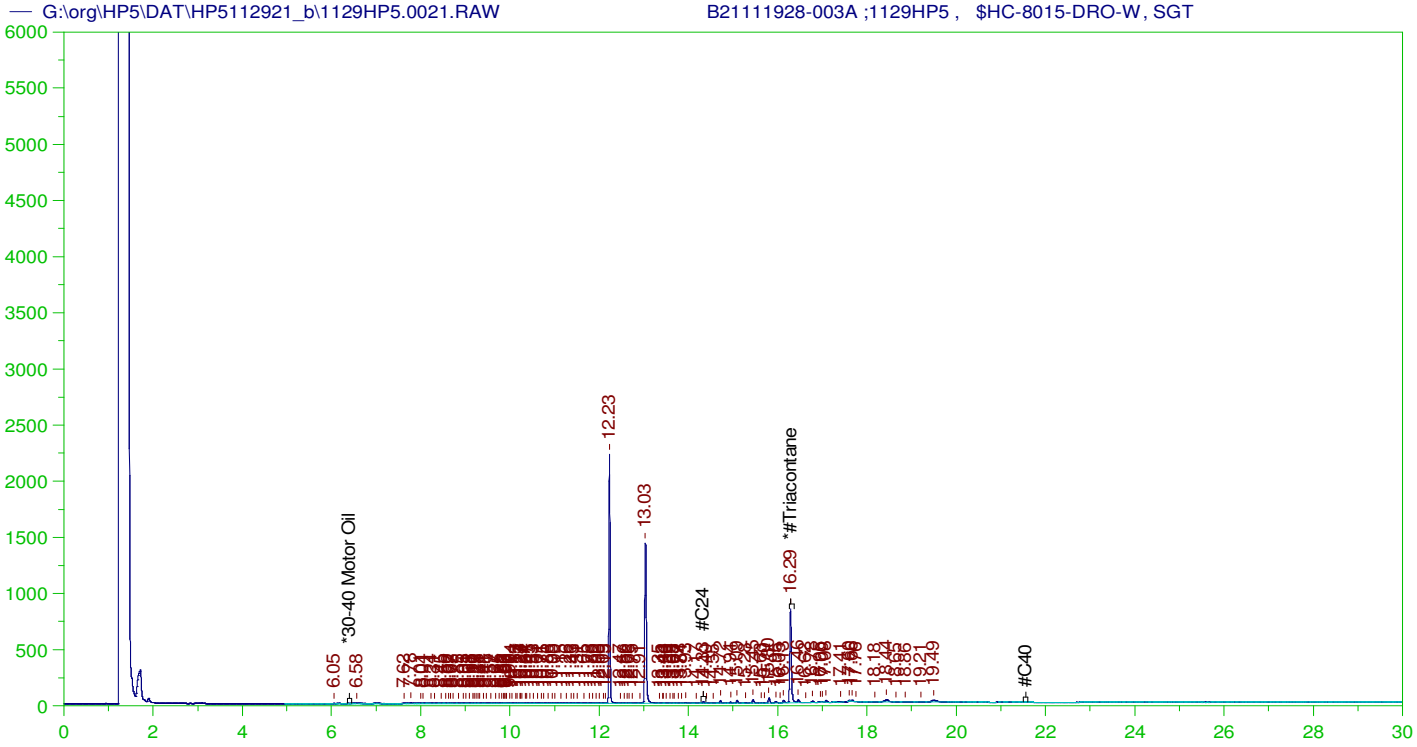
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.226	.202	.123	60.81	-
*1-Chlorooctadecane	13.034	.202	.096	47.55	-
*#Triacontane	16.285	.202	.08	39.82	-

DRO Area:441079.6 DRO Amount: 1.421019E-02
TEH Area:1957016 TEH Amount: 6.304887E-02

ERH1925 (RHMW03) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0021.RAW B21111928-003A ;1129HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-003A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0021.RAW
Date & Time Acquired: 11/29/2021 11:50:30 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

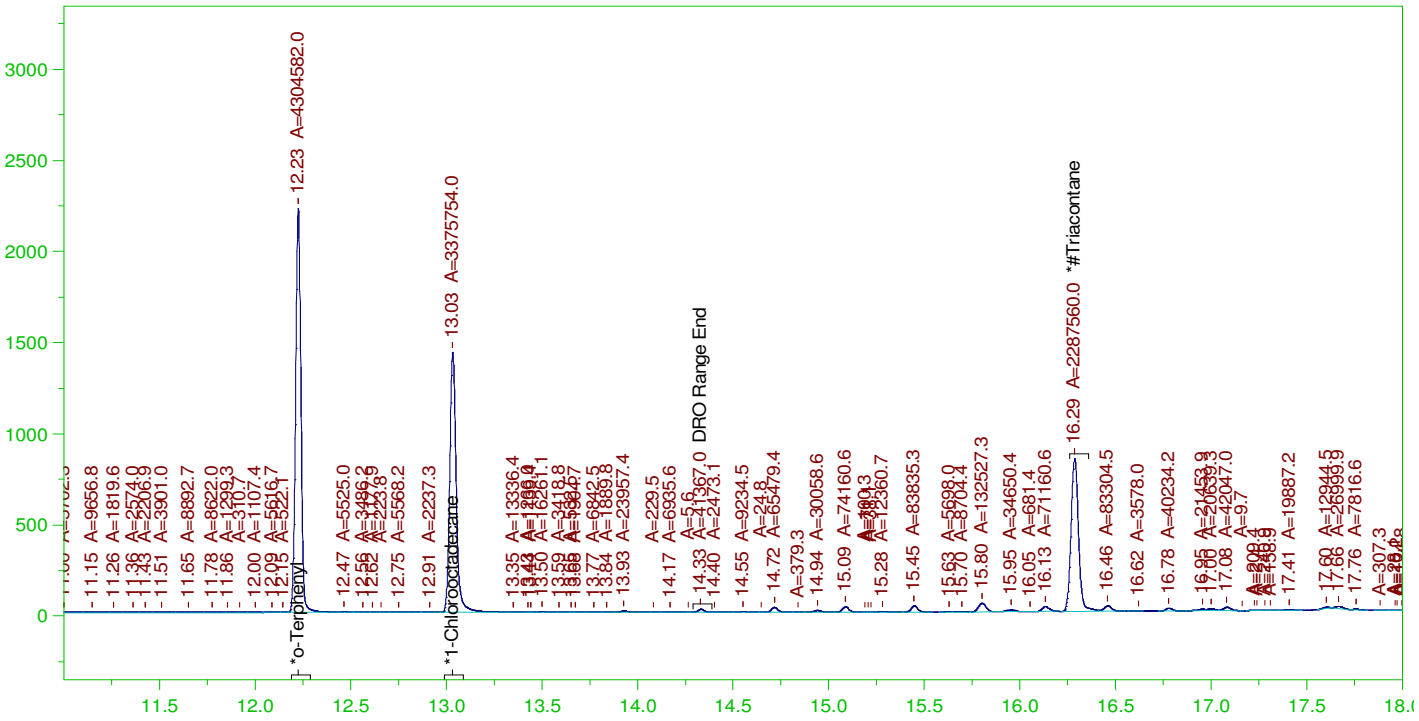
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.285	.505	.08	15.89	-

RRO Area:1279695 RRO AMOUNT: 4.528772E-02

ERH1925 (RHMW03) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0021.RAW B21111928-003A ;1129HP5 , $HC-8015-DRO-W, SGT



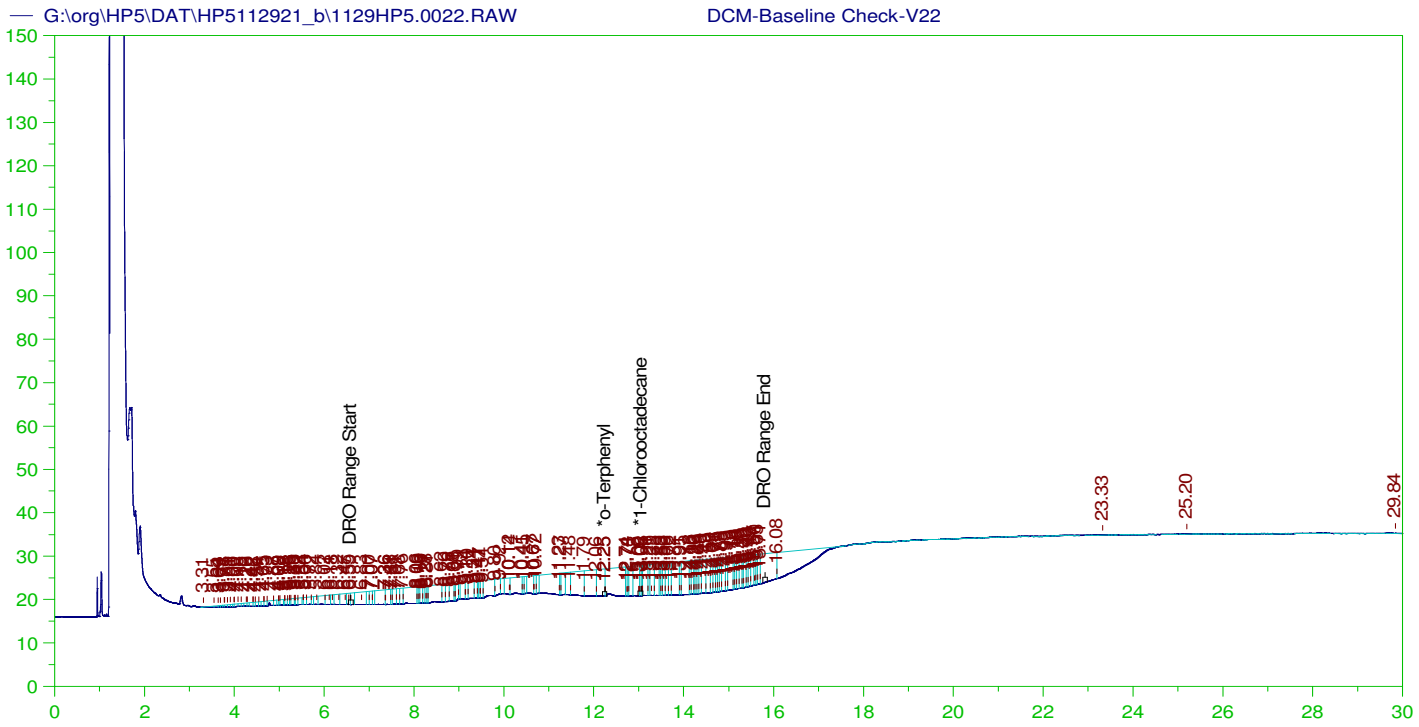
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-003A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0021.RAW
Date & Time Acquired: 11/29/2021 11:50:30 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 990 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.226	.202	.122	60.61	-
*1-Chlorooctadecane	13.034	.202	.096	47.53	-
*#Triacontane	16.285	.202	.08	39.54	-

DRO Area:412309.9 DRO Amount: 1.328333E-02
TEH Area:1680617 TEH Amount: 5.414419E-02



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V22
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0022.RAW
Date & Time Acquired: 11/30/2021 12:33:23 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

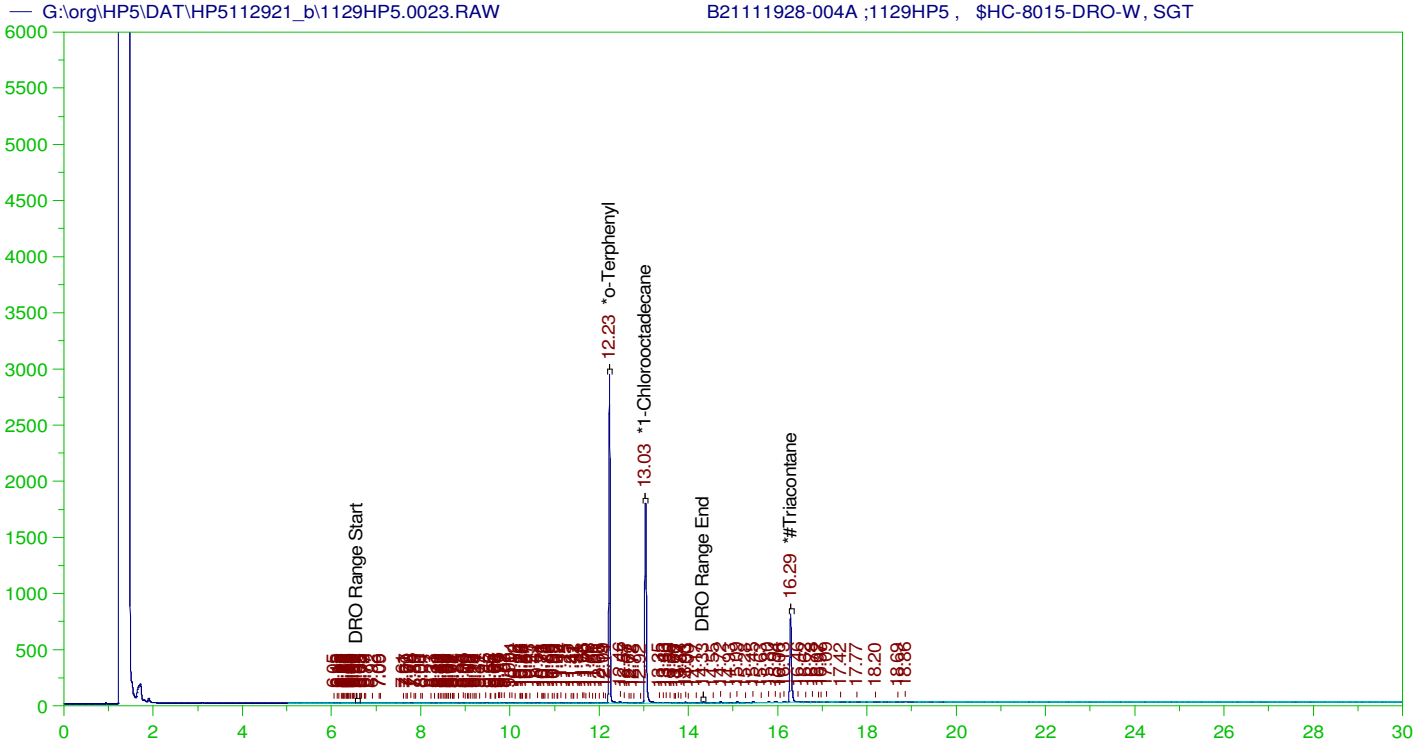
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.252	200.	2.055	1.03	-
*1-Chlorooctadecane	13.053	200.	.374	.19	-

DRO Area:2969840 DRO Amount: 94.7221
TEH Area:3472199 TEH Amount: 110.7447

ERH1928 (RHMW05) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0023.RAW B21111928-004A ;1129HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-004A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0023.RAW
Date & Time Acquired: 11/30/2021 1:16:07 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

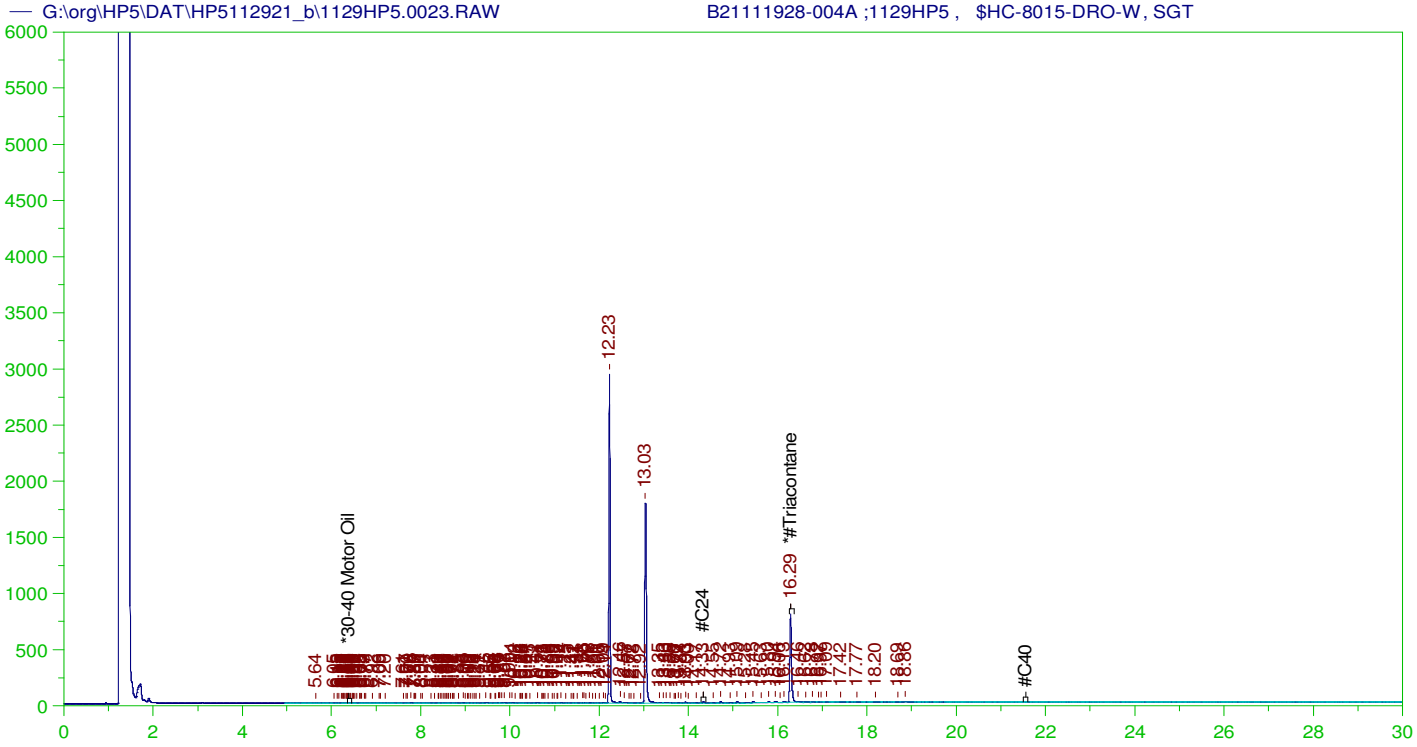
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.226	.192	.155	80.84	-
*1-Chlorooctadecane	13.034	.192	.114	59.17	-
*#Triacontane	16.286	.192	.075	38.9	-

DRO Area:510614.7 DRO Amount: 1.565951E-02
TEH Area:955661.8 TEH Amount: 0.0293082

ERH1928 (RHMW05) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0023.RAW B21111928-004A ;1129HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-004A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0023.RAW
Date & Time Acquired: 11/30/2021 1:16:07 AM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.286	.481	.075	15.56	-

RRO Area:435676.5 RRO AMOUNT: 0.0146771

ERH1928 (RHMW05) Batch ID: 161631

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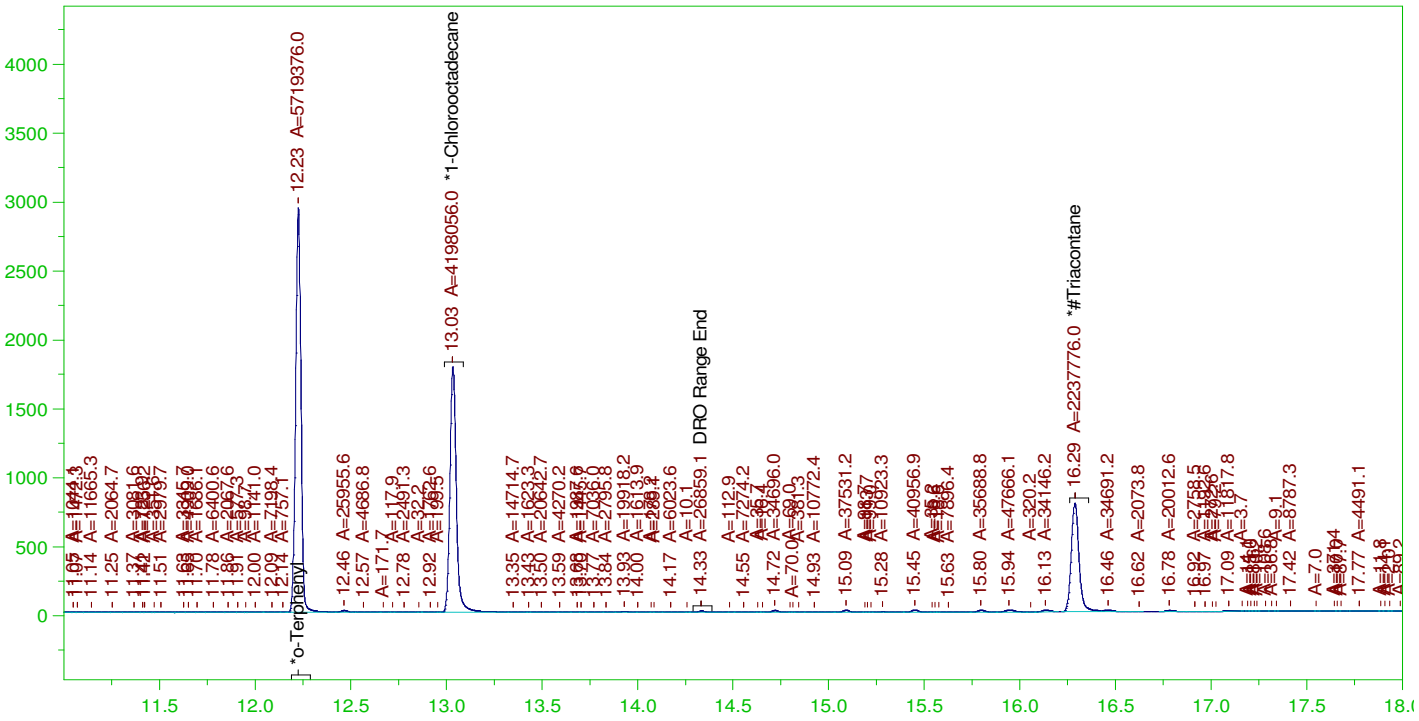


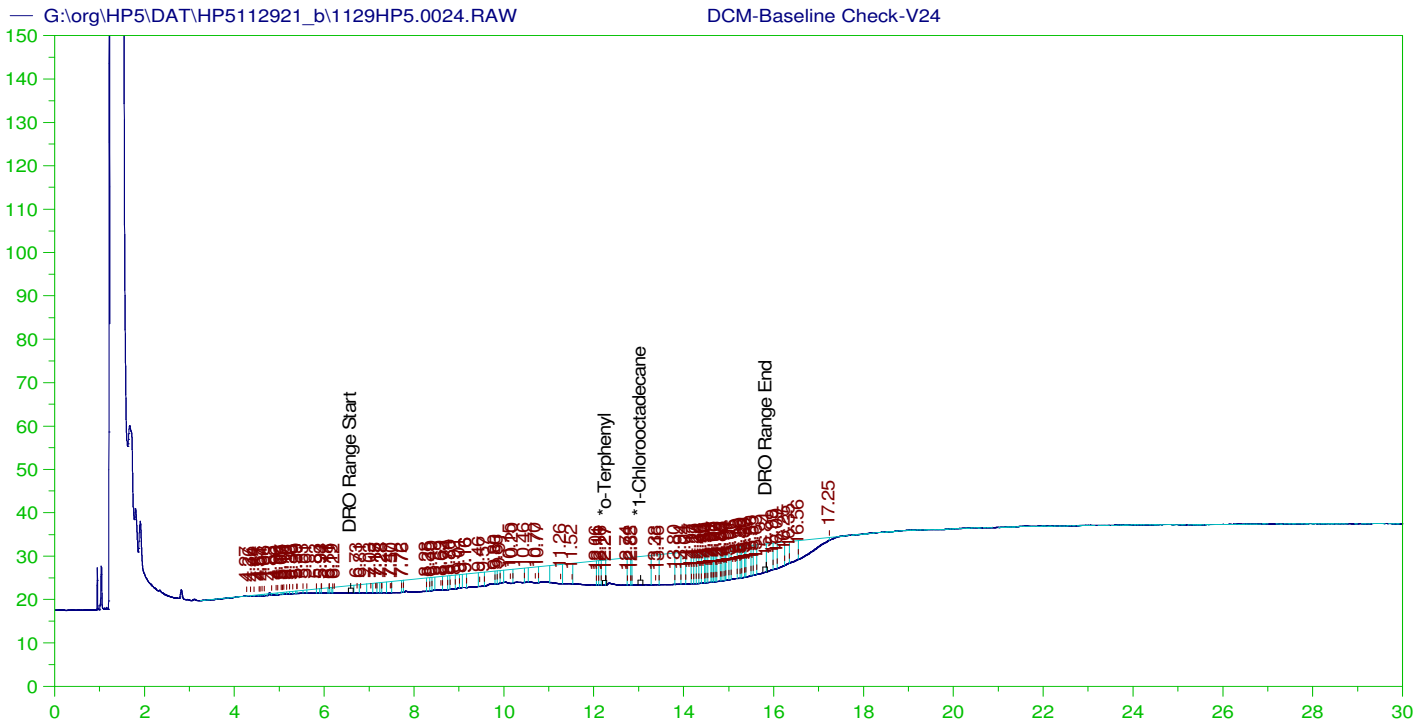
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-004A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0023.RAW
Date & Time Acquired: 11/30/2021 1:16:07 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.226	.192	.155	80.53	-
*1-Chlorooctadecane	13.034	.192	.114	59.11	-
*#Triacontane	16.286	.192	.074	38.68	-

DRO Area:576321.5 DRO Amount: 1.767461E-02
TEH Area:1145005 TEH Amount: 3.511498E-02



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V24
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0024.RAW
Date & Time Acquired: 11/30/2021 1:59:03 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

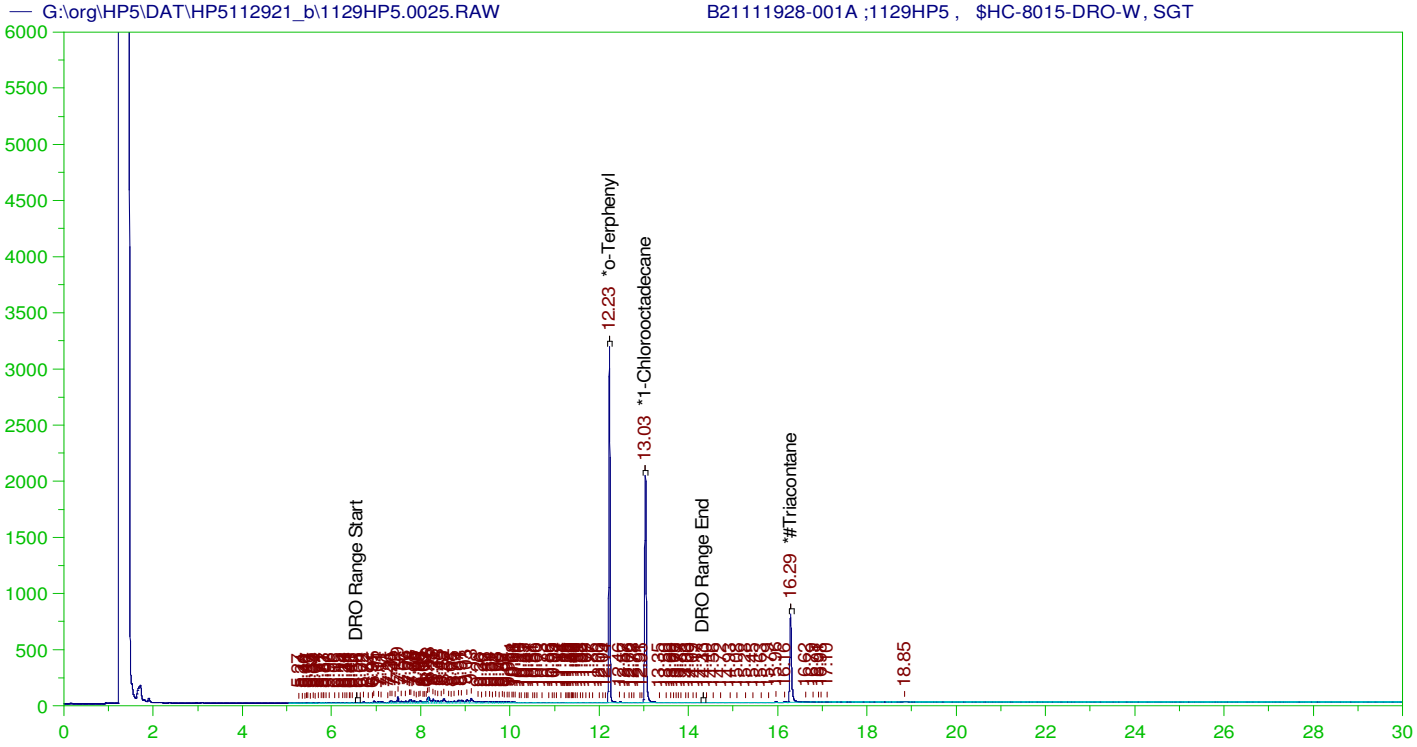
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.266	200.	1.041	.52	-
*1-Chlorooctadecane	29.907	200.	.	.	-

DRO Area:2641126 DRO Amount: 84.23787
TEH Area:3042595 TEH Amount: 97.04258

ERH1919 (RHMW01R) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0025.RAW B21111928-001A ;1129HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-001A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0025.RAW
Date & Time Acquired: 11/30/2021 2:41:47 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.225	.2	.172	85.9	-
*1-Chlorooctadecane	13.033	.2	.133	66.7	-
*#Triacontane	16.286	.2	.08	40.16	-

DRO Area:3276523 DRO Amount: 0.1045036
TEH Area:3529331 TEH Amount: 0.1125669

ERH1919 (RHMW01R) Batch ID: 161631

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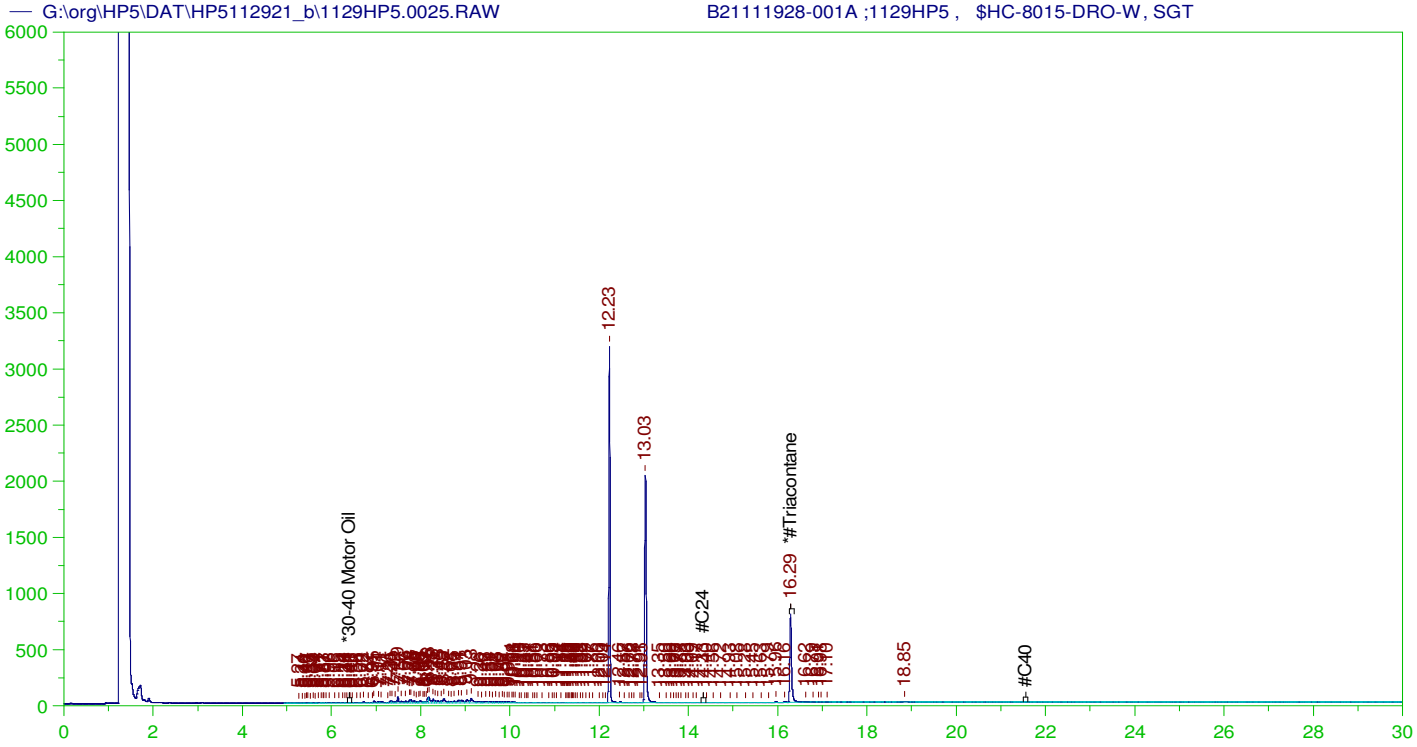

RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-001A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0025.RAW
Date & Time Acquired: 11/30/2021 2:41:47 AM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-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 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.286	.5	.08	16.06	-

RRO Area:154501.1 RRO AMOUNT: 5.413036E-03

ERH1919 (RHMW01R) Batch ID: 161631

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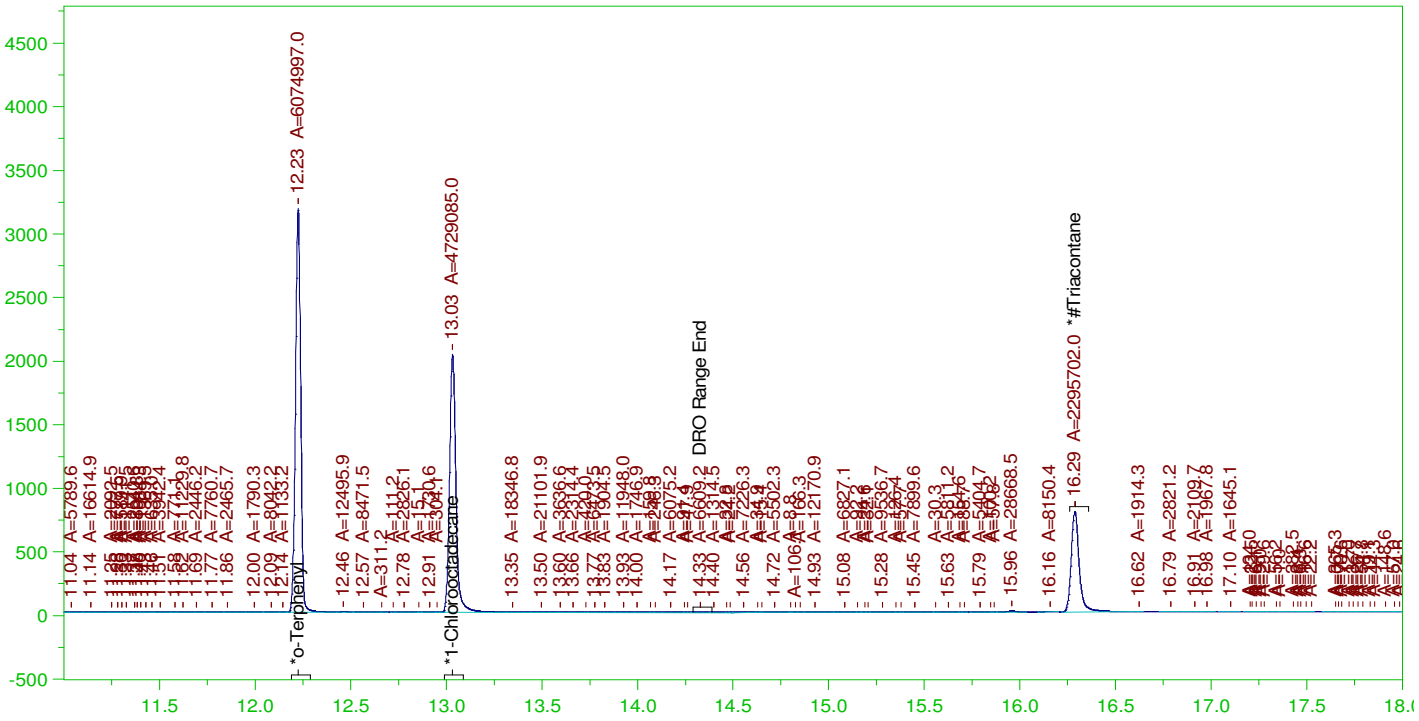


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-001A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0025.RAW
Date & Time Acquired: 11/30/2021 2:41:47 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

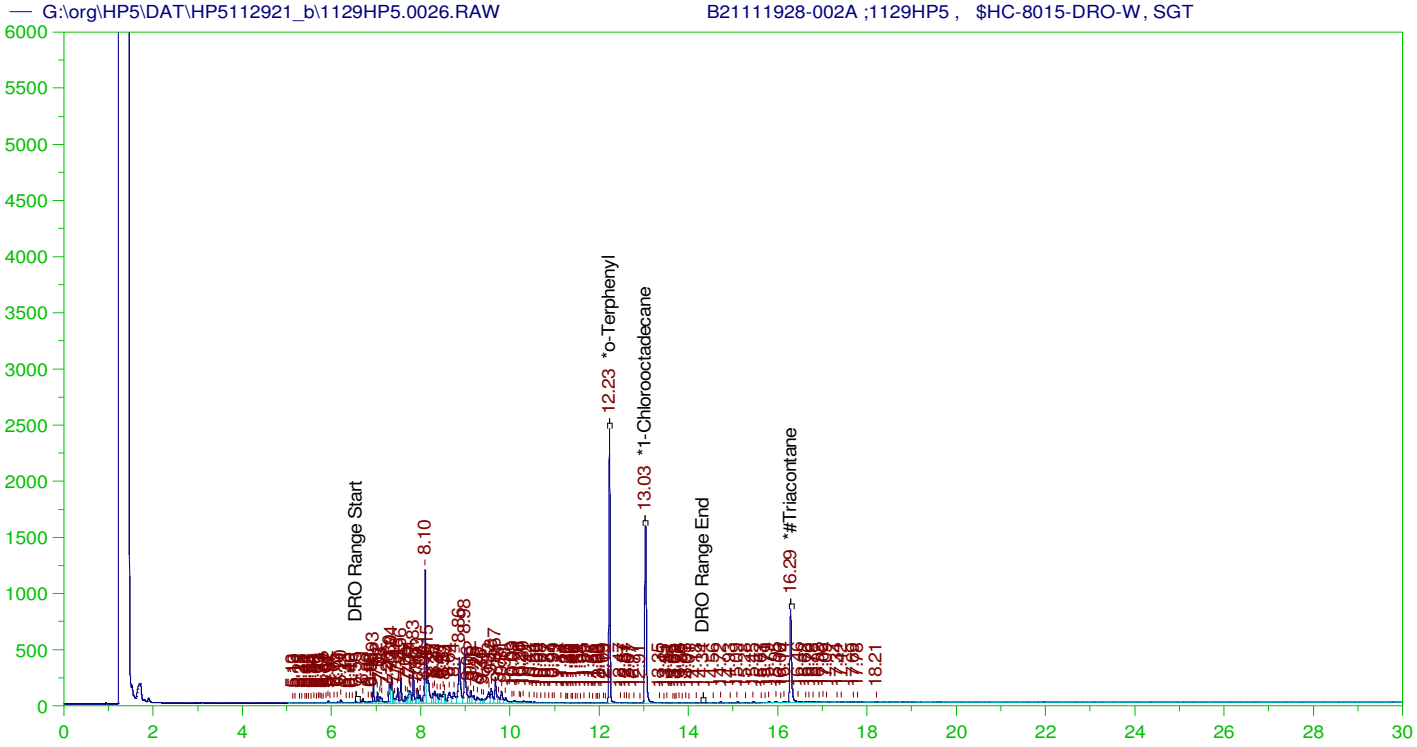
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.225	.2	.171	85.54	-
*1-Chlorooctadecane	13.033	.2	.133	66.59	-
*#Triacontane	16.286	.2	.079	39.68	-

DRO Area:3321760 DRO Amount: 0.1059465
TEH Area:3785153 TEH Amount: 0.1207262

ERH1922 (RHMW02) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0026.RAW B21111928-002A ;1129HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-002A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0026.RAW
Date & Time Acquired: 11/30/2021 3:24:44 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.227	.196	.132	67.27	-
*1-Chlorooctadecane	13.034	.196	.106	54.06	-
*#Triacontane	16.287	.196	.081	41.52	-

DRO Area:1.658836E+07 DRO Amount: 0.5187062
TEH Area:1.721205E+07 TEH Amount: 0.5382087

ERH1922 (RHMW02) Batch ID: 161631

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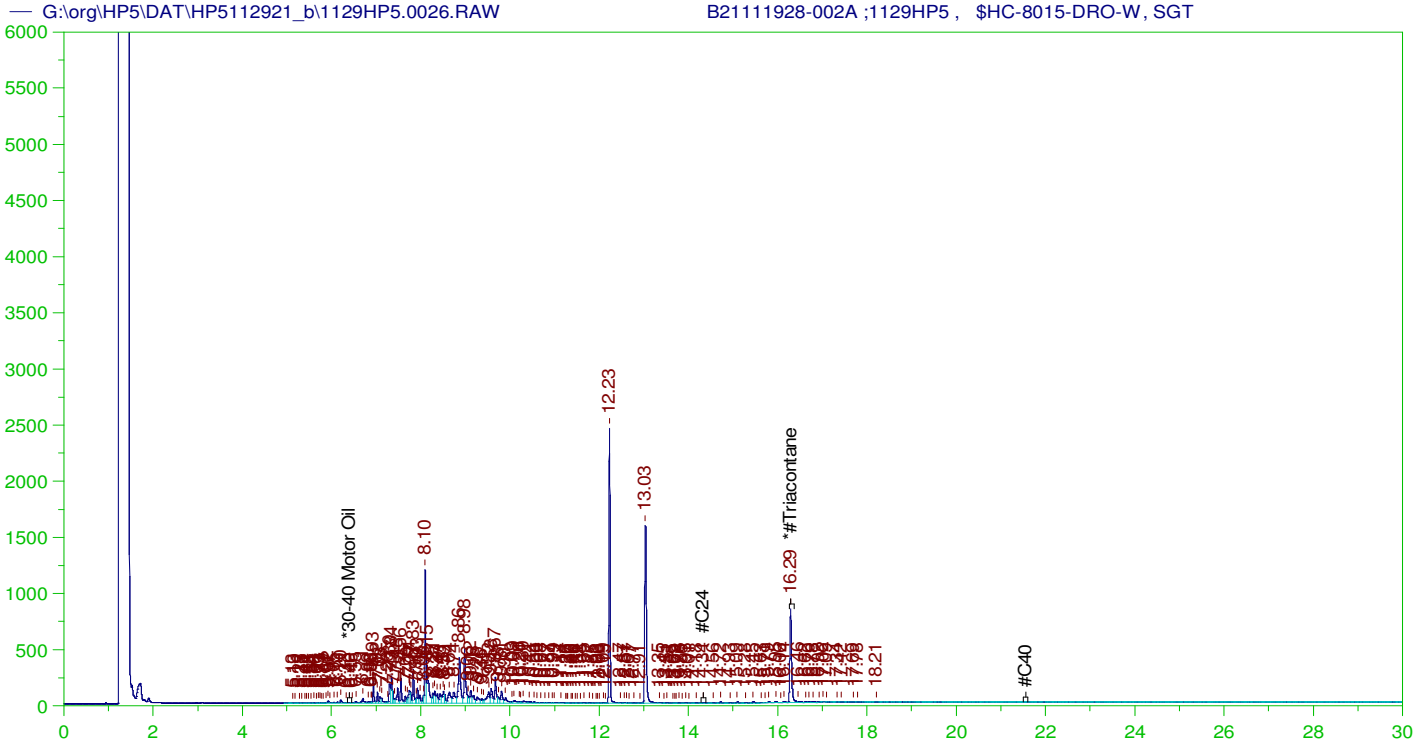


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-002A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0026.RAW
Date & Time Acquired: 11/30/2021 3:24:44 AM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

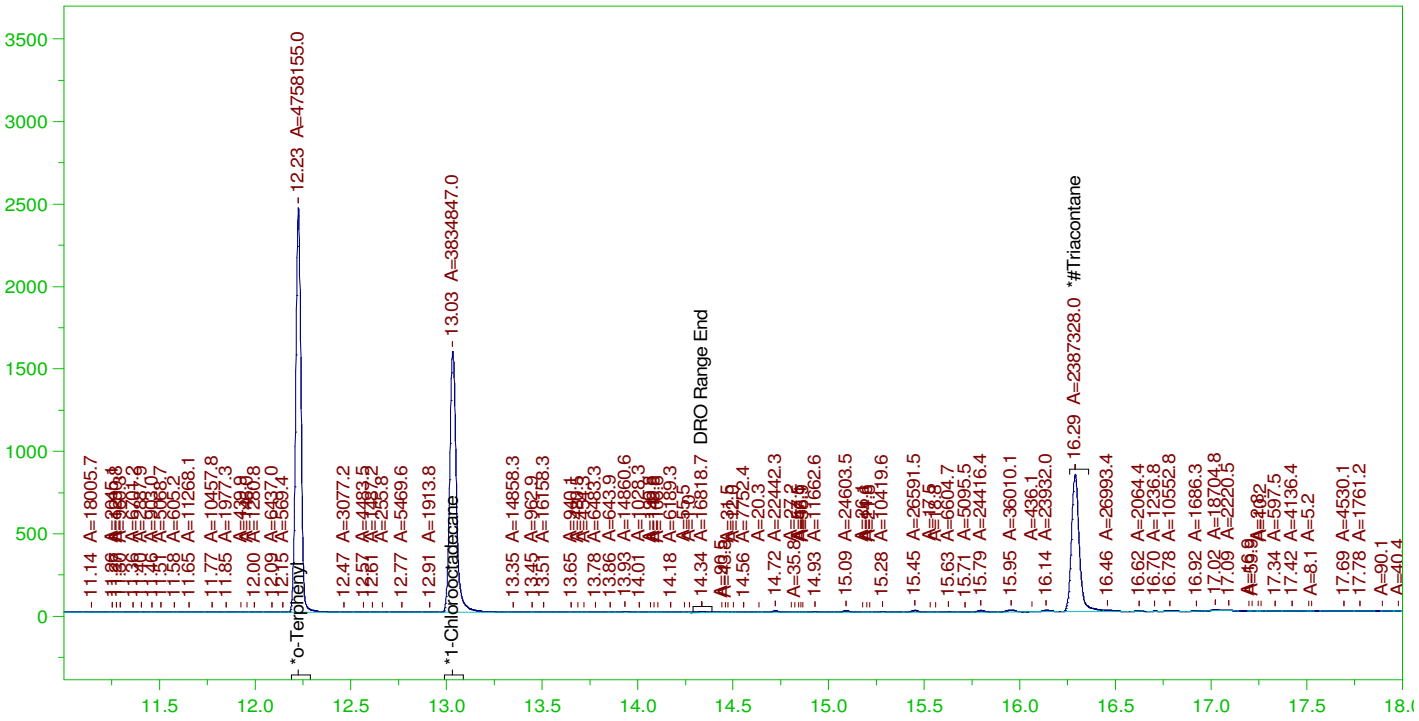
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.287	.49	.081	16.61	-

RRO Area:330094.9 RRO AMOUNT: 0.0113383

ERH1922 (RHMW02) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0026.RAW B21111928-002A ;1129HP5 , $HC-8015-DRO-W, SGT



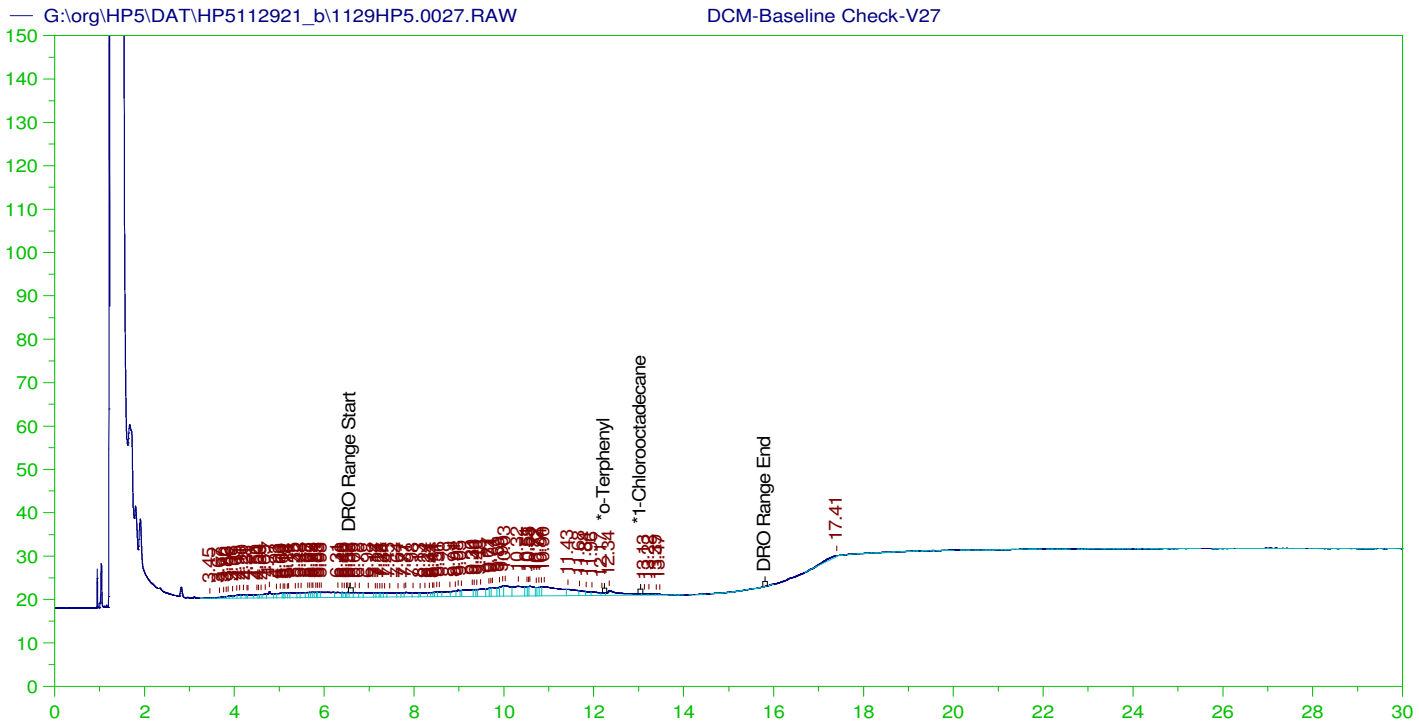
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-002A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0026.RAW
Date & Time Acquired: 11/30/2021 3:24:44 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.227	.196	.131	67.	-
*1-Chlorooctadecane	13.034	.196	.106	54.	-
*#Triacontane	16.287	.196	.081	41.26	-

DRO Area:1.659823E+07 DRO Amount: 0.519015
TEH Area:1.734543E+07 TEH Amount: 0.5423793



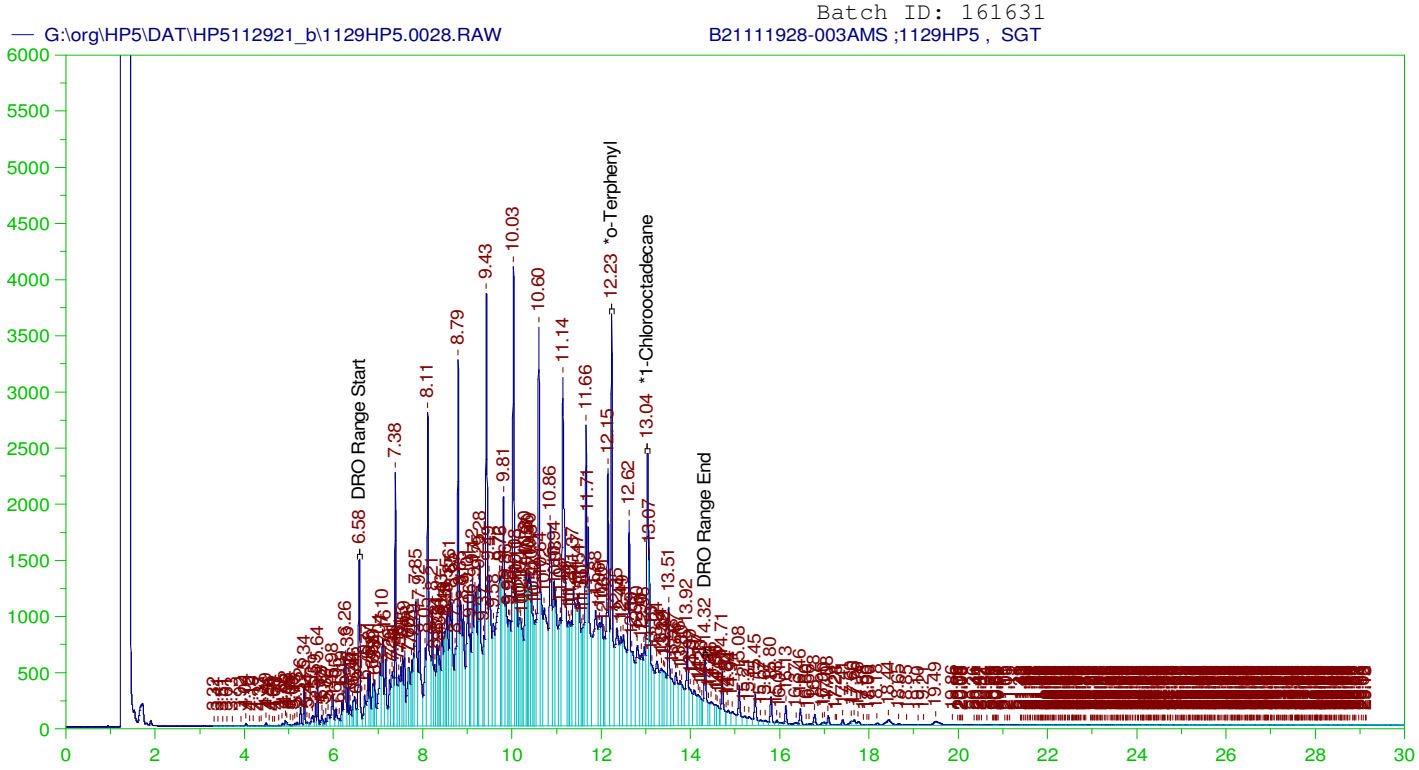
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V27
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0027.RAW
Date & Time Acquired: 11/30/2021 4:07:38 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 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	29.828	200.	.	.	-
*1-Chlorooctadecane	29.828	200.	.	.	-

DRO Area:507620.1 DRO Amount: 16.19038
TEH Area:702256.1 TEH Amount: 22.39823

Batch ID: 161631



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

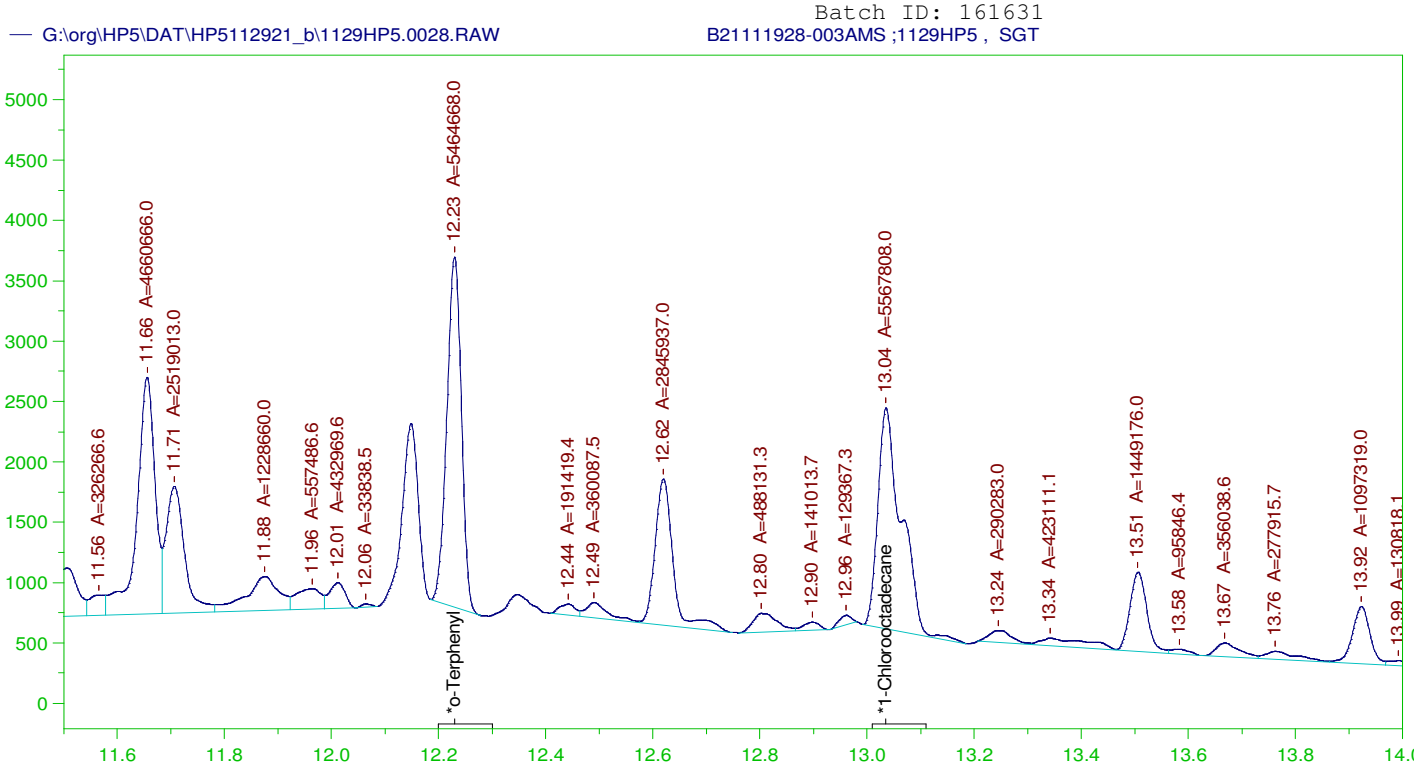
Sample Name: B21111928-003AMS ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0028.RAW
Date & Time Acquired: 11/30/2021 4:50:25 AM
Method File: G:\Org\HP5\Methods\D3_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.23	.198	.289	145.91	-
*1-Chlorooctadecane	13.035	.198	.184	92.77	-

DRO Area:3.800102E+08 DRO Amount: 12.0003
TEH Area:4.099673E+08 TEH Amount: 12.94631

Batch ID: 161631



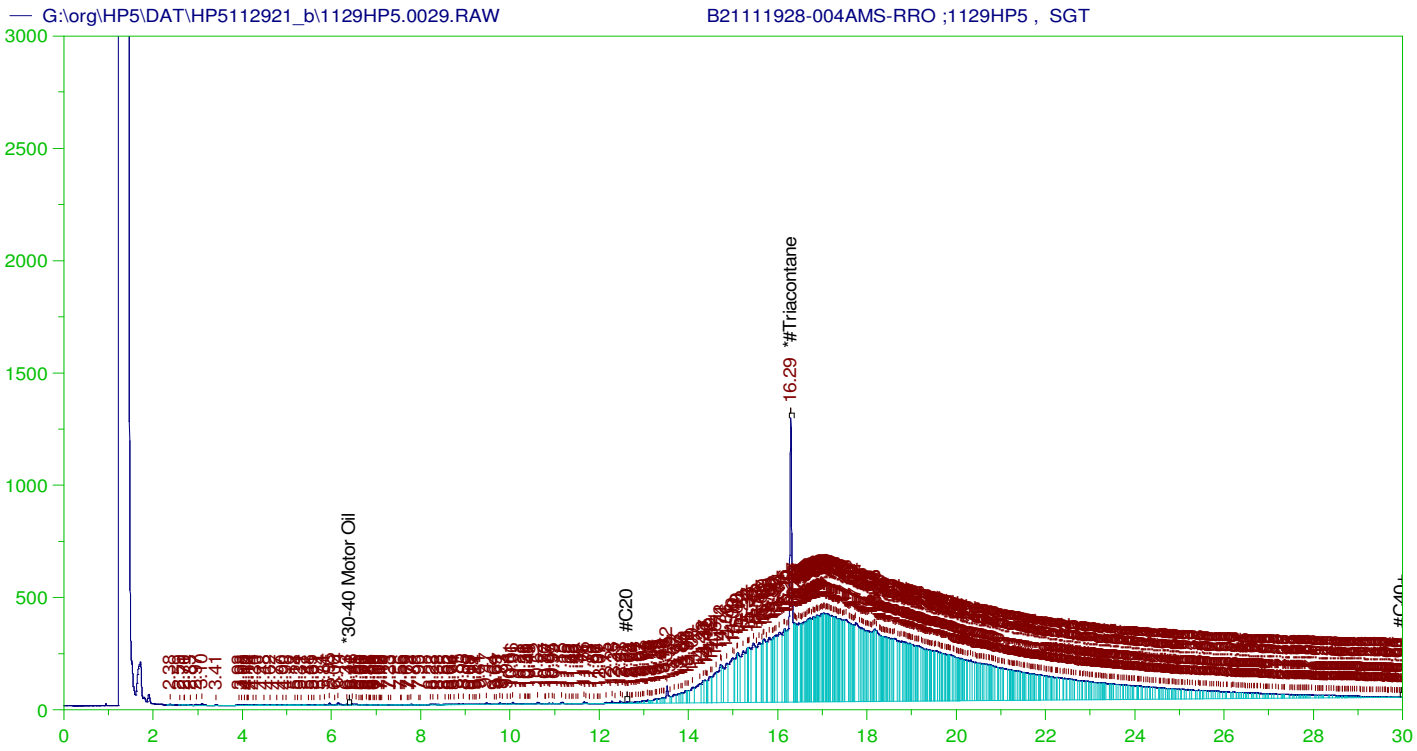
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-003AMS ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0028.RAW
Date & Time Acquired: 11/30/2021 4:50:25 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1010 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.23	.198	.152	76.95	-
*1-Chlorooctadecane	13.035	.198	.155	78.4	-

