

# Energy Laboratories Inc

# ANALYTICAL RUN Summary

18-Oct-21

Run ID GCFID-HP4-B\_211006C

<b>Run Start Date:</b> 10/6/2021
<b>Analyst:</b> Ann Nebel
<b>Ical:</b>
<b>Column ID:</b>
<b>Comments:</b>

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

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist
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14764037	CCV_1006HP43	HC-8015-DRO-	CAL1		10/7/2021 1:07:4	1	R368536		0	0	
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Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane	S	mg/L		0.0019847		0.002	0	0	0	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
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14764038	CCV_1006HP43	HC-8015-DRO-	CAL2		10/7/2021 1:53:0	1	R368536		0	0	
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Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane	S	mg/L		0.04853713		0.05	0	0	0.002	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
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14764039	CCV_1006HP43	HC-8015-DRO-	CAL3		10/7/2021 2:38:3	1	R368536		0	0	
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Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane	S	mg/L		0.2121789		0.2	0	0	0.002	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
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14764040	CCV_1006HP43	HC-8015-DRO-	CAL4		10/7/2021 3:23:5	1	R368536		0	0	
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Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
n-Triacontane	S	mg/L		0.4903055		0.5	0	0	0.002	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					
Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
14764041	CCV_1006HP43	HC-8015-DRO-	CAL5		10/7/2021 4:09:3	1	R368536		0	0						
n-Triacontane	S	mg/L		0.9788904		1	0	0	0.002	0.002	0	98%	80	120	0%	

Write Sequence	Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
	G:\org\HP4\DAT\HP4100621_b\1006HP4.28r	CCV_1006HP411r, CSCAN ;1006HP4 , DRO210708A	G:\org\HP4\Methods\CSC211006.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.29r	DCM-Baseline Check-V29	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.30r	CCV_1006HP407r, CAL1 ;1006HP4 , 2 ug per mL Triacotane (10 uL of Cal3 + 990 uL DCM(14354)	G:\Org\HP4\Methods\DS_ORO-AA-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.31r	CCV_1006HP408r, CAL2 ;1006HP4 , 50 ug per mL Triacotane (100 uL Cal4 + 900 uL of DCM(14354)	G:\Org\HP4\Methods\DS_ORO-AA-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.32r	CCV_1006HP409r, CAL3 ;1006HP4 , 200 ug per mL Triacotane (100uL of Cal5 + 400 uL DCM(14354)	G:\Org\HP4\Methods\DS_ORO-AA-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.33r	CCV_1006HP404r, CAL4 ;1006HP4 , 500 ug per mL Triacotane (250uL of Cal5 + 250 uL DCM(14354)	G:\Org\HP4\Methods\DS_ORO-AA-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.34r	CCV_1006HP405r, CAL5 ;1006HP4 , 1000 ug per mL Triacotane (500 uL 2000 ug/mL Triacotane DRO211006A + 500 DCM(14354)	G:\Org\HP4\Methods\DS_ORO-AA-L%.met	1	1	1	1	0

File Name: G:\Org\HP4\Cals\SW8015C\_ORO211007AA.CAL

Version: 43

Creator: AMN

Description: 8015C-Oil Range w/Triacontane. New ICal Per 1006HP4 (2021)-2 uL Inj.;

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

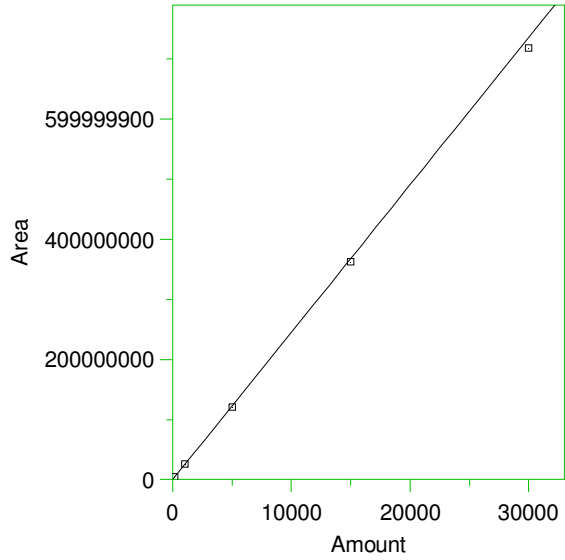
Method of calculating data point averages: Equal weight for all updates

No calibration update report

All levels are normal data points.



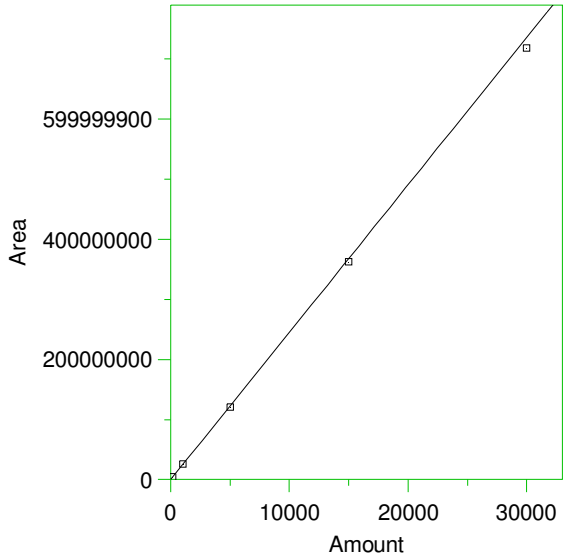
1 \*30-40 Motor Oil



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 = 24529.56 X + 0  
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9990484  
 Average error: 1.972%  
 Average CF: 24529.56  
 RSD: 2.304%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	150	3765836	25105.57	2.348	Manual	1/1/2022 10:32:22 AM
2	1000	2.516261E+07	25162.61	2.581	Manual	10/7/2021 12:56:01 PM
3	5000	1.213971E+08	24279.42	-1.020	Manual	10/7/2021 12:55:18 PM
4	15000	3.623479E+08	24156.53	-1.521	Manual	10/7/2021 12:55:30 PM
5	30000	7.183105E+08	23943.68	-2.388	Manual	10/7/2021 12:55:47 PM

2 #C20



Expected retention time: 12.58 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

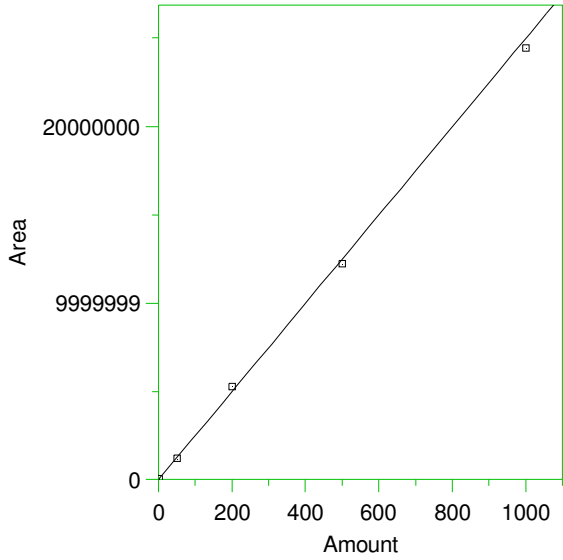
Single peak quantification by area

$Y = 24529.56 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9990484  
 Average error: 1.972%  
 Average CF: 24529.56  
 RSD: 2.304%

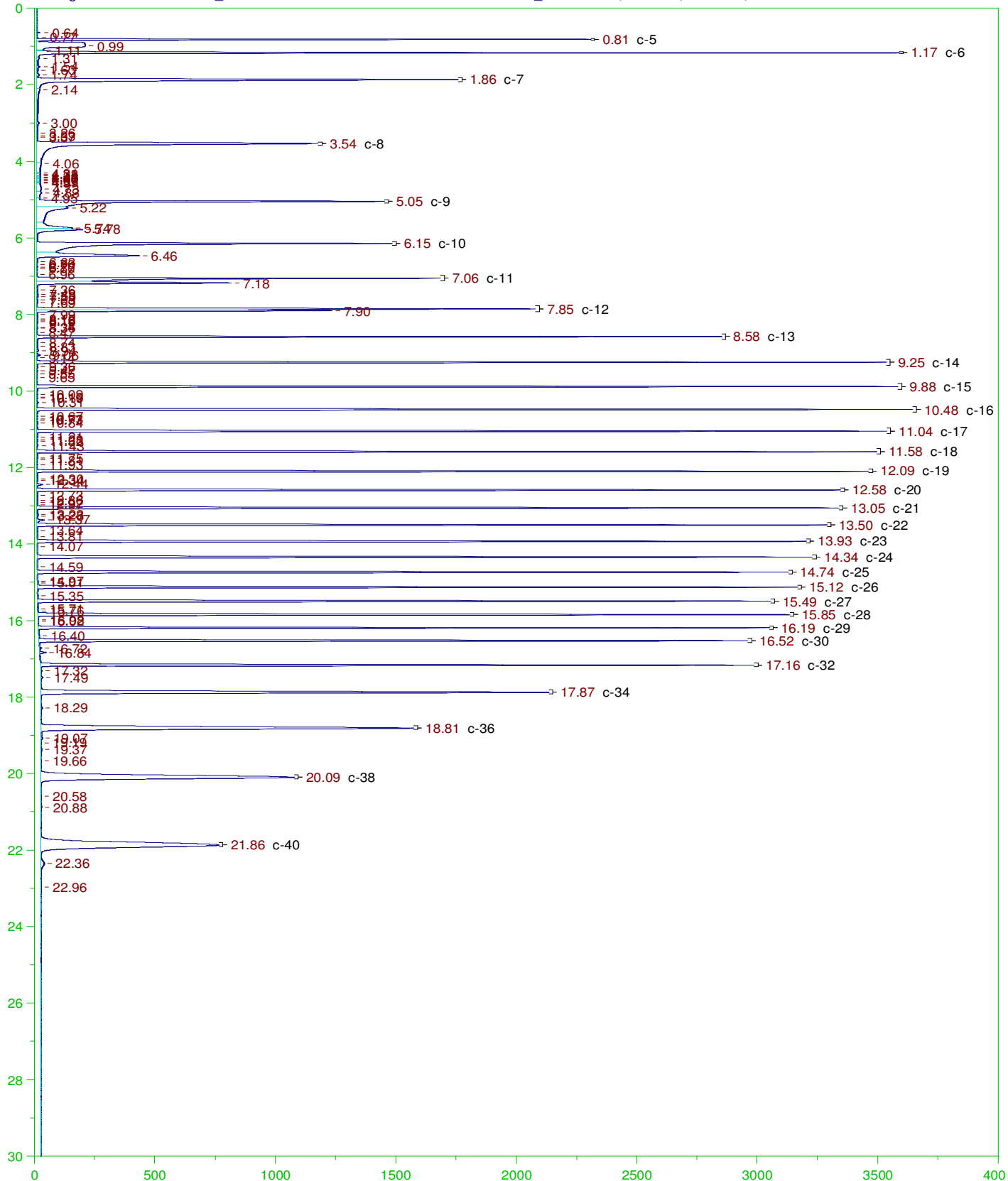
Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	150	3765836	25105.57	2.348	Manual	1/1/2022 10:32:46 AM
2	1000	2.516261E+07	25162.61	2.581	Manual	1/1/2022 10:32:43 AM
3	5000	1.213971E+08	24279.42	-1.020	Manual	1/1/2022 10:32:41 AM
4	15000	3.623479E+08	24156.53	-1.521	Manual	1/1/2022 10:32:39 AM
5	30000	7.183105E+08	23943.68	-2.388	Manual	1/1/2022 10:32:36 AM

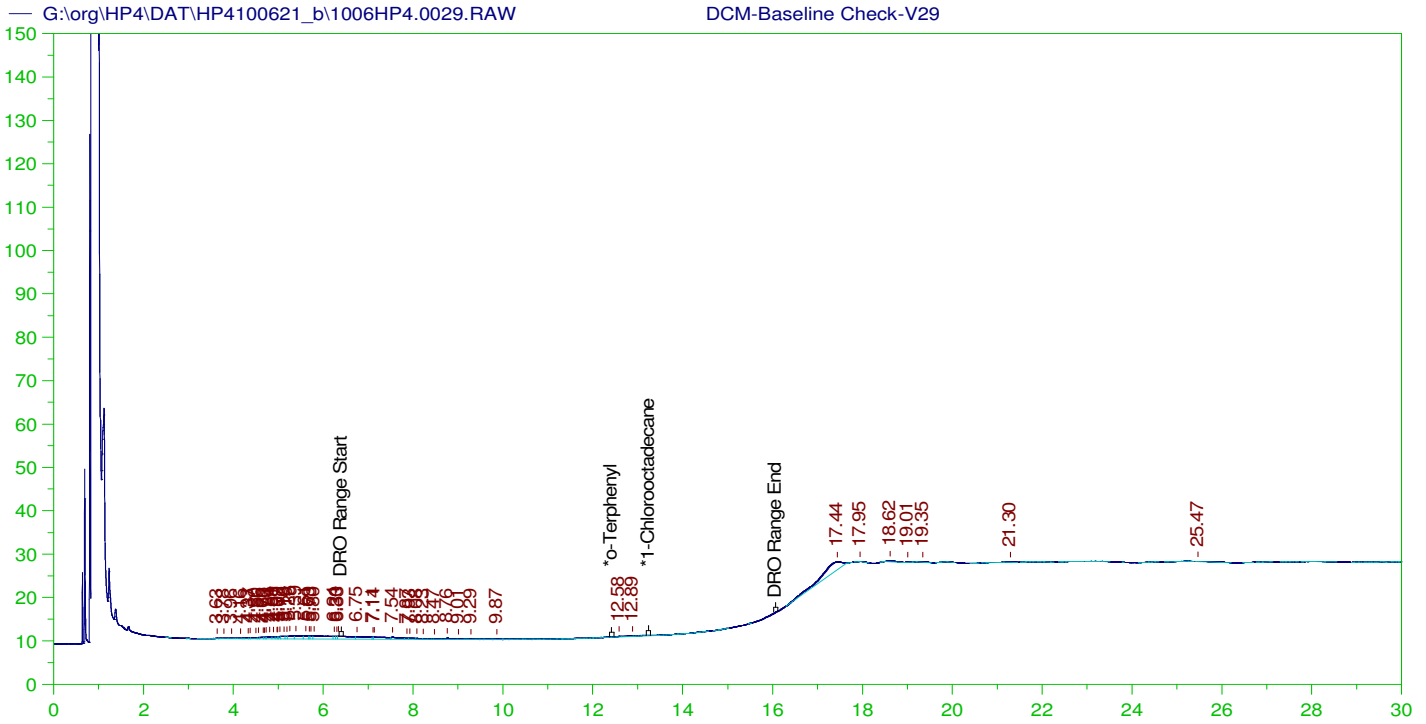
3 \*#Triacontane



Expected retention time: 16.34 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 = 24973.81 X + 0  
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9989417  
 Average error: 2.783%  
 Average CF: 24973.81  
 RSD: 3.701%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2	50369.5	25184.75	0.845	Manual	10/7/2021 1:17:20 PM
2	50	1212157	24243.14	-2.926	G:\Org\HP4\DAT\HP4100621_b\1006HP4.0015.BND	10/7/2021 12:47:26 PM
3	200	5300126	26500.63	6.114	G:\Org\HP4\DAT\HP4100621_b\1006HP4.0017.BND	10/7/2021 12:47:56 PM
4	500	1.22448E+07	24489.6	-1.939	G:\Org\HP4\DAT\HP4100621_b\1006HP4.0019.BND	10/7/2021 12:48:04 PM
5	1000	2.445095E+07	24450.95	-2.094	Manual	10/7/2021 4:09:51 PM





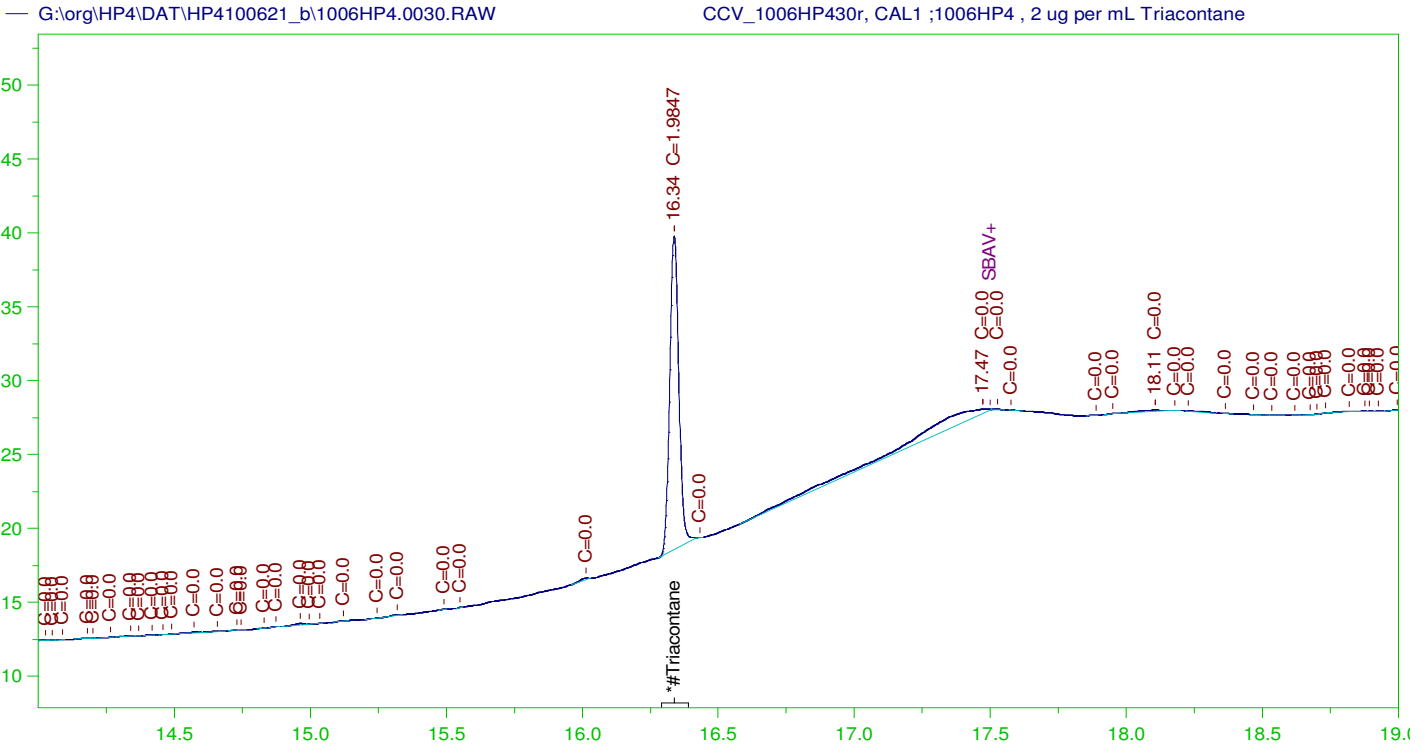
**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V29  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0029.RAW  
 Date & Time Acquired: 10/7/2021 12:22:20 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-MX-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO201204MX.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 26029.55  
 Rt range for Diesel Range Organics: 6.35 to 16.12

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

DRO Area:46051.94 DRO Amount: 1.769218  
 TEH Area:213678.8 TEH Amount: 8.209086



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_1006HP430r, CAL1 ;1006HP4 , 2 ug per mL Triacontane  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0030.RAW  
 Date & Time Acquired: 10/7/2021 1:07:43 PM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-AA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AA.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.53 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.337	500.	1.985	.4

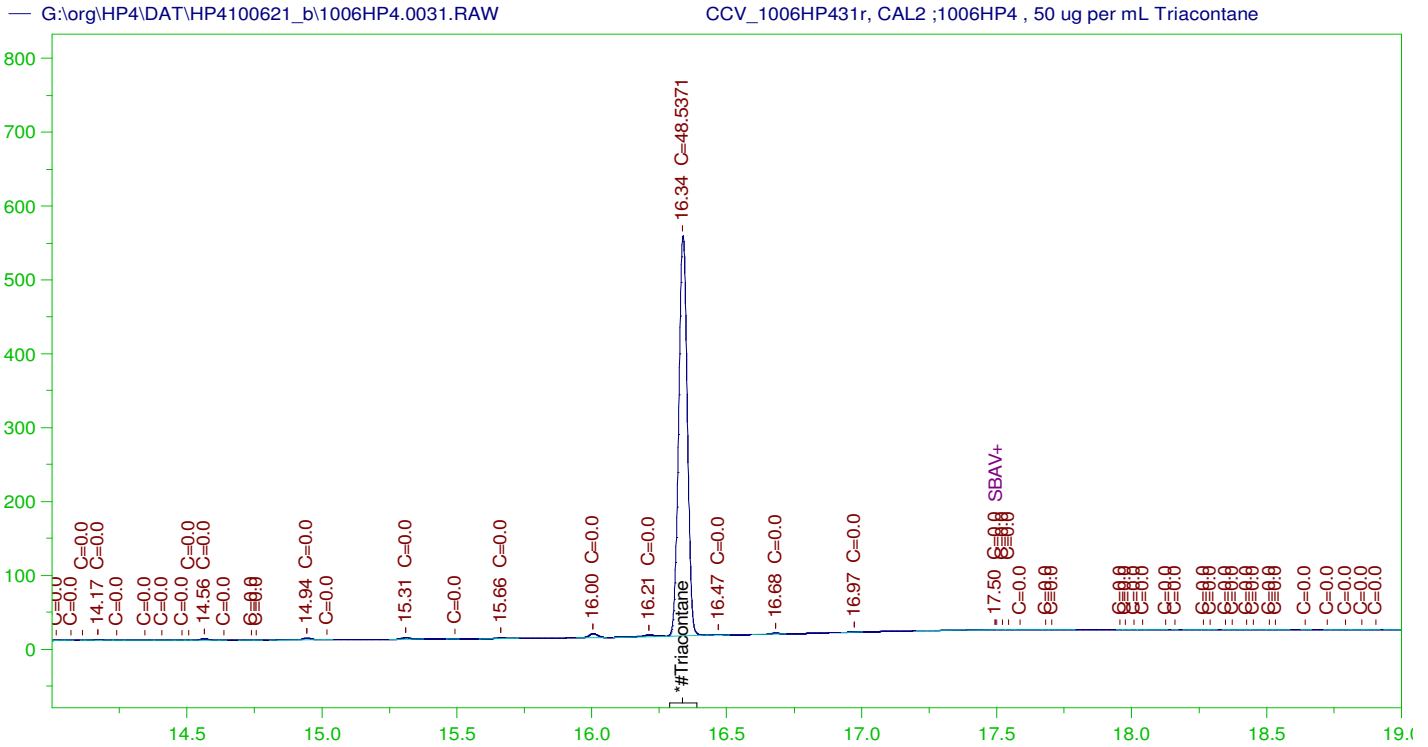
RRO Area:16216.42 RRO AMOUNT: 0.6610969

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0030.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.337	200.	1.985	.99	75-125



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_1006HP431r, CAL2 ;1006HP4 , 50 ug per mL Triacontane  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0031.RAW  
 Date & Time Acquired: 10/7/2021 1:53:07 PM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-AA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AA.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.53 to 30.05

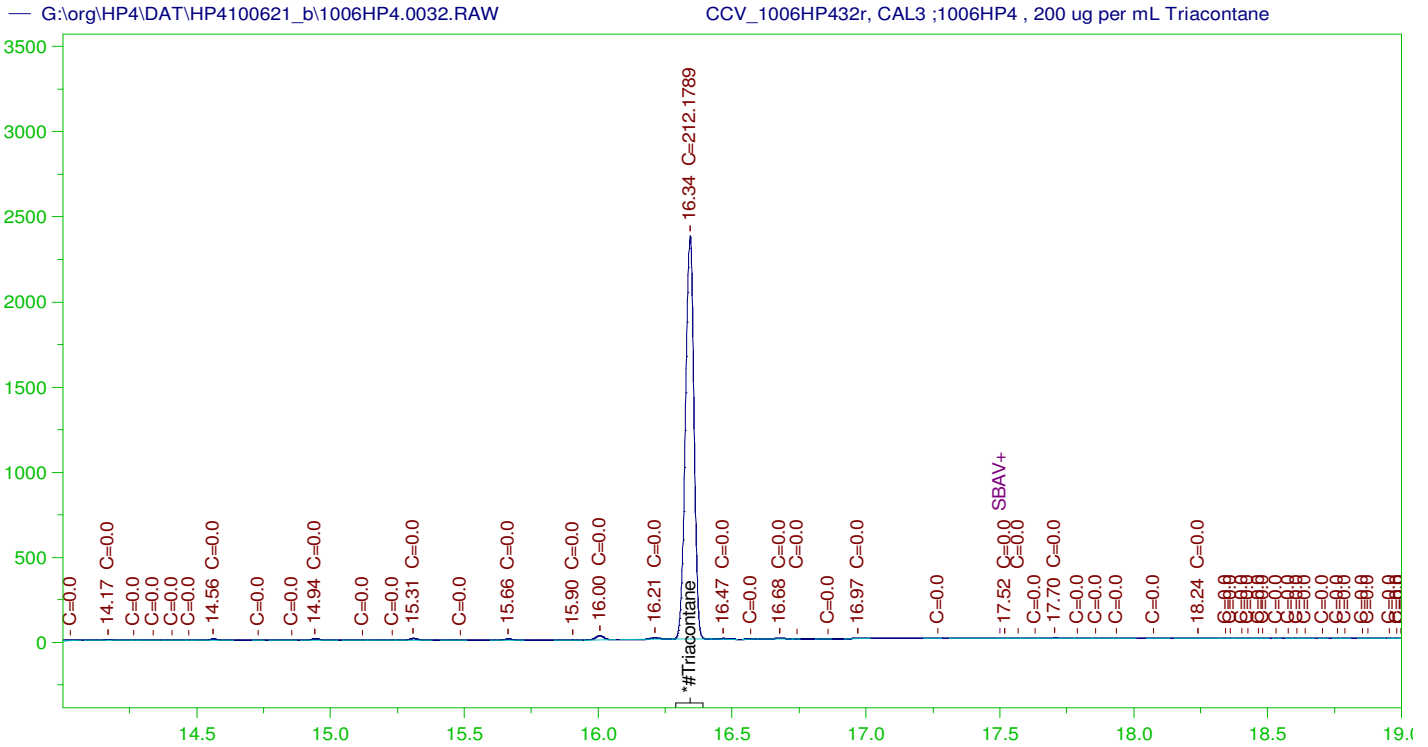
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.337	500.	48.537	9.71	-

RRO Area:50498.79 RRO AMOUNT: 2.058691

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0031.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.337	200.	48.537	24.27	75-125



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_1006HP432r, CAL3 ;1006HP4 , 200 ug per mL Triacontane  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0032.RAW  
 Date & Time Acquired: 10/7/2021 2:38:34 PM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-AA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AA.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.53 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.343	500.	212.179	42.44	-

RRO Area:223185.5 RRO AMOUNT: 9.098632

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0032.RAW

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

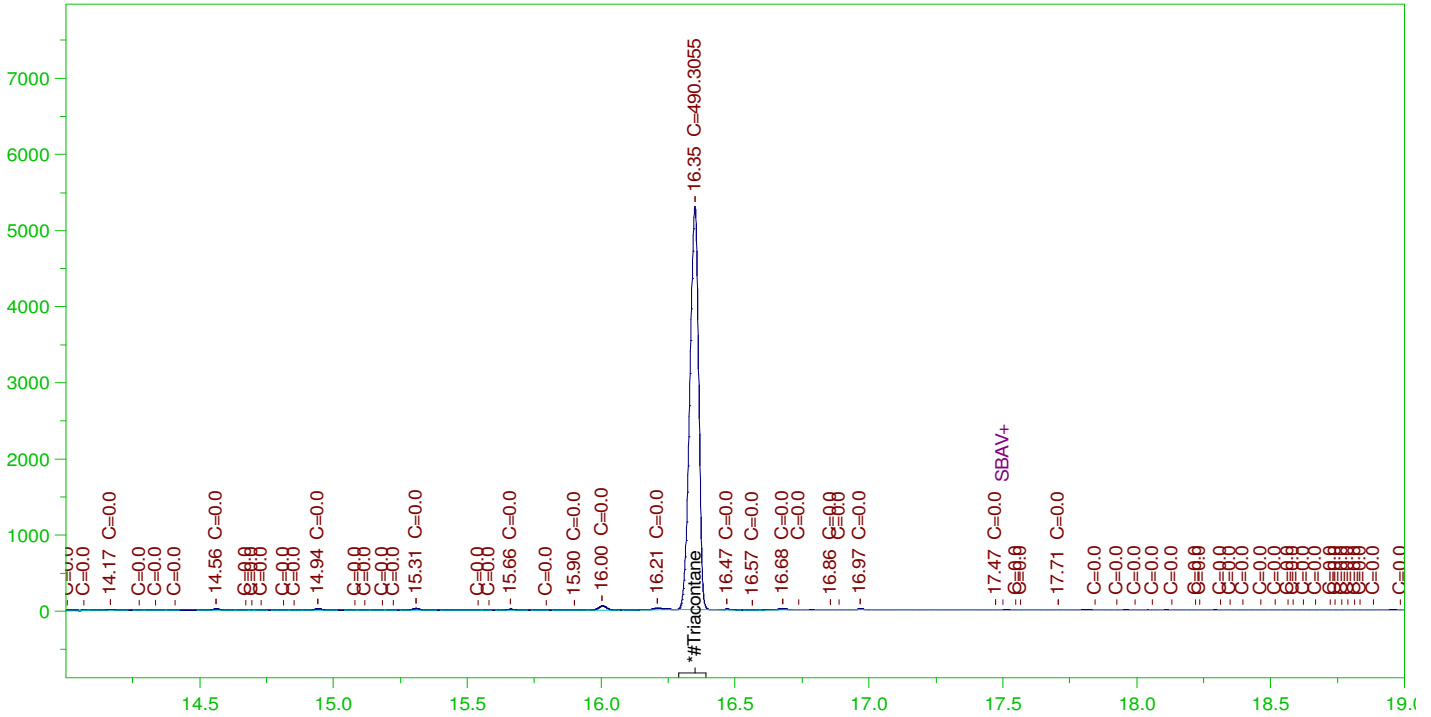
  

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.343	200.	212.179	106.09	75-125



G:\org\HP4\DAT\HP4100621\_b\1006HP4.0033.RAW

CCV\_1006HP433r, CAL4 ;1006HP4 , 500 ug per mL Triacontane



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_1006HP433r, CAL4 ;1006HP4 , 500 ug per mL Triacontane  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0033.RAW  
 Date & Time Acquired: 10/7/2021 3:23:59 PM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-AA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AA.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.53 to 30.05

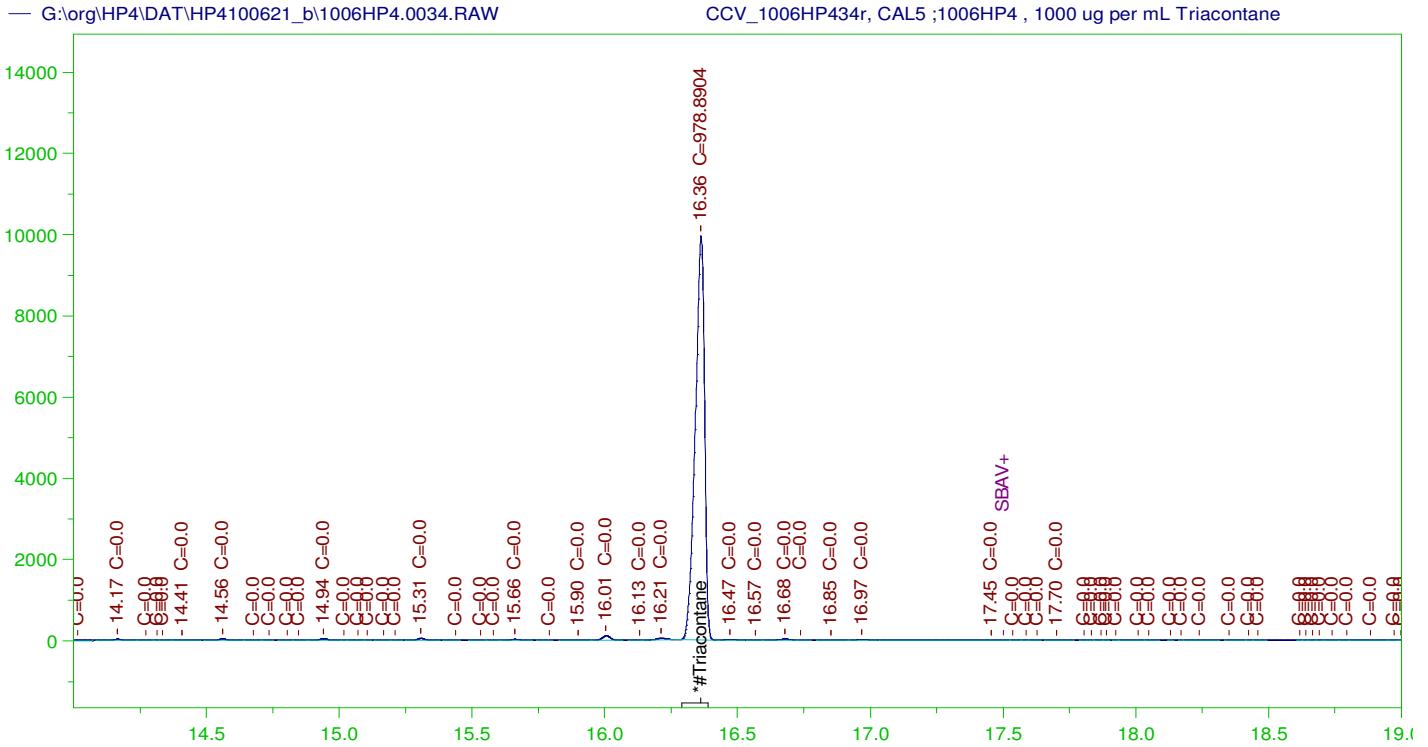
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.35	500.	490.306	98.06	-

RRO Area:522651.3 RRO AMOUNT: 21.307

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0033.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.023	.	75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.35	200.	490.306	245.15	75-125



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_1006HP434r, CAL5 ;1006HP4 , 1000 ug per mL Triacontane  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0034.RAW  
 Date & Time Acquired: 10/7/2021 4:09:35 PM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-AA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AA.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.53 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.363	500.	978.89	195.78	-

RRO Area:1029665 RRO AMOUNT: 41.9765

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0034.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.363	200.	978.89	489.45	75-125

Write Sequence	Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manual Integrations
	G:\org\HP4\DAT\HP4100621_b1006HP4.28r	CCV_1006HP411r, CSCAN ;1006HP4 , DRO210708A	G:\org\HP4\Methods\CSC211006.met	1	1	1	1	0	No Integration
	G:\org\HP4\DAT\HP4100621_b1006HP4.29r	DCM-Baseline Check-V29	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0	No Integration
	G:\org\HP4\DAT\HP4100621_b1006HP4.30r	CCV_1006HP407r, CAL1 ;1006HP4 , 2 ug per mL Triacotane (10 uL of Cal3 + 990 uL DCM(14354)	G:\Org\HP4\Methods\DS_ORO-AA-L%.met	1	1	1	1	0	The integration of Triacotane is integrated using a valley to valley integration.
	G:\org\HP4\DAT\HP4100621_b1006HP4.31r	CCV_1006HP408r, CAL2 ;1006HP4 , 50 ug per mL Triacotane (100 uL Cal4 + 900 uL of DCM(14354)	G:\Org\HP4\Methods\DS_ORO-AA-L%.met	1	1	1	1	0	The integration of Triacotane is integrated using a valley to valley integration.
	G:\org\HP4\DAT\HP4100621_b1006HP4.32r	CCV_1006HP409r, CAL3 ;1006HP4 , 200 ug per mL Triacotane (100uL of Cal5 + 400 uL DCM(14354)	G:\Org\HP4\Methods\DS_ORO-AA-L%.met	1	1	1	1	0	The integration of Triacotane is integrated using a valley to valley integration.
	G:\org\HP4\DAT\HP4100621_b1006HP4.33r	CCV_1006HP404r, CAL4 ;1006HP4 , 500 ug per mL Triacotane (250uL of Cal5 + 250 uL DCM(14354)	G:\Org\HP4\Methods\DS_ORO-AA-L%.met	1	1	1	1	0	The integration of Triacotane is integrated using a valley to valley integration.
	G:\org\HP4\DAT\HP4100621_b1006HP4.34r	CCV_1006HP405r, CAL5 ;1006HP4 , 1000 ug per mL Triacotane (500 uL 2000 ug/mL Triacotane DRO211006A + 500 DCM(14354)	G:\Org\HP4\Methods\DS_ORO-AA-L%.met	1	1	1	1	0	The integration of Triacotane is integrated using a valley to valley integration.



Digitally signed by  
Ann Nebel  
Date: 2022.01.26 11:36:11 -07:00

# Energy Laboratories Inc

# ANALYTICAL RUN Summary

13-Oct-21

Run ID GCFID-HP4-B\_211006B

<b>Run Start Date:</b> 10/6/2021
<b>Analyst:</b> Ann Nebel
<b>Ical:</b>
<b>Column ID:</b>
<b>Comments:</b> 8015C Oil Range

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-OIL	8/31/2025
DRO210902A	50,000 ug/mL Oil Std for RRO-In DCM					Second Sou	9/1/2026

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist				
14764069	CCV_1006HP41	HC-8015-DRO-	CAL1		10/7/2021 12:16:	1	R368535			0	0				
<b>Analyte</b>		<b>T Units</b>	<b>RAW</b>	<b>Final</b>	<b>Text</b>	<b>Spike</b>	<b>SPKref</b>	<b>RPDref</b>	<b>MDL</b>	<b>PQL</b>	<b>UQL</b>	<b>%REC</b>	<b>LOW</b>	<b>HIGH</b>	<b>%RPD Q</b>
TEH(Oil Range)		A mg/L		0.1652093		0.15	0	0	0	0.3	0	110%	80	120	0%
14764070	CCV_1006HP41	HC-8015-DRO-	CAL2		10/7/2021 1:47:3	1	R368535			0	0				
<b>Analyte</b>		<b>T Units</b>	<b>RAW</b>	<b>Final</b>	<b>Text</b>	<b>Spike</b>	<b>SPKref</b>	<b>RPDref</b>	<b>MDL</b>	<b>PQL</b>	<b>UQL</b>	<b>%REC</b>	<b>LOW</b>	<b>HIGH</b>	<b>%RPD Q</b>
TEH(Oil Range)		A mg/L		1.022149		1	0	0	0	0.3	0	102%	80	120	0%
14764071	CCV_1006HP41	HC-8015-DRO-	CAL3		10/7/2021 3:19:0	1	R368535			0	0				
<b>Analyte</b>		<b>T Units</b>	<b>RAW</b>	<b>Final</b>	<b>Text</b>	<b>Spike</b>	<b>SPKref</b>	<b>RPDref</b>	<b>MDL</b>	<b>PQL</b>	<b>UQL</b>	<b>%REC</b>	<b>LOW</b>	<b>HIGH</b>	<b>%RPD Q</b>
TEH(Oil Range)		A mg/L		4.956371		5	0	0	0	0.3	0	99%	80	120	0%
14764072	CCV_1006HP41	HC-8015-DRO-	CAL4		10/7/2021 4:50:1	1	R368535			0	0				
<b>Analyte</b>		<b>T Units</b>	<b>RAW</b>	<b>Final</b>	<b>Text</b>	<b>Spike</b>	<b>SPKref</b>	<b>RPDref</b>	<b>MDL</b>	<b>PQL</b>	<b>UQL</b>	<b>%REC</b>	<b>LOW</b>	<b>HIGH</b>	<b>%RPD Q</b>

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14764072	CCV_1006HP41	HC-8015-DRO-	CAL4		10/7/2021 4:50:1	1	R368535		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		14.79833		15	0	0	0	0.3	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					
14764073	CCV_1006HP42	HC-8015-DRO-	CAL5		10/7/2021 6:21:2	1	R368535		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		29.29968		30	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					
14764074	CCV_1006HP42	HC-8015-DRO-	ICV		10/7/2021 9:21:4	1	R368535		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		5.390338		5	0	0	0	0.3	0	108%	80	120	0%	

File Name: G:\Org\HP4\Cals\SW8015C\_ORO211007AA.CAL

Version: 43

Creator: AMN

Description: 8015C-Oil Range w/Triacontane. New ICal Per 1006HP4 (2021)-2 uL Inj.;

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

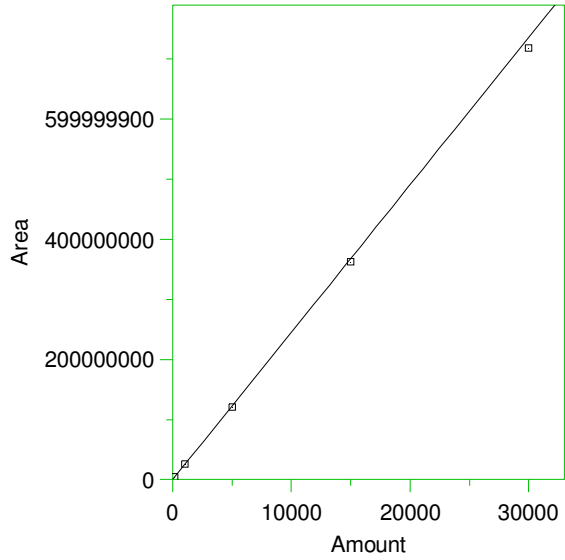
No default component

Method of calculating data point averages: Equal weight for all updates

No calibration update report

All levels are normal data points.

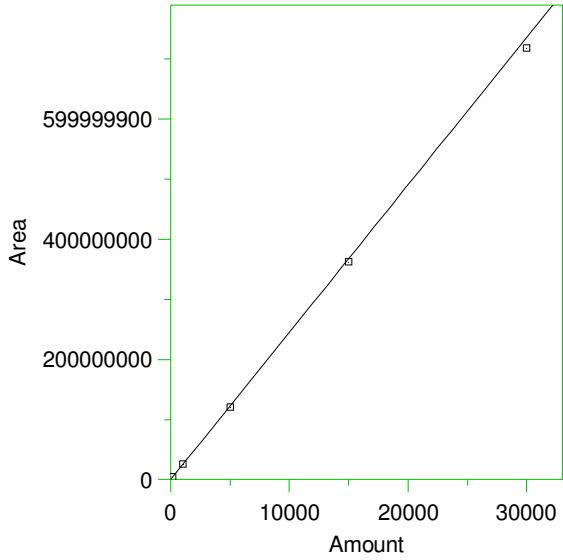
1 \*30-40 Motor Oil



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  
 $Y = 24529.56 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9990484  
 Average error: 1.972%  
 Average CF: 24529.56  
 RSD: 2.304%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	150	3765836	25105.57	2.348	Manual	1/1/2022 10:32:22 AM
2	1000	2.516261E+07	25162.61	2.581	Manual	10/7/2021 12:56:01 PM
3	5000	1.213971E+08	24279.42	-1.020	Manual	10/7/2021 12:55:18 PM
4	15000	3.623479E+08	24156.53	-1.521	Manual	10/7/2021 12:55:30 PM
5	30000	7.183105E+08	23943.68	-2.388	Manual	10/7/2021 12:55:47 PM

2 #C20



Expected retention time: 12.58 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

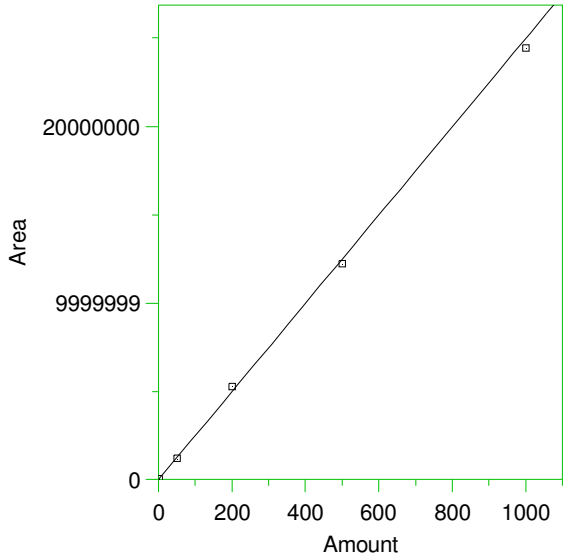
$Y = 24529.56 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9990484  
 Average error: 1.972%  
 Average CF: 24529.56  
 RSD: 2.304%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	150	3765836	25105.57	2.348	Manual	1/1/2022 10:32:46 AM
2	1000	2.516261E+07	25162.61	2.581	Manual	1/1/2022 10:32:43 AM
3	5000	1.213971E+08	24279.42	-1.020	Manual	1/1/2022 10:32:41 AM
4	15000	3.623479E+08	24156.53	-1.521	Manual	1/1/2022 10:32:39 AM
5	30000	7.183105E+08	23943.68	-2.388	Manual	1/1/2022 10:32:36 AM



3 \*#Triacontane

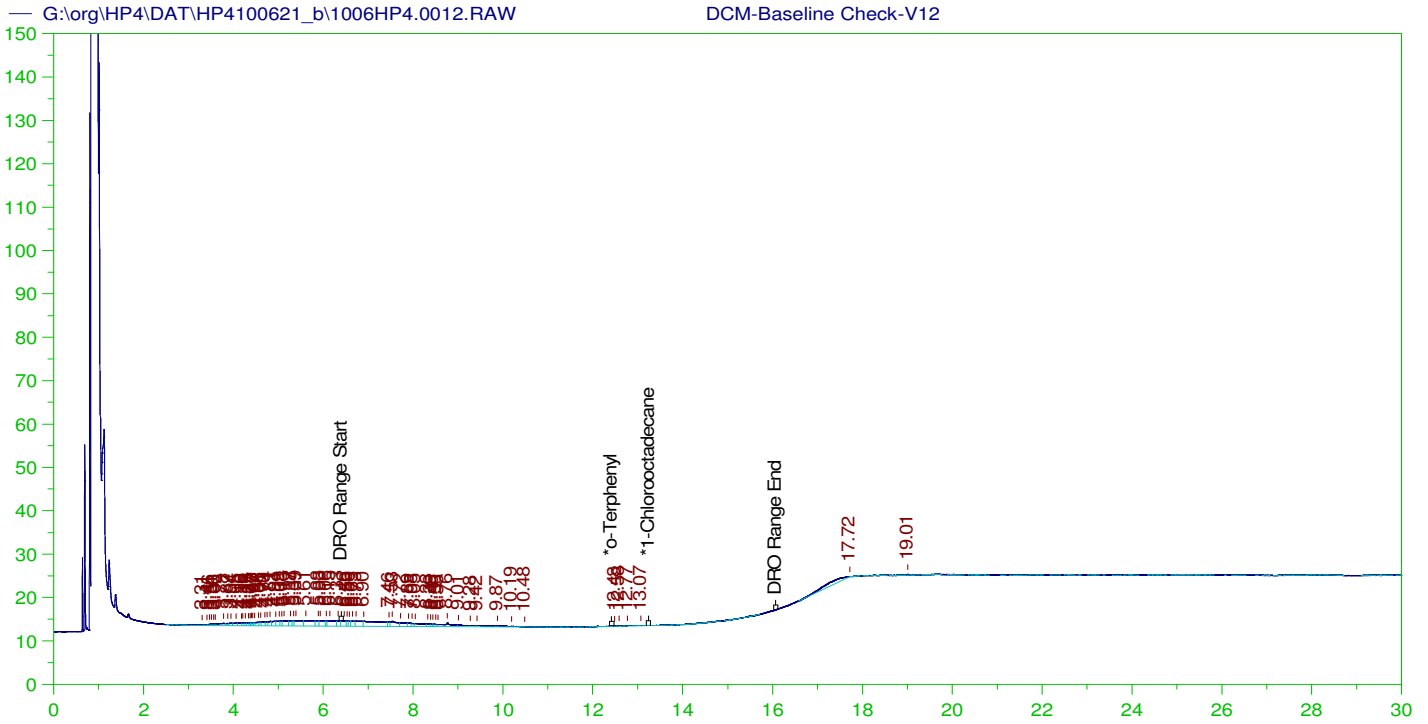


Expected retention time: 16.34 minutes  
 Search window: 0.05 minutes  
 No retention time reference component  
 Group number: 0  
 High alarm limit: 0  
 Low alarm limit: 0  
 Component constant: 0  
 Single peak quantification by area  
 Y = 24973.81 X + 0  
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9989417  
 Average error: 2.783%  
 Average CF: 24973.81  
 RSD: 3.701%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2	50369.5	25184.75	0.845	Manual	10/7/2021 1:17:20 PM
2	50	1212157	24243.14	-2.926	G:\Org\HP4\DAT\HP4100621_b\1006HP4.0015.BND	10/7/2021 12:47:26 PM
3	200	5300126	26500.63	6.114	G:\Org\HP4\DAT\HP4100621_b\1006HP4.0017.BND	10/7/2021 12:47:56 PM
4	500	1.22448E+07	24489.6	-1.939	G:\Org\HP4\DAT\HP4100621_b\1006HP4.0019.BND	10/7/2021 12:48:04 PM
5	1000	2.445095E+07	24450.95	-2.094	Manual	10/7/2021 4:09:51 PM

Write Sequence	Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
		Insert Entries(Have the first cell for entries select)						
	G:\org\HP4\DAT\HP4100621_b\1006HP4.11r	CCV_1006HP411r, CSCAN ;1006HP4 , DRO210708A	G:\org\HP4\Methods\CSC211006.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.12r	DCM-Baseline Check-V12	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.13r	CCV_1006HP413r, CAL1 ;1006HP4 , 150 ug per mL Oil (10 uL of Cal4 + 990 uL DCM)(14354)	G:\Org\HP4\methods\DR_8015-13-OIL-AA-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.14r	DCM-Baseline Check-V14	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.15r	CCV_1006HP415r, CAL2 ;1006HP4 , 1000 ug per mL Oil (200 uL of Cal 3 +800 uL DCM)(14354)	G:\Org\HP4\methods\DR_8015-15-OIL-AA-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.16r	DCM-Baseline Check-V16	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.17r	CCV_1006HP417r, CAL3 ;1006HP4 , 5000 ug per mL Oil (200 uL of Cal 4 + 400 uL DCM)(14354)	G:\Org\HP4\methods\DR_8015-17-OIL-AA-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.18r	DCM-Baseline Check-V18	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.19r	CCV_1006HP419r, CAL4 ;1006HP4 , 15000 ug per mL Oil (200 uL of CAL5 + 200 uL DCM)(14354)	G:\Org\HP4\methods\DR_8015-19-OIL-AA-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.20r	DCM-Baseline Check-V20	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.21r	CCV_1006HP423r, CAL5 ;1006HP4 , 30000 ug per mL Oil (600 uL of DRO180918C + 400 uL of DCM)(14354)	G:\Org\HP4\methods\DR_8015-21-OIL-AA-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.22r	DCM-Baseline Check-V22	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.23r	DCM-Baseline Check-V23	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.24r	DCM-Baseline Check-V24	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4100621_b\1006HP4.25r	CCV_1006HP425r, Second Source ;1006HP4 , 5000 ug per mL Oil (100 uL of DRO210902A + 900 uL of DCM)	G:\Org\HP4\methods\DR_8015-17-OIL-AA-L%.met	1	1	1	1	0





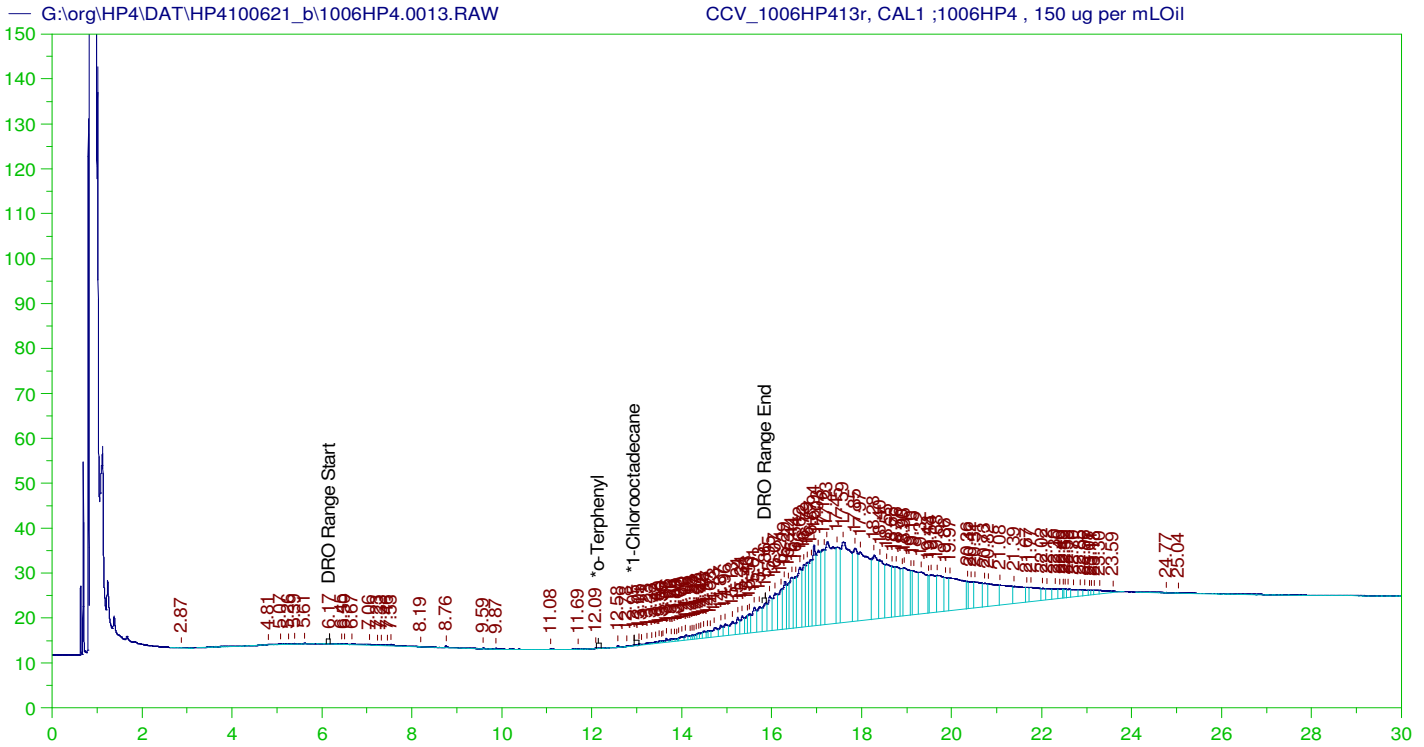
**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V12  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0012.RAW  
 Date & Time Acquired: 10/6/2021 11:30:37 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-MX-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO201204MX.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 26029.55  
 Rt range for Diesel Range Organics: 6.35 to 16.12

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.914	200.	.	-
*1-Chlorooctadecane	29.914	200.	.	-

DRO Area:151604.2 DRO Amount: 5.824311  
 TEH Area:344150.3 TEH Amount: 13.22152



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1006HP413r, CAL1 ;1006HP4 , 150 ug per mL Oil  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0013.RAW  
 Date & Time Acquired: 10/7/2021 12:16:08 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-13-OIL-AA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_Oil\_210106AA.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 24529.56

Rt range for Diesel Range Organics: 6.09 to 15.88

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.973	200.	.	-
*1-Chlorooctadecane	12.946	200.	.024	.01

DRO Area: 350454.1

DRO Amount: 14.28701

TEH (Oil Range) Area: 4052512

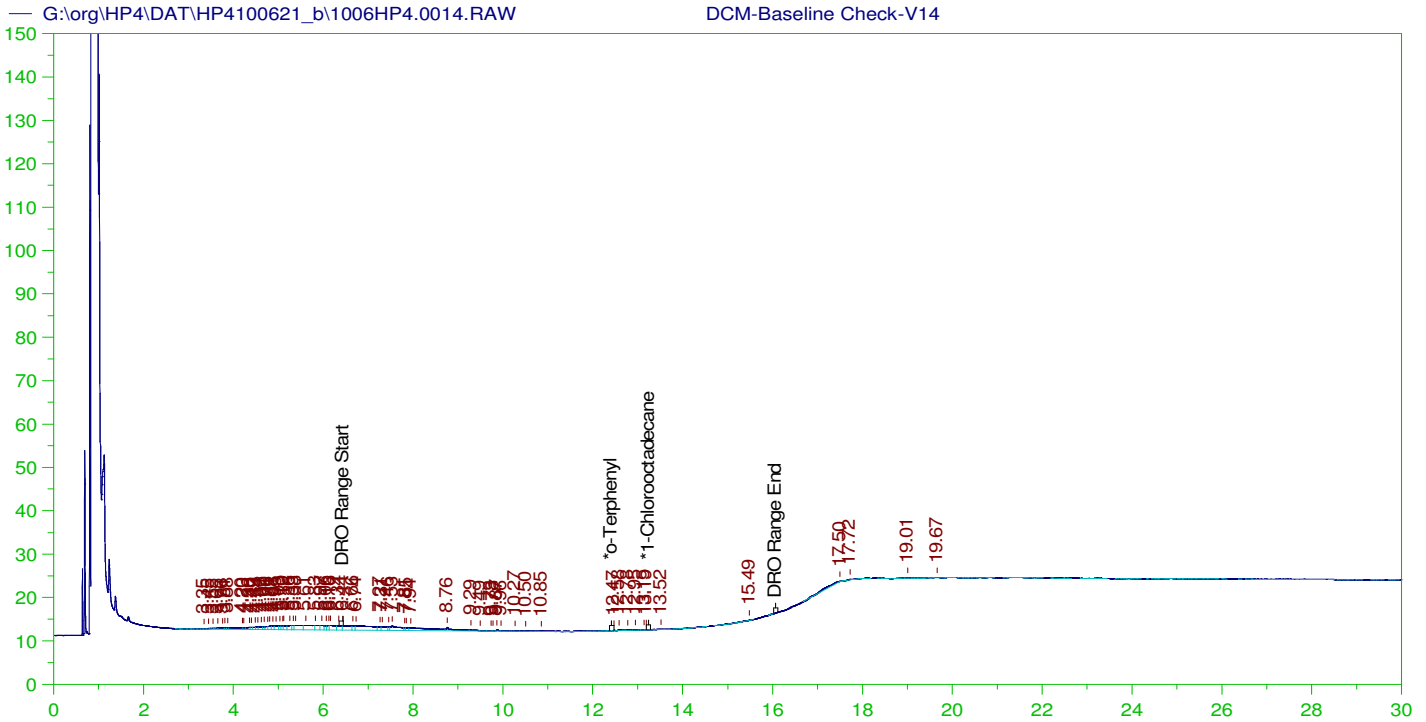
TEH (Oil Range) Amount: 165.2093

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0013.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	5000.	165.21	3.3	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	29.973	200.	.	.	85-115
*1-Chlorooctadecane	12.946	200.	.024	.01	85-115

AMN 10/13/2021



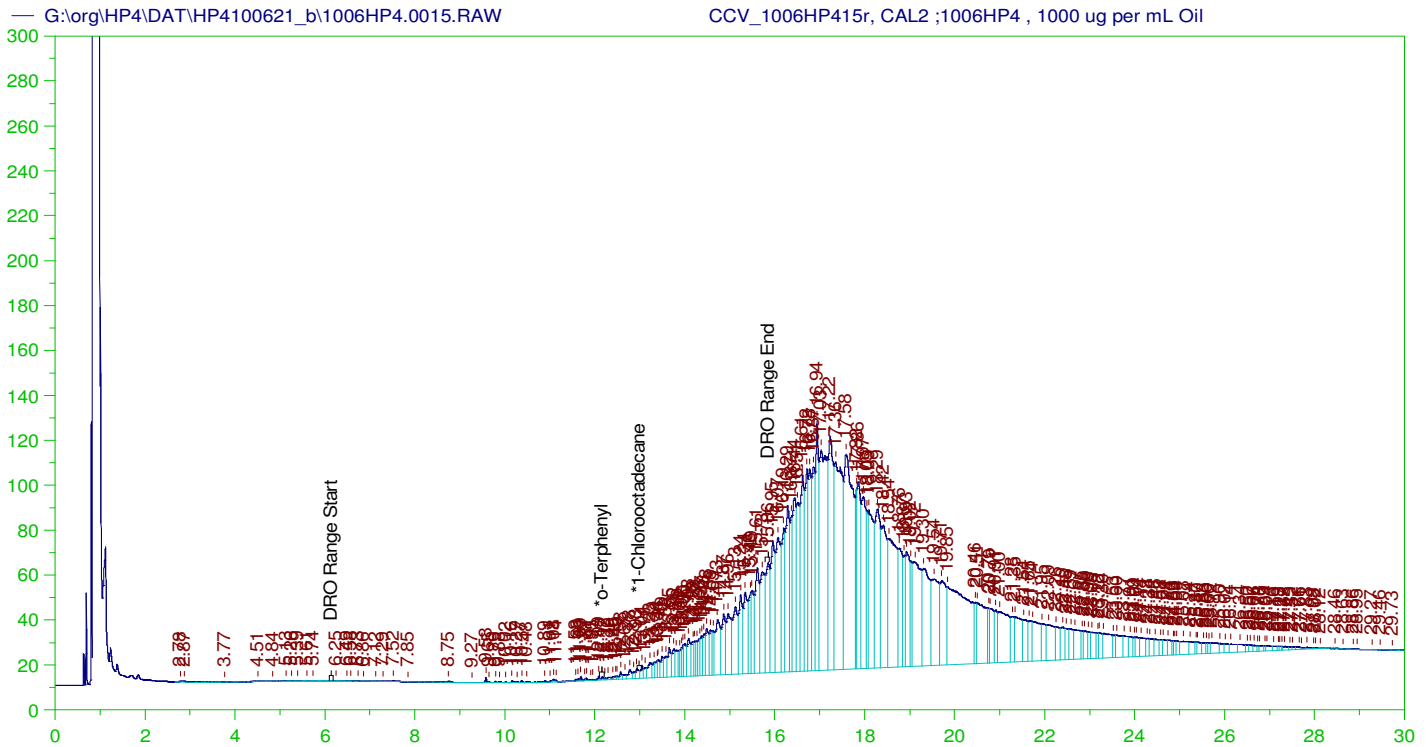
**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V14  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0014.RAW  
 Date & Time Acquired: 10/7/2021 1:01:51 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-MX-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO201204MX.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 26029.55  
 Rt range for Diesel Range Organics: 6.35 to 16.12

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.884	200.	.	-
*1-Chlorooctadecane	29.884	200.	.	-

DRO Area:131624.4 DRO Amount: 5.056731  
 TEH Area:277425.9 TEH Amount: 10.65811



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1006HP415r, CAL2 ;1006HP4 , 1000 ug per mL Oil  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0015.RAW  
 Date & Time Acquired: 10/7/2021 1:47:37 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-15-OIL-AA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_Oil\_210106AA.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 24529.56

Rt range for Diesel Range Organics: 6.09 to 15.88

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.166	200.	.147	.07
*1-Chlorooctadecane	29.932	200.	.	.

DRO Area: 3765940

DRO Amount: 153.5266

TEH (Oil Range) Area: 2.507288E+07

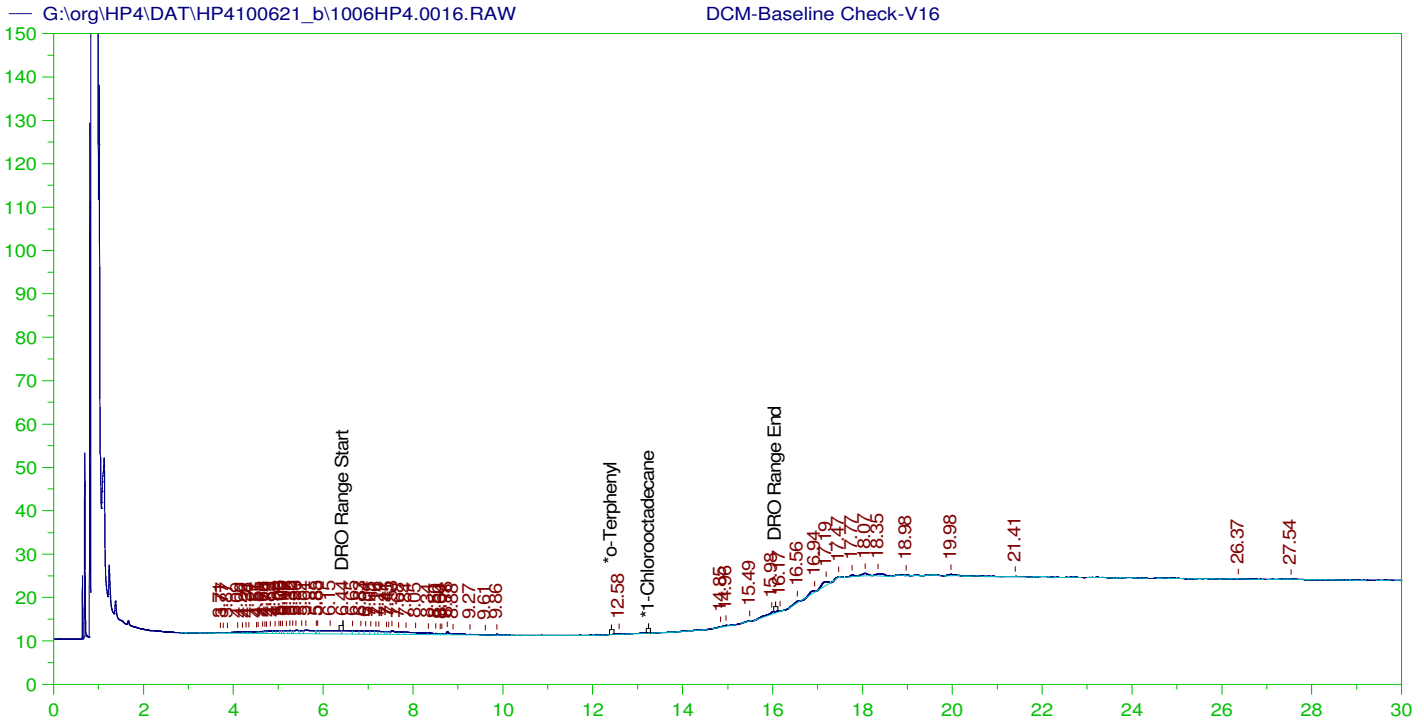
TEH (Oil Range) Amount: 1022.149

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0015.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	5000.	1022.15	20.44	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.166	200.	.147	.07	85-115
*1-Chlorooctadecane	29.932	200.	.	.	85-115

AMN 10/13/2021



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V16  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0016.RAW  
 Date & Time Acquired: 10/7/2021 2:33:20 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-MX-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO201204MX.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

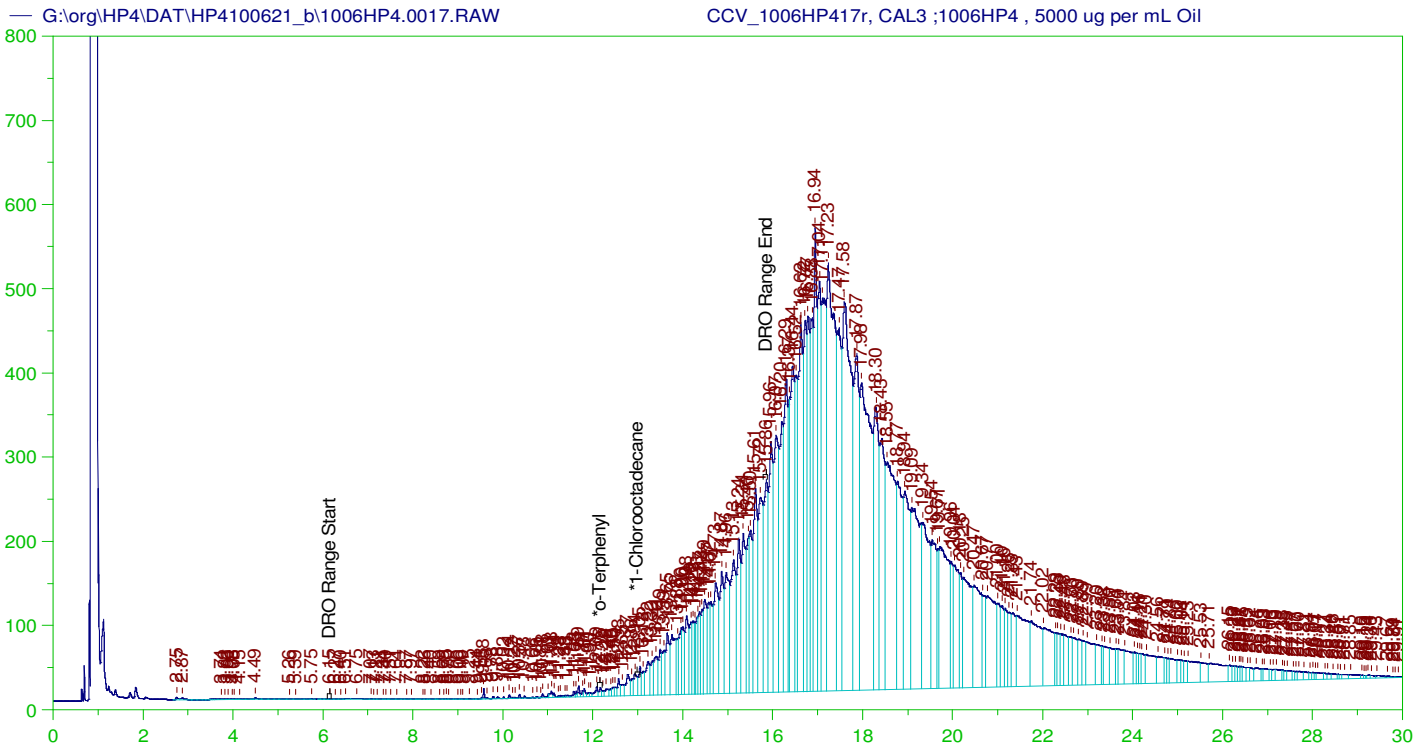
Mean RF for TEH: 26029.55

Rt range for Diesel Range Organics: 6.35 to 16.12

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

DRO Area:114216.7 DRO Amount: 4.387964  
 TEH Area:265335.9 TEH Amount: 10.19364





**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1006HP417r, CAL3 ;1006HP4 , 5000 ug per mL Oil  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0017.RAW  
 Date & Time Acquired: 10/7/2021 3:19:06 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-17-OIL-AA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_Oil\_210106AA.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 24529.56

Rt range for Diesel Range Organics: 6.09 to 15.88

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.165	200.	1.127	.56
*1-Chlorooctadecane	29.907	200.	.	-

DRO Area: 2.051403E+07

DRO Amount: 836.2982

TEH (Oil Range) Area: 1.215776E+08

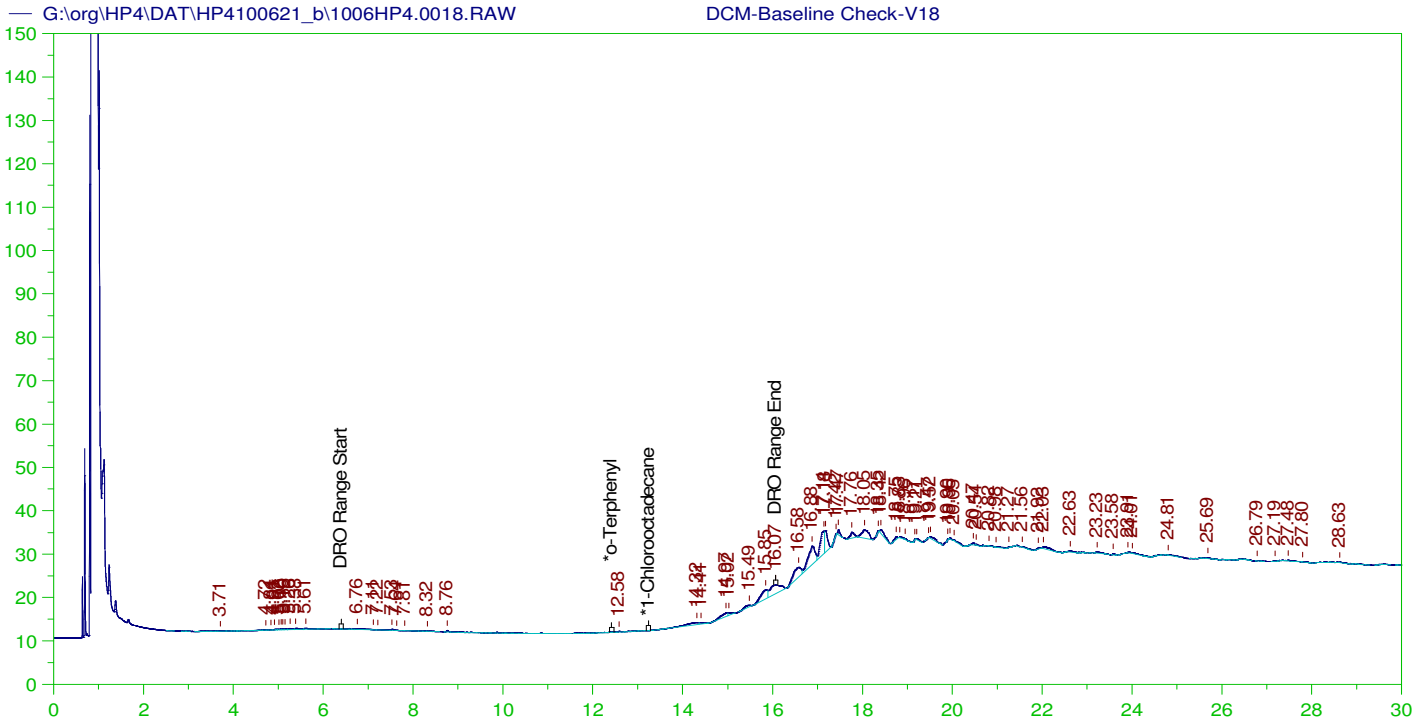
TEH (Oil Range) Amount: 4956.371

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0017.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	5000.	4956.37	99.13	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.165	200.	1.127	.56	85-115
*1-Chlorooctadecane	29.907	200.	.	.	85-115

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**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

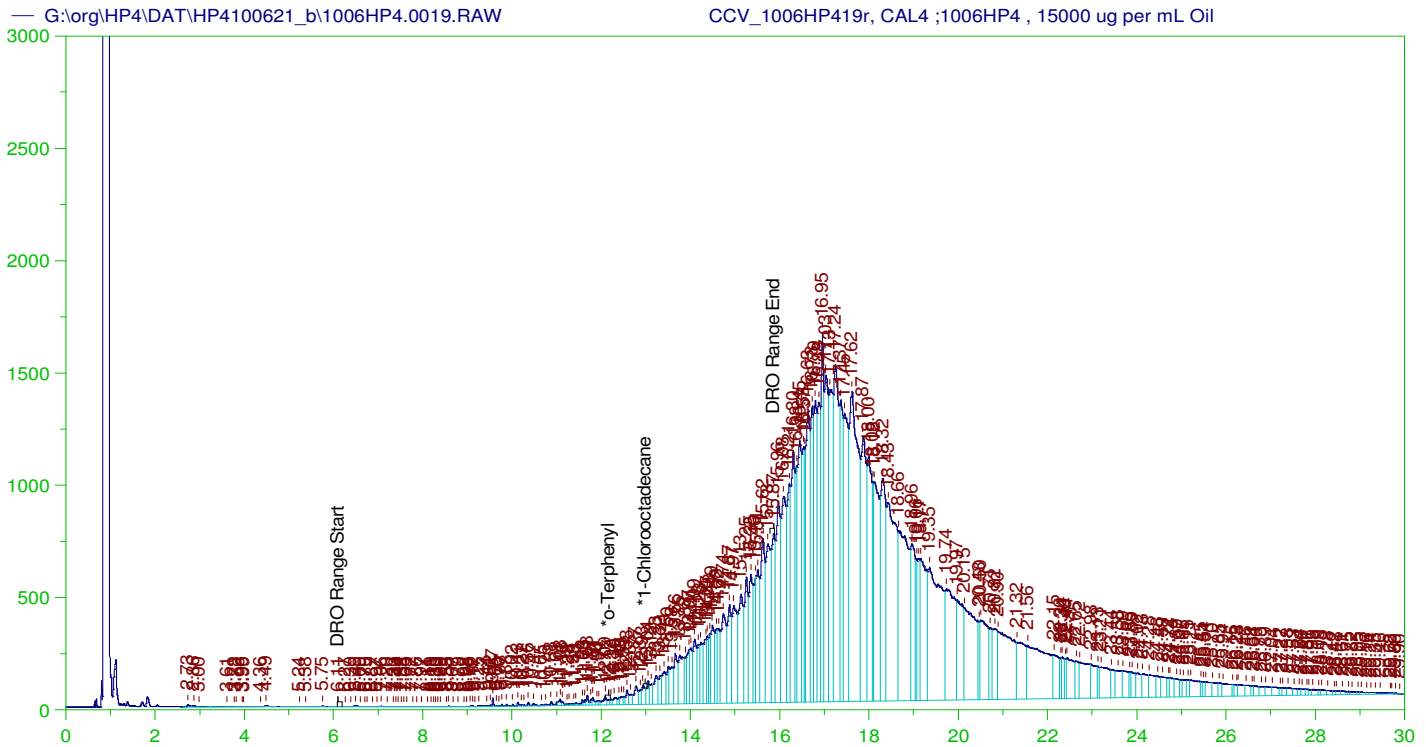
Sample Name: DCM-Baseline Check-V18  
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 Method File: G:\Org\HP4\methods\DR\_8015-MX-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO201204MX.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

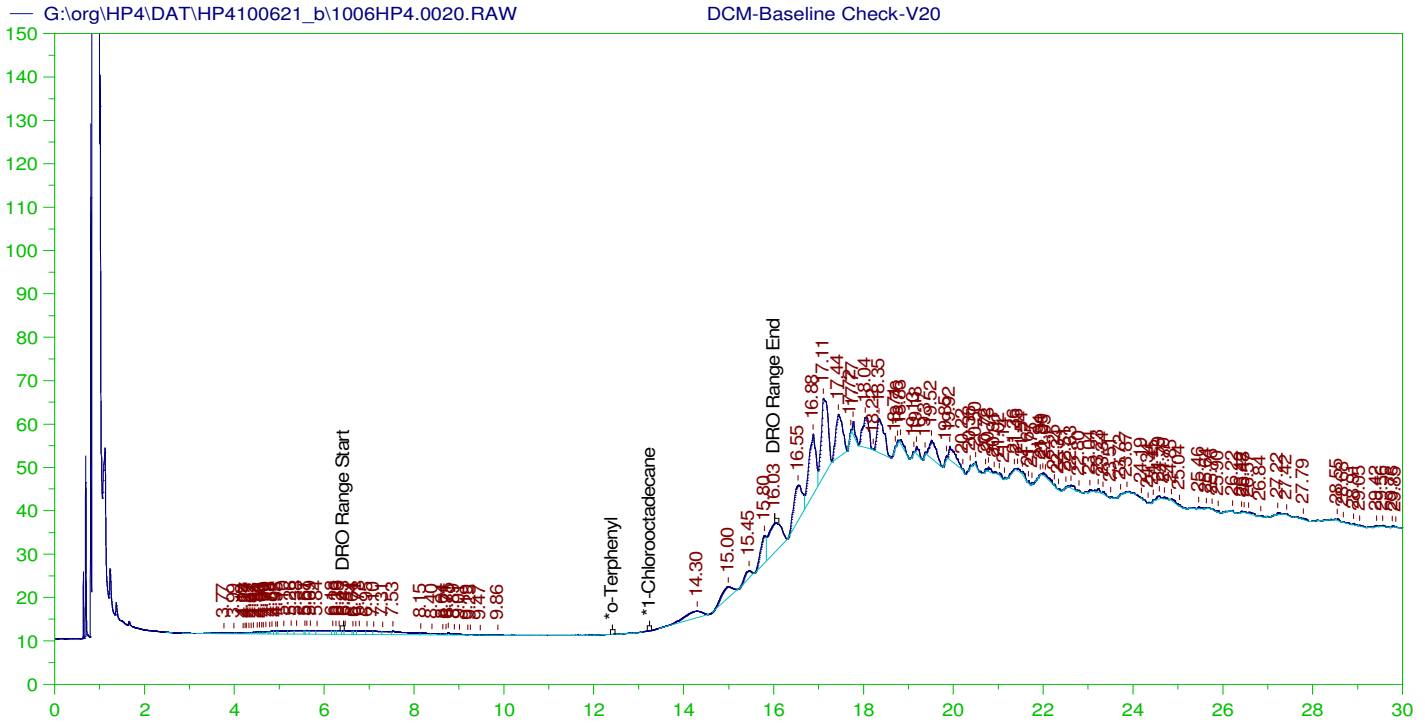
Mean RF for TEH: 26029.55

Rt range for Diesel Range Organics: 6.35 to 16.12

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.931	200.	.	-
*1-Chlorooctadecane	29.931	200.	.	-

DRO Area:108588.8 DRO Amount: 4.171752  
 TEH Area:364372 TEH Amount: 13.9984





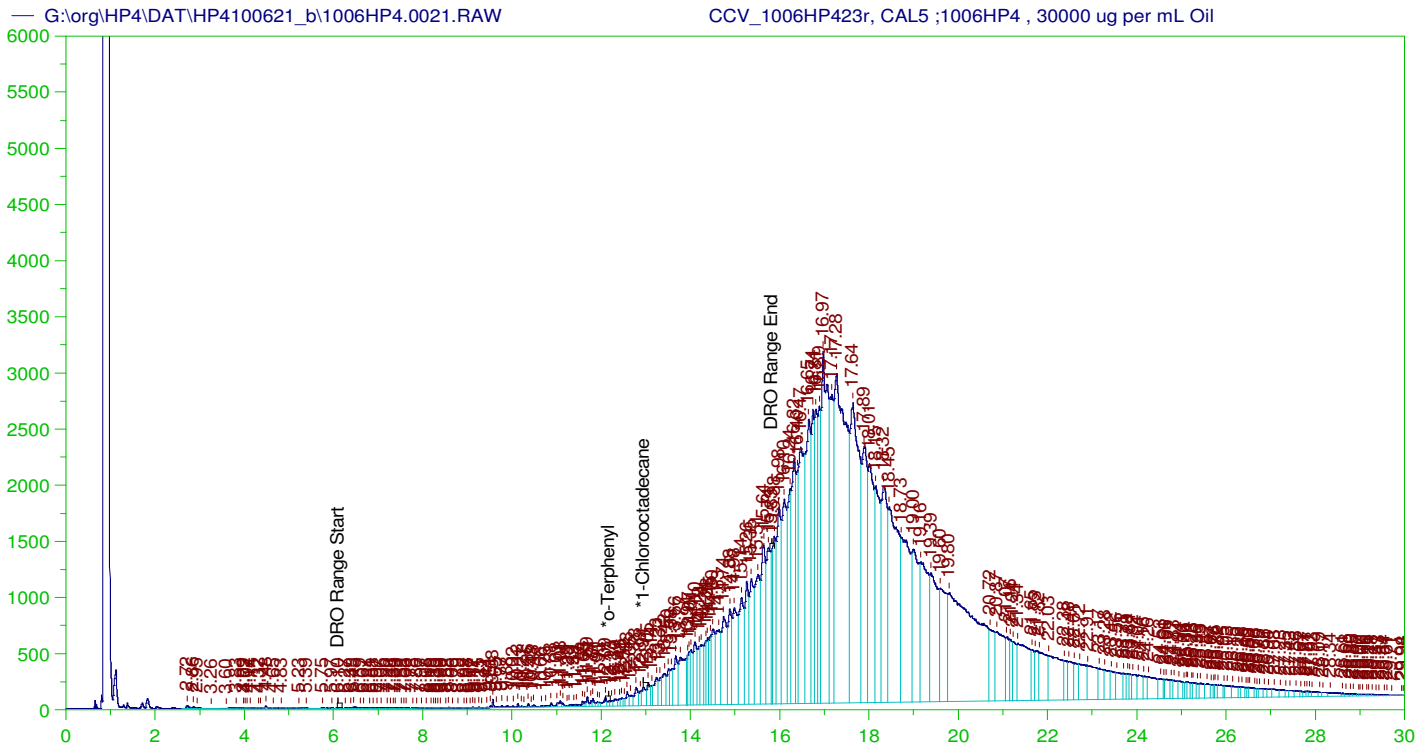
**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V20  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0020.RAW  
 Date & Time Acquired: 10/7/2021 5:35:48 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-MX-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO201204MX.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 26029.55  
 Rt range for Diesel Range Organics: 6.35 to 16.12

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.983	200.	.	-
*1-Chlorooctadecane	29.983	200.	.	-

DRO Area:396511 DRO Amount: 15.23311  
 TEH Area:1438866 TEH Amount: 55.27819



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1006HP423r, CAL5 ;1006HP4 , 30000 ug per mL Oil  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0021.RAW  
 Date & Time Acquired: 10/7/2021 6:21:29 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-21-OIL-AA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_Oil\_210106AA.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 24529.56  
 Rt range for Diesel Range Organics: 6.09 to 15.88

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.17	200.	5.119	2.56	-
*1-Chlorooctadecane	12.944	200.	32.459	16.23	-

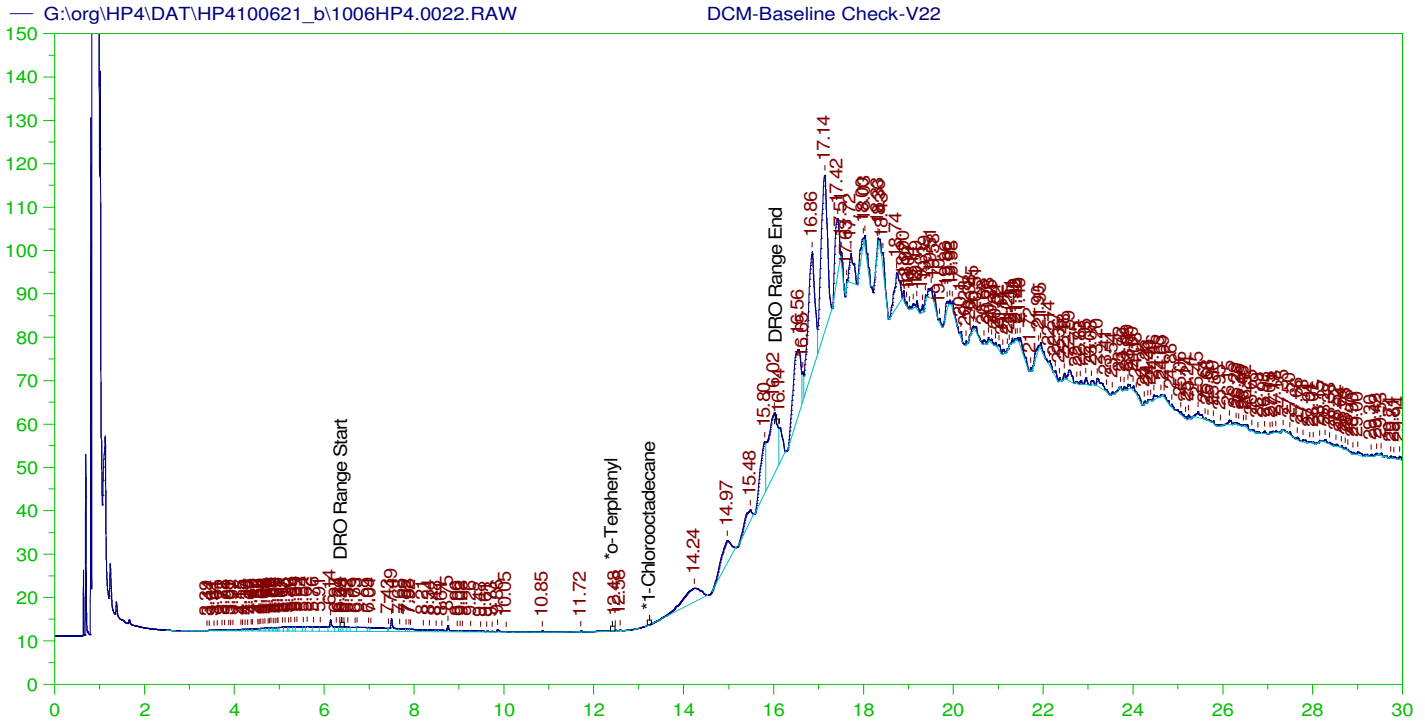
DRO Area: 1.18208E+08 DRO Amount: 4819.003  
 TEH (Oil Range) Area: 7.187084E+08 TEH (Oil Range) Amount: 29299.68

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0021.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	5000.	29299.68	585.99	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.17	200.	5.119	2.56	85-115
*1-Chlorooctadecane	12.944	200.	32.459	16.23	85-115

AMN 10/13/2021



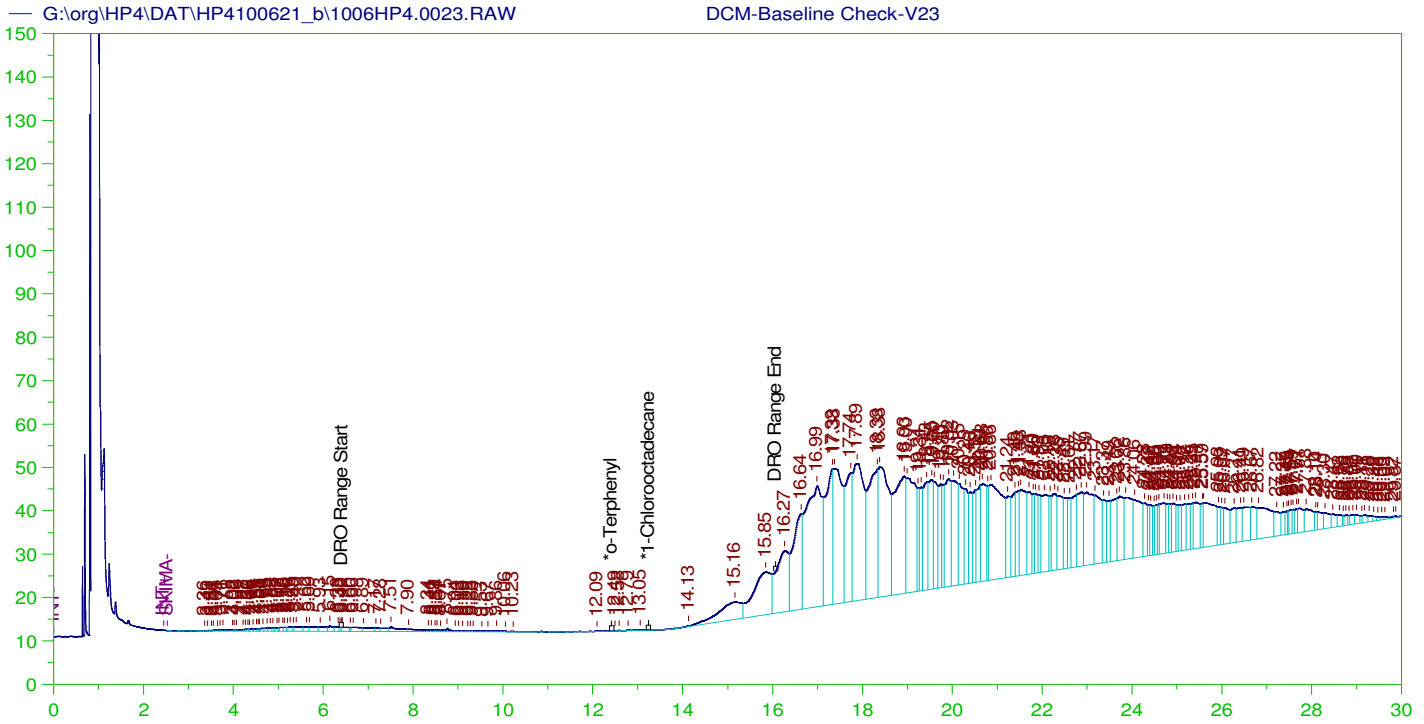
**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V22  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0022.RAW  
 Date & Time Acquired: 10/7/2021 7:06:39 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-MX-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO201204MX.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 26029.55  
 Rt range for Diesel Range Organics: 6.35 to 16.12

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

DRO Area: 659389.9 DRO Amount: 25.33236  
 TEH Area: 2246216 TEH Amount: 86.29485



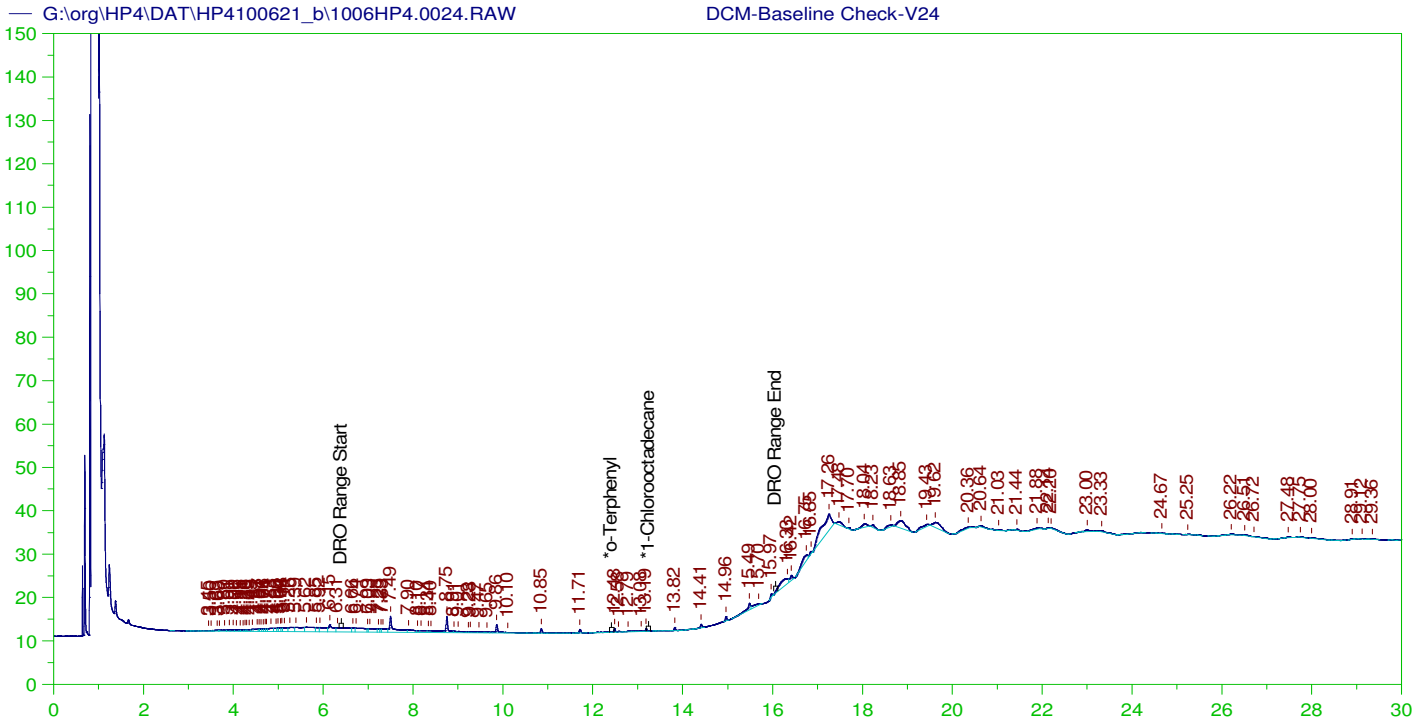
**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V23  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0023.RAW  
 Date & Time Acquired: 10/7/2021 7:51:25 AM  
 Method File: G:\Org\HP4\methods\D3\_8015-MX-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO201204MX.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 26029.55  
 Rt range for Diesel Range Organics: 6.35 to 16.12

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

DRO Area: 556661.1 DRO Amount: 21.38574  
 TEH Area: 1.320998E+07 TEH Amount: 507.4994



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

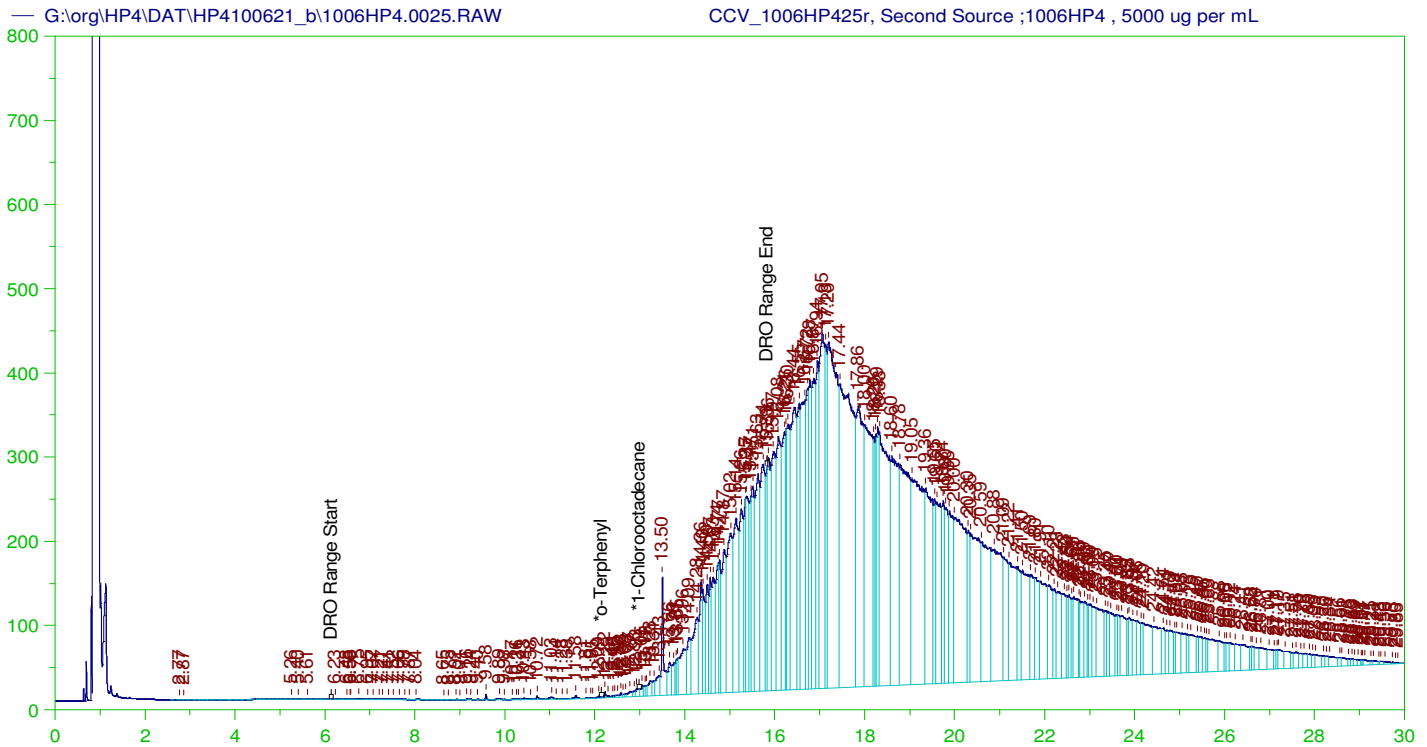
Sample Name: DCM-Baseline Check-V24  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0024.RAW  
 Date & Time Acquired: 10/7/2021 8:36:35 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-MX-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO201204MX.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 26029.55  
 Rt range for Diesel Range Organics: 6.35 to 16.12

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.993	200.	.	-
*1-Chlorooctadecane	29.993	200.	.	-

DRO Area:143991.1 DRO Amount: 5.531833  
 TEH Area:496648.4 TEH Amount: 19.08018





**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1006HP425r, Second Source ;1006HP4 , 5000 ug per mL  
 Raw File: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0025.RAW  
 Date & Time Acquired: 10/7/2021 9:21:40 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-17-OIL-AA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_Oil\_210106AA.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 24529.56

Rt range for Diesel Range Organics: 6.09 to 15.88

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.852	200.	.	-
*1-Chlorooctadecane	29.852	200.	.	-

DRO Area: 2.19787E+07

DRO Amount: 896.0085

TEH (Oil Range) Area: 1.322226E+08

TEH (Oil Range) Amount: 5390.338

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4100621\_b\1006HP4.0025.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	5000.	5390.34	107.81	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	29.852	200.	.	.	85-115
*1-Chlorooctadecane	29.852	200.	.	.	85-115

AMN 10/13/2021

Write Sequence	Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manual Integrations
	G:\org\HP4\DAT\HP4100621_b1006HP4.11r	CCV_1006HP411r, CSCAN ;1006HP4 , DRO210708A	G:\org\HP4\Methods\CSC211006.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4100621_b1006HP4.12r	DCM-Baseline Check-V12	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4100621_b1006HP4.13r	CCV_1006HP413r, CAL1 ;1006HP4 , 150 ug per mL Oil (10 uL of Cal4 + 990 uL DCM)(14354)	G:\Org\HP4\methods\DR_8015-13-OIL-AA-L%.met	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline. Set Baseline Now at 23.18
	G:\org\HP4\DAT\HP4100621_b1006HP4.14r	DCM-Baseline Check-V14	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4100621_b1006HP4.15r	CCV_1006HP415r, CAL2 ;1006HP4 , 1000 ug per mL Oil (200 uL of Cal 3 +800 uL DCM)(14354)	G:\Org\HP4\methods\DR_8015-15-OIL-AA-L%.met	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline. Set Baseline Now at 28.22
	G:\org\HP4\DAT\HP4100621_b1006HP4.16r	DCM-Baseline Check-V16	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4100621_b1006HP4.17r	CCV_1006HP417r, CAL3 ;1006HP4 , 5000 ug per mL Oil (200 uL of Cal 4 + 400 uL DCM)(14354)	G:\Org\HP4\methods\DR_8015-17-OIL-AA-L%.met	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline.
	G:\org\HP4\DAT\HP4100621_b1006HP4.18r	DCM-Baseline Check-V18	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4100621_b1006HP4.19r	CCV_1006HP419r, CAL4 ;1006HP4 , 15000 ug per mL Oil (200 uL of CAL5 + 200 uL DCM)(14354)	G:\Org\HP4\methods\DR_8015-19-OIL-AA-L%.met	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline.
	G:\org\HP4\DAT\HP4100621_b1006HP4.20r	DCM-Baseline Check-V20	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4100621_b1006HP4.21r	CCV_1006HP423r, CAL5 ;1006HP4 , 30000 ug per mL Oil (600 uL of DRO180918C + 400 uL of DCM)(14354)	G:\Org\HP4\methods\DR_8015-21-OIL-AA-L%.met	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline.
	G:\org\HP4\DAT\HP4100621_b1006HP4.22r	DCM-Baseline Check-V22	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4100621_b1006HP4.23r	DCM-Baseline Check-V23	G:\Org\HP4\methods\D3_8015-MX-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4100621_b1006HP4.24r	DCM-Baseline Check-V24	G:\Org\HP4\methods\DR_8015-MX-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4100621_b1006HP4.25r	CCV_1006HP425r, Second Source ;1006HP4 , 5000 ug per mL Oil (100 uL of DRO210902A + 900 uL of DCM)	G:\Org\HP4\methods\DR_8015-17-OIL-AA-L%.met	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline.

*Ann Nebel*

Digitally signed by  
Ann Nebel  
Date: 2022.01.17 15:08:07 -07:00

# Energy Laboratories Inc

# ANALYTICAL RUN Summary

02-Nov-21

Run ID GCFID-HP4-B\_211101A

<b>Run Start Date:</b> 11/1/2021
<b>Analyst:</b> Ann Nebel
<b>Ical:</b>
<b>Column ID:</b>
<b>Comments:</b> ICAL for SW8015C_DRO211102OA

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					DIESEL-CA	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					SURR-CAL	9/30/2024

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist						
14818927	CCV_1101HP41	HC-8015-DRO-	CAL1		11/1/2021 8:13:4	1	R369598		0	0							
<b>Analyte</b>		<b>T</b>	<b>Units</b>	<b>RAW</b>	<b>Final</b>	<b>Text</b>	<b>Spike</b>	<b>SPKref</b>	<b>RPDref</b>	<b>MDL</b>	<b>PQL</b>	<b>UQL</b>	<b>%REC</b>	<b>LOW</b>	<b>HIGH</b>	<b>%RPD</b>	<b>Q</b>
o-Terphenyl		S	mg/L	0.00195173		0.002	0	0	0.000531	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						
14818928	CCV_1101HP41	HC-8015-DRO-	CAL2		11/1/2021 9:04:4	1	R369598		0	0							
<b>Analyte</b>		<b>T</b>	<b>Units</b>	<b>RAW</b>	<b>Final</b>	<b>Text</b>	<b>Spike</b>	<b>SPKref</b>	<b>RPDref</b>	<b>MDL</b>	<b>PQL</b>	<b>UQL</b>	<b>%REC</b>	<b>LOW</b>	<b>HIGH</b>	<b>%RPD</b>	<b>Q</b>
o-Terphenyl		S	mg/L	0.04894254		0.05	0	0	0.000531	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						
14818929	CCV_1101HP41	HC-8015-DRO-	CAL3		11/1/2021 9:55:1	1	R369598		0	0							
<b>Analyte</b>		<b>T</b>	<b>Units</b>	<b>RAW</b>	<b>Final</b>	<b>Text</b>	<b>Spike</b>	<b>SPKref</b>	<b>RPDref</b>	<b>MDL</b>	<b>PQL</b>	<b>UQL</b>	<b>%REC</b>	<b>LOW</b>	<b>HIGH</b>	<b>%RPD</b>	<b>Q</b>
o-Terphenyl		S	mg/L	0.2012884		0.2	0	0	0.000531	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					
14818930	CCV_1101HP41	HC-8015-DRO-	CAL4		11/1/2021 10:45:	1	R369598		0	0						
Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl	S	mg/L		0.5057291		0.5	0	0	0.000531	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					
14818931	CCV_1101HP41	HC-8015-DRO-	CAL5		11/1/2021 11:36:	1	R369598		0	0						
Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl	S	mg/L		1.027384		1	0	0	0.000531	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					
14818932	CCV_1101HP41	HC-8015-DRO-	CAL1		11/2/2021 1:16:4	1	R369598		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		0.1539031		0.15	0	0	0.0782	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					
14818933	CCV_1101HP41	HC-8015-DRO-	CAL2		11/2/2021 2:07:1	1	R369598		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		3.723079		3.75	0	0	0.0782	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					
14818934	CCV_1101HP41	HC-8015-DRO-	CAL3		11/2/2021 2:57:2	1	R369598		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		14.98193		15	0	0	0.0782	0.3	50	100%	80	120	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14818935	CCV_1101HP41	HC-8015-DRO-	CAL4		11/2/2021 3:47:4	1	R369598		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		36.3038		37.5	0	0	0.0782	0.3	50	97%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14818936	CCV_1101HP42	HC-8015-DRO-	CAL5		11/2/2021 4:38:0	1	R369598		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		50.71311		50	0	0	0.0782	0.3	50	101%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14818937	CCV_1101HP42	HC-8015-DRO-	ICV		11/2/2021 6:18:3	1	R369598		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		14.96337		15	0	0	0.0782	0.3	50	100%	80	120	0%	

Write Sequence	Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
	\\org\HP4\DAT\HP4110121_b\1101HP4.07r	DCM-Baseline Check-V07	G:\Org\HP4\methods\DR_8015-OA-LEXP.met					
	\\org\HP4\DAT\HP4110121_b\1101HP4.08r	CCV_1101HP408r, DRO ;1101HP4 , DRO211025A	G:\Org\HP4\methods\DC_8015-OA-L0.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.09r	DCM-Baseline Check-V09	G:\Org\HP4\methods\DR_8015-OA-LEXP.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.10r	CCV_1101HP410r, CAL1 ;1101HP4 , 2 ug per mL OTP (10 uL of Cal3 + 990 uL DCM(14408))	G:\Org\HP4\methods\DS_8015-OA-L#.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.11r	CCV_1101HP411r, CAL2 ;1101HP4 , 50 ug per mL OTP (100 uL Cal4 + 900 uL of DCM(14408))	G:\Org\HP4\methods\DS_8015-OA-L#.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.12r	CCV_1101HP412r, CAL3 ;1101HP4 , 200 ug per mL OTP (100uL of Cal5 + 400 uL DCM(14408))	G:\Org\HP4\methods\DS_8015-OA-L#.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.13r	CCV_1101HP413r, CAL4 ;1101HP4 , 500 ug per mL OTP (250uL of Cal5 + 250 uL DCM(14408))	G:\Org\HP4\methods\DS_8015-OA-L#.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.14r	CCV_1101HP414r, CAL5 ;1101HP4 , 1000 ug per mL OTP (250 uL 4000 ug/mL OTP DRO211101A + 750 DCM(14408))	G:\Org\HP4\methods\DS_8015-OA-L#.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.15r	DCM-Baseline Check-V15	G:\Org\HP4\methods\DR_8015-OA-LEXP.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.16r	CCV_1101HP416r, CAL1 ;1101HP4 , 150 ug per mL Diesel (10 uL of Cal3 + 990 uL DCM(14408))	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.17r	CCV_1101HP417r, CAL2 ;1101HP4 , 3750 ug per mL Diesel (100 uL Cal4 + 900 uL of DCM(14408))	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.18r	CCV_1101HP418r, CAL3 ;1101HP4 , 15000 ug per mL Diesel (300 uL of DRO211012A + 700 uL DCM(14408))	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.19r	CCV_1101HP419r, CAL4 ;1101HP4 , 37500ug per mL Diesel (750 uL of DRO211012A + 250 uL DCM(14408))	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.20r	CCV_1101HP420r, CAL5 ;1101HP4 , 50000 ug per mL Diesel (200 uL of DRO211012A)	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.21r	DCM-Baseline Check-V21	G:\Org\HP4\methods\DR_8015-OA-LEXP.met	1	1	1	1	0
	\\org\HP4\DAT\HP4110121_b\1101HP4.22r	CCV_1101HP422r, Second Source ;1101HP4 , 15000 ug per mL (100uL of DRO211012B + 900uL DCM(14408))	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0

File Name: G:\Org\HP4\Cals\SW8015C\_DRO211102OA.CAL

Version: 1

Creator: AMN

Description: 8015C-DRO. New ICal Per 1102HP4 (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

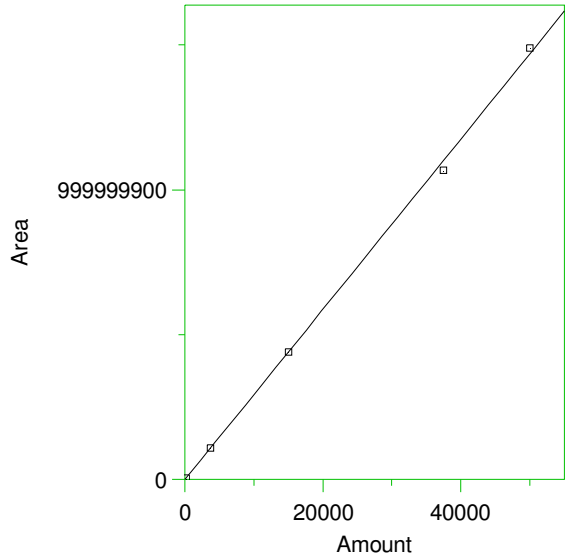
No default component

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: 6.79 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

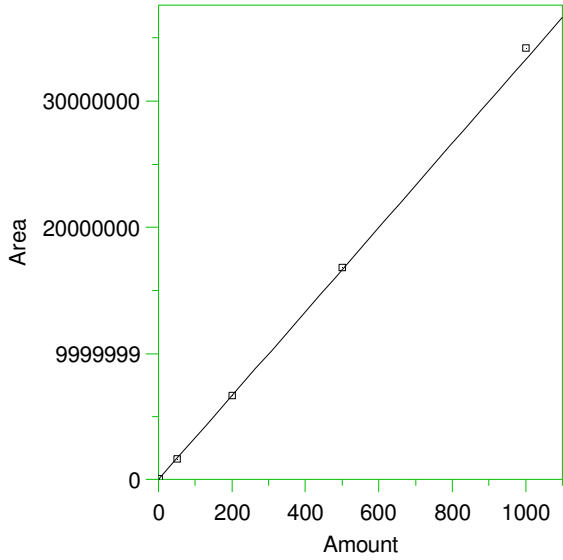
$Y = 29373.28 X + 0$

Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.9989712  
 Average error: 1.611%  
 Average CF: 29373.28  
 RSD: 2.208%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	150	4520637	30137.58	2.602	Manual	11/2/2021 7:52:13 AM
2	3750	1.09359E+08	29162.4	-0.718	Manual	11/2/2021 7:52:33 AM
3	15000	4.400683E+08	29337.89	-0.120	Manual	11/2/2021 7:52:42 AM
4	37500	1.066362E+09	28436.32	-3.190	Manual	11/2/2021 7:52:54 AM
5	50000	1.48961E+09	29792.2	1.426	Manual	11/2/2021 7:53:06 AM



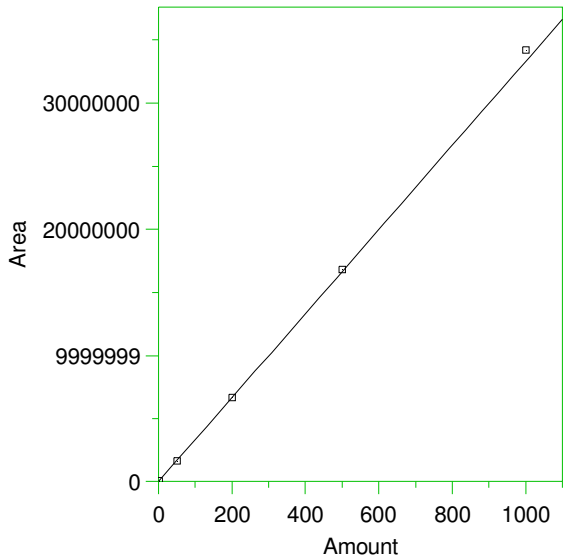
2 \*o-Terphenyl



Expected retention time: 12.87 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 = 33319.7 X + 0  
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.998904  
 Average error: 1.811%  
 Average CF: 33319.7  
 RSD: 2.209%

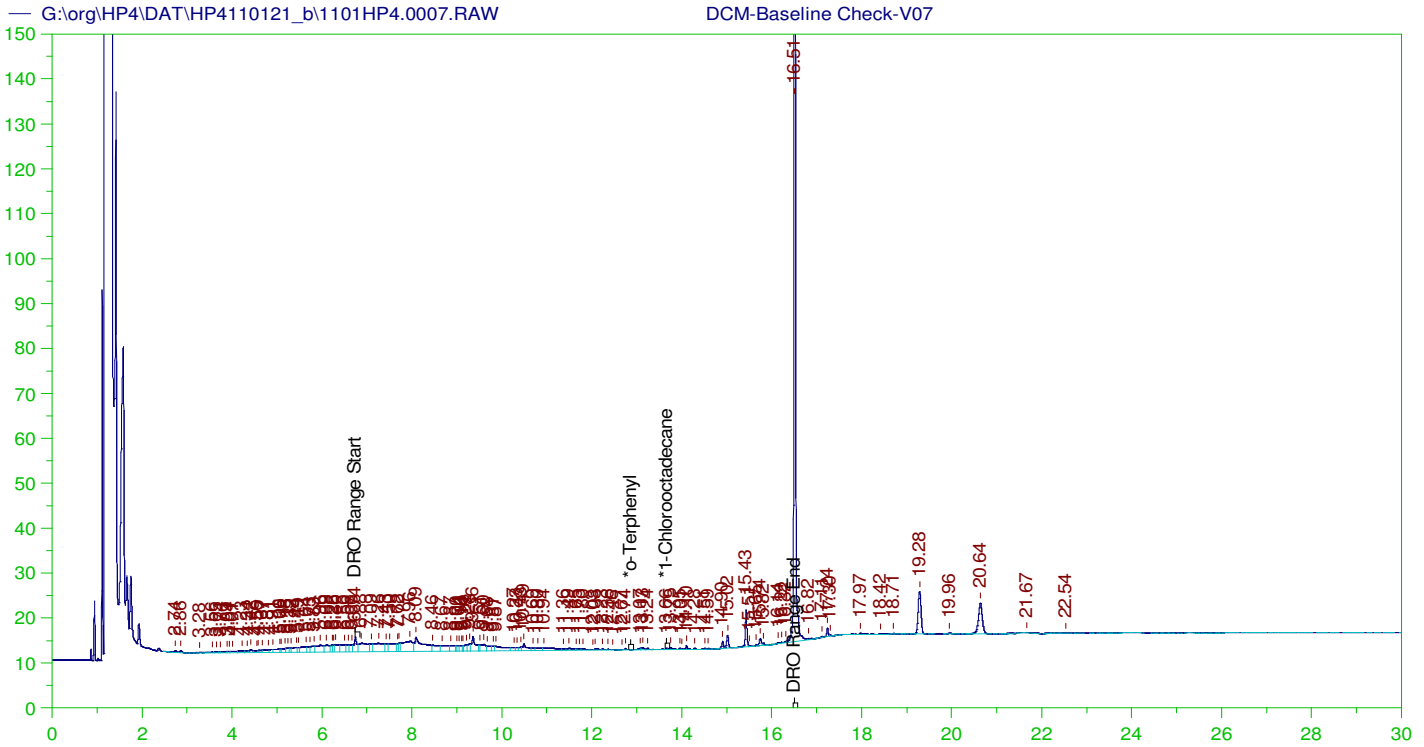
Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2	65030.99	32515.49	-2.414	G:\Org\HP4\DAT\HP4110121_b\1101HP4.0010.BND	11/2/2021 7:51:41 AM
2	50	1630751	32615.02	-2.115	G:\Org\HP4\DAT\HP4110121_b\1101HP4.0011.BND	11/2/2021 7:51:35 AM
3	200	6706871	33534.36	0.644	G:\Org\HP4\DAT\HP4110121_b\1101HP4.0012.BND	11/2/2021 7:51:30 AM
4	500	1.685074E+07	33701.48	1.146	G:\Org\HP4\DAT\HP4110121_b\1101HP4.0013.BND	11/2/2021 7:50:16 AM
5	1000	3.423214E+07	34232.14	2.738	G:\Org\HP4\DAT\HP4110121_b\1101HP4.0014.BND	11/2/2021 7:50:10 AM

3 \*1-Chlorooctadecane



Expected retention time: 13.68 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  
 $Y = 33319.7 X + 0$   
 Average CF fit with equal weighting, forced to origin  
 Coefficient of determination: 0.998904  
 Average error: 1.811%  
 Average CF: 33319.7  
 RSD: 2.209%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	2	65030.99	32515.49	-2.414	Manual	11/2/2021 7:51:46 AM
2	50	1630751	32615.02	-2.115	Manual	11/2/2021 7:51:47 AM
3	200	6706871	33534.36	0.644	Manual	11/2/2021 7:51:49 AM
4	500	1.685074E+07	33701.48	1.146	Manual	11/2/2021 7:51:51 AM
5	1000	3.423214E+07	34232.14	2.738	Manual	11/2/2021 7:51:53 AM



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V07  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0007.RAW  
 Date & Time Acquired: 11/1/2021 5:37:56 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-OA-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

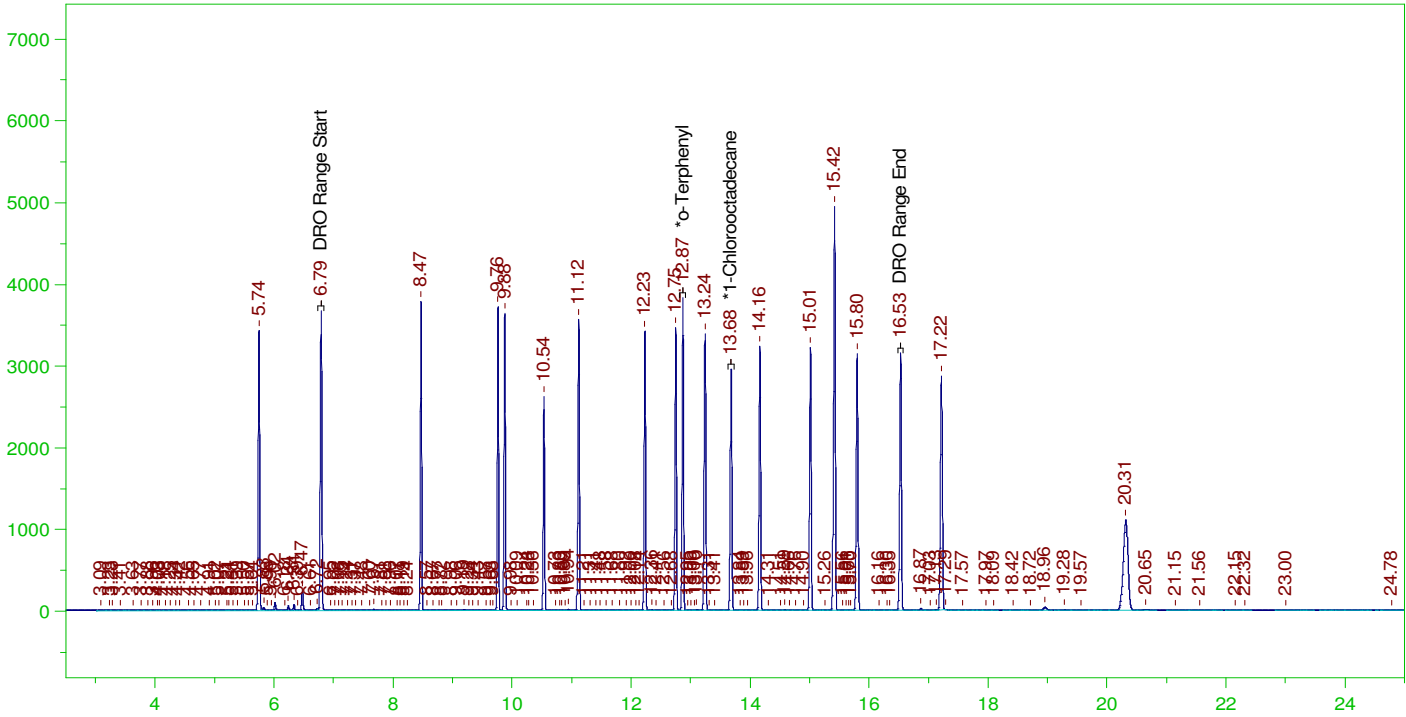
Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.74 to 16.58

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.966	200.	.	-
*1-Chlorooctadecane	13.659	200.	.028	.01

DRO Area:1037666 DRO Amount: 35.32688  
 TEH Area:1315488 TEH Amount: 44.78518

G:\org\HP4\DAT\HP4110121\_b\1101HP4.0008.RAW

CCV\_1101HP408r, DRO ;1101HP4 , DRO211025A



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP408r, DRO ;1101HP4 , DRO211025A  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0008.RAW  
 Date & Time Acquired: 11/1/2021 6:29:58 PM  
 Method File: G:\Org\HP4\methods\DC\_8015-OA-L0.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

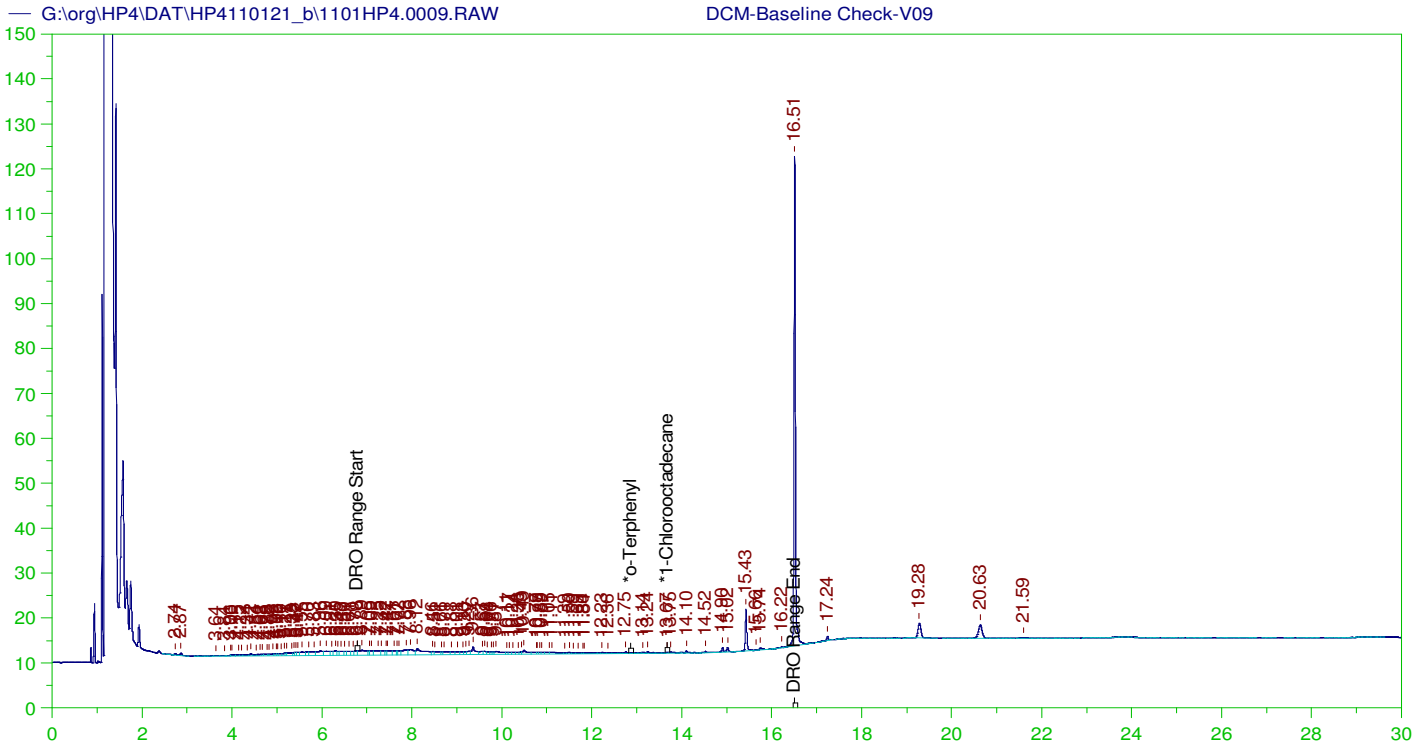
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.871	200.	197.197	98.6
*1-Chlorooctadecane	13.68	200.	162.692	81.35

DRO Area: 8.91221E+07 DRO Amount: 3034.122  
 TEH Area: 1.09099E+08 TEH Amount: 3714.228

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0008.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	3714.23	24.76	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.871	200.	197.197	98.6	85-115
*1-Chlorooctadecane	13.68	200.	162.692	81.35	85-115



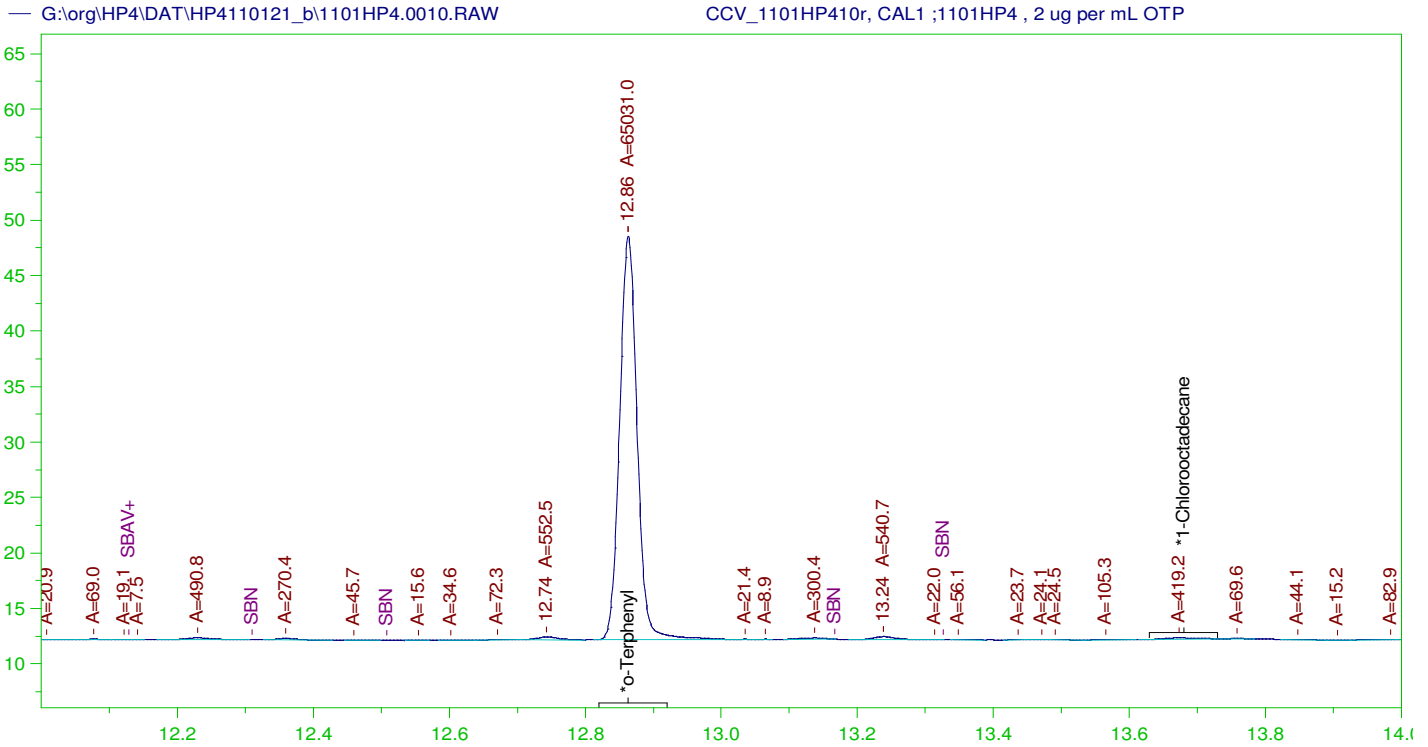
**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V09  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0009.RAW  
 Date & Time Acquired: 11/1/2021 7:21:52 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-OA-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.74 to 16.58

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.549	200.	.	-
*1-Chlorooctadecane	13.667	200.	.027	.01 -

DRO Area: 494658.3 DRO Amount: 16.84042  
 TEH Area: 640048.8 TEH Amount: 21.79017



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP410r, CAL1 ;1101HP4 , 2 ug per mL OTP  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0010.RAW  
 Date & Time Acquired: 11/1/2021 8:13:42 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-OA-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

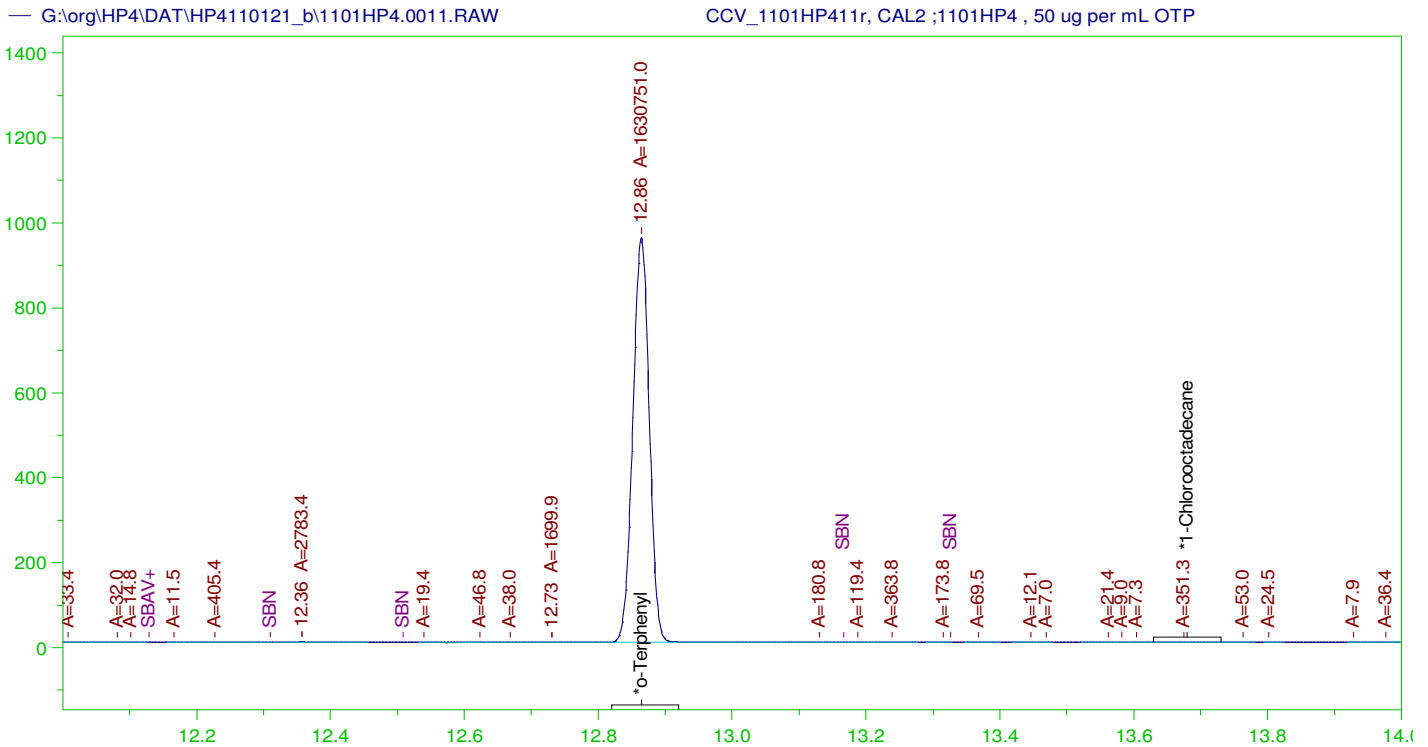
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.863	200.	1.952	.98
*1-Chlorooctadecane	29.971	200.	.	.

DRO Area:246716.6 DRO Amount: 8.399357  
 TEH Area:346478.1 TEH Amount: 11.79569

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0010.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.863	200.	1.952	.98	85-115
*1-Chlorooctadecane	29.971	200.	.	.	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP411r, CAL2 ;1101HP4 , 50 ug per mL OTP  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0011.RAW  
 Date & Time Acquired: 11/1/2021 9:04:46 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-OA-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

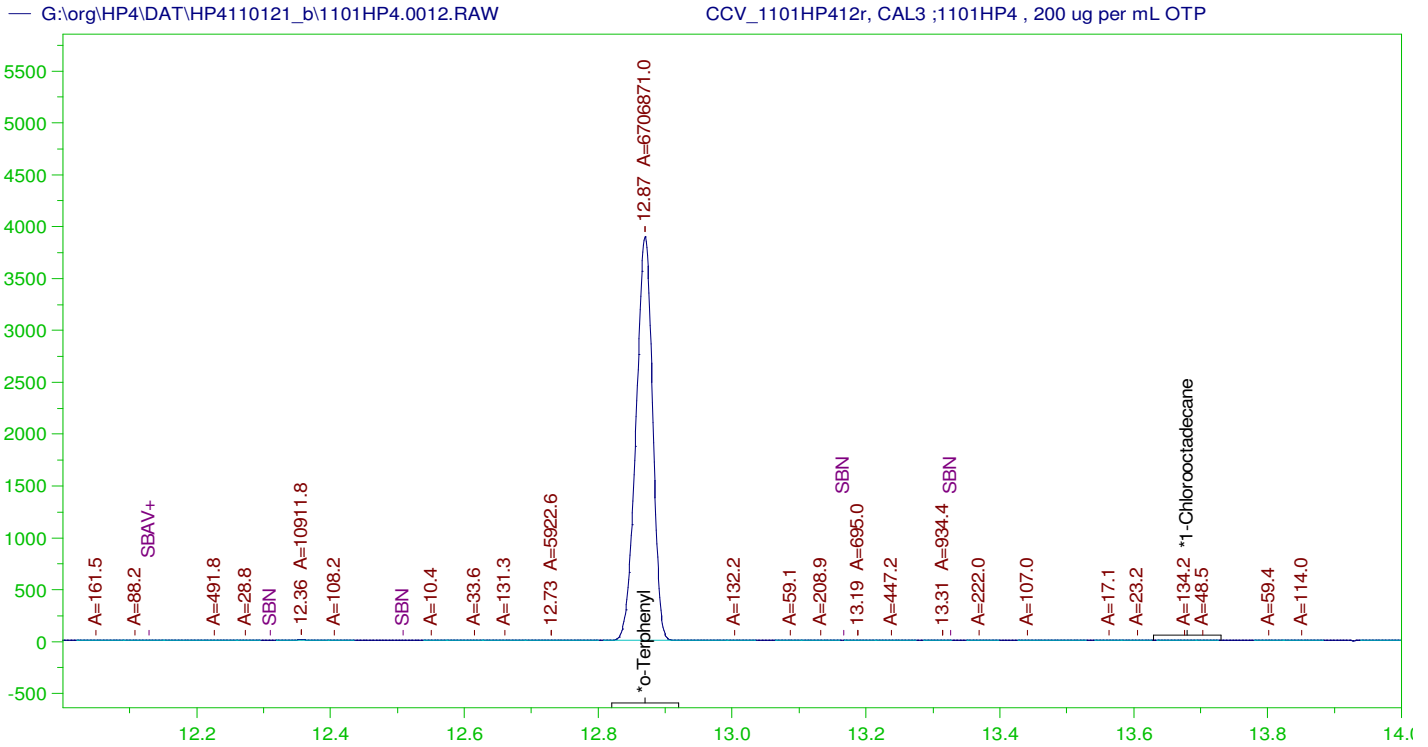
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.864	200.	48.943	24.47
*1-Chlorooctadecane	29.962	200.	.	.

DRO Area:198520.5 DRO Amount: 6.75854  
 TEH Area:236761.3 TEH Amount: 8.060432

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0011.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.864	200.	48.943	24.47	85-115
*1-Chlorooctadecane	29.962	200.	.	.	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP412r, CAL3 ;1101HP4 , 200 ug per mL OTP  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0012.RAW  
 Date & Time Acquired: 11/1/2021 9:55:15 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-OA-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.87	200.	201.289	100.64
*1-Chlorooctadecane	29.944	200.	.	-

DRO Area:204842.1 DRO Amount: 6.973756  
 TEH Area:260037.3 TEH Amount: 8.852851

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0012.RAW

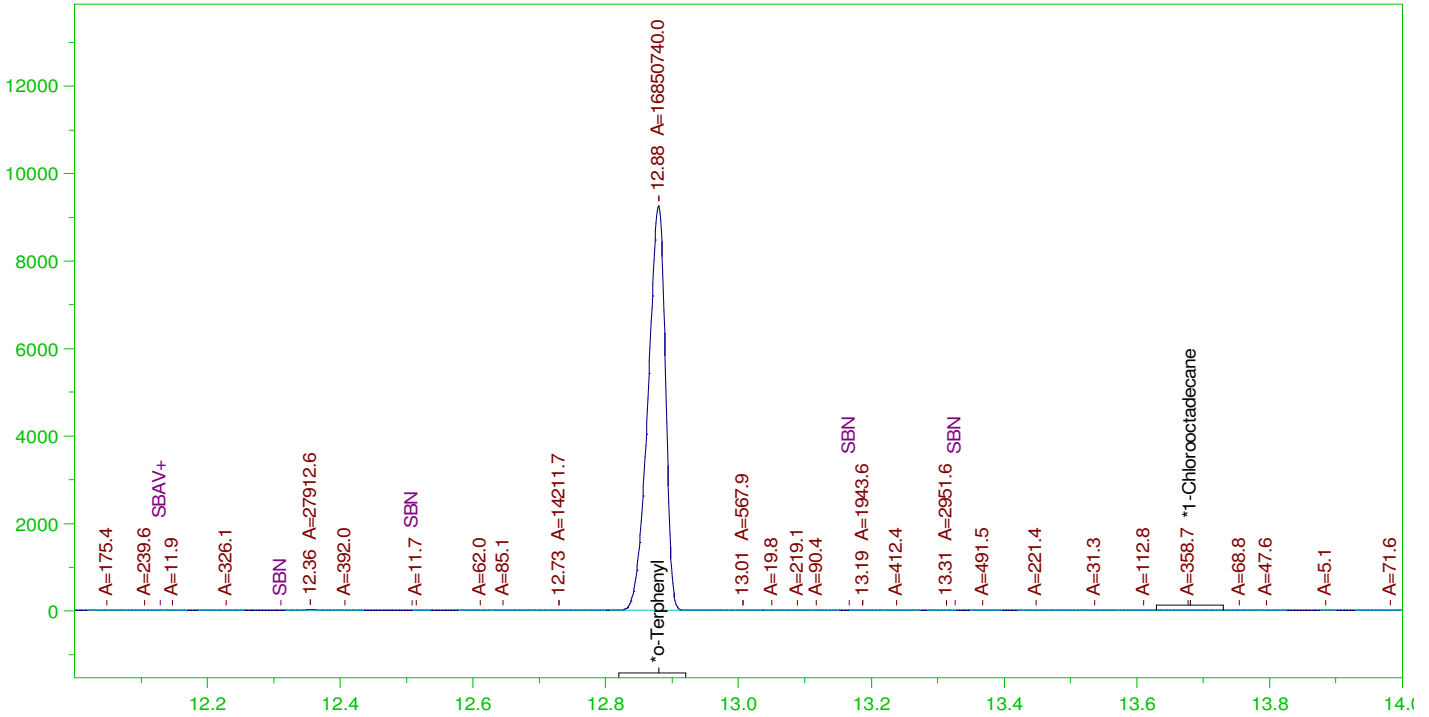
COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	.	.	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.87	200.	201.289	100.64	85-115
*1-Chlorooctadecane	29.944	200.	.	.	85-115



G:\org\HP4\DAT\HP4110121\_b\1101HP4.0013.RAW

CCV\_1101HP413r, CAL4 ;1101HP4 , 500 ug per mL OTP



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP413r, CAL4 ;1101HP4 , 500 ug per mL OTP  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0013.RAW  
 Date & Time Acquired: 11/1/2021 10:45:33 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-OA-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

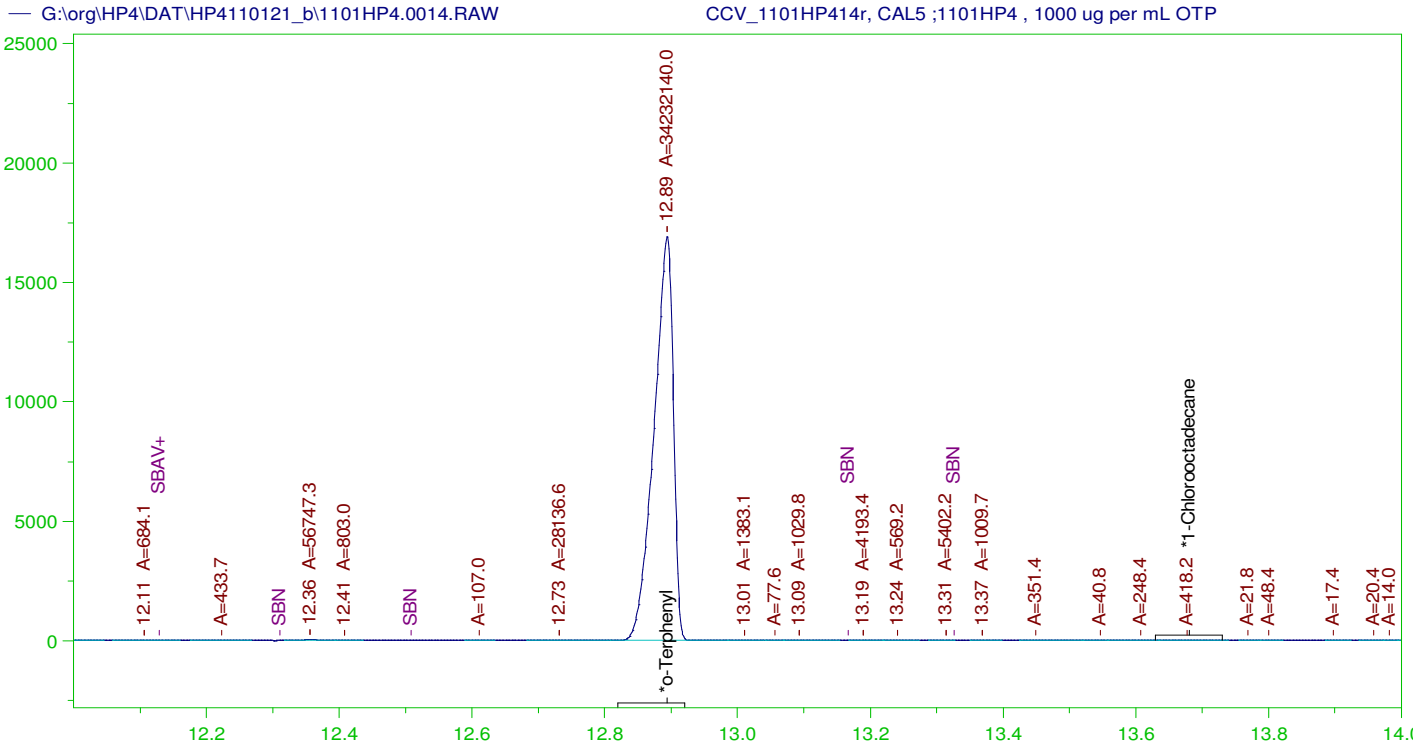
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.879	200.	505.729	252.86
*1-Chlorooctadecane	29.986	200.	.	-

DRO Area:248934.2 DRO Amount: 8.474853  
 TEH Area:316561.3 TEH Amount: 10.77719

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0013.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.879	200.	505.729	252.86	85-115
*1-Chlorooctadecane	29.986	200.	.	.	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP414r, CAL5 ;1101HP4 , 1000 ug per mL OTP  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0014.RAW  
 Date & Time Acquired: 11/1/2021 11:36:02 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-OA-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

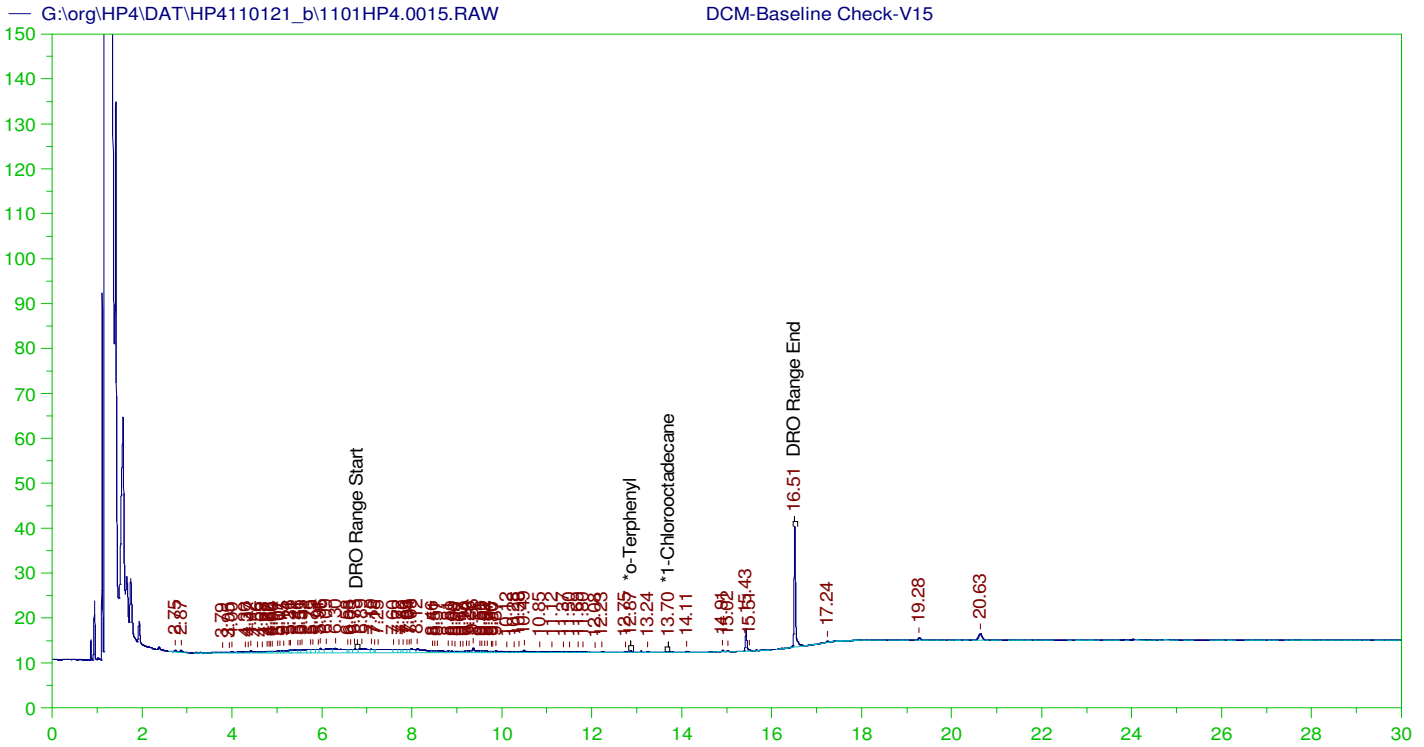
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.894	200.	1027.384	513.69
*1-Chlorooctadecane	29.945	200.	.	-

DRO Area:283897.7 DRO Amount: 9.66517  
 TEH Area:329575.5 TEH Amount: 11.22025

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0014.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.894	200.	1027.384	513.69	85-115
*1-Chlorooctadecane	29.945	200.	.	.	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V15  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0015.RAW  
 Date & Time Acquired: 11/2/2021 12:26:19 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-OA-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

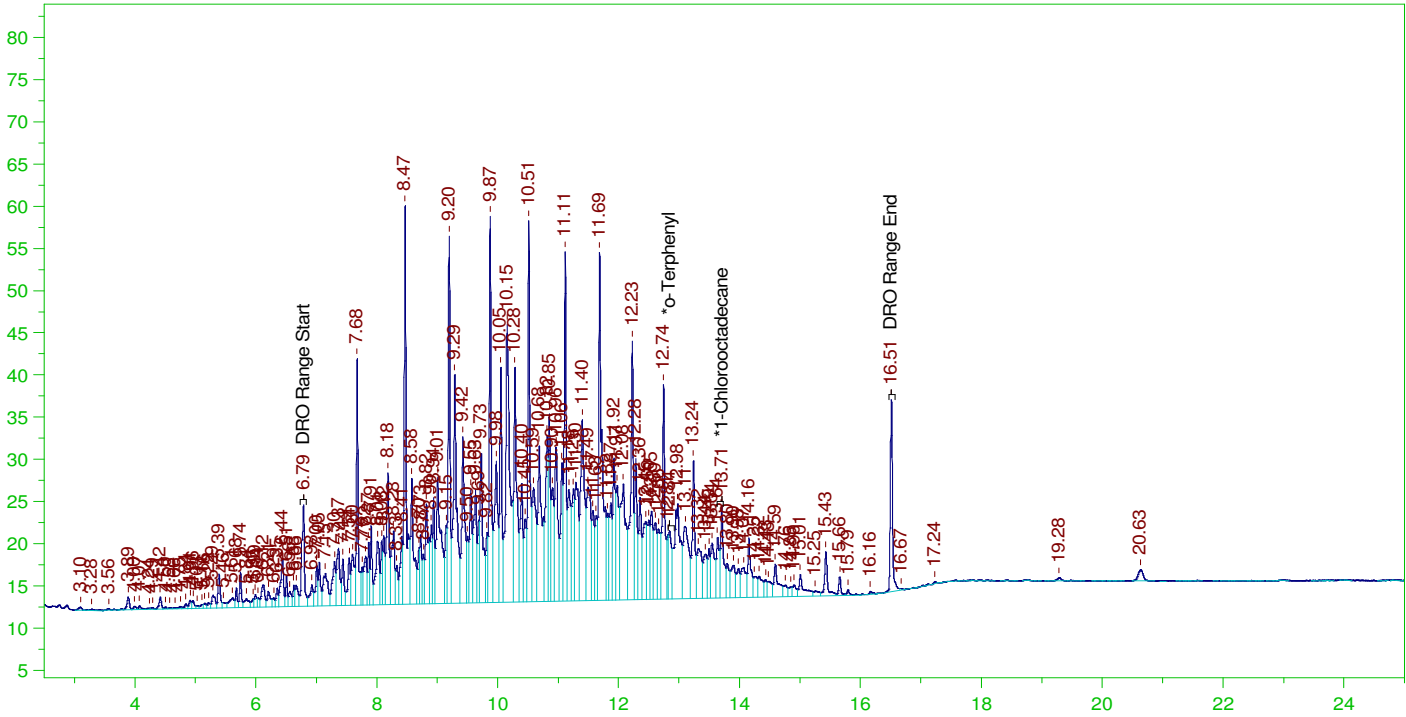
Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.74 to 16.58

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.866	200.	.046	.02	-
*1-Chlorooctadecane	13.702	200.	.016	.01	-

DRO Area:216198.9 DRO Amount: 7.360394  
 TEH Area:333132.8 TEH Amount: 11.34136

G:\org\HP4\DAT\HP4110121\_b\1101HP4.0016.RAW

CCV\_1101HP416r, CAL1 ;1101HP4 , 150 ug per mL Diesel



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP416r, CAL1 ;1101HP4 , 150 ug per mL Diesel  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0016.RAW  
 Date & Time Acquired: 11/2/2021 1:16:49 AM  
 Method File: G:\Org\HP4\Methods\DC\_8015-OA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.841	200.	.842	.42	-
*1-Chlorooctadecane	13.706	200.	1.092	.55	-

DRO Area:4341542 DRO Amount: 147.8058  
 TEH Area:4520637 TEH Amount: 153.903

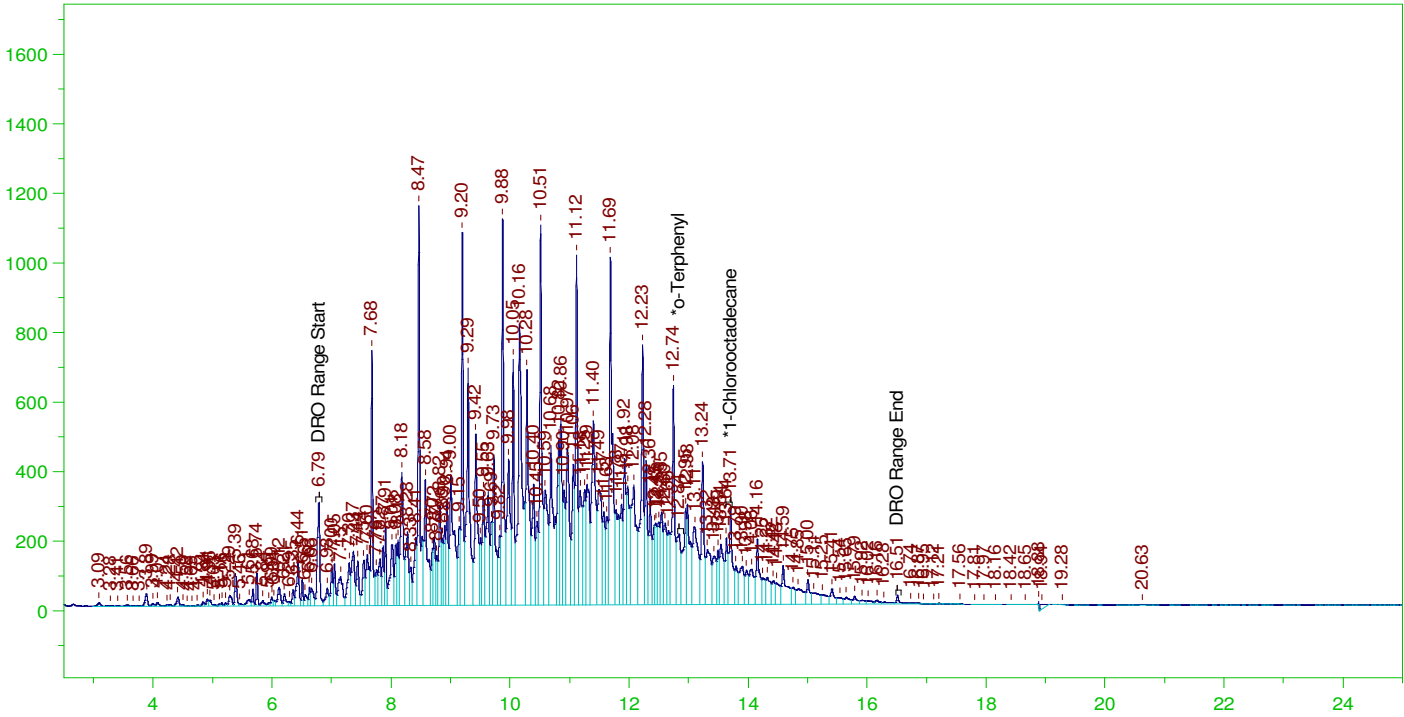
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0016.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	153.9	1.03	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.841	200.	.842	.42	85-115
*1-Chlorooctadecane	13.706	200.	1.092	.55	85-115

G:\org\HP4\DAT\HP4110121\_b\1101HP4.0017.RAW

CCV\_1101HP417r, CAL2 ;1101HP4 , 3750 ug per mL Diesel



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP417r, CAL2 ;1101HP4 , 3750 ug per mL Diesel  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0017.RAW  
 Date & Time Acquired: 11/2/2021 2:07:13 AM  
 Method File: G:\Org\HP4\Methods\DC\_8015-OA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.837	200.	28.641	14.32	-
*1-Chlorooctadecane	13.705	200.	33.114	16.56	-

DRO Area:1.065299E+08 DRO Amount: 3626.763  
 TEH Area:1.09359E+08 TEH Amount: 3723.079

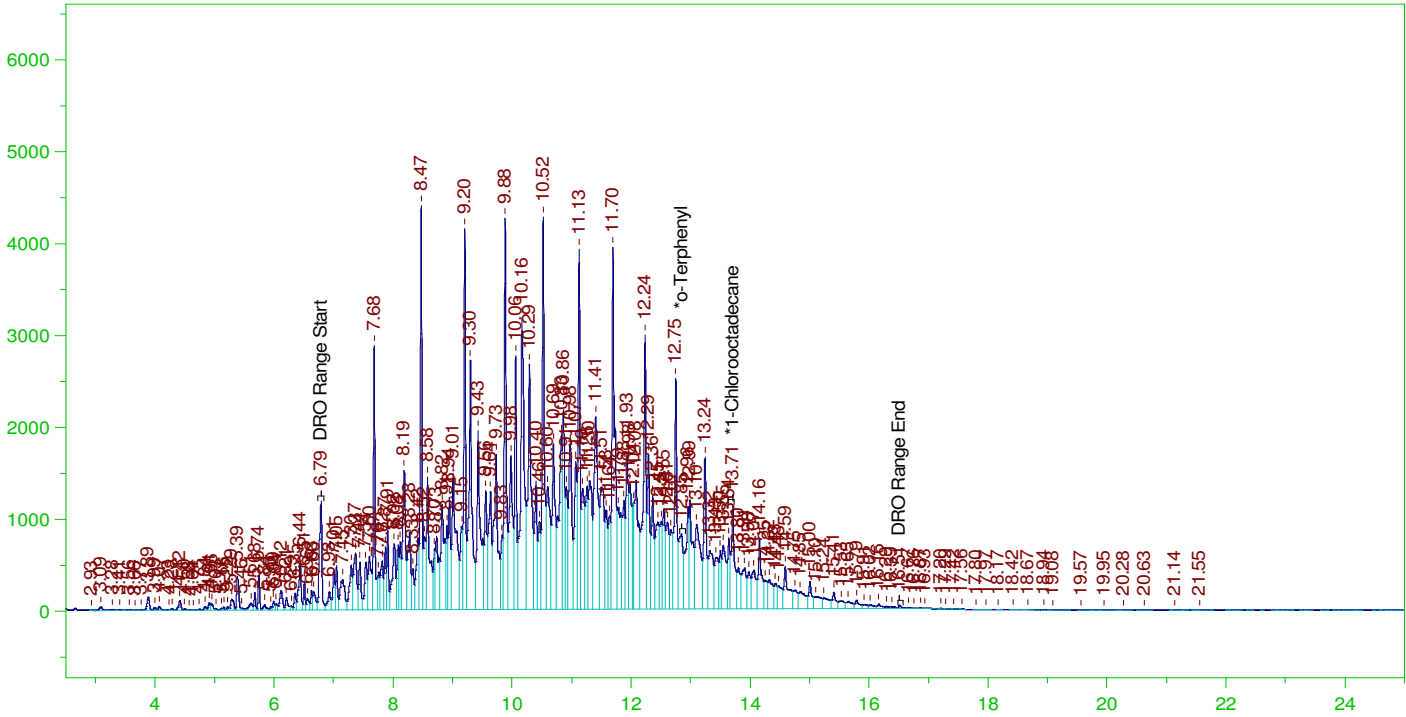
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0017.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	3723.08	24.82	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.837	200.	28.641	14.32	85-115
*1-Chlorooctadecane	13.705	200.	33.114	16.56	85-115

G:\org\HP4\DAT\HP4110121\_b\1101HP4.0018.RAW

CCV\_1101HP418r, CAL3 ;1101HP4 , 15000 ug per mL Diesel



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP418r, CAL3 ;1101HP4 , 15000 ug per mL Diesel  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0018.RAW  
 Date & Time Acquired: 11/2/2021 2:57:28 AM  
 Method File: G:\Org\HP4\Methods\DC\_8015-OA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.846	200.	119.117	59.56	-
*1-Chlorooctadecane	13.709	200.	132.401	66.2	-

DRO Area: 4.291878E+08 DRO Amount: 14611.51  
 TEH Area: 4.400683E+08 TEH Amount: 14981.93

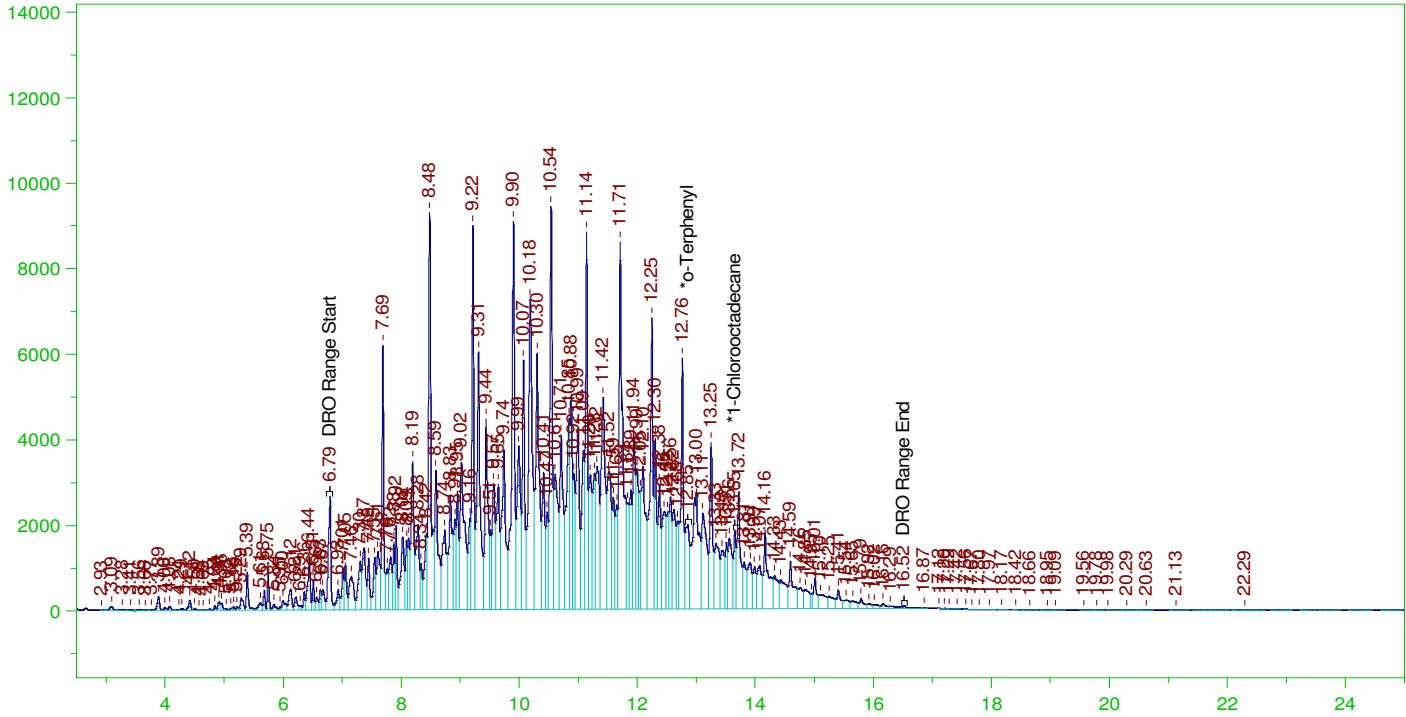
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0018.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	14981.93	99.88	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.846	200.	119.117	59.56	85-115
*1-Chlorooctadecane	13.709	200.	132.401	66.2	85-115

G:\org\HP4\DAT\HP4110121\_b\1101HP4.0019.RAW

CCV\_1101HP419r, CAL4 ;1101HP4 , 37500ug per mL Diesel



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP419r, CAL4 ;1101HP4 , 37500ug per mL Diesel  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0019.RAW  
 Date & Time Acquired: 11/2/2021 3:47:46 AM  
 Method File: G:\Org\HP4\Methods\DC\_8015-OA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

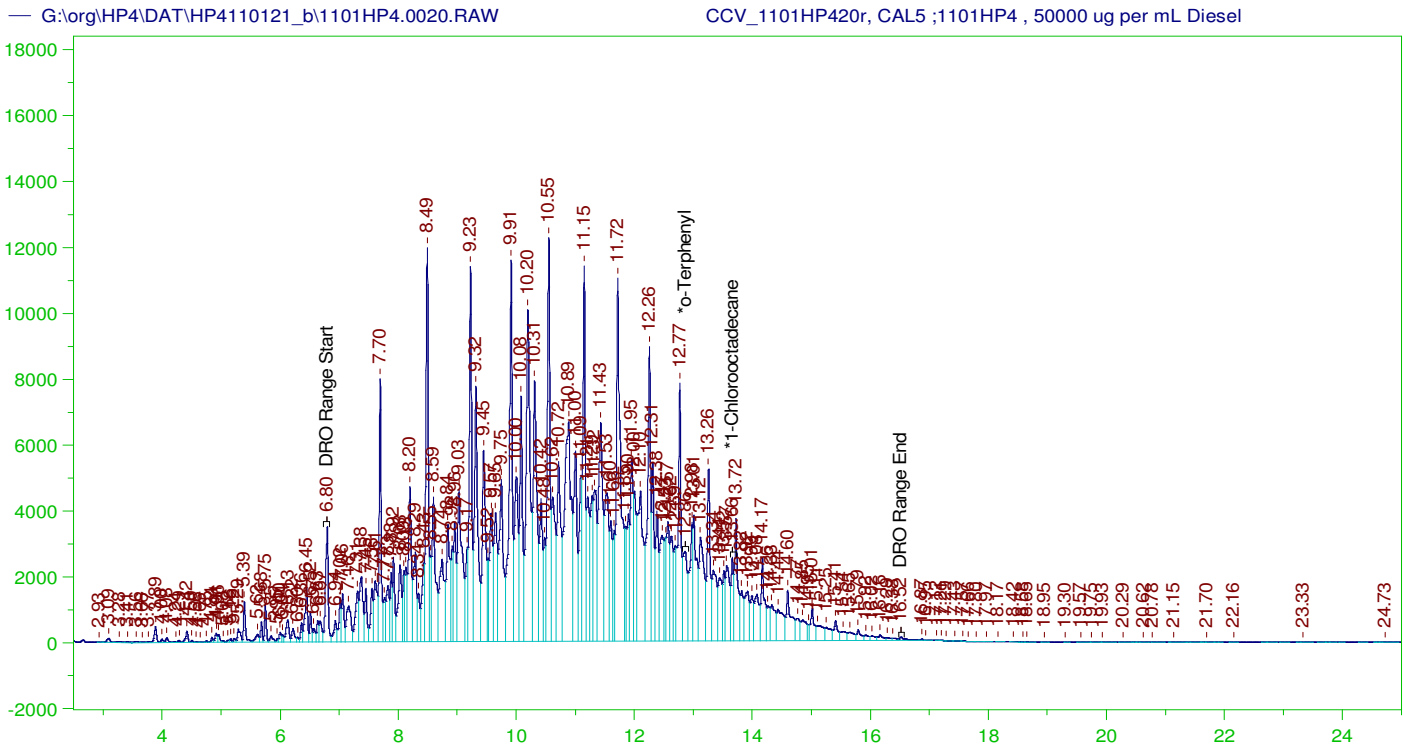
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.855	200.	279.085	139.54
*1-Chlorooctadecane	13.653	200.	147.666	73.83

DRO Area:1.040405E+09 DRO Amount: 35420.13  
 TEH Area:1.066362E+09 TEH Amount: 36303.8

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0019.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	36303.8	242.03	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.855	200.	279.085	139.54	85-115
*1-Chlorooctadecane	13.653	200.	147.666	73.83	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP420r, CAL5 ;1101HP4 , 50000 ug per mL Diesel  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0020.RAW  
 Date & Time Acquired: 11/2/2021 4:38:01 AM  
 Method File: G:\Org\HP4\Methods\DC\_8015-OA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.862	200.	408.713	204.36
*1-Chlorooctadecane	13.661	200.	204.074	102.04

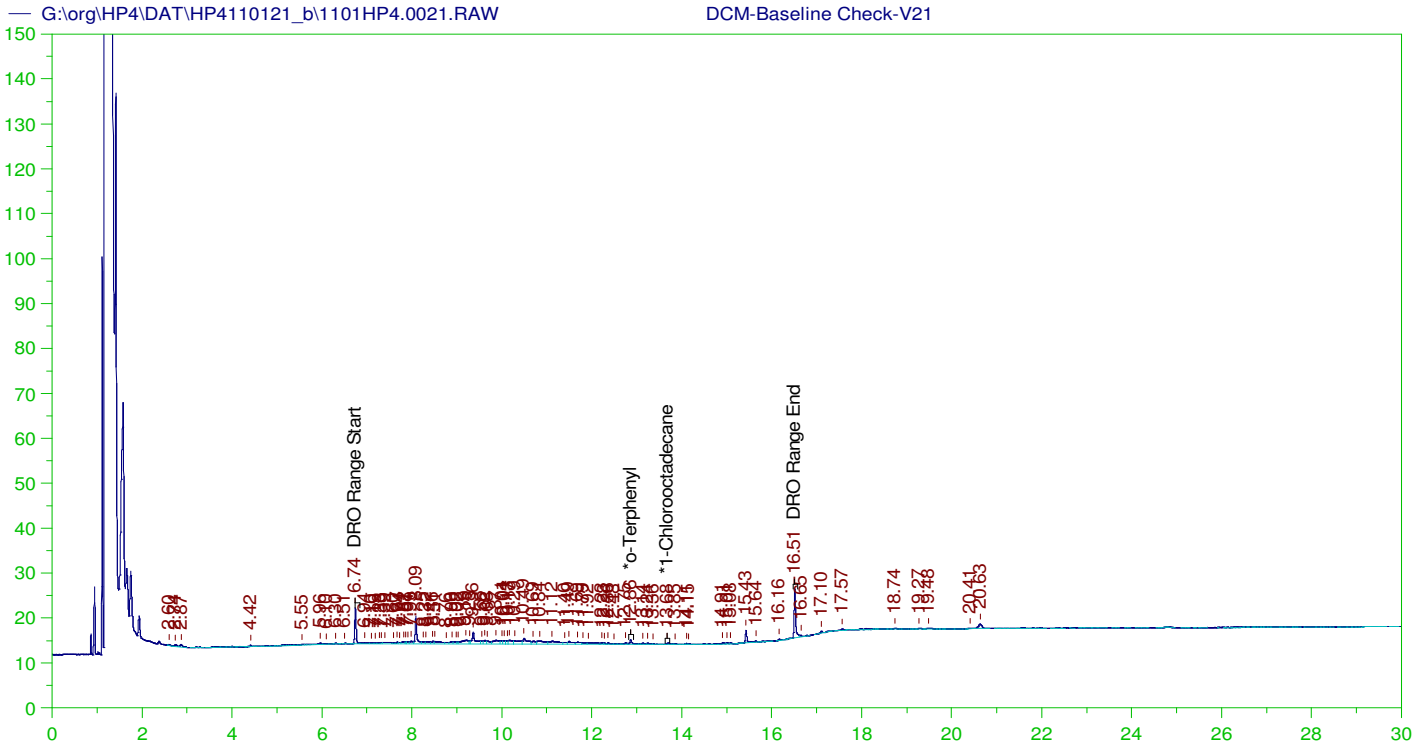
DRO Area: 1.453258E+09 DRO Amount: 49475.51  
 TEH Area: 1.48961E+09 TEH Amount: 50713.11

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0020.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	50713.11	338.09	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.862	200.	408.713	204.36	85-115
*1-Chlorooctadecane	13.661	200.	204.074	102.04	85-115





**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V21  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0021.RAW  
 Date & Time Acquired: 11/2/2021 5:28:21 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-OA-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

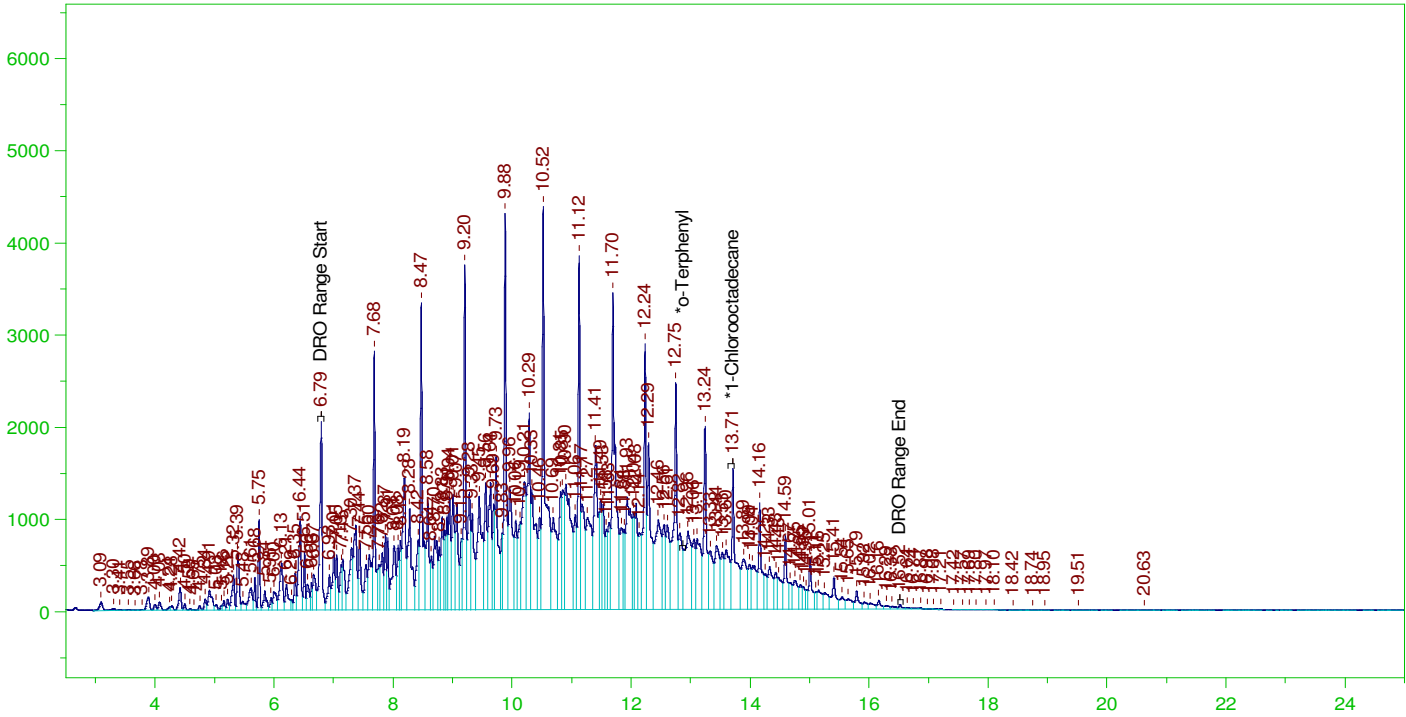
Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.74 to 16.58

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.865	200.	.126	.06	-
*1-Chlorooctadecane	13.677	200.	.038	.02	-

DRO Area:238253.6 DRO Amount: 8.111236  
 TEH Area:273352.9 TEH Amount: 9.306175

G:\org\HP4\DAT\HP4110121\_b\1101HP4.0022.RAW

CCV\_1101HP422r, Second Source ;1101HP4 , 15000 ug per mL



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_1101HP422r, Second Source ;1101HP4 , 15000 ug per mL  
 Raw File: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0022.RAW  
 Date & Time Acquired: 11/2/2021 6:18:32 AM  
 Method File: G:\Org\HP4\Methods\DC\_8015-OA-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020A.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.74 to 16.58

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.896	200.	.	-
*1-Chlorooctadecane	13.712	200.	201.891	100.95 -

DRO Area: 4.14403E+08 DRO Amount: 14108.16  
 TEH Area: 4.395233E+08 TEH Amount: 14963.37

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4110121\_b\1101HP4.0022.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	14963.37	99.76	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	29.896	200.	.	.	85-115
*1-Chlorooctadecane	13.712	200.	201.891	100.95	85-115

Write Sequence	Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manual Integrations
		DCM-Baseline Check-V07	G:\Org\HP4\methods\DR_8015-OA-LEXP.met	1	1	1	1	0	No Integration
		CCV_1101HP408r, DRO ;1101HP4 , DRO211025A	G:\Org\HP4\methods\DC_8015-OA-L0.met	1	1	1	1	0	No Integration
		DCM-Baseline Check-V09	G:\Org\HP4\methods\DR_8015-OA-LEXP.met	1	1	1	1	0	No Integration
		CCV_1101HP410r, CAL1 ;1101HP4 , 2 ug per mL OTP (10 uL of Cal3 + 990 uL DCM(14408))	G:\Org\HP4\methods\DS_8015-OA-L#.met	1	1	1	1	0	Surrogates are integrated using valley to valley integration using a Set Baseline Now before at 12.51 and after at 13.17.
		CCV_1101HP411r, CAL2 ;1101HP4 , 50 ug per mL OTP (100 uL Cal4 + 900 uL of DCM(14408))	G:\Org\HP4\methods\DS_8015-OA-L#.met	1	1	1	1	0	Surrogates are integrated using valley to valley integration using a Set Baseline Now before at 12.51 and after at 13.17.
		CCV_1101HP412r, CAL3 ;1101HP4 , 200 ug per mL OTP (100uL of Cal5 + 400 uL DCM(14408))	G:\Org\HP4\methods\DS_8015-OA-L#.met	1	1	1	1	0	Surrogates are integrated using valley to valley integration using a Set Baseline Now before at 12.51 and after at 13.17.
		CCV_1101HP413r, CAL4 ;1101HP4 , 500 ug per mL OTP (250uL of Cal5 + 250 uL DCM(14408))	G:\Org\HP4\methods\DS_8015-OA-L#.met	1	1	1	1	0	Surrogates are integrated using valley to valley integration using a Set Baseline Now before at 12.51 and after at 13.17.
		CCV_1101HP414r, CAL5 ;1101HP4 , 1000 ug per mL OTP (250 uL 4000 ug/mL OTP DRO21101A + 750 DCM(14408))	G:\Org\HP4\methods\DS_8015-OA-L#.met	1	1	1	1	0	Surrogates are integrated using valley to valley integration using a Set Baseline Now before at 12.51 and after at 13.17.
		DCM-Baseline Check-V15	G:\Org\HP4\methods\DR_8015-OA-LEXP.met	1	1	1	1	0	No Integration
		CCV_1101HP416r, CAL1 ;1101HP4 , 150 ug per mL Diesel (10 uL of Cal3 + 990 uL DCM(14408),	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics is the hydrocarbon response with reference to the baseline. Assigned Set Baseline All Valley on at 17.1
		CCV_1101HP417r, CAL2 ;1101HP4 , 3750 ug per mL Diesel (100 uL Cal4 + 900 uL of DCM(14408))	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics is the hydrocarbon response with reference to the baseline. Assigned Set Baseline All Valley on at 17.1
		CCV_1101HP418r, CAL3 ;1101HP4 , 15000 ug per mL Diesel (300 uL of DRO211012A + 700 uL DCM(14408))	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics is the hydrocarbon response with reference to the baseline. Assigned Set Baseline All Valley on at 17.1
		CCV_1101HP419r, CAL4 ;1101HP4 , 37500 ug per mL Diesel (750 uL of DRO211012A + 250 uL DCM(14408))	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics is the hydrocarbon response with reference to the baseline. Assigned Set Baseline All Valley on at 17.1
		CCV_1101HP420r, CAL5 ;1101HP4 , 50000 ug per mL Diesel (200 uL of DRO211012A)	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics is the hydrocarbon response with reference to the baseline. Assigned Set Baseline All Valley on at 17.1
		DCM-Baseline Check-V21	G:\Org\HP4\methods\DR_8015-OA-LEXP.met	1	1	1	1	0	No Integration
		CCV_1101HP422r, Second Source ;1101HP4 , 15000 ug per mL (100uL of DRO211012B + 900uL DCM(14408))	G:\Org\HP4\Methods\DC_8015-OA-L%.met	1	1	1	1	0	The integration of Diesel Range Organics is the hydrocarbon response with reference to the baseline. Assigned Set Baseline All Valley on at 17.1

*Ann Nebel*

Digitally signed by  
Ann Nebel  
Date: 2022.01.17 15:04:47 -07:00

# PREP BATCH REPORT

Prep Code: **HC-3520-DRO**  
 Prep Batch **162891** Prep Temp **NA °C**

Technician: **Aloysia L. Noble**  
 Batch Units: **ML**

Prep Start Date: **1/12/2022 2:39:57 PM**  
 Prep End Date: **1/14/2022 11:44:00 A**

Sample ID	Matrix	pH	Initial Samp Amt	Sol Added	Sol Recovered	Final Vol (mL)	Factor	Balance	Prep Start Date	Prep End Date
MB-162891			1000	0	0	1.00	0.001		1/12/2022	1/13/2022
Start time: 2:38Pm, 1/12/2022. End time: 01/13/2022 at 9:05 AM. SGT by ALN on 1/17/2022 using remainder of sample.										
LCS-162891			1000	0	0	1.00	0.001		1/12/2022	1/13/2022
All bottles were completely used, defaced and disposed of on 01/12/2022. S SGT by ALN on 1/17/2022 using remainder of sample.										
LCSD-162891			1000	0	0	1.00	0.001		1/12/2022	1/13/2022
SGT by ALN on 1/17/2022 using remainder of sample.										
LCS-RRO-162891			1000	0	0	1.00	0.001		1/12/2022	1/13/2022
SGT by ALN on 1/17/2022 using remainder of sample.										
LCSD-RRO-162891			1000	0	0	1.00	0.001		1/12/2022	1/13/2022
SGT by ALN on 1/17/2022 using remainder of sample.										
B22010507-001D	Ground Water	2	1060	0	0	1.00	0.000943		1/12/2022	1/13/2022
Bottle 1/2: clear, no sediment, on solvent at 1:55PM.										
B22010625-001D	Ground Water	2	1060	0	0	1.00	0.000943		1/12/2022	1/13/2022
Bottle 1/2: clear, no sediment, on solvent at 1:51PM. SGT by ALN on 1/17/2022 using remainder of sample.										
B22010626-001D	Ground Water	2	1030	0	0	1.00	0.000971		1/12/2022	1/13/2022
Bottle 1/2: clear, no sediment, on solvent at 1:47PM. SGT by ALN on 1/17/2022 using remainder of sample.										
B22010626-001DMS	Ground Water	2	1040	0	0	1.00	0.000962		1/12/2022	1/13/2022
Bottle 1/2: clear, no sediment, on solvent at 1:44PM. SGT by ALN on 1/17/2022 using remainder of sample.										
B22010628-001D	Ground Water	2	1060	0	0	1.00	0.000943		1/12/2022	1/13/2022
Bottle 1/2: clear, no sediment, on solvent at 1:37PM.										
B22010629-001D	Ground Water	2	1060	0	0	1.00	0.000943		1/12/2022	1/13/2022
Bottle 1/2: clear, no sediment, on solvent at 1:34PM. SGT by ALN on 1/17/2022 using remainder of sample.										
B22010633-001D	Ground Water	2	1020	0	0	1.00	0.00098		1/12/2022	1/13/2022
Bottle 1/2: clear, light sediment, on solvent at 1:25PM. SGT by ALN on 1/17/2022 using remainder of sample.										
B22010637-001D	Ground Water	2	1020	0	0	1.00	0.00098		1/12/2022	1/13/2022
Bottle 1/2: clear, no sediment, on solvent at 1:21PM.										
B22010641-001D	Drinking Water	2	1060	0	0	1.00	0.000943		1/12/2022	1/13/2022
Bottle 1/2: clear, no sediment, on solvent at 1:18PM. SGT by ALN on 1/17/2022 using remainder of sample.										

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
14634	4ML, Amber Vial, 20211215	12/15/2022
14647	Dichloromethane EC832	10/28/2023

Spk ID	Spike Name	SampType	AmtAdd	Exp Date
FP220102 14446	DCM RINSED FILTER PAPER	all	1	4/6/2026
SG220101(13376)	Baked Silica Gel	all	5g	2/28/2030
Sulfate 12/27/21 (	Baked Sodium Sulfate	all	Varies	11/29/2026
DRO220106B	Triacotane SURR 1000 ug/mL	All except LCS, L	100 uL	4/6/2026
DRO211213A	OTP only SURR 2000 ug/mL	All except RRO-L	100 uL	9/30/2024
DRO220106C	#2 Diesel in Acetone 150,000 ug/mL	LCS, LCSD, MS,	100 uL	11/5/2023
DRO220112A	50,000 ug/mL Oil Std for RRO-In D	LCS-RRO, LCSD	100 uL	9/1/2026

# PREP BATCH REPORT

Prep Code: **HC-3520-DRO**  
 Prep Batch **162891** Prep Temp **NA °C**

Technician: **Aloysia L. Noble**  
 Batch Units: **ML**

Prep Start Date: **1/12/2022 2:39:57 PM**  
 Prep End Date: **1/14/2022 11:44:00 A**

Sample ID	Matrix	pH	Initial Samp Amt	Sol Added	Sol Recovered	Final Vol (mL)	Factor	Balance	Prep Start Date	Prep End Date
B22010641-001DMS-RRO	Drinking Water	2	1050	0	0	1.00	0.000952		1/12/2022	1/13/2022
Bottle 1/2: clear, no sediment, on solvent at 1:14PM. SGT by ALN on 1/17/2022 using remainder of sample.										
B22010643-001D	Ground Water	2	1050	0	0	1.00	0.000952		1/12/2022	1/13/2022
Bottle 1/2: clear, no sediment, on solvent at 1:10PM. SGT by ALN on 1/17/2022 using remainder of sample.										
B22010643-002B	Ground Water	2	1050	0	0	1.00	0.000952		1/12/2022	1/13/2022
Bottle 1/2: clear, light sediment, on solvent at 1:06PM. SGT by ALN on 1/17/2022 using remainder of sample.										
B22010338-001D	Ground Water	2	1040	0	0	1.00	0.000962		1/13/2022	1/14/2022
Bottle 2/2: clear, no sediment. Start 11:45 AM on 11/13/2022 End time: 1/14/2022 at 9:30 AM. Reextract original sample was extracted in prep batch 162824.										

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
14634	4ML, Amber Vial, 20211215	12/15/2022
14647	Dichloromethane EC832	10/28/2023

Spk ID	Spike Name	SampType	AmtAdd	Exp Date
FP220102 14446	DCM RINSED FILTER PAPER	all	1	4/6/2026
SG220101(13376)	Baked Silica Gel	all	5g	2/28/2030
Sulfate 12/27/21 (	Baked Sodium Sulfate	all	Varies	11/29/2026
DRO220106B	Triacotane SURR 1000 ug/mL	All except LCS, L	100 uL	4/6/2026
DRO211213A	OTP only SURR 2000 ug/mL	All except RRO-L	100 uL	9/30/2024
DRO220106C	#2 Diesel in Acetone 150,000 ug/mL	LCS, LCSD, MS,	100 uL	11/5/2023
DRO220112A	50,000 ug/mL Oil Std for RRO-In D	LCS-RRO, LCSD	100 uL	9/1/2026

# Energy Laboratories Inc

# ANALYTICAL RUN Summary

17-Jan-22

Run ID GCFID-HP4-B\_220114A

<b>Run Start Date:</b> 1/14/2022
<b>Analyst:</b> Ann Nebel
<b>Ical:</b>
<b>Column ID:</b>
<b>Comments:</b> DRO-8015 CAL information is in Index GCFID-HP4-B_211101A; DRO-8015-OIL CAL information is in Index GCFID-HP4-B_211006B

Std ID	Std Name	Std Amount	Std Units	Samp Amount	Samp Units	SampType	Expiration Date
DRO211220B	Carbon Scan STD-Marker					MARKER	3/5/2028
DRO220105B	8015 CCV-15,000ug/mL + 200 OTP					CCV-DRO	4/30/2023
DRO220106A	5,000 ug/mL RRO CCV 200 ug/mL Triacontane					CCV-RRO	4/6/2026

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980613	CCV_0114HP43	HC-8015-DRO-	CCV		1/14/2022 11:26:	1	R373231			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	4.428465332			5	0	0	0.0513	0.3	0	89%	80	120	0%	
n-Triacontane	S	mg/L	0.1939239			0.2	0	0	0.00054	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					
14980614	CCV_0114HP43	HC-8015-DRO-	CCV		1/14/2022 12:11:	1	R373231			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	14.39402			15	0	0	0.0358	0.3	0	96%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L	14.92937			15	0	0	0.0782	0.3	50	100%	80	120	0%	
o-Terphenyl	S	mg/L	0.2009118			0.2	0	0	0.000531	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					
14980615	LCS-162891	HC-8015-DRO-	LCS-DOD		1/14/2022 2:26:5	1	162891	1/12/2022 2:		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					
14980615	LCS-162891	HC-8015-DRO-	LCS-DOD		1/14/2022 2:26:5	1	162891	1/12/2022 2:	0	0						
Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		13.40676		15	0	0	0.0358	0.3	0	89%	36	132	0%	
Total Extractable Hydrocarbons	A	mg/L		14.27731		15	0	0	0.0782	0.3	50	95%	60	132	0%	
o-Terphenyl	S	mg/L		0.1886789		0.2	0	0	0.000531	0.002	0	94%	56	125	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980616	LCSD-162891	HC-8015-DRO-	LCSD-DOD		1/14/2022 3:11:4	1	162891	1/12/2022 2:	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		13.5505		15	0	13.40676	0.0358	0.3	0	90%	36	132	1%	
Total Extractable Hydrocarbons	A	mg/L		14.43253		15	0	14.27731	0.0782	0.3	50	96%	60	132	1%	
o-Terphenyl	S	mg/L		0.1892319		0.2	0	0	0.000531	0.002	0	95%	56	125	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980617	MB-162891	HC-8015-DRO-	MBLK		1/14/2022 3:56:3	1	162891	1/12/2022 2:	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	0.0358	0.15	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40)	A	mg/L		0		0	0	0	0.0513	0.15	0	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.0782	0.15	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0516		0.1	0	0	0.00054	0.002	0	52%	50	150	0%	
o-Terphenyl	S	mg/L		0.196672		0.2	0	0	0.000531	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					
14980618	B22010507-001	HC-8015-DRO-	SAMP		1/14/2022 4:41:2	1	162891	1/12/2022 2:	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	0.0337594	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40)	A	mg/L		0		0	0	0	0.0483759	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.0737426	0.3	50	0%	0	0	0%	U
n-Triacontane	S	mg/L		0.0876		0.0943	0	0	0.0005092	0.001886	0	93%	50	150	0%	
o-Terphenyl	S	mg/L		0.1822177		0.1886	0	0	0.0005007	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					
14980619	B22010625-001	HC-8015-DRO-	SAMP		1/14/2022 5:26:3	1	162891	1/12/2022 2:	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		0.04861623		0	0	0	0.0337594	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40)	A	mg/L		0.094786592		0	0	0	0.0483759	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		0.1455869		0	0	0	0.0737426	0.3	50	0%	0	0	0%	J
n-Triacontane	S	mg/L		0.0932		0.0943	0	0	0.0005092	0.001886	0	99%	50	150	0%	
o-Terphenyl	S	mg/L		0.173842		0.1886	0	0	0.0005007	0.002	0	92%	56	125	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980620	B22010626-001	HC-8015-DRO-	SAMP		1/14/2022 6:11:5	1	162891	1/12/2022 2:	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		0.07172716		0	0	0	0.0347618	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40)	A	mg/L		0.155823216		0	0	0	0.0498123	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		0.3181632		0	0	0	0.0759322	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.0881		0.0971	0	0	0.0005243	0.001942	0	91%	50	150	0%	
o-Terphenyl	S	mg/L		0.1683246		0.1942	0	0	0.0005156	0.002	0	87%	56	125	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980621	B22010626-001	HC-8015-DRO-	MS-DOD		1/14/2022 6:56:5	1	162891	1/12/2022 2:	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		12.61511		14.43	0.0717272	0	0.0344396	0.3	0	87%	36	132	0%	
Total Extractable Hydrocarbons	A	mg/L		13.71579		14.43	0.3181632	0	0.0752284	0.3	50	93%	60	132	0%	
o-Terphenyl	S	mg/L		0.1302891		0.1924	0	0	0.0005108	0.002	0	68%	56	125	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980622	CCV_0114HP41	HC-8015-DRO-	CCV		1/14/2022 9:56:2	1	R373231			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		4.53427002		5	0	0	0.0513	0.3	0	91%	80	120	0%	
n-Triacontane	S	mg/L		0.1987309		0.2	0	0	0.00054	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					
14980623	CCV_0114HP41	HC-8015-DRO-	CCV		1/14/2022 10:41:	1	R373231		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		15.04524		15	0	0	0.0358	0.3	0	100%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.59376		15	0	0	0.0782	0.3	50	104%	80	120	0%	
o-Terphenyl	S	mg/L		0.2109898		0.2	0	0	0.000531	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					
14980624	B22010628-001	HC-8015-DRO-	SAMP		1/15/2022 12:55:	1	162891	1/12/2022 2:	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	0.0337594	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40)	A	mg/L		0		0	0	0	0.0483759	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.0737426	0.3	50	0%	0	0	0%	U
n-Triacontane	S	mg/L		0.0967		0.0943	0	0	0.0005092	0.001886	0	103%	50	150	0%	
o-Terphenyl	S	mg/L		0.194551		0.1886	0	0	0.0005007	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					
14980625	B22010637-001	HC-8015-DRO-	SAMP		1/15/2022 1:40:0	1	162891	1/12/2022 2:	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	0.035084	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40)	A	mg/L		0		0	0	0	0.050274	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.076636	0.3	50	0%	0	0	0%	U
n-Triacontane	S	mg/L		0.1242		0.098	0	0	0.0005292	0.00196	0	127%	50	150	0%	
o-Terphenyl	S	mg/L		0.2146298		0.196	0	0	0.0005204	0.002	0	110%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980626	B22010641-001	HC-8015-DRO-	SAMP		1/15/2022 2:24:5	1	162891	1/12/2022 2:	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		0.2727154		0	0	0	0.0337594	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (C24 to C40)	A	mg/L		0.133066773		0	0	0	0.0483759	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		0.4120174		0	0	0	0.0737426	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.1117		0.0943	0	0	0.0005092	0.001886	0	118%	50	150	0%	
o-Terphenyl	S	mg/L		0.2034953		0.1886	0	0	0.0005007	0.002	0	108%	56	125	0%	
TEH(Oil Range)	X	mg/L		0.197343603		0	0	0	0.0483759	0.3	0	0%	0	0	0%	J

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980627	B22010643-001	HC-8015-DRO-	SAMP		1/15/2022 3:54:3	1	162891	1/12/2022 2:	0	0						
Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		1.455907		0	0	0	0.0340816	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40)	A	mg/L	0.278824627			0	0	0	0.0488376	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		1.744522		0	0	0	0.0744464	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.1031		0.0952	0	0	0.0005141	0.001904	0	108%	50	150	0%	
o-Terphenyl	S	mg/L	0.1829686			0.1904	0	0	0.0005055	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					
14980628	B22010643-002	HC-8015-DRO-	SAMP		1/15/2022 4:39:2	1	162891	1/12/2022 2:	0	0						
Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
Diesel Range Organics (C10 to C24)	A	mg/L		1.553608		0	0	0	0.0340816	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40)	A	mg/L	0.318922371			0	0	0	0.0488376	0.3	0	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		1.887609		0	0	0	0.0744464	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.1063		0.0952	0	0	0.0005141	0.001904	0	112%	50	150	0%	
o-Terphenyl	S	mg/L	0.175564			0.1904	0	0	0.0005055	0.002	0	92%	56	125	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980629	B22010629-001	HC-8015-DRO-	SAMP		1/15/2022 6:08:5	1	162891	1/12/2022 2:	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		0.360394		0	0	0	0.0337594	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (C24 to C40)	A	mg/L	0.475332588			0	0	0	0.0483759	0.3	0	0%	0	0	0%	
Total Extractable Hydrocarbons	A	mg/L		0.824827		0	0	0	0.0737426	0.3	50	0%	0	0	0%	
n-Triacontane	S	mg/L		0.1148		0.0943	0	0	0.0005092	0.001886	0	122%	50	150	0%	
o-Terphenyl	S	mg/L	0.2064615			0.1886	0	0	0.0005007	0.002	0	109%	56	125	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980630	B22010633-001	HC-8015-DRO-	SAMP		1/15/2022 6:53:4	1	162891	1/12/2022 2:	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	0.035084	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40)	A	mg/L	0.248081326			0	0	0	0.050274	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons	A	mg/L		0.2848516		0	0	0	0.076636	0.3	50	0%	0	0	0%	J
n-Triacontane	S	mg/L		0.1098		0.098	0	0	0.0005292	0.00196	0	112%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980630	B22010633-001	HC-8015-DRO-	SAMP		1/15/2022 6:53:4	1	162891	1/12/2022 2:	0	0						
Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl	S	mg/L		0.202098		0.196	0	0	0.0005204	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					
14980631	B22010641-001	HC-8015-DRO-	MS-DOD		1/15/2022 7:38:1	1	162891	1/12/2022 2:	1E+07	0						
Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
TEH(Oil Range)	A	mg/L		4.440487862		4.76	0.1973436	0	0.0488376	0.3	0	89%	41	113	0%	
n-Triacontane	S	mg/L		0.1023		0.0952	0	0	0.0005141	0.002	0	107%	50	150	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980632	CCV_0114HP43	HC-8015-DRO-	CCV		1/15/2022 9:07:2	1	R373231				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		4.700487793		5	0	0	0.0513	0.3	0	94%	80	120	0%	
n-Triacontane	S	mg/L		0.2010192		0.2	0	0	0.00054	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					
14980633	CCV_0114HP43	HC-8015-DRO-	CCV		1/15/2022 9:51:5	1	R373231				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		15.34227		15	0	0	0.0358	0.3	0	102%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.90669		15	0	0	0.0782	0.3	50	106%	80	120	0%	
o-Terphenyl	S	mg/L		0.2332692		0.2	0	0	0.000531	0.002	0	117%	80	120	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980634	LCS-RRO-16289	HC-8015-DRO-	LCS-DOD		1/15/2022 11:21:	1	162891	1/12/2022 2:	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		4.412673473		5	0	0	0.0513	0.3	0	88%	41	113	0%	
n-Triacontane	S	mg/L		0.05		0.1	0	0	0.00054	0.002	0	50%	50	150	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980635	LCSD-RRO-162	HC-8015-DRO-	LCSD-DOD		1/15/2022 12:50:	1	162891	1/12/2022 2:	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	4.080487251			5	0	4.4126735	0.0513	0.3	0	82%	41	113	8%	
n-Triacontane	S	mg/L	0.067			0.1	0	0	0.00054	0.002	0	67%	50	150	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980636	CCV_0114HP44	HC-8015-DRO-	CCV		1/15/2022 2:19:5	1	R373231		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	4.583741211			5	0	0	0.0513	0.3	0	92%	80	120	0%	
n-Triacontane	S	mg/L	0.1973301			0.2	0	0	0.00054	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					
14980637	CCV_0114HP44	HC-8015-DRO-	CCV		1/16/2022 11:47:	1	R373231		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	4.634558105			5	0	0	0.0513	0.3	0	93%	80	120	0%	
n-Triacontane	S	mg/L	0.2003295			0.2	0	0	0.00054	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					
14980638	CCV_0114HP44	HC-8015-DRO-	CCV		1/16/2022 12:31:	1	R373231		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	14.96338			15	0	0	0.0358	0.3	0	100%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L	15.51604			15	0	0	0.0782	0.3	50	103%	80	120	0%	
o-Terphenyl	S	mg/L	0.2287146			0.2	0	0	0.000531	0.002	0	114%	80	120	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980639	B22010338-001	HC-8015-DRO-	SAMP		1/16/2022 2:00:5	1	162891	1/13/2022 1	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	0.0344396	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (C24 to C40)	A	mg/L		0		0	0	0	0.0493506	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons	A	mg/L		0		0	0	0	0.0752284	0.3	50	0%	0	0	0%	U
n-Triacontane	S	mg/L	0.1254257			0.0962	0	0	0.0005195	0.001924	0	130%	50	150	0%	
o-Terphenyl	S	mg/L	0.1254257			0.1924	0	0	0.0005108	0.002	0	65%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14980640	CCV_0114HP44	HC-8015-DRO-	CCV		1/16/2022 3:30:1	1	R373231		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	4.623973633			5	0	0	0.0513	0.3	0	92%	80	120	0%	
n-Triacontane	S	mg/L	0.2015067			0.2	0	0	0.00054	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					
14980641	CCV_0114HP44	HC-8015-DRO-	CCV		1/16/2022 4:14:5	1	R373231		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	15.09447			15	0	0	0.0358	0.3	0	101%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L	15.65471			15	0	0	0.0782	0.3	50	104%	80	120	0%	
o-Terphenyl	S	mg/L	0.2303813			0.2	0	0	0.000531	0.002	0	115%	80	120	0%	

# Energy Laboratories Inc

# ANALYTICAL RUN Summary

18-Jan-22

Run ID GCFID-HP4-B\_220117A

<b>Run Start Date:</b> 1/17/2022
<b>Analyst:</b> Ann Nebel
<b>Ical:</b>
<b>Column ID:</b>
<b>Comments:</b> DRO-8015 CAL information is in Index GCFID-HP4-B_211101A; DRO-8015-OIL CAL information is in Index GCFID-HP4-B_211006B

Std ID	Std Name	Std Amount	Std Units	Samp Amount	Samp Units	SampType	Expiration Date
DRO220106A	5,000 ug/mL RRO CCV 200 ug/mL Triacontane					CCV-RRO	4/6/2026
DRO220111A	Carbon Scan STD-Marker					MARKER	7/13/2026
DRO220114A	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					
14984575	CCV_0117HP40	HC-8015-DRO-	CCV		1/17/2022 3:43:1	1	R373332		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		4.78919189		5	0	0	0.0513	0.3	0	96%	80	120	0%	
n-Triacontane	S	mg/L		0.2084472		0.2	0	0	0.00054	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					
14984576	CCV_0117HP40	HC-8015-DRO-	CCV		1/17/2022 4:28:0	1	R373332		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		14.68115		15	0	0	0.0358	0.3	0	98%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.22898		15	0	0	0.0782	0.3	50	102%	80	120	0%	
o-Terphenyl	S	mg/L		0.225423		0.2	0	0	0.000531	0.002	0	113%	80	120	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14984577	LCS-162891	HC-8015-DRO-	LCS-DOD		1/17/2022 6:44:4	1	162891	1/12/2022 2:	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					
14984577	LCS-162891	HC-8015-DRO-	LCS-DOD		1/17/2022 6:44:4	1	162891	1/12/2022 2:	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		13.45012		15	0	0	0.0358	0.3	0	90%	36	132	0%	
Total Extractable Hydrocarbons (SGT	A	mg/L		14.29216		15	0	0	0.0782	0.3	0	95%	60	132	0%	
o-Terphenyl (SGT)	S	mg/L		0.1931316		0.2	0	0	0.000531	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					
14984578	LCSD-162891	HC-8015-DRO-	LCSD-DOD		1/17/2022 7:30:0	1	162891	1/12/2022 2:	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		13.14248		15	0	13.45012	0.0358	0.3	0	88%	36	132	2%	
Total Extractable Hydrocarbons (SGT	A	mg/L		13.97379		15	0	14.29216	0.0782	0.3	0	93%	60	132	2%	
o-Terphenyl (SGT)	S	mg/L		0.1863258		0.2	0	0	0.000531	0.002	0	93%	56	125	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14984579	MB-162891	HC-8015-DRO-	MBLK		1/17/2022 8:15:2	1	162891	1/12/2022 2:	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	0.0358	0.15	0	0%	0	0	0%	
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0513	0.15	0	0%	0	0	0%	
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.0782	0.15	0	0%	0	0	0%	
n-Triacontane (SGT)	S	mg/L		0.0562		0.1	0	0	0.00054	0.002	0	56%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1938066		0.2	0	0	0.000531	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					
14984580	B22010625-001	HC-8015-DRO-	SAMP		1/17/2022 9:00:5	1	162891	1/12/2022 2:	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	0.0337594	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0		0	0	0	0.0483759	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT	A	mg/L		0		0	0	0	0.0737426	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.0867		0.0943	0	0	0.0005092	0.001886	0	92%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1664708		0.1886	0	0	0.0005007	0.001886	0	88%	56	125	0%	

Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14984581	B22010629-001	HC-8015-DRO-	SAMP		1/17/2022 9:46:0	1	162891	1/12/2022 2:	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	0.0337594	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t A	mg/L			0		0	0	0	0.0483759	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT A	mg/L			0		0	0	0	0.0737426	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.1003		0.0943	0	0	0.0005092	0.001886	0	106%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1865805		0.1886	0	0	0.0005007	0.001886	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					
14984582	B22010633-001	HC-8015-DRO-	SAMP		1/17/2022 10:31:	1	162891	1/12/2022 2:	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	0.035084	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t A	mg/L			0		0	0	0	0.050274	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT A	mg/L			0		0	0	0	0.076636	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.0987		0.098	0	0	0.0005292	0.00196	0	101%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1894179		0.196	0	0	0.0005204	0.00196	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					
14984583	B22010641-001	HC-8015-DRO-	SAMP		1/18/2022 12:01:	1	162891	1/12/2022 2:	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			0.04554261		0	0	0	0.0337594	0.3	0	0%	0	0	0%	J
Oil Range Hydrocarbons (SGT-C24 t A	mg/L			0		0	0	0	0.0483759	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT A	mg/L			0		0	0	0	0.0737426	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.0945		0.0943	0	0	0.0005092	0.001886	0	100%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1894701		0.1886	0	0	0.0005007	0.001886	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					
14984584	B22010626-001	HC-8015-DRO-	SAMP		1/18/2022 12:47:	1	162891	1/12/2022 2:	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	0.0347618	0.3	0	0%	0	0	0%	U
Oil Range Hydrocarbons (SGT-C24 t A	mg/L			0		0	0	0	0.0498123	0.3	0	0%	0	0	0%	U
Total Extractable Hydrocarbons (SGT A	mg/L			0		0	0	0	0.0759322	0.3	0	0%	0	0	0%	U
n-Triacontane (SGT)	S	mg/L		0.076		0.0971	0	0	0.0005243	0.001942	0	78%	50	150	0%	