DRO Area:1.781798E+08 DRO Amount: 5.626719
TEH Area:1.902066E+08 TEH Amount: 6.006514



RESIDUAL RANGE ORGANICS CHROMATOGRAM

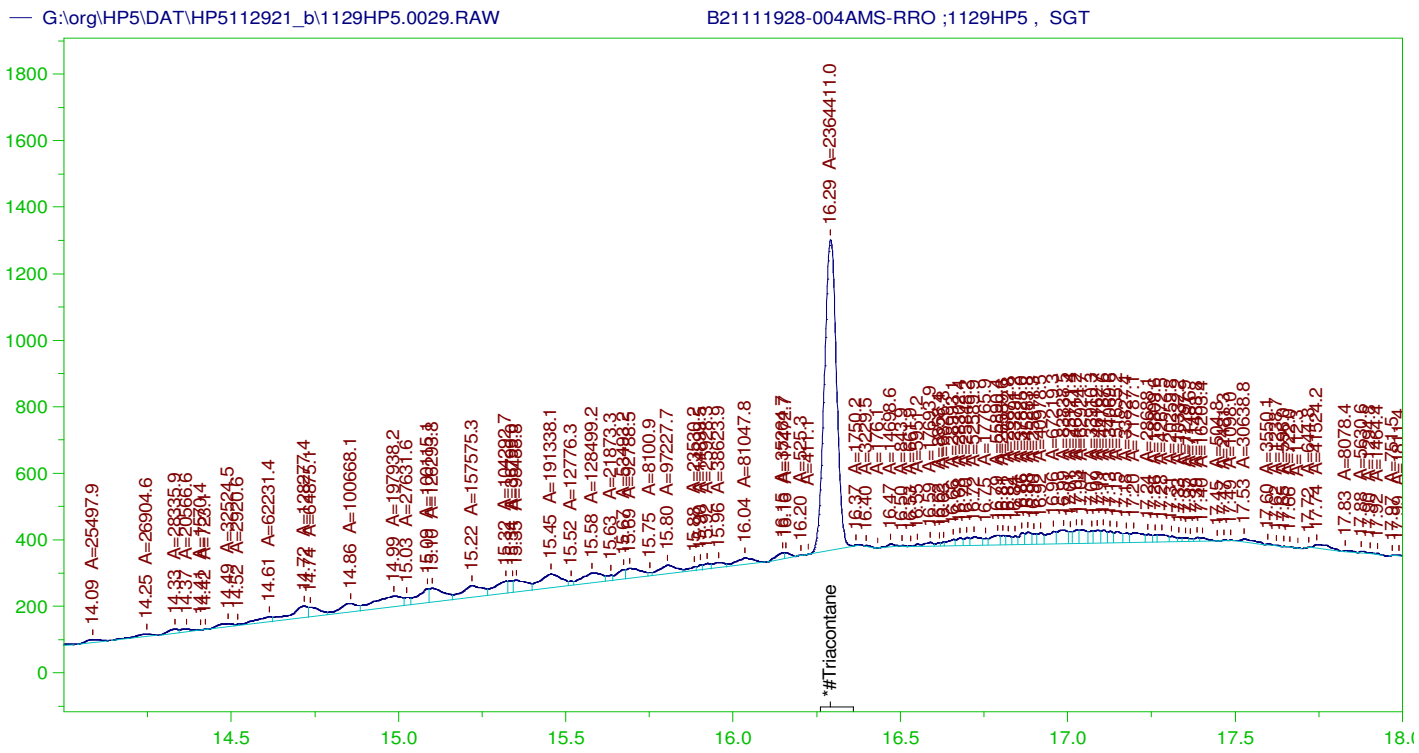
Sample Name: B21111928-004AMS-RRO ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0029.RAW
Date & Time Acquired: 11/30/2021 5:33:23 AM
Method File: G:\Org\HP5\Methods\D3_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

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	.485	.167	34.48	-

RRO TEH (Oil Range) Area:1.302797E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.431482

AMN 12/14/2021



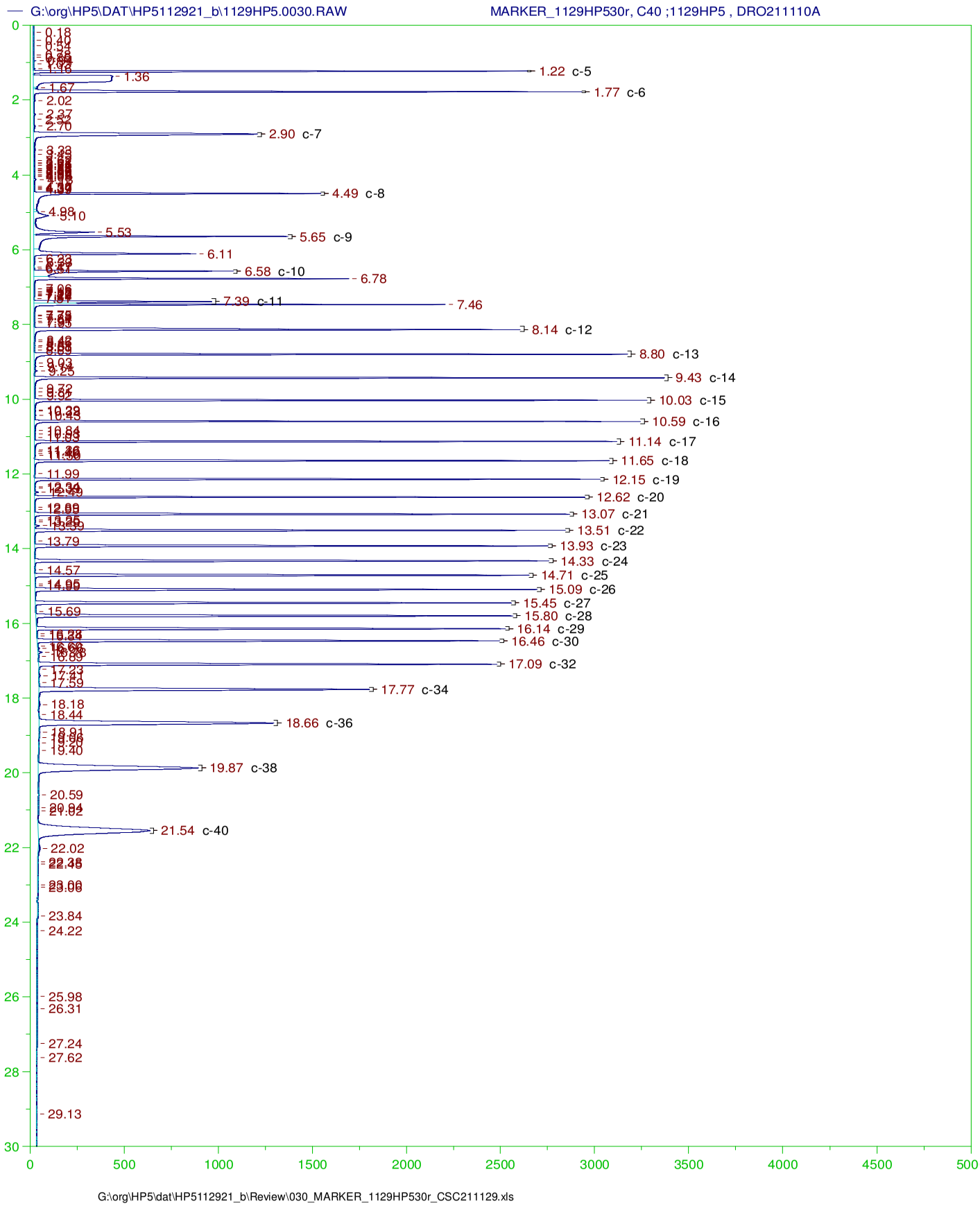
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-004AMS-RRO ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0029.RAW
Date & Time Acquired: 11/30/2021 5:33:23 AM
Method File: G:\Org\HP5\Methods\DS_ORObAF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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: 12.58 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.291	.485	.079	16.35	-

RRO Area:4192015 RRO AMOUNT: 0.142592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MARKER_1129HP530r, C40 ;1129HP5 , DRO211110A
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1.36
1.67
1.77 c-6
2.02
2.70
2.90 c-7
4.49 c-8
4.98
5.10
5.53
5.65 c-9
6.11
6.58 c-10
6.78
7.39 c-11
7.46
8.14 c-12
8.80 c-13
9.43 c-14
10.03 c-15
10.59 c-16
11.14 c-17
11.65 c-18
11.99
12.15 c-19
12.62 c-20
13.07 c-21
13.51 c-22
13.79
13.93 c-23
14.33 c-24
14.57
14.71 c-25
15.09 c-26
15.45 c-27
15.69
15.80 c-28
16.14 c-29
16.46 c-30
17.09 c-32
17.59
17.77 c-34
18.18
18.44
18.66 c-36
19.40
19.87 c-38
20.59
21.54 c-40
22.02
23.84
24.22
25.98
26.31
27.24
27.62
29.13
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1000
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3500
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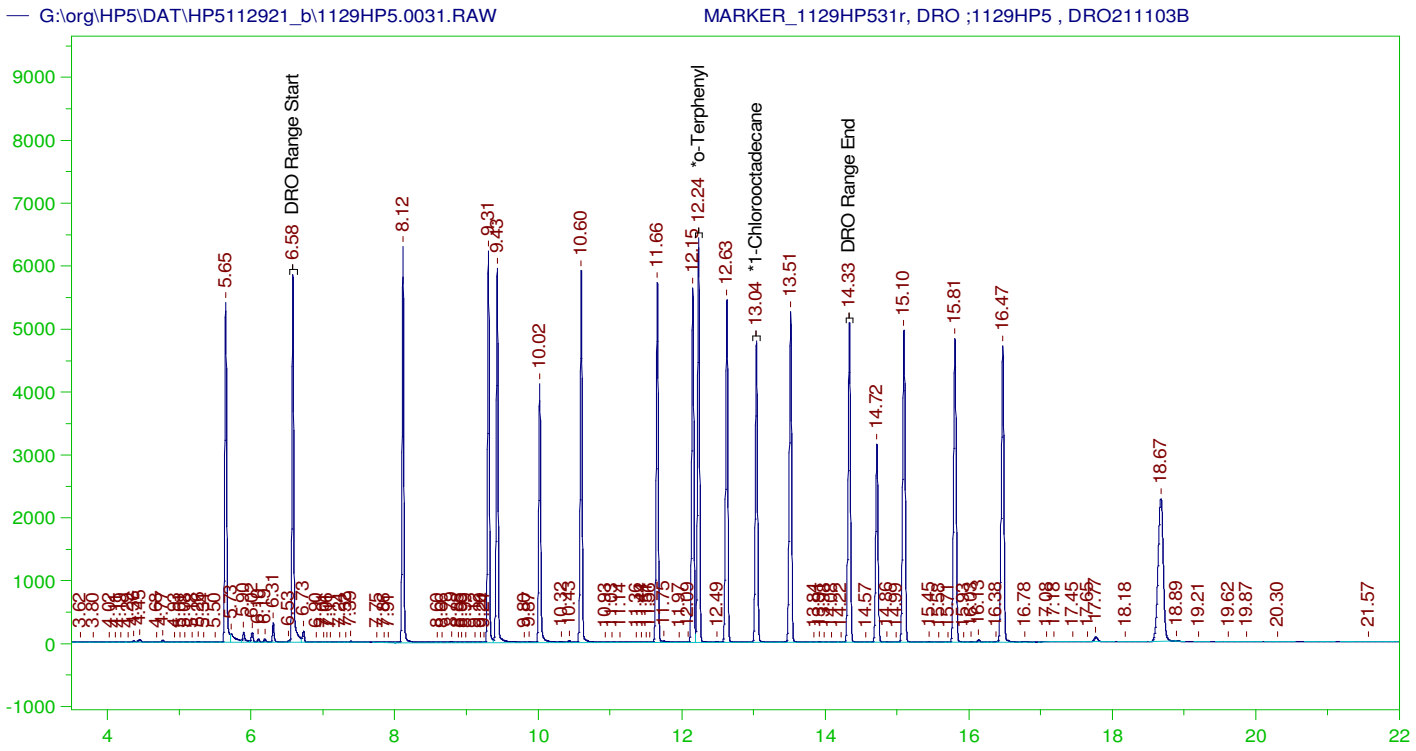


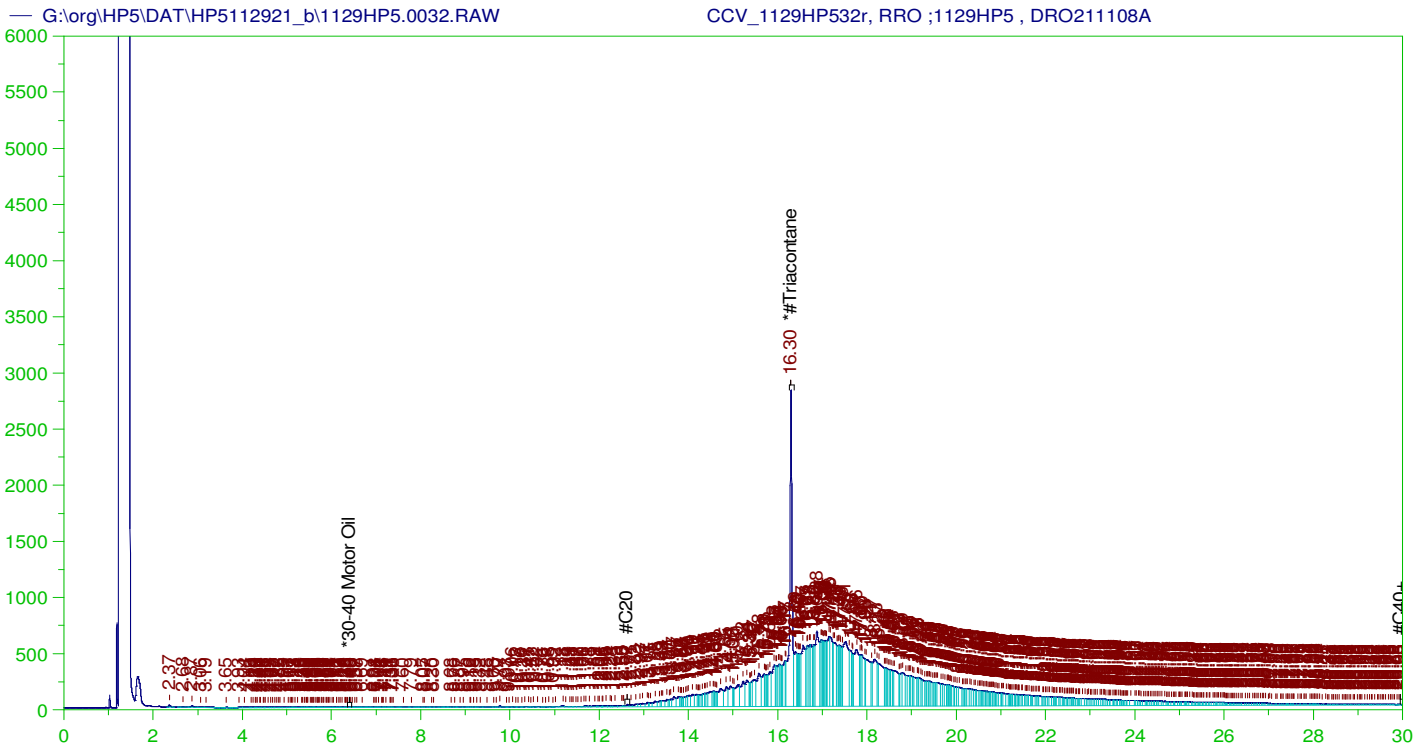
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1129HP531r, DRO ;1129HP5 , DRO211103B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0031.RAW
Date & Time Acquired: 11/30/2021 6:59:16 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.235	.2	.352	176.02	-
*1-Chlorooctadecane	13.041	.2	.285	142.53	-

DRO Area:1.200096E+08 DRO Amount: 3.827668
TEH Area:1.870202E+08 TEH Amount: 5.964949



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1129HP532r, RRO ;1129HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0032.RAW
Date & Time Acquired: 11/30/2021 7:41:57 AM
Method File: G:\Org\HP5\Methods\DC_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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.	359.609	71.92	-

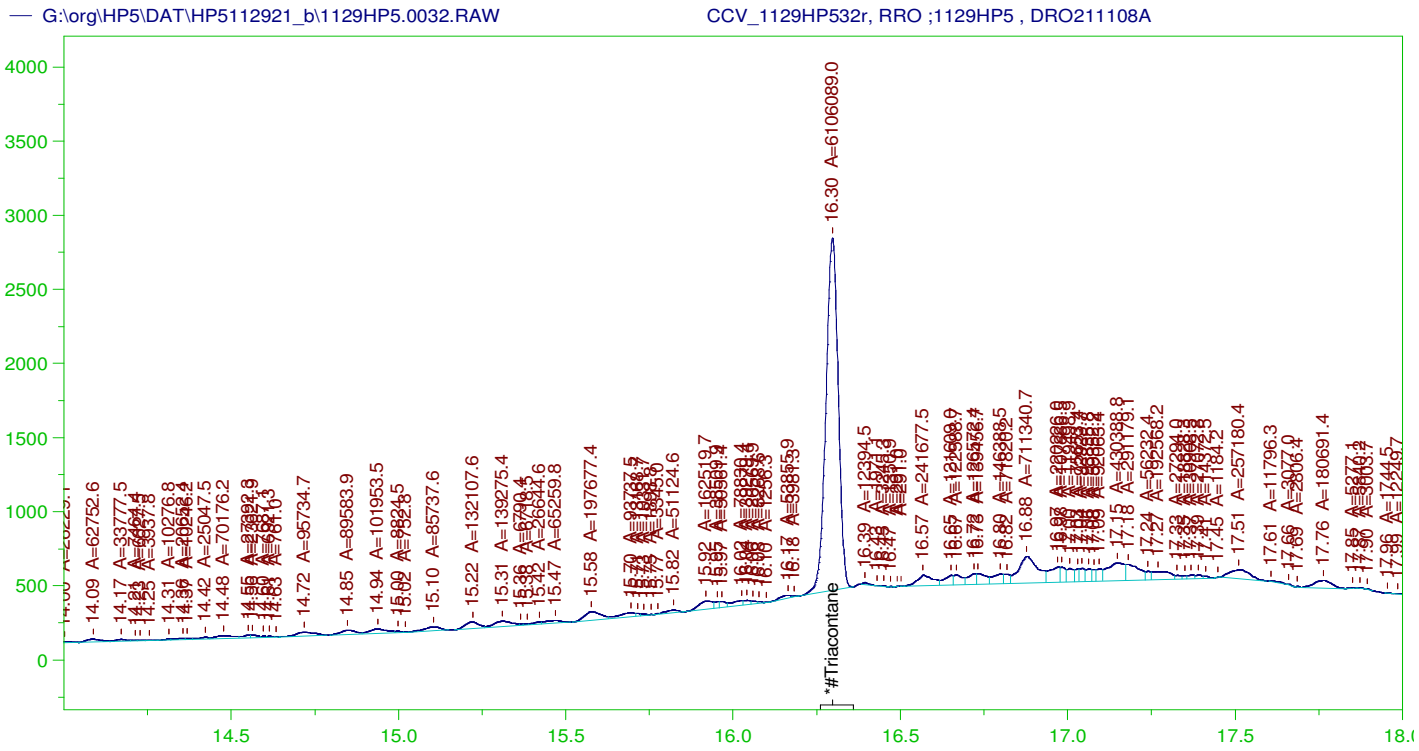
~~RRO~~ TEH (Oil Range) Area:1.432918E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 5020.311

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0032.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.026	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.296	200.	359.609	179.8	75-125

AMN 12/14/2021



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1129HP532r, RRO ;1129HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0032.RAW
Date & Time Acquired: 11/30/2021 7:41:57 AM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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

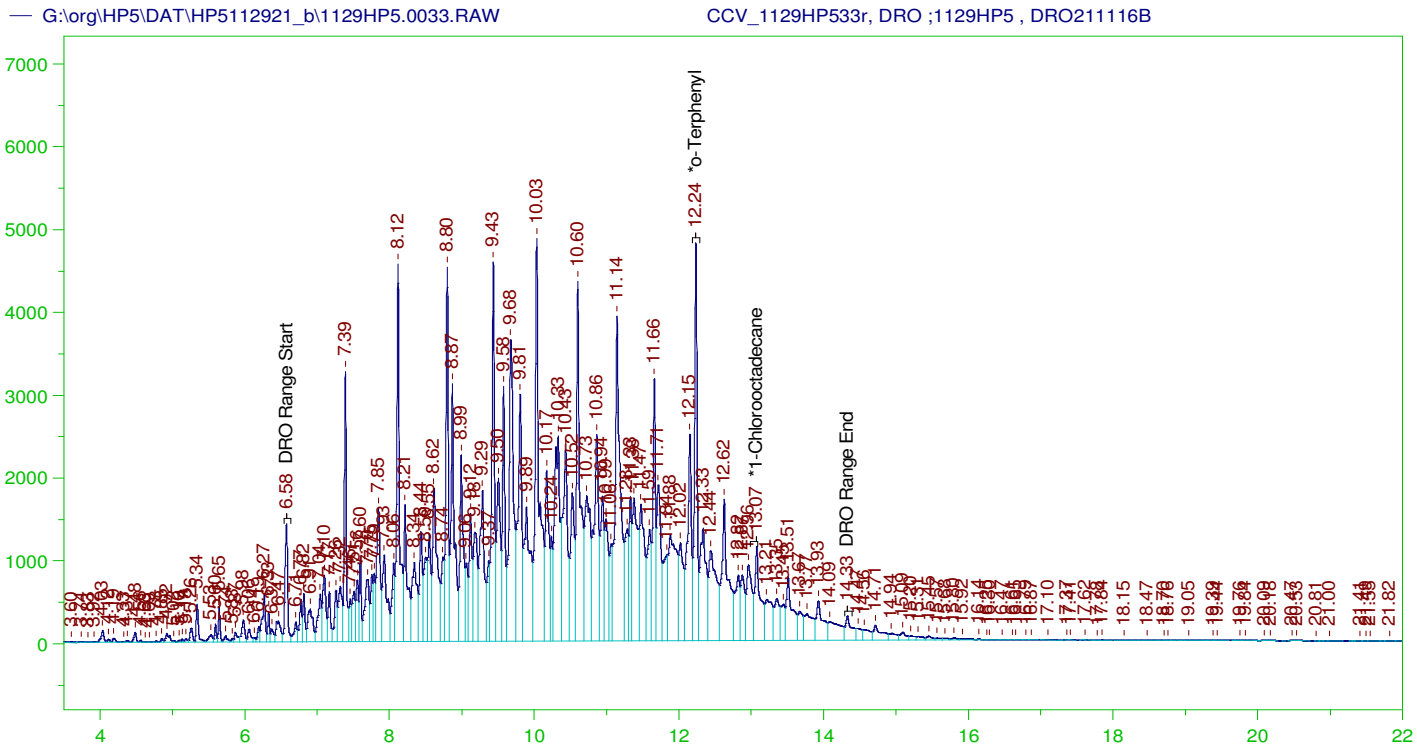
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.296	500.	211.063	42.21	-

RRO Area:6901569 RRO AMOUNT: 241.8005

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0032.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.026	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.296	200.	211.063	105.53	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1129HP533r, DRO ;1129HP5 , DRO211116B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0033.RAW
Date & Time Acquired: 11/30/2021 8:24:51 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

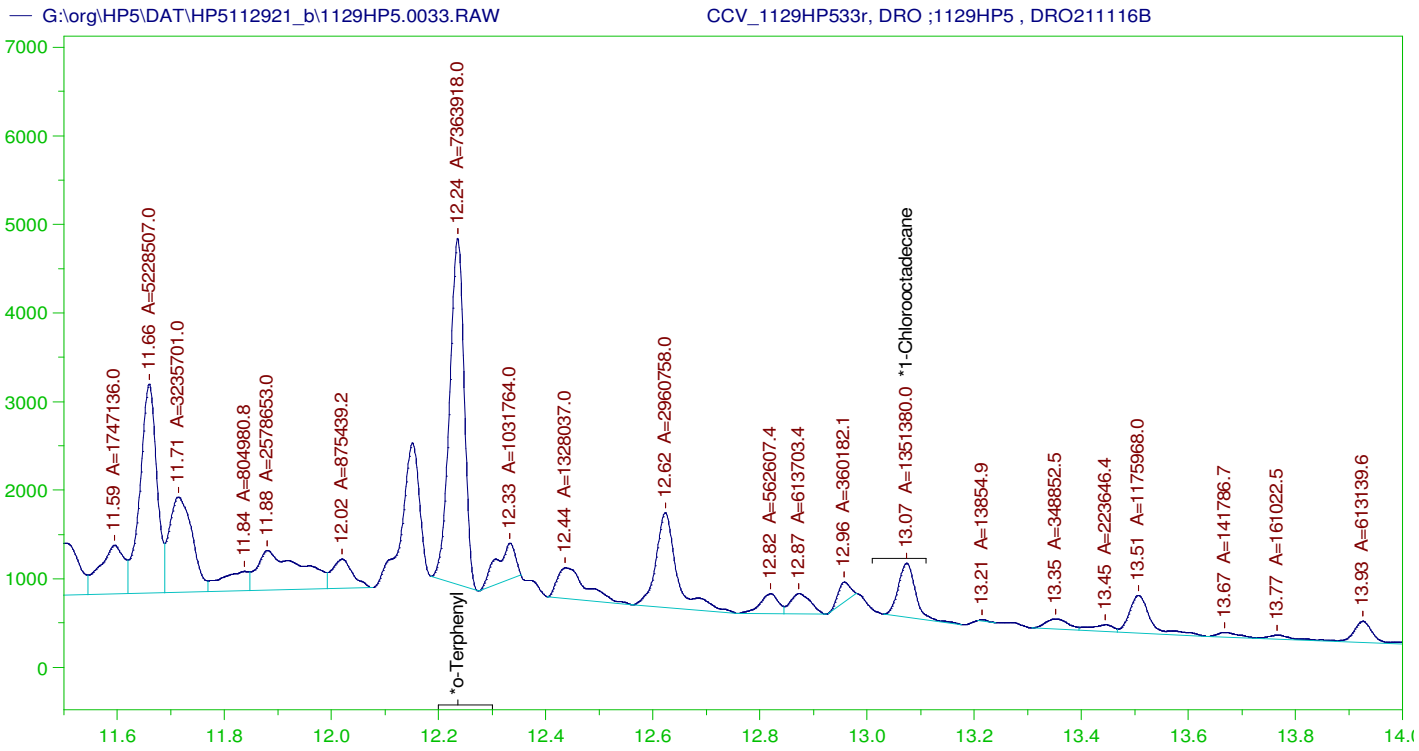
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.235	200.	342.521	171.26	-
*1-Chlorooctadecane	13.074	200.	163.983	81.99	-

DRO Area:4.772095E+08 DRO Amount: 15220.45
TEH Area:4.944163E+08 TEH Amount: 15769.25

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0033.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15769.25	105.13	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.235	200.	342.521	171.26	85-115
*1-Chlorooctadecane	13.074	200.	163.983	81.99	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1129HP533r, DRO ;1129HP5 , DRO211116B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0033.RAW
Date & Time Acquired: 11/30/2021 8:24:51 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

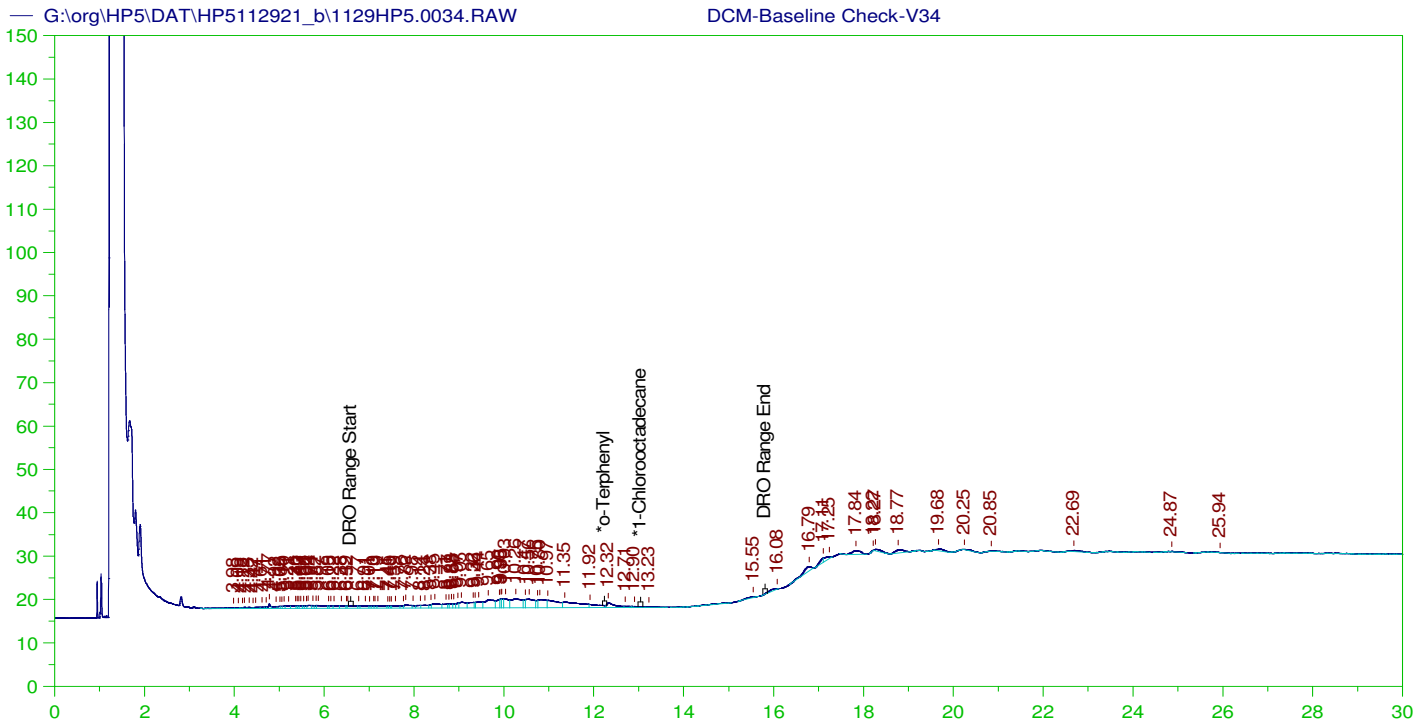
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.235	200.	207.381	103.69	-
*1-Chlorooctadecane	13.074	200.	38.057	19.03	-

DRO Area:2.647945E+08 DRO Amount: 8445.537
TEH Area:2.756693E+08 TEH Amount: 8792.386

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0033.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8792.39	58.62	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.235	200.	207.381	103.69	85-115
*1-Chlorooctadecane	13.074	200.	38.057	19.03	85-115



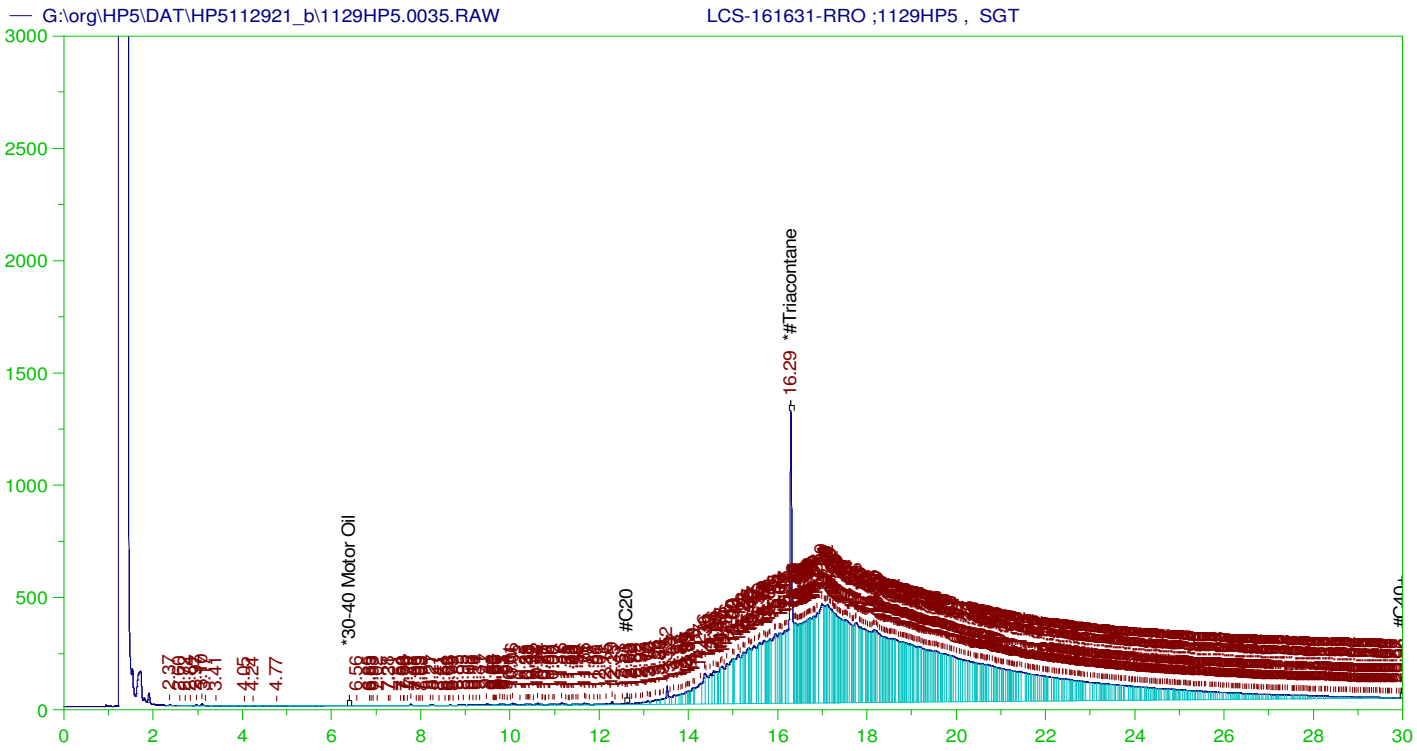
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V34
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0034.RAW
Date & Time Acquired: 11/30/2021 9:07:39 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	29.874	200.	.	.	-
*1-Chlorooctadecane	29.874	200.	.	.	-

DRO Area:388939.5 DRO Amount: 12.4051
TEH Area:556168.8 TEH Amount: 17.73883



RESIDUAL RANGE ORGANICS CHROMATOGRAM

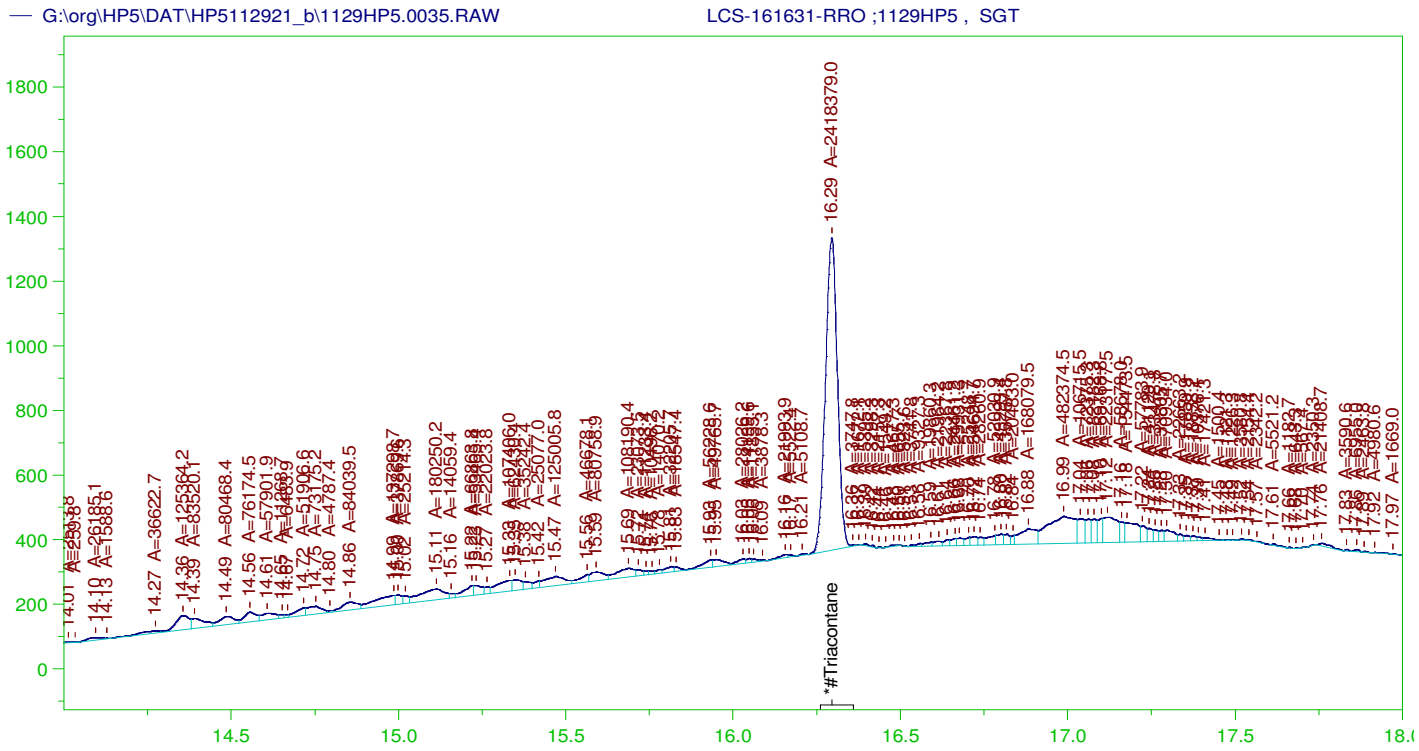
Sample Name: LCS-161631-RRO ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0035.RAW
Date & Time Acquired: 11/30/2021 9:50:14 AM
Method File: G:\Org\HP5\Methods\D3_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	16.294	.5	.169	33.86	-

~~RRO~~ TEH (Oil Range) Area:1.329021E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.656301

AMN 12/14/2021



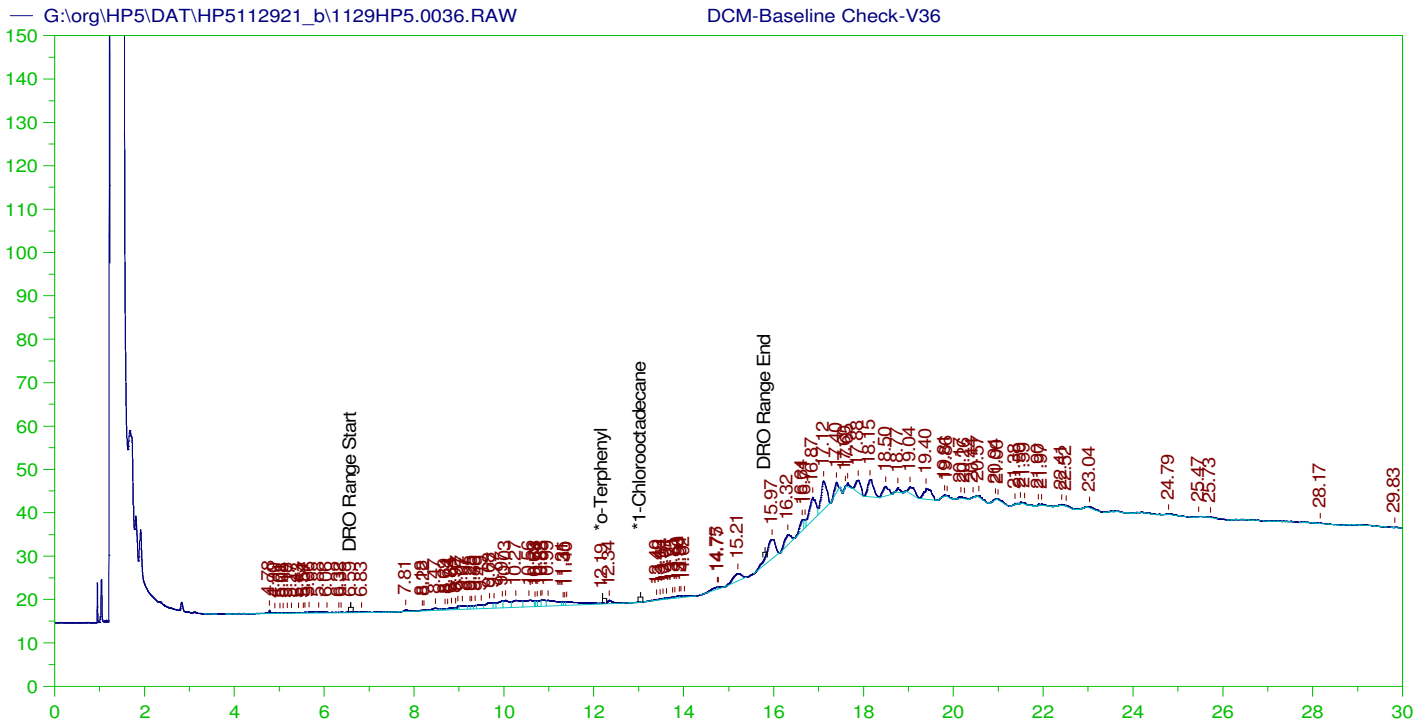
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: LCS-161631-RRO ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0035.RAW
Date & Time Acquired: 11/30/2021 9:50:14 AM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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	16.294	.5	.084	16.72	-

RRO Area:4972102 RRO AMOUNT: 0.1742005



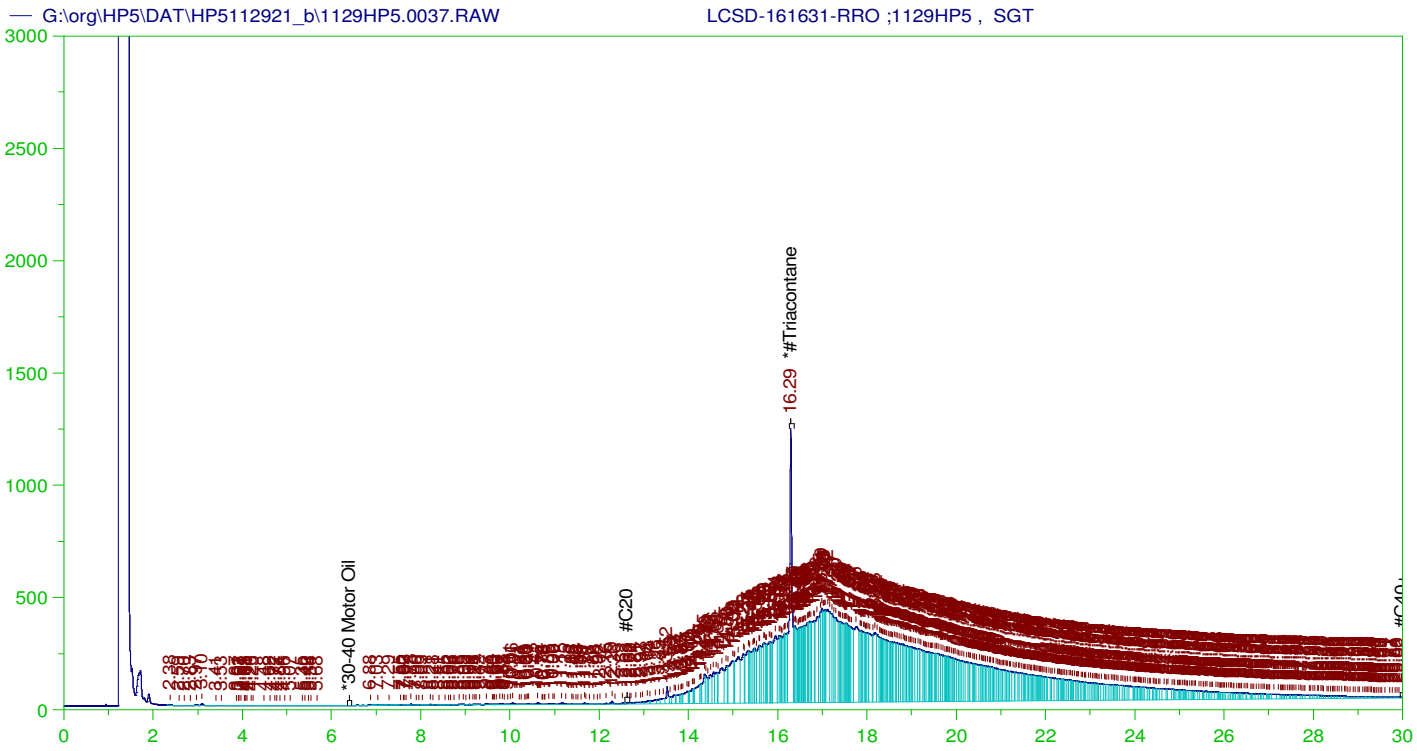
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V36
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0036.RAW
Date & Time Acquired: 11/30/2021 10:33:15 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	12.193	200.	.023	.01	-
*1-Chlorooctadecane	29.829	200.	.	.	-

DRO Area:262120.5 DRO Amount: 8.360249
TEH Area:702149.4 TEH Amount: 22.39483



RESIDUAL RANGE ORGANICS CHROMATOGRAM

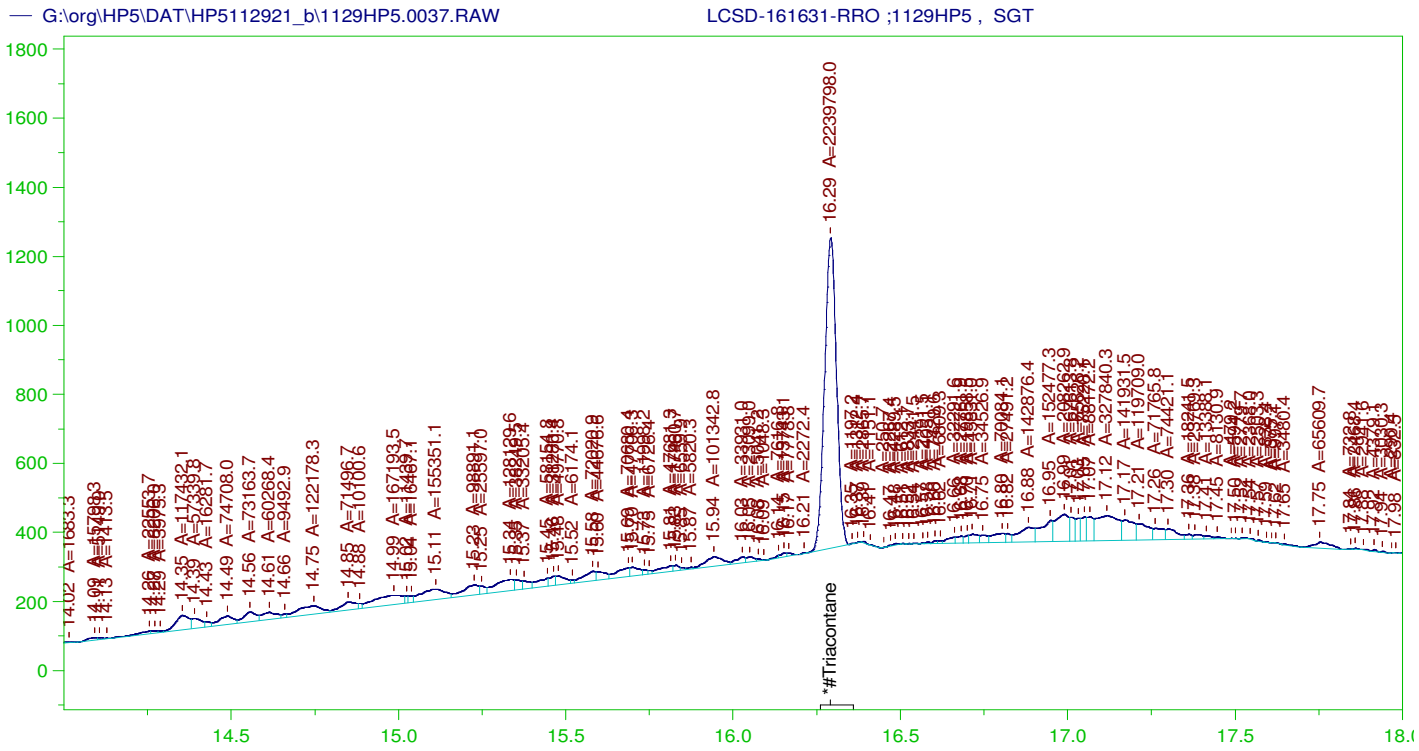
Sample Name: LCSD-161631-RRO ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0037.RAW
Date & Time Acquired: 11/30/2021 11:16:00 AM
Method File: G:\Org\HP5\Methods\D3_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	16.291	.5	.161	32.2	-

~~RRO~~ TEH (Oil Range) Area:1.263669E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.427337

AMN 12/14/2021



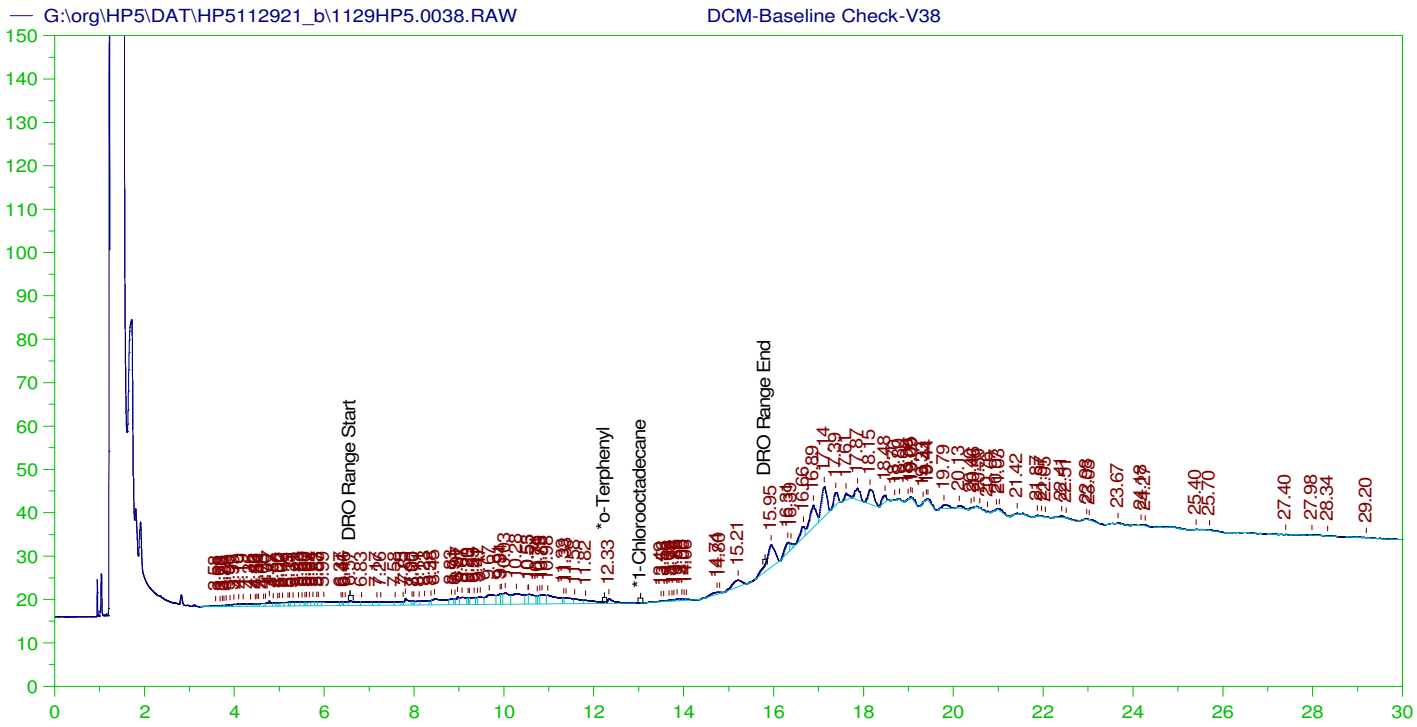
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: LCSD-161631-RRO ;1129HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0037.RAW
Date & Time Acquired: 11/30/2021 11:16:00 AM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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	16.291	.5	.077	15.48	-

RRO Area:4577424 RRO AMOUNT: 0.1603727



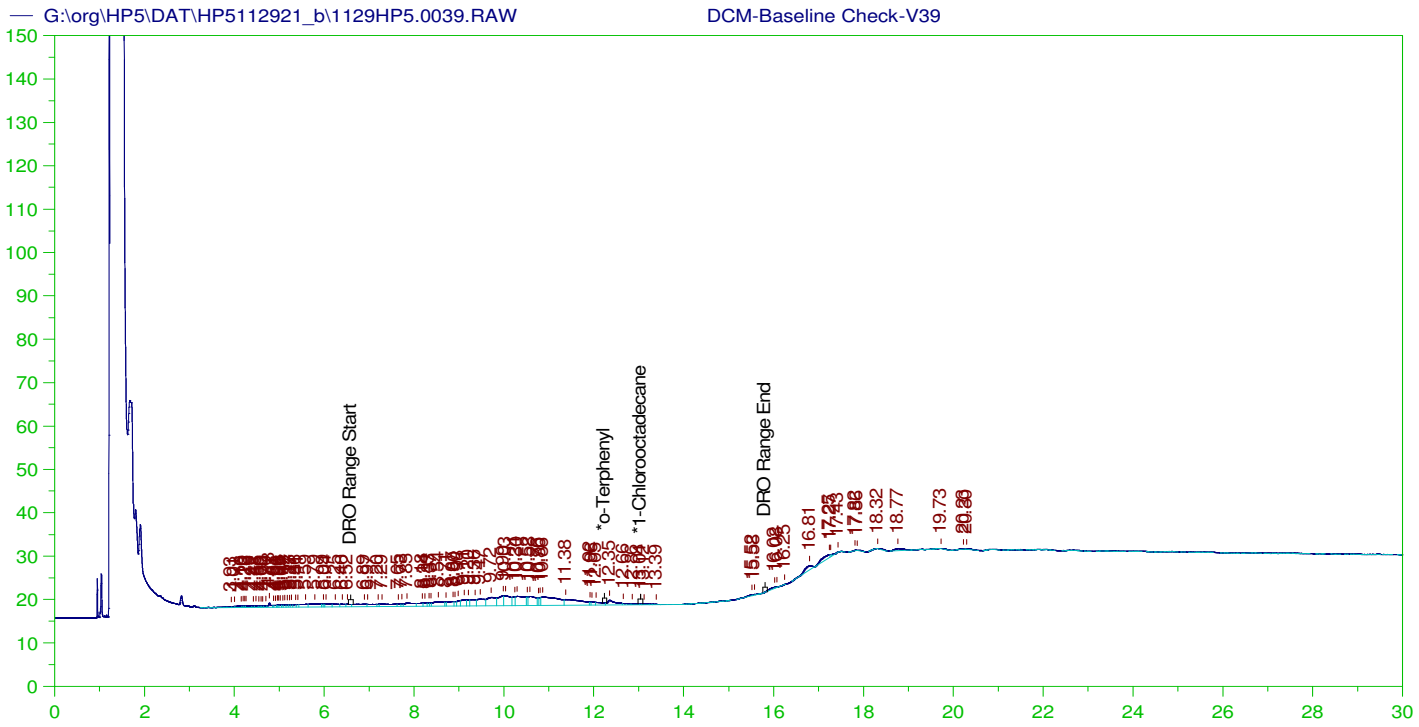
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V38
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0038.RAW
Date & Time Acquired: 11/30/2021 11:58:40 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	29.963	200.	.	.	-
*1-Chlorooctadecane	29.963	200.	.	.	-

DRO Area:493578.3 DRO Amount: 15.74252
TEH Area:1014971 TEH Amount: 32.37219



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V39
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0039.RAW
Date & Time Acquired: 11/30/2021 12:41:25 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

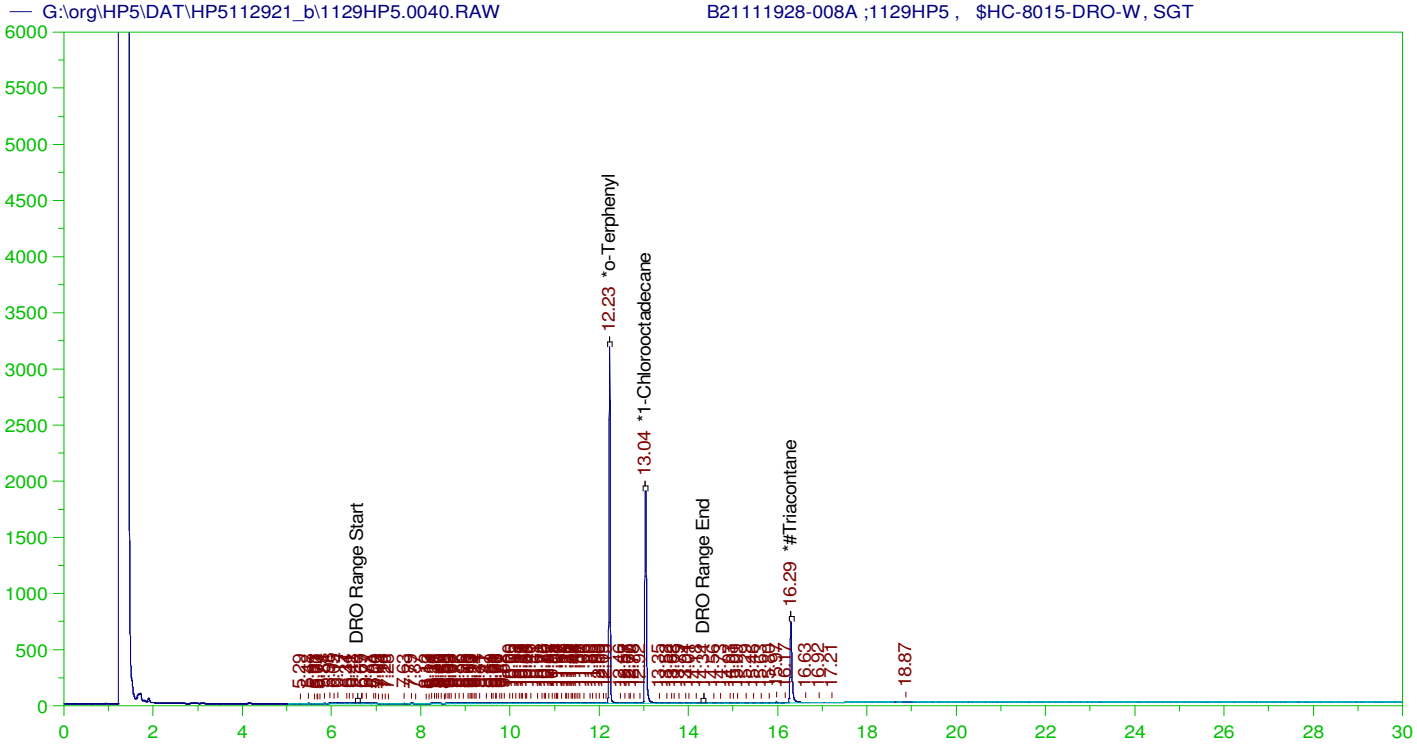
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.948	200.	.	-
*1-Chlorooctadecane	13.039	200.	.016	.01 -

DRO Area:420040.6 DRO Amount: 13.39706
TEH Area:551368.1 TEH Amount: 17.58571

ERH1938 (Post-chlorination) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0040.RAW B21111928-008A ;1129HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-008A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0040.RAW
Date & Time Acquired: 11/30/2021 1:24:11 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

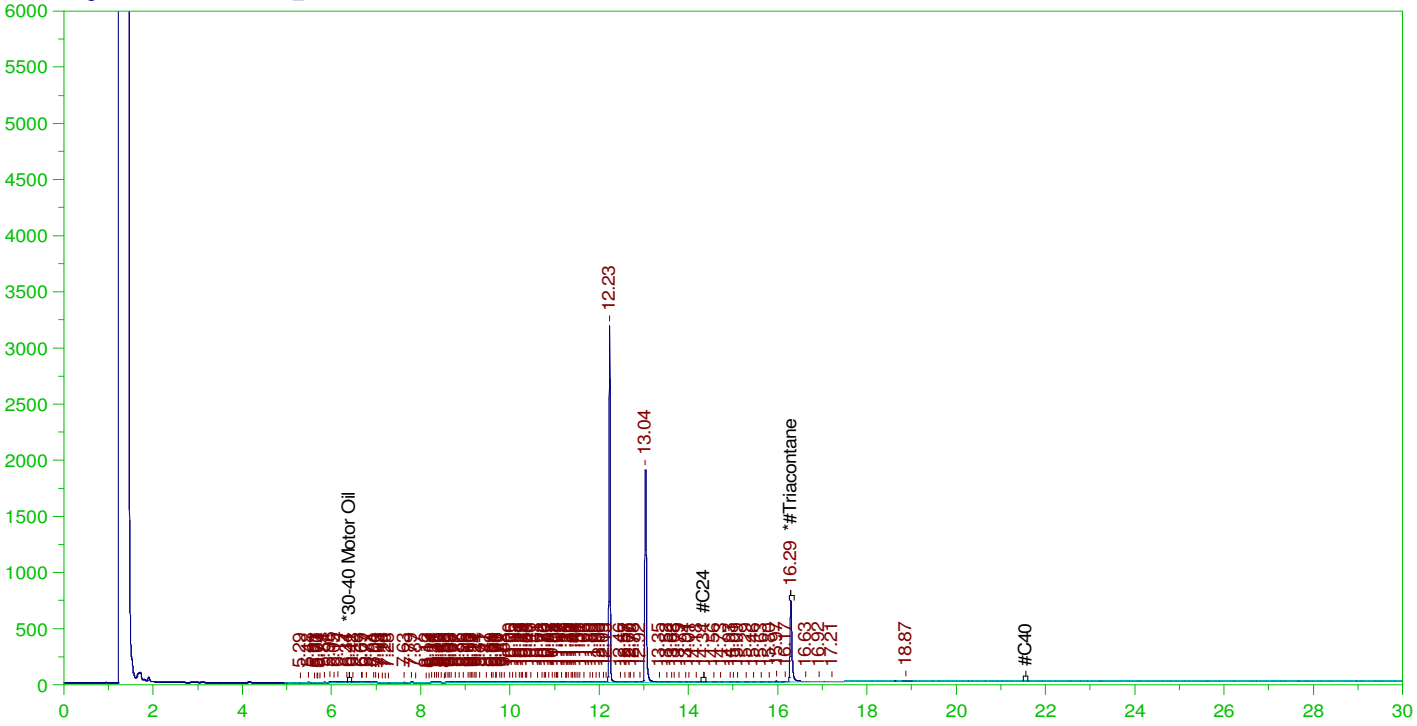
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.229	.192	.168	87.38	-
*1-Chlorooctadecane	13.036	.192	.124	64.45	-
*#Triacontane	16.293	.192	.075	39.01	-