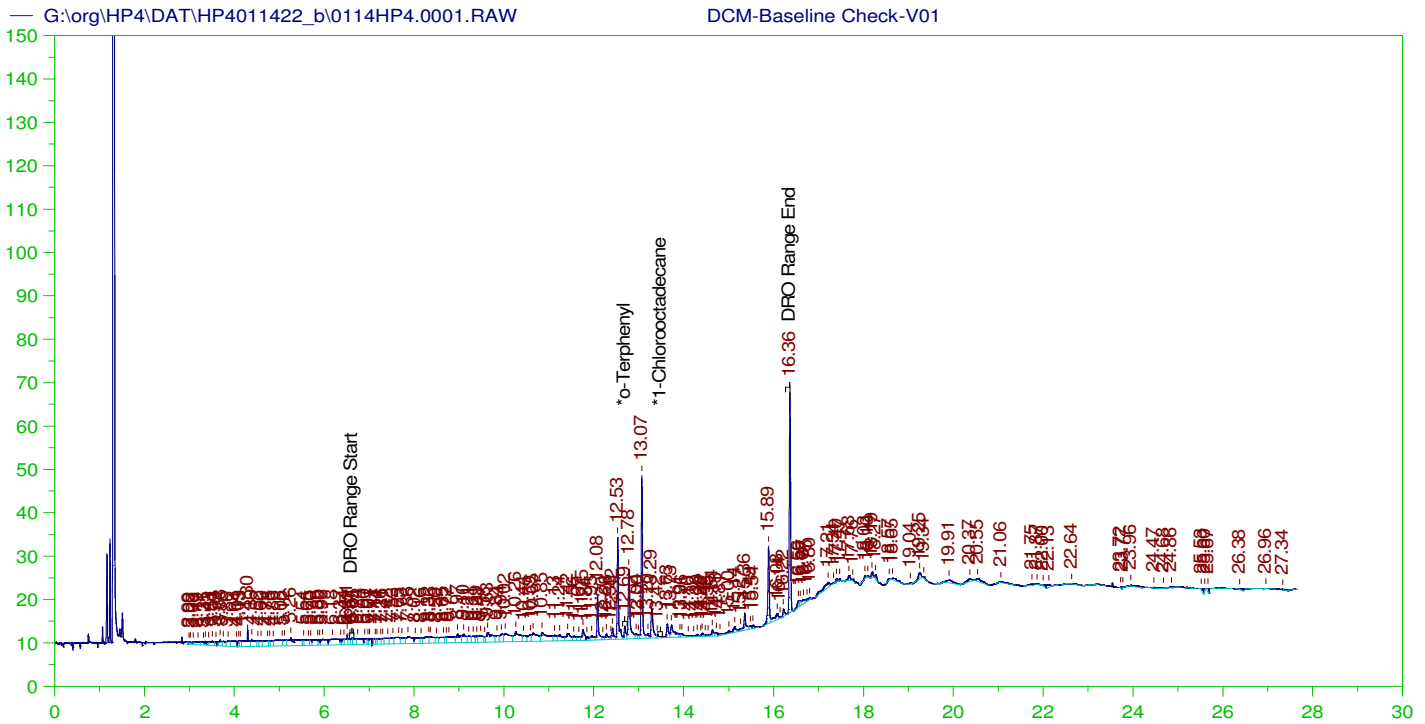
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14984584	B22010626-001	HC-8015-DRO-	SAMP		1/18/2022 12:47:	1	162891	1/12/2022 2:	0	0						
Analyte	T	Units	RAW	Final	Text	Spike	SPKref	RPDref	MDL	PQL	UQL	%REC	LOW	HIGH	%RPD	Q
o-Terphenyl (SGT)	S	mg/L		0.1574279		0.1942	0	0	0.0005156	0.001942	0	81%	56	125	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14984585	B22010626-001	HC-8015-DRO-	MS-DOD		1/18/2022 1:32:1	1	162891	1/12/2022 2:	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			11.82337		14.43	0	0	0	0.3	0	82%	36	132	0%	
Total Extractable Hydrocarbons (SGT A	mg/L			12.51751		14.43	0	0	0	0.3	0	87%	60	132	0%	
o-Terphenyl (SGT)	S	mg/L		0.125465		0.1924	0	0	0.0004127	0.002	0	65%	56	125	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14984586	CCV_0117HP41	HC-8015-DRO-	CCV		1/18/2022 3:02:2	1	R373332				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		4.67555469		5	0	0	0.0513	0.3	0	94%	80	120	0%	
n-Triacontane	S	mg/L		0.2063368		0.2	0	0	0.00054	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					
14984587	CCV_0117HP42	HC-8015-DRO-	CCV		1/18/2022 3:47:2	1	R373332				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		14.4398		15	0	0	0	0.3	0	96%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		14.97497		15	0	0	0.0782	0.3	50	100%	80	120	0%	
o-Terphenyl	S	mg/L		0.2199076		0.2	0	0	0.000531	0.002	0	110%	80	120	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14984588	B22010643-001	HC-8015-DRO-	SAMP		1/18/2022 5:17:2	1	162891	1/12/2022 2:	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			0.7948647		0	0	0	0.0340816	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0.15336867		0	0	0	0.0488376	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons (SGT A	mg/L			0.9633197		0	0	0	0.0744464	0.3	0	0%	0	0	0%	
n-Triacontane (SGT)	S	mg/L		0.0983		0.0952	0	0	0.0005141	0.001904	0	103%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1836126		0.1904	0	0	0.0005055	0.001904	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					
14984589	B22010643-002	HC-8015-DRO-	SAMP		1/18/2022 6:02:2	1	162891	1/12/2022 2:	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		0.8967723		0	0	0	0.0340816	0.3	0	0%	0	0	0%	
Oil Range Hydrocarbons (SGT-C24 t	A	mg/L		0.18258576		0	0	0	0.0488376	0.3	0	0%	0	0	0%	J
Total Extractable Hydrocarbons (SGT	A	mg/L		1.084771		0	0	0	0.0744464	0.3	0	0%	0	0	0%	
n-Triacontane (SGT)	S	mg/L		0.099		0.0952	0	0	0.0005141	0.001904	0	104%	50	150	0%	
o-Terphenyl (SGT)	S	mg/L		0.1762067		0.1904	0	0	0.0005055	0.001904	0	93%	56	125	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14984590	B22010641-001	HC-8015-DRO-	MS-DOD		1/18/2022 6:47:3	1	162891	1/12/2022 2:	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		4.44982719		4.76	0	0	0.0488376	0.3	0	93%	41	113	0%	
n-Triacontane (SGT)	S	mg/L		0.0998		0.0952	0	0	0.0005141	0.002	0	105%	50	150	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14984591	LCSD-RRO-162	HC-8015-DRO-	LCSD-DOD		1/18/2022 8:17:0	1	162891	1/12/2022 2:	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		4.25417709		5	0	4.6700897	0.0513	0.3	0	85%	41	113	9%	
n-Triacontane (SGT)	S	mg/L		0.065		0.1	0	0	0.00054	0.002	0	65%	50	150	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14984592	LCS-RRO-1628	HC-8015-DRO-	LCS-DOD		1/18/2022 9:47:0	1	162891	1/12/2022 2:	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		4.67008972		5	0	4.2541771	0.0513	0.3	0	93%	41	113	9%	
n-Triacontane (SGT)	S	mg/L		0.0706		0.1	0	0	0.00054	0.002	0	71%	50	150	0%	
Seq No	Lab ID	Test Code	Sample Typ	File ID	Analysis Date	DF	Batch ID	Prep Date	SPKref	RPDref	pmoist					
14984593	CCV_0117HP43	HC-8015-DRO-	CCV		1/18/2022 12:10:	1	R373332		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		4.95863477		5	0	0	0.0513	0.3	0	99%	80	120	0%	
n-Triacontane	S	mg/L		0.2078345		0.2	0	0	0.00054	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					
14984594	CCV_0117HP43	HC-8015-DRO-	CCV		1/18/2022 12:54:	1	R373332		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		15.02668		15	0	0	0.0358	0.3	0	100%	80	120	0%	
Total Extractable Hydrocarbons	A	mg/L		15.57983		15	0	0	0.0782	0.3	50	104%	80	120	0%	
o-Terphenyl	S	mg/L	0.2286203			0.2	0	0	0.000531	0.002	0	114%	80	120	0%	

Write Sequence	Data File	Sample Name	Insert Entries(Have the first call for entries select)	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID
	G:\org\HP4\DAT\HP4011422_b\0114HP4.01f	DCM-Baseline Check-V01		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.02f	DCM-Baseline Check-V02		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.03f	MARKER_0114HP432r, DRO_0114HP4, DRO211220B		G:\org\HP4\Methods\CSC220114.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.04f	CCV_0114HP433r, RRO_0114HP4, DRO220106A		G:\Org\HP4\Methods\DC_ORO-T-AE-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.05f	CCV_0114HP434r, DRO_0114HP4, DRO220105B		G:\Org\HP4\Methods\DC_8015-C24-OL-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.06f	DCM-Baseline Check-V06		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.07f	DCM-Baseline Check-V07		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.08f	LCS-162891_0114HP4,		G:\Org\HP4\methods\DS_8015-C24-OL-L%.met	1000	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.09f	LCSD-162891_0114HP4,		G:\Org\HP4\methods\DS_8015-C24-OL-L%.met	1000	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.10f	MB-162891_0114HP4,		G:\Org\HP4\methods\DR_8015-C24T-OL-L%.met	1000	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.11f	B22010507-001D_0114HP4, \$HC-8015-DRO-W,		G:\Org\HP4\Methods\DR_ORO-S-AE-L%.met	1060	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.12f	B22010625-001D_0114HP4, \$HC-8015-DRO-W,		G:\Org\HP4\Methods\DR_ORO-S-AE-L%.met	1060	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.13f	B22010626-001D_0114HP4, \$HC-8015-DRO-W,		G:\Org\HP4\Methods\DR_ORO-S-AE-L%.met	1030	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.14f	B22010626-001DMS_0114HP4,		G:\Org\HP4\methods\DS_8015-C24-OL-L%.met	1040	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.15f	DCM-Baseline Check-V15		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.16f	B22010338-001D_0114HP4, \$HC-8015-DRO-W, rx need rerun due to baseline		G:\Org\HP4\methods\DR_8015-C24T-OK-L0.met	1040	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.17f	MARKER_0114HP417r, DRO_0114HP4, DRO211220B		G:\org\HP4\Methods\CSC220114.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.18f	CCV_0114HP418r, RRO_0114HP4, DRO220106A		G:\Org\HP4\Methods\DC_ORO-T-AE-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.19f	CCV_0114HP419r, DRO_0114HP4, DRO220105B		G:\Org\HP4\Methods\DS_ORO-T-AE-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.20f	DCM-Baseline Check-V20		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.21f	DCM-Baseline Check-V21		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.22f	B22010628-001D_0114HP4, \$HC-8015-DRO-W,		G:\Org\HP4\Methods\DR_8015-C24T-OL-L%.met	1060	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.23f	B22010637-001D_0114HP4, \$HC-8015-DRO-W,		G:\Org\HP4\Methods\DR_ORO-S-AE-L%.met	1020	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.24f	B22010641-001D_0114HP4, \$HC-8015-DRO-W,		G:\Org\HP4\Methods\DR_ORO-S-AE-L%.met	1060	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.25f	DCM-Baseline Check-V25		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.26f	B22010643-001D_0114HP4, \$HC-8015-DRO-W,		G:\Org\HP4\Methods\DS_8015-011426-OL-L%.met	1050	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.27f	B22010643-002B_0114HP4, \$HC-8015-DRO-W,		G:\Org\HP4\Methods\DS_ORO-011427-AE-L%.met	1050	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.28f	DCM-Baseline Check-V28		G:\Org\HP4\Methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.29f	B22010629-001D_0114HP4, \$HC-8015-DRO-W,		G:\Org\HP4\Methods\DS_8015-011429-OL-L%.met	1060	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.30f	B22010633-001D_0114HP4, \$HC-8015-DRO-W,		G:\Org\HP4\Methods\DR_ORO-011429-AE-L%.met	1020	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.31f	B22010641-001DMS-RRO_0114HP4,		G:\Org\HP4\Methods\DS_8015-T-OL-L%.met	1050	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.32f	MARKER_0114HP432r, DRO_0114HP4, DRO211220B		G:\Org\HP4\Methods\DC_ORO-T-AE-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.33f	CCV_0114HP433r, RRO_0114HP4, DRO220106A		G:\Org\HP4\Methods\DC_ORO-T-AE-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.34f	CCV_0114HP434r, DRO_0114HP4, DRO220105B		G:\Org\HP4\Methods\DS_ORO-T-AE-L%.met	1	1	1	1	0
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	G:\org\HP4\DAT\HP4011422_b\0114HP4.36f	LCS-RRO-162891_0114HP4,		G:\Org\HP4\Methods\DS_ORO-T-AE-L%.met	1000	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.37f	DCM-Baseline Check-V37		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.38f	LCSD-RRO-162891_0114HP4,		G:\Org\HP4\Methods\DS_ORO-T-AE-L%.met	1000	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.39f	MARKER_0114HP439r, DRO_0114HP4, DRO211220B		G:\Org\HP4\Methods\DC_ORO-T-AE-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.40f	CCV_0114HP440r, RRO_0114HP4, DRO220106A		G:\Org\HP4\Methods\DC_ORO-T-AE-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.41f	DCM-Baseline Check-V41		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.42f	MARKER_0114HP442r, DRO_0114HP4, DRO211220B		G:\org\HP4\Methods\CSC220114.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.43f	CCV_0114HP443r, RRO_0114HP4, DRO220106A		G:\Org\HP4\Methods\DC_ORO-T-AE-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.44f	CCV_0114HP444r, DRO_0114HP4, DRO220105B		G:\Org\HP4\Methods\DS_ORO-T-AE-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.45f	DCM-Baseline Check-V45		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.46f	B22010338-001D_0114HP4, \$HC-8015-DRO-W, RR		G:\Org\HP4\Methods\DR_8015-C24T-OL-L%.met	1040	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.47f	MARKER_0114HP447r, DRO_0114HP4, DRO211220B		G:\Org\HP4\Methods\DR_ORO-S-AE-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.48f	CCV_0114HP448r, RRO_0114HP4, DRO220106A		G:\Org\HP4\Methods\DS_8015-T-OL-L%.met	1	1	1	1	0
	G:\org\HP4\DAT\HP4011422_b\0114HP4.49f	CCV_0114HP449r, DRO_0114HP4, DRO220105B		G:\org\HP4\Methods\CSC220114.met	1	1	1	1	0
				G:\Org\HP4\Methods\DC_ORO-T-AE-L%.met	1	1	1	1	0
				G:\Org\HP4\Methods\DS_ORO-T-AE-L%.met	1	1	1	1	0
				G:\Org\HP4\Methods\DC_8015-C24-OL-L%.met	1	1	1	1	0
				G:\Org\HP4\Methods\DS_8015-C24-OL-L%.met	1	1	1	1	0





**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

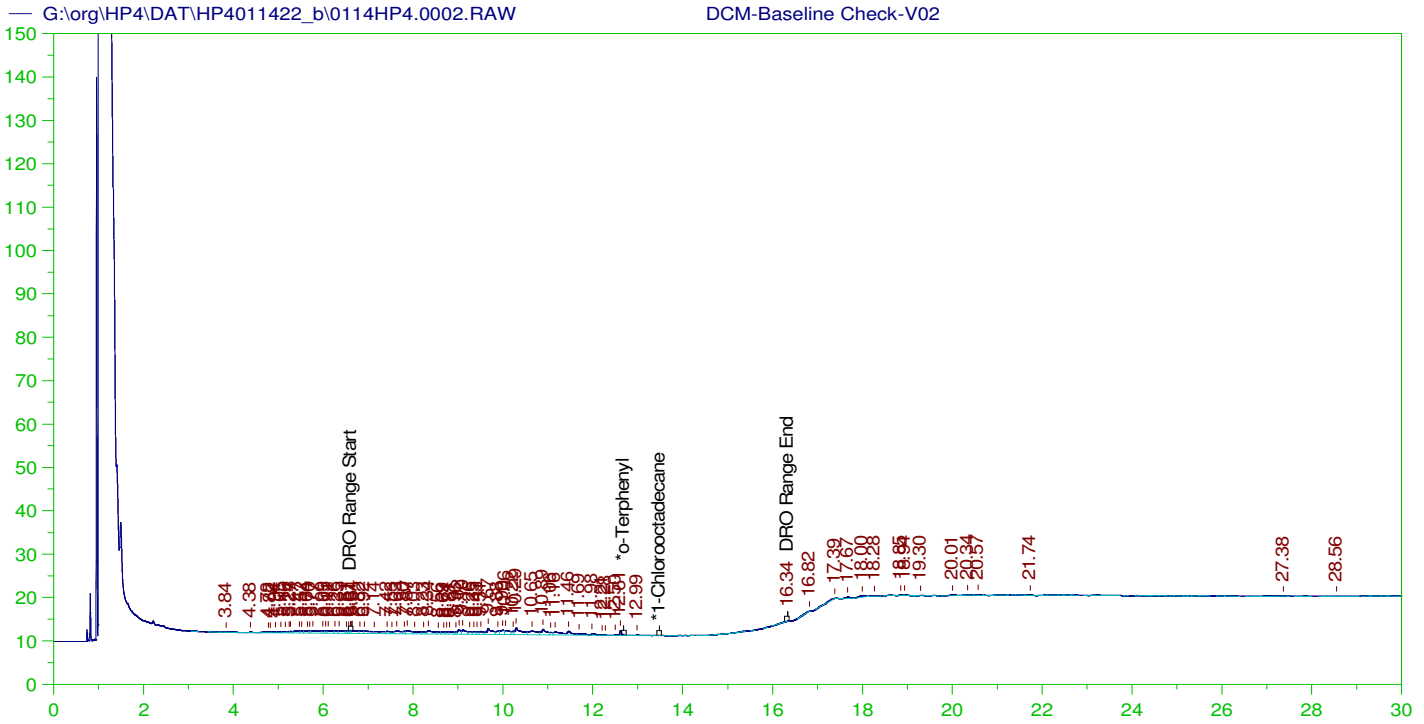
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 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.69	200.	.249	.12
*1-Chlorooctadecane	27.592	200.	.	.

DRO Area: 930426 DRO Amount: 31.67593  
 TEH Area: 1279048 TEH Amount: 43.5446



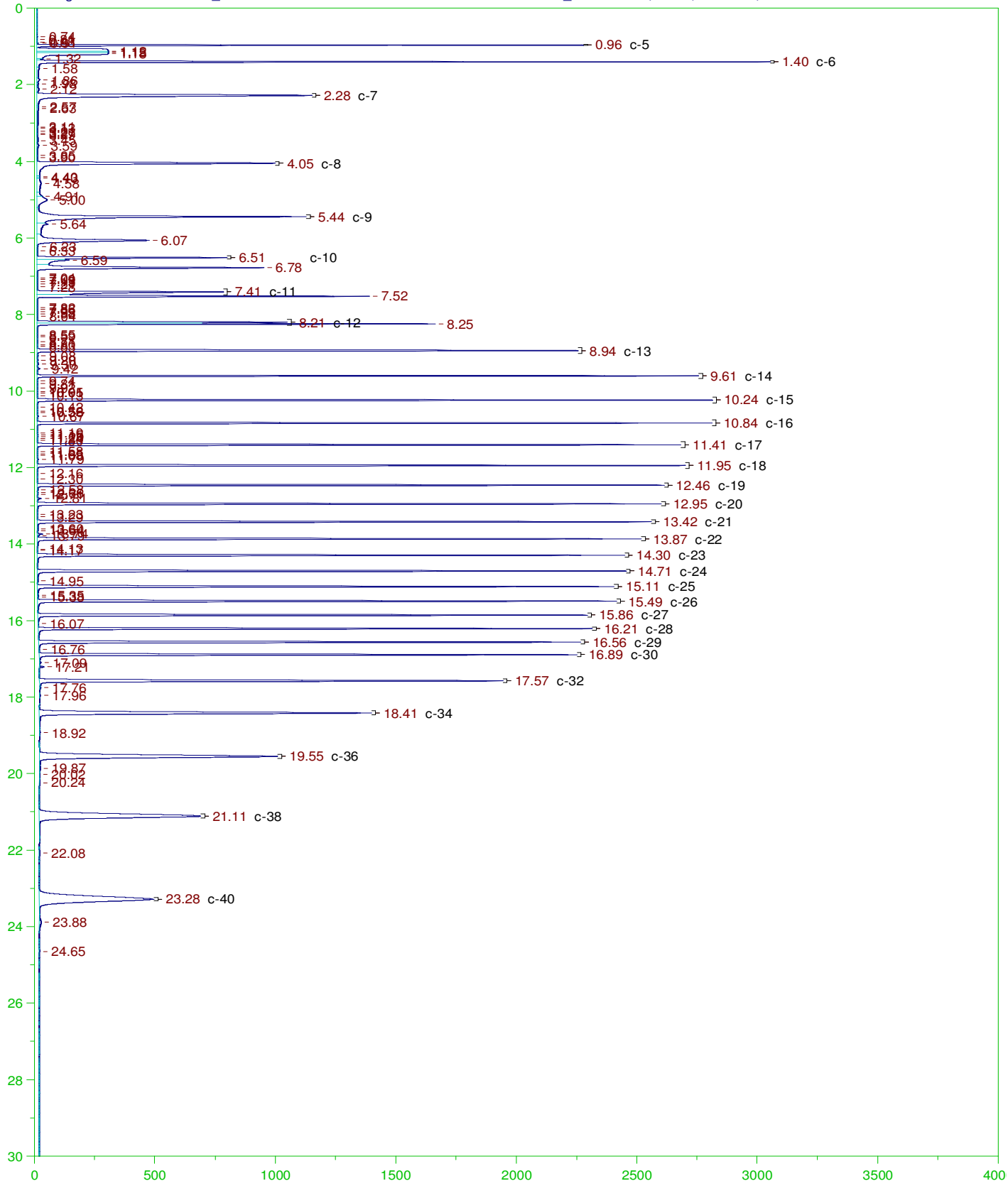
**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V02  
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 Sample Weight: 1 Dilution: 1 S.A.: 1

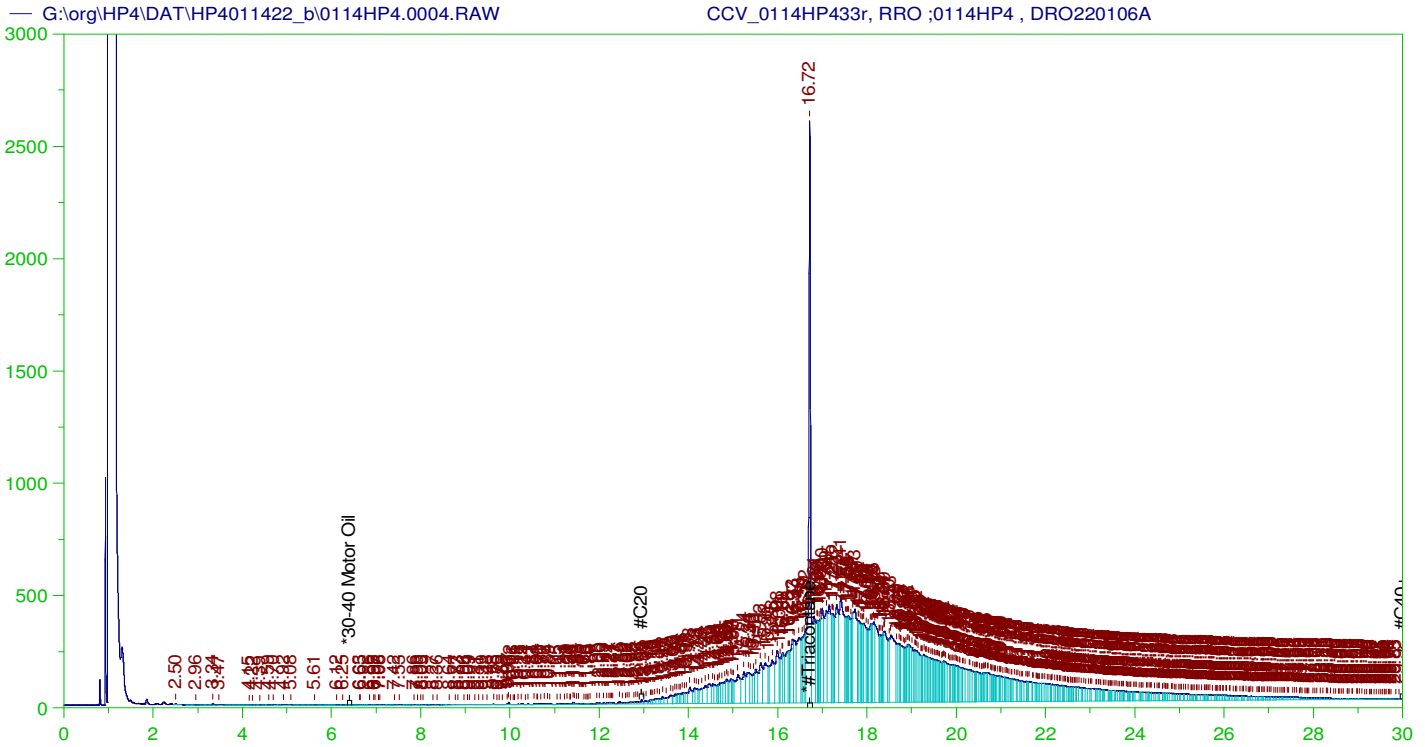
Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.953	200.	.	-
*1-Chlorooctadecane	29.953	200.	.	-

DRO Area:204846 DRO Amount: 6.973889  
 TEH Area:276366.1 TEH Amount: 9.408758







**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP433r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0004.RAW  
 Date & Time Acquired: 1/14/2022 11:26:48 AM  
 Method File: G:\Org\HP4\Methods\DC\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.716	500.	306.884	61.38	-

RRO TEH (Oil Range) Area:1.086283E+08 RRO TEH (Oil Range) AMOUNT: 4428.465

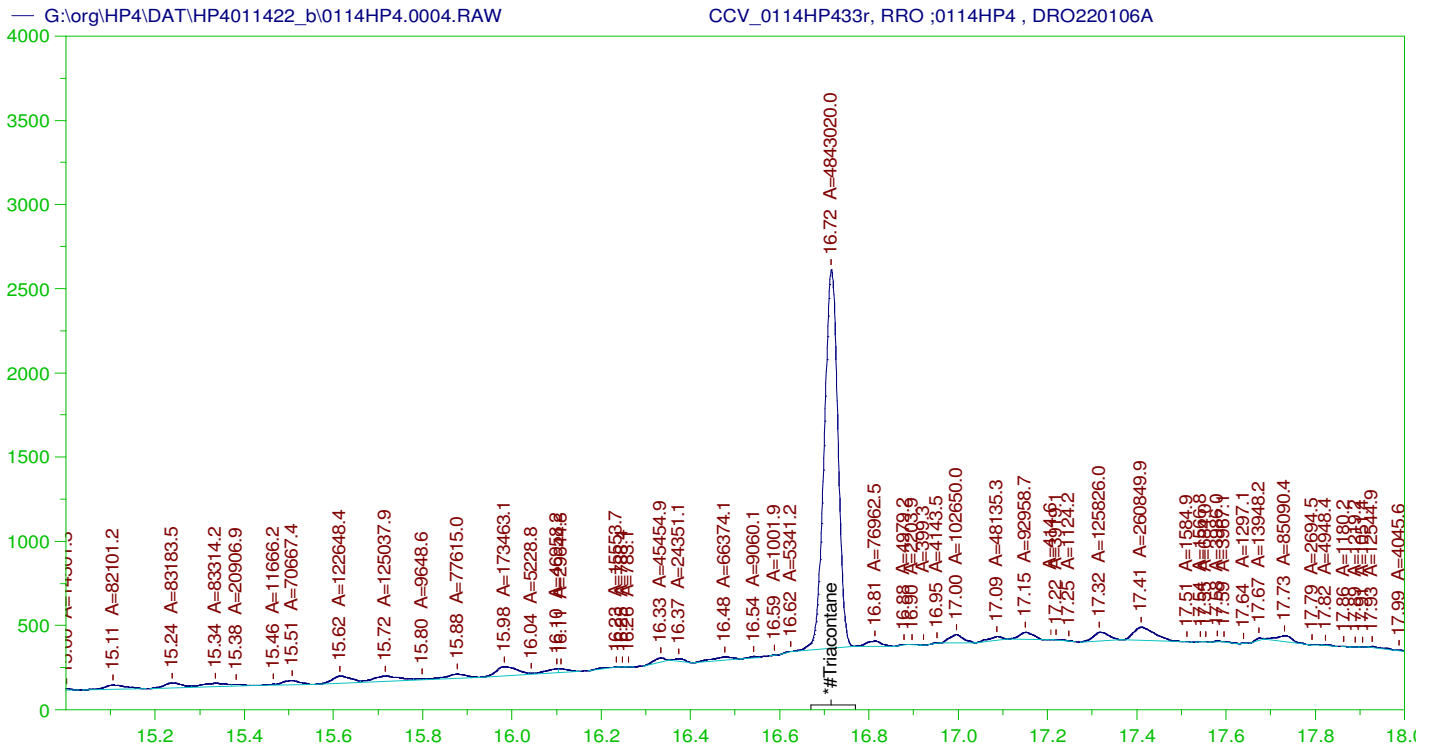
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COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
*30-40 Motor Oil	5000.	.	75-125	

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.716	200.	306.884	153.44	75-125

AMN 02/01/2022



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP433r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0004.RAW  
 Date & Time Acquired: 1/14/2022 11:26:48 AM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.9 to 30.05

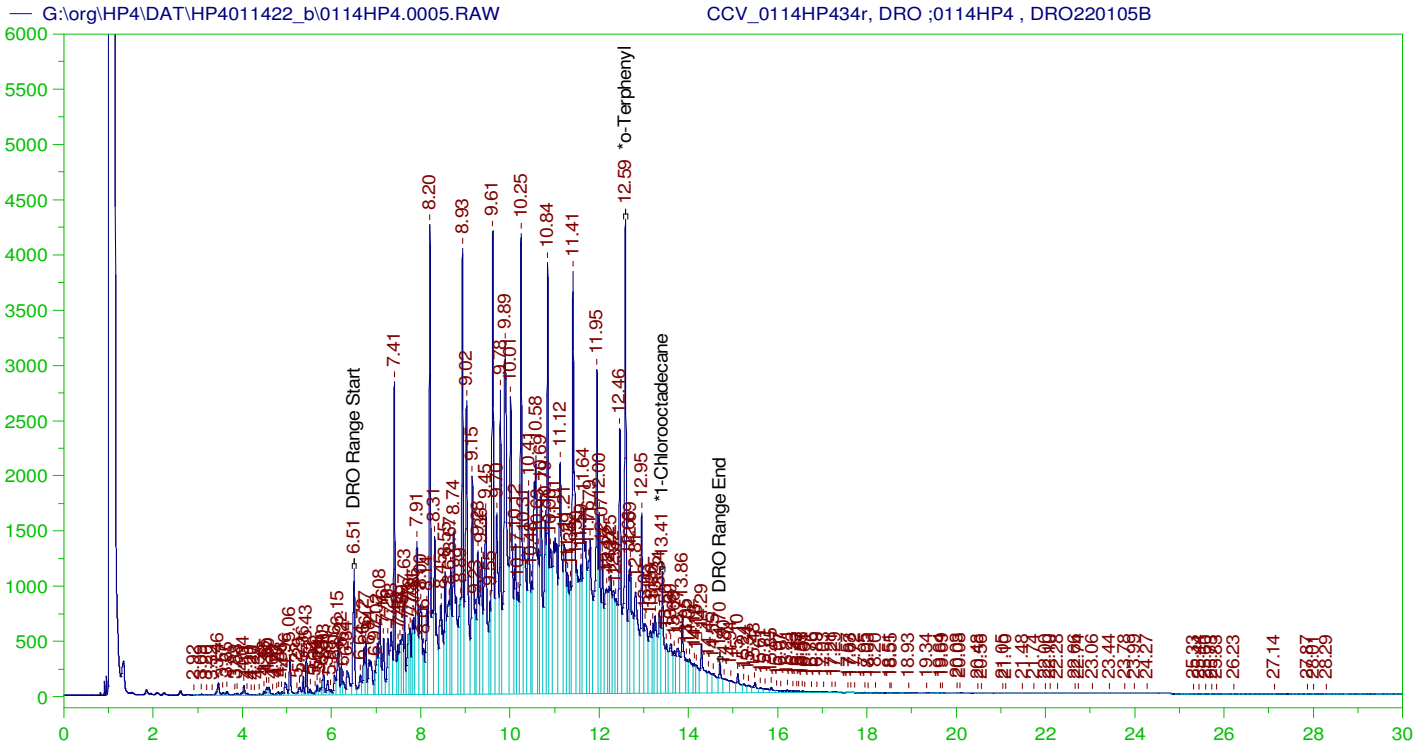
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.716	500.	193.924	38.78	-

RRO Area:3263680 RRO AMOUNT: 133.0509

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0004.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.716	200.	193.924	96.96	75-125



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0114HP434r, DRO ;0114HP4 , DRO220105B  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0005.RAW  
 Date & Time Acquired: 1/14/2022 12:11:48 PM  
 Method File: G:\Org\HP4\methods\DC\_8015-C24-OL-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.585	200.	351.758	175.88
*1-Chlorooctadecane	13.414	200.	112.551	56.28

DRO Area: 4.227997E+08 DRO Amount: 14394.02  
 TEH Area: 4.385245E+08 TEH Amount: 14929.37

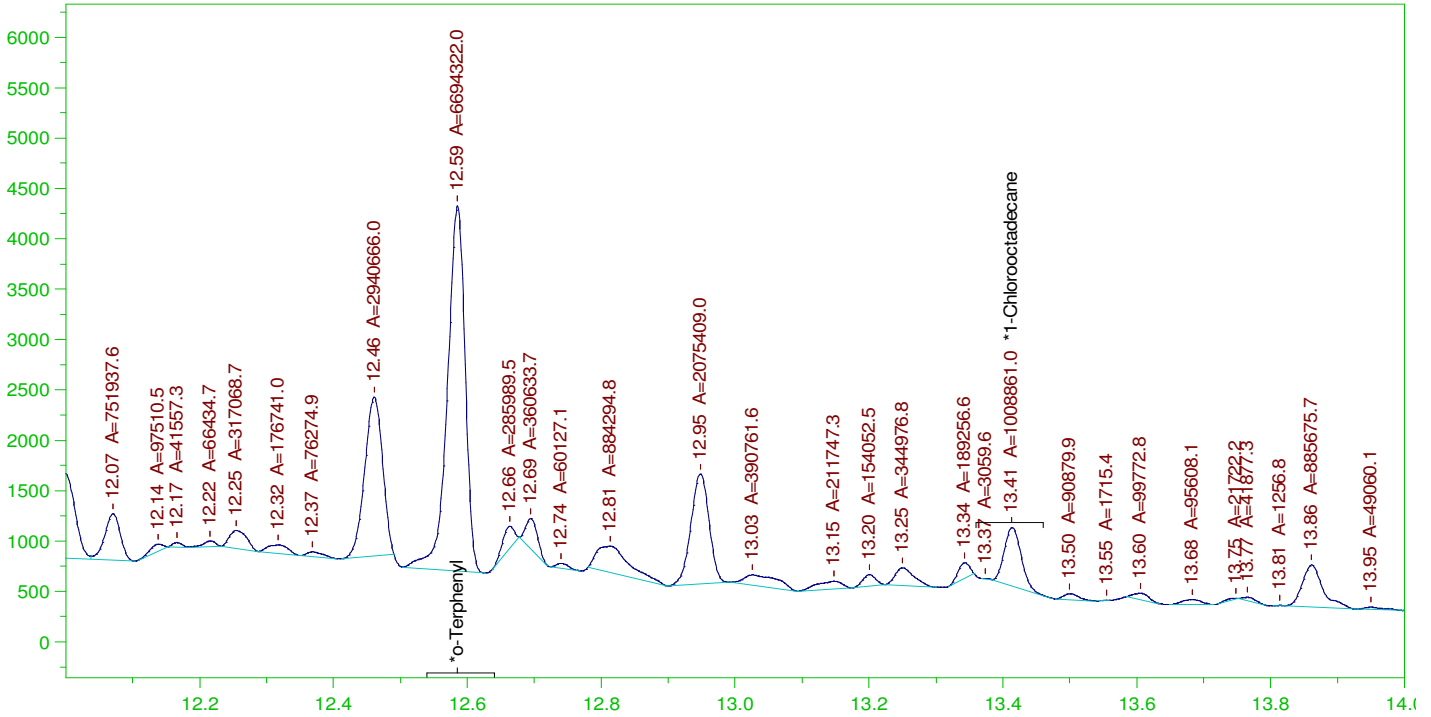
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0005.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	14929.37	99.53	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.585	200.	351.758	175.88	85-115
*1-Chlorooctadecane	13.414	200.	112.551	56.28	85-115

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0005.RAW

CCV\_0114HP434r, DRO ;0114HP4 , DRO220105B



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0114HP434r, DRO ;0114HP4 , DRO220105B  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0005.RAW  
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 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

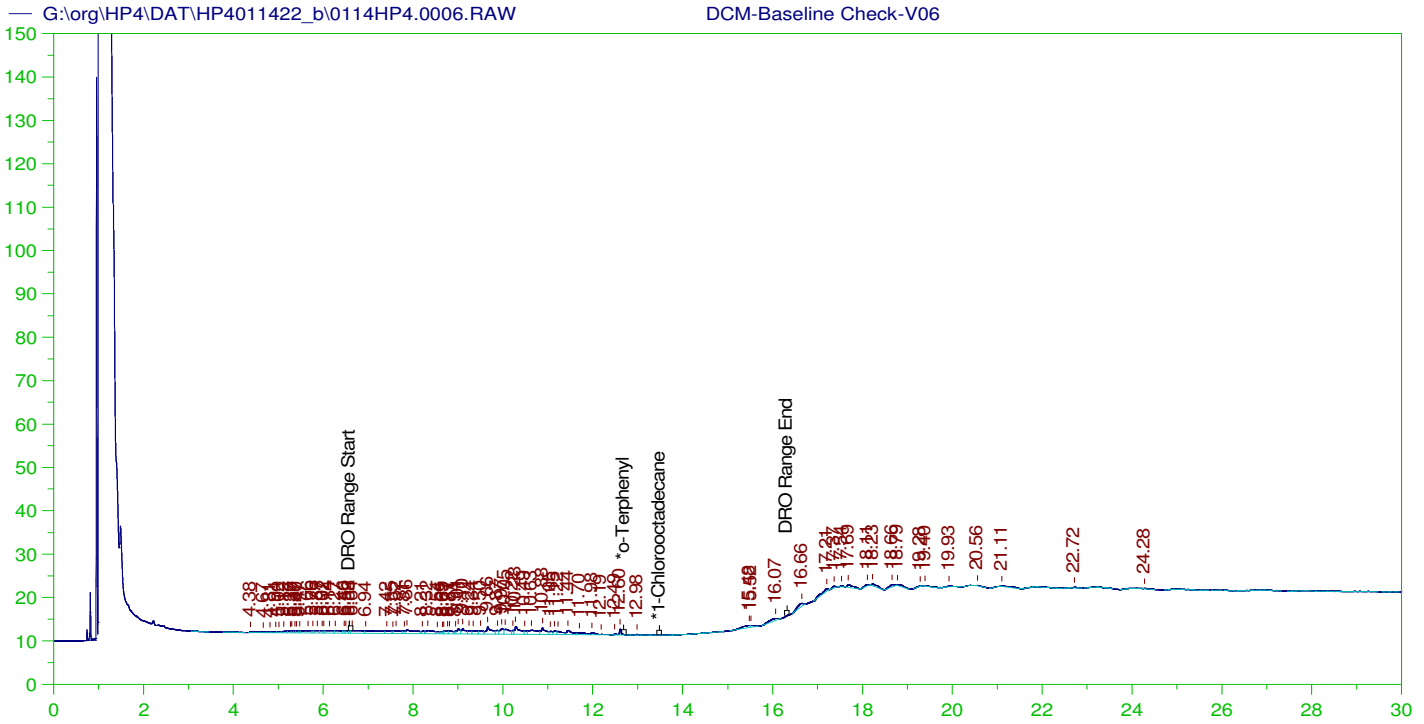
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.585	200.	200.912	100.46
*1-Chlorooctadecane	13.414	200.	30.278	15.14

DRO Area: 1.840318E+08 DRO Amount: 6265.278  
 TEH Area: 1.938482E+08 TEH Amount: 6599.473

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0005.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	6599.47	44.	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.585	200.	200.912	100.46	85-115
*1-Chlorooctadecane	13.414	200.	30.278	15.14	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

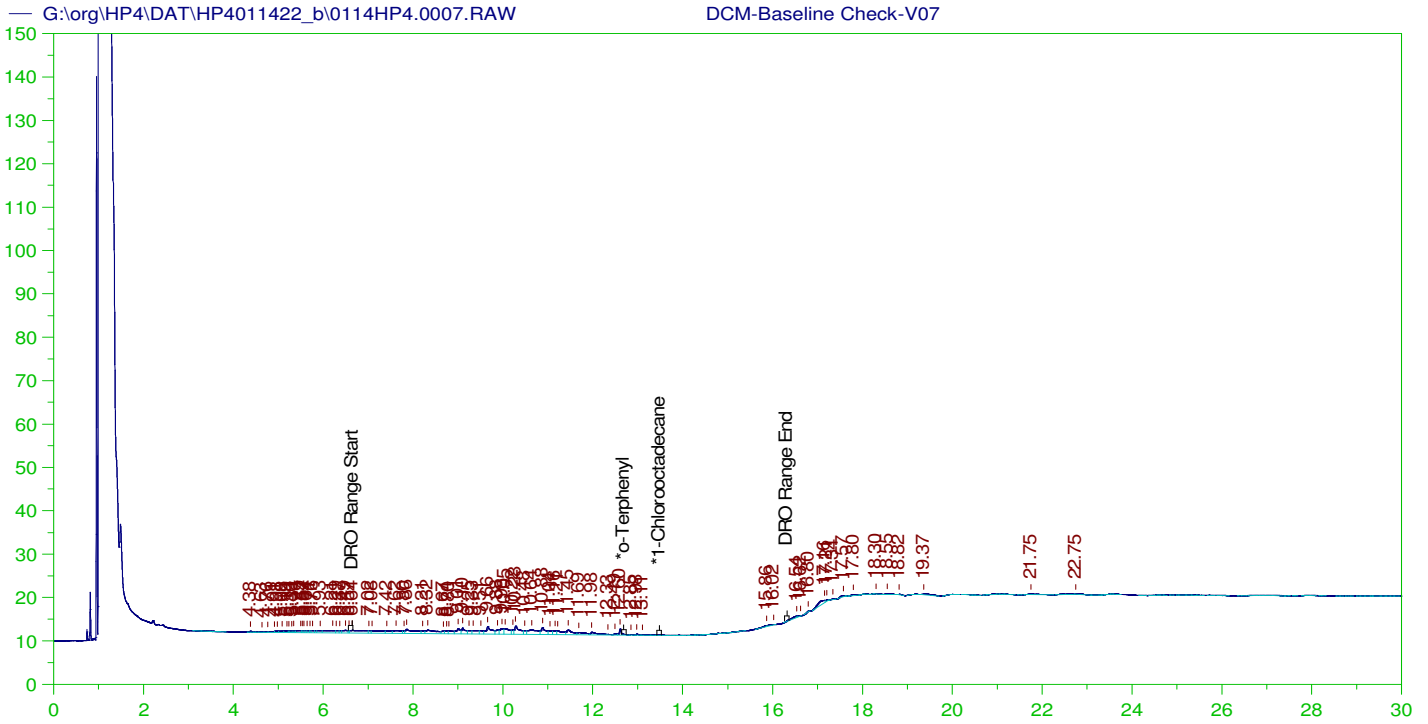
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 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.89	200.	.	-
*1-Chlorooctadecane	29.89	200.	.	-

DRO Area:242927.5 DRO Amount: 8.270357  
 TEH Area:352578.2 TEH Amount: 12.00337



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

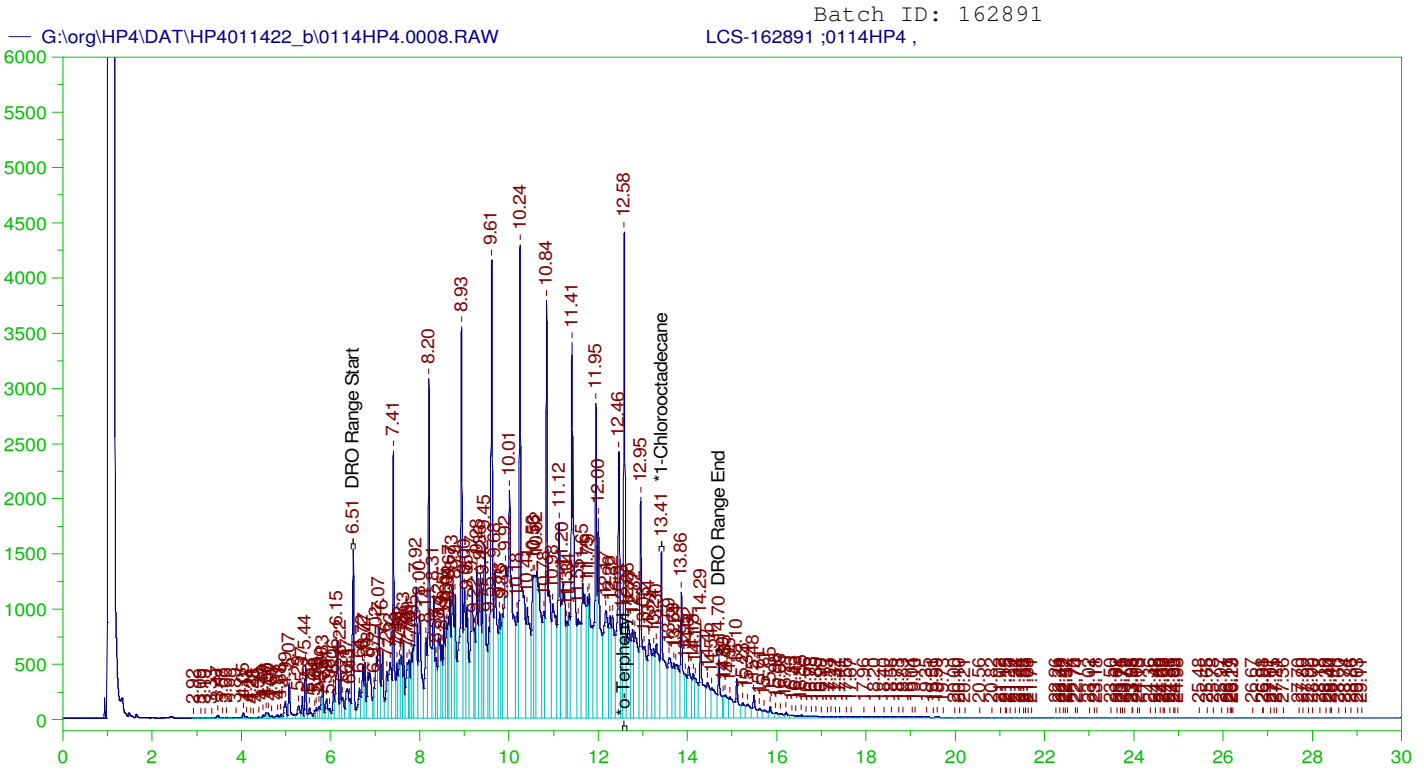
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 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.901	200.	.	-
*1-Chlorooctadecane	29.901	200.	.	-

DRO Area:243189.3 DRO Amount: 8.279272  
 TEH Area:323041.9 TEH Amount: 10.99782



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: LCS-162891 ;0114HP4 ,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0008.RAW  
Date & Time Acquired: 1/14/2022 2:26:52 PM  
Method File: G:\Org\HP4\methods\D3\_8015-C24-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO21110201-C24.CAL  
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

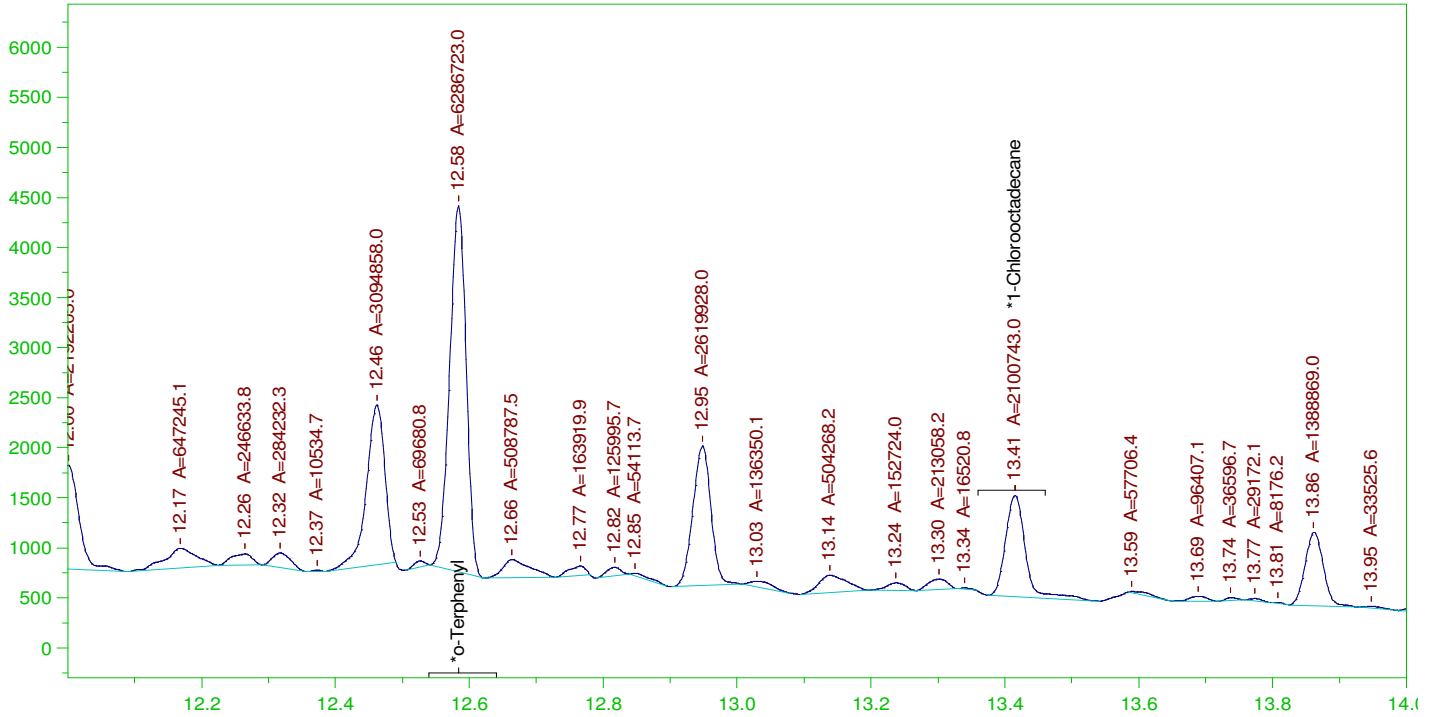
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.584	.2	.299	149.37	-
*1-Chlorooctadecane	13.415	.2	.207	103.65	-

DRO Area: 3.938004E+08 DRO Amount: 13.40676  
TEH Area: 4.193713E+08 TEH Amount: 14.27731

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0008.RAW

LCS-162891 ;0114HP4 ,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: LCS-162891 ;0114HP4 ,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0008.RAW  
Date & Time Acquired: 1/14/2022 2:26:52 PM  
Method File: G:\Org\HP4\methods\DS\_8015-C24-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24.CAL  
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.584	.2	.189	94.34	-
*1-Chlorooctadecane	13.415	.2	.063	31.52	-

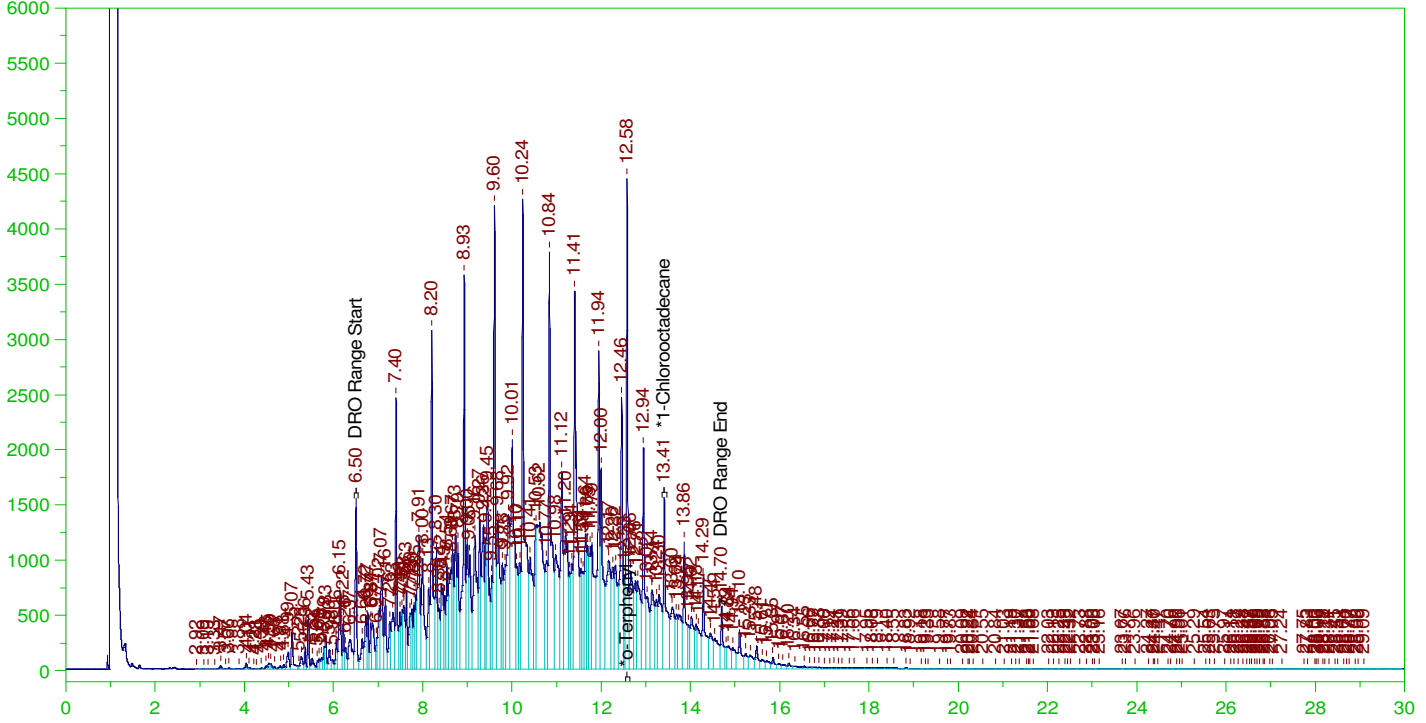
DRO Area:1.621409E+08 DRO Amount: 5.520015  
TEH Area:1.747908E+08 TEH Amount: 5.950674



Batch ID: 162891

LCSD-162891 ;0114HP4 ,

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0009.RAW



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: LCSD-162891 ;0114HP4 ,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0009.RAW  
Date & Time Acquired: 1/14/2022 3:11:47 PM  
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Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO21110201-C24.CAL  
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

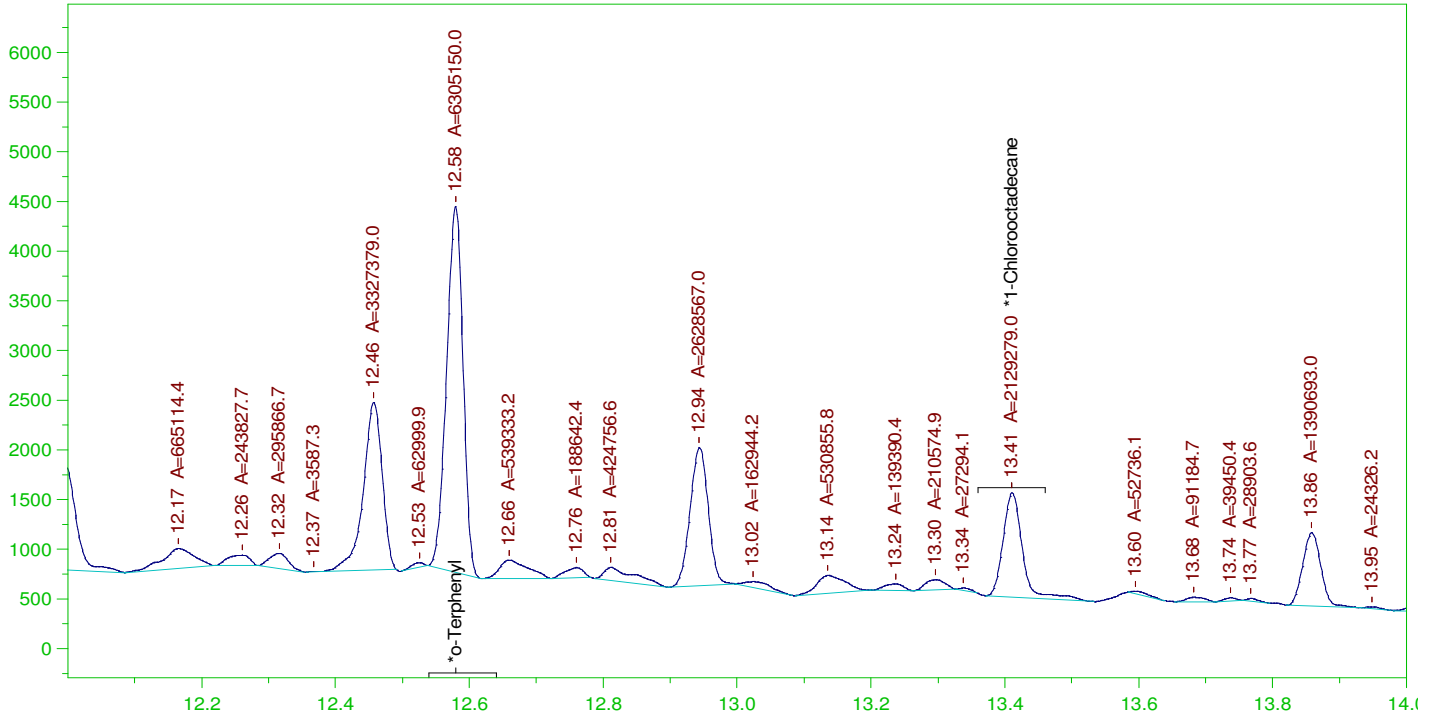
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.579	.2	.3	149.99
*1-Chlorooctadecane	13.411	.2	.206	103.18

DRO Area: 3.980227E+08 DRO Amount: 13.5505  
TEH Area: 4.239308E+08 TEH Amount: 14.43253

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0009.RAW

LCSD-162891 ;0114HP4 ,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: LCSD-162891 ;0114HP4 ,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0009.RAW  
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 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.579	.2	.189	94.62
*1-Chlorooctadecane	13.411	.2	.064	31.95

DRO Area:1.644962E+08 DRO Amount: 5.6002  
 TEH Area:1.775087E+08 TEH Amount: 6.043204



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: MB-162891 ;0114HP4 ,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0010.RAW  
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 Method File: G:\Org\HP4\methods\DR\_8015-C24T-OL-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24-TRI.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

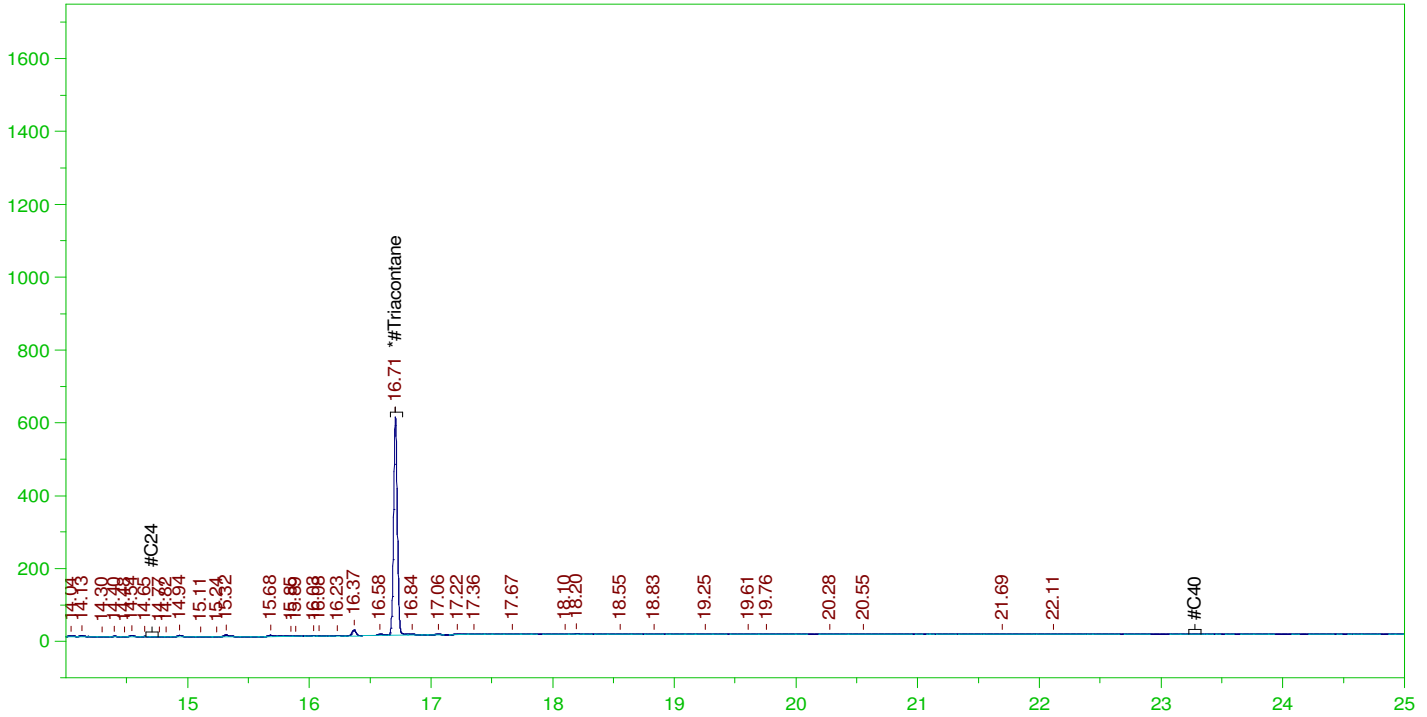
Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.58	.2	.197	98.55	-
*1-Chlorooctadecane	13.387	.2	.	.05	-
*#Triacontane	16.708	.2	.052	26.07	-

DRO Area:385096.9 DRO Amount: 1.311045E-02  
 TEH Area:589482.4 TEH Amount: 2.006866E-02

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0010.RAW

MB-162891 ;0114HP4 ,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: MB-162891 ;0114HP4 ,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0010.RAW  
 Date & Time Acquired: 1/14/2022 3:56:39 PM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-S-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.66 to 23.33

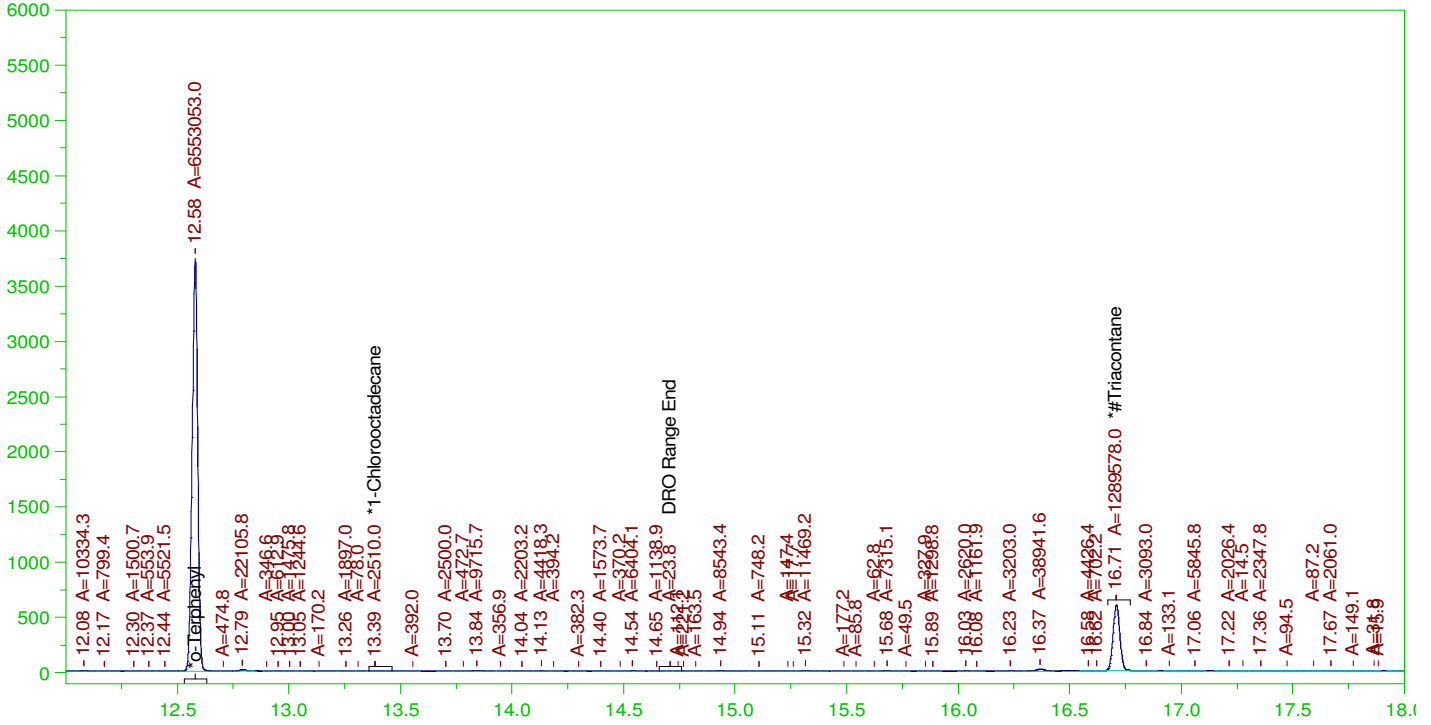
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.708	.5	.052	10.43

RRO Area:150813.2 RRO AMOUNT: 6.148221E-03

Batch ID: 162891

MB-162891 ;0114HP4 ,

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0010.RAW



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: MB-162891 ;0114HP4 ,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0010.RAW  
Date & Time Acquired: 1/14/2022 3:56:39 PM  
Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24-TRI.CAL  
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.58	.2	.197	98.34
*1-Chlorooctadecane	13.387	.2	.04	-
*#Triacontane	16.708	.2	.052	25.82

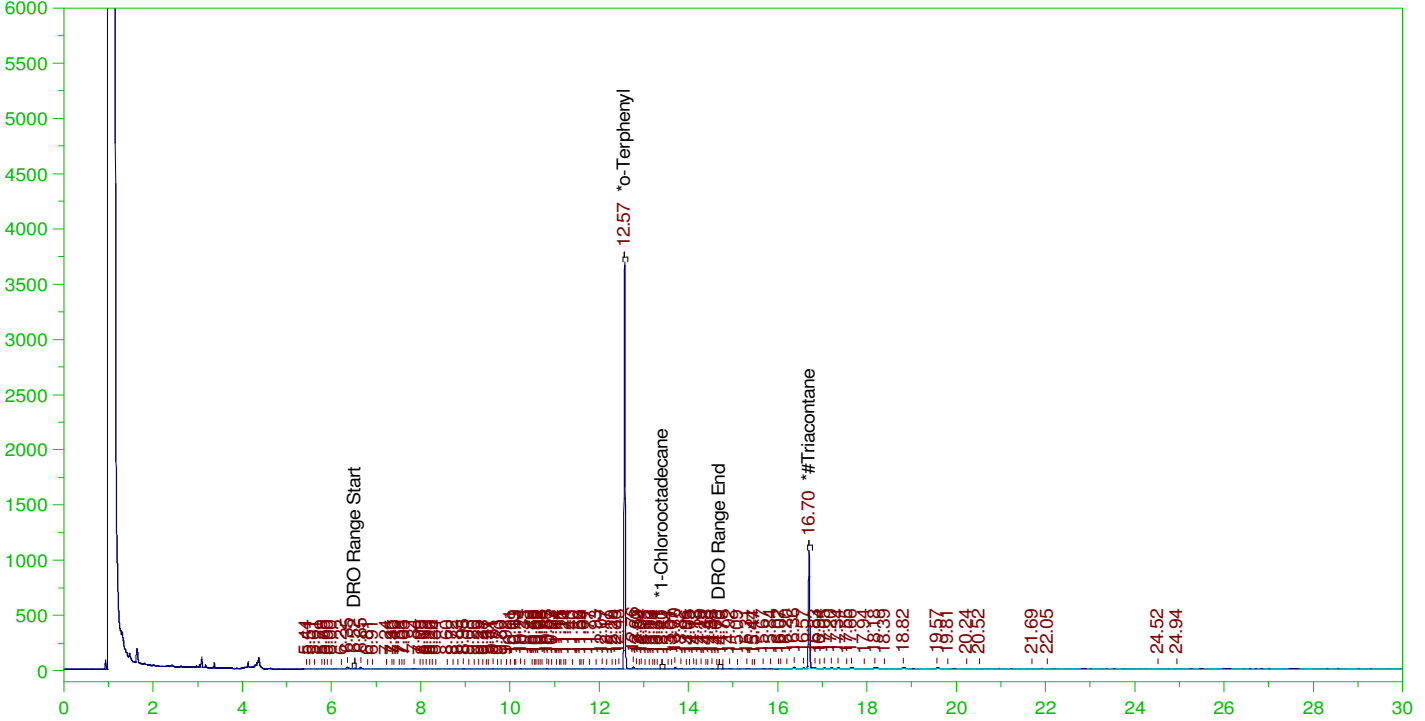
DRO Area:212573.3 DRO Amount: 7.236963E-03  
TEH Area:535947.6 TEH Amount: 1.824609E-02

ERH2350 (OWDFMW08A)

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0011.RAW

Batch ID: 162891

B22010507-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010507-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0011.RAW  
Date & Time Acquired: 1/14/2022 4:41:29 PM  
Method File: G:\Org\HP4\methods\DR\_8015-C24T-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24-TRI.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.569	.189	.183	96.96	-
*1-Chlorooctadecane	13.402	.189	.	.1	-
*#Triacontane	16.699	.189	.088	46.79	-

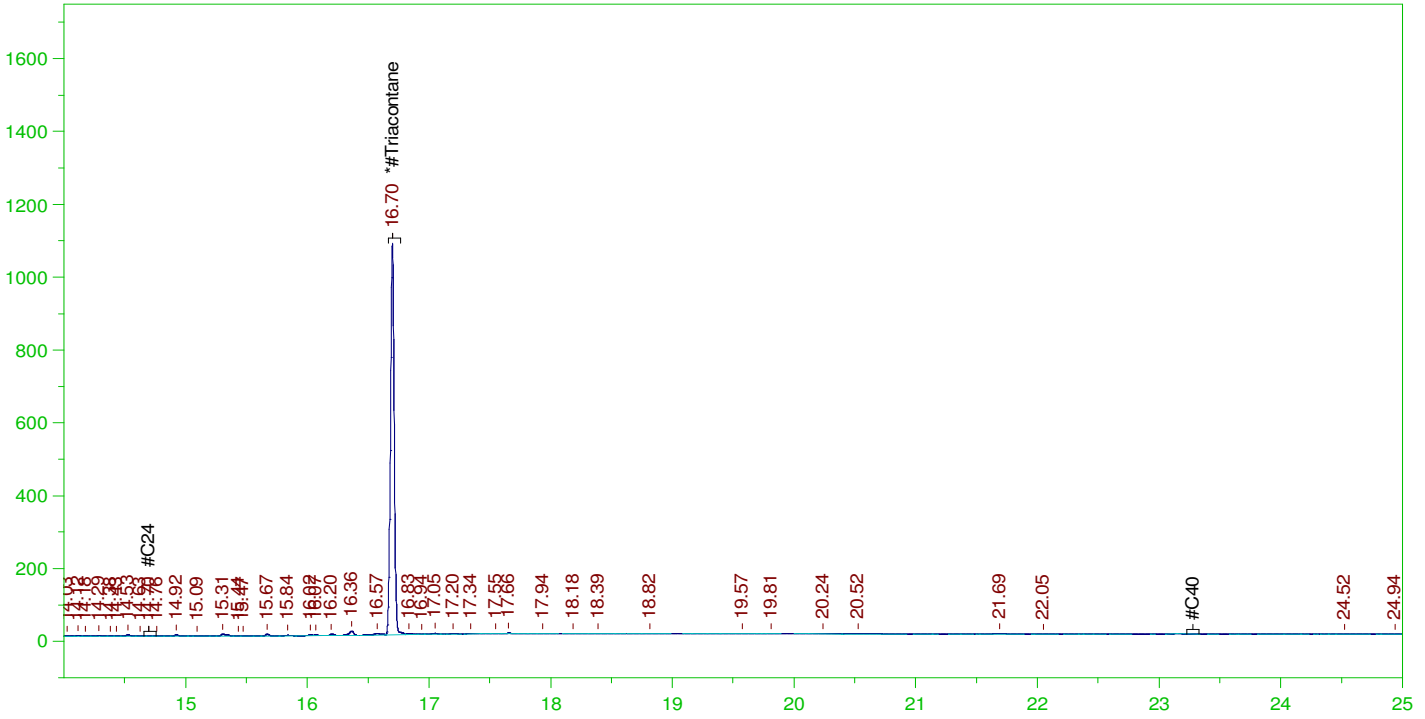
DRO Area:533839.1 DRO Amount: 1.714558E-02  
TEH Area:827431.6 TEH Amount: 2.657503E-02

ERH2350 (OWDFMW08A)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0011.RAW

B22010507-001D ;0114HP4 , \$HC-8015-DRO-W,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010507-001D ;0114HP4 , \$HC-8015-DRO-W,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0011.RAW  
 Date & Time Acquired: 1/14/2022 4:41:29 PM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-S-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.66 to 23.33

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.699	.472	.088	18.69

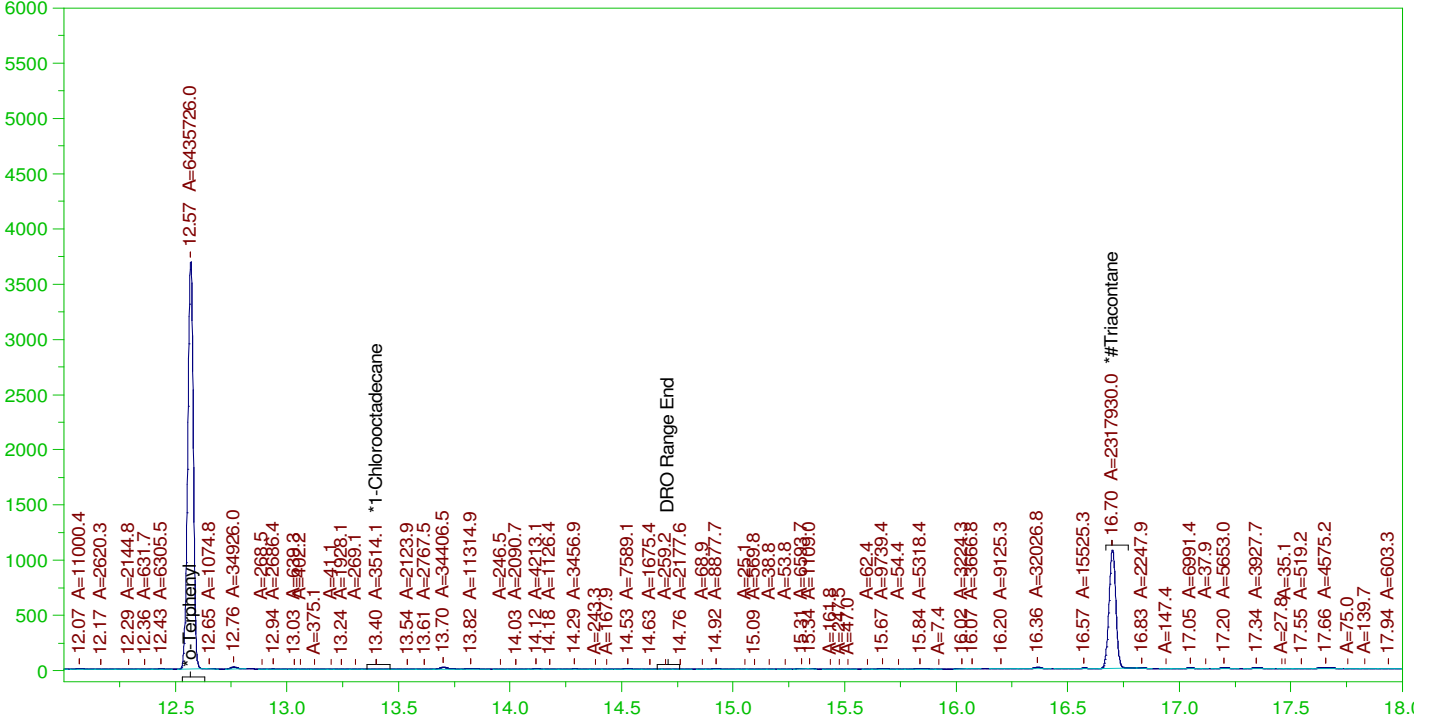
RRO Area:186504.6 RRO AMOUNT: 7.172886E-03

ERH2350 (OWDFMW08A)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0011.RAW

B22010507-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010507-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0011.RAW  
Date & Time Acquired: 1/14/2022 4:41:29 PM  
Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020L-C24-TRI.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.569	.189	.182	96.58	-
*1-Chlorooctadecane	13.402	.189	.	.05	-
*#Triacontane	16.699	.189	.088	46.41	-

DRO Area:418746.9  
TEH Area:1796874

DRO Amount: 0.0134491  
TEH Amount: 5.771111E-02

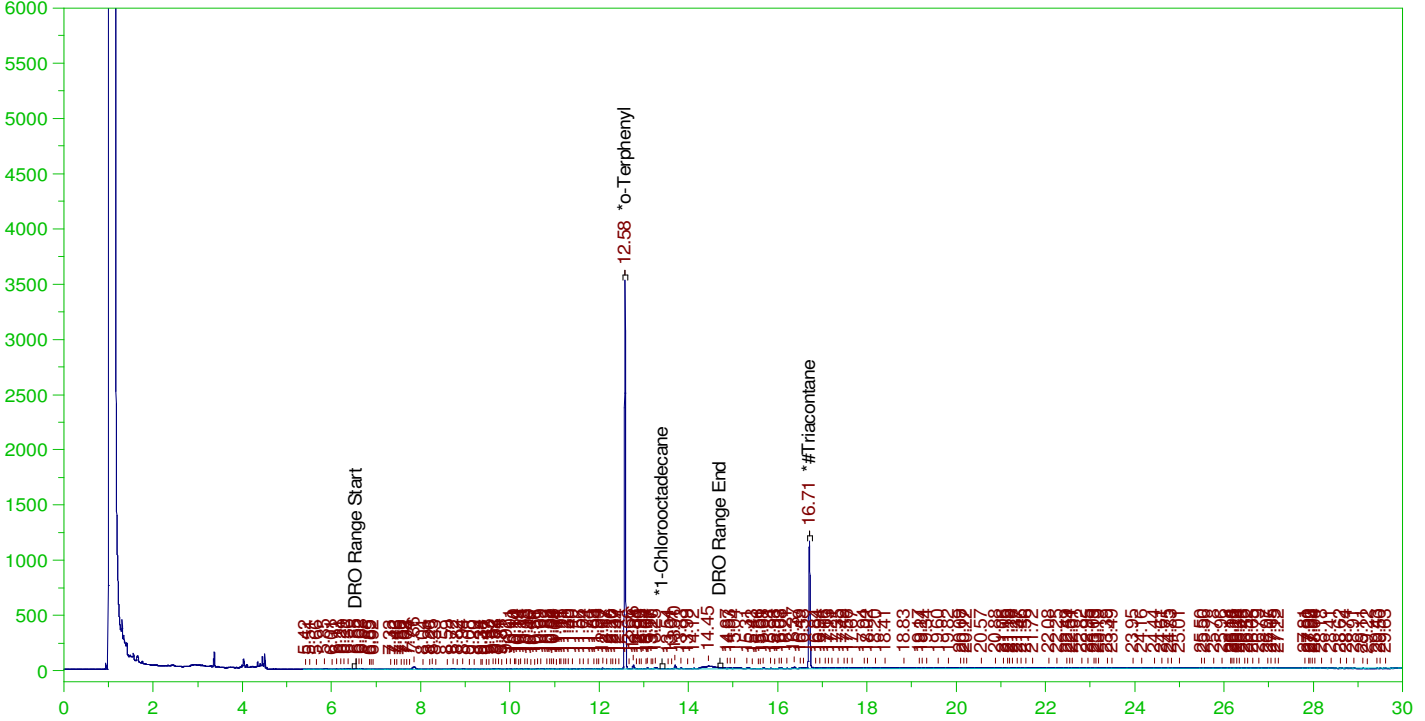


ERH2344 (OWDFMW04A)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0012.RAW

B22010625-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010625-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0012.RAW  
Date & Time Acquired: 1/14/2022 5:26:39 PM  
Method File: G:\Org\HP4\methods\D3\_8015-C24T-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO21110201-C24-TRI.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.578	.189	.174	92.43	-
*1-Chlorooctadecane	29.97	.189	.	.	-
*#Triacontane	16.708	.189	.096	50.83	-

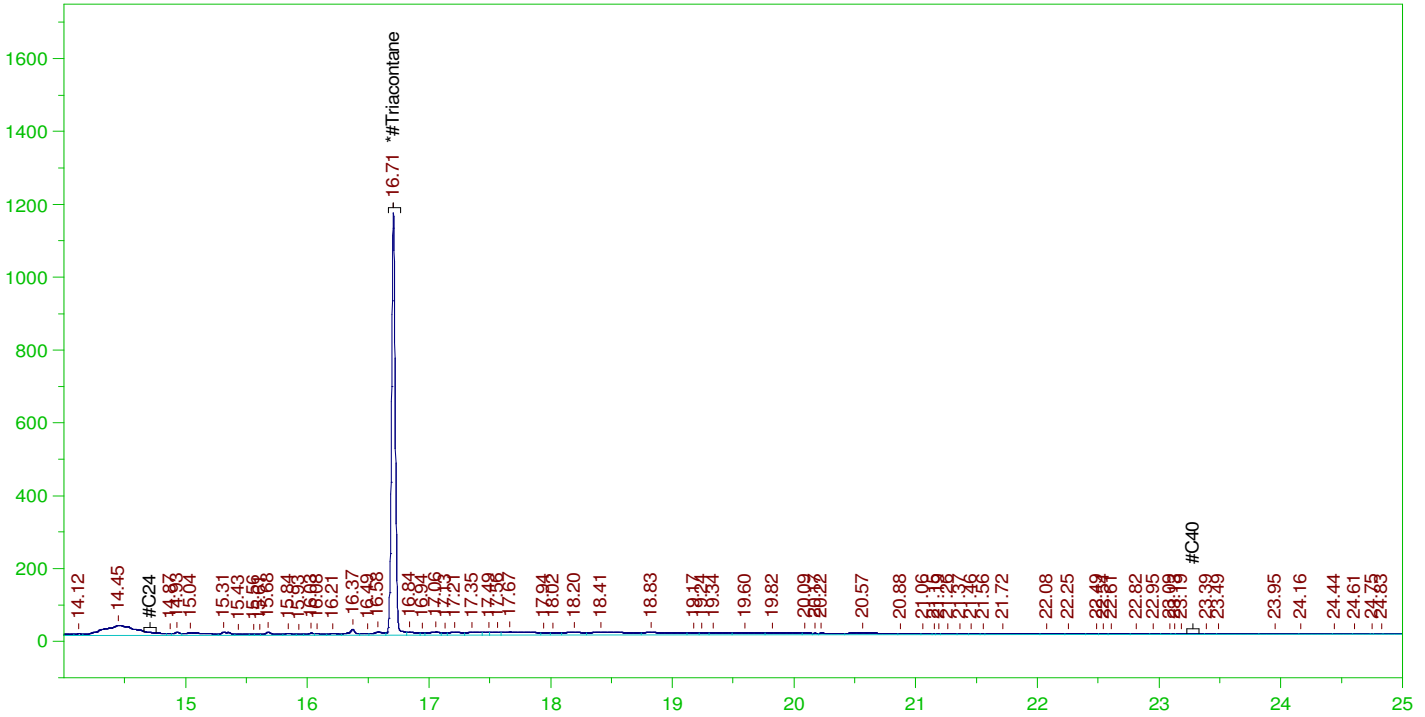
DRO Area:1513699 DRO Amount: 4.861623E-02  
TEH Area:4532946 TEH Amount: 0.1455869

ERH2344 (OWDFMW04A)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0012.RAW

B22010625-001D ;0114HP4 , \$HC-8015-DRO-W,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010625-001D ;0114HP4 , \$HC-8015-DRO-W,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0012.RAW  
 Date & Time Acquired: 1/14/2022 5:26:39 PM  
 Method File: G:\Org\HP4\Methods\D3\_ORO-S-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.66 to 23.33

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.708	.472	.096	20.33

RRO Area:2464578 RRO AMOUNT: 9.478659E-02

ERH2344 (OWDFMW04A)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0012.RAW

B22010625-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010625-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0012.RAW  
Date & Time Acquired: 1/14/2022 5:26:39 PM  
Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24-TRI.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.578	.189	.174	92.14	-
*1-Chlorooctadecane	13.376	.189	.	.01	-
*#Triacontane	16.708	.189	.093	49.41	-

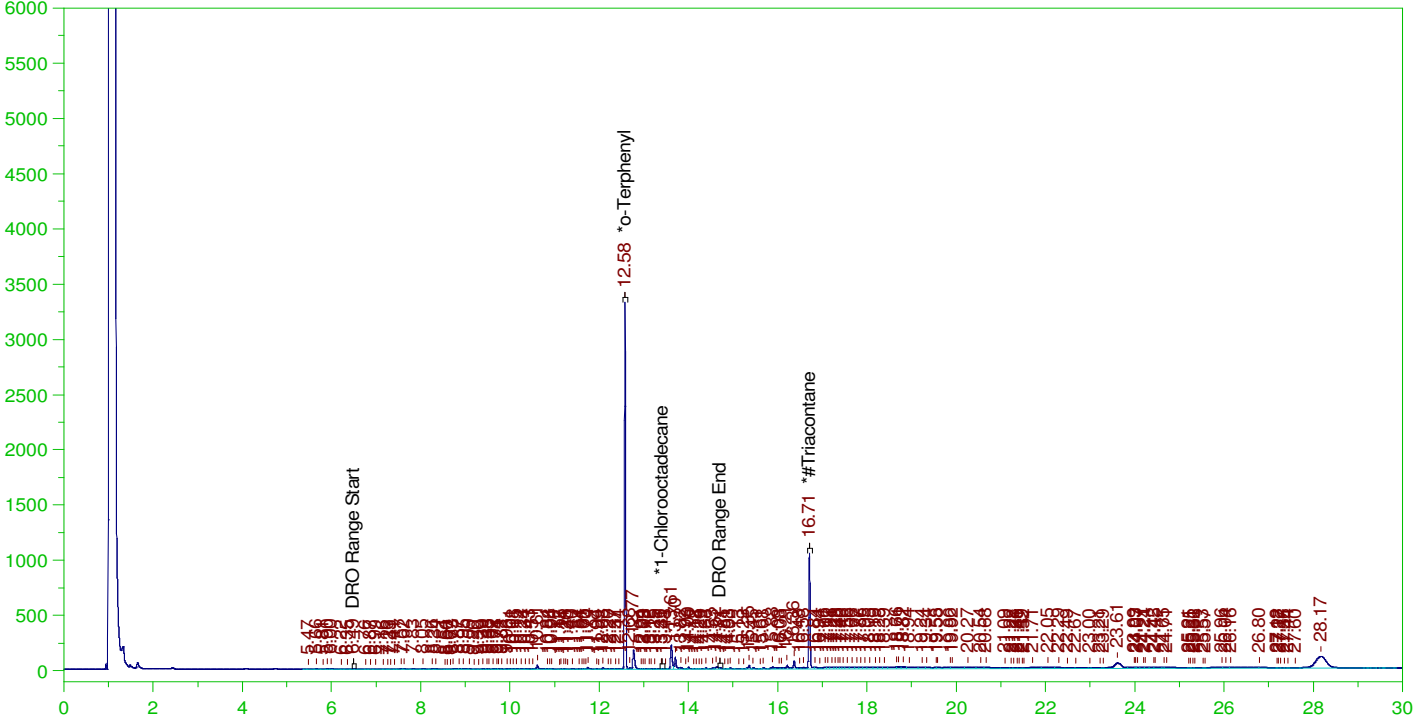
DRO Area:644048.9 DRO Amount: 2.068524E-02  
TEH Area:2361368 TEH Amount: 7.584123E-02

ERH2366 (RHMW19)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0013.RAW

B22010626-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010626-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0013.RAW  
Date & Time Acquired: 1/14/2022 6:11:50 PM  
Method File: G:\Org\HP4\methods\D3\_8015-C24T-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO21110201-C24-TRI.CAL  
Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.577	.194	.169	87.03	-
*1-Chlorooctadecane	13.409	.194	.	.02	-
*#Triacontane	16.708	.194	.091	47.11	-

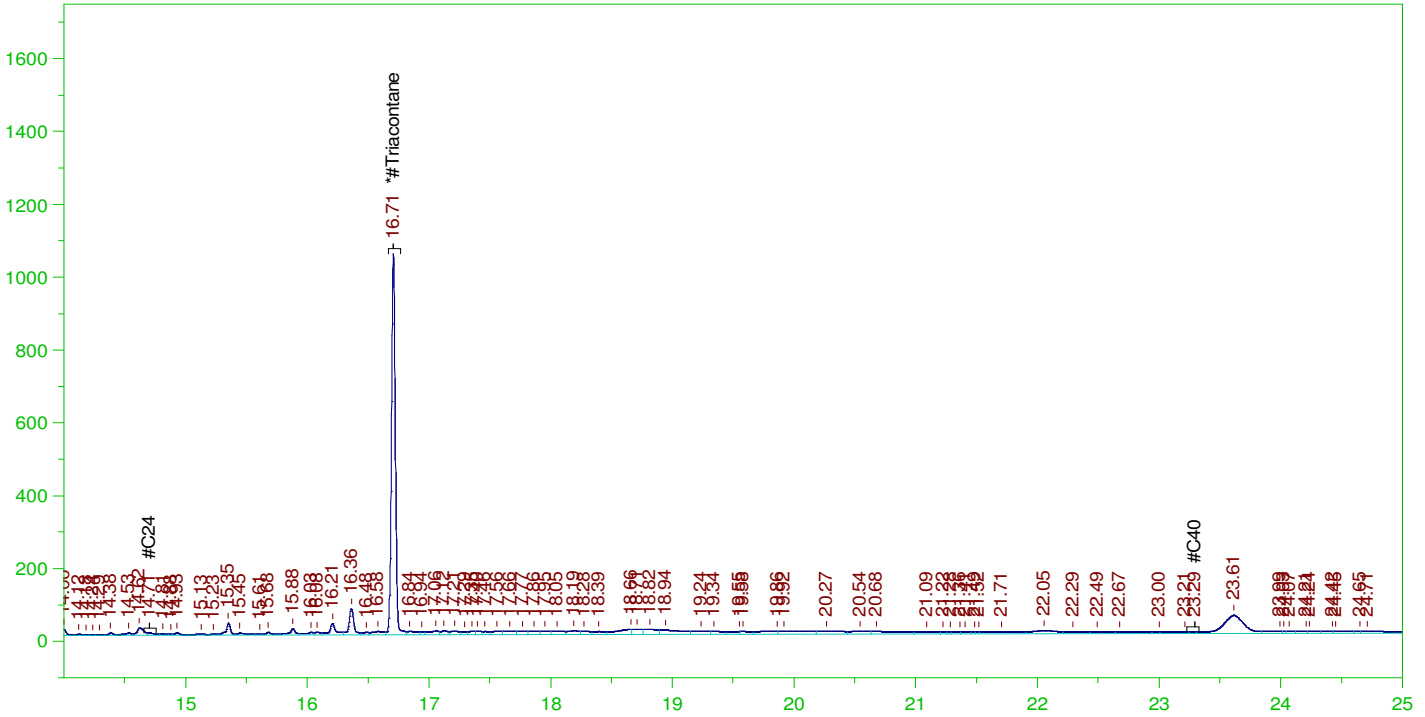
DRO Area:2170068 DRO Amount: 7.172716E-02  
TEH Area:9625861 TEH Amount: 0.3181632

ERH2366 (RHMW19)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0013.RAW

B22010626-001D ;0114HP4 , \$HC-8015-DRO-W,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010626-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0013.RAW  
Date & Time Acquired: 1/14/2022 6:11:50 PM  
Method File: G:\Org\HP4\Methods\D3\_ORO-S-AE-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
Rt range for Residual Range Organics: 14.66 to 23.33

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.708	.485	.091	18.84

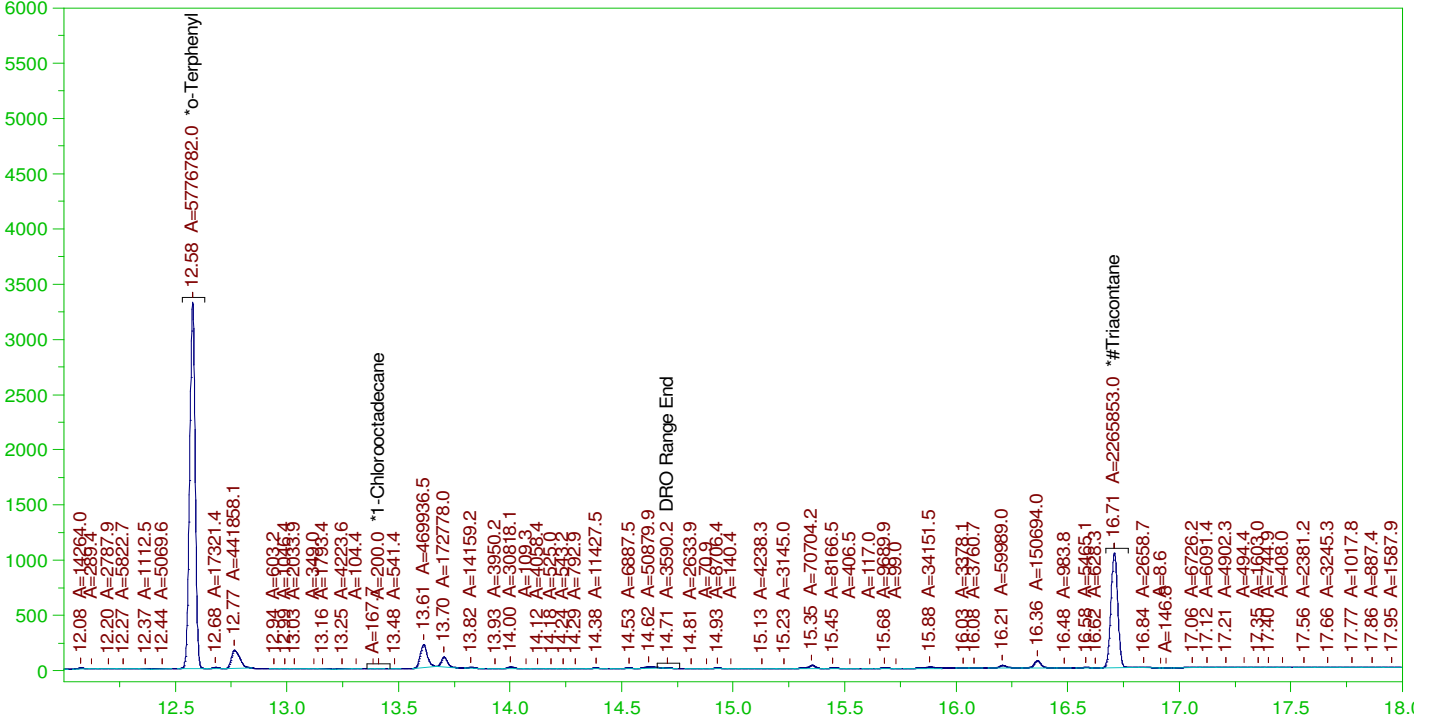
RRO Area:3936944 RRO AMOUNT: 0.1558232

ERH2366 (RHMW19)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0013.RAW

B22010626-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010626-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0013.RAW  
Date & Time Acquired: 1/14/2022 6:11:50 PM  
Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24-TRI.CAL  
Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

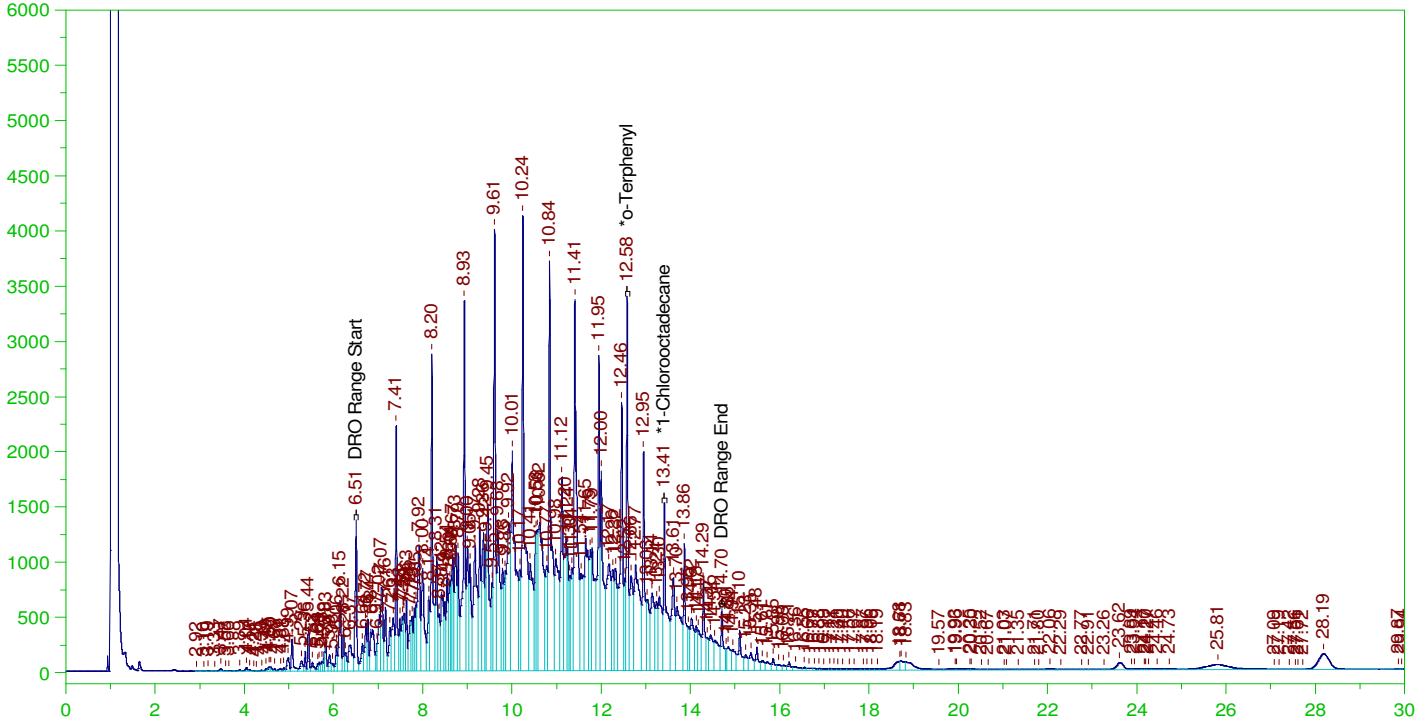
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.577	.194	.168	86.69
*1-Chlorooctadecane	29.839	.194	.	-
*#Triacontane	16.708	.194	.088	45.36

DRO Area:1679332 DRO Amount: 5.550689E-02  
TEH Area:4572341 TEH Amount: 0.1511294

Batch ID: 162891

B22010626-001DMS ;0114HP4 ,

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0014.RAW



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

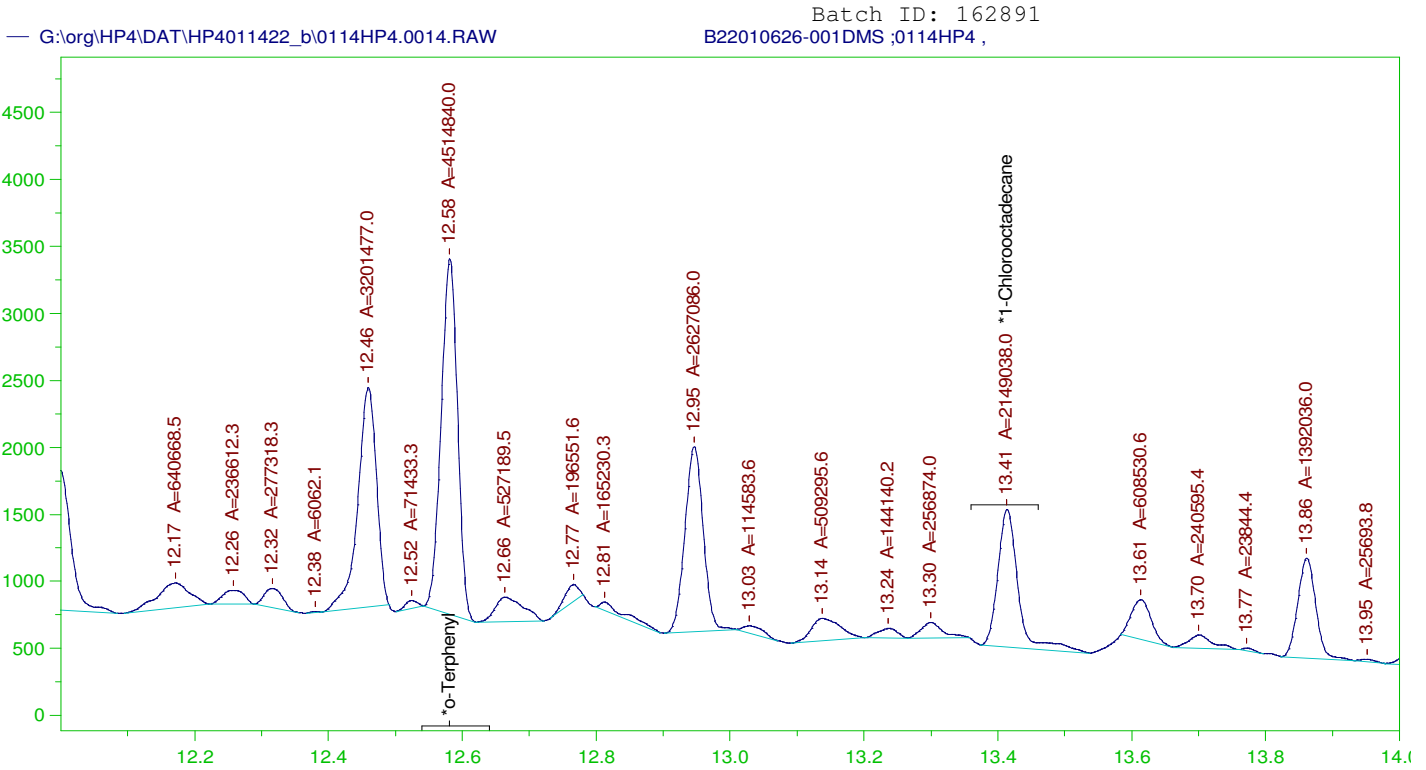
Sample Name: B22010626-001DMS ;0114HP4 ,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0014.RAW  
Date & Time Acquired: 1/14/2022 6:56:53 PM  
Method File: G:\Org\HP4\methods\D3\_8015-C24-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO21110201-C24.CAL  
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.581	.192	.231	120.32	-
*1-Chlorooctadecane	13.413	.192	.197	102.19	-

DRO Area:3.853691E+08 DRO Amount: 12.61511  
TEH Area:4.189929E+08 TEH Amount: 13.71579



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

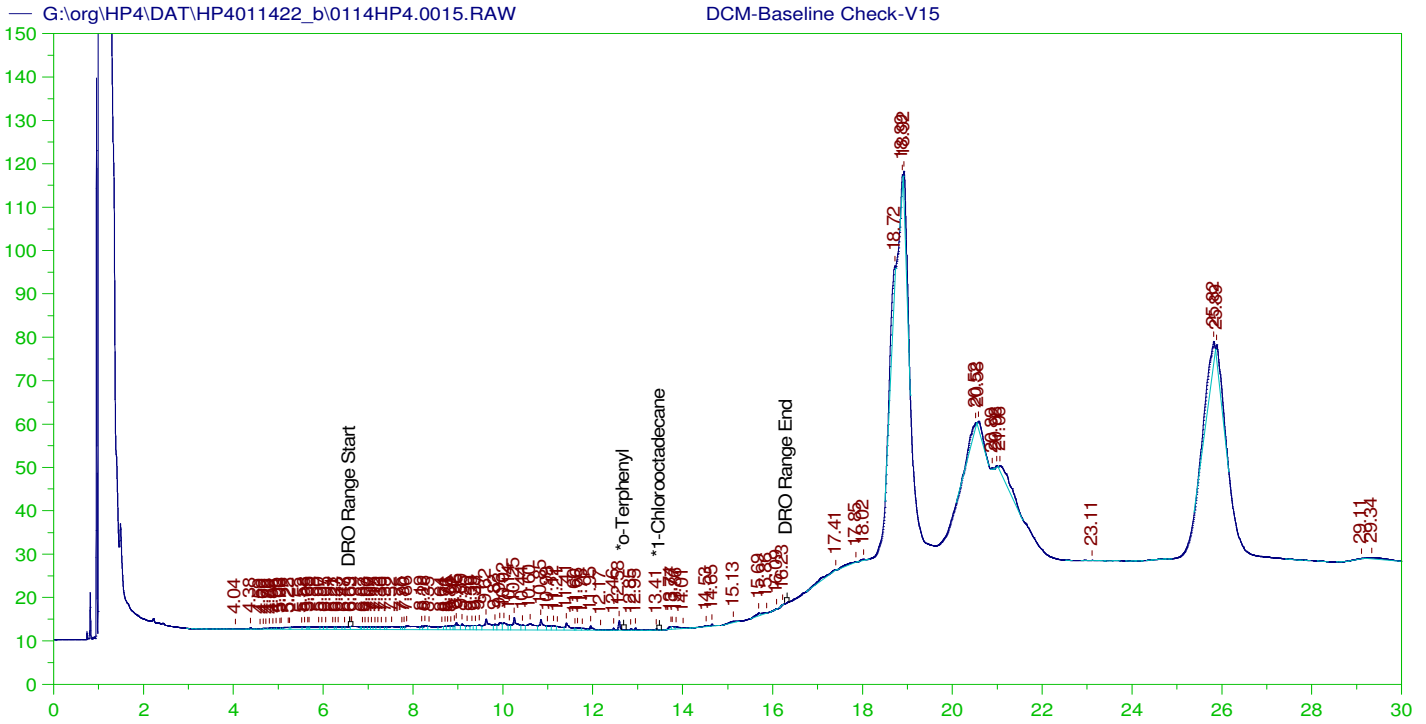
Sample Name: B22010626-001DMS ;0114HP4 ,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0014.RAW  
 Date & Time Acquired: 1/14/2022 6:56:53 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-C24-OL-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24.CAL  
 Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.581	.192	.13	67.75	-
*1-Chlorooctadecane	13.413	.192	.062	32.25	-

DRO Area: 1.567104E+08 DRO Amount: 5.129939  
 TEH Area: 1.729965E+08 TEH Amount: 5.663067





**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V15  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0015.RAW  
 Date & Time Acquired: 1/14/2022 7:41:49 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.341	200.	.	-
*1-Chlorooctadecane	29.341	200.	.	-

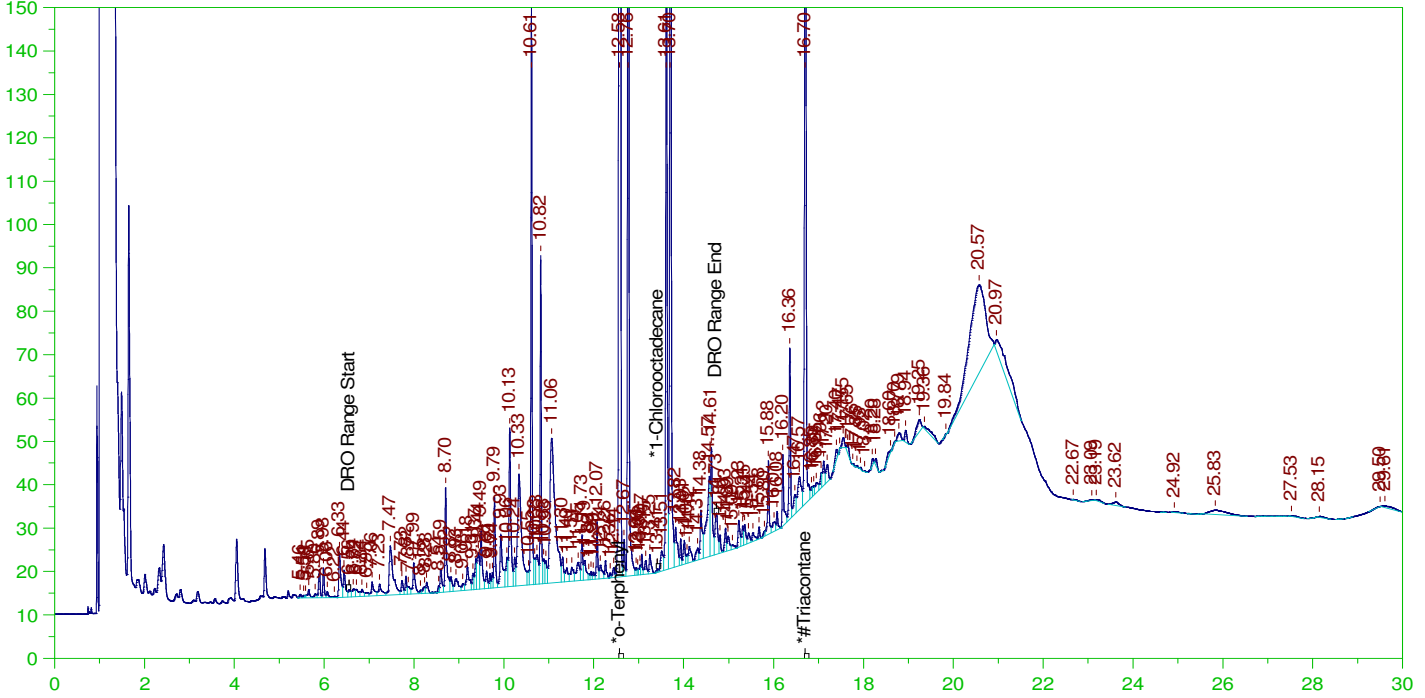
DRO Area:317892.7 DRO Amount: 10.82251  
 TEH Area:818022.3 TEH Amount: 27.8492

ERH2364 (RHMW06)

Batch ID: 162824

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0016.RAW

B22010338-001D ;0114HP4 , \$HC-8015-DRO-W, rx



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

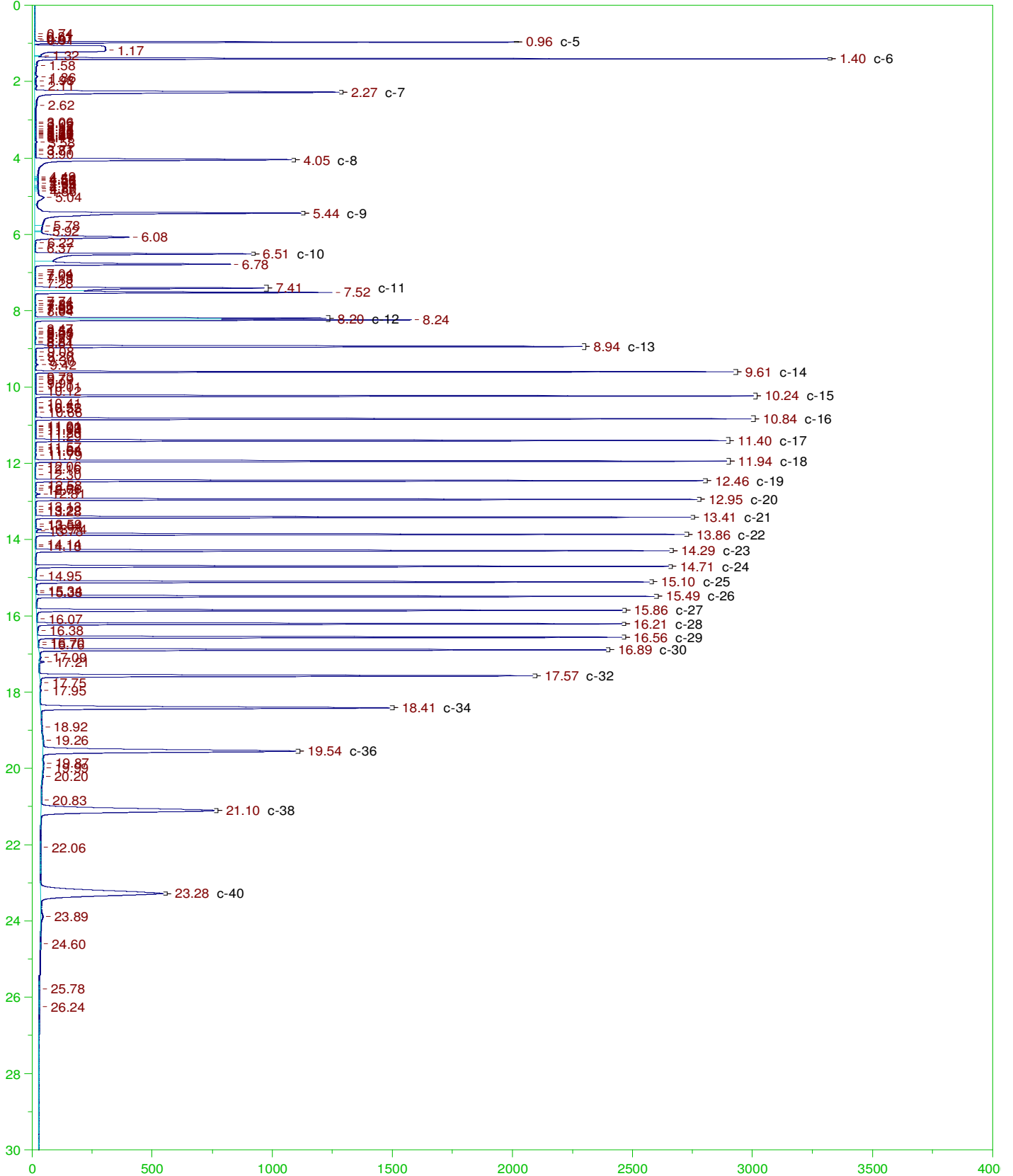
Sample Name: B22010338-001D ;0114HP4 , \$HC-8015-DRO-W, rx  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0016.RAW  
 Date & Time Acquired: 1/14/2022 8:26:43 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-C24T-OK-L0.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OK-C24-TRI.CAL  
 Sample Weight: 1040 Dilution: 1 S.A.: 1

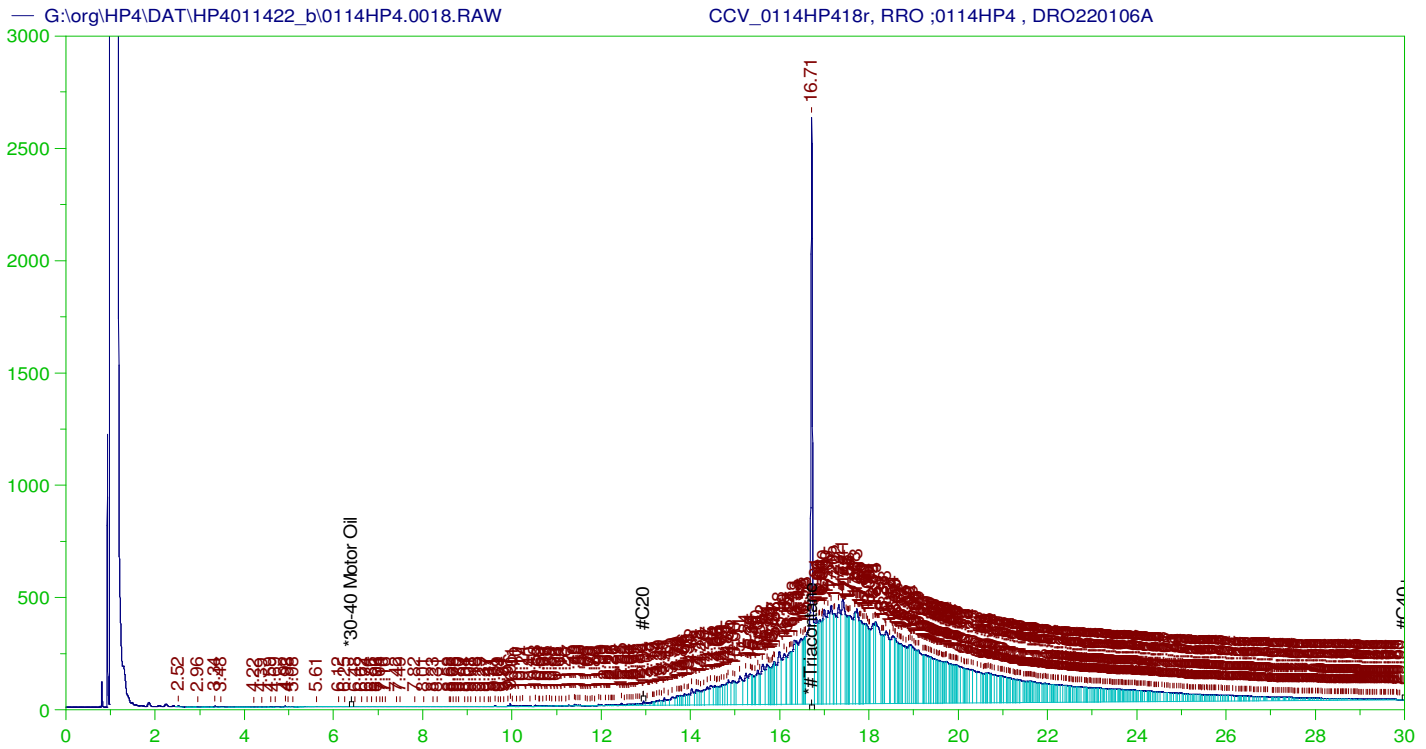
Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.49 to 14.78

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.576	.192	.106	55.36	-
*1-Chlorooctadecane	13.415	.192	.	.03	-
*#Triacontane	16.704	.192	.016	8.23	-

DRO Area: 3817680 DRO Amount: 0.1249723  
 TEH Area: 5131794 TEH Amount: 0.16799





**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP418r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0018.RAW  
 Date & Time Acquired: 1/14/2022 9:56:20 PM  
 Method File: G:\Org\HP4\Methods\DC\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.715	500.	351.234	70.25	-

RRO TEH (Oil Range) Area:1.112237E+08 RRO TEH (Oil Range) AMOUNT: 4534.27

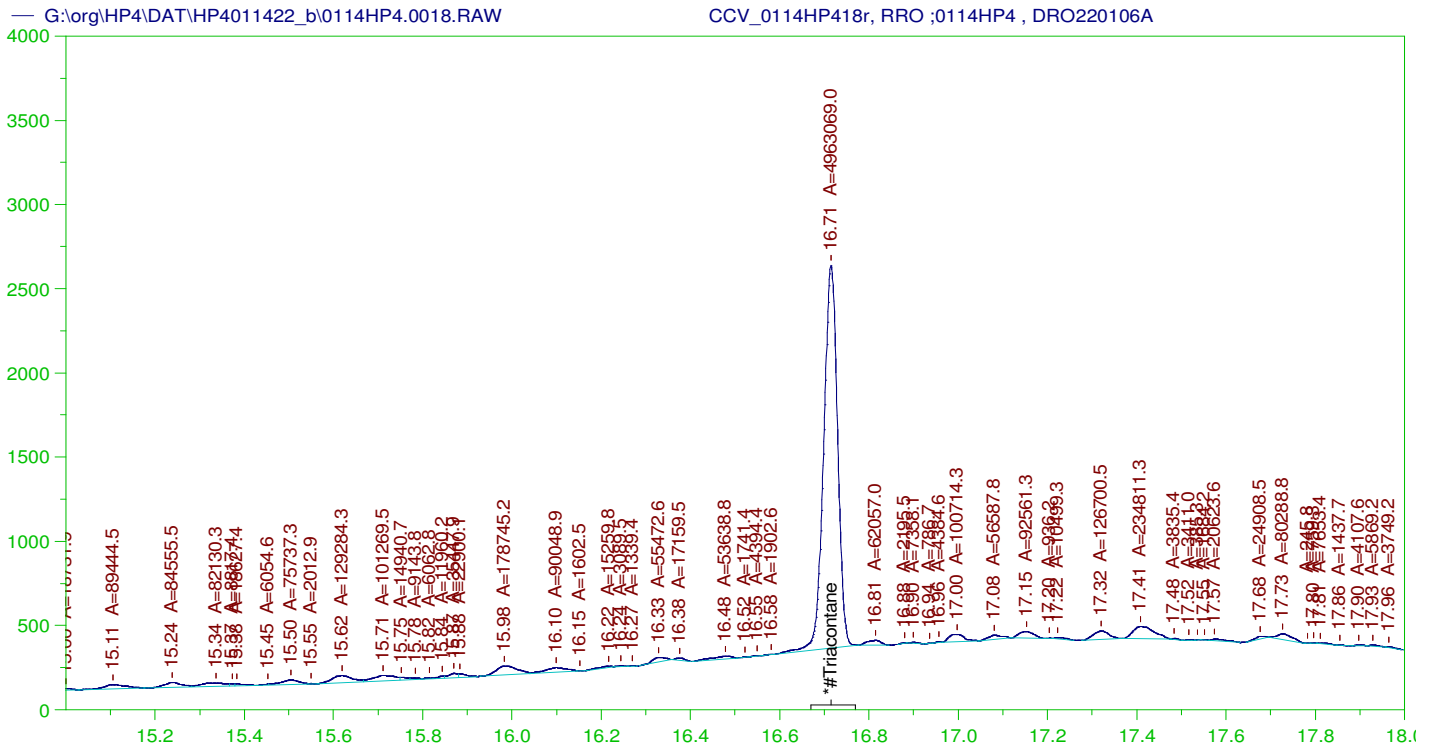
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0018.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.715	200.	351.234	175.62	75-125

AMN 02/01/2022



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP418r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0018.RAW  
 Date & Time Acquired: 1/14/2022 9:56:20 PM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.9 to 30.05

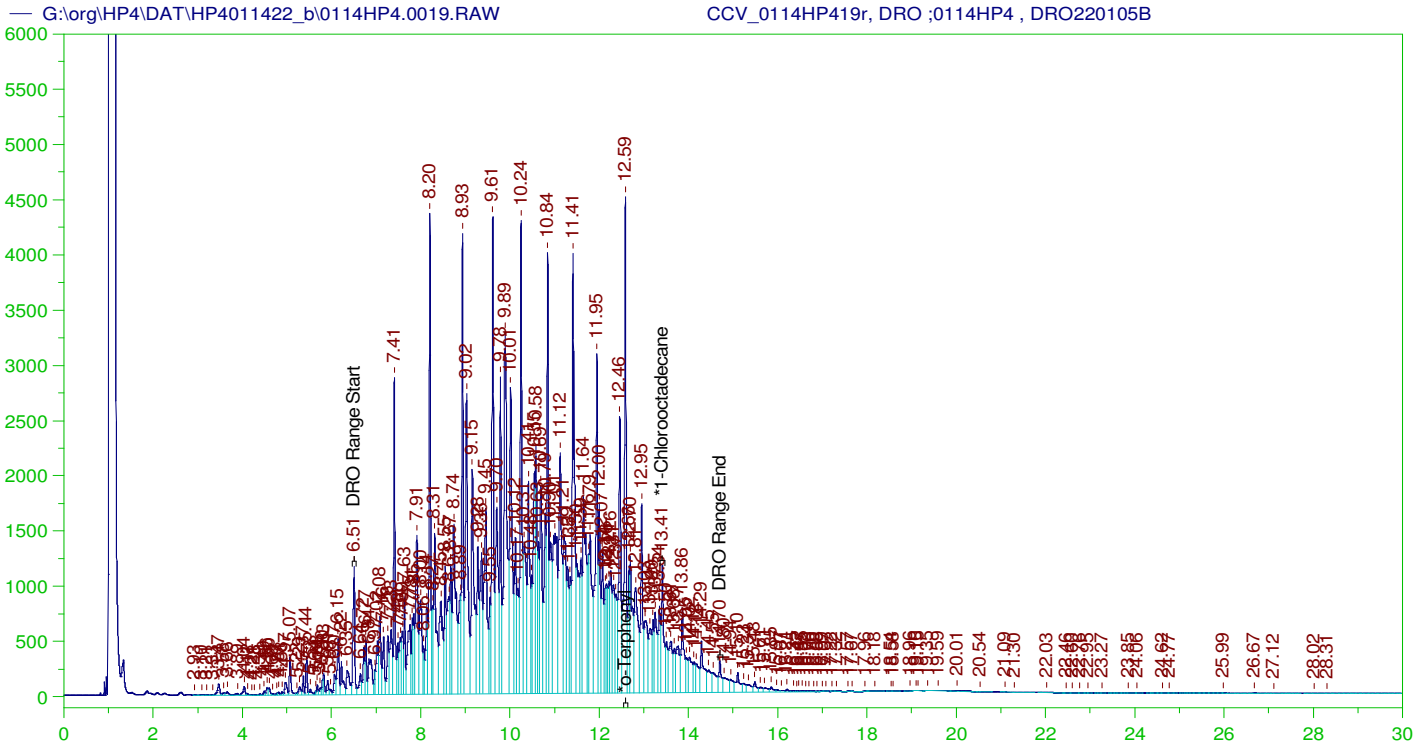
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.715	500.	198.731	39.75

RRO Area:3345303 RRO AMOUNT: 136.3784

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0018.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.715	200.	198.731	99.37	75-125



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0114HP419r, DRO ;0114HP4 , DRO220105B  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0019.RAW  
 Date & Time Acquired: 1/14/2022 10:41:06 PM  
 Method File: G:\Org\HP4\methods\DC\_8015-C24-OL-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.585	200.	368.011	184.01
*1-Chlorooctadecane	13.413	200.	116.966	58.48

DRO Area: 4.419279E+08 DRO Amount: 15045.24  
 TEH Area: 4.580398E+08 TEH Amount: 15593.76

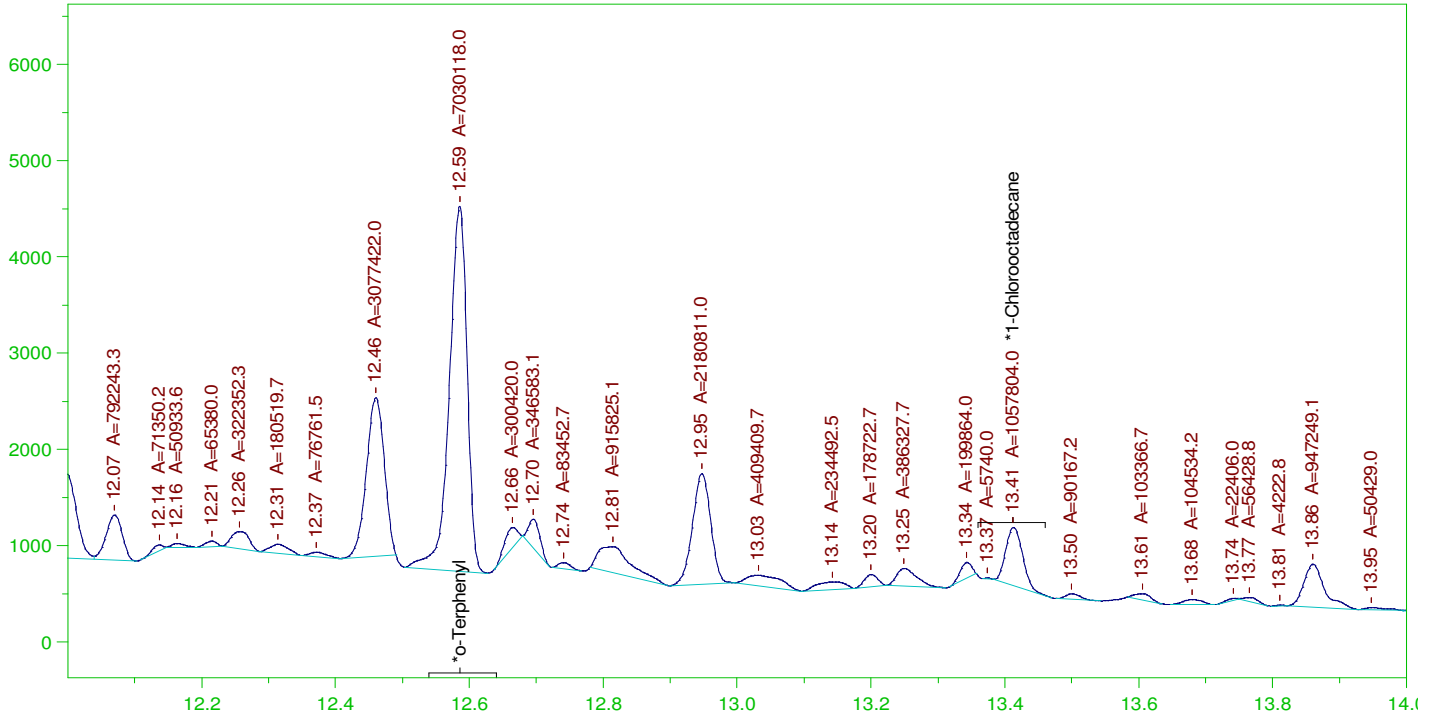
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0019.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15593.76	103.96	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.585	200.	368.011	184.01	85-115
*1-Chlorooctadecane	13.413	200.	116.966	58.48	85-115

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0019.RAW

CCV\_0114HP419r, DRO ;0114HP4 , DRO220105B



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0114HP419r, DRO ;0114HP4 , DRO220105B  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0019.RAW  
 Date & Time Acquired: 1/14/2022 10:41:06 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-C24-OL-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.585	200.	210.99	105.49
*1-Chlorooctadecane	13.413	200.	31.747	15.87

DRO Area:1.922616E+08 DRO Amount: 6545.458  
 TEH Area:2.024481E+08 TEH Amount: 6892.253

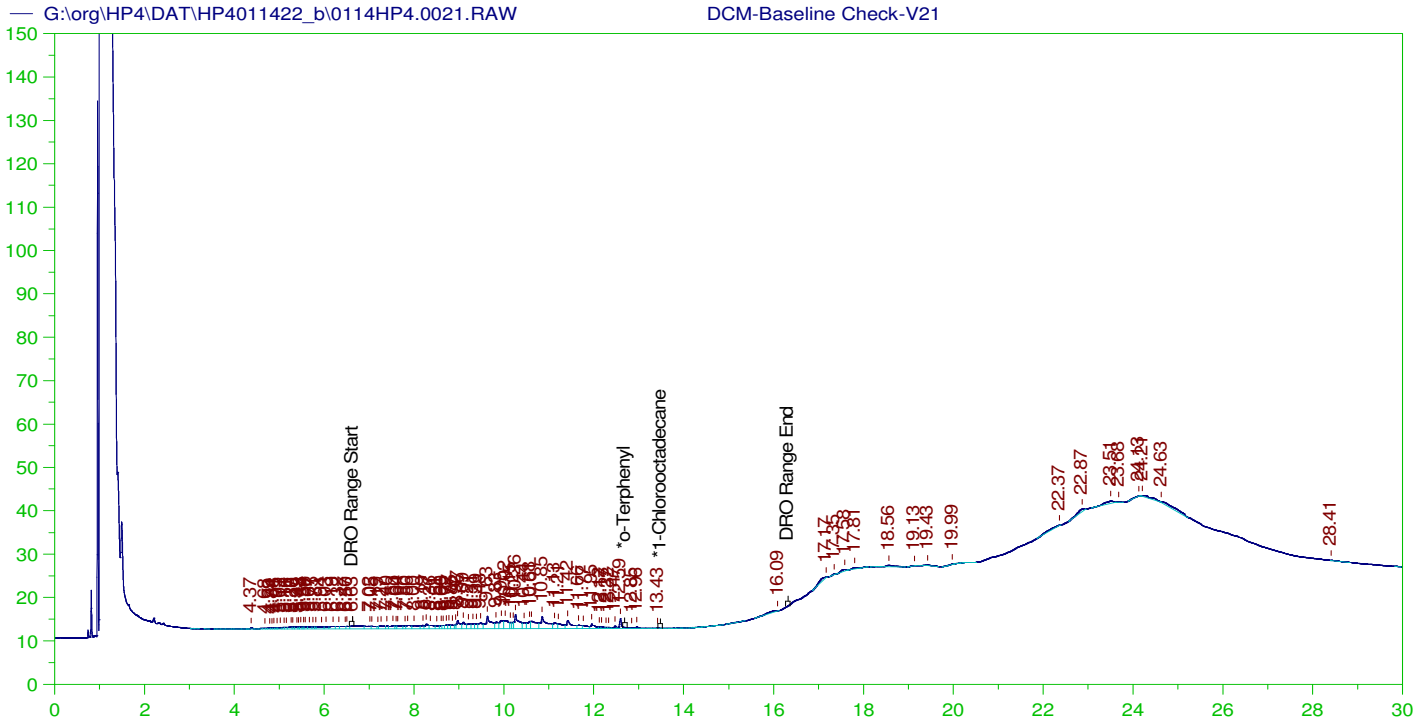
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0019.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	6892.25	45.95	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.585	200.	210.99	105.49	85-115
*1-Chlorooctadecane	13.413	200.	31.747	15.87	85-115







**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V21  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0021.RAW  
 Date & Time Acquired: 1/15/2022 12:10:36 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.845	200.	.	-
*1-Chlorooctadecane	29.845	200.	.	-

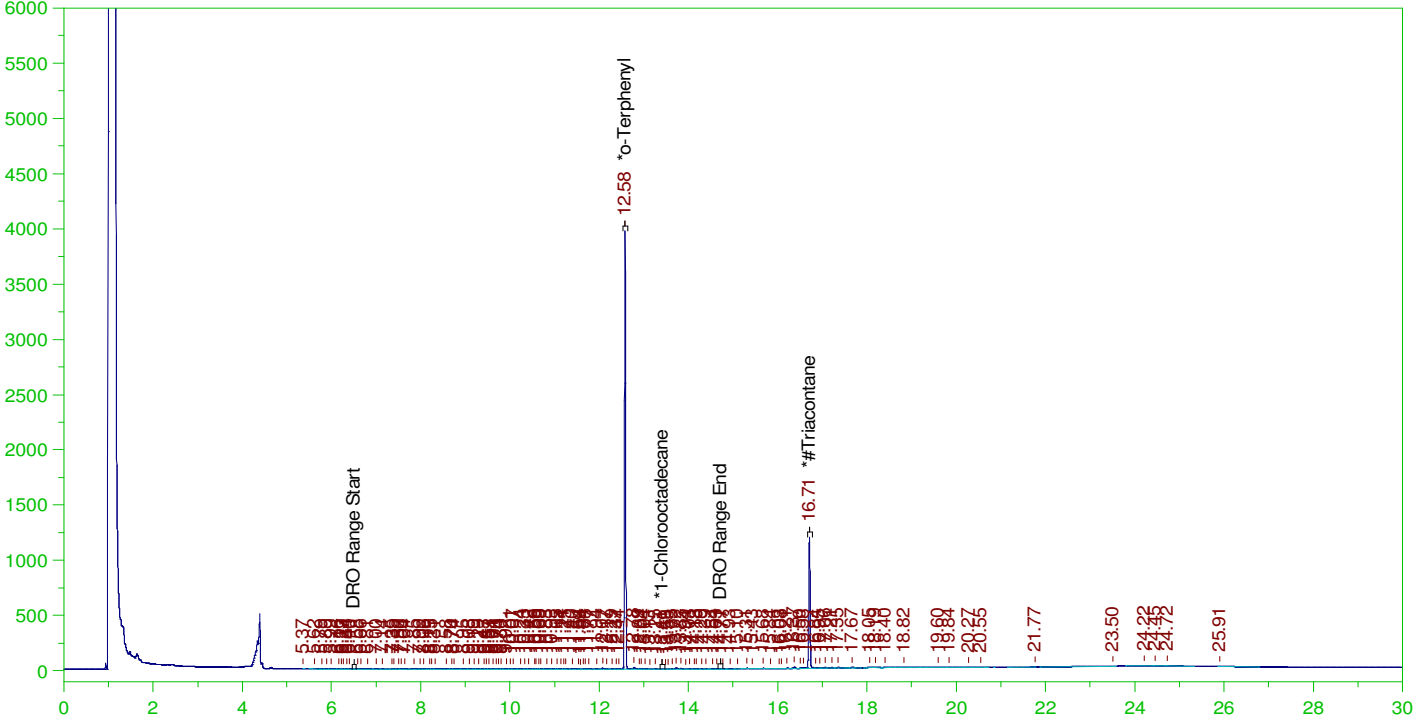
DRO Area:347936.9 DRO Amount: 11.84536  
 TEH Area:461237.4 TEH Amount: 15.70262

ERH2348 (OWDFMW07A)

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0022.RAW

Batch ID: 162891

B22010628-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010628-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0022.RAW  
Date & Time Acquired: 1/15/2022 12:55:16 AM  
Method File: G:\Org\HP4\methods\DR\_8015-C24T-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020L-C24-TRI.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.578	.189	.195	103.36	-
*1-Chlorooctadecane	13.413	.189	.	.02	-
*#Triacontane	16.708	.189	.098	52.11	-

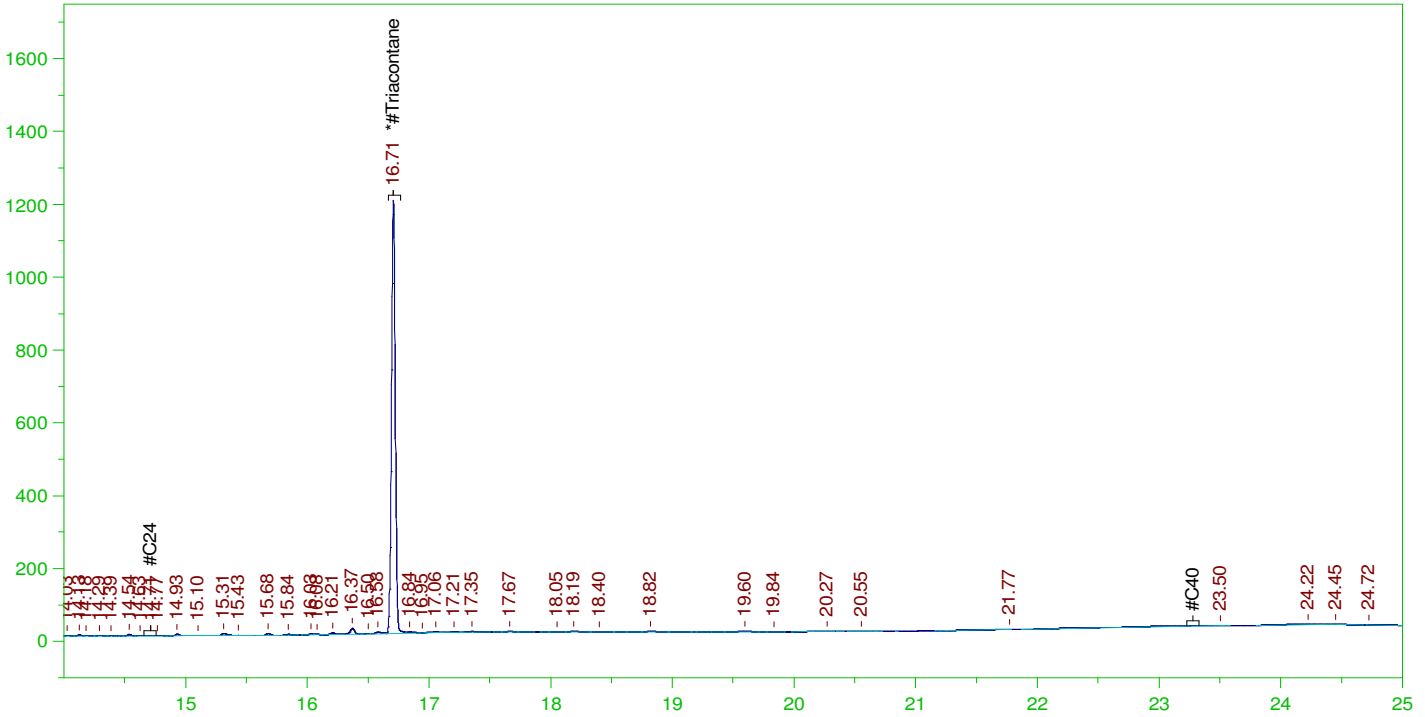
DRO Area:466498.8 DRO Amount: 1.498278E-02  
TEH Area:845949.3 TEH Amount: 2.716978E-02

ERH2348 (OWDFMW07A)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0022.RAW

B22010628-001D ;0114HP4 , \$HC-8015-DRO-W,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010628-001D ;0114HP4 , \$HC-8015-DRO-W,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0022.RAW  
 Date & Time Acquired: 1/15/2022 12:55:16 AM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-S-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.66 to 23.33

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.708	.472	.098	20.83

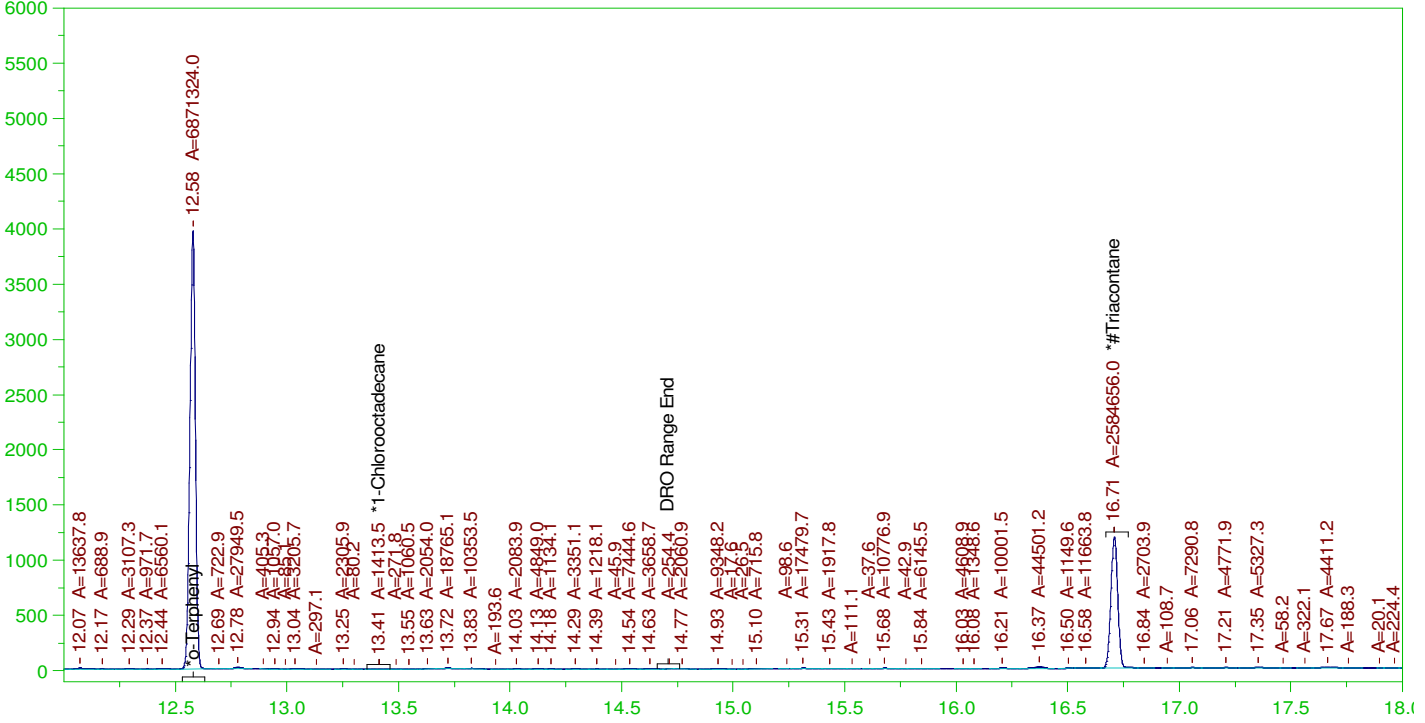
RRO Area:200137.2 RRO AMOUNT: 7.69719E-03

ERH2348 (OWDFMW07A)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0022.RAW

B22010628-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010628-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0022.RAW  
Date & Time Acquired: 1/15/2022 12:55:16 AM  
Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24-TRI.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.578	.189	.195	103.11
*1-Chlorooctadecane	13.413	.189	.02	-
*#Triacontane	16.708	.189	.098	51.75

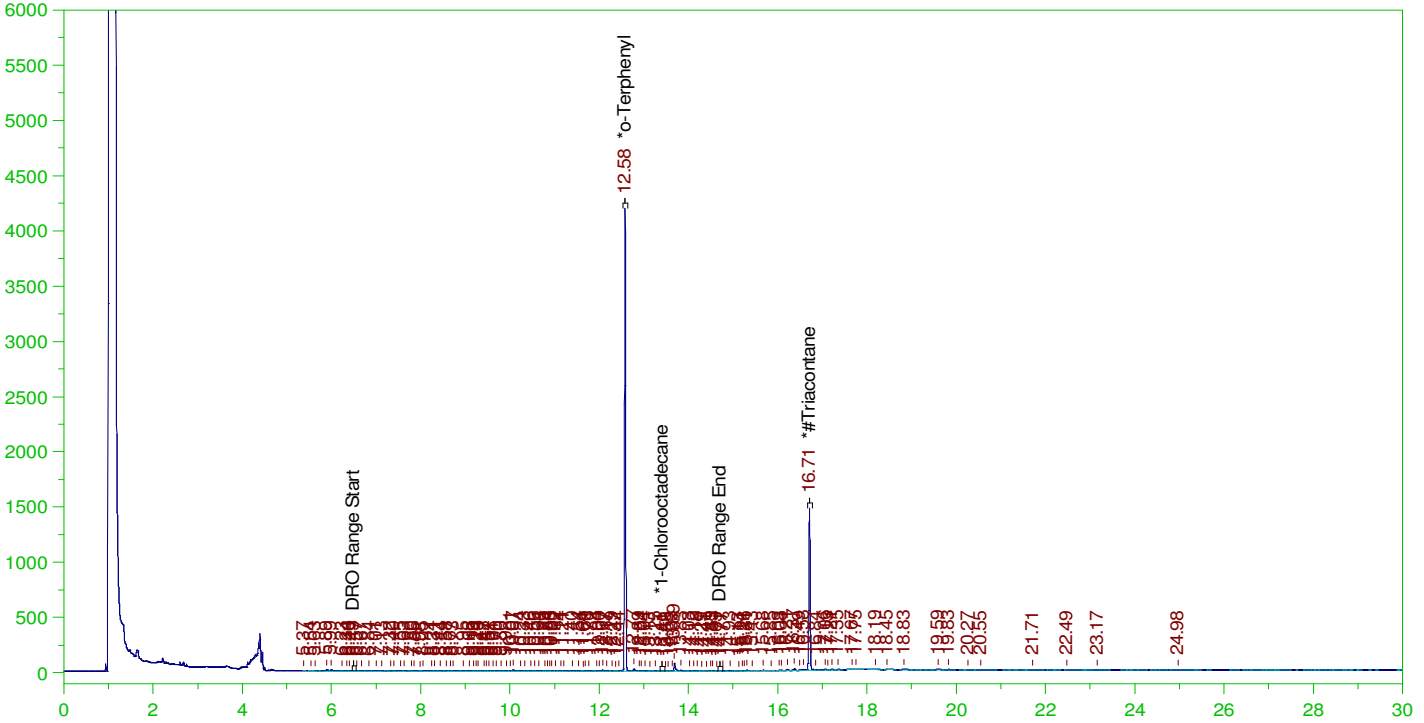
DRO Area:340723 DRO Amount: 1.094317E-02  
TEH Area:3510684 TEH Amount: 0.1127544

ERH2374 (RHMW14 Zone3)

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0023.RAW

Batch ID: 162891

B22010637-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010637-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0023.RAW  
Date & Time Acquired: 1/15/2022 1:40:04 AM  
Method File: G:\Org\HP4\methods\DR\_8015-C24T-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24-TRI.CAL  
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.58	.196	.215	109.63
*1-Chlorooctadecane	13.411	.196	.	.03
*#Triacontane	16.71	.196	.125	63.65

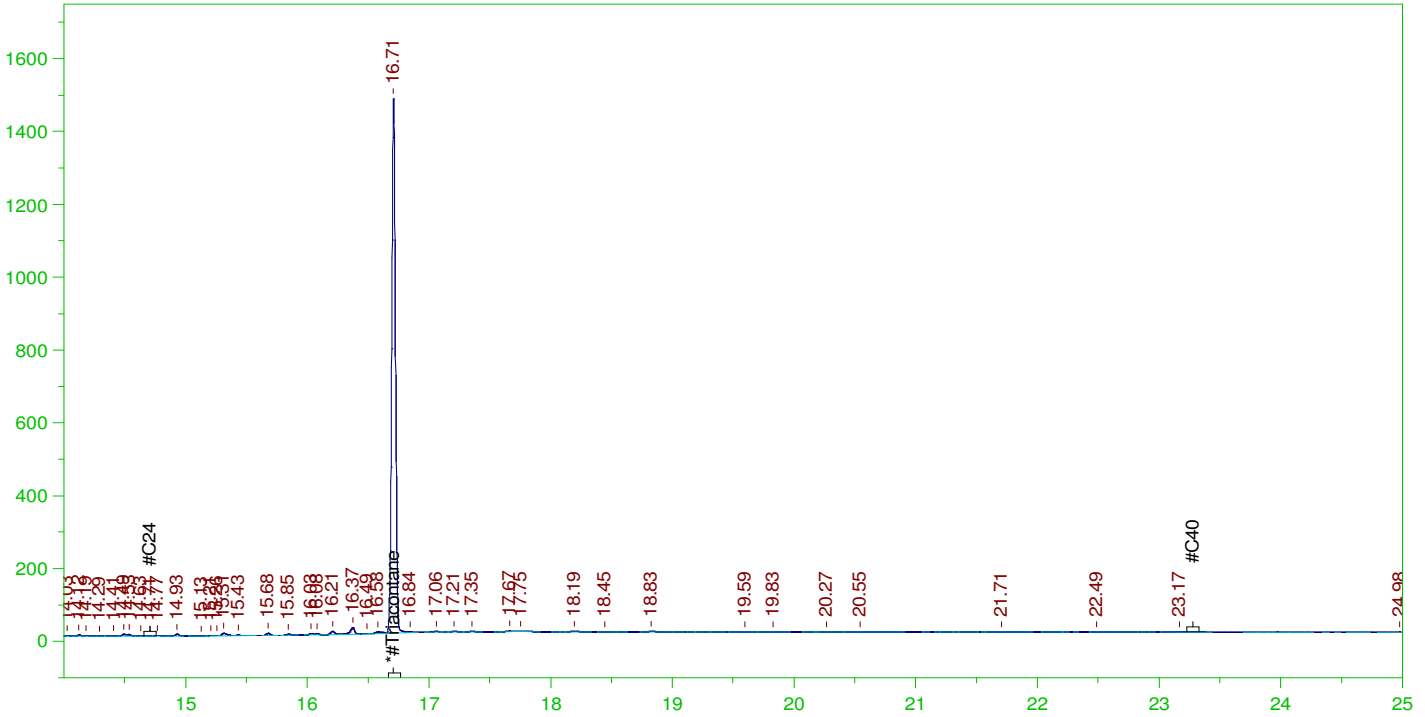
DRO Area:768767.3 DRO Amount: 2.565915E-02  
TEH Area:1172704 TEH Amount: 3.914136E-02

ERH2374 (RHMW14 Zone3)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0023.RAW

B22010637-001D ;0114HP4 , \$HC-8015-DRO-W,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010637-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0023.RAW  
Date & Time Acquired: 1/15/2022 1:40:04 AM  
Method File: G:\Org\HP4\Methods\DR\_ORO-S-AE-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
Rt range for Residual Range Organics: 14.66 to 23.33

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane_____	16.71	.49	.125	25.42	-

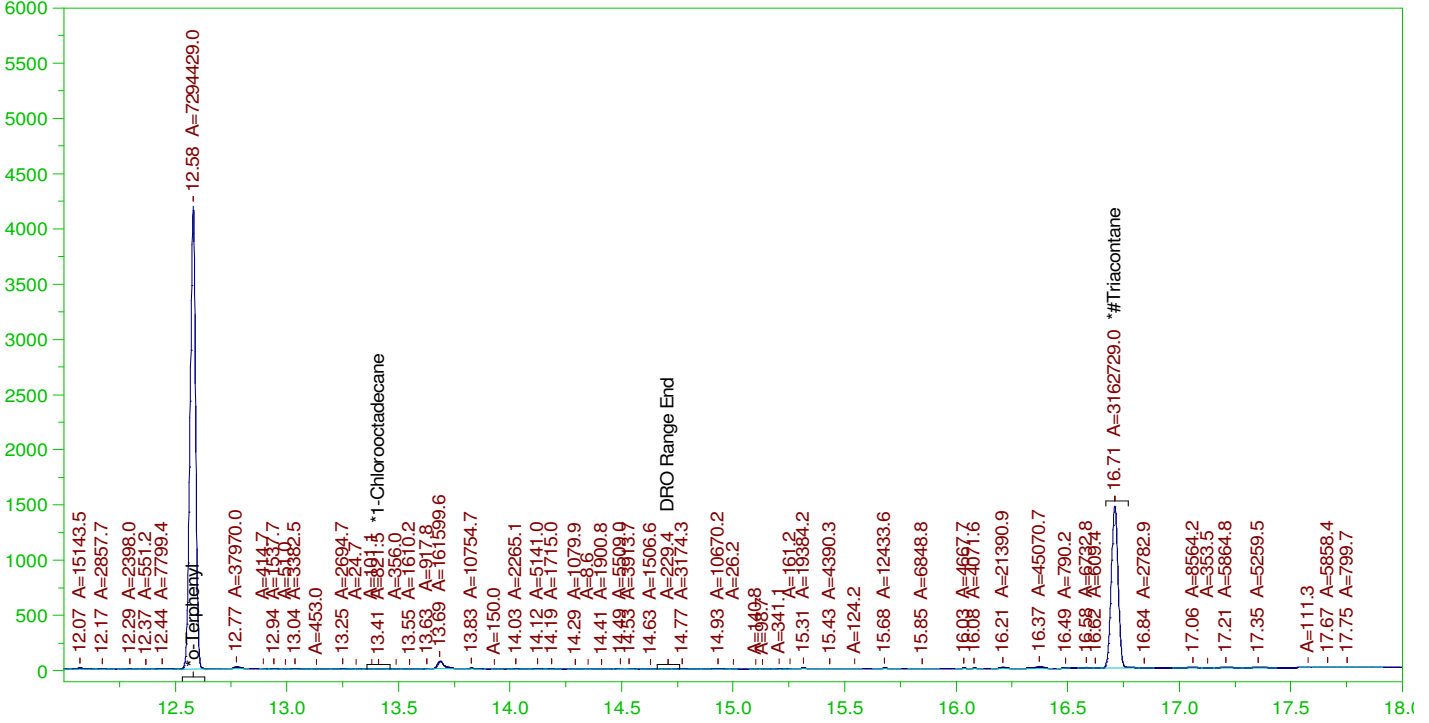
RRO Area:237631.2 RRO AMOUNT: 9.497591E-03

ERH2374 (RHMW14 Zone3)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0023.RAW

B22010637-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010637-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0023.RAW  
Date & Time Acquired: 1/15/2022 1:40:04 AM  
Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020L-C24-TRI.CAL  
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.58	.196	.215	109.46
*1-Chlorooctadecane	13.411	.196	.	.01
*#Triacontane	16.71	.196	.124	63.32

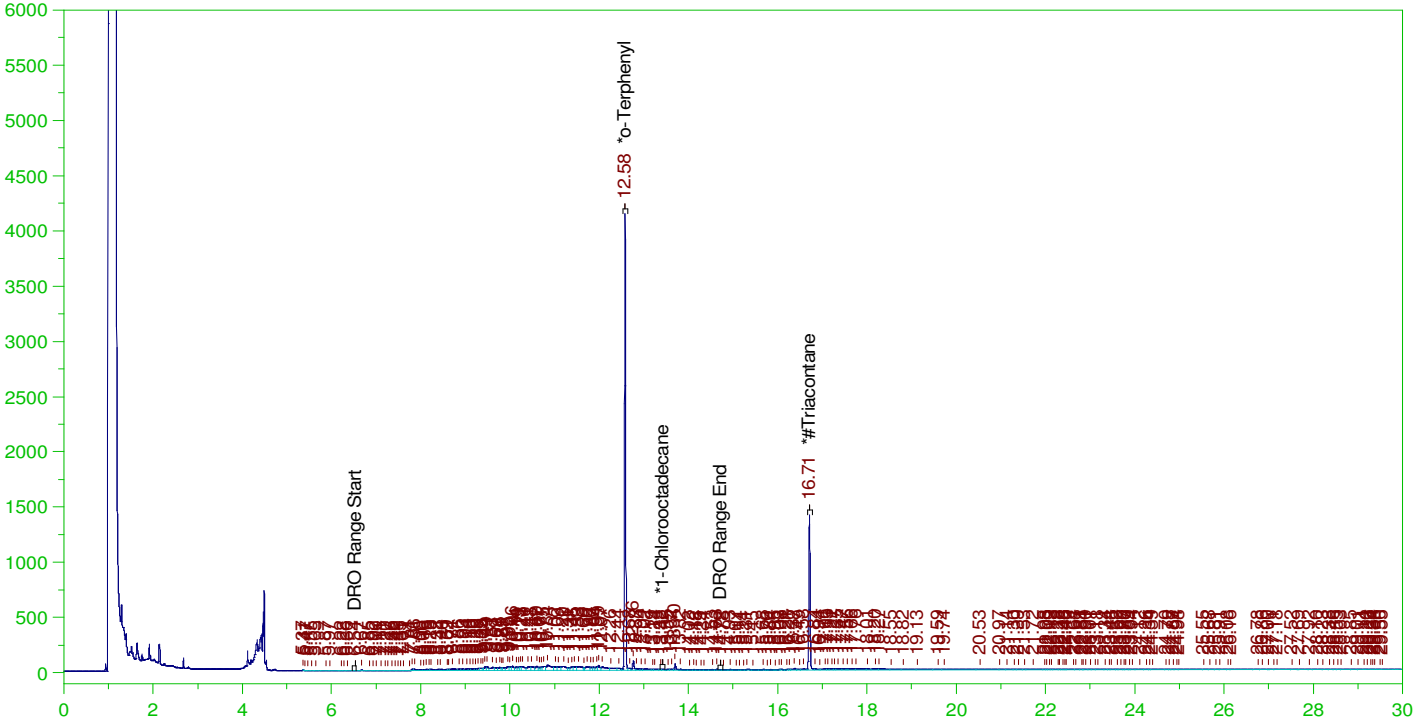
DRO Area:547951.7 DRO Amount: 1.828899E-02  
TEH Area:4458404 TEH Amount: 0.1488082

ERH2389 (RHMW2254-01 LF)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0024.RAW

B22010641-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010641-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0024.RAW  
Date & Time Acquired: 1/15/2022 2:24:53 AM  
Method File: G:\Org\HP4\methods\D3\_8015-C24T-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO21110201-C24-TRI.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.579	.189	.208	110.24	-
*1-Chlorooctadecane	13.416	.189	.001	.69	-
*#Triacontane	16.709	.189	.116	61.34	-

DRO Area:8491179 DRO Amount: 0.2727154  
TEH Area:1.282844E+07 TEH Amount: 0.4120174

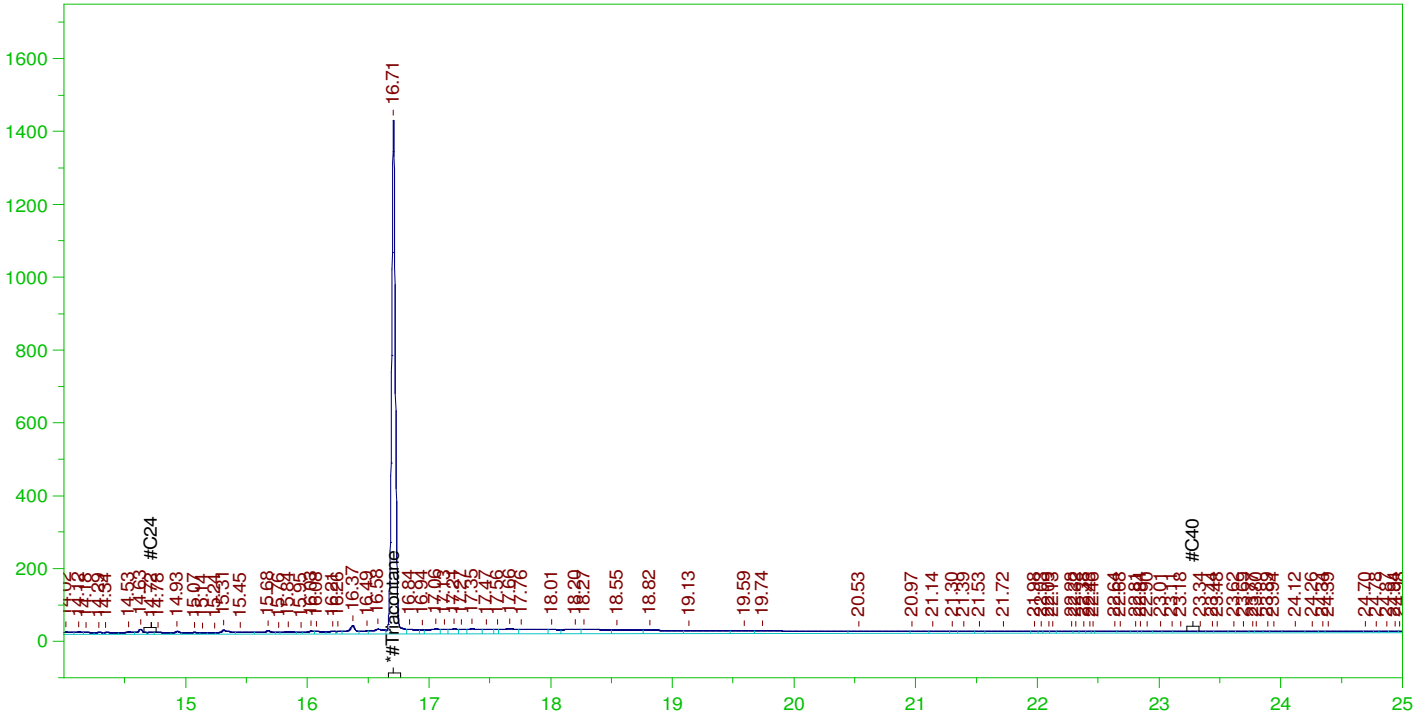


ERH2389 (RHMW2254-01 LF)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0024.RAW

B22010641-001D ;0114HP4 , \$HC-8015-DRO-W,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010641-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0024.RAW  
Date & Time Acquired: 1/15/2022 2:24:53 AM  
Method File: G:\Org\HP4\Methods\D3\_ORO-S-AE-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
Rt range for Residual Range Organics: 14.66 to 23.33

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.709	.472	.116	24.54

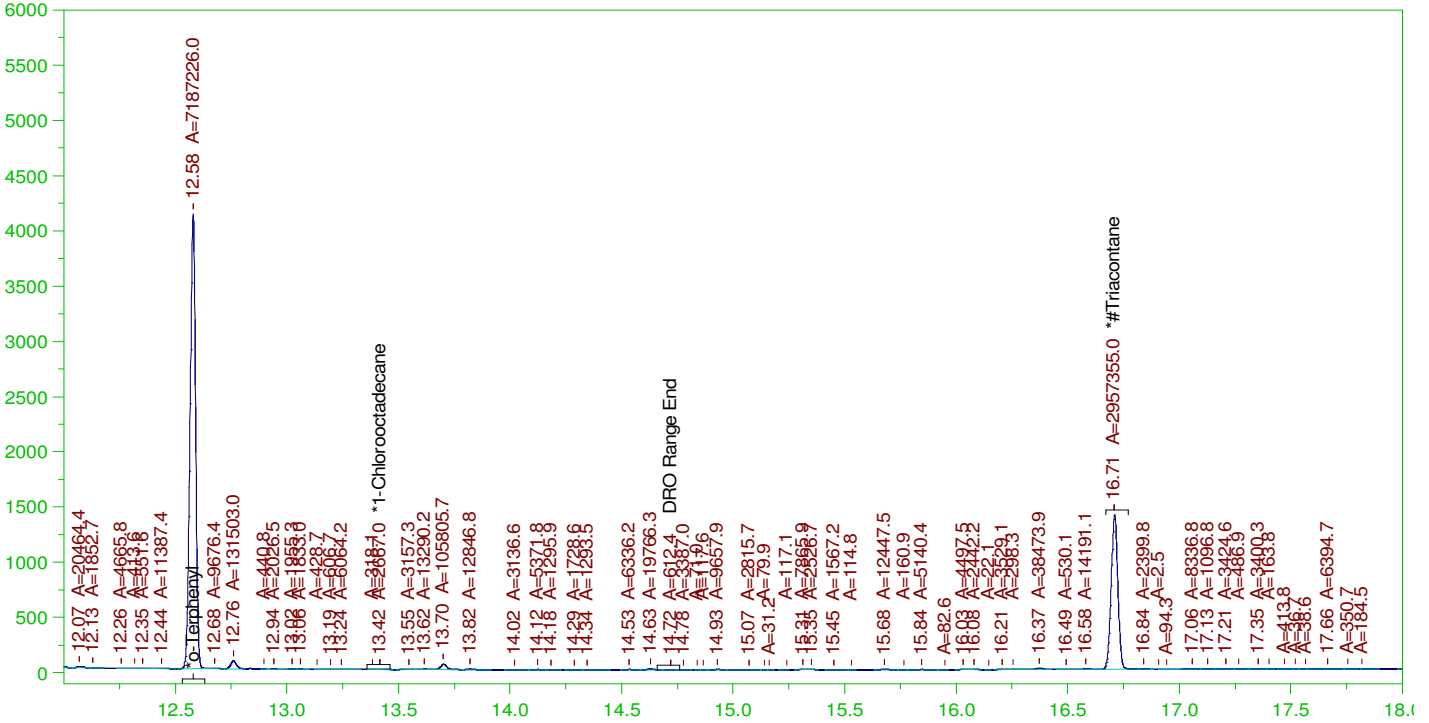
RRO Area:3459914 RRO AMOUNT: 0.1330668

ERH2389 (RHMW2254-01 LF)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0024.RAW

B22010641-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

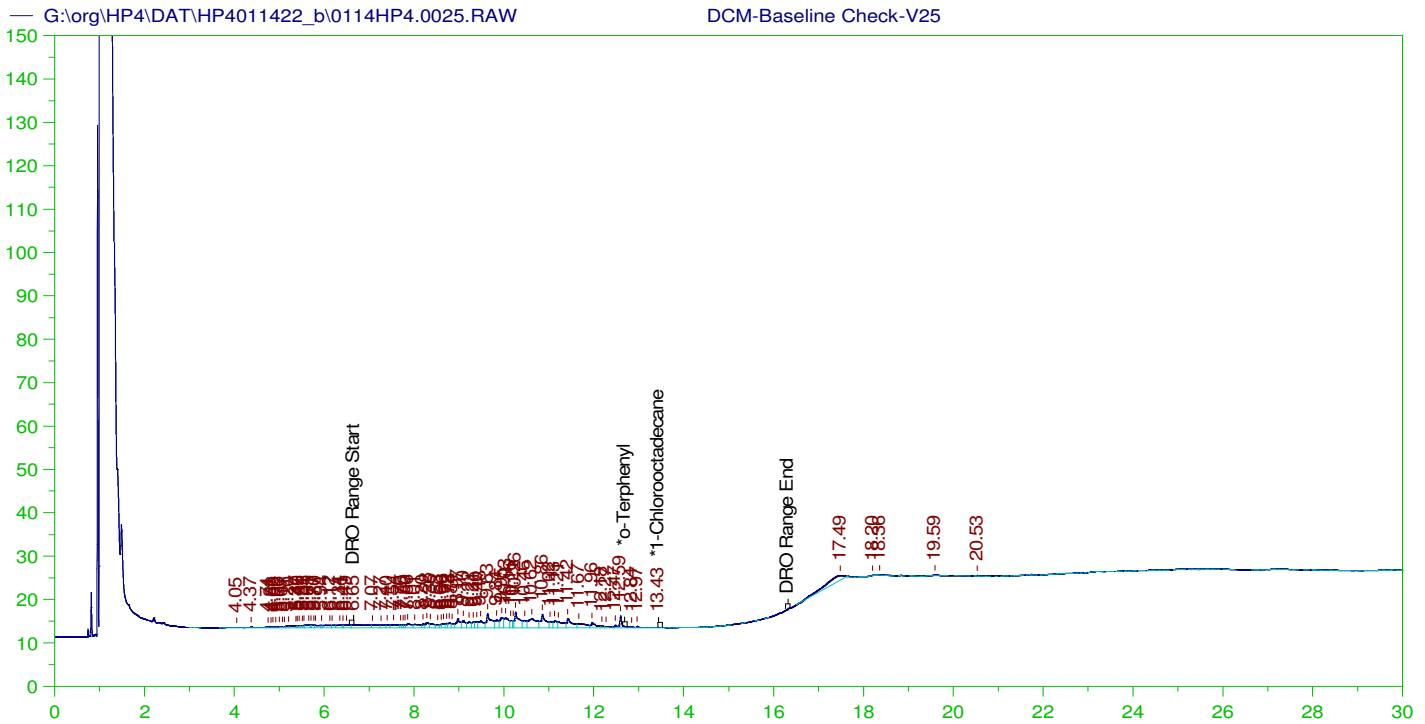
Sample Name: B22010641-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0024.RAW  
Date & Time Acquired: 1/15/2022 2:24:53 AM  
Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24-TRI.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.579	.189	.203	107.85
*1-Chlorooctadecane	13.416	.189	.04	-
*#Triacontane	16.709	.189	.112	59.21

DRO Area:2605102 DRO Amount: 8.366936E-02  
TEH Area:8201033 TEH Amount: 0.2633967



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V25  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0025.RAW  
 Date & Time Acquired: 1/15/2022 3:09:41 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.978	200.	.	-
*1-Chlorooctadecane	13.434	200.	.021	.01 -

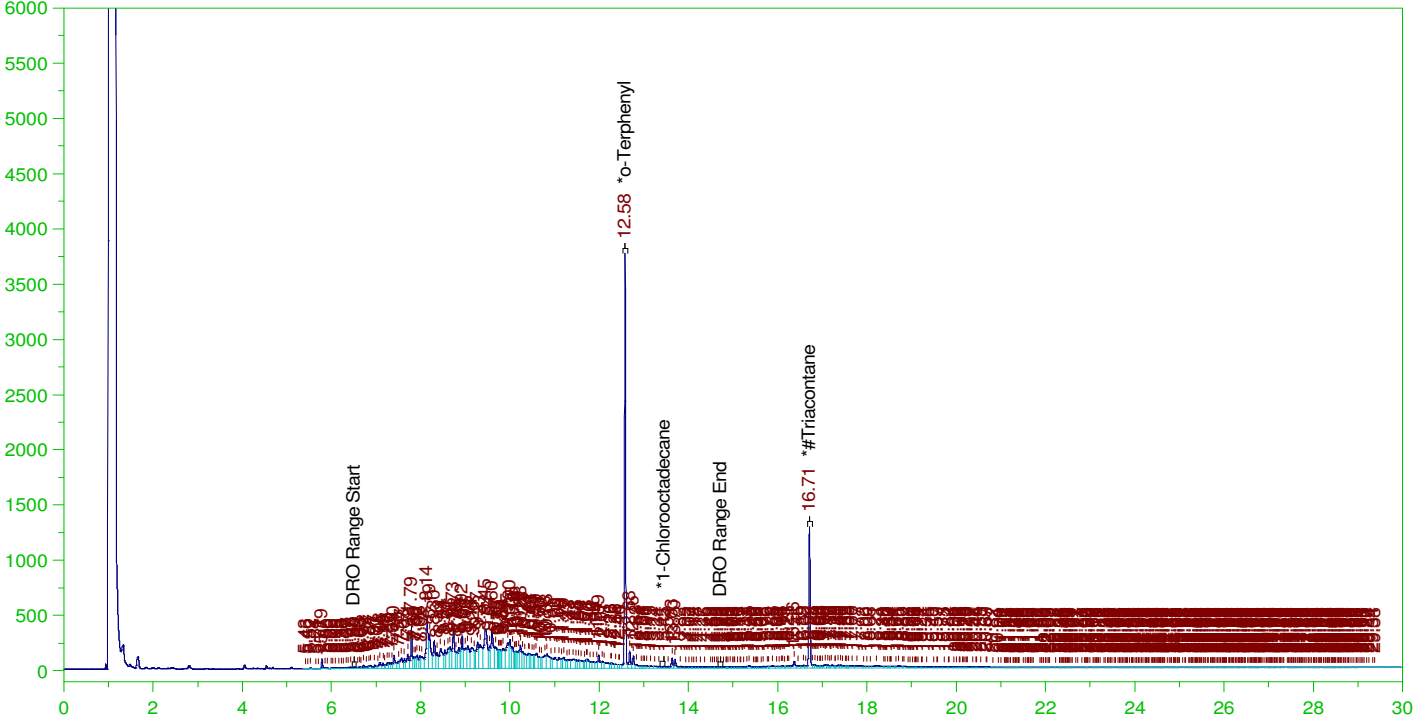
DRO Area:414735.7 DRO Amount: 14.11949  
 TEH Area:528833.3 TEH Amount: 18.00389

ERH2385 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0026.RAW

B22010643-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010643-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0026.RAW  
Date & Time Acquired: 1/15/2022 3:54:31 AM  
Method File: G:\Org\HP4\methods\D3\_8015-011426-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO21110201-C24-TRI.CAL  
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.579	.19	.191	100.22	-
*1-Chlorooctadecane	13.451	.19	.003	1.8	-
*#Triacontane	16.709	.19	.11	57.87	-

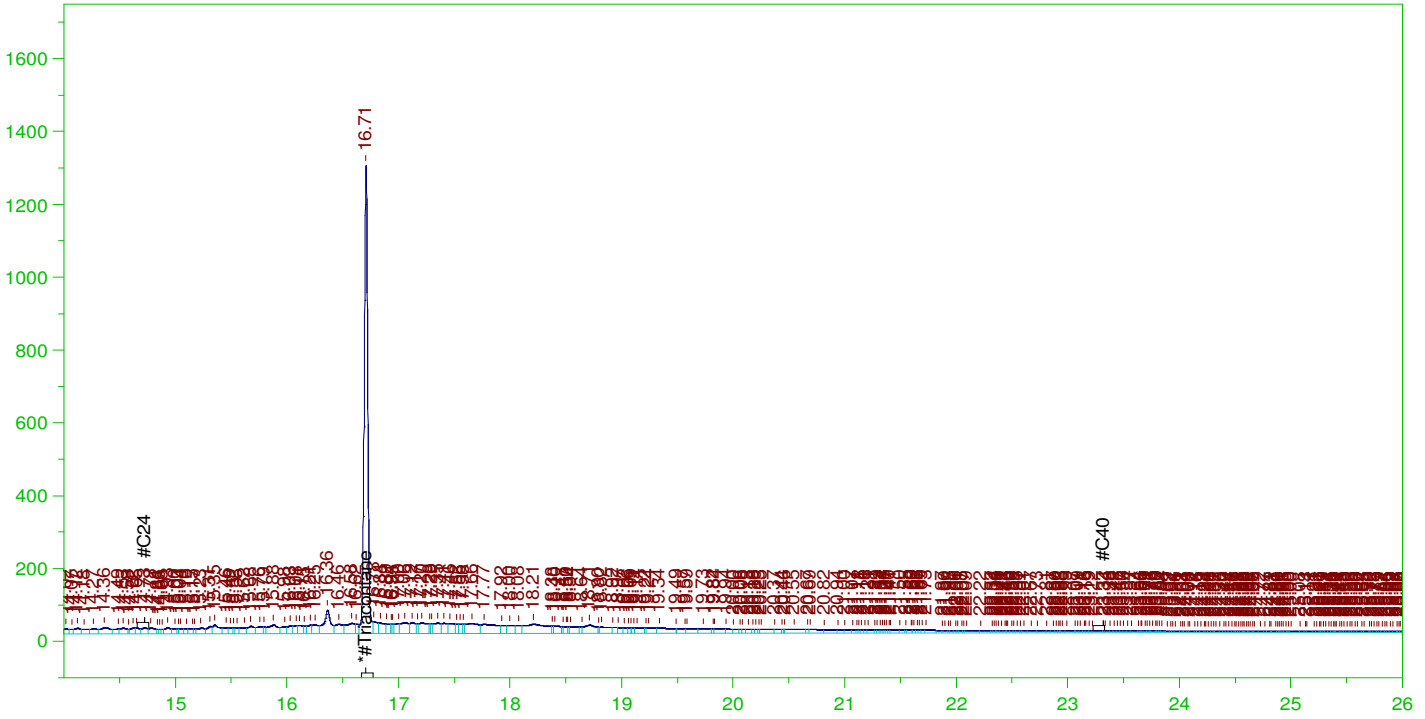
DRO Area: 4.490298E+07 DRO Amount: 1.455907  
TEH Area: 5.380446E+07 TEH Amount: 1.744522

ERH2385 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0026.RAW

B22010643-001D ;0114HP4 , \$HC-8015-DRO-W,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010643-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0026.RAW  
Date & Time Acquired: 1/15/2022 3:54:31 AM  
Method File: G:\Org\HP4\Methods\D3\_ORO-011426-AE-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
Rt range for Residual Range Organics: 14.66 to 23.33

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane_____	16.709	.476	.11	23.08	-

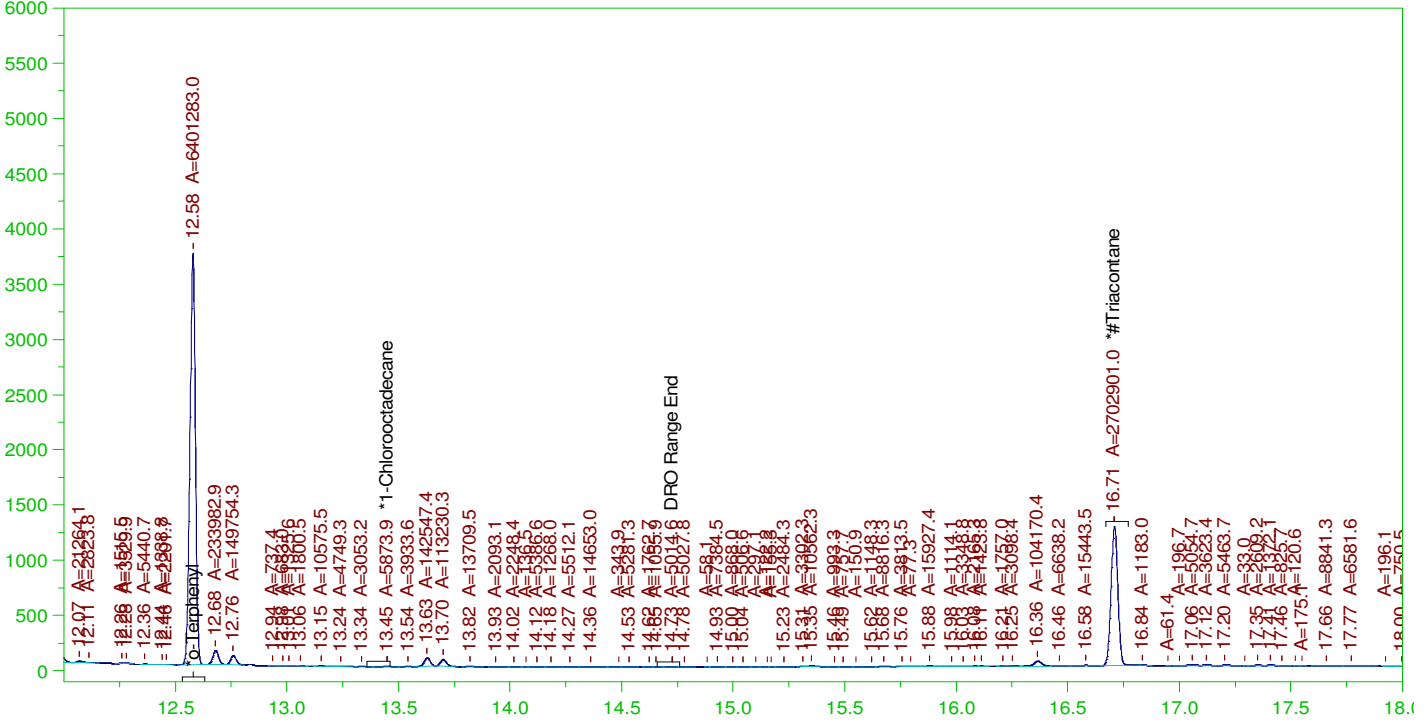
RRO Area:7181419 RRO AMOUNT: 0.2788246

ERH2385 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0026.RAW

B22010643-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010643-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0026.RAW  
Date & Time Acquired: 1/15/2022 3:54:31 AM  
Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020L-C24-TRI.CAL  
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.579	.19	.183	96.06	-
*1-Chlorooctadecane	13.451	.19	.	.09	-
*#Triacontane	16.709	.19	.103	54.11	-

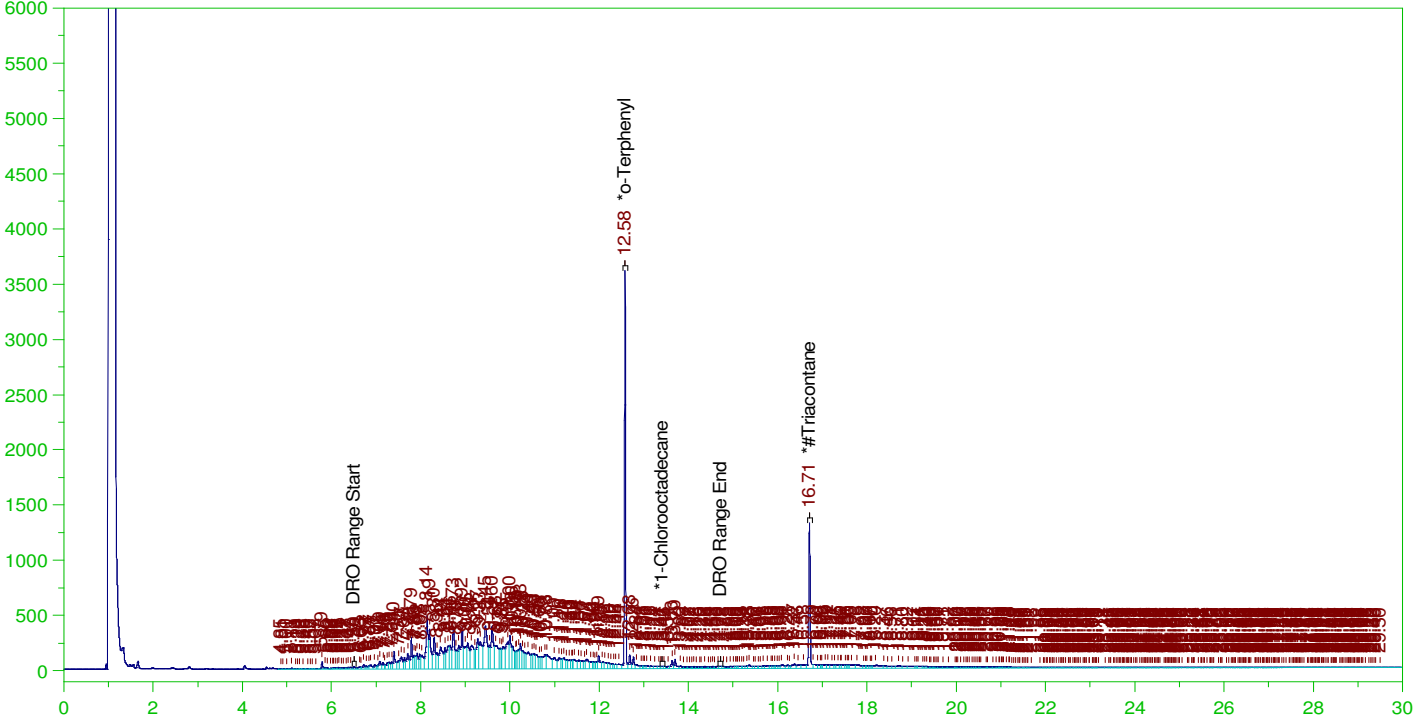
DRO Area:2.978499E+07 DRO Amount: 0.9657301  
TEH Area:3.080518E+07 TEH Amount: 0.9988082

ERH2387 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0027.RAW

B22010643-002B ;0114HP4, \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010643-002B ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0027.RAW  
Date & Time Acquired: 1/15/2022 4:39:24 AM  
Method File: G:\Org\HP4\methods\D3\_8015-011427-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO21110201-C24-TRI.CAL  
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.579	.19	.184	96.69	-
*1-Chlorooctadecane	13.409	.19	.002	1.02	-
*#Triacontane	16.709	.19	.115	60.4	-

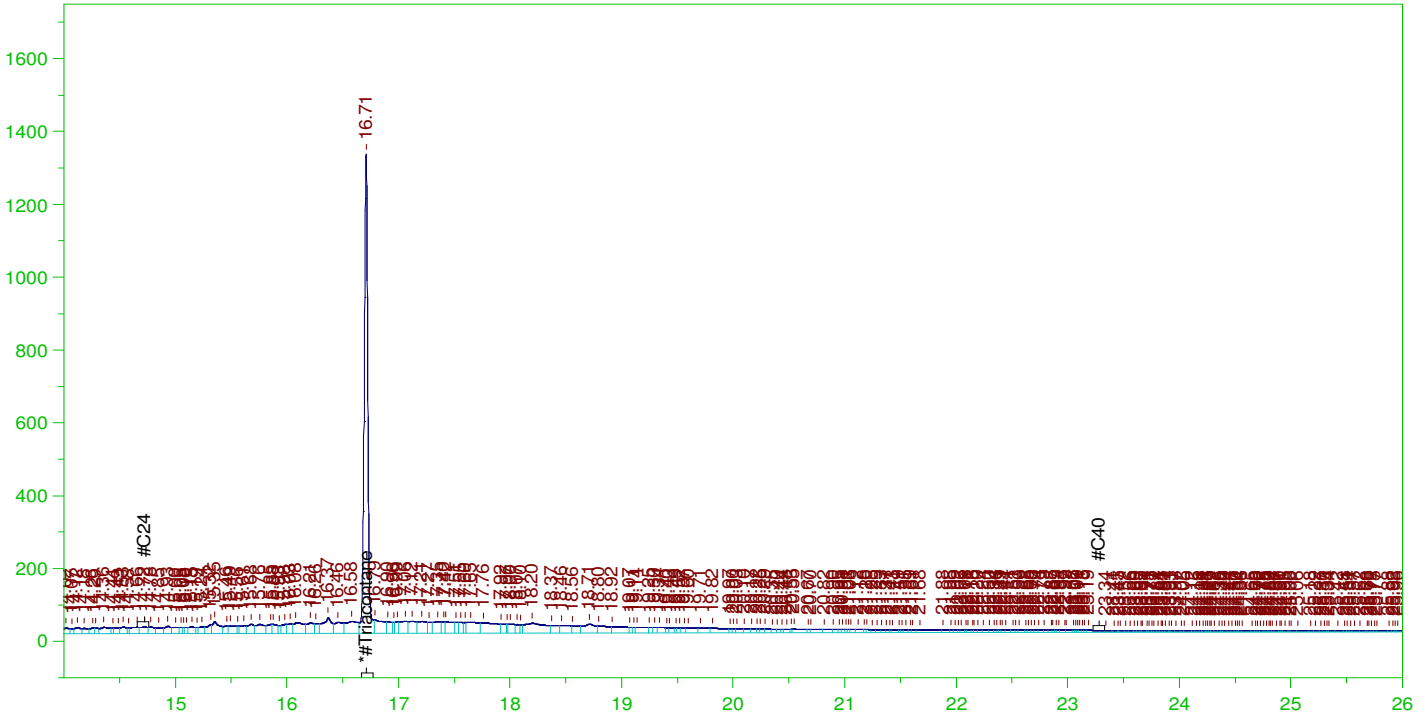
DRO Area: 4.79163E+07 DRO Amount: 1.553608  
TEH Area: 5.821752E+07 TEH Amount: 1.887609

ERH2387 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0027.RAW

B22010643-002B ;0114HP4, \$HC-8015-DRO-W,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010643-002B ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0027.RAW  
Date & Time Acquired: 1/15/2022 4:39:24 AM  
Method File: G:\Org\HP4\Methods\D3\_ORO-011427-AE-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
Rt range for Residual Range Organics: 14.66 to 23.33

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.709	.476	.115	24.06

RRO Area:8214178 RRO AMOUNT: 0.3189224

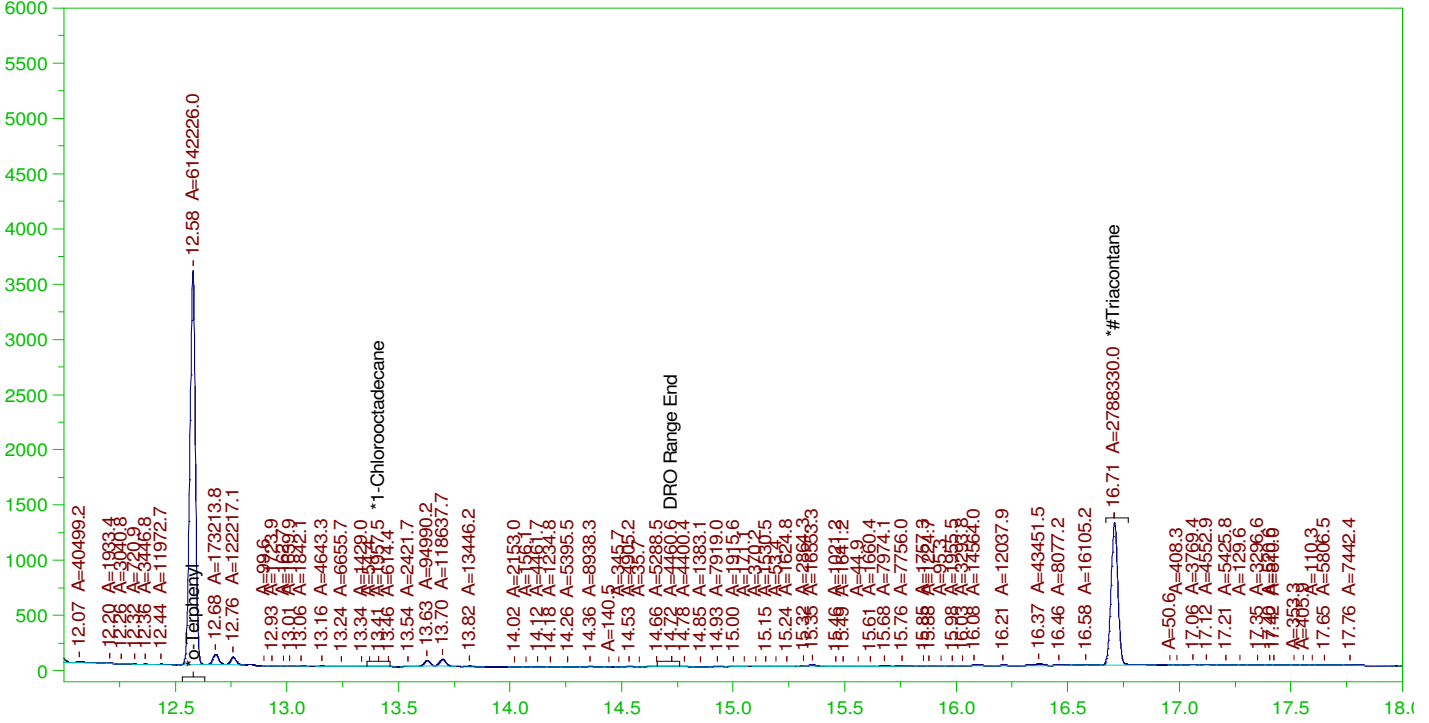


ERH2387 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0027.RAW

B22010643-002B ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

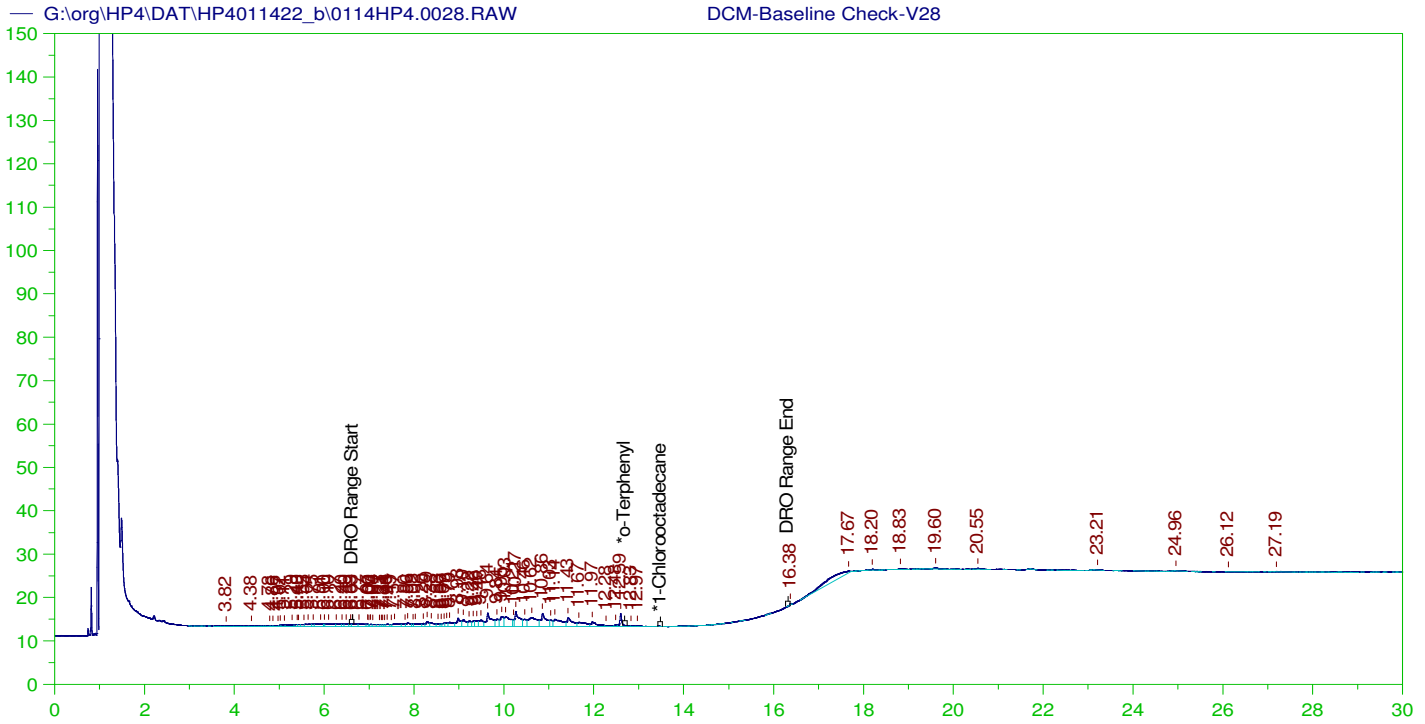
Sample Name: B22010643-002B ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0027.RAW  
Date & Time Acquired: 1/15/2022 4:39:24 AM  
Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020L-C24-TRI.CAL  
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.579	.19	.176	92.17	-
*1-Chlorooctadecane	13.409	.19	.	.03	-
*Triacontane	16.709	.19	.106	55.83	-

DRO Area:3.25147E+07 DRO Amount: 1.054236  
TEH Area:3.330392E+07 TEH Amount: 1.079826



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V28  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0028.RAW  
 Date & Time Acquired: 1/15/2022 5:24:08 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.983	200.	.	-
*1-Chlorooctadecane	29.983	200.	.	-

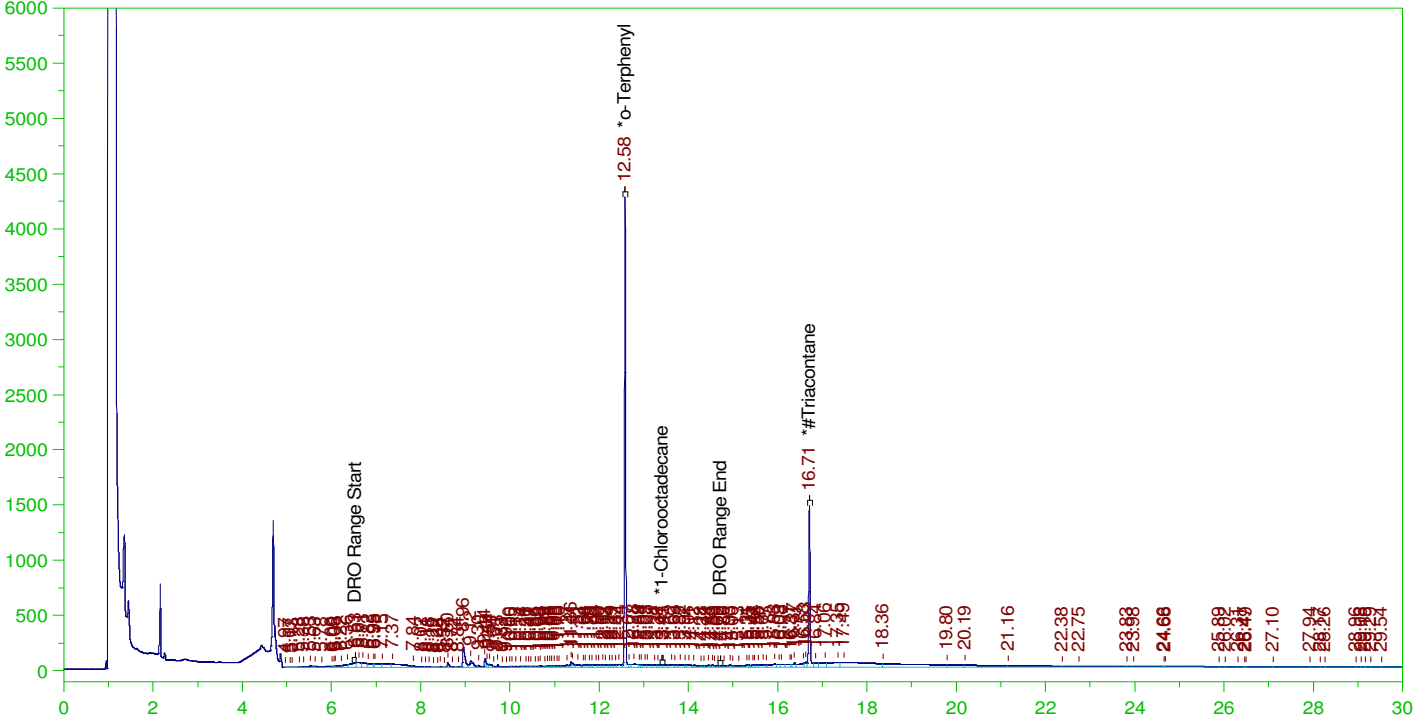
DRO Area:391588.9 DRO Amount: 13.33147  
 TEH Area:501179.9 TEH Amount: 17.06244

ERH2358 (RHMW11 zone 5)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0029.RAW

B22010629-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010629-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0029.RAW  
Date & Time Acquired: 1/15/2022 6:08:51 AM  
Method File: G:\Org\HP4\methods\D3\_8015-011429-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO21110201-C24-TRI.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.579	.189	.213	112.67	-
*1-Chlorooctadecane	13.413	.189	.004	2.03	-
*#Triacontane	16.707	.189	.128	67.7	-

DRO Area:1.122111E+07 DRO Amount: 0.360394

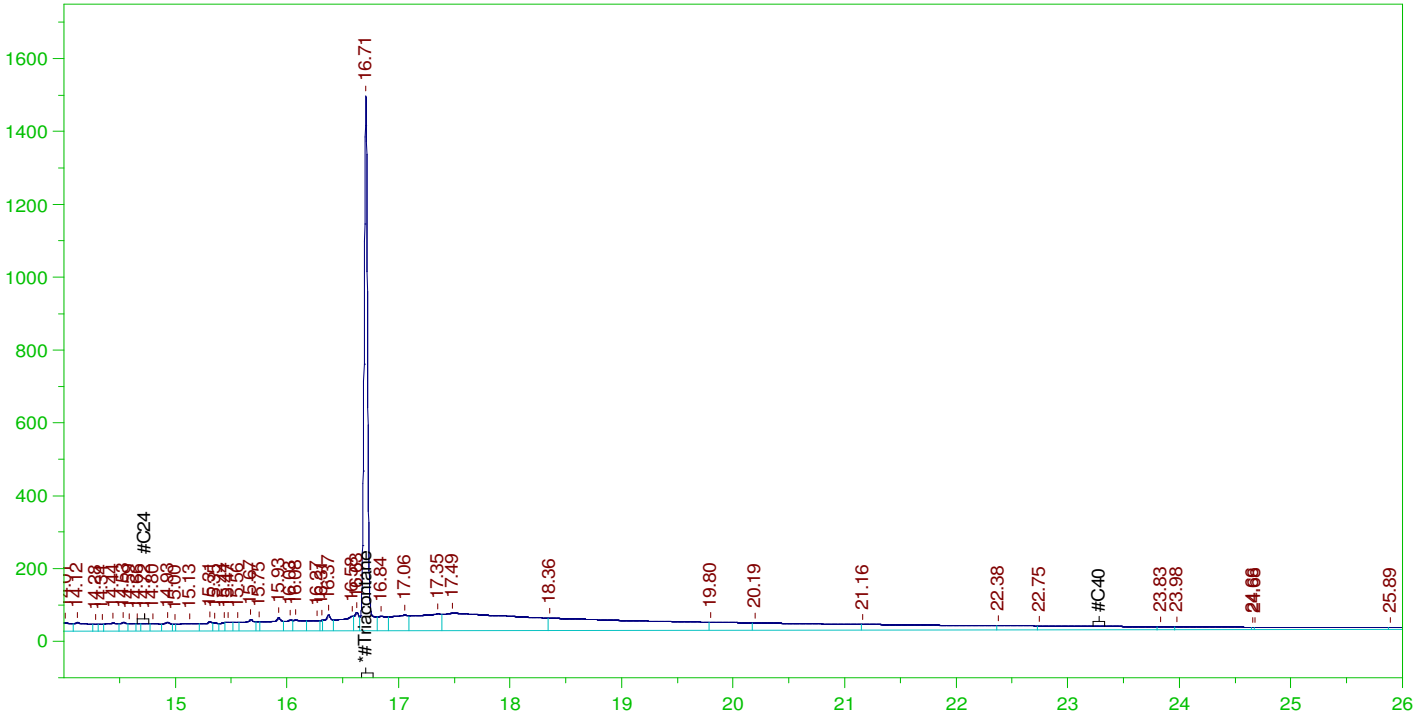
TEH Area:2.568154E+07 TEH Amount: 0.824827

ERH2358 (RHMW11 zone 5)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0029.RAW

B22010629-001D ;0114HP4 , \$HC-8015-DRO-W,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010629-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0029.RAW  
Date & Time Acquired: 1/15/2022 6:08:51 AM  
Method File: G:\Org\HP4\Methods\D3\_ORO-011429-AE-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
Rt range for Residual Range Organics: 14.66 to 23.33

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.707	.472	.128	27.08

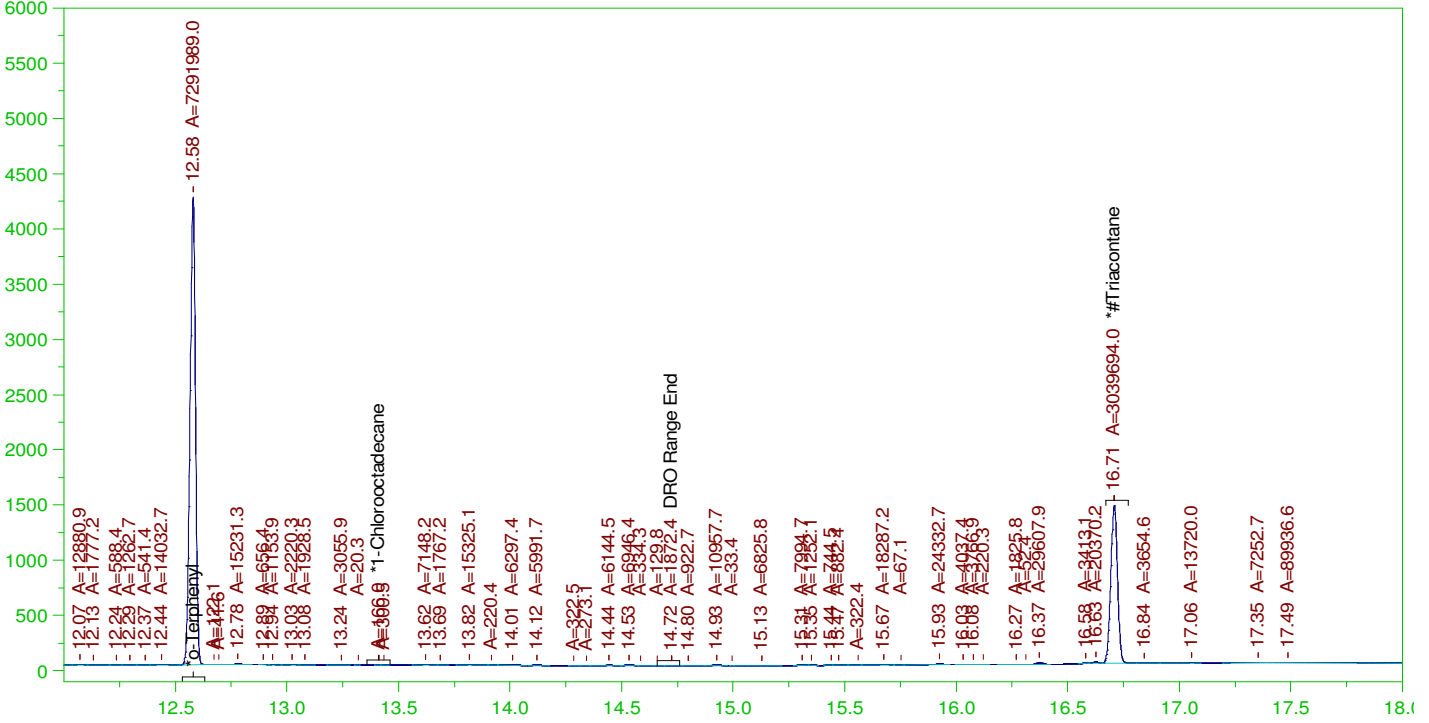
RRO Area:1.235928E+07 RRO AMOUNT: 0.4753326

ERH2358 (RHMW11 zone 5)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0029.RAW

B22010629-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010629-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0029.RAW  
Date & Time Acquired: 1/15/2022 6:08:51 AM  
Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24-TRI.CAL  
Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.579	.189	.206	109.42
*1-Chlorooctadecane	29.972	.189	.	-
*#Triacontane	16.707	.189	.115	60.86