DRO Area:441187 DRO Amount: 0.0135303
TEH Area:685663.3 TEH Amount: 2.102789E-02

ERH1938 (Post-chlorination) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0040.RAW B21111928-008A ;1129HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-008A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0040.RAW
Date & Time Acquired: 11/30/2021 1:24:11 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AFa-SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

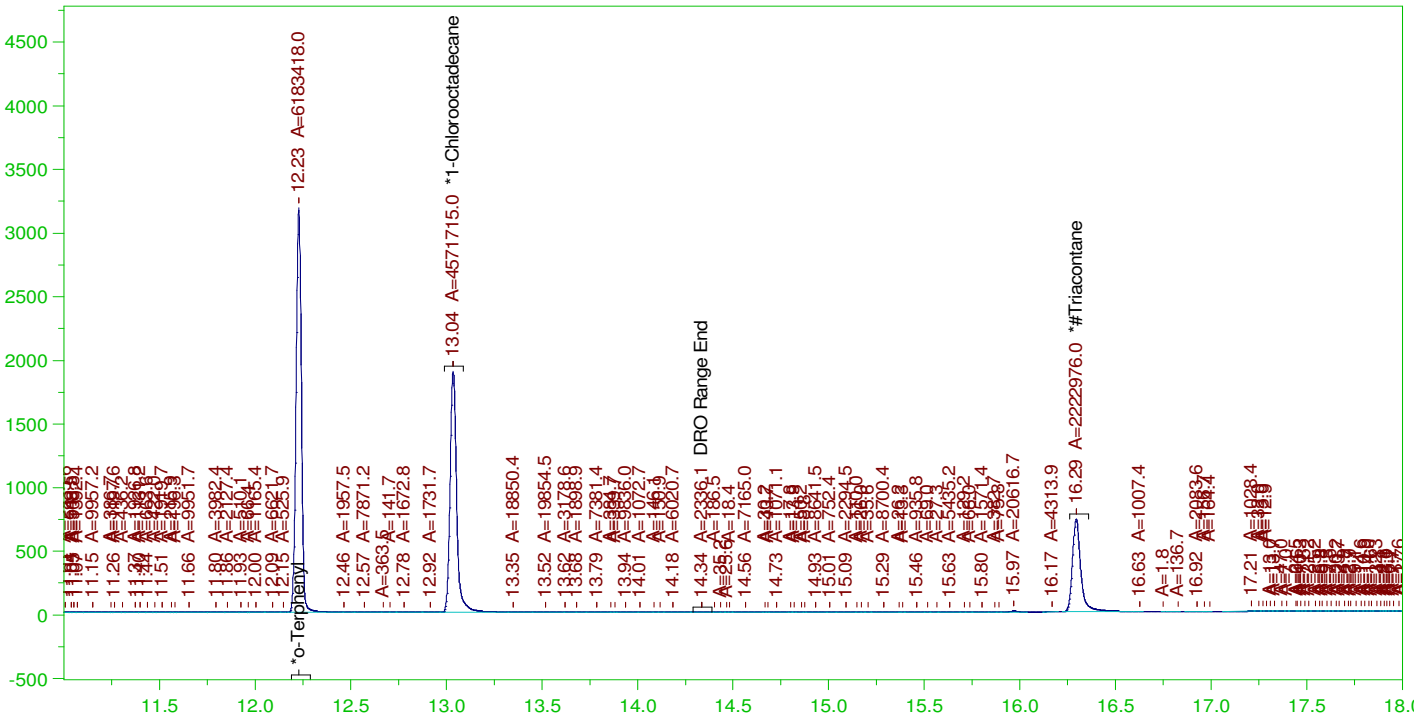
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.29 to 21.606

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.293	.481	.075	15.6	-

RRO Area:104550.8 RRO AMOUNT: 3.522114E-03

ERH1938 (Post-chlorination) Batch ID: 161631

G:\org\HP5\DAT\HP5112921_b\1129HP5.0040.RAW B21111928-008A ;1129HP5 , $HC-8015-DRO-W, SGT



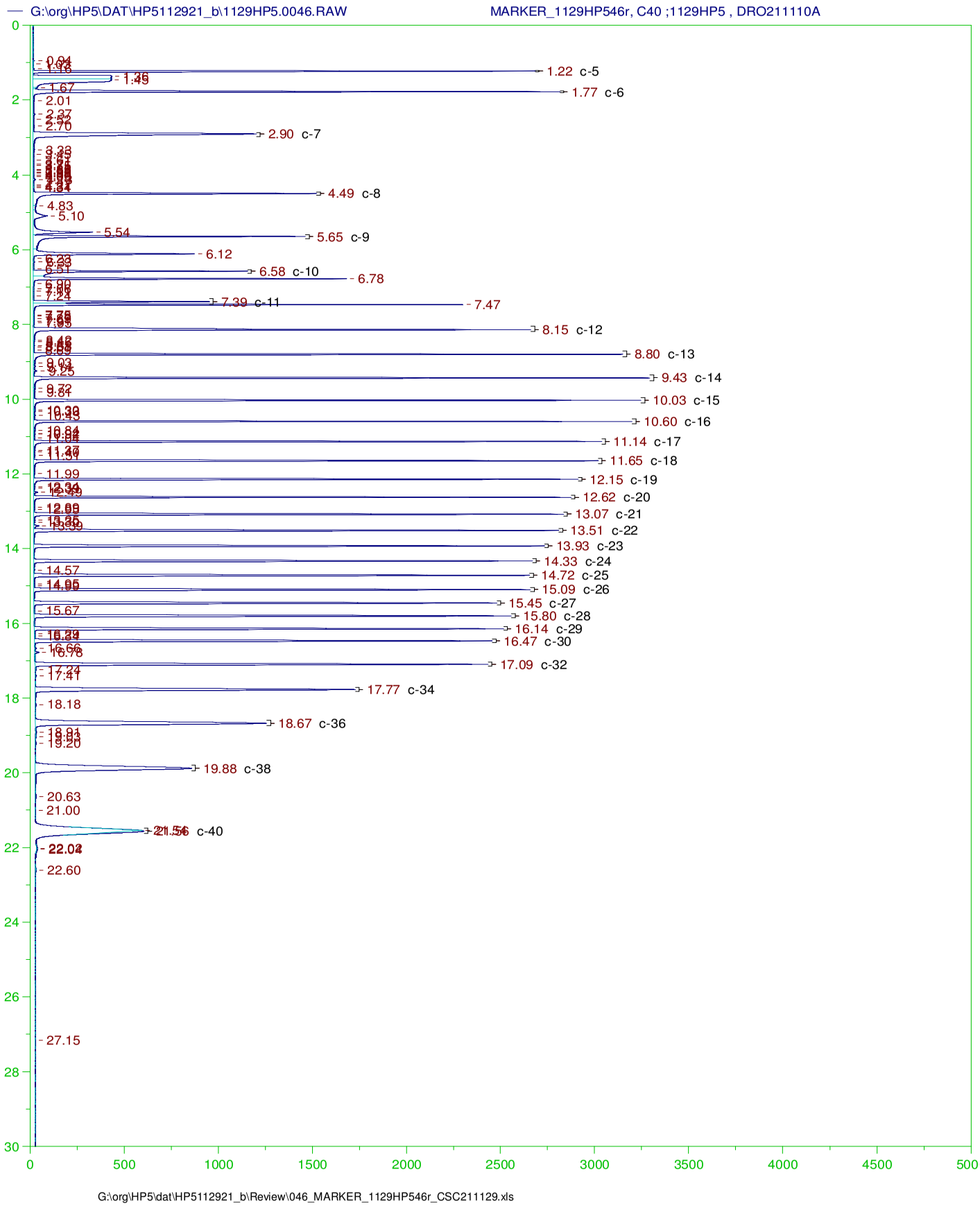
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-008A ;1129HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0040.RAW
Date & Time Acquired: 11/30/2021 1:24:11 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24-Tri.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.229	.192	.167	87.07	-
*1-Chlorooctadecane	13.036	.192	.124	64.37	-
*#Triacontane	16.293	.192	.074	38.42	-

DRO Area:355926.4 DRO Amount: 1.091554E-02
TEH Area:632152.1 TEH Amount: 1.938682E-02



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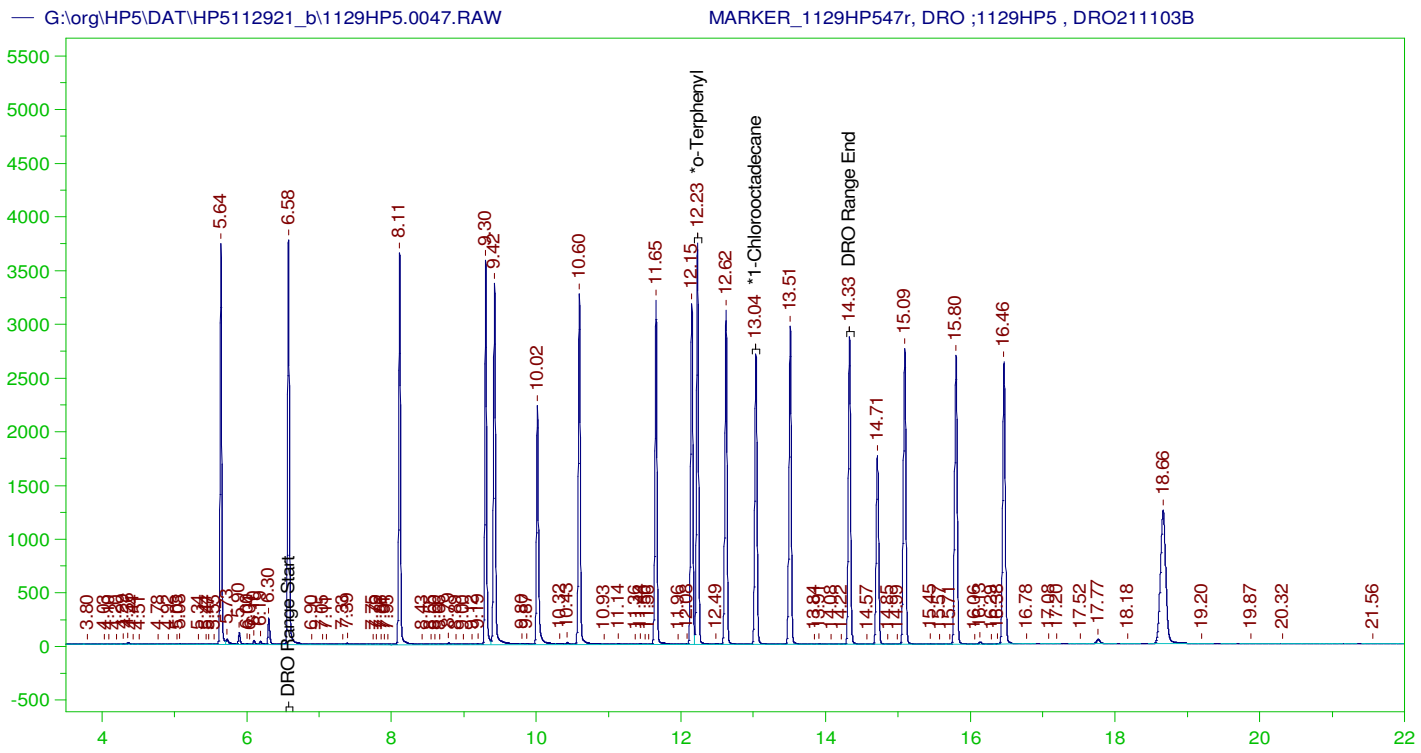


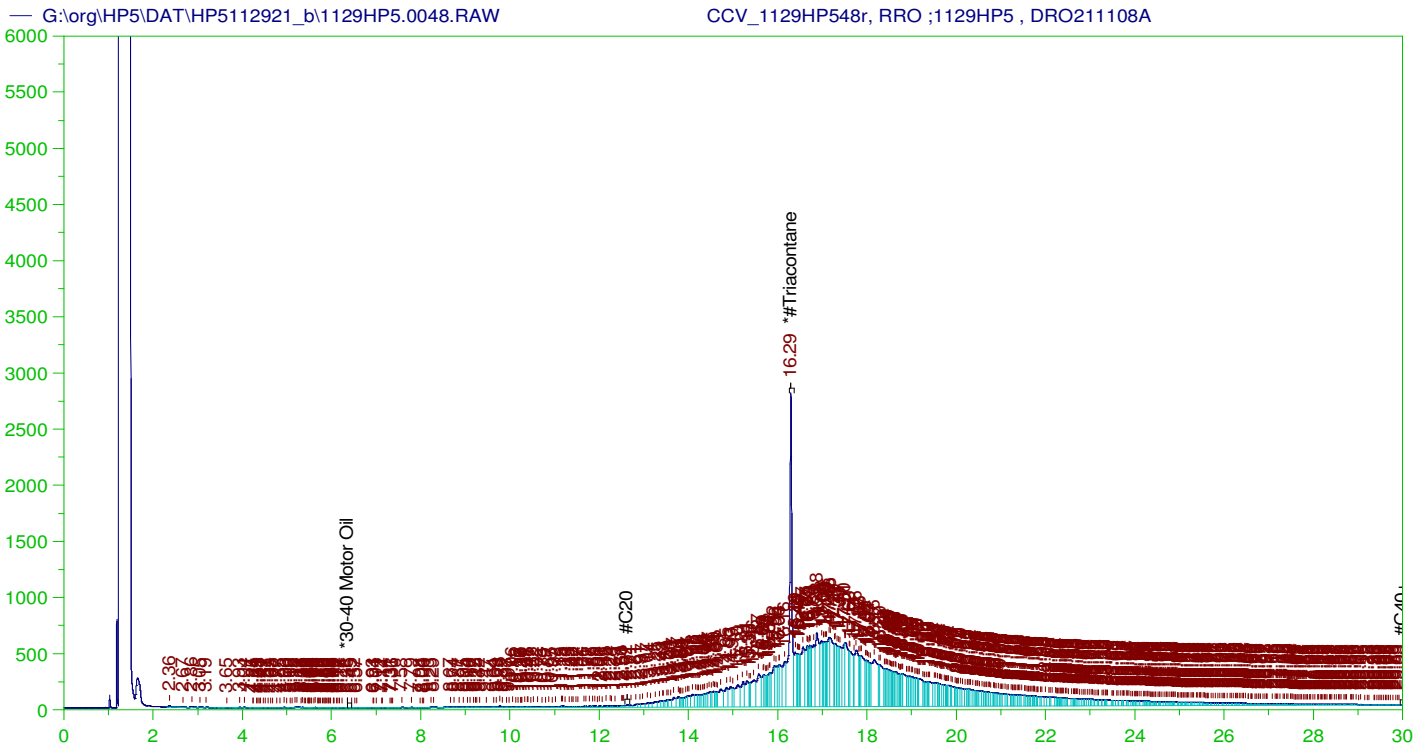
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1129HP547r, DRO ;1129HP5 , DRO211103B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0047.RAW
Date & Time Acquired: 11/30/2021 6:24:07 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.23	.2	.201	100.33	-
*1-Chlorooctadecane	13.036	.2	.161	80.73	-

DRO Area:6.887581E+07 DRO Amount: 2.196772
TEH Area:1.071144E+08 TEH Amount: 3.41638



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1129HP548r, RRO ;1129HP5 , DRO211108A
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Date & Time Acquired: 11/30/2021 7:07:19 PM
Method File: G:\Org\HP5\Methods\DC_ORO-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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	16.294	500.	356.005	71.2	-

~~RRO~~ TEH (Oil Range) Area:1.410852E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4943.001

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0048.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.04	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.294	200.	356.005	178.	75-125

AMN 12/14/2021

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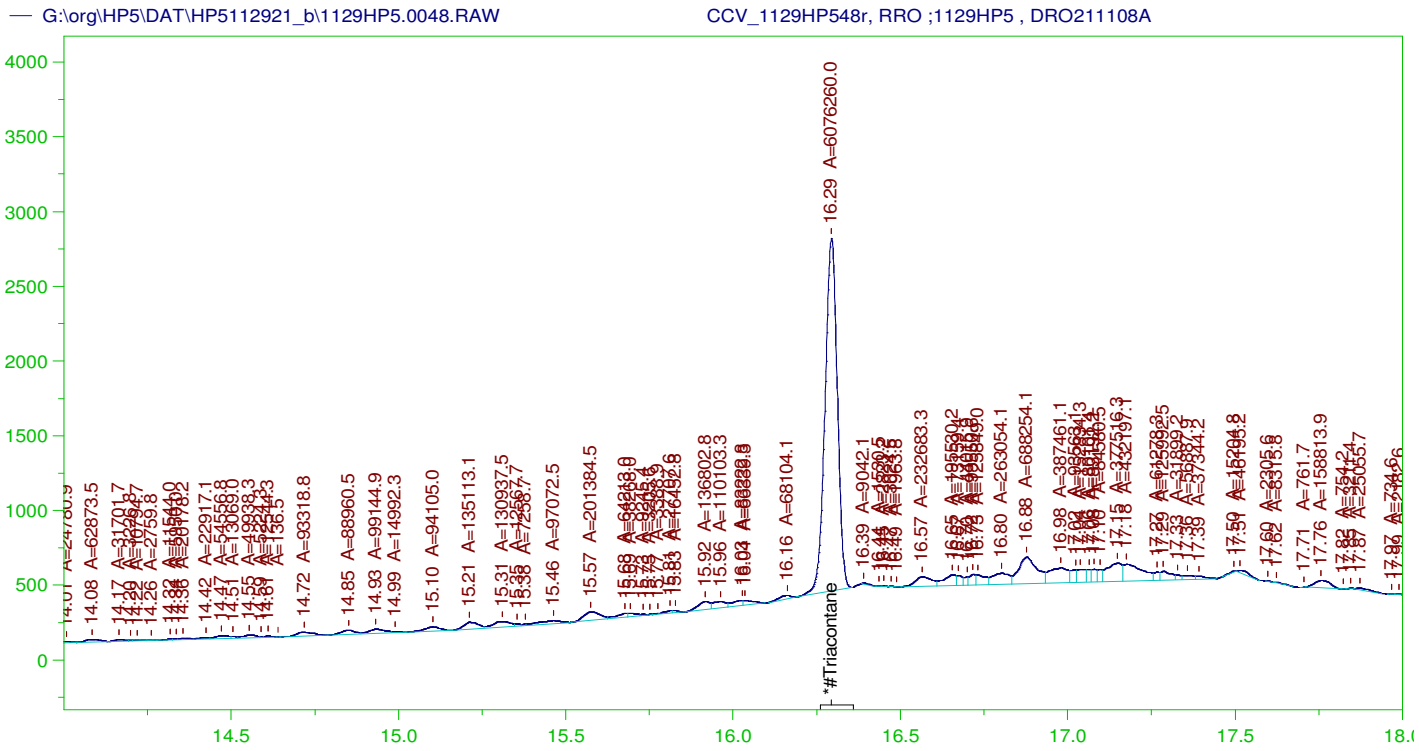


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1129HP548r, RRO ;1129HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0048.RAW
Date & Time Acquired: 11/30/2021 7:07:19 PM
Method File: G:\Org\HP5\Methods\DS_OROb-AF-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AF.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

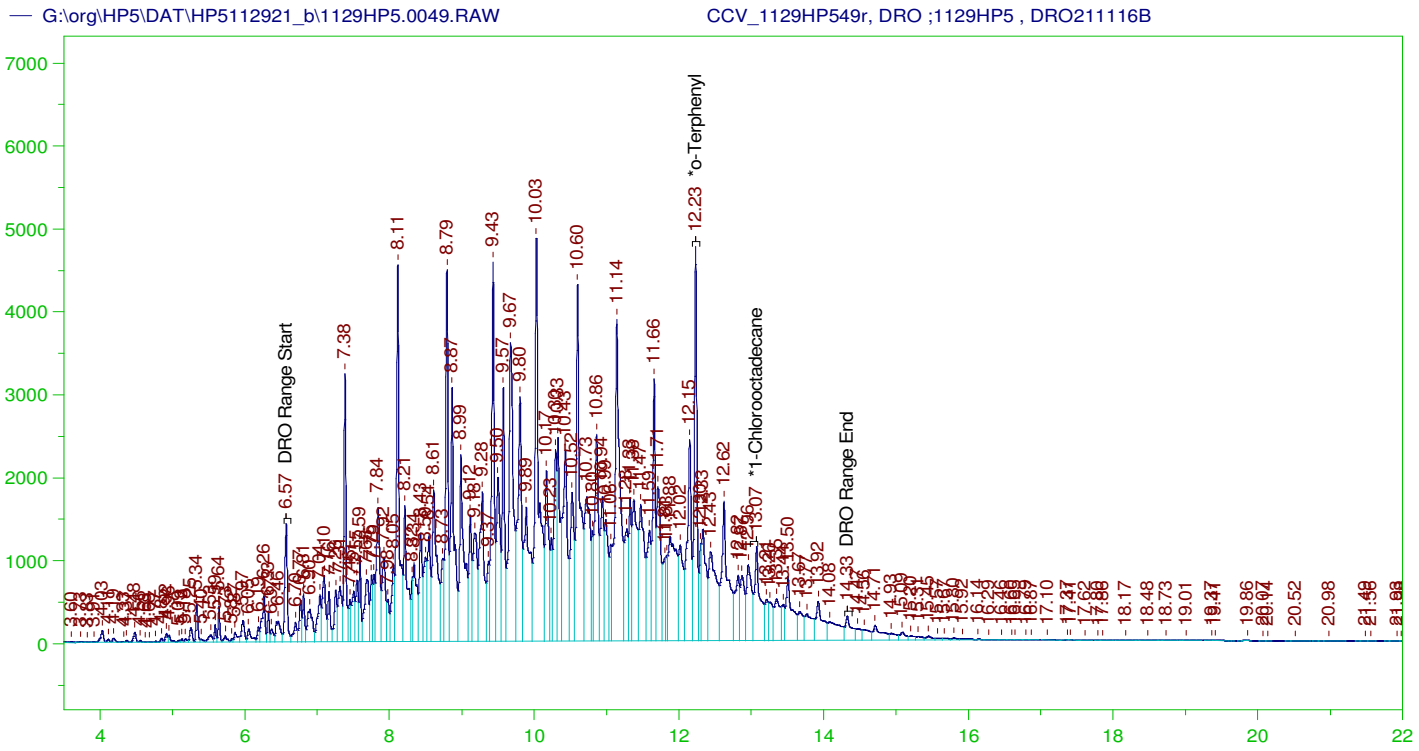
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.294	500.	210.032	42.01	-

RRO Area:6804585 RRO AMOUNT: 238.4026

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0048.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.04	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.294	200.	210.032	105.02	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1129HP549r, DRO ;1129HP5 , DRO211116B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0049.RAW
Date & Time Acquired: 11/30/2021 7:50:43 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-ID-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102ID-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 14.39

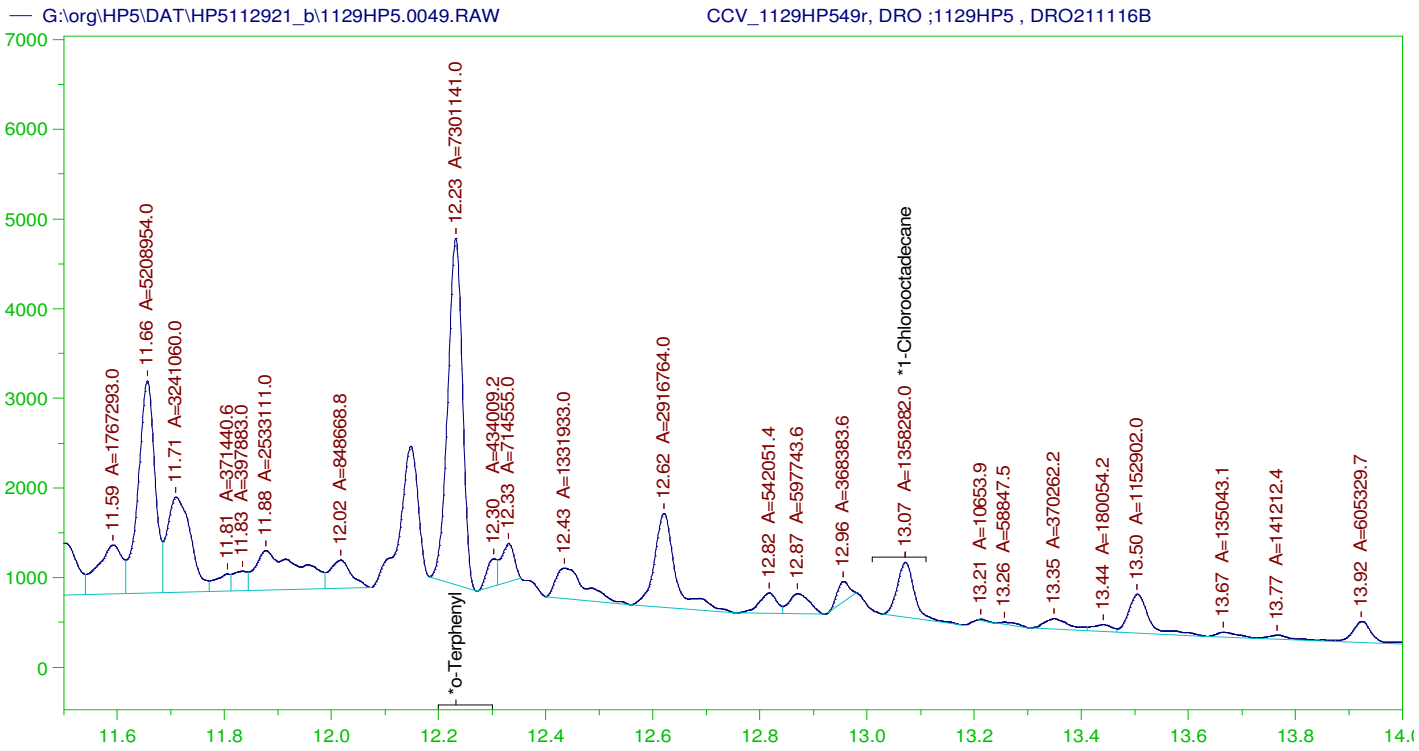
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.232	200.	338.888	169.44	-
*1-Chlorooctadecane	13.072	200.	164.677	82.34	-

DRO Area:4.732977E+08 DRO Amount: 15095.68
TEH Area:4.904597E+08 TEH Amount: 15643.06

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0049.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15643.06	104.29	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.232	200.	338.888	169.44	85-115
*1-Chlorooctadecane	13.072	200.	164.677	82.34	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1129HP549r, DRO ;1129HP5 , DRO211116B
Raw File: G:\org\HP5\DAT\HP5112921_b\1129HP5.0049.RAW
Date & Time Acquired: 11/30/2021 7:50:43 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-ID-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IC-24.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.55 to 14.4

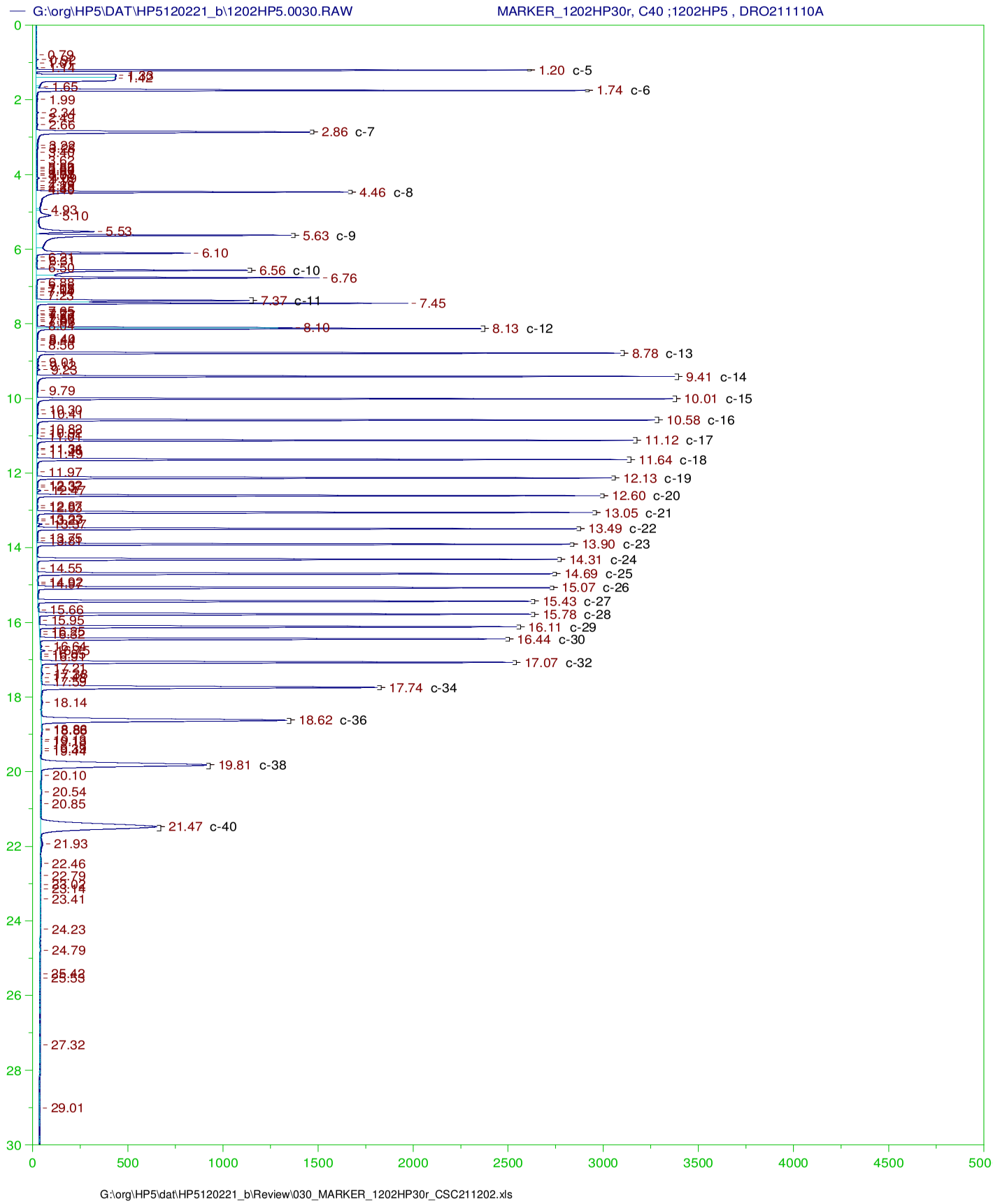
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.232	200.	205.613	102.81	-
*1-Chlorooctadecane	13.072	200.	38.252	19.13	-

DRO Area:2.626484E+08 DRO Amount: 8377.086
TEH Area:2.734723E+08 TEH Amount: 8722.312

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5112921_b\1129HP5.0049.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8722.31	58.15	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.232	200.	205.613	102.81	85-115
*1-Chlorooctadecane	13.072	200.	38.252	19.13	85-115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1.20 c-5
1.74 c-6
2.86 c-7
4.46 c-8
5.63 c-9
6.56 c-10
7.37 c-11
8.13 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
12.60 c-20
13.05 c-21
13.49 c-22
13.90 c-23
14.31 c-24
14.69 c-25
15.07 c-26
15.43 c-27
15.78 c-28
16.11 c-29
16.44 c-30
17.07 c-32
17.74 c-34
18.62 c-36
19.81 c-38
21.47 c-40
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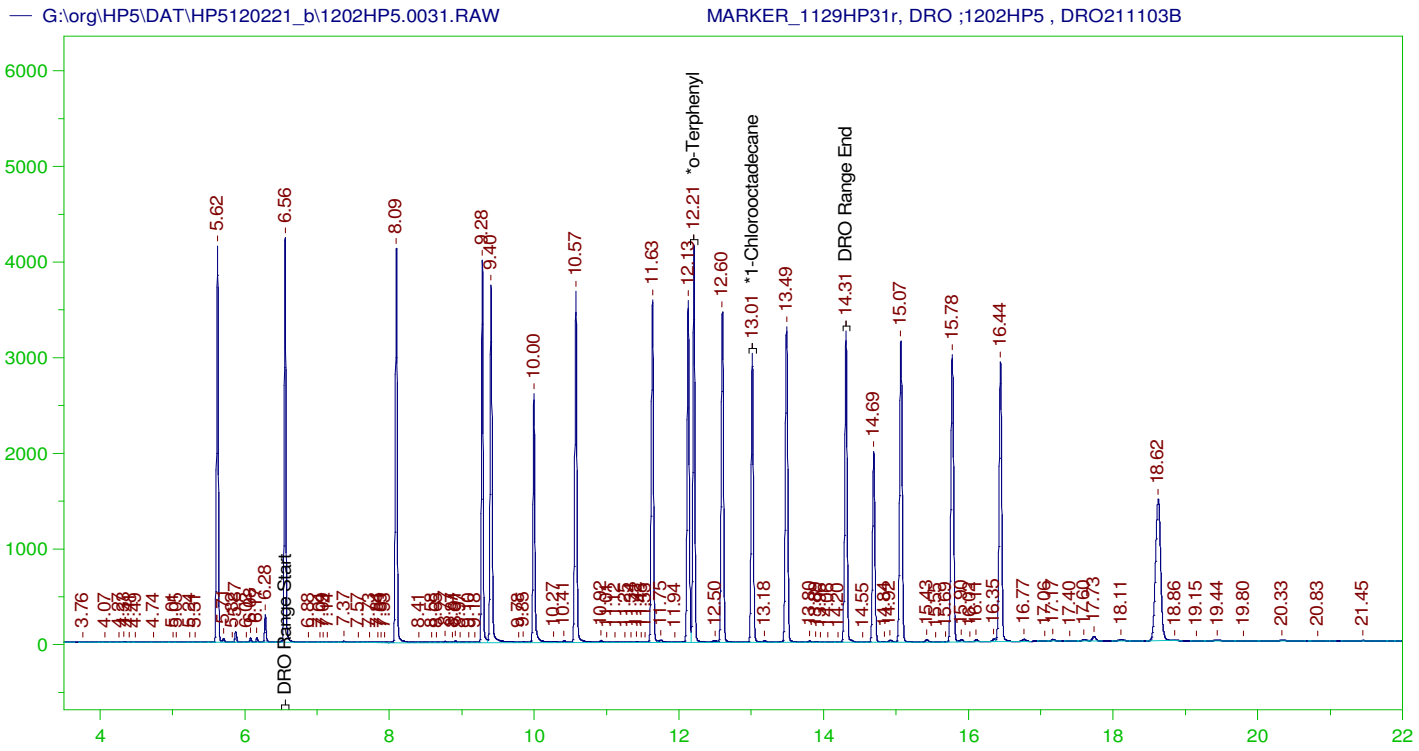


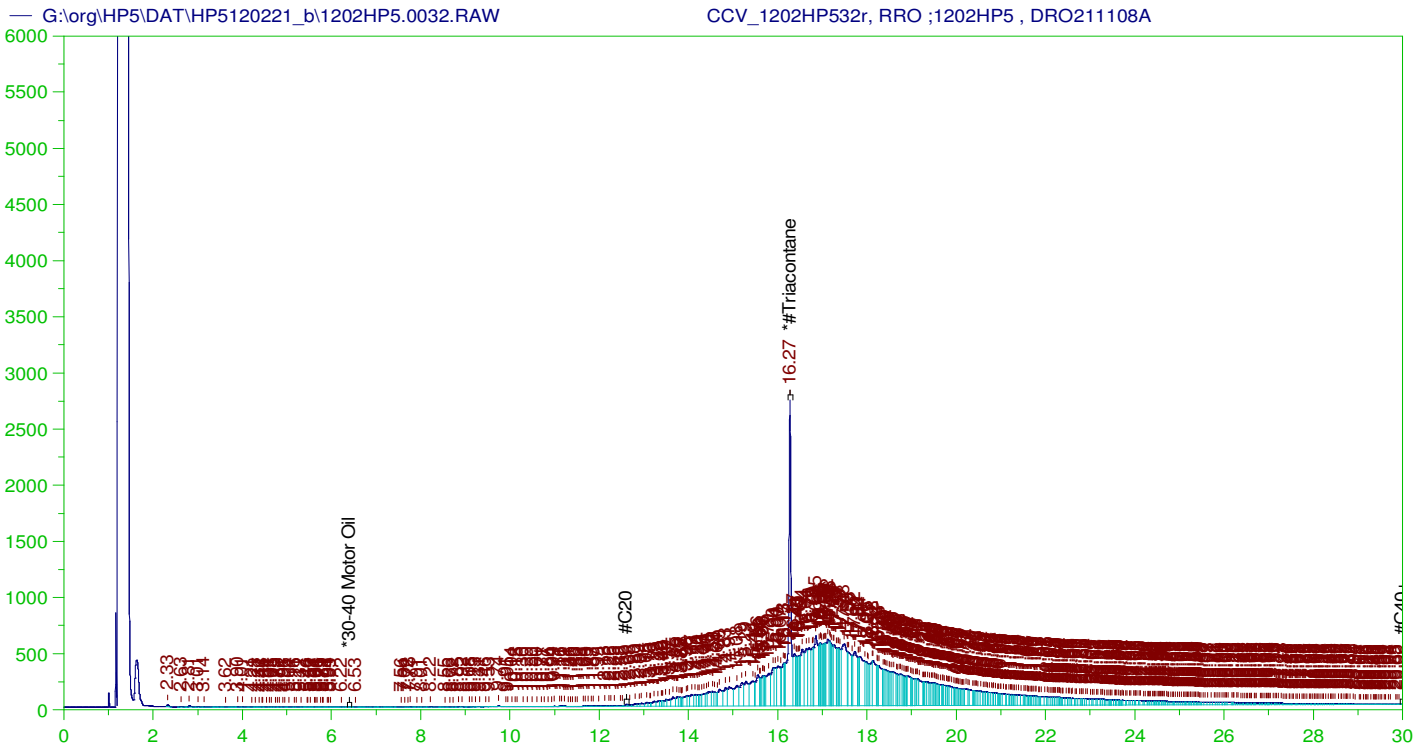
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1129HP31r, DRO ;1202HP5 , DRO211103B
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0031.RAW
Date & Time Acquired: 12/3/2021 4:54:31 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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	12.207	.2	.223	111.68	-
*1-Chlorooctadecane	13.014	.2	.181	90.27	-

DRO Area:7.667422E+07 DRO Amount: 2.4455
TEH Area:1.200637E+08 TEH Amount: 3.829393



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1202HP532r, RRO ;1202HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0032.RAW
Date & Time Acquired: 12/3/2021 5:37:42 AM
Method File: G:\Org\HP5\Methods\DC_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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	16.272	500.	339.471	67.89	-

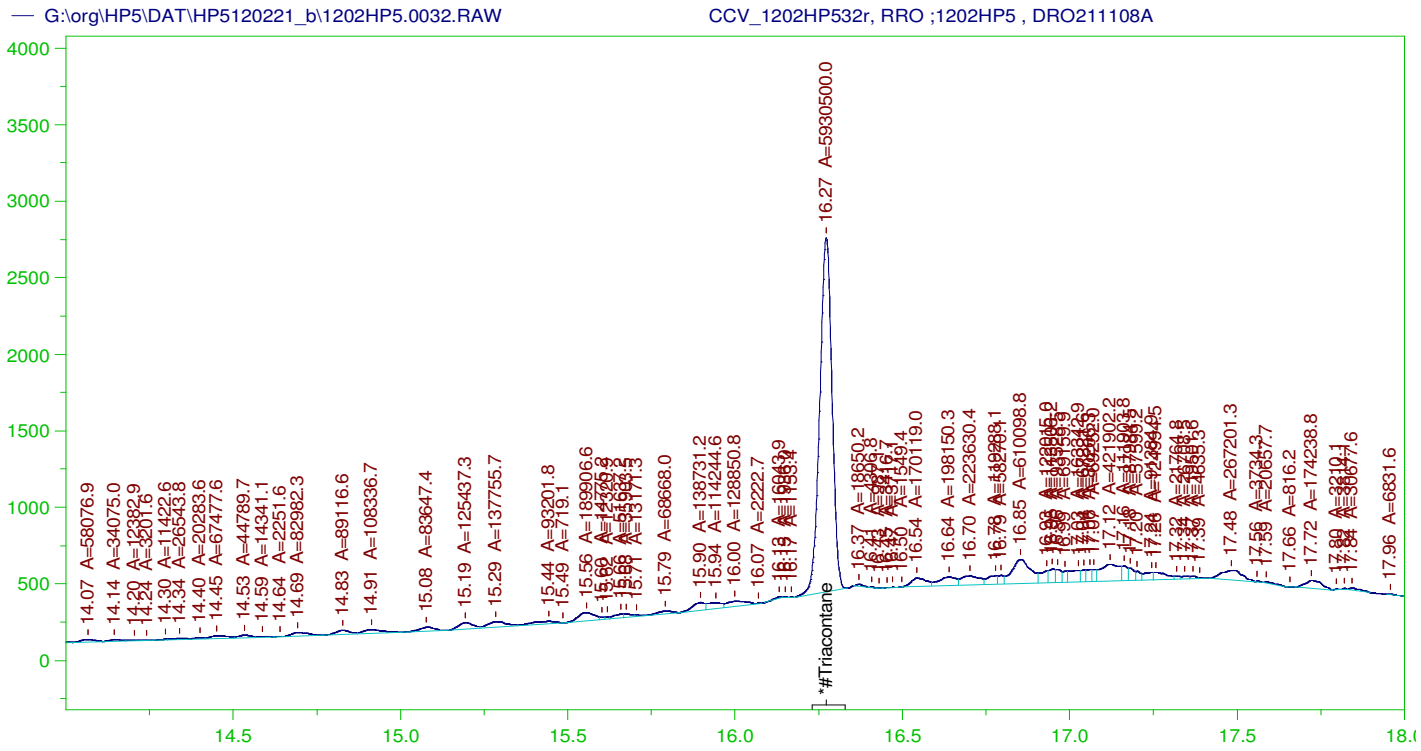
~~RRO~~ TEH (Oil Range) Area:1.363904E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4778.517

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120221_b\1202HP5.0032.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.272	200.	339.471	169.74	75-125

AMN 12/13/2021



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1202HP532r, RRO ;1202HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0032.RAW
Date & Time Acquired: 12/3/2021 5:37:42 AM
Method File: G:\Org\HP5\Methods\DS_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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

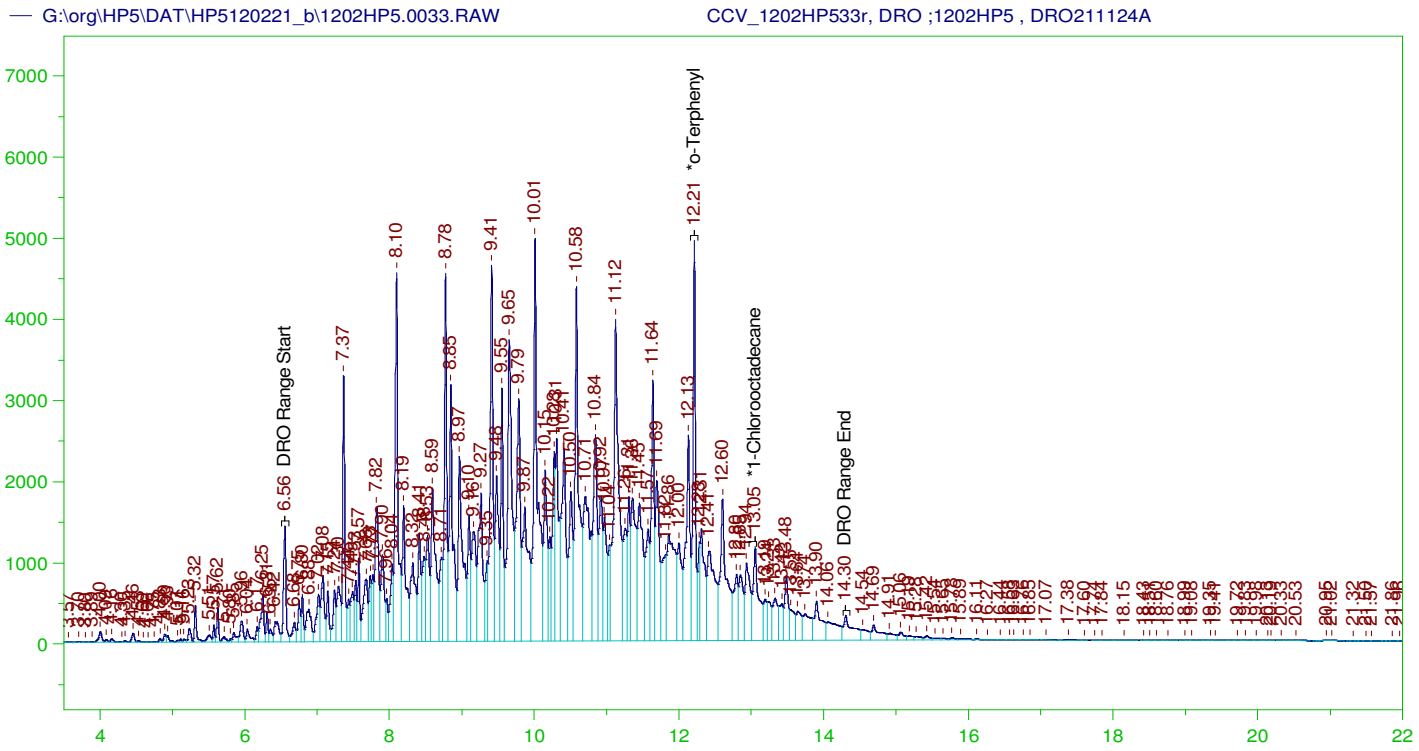
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.272	500.	204.994	41.	-

RRO Area:6183030 RRO AMOUNT: 216.6261

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120221_b\1202HP5.0032.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.272	200.	204.994	102.5	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1202HP533r, DRO ;1202HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0033.RAW
Date & Time Acquired: 12/3/2021 6:20:45 AM
Method File: G:\Org\HP5\Methods\DC_8015-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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	12.213	200.	347.963	173.98	-
*1-Chlorooctadecane	13.051	200.	169.919	84.96	-

DRO Area:4.889742E+08 DRO Amount: 15595.67
TEH Area:5.057145E+08 TEH Amount: 16129.6

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120221_b\1202HP5.0033.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	16129.6	107.53	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.213	200.	347.963	173.98	85-115
*1-Chlorooctadecane	13.051	200.	169.919	84.96	85-115

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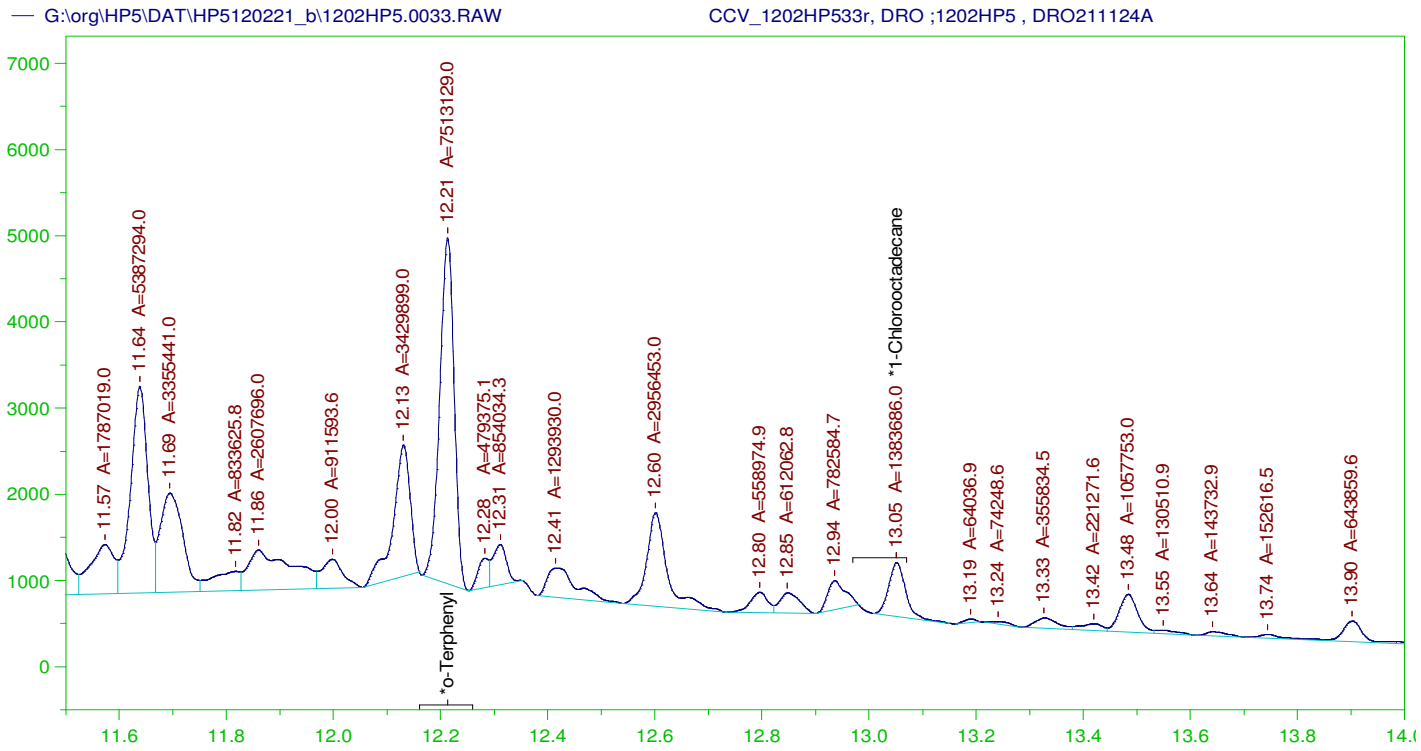


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1202HP533r, DRO ;1202HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0033.RAW
Date & Time Acquired: 12/3/2021 6:20:45 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-IE-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24.CAL
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

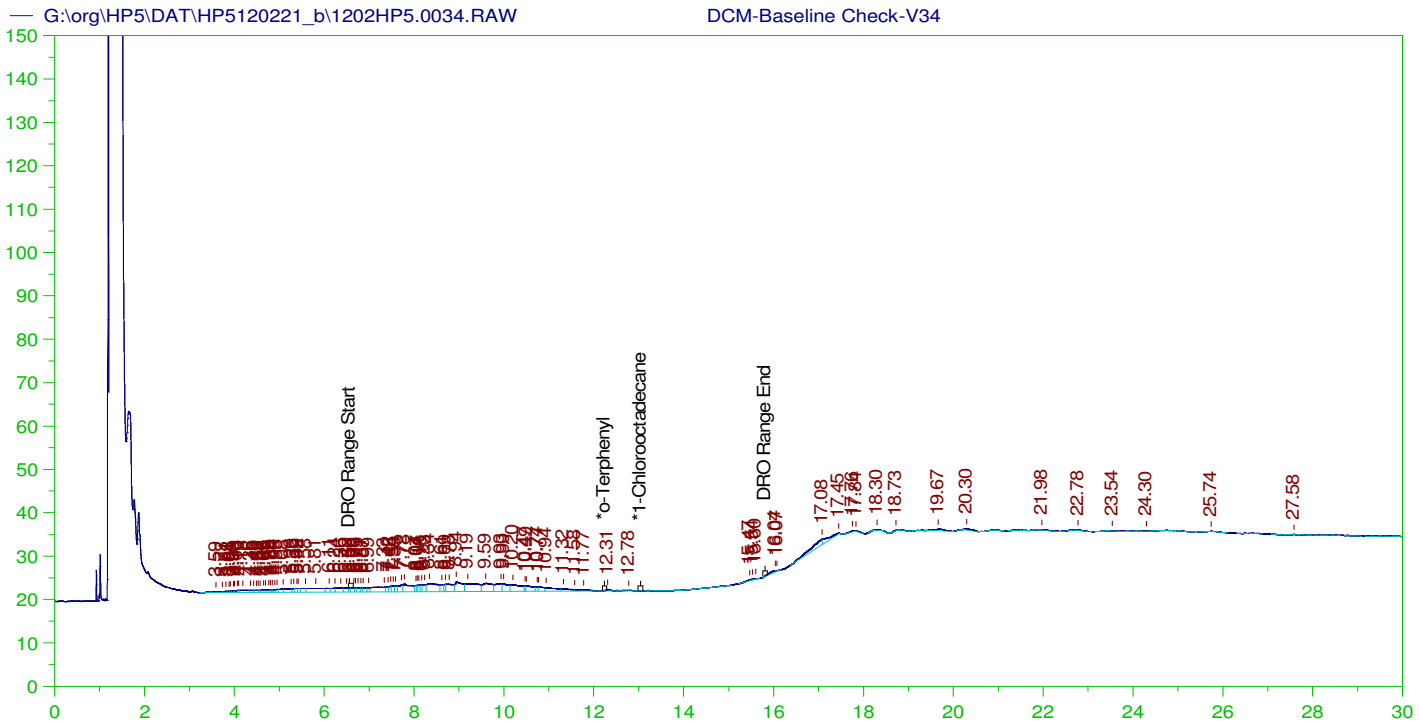
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.213	200.	211.583	105.79	-
*1-Chlorooctadecane	13.051	200.	38.967	19.48	-

DRO Area:2.753616E+08 DRO Amount: 8782.57
TEH Area:2.862118E+08 TEH Amount: 9128.633

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120221_b\1202HP5.0033.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	9128.63	60.86	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.213	200.	211.583	105.79	85-115
*1-Chlorooctadecane	13.051	200.	38.967	19.48	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

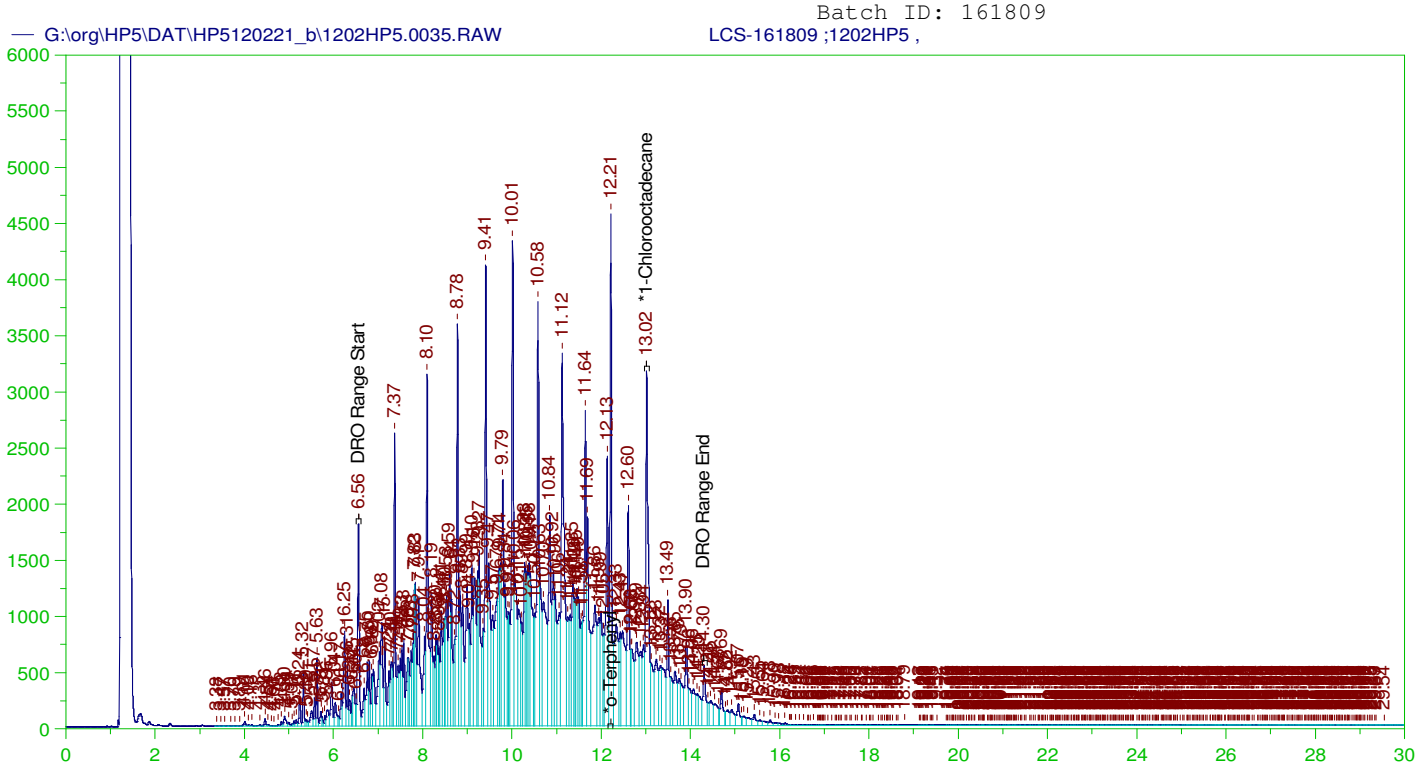
Sample Name: DCM-Baseline Check-V34
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0034.RAW
Date & Time Acquired: 12/3/2021 7:03:27 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

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	29.921	200.	.	.	-
*1-Chlorooctadecane	29.921	200.	.	.	-

DRO Area:407019.5 DRO Amount: 12.98176
TEH Area:599501 TEH Amount: 19.12089

Batch ID: 161809



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

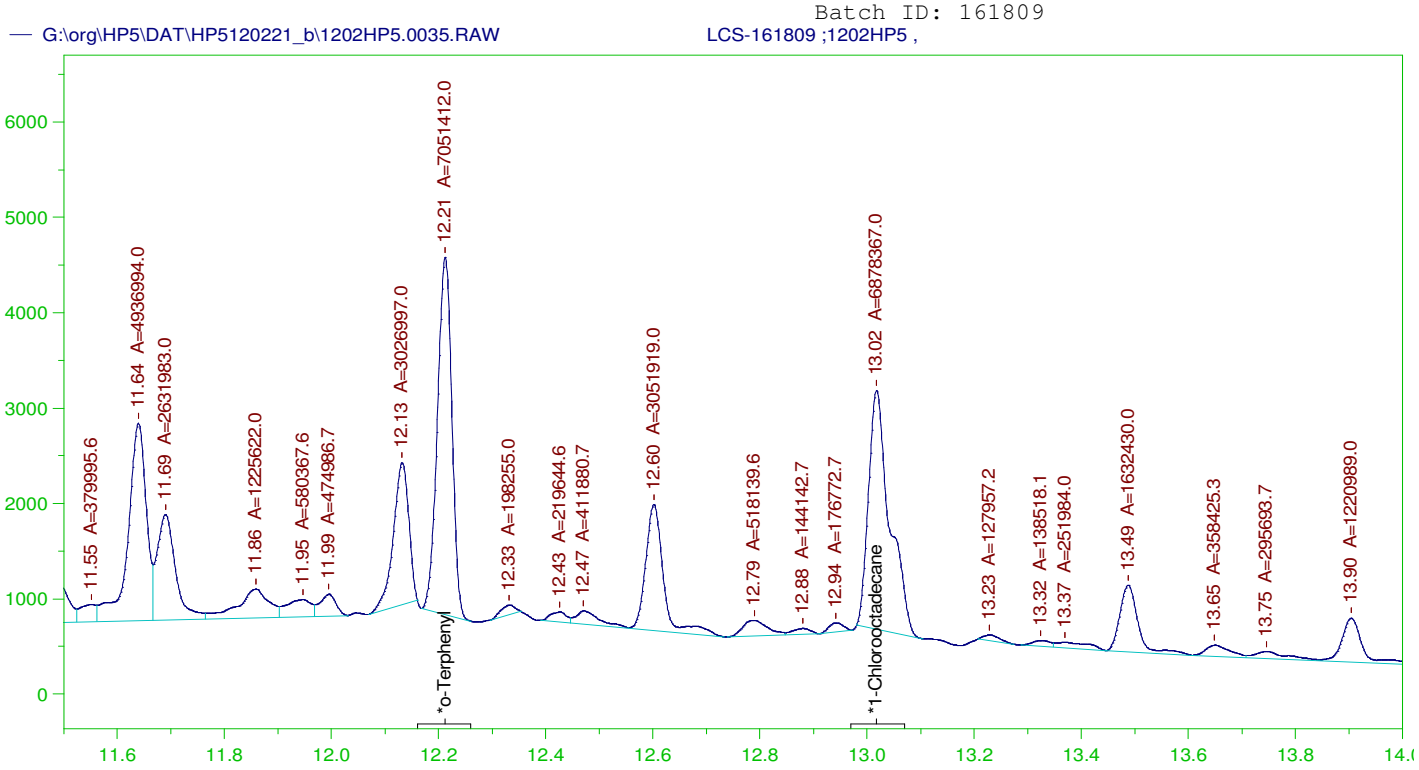
Sample Name: LCS-161809 ;1202HP5 ,
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0035.RAW
Date & Time Acquired: 12/3/2021 7:46:14 AM
Method File: G:\Org\HP5\Methods\D3_8015-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	12.212	.2	.343	171.54	-
*1-Chlorooctadecane	13.018	.2	.339	169.35	-