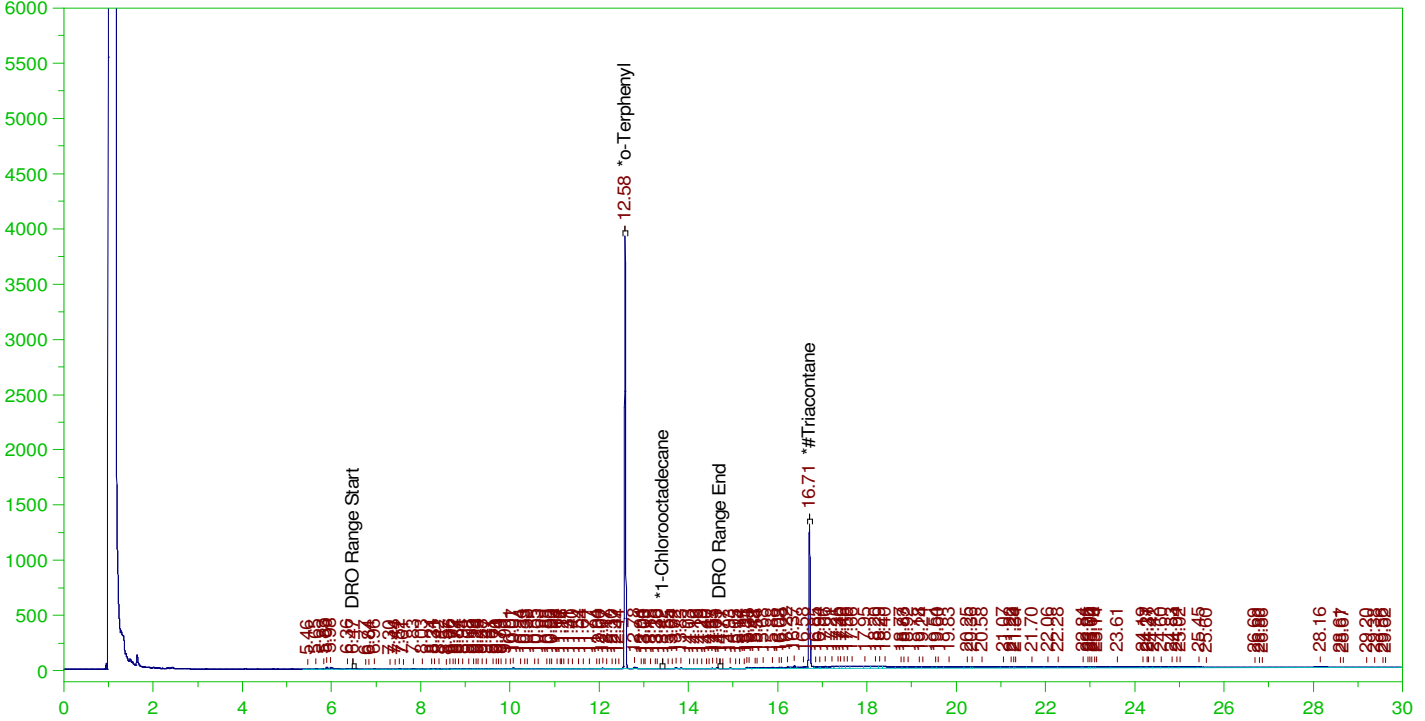
DRO Area:5531502 DRO Amount: 0.177658  
TEH Area:1.614726E+07 TEH Amount: 0.5186095

ERH2362 (RHMW09)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0030.RAW

B22010633-001D ;0114HP4, \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010633-001D ;0114HP4, \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0030.RAW  
Date & Time Acquired: 1/15/2022 6:53:43 AM  
Method File: G:\Org\HP4\methods\D3\_8015-C24T-OL-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO21110201-C24-TRI.CAL  
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.579	.196	.203	103.7	-
*1-Chlorooctadecane	13.416	.196	.	.04	-
*#Triacontane	16.709	.196	.116	59.18	-

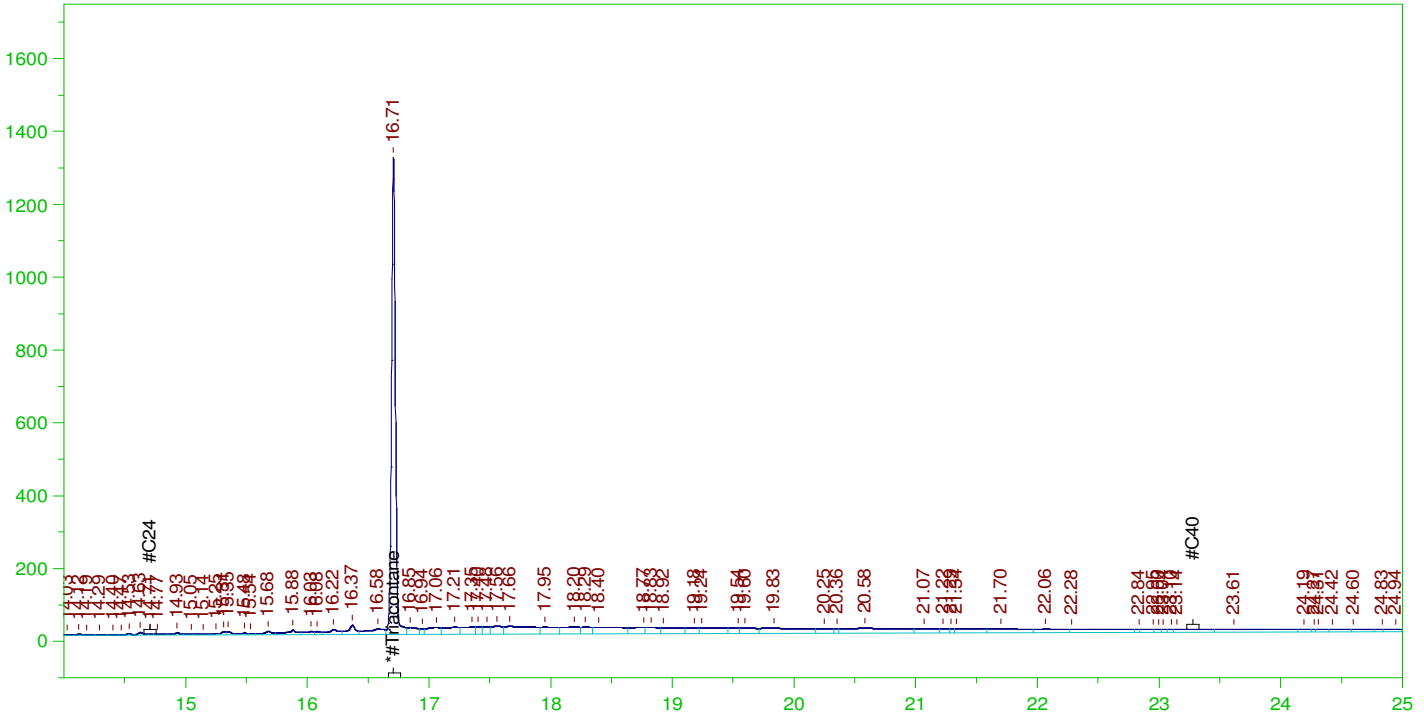
DRO Area:639339.1 DRO Amount: 2.133923E-02  
TEH Area:8534365 TEH Amount: 0.2848516

ERH2362 (RHMW09)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0030.RAW

B22010633-001D ;0114HP4 , \$HC-8015-DRO-W,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010633-001D ;0114HP4 , \$HC-8015-DRO-W,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0030.RAW  
 Date & Time Acquired: 1/15/2022 6:53:43 AM  
 Method File: G:\Org\HP4\Methods\D3\_ORO-S-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
 Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.66 to 23.33

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane_____	16.709	.49	.116	23.67	-

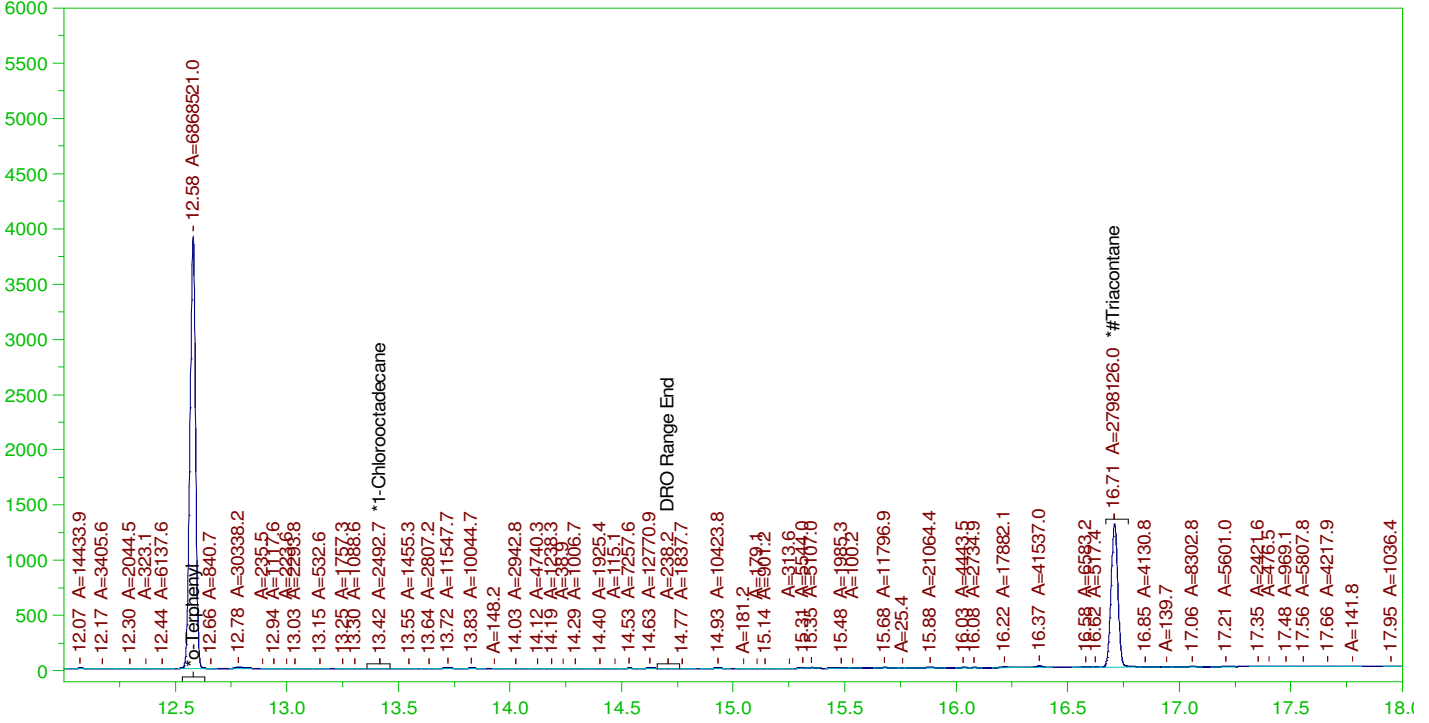
RRO Area:6207033 RRO AMOUNT: 0.2480813

ERH2362 (RHMW09)

Batch ID: 162891

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0030.RAW

B22010633-001D ;0114HP4 , \$HC-8015-DRO-W,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010633-001D ;0114HP4 , \$HC-8015-DRO-W,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0030.RAW  
Date & Time Acquired: 1/15/2022 6:53:43 AM  
Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020L-C24-TRI.CAL  
Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

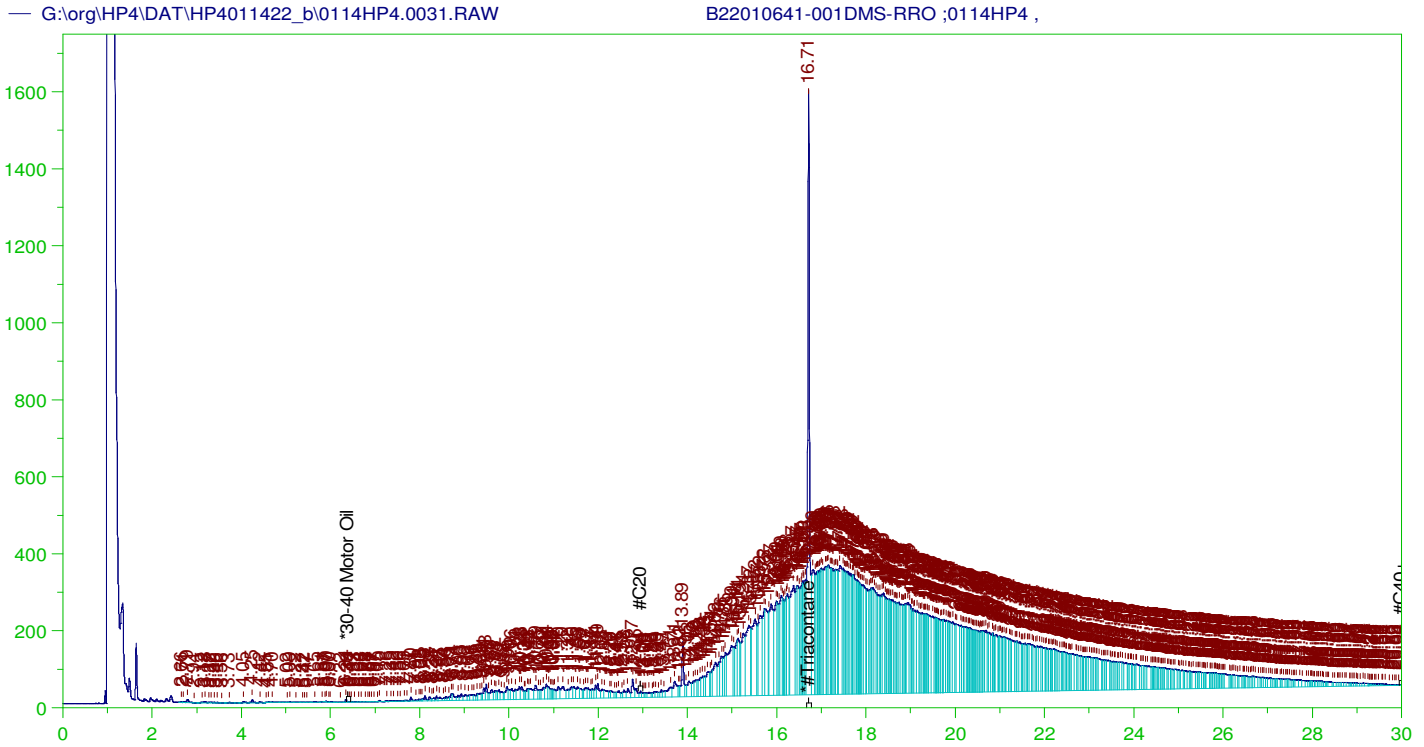
Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.579	.196	.202	103.07
*1-Chlorooctadecane	13.416	.196	.	.04
*#Triacontane	16.709	.196	.11	56.02

DRO Area:457209.8  
TEH Area:974236.7

DRO Amount: 0.0152603  
TEH Amount: 3.251711E-02





**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

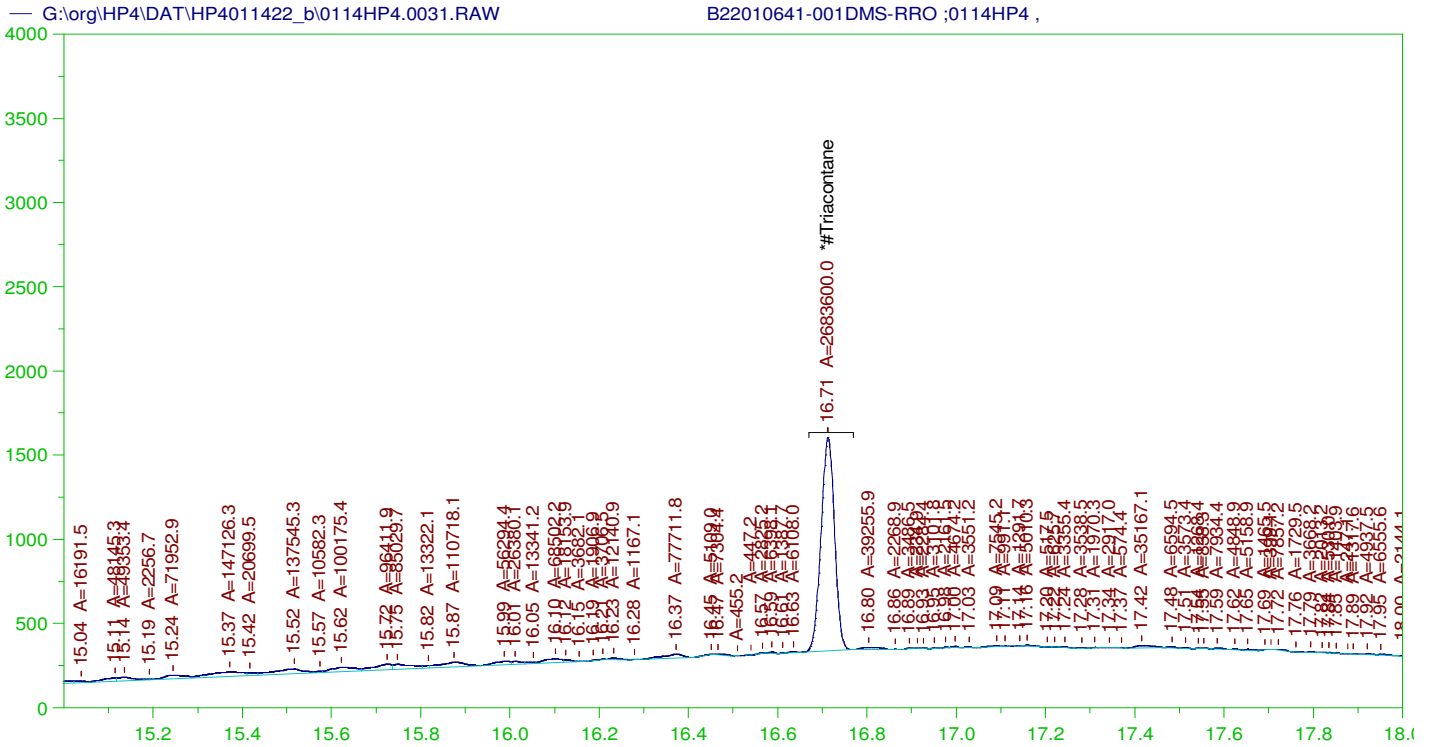
Sample Name: B22010641-001DMS-RRO ;0114HP4 ,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0031.RAW  
 Date & Time Acquired: 1/15/2022 7:38:17 AM  
 Method File: G:\Org\HP4\Methods\D3\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.712	.476	.184	38.71	-

RRO TEH (Oil Range) Area:1.143694E+08 RRO TEH (Oil Range) AMOUNT: 4.440488

AMN 02/01/2022



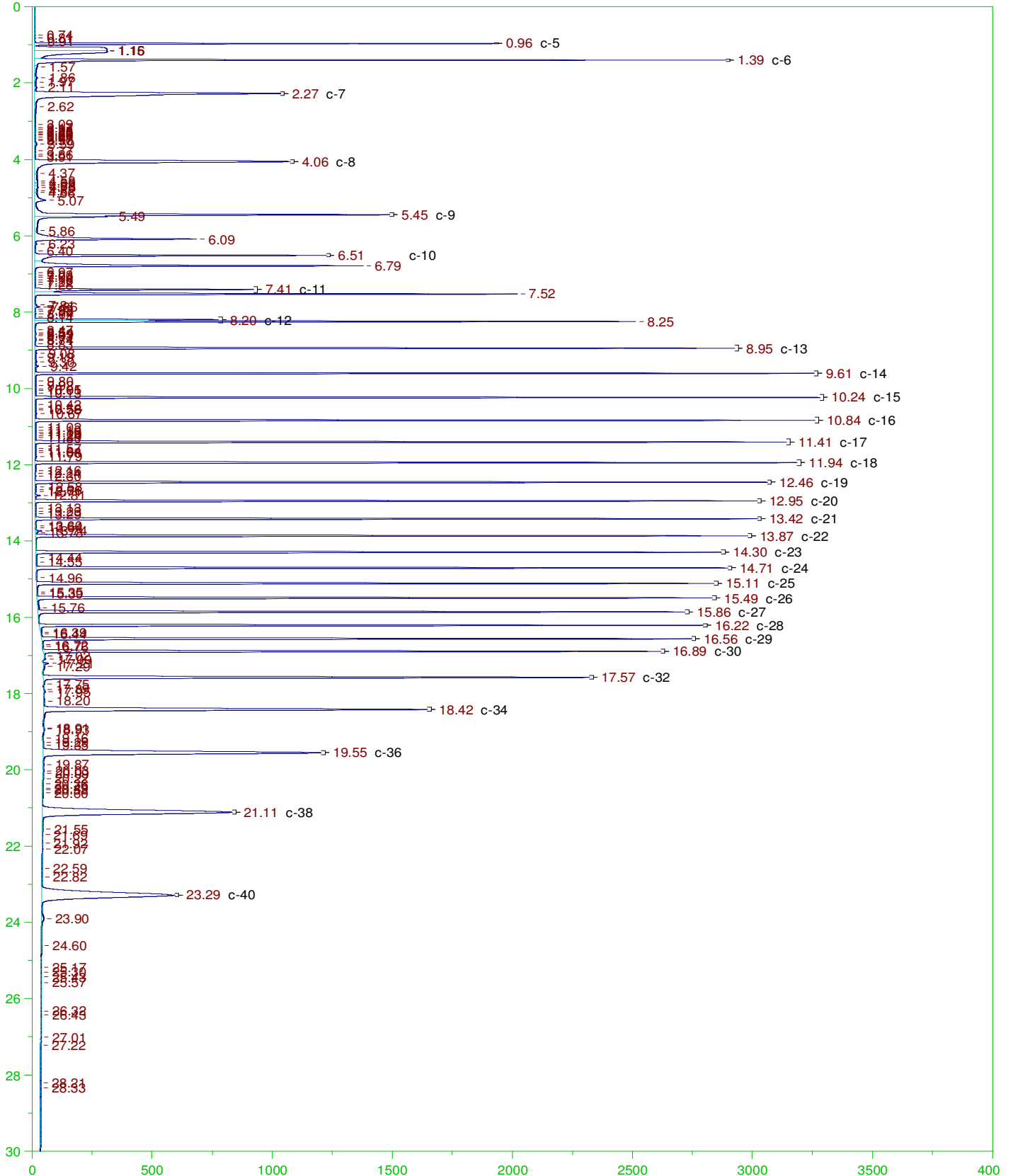
**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

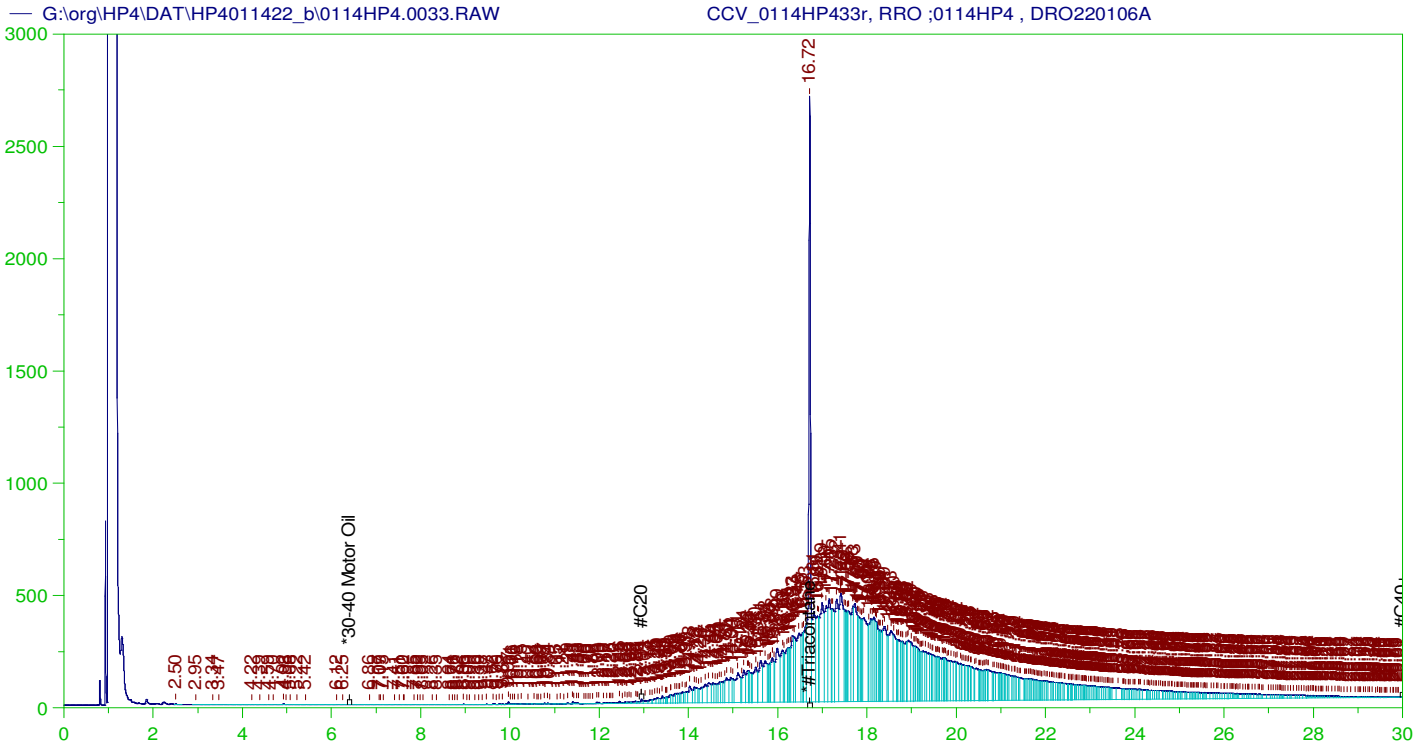
Sample Name: B22010641-001DMS-RRO ;0114HP4 ,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0031.RAW  
Date & Time Acquired: 1/15/2022 7:38:17 AM  
Method File: G:\Org\HP4\Methods\DS\_ORO-T-AE-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
Rt range for Residual Range Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.712	.476	.102	21.49

RRO Area:2675779 RRO AMOUNT: 0.1038894





**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP433r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0033.RAW  
 Date & Time Acquired: 1/15/2022 9:07:20 AM  
 Method File: G:\Org\HP4\Methods\DC\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.715	500.	313.682	62.74	-

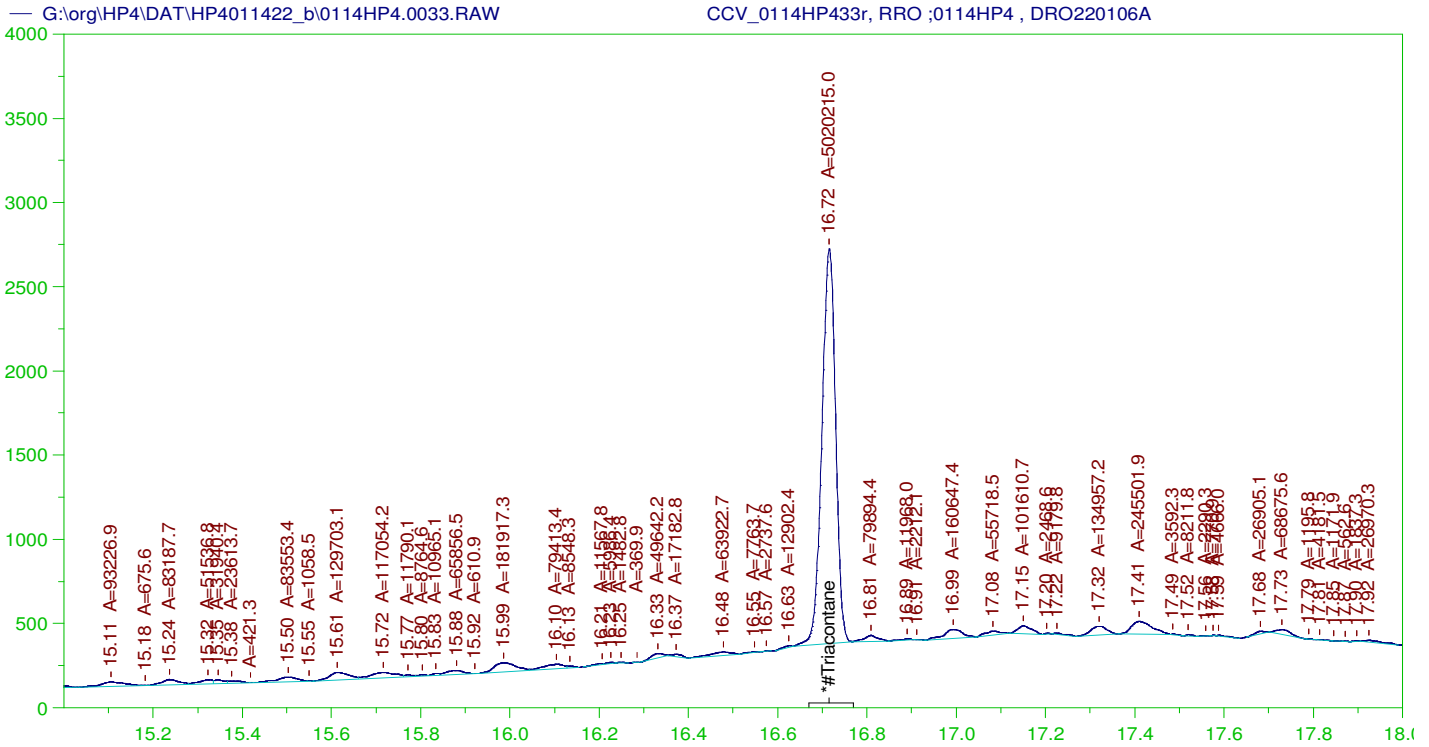
RRO TEH (Oil Range) Area:1.153009E+08 RRO TEH (Oil Range) AMOUNT: 4700.488

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0033.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.715	200.	313.682	156.84	75-125

AMN 02/01/2022



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP433r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0033.RAW  
 Date & Time Acquired: 1/15/2022 9:07:20 AM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.715	500.	201.019	40.2

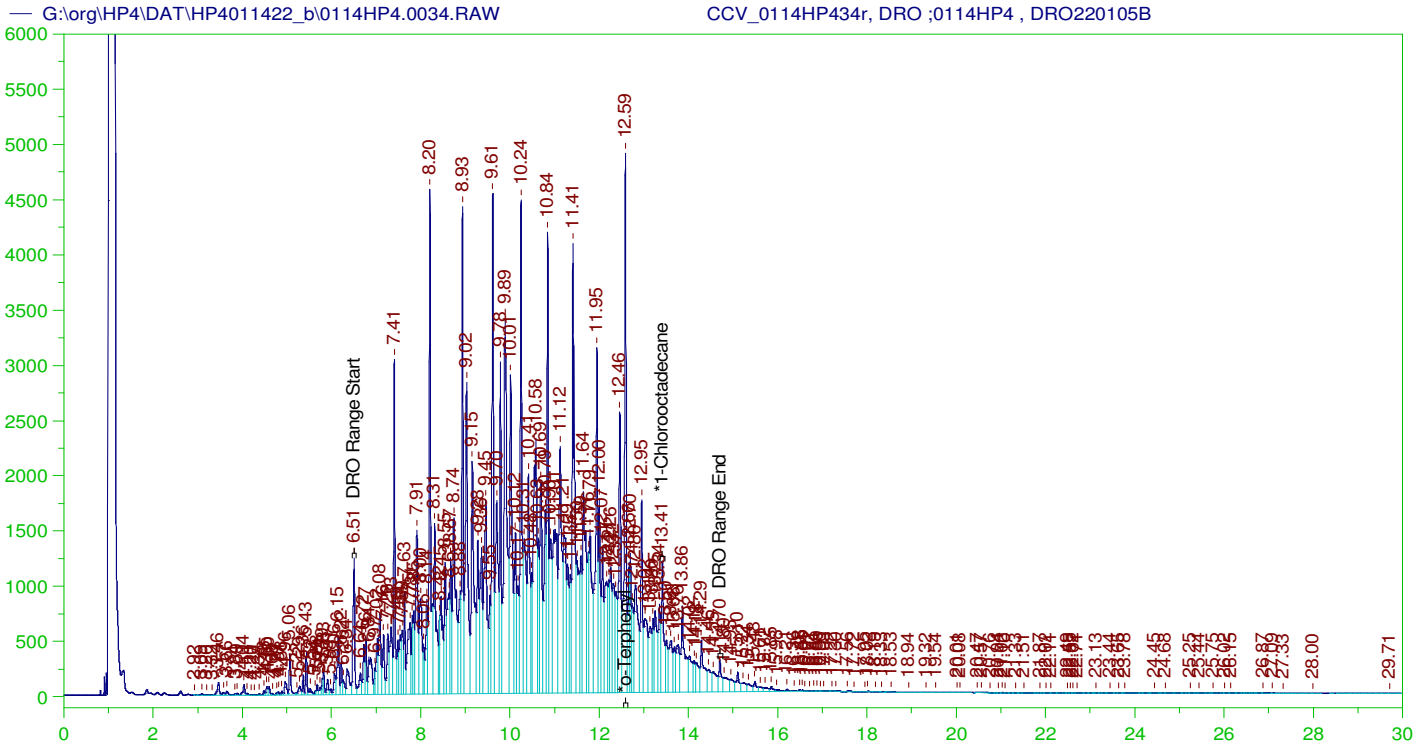
RRO Area:3545031 RRO AMOUNT: 144.5208

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0033.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.715	200.	201.019	100.51	75-125



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0114HP434r, DRO ;0114HP4 , DRO220105B  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0034.RAW  
 Date & Time Acquired: 1/15/2022 9:51:53 AM  
 Method File: G:\Org\HP4\methods\DC\_8015-C24-OL-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.46 to 14.76

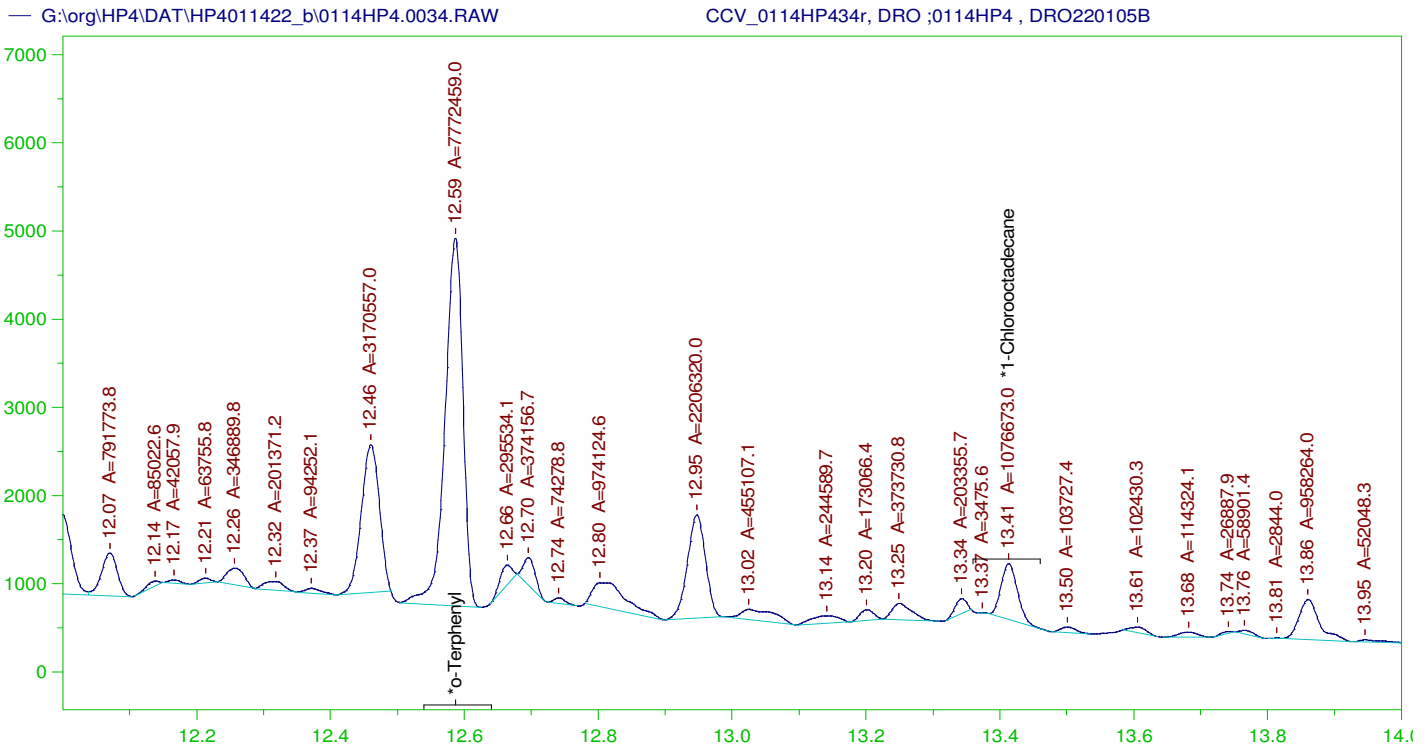
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.586	200.	390.59	195.29
*1-Chlorooctadecane	13.413	200.	120.024	60.01

DRO Area: 4.506528E+08 DRO Amount: 15342.27  
 TEH Area: 4.672315E+08 TEH Amount: 15906.69

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0034.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15906.69	106.04	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.586	200.	390.59	195.29	85-115
*1-Chlorooctadecane	13.413	200.	120.024	60.01	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0114HP434r, DRO ;0114HP4 , DRO220105B  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0034.RAW  
 Date & Time Acquired: 1/15/2022 9:51:53 AM  
 Method File: G:\Org\HP4\methods\DS\_8015-C24-OL-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.46 to 14.76

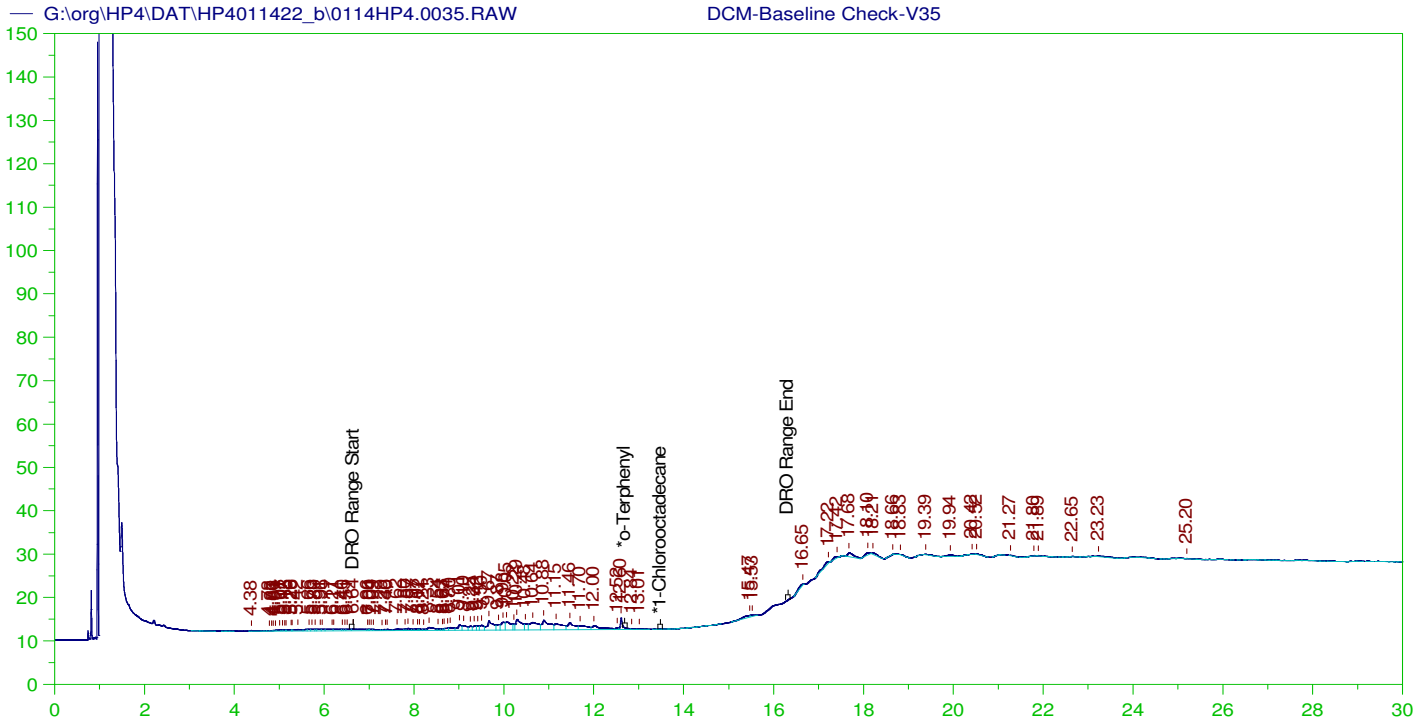
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.586	200.	233.269	116.63
*1-Chlorooctadecane	13.413	200.	32.313	16.16

DRO Area: 1.964611E+08 DRO Amount: 6688.431  
 TEH Area: 2.069796E+08 TEH Amount: 7046.528

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0034.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	7046.53	46.98	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.586	200.	233.269	116.63	85-115
*1-Chlorooctadecane	13.413	200.	32.313	16.16	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V35  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0035.RAW  
 Date & Time Acquired: 1/15/2022 10:36:33 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.56 to 16.37

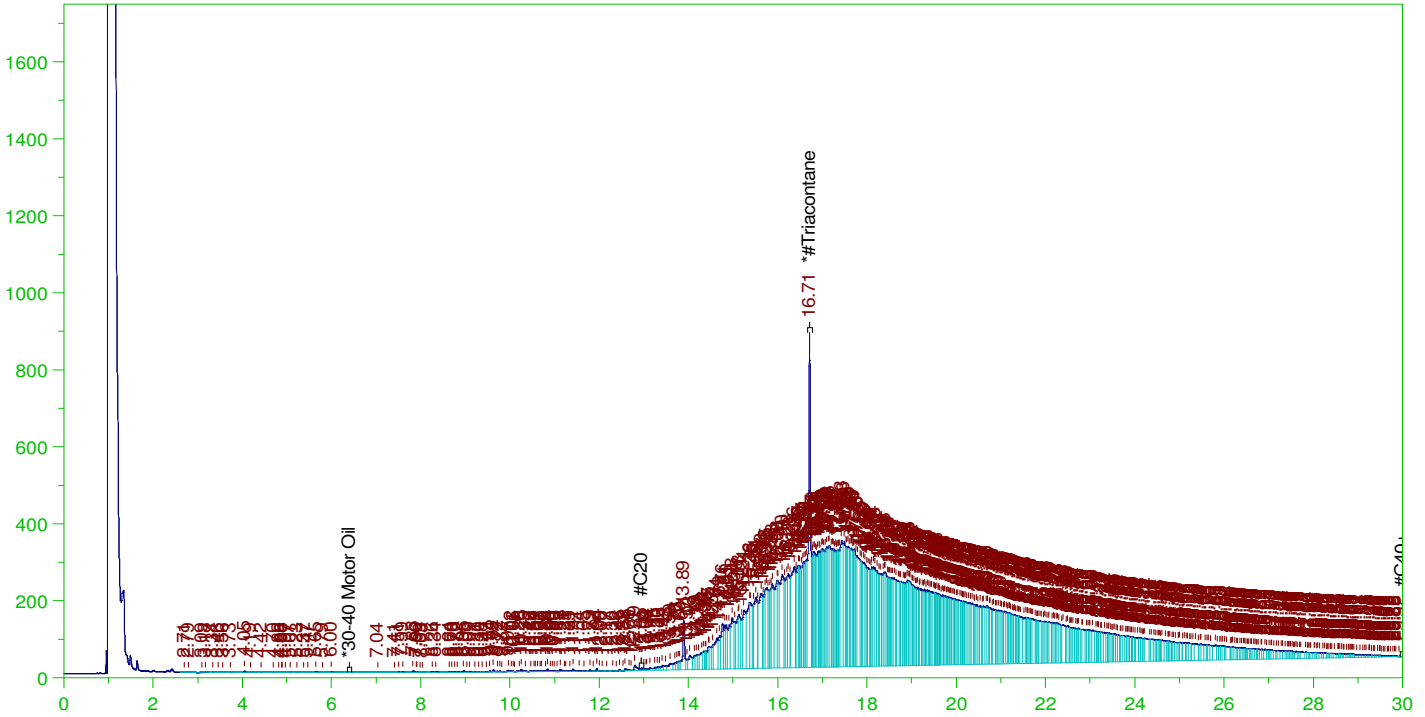
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.913	200.	.	-
*1-Chlorooctadecane	29.913	200.	.	-

DRO Area:305145.3 DRO Amount: 10.38853  
 TEH Area:402072.3 TEH Amount: 13.68837



G:\org\HP4\DAT\HP4011422\_b\0114HP4.0036.RAW

LCS-RRO-162891 ;0114HP4 ,



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

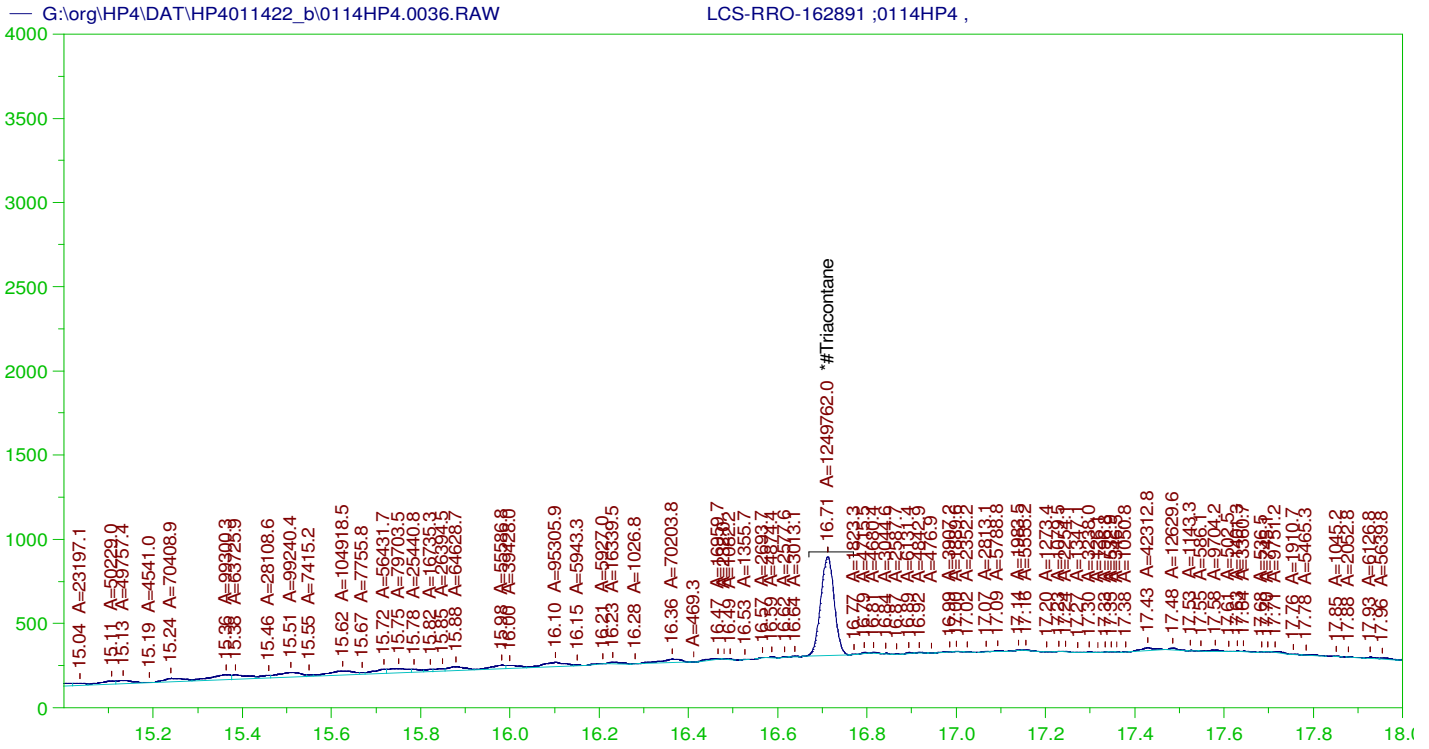
Sample Name: LCS-RRO-162891 ;0114HP4 ,  
Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0036.RAW  
Date & Time Acquired: 1/15/2022 11:21:24 AM  
Method File: G:\Org\HP4\Methods\D3\_ORO-T-AE-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane_____	16.712	.5	.124	24.9	-

RRO TEH (Oil Range) Area:1.08241E+08 RRO TEH (Oil Range) AMOUNT: 4.412673

AMN 02/01/2022



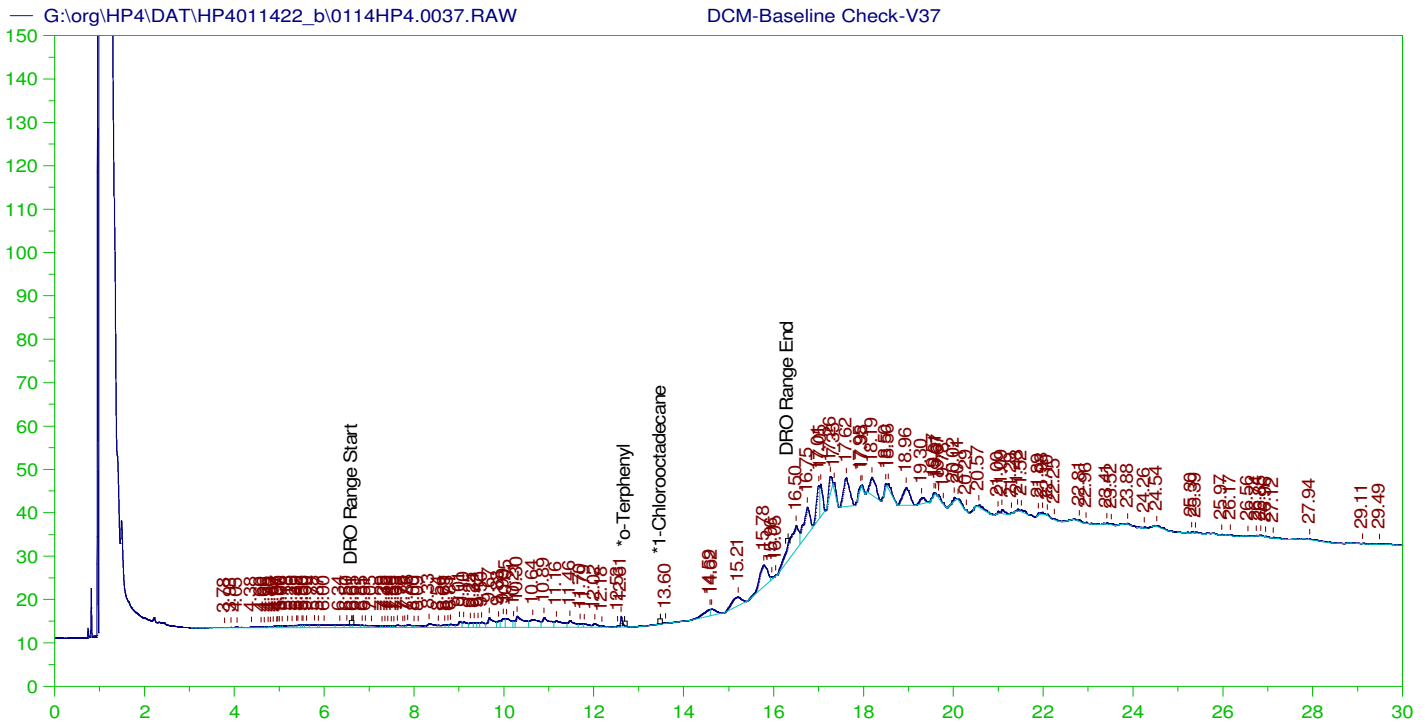
**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: LCS-RRO-162891 ;0114HP4 ,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0036.RAW  
 Date & Time Acquired: 1/15/2022 11:21:24 AM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.712	.5	.05	10.01

RRO Area:2651660 RRO AMOUNT: 0.1081006



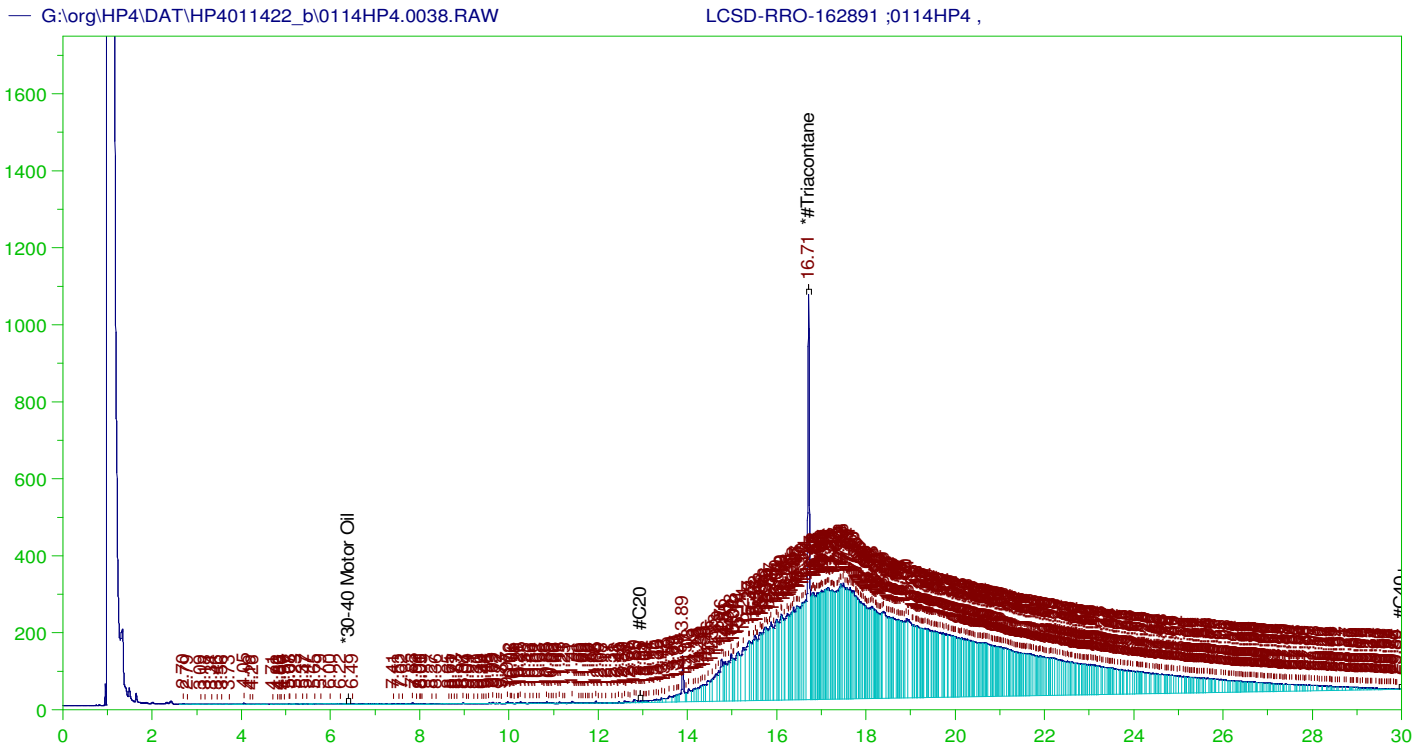
**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V37  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0037.RAW  
 Date & Time Acquired: 1/15/2022 12:05:59 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.919	200.	.	-
*1-Chlorooctadecane	29.919	200.	.	-

DRO Area:444726.1 DRO Amount: 15.1405  
 TEH Area:1017213 TEH Amount: 34.63054



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

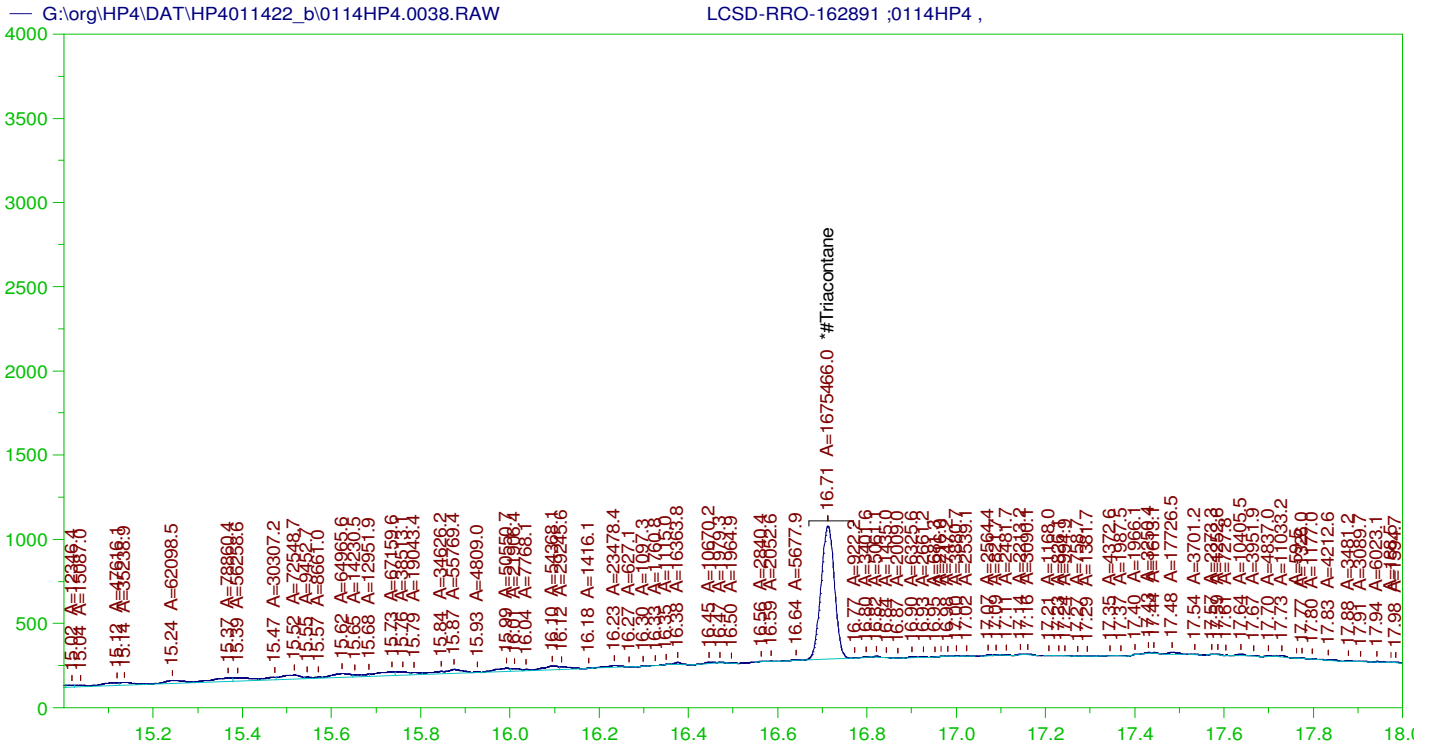
Sample Name: LCSD-RRO-162891 ;0114HP4 ,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0038.RAW  
 Date & Time Acquired: 1/15/2022 12:50:41 PM  
 Method File: G:\Org\HP4\Methods\D3\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.712	.5	.136	27.25

RRO TEH (Oil Range) Area:1.000926E+08 RRO TEH (Oil Range) AMOUNT: 4.080487

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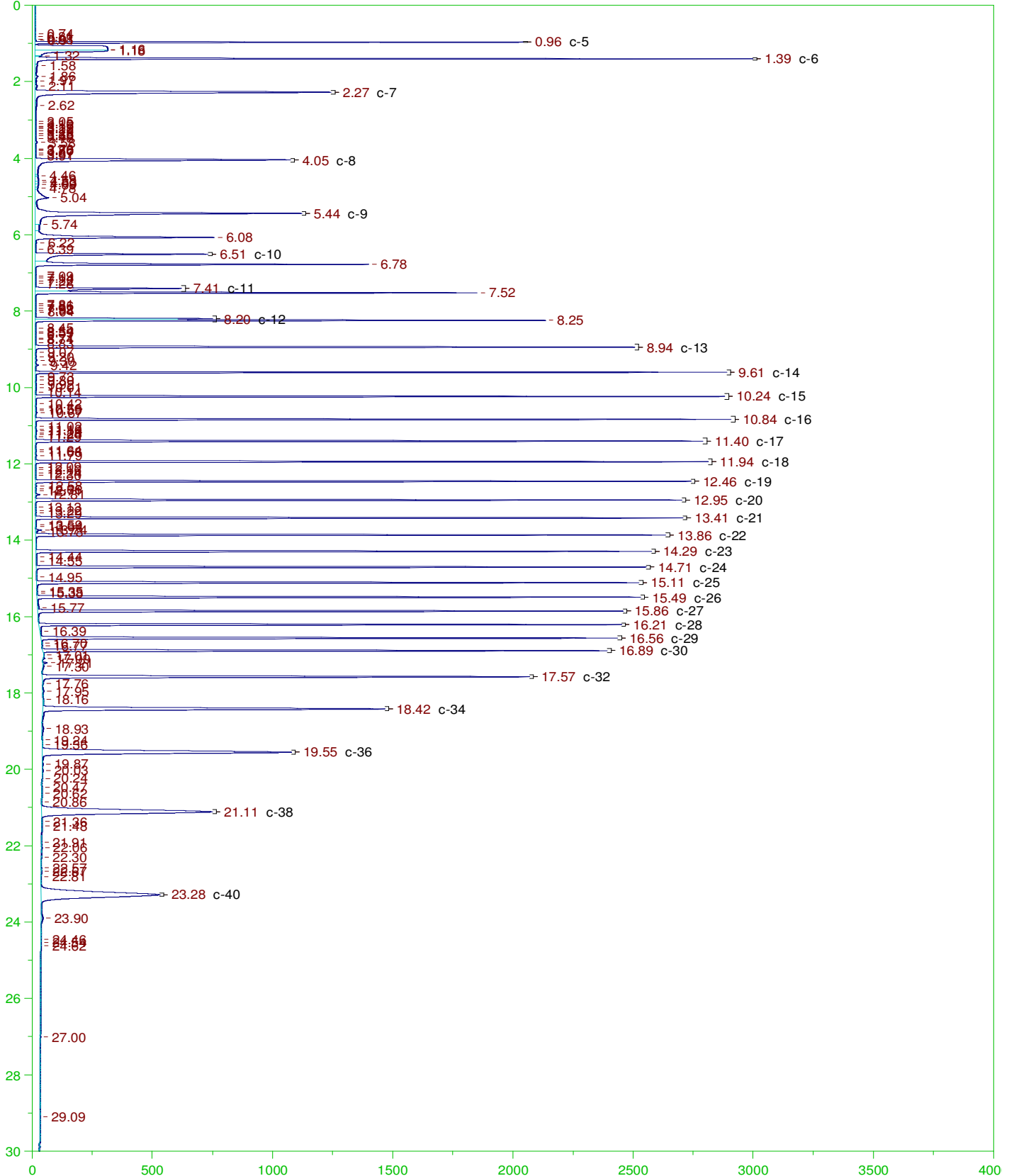
**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

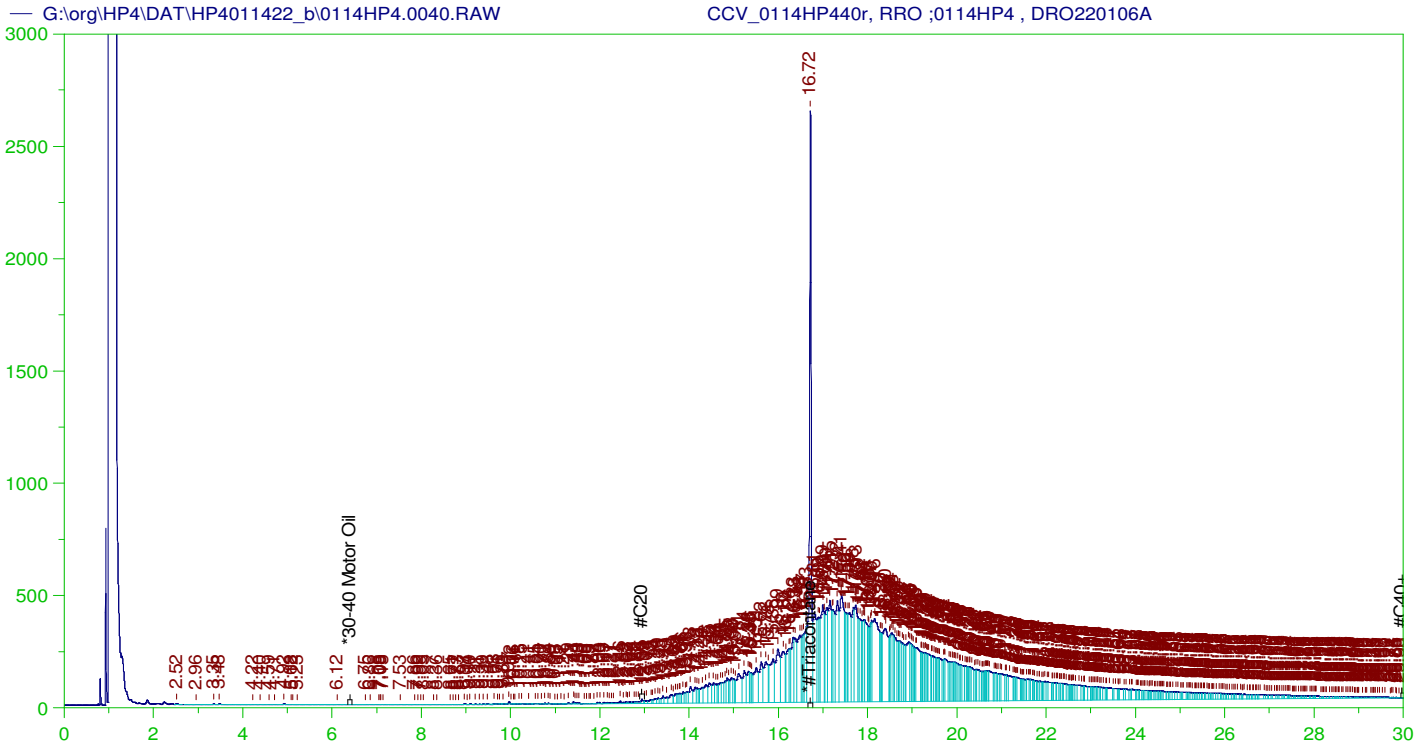
Sample Name: LCSD-RRO-162891 ;0114HP4 ,  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0038.RAW  
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 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.712	.5	.067	13.42

RRO Area:2224857 RRO AMOUNT: 9.070103E-02





**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP440r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0040.RAW  
 Date & Time Acquired: 1/15/2022 2:19:56 PM  
 Method File: G:\Org\HP4\Methods\DC\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.717	500.	309.073	61.81	-

RRO TEH (Oil Range) Area:1.124372E+08 RRO TEH (Oil Range) AMOUNT: 4583.741

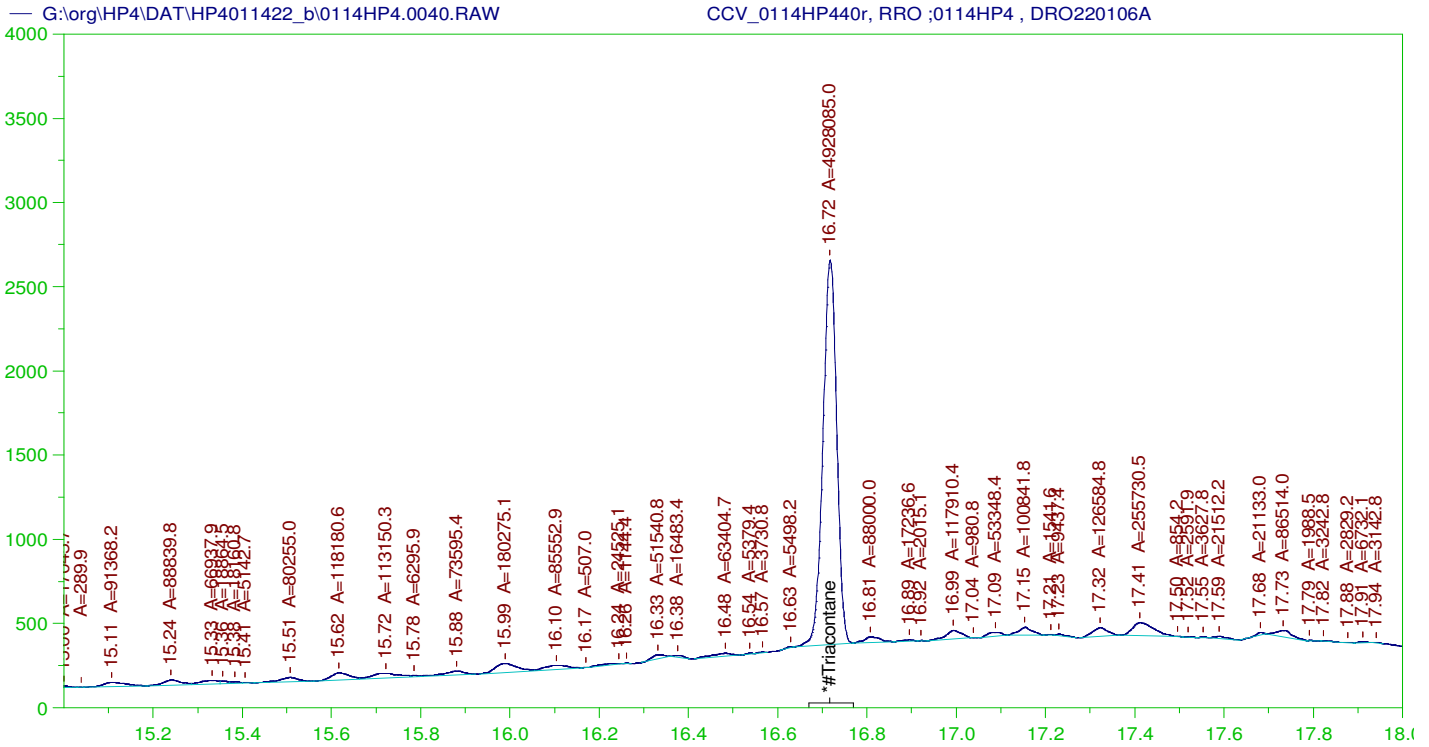
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0040.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.717	200.	309.073	154.54	75-125

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**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP440r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0040.RAW  
 Date & Time Acquired: 1/15/2022 2:19:56 PM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.9 to 30.05

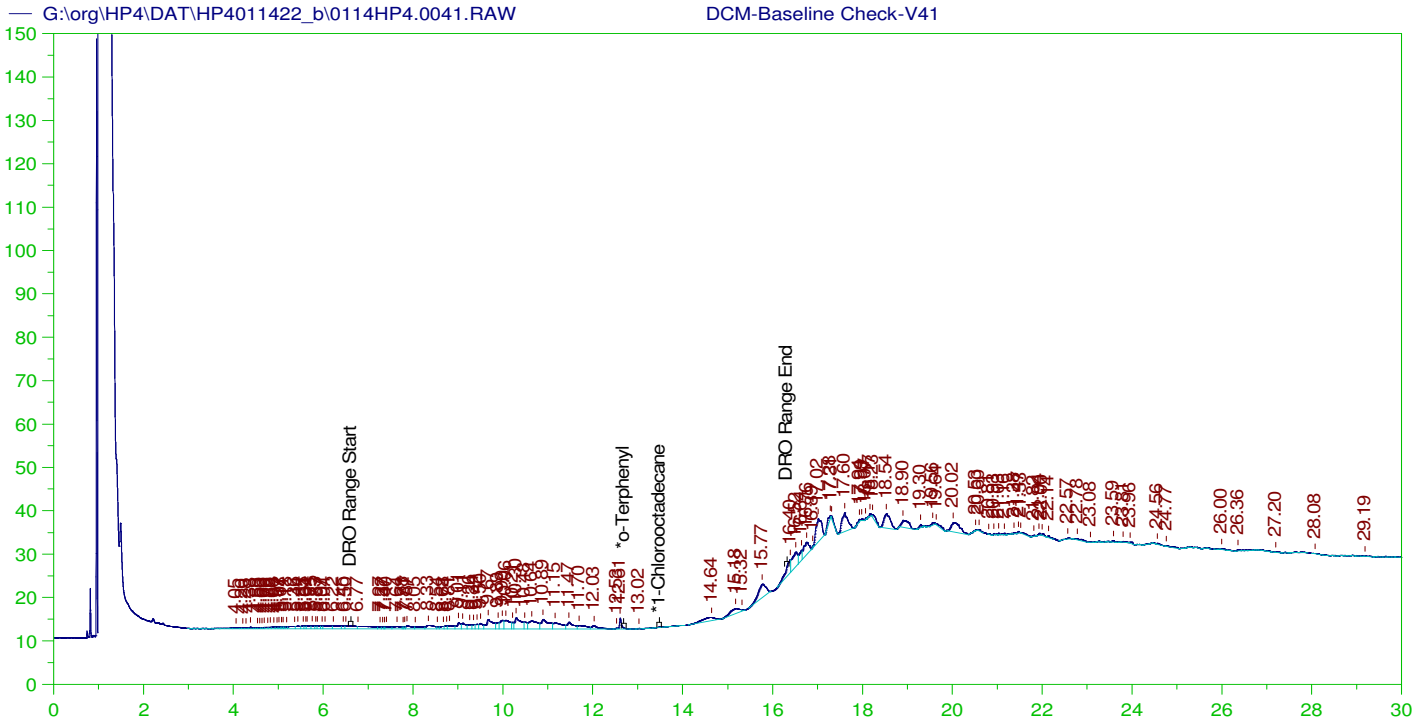
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.717	500.	197.33	39.47

RRO Area:3469572 RRO AMOUNT: 141.4445

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0040.RAW  
 COMPOUND ACTUAL (NG) MEASURED (NG) %RECOVERY LIMITS  
 \*30-40 Motor Oil 5000. . 75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.717	200.	197.33	98.67	75-125





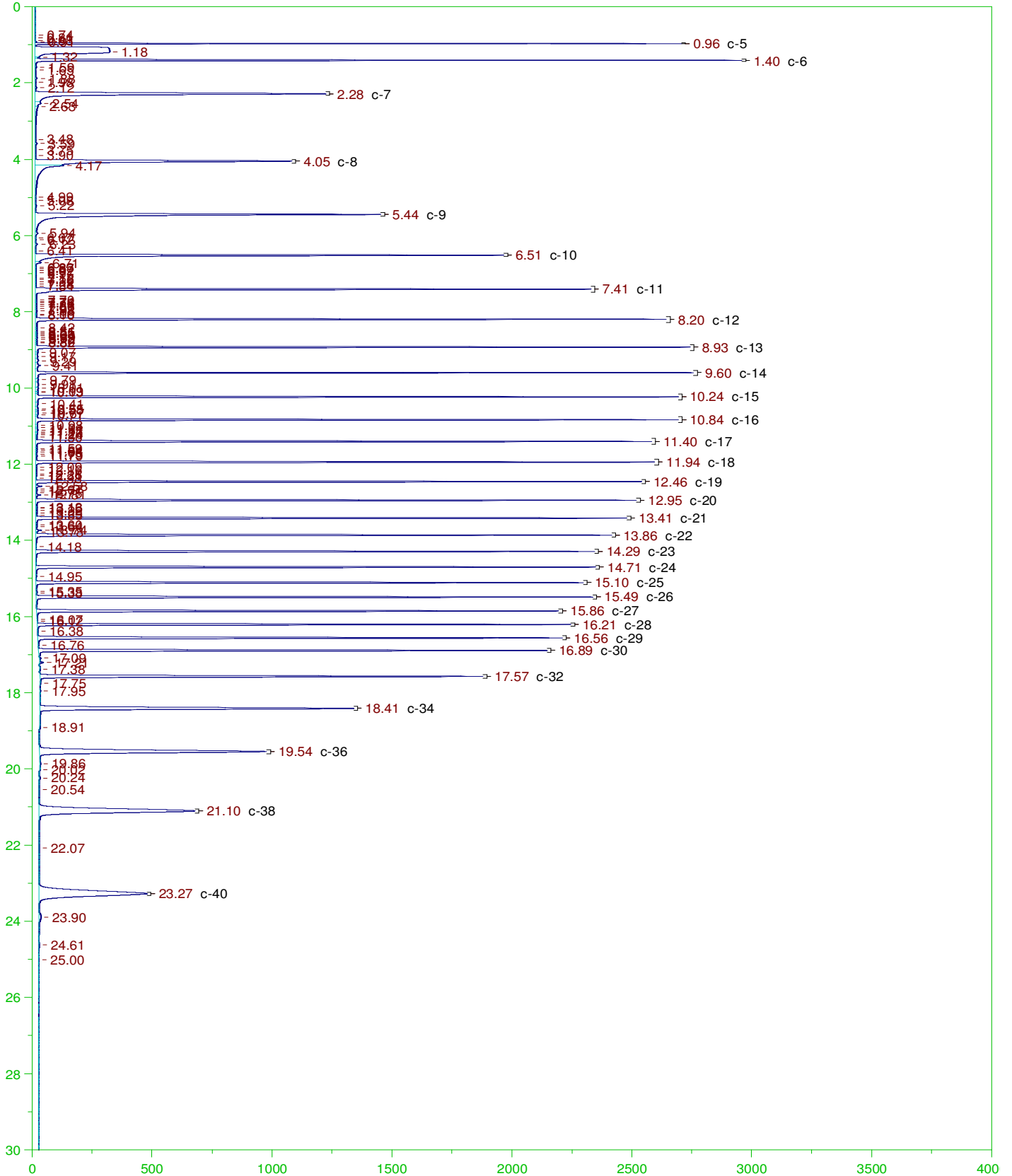
**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

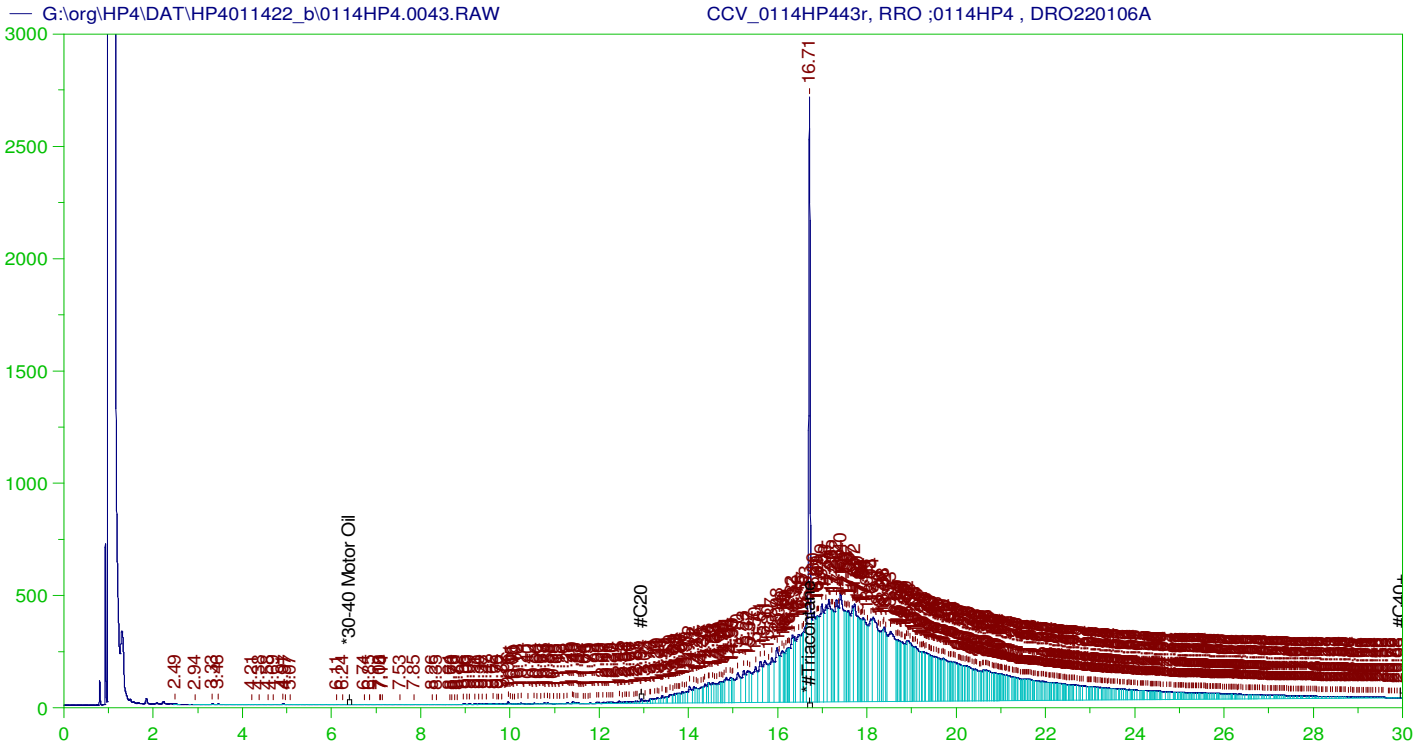
Sample Name: DCM-Baseline Check-V41  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0041.RAW  
 Date & Time Acquired: 1/15/2022 3:04:22 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.879	200.	.	-
*1-Chlorooctadecane	29.879	200.	.	-

DRO Area:393620.3 DRO Amount: 13.40063  
 TEH Area:803237.7 TEH Amount: 27.34587





**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP443r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0043.RAW  
 Date & Time Acquired: 1/16/2022 11:47:18 AM  
 Method File: G:\Org\HP4\Methods\DC\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane_____	16.709	500.	308.606	61.72	-

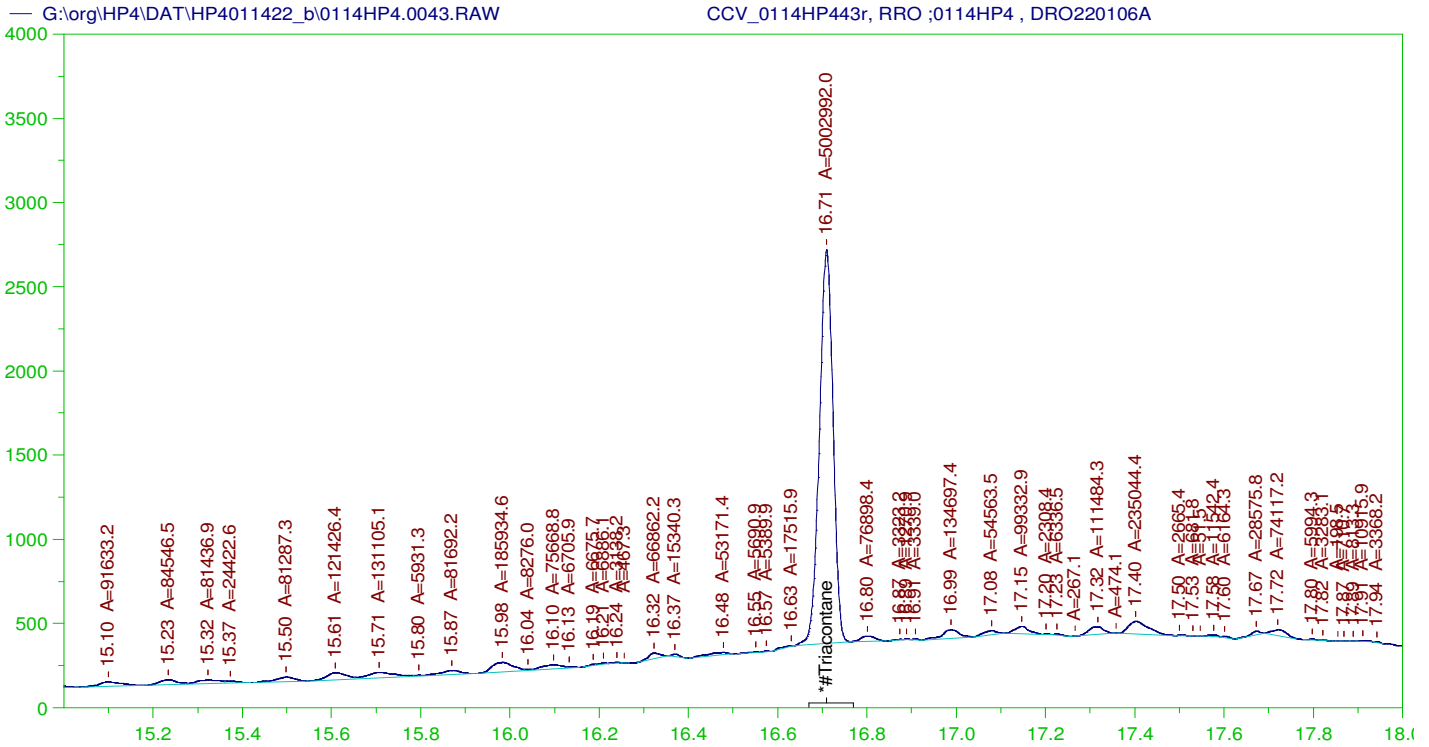
RRO TEH (Oil Range) Area:1.136837E+08 RRO TEH (Oil Range) AMOUNT: 4634.558

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0043.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane_____	16.709	200.	308.606	154.3	75-125

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**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP443r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0043.RAW  
 Date & Time Acquired: 1/16/2022 11:47:18 AM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

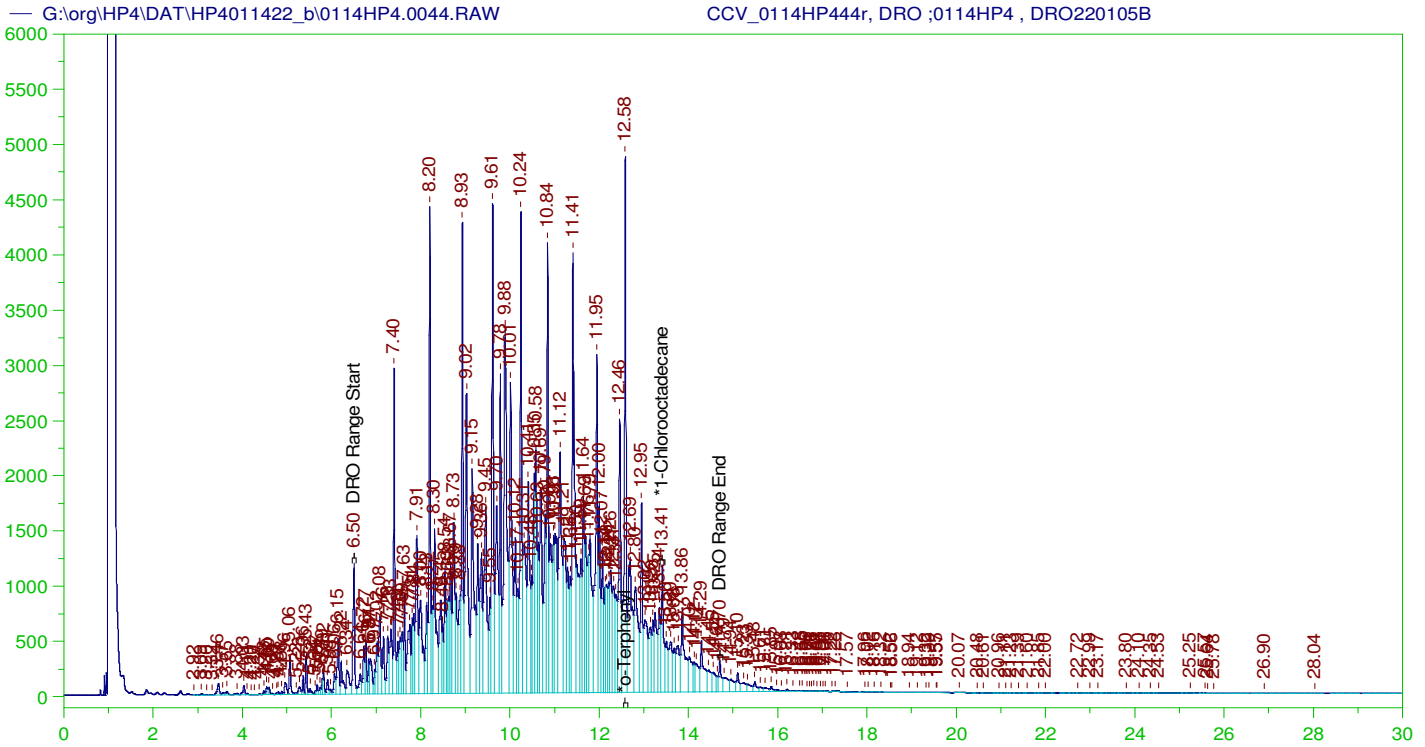
Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.709	500.	200.33	40.07

RRO Area:3586753 RRO AMOUNT: 146.2216

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0043.RAW  
 COMPOUND ACTUAL (NG) MEASURED (NG) %RECOVERY LIMITS  
 \*30-40 Motor Oil 5000. . . 75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.709	200.	200.33	100.16	75-125



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0114HP444r, DRO ;0114HP4 , DRO220105B  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0044.RAW  
 Date & Time Acquired: 1/16/2022 12:31:42 PM  
 Method File: G:\Org\HP4\methods\DC\_8015-C24-OL-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.46 to 14.76

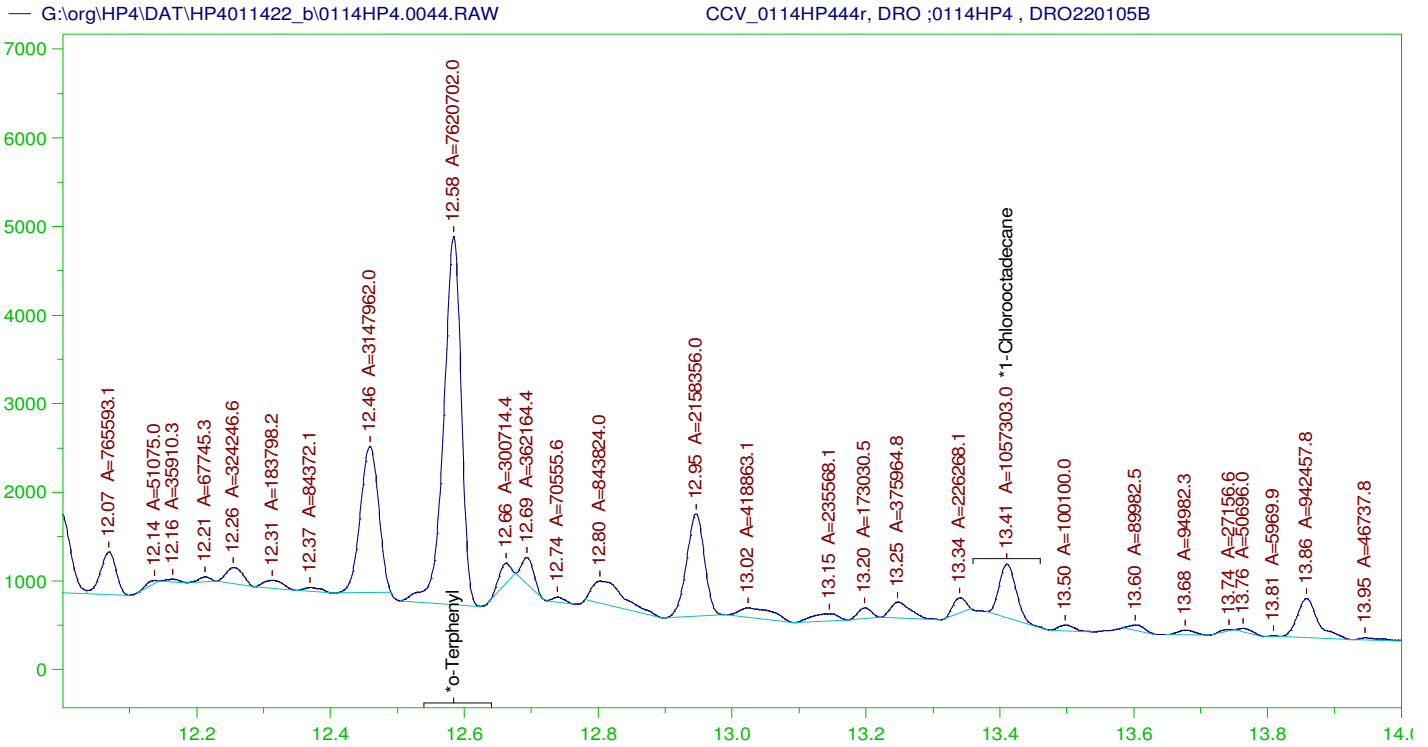
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.584	200.	381.24	190.62
*1-Chlorooctadecane	13.41	200.	117.827	58.91

DRO Area: 4.395236E+08 DRO Amount: 14963.38  
 TEH Area: 4.557569E+08 TEH Amount: 15516.04

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0044.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15516.04	103.44	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.584	200.	381.24	190.62	85-115
*1-Chlorooctadecane	13.41	200.	117.827	58.91	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0114HP444r, DRO ;0114HP4 , DRO220105B  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0044.RAW  
 Date & Time Acquired: 1/16/2022 12:31:42 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-C24-OL-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020L-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

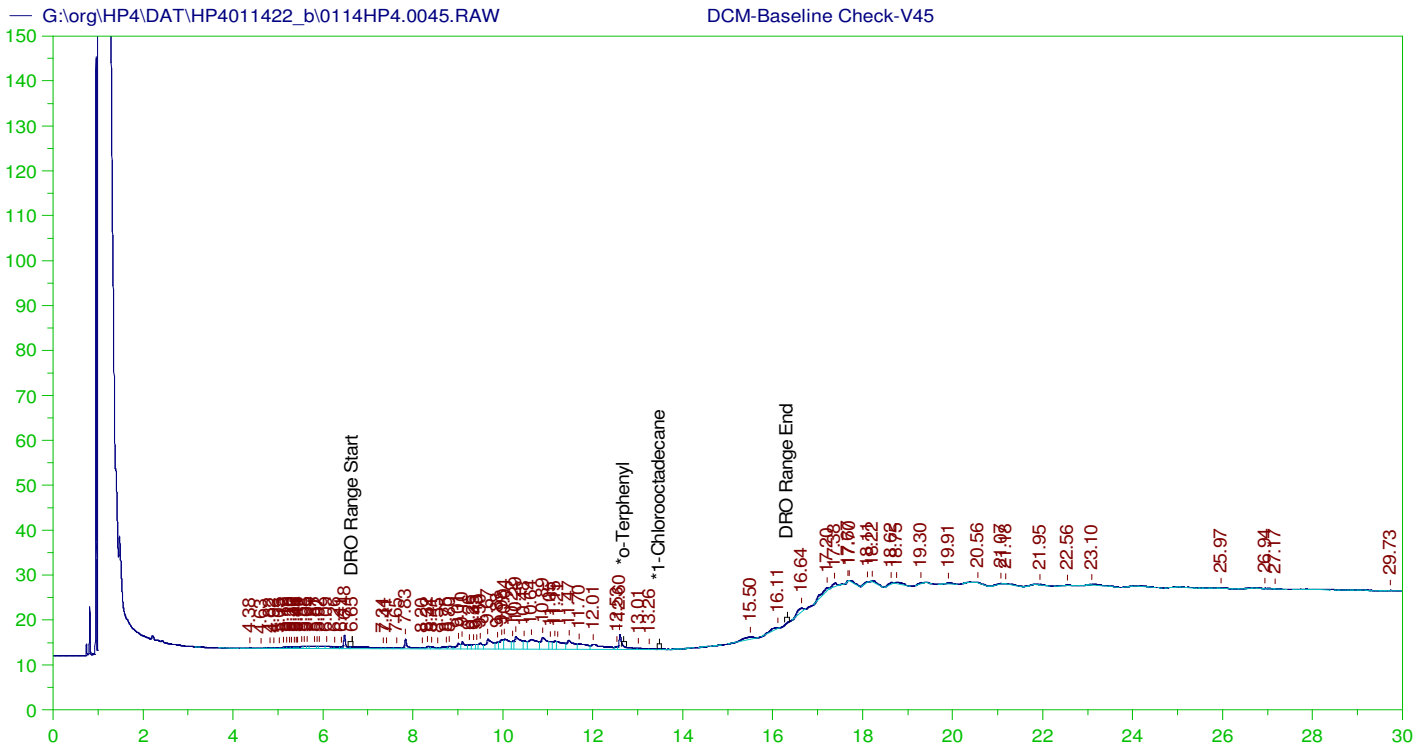
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.584	200.	228.715	114.36
*1-Chlorooctadecane	13.41	200.	31.732	15.87

DRO Area: 1.911683E+08 DRO Amount: 6508.238  
 TEH Area: 2.013756E+08 TEH Amount: 6855.741

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0044.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	6855.74	45.7	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.584	200.	228.715	114.36	85-115
*1-Chlorooctadecane	13.41	200.	31.732	15.87	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V45  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0045.RAW  
 Date & Time Acquired: 1/16/2022 1:16:24 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.73	200.	.	-
*1-Chlorooctadecane	29.73	200.	.	-

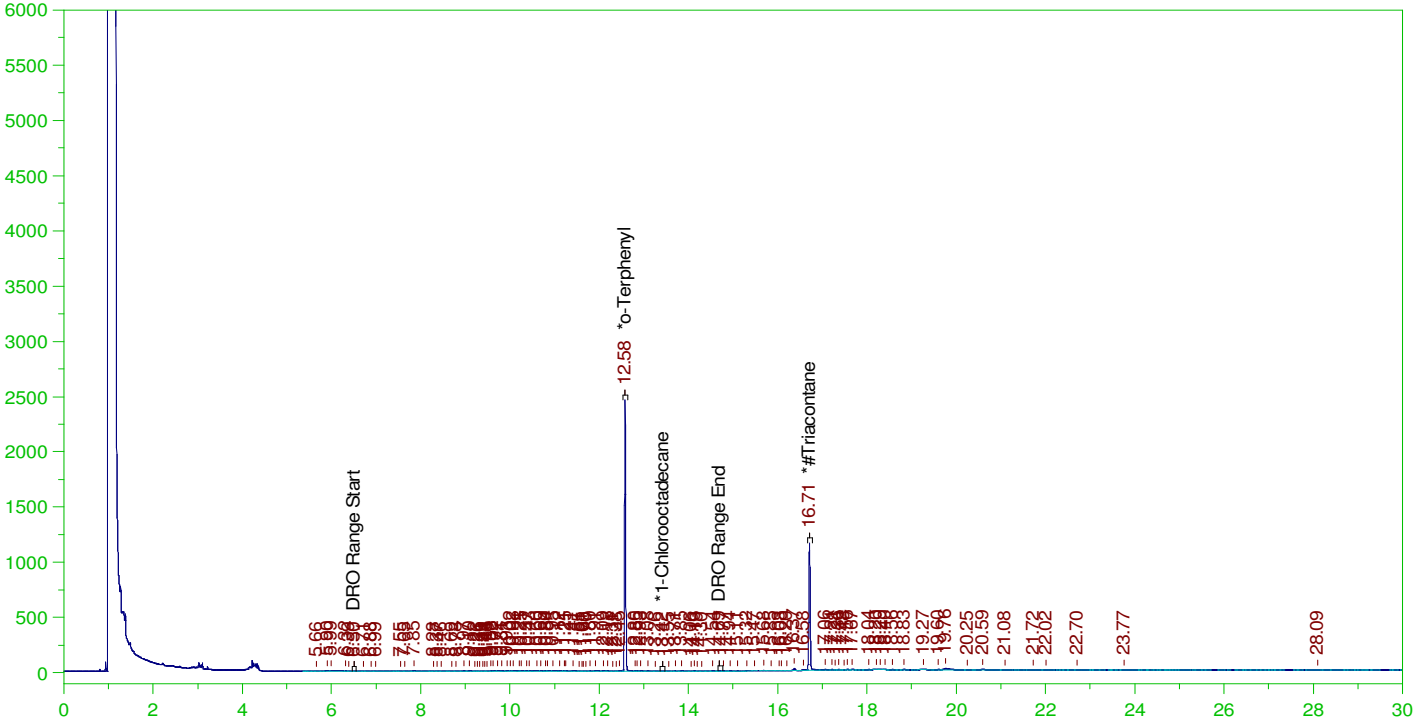
DRO Area:377520.5 DRO Amount: 12.85252  
 TEH Area:489577.4 TEH Amount: 16.66744

ERH2364 (RHMW06)

Batch ID: 162824

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0046.RAW

B22010338-001D ;0114HP4 , \$HC-8015-DRO-W, RR



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010338-001D ;0114HP4 , \$HC-8015-DRO-W, RR  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0046.RAW  
 Date & Time Acquired: 1/16/2022 2:00:59 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-C24T-OL-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24-TRI.CAL  
 Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.578	.192	.126	65.42	-
*1-Chlorooctadecane	13.418	.192	.	.05	-
*#Triacontane	16.709	.192	.099	51.73	-

DRO Area:456269.6 DRO Amount: 1.493605E-02  
 TEH Area:852962.6 TEH Amount: 2.792185E-02

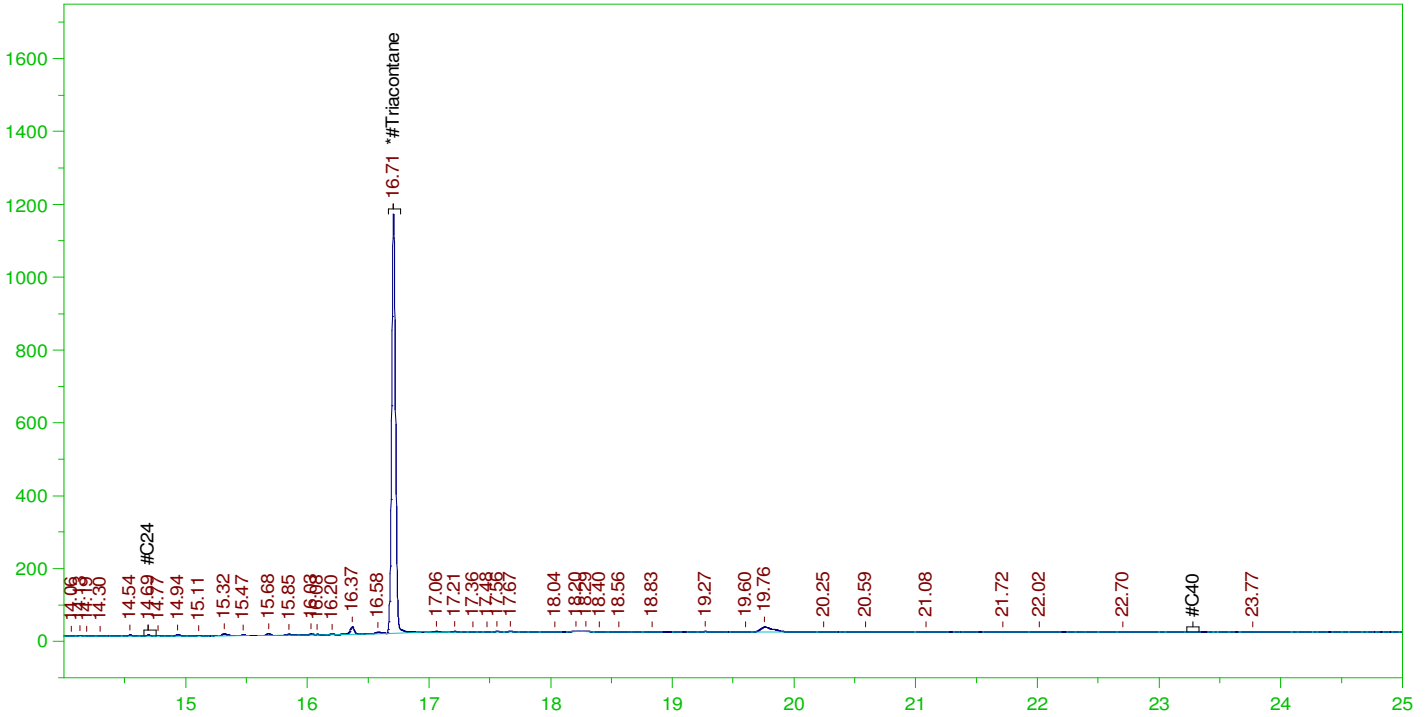


ERH2364 (RHMW06)