DRO Area:4.07108E+08 DRO Amount: 12.98458
TEH Area:4.3604E+08 TEH Amount: 13.90736

Batch ID: 161809



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

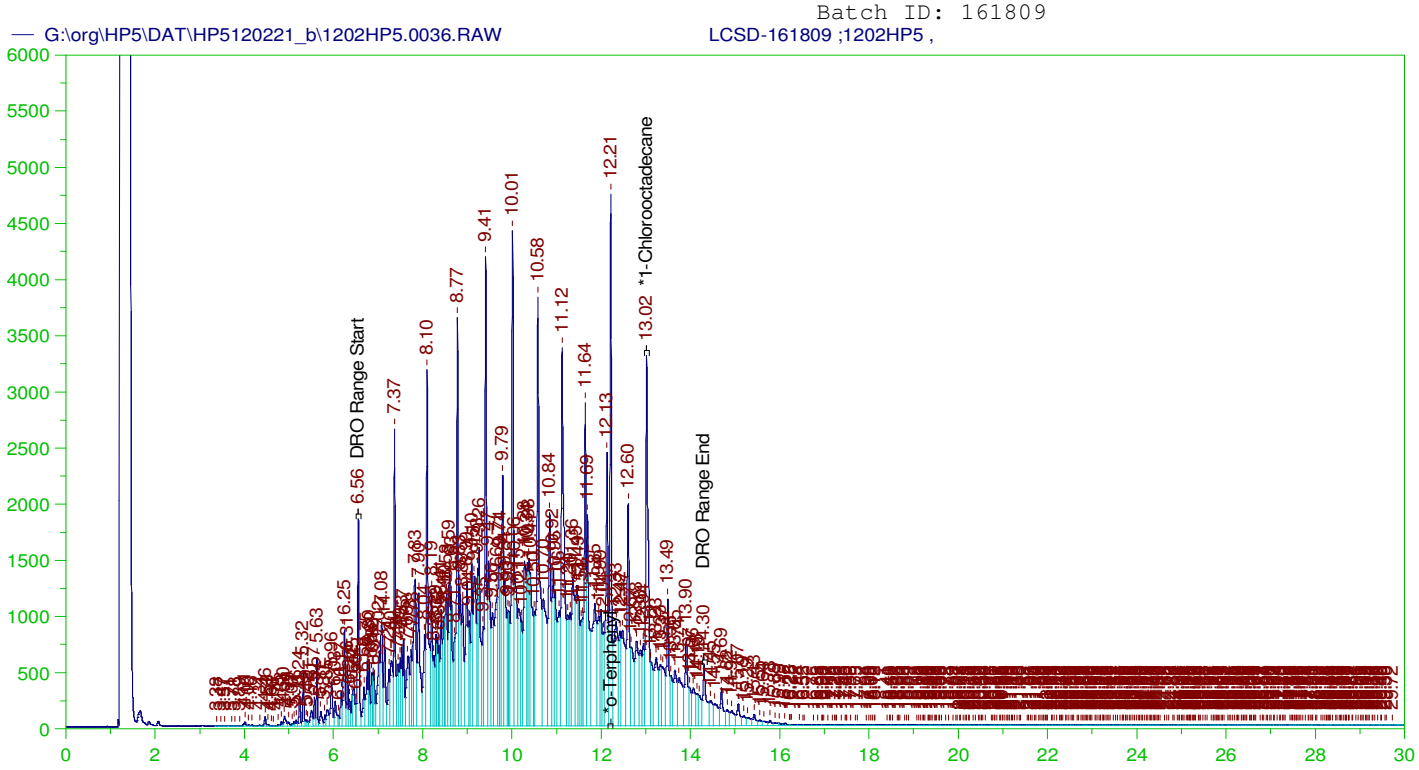
Sample Name: LCS-161809 ;1202HP5 ,
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0035.RAW
Date & Time Acquired: 12/3/2021 7:46:14 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-IE-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	12.212	.2	.199	99.29	-
*1-Chlorooctadecane	13.018	.2	.194	96.85	-

DRO Area:2.012475E+08 DRO Amount: 6.418724
TEH Area:2.152214E+08 TEH Amount: 6.864418

Batch ID: 161809



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: LCSD-161809 ;1202HP5 ,
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0036.RAW
Date & Time Acquired: 12/3/2021 8:29:00 AM
Method File: G:\Org\HP5\Methods\D3_8015-120236-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

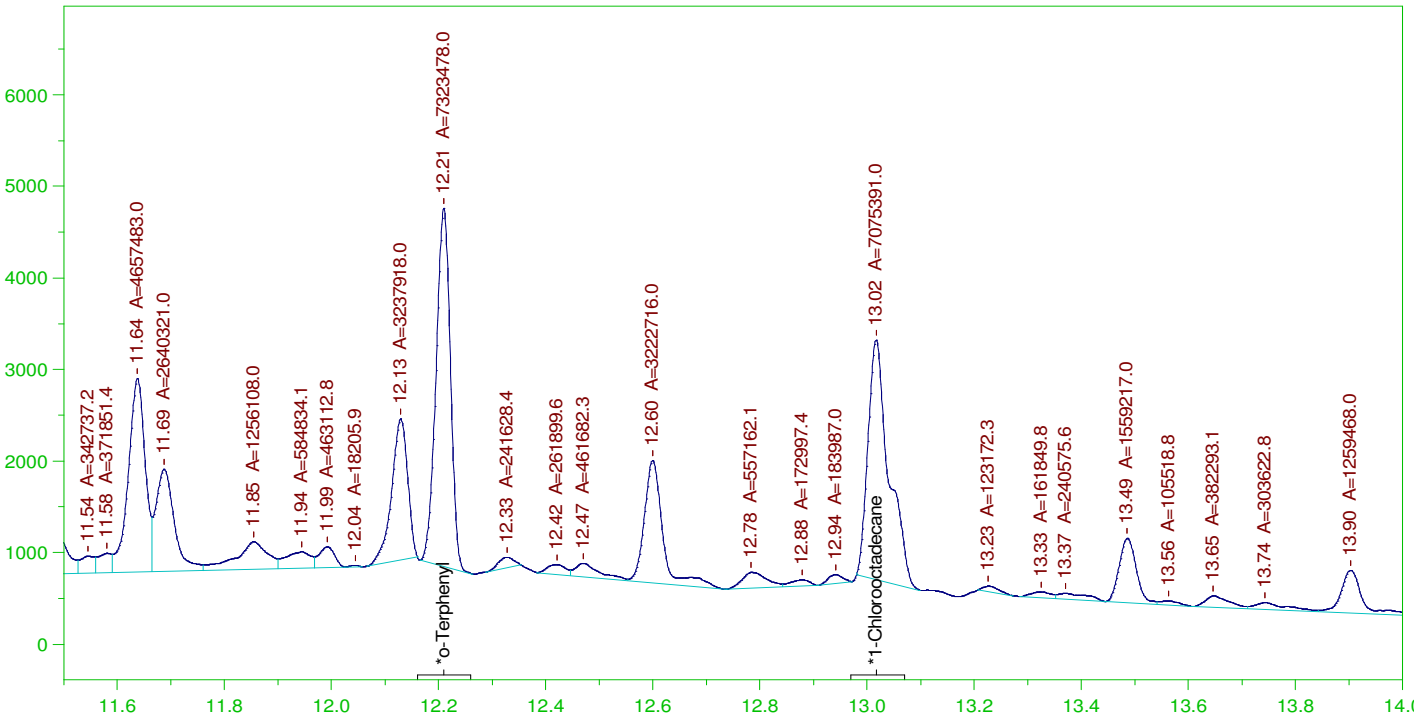
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.21	.2	.346	173.14	-
*1-Chlorooctadecane	13.017	.2	.346	172.96	-

DRO Area:4.151054E+08 DRO Amount: 13.23966
TEH Area:4.440533E+08 TEH Amount: 14.16294

Batch ID: 161809

G:\org\HP5\DAT\HP5120221_b\1202HP5.0036.RAW LCSD-161809 ;1202HP5 ,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

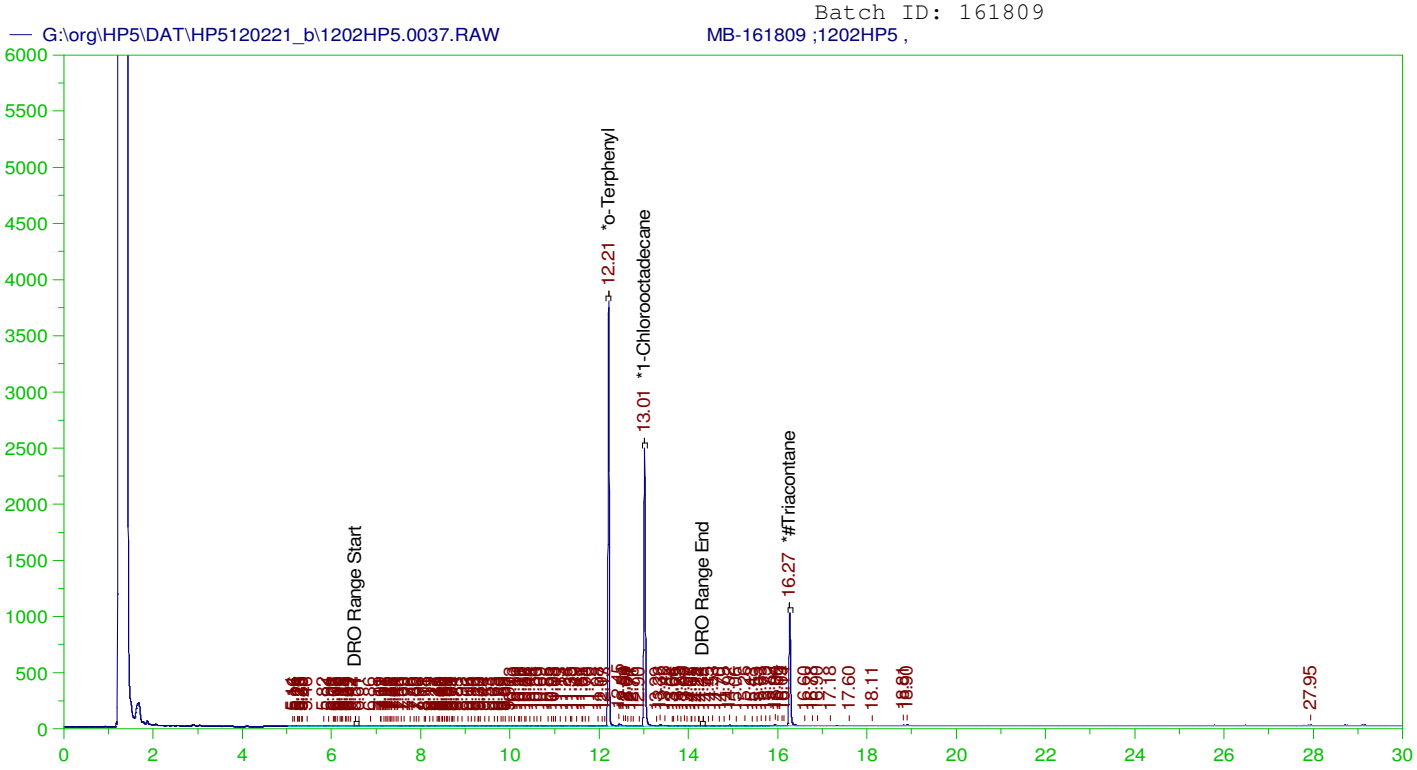
Sample Name: LCSD-161809 ;1202HP5 ,
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0036.RAW
Date & Time Acquired: 12/3/2021 8:29:00 AM
Method File: G:\Org\HP5\Methods\DS_8015-24-IE-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	12.21	.2	.206	103.12	-
*1-Chlorooctadecane	13.017	.2	.199	99.63	-

DRO Area:2.044394E+08 DRO Amount: 6.52053
TEH Area:2.186485E+08 TEH Amount: 6.973725

Batch ID: 161809



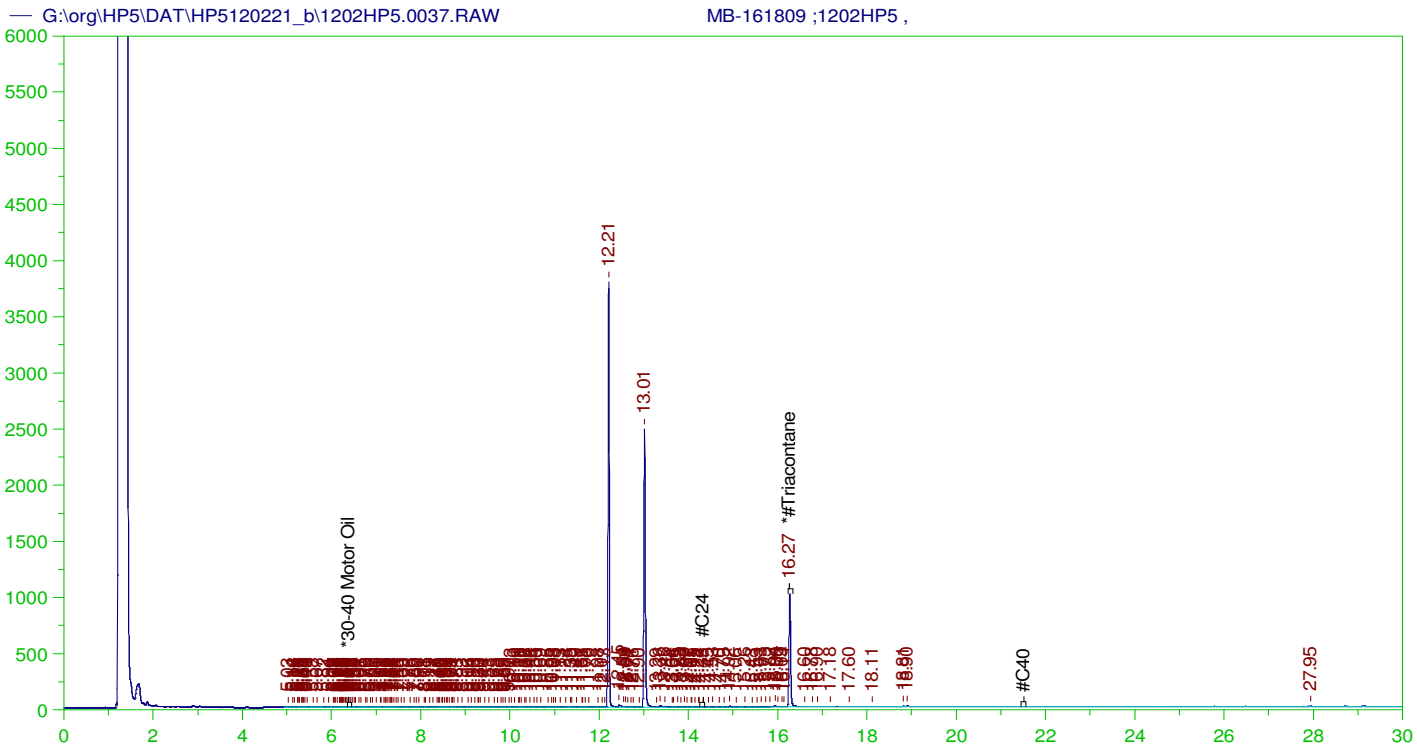
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MB-161809 ;1202HP5 ,
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0037.RAW
Date & Time Acquired: 12/3/2021 9:11:42 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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	12.208	.2	.205	102.32	-
*1-Chlorooctadecane	13.014	.2	.158	78.96	-
*#Triacontane	16.268	.2	.096	48.17	-

DRO Area:749615.3 DRO Amount: 2.390874E-02
TEH Area:1009767 TEH Amount: 3.220619E-02



RESIDUAL RANGE ORGANICS CHROMATOGRAM

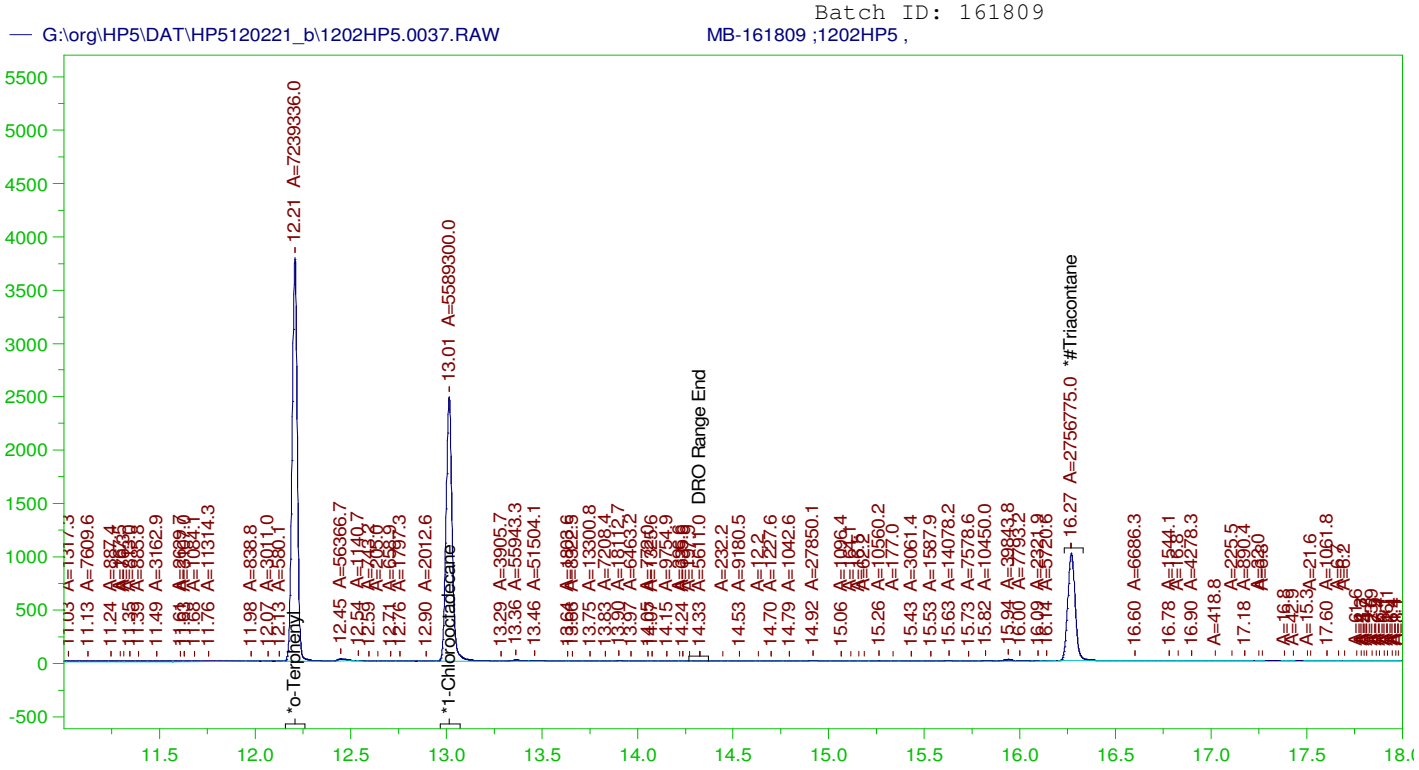
Sample Name: MB-161809 ;1202HP5 ,
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0037.RAW
Date & Time Acquired: 12/3/2021 9:11:42 AM
Method File: G:\Org\HP5\Methods\DR_OROS-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG-SAMP.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.26 to 21.56

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.268	.5	.096	19.27	-

RRO Area:221338.9 RRO AMOUNT: 7.754737E-03

Batch ID: 161809



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MB-161809 ;1202HP5 ,
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0037.RAW
Date & Time Acquired: 12/3/2021 9:11:42 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

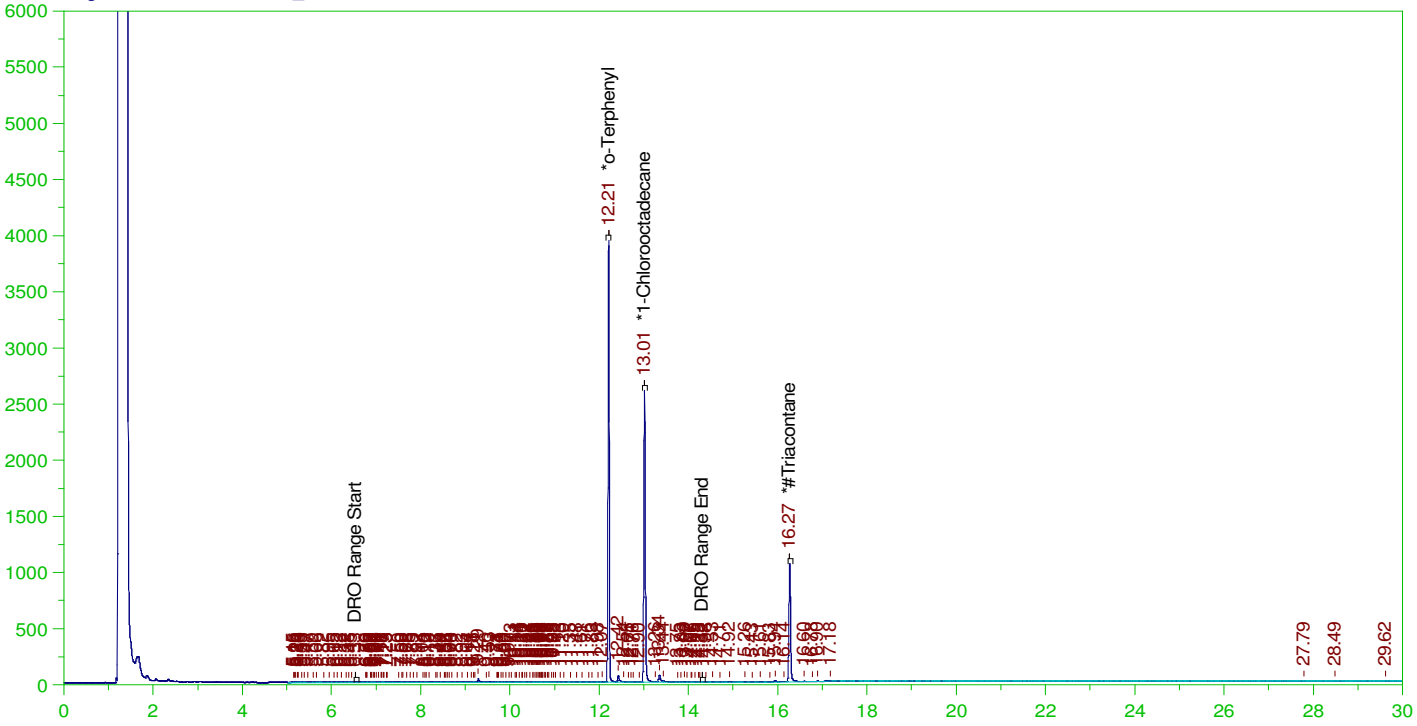
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.208	.2	.204	101.94	-
*1-Chlorooctadecane	13.014	.2	.157	78.7	-
*#Triacontane	16.268	.2	.095	47.65	-

DRO Area:672563.6 DRO Amount: 0.0214512
TEH Area:989684.8 TEH Amount: 3.156568E-02

ERH1936 (RHSF) Batch ID: 161809

G:\org\HP5\DAT\HP5120221_b\1202HP5.0038.RAW B21111928-007B ;1202HP5 , $HC-8015-DRO-W, RX



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-007B ;1202HP5 , $HC-8015-DRO-W, RX
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0038.RAW
Date & Time Acquired: 12/3/2021 9:54:34 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

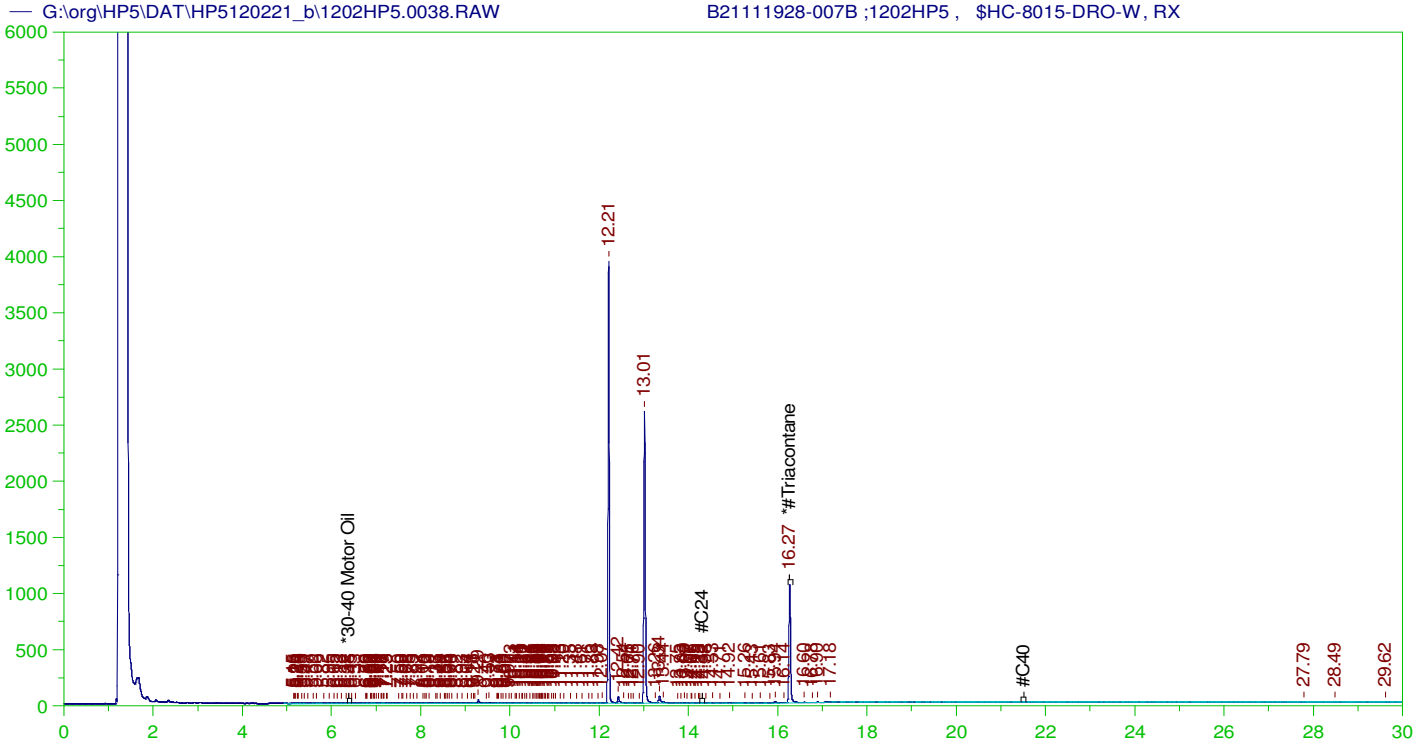
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.208	.2	.213	106.49	-
*1-Chlorooctadecane	13.014	.2	.165	82.41	-
*#Triacontane	16.267	.2	.101	50.3	-

DRO Area:1169859 DRO Amount: 3.731229E-02
TEH Area:1398145 TEH Amount: 4.459337E-02

ERH1936 (RHSF) Batch ID: 161809

G:\org\HP5\DAT\HP5120221_b\1202HP5.0038.RAW B21111928-007B ;1202HP5 , $HC-8015-DRO-W, RX



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-007B ;1202HP5 , $HC-8015-DRO-W, RX
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0038.RAW
Date & Time Acquired: 12/3/2021 9:54:34 AM
Method File: G:\Org\HP5\Methods\DR_OROS-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG-SAMP.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

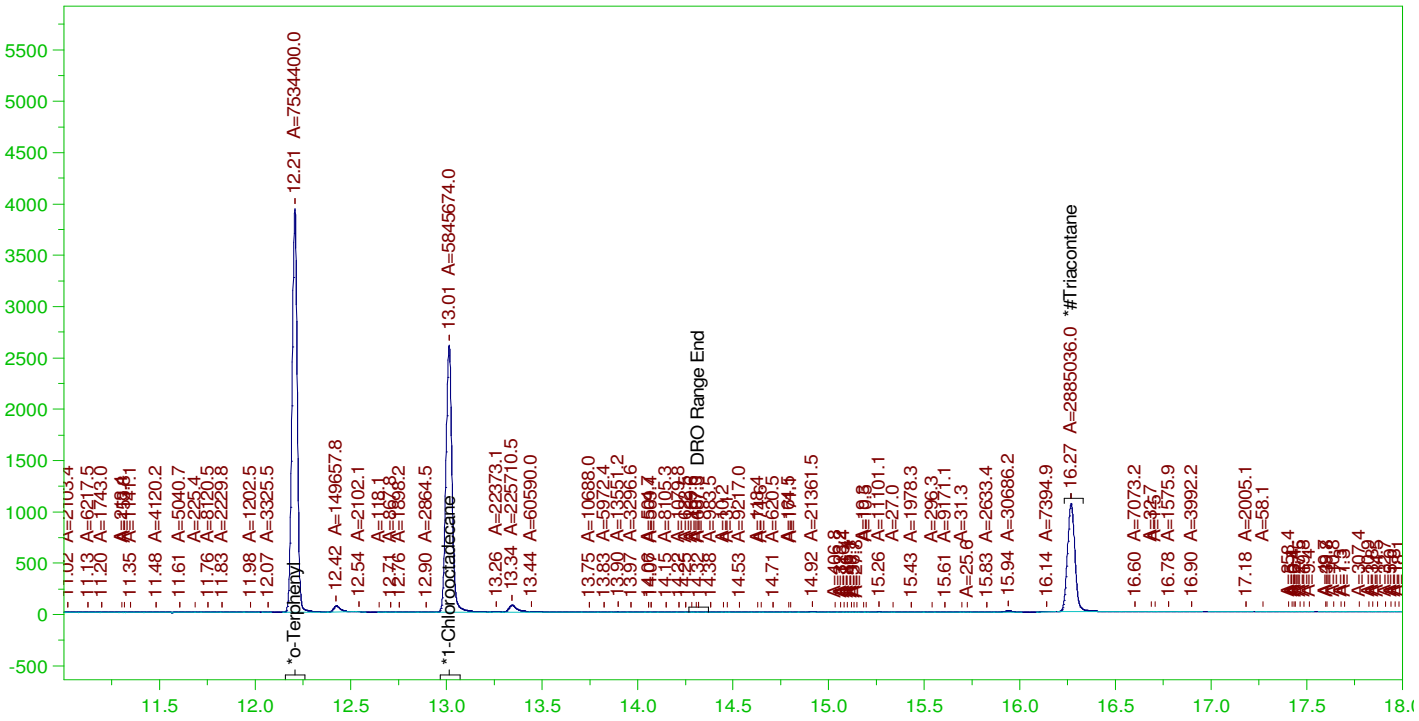
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.26 to 21.56

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.267	.5	.101	20.12	-

RRO Area:128326.7 RRO AMOUNT: 0.004496

ERH1936 (RHSF) Batch ID: 161809

G:\org\HP5\DAT\HP5120221_b\1202HP5.0038.RAW B21111928-007B ;1202HP5 , $HC-8015-DRO-W, RX



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-007B ;1202HP5 , $HC-8015-DRO-W, RX
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0038.RAW
Date & Time Acquired: 12/3/2021 9:54:34 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

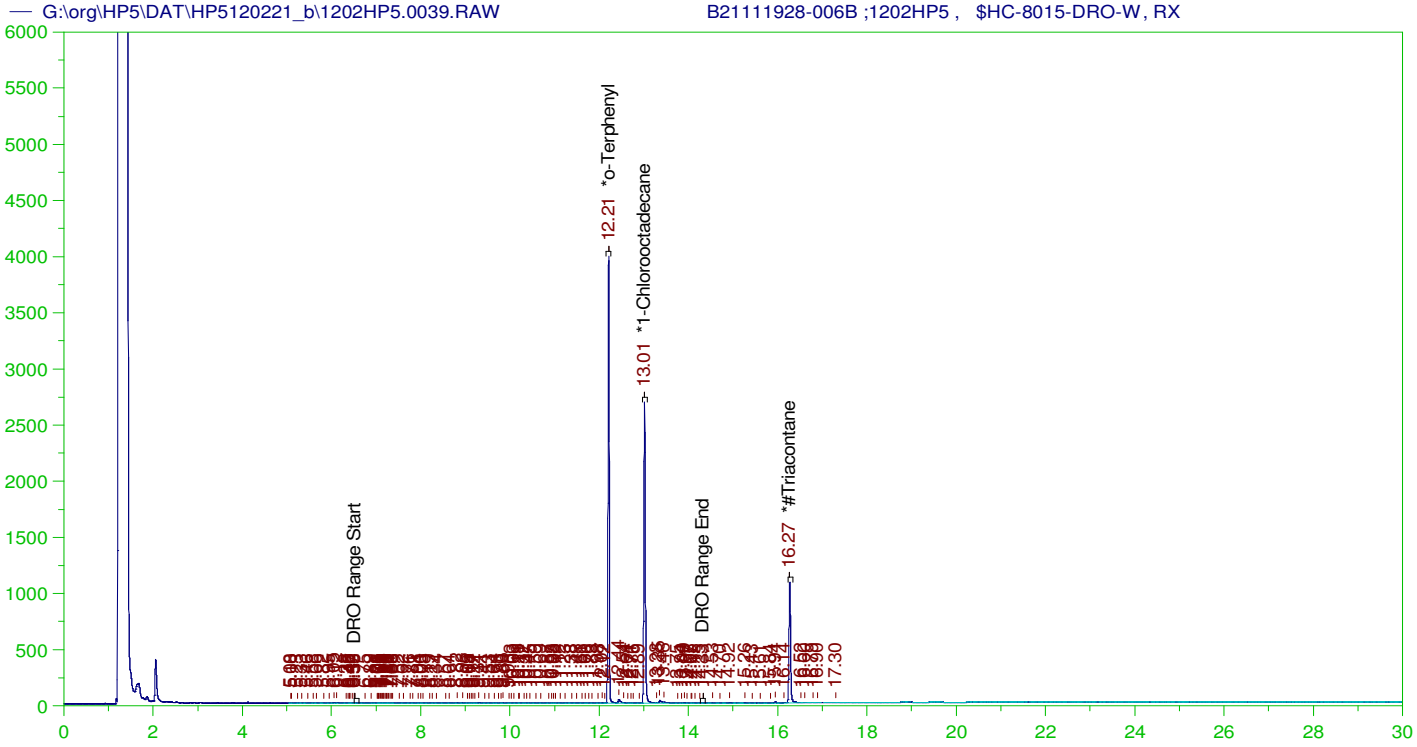
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.208	.2	.212	106.09	-
*1-Chlorooctadecane	13.014	.2	.165	82.31	-
*#Triacontane	16.267	.2	.1	49.86	-

DRO Area:1122739 DRO Amount: 3.580941E-02
TEH Area:1479052 TEH Amount: 4.717389E-02

ERH1934 (RHSF) Batch ID: 161809

G:\org\HP5\DAT\HP5120221_b\1202HP5.0039.RAW B21111928-006B ;1202HP5 , $HC-8015-DRO-W, RX



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-006B ;1202HP5 , $HC-8015-DRO-W, RX
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0039.RAW
Date & Time Acquired: 12/3/2021 10:37:23 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

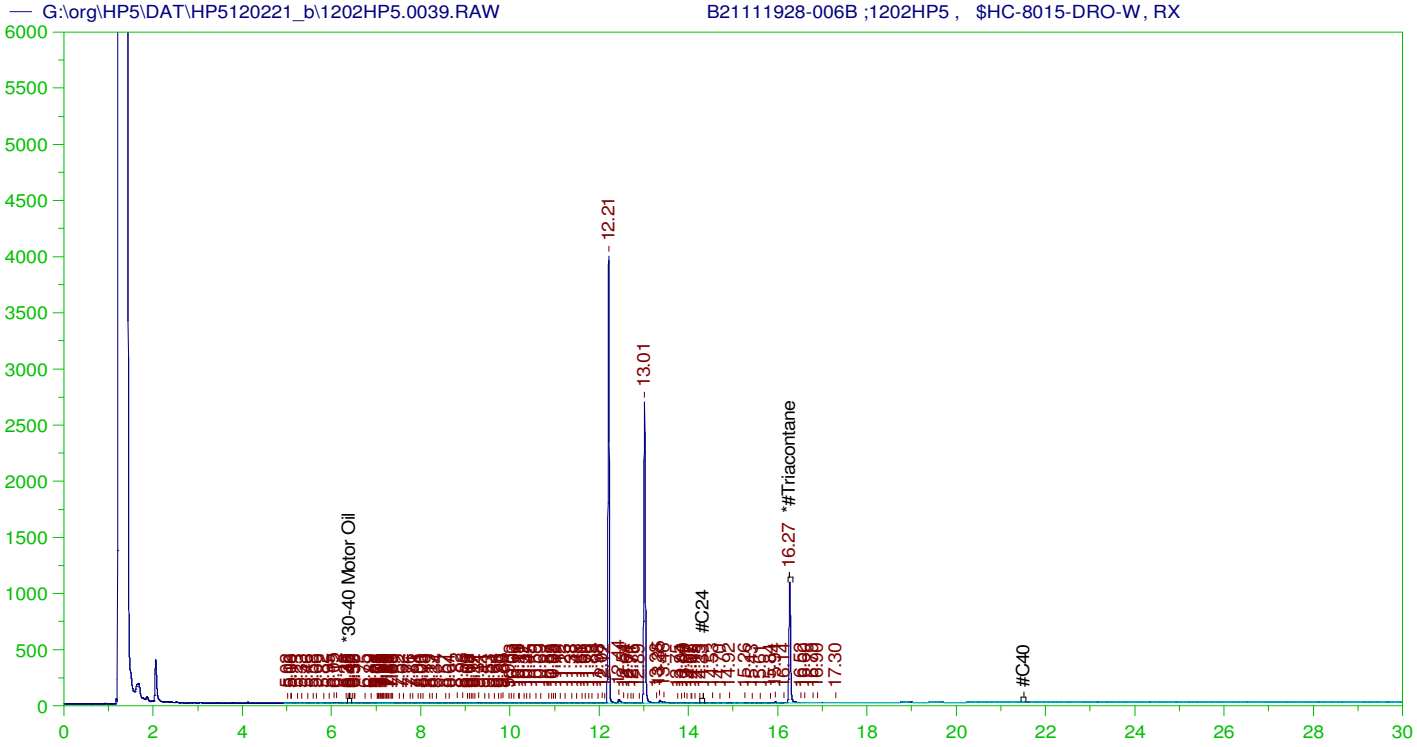
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.208	.2	.216	107.91	-
*1-Chlorooctadecane	13.014	.2	.169	84.64	-
*#Triacontane	16.267	.2	.101	50.55	-

DRO Area:975291.4 DRO Amount: 3.110661E-02
TEH Area:1219755 TEH Amount: 0.0389037

ERH1934 (RHSF) Batch ID: 161809

G:\org\HP5\DAT\HP5120221_b\1202HP5.0039.RAW B21111928-006B ;1202HP5 , $HC-8015-DRO-W, RX



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-006B ;1202HP5 , $HC-8015-DRO-W, RX
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0039.RAW
Date & Time Acquired: 12/3/2021 10:37:23 AM
Method File: G:\Org\HP5\Methods\DR_OROS-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG-SAMP.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

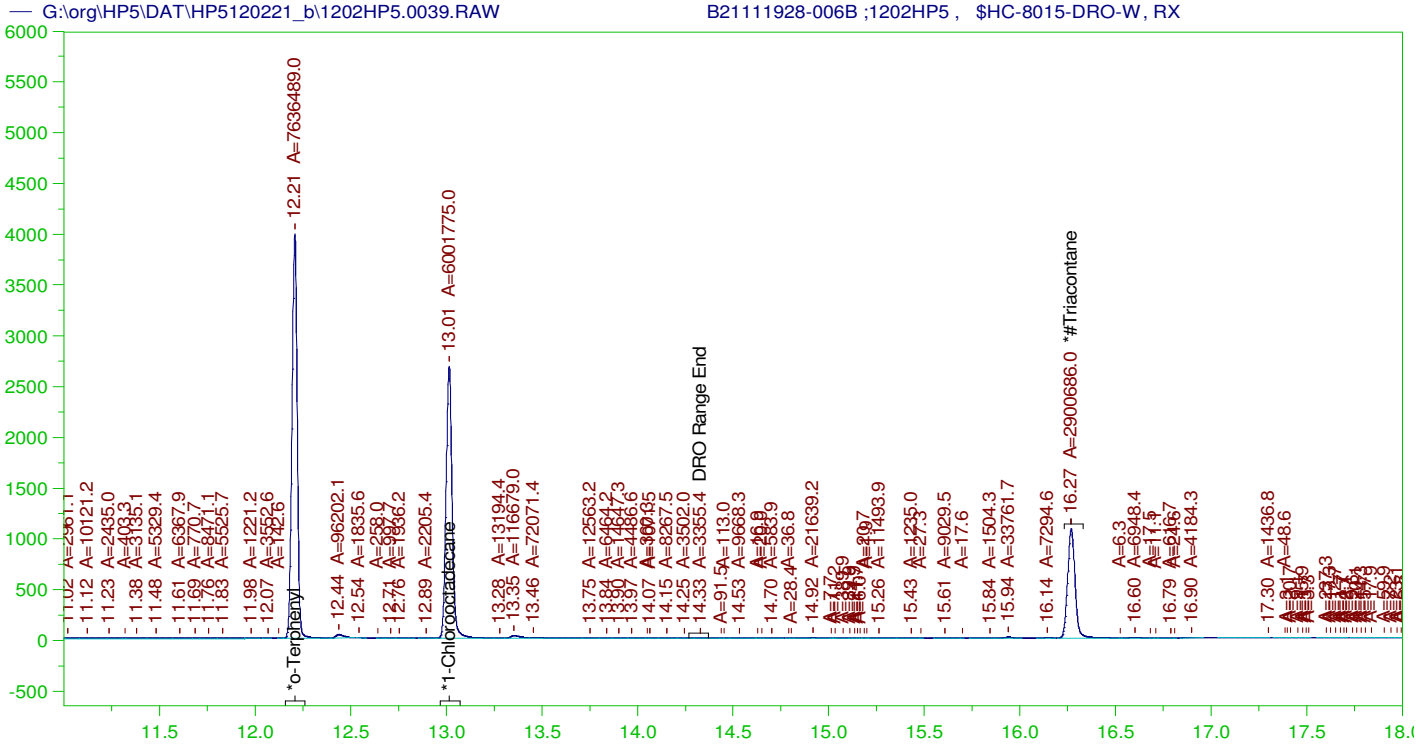
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.26 to 21.56

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.267	.5	.101	20.22	-

RRO Area:130520.6 RRO AMOUNT: 4.572865E-03

ERH1934 (RHSF) Batch ID: 161809

G:\org\HP5\DAT\HP5120221_b\1202HP5.0039.RAW B21111928-006B ;1202HP5 , $HC-8015-DRO-W, RX



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

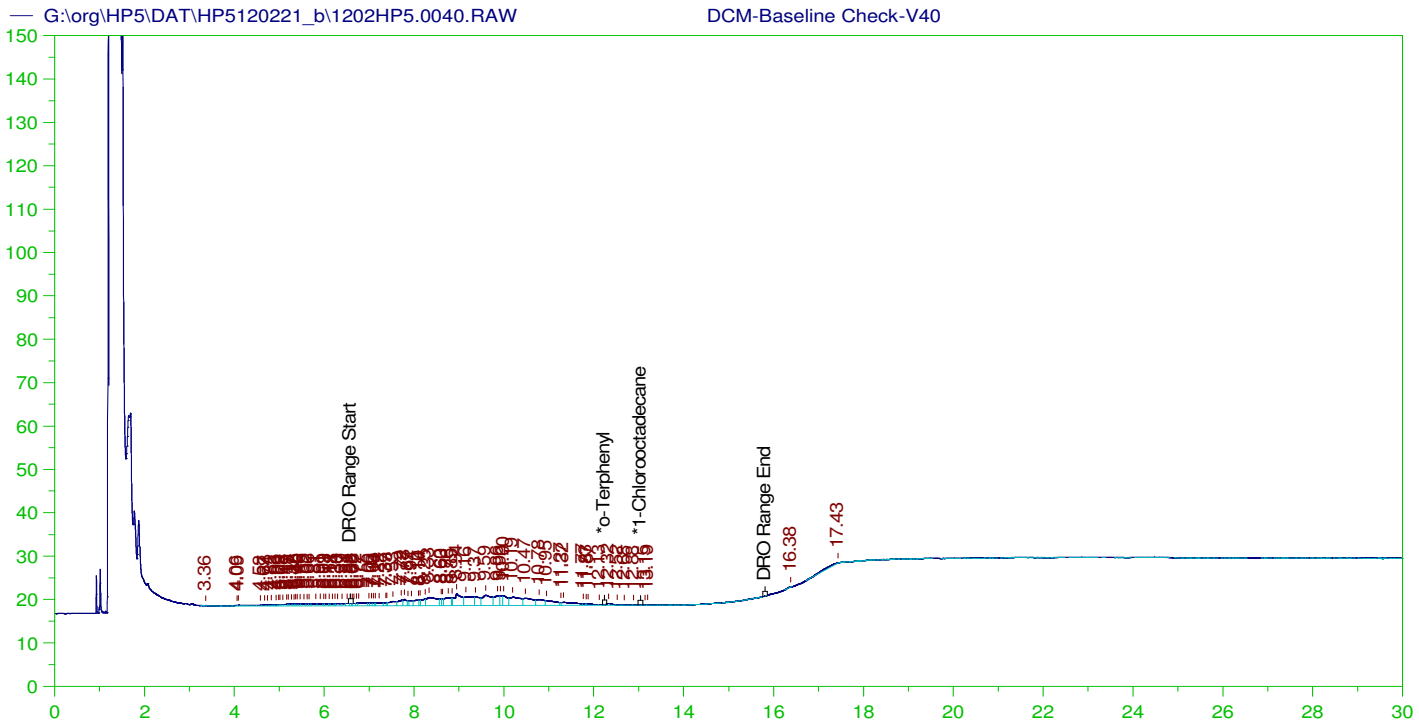
Sample Name: B21111928-006B ;1202HP5 , $HC-8015-DRO-W, RX
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0039.RAW
Date & Time Acquired: 12/3/2021 10:37:23 AM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24-Tri.CAL
Sample Weight: 1000 Dilution: 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	12.208	.2	.215	107.53	-
*1-Chlorooctadecane	13.014	.2	.169	84.51	-
*#Triacontane	16.267	.2	.1	50.13	-

DRO Area:962665.6 DRO Amount: 3.070391E-02
TEH Area:1459590 TEH Amount: 4.655316E-02

G:\org\HP5\dat\HP5120221_b\Review\039_B21111928-006B_DS_8015-C24T-IE-L#.xls



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V40
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0040.RAW
Date & Time Acquired: 12/3/2021 11:20:23 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

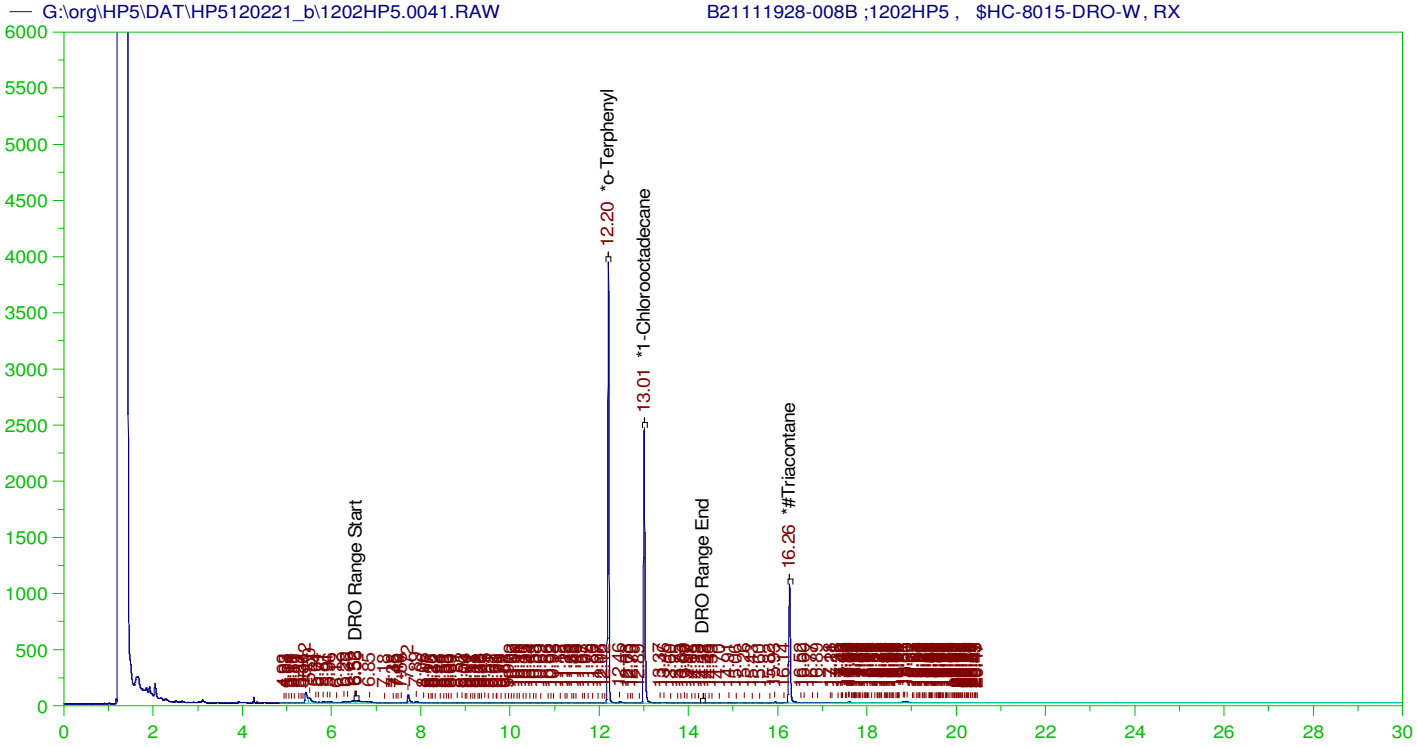
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.54 to 15.86

SURROGATE COMPOUND	RT	ACTUAL	MEASURED		%REC
*o-Terphenyl	29.953	200.	.	.	-
*1-Chlorooctadecane	29.953	200.	.	.	-

DRO Area:426075.5 DRO Amount: 13.58954
TEH Area:494042 TEH Amount: 15.75731

ERH1938 (Post-chlorination) Batch ID: 161809

G:\org\HP5\DAT\HP5120221_b\1202HP5.0041.RAW B21111928-008B ;1202HP5 , $HC-8015-DRO-W, RX



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-008B ;1202HP5 , $HC-8015-DRO-W, RX
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0041.RAW
Date & Time Acquired: 12/3/2021 12:03:09 PM
Method File: G:\Org\HP5\Methods\DR_8015-120241-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

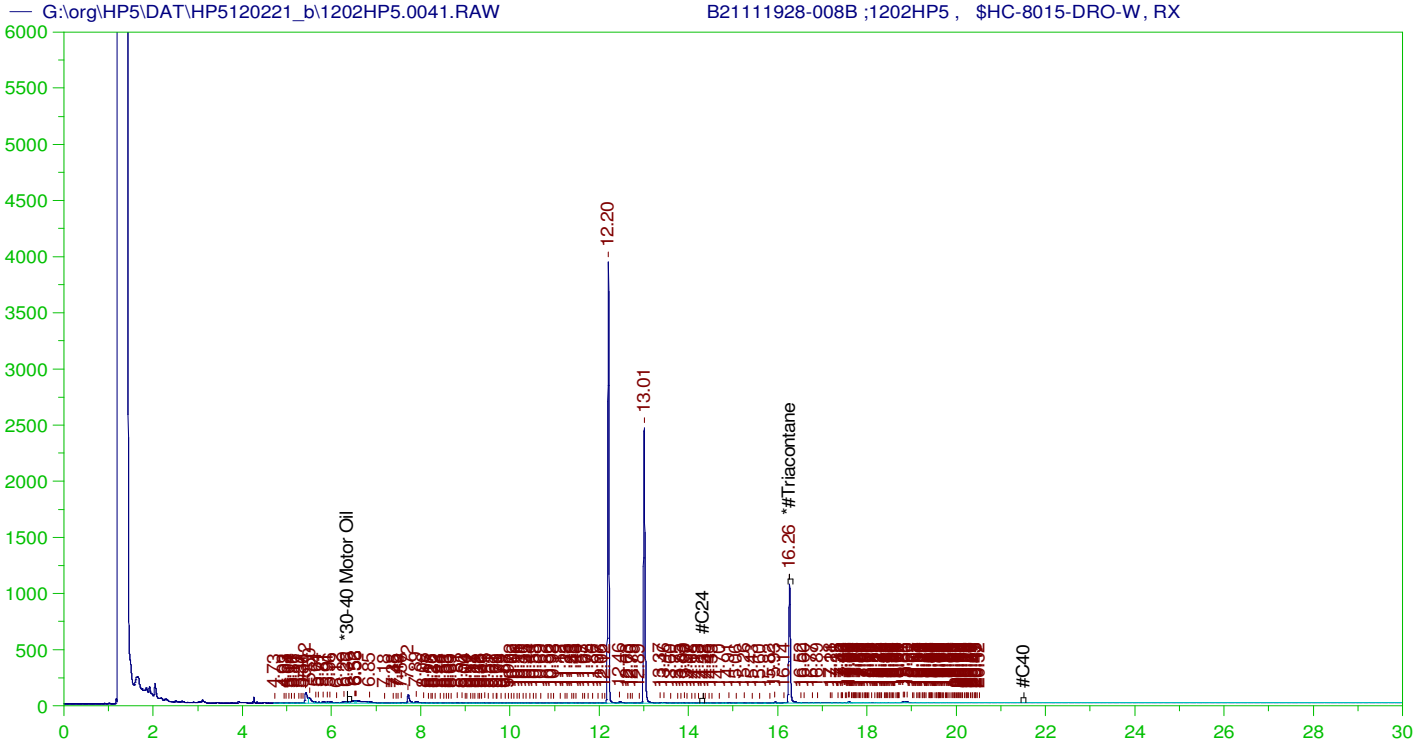
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.201	.2	.214	106.89	-
*1-Chlorooctadecane	13.007	.2	.157	78.64	-
*#Triacontane	16.261	.2	.102	51.17	-

DRO Area:1997141 DRO Amount: 6.369817E-02
TEH Area:4075630 TEH Amount: 0.1299909

ERH1938 (Post-chlorination) Batch ID: 161809

G:\org\HP5\DAT\HP5120221_b\1202HP5.0041.RAW B21111928-008B ;1202HP5 , $HC-8015-DRO-W, RX



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-008B ;1202HP5 , $HC-8015-DRO-W, RX
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0041.RAW
Date & Time Acquired: 12/3/2021 12:03:09 PM
Method File: G:\Org\HP5\Methods\DR_OROS-120241-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG-SAMP.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

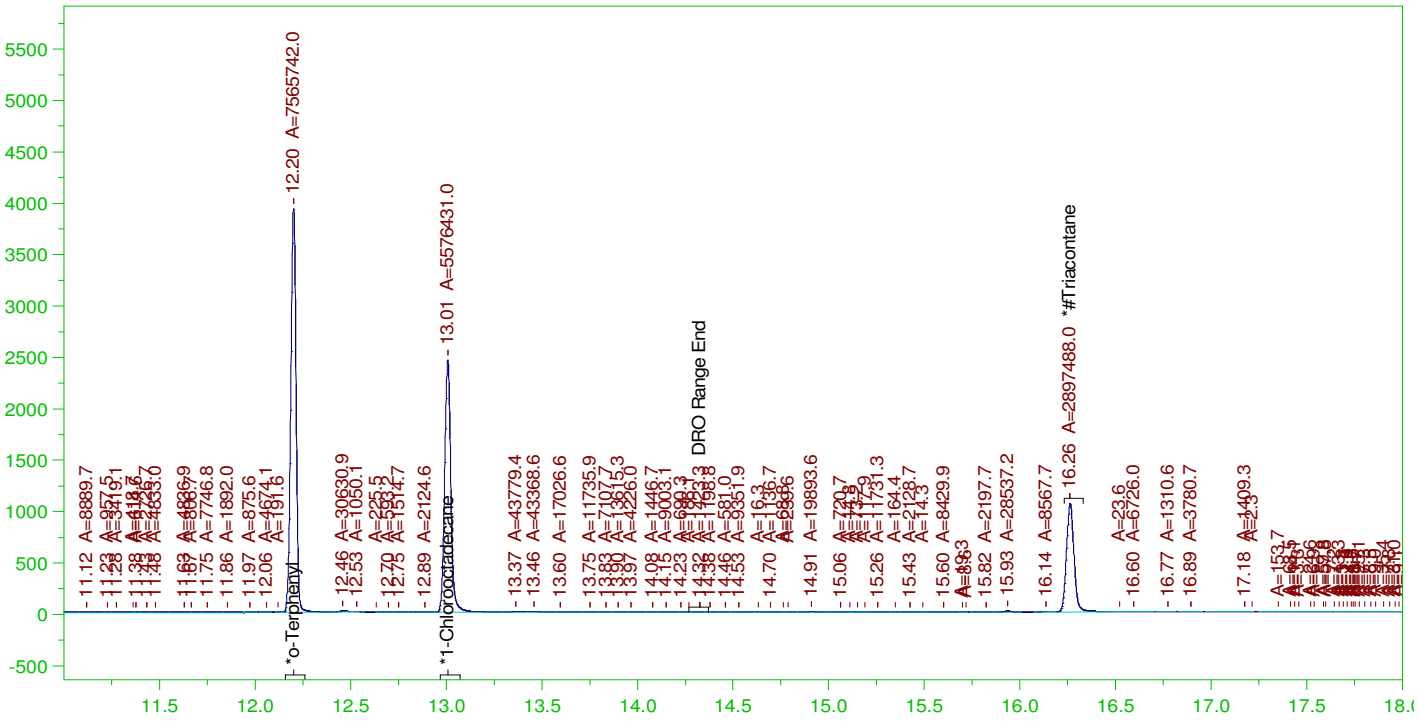
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.26 to 21.56

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.261	.5	.102	20.47	-

RRO Area:953953.1 RRO AMOUNT: 3.342231E-02

ERH1938 (Post-chlorination) Batch ID: 161809

G:\org\HP5\DAT\HP5120221_b\1202HP5.0041.RAW B21111928-008B ;1202HP5 , $HC-8015-DRO-W, RX



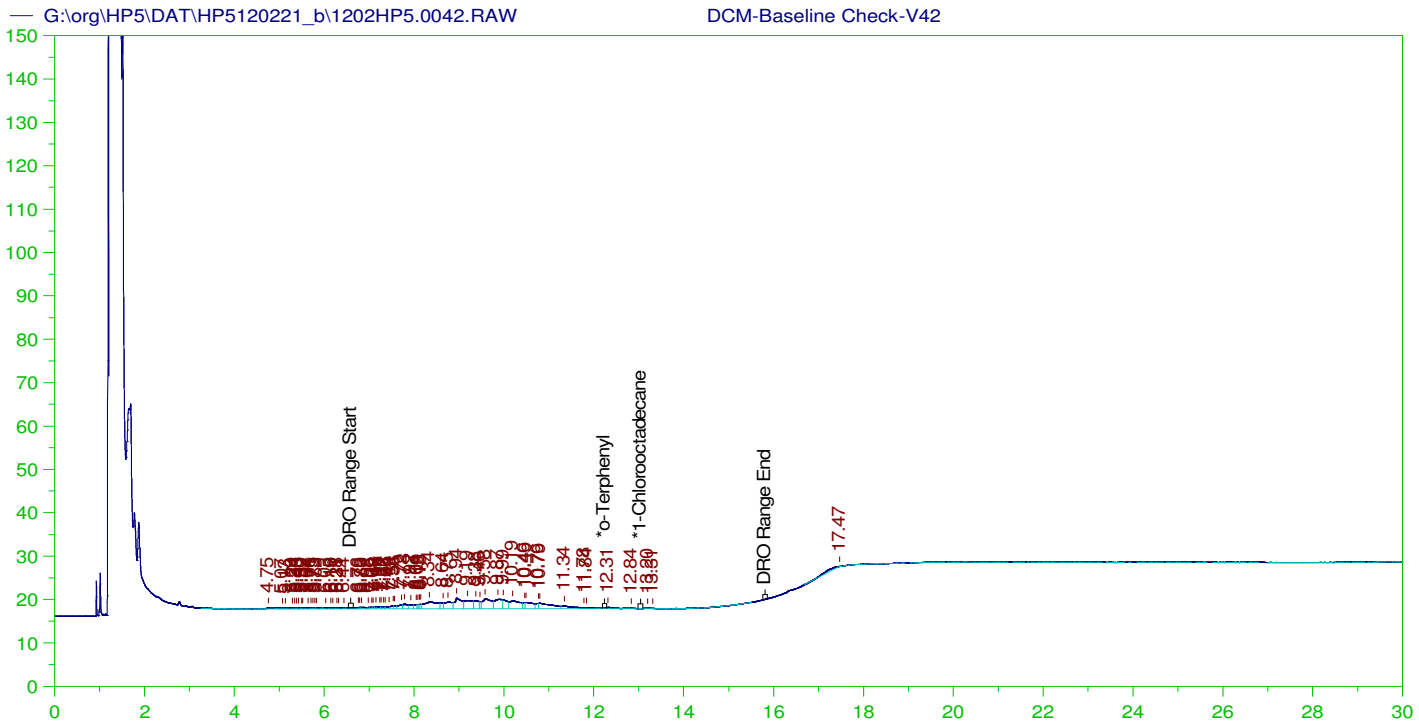
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-008B ;1202HP5 , $HC-8015-DRO-W, RX
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0041.RAW
Date & Time Acquired: 12/3/2021 12:03:09 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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	12.201	.2	.213	106.53	-
*1-Chlorooctadecane	13.007	.2	.157	78.52	-
*#Triacontane	16.261	.2	.1	50.08	-