Batch ID: 162824

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0046.RAW

B22010338-001D ;0114HP4 , \$HC-8015-DRO-W, RR



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010338-001D ;0114HP4 , \$HC-8015-DRO-W, RR  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0046.RAW  
 Date & Time Acquired: 1/16/2022 2:00:59 PM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-S-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE-SAMPLE.CAL  
 Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.66 to 23.33

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.709	.481	.099	20.6

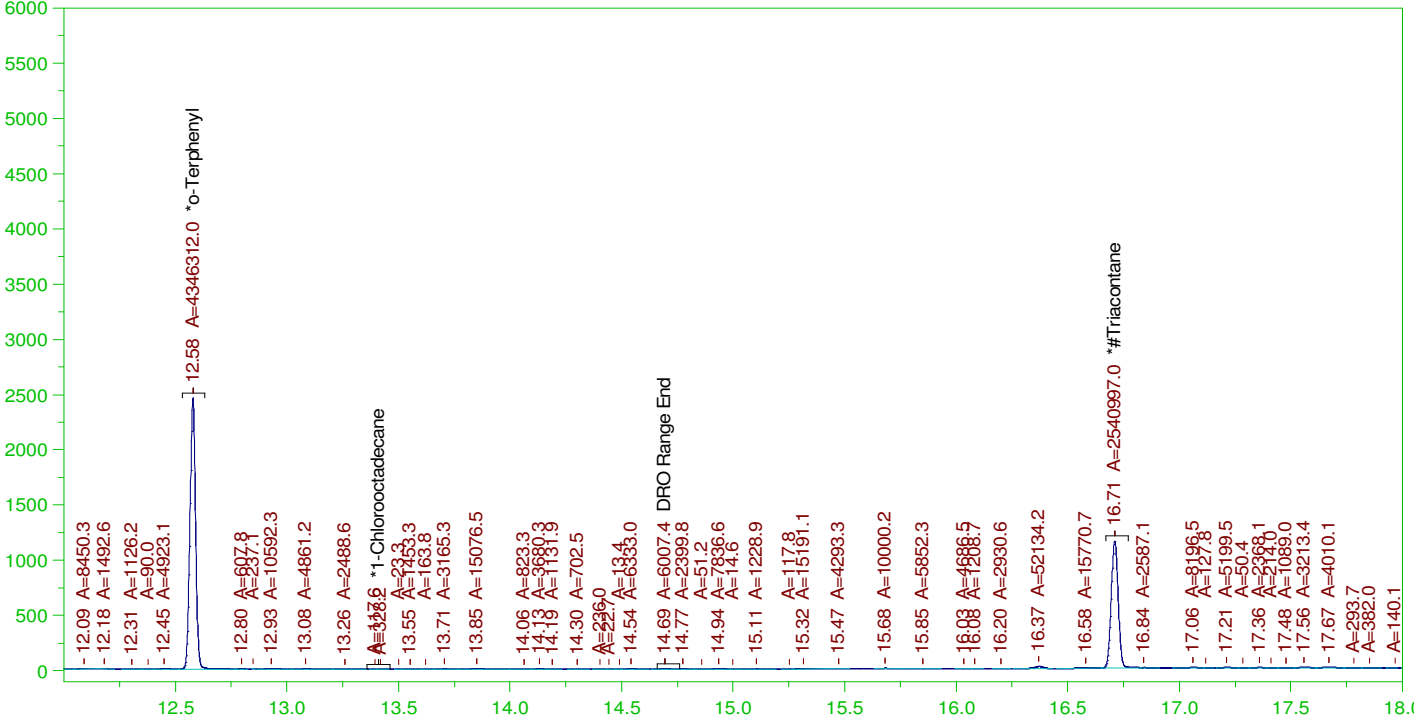
RRO Area:299562.3 RRO AMOUNT: 1.174259E-02

ERH2364 (RHMW06)

Batch ID: 162824

G:\org\HP4\DAT\HP4011422\_b\0114HP4.0046.RAW

B22010338-001D ;0114HP4 , \$HC-8015-DRO-W, RR



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

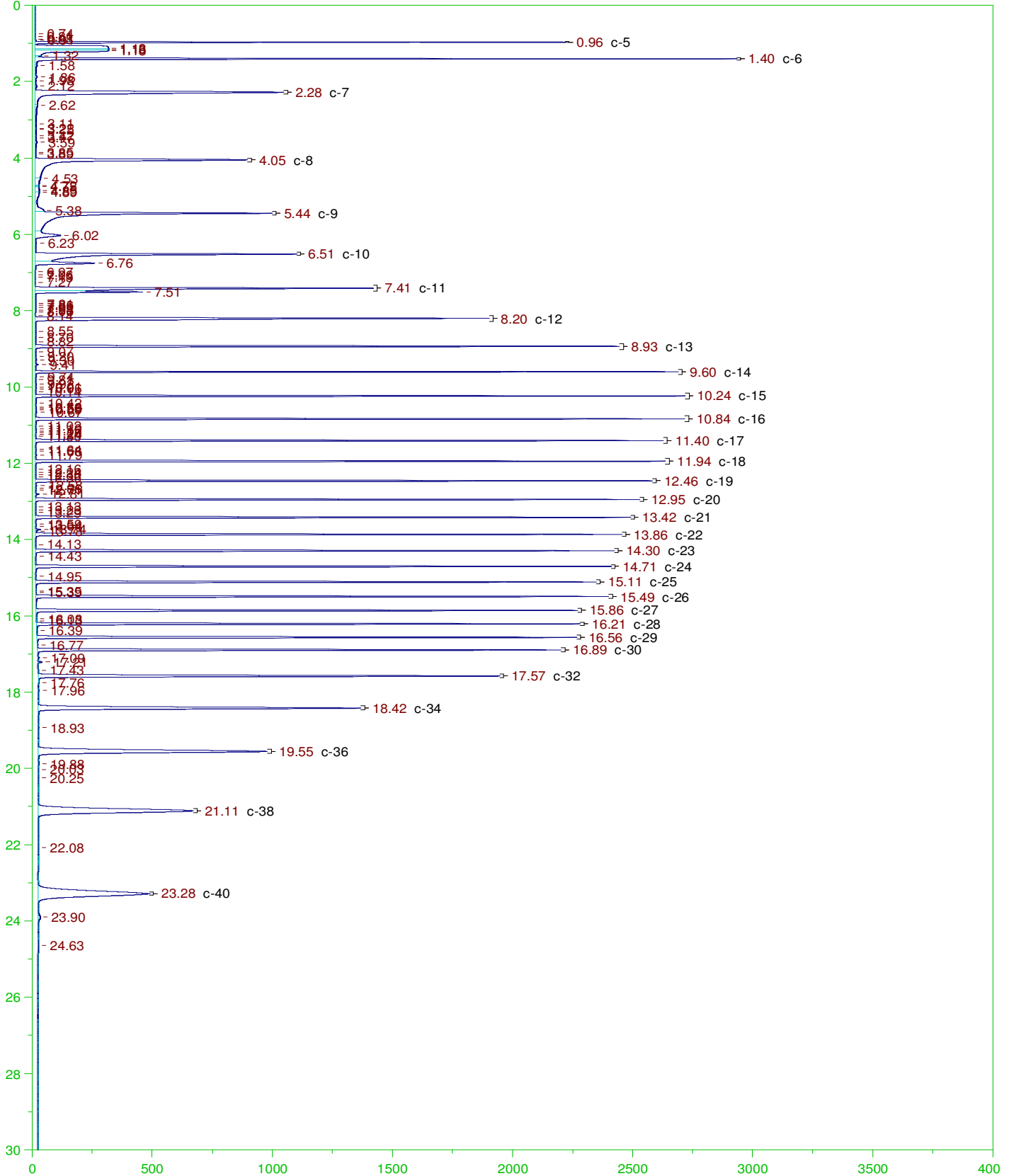
Sample Name: B22010338-001D ;0114HP4 , \$HC-8015-DRO-W, RR  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0046.RAW  
 Date & Time Acquired: 1/16/2022 2:00:59 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-T-OL-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24-TRI.CAL  
 Sample Weight: 1040 Dilution: 1 S.A.: 1

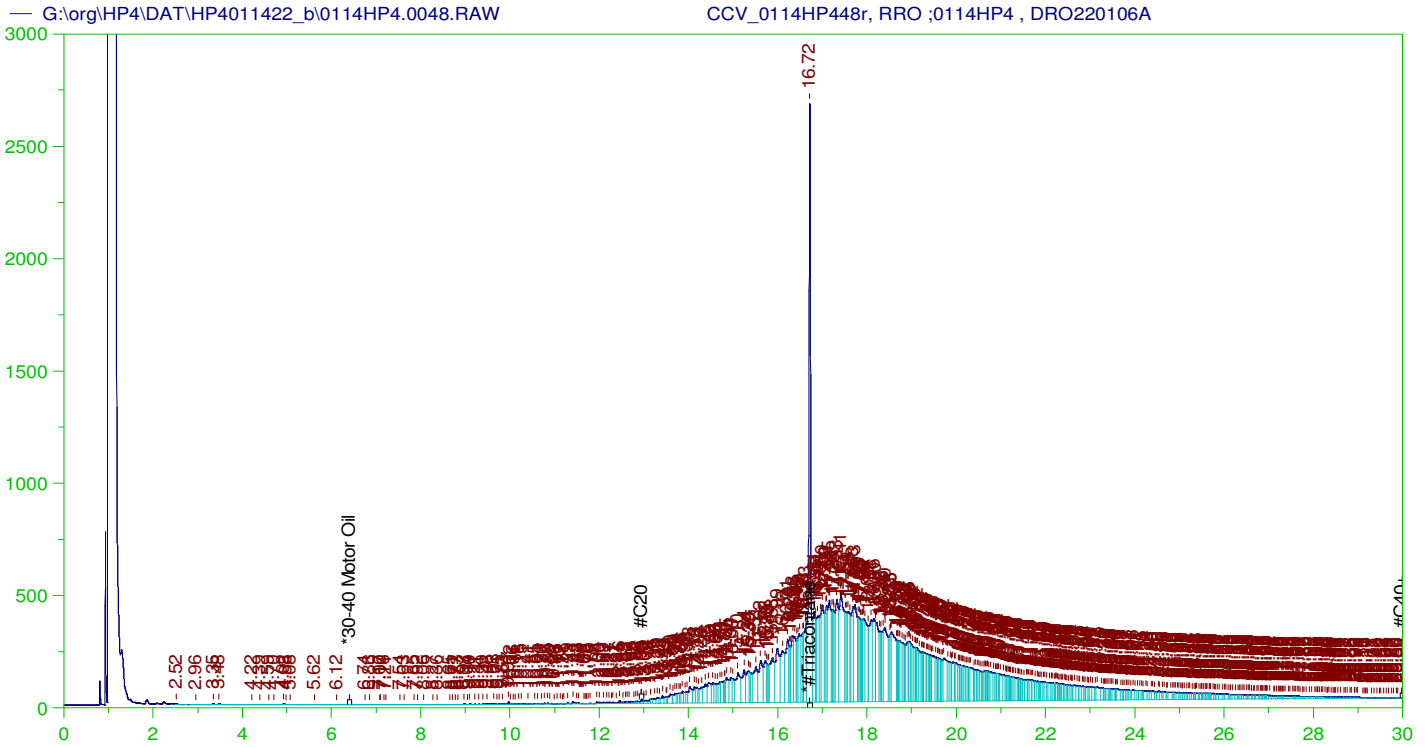
Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.578	.192	.125	65.22	-
*1-Chlorooctadecane	29.98	.192	.	-	-
*#Triacontane	16.709	.192	.098	50.87	-

DRO Area:306407.3 DRO Amount: 1.003029E-02  
 TEH Area:1605168 TEH Amount: 5.254541E-02





**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP448r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0048.RAW  
 Date & Time Acquired: 1/16/2022 3:30:19 PM  
 Method File: G:\Org\HP4\Methods\DC\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane_____	16.718	500.	312.666	62.53	-

RRO TEH (Oil Range) Area:1.134241E+08 RRO TEH (Oil Range) AMOUNT: 4623.974

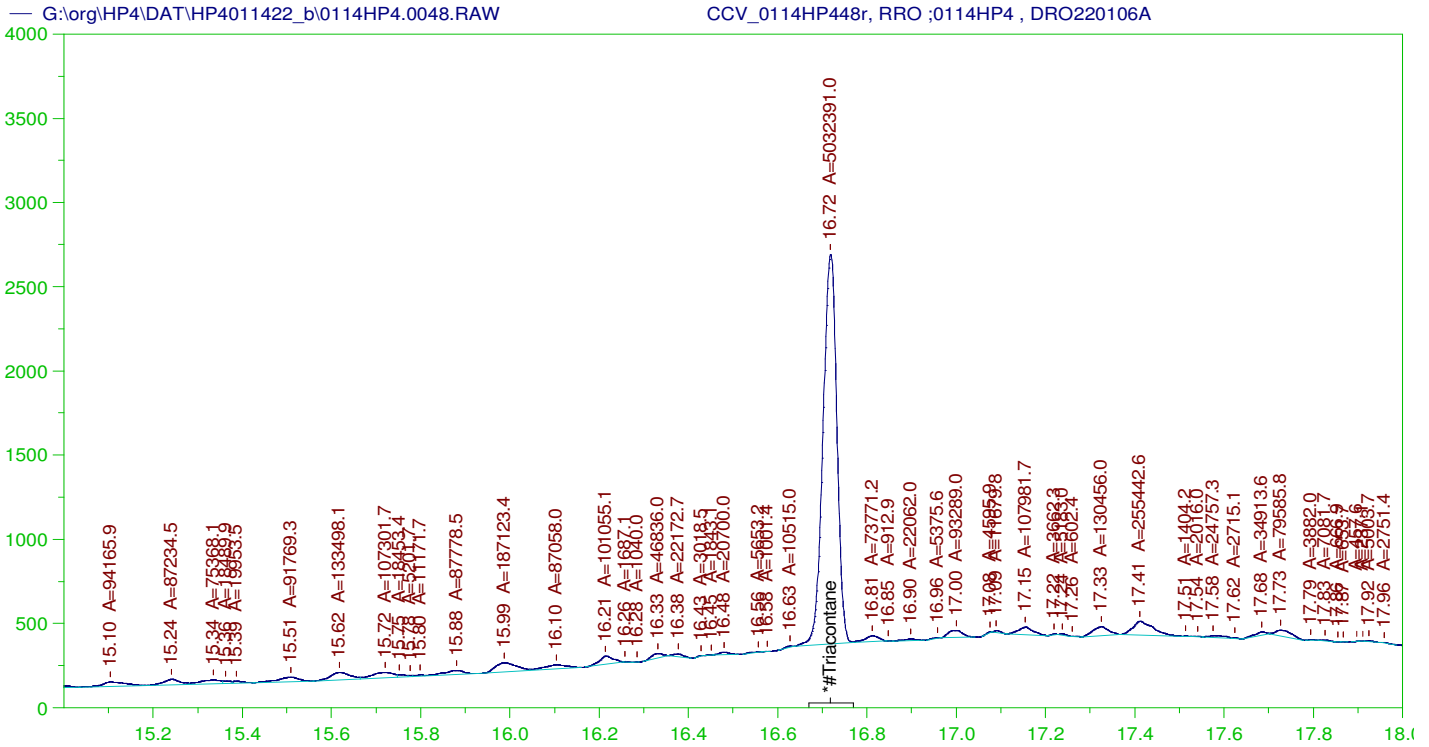
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0048.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane_____	16.718	200.	312.666	156.33	75-125

AMN 02/01/2022



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0114HP448r, RRO ;0114HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0048.RAW  
 Date & Time Acquired: 1/16/2022 3:30:19 PM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AE-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AE.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

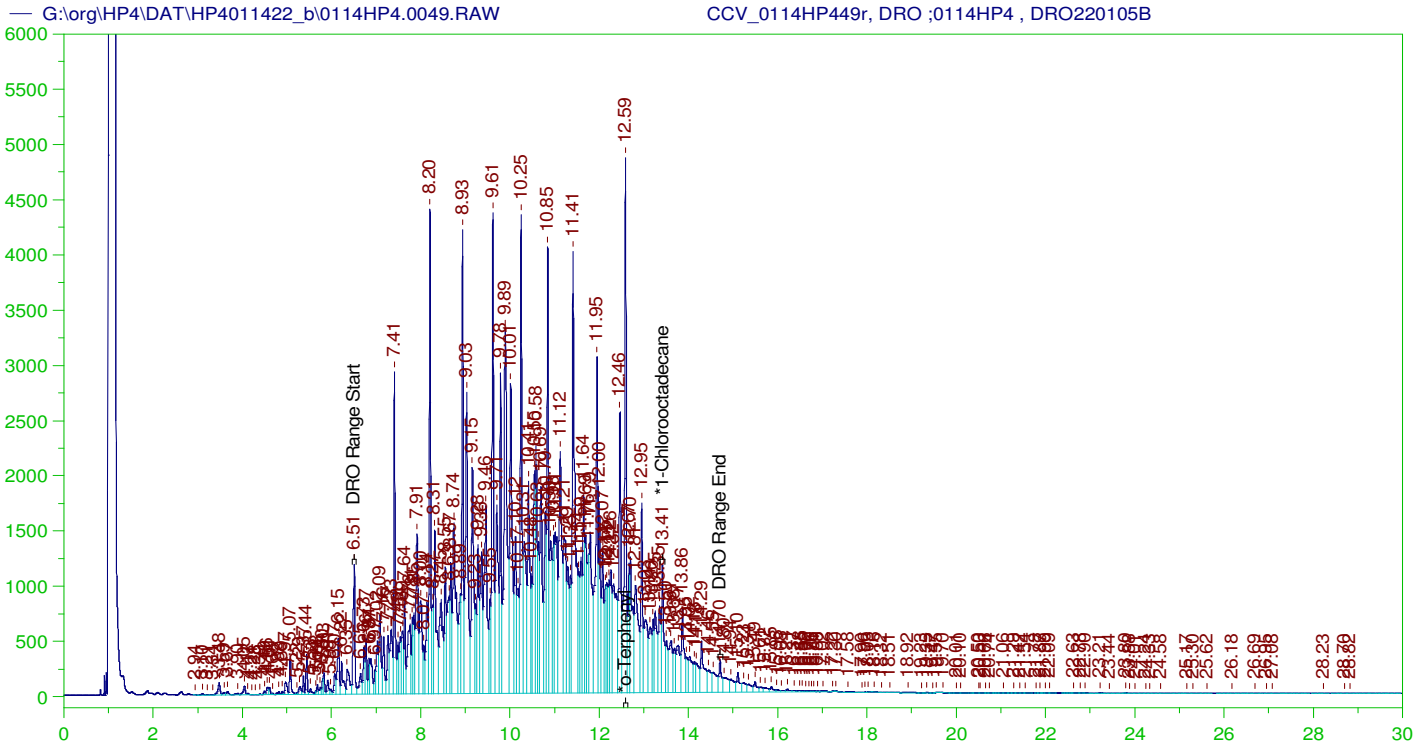
Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.9 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.718	500.	201.507	40.3

RRO Area:3482042 RRO AMOUNT: 141.9529

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0048.RAW  
 COMPOUND ACTUAL (NG) MEASURED (NG) %RECOVERY LIMITS  
 \*30-40 Motor Oil 5000. . 75-125

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.718	200.	201.507	100.75	75-125



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0114HP449r, DRO ;0114HP4 , DRO220105B  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0049.RAW  
 Date & Time Acquired: 1/16/2022 4:14:53 PM  
 Method File: G:\Org\HP4\methods\DC\_8015-C24-OL-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OL-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.46 to 14.76

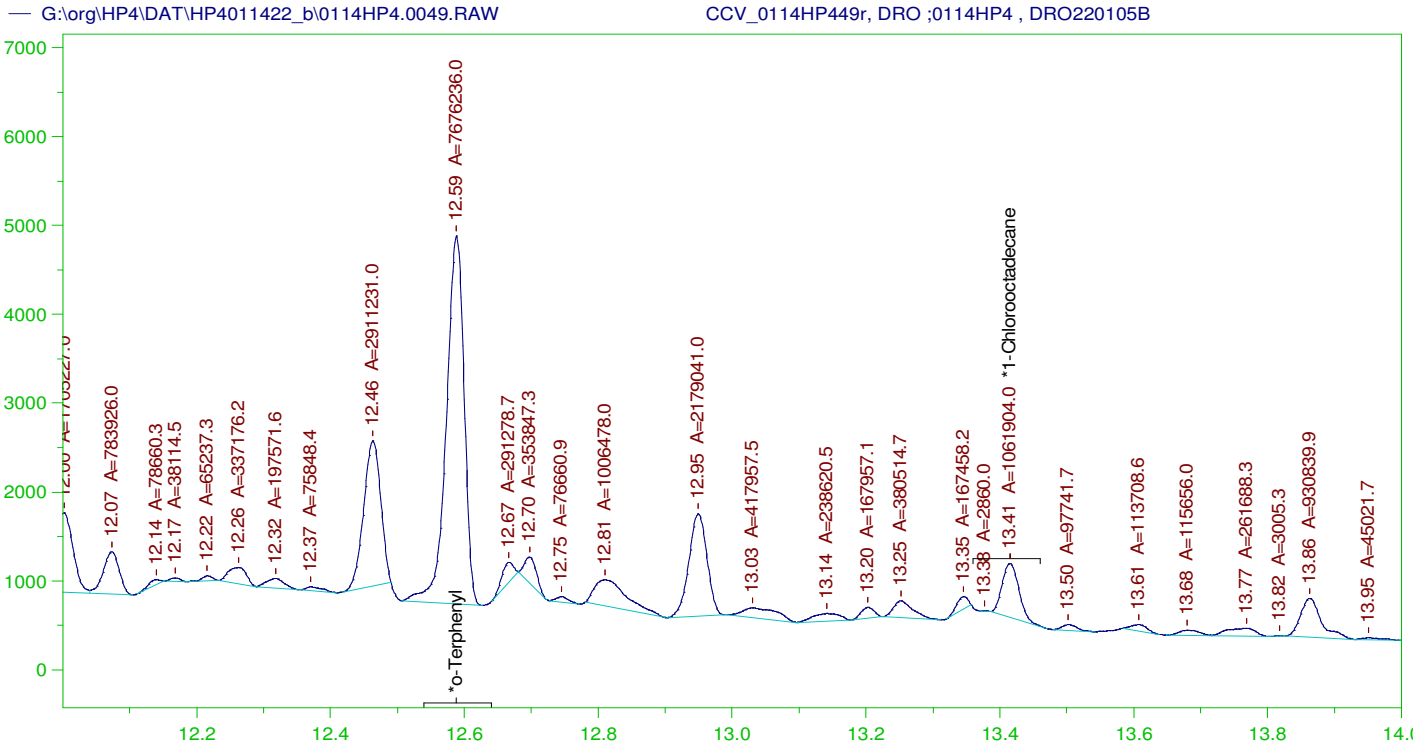
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.588	200.	384.446	192.22
*1-Chlorooctadecane	13.415	200.	117.607	58.8

DRO Area: 4.433741E+08 DRO Amount: 15094.47  
 TEH Area: 4.5983E+08 TEH Amount: 15654.71

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0049.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15654.71	104.36	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.588	200.	384.446	192.22	85-115
*1-Chlorooctadecane	13.415	200.	117.607	58.8	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0114HP449r, DRO ;0114HP4 , DRO220105B  
 Raw File: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0049.RAW  
 Date & Time Acquired: 1/16/2022 4:14:53 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-C24-OL-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020L-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.46 to 14.76

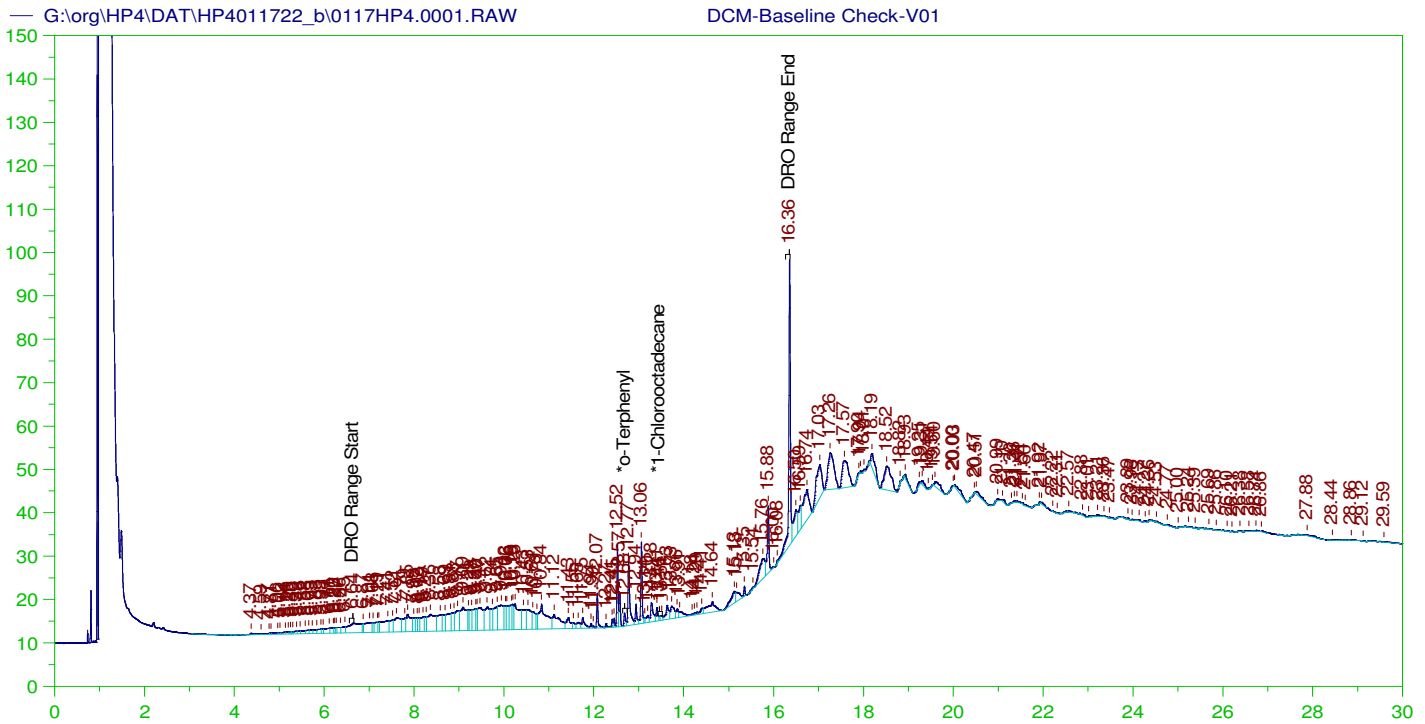
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.588	200.	230.381	115.19
*1-Chlorooctadecane	13.415	200.	31.87	15.94

DRO Area: 1.92513E+08 DRO Amount: 6554.019  
 TEH Area: 2.027343E+08 TEH Amount: 6901.998

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011422\_b\0114HP4.0049.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	6902.	46.01	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.588	200.	230.381	115.19	85-115
*1-Chlorooctadecane	13.415	200.	31.87	15.94	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

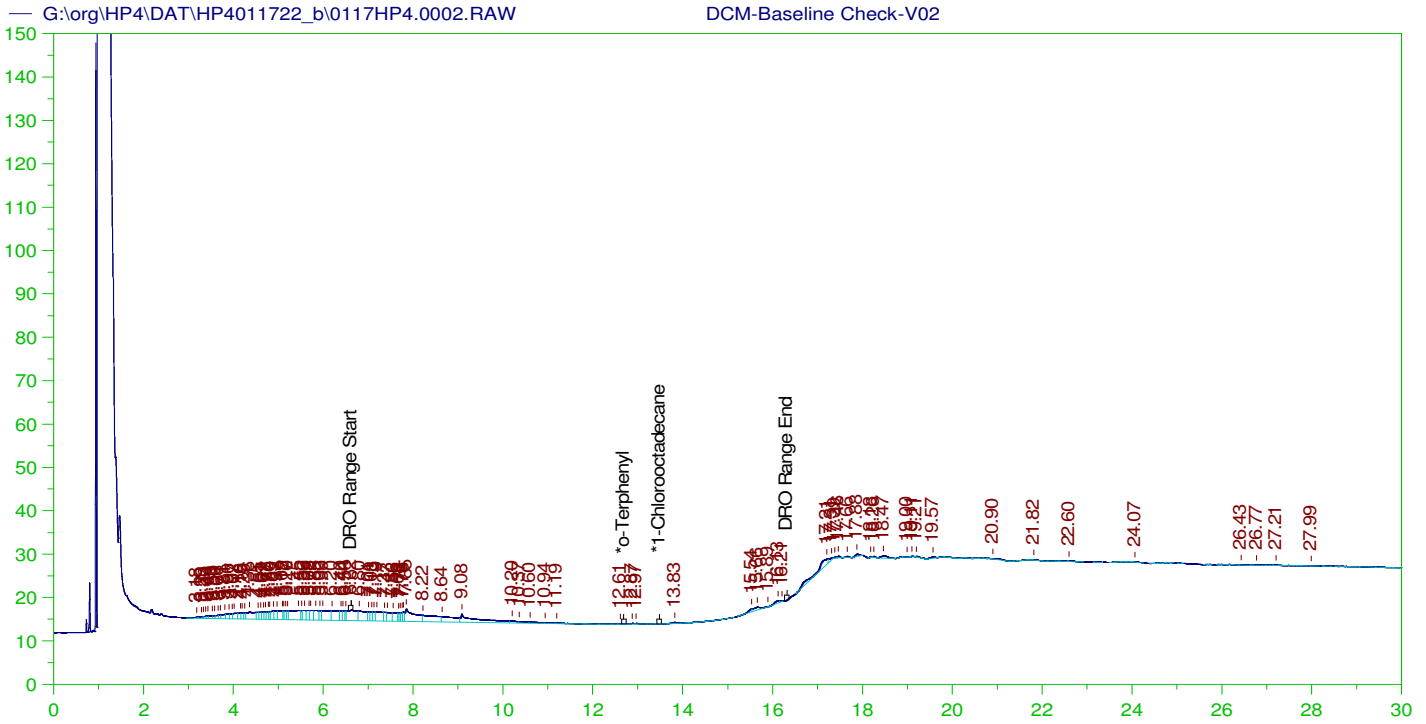
Sample Name: DCM-Baseline Check-V01  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0001.RAW  
 Date & Time Acquired: 1/17/2022 12:32:36 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.683	200.	.233	.12	-
*1-Chlorooctadecane	13.461	200.	.051	.03	-

DRO Area:1714406 DRO Amount: 58.36617  
 TEH Area:2322538 TEH Amount: 79.06976





**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

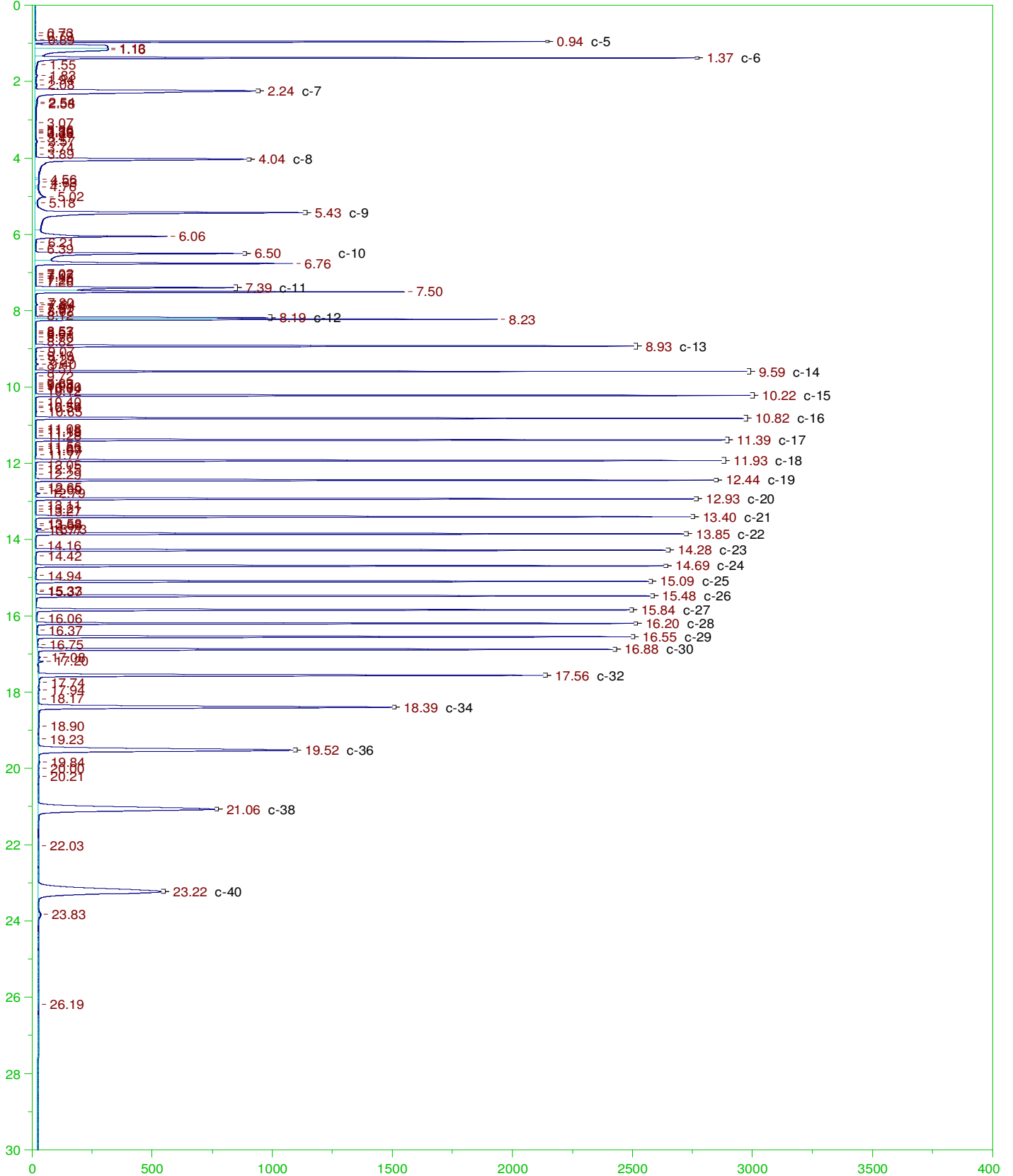
Sample Name: DCM-Baseline Check-V02  
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 Date & Time Acquired: 1/17/2022 2:13:02 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

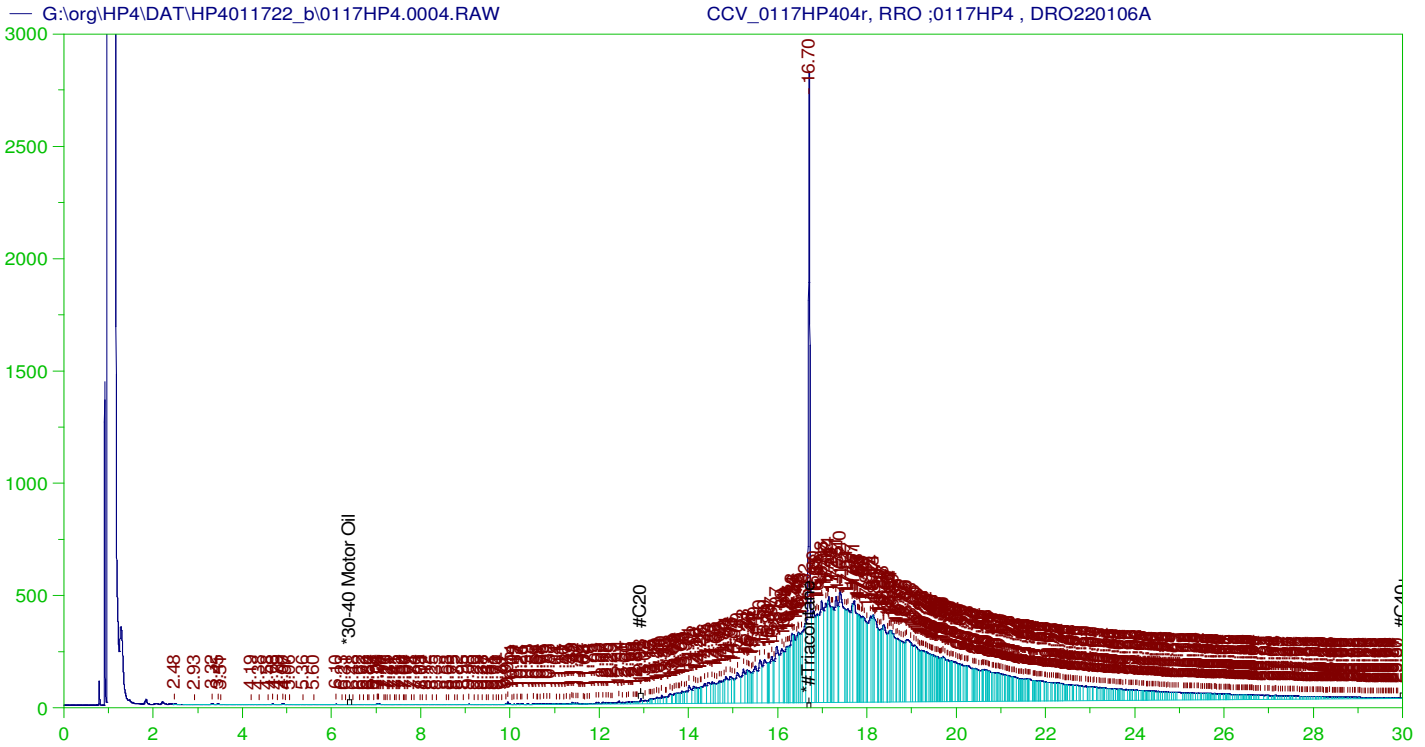
Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.989	200.	.	-
*1-Chlorooctadecane	29.989	200.	.	-

DRO Area:346203.7 DRO Amount: 11.78635  
 TEH Area:735815.1 TEH Amount: 25.0505





**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0117HP404r, RRO ;0117HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0004.RAW  
 Date & Time Acquired: 1/17/2022 3:43:11 PM  
 Method File: G:\Org\HP4\Methods\DC\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.703	500.	323.939	64.79	-

RRO TEH (Oil Range) Area:1.174768E+08 RRO TEH (Oil Range) AMOUNT: 4789.192

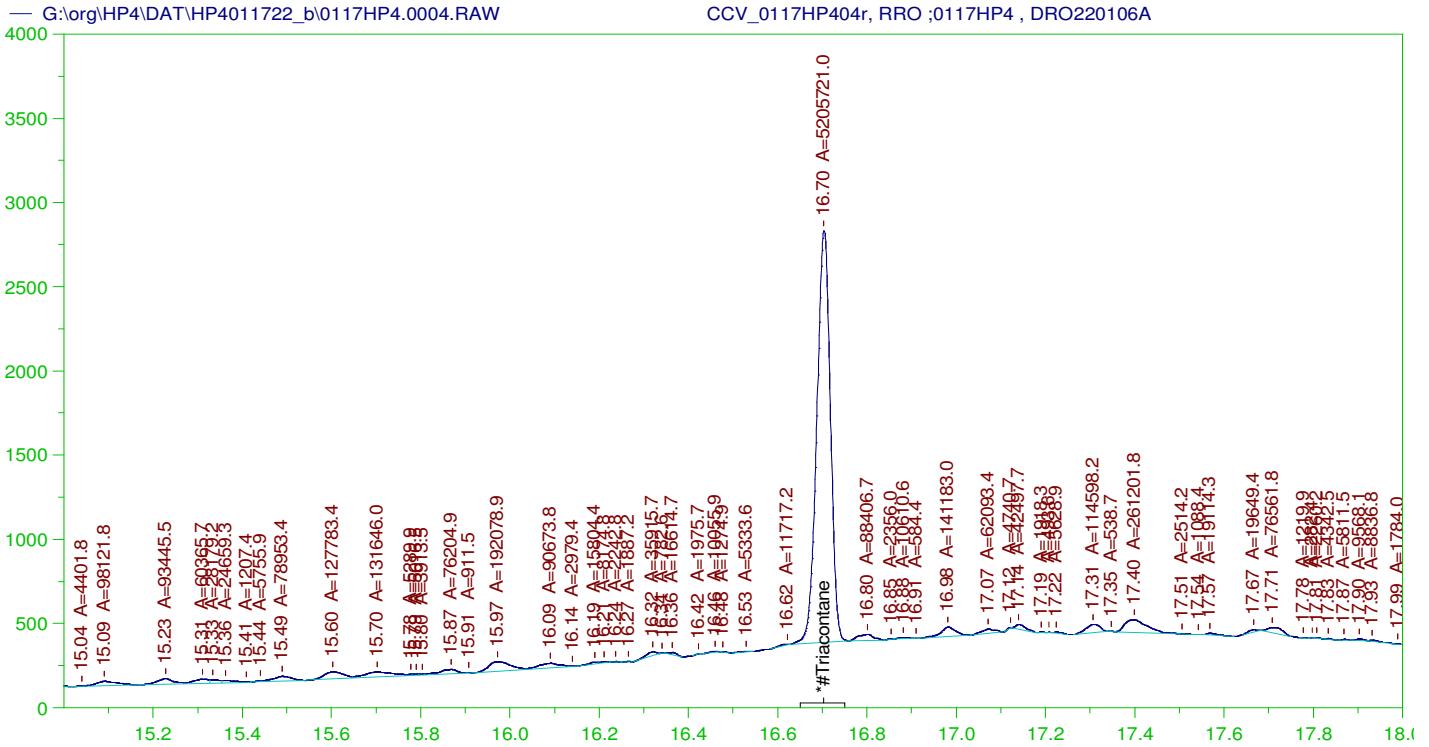
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0004.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.703	200.	323.939	161.97	75-125

AMN 02/1/2022



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0117HP404r, RRO ;0117HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0004.RAW  
 Date & Time Acquired: 1/17/2022 3:43:11 PM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.703	500.	208.447	41.69

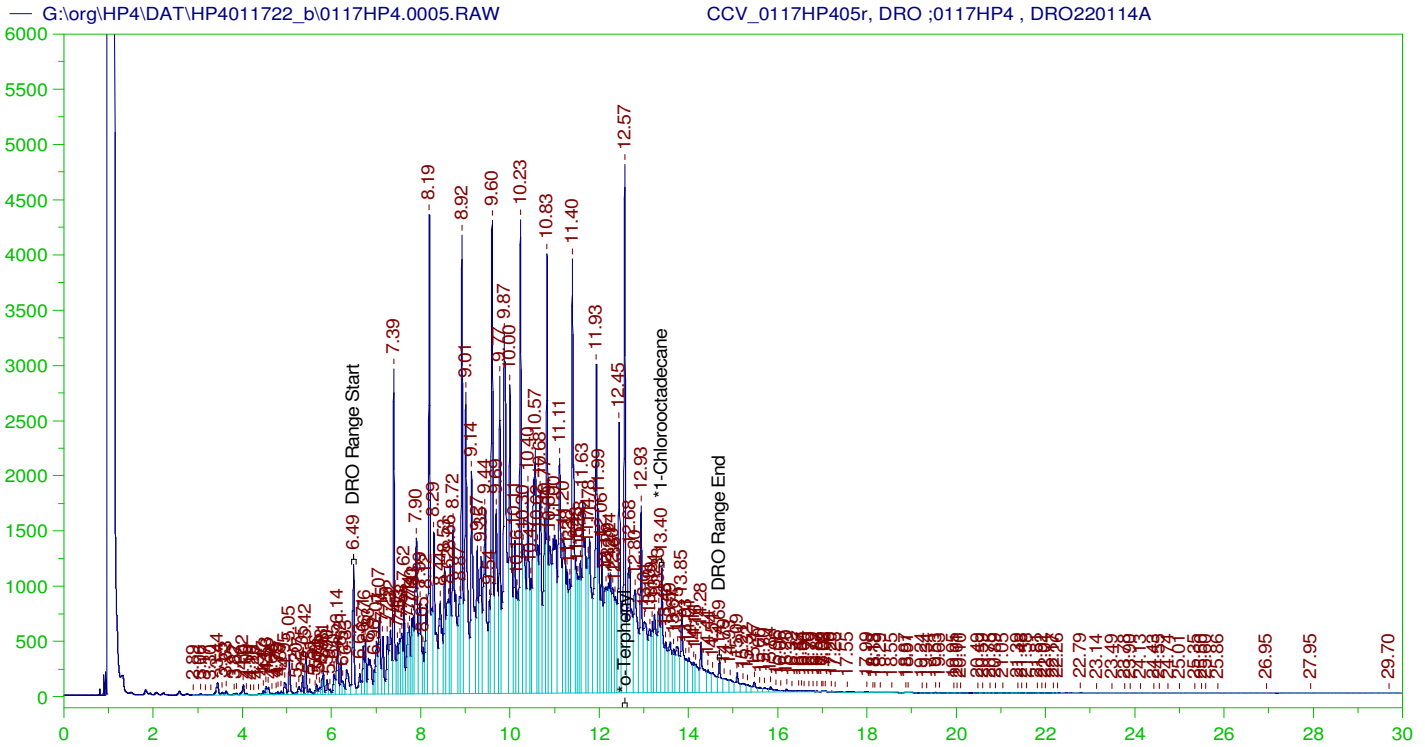
RRO Area:3395715 RRO AMOUNT: 138.4336

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0004.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.703	200.	208.447	104.22	75-125



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0117HP405r, DRO ;0117HP4 , DRO220114A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0005.RAW  
 Date & Time Acquired: 1/17/2022 4:28:09 PM  
 Method File: G:\Org\HP4\methods\DC\_8015-C24-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

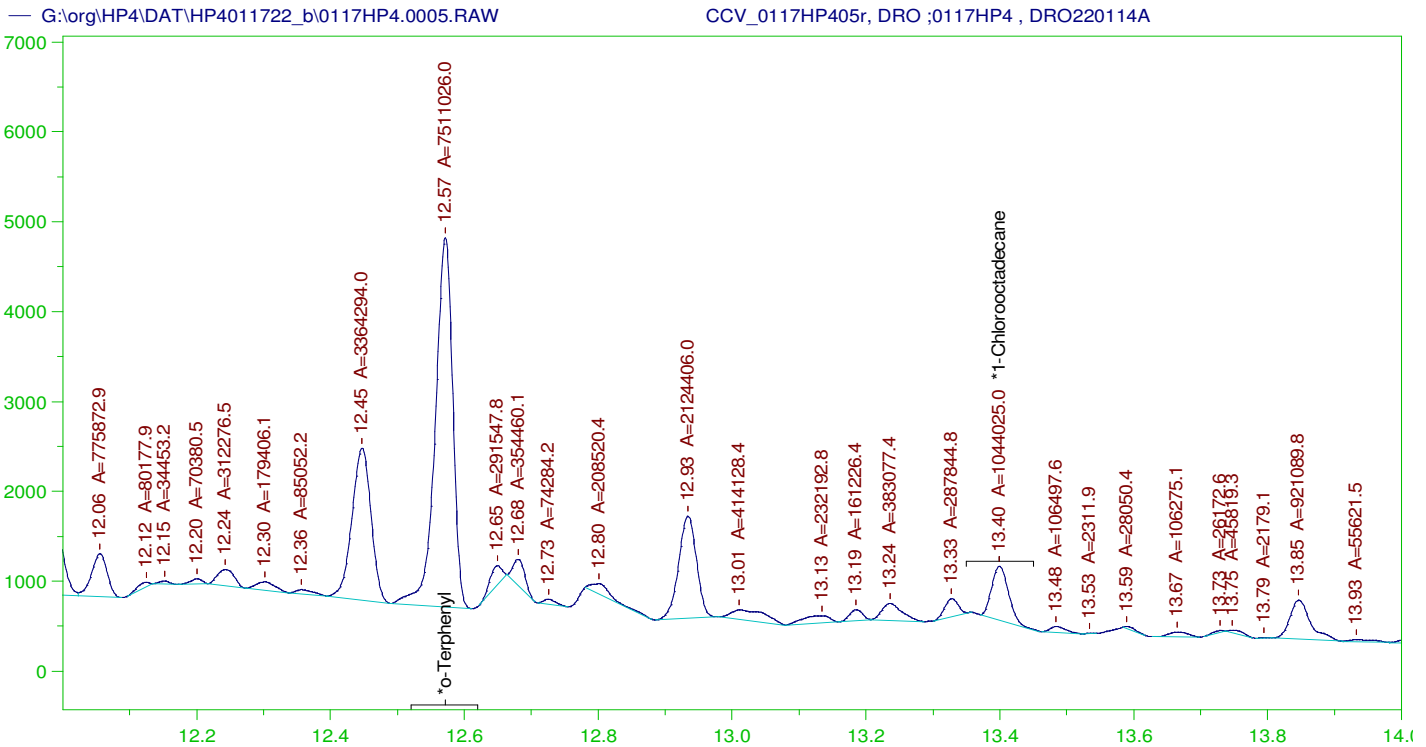
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.571	200.	374.654	187.33
*1-Chlorooctadecane	13.399	200.	112.548	56.27

DRO Area: 4.312336E+08 DRO Amount: 14681.15  
 TEH Area: 4.473251E+08 TEH Amount: 15228.98

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0005.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15228.98	101.53	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.571	200.	374.654	187.33	85-115
*1-Chlorooctadecane	13.399	200.	112.548	56.27	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0117HP405r, DRO ;0117HP4 , DRO220114A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0005.RAW  
 Date & Time Acquired: 1/17/2022 4:28:09 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-C24-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

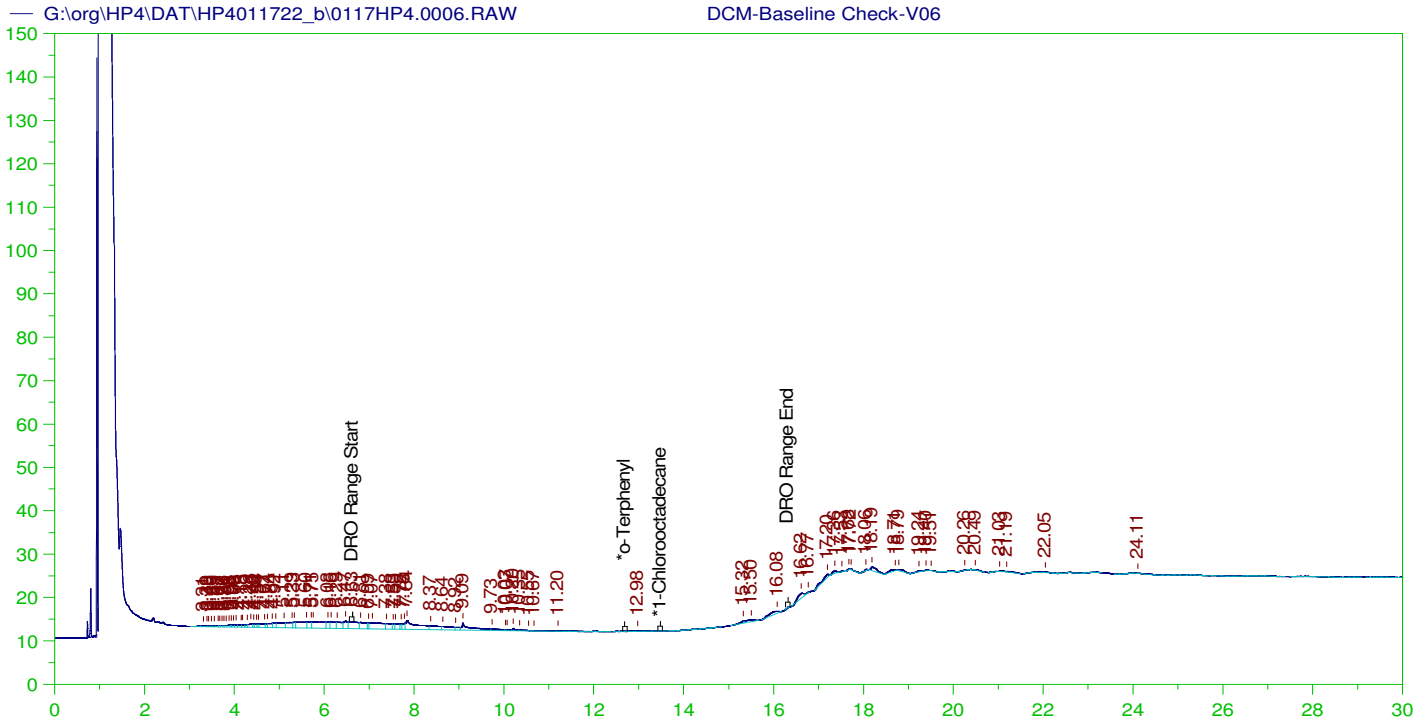
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.571	200.	225.423	112.71
*1-Chlorooctadecane	13.399	200.	31.334	15.67

DRO Area: 1.883984E+08 DRO Amount: 6413.938  
 TEH Area: 1.985349E+08 TEH Amount: 6759.033

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0005.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	6759.03	45.06	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.571	200.	225.423	112.71	85-115
*1-Chlorooctadecane	13.399	200.	31.334	15.67	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

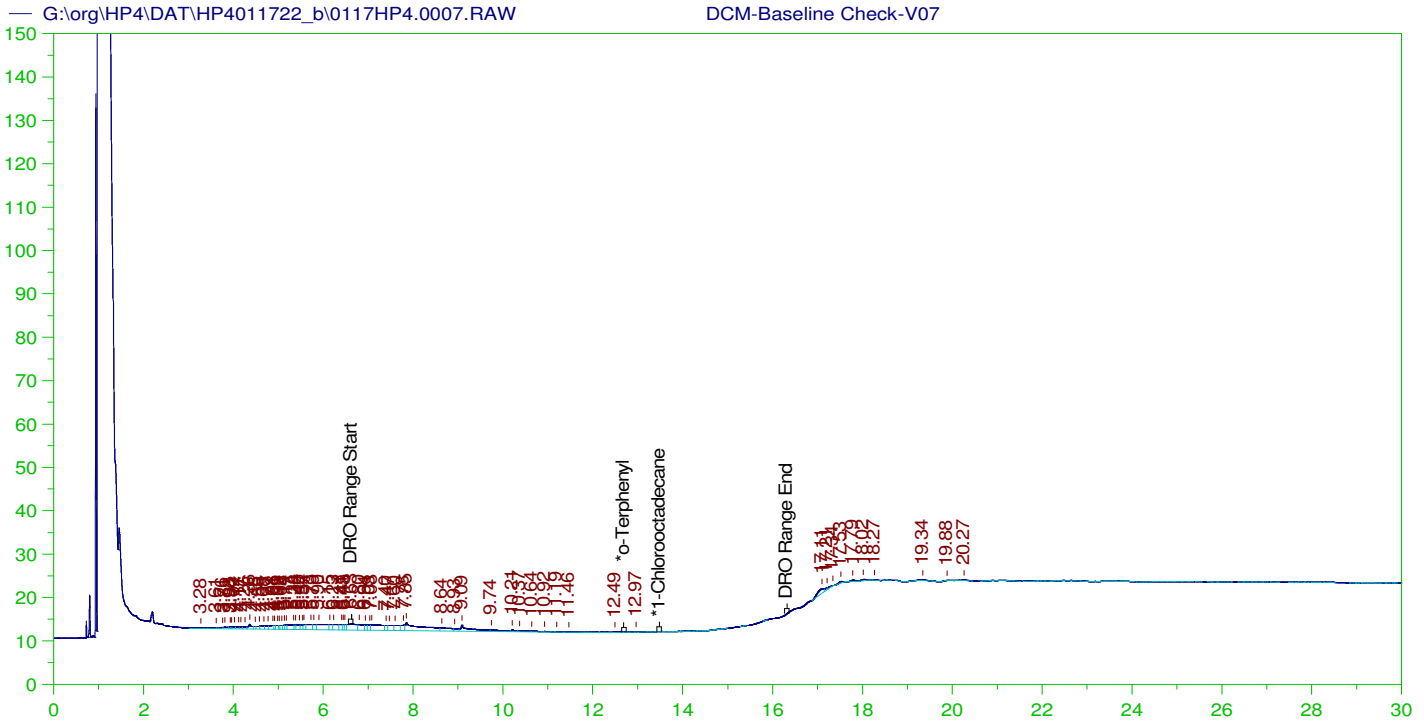
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 Date & Time Acquired: 1/17/2022 5:13:33 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

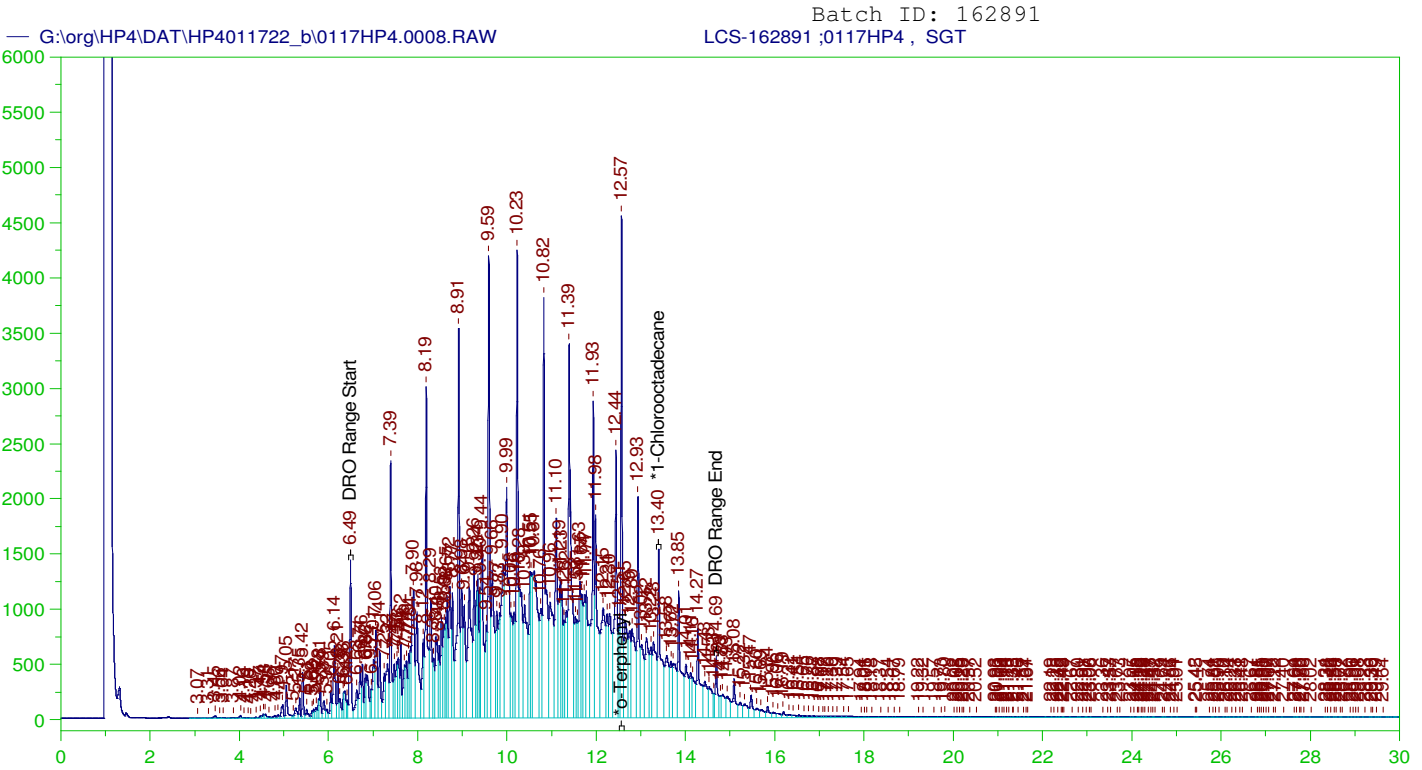
Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.968	200.	.	-
*1-Chlorooctadecane	29.968	200.	.	-

DRO Area:230447.1 DRO Amount: 7.845469  
 TEH Area:486043 TEH Amount: 16.54712







**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: LCS-162891 ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0008.RAW  
 Date & Time Acquired: 1/17/2022 6:44:48 PM  
 Method File: G:\Org\HP4\methods\D3\_8015-C24-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

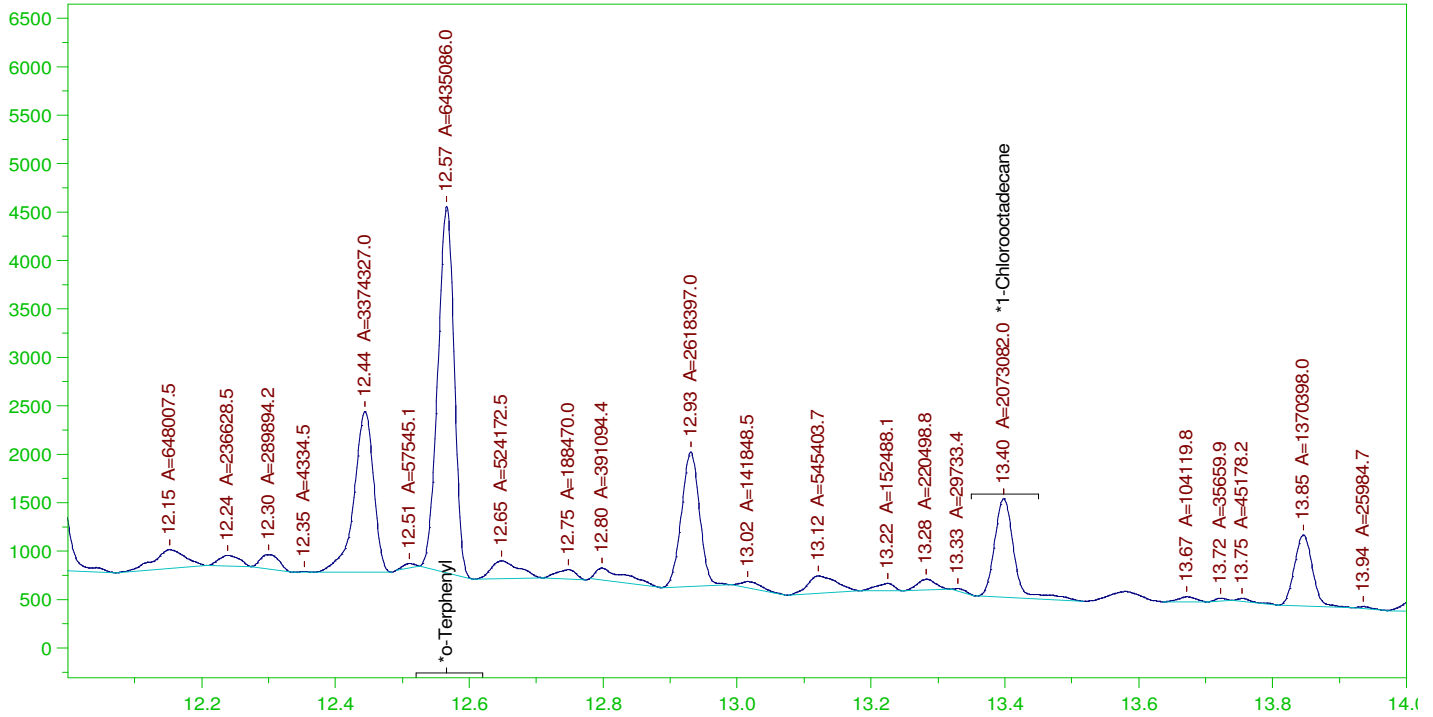
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.566	.2	.305	152.45	-
*1-Chlorooctadecane	13.398	.2	.203	101.74	-

DRO Area: 3.950741E+08 DRO Amount: 13.45012  
 TEH Area: 4.198076E+08 TEH Amount: 14.29216

Batch ID: 162891

LCS-162891 ;0117HP4 , SGT

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0008.RAW



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

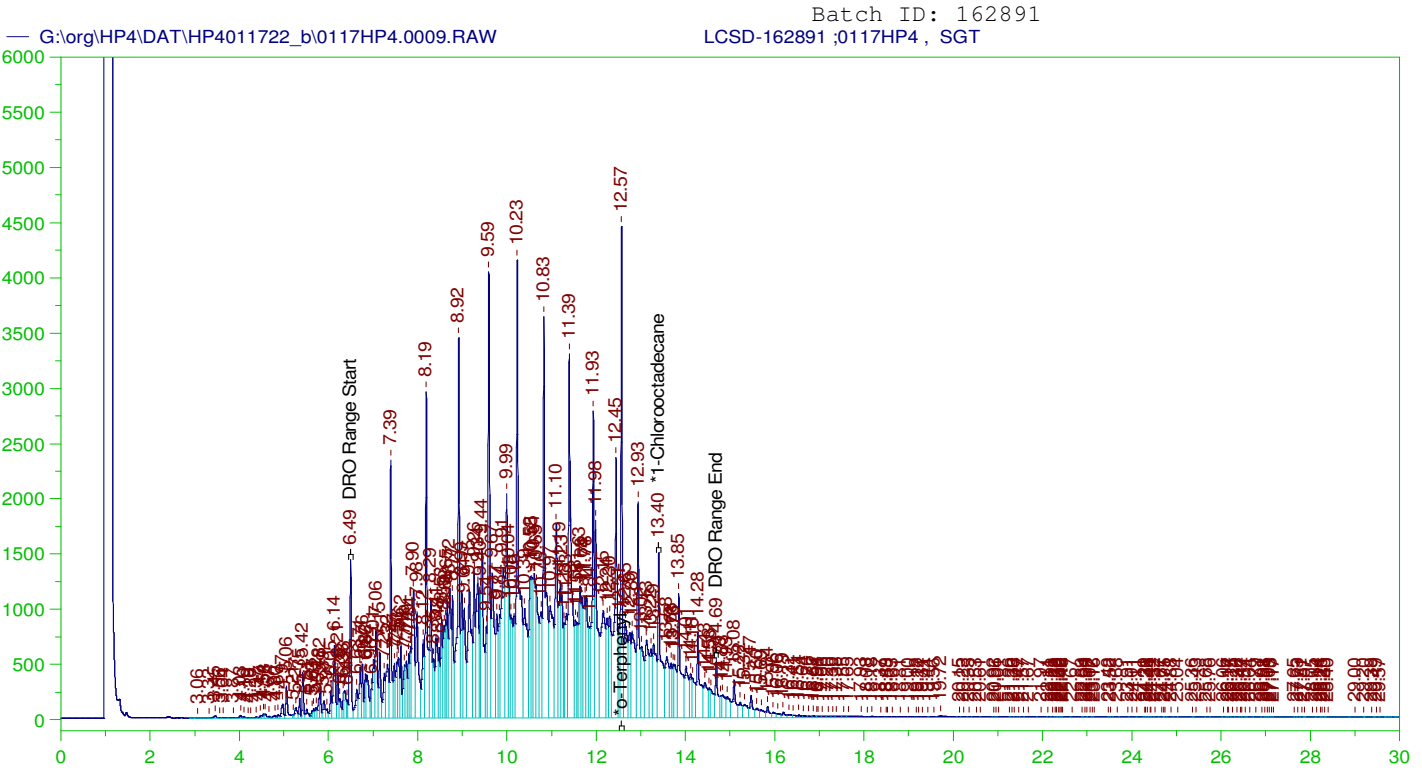
Sample Name: LCS-162891 ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0008.RAW  
 Date & Time Acquired: 1/17/2022 6:44:48 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-C24-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OM-C24.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.566	.2	.193	96.57
*1-Chlorooctadecane	13.398	.2	.062	31.11

DRO Area: 1.628745E+08 DRO Amount: 5.54499  
 TEH Area: 1.740989E+08 TEH Amount: 5.92712



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: LCSD-162891 ;0117HP4 , SGT  
 Raw File: G:\Org\HP4\DAT\HP4011722\_b\0117HP4.0009.RAW  
 Date & Time Acquired: 1/17/2022 7:30:09 PM  
 Method File: G:\Org\HP4\methods\D3\_8015-C24-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OM-C24.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

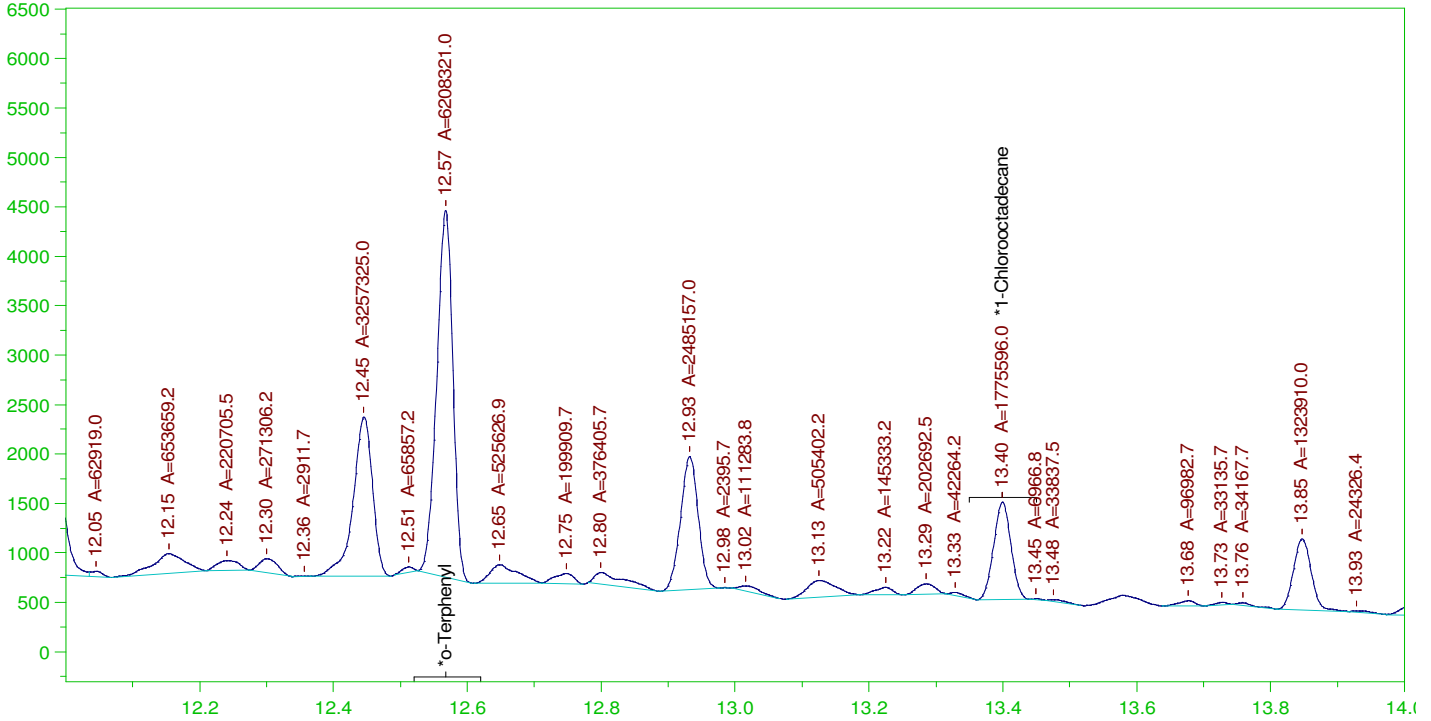
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.567	.2	.298	149.03	-
*1-Chlorooctadecane	13.399	.2	.197	98.61	-

DRO Area: 3.860378E+08 DRO Amount: 13.14248  
 TEH Area: 4.104559E+08 TEH Amount: 13.97379

Batch ID: 162891

LCSD-162891 ;0117HP4 , SGT

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0009.RAW



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

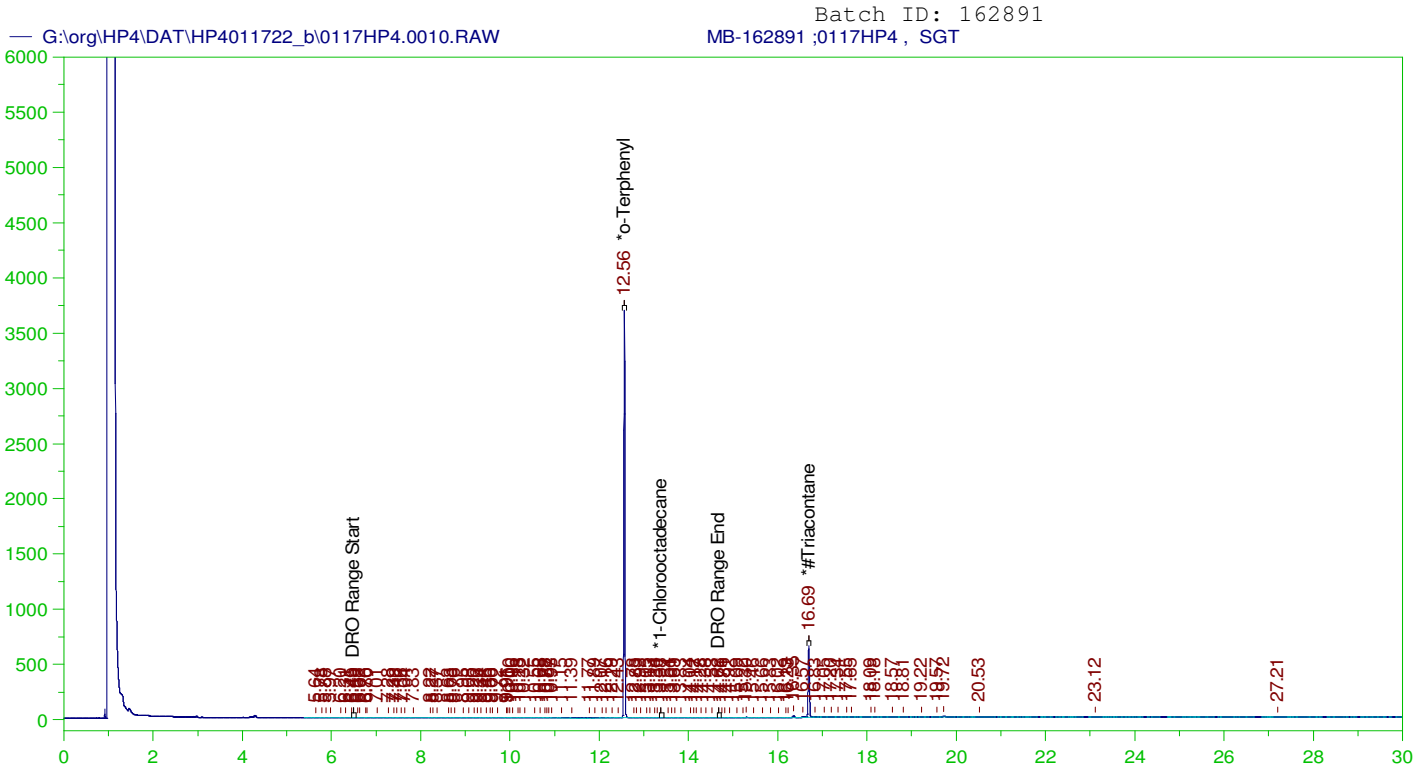
Sample Name: LCSD-162891 ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0009.RAW  
 Date & Time Acquired: 1/17/2022 7:30:09 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-C24-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.567	.2	.186	93.16	-
*1-Chlorooctadecane	13.399	.2	.053	26.64	-

DRO Area: 1.588585E+08 DRO Amount: 5.408267  
 TEH Area: 1.701426E+08 TEH Amount: 5.792429



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: MB-162891 ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0010.RAW  
 Date & Time Acquired: 1/17/2022 8:15:28 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-C24T-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

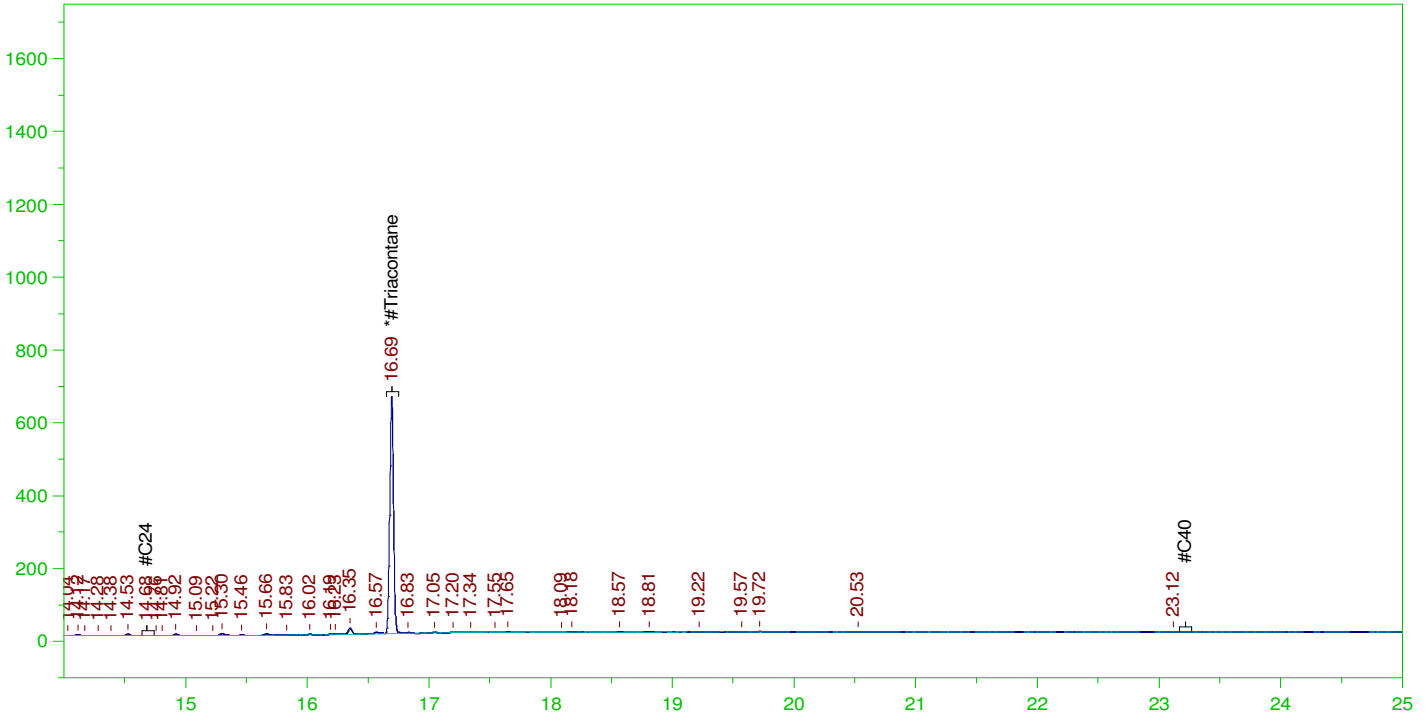
Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.562	.2	.194	97.04	-
*1-Chlorooctadecane	13.377	.2	.	.05	-
*#Triacontane	16.694	.2	.057	28.32	-

DRO Area:245017 DRO Amount: 8.341494E-03  
 TEH Area:460506.7 TEH Amount: 1.567774E-02

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0010.RAW

MB-162891 ;0117HP4 , SGT



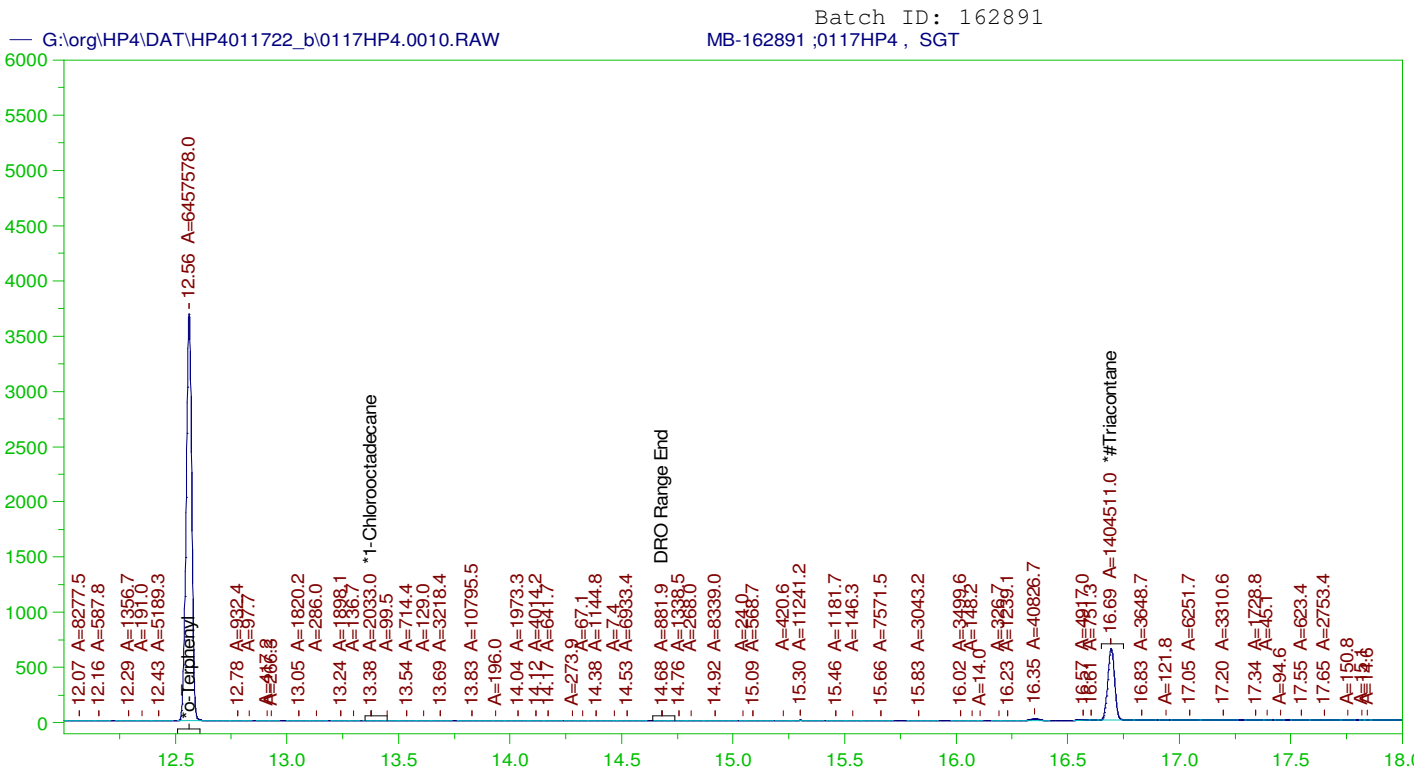
**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: MB-162891 ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0010.RAW  
 Date & Time Acquired: 1/17/2022 8:15:28 PM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-S-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF-SAMPLE.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.64 to 23.27

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.694	.5	.057	11.33

RRO Area:163295.4 RRO AMOUNT: 6.657084E-03



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: MB-162891 ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0010.RAW  
 Date & Time Acquired: 1/17/2022 8:15:28 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-T-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OM-C24-TRI.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.562	.2	.194	96.9	-
*1-Chlorooctadecane	13.377	.2	.	.03	-
*#Triacontane	16.694	.2	.056	28.12	-

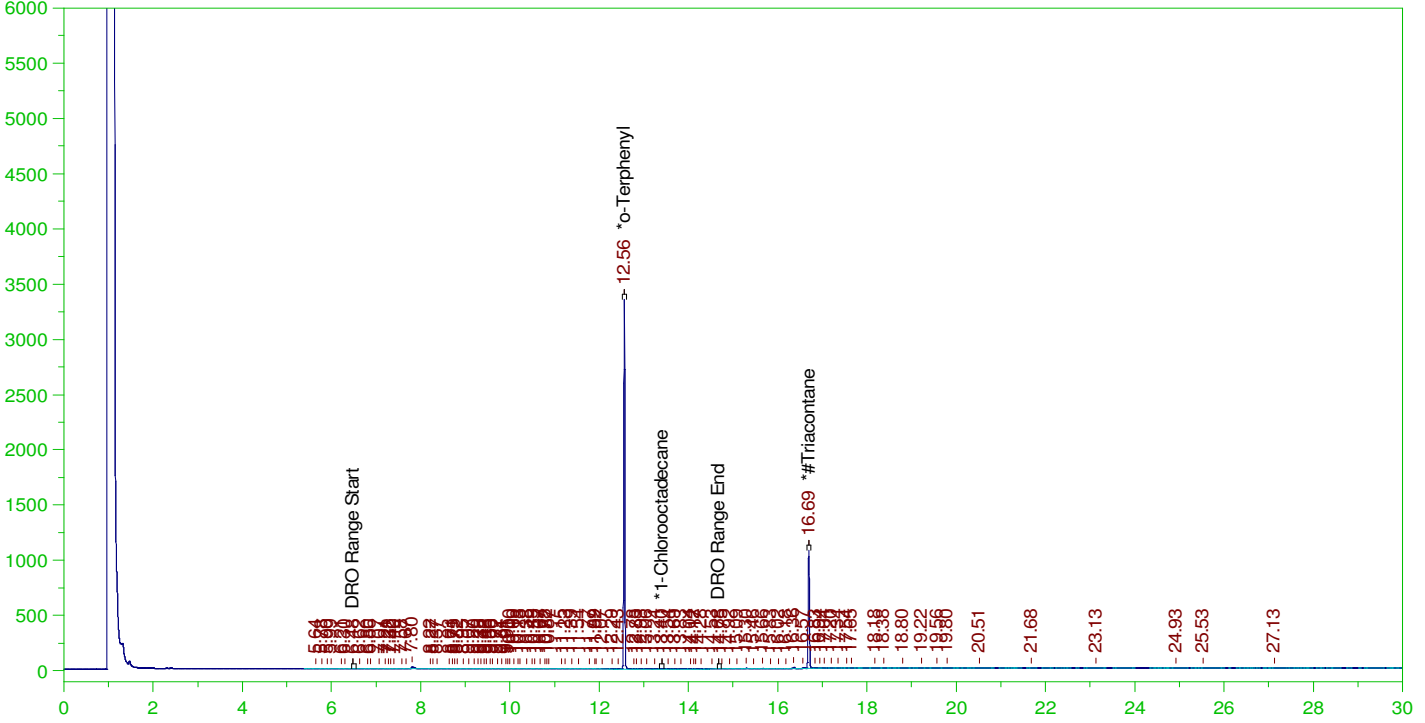
DRO Area:283825.3 DRO Amount: 9.662704E-03  
 TEH Area:688287.3 TEH Amount: 2.343243E-02

ERH2344 (OWDFMW04A)

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0011.RAW

Batch ID: 162891

B22010625-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010625-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0011.RAW  
 Date & Time Acquired: 1/17/2022 9:00:50 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-C24T-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.56	.189	.167	88.39	-
*1-Chlorooctadecane	13.403	.189	.	.04	-
*#Triacontane	16.694	.189	.087	46.25	-

DRO Area:388698.3 DRO Amount: 1.248402E-02  
 TEH Area:598400.7 TEH Amount: 1.921913E-02

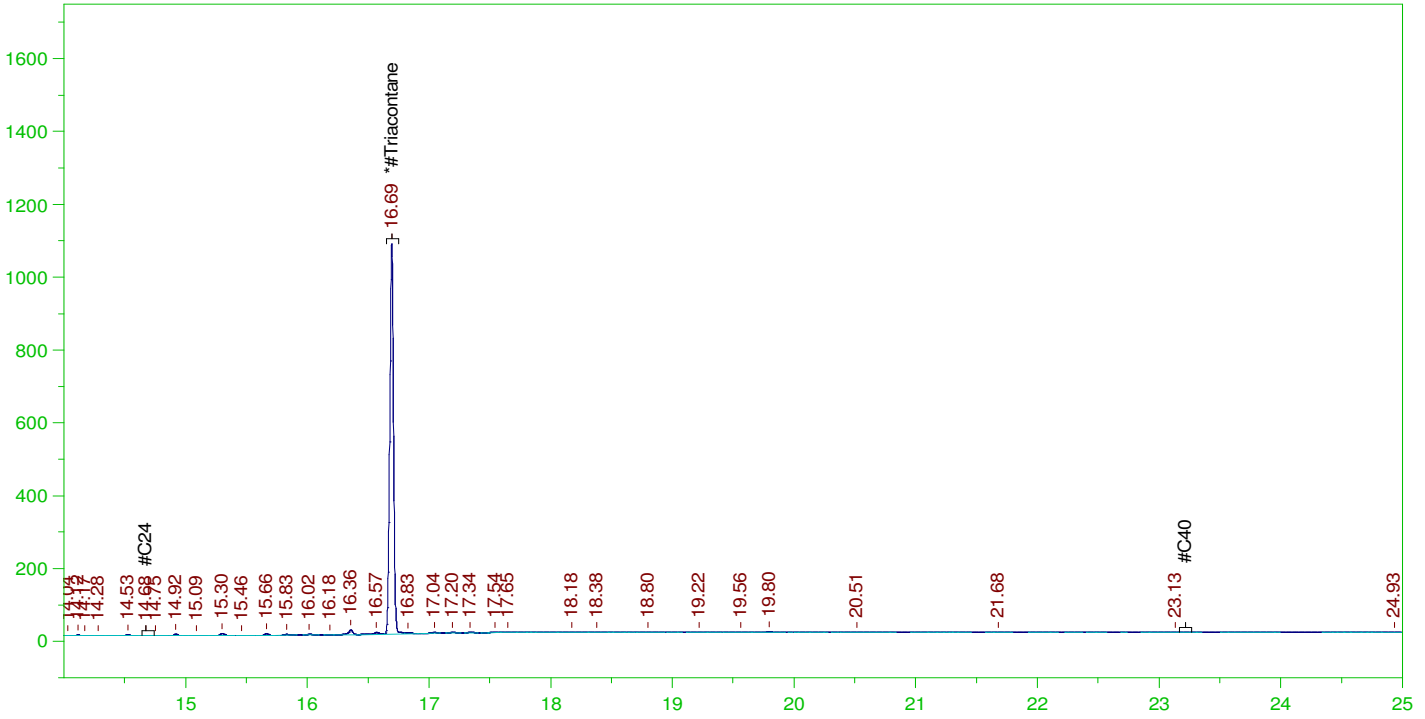


ERH2344 (OWDFMW04A)

Batch ID: 162891

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B22010625-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010625-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0011.RAW  
 Date & Time Acquired: 1/17/2022 9:00:50 PM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-S-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF-SAMPLE.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.64 to 23.27

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.694	.472	.087	18.49

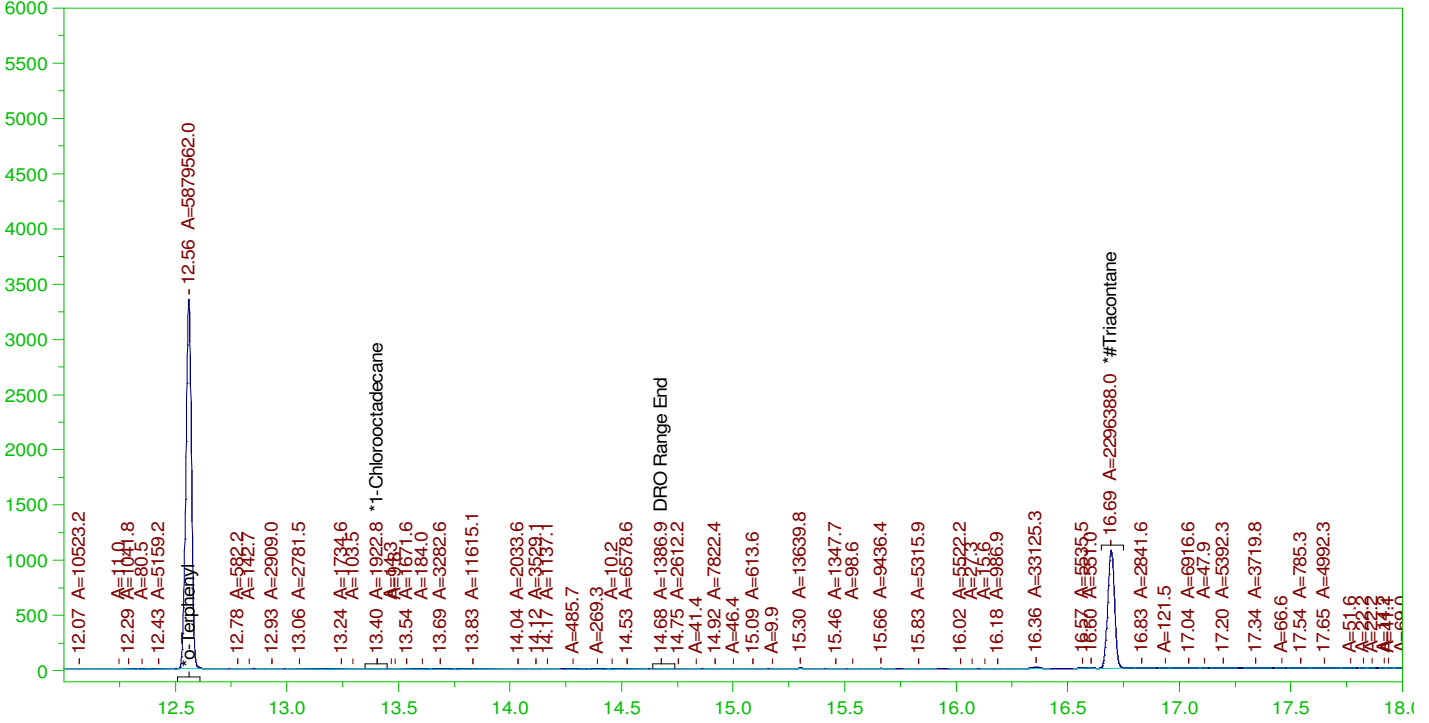
RRO Area:168410.1 RRO AMOUNT: 6.476979E-03

ERH2344 (OWDFMW04A)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0011.RAW

B22010625-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010625-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0011.RAW  
 Date & Time Acquired: 1/17/2022 9:00:50 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-T-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.56	.189	.166	88.23	-
*1-Chlorooctadecane	13.403	.189	.	.03	-
*#Triacontane	16.694	.189	.087	45.98	-

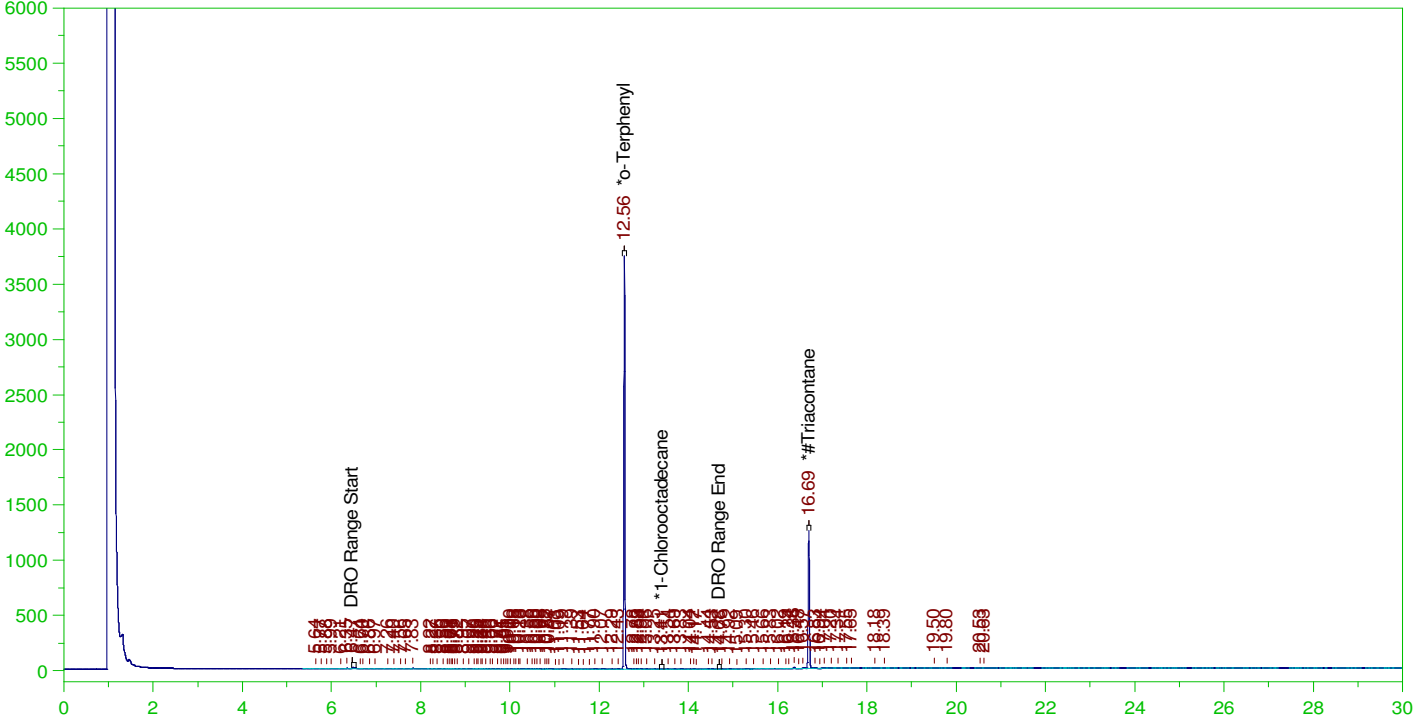
DRO Area:488185.2 DRO Amount: 1.567929E-02  
 TEH Area:760341.3 TEH Amount: 2.442026E-02

ERH2358 (RHMW11 zone 5)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0012.RAW

B22010629-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010629-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0012.RAW  
 Date & Time Acquired: 1/17/2022 9:46:07 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-C24T-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.562	.189	.187	99.01	-
*1-Chlorooctadecane	13.405	.189	.	.02	-
*Triacontane	16.694	.189	.101	53.42	-

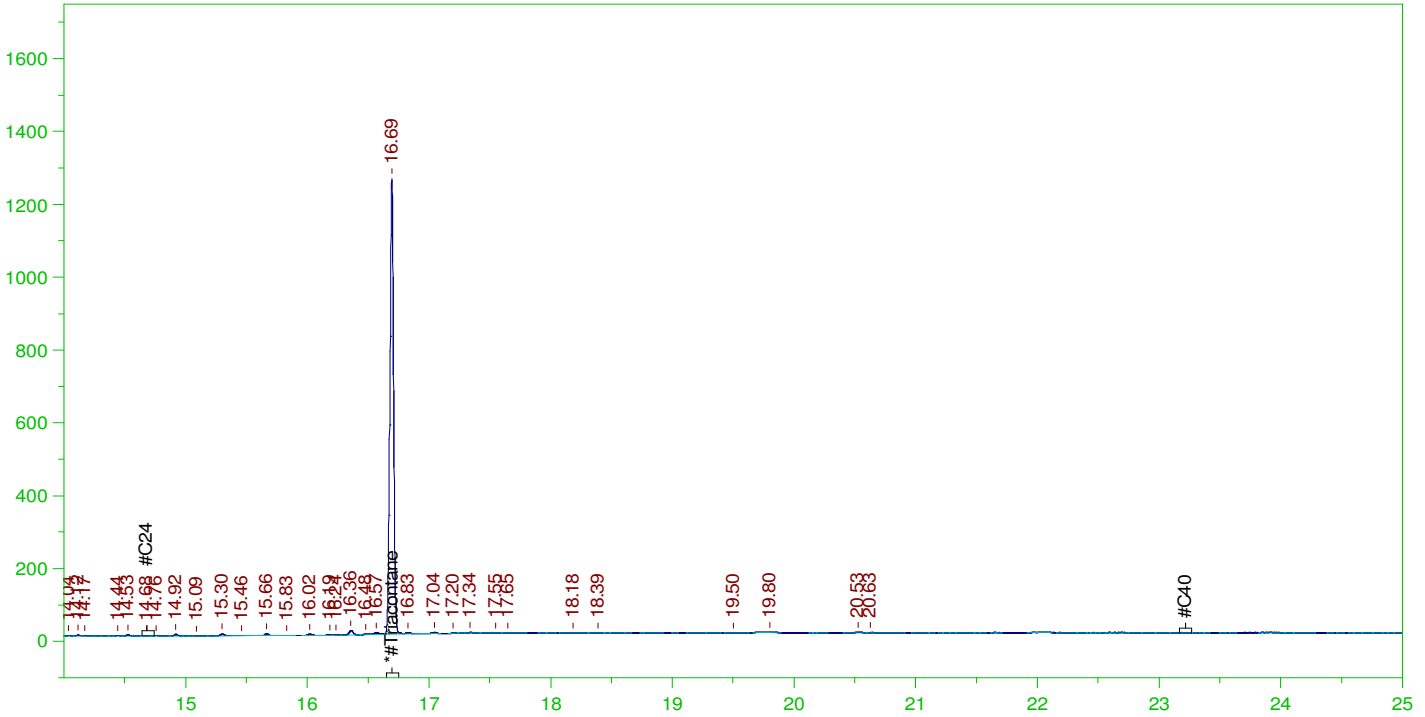
DRO Area:454258.5 DRO Amount: 1.458965E-02  
 TEH Area:661063.3 TEH Amount: 0.0212317

ERH2358 (RHMW11 zone 5)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0012.RAW

B22010629-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010629-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0012.RAW  
 Date & Time Acquired: 1/17/2022 9:46:07 PM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-S-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF-SAMPLE.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.64 to 23.27

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.694	.472	.101	21.35

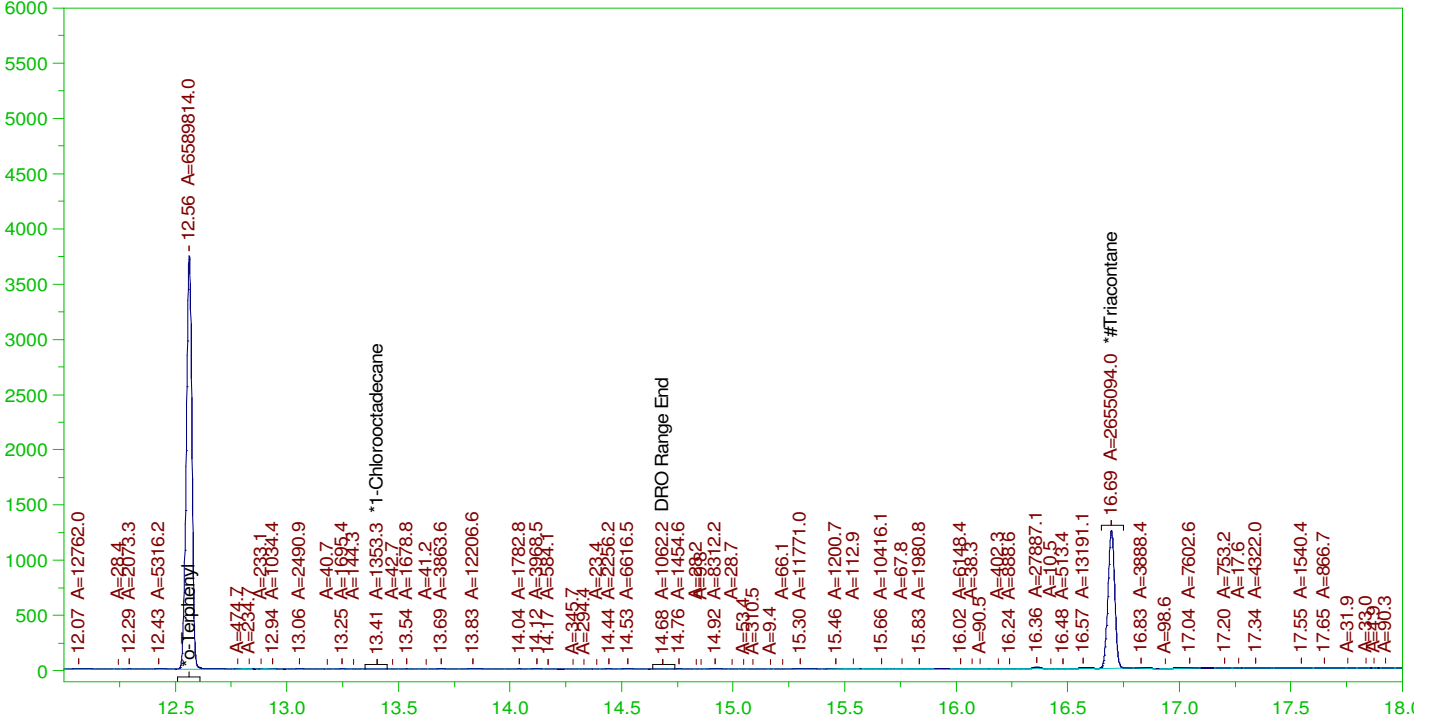
RRO Area:130855.1 RRO AMOUNT: 5.032631E-03