DRO Area:1895410 DRO Amount: 6.045351E-02
TEH Area:3443077 TEH Amount: 0.1098158

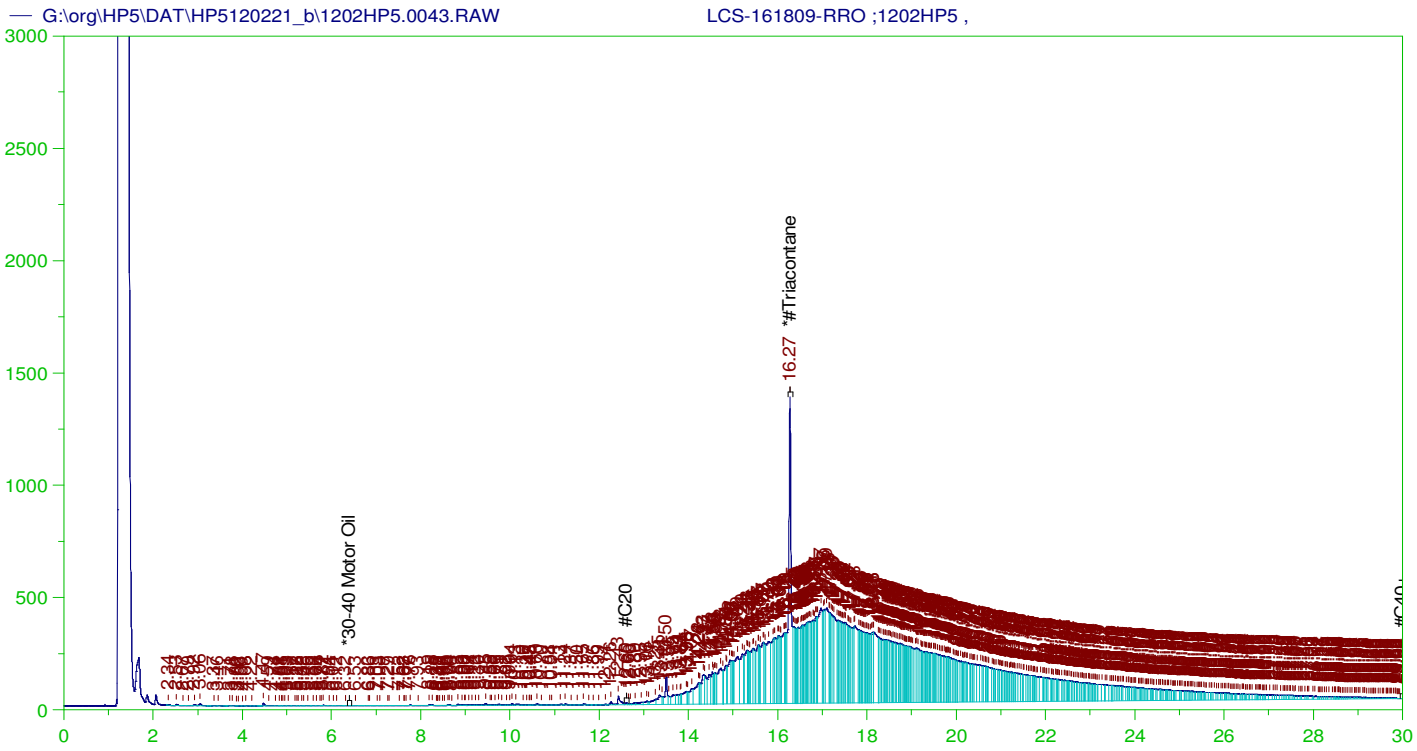


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V42
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0042.RAW
Date & Time Acquired: 12/3/2021 12:45:42 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 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	29.947	200.	.	.	-
*1-Chlorooctadecane	29.947	200.	.	.	-

DRO Area:373346.7 DRO Amount: 11.90777
TEH Area:420398.7 TEH Amount: 13.40848



RESIDUAL RANGE ORGANICS CHROMATOGRAM

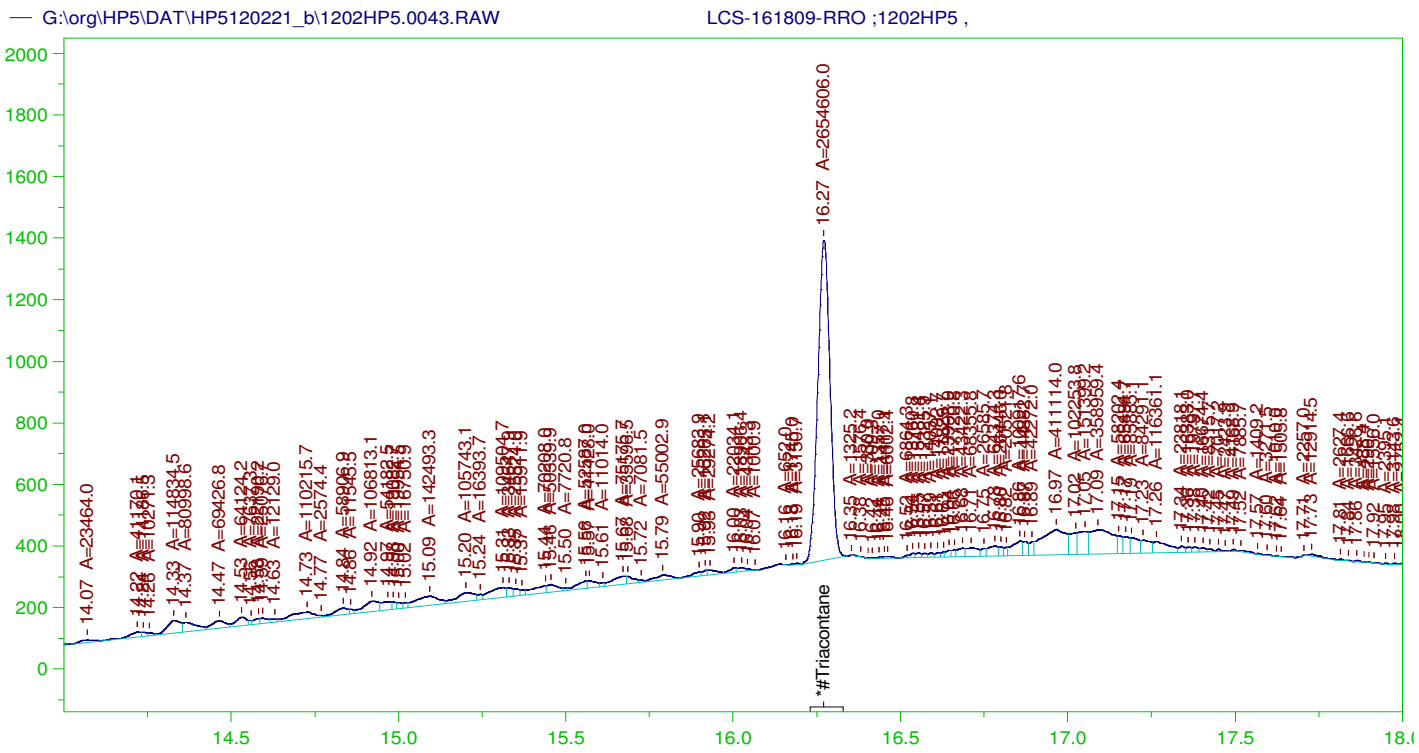
Sample Name: LCS-161809-RRO ;1202HP5 ,
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0043.RAW
Date & Time Acquired: 12/3/2021 1:28:19 PM
Method File: G:\Org\HP5\Methods\D3_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	16.271	.5	.185	37.02	-

~~RRO~~ TEH (Oil Range) Area:1.284064E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.498794

AMN 12/13/2021



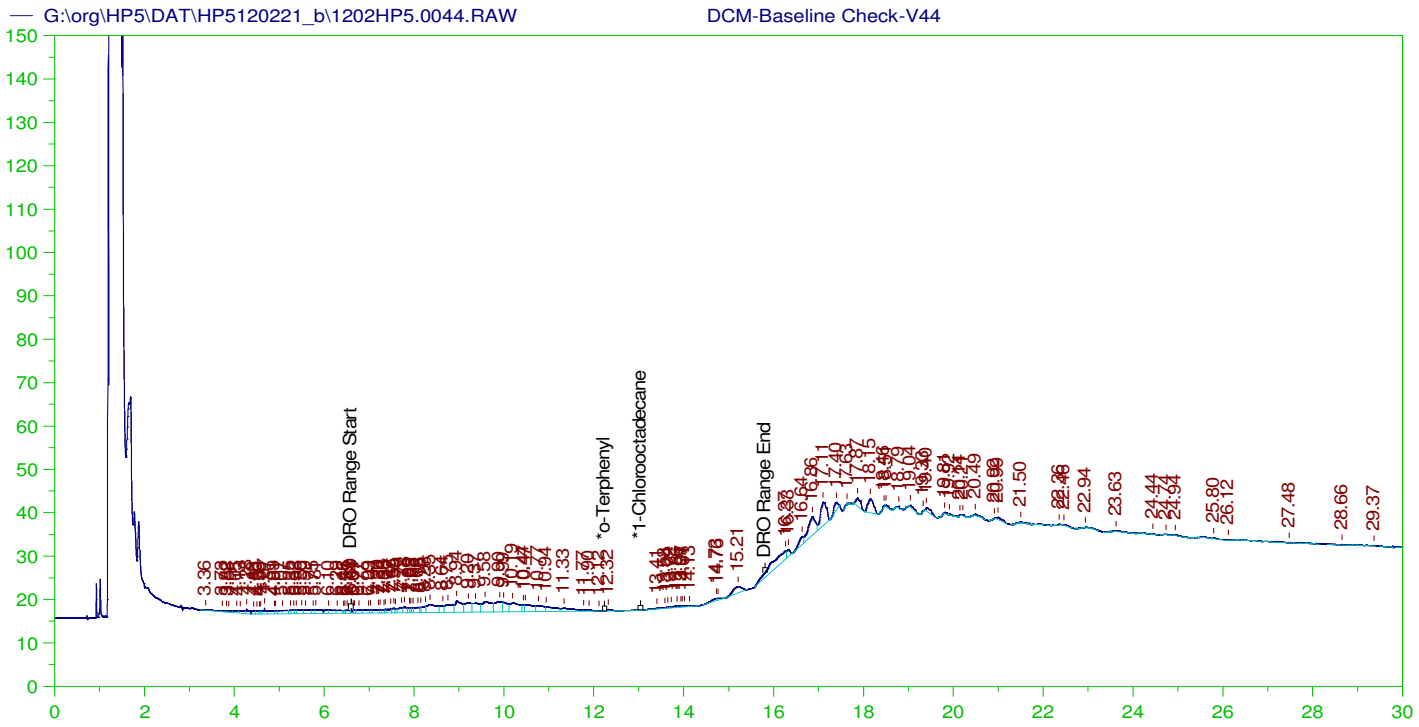
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: LCS-161809-RRO ;1202HP5 ,
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0043.RAW
Date & Time Acquired: 12/3/2021 1:28:19 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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	16.271	.5	.092	18.35	-

RRO Area:4573973 RRO AMOUNT: 0.1602518



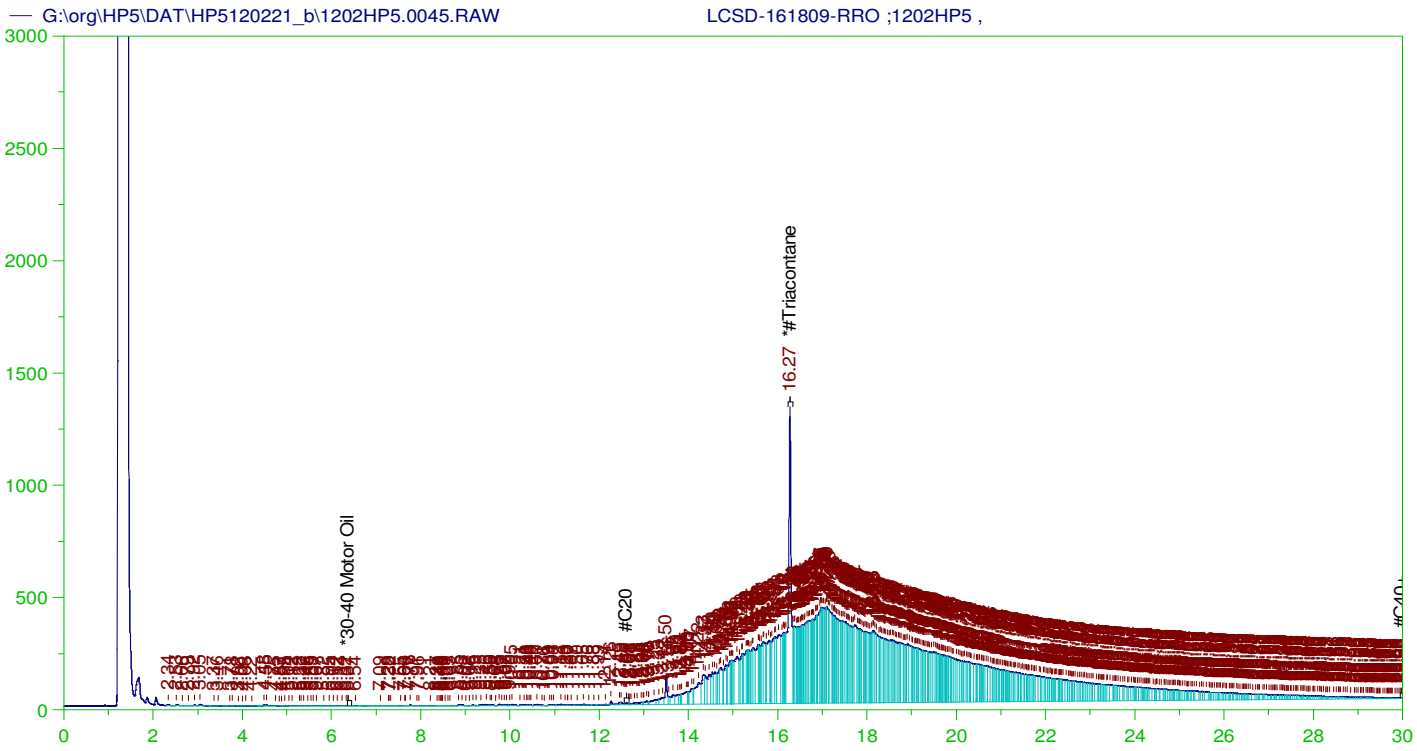
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V44
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0044.RAW
Date & Time Acquired: 12/3/2021 2:11:03 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	29.971	200.	.	.	-
*1-Chlorooctadecane	29.971	200.	.	.	-

DRO Area:453860.5 DRO Amount: 14.47573
TEH Area:873292.1 TEH Amount: 27.85337



RESIDUAL RANGE ORGANICS CHROMATOGRAM

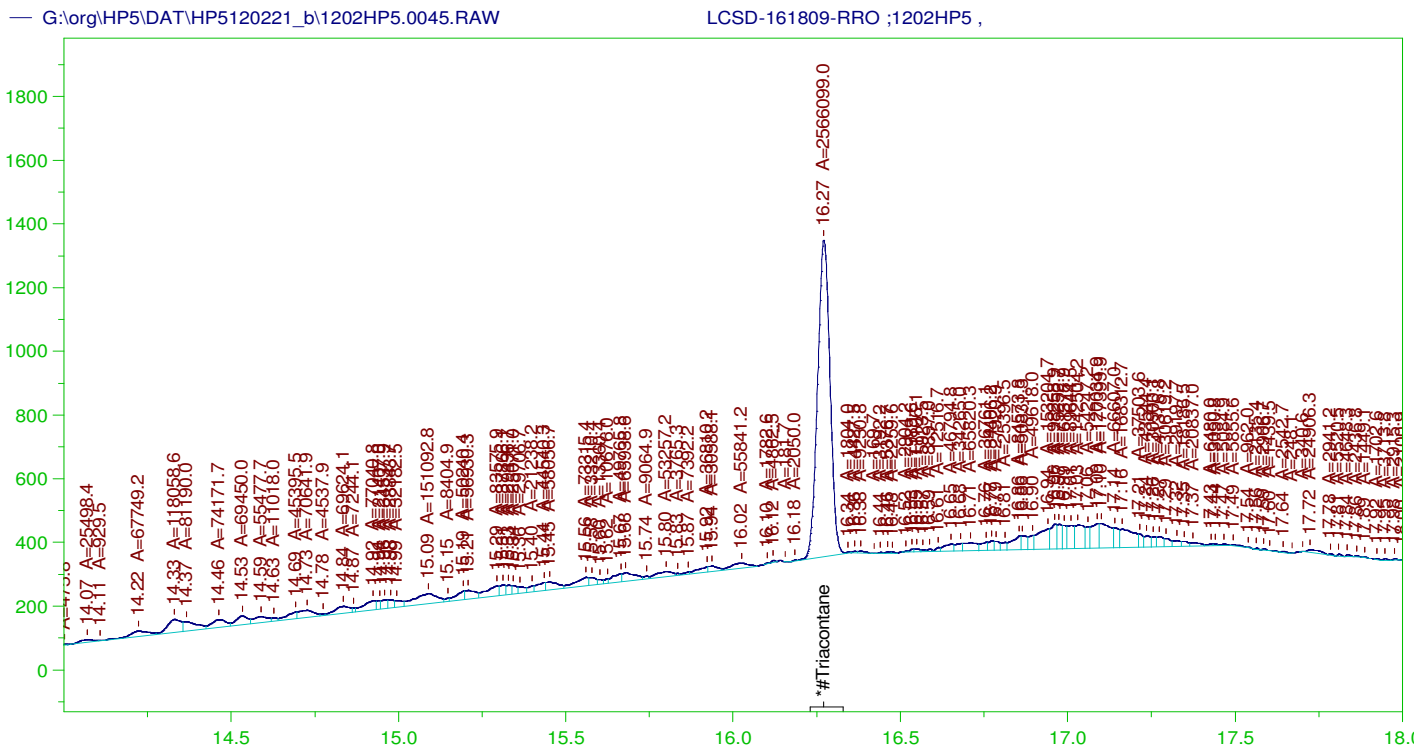
Sample Name: LCSD-161809-RRO ;1202HP5 ,
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0045.RAW
Date & Time Acquired: 12/3/2021 2:53:42 PM
Method File: G:\Org\HP5\Methods\D3_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	16.271	.5	.184	36.8	-

~~RRO~~ TEH (Oil Range) Area:1.304225E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.569427

AMN 12/13/2021



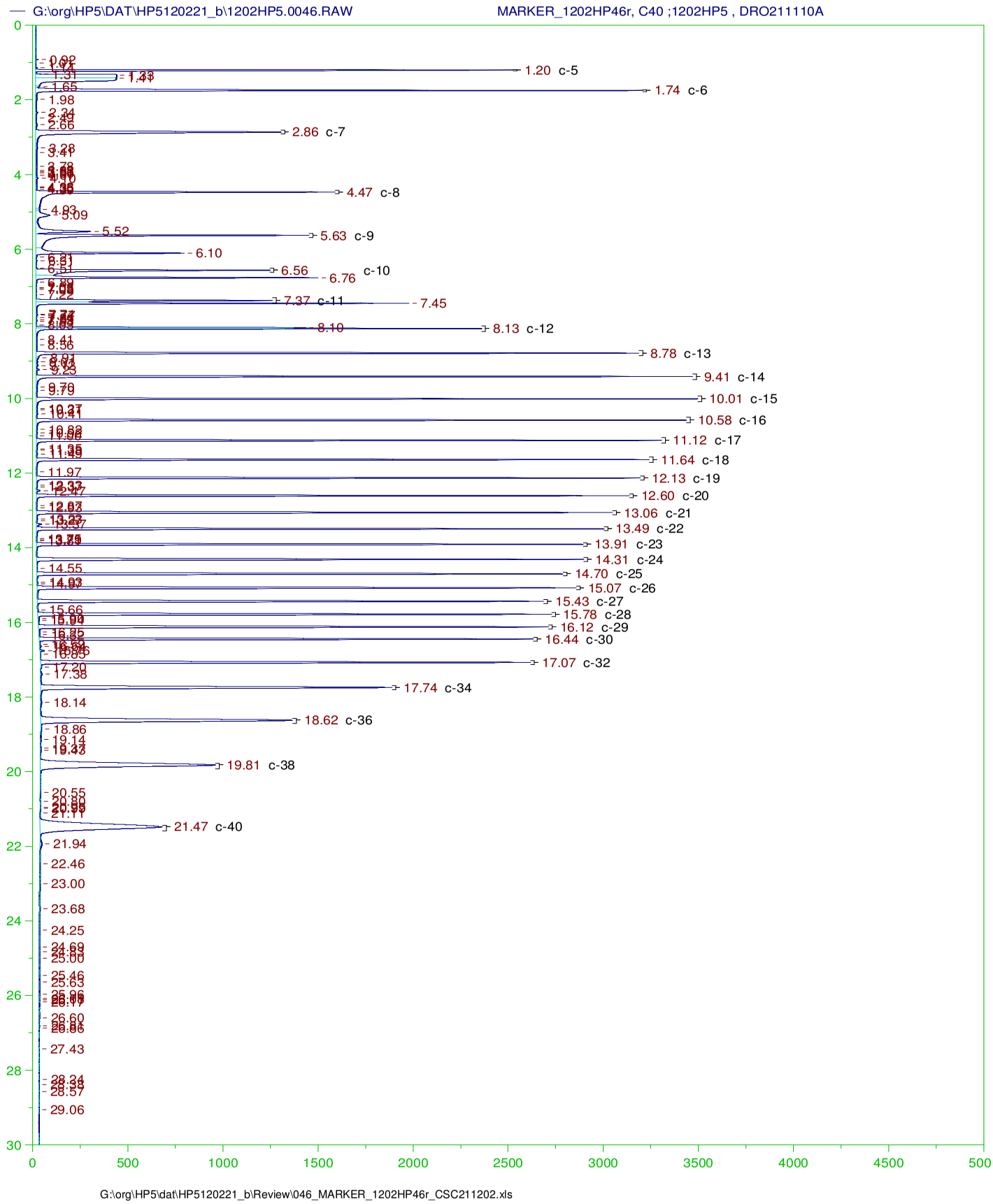
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: LCSD-161809-RRO ;1202HP5 ,
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0045.RAW
Date & Time Acquired: 12/3/2021 2:53:42 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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	16.271	.5	.089	17.74	-

RRO Area:4596117 RRO AMOUNT: 0.1610276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MARKER_1202HP46r, C40 ;1202HP5 , DRO211110A
1.20 c-5
1.74 c-6
2.86 c-7
4.47 c-8
5.63 c-9
6.10
6.56
6.76 c-10
7.37 c-11
7.45
8.10
8.13 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
11.97
12.13 c-19
12.60 c-20
13.06 c-21
13.49 c-22
13.91 c-23
14.31 c-24
14.55
14.70 c-25
15.07 c-26
15.43 c-27
15.66
15.78 c-28
16.12 c-29
16.44 c-30
17.07 c-32
17.20
17.38
17.74 c-34
18.14
18.62 c-36
18.86
19.14
19.81 c-38
20.55
21.11
21.47 c-40
21.94
22.46
23.00
23.68
24.25
25.00
25.46
25.63
26.60
27.43
28.34
28.57
29.06
0
500
1000
1500
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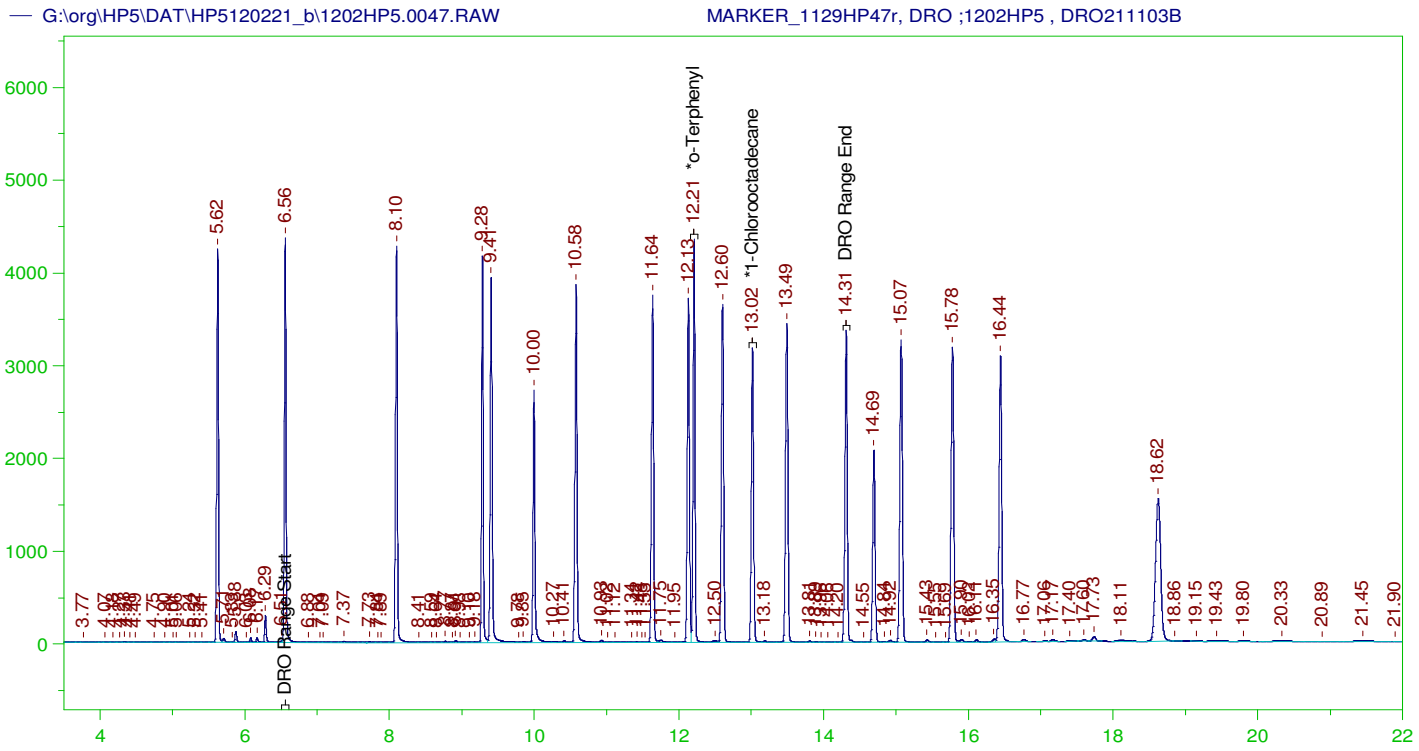


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

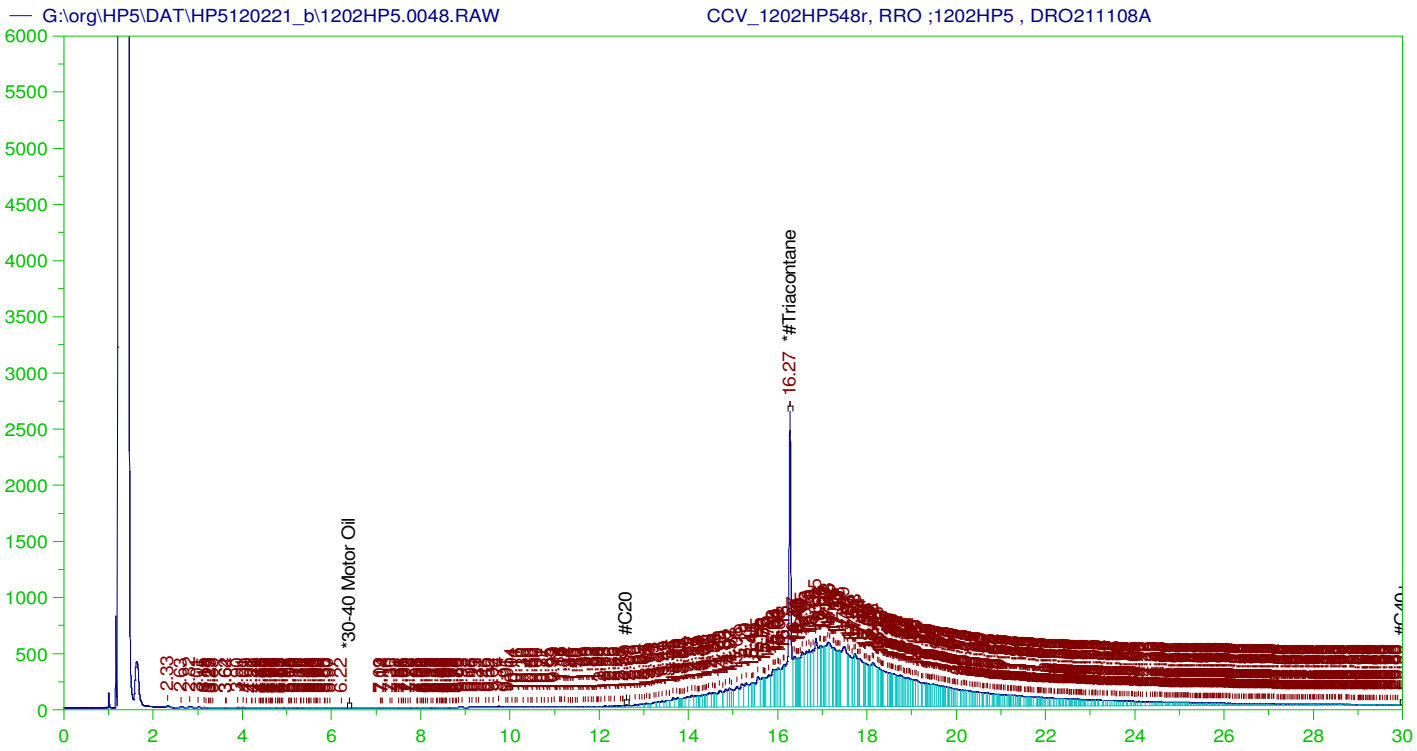
Sample Name: MARKER_1129HP47r, DRO ;1202HP5 , DRO211103B
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0047.RAW
Date & Time Acquired: 12/3/2021 4:19:24 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 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	12.21	.2	.233	116.45	-
*1-Chlorooctadecane	13.016	.2	.188	94.14	-

DRO Area:8.011156E+07 DRO Amount: 2.555133
TEH Area:1.253363E+08 TEH Amount: 3.997563

G:\org\HP5\dat\HP5120221_b\Review\047_MARKER_1129HP47r_DC_8015-24-IE-L%.xls



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1202HP548r, RRO ;1202HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0048.RAW
Date & Time Acquired: 12/3/2021 5:02:25 PM
Method File: G:\Org\HP5\Methods\DC_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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	16.272	500.	340.034	68.01	-

~~RRO~~ TEH (Oil Range) Area:1.315847E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4610.145

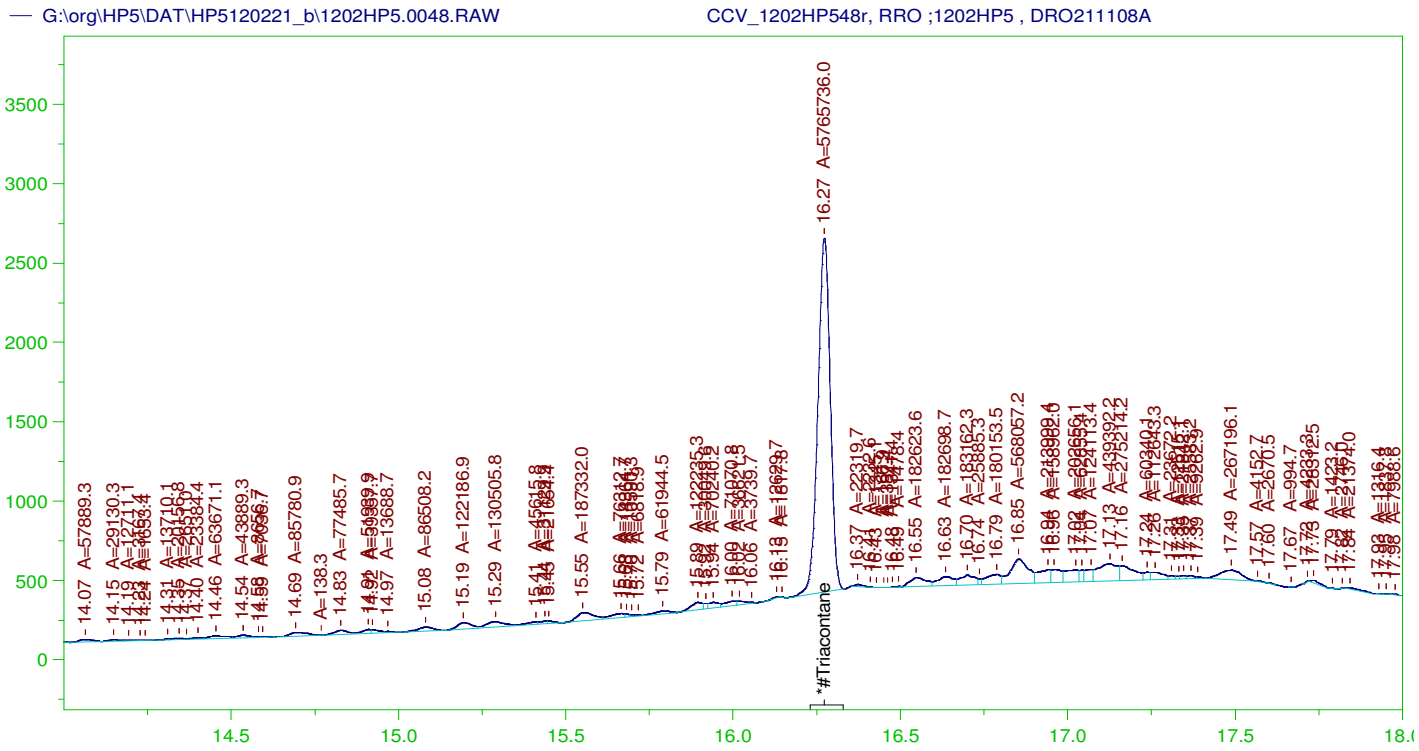
CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120221_b\1202HP5.0048.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.272	200.	340.034	170.02	75-125

AMN 12/13/2021

G:\org\HP5\dat\HP5120221_b\Review\048_CCV_1202HP548r_DC_ORO-AG-L%.xls



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1202HP548r, RRO ;1202HP5 , DRO211108A
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0048.RAW
Date & Time Acquired: 12/3/2021 5:02:25 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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

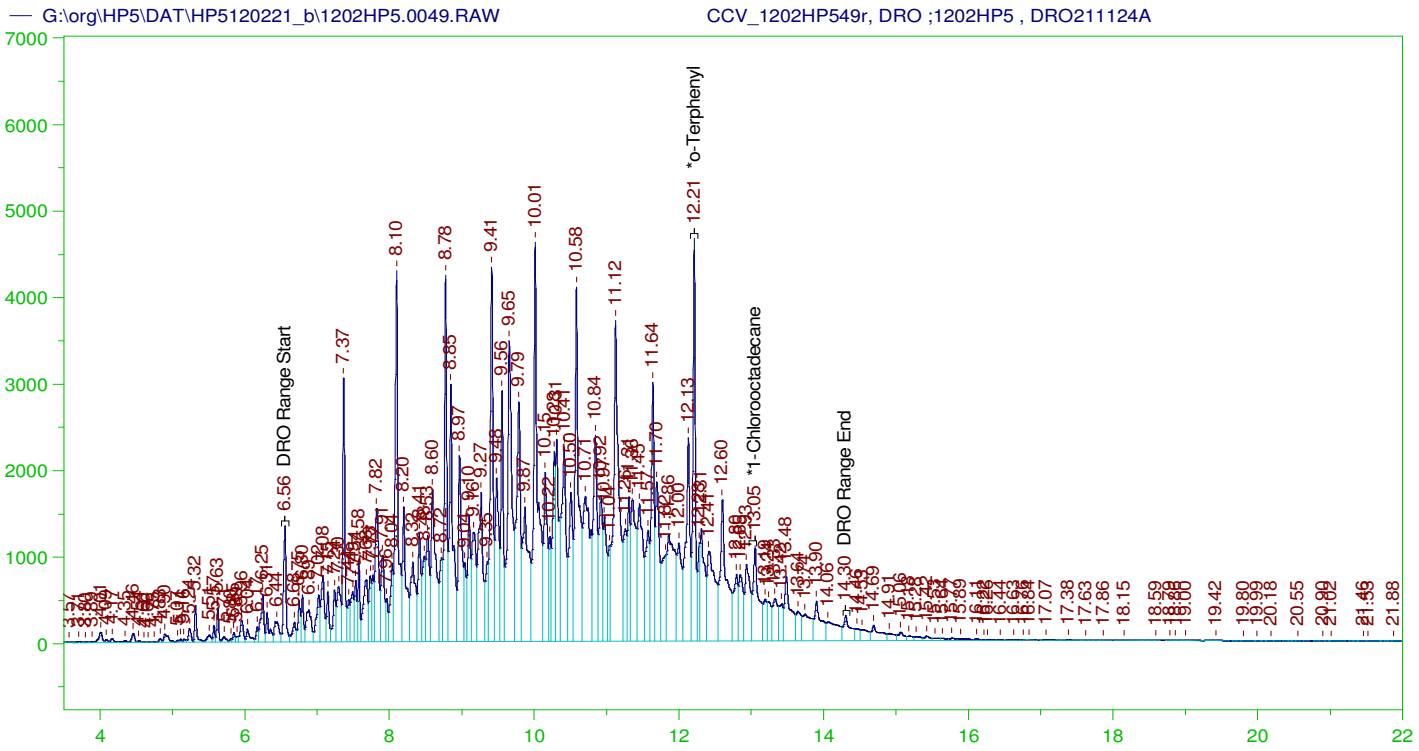
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.272	500.	199.299	39.86	-

RRO Area:5835407 RRO AMOUNT: 204.4469

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120221_b\1202HP5.0048.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.272	200.	199.299	99.65	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1202HP549r, DRO ;1202HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0049.RAW
Date & Time Acquired: 12/3/2021 5:45:33 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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

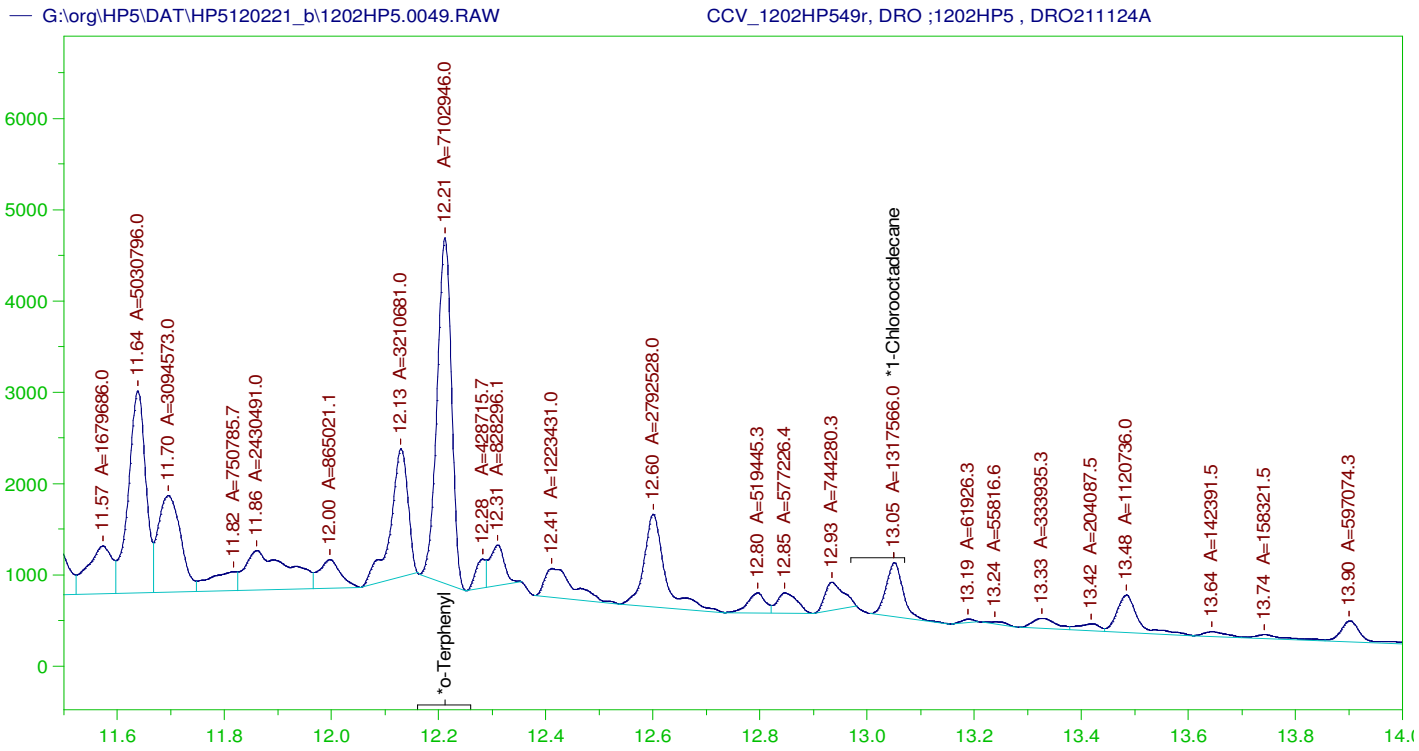
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	200.	330.105	165.05	-
*1-Chlorooctadecane	13.05	200.	158.194	79.1	-

DRO Area:4.576545E+08 DRO Amount: 14596.74
TEH Area:4.740619E+08 TEH Amount: 15120.05

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120221_b\1202HP5.0049.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15120.05	100.8	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.212	200.	330.105	165.05	85-115
*1-Chlorooctadecane	13.05	200.	158.194	79.1	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1202HP549r, DRO ;1202HP5 , DRO211124A
Raw File: G:\org\HP5\DAT\HP5120221_b\1202HP5.0049.RAW
Date & Time Acquired: 12/3/2021 5:45:33 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IE-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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

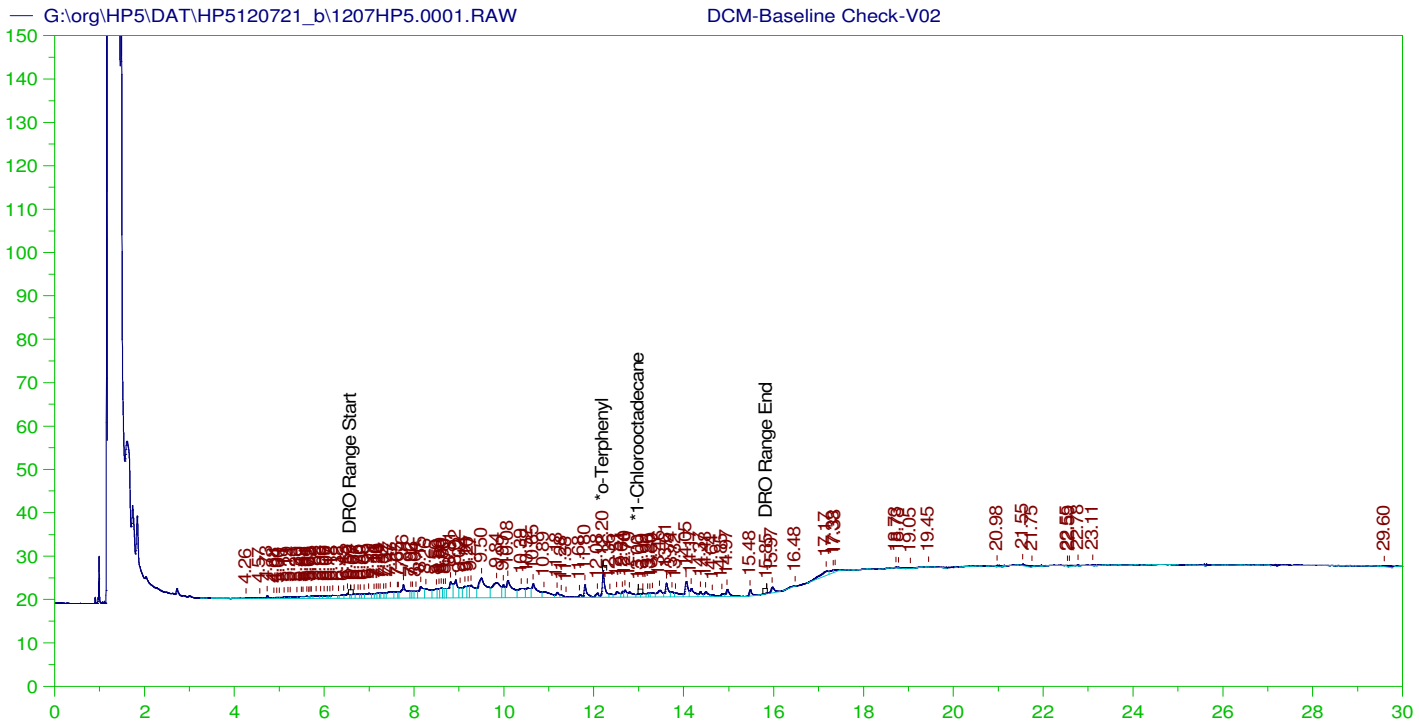
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.212	200.	200.031	100.02	-
*1-Chlorooctadecane	13.05	200.	37.105	18.55	-

DRO Area:2.575409E+08 DRO Amount: 8214.185
TEH Area:2.67642E+08 TEH Amount: 8536.356

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120221_b\1202HP5.0049.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8536.36	56.91	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.212	200.	200.031	100.02	85-115
*1-Chlorooctadecane	13.05	200.	37.105	18.55	85-115



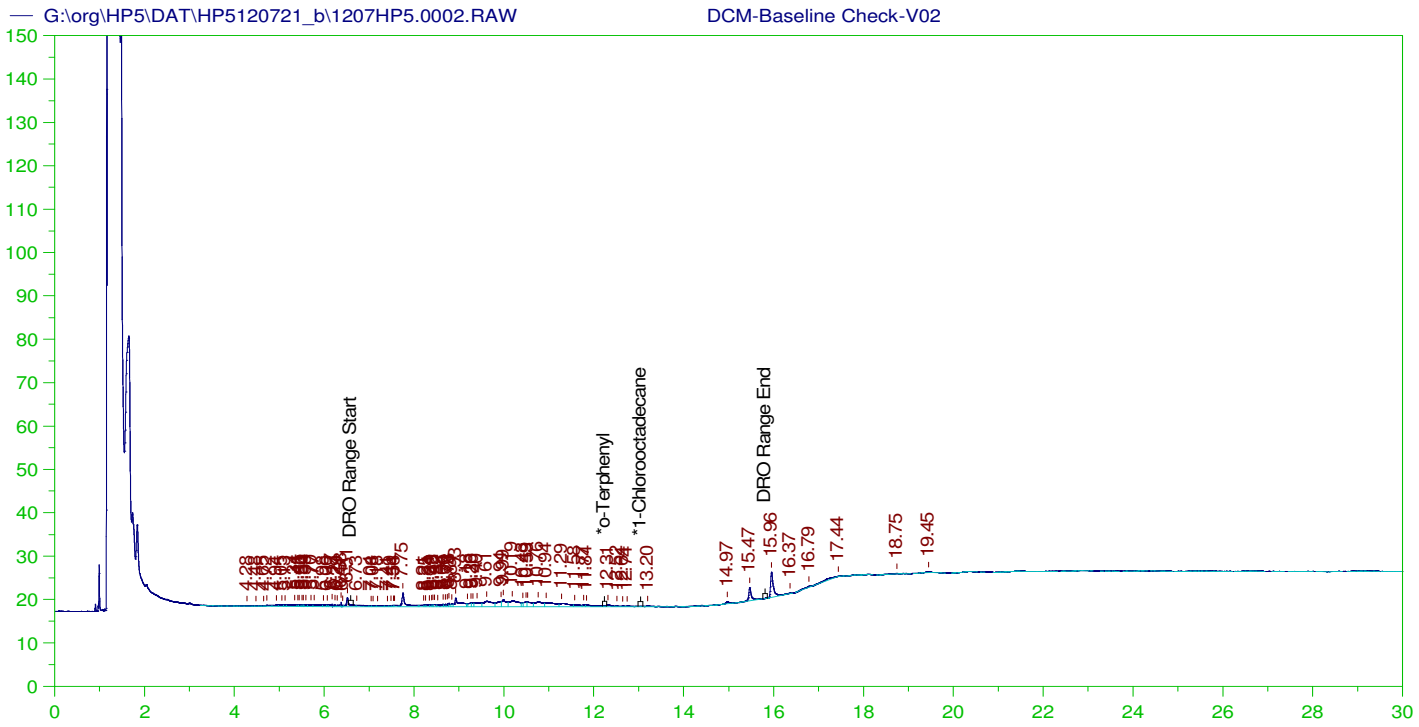
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V02
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0001.RAW
Date & Time Acquired: 12/7/2021 11:07:00 AM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	12.205	200.	.727	.36	-
*1-Chlorooctadecane	12.997	200.	.114	.06	-

DRO Area:713492.6 DRO Amount: 22.75662
TEH Area:829972 TEH Amount: 26.47169



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V02
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0002.RAW
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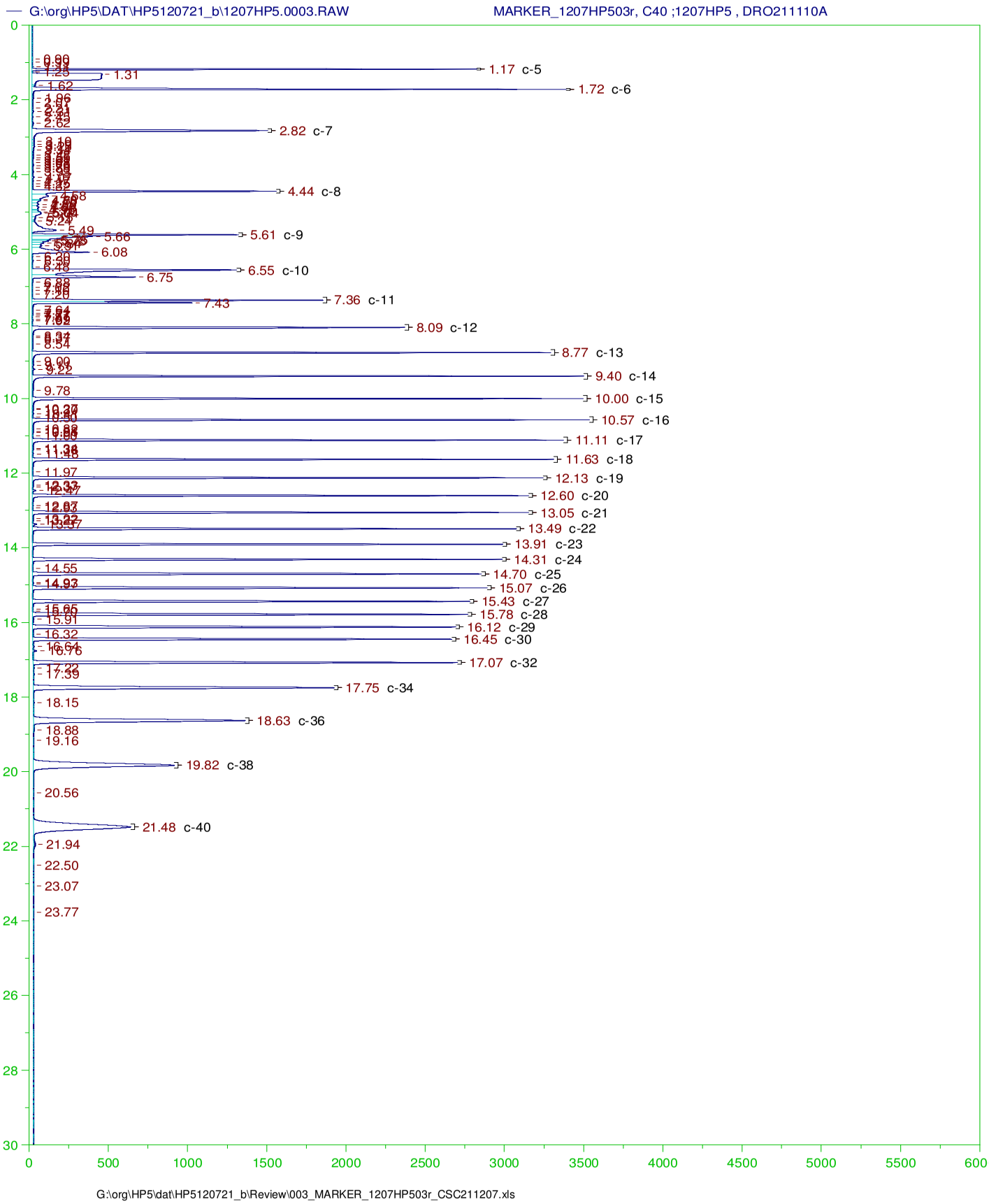
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 Dilution: 1 S.A.: 1

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	29.916	200.	.	.	-
*1-Chlorooctadecane	29.916	200.	.	.	-

DRO Area:226905.1 DRO Amount: 7.237066
TEH Area:319756.3 TEH Amount: 10.19852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MARKER_1207HP503r, C40 ;1207HP5 , DRO211110A
1.17 c-5
1.31
1.72 c-6
2.82 c-7
4.44 c-8
5.61 c-9
6.55 c-10
7.36 c-11
8.09 c-12
8.77 c-13
9.40 c-14
10.00 c-15
10.57 c-16
11.11 c-17
11.63 c-18
12.13 c-19
12.60 c-20
13.05 c-21
13.49 c-22
13.91 c-23
14.31 c-24
14.70 c-25
15.07 c-26
15.43 c-27
15.78 c-28
16.12 c-29
16.45 c-30
17.07 c-32
17.75 c-34
18.63 c-36
19.82 c-38
21.48 c-40
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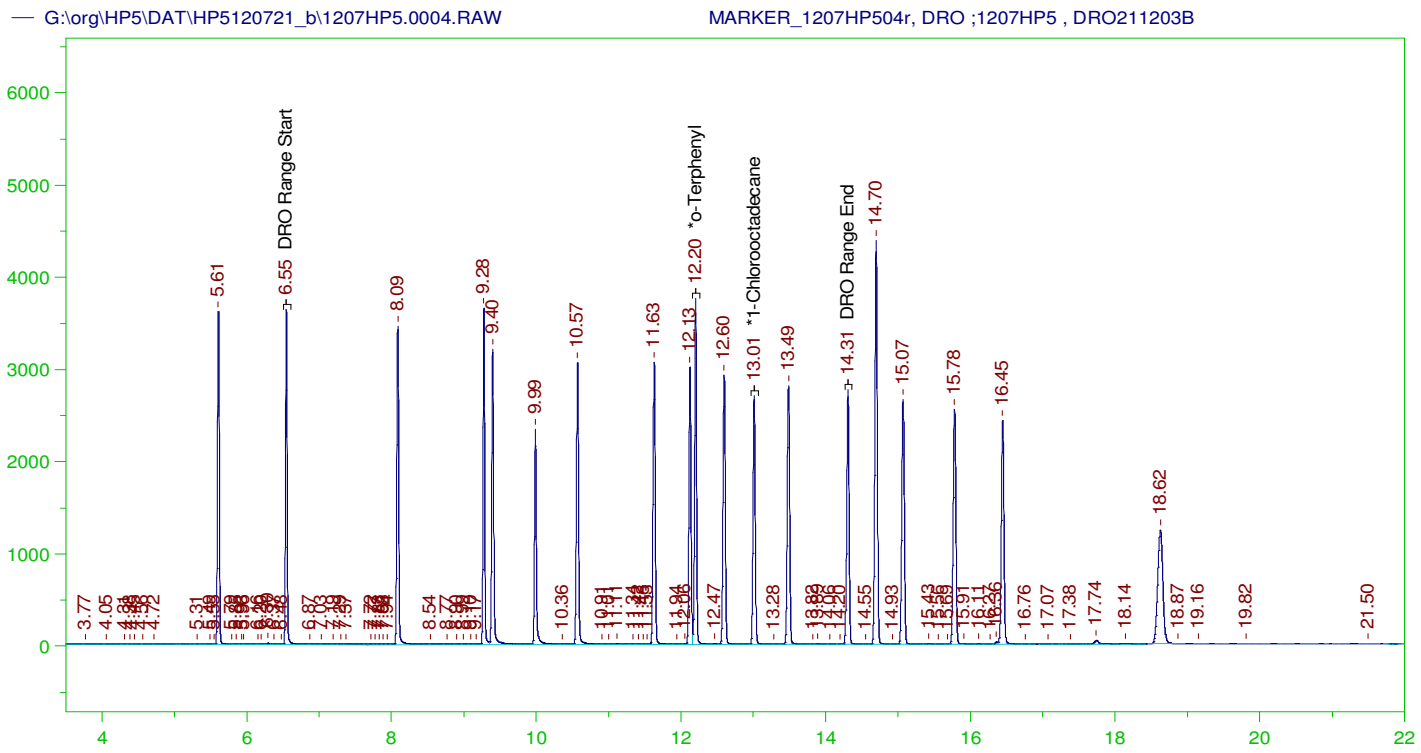


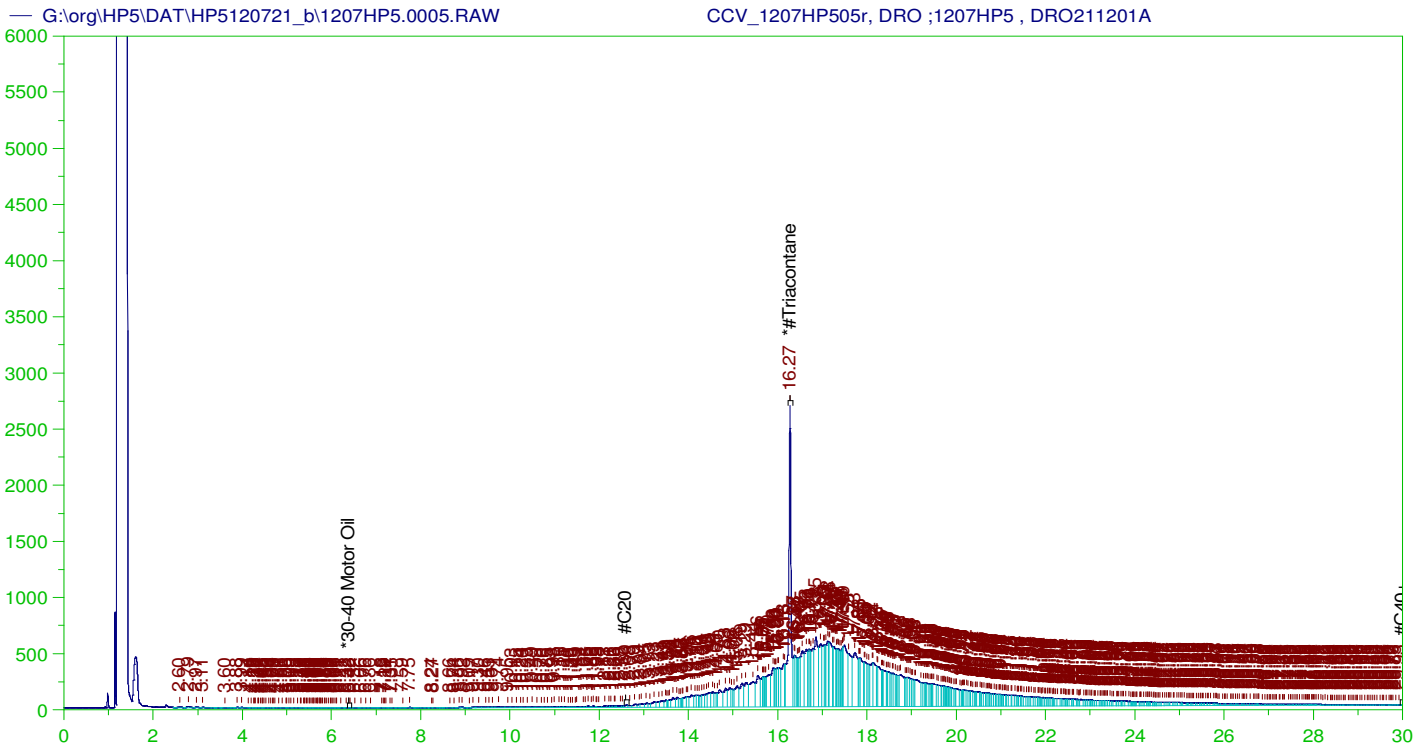
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1207HP504r, DRO ;1207HP5 , DRO211203B
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0004.RAW
Date & Time Acquired: 12/7/2021 1:16:03 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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	12.203	.2	.201	100.56	-
*1-Chlorooctadecane	13.012	.2	.161	80.43	-