ERH2358 (RHMW11 zone 5)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0012.RAW

B22010629-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010629-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0012.RAW  
 Date & Time Acquired: 1/17/2022 9:46:07 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-T-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.562	.189	.187	98.89	-
*1-Chlorooctadecane	13.405	.189	.	.02	-
*#Triacontane	16.694	.189	.1	53.16	-

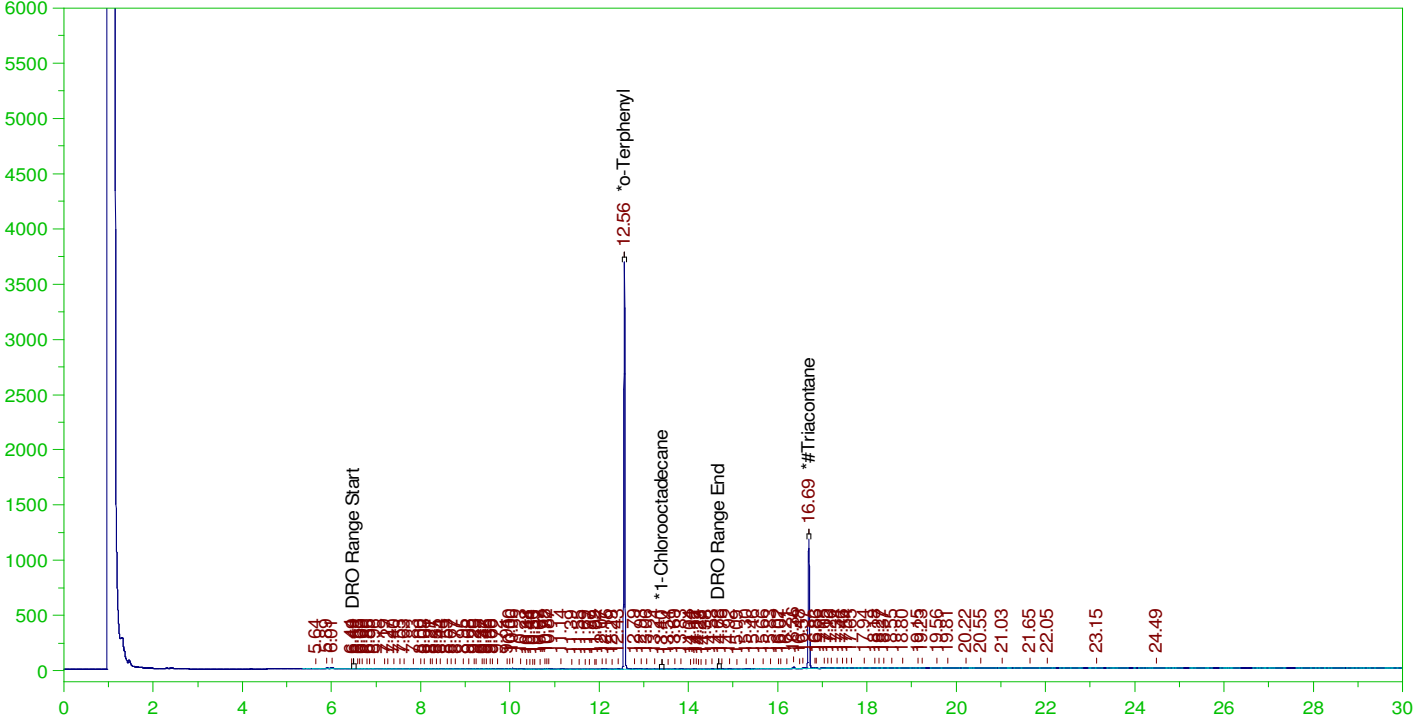
DRO Area:564886.2 DRO Amount: 1.814273E-02  
 TEH Area:863684.4 TEH Amount: 2.773939E-02

ERH2362 (RHMW09)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0013.RAW

B22010633-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010633-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0013.RAW  
 Date & Time Acquired: 1/17/2022 10:31:23 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-C24T-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.562	.196	.19	96.76	-
*1-Chlorooctadecane	13.402	.196	.	.03	-
*#Triacontane	16.695	.196	.099	50.62	-

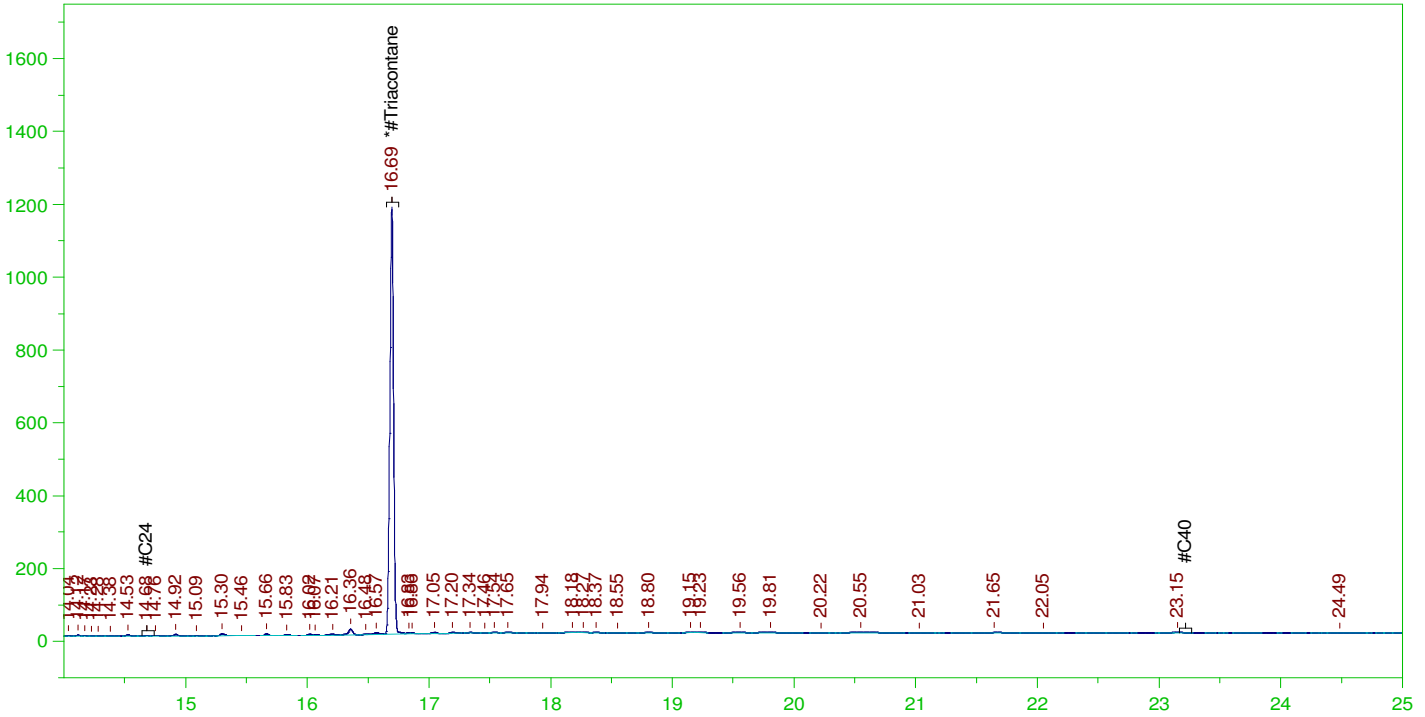
DRO Area:409962.6 DRO Amount: 1.368332E-02  
 TEH Area:757279.4 TEH Amount: 2.527572E-02

ERH2362 (RHMW09)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0013.RAW

B22010633-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010633-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0013.RAW  
 Date & Time Acquired: 1/17/2022 10:31:23 PM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-S-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF-SAMPLE.CAL  
 Sample Weight: 1020 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.64 to 23.27

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane_____	16.695	.49	.099	20.23	-

RRO Area:224041.1 RRO AMOUNT: 8.954424E-03

ERH2362 (RHMW09)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0013.RAW

B22010633-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010633-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0013.RAW  
 Date & Time Acquired: 1/17/2022 10:31:23 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-T-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1020 Dilution: 1 S.A.: 1

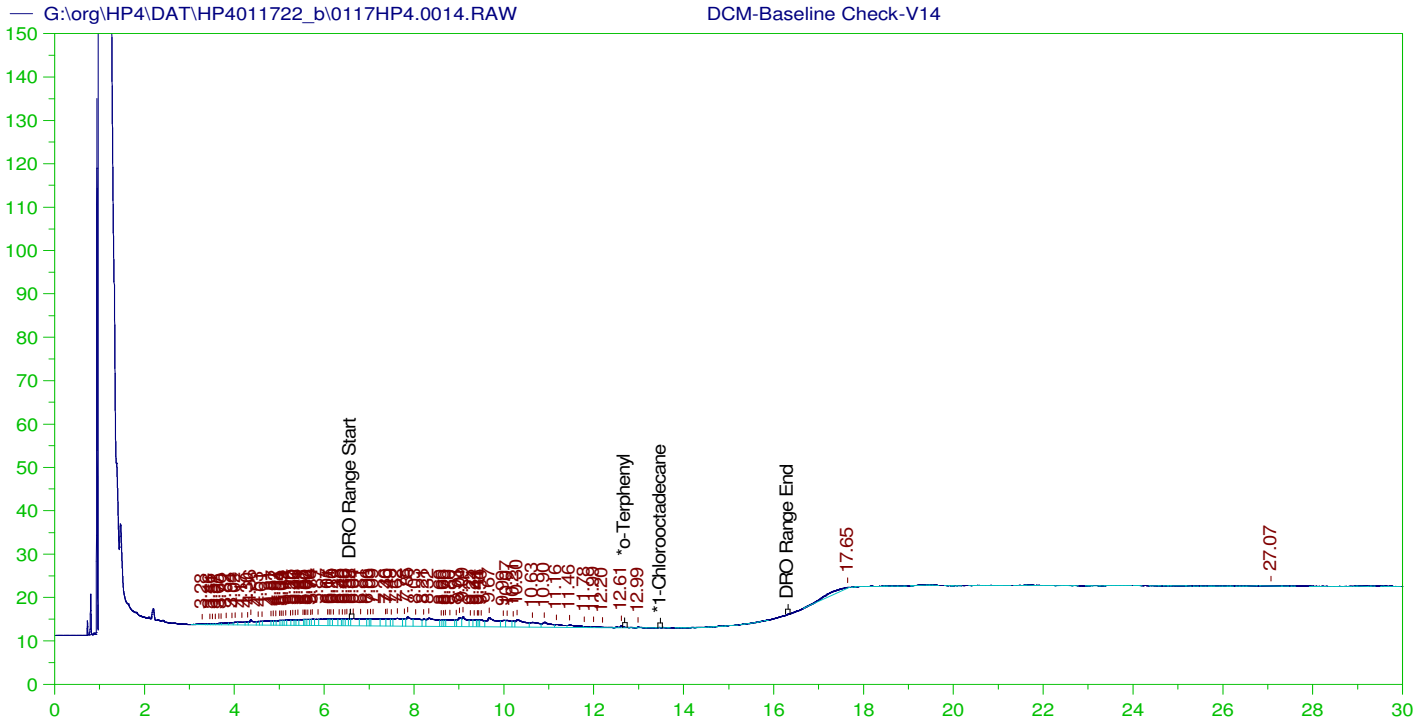
Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.562	.196	.189	96.6	-
*1-Chlorooctadecane	13.402	.196	.	.02	-
*#Triacontane	16.695	.196	.099	50.34	-

DRO Area:492023.8 DRO Amount: 1.642228E-02  
 TEH Area:907246.1 TEH Amount: 3.028116E-02





**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V14  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0014.RAW  
 Date & Time Acquired: 1/17/2022 11:16:37 PM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.56 to 16.37

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

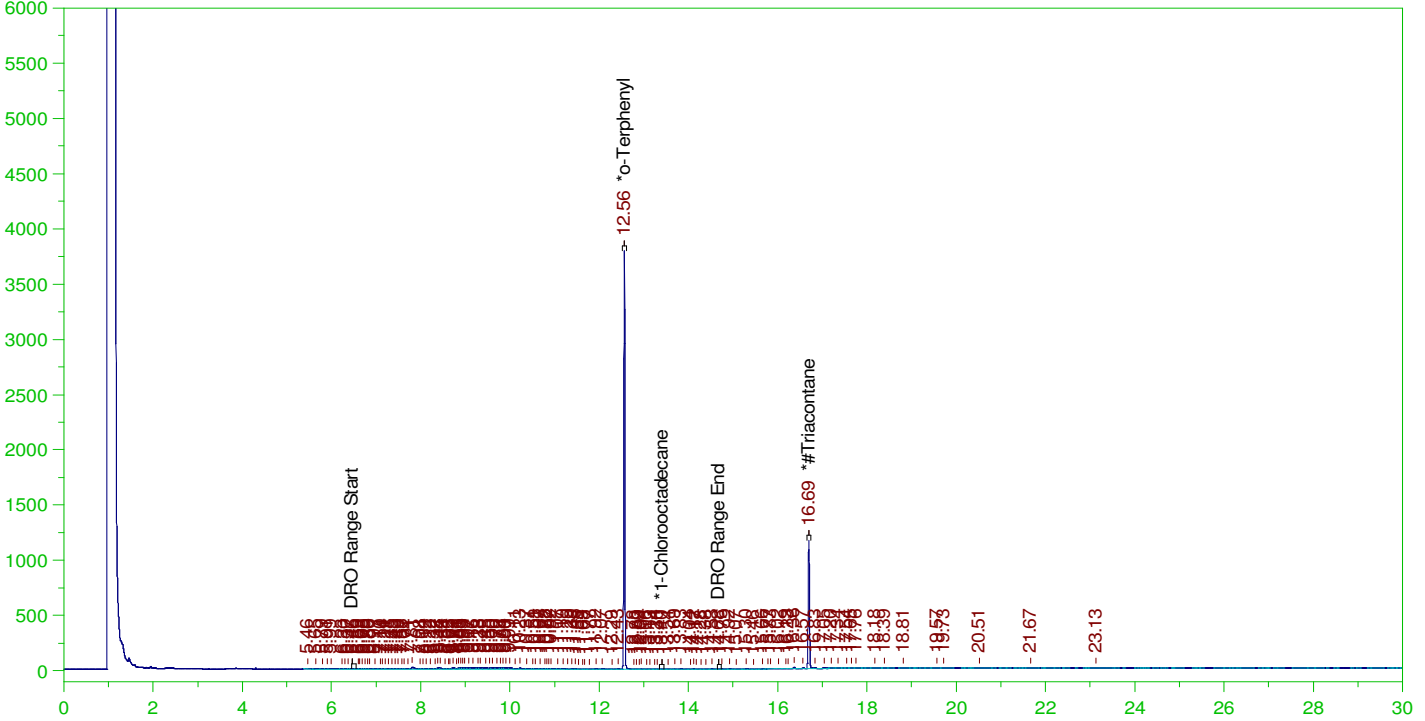
DRO Area:434959.6 DRO Amount: 14.808  
 TEH Area:663875.5 TEH Amount: 22.60134

ERH2389 (RHMW2254-01 LF)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0015.RAW

B22010641-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010641-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0015.RAW  
 Date & Time Acquired: 1/18/2022 12:01:54 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-C24T-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.561	.189	.19	100.57	-
*1-Chlorooctadecane	13.404	.189	.	.04	-
*#Triacontane	16.695	.189	.095	50.39	-

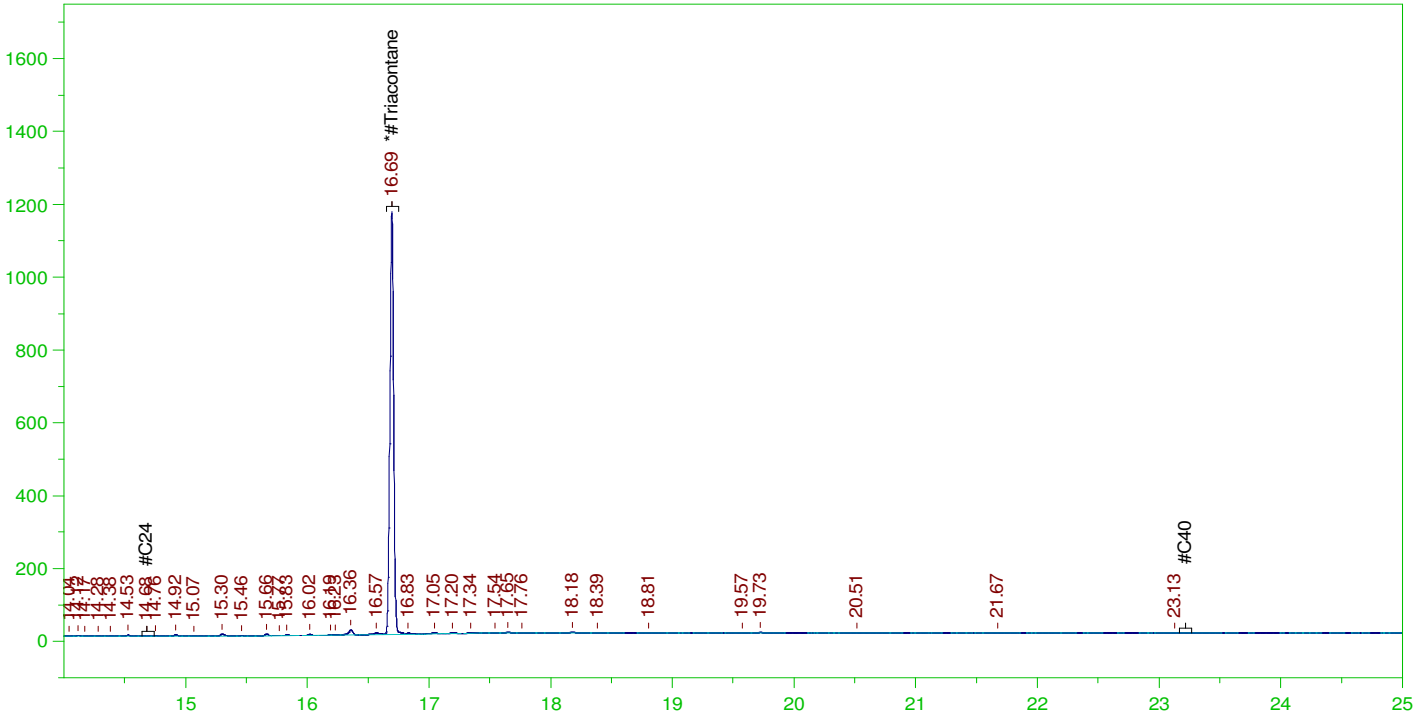
DRO Area:1418000 DRO Amount: 4.554261E-02  
 TEH Area:1645671 TEH Amount: 5.285485E-02

ERH2389 (RHMW2254-01 LF)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0015.RAW

B22010641-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010641-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0015.RAW  
 Date & Time Acquired: 1/18/2022 12:01:54 AM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-S-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF-SAMPLE.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.64 to 23.27

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.695	.472	.095	20.15

RRO Area:185749.1 RRO AMOUNT: 7.143829E-03

ERH2389 (RHMW2254-01 LF)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0015.RAW

B22010641-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010641-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0015.RAW  
 Date & Time Acquired: 1/18/2022 12:01:54 AM  
 Method File: G:\Org\HP4\methods\DS\_8015-T-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1060 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.561	.189	.189	100.42
*1-Chlorooctadecane	13.404	.189	.03	-
*#Triacontane	16.695	.189	.095	50.11

DRO Area:1401778  
 TEH Area:1733452

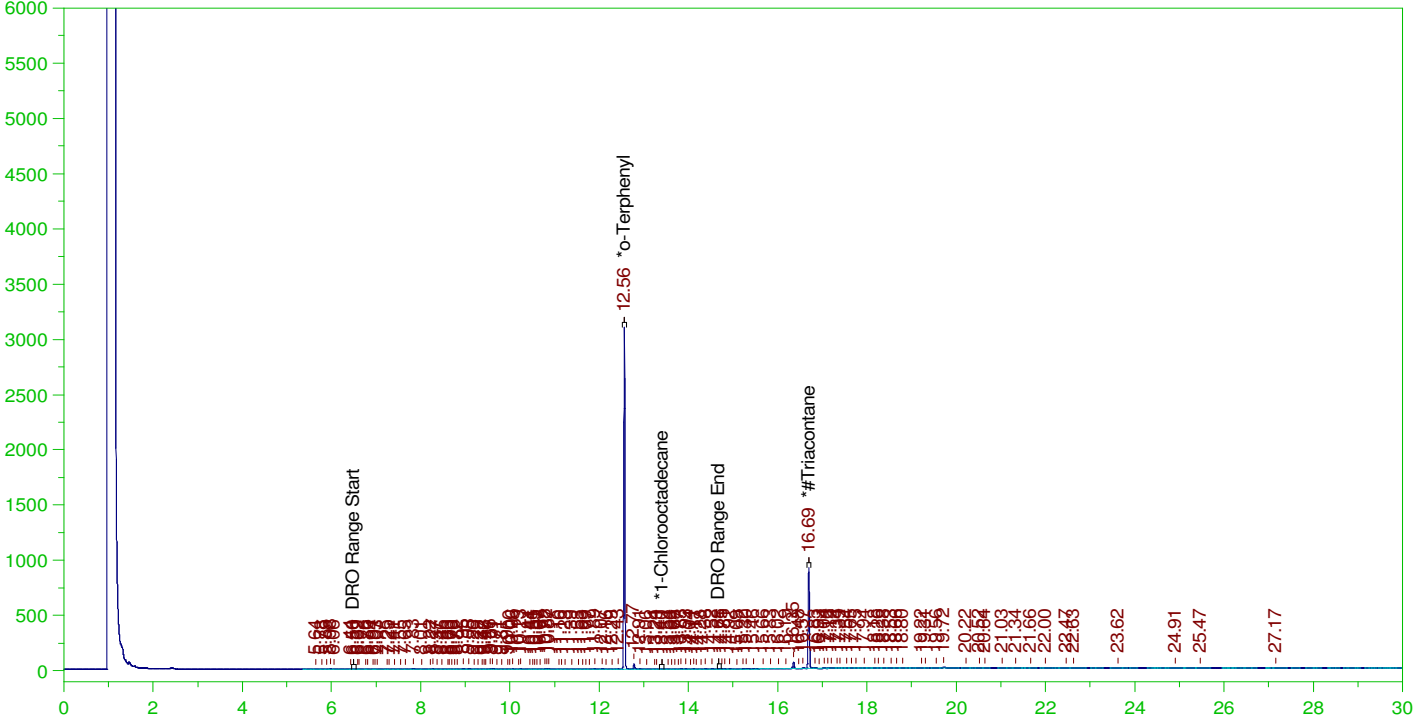
DRO Amount: 0.0450216  
 TEH Amount: 5.567415E-02

ERH2366 (RHMW19)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0016.RAW

B22010626-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010626-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0016.RAW  
 Date & Time Acquired: 1/18/2022 12:47:05 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-C24T-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.561	.194	.158	81.21	-
*1-Chlorooctadecane	13.4	.194	.	.03	-
*#Triacontane	16.693	.194	.077	39.42	-

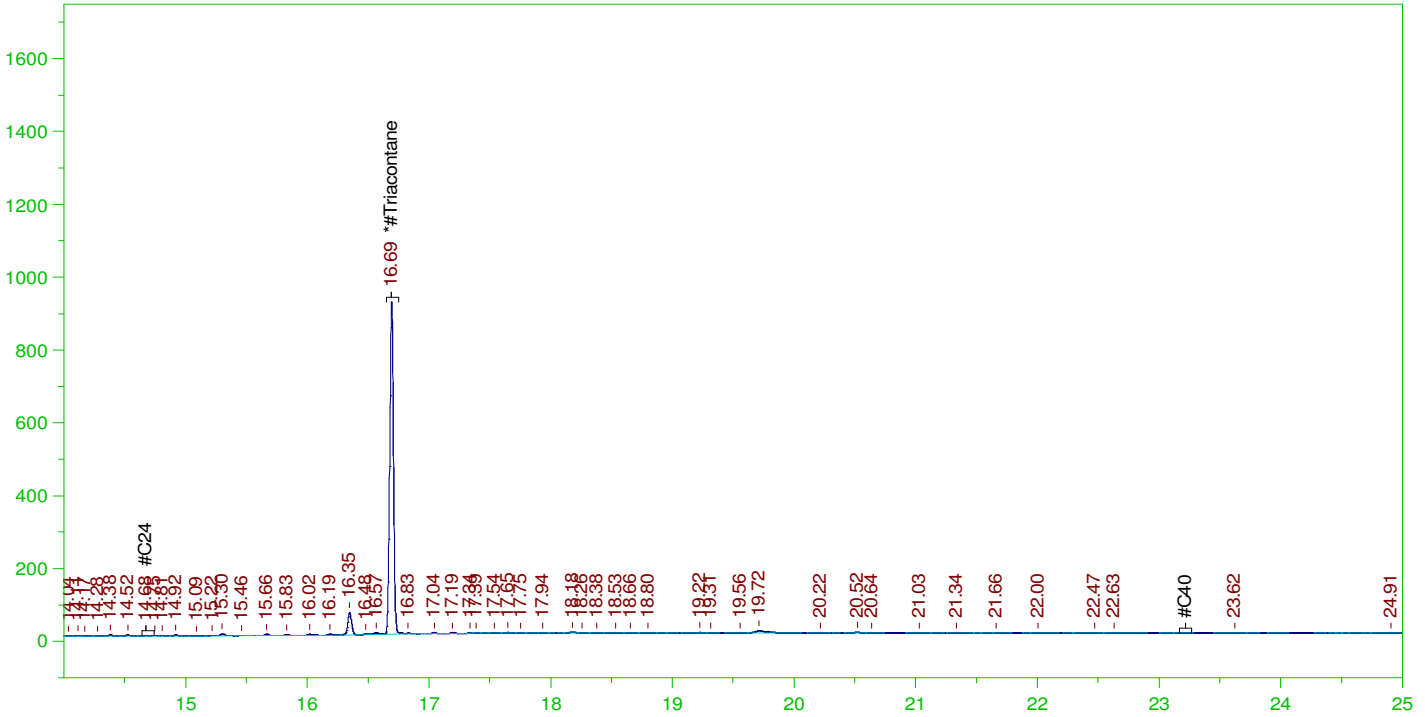
DRO Area:463656.2 DRO Amount: 1.532521E-02  
 TEH Area:861402.6 TEH Amount: 2.847191E-02

ERH2366 (RHMW19)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0016.RAW

B22010626-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010626-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0016.RAW  
 Date & Time Acquired: 1/18/2022 12:47:05 AM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-S-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF-SAMPLE.CAL  
 Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.64 to 23.27

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.693	.485	.076	15.76

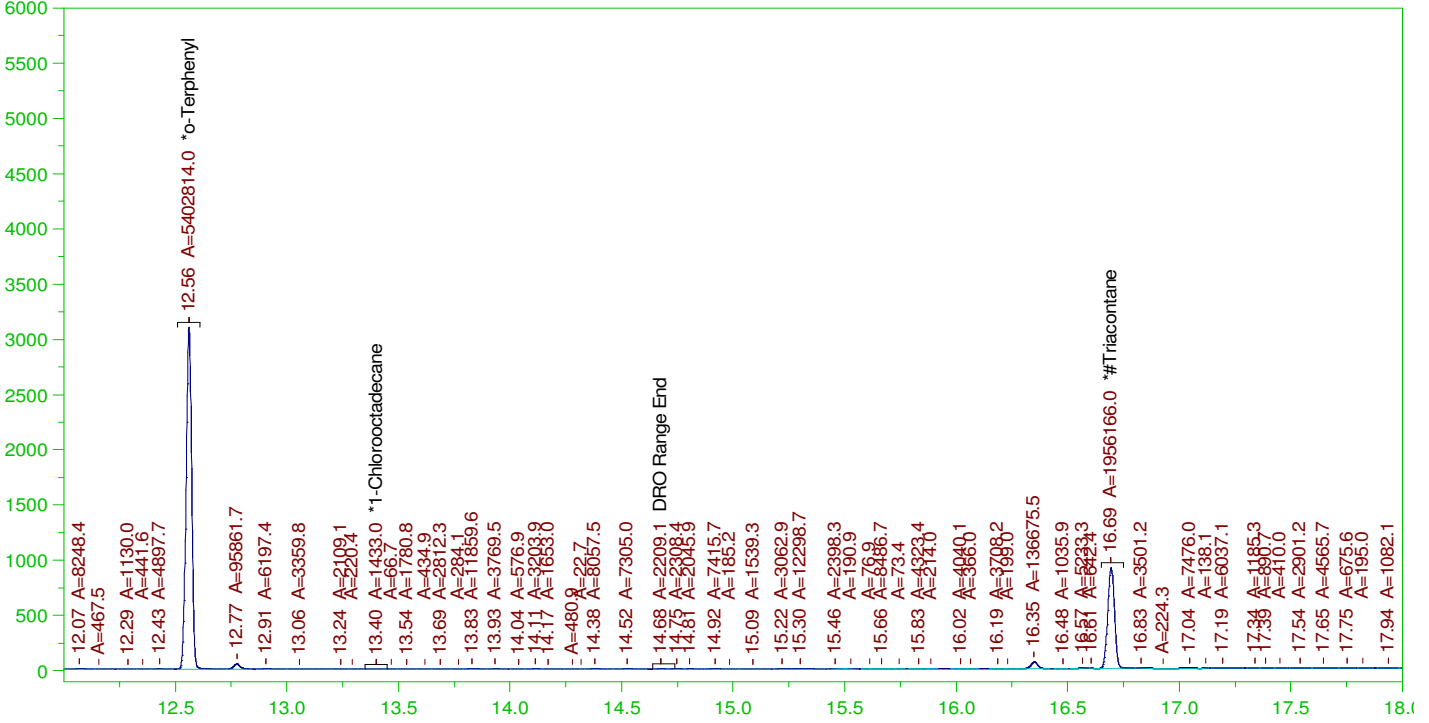
RRO Area:349197.9 RRO AMOUNT: 1.382116E-02

ERH2366 (RHMW19)

Batch ID: 162891

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B22010626-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010626-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0016.RAW  
 Date & Time Acquired: 1/18/2022 12:47:05 AM  
 Method File: G:\Org\HP4\methods\DS\_8015-T-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OM-C24-TRI.CAL  
 Sample Weight: 1030 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

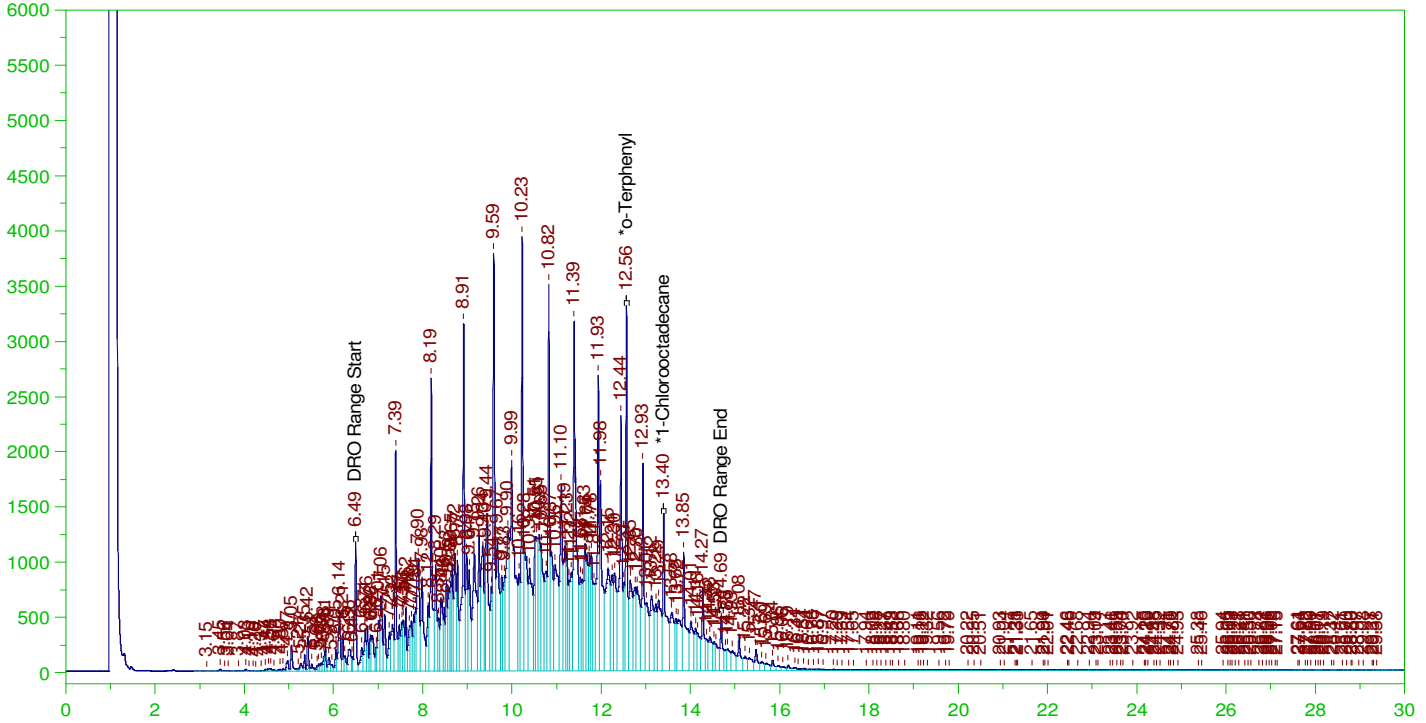
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.561	.194	.157	81.08	-
*1-Chlorooctadecane	13.4	.194	.	.02	-
*Triacontane	16.693	.194	.076	39.16	-

DRO Area:329133.9 DRO Amount: 1.087885E-02  
 TEH Area:683782.3 TEH Amount: 2.260103E-02

Batch ID: 162891

B22010626-001DMS ;0117HP4 ,

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0017.RAW



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010626-001DMS ;0117HP4 ,  
Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0017.RAW  
Date & Time Acquired: 1/18/2022 1:32:17 AM  
Method File: G:\Org\HP4\methods\D3\_8015-C24-OM-L%.met  
Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24.CAL  
Sample Weight: 1040 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.564	.192	.223	116.13	-
*1-Chlorooctadecane	13.398	.192	.185	95.97	-

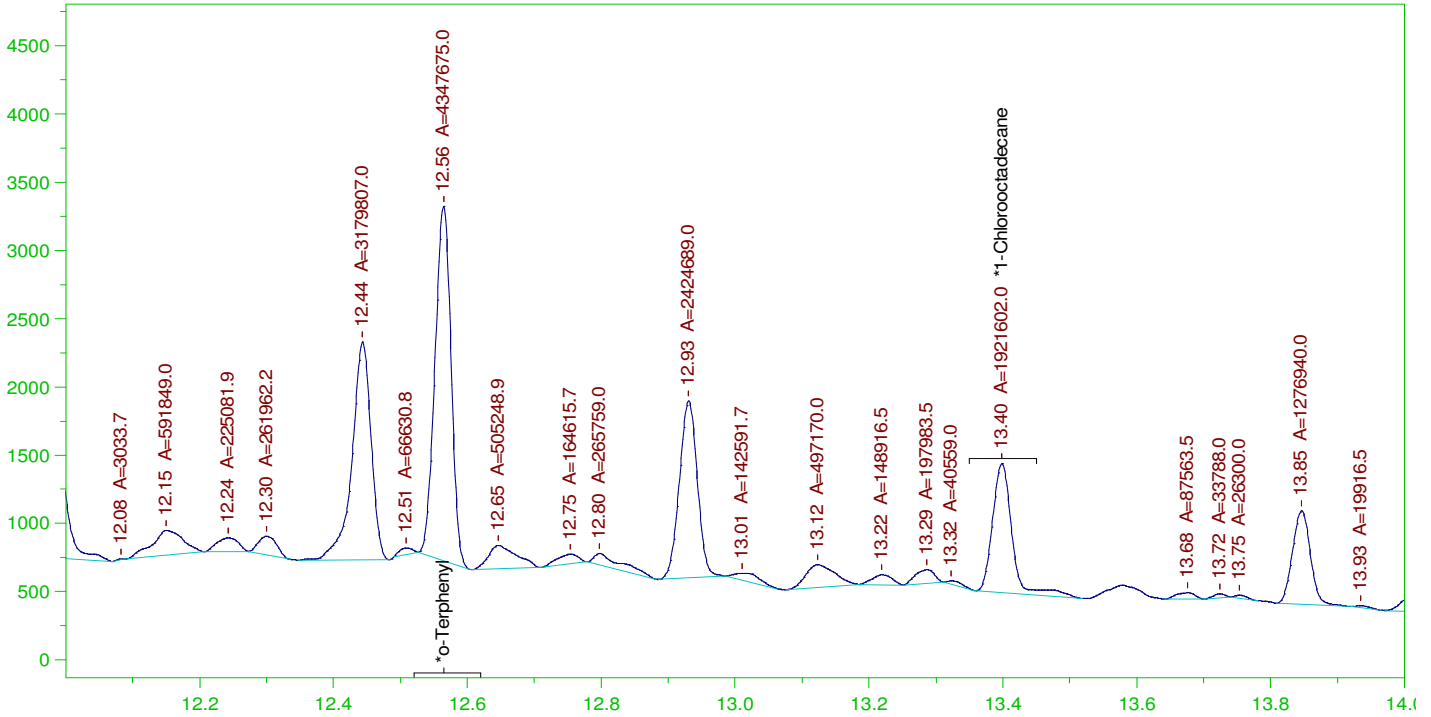
DRO Area: 3.611828E+08 DRO Amount: 11.82337  
TEH Area: 3.823874E+08 TEH Amount: 12.51751



Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0017.RAW

B22010626-001DMS ;0117HP4 ,



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

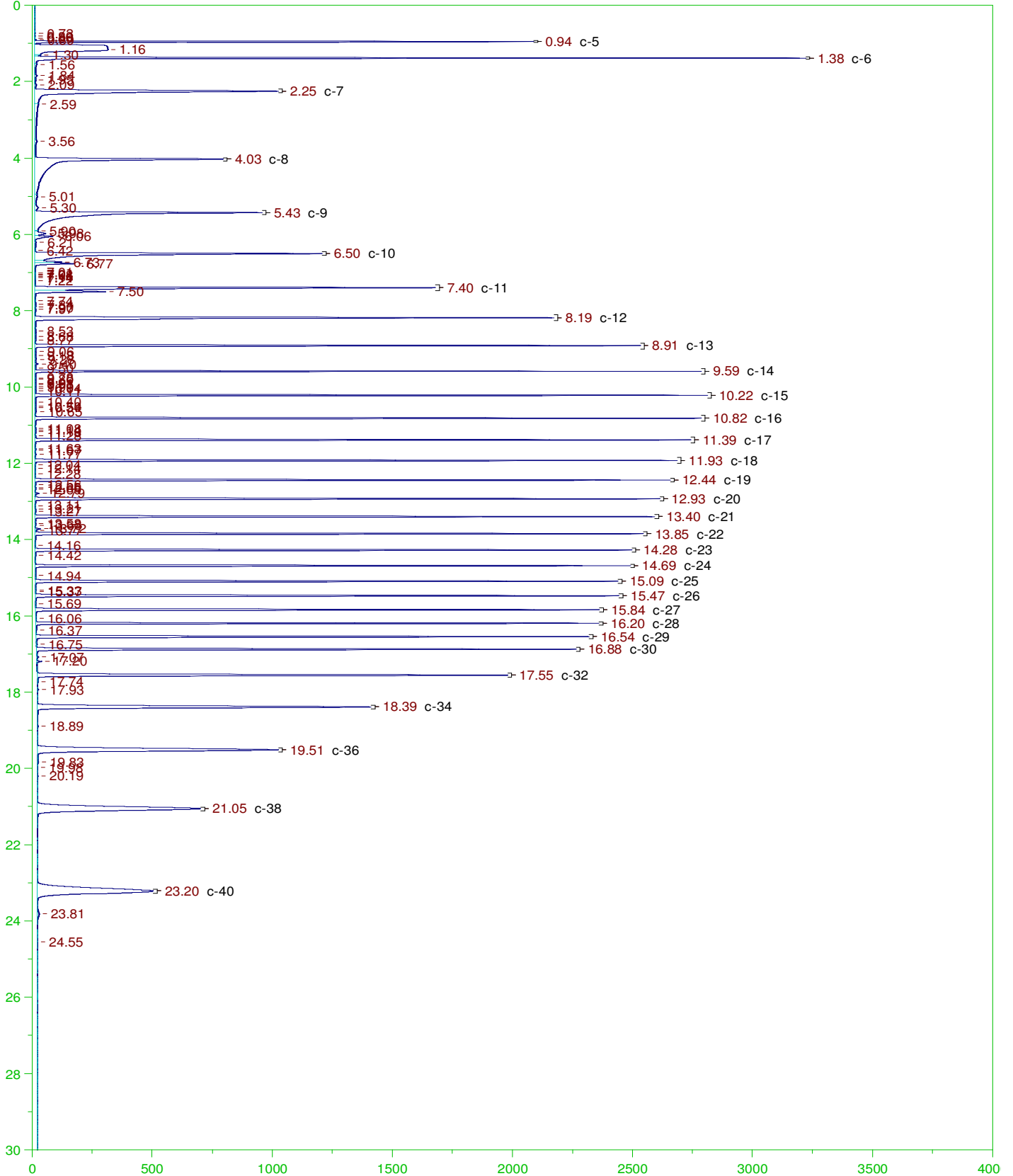
Sample Name: B22010626-001DMS ;0117HP4 ,  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0017.RAW  
 Date & Time Acquired: 1/18/2022 1:32:17 AM  
 Method File: G:\Org\HP4\methods\DS\_8015-C24-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24.CAL  
 Sample Weight: 1040 Dilution: 1 S.A.: 1

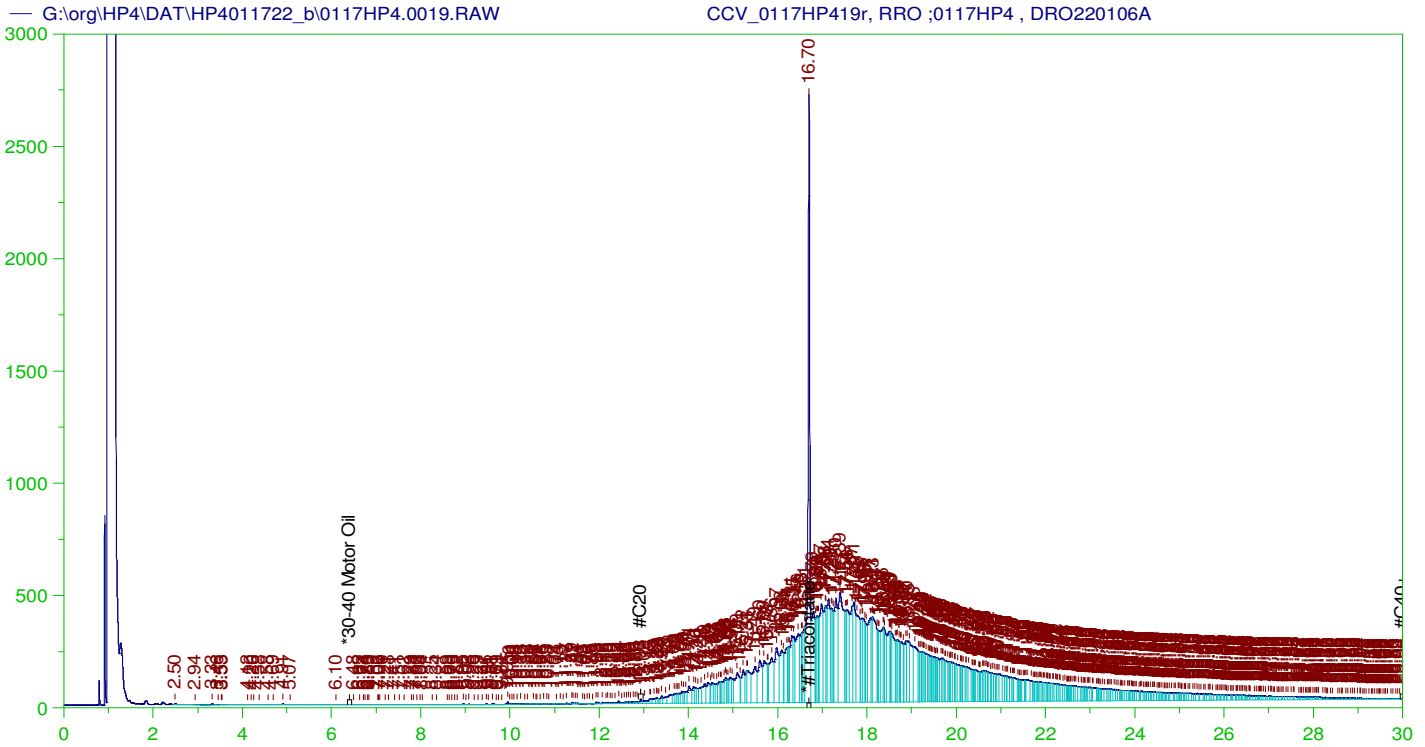
Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.564	.192	.125	65.24	-
*1-Chlorooctadecane	13.398	.192	.055	28.84	-

DRO Area:1.463502E+08 DRO Amount: 4.790794  
 TEH Area:1.554469E+08 TEH Amount: 5.088578





**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0117HP419r, RRO ;0117HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0019.RAW  
 Date & Time Acquired: 1/18/2022 3:02:24 AM  
 Method File: G:\Org\HP4\Methods\DC\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.699	500.	322.977	64.6	-

RRO TEH (Oil Range) Area:1.146893E+08 RRO TEH (Oil Range) AMOUNT: 4675.555

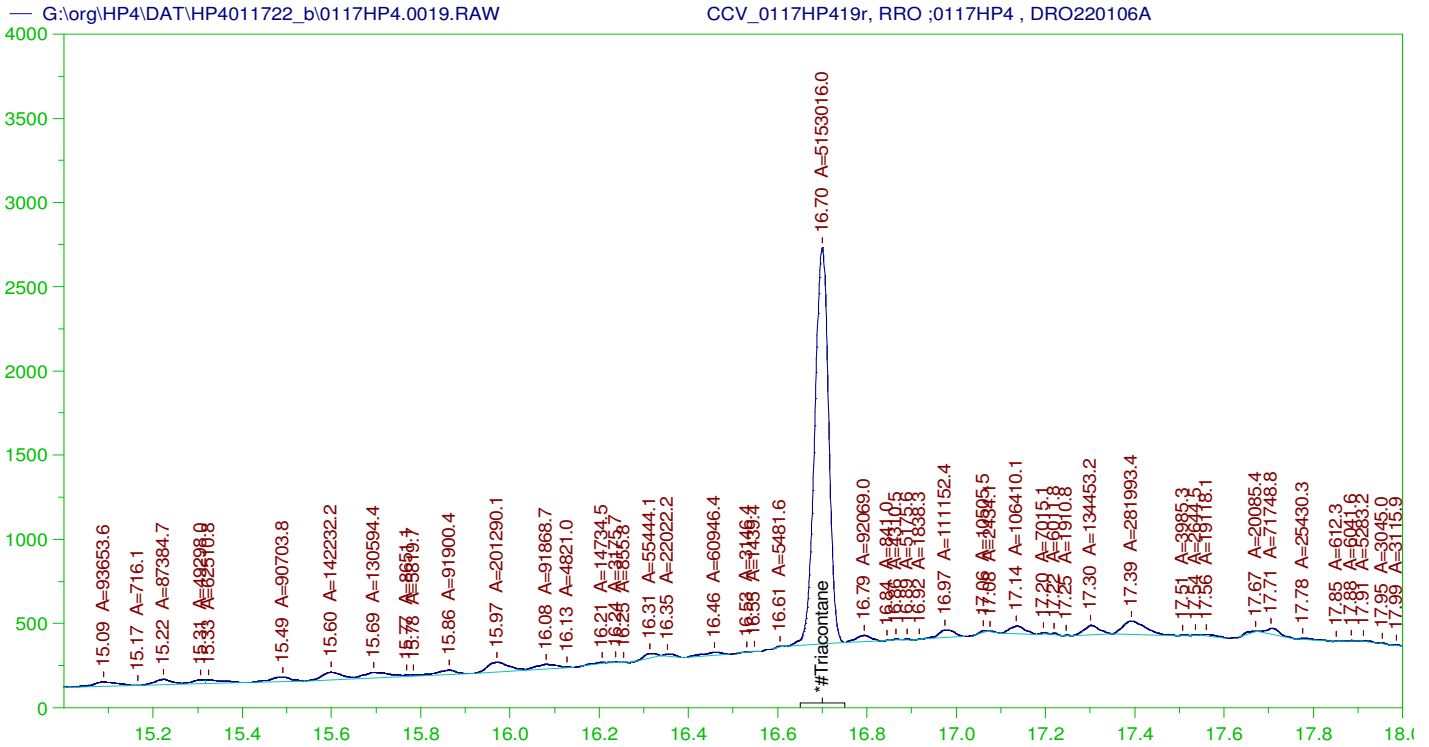
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0019.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.699	200.	322.977	161.49	75-125

AMN 02/01/2022



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0117HP419r, RRO ;0117HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0019.RAW  
 Date & Time Acquired: 1/18/2022 3:02:24 AM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.699	500.	206.337	41.27

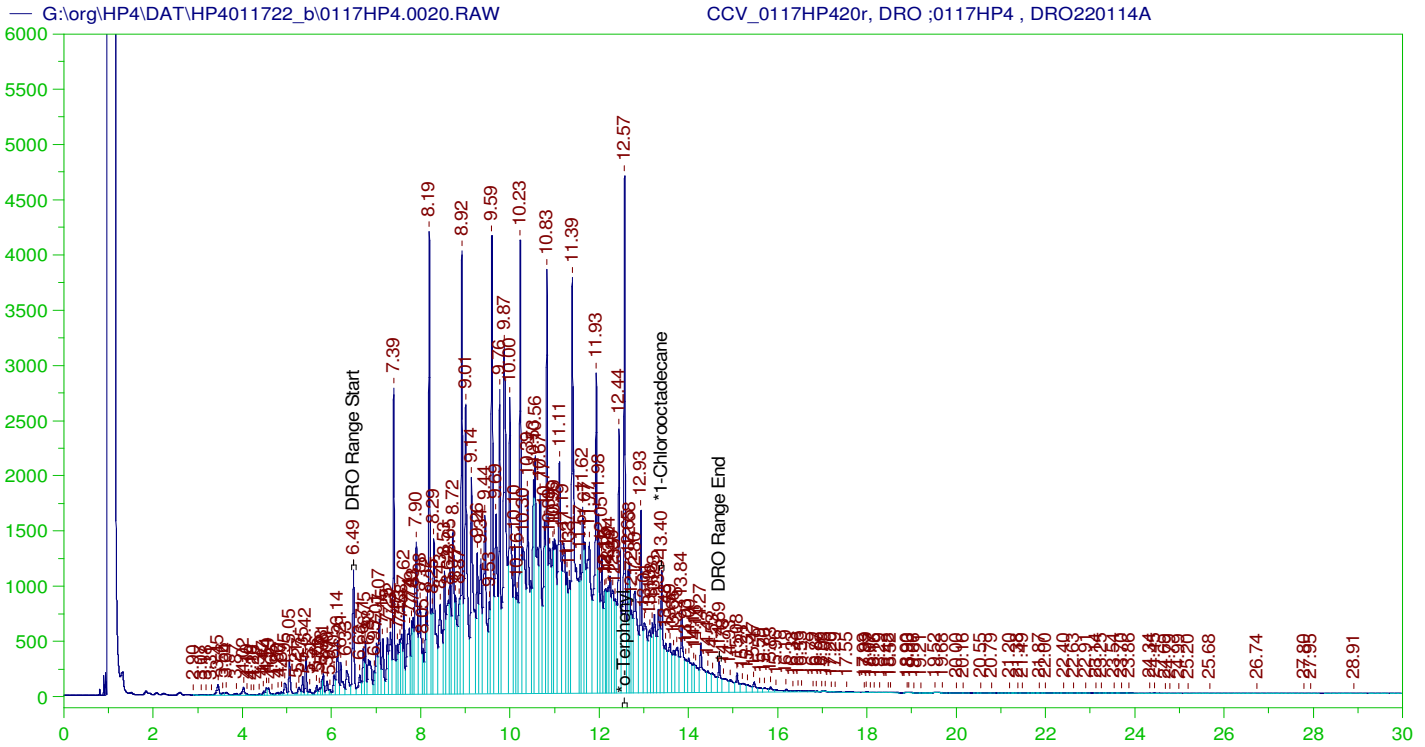
RRO Area:3471182 RRO AMOUNT: 141.5102

**CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0019.RAW**

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.699	200.	206.337	103.17	75-125



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0117HP420r, DRO ;0117HP4 , DRO220114A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0020.RAW  
 Date & Time Acquired: 1/18/2022 3:47:24 AM  
 Method File: G:\Org\HP4\methods\DC\_8015-C24-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.568	200.	371.249	185.62
*1-Chlorooctadecane	13.396	200.	109.951	54.98

DRO Area: 4.241443E+08 DRO Amount: 14439.8  
 TEH Area: 4.39864E+08 TEH Amount: 14974.97

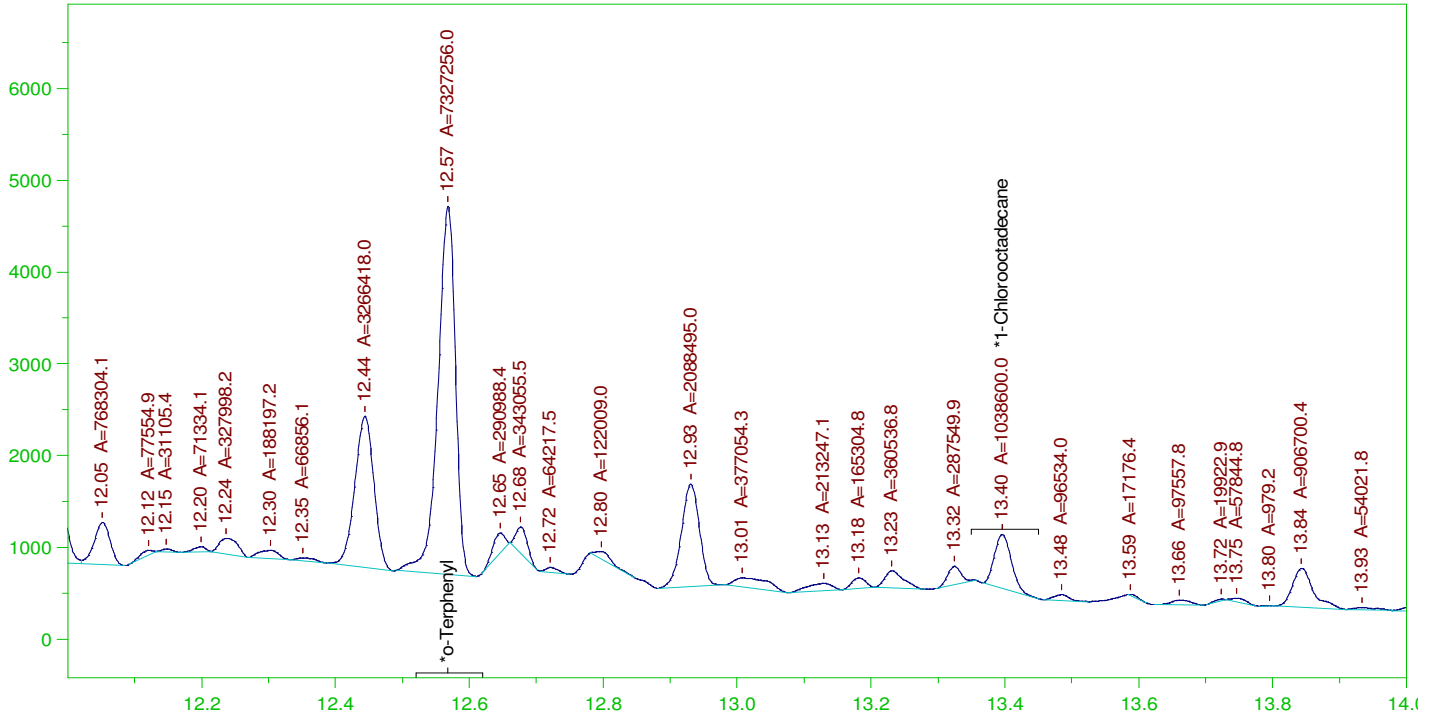
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0020.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	14974.97	99.83	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.568	200.	371.249	185.62	85-115
*1-Chlorooctadecane	13.396	200.	109.951	54.98	85-115

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0020.RAW

CCV\_0117HP420r, DRO ;0117HP4 , DRO220114A



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0117HP420r, DRO ;0117HP4 , DRO220114A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0020.RAW  
 Date & Time Acquired: 1/18/2022 3:47:24 AM  
 Method File: G:\Org\HP4\methods\DS\_8015-C24-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

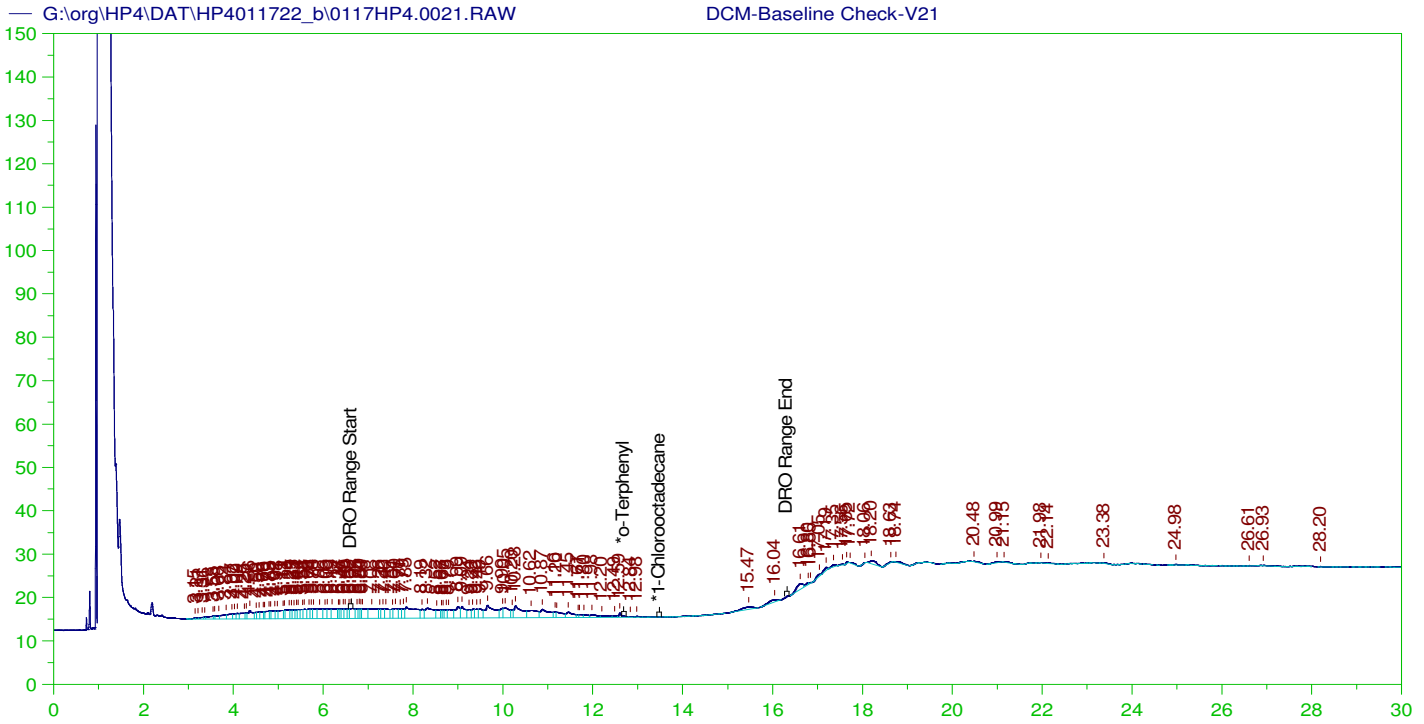
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.568	200.	219.908	109.95
*1-Chlorooctadecane	13.396	200.	31.171	15.59

DRO Area: 1.843761E+08 DRO Amount: 6277.001  
 TEH Area: 1.94109E+08 TEH Amount: 6608.355

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0020.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	6608.36	44.06	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.568	200.	219.908	109.95	85-115
*1-Chlorooctadecane	13.396	200.	31.171	15.59	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V21  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0021.RAW  
 Date & Time Acquired: 1/18/2022 4:32:27 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.903	200.	.	-
*1-Chlorooctadecane	29.903	200.	.	-

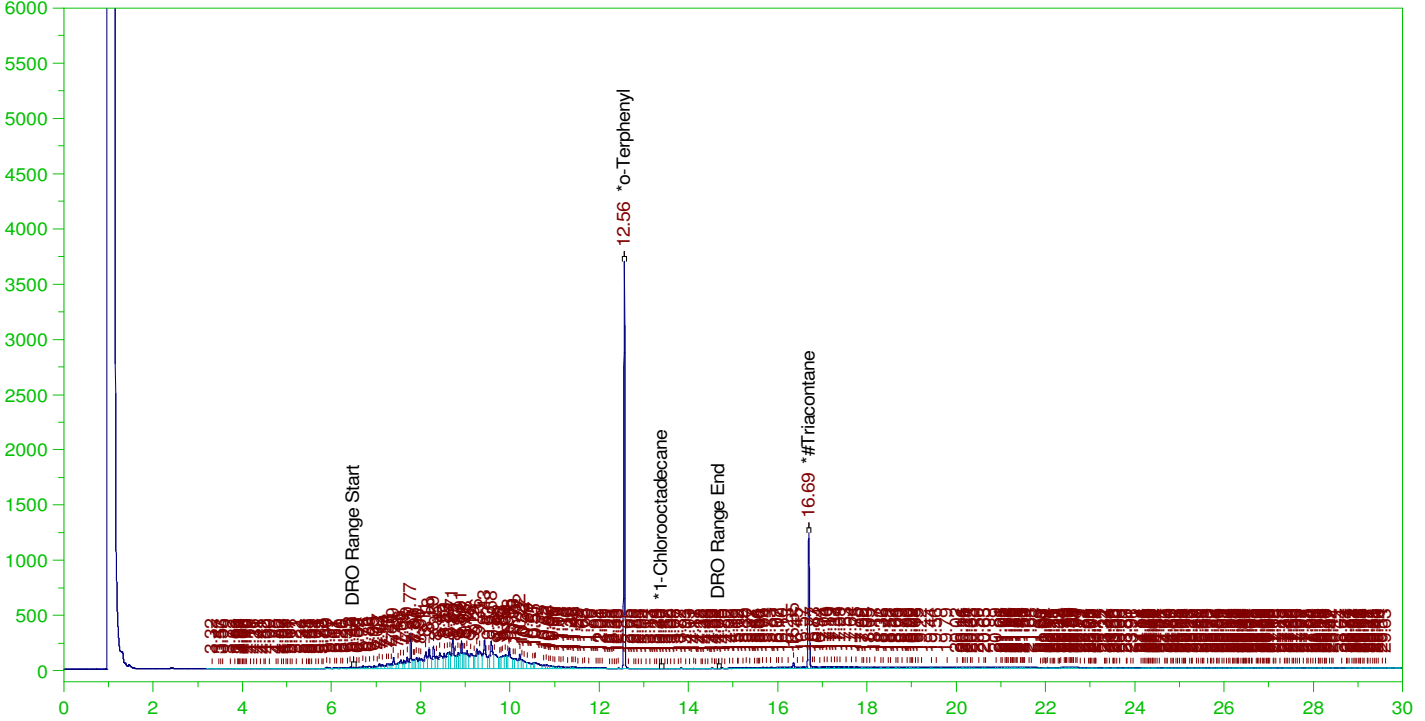
DRO Area: 623770.3 DRO Amount: 21.23598  
 TEH Area: 1007103 TEH Amount: 34.28637

ERH2385 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0022.RAW

B22010643-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010643-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0022.RAW  
 Date & Time Acquired: 1/18/2022 5:17:29 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-011722-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.561	.19	.184	96.74	-
*1-Chlorooctadecane	13.399	.19	.	.02	-
*#Triacontane	16.693	.19	.102	53.66	-

DRO Area: 2.451517E+07 DRO Amount: 0.7948647  
 TEH Area: 2.971065E+07 TEH Amount: 0.9633197

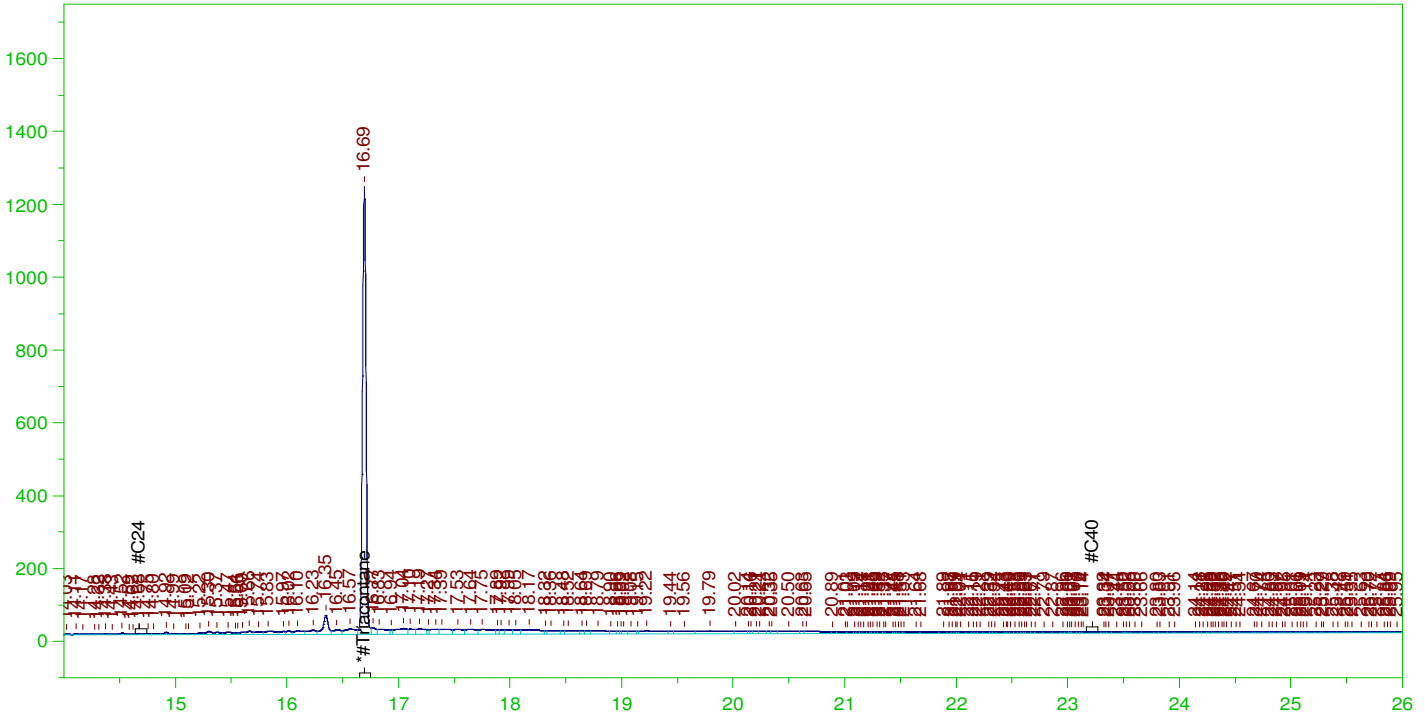


ERH2385 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0022.RAW

B22010643-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010643-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0022.RAW  
 Date & Time Acquired: 1/18/2022 5:17:29 AM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-011722-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF-SAMPLE.CAL  
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.64 to 23.27

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.693	.476	.102	21.47

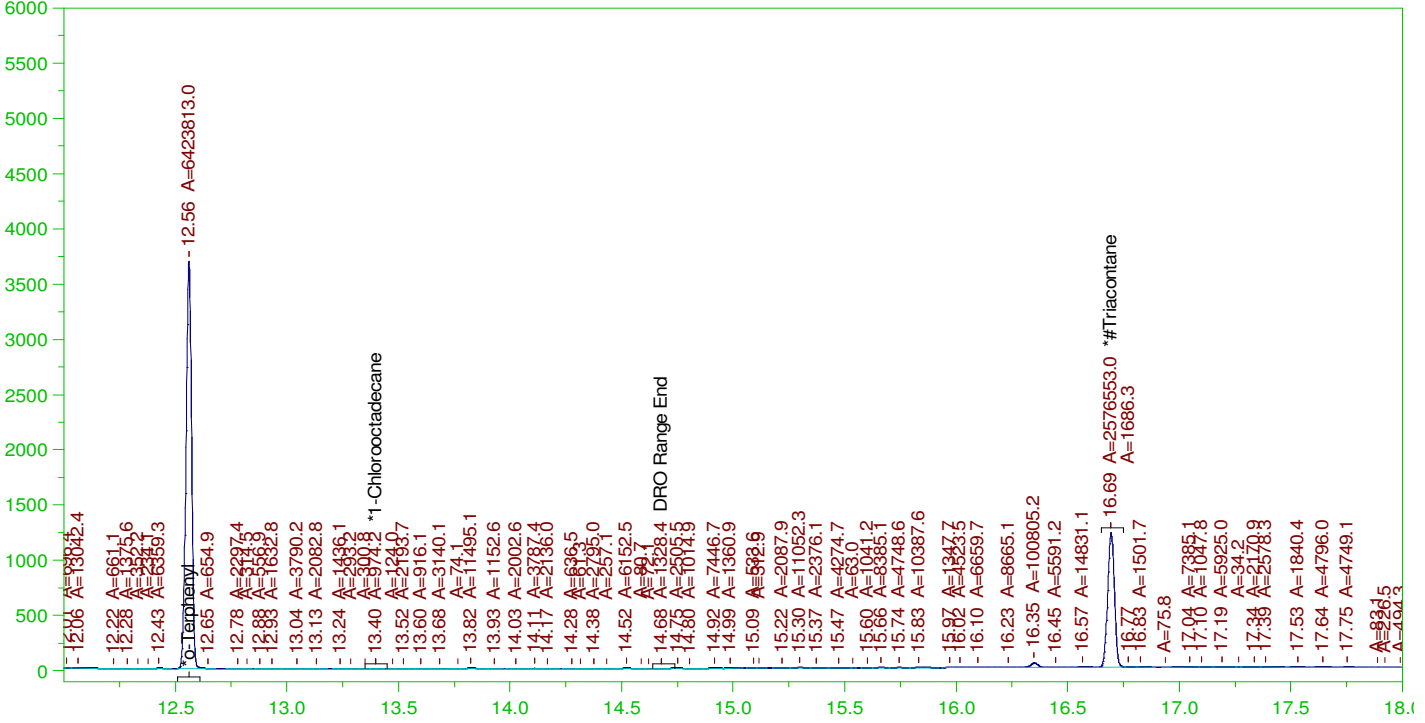
RRO Area:3950170 RRO AMOUNT: 0.1533687

ERH2385 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0022.RAW

B22010643-001D ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010643-001D ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0022.RAW  
 Date & Time Acquired: 1/18/2022 5:17:29 AM  
 Method File: G:\Org\HP4\methods\DS\_8015-T-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.561	.19	.184	96.4	-
*1-Chlorooctadecane	13.399	.19	.	.01	-
*#Triacontane	16.693	.19	.098	51.59	-

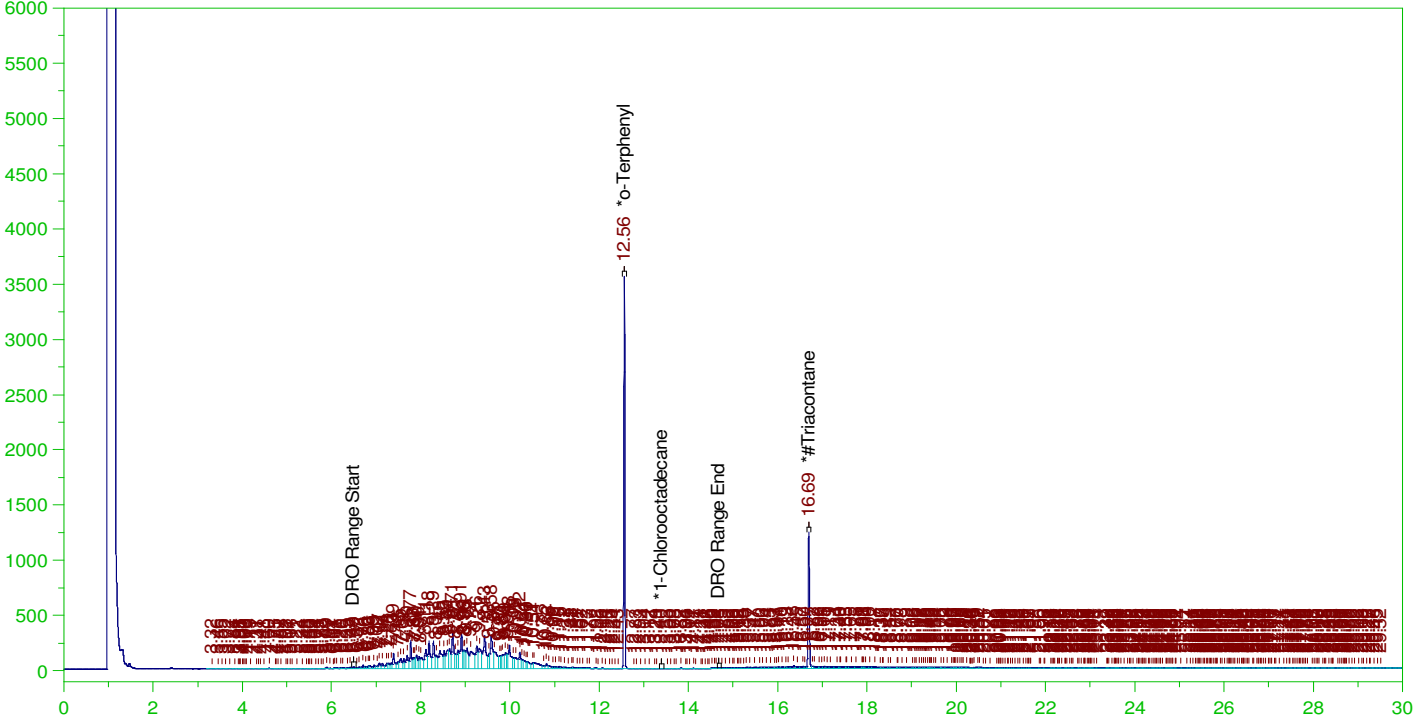
DRO Area: 2.295231E+07 DRO Amount: 0.7441916  
 TEH Area: 2.351032E+07 TEH Amount: 0.762284

ERH2387 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0023.RAW

B22010643-002B ;0117HP4, \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: B22010643-002B ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0023.RAW  
 Date & Time Acquired: 1/18/2022 6:02:29 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-011722-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.561	.19	.177	92.73	-
*1-Chlorooctadecane	13.399	.19	.	.06	-
*#Triacontane	16.693	.19	.104	54.79	-

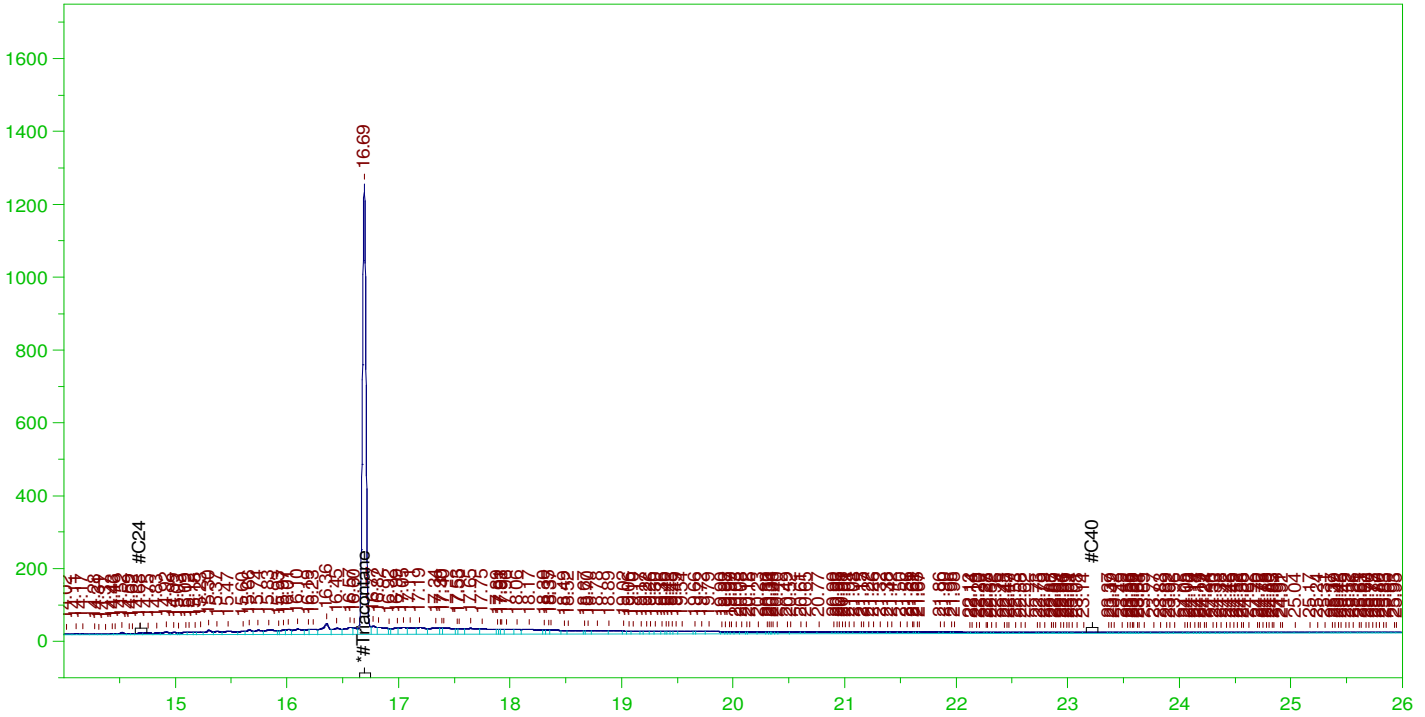
DRO Area: 2.76582E+07 DRO Amount: 0.8967723  
 TEH Area: 3.345645E+07 TEH Amount: 1.084771

ERH2387 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0023.RAW

B22010643-002B ;0117HP4, \$HC-8015-DRO-W, SGT



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010643-002B ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0023.RAW  
 Date & Time Acquired: 1/18/2022 6:02:29 AM  
 Method File: G:\Org\HP4\Methods\DR\_ORO-011722-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF-SAMPLE.CAL  
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 14.64 to 23.27

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.693	.476	.104	21.92

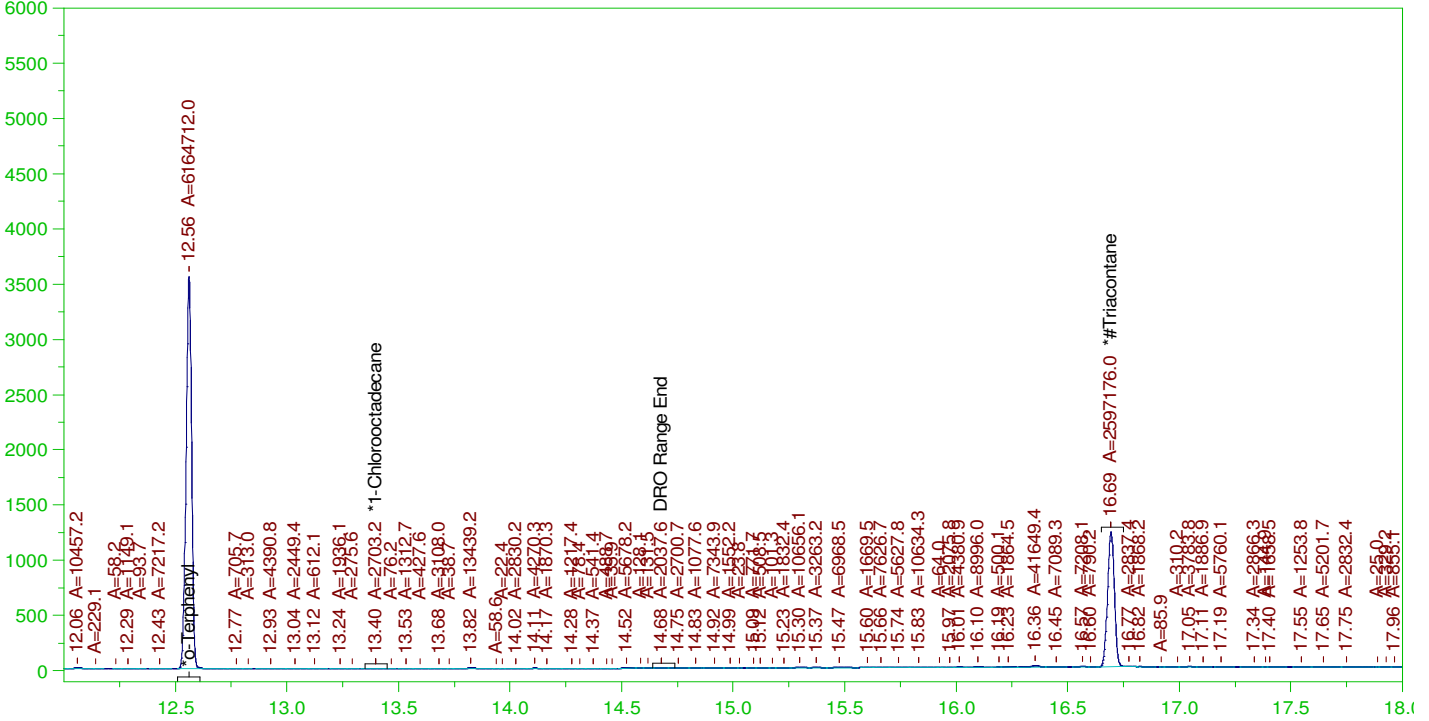
RRO Area:4702686 RRO AMOUNT: 0.1825858

ERH2387 (RHMW2254-01 Bailer)

Batch ID: 162891

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0023.RAW

B22010643-002B ;0117HP4 , \$HC-8015-DRO-W, SGT



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

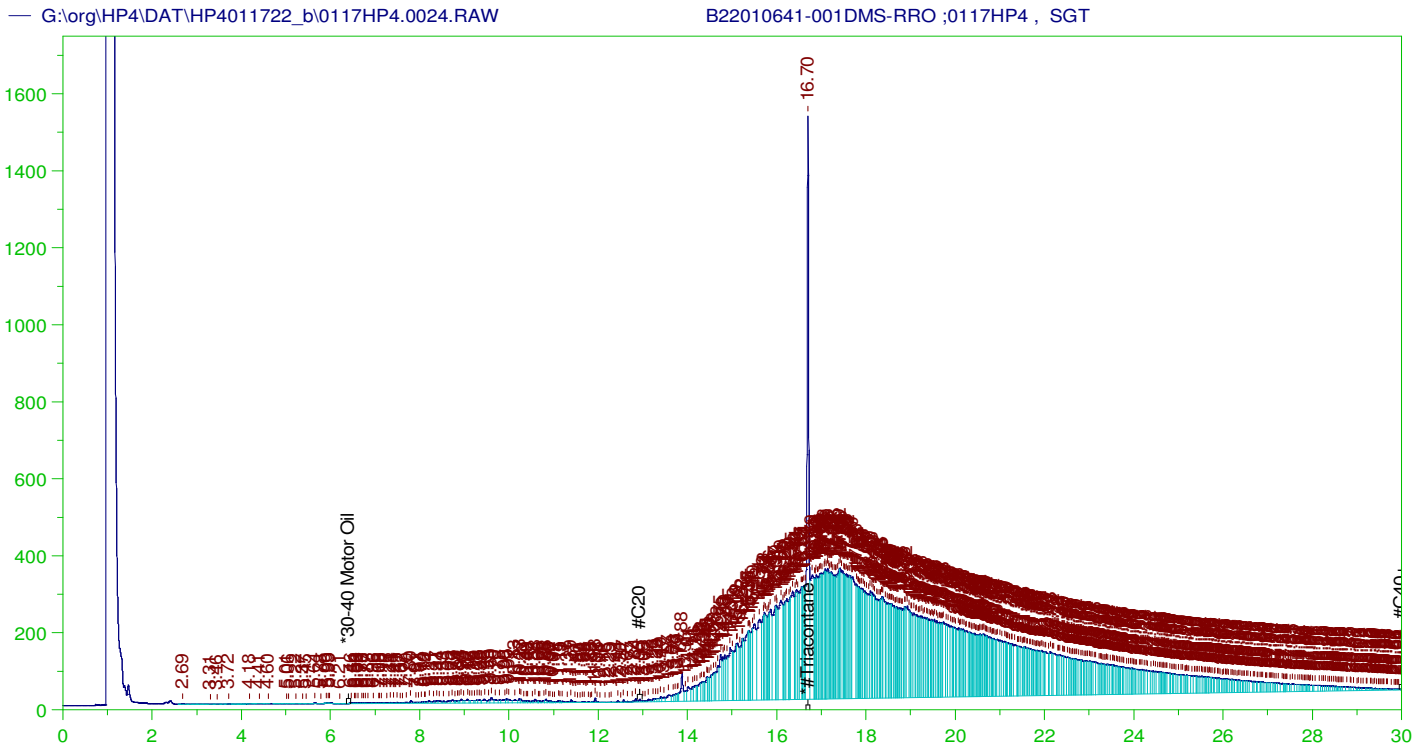
Sample Name: B22010643-002B ;0117HP4 , \$HC-8015-DRO-W, SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0023.RAW  
 Date & Time Acquired: 1/18/2022 6:02:29 AM  
 Method File: G:\Org\HP4\methods\DS\_8015-T-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO2111020M-C24-TRI.CAL  
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.561	.19	.176	92.51	-
*1-Chlorooctadecane	13.399	.19	.	.04	-
*#Triacontane	16.693	.19	.099	52.	-

DRO Area: 2.664213E+07 DRO Amount: 0.8638278  
 TEH Area: 2.716883E+07 TEH Amount: 0.8809053



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

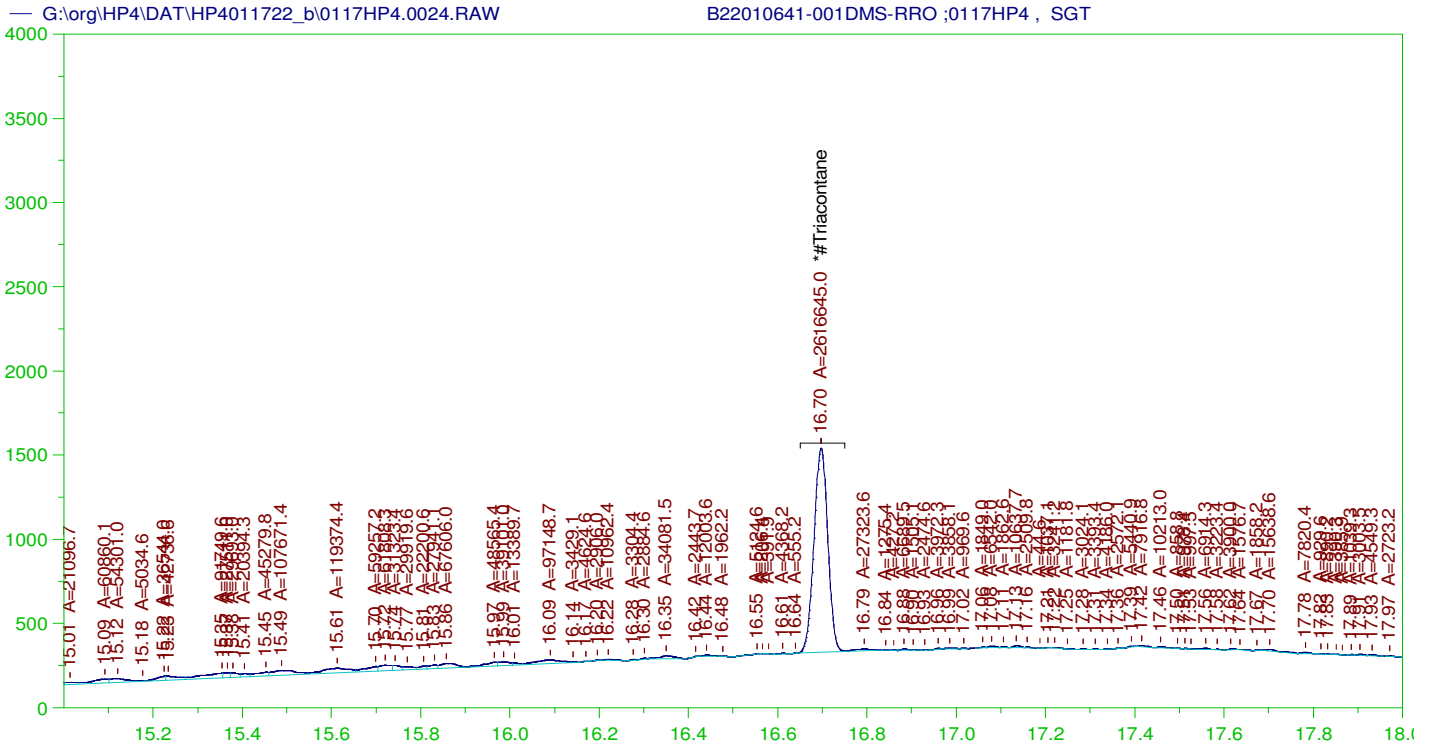
Sample Name: B22010641-001DMS-RRO ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0024.RAW  
 Date & Time Acquired: 1/18/2022 6:47:30 AM  
 Method File: G:\Org\HP4\Methods\D3\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.697	.476	.174	36.5	-

~~RRO~~ TEH (Oil Range) Area:1.146099E+08 ~~RRO~~ TEH (Oil Range) AMOUNT: 4.449827

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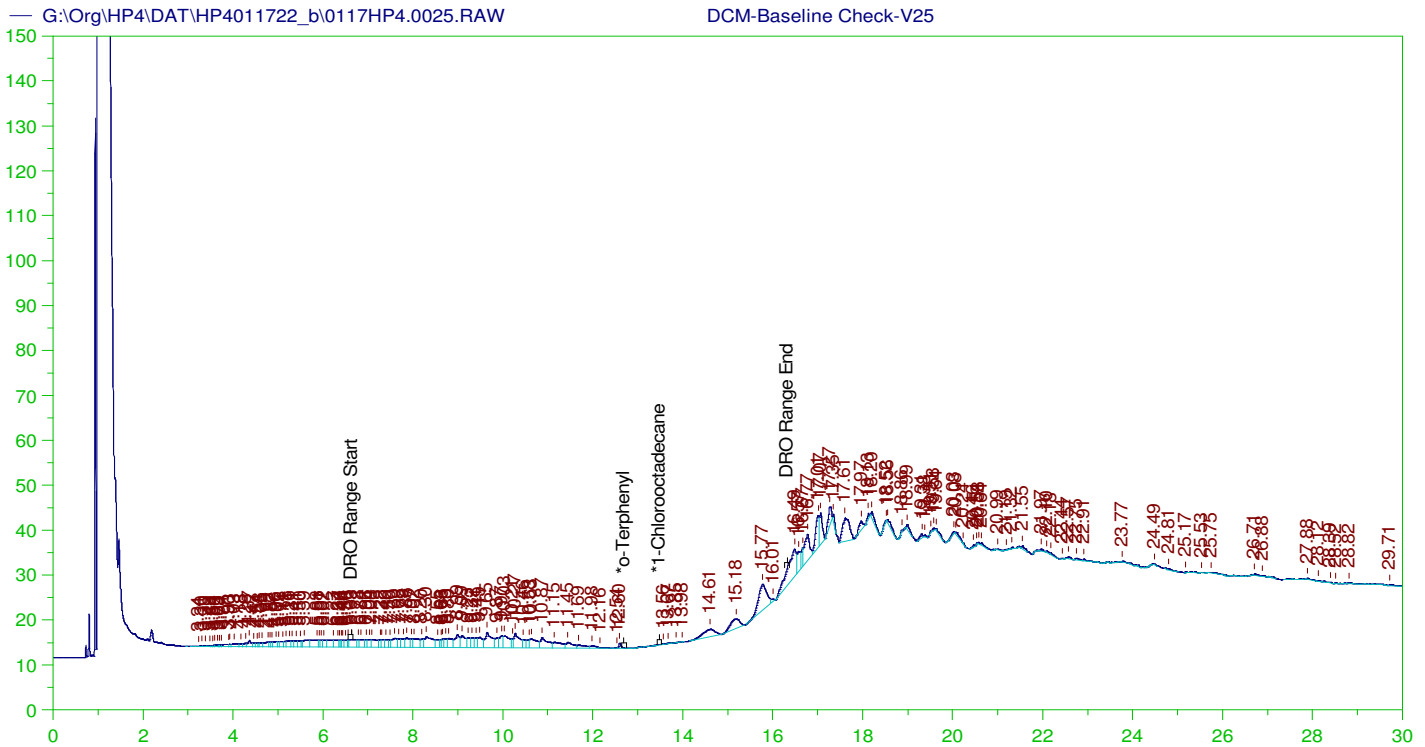
**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: B22010641-001DMS-RRO ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0024.RAW  
 Date & Time Acquired: 1/18/2022 6:47:30 AM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.697	.476	.1	20.96 -

RRO Area:2595832 RRO AMOUNT: 0.1007854



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V25  
 Raw File: G:\Org\HP4\DAT\HP4011722\_b\0117HP4.0025.RAW  
 Date & Time Acquired: 1/18/2022 7:32:15 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.56 to 16.37

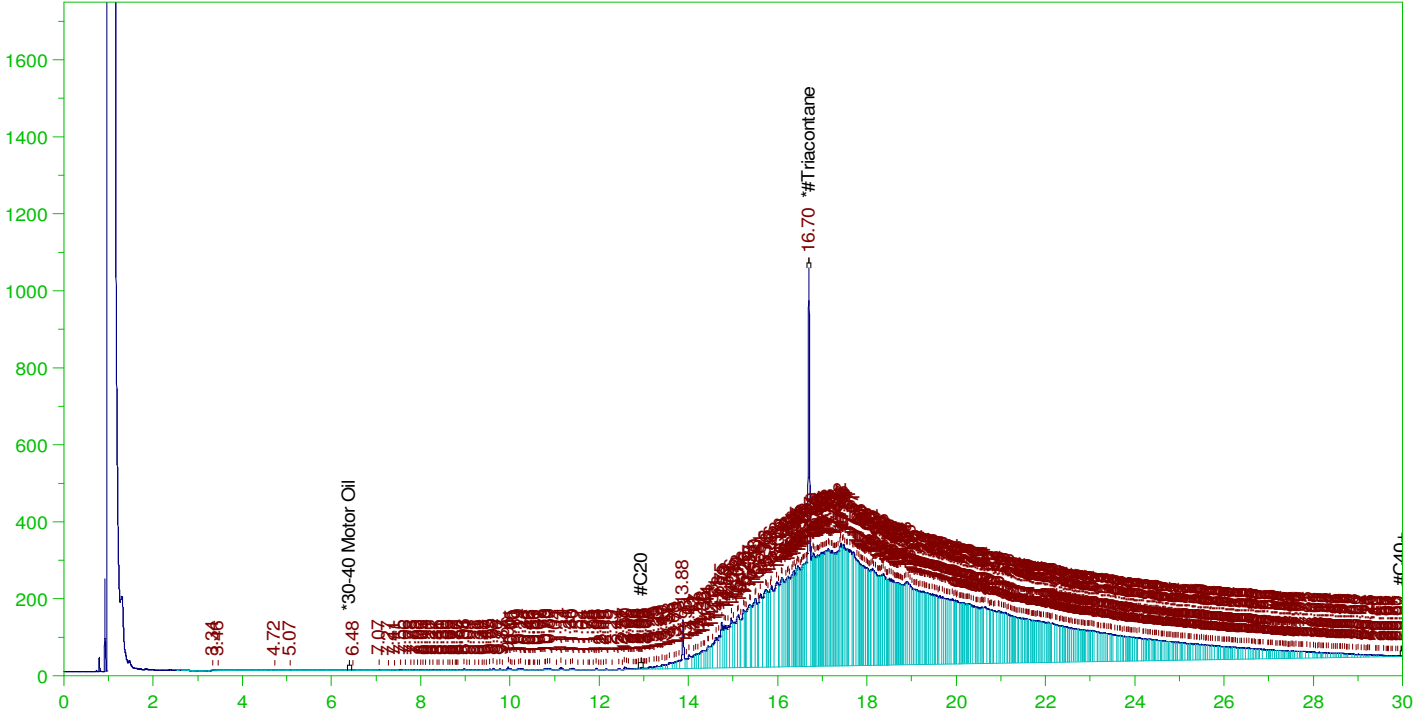
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.922	200.	.	-
*1-Chlorooctadecane	29.922	200.	.	-

DRO Area:734445.1 DRO Amount: 25.00385  
 TEH Area:1380130 TEH Amount: 46.98592



G:\org\HP4\DAT\HP4011722\_b\0117HP4.0026.RAW

LCSD-RRO-162891 ;0117HP4 , SGT



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

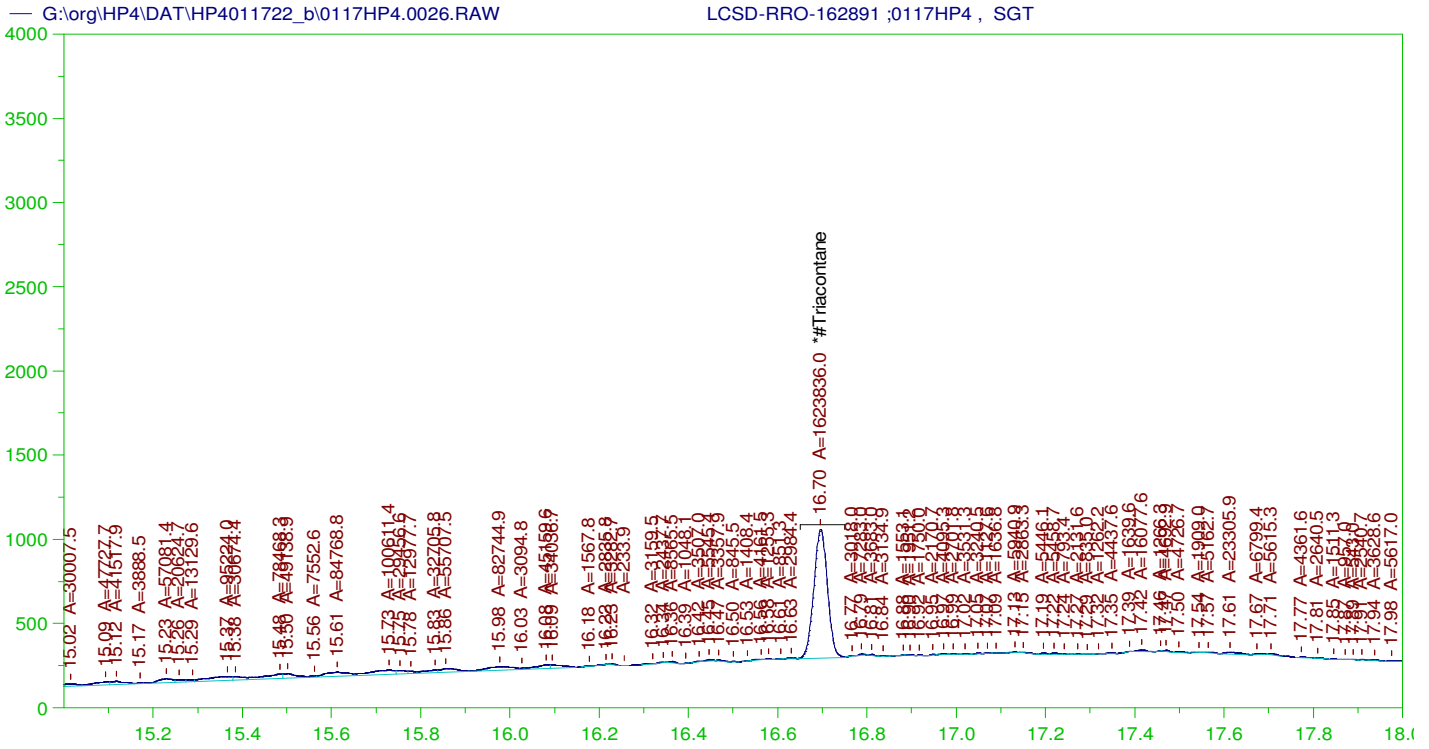
Sample Name: LCSD-RRO-162891 ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0026.RAW  
 Date & Time Acquired: 1/18/2022 8:17:01 AM  
 Method File: G:\Org\HP4\Methods\D3\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.696	.5	.134	26.83

RRO TEH (Oil Range) Area:1.043531E+08 RRO TEH (Oil Range) AMOUNT: 4.254177

AMN 02/01/2022



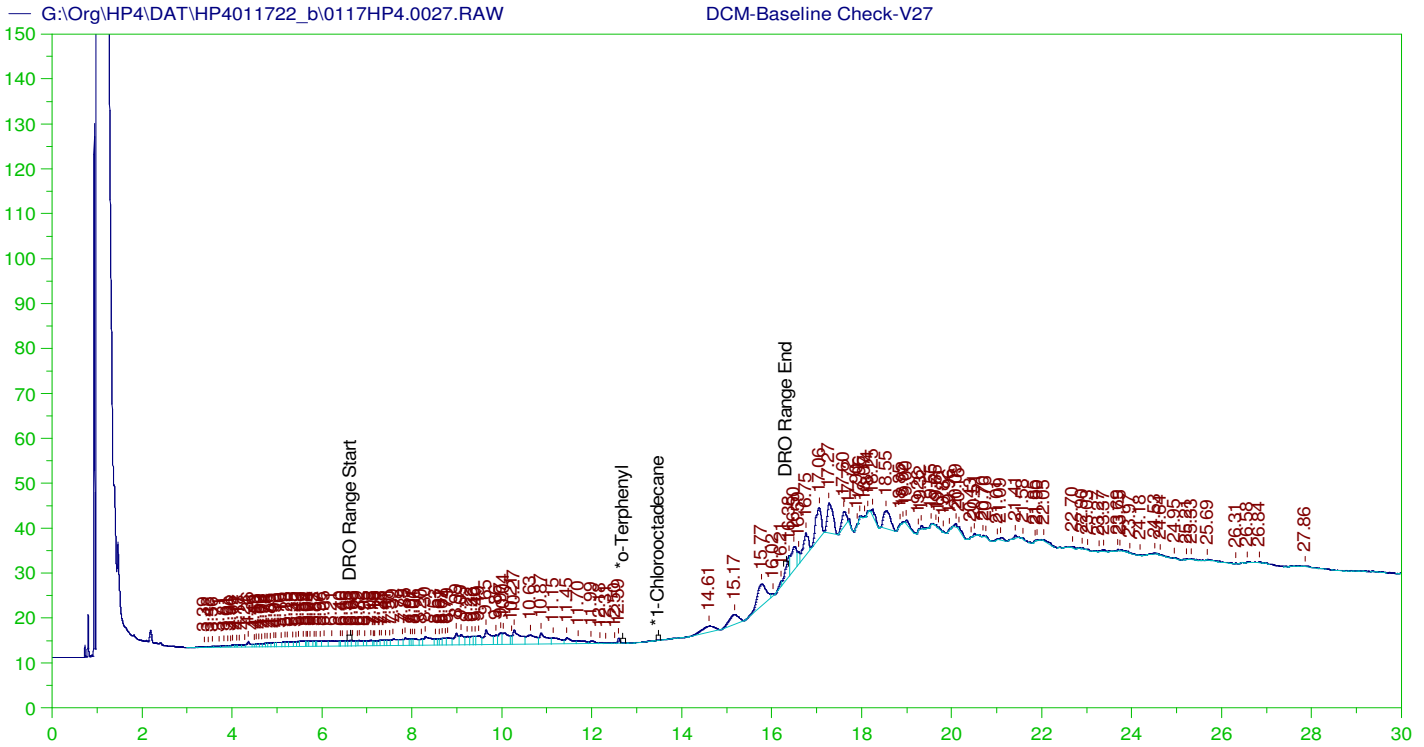
**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: LCSD-RRO-162891 ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0026.RAW  
 Date & Time Acquired: 1/18/2022 8:17:01 AM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.696	.5	.065	13. -