DRO Area:6.537205E+07 DRO Amount: 2.085021
TEH Area:1.069625E+08 TEH Amount: 3.411535



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1207HP505r, DRO ;1207HP5 , DRO211201A
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0005.RAW
Date & Time Acquired: 12/7/2021 1:59:17 PM
Method File: G:\Org\HP5\Methods\DC_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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	16.273	500.	337.06	67.41	-

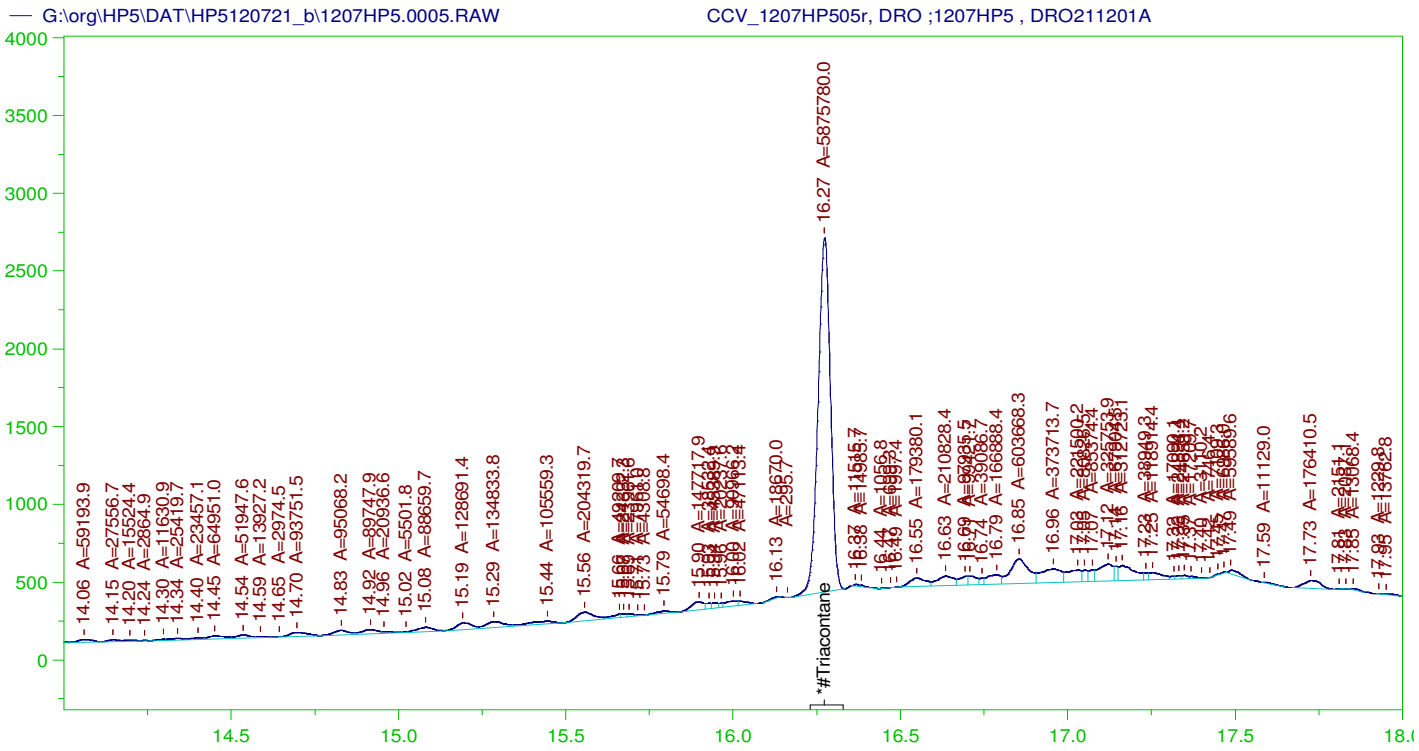
~~RRO~~ TEH (Oil Range)Area:1.340723E+08 ~~RRO~~ TEH (Oil Range)AMOUNT: 4697.302

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120721_b\1207HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.036	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.273	200.	337.06	168.53	75-125

AMN 12/13/2021



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1207HP505r, DRO ;1207HP5 , DRO211201A
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0005.RAW
Date & Time Acquired: 12/7/2021 1:59:17 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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

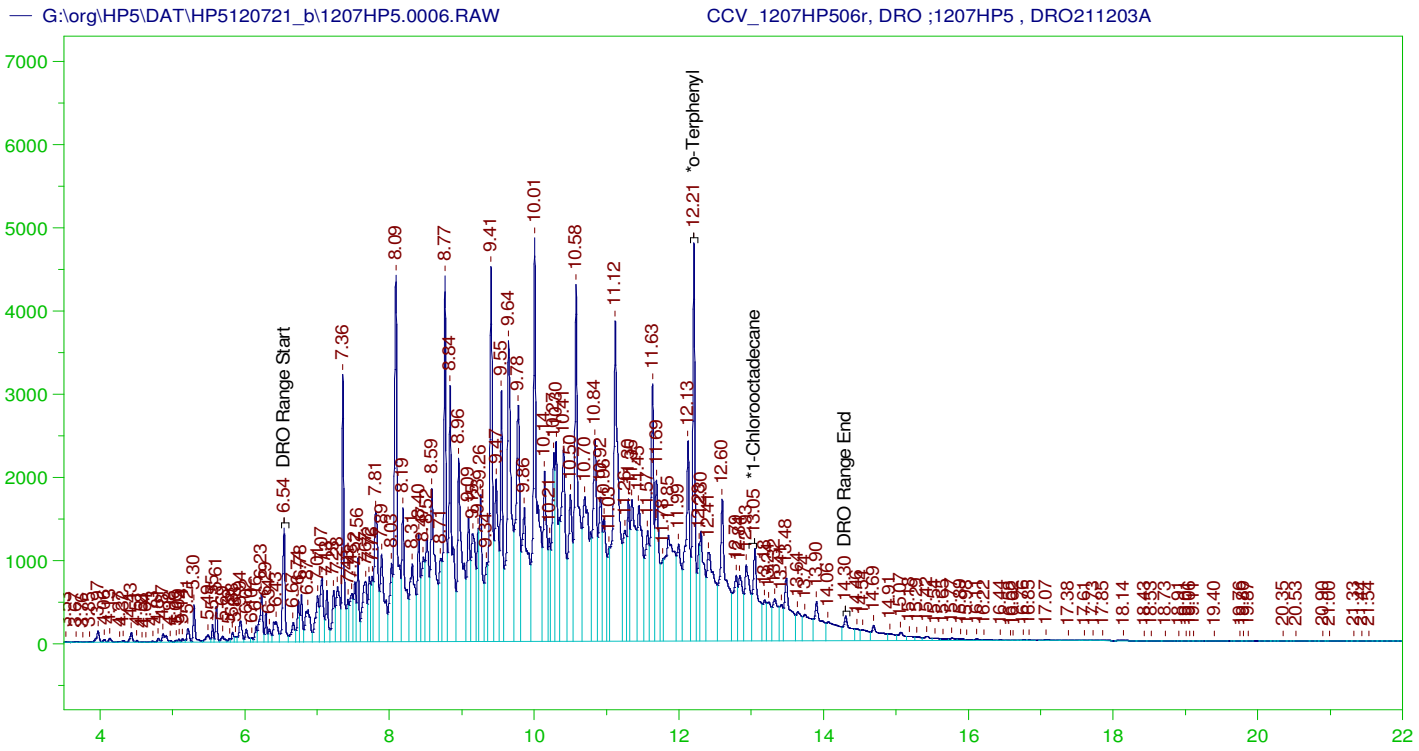
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.273	500.	203.102	40.62	-

RRO Area:5988152 RRO AMOUNT: 209.7984

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120721_b\1207HP5.0005.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.036	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.273	200.	203.102	101.55	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1207HP506r, DRO ;1207HP5 , DRO211203A
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0006.RAW
Date & Time Acquired: 12/7/2021 2:42:13 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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	12.207	200.	335.333	167.67	-
*1-Chlorooctadecane	13.047	200.	157.413	78.71	-

DRO Area:4.705948E+08 DRO Amount: 15009.47
TEH Area:4.876153E+08 TEH Amount: 15552.33

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120721_b\1207HP5.0006.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15552.33	103.68	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.207	200.	335.333	167.67	85-115
*1-Chlorooctadecane	13.047	200.	157.413	78.71	85-115

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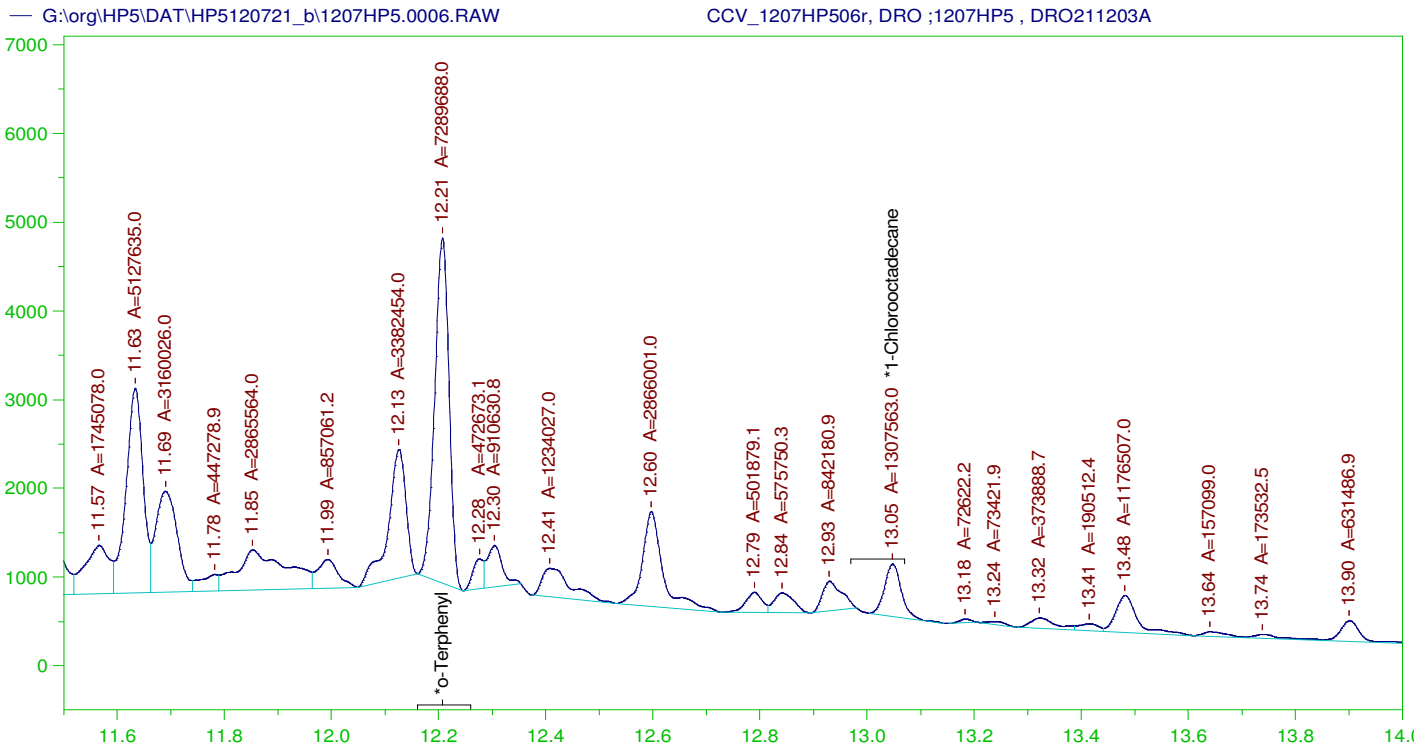


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1207HP506r, DRO ;1207HP5 , DRO211203A
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0006.RAW
Date & Time Acquired: 12/7/2021 2:42:13 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IE-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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

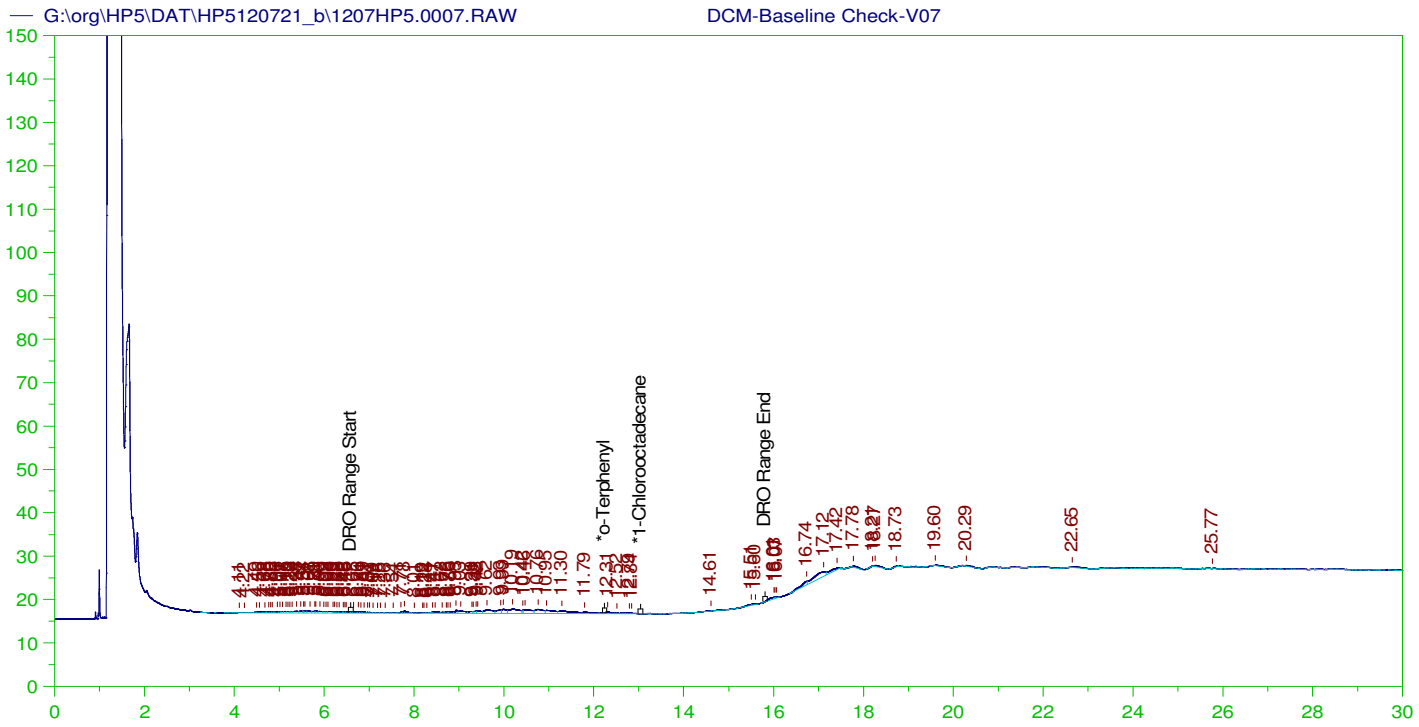
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.207	200.	205.29	102.65	-
*1-Chlorooctadecane	13.047	200.	36.823	18.41	-

DRO Area:2.644311E+08 DRO Amount: 8433.944
TEH Area:2.748899E+08 TEH Amount: 8767.525

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120721_b\1207HP5.0006.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8767.53	58.45	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.207	200.	205.29	102.65	85-115
*1-Chlorooctadecane	13.047	200.	36.823	18.41	85-115



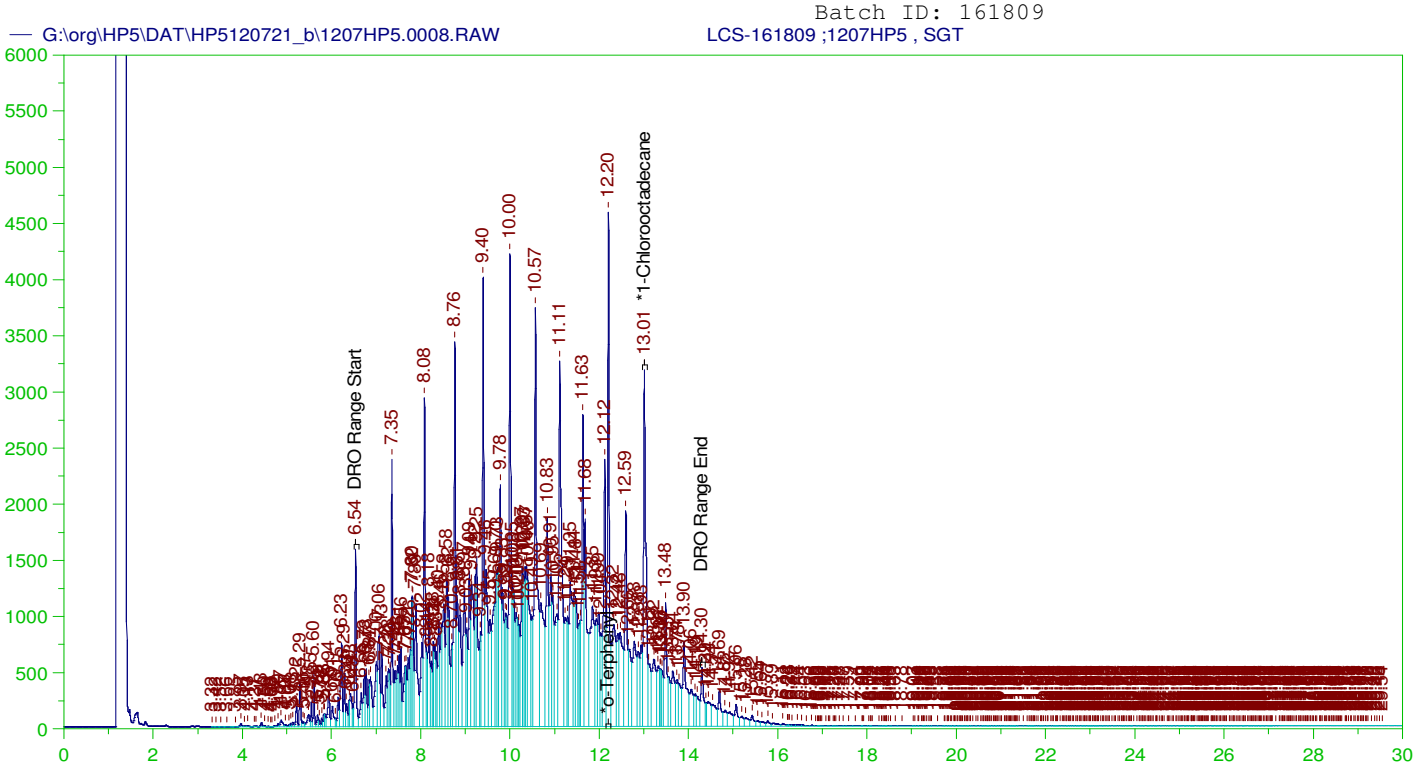
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: DCM-Baseline Check-V07
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0007.RAW
Date & Time Acquired: 12/7/2021 3:25:13 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-LEXP.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IB.CAL
Sample Weight: 1 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	29.883	200.	.	.	-
*1-Chlorooctadecane	29.883	200.	.	.	-

DRO Area:157104 DRO Amount: 5.010781
TEH Area:276657.9 TEH Amount: 8.823915

Batch ID: 161809



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: LCS-161809 ;1207HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0008.RAW
Date & Time Acquired: 12/7/2021 4:08:28 PM
Method File: G:\Org\HP5\Methods\D3_8015-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

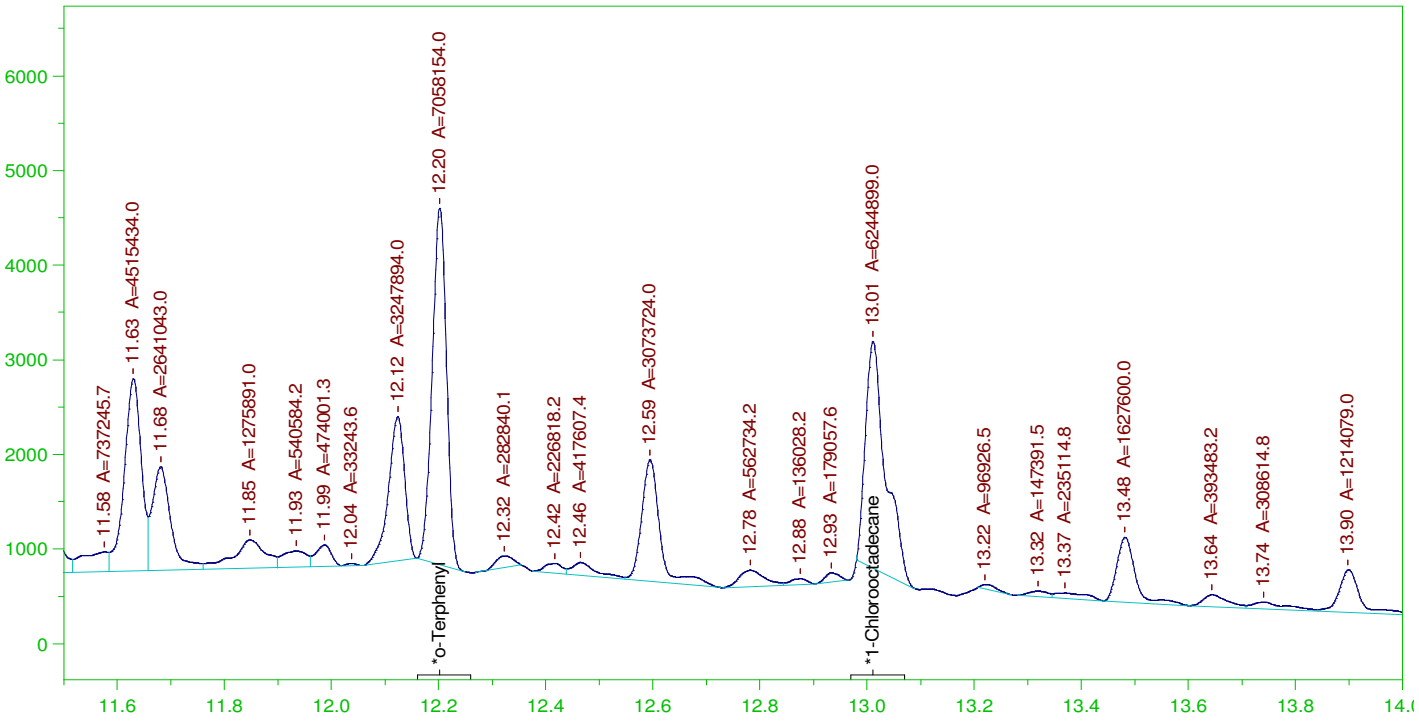
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.202	.2	.337	168.75	-
*1-Chlorooctadecane	13.011	.2	.334	167.02	-

DRO Area:3.961041E+08 DRO Amount: 12.63361
TEH Area:4.215486E+08 TEH Amount: 13.44516

Batch ID: 161809

G:\org\HP5\DAT\HP5120721_b\1207HP5.0008.RAW LCS-161809 ;1207HP5 , SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

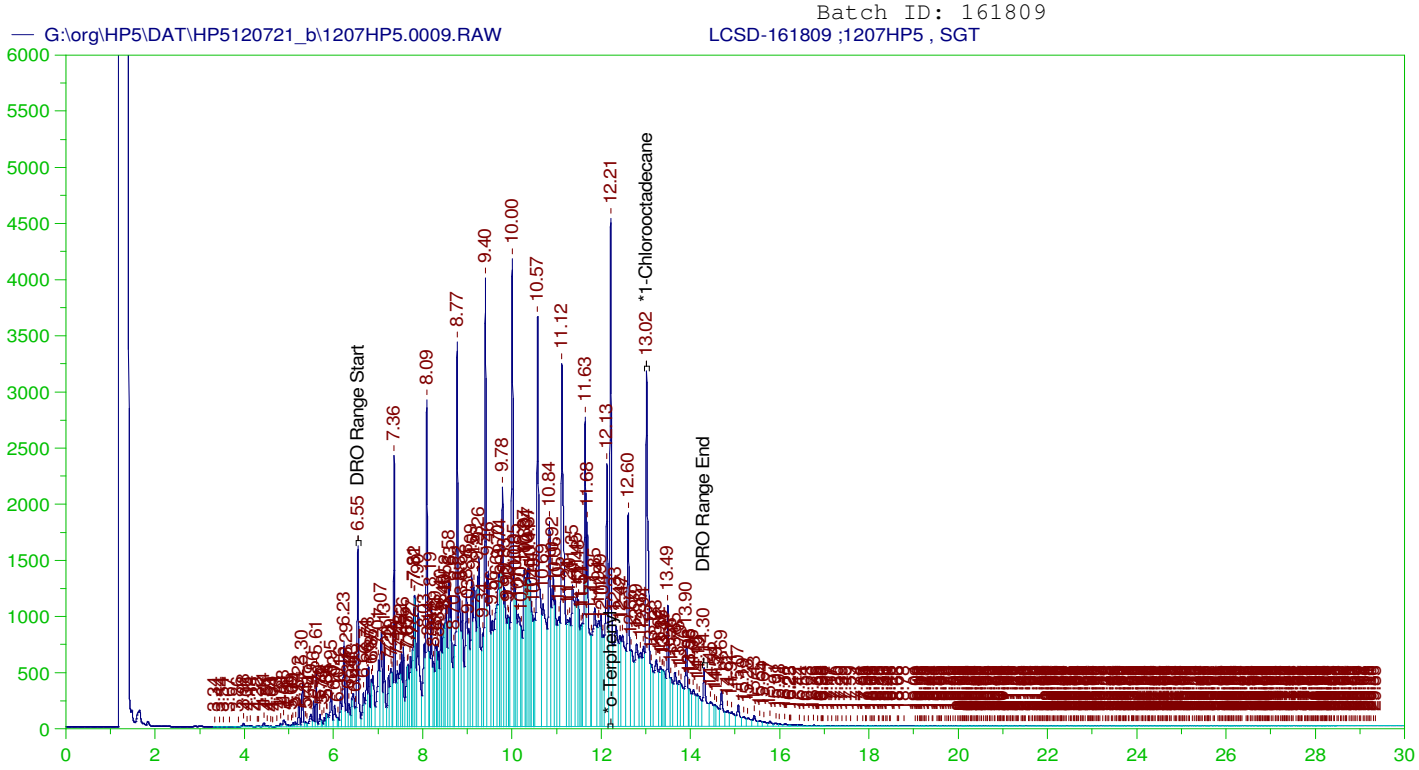
Sample Name: LCS-161809 ;1207HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0008.RAW
Date & Time Acquired: 12/7/2021 4:08:28 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IE-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	12.202	.2	.199	99.38	-
*1-Chlorooctadecane	13.011	.2	.176	87.93	-

DRO Area:1.916637E+08 DRO Amount: 6.113052
TEH Area:2.032458E+08 TEH Amount: 6.482459

Batch ID: 161809



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

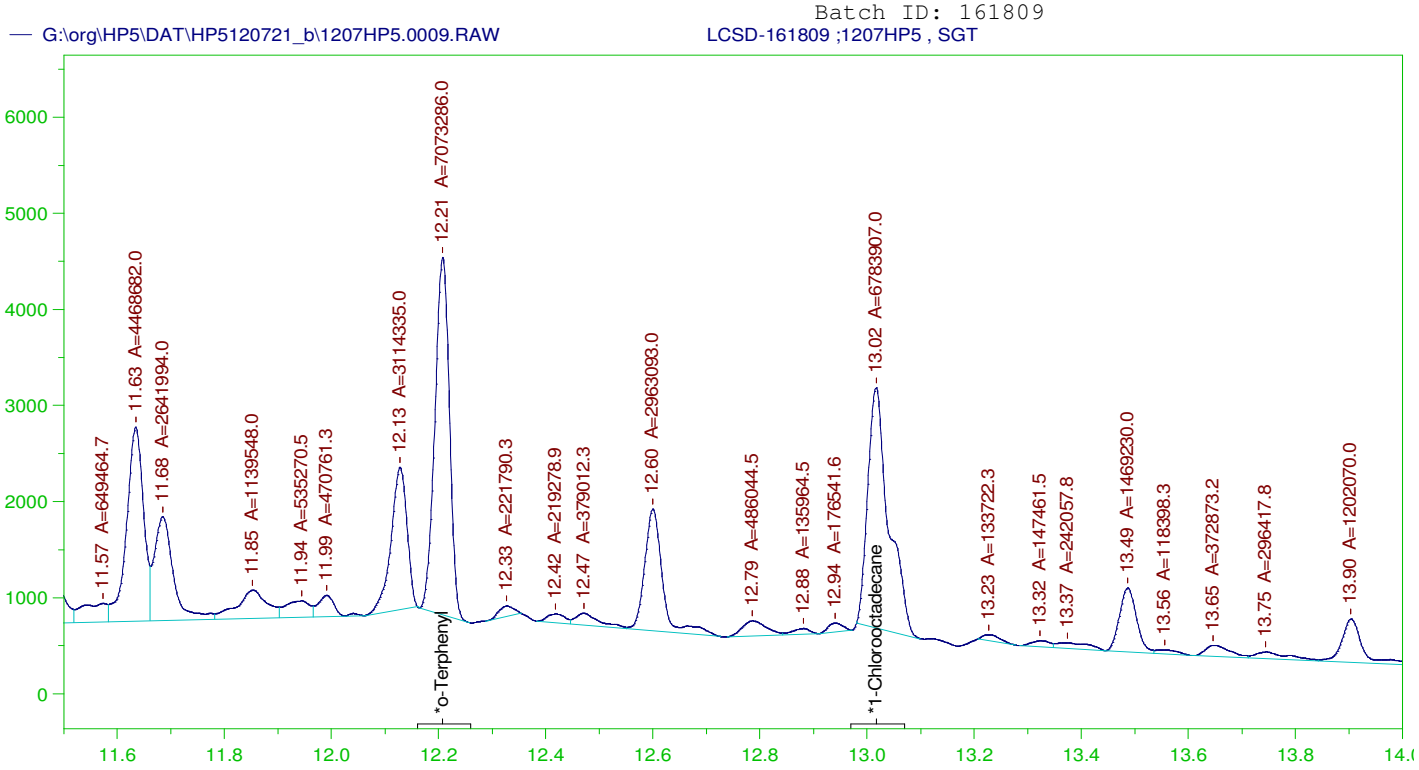
Sample Name: LCSD-161809 ;1207HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0009.RAW
Date & Time Acquired: 12/7/2021 4:51:26 PM
Method File: G:\Org\HP5\Methods\D3_8015-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	12.208	.2	.33	164.94	-
*1-Chlorooctadecane	13.017	.2	.337	168.55	-

DRO Area:3.922998E+08 DRO Amount: 12.51228
TEH Area:4.17349E+08 TEH Amount: 13.31121

Batch ID: 161809



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

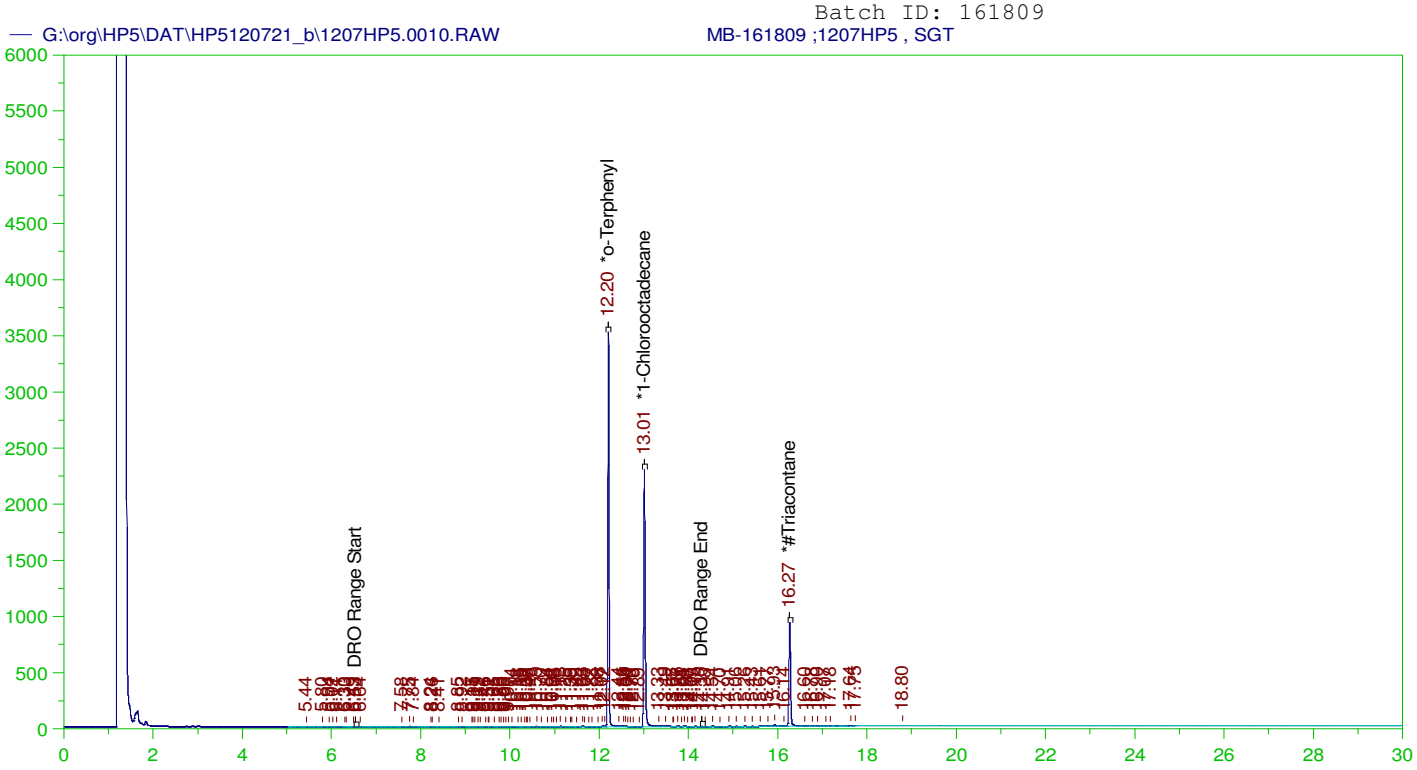
Sample Name: LCSD-161809 ;1207HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0009.RAW
Date & Time Acquired: 12/7/2021 4:51:26 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IE-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	12.208	.2	.199	99.6	-
*1-Chlorooctadecane	13.017	.2	.191	95.52	-

DRO Area:1.894029E+08 DRO Amount: 6.040944
TEH Area:2.013103E+08 TEH Amount: 6.420727

Batch ID: 161809

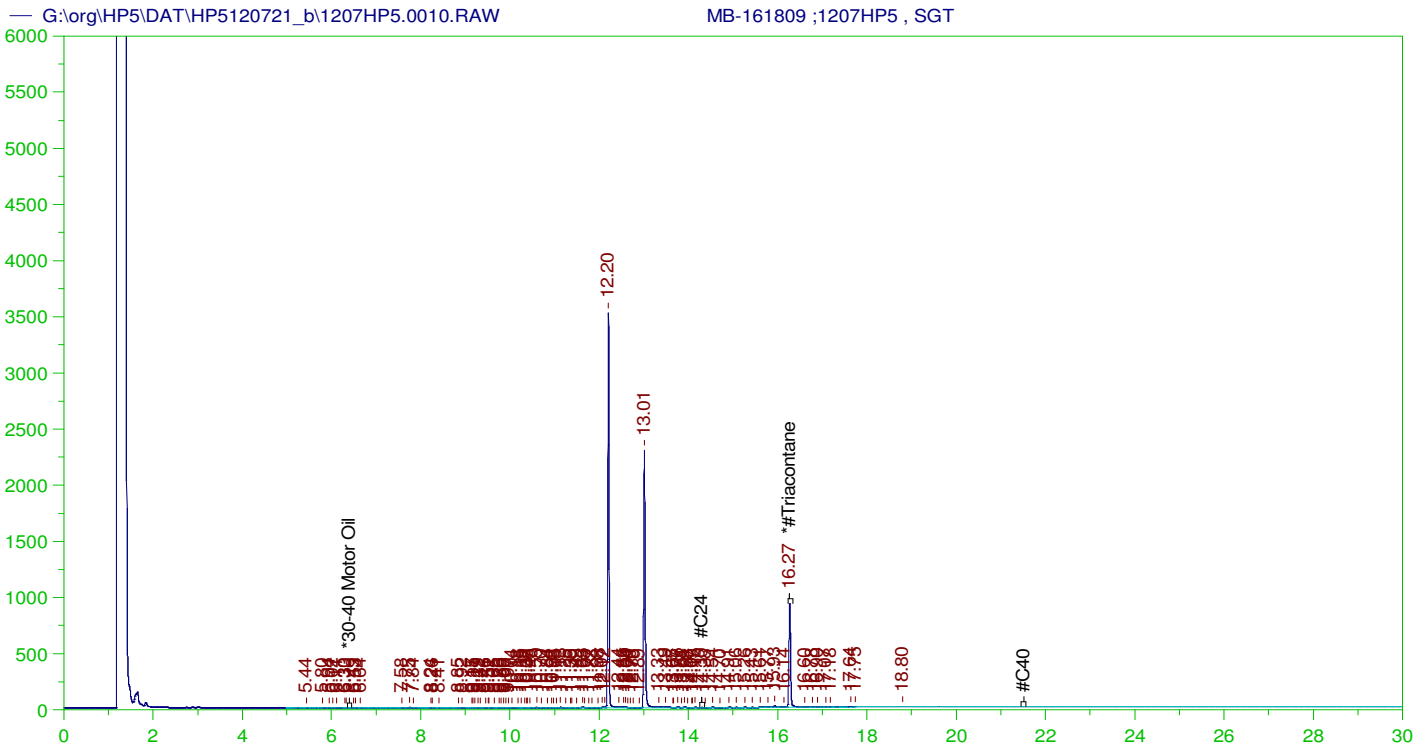


DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: MB-161809 ;1207HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0010.RAW
Date & Time Acquired: 12/7/2021 5:34:39 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24-Tri.CAL
Sample 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	12.203	.2	.193	96.26	-
*1-Chlorooctadecane	13.011	.2	.149	74.68	-
*#Triacontane	16.266	.2	.088	43.76	-

DRO Area:288484 DRO Amount: 9.201105E-03
TEH Area:465162.6 TEH Amount: 1.483621E-02



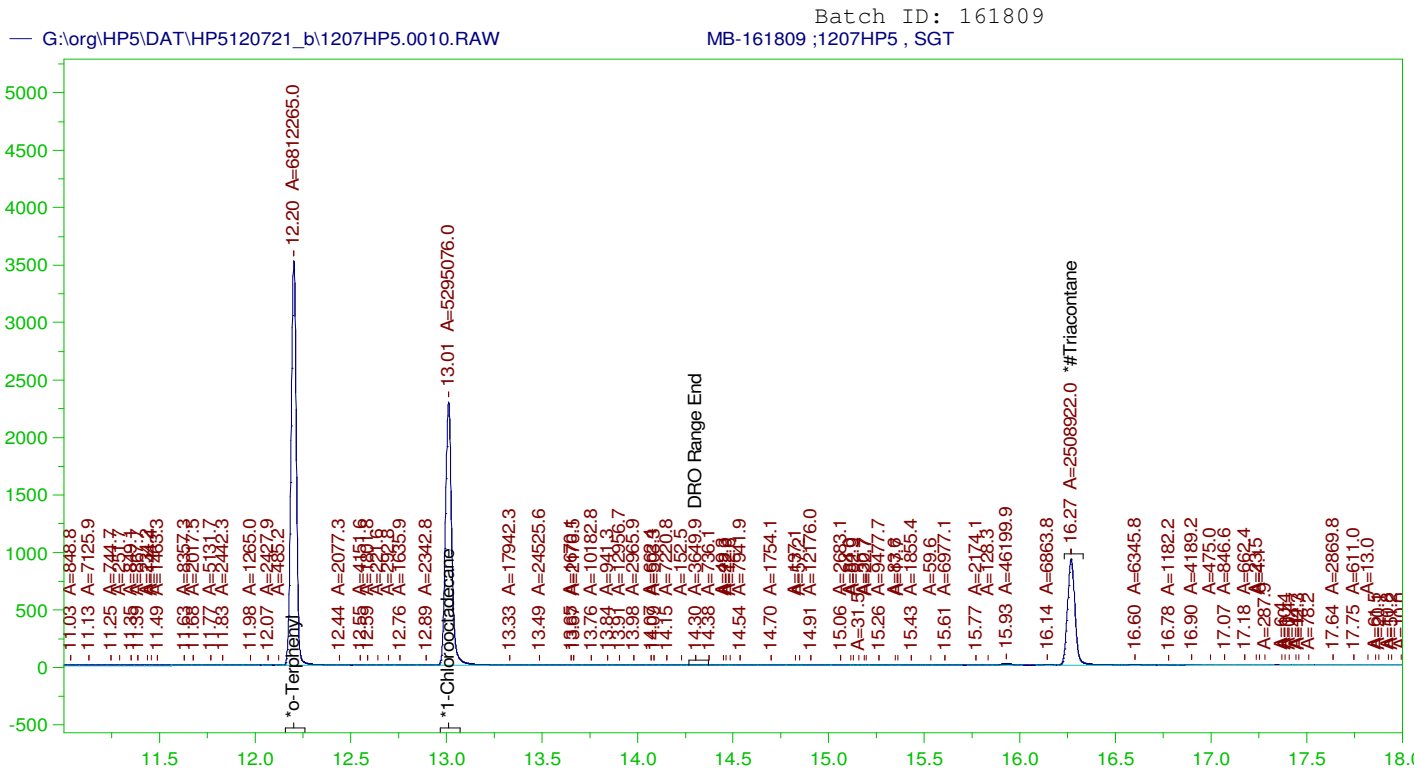
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: MB-161809 ;1207HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0010.RAW
Date & Time Acquired: 12/7/2021 5:34:39 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG-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: 14.26 to 21.56

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.266	.5	.088	17.5	-

RRO Area:153016.7 RRO AMOUNT: 5.36103E-03



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MB-161809 ;1207HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0010.RAW
Date & Time Acquired: 12/7/2021 5:34:39 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

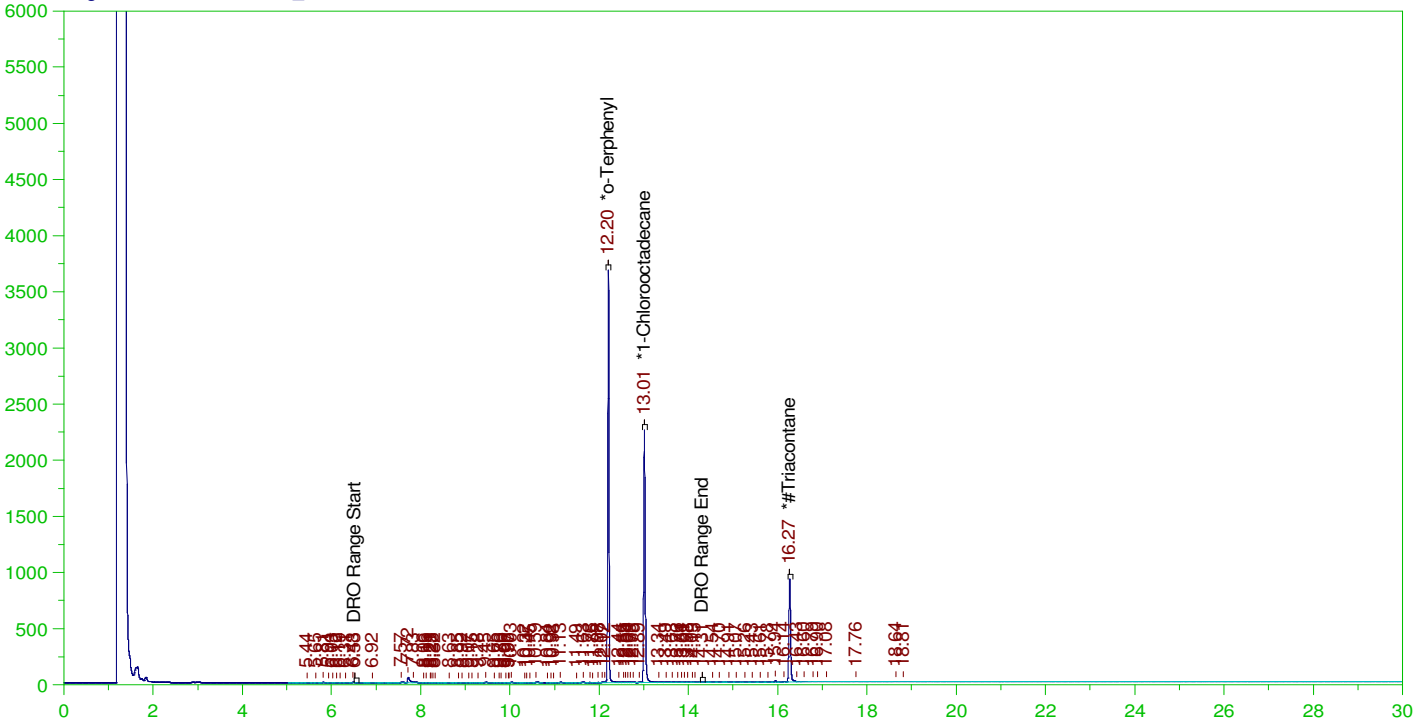
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.203	.2	.192	95.92	-
*1-Chlorooctadecane	13.011	.2	.149	74.56	-
*#Triacontane	16.266	.2	.087	43.36	-

DRO Area:231652.2 DRO Amount: 7.388472E-03
TEH Area:433865.5 TEH Amount: 0.013838

ERH1938 (Post-chlorination) Batch ID: 161809

G:\org\HP5\DAT\HP5120721_b\1207HP5.0011.RAW B21111928-008B ;1207HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-008B ;1207HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0011.RAW
Date & Time Acquired: 12/7/2021 6:18:00 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-24-Tri.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

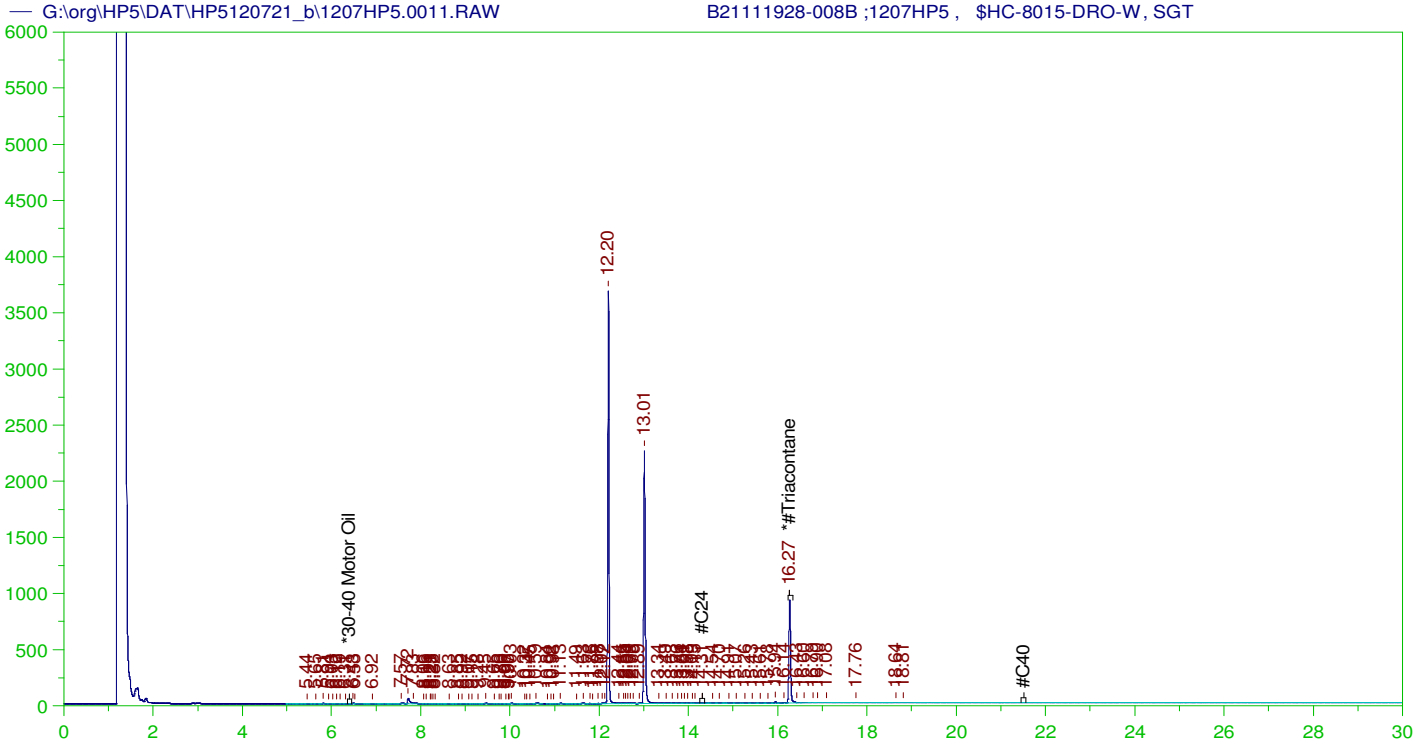
Mean RF for TEH: 31353.19
Rt range for Diesel Range Organics: 6.51 to 14.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.202	.2	.199	99.51	-
*1-Chlorooctadecane	13.012	.2	.146	72.9	-
*#Triacontane	16.266	.2	.089	44.64	-

DRO Area:452554.9 DRO Amount: 1.443409E-02
TEH Area:646749.1 TEH Amount: 2.062786E-02

ERH1938 (Post-chlorination) Batch ID: 161809

G:\org\HP5\DAT\HP5120721_b\1207HP5.0011.RAW B21111928-008B ;1207HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B21111928-008B ;1207HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0011.RAW
Date & Time Acquired: 12/7/2021 6:18:00 PM
Method File: G:\Org\HP5\Methods\DR_OROS-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG-SAMP.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

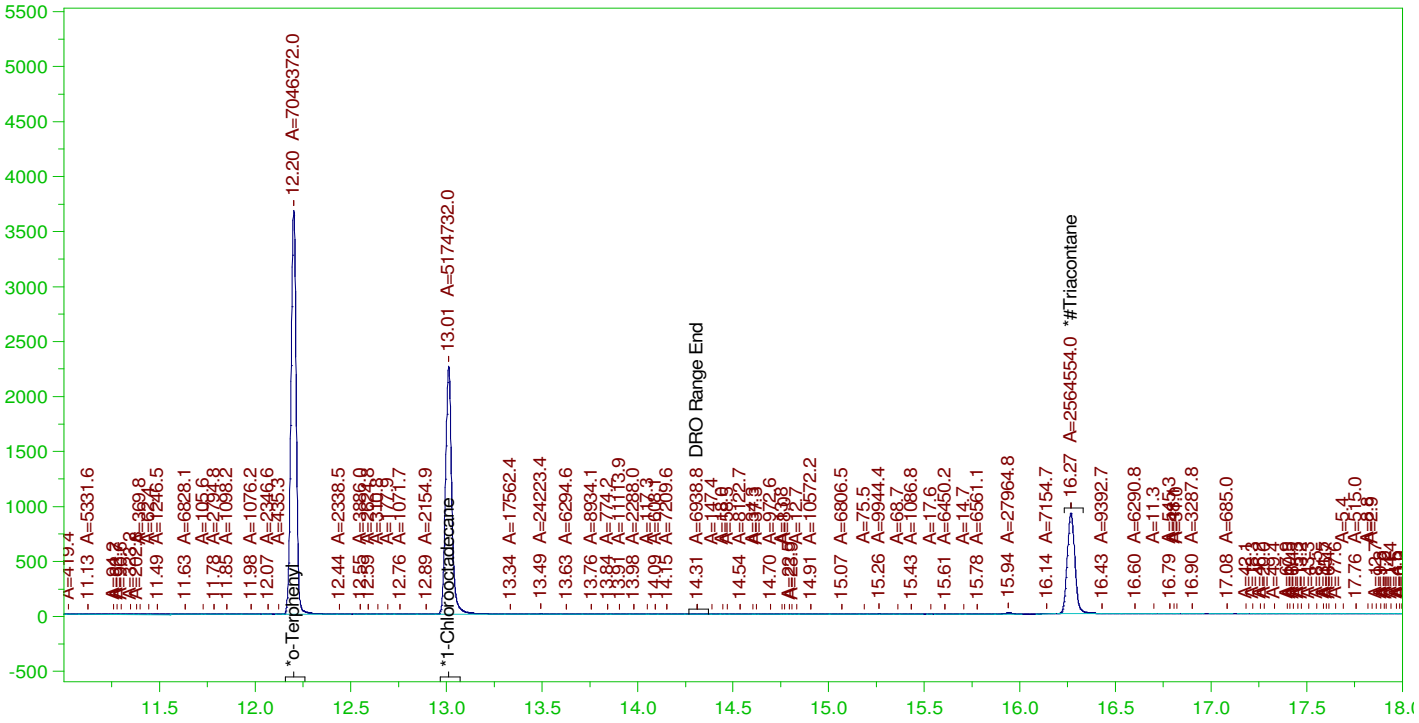
Mean RF for for Residual Range Organics Calculations: 28542.41
Rt range for Residual Range Organics: 14.26 to 21.56

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.266	.5	.089	17.86	-

RRO Area:151382.8 RRO AMOUNT: 5.303783E-03

ERH1938 (Post-chlorination) Batch ID: 161809

G:\org\HP5\DAT\HP5120721_b\1207HP5.0011.RAW B21111928-008B ;1207HP5 , $HC-8015-DRO-W, SGT



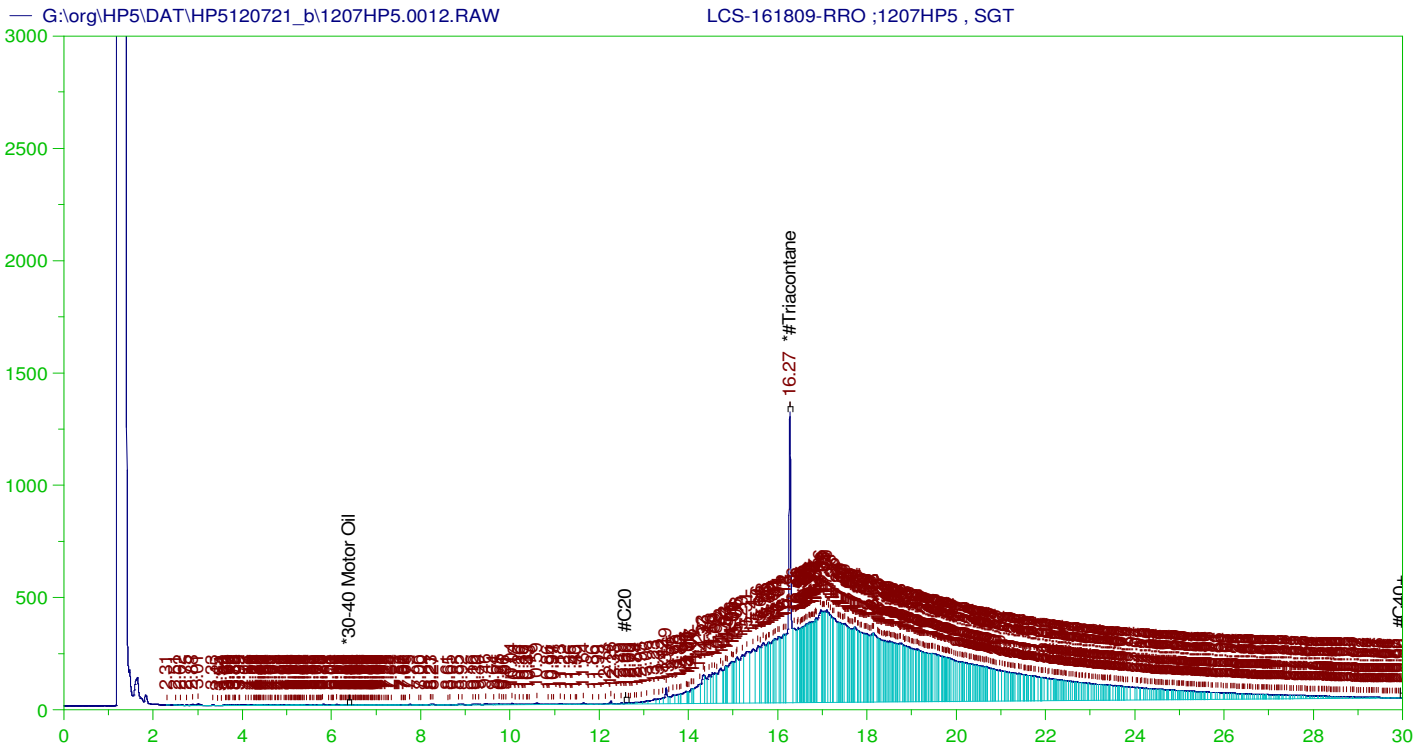
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B21111928-008B ;1207HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0011.RAW
Date & Time Acquired: 12/7/2021 6:18:00 PM
Method File: G:\Org\HP5\Methods\DS_8015-C24T-IE-L#.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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	12.202	.2	.198	99.22	-
*1-Chlorooctadecane	13.012	.2	.146	72.86	-
*#Triacontane	16.266	.2	.089	44.32	-

DRO Area:415257.5 DRO Amount: 1.324451E-02
TEH Area:621375.3 TEH Amount: 1.981857E-02



RESIDUAL RANGE ORGANICS CHROMATOGRAM

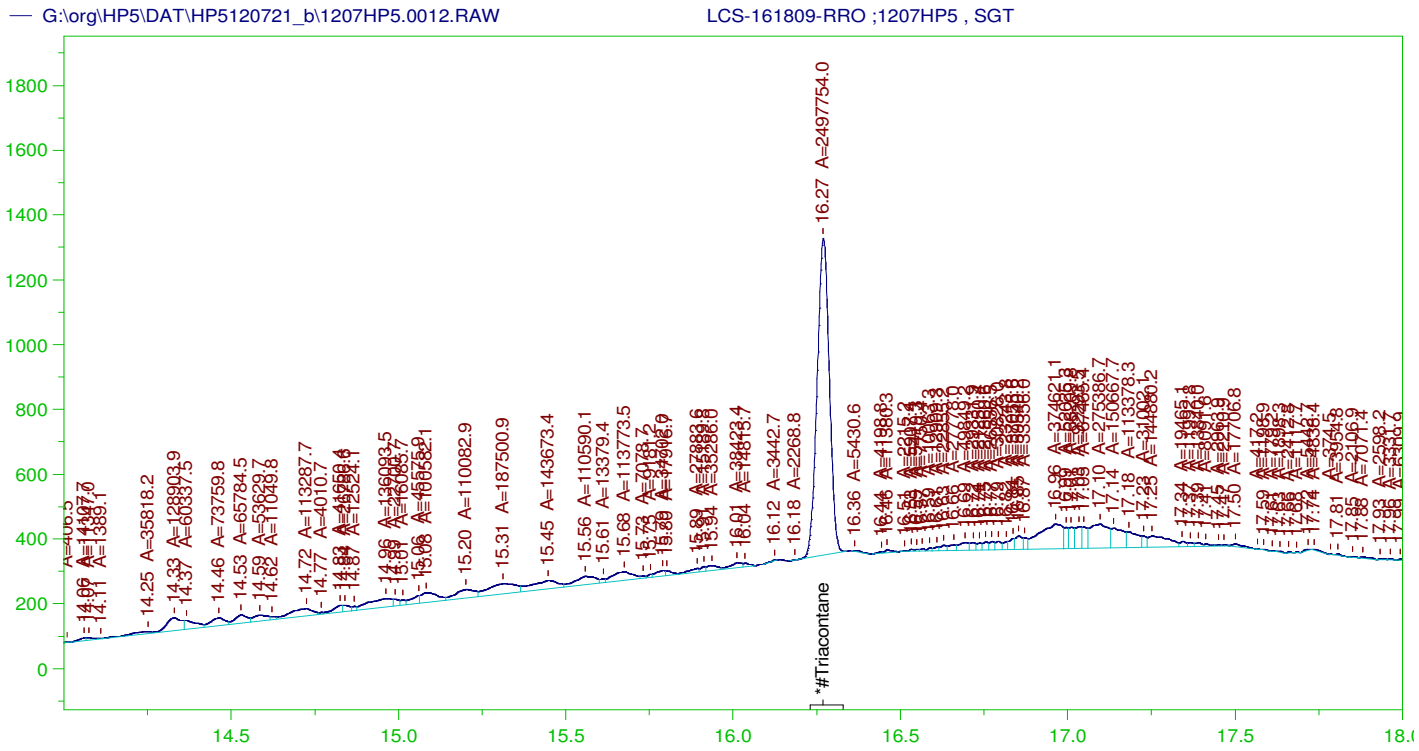
Sample Name: LCS-161809-RRO ;1207HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0012.RAW
Date & Time Acquired: 12/7/2021 7:01:15 PM
Method File: G:\Org\HP5\Methods\D3_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	16.269	.5	.182	36.3	-

~~RRO~~ TEH (Oil Range) Area:1.245395E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.363313

AMN 12/13/2021



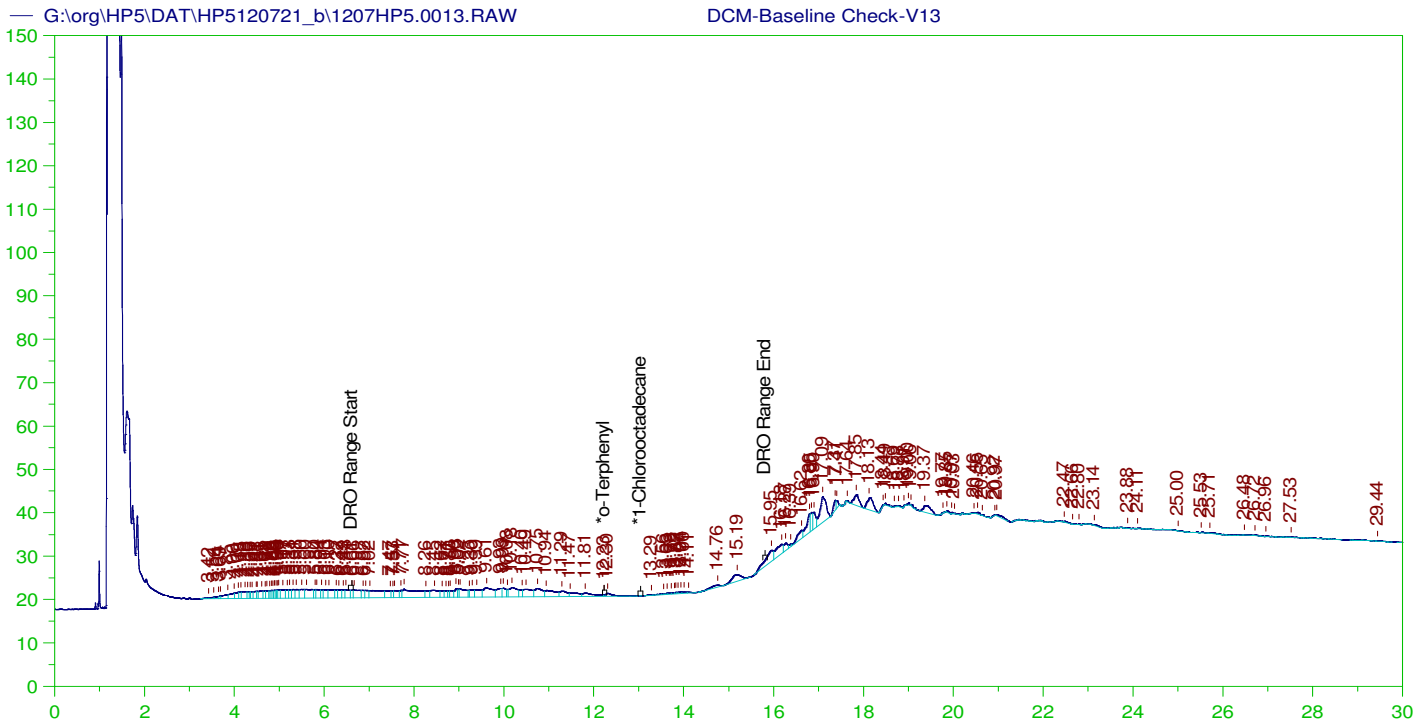
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: LCS-161809-RRO ;1207HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0012.RAW
Date & Time Acquired: 12/7/2021 7:01:15 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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	16.269	.5	.086	17.27	-

RRO Area:4279272 RRO AMOUNT: 0.1499268



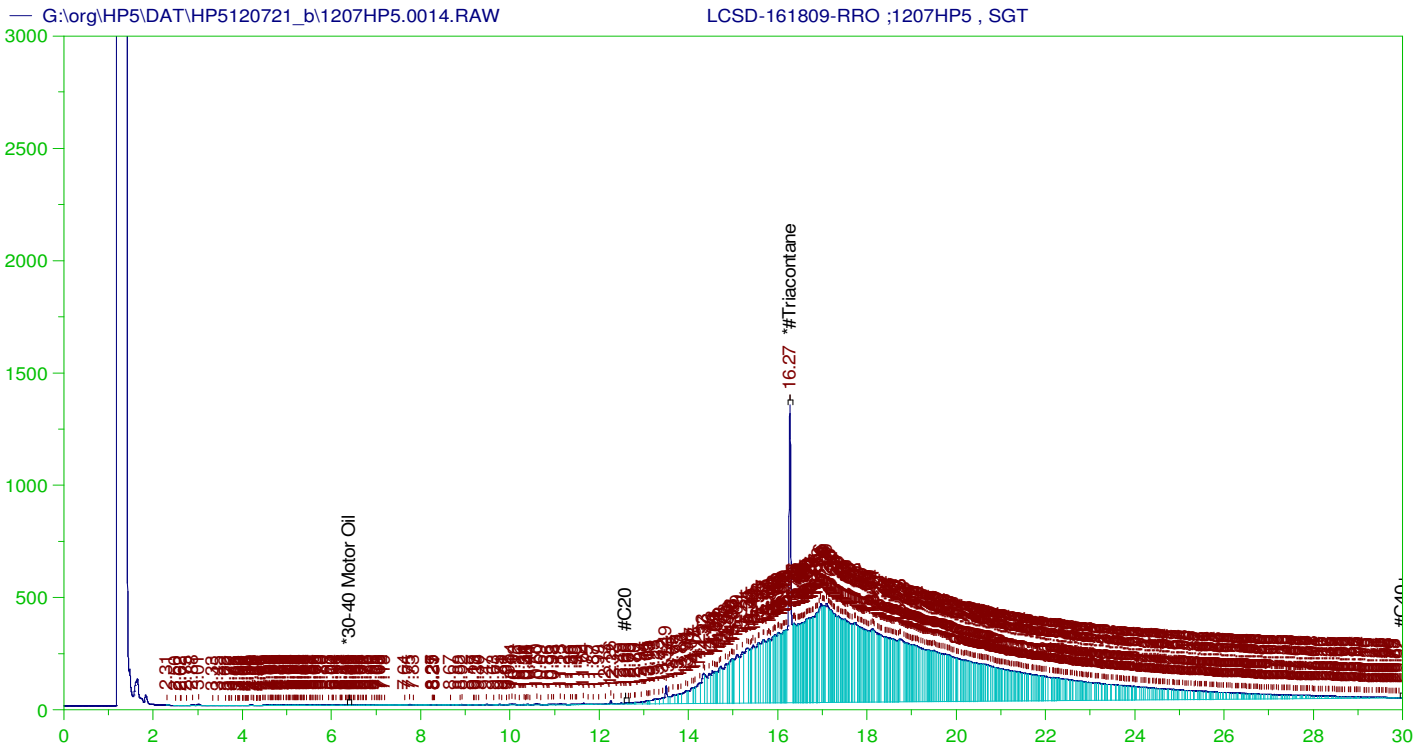
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: DCM-Baseline Check-V13
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0013.RAW
Date & Time Acquired: 12/7/2021 7:44:29 PM
Method File: G:\Org\HP5\Methods\DR_8015-IB-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	12.227	200.	.016	.01	-
*1-Chlorooctadecane	29.897	200.	.	.	-

DRO Area:533596.3 DRO Amount: 17.01888
TEH Area:1188642 TEH Amount: 37.91136



RESIDUAL RANGE ORGANICS CHROMATOGRAM

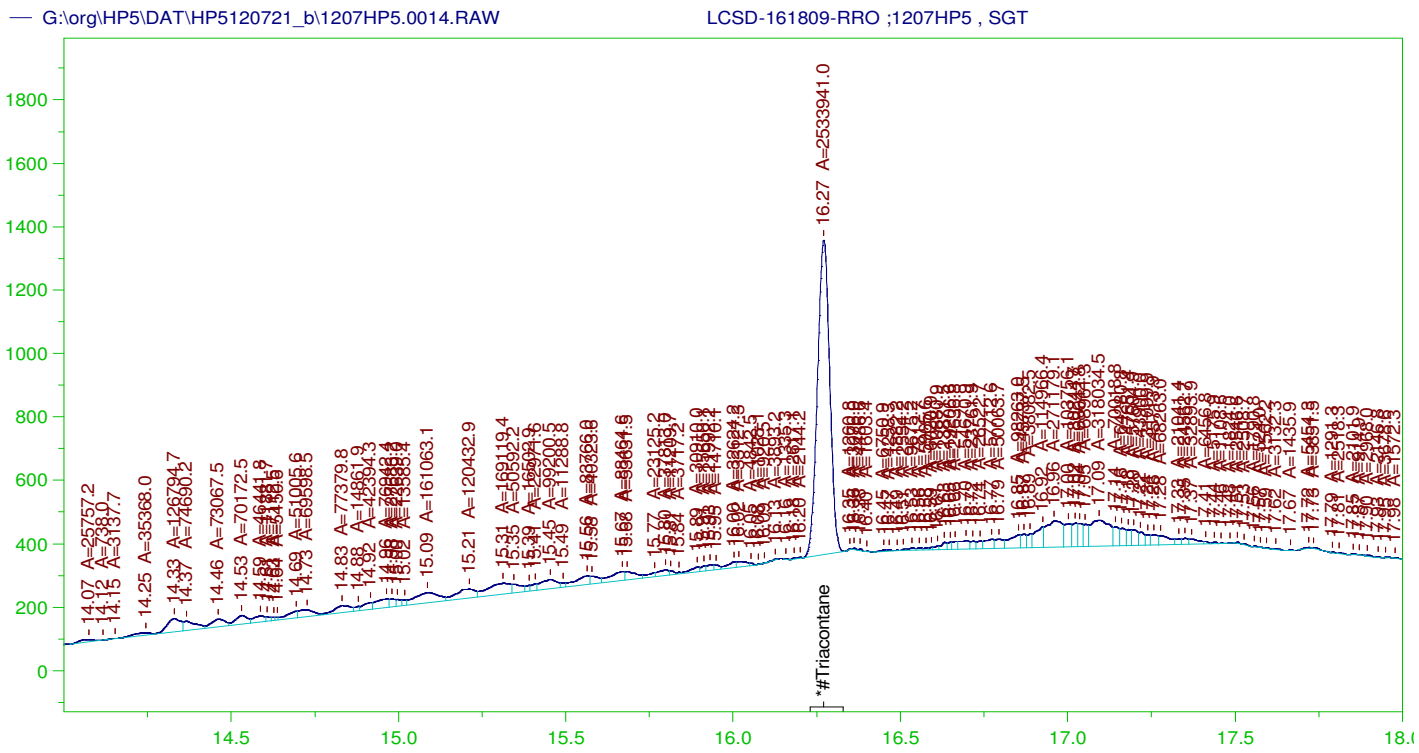
Sample Name: LCSD-161809-RRO ;1207HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0014.RAW
Date & Time Acquired: 12/7/2021 8:27:41 PM
Method File: G:\Org\HP5\Methods\D3_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.CAL
Sample Weight: 1000 Dilution: 1 S.A.: 1

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	16.271	.5	.174	34.8	-

~~RRO~~ TEH (Oil Range) Area:1.331292E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.66426

AMN 12/13/2021



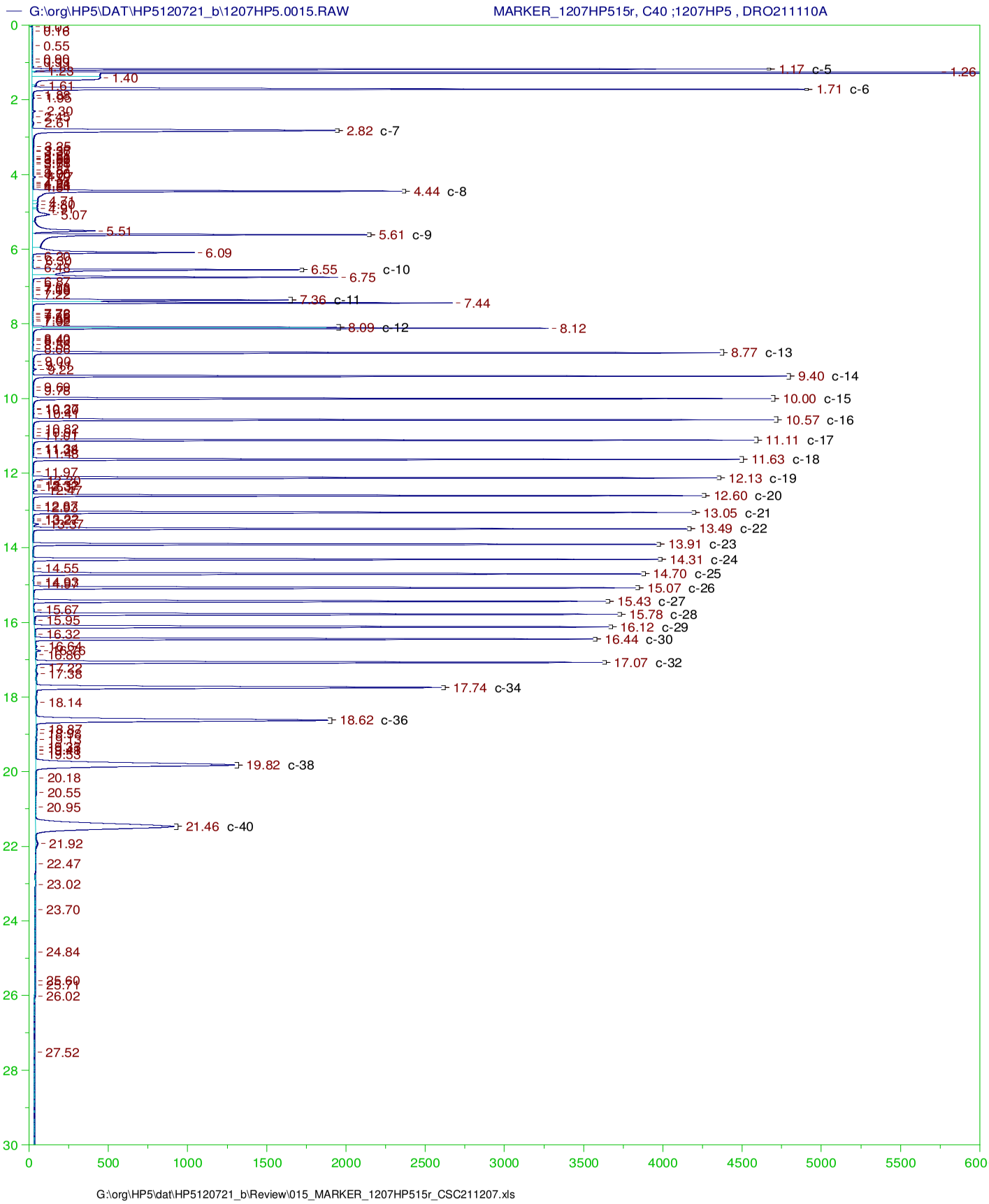
RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: LCSD-161809-RRO ;1207HP5 , SGT
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0014.RAW
Date & Time Acquired: 12/7/2021 8:27:41 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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	16.271	.5	.088	17.52	-

RRO Area:4615675 RRO AMOUNT: 0.1617129


G:\org\HP5\DAT\HP5120721_b\1207HP5.0015.RAW
MARKER_1207HP515r, C40 ;1207HP5 , DRO211110A
1.17 c-5
1.26
1.40
1.71 c-6
2.82 c-7
4.44 c-8
5.51
5.61 c-9
6.09
6.55
6.75 c-10
7.36 c-11
7.44
8.09 c-12
8.12
8.77 c-13
9.40 c-14
10.00 c-15
10.57 c-16
11.11 c-17
11.63 c-18
12.13 c-19
12.60 c-20
13.05 c-21
13.49 c-22
13.91 c-23
14.31 c-24
14.70 c-25
15.07 c-26
15.43 c-27
15.78 c-28
16.12 c-29
16.44 c-30
17.07 c-32
17.74 c-34
18.14
18.62 c-36
19.82 c-38
20.18
20.55
20.95
21.46 c-40
21.92
22.47
23.02
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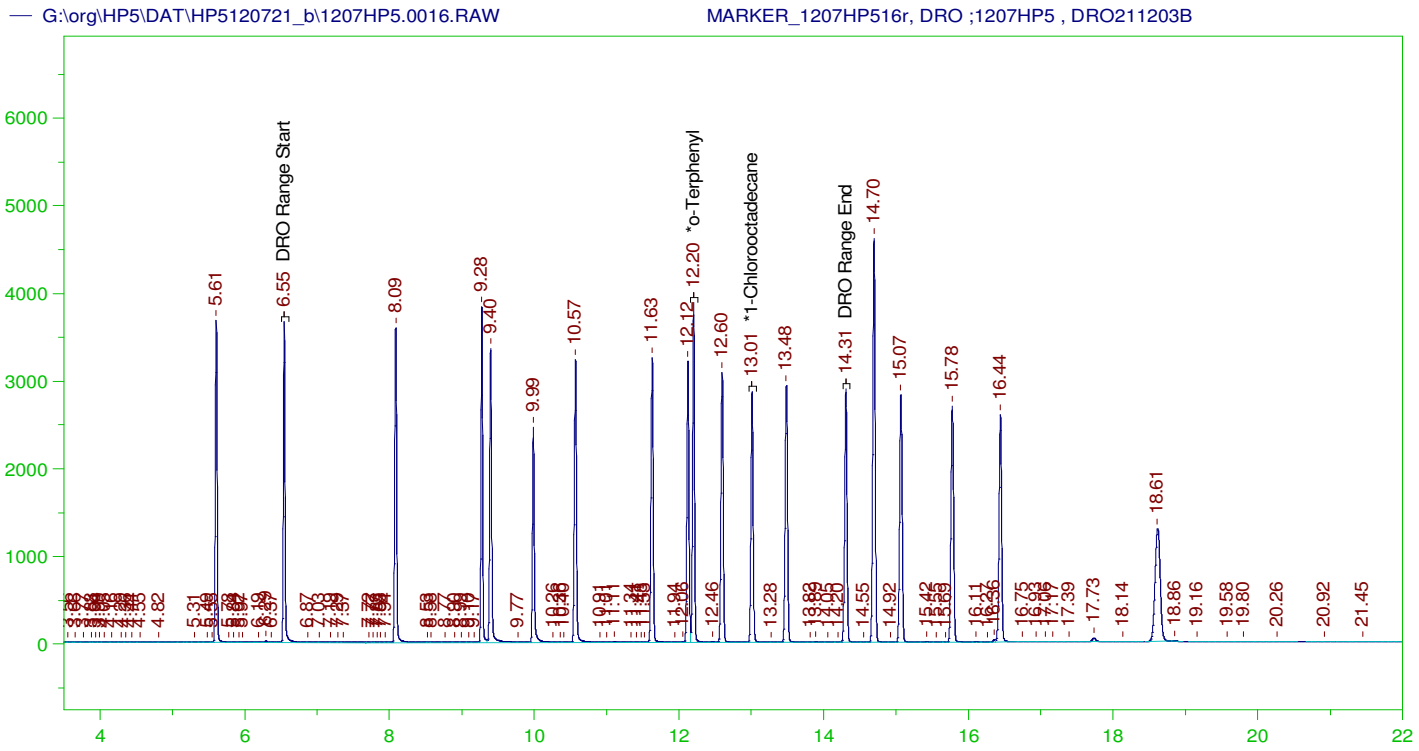


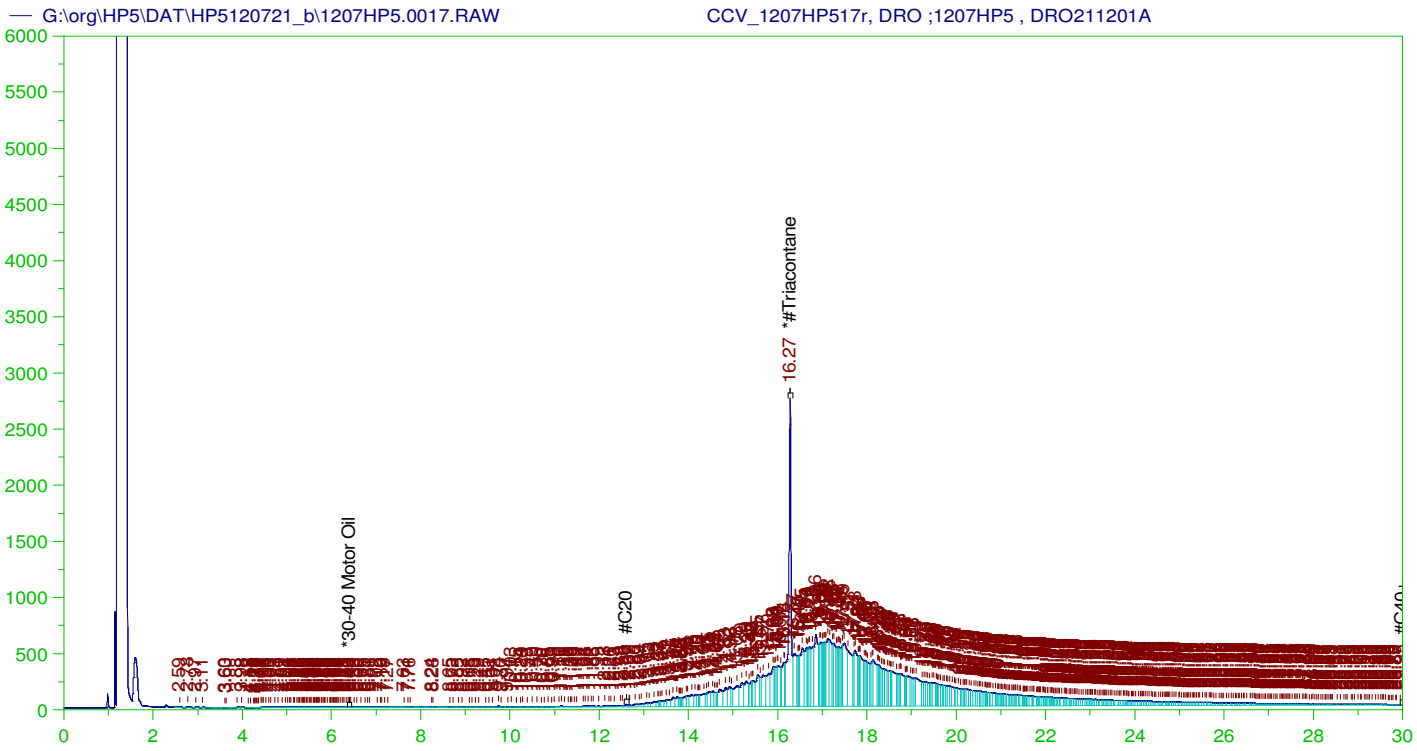
DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: MARKER_1207HP516r, DRO ;1207HP5 , DRO211203B
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0016.RAW
Date & Time Acquired: 12/7/2021 9:54:07 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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	12.203	.2	.212	105.96	-
*1-Chlorooctadecane	13.01	.2	.171	85.29	-

DRO Area:6.891877E+07 DRO Amount: 2.198142
TEH Area:1.126031E+08 TEH Amount: 3.59144



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1207HP517r, DRO ;1207HP5 , DRO211201A
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0017.RAW
Date & Time Acquired: 12/7/2021 10:37:27 PM
Method File: G:\Org\HP5\Methods\DC_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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	16.274	500.	353.279	70.66	-

~~RRO~~ TEH (Oil Range) Area:1.388331E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4864.1

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120721_b\1207HP5.0017.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.018	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.274	200.	353.279	176.64	75-125

AMN 12/13/2021

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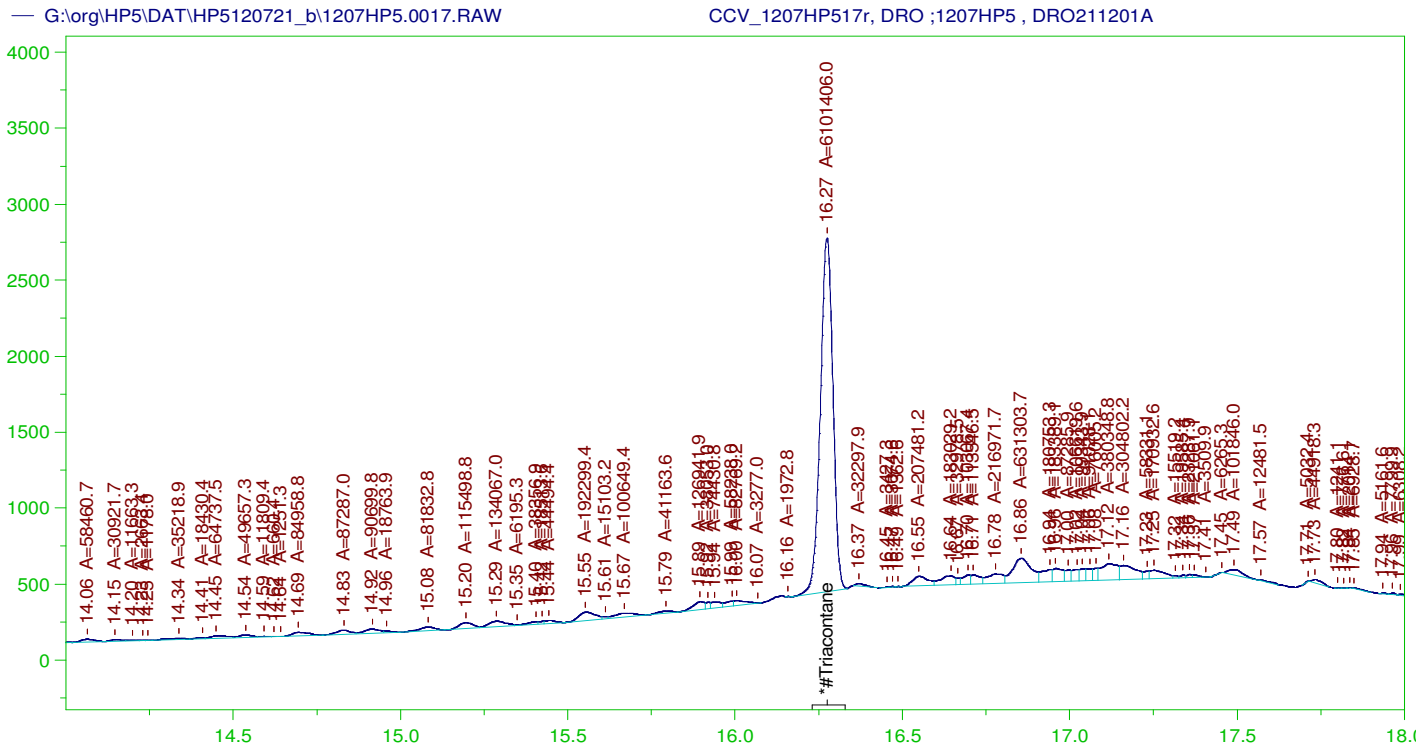


RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: CCV_1207HP517r, DRO ;1207HP5 , DRO211201A
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0017.RAW
Date & Time Acquired: 12/7/2021 10:37:27 PM
Method File: G:\Org\HP5\Methods\DS_ORO-AG-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO211017AG.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

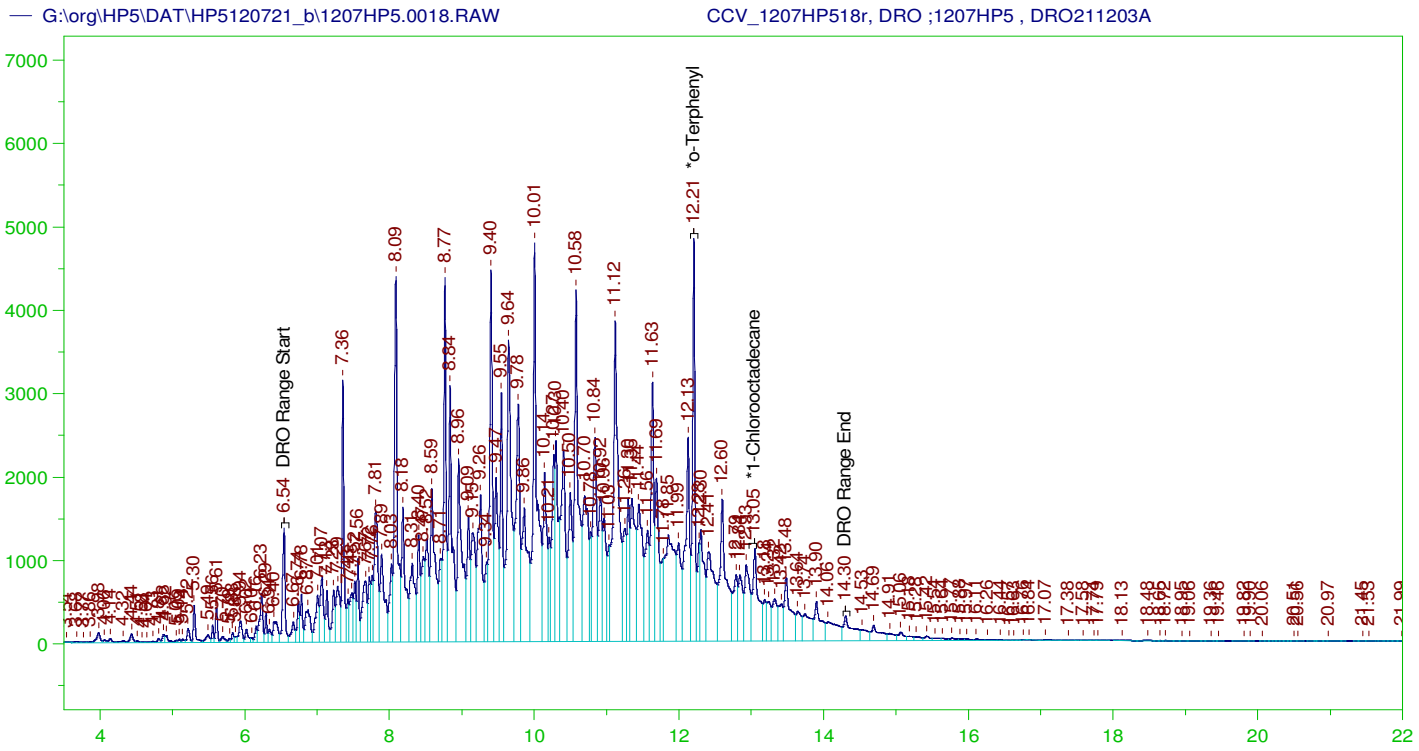
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.274	500.	210.901	42.18	-

RRO Area:5991801 RRO AMOUNT: 209.9262

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120721_b\1207HP5.0017.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.018	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.274	200.	210.901	105.45	75-125



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: CCV_1207HP518r, DRO ;1207HP5 , DRO211203A
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0018.RAW
Date & Time Acquired: 12/7/2021 11:20:36 PM
Method File: G:\Org\HP5\Methods\DC_8015-24-IE-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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

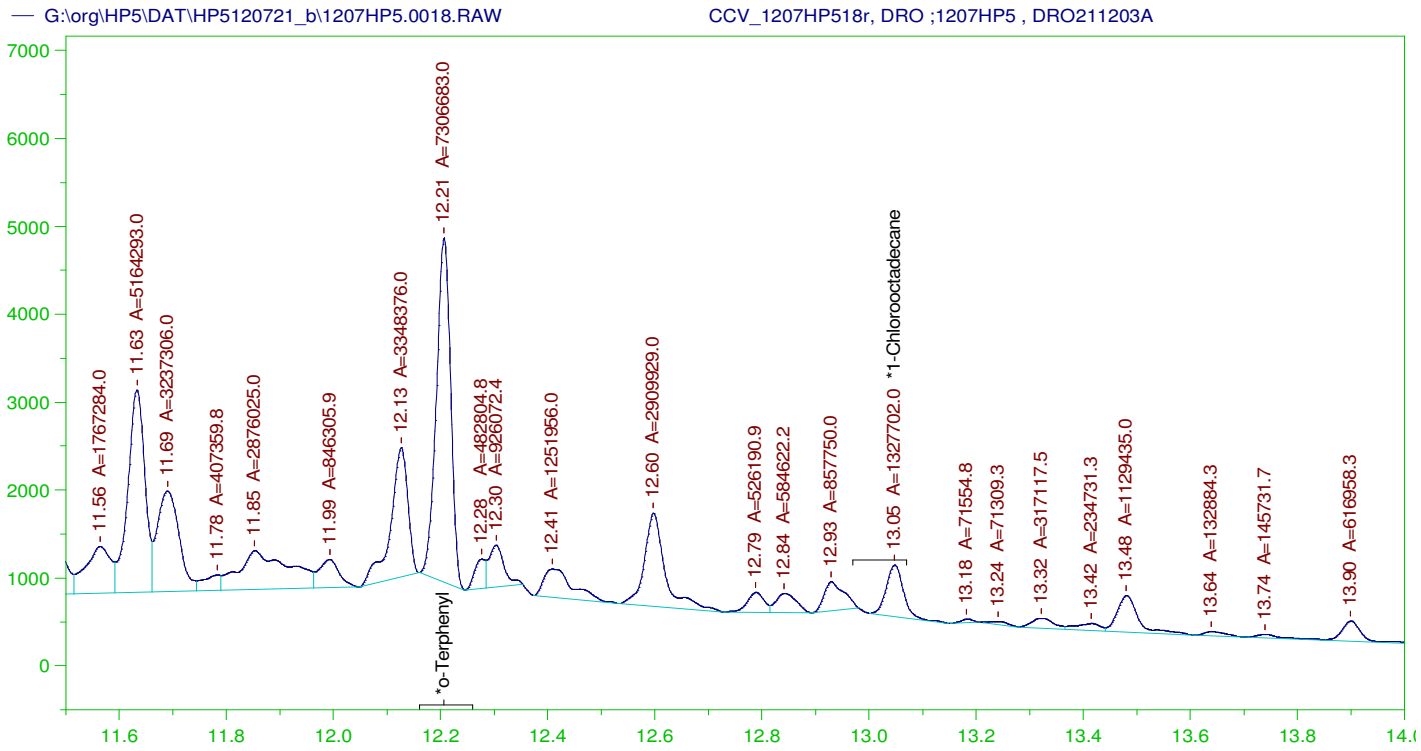
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.206	200.	338.254	169.13	-
*1-Chlorooctadecane	13.048	200.	164.218	82.11	-

DRO Area:4.744403E+08 DRO Amount: 15132.12
TEH Area:4.908658E+08 TEH Amount: 15656.01

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120721_b\1207HP5.0018.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15656.01	104.37	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.206	200.	338.254	169.13	85-115
*1-Chlorooctadecane	13.048	200.	164.218	82.11	85-115



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT
Sample Name: CCV_1207HP518r, DRO ;1207HP5 , DRO211203A
Raw File: G:\org\HP5\DAT\HP5120721_b\1207HP5.0018.RAW
Date & Time Acquired: 12/7/2021 11:20:36 PM
Method File: G:\Org\HP5\Methods\DS_8015-24-IE-L#.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO211102IE-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	12.206	200.	205.769	102.88	-
*1-Chlorooctadecane	13.048	200.	37.39	18.7	-

DRO Area:2.659892E+08 DRO Amount: 8483.642
TEH Area:2.763575E+08 TEH Amount: 8814.333

CONTINUING CALIBRATION REPORT: G:\org\HP5\DAT\HP5120721_b\1207HP5.0018.RAW

COMPOUND	ACTUAL(NG)	MEASURED(NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	8814.33	58.76	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.206	200.	205.769	102.88	85-115
*1-Chlorooctadecane	13.048	200.	37.39	18.7	85-115

Write Sequence | Insert Entries|Have the fist cell for entries selecte

Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manual Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.01r	DCM-Baseline Check-V01	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.02r	MARKER_1124HP502r, C40 ;1124HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.03r	MARKER_1124HP503r, DRO ;1124HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.04r	CCV_1124HP504r, RRO ;1124HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_OROb-AF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.05r	CCV_1124HP505r, DRO ;1124HP5 , DRO211116B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.06r	DCM-Baseline Check-V06	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.07r	LCS-161631 ;1124HP5 ,	G:\Org\HP5\Methods\D3_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.08r	LCSD-161631 ;1124HP5 ,	G:\Org\HP5\Methods\D3_8015-112408-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.09r	MB-161631 ;1124HP5 ,	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.10r	B21111928-006A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-112410-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-112410-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	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 turn integration on at 4.82 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.11r	B21111928-007A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1045	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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.12r	B21111928-008A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.13r	B21111928-005A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-112413-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-112413-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	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 width adjusted. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.14r	B21111880-002B ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-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 Now placed slight before at 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.15r	B21111880-003B ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-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 Now placed slight before at 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.16r	MARKER_1124HP516r, C40 ;1124HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.17r	MARKER_1124HP517r, DRO ;1124HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.18r	CCV_1124HP518r, DRO ;1124HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_OROb-AF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.

G:\org\HP5\DAT\HP5112421_b\1124HP5.19r	CCV_1124HP519r, DRO ;1124HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.25r	DCM-Baseline Check-V25	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.26r	MARKER_1124HP526r, C40 ;1124HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.27r	MARKER_1124HP527r, DRO ;1124HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1000	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.28r	CCV_1124HP528r, DRO ;1124HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_OROb-AF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.29r	CCV_1124HP529r, DRO ;1124HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.30r	DCM-Baseline Check-V30	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.31r	B21111928-004A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-112431-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-112431-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	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 width adjusted Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.32r	B21111928-003A ;1124HP5 , $HC-8015-DRO-W, Needs rr low poke	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	990	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.33r	B21111928-003AMS ;1124HP5 ,	G:\Org\HP5\Methods\D3_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1010	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. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.34r	DCM-Baseline Check-V34	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.35r	DCM-Baseline Check-V35	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.36r	B21111928-001A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-112436-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-112436-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-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 with set baseline now at 28.52 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.37r	DCM-Baseline Check-V37	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.38r	DCM-Baseline Check-V38	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.39r	B21111928-002A ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-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. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.40r	DCM-Baseline Check-V40	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.41r	B21111928-004AMS-RRO ;1124HP5 ,	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_OROb-AF-L%.MET	1030	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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.42r	MARKER_1124HP542r, C40 ;1124HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.43r	MARKER_1124HP543r, DRO ;1124HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1000	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.44r	CCV_1124HP544r, DRO ;1124HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_OROb-AF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.45r	CCV_1124HP545r, DRO ;1124HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.46r	DCM-Baseline Check-V46	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.47r	B21111910-001B ;1124HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\D3_8015-C24T-ID-L%.met G:\Org\HP5\Methods\D3_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-24T-ID-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. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.48r	DCM-Baseline Check-V47	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.49r	DCM-Baseline Check-V48	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.50r	LCS-161631-RRO ;1124HP5 ,	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_OROb-AF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.51r	DCM-Baseline Check-V51	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No Integrations

G:\org\HP5\DAT\HP5112421_b\1124HP5.52r	LCSD-161631-RRO ;1124HP5 ,	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_OROb-AF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.53r	MARKER_1124HP553r, C40 ;1124HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.54r	MARKER_1124HP554r, DRO ;1124HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1000	1	1	1	0	No Integrations
G:\org\HP5\DAT\HP5112421_b\1124HP5.55r	CCV_1124HP5565r, DRO ;1124HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_OROb-AF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112421_b\1124HP5.56r	CCV_1124HP556r, DRO ;1124HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.

Ann Nebel

Digitally signed by
Ann Nebel
Date: 2021.12.13 14:26:30 -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 Integration
G:\org\HP5\DAT\HP5112921_b\1129HP5.01r	DCM-Baseline Check-V01	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.02r	MARKER_1129HP502r, C40 ;1129HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.03r	MARKER_1129HP503r, DRO ;1129HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.04r	CCV_1129HP504r, RRO ;1129HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_OROb-AF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.05r	CCV_1129HP505r, DRO ;1129HP5 , DRO211116B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.06r	DCM-Baseline Check-V06	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.07r	B21111928-003A ;1129HP5 , $HC-8015-DRO-W, RR	G:\Org\HP5\Methods\DR_8015-112907-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-112907-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-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 wtih peak width adjusted. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.08r	DCM-Baseline Check-V08	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.09r	LCS-161631 ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.10r	LCSD-161631 ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_8015-112910-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.11r	MB-161631 ;1129HP5 , SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.12r	B21111910-001B ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.13r	B21111928-007A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1045	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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.14r	MARKER_1129HP514r, DRO ;1129HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.15r	MARKER_1129HP515r, C40 ;1129HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.16r	CCV_1129HP516r, RRO ;1129HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_OROb-AF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.17r	CCV_1129HP517r, DRO ;1129HP5 , DRO211116B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.18r	DCM-Baseline Check-V18	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.19r	B21111928-005A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.20r	B21111928-006A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.21r	B21111928-003A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-112921-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-112921-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-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. Set Baseline Now at 18.05 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.22r	DCM-Baseline Check-V22	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.23r	B21111928-004A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.24r	DCM-Baseline Check-V24	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations

G:\org\HP5\DAT\HP5112921_b\1129HP5.25r	B21111928-001A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.26r	B21111928-002A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.27r	DCM-Baseline Check-V27	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.28r	B21111928-003AMS ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-L#.met	1010	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. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.29r	B21111928-004AMS-RRO ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-L%.MET	1030	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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.30r	MARKER_1129HP530r, C40 ;1129HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.31r	MARKER_1129HP531r, DRO ;1129HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.32r	CCV_1129HP532r, RRO ;1129HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.33r	CCV_1129HP533r, DRO ;1129HP5 , DRO211116B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.34r	DCM-Baseline Check-V34	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.35r	LCS-161631-RRO ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.36r	DCM-Baseline Check-V36	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.37r	LCSD-161631-RRO ;1129HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.38r	DCM-Baseline Check-V38	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.39r	DCM-Baseline Check-V39	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.40r	B21111928-008A ;1129HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-ID-L%.met G:\Org\HP5\Methods\DR_OROS-AFa-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-ID-L#.MET	1040	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 12.16 minutes and 16.21 minutes and slightly after the surrogate peaks at 12.52 and 16.64 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.46r	MARKER_1129HP546r, C40 ;1129HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211129.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.47r	MARKER_1129HP547r, DRO ;1129HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5112921_b\1129HP5.48r	CCV_1129HP548r, RRO ;1129HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AF-L%.MET G:\Org\HP5\Methods\DS_ORObAF-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 16.19 minutes slightly after the surrogate peak at 16.38 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5112921_b\1129HP5.49r	CCV_1129HP549r, DRO ;1129HP5 , DRO211116B	G:\Org\HP5\Methods\DC_8015-24-ID-L%.met G:\Org\HP5\Methods\DS_8015-24-ID-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.

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Date: 2021.12.13 14:26:53 -07:00

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 Integrations
G:\org\HP5\DAT\HP5120221_b\1202HP5.30r	MARKER_1202HP30r, C40 ;1202HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211202.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120221_b\1202HP5.31r	MARKER_1129HP31r, DRO ;1202HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120221_b\1202HP5.32r	CCV_1202HP532r, RRO ;1202HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-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 16.14 minutes slightly after the surrogate peak at 16.35 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5120221_b\1202HP5.33r	CCV_1202HP533r, DRO ;1202HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5120221_b\1202HP5.34r	DCM-Baseline Check-V34	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120221_b\1202HP5.35r	LCS-161809 ;1202HP5 ,	G:\Org\HP5\Methods\D3_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-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. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5120221_b\1202HP5.36r	LCSD-161809 ;1202HP5 ,	G:\Org\HP5\Methods\D3_8015-120236-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5120221_b\1202HP5.37r	MB-161809 ;1202HP5 ,	G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met G:\Org\HP5\Methods\DR_OROS-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-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 12.08 minutes and 16.18 minutes and slightly after the surrogate peaks at 12.52 and 16.53 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5120221_b\1202HP5.38r	B21111928-007B ;1202HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met G:\Org\HP5\Methods\DR_OROS-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-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 12.08 minutes and 16.18 minutes and slightly after the surrogate peaks at 12.52 and 16.53 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5120221_b\1202HP5.39r	B21111928-006B ;1202HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met G:\Org\HP5\Methods\DR_OROS-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-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 12.08 minutes and 16.18 minutes and slightly after the surrogate peaks at 12.52 and 16.53 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5120221_b\1202HP5.40r	DCM-Baseline Check-V40	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120221_b\1202HP5.41r	B21111928-008B ;1202HP5 , $HC-8015-DRO-W,	G:\Org\HP5\Methods\DR_8015-120241-IE-L%.met G:\Org\HP5\Methods\DR_OROS-120241-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-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 wtih a Set Baseline Now on at 20.71 minutes. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.08 minutes and 16.18 minutes and slightly after the surrogate peaks at 12.52 and 16.53 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5120221_b\1202HP5.42r	DCM-Baseline Check-V42	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120221_b\1202HP5.43r	LCS-161809-RRO ;1202HP5 ,	G:\Org\HP5\Methods\D3_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-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 16.14 minutes slightly after the surrogate peak at 16.35 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5120221_b\1202HP5.44r	DCM-Baseline Check-V44	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120221_b\1202HP5.45r	LCSD-161809-RRO ;1202HP5 ,	G:\Org\HP5\Methods\D3_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-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 16.14 minutes slightly after the surrogate peak at 16.35 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5120221_b\1202HP5.46r	MARKER_1202HP46r, C40 ;1202HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211202.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120221_b\1202HP5.47r	MARKER_1129HP47r, DRO ;1202HP5 , DRO211103B	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120221_b\1202HP5.48r	CCV_1202HP548r, RRO ;1202HP5 , DRO211108A	G:\Org\HP5\Methods\DC_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-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 16.14 minutes slightly after the surrogate peak at 16.35 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5120221_b\1202HP5.49r	CCV_1202HP549r, DRO ;1202HP5 , DRO211124A	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.

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Ann Nebel
Date: 2021.12.13 14:27:10 -07:00

Write Sequence	Insert Entries(Have the first cell for entries selected							
Data File	Sample Nam	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manual Integrations
G:\org\HP5\DAT\HP5120721_b\1207HP5.01r	DCM-Baseline Check-V02	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120721_b\1207HP5.02r	DCM-Baseline Check-V02	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120721_b\1207HP5.03r	MARKER_1207HP503r, C40 ;1207HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211207.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120721_b\1207HP5.04r	MARKER_1207HP504r, DRO ;1207HP5 , DRO211203B	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met	1000	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120721_b\1207HP5.05r	CCV_1207HP505r, DRO ;1207HP5 , DRO211201A	G:\Org\HP5\Methods\DC_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-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 16.14 minutes slightly after the surrogate peak at 16.35 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5120721_b\1207HP5.06r	CCV_1207HP506r, DRO ;1207HP5 , DRO211203A	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5120721_b\1207HP5.07r	DCM-Baseline Check-V07	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120721_b\1207HP5.08r	LCS-161809 ;1207HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-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. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5120721_b\1207HP5.09r	LCSD-161809 ;1207HP5 , SGT	G:\Org\HP5\Methods\D3_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-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. Surrogates are integrated using a valley to valley integration using Set Basline Now placed slight before at 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.
G:\org\HP5\DAT\HP5120721_b\1207HP5.10r	MB-161809 ;1207HP5 , SGT	G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met G:\Org\HP5\Methods\DR_OROS-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-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 12.08 minutes and 16.18 minutes and slightly after the surrogate peaks at 12.52 and 16.53 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5120721_b\1207HP5.11r	B21111928-008B ;1207HP5 , $HC-8015-DRO-W, SGT	G:\Org\HP5\Methods\DR_8015-C24T-IE-L%.met G:\Org\HP5\Methods\DR_OROS-AG-L%.MET G:\Org\HP5\Methods\DS_8015-C24T-IE-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 12.08 minutes and 16.18 minutes and slightly after the surrogate peaks at 12.52 and 16.53 minutes. X-axis scaling showing surrogate peak from 11-18 minutes.
G:\org\HP5\DAT\HP5120721_b\1207HP5.12r	LCS-161809-RRO ;1207HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-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 16.14 minutes slightly after the surrogate peak at 16.35 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5120721_b\1207HP5.13r	DCM-Baseline Check-V13	G:\Org\HP5\Methods\DR_8015-IB-LEXP.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120721_b\1207HP5.14r	LCSD-161809-RRO ;1207HP5 , SGT	G:\Org\HP5\Methods\D3_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-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 16.14 minutes slightly after the surrogate peak at 16.35 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5120721_b\1207HP5.15r	MARKER_1207HP515r, C40 ;1207HP5 , DRO211110A	g:\org\HP5\Methods\\CSC211207.met	1	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120721_b\1207HP5.16r	MARKER_1207HP516r, DRO ;1207HP5 , DRO211203B	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met	1000	1	1	1	0	No integrations
G:\org\HP5\DAT\HP5120721_b\1207HP5.17r	CCV_1207HP517r, DRO ;1207HP5 , DRO211201A	G:\Org\HP5\Methods\DC_ORO-AG-L%.MET G:\Org\HP5\Methods\DS_ORO-AG-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 16.14 minutes slightly after the surrogate peak at 16.35 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP5\DAT\HP5120721_b\1207HP5.18r	CCV_1207HP518r, DRO ;1207HP5 , DRO211203A	G:\Org\HP5\Methods\DC_8015-24-IE-L%.met G:\Org\HP5\Methods\DS_8015-24-IE-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 12.16 minutes and slightly after the surrogate peak at 12.35 minutes and X-axis scaling showing surrogate peak from 11.5-14 minutes.

Digitally signed by
Ann Nebel
Date: 2021.12.13 14:27:25 -07:00

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

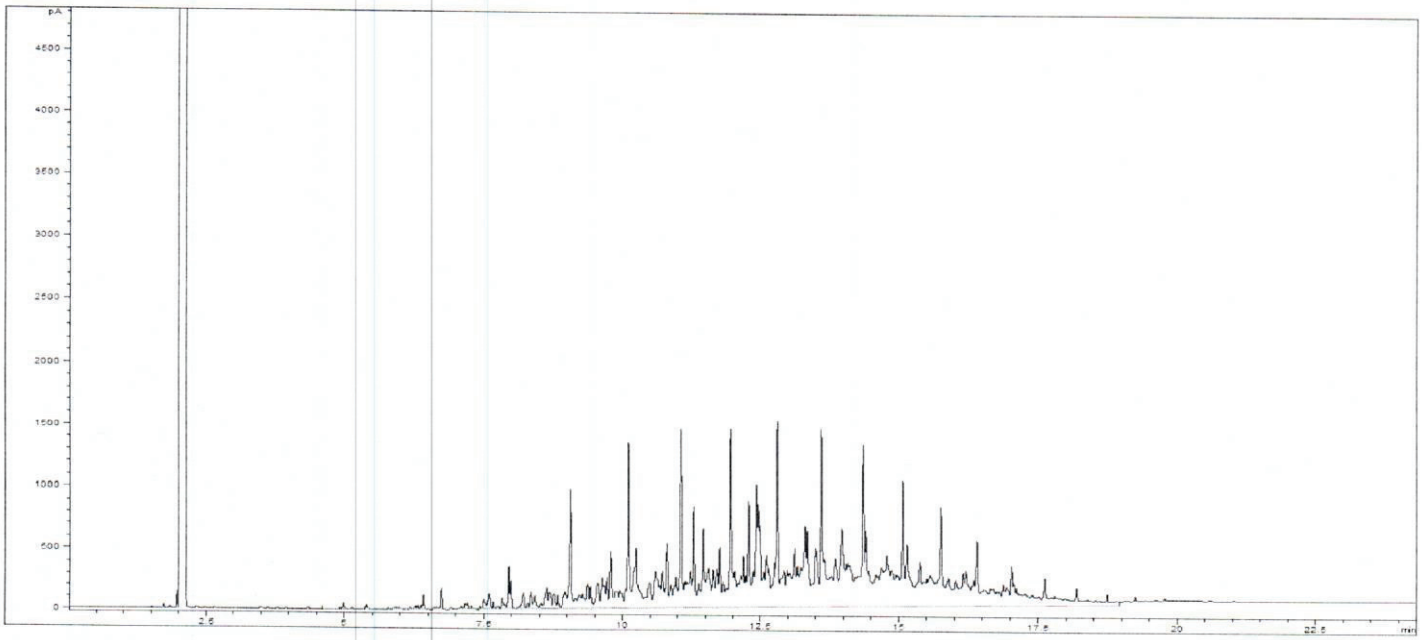
Product ID UST148
Lot **LRAC6316**
Expiration Date April 2023
Manufacturing Date April 2020
Storage Conditions Room Temperature
Solvent/Matrix DICHLOROMETHANE

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)

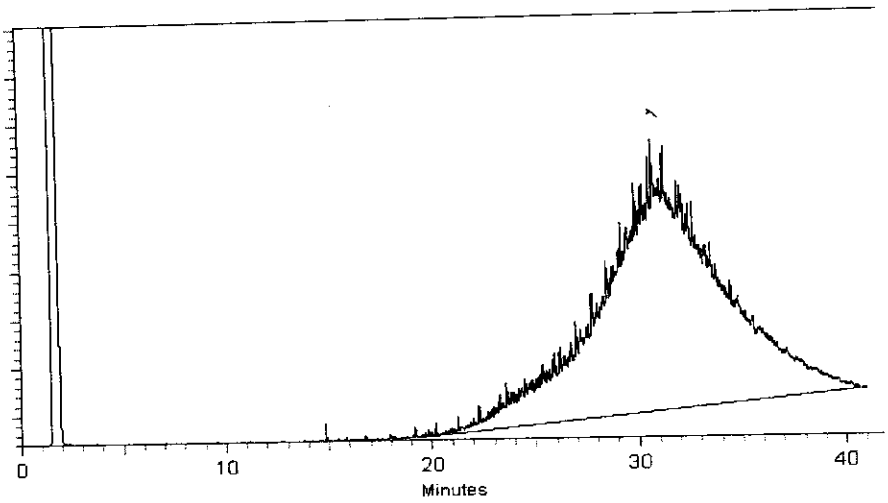
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

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
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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

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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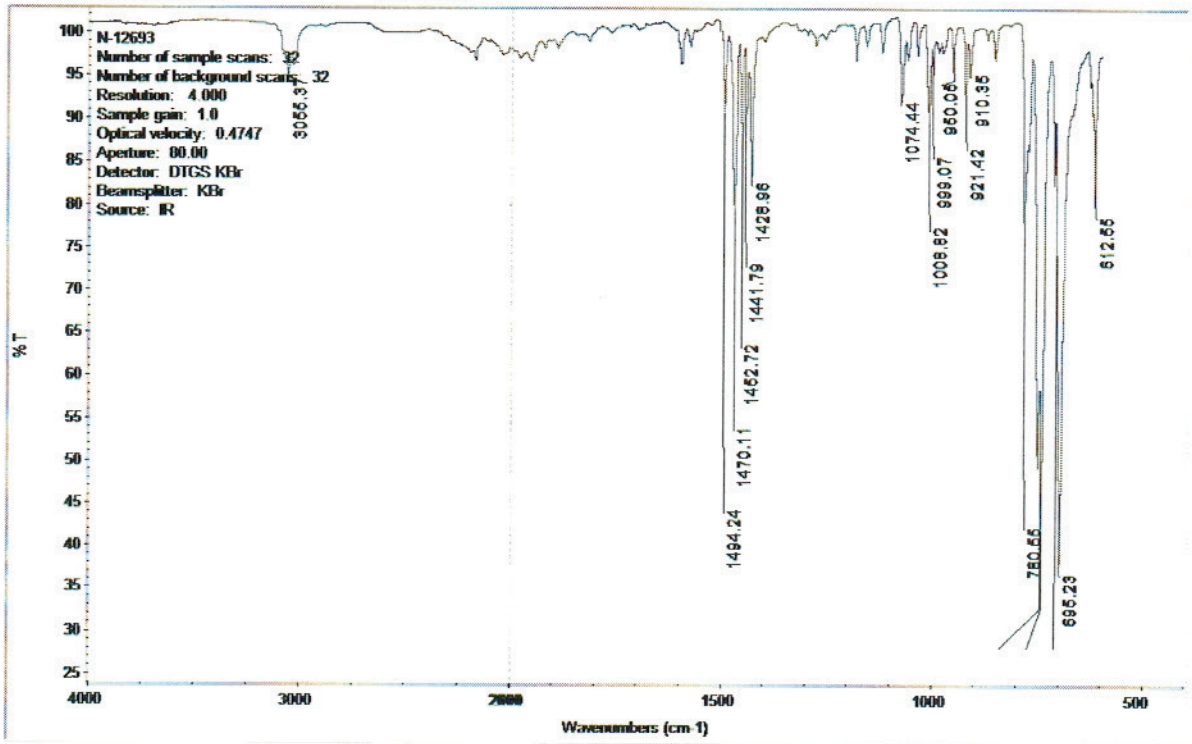
info@chemservice.com • www.chemservice.com

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 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

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

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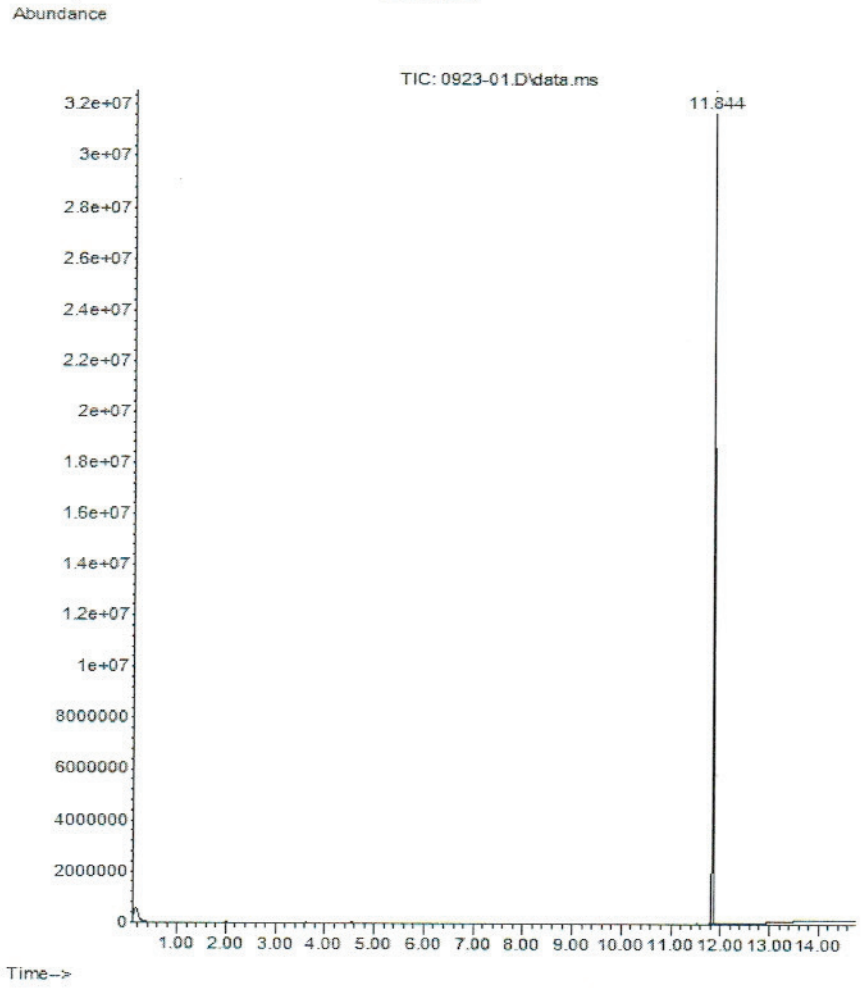
CERTIFICATE OF ANALYSIS

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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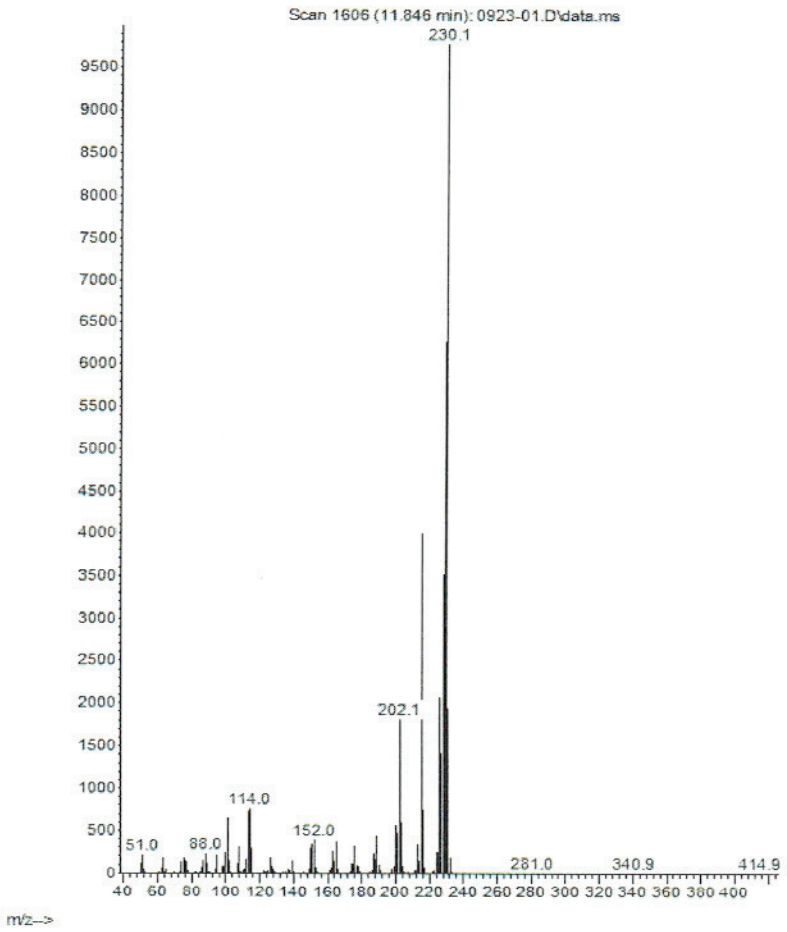
CERTIFICATE OF ANALYSIS

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 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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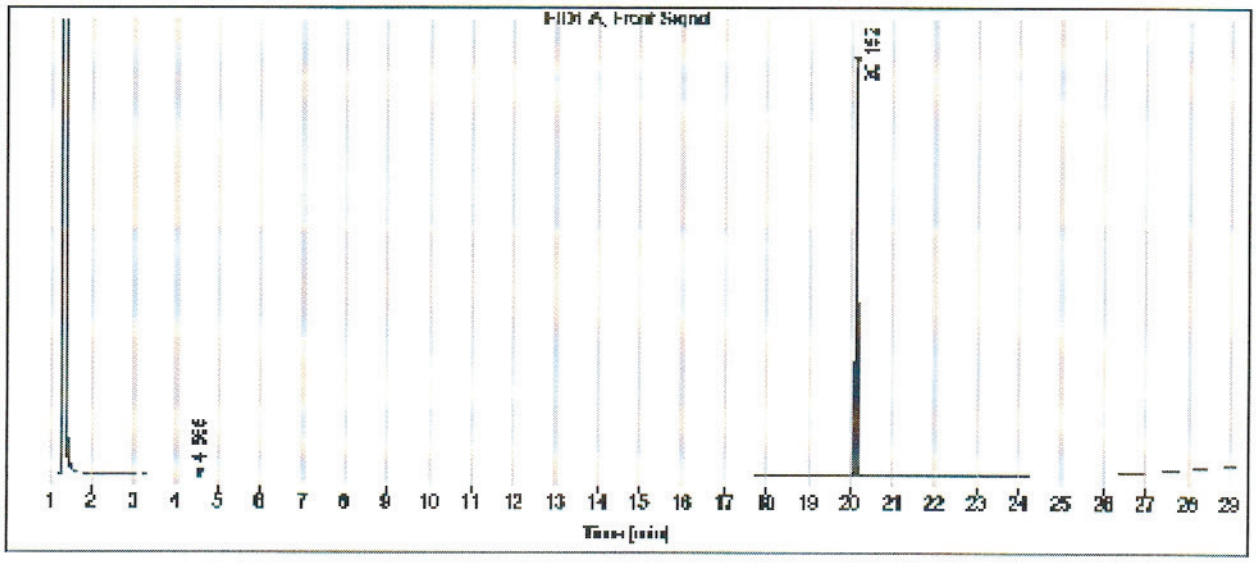
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

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:	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		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:	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

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:	DRO211116B		
Standard Name	8015 CCV-15,000ug/mL + 200 OTP	Type:	Secondary
Date Prepared	11/16/2021	BY:	Jillian L Bostwick
Date Expires:	4/30/2023		
Department	dropr	Status:	Empty/Disposed
Vendor:			
Lot Number:			
Balance ID:			
Comments:	8015DRO CCV MIX-15,000ug/mL +200 OTP #2 Diesel		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC480	14470	2.6	mL	9/16/

Final Volume: 4 mL

Stock Source		Base Units	Amount Added
DRO200420B	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

Page: *1 of 1*

Certificate of Analysis

Diesel Fuel No. 2

Certified Reference Material

Description

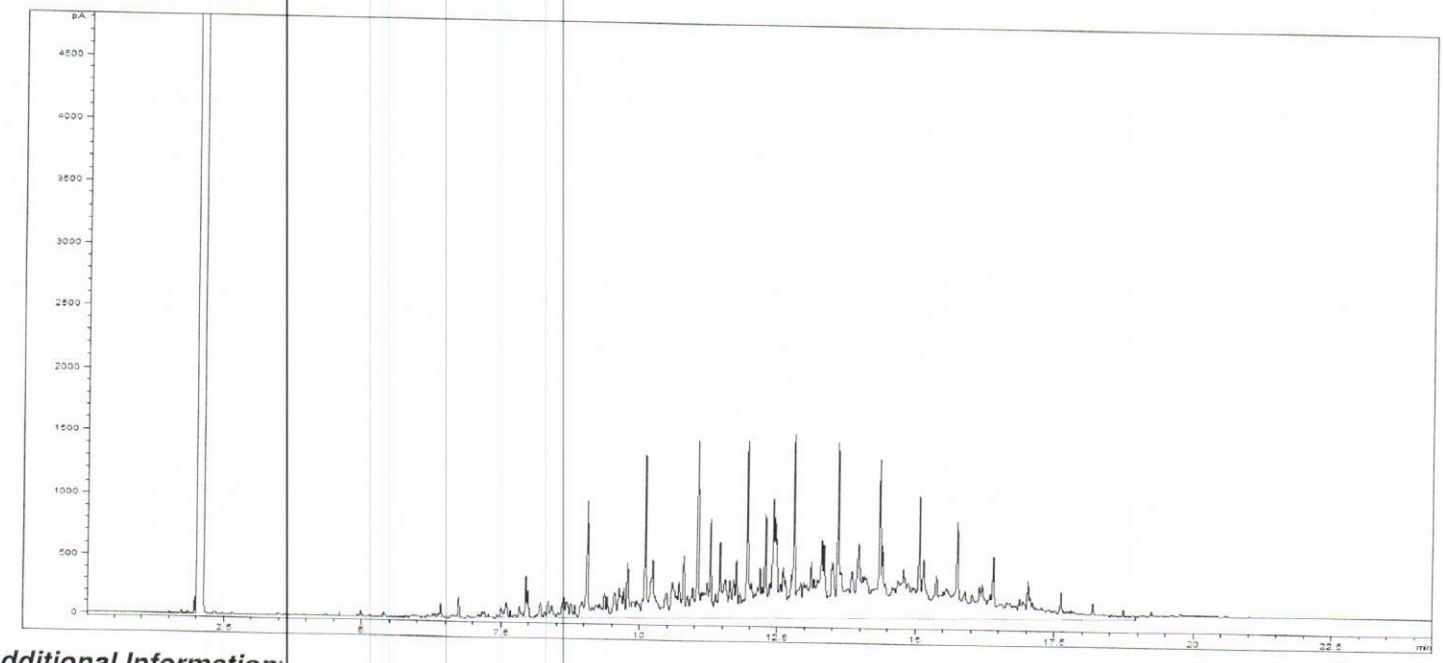
Product ID UST148
Lot **LRAC6316**
Expiration Date April 2023
Manufacturing Date April 2020
Storage Conditions Room Temperature
Solvent/Matrix DICHLOROMETHANE

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@millipore sigma.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:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

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:	DRO200420B		
Standard Name	OTP-4000 ug/mL DCM	Type:	Secondary
Date Prepared	4/20/2020	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 DY035	12540	25	mL	12/25

Final Volume: 25 mL

Stock Source		Base Units	Amount Added
DRO191001A	O-Terphenyl	ug/mL	0.0999 g

Analytes		CAS	Conc:	ug/mL
A	O-Terphenyl	84-15-1		4000

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO191001A		
Standard Name	O-Terphenyl	Type:	Neat
Date Prepared	10/1/2019	BY:	Ann Nebel
Date Expires:	9/30/2024		
Department	dropr	Status:	New
Vendor:	Chemservice		
Lot Number:	8997800		
Balance ID:			
Comments:	ID#: 6271		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
o-Terphenyl	11954	500	mg	9/30/

Final Volume: mL

Stock Source **Base Units** **Amount Added**

Analytes **CAS** Conc: **ug/mL**

A O-Terphenyl 84-15-1

Page: *1 of 1*

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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

o-Terphenyl

CATALOG NUMBER	N-12693-500MG
LOT NUMBER	8997800
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 #: 11954
Opened:
o-Terphenyl
Expires: 9/30/2024
Rec'd: 10/1/2019
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

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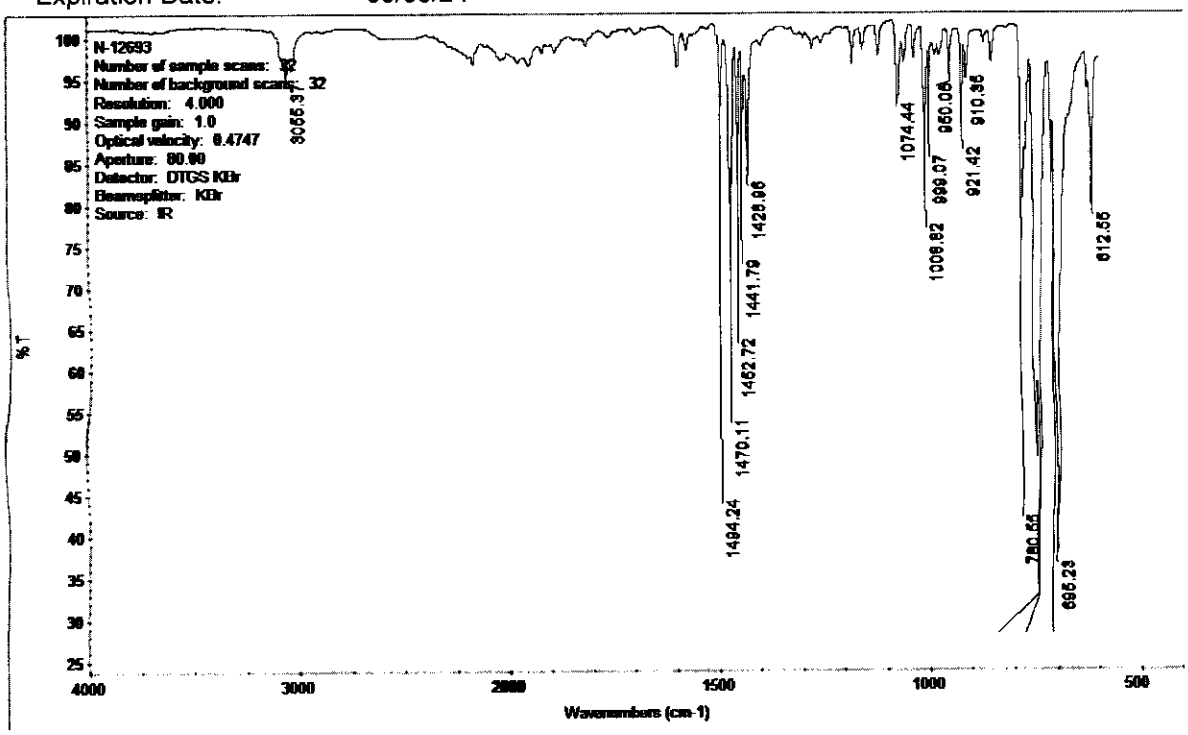
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	8997800
Expiration Date:	09/30/24



Chem Service, Inc. is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008

ISO/IEC 17025
Accreditation Number 63520

ISO GUIDE 34
Accreditation Number 63520

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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:	8997800
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

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ISO GUIDE 34 Accreditation Number #3520

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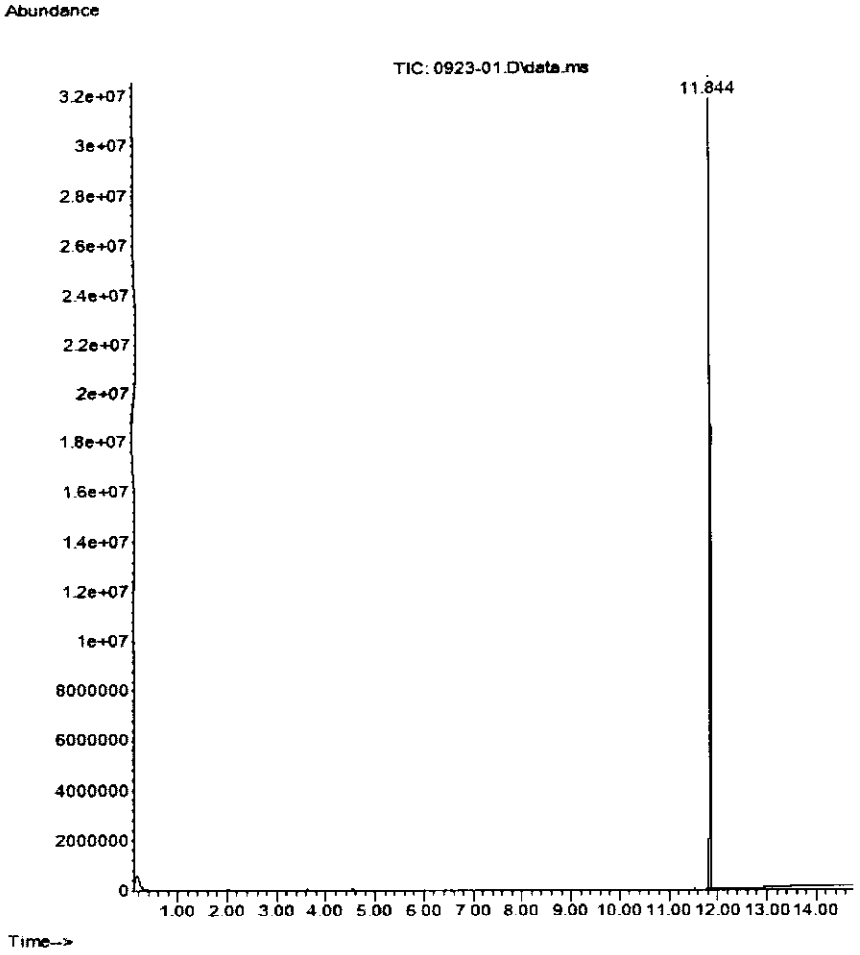
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	8997800
Expiration Date:	09/30/24



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ISO/IEC 17025
Accreditation Number 83520
ISO GUIDE 34
Accreditation Number 83520

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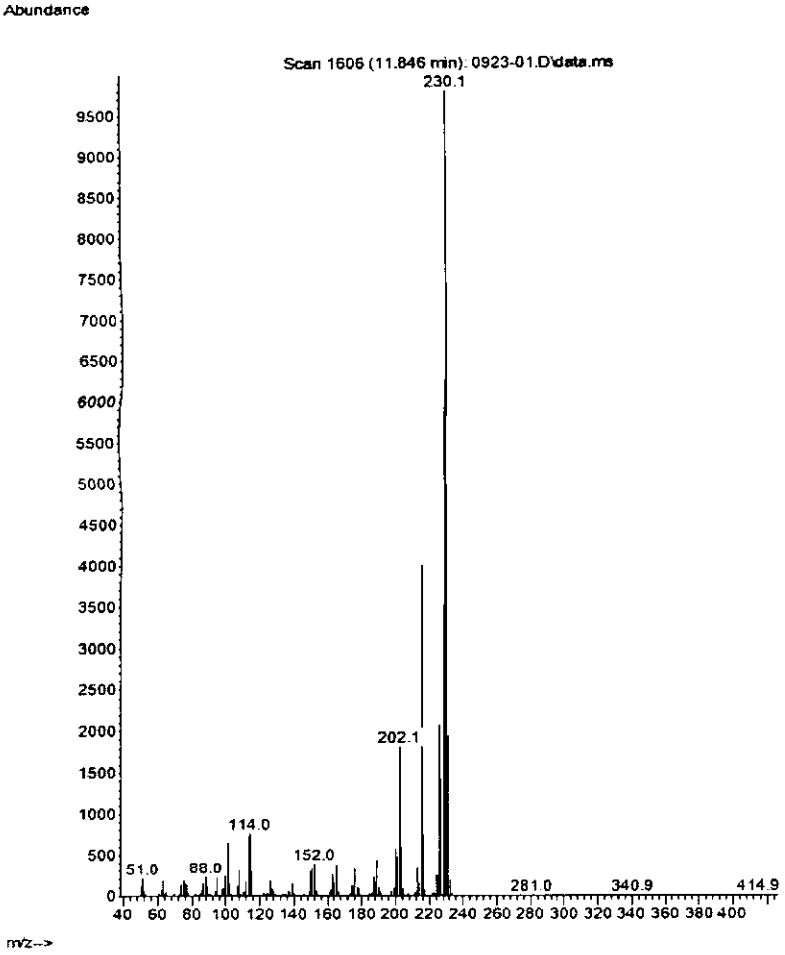
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	8997800
Expiration Date:	09/30/24



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ISO/IEC 17025
Accreditation Number 83520
ISO GUIDE 34
Accreditation Number 83520

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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:	8997800
Expiration Date:	09/30/24

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ISO/IEC 17025
Accreditation Number: 63520

ISO GUIDE 34
Accreditation Number: 63520

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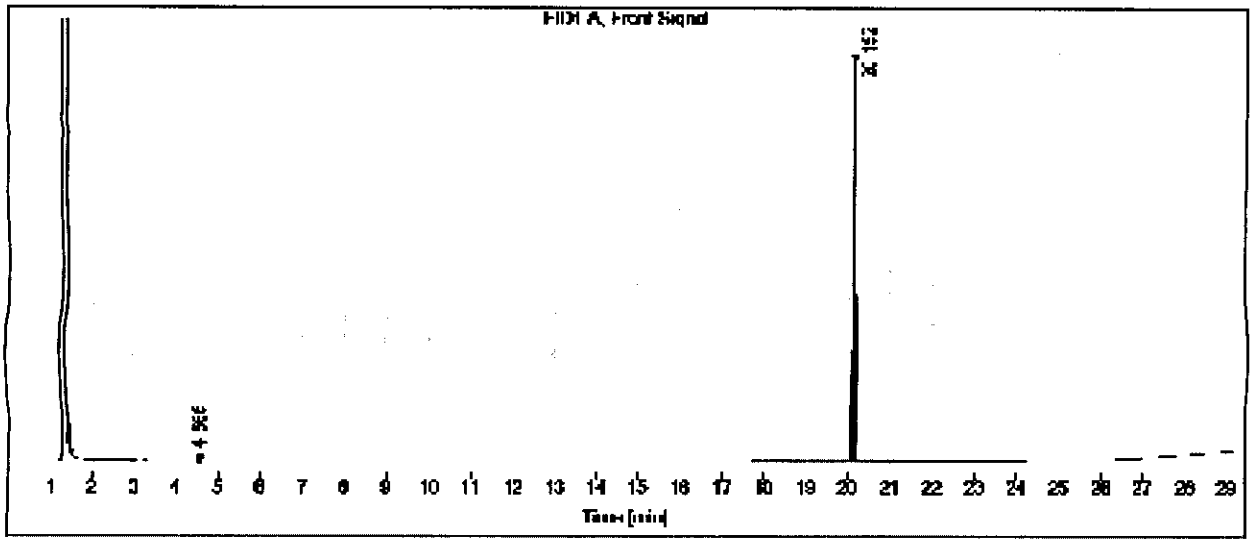
info@chemservice.com • www.chemservice.com

Gas

CERTIFICATE OF ANALYSIS

Data file:	C:\CHEM32		
Sample name:	N-12693		
Instrument:	GC 2	[illegible]	[illegible]
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%
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20.152	BB	0.0391	1171.9556	439.4599	99.89
		Sum	1173.1963		

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ISO/IEC 17025 Accreditation Number 63520
ISO GUIDE 34 Accreditation Number 63520

Energy Laboratories Inc

Standard LOG

Standard ID: DRO211124A
Standard Name: 8015 CCV-15,000ug/mL + 200 OTP
Type: Secondary
Date Prepared: 11/24/2021
BY: Ann Nebel
Date Expires: 4/30/2023
Department: dropr
Status: Open
Vendor:
Lot Number:
Balance ID:

Comments: 8015DRO CCV MIX-15,000ug/mL +200 OTP #2 Diesel

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC735	14518	2.6	mL	10/14

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

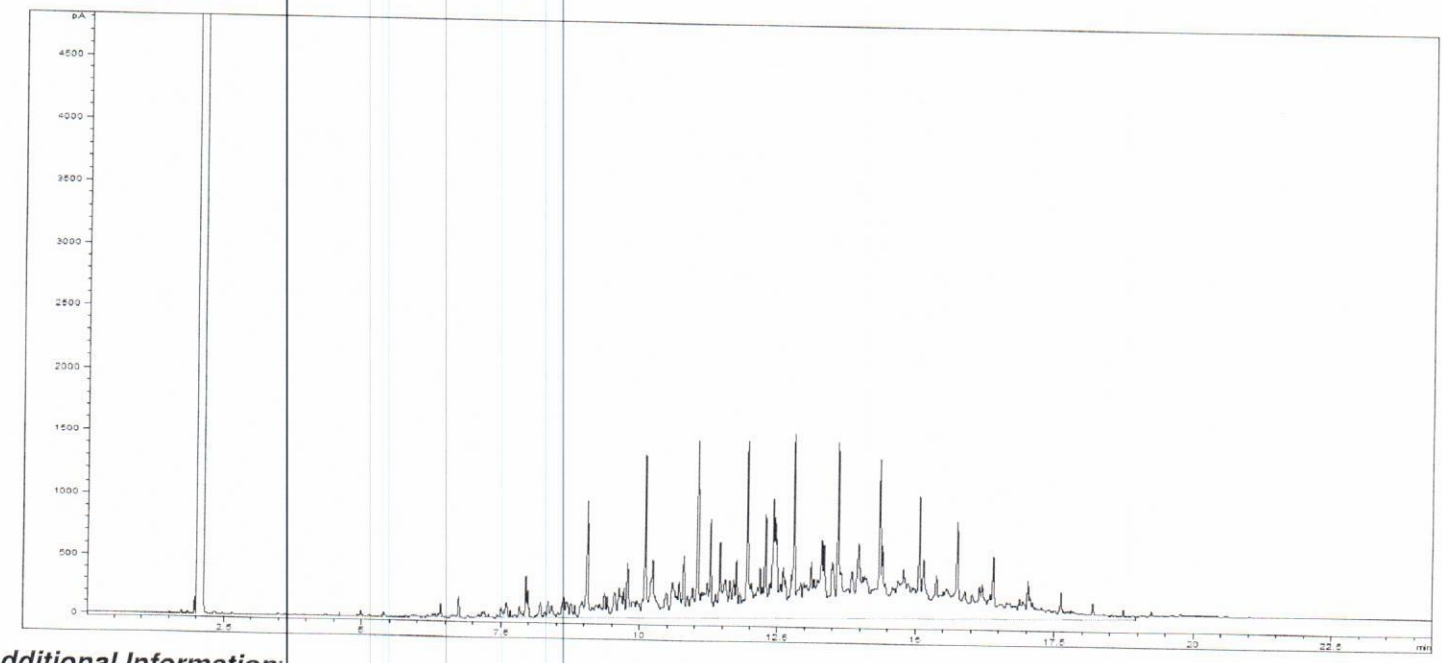
Product ID UST148
Lot **LRAC6316**
Expiration Date April 2023
Manufacturing Date April 2020
Storage Conditions Room Temperature
Solvent/Matrix DICHLOROMETHANE

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@millipore sigma.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
Date Prepared: 4/30/2020
Date Expires: 9/30/2024
Department: dropr
Vendor: Chemservice
Lot Number: 9972100
Balance ID:

Type: Neat
BY: Ann Nebel
Status: New

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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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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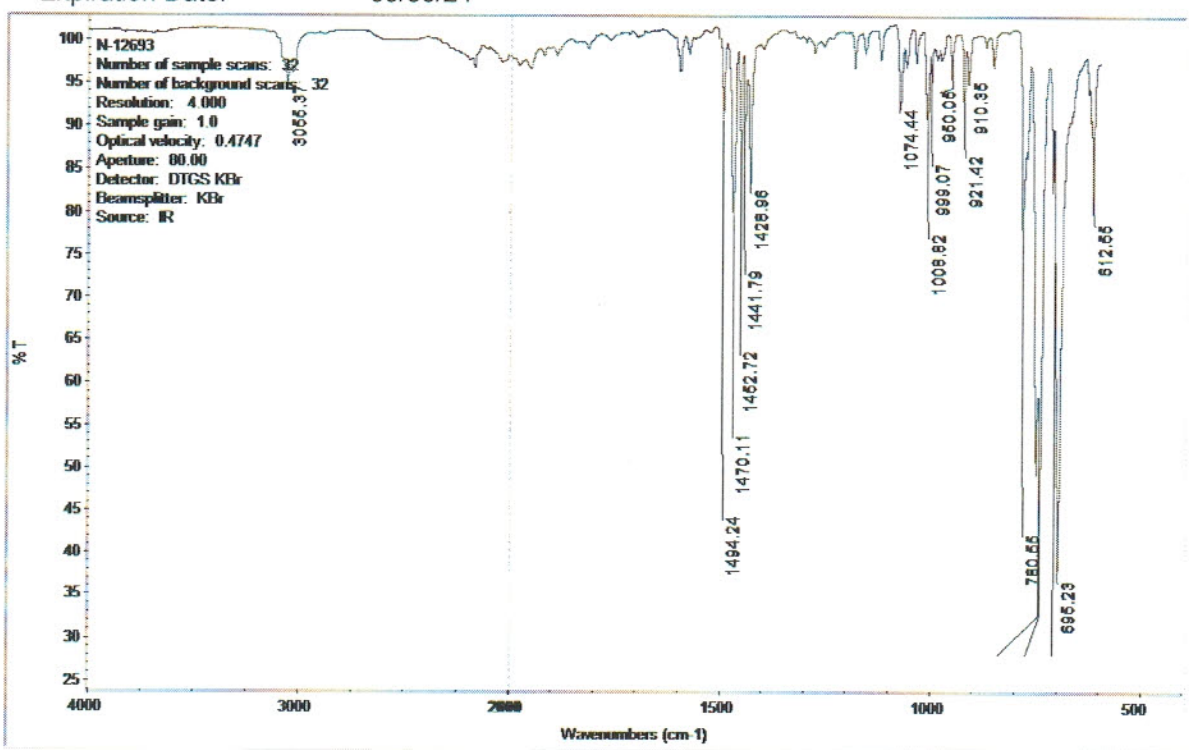
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



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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

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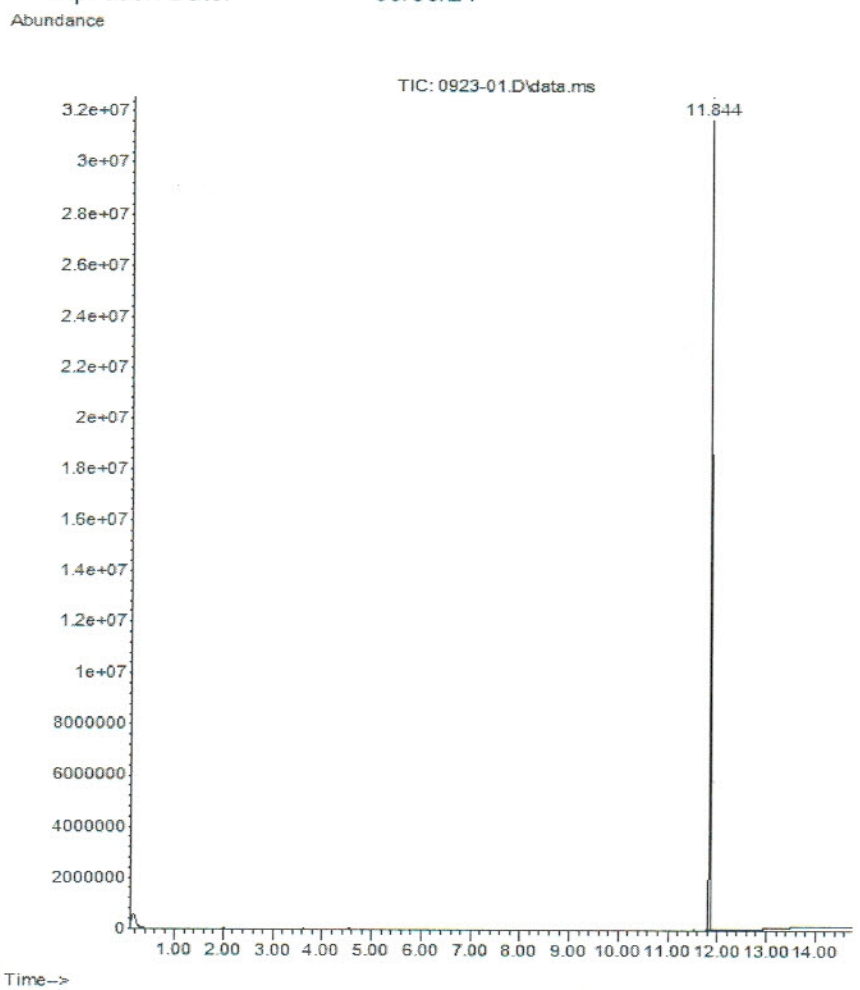
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



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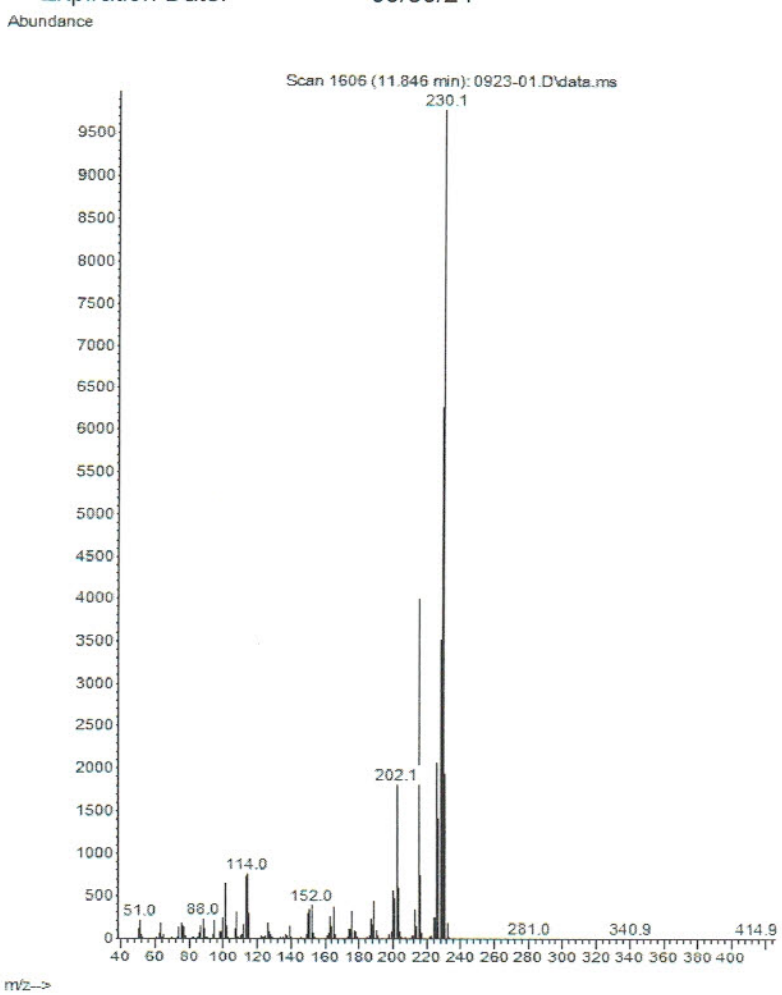
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



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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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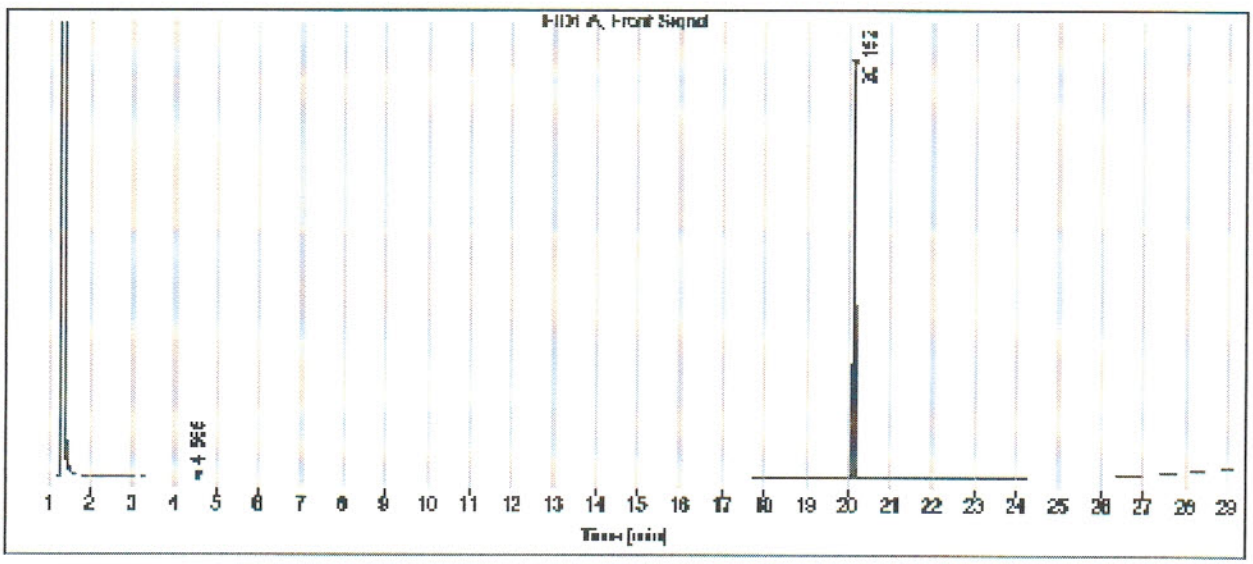
Gas

CERTIFICATE OF ANALYSIS

Data file:	C:\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

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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:	DRO211203A		
Standard Name	8015 CCV-15,000ug/mL + 200 OTP	Type:	Secondary
Date Prepared	12/3/2021	BY:	Ann Nebel
Date Expires:	4/30/2023		
Department	dropr	Status:	Empty/Disposed
Vendor:			
Lot Number:			
Balance ID:			

Comments: 8015DRO CCV MIX-15,000ug/mL +200 OTP #2 Diesel

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC735	14518	2.6	mL	10/14

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

Page: *1 of 1*

Certificate of Analysis

Diesel Fuel No. 2

Certified Reference Material

Description

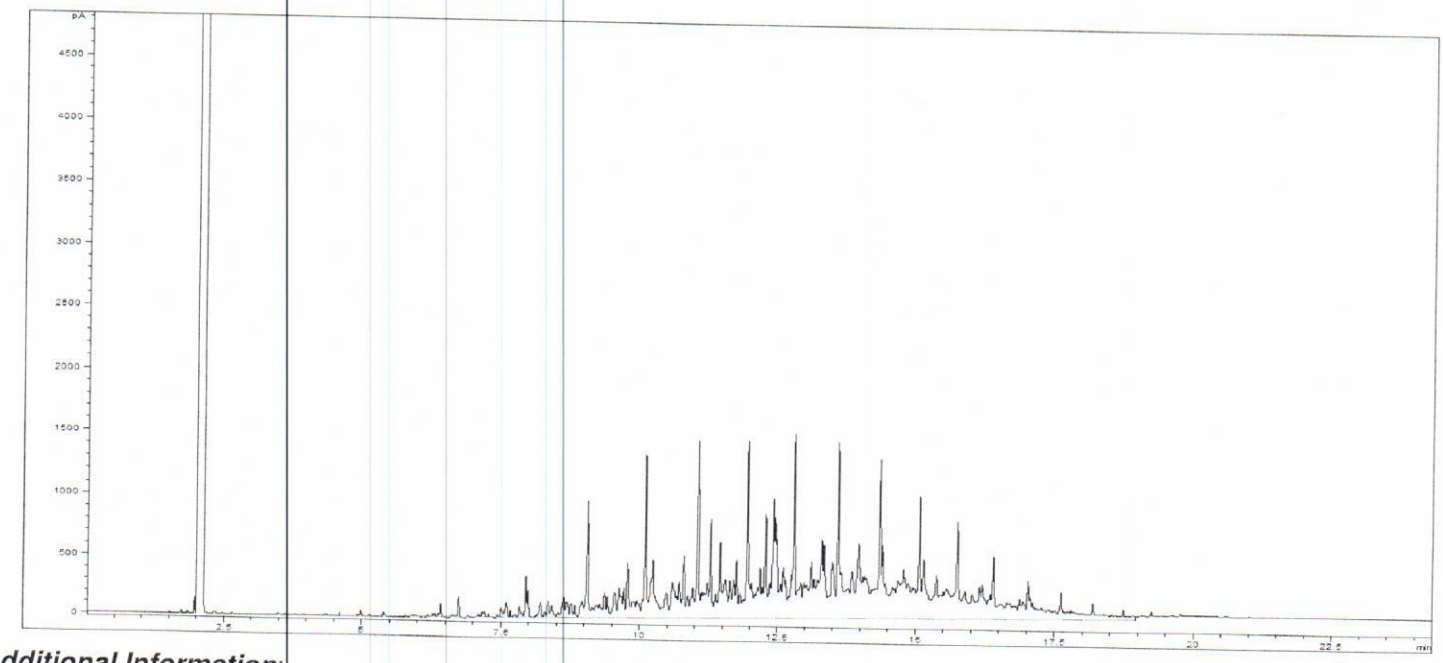
Product ID UST148
Lot **LRAC6316**
Expiration Date April 2023
Manufacturing Date April 2020
Storage Conditions Room Temperature
Solvent/Matrix DICHLOROMETHANE

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
ISO 17034
REFERENCE MATERIAL PRODUCER

SIGMA-ALDRICH
2931 Soldier Springs Rd. Laramie, Wyoming 82070 USA
800-325-5832
TechService@millipore sigma.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

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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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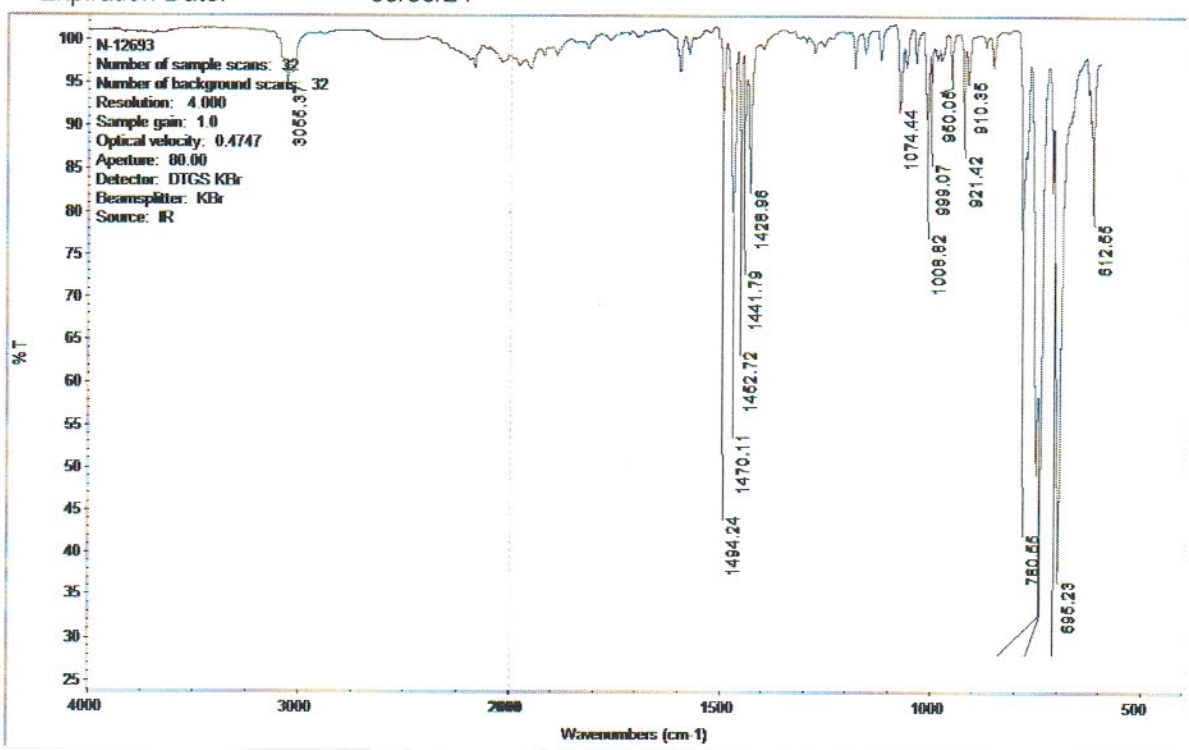
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



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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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PJLA Testing

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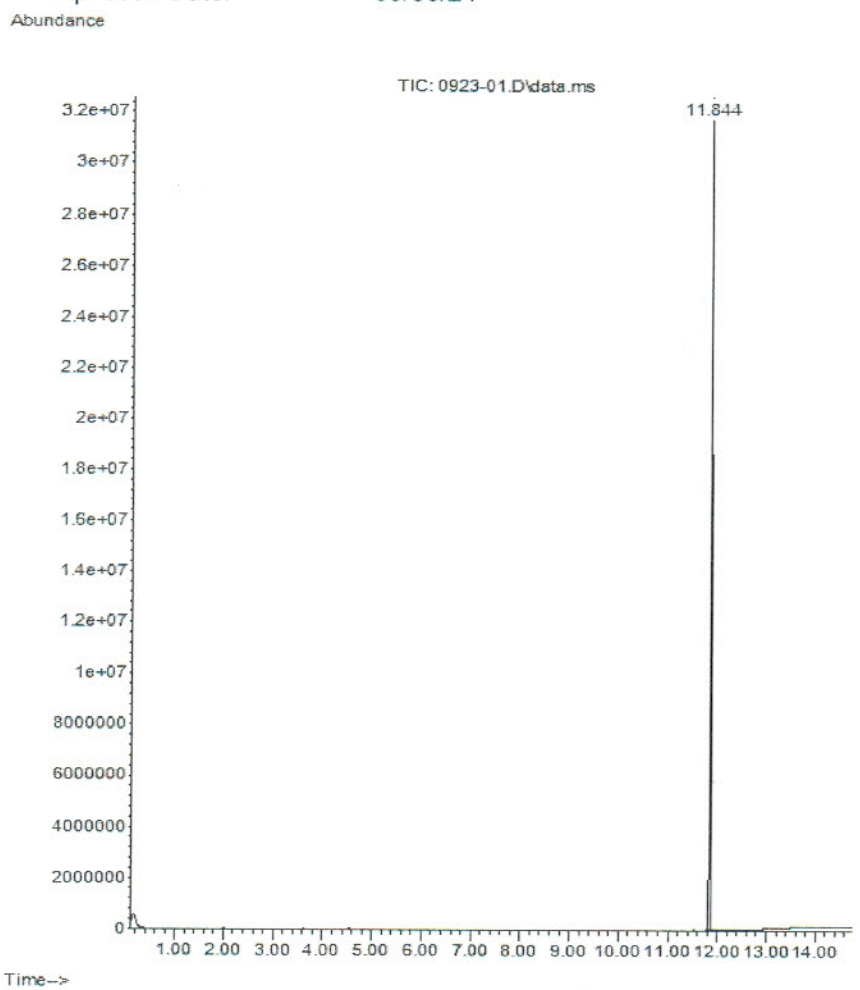
info@chemservice.com • www.chemservice.com

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 Testing

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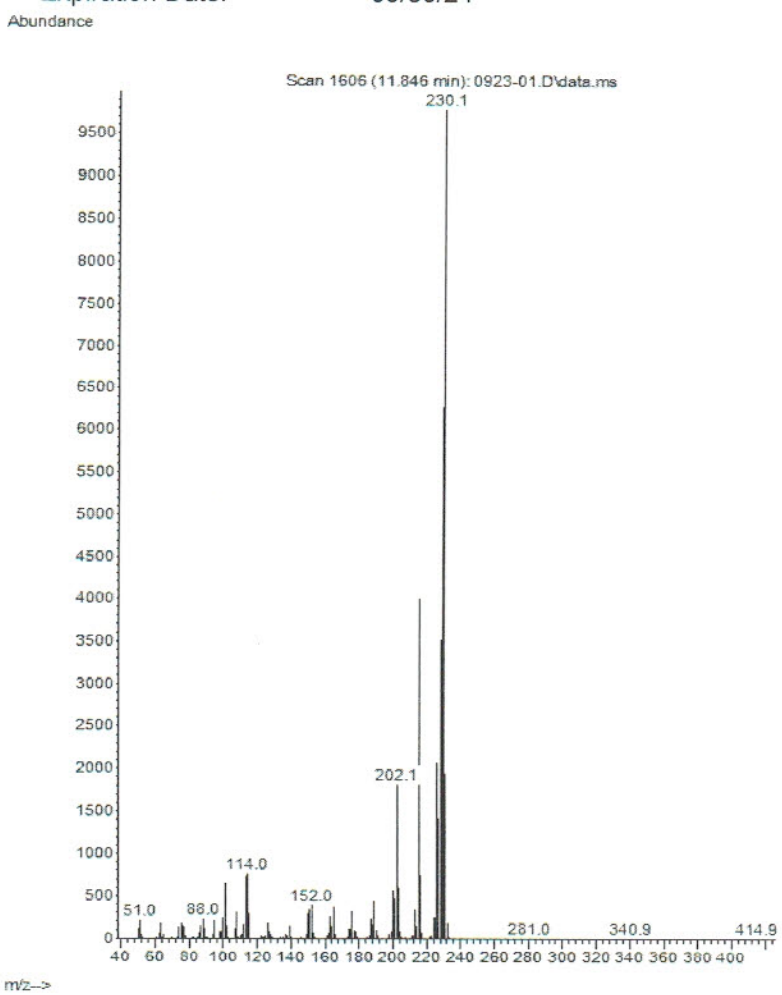
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24



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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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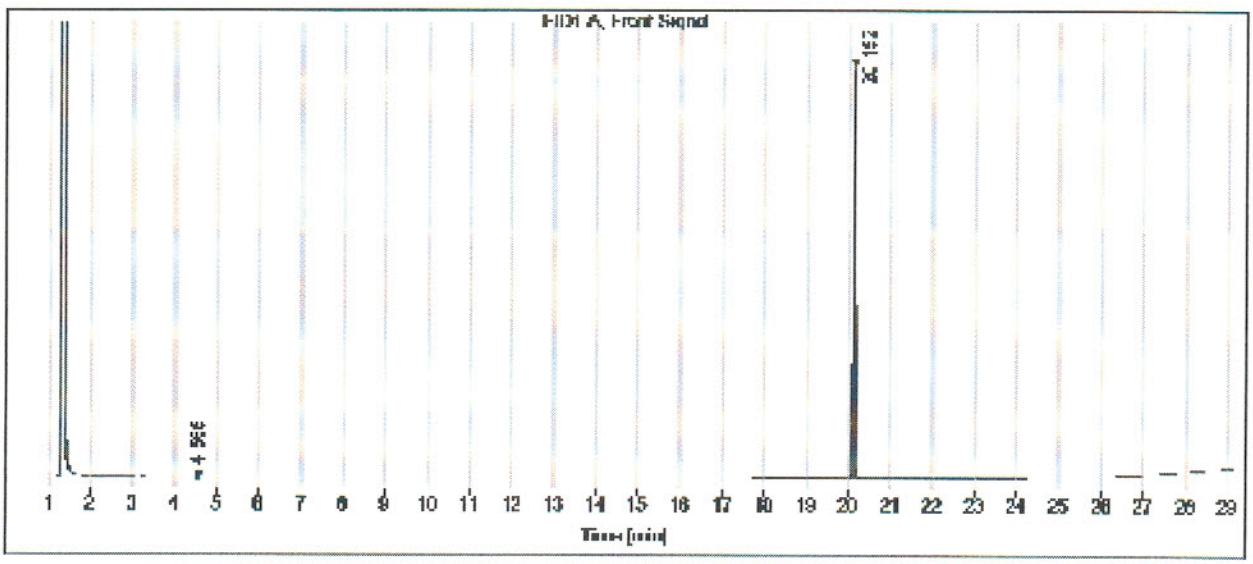
Gas

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:	DRO211008A		
Standard Name	5,000 ug/mL RRO CCV 200 ug/mL Triaconta	Type:	Secondary
Date Prepared	10/8/2021	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 EC119	14354	2.8	mL	8/3/2

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
DRO211006A	Triacontane SURR 2000 ug/mL	ug/mL	800 µL

Analytes		CAS	Conc:	ug/mL
A	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)

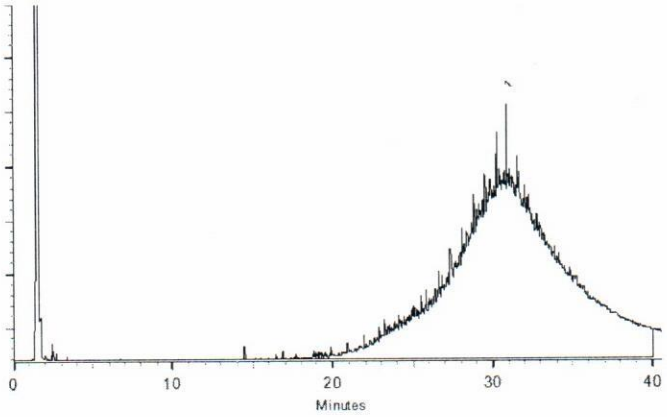
Carrier Gas:
hydrogen-constant pressure 10 psi.

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:	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

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.

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211201A		
Standard Name	5,000 ug/mL RRO CCV 200 ug/mL Triaconta	Type:	Secondary
Date Prepared	12/1/2021	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 EC735	14518	2.8	mL	10/14

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)

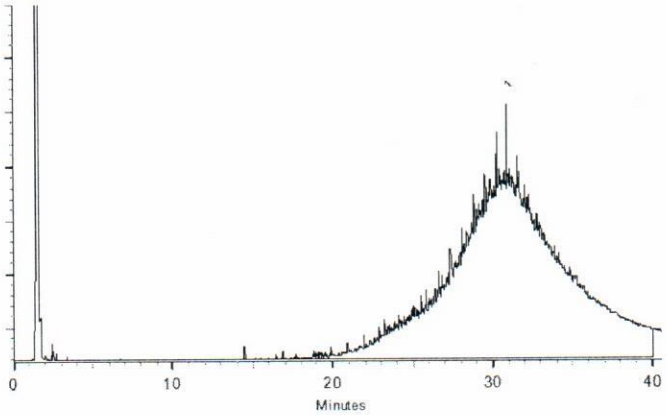
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

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*

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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.

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

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO211012J		
Standard Name	OTP/COD SURR 2000 ug/mL	Type:	Secondary
Date Prepared	10/12/2021	BY:	Ann Nebel
Date Expires:	9/30/2024		
Department	dropr	Status:	New
Vendor:			
Lot Number:			
Balance ID:	BAL-DRO		
Comments:	OTP/COD SURR 2000 ug/mL		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Acetone EA662	14050	100	mL	1/7/2

Final Volume: 100 mL

Stock Source		Base Units	Amount Added
DRO201014C	1-Chlorooctadecane	ug/mL	0.2002 g
DRO201014B	O-Terphenyl	ug/mL	0.2009 g

Analytes		CAS	Conc:	ug/mL
A	1-Chlorooctadecane	3386-33-2		2000
A	O-Terphenyl	84-15-1		2000

Energy Laboratories Inc

Standard LOG

Standard ID:	DRO201014B		
Standard Name	O-Terphenyl	Type:	Neat
Date Prepared	10/14/2020	BY:	Ann Nebel
Date Expires:	9/30/2024		
Department	dropr	Status:	New
Vendor:	Chemservice		
Lot Number:	10029300		
Balance ID:			
Comments:	ID#: 6271		

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
o-Terphenyl	13191	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

Am

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	10029300
DATE CERTIFIED	09/23/19
EXPIRATION DATE	09/30/24
CAS NUMBER	84-15-1
MOLECULAR FORMULA	C18H14
MOLECULAR WEIGHT	230.32
STORAGE	Store at room temperature (20 - 25 °C).
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.

ID #: 13191
Opened:
o-Terphenyl
Expires: 9/30/2024
Rec'd: 10/14/2020
Energy Laboratories Inc 1120 So. 27th Street
Billings MT 59107

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

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
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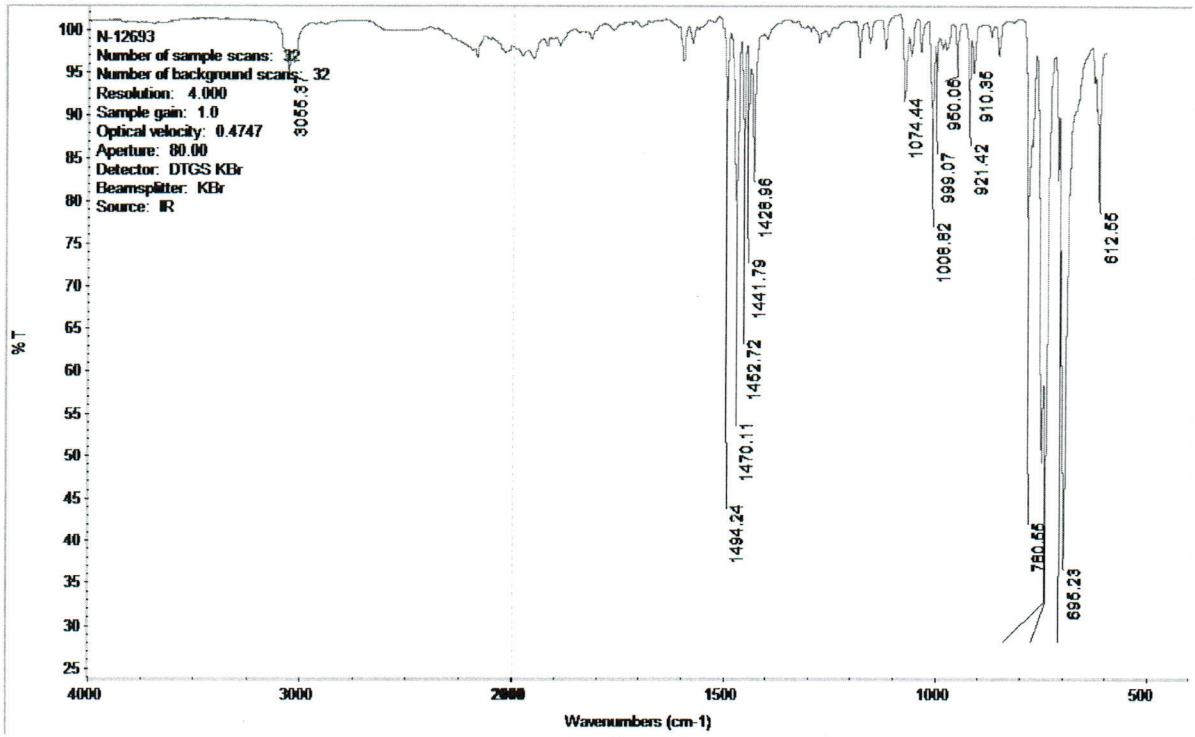
CERTIFICATE OF ANALYSIS

Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	10029300
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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Description:	o-Terphenyl
Lot Number:	10029300
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

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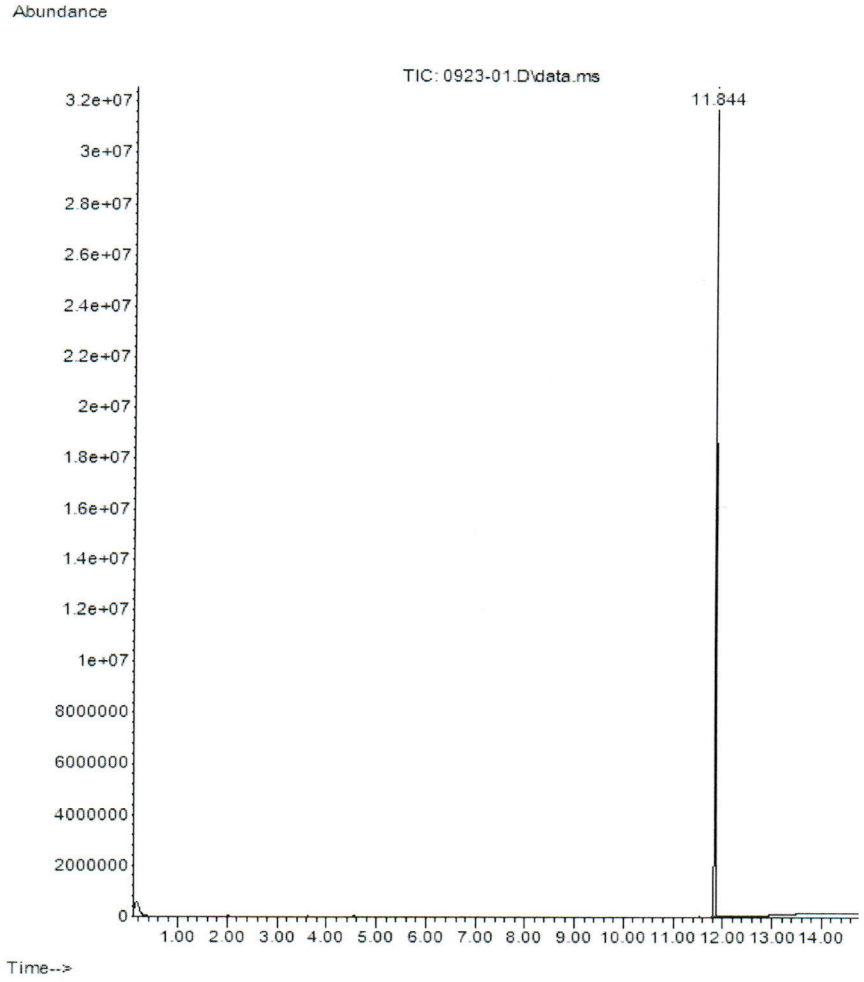

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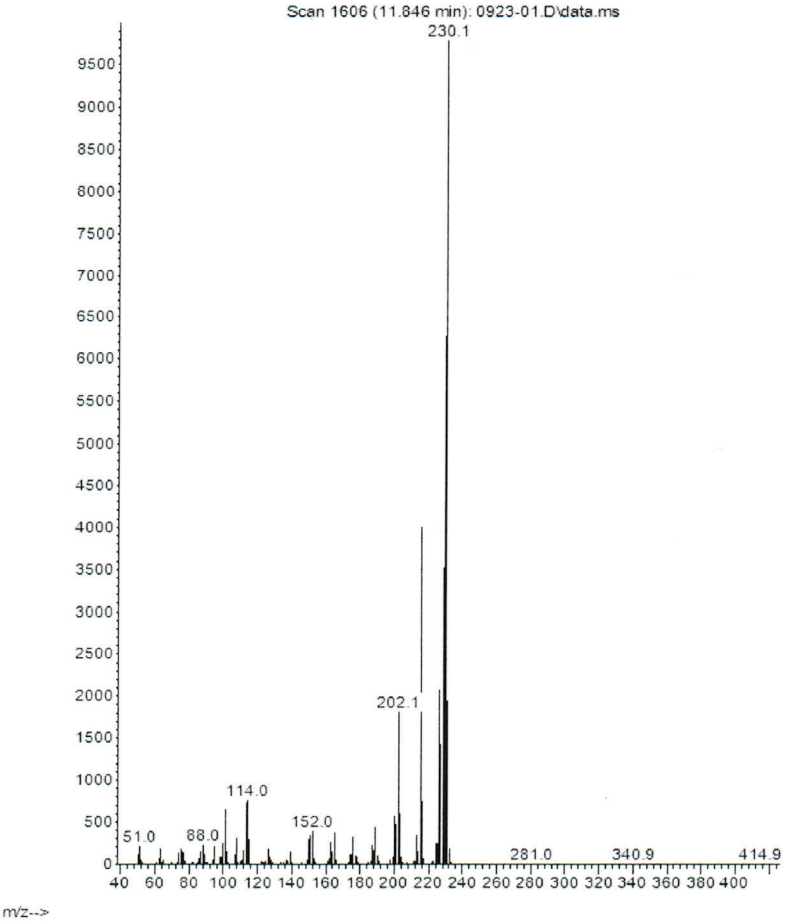

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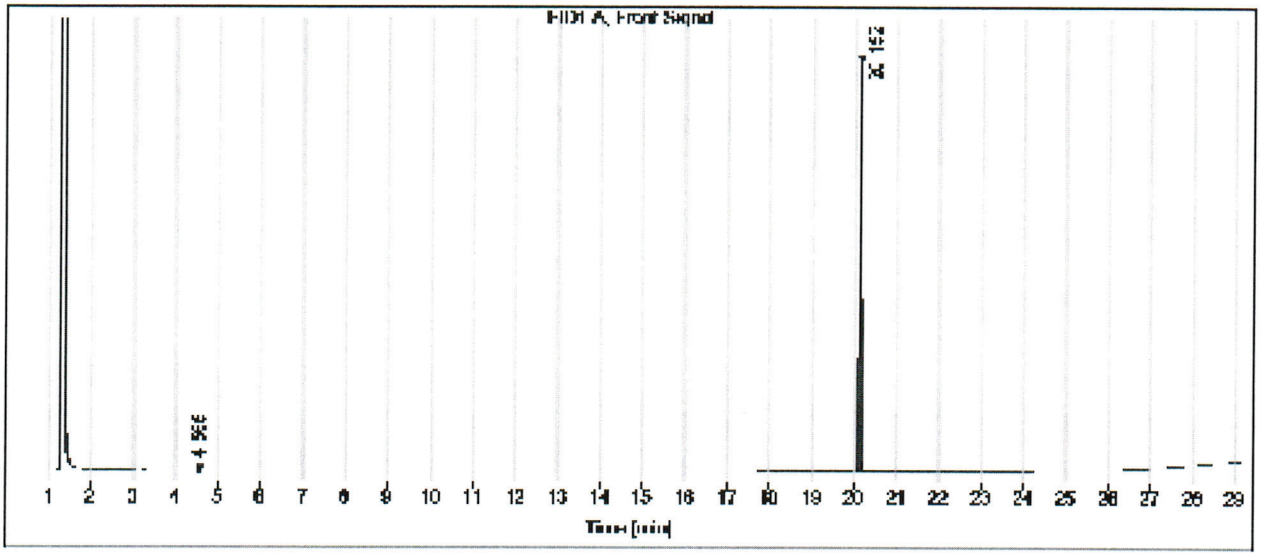
Gas

CERTIFICATE OF ANALYSIS

Data file:	C:\CHEM32		
Sample name:	N-12893		
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:	DRO211115A		
Standard Name	Triacontane SURR 1000 ug/mL	Type:	Secondary
Date Prepared	11/15/2021	BY:	Ann Nebel
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 EC480	14470	2	mL	9/16/

Final Volume: 4 mL

Stock Source		**Base Units**	**Amount Added**
DRO211006A	Triacontane SURR 2000 ug/mL	ug/mL	2 mL

Analytes		**CAS**	Conc:	**ug/mL**
A	Triacontane-d62			1000

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

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.

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

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*

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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
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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

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