RRO Area:2357474 RRO AMOUNT: 9.610745E-02



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: DCM-Baseline Check-V27  
 Raw File: G:\Org\HP4\DAT\HP4011722\_b\0117HP4.0027.RAW  
 Date & Time Acquired: 1/18/2022 9:01:53 AM  
 Method File: G:\Org\HP4\methods\DR\_8015-OH-LEXP.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OH.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

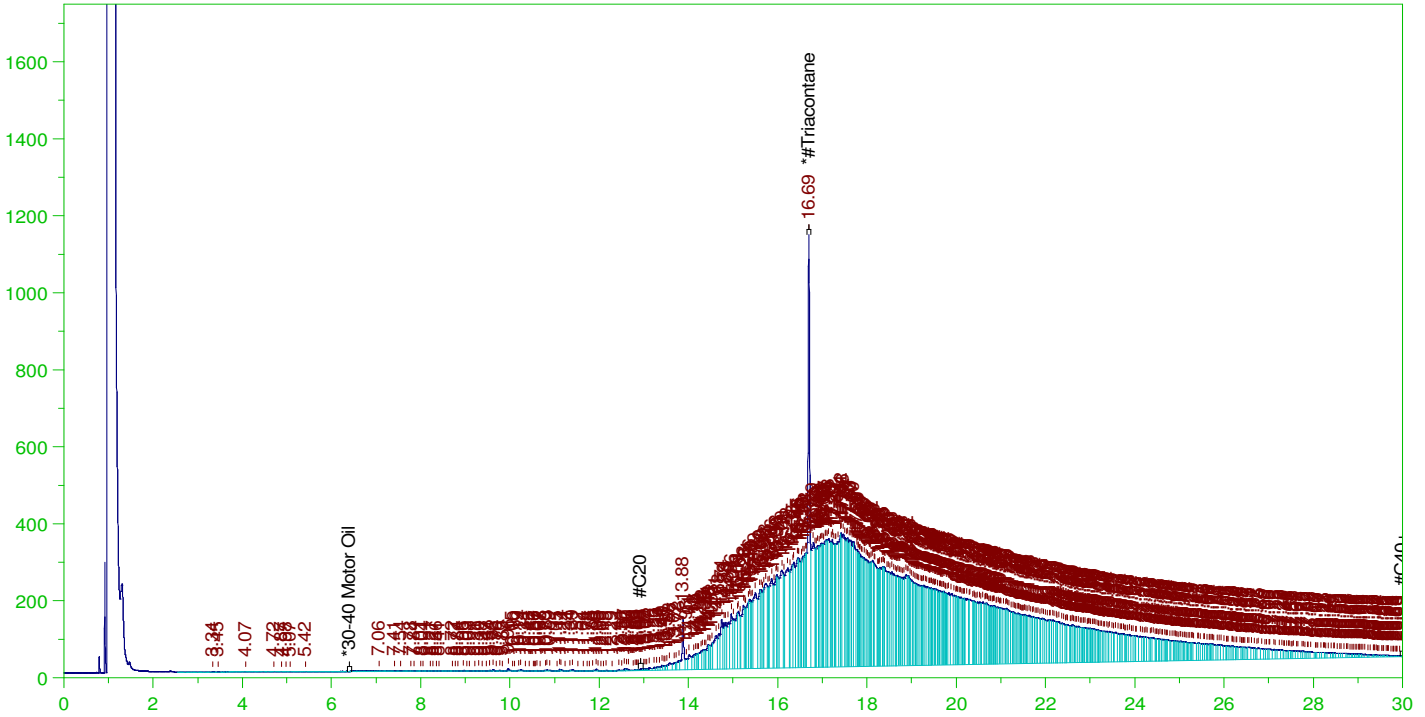
Mean RF for TEH: 29373.28  
 Rt range for Diesel Range Organics: 6.56 to 16.37

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	29.963	200.	.	-
*1-Chlorooctadecane	29.963	200.	.	-

DRO Area:659989.4 DRO Amount: 22.46904  
 TEH Area:1230029 TEH Amount: 41.87579

G:\org\HP4\DAT\HP4011722\_b\0117HP4.0028.RAW

LCS-RRO-162891 ;0117HP4 , SGT



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

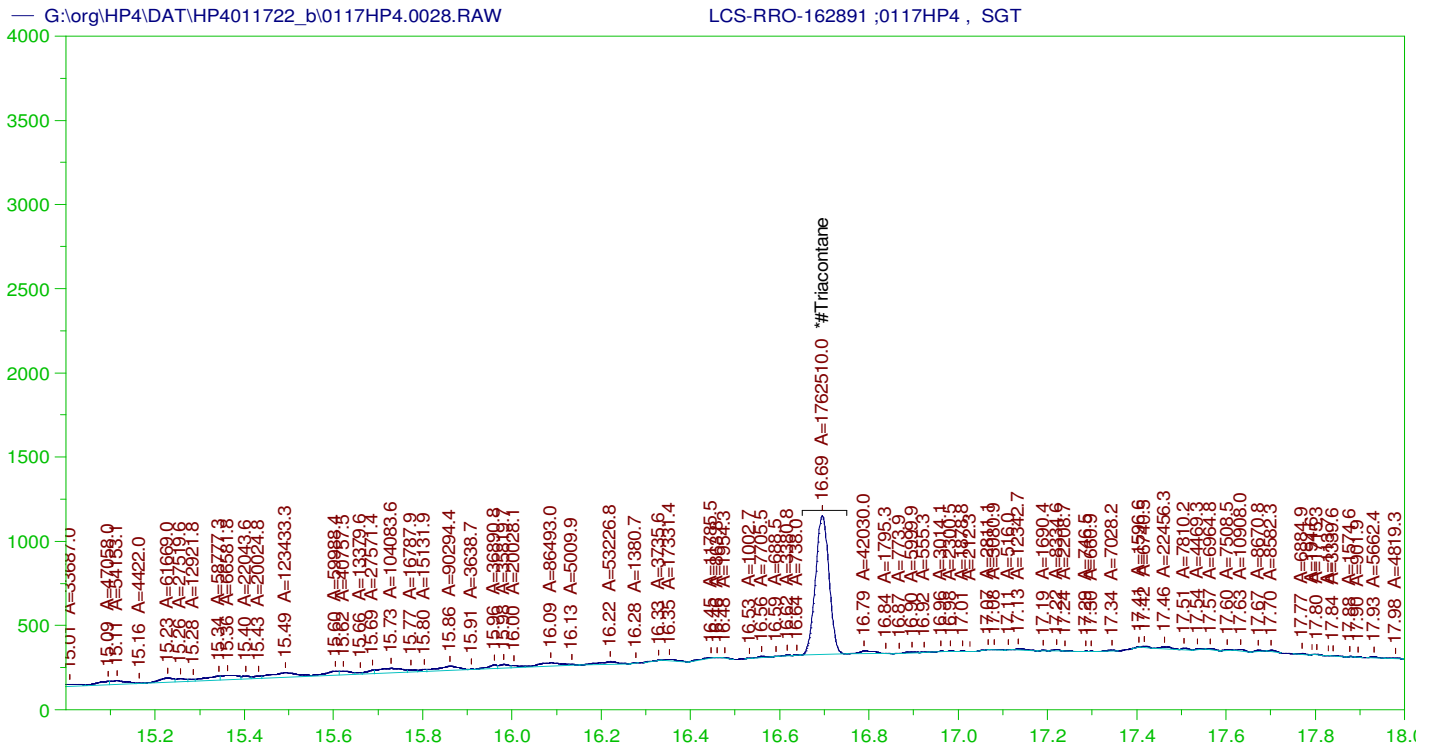
Sample Name: LCS-RRO-162891 ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0028.RAW  
 Date & Time Acquired: 1/18/2022 9:47:03 AM  
 Method File: G:\Org\HP4\Methods\D3\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.695	.5	.146	29.25

RRO TEH (Oil Range) Area:1.145553E+08 RRO TEH (Oil Range) AMOUNT: 4.67009

AMN 02/01/2022



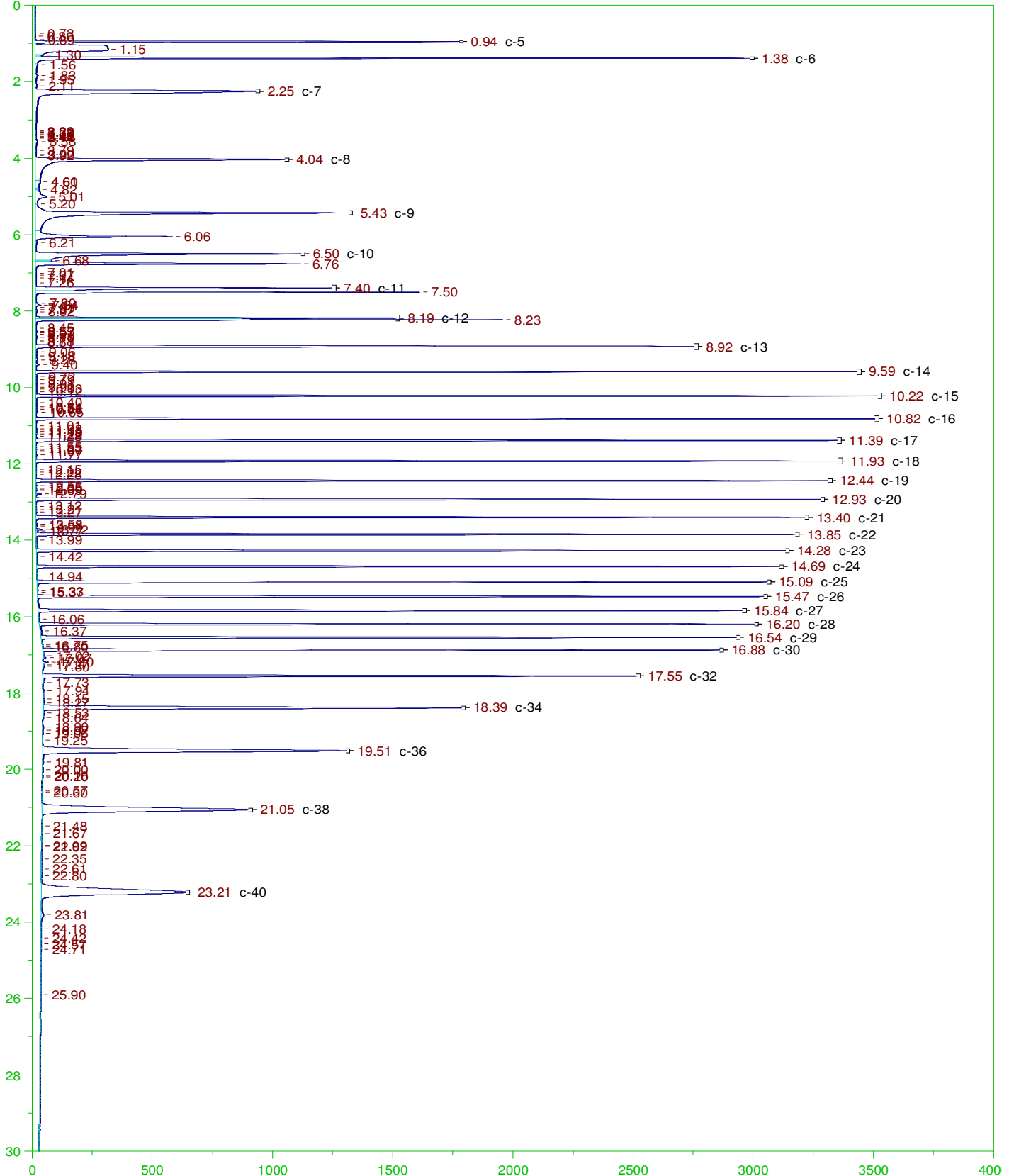
**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

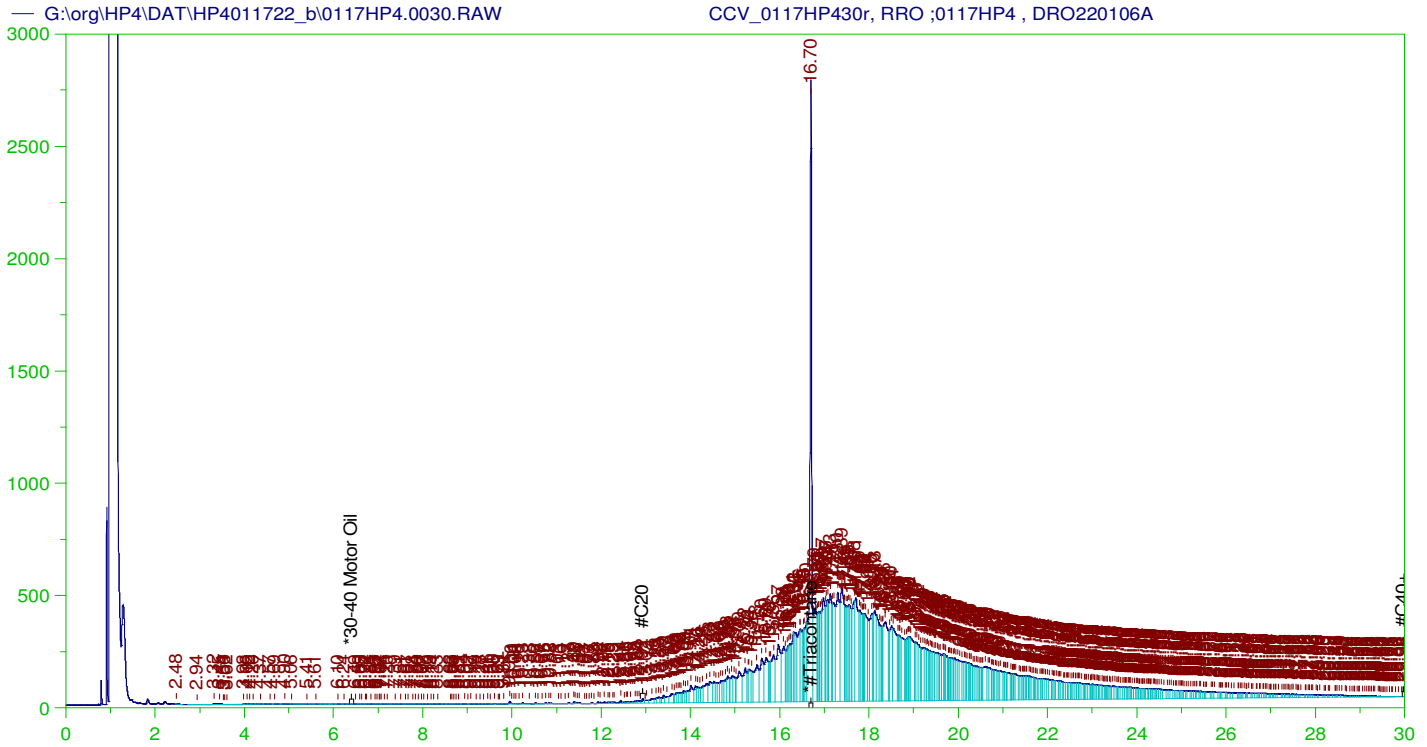
Sample Name: LCS-RRO-162891 ;0117HP4 , SGT  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0028.RAW  
 Date & Time Acquired: 1/18/2022 9:47:03 AM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1000 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane_____	16.695	.5	.071	14.11 -

RRO Area:2681201 RRO AMOUNT: 0.1093049





**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0117HP430r, RRO ;0117HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0030.RAW  
 Date & Time Acquired: 1/18/2022 12:10:10 PM  
 Method File: G:\Org\HP4\Methods\DC\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for ~~Residual~~ TEH (Oil Range) Organics Calculations: 24529.56  
 Rt range for ~~Residual~~ TEH (Oil Range) Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.697	500.	331.346	66.27	-

RRO TEH (Oil Range) Area:1.216331E+08 RRO TEH (Oil Range) AMOUNT: 4958.635

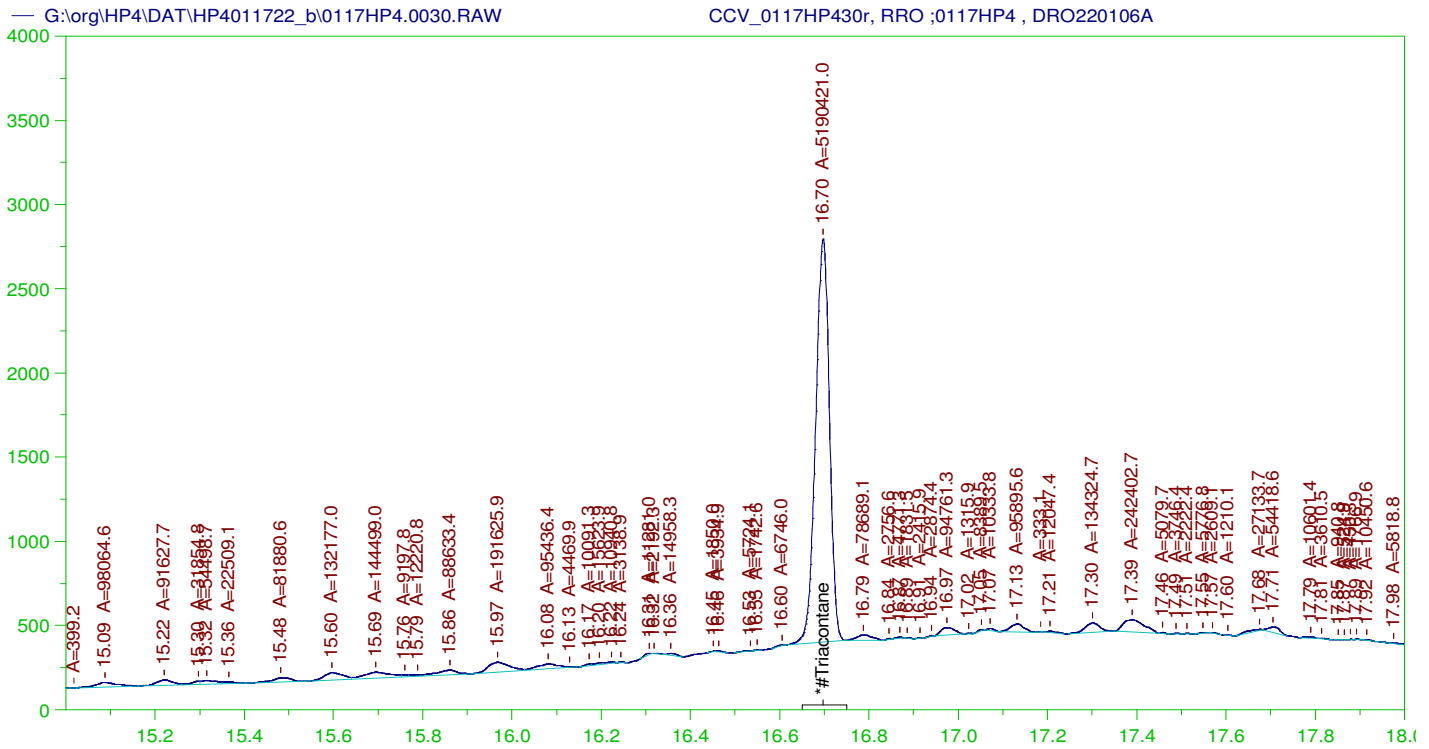
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0030.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.697	200.	331.346	165.67	75-125

AMN 02/01/2022



**RESIDUAL RANGE ORGANICS CHROMATOGRAM**

Sample Name: CCV\_0117HP430r, RRO ;0117HP4 , DRO220106A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0030.RAW  
 Date & Time Acquired: 1/18/2022 12:10:10 PM  
 Method File: G:\Org\HP4\Methods\DS\_ORO-T-AF-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_ORO211007AF.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 24529.56  
 Rt range for Residual Range Organics: 12.88 to 30.05

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*#Triacontane	16.697	500.	207.835	41.57

RRO Area:3318724 RRO AMOUNT: 135.2948

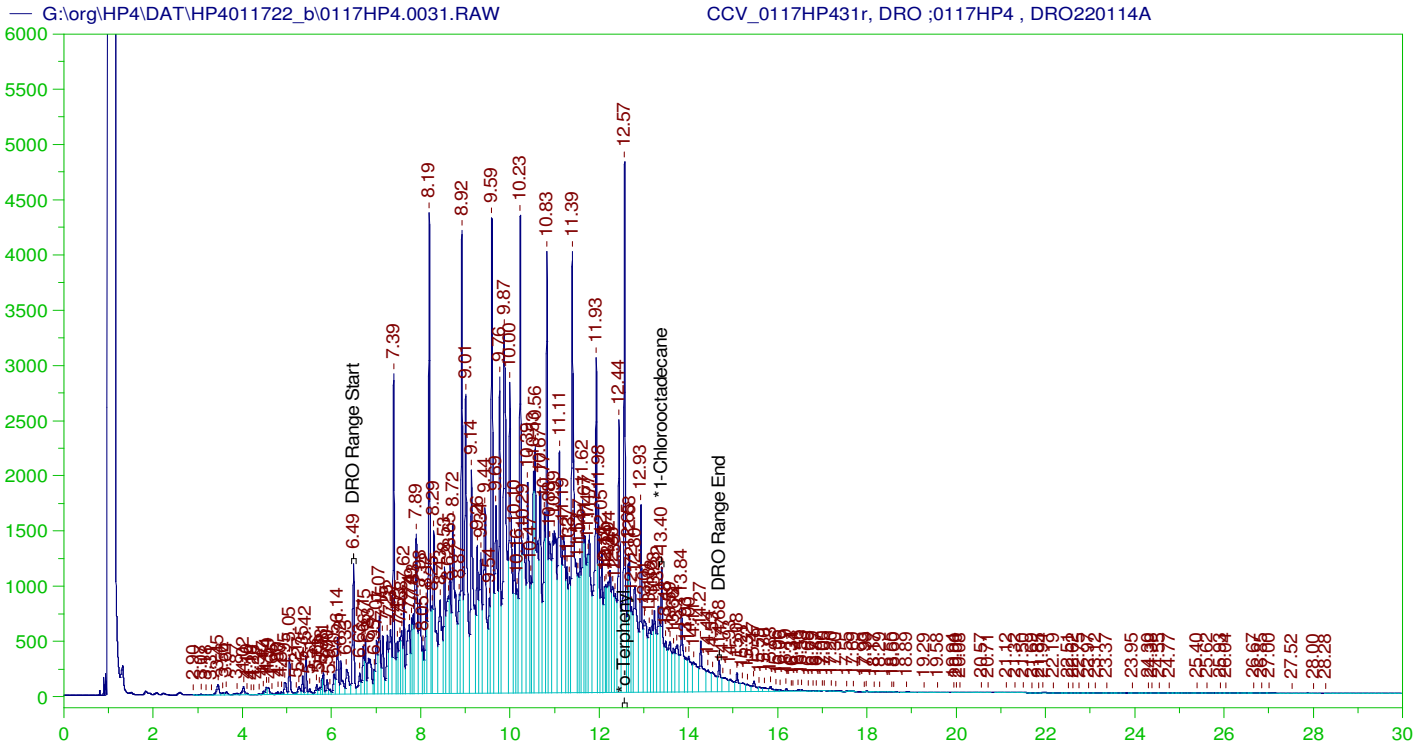
CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0030.RAW

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

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*#Triacontane	16.697	200.	207.835	103.92	75-125





**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0117HP431r, DRO ;0117HP4 , DRO220114A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0031.RAW  
 Date & Time Acquired: 1/18/2022 12:54:53 PM  
 Method File: G:\Org\HP4\methods\DC\_8015-C24-OM-L%.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OM-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

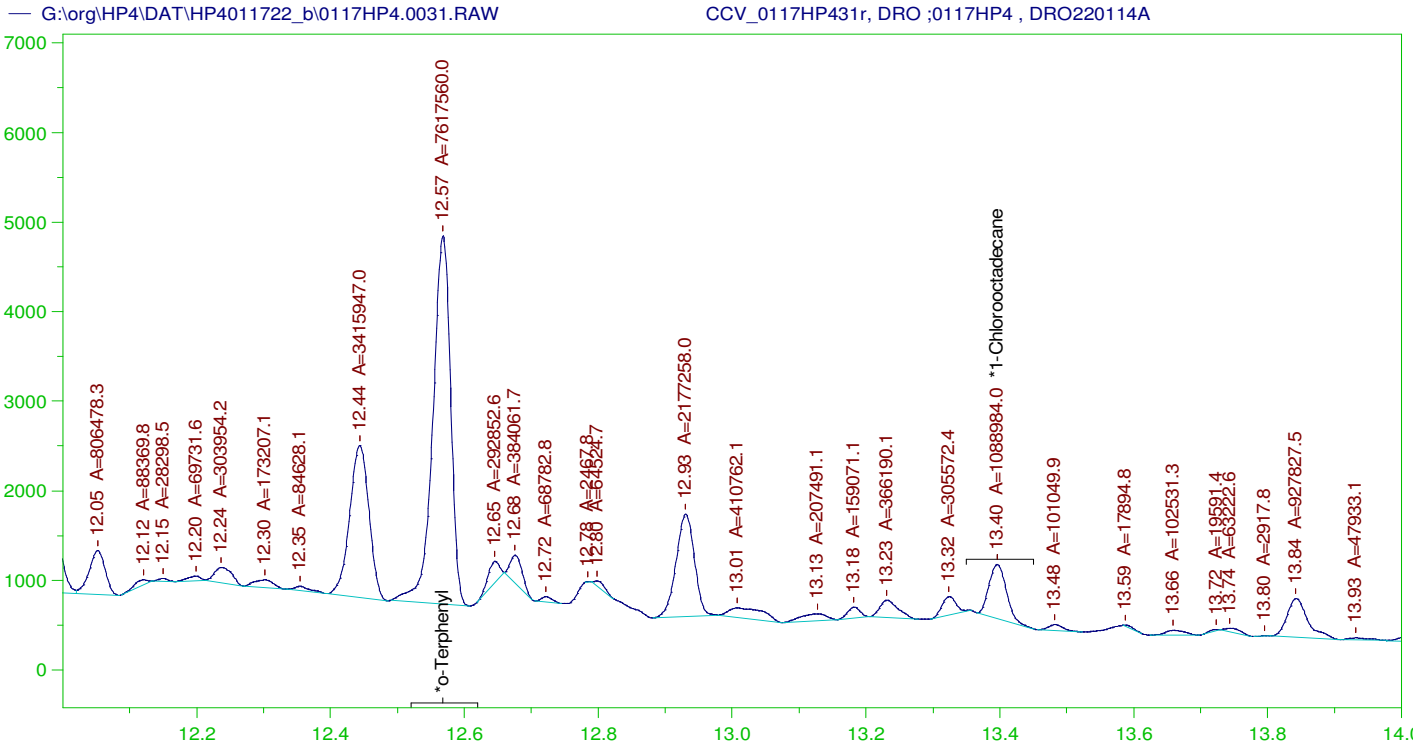
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.568	200.	383.867	191.93
*1-Chlorooctadecane	13.396	200.	114.473	57.24

DRO Area: 4.413829E+08 DRO Amount: 15026.68  
 TEH Area: 4.576308E+08 TEH Amount: 15579.83

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0031.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	15579.83	103.87	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.568	200.	383.867	191.93	85-115
*1-Chlorooctadecane	13.396	200.	114.473	57.24	85-115



**DIESEL RANGE ORGANICS CHROMATOGRAM REPORT**

Sample Name: CCV\_0117HP431r, DRO ;0117HP4 , DRO220114A  
 Raw File: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0031.RAW  
 Date & Time Acquired: 1/18/2022 12:54:53 PM  
 Method File: G:\Org\HP4\methods\DS\_8015-C24-OM-L#.met  
 Calibration File: G:\Org\HP4\Cals\SW8015C\_DRO211102OM-C24.CAL  
 Sample Weight: 1 Dilution: 1 S.A.: 1

Mean RF for TEH: 29373.28

Rt range for Diesel Range Organics: 6.45 to 14.74

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	12.568	200.	228.62	114.31
*1-Chlorooctadecane	13.396	200.	32.683	16.34

DRO Area: 1.928026E+08 DRO Amount: 6563.877  
 TEH Area: 2.030472E+08 TEH Amount: 6912.649

CONTINUING CALIBRATION REPORT: G:\org\HP4\DAT\HP4011722\_b\0117HP4.0031.RAW

COMPOUND	ACTUAL (NG)	MEASURED (NG)	%RECOVERY	LIMITS
TOTAL DRO	15000.	6912.65	46.08	85-115

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	LIMITS
*o-Terphenyl	12.568	200.	228.62	114.31	85-115
*1-Chlorooctadecane	13.396	200.	32.683	16.34	85-115

Write Sequence	Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manual Integrations
	G:\org\HP4\DAT\HP4011422_b\0114HP4.01r	DCM-Baseline Check-V01	G:\org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4011422_b\0114HP4.02r	DCM-Baseline Check-V02	G:\org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4011422_b\0114HP4.03r	MARKER_0114HP432r, DRO_0114HP4, DRO211220B	G:\org\HP4\Methods\CSC220114.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4011422_b\0114HP4.04r	CCV_0114HP433r, RRO_0114HP4, DRO220106A	G:\org\HP4\Methods\DC_ORO-T-AE-L%.met G:\org\HP4\Methods\DS_ORO-T-AE-L%.met	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline. Surrogates are integrated using a valley to valley integration using Set Baseline All Valley placed at 16.25 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
	G:\org\HP4\DAT\HP4011422_b\0114HP4.05r	CCV_0114HP434r, DRO_0114HP4, DRO220105B	G:\org\HP4\methods\DC_8015-C24-OL-L%.met G:\org\HP4\methods\DS_8015-C24-OL-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 baseline. Assigned Set Baseline All Valley on at 17.1 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.
	G:\org\HP4\DAT\HP4011422_b\0114HP4.06r	DCM-Baseline Check-V06	G:\org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4011422_b\0114HP4.07r	DCM-Baseline Check-V07	G:\org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4011422_b\0114HP4.08r	LCS-162891_0114HP4,	G:\org\HP4\methods\D3_8015-C24-OL-L%.met G:\org\HP4\methods\DS_8015-C24-OL-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 baseline. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.
	G:\org\HP4\DAT\HP4011422_b\0114HP4.09r	LCS-162891_0114HP4,	G:\org\HP4\methods\D3_8015-C24-OL-L%.met G:\org\HP4\methods\DS_8015-C24-OL-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 baseline. A Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.
	G:\org\HP4\DAT\HP4011422_b\0114HP4.10r	MB-162891_0114HP4,	G:\org\HP4\methods\DR_8015-C24T-OL-L%.met G:\org\HP4\Methods\DR_ORO-S-AE-L%.met G:\org\HP4\methods\DS_8015-T-OL-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 baseline. Assigned Set Baseline All Valley on at 17.08 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes. Set Baseline All Valley on 14.07 minutes and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
	G:\org\HP4\DAT\HP4011422_b\0114HP4.11r	B22010507-001D_0114HP4, \$HC-8015-DRO-W,	G:\org\HP4\methods\DR_8015-C24T-OL-L%.met G:\org\HP4\Methods\DR_ORO-S-AE-L%.met G:\org\HP4\methods\DS_8015-T-OL-L%.met	1060	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the baseline. Assigned Set Baseline All Valley on at 17.08 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes. Set Baseline All Valley on 14.07 minutes and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
	G:\org\HP4\DAT\HP4011422_b\0114HP4.12r	B22010625-001D_0114HP4, \$HC-8015-DRO-W,	G:\org\HP4\methods\D3_8015-C24T-OL-L%.met G:\org\HP4\Methods\DR_ORO-S-AE-L%.met G:\org\HP4\methods\DS_8015-T-OL-L%.met	1060	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the baseline. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes. Set Baseline All Valley on 14.07 minutes and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
	G:\org\HP4\DAT\HP4011422_b\0114HP4.13r	B22010626-001D_0114HP4, \$HC-8015-DRO-W,	G:\org\HP4\methods\D3_8015-C24T-OL-L%.met G:\org\HP4\Methods\DR_ORO-S-AE-L%.met G:\org\HP4\methods\DS_8015-T-OL-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 baseline. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes. Set Baseline All Valley on 14.07 minutes and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
	G:\org\HP4\DAT\HP4011422_b\0114HP4.14r	B22010626-001DMS_0114HP4,	G:\org\HP4\methods\D3_8015-C24-OL-L%.met G:\org\HP4\methods\DS_8015-C24-OL-L%.met	1040	1	1	1	0	The integration of Diesel Range Organics (C10-C24) and Total Extractable Hydrocarbons is the hydrocarbon response with reference to the baseline. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.
	G:\org\HP4\DAT\HP4011422_b\0114HP4.15r	DCM-Baseline Check-V15	G:\org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4011422_b\0114HP4.16r	B22010338-001D_0114HP4, \$HC-8015-DRO-W, rx need rerun due to baseline	G:\org\HP4\methods\DR_8015-C24T-OK-L0.met	1040	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4011422_b\0114HP4.17r	MARKER_0114HP417r, DRO_0114HP4, DRO211220B	G:\org\HP4\Methods\CSC220114.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4011422_b\0114HP4.18r	CCV_0114HP418r, RRO_0114HP4, DRO220106A	G:\org\HP4\Methods\DC_ORO-T-AE-L%.met G:\org\HP4\Methods\DS_ORO-T-AE-L%.met	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline. Surrogates are integrated using a valley to valley integration using Set Baseline All Valley placed at 16.25 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
	G:\org\HP4\DAT\HP4011422_b\0114HP4.19r	CCV_0114HP419r, DRO_0114HP4, DRO220105B	G:\org\HP4\methods\DC_8015-C24-OL-L%.met G:\org\HP4\methods\DS_8015-C24-OL-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 baseline. Assigned Set Baseline All Valley on at 17.1 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.
	G:\org\HP4\DAT\HP4011422_b\0114HP4.20r	DCM-Baseline Check-V20	G:\org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4011422_b\0114HP4.21r	DCM-Baseline Check-V21	G:\org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0	No integrations
	G:\org\HP4\DAT\HP4011422_b\0114HP4.22r	B22010628-001D_0114HP4, \$HC-8015-DRO-W,	G:\org\HP4\methods\DR_8015-C24T-OL-L%.met G:\org\HP4\Methods\DR_ORO-S-AE-L%.met G:\org\HP4\methods\DS_8015-T-OL-L%.met	1060	1	1	1	0	The integration of Diesel Range Organics (C10-C24), C24-C40, and Total Extractable Hydrocarbons (TEH) is the hydrocarbon response with reference to the baseline. Assigned Set Baseline All Valley on at 17.08 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes. Set Baseline All Valley on 14.07 minutes and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.



G:\org\HP4\DAT\HP4011422_b\0114HP4.46r	B22010338-001D_0114HP4 , \$HC-8015-DRO-W, RR	G:\Org\HP4\methods\DR_8015-C24T-OL-L%.met G:\Org\HP4\Methods\DR_ORO-S-AE-L%.met G:\Org\HP4\methods\DS_8015-T-OL-L#.met	1040	1	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 baseline. Assigned Set Baseline All Valley on at 17.06 minutes Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes, Set Baseline All Valley on 14.07 minutes and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
G:\org\HP4\DAT\HP4011422_b\0114HP4.47r	MARKER_0114HP447r, DRO_0114HP4 , DRO211220B	G:\org\HP4\Methods\CSC220114.met	1	1	1	1	1	0	No integrations
G:\org\HP4\DAT\HP4011422_b\0114HP4.48r	CCV_0114HP448r, RRO_0114HP4 , DRO220106A	G:\Org\HP4\Methods\DC_ORO-T-AE-L%.met G:\Org\HP4\Methods\DS_ORO-T-AE-L%.met	1	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline. Surrogates are integrated using a valley to valley integration using Set Baseline All Valley placed at 16.25 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP4\DAT\HP4011422_b\0114HP4.49r	CCV_0114HP449r, DRO_0114HP4 , DRO220105B	G:\Org\HP4\methods\DC_8015-C24-OL-L%.met G:\Org\HP4\methods\DS_8015-C24-OL-L#.met	1	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 baseline. Assigned Set Baseline All Valley on at 17.1 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.

*Ann Nebel*

Digitally signed by  
Ann Nebel  
Date: 2022.02.01 13:31:38 -07:00

Write Sequence	Data File	Sample Name	Method	Weight	Dil Factor	Amt Inj.	IS	Cal ID	Manual Integrations
									Insert Entries(Have the first cell for entries selected)
G:\org\HP4\DAT\HP4011722_b\0117HP4.01r	DCM-Baseline Check-V01		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	1	0 No Integrations
G:\org\HP4\DAT\HP4011722_b\0117HP4.02r	DCM-Baseline Check-V02		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	1	0 No Integrations
G:\org\HP4\DAT\HP4011722_b\0117HP4.03r	MARKER_0117HP403r, DRO_0117HP4, DRO220111A		G:\org\HP4\Methods\CSC220117.met	1	1	1	1	1	0 No Integrations
G:\org\HP4\DAT\HP4011722_b\0117HP4.04r	CCV_0117HP404r, RRO_0117HP4, DRO220106A		G:\Org\HP4\Methods\DC_ORO-T-AF-L%.met G:\Org\HP4\Methods\DS_ORO-T-AF-L%.met	1	1	1	1	1	0 The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline. Surrogates are integrated using a valley to valley integration using Set Baseline All Valley placed at 16.25 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.05r	CCV_0117HP405r, DRO_0117HP4, DRO220114A		G:\Org\HP4\methods\DC_8015-C24-OM-L%.met G:\Org\HP4\methods\DS_8015-C24-OM-L%.met	1	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 baseline. Assigned Set Baseline All Valley on at 17.1 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.06r	DCM-Baseline Check-V06		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	1	0 No Integrations
G:\org\HP4\DAT\HP4011722_b\0117HP4.07r	DCM-Baseline Check-V07		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	1	0 No Integrations
G:\org\HP4\DAT\HP4011722_b\0117HP4.08r	LCS-162891_0117HP4, SGT		G:\Org\HP4\methods\D3_8015-C24-OM-L%.met G:\Org\HP4\methods\DS_8015-C24-OM-L%.met	1000	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 baseline. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.09r	LCS-D-162891_0117HP4, SGT		G:\Org\HP4\methods\D3_8015-C24-OM-L%.met G:\Org\HP4\methods\DS_8015-C24-OM-L%.met	1000	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 baseline. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.10r	MB-162891_0117HP4, SGT		G:\Org\HP4\methods\DR_8015-C24T-OM-L%.met G:\Org\HP4\Methods\DR_ORO-S-AF-L%.met G:\Org\HP4\methods\DS_8015-T-OM-L%.met	1000	1	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 baseline. Assigned Set Baseline All Valley on at 17.08 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes. Set Baseline All Valley on 14.07 minutes and and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.11r	B22010625-001D_0117HP4, \$HC-8015-DRO-W, SGT		G:\Org\HP4\methods\DR_8015-C24T-OM-L%.met G:\Org\HP4\Methods\DR_ORO-S-AF-L%.met G:\Org\HP4\methods\DS_8015-T-OM-L%.met	1060	1	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 baseline. Assigned Set Baseline All Valley on at 17.08 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes. Set Baseline All Valley on 14.07 minutes and and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.12r	B22010629-001D_0117HP4, \$HC-8015-DRO-W, SGT		G:\Org\HP4\methods\DR_8015-C24T-OM-L%.met G:\Org\HP4\Methods\DR_ORO-S-AF-L%.met G:\Org\HP4\methods\DS_8015-T-OM-L%.met	1060	1	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 baseline. Assigned Set Baseline All Valley on at 17.08 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes. Set Baseline All Valley on 14.07 minutes and and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.13r	B22010633-001D_0117HP4, \$HC-8015-DRO-W, SGT		G:\Org\HP4\methods\DR_8015-C24T-OM-L%.met G:\Org\HP4\Methods\DR_ORO-S-AF-L%.met G:\Org\HP4\methods\DS_8015-T-OM-L%.met	1020	1	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 baseline. Assigned Set Baseline All Valley on at 17.08 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes. Set Baseline All Valley on 14.07 minutes and and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.14r	DCM-Baseline Check-V14		G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	1	0 No Integrations
G:\org\HP4\DAT\HP4011722_b\0117HP4.15r	B22010641-001D_0117HP4, \$HC-8015-DRO-W, SGT		G:\Org\HP4\methods\DR_8015-C24T-OM-L%.met G:\Org\HP4\Methods\DR_ORO-S-AF-L%.met G:\Org\HP4\methods\DS_8015-T-OM-L%.met	1060	1	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 baseline. Assigned Set Baseline All Valley on at 17.08 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes. Set Baseline All Valley on 14.07 minutes and and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.16r	B22010626-001D_0117HP4, \$HC-8015-DRO-W, SGT		G:\Org\HP4\methods\DR_8015-C24T-OM-L%.met G:\Org\HP4\Methods\DR_ORO-S-AF-L%.met G:\Org\HP4\methods\DS_8015-T-OM-L%.met	1030	1	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 baseline. Assigned Set Baseline All Valley on at 17.08 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes. Set Baseline All Valley on 14.07 minutes and and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.17r	B22010626-001DMS_0117HP4,		G:\Org\HP4\methods\D3_8015-C24-OM-L%.met G:\Org\HP4\methods\DS_8015-C24-OM-L%.met	1040	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 baseline. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.18r	MARKER_0117HP418r, DRO_0117HP4, DRO220111A		G:\org\HP4\Methods\CSC220117.met	1	1	1	1	1	0 No Integrations

G:\org\HP4\DAT\HP4011722_b\0117HP4.19r	CCV_0117HP419r, RRO_0117HP4 , DRO220106A	G:\Org\HP4\Methods\DC_ORO-T-AF-L%.met G:\Org\HP4\Methods\DS_ORO-T-AF-L%.met	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline. Surrogates are integrated using a valley to valley integration using Set Baseline All Valley placed at 16.25 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.20r	CCV_0117HP420r, DRO_0117HP4 , DRO220114A	G:\Org\HP4\methods\DC_8015-C24-OM-L%.met G:\Org\HP4\methods\DS_8015-C24-OM-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 baseline. Assigned Set Baseline All Valley on at 17.1 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.21r	DCM-Baseline Check-V21	G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP4\DAT\HP4011722_b\0117HP4.22r	B22010643-001D_0117HP4 , \$HC-8015-DRO-W, SGT	G:\Org\HP4\methods\DR_8015-011722-OM-L%.met G:\Org\HP4\Methods\DR_ORO-011722-AF-L%.met G:\Org\HP4\methods\DS_8015-T-OM-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 baseline with peak width adjusted. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes, Set Baseline All Valley on 14.07 minutes and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.23r	B22010643-002B_0117HP4 , \$HC-8015-DRO-W, SGT	G:\Org\HP4\methods\DR_8015-011722-OM-L%.met G:\Org\HP4\Methods\DR_ORO-011722-AF-L%.met G:\Org\HP4\methods\DS_8015-T-OM-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 baseline with peak width adjusted. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.51 minutes and after the surrogate peak at 12.84 minutes, Set Baseline All Valley on 14.07 minutes and Set Baseline Now at 16.91 minutes and X-axis scaling showing surrogate peak from 12-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.24r	B22010641-001DMS-RRO_0117HP4 , SGT	G:\Org\HP4\Methods\D3_ORO-T-AF-L%.met G:\Org\HP4\Methods\DS_ORO-T-AF-L%.met	1050	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline. Surrogates are integrated using a valley to valley integration using Set Baseline All Valley placed at 16.25 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.25r	DCM-Baseline Check-V25	G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP4\DAT\HP4011722_b\0117HP4.26r	LCS-D-RRO-162891_0117HP4 , SGT	G:\Org\HP4\Methods\D3_ORO-T-AF-L%.met G:\Org\HP4\Methods\DS_ORO-T-AF-L%.met	1000	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline. Surrogates are integrated using a valley to valley integration using Set Baseline All Valley placed at 16.25 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.27r	DCM-Baseline Check-V27	G:\Org\HP4\methods\DR_8015-OH-LEXP.met	1	1	1	1	0	No Integrations
G:\org\HP4\DAT\HP4011722_b\0117HP4.28r	LCS-RRO-162891_0117HP4 , SGT	G:\Org\HP4\Methods\D3_ORO-T-AF-L%.met G:\Org\HP4\Methods\DS_ORO-T-AF-L%.met	1000	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline. Surrogates are integrated using a valley to valley integration using Set Baseline All Valley placed at 16.25 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.29r	MARKER_0117HP429r, DRO_0117HP4 , DRO220111A	G:\org\HP4\Methods\CSC220117.met	1	1	1	1	0	No Integrations
G:\org\HP4\DAT\HP4011722_b\0117HP4.30r	CCV_0117HP430r, RRO_0117HP4 , DRO220106A	G:\Org\HP4\Methods\DC_ORO-T-AF-L%.met G:\Org\HP4\Methods\DS_ORO-T-AF-L%.met	1	1	1	1	0	The integration of Oil Range hydrocarbon is the hydrocarbon response with reference to the baseline. Surrogates are integrated using a valley to valley integration using Set Baseline All Valley placed at 16.25 minutes and X-axis scaling showing surrogate peak from 15-18 minutes.
G:\org\HP4\DAT\HP4011722_b\0117HP4.31r	CCV_0117HP431r, DRO_0117HP4 , DRO220114A	G:\Org\HP4\methods\DC_8015-C24-OM-L%.met G:\Org\HP4\methods\DS_8015-C24-OM-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 baseline. Assigned Set Baseline All Valley on at 17.1 minutes. Surrogates are integrated using a valley to valley integration using Set Baseline Now placed before at 12.49 minutes and after the surrogate peak at 12.78 minutes and X-axis scaling showing surrogate peak from 12-14 minutes.

*Ann Nebel*

Digitally signed by  
Ann Nebel  
Date: 2022.02.01 13:38:38 -07:00

# Energy Laboratories Inc

# Spike LOG

Standard ID: DRO211101A  
Standard Name: OTP-4000 ug/mL DCM  
Date Prepared: 11/1/2021  
Date Expires: 9/30/2024  
Department: dropr  
Vendor:  
Lot Number:  
Balance ID: BAL-DRO  
Comments: Used to Prep DRO-8015 ICAL and CCV Solutions

Type: Secondary  
BY: Ann Nebel  
Status: Open

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC328	14408	25	mL	8/19/

**Final Volume:** 25 mL

**Stock Source**

DRO200430B O-Terphenyl

**Base Units**

ug/mL

**Amount Added**

0.1012 g

**Analtes**

A O-Terphenyl

**CAS**

84-15-1

Conc:

**ug/mL**

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:  
Comments: ID#: 6271

Type: Neat  
BY: Ann Nebel  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
o-Terphenyl	12650	500	mg	9/30/

Final Volume: mL

Stock Source

**Base Units**

**Amount Added**

Analtes

**CAS**

Conc: ug/mL

A O-Terphenyl

84-15-1

1

Anna

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](mailto:info@chemservice.com) • [www.chemservice.com](http://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

Energyl Laboratories Inc 1120 So. 27th Street  
Billings MT 59107

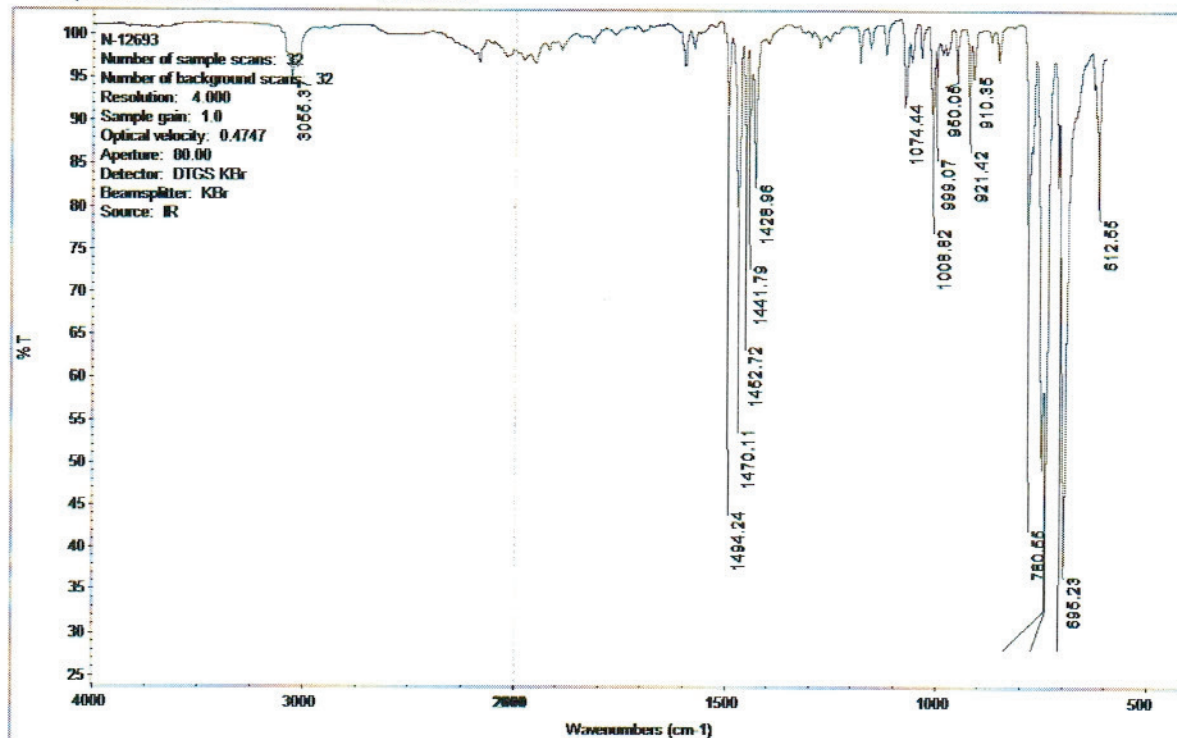
Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015



## 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



## 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

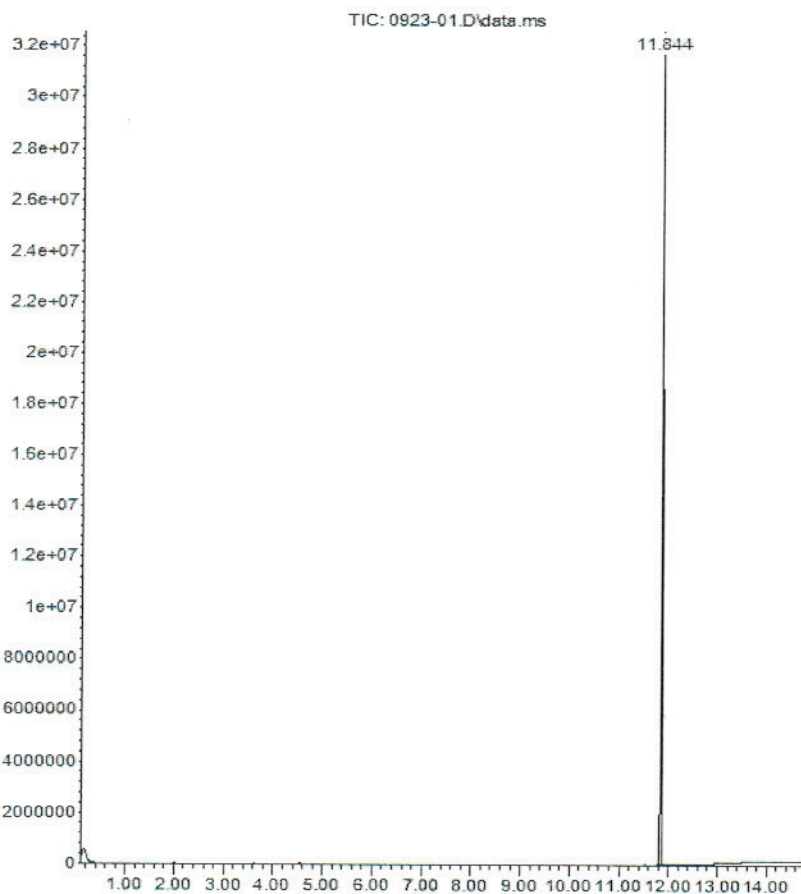
660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599  
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729  
[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

## CERTIFICATE OF ANALYSIS

### Analysis Method:

Catalog Number: N-12693-500MG  
Description: o-Terphenyl  
Lot Number: 9972100  
Expiration Date: 09/30/24

Abundance



Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015



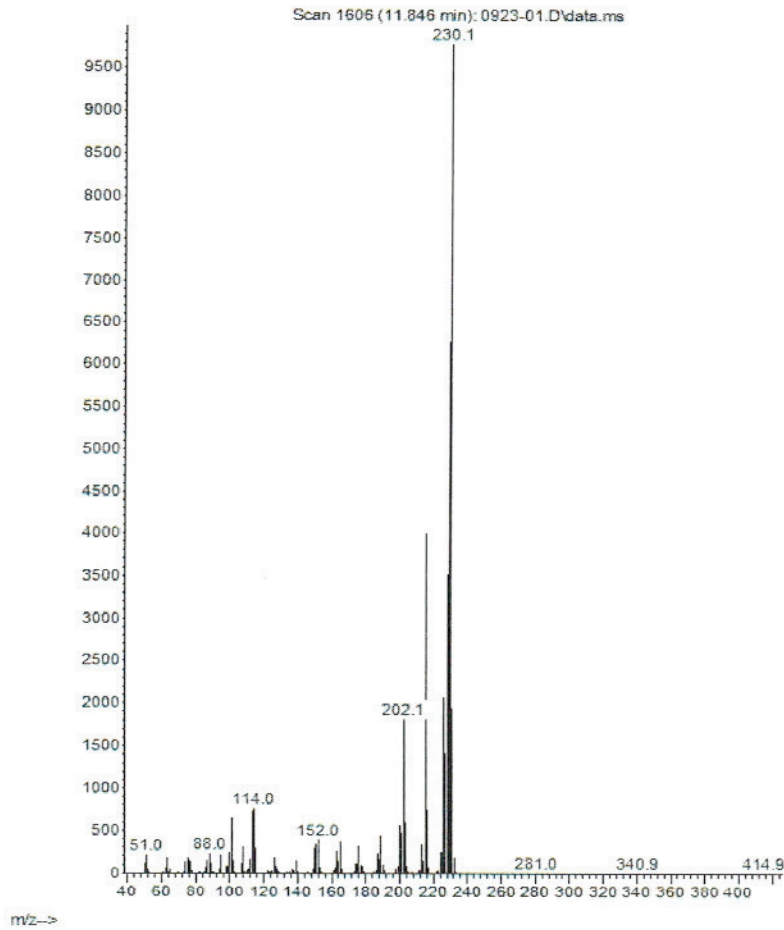


## CERTIFICATE OF ANALYSIS

### Analysis Method:

Catalog Number: N-12693-500MG  
Description: o-Terphenyl  
Lot Number: 9972100  
Expiration Date: 09/30/24

Abundance



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](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

## CERTIFICATE OF ANALYSIS

### Analysis Method:

Catalog Number:	N-12693-500MG
Description:	o-Terphenyl
Lot Number:	9972100
Expiration Date:	09/30/24

Chem Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015



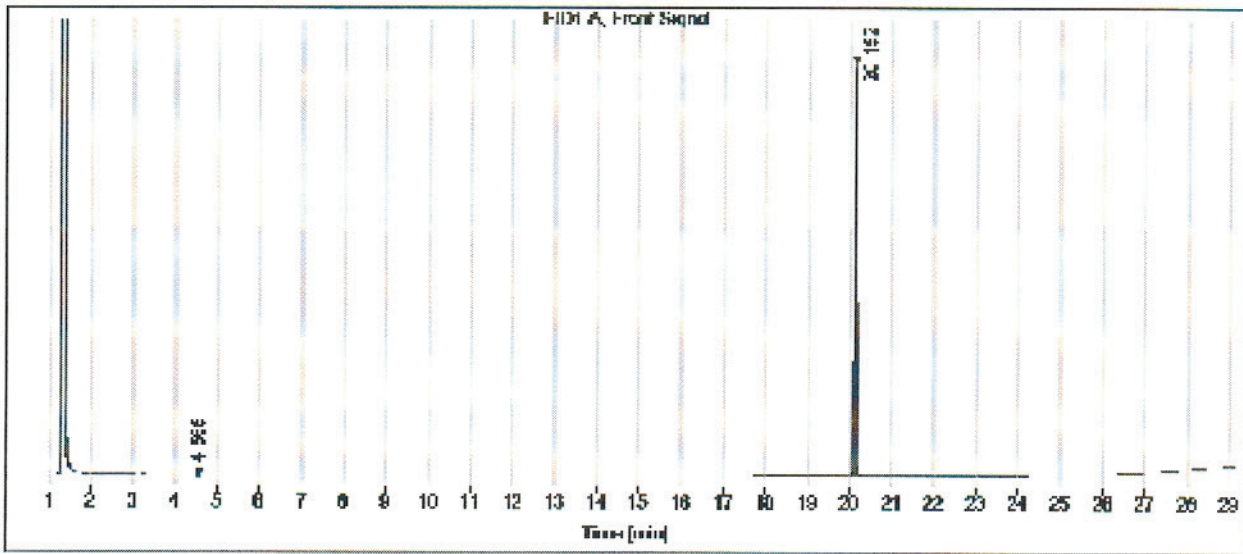
660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599  
 1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729  
[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

Gas

Data file: C:\CHEM3\  
 Sample name: N-12893  
 Instrument: GC 2  
 Injection date: 8/23/2019 9:58:34 AM  
 Acq. method: SCREEN.M  
 Column name: HP-5

## CERTIFICATE OF ANALYSIS

Location: Vial 141  
 Injection volume: 1.0uL



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





# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO211012A  
Standard Name: Diesel Fuel #2 50,000 ug/mL in DCM  
Date Prepared: 10/12/2021  
Date Expires: 4/30/2023  
Department: dropr  
Vendor: Sigma-Aldrich  
Lot Number: LRAC6316  
Balance ID:  
Comments: Diesel Fuel #2 For CCVs.

Type: Primary  
BY: Ann Nebel  
Status: New

---

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**

**Analtes**

**CAS**

Conc: ug/mL

Diesel Fuel #2

0

# Certificate of Analysis

Certified  
Reference  
Material

Diesel Fuel No. 2

## 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

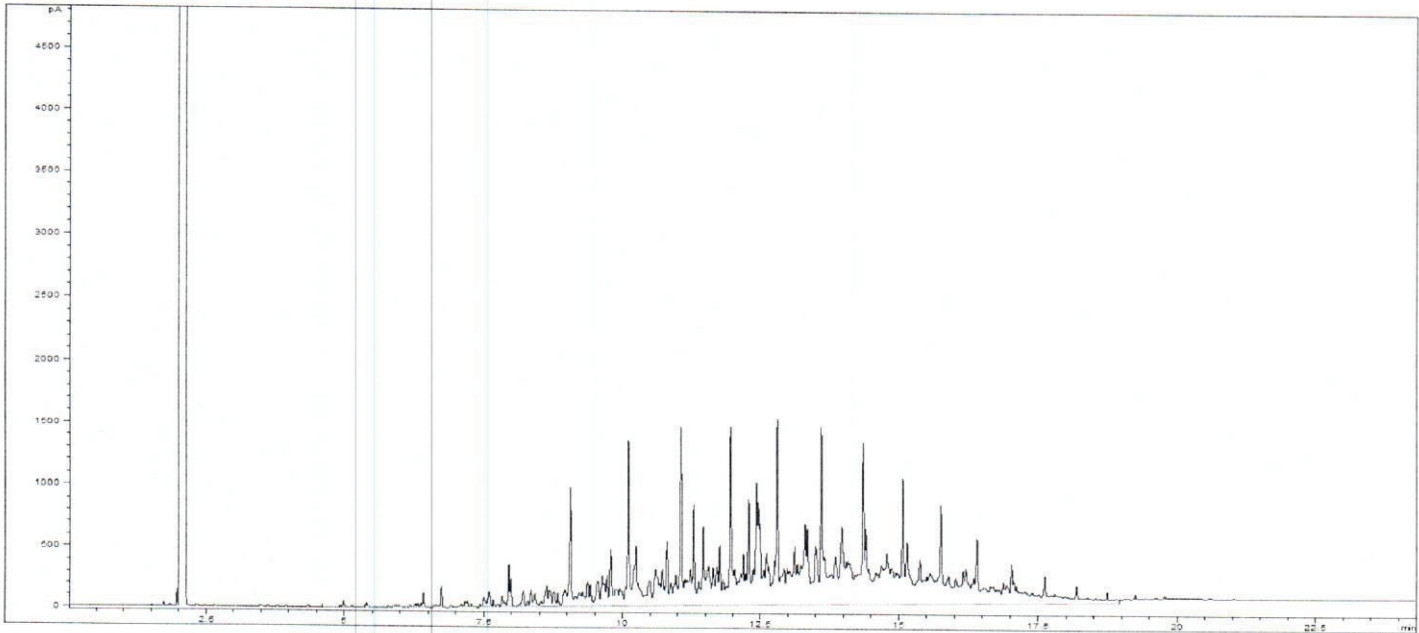
Rec'd: 10/12/2021

Energy Laboratories Inc 1120 So. 27th Street  
Billings MT 59107

## Certified Values

Analyte	Certified Value <sup>1,4</sup>	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: H<sub>2</sub>, 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



**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:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

**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.

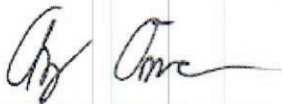
**Traceability:** The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual 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.

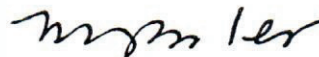
Expiration is at end of month given on certificate and label.

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



# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO180918C  
Standard Name: 50,000 ug/mL Oil Std For AK103 RRO-In DC  
Date Prepared: 9/18/2018  
Date Expires: 8/31/2025  
Department: dropr  
Vendor: Restek  
Lot Number: A0140080  
Balance ID: Sartorius 4 place balance

Type: Primary  
BY: Ann Nebel  
Status: Open

Comments:

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Residual Range Calibration Standard	10787	1	mL	8/31/

**Final Volume:** 1 mL

Stock Source

**Base Units**

**Amount Added**

Analtes

**CAS**

Conc: **ug/mL**



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



### 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) CAS # 64742-65-0.F (Lot A0126386) Purity ----%	50,113.0 µg/mL	+/- 293.4226	µg/mL	Gravimetric
			+/- 1,492.4284	µg/mL	Unstressed
			+/- 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

Energyl Laboratories Inc 1120 So. 27th Street  
Billings MT 59107

**Column:**  
30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

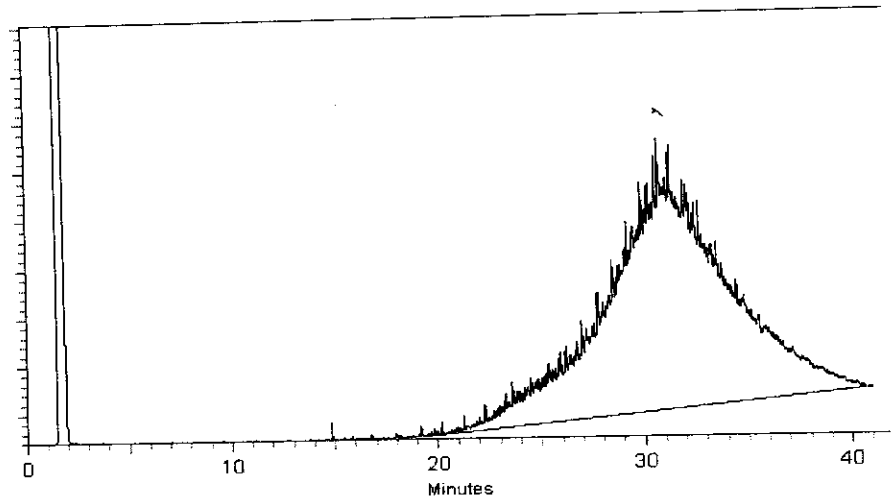
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

**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*  
Brandon Reish - Mix Technician

Date Mixed: 28-Jul-2018

Balance: B345965662

*Diane Shaffer*  
Diane Shaffer - Operations Tech-ARM QC

Date Passed: 30-Jul-2018

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO211006A  
Standard Name: Triacontane SURR 2000 ug/mL  
Date Prepared: 10/6/2021  
Date Expires: 4/6/2026  
Department: dropr  
Vendor:  
Lot Number:  
Balance ID: BAL-DRO  
Comments: Triacontane SURR 2000 ug/mL

Type: Secondary  
BY: Jillian L Bostwick  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Acetone DZ509	13553	50	mL	7/22/

**Final Volume:** 50 mL

Stock Source  
DRO210406A Triacontane-d62 Surr For AK103 RRO

**Base Units**  
ug/mL

**Amount Added**  
0.1001 g

Analtes  
A Triacontane-d62

**CAS**

Conc: **ug/mL**  
2000

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO210406A  
Standard Name: Triacontane-d62 Surr For AK103 RRO  
Date Prepared: 4/6/2021  
Date Expires: 4/6/2026  
Department: dropr  
Vendor: Sigma-Aldrich  
Lot Number: MBBC4347  
Balance ID:  
Comments: Alaska surr [for AK103 RRO]

Type: Neat  
BY: Ann Nebel  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Triacontane-d62-98 atom % D	13736		mL	4/6/2026

Final Volume: mL

Stock Source

**Base Units**

**Amount Added**

Analtes

**CAS**

Conc: ug/mL

A Triacontane-d62

1

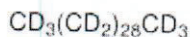


3050 Spruce Street, Saint Louis, MO 63103, USA  
 Website: www.sigmaaldrich.com  
 Email USA: techserv@sial.com  
 Outside USA: eurtechserv@sial.com

## Certificate of Analysis

Product Name:  
 Triacontane-d62 - 98 atom % D

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: \_\_\_\_\_

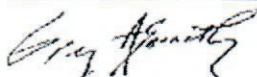
Triacontane-d62-98 atom % D

Expires: 4/6/2026

Rec'd: 4/6/2021

Energx 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**

DRO181105A #2 Diesel (NEAT)

**Base Units**

ug/mL

**Amount Added**

3.7507 g

**Analtes**

A #2 Diesel

**CAS**

68476-34-6

Conc:

**ug/mL**

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 Station 1240 S. 27th Billings, MT) 2nd Source

---

<u>Stock Source</u>	<u>Base Units</u>	<u>Final Volume:</u>	<u>Amount Added</u>
<u>Analvtes</u>	<u>CAS</u>	<u>Conc:</u>	<u>ug/mL</u>
A #2 Diesel	68476-34-6	250 mL	1

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO210902A  
 Standard Name: 50,000 ug/mL Oil Std for RRO-In DCM  
 Date Prepared: 9/2/2021  
 Date Expires: 9/1/2026  
 Department: dropr  
 Vendor:  
 Lot Number:  
 Balance ID: BAL-DRO  
 Comments: .625 g of 30W and 40 W each LCS for Oil range

Type: Secondary  
 BY: Jillian L Bostwick  
 Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EB867	14196	25	mL	6/18/

**Final Volume:** 25 mL

<u>Stock Source</u>	<u>Base Units</u>	<u>Amount Added</u>
DRO210901B 40W Motor Oil-Valvoline	ug/mL	0.6261 g
DRO210901A 30W Motor Oil-Valvoline	ug/mL	0.6254 g

<u>Analtes</u>	<u>CAS</u>	<u>Conc:</u>	<u>ug/mL</u>
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: DRO210901A  
Standard Name: 30W Motor Oil-Valvoline  
Date Prepared: 9/1/2021  
Date Expires: 9/1/2026  
Department: dropr  
Vendor:  
Lot Number: F1620C1  
Balance ID:  
Type: Primary  
BY: Jillian L Bostwick  
Status: New  
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**

Analtes

**CAS**

Conc: ug/mL

A 30W-Motor oil

1

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO210901B  
Standard Name: 40W Motor Oil-Valvoline  
Date Prepared: 9/1/2021  
Date Expires: 9/1/2026  
Department: dropr  
Vendor:  
Lot Number: L0717H2  
Balance ID:  
Type: Primary  
BY: Jillian L Bostwick  
Status: New  
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	9/1/2026

Final Volume: mL

Stock Source

**Base Units**

**Amount Added**

Analtes

**CAS**

Conc: ug/mL

A 40W-Motor oil

1

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO220105B  
 Standard Name: 8015 CCV-15,000ug/mL + 200 OTP  
 Date Prepared: 1/5/2022  
 Date Expires: 4/30/2023  
 Department: dropr  
 Vendor:  
 Lot Number:  
 Balance ID:  
 Comments: 8015DRO CCV MIX-15,000ug/mL +200 OTP #2 Diesel

Type: Secondary  
 BY: Ann Nebel  
 Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC832	14647	2.6	mL	10/28

**Final Volume:** 4 mL

<u>Stock Source</u>	<u>Base Units</u>	<u>Amount Added</u>
DRO211101A OTP-4000 ug/mL DCM	ug/mL	0.2 mL
DRO211214C Diesel Fuel #2 50,000 ug/mL in DCM	ug/mL	1.2 mL

<u>Analtes</u>	<u>CAS</u>	<u>Conc:</u>	<u>ug/mL</u>
A #2 Diesel			15000
Diesel Fuel #2			0
A O-Terphenyl	84-15-1		200

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO211214C  
Standard Name: Diesel Fuel #2 50,000 ug/mL in DCM  
Date Prepared: 12/14/2021  
Date Expires: 4/30/2023  
Department: dropr  
Vendor: Sigma-Aldrich  
Lot Number: LRAC6316  
Balance ID:  
Comments: Diesel Fuel #2 For CCVs.

Type: Primary  
BY: Ann Nebel  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Diesel Fuel No. 2	14623	1	mL	4/30/

Final Volume: mL

**Stock Source**

**Base Units**

**Amount Added**

**Analtes**

**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 #: 14623

Opened: \_\_\_\_\_

Diesel Fuel No. 2

Expires: 4/30/2023

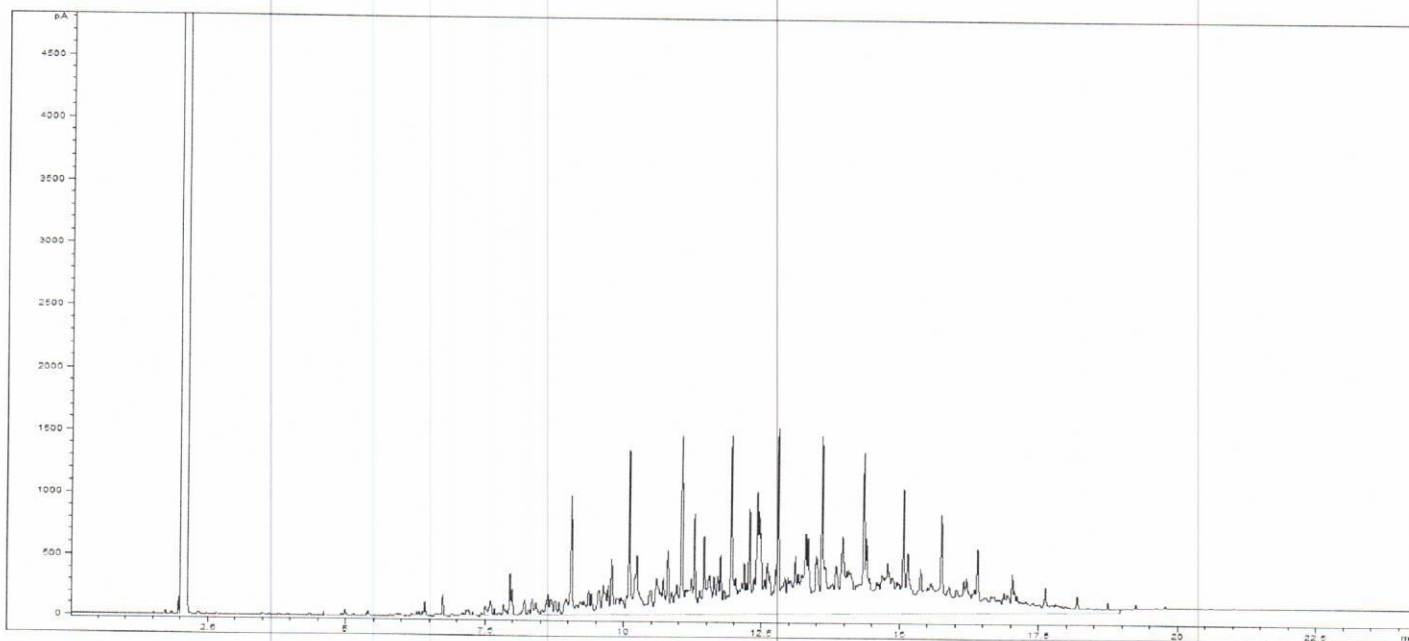
Rec'd: 12/14/2021

Energy Laboratories Inc 1120 So. 27th Street  
Billings MT 59107

## Certified Values

Analyte	Certified Value <sup>1,4</sup>	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: H<sub>2</sub>, 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



**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:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

**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.

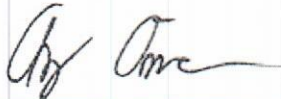
**Traceability:** The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual 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

Certification Date April 30, 2020  
Version 0-4302020



Mark Pooler - QA Supervisor



# Energy Laboratories Inc

# Spike LOG

Standard ID: DRO211101A  
Standard Name: OTP-4000 ug/mL DCM  
Date Prepared: 11/1/2021  
Date Expires: 9/30/2024  
Department: dropr  
Vendor:  
Lot Number:  
Balance ID: BAL-DRO  
Comments: Used to Prep DRO-8015 ICAL and CCV Solutions

Type: Secondary  
BY: Ann Nebel  
Status: Open

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC328	14408	25	mL	8/19/

**Final Volume:** 25 mL

Stock Source

DRO200430B O-Terphenyl

**Base Units**

ug/mL

**Amount Added**

0.1012 g

Analtes

A O-Terphenyl

**CAS**

84-15-1

Conc:

**ug/mL**

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:  
Comments: ID#: 6271

Type: Neat  
BY: Ann Nebel  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
o-Terphenyl	12650	500	mg	9/30/

Final Volume: mL

Stock Source

**Base Units**

**Amount Added**

Analtes

**CAS**

Conc: ug/mL

A O-Terphenyl

84-15-1

1

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599  
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729  
[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://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 C<sub>18</sub>H<sub>14</sub>  
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

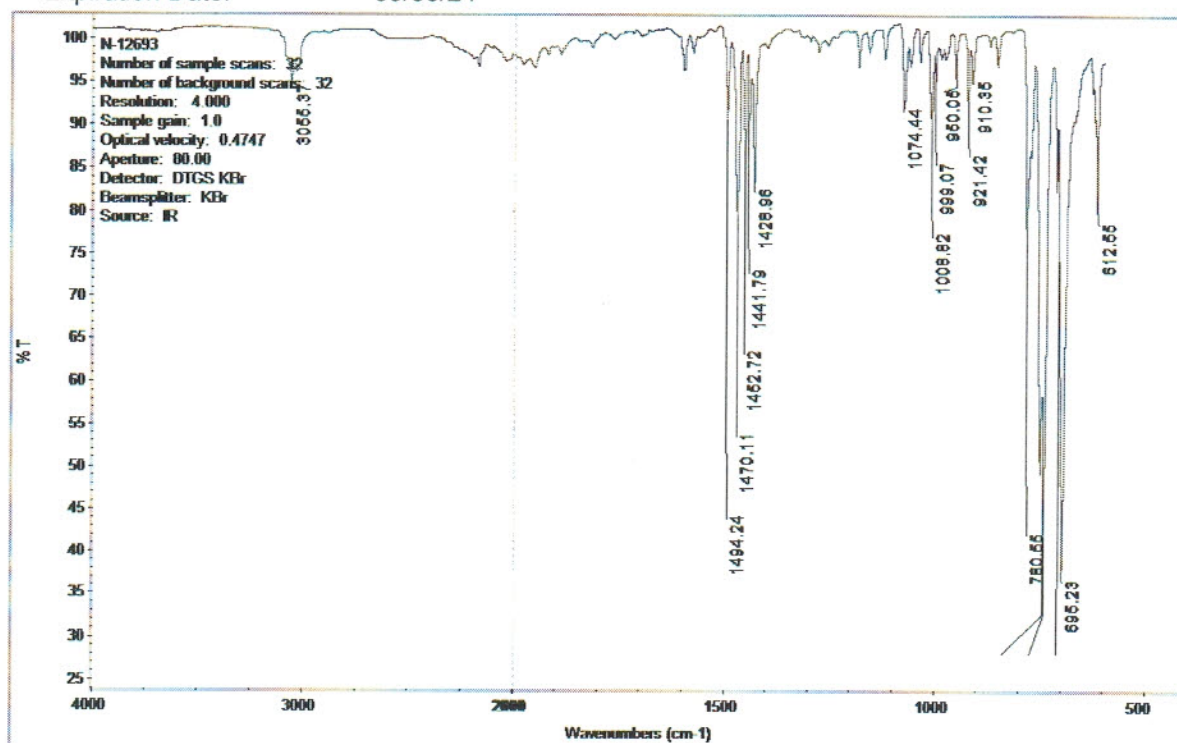
Energy Laboratories Inc 1120 So. 27th Street  
Billings MT 59107



## 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](mailto:info@chemservice.com) • [www.chemservice.com](http://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

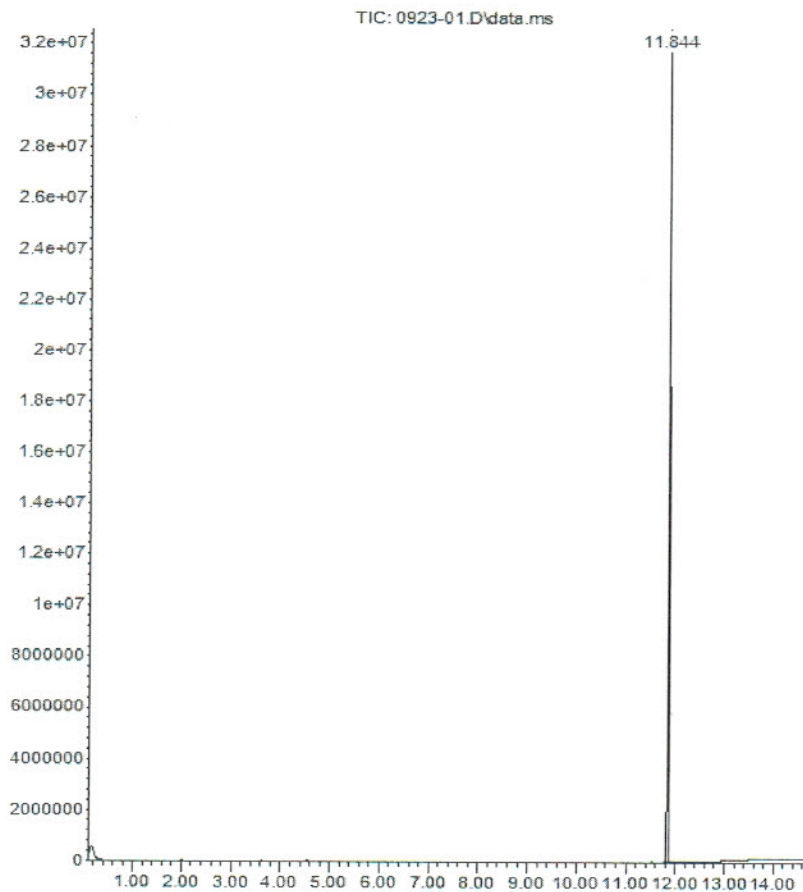
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[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

## CERTIFICATE OF ANALYSIS

### Analysis Method:

Catalog Number: N-12693-500MG  
Description: o-Terphenyl  
Lot Number: 9972100  
Expiration Date: 09/30/24

Abundance



Time-->

Chem. Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015





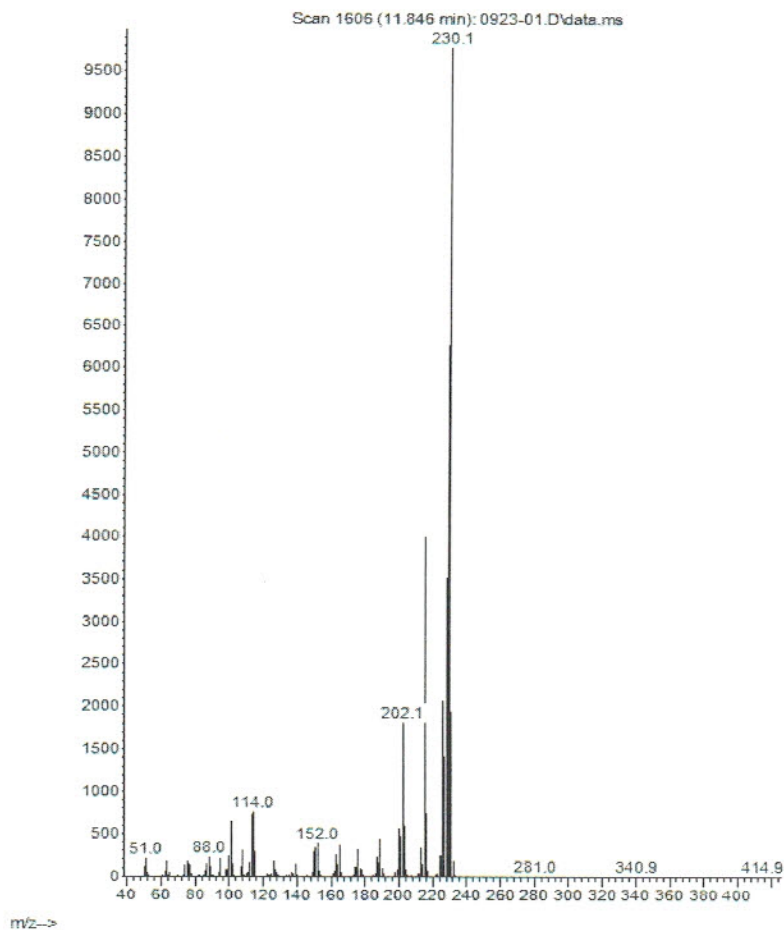
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1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729  
[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

## CERTIFICATE OF ANALYSIS

### Analysis Method:

Catalog Number: N-12693-500MG  
Description: o-Terphenyl  
Lot Number: 9972100  
Expiration Date: 09/30/24

Abundance



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



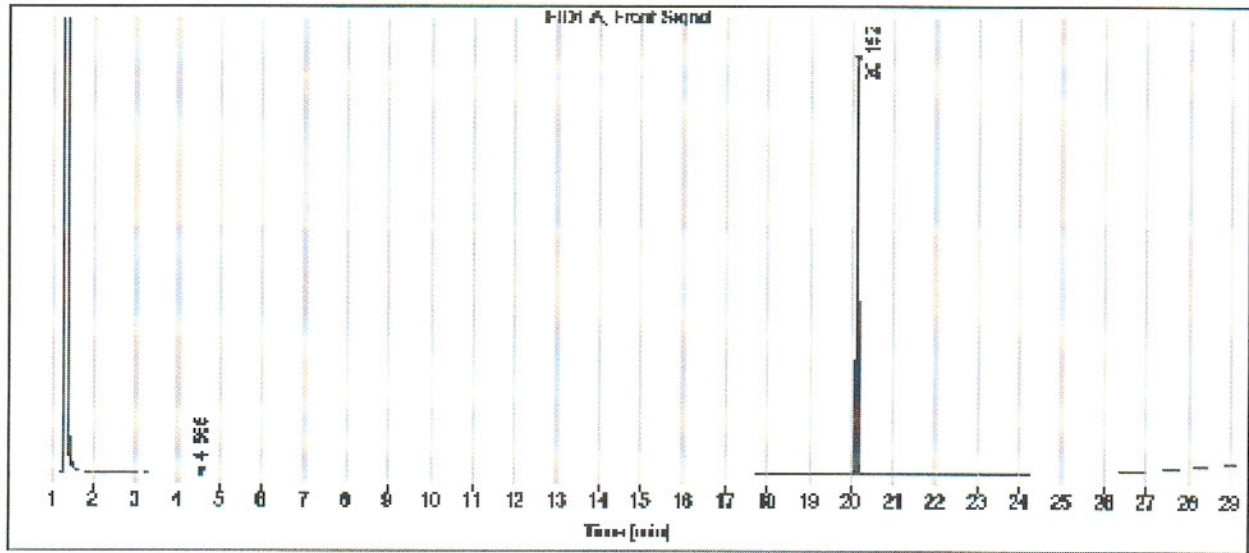
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[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

Gas

Data file: C:\CHEM3\  
 Sample name: N-12683  
 Instrument: GC 2  
 Injection date: 9/23/2019 9:58:34 AM  
 Acq. method: SCREEN.M  
 Column name: HP-5

## CERTIFICATE OF ANALYSIS

Sample type:   
 Location: Vial 141  
 Injection volume: 1.0uL



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



# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO220114A  
 Standard Name: 8015 CCV-15,000ug/mL + 200 OTP  
 Date Prepared: 1/14/2022  
 Date Expires: 4/30/2023  
 Department: dropr  
 Vendor:  
 Lot Number:  
 Balance ID:  
 Comments: 8015DRO CCV MIX-15,000ug/mL +200 OTP #2 Diesel

Type: Secondary  
 BY: Jillian L Bostwick  
 Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC832	14647	2.6	mL	10/28

**Final Volume:** 4 mL

<u>Stock Source</u>	<u>Base Units</u>	<u>Amount Added</u>
DRO211101A OTP-4000 ug/mL DCM	ug/mL	0.2 mL
DRO211214C Diesel Fuel #2 50,000 ug/mL in DCM	ug/mL	1.2 mL

<u>Analtes</u>	<u>CAS</u>	<u>Conc:</u>	<u>ug/mL</u>
A #2 Diesel			15000
Diesel Fuel #2			0
A O-Terphenyl	84-15-1		200

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO211214C  
Standard Name: Diesel Fuel #2 50,000 ug/mL in DCM  
Date Prepared: 12/14/2021  
Date Expires: 4/30/2023  
Department: dropr  
Vendor: Sigma-Aldrich  
Lot Number: LRAC6316  
Balance ID:  
Comments: Diesel Fuel #2 For CCVs.

Type: Primary  
BY: Ann Nebel  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Diesel Fuel No. 2	14623	1	mL	4/30/

Final Volume: mL

**Stock Source**

**Base Units**

**Amount Added**

**Analtes**

**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 #: 14623

Opened: \_\_\_\_\_

Diesel Fuel No. 2

Expires: 4/30/2023

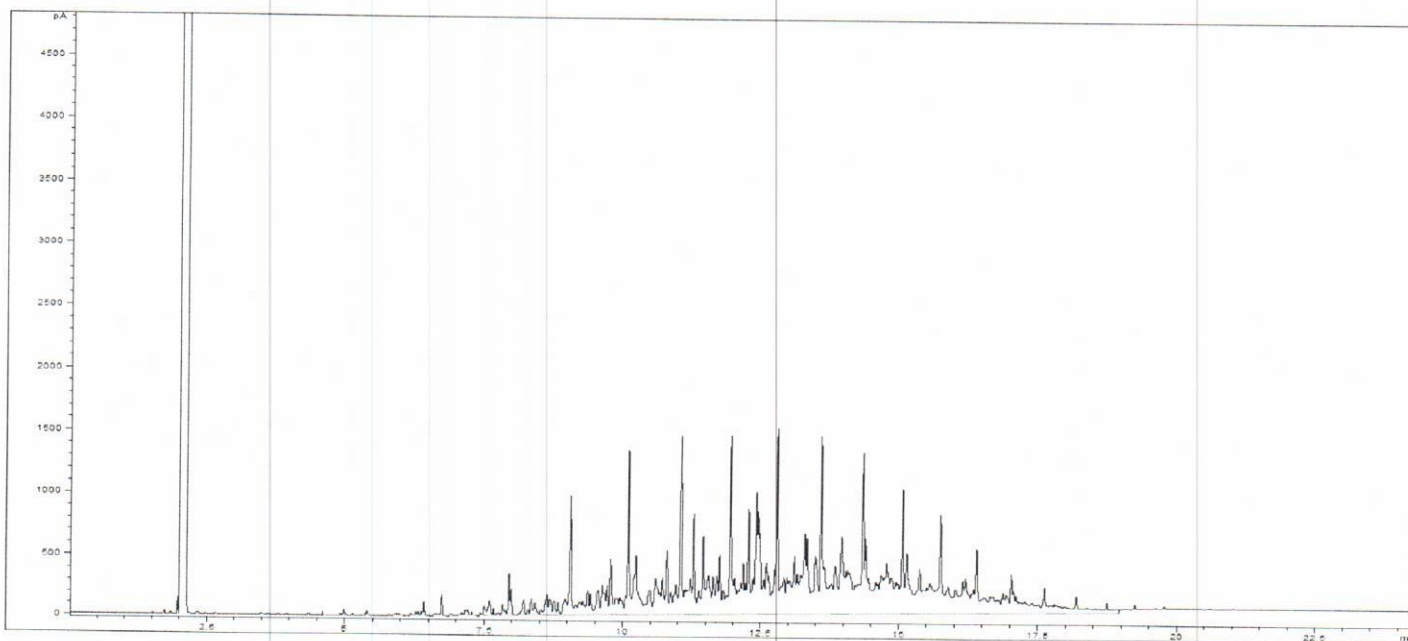
Rec'd: 12/14/2021

Energy Laboratories Inc 1120 So. 27th Street  
Billings MT 59107

## Certified Values

Analyte	Certified Value <sup>1,4</sup>	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: H<sub>2</sub>, 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



**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:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{homogeneity}^2 + u_{stability}^2}$$

**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.

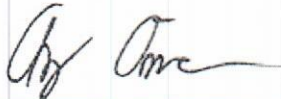
**Traceability:** The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual 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

Certification Date April 30, 2020  
Version 0-4302020



Mark Pooler - QA Supervisor



# Energy Laboratories Inc

# Spike LOG

Standard ID: DRO211101A  
Standard Name: OTP-4000 ug/mL DCM  
Date Prepared: 11/1/2021  
Date Expires: 9/30/2024  
Department: dropr  
Vendor:  
Lot Number:  
Balance ID: BAL-DRO  
Comments: Used to Prep DRO-8015 ICAL and CCV Solutions

Type: Secondary  
BY: Ann Nebel  
Status: Open

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC328	14408	25	mL	8/19/

**Final Volume:** 25 mL

**Stock Source**

DRO200430B O-Terphenyl

**Base Units**

ug/mL

**Amount Added**

0.1012 g

**Analtes**

A O-Terphenyl

**CAS**

84-15-1

Conc:

**ug/mL**

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:  
Comments: ID#: 6271

Type: Neat  
BY: Ann Nebel  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
o-Terphenyl	12650	500	mg	9/30/

Final Volume: mL

Stock Source

**Base Units**

**Amount Added**

Analtes

**CAS**

Conc: ug/mL

A O-Terphenyl

84-15-1

1

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599  
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729  
[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://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 C<sub>18</sub>H<sub>14</sub>  
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

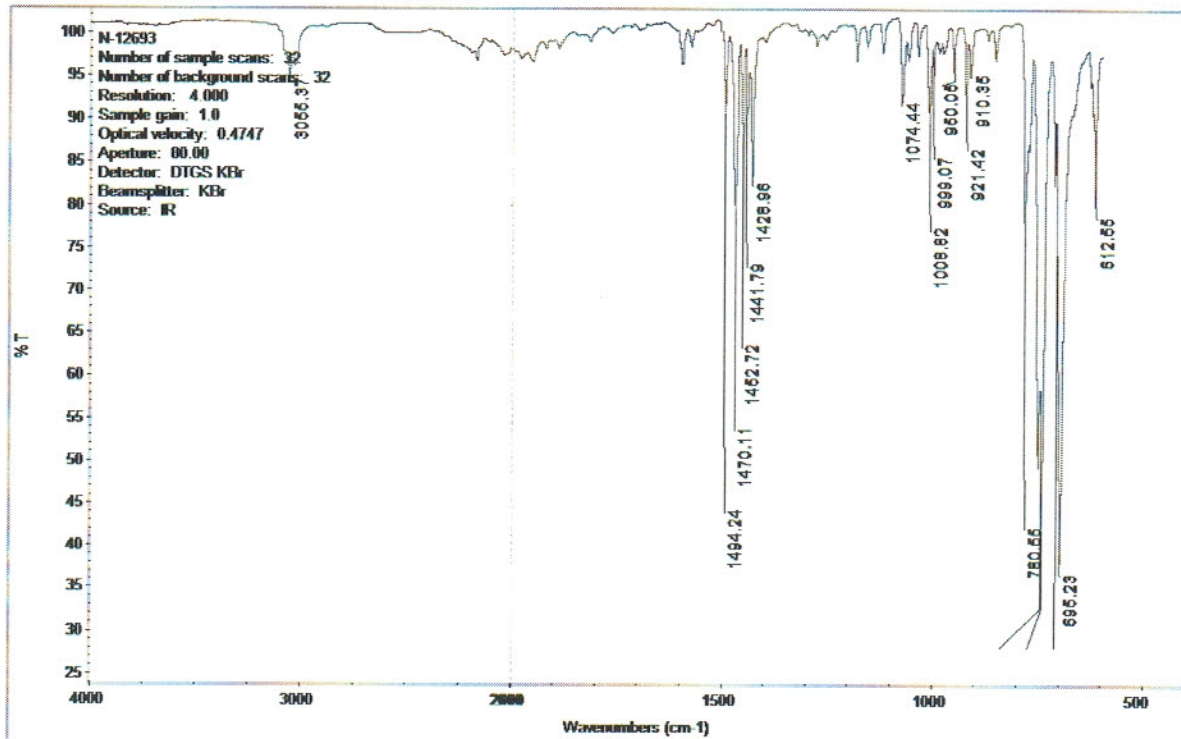
Rec'd: 4/30/2020

Energy Laboratories Inc 1120 So. 27th Street  
Billings MT 59107

## 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 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

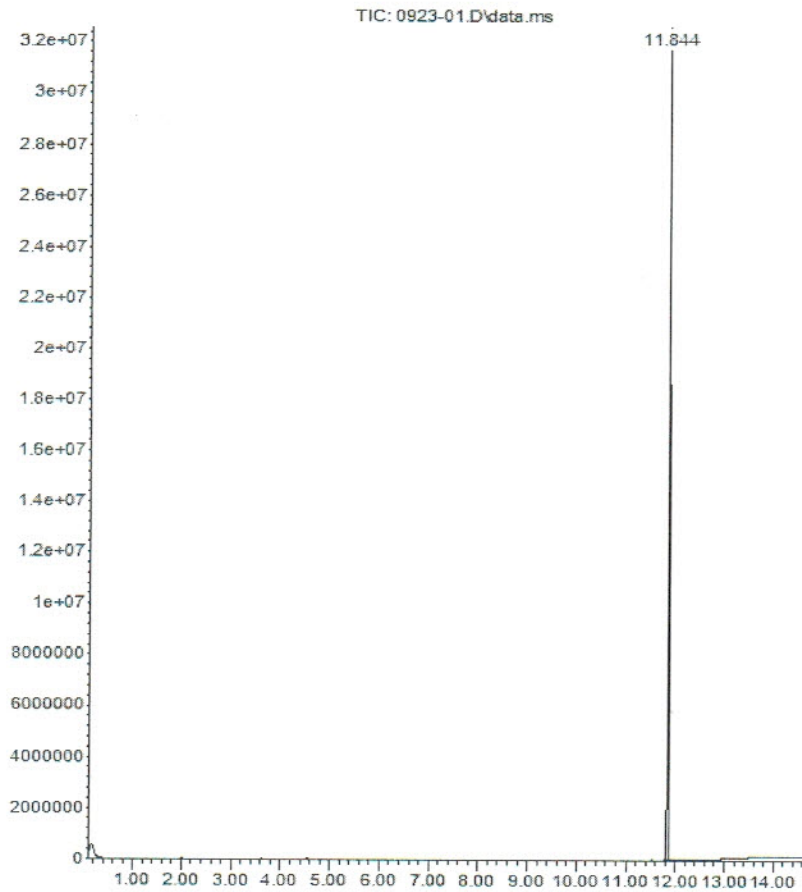
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## CERTIFICATE OF ANALYSIS

### Analysis Method:

Catalog Number: N-12693-500MG  
Description: o-Terphenyl  
Lot Number: 9972100  
Expiration Date: 09/30/24

Abundance



Time-->

Chem. Service is accredited to ISO 17034:2016, ISO/IEC 17025:2017 and certified to ISO 9001:2015





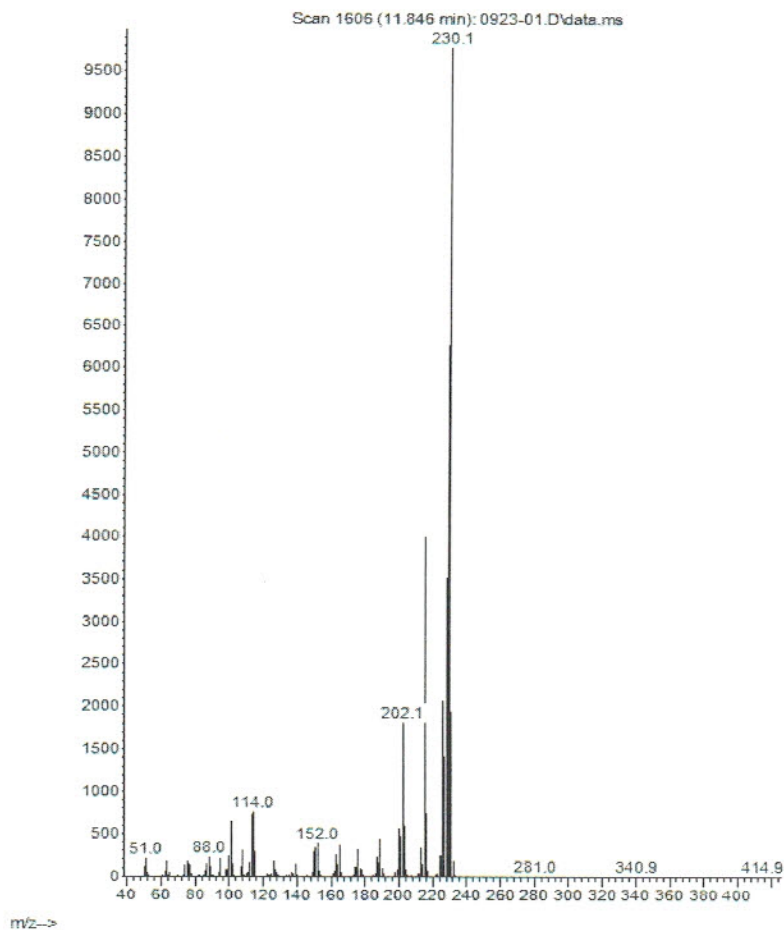
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1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729  
[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

## CERTIFICATE OF ANALYSIS

### Analysis Method:

Catalog Number: N-12693-500MG  
Description: o-Terphenyl  
Lot Number: 9972100  
Expiration Date: 09/30/24

Abundance



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



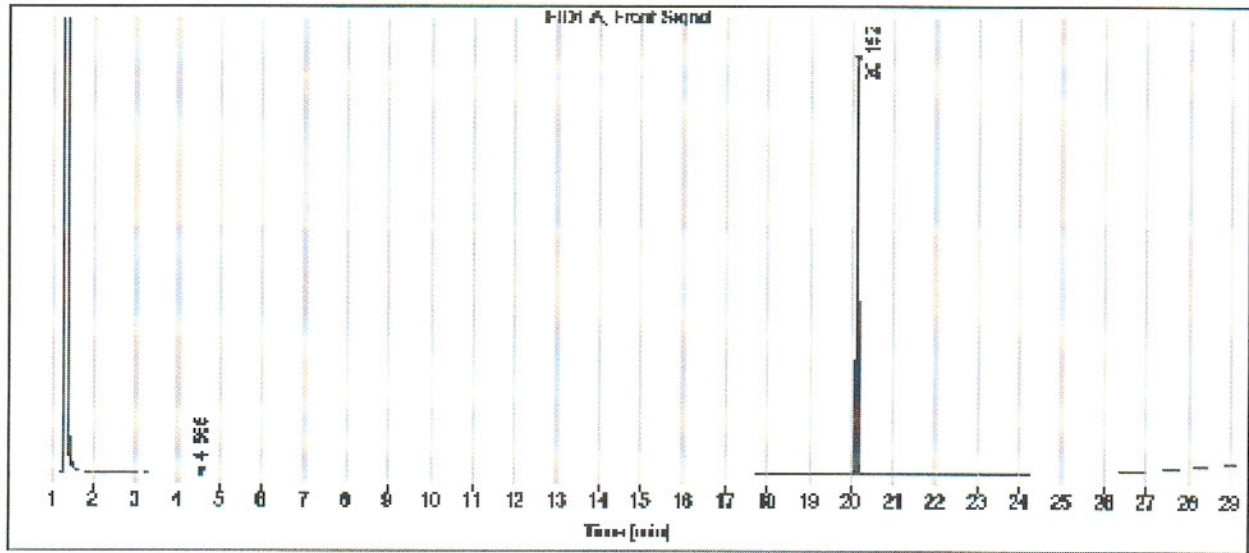
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[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

Gas

Data file: C:\CHEM3\  
 Sample name: N-12683  
 Instrument: GC 2  
 Injection date: 9/23/2019 9:58:34 AM  
 Acq. method: SCREEN.M  
 Column name: HP-5

## CERTIFICATE OF ANALYSIS

Sample type:   
 Location: Vial 141  
 Injection volume: 1.0uL



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





# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO220106A  
Standard Name 5,000 ug/mL RRO CCV 200 ug/mL Triaconta Type: Secondary  
Date Prepared 1/6/2022 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 EC832	14647	2.8	mL	10/28

**Final Volume:** 4 mL

**Stock Source**

DRO210401B 50,000 ug/mL Oil Std For AK103 RRO-I  
DRO220105A Triacontane SURR 1000 ug/mL

**Base Units**

ug/mL  
ug/mL

**Amount Added**

400 µL  
800 µL

**Analtes**

A 30/40W Motor Oil  
A Triacontane-d62

**CAS**

Conc: **ug/mL**  
5000  
200

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO210401B  
Standard Name: 50,000 ug/mL Oil Std For AK103 RRO-In DC  
Date Prepared: 4/1/2021  
Date Expires: 1/31/2028  
Department: dropr  
Vendor: Restek  
Lot Number: A0166827  
Balance ID: Sartorius 4 place balance

Type: Primary  
BY: Ann Nebel  
Status: Open

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**

Analtes

**CAS**

Conc: **ug/mL**



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



### 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) CAS # 64742-65-0.F (Lot A0126386) Purity ----%	50,056.0 µg/mL	+/- 293.0889	µg/mL	Gravimetric
			+/- 1,490.7309	µg/mL	Unstressed
			+/- 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:**

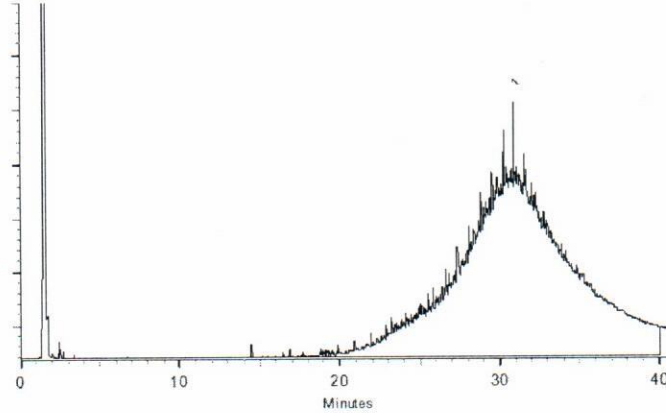
250°C

**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*  
Kylie Struble - Operations Technician I

**Date Mixed:** 02-Dec-2020

**Balance:** 1128353505

*Justin Albertson*  
Justin 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/ $\mu$ ECD, 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:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

$k$  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](http://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](http://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: DRO220105A  
Standard Name: Triacotane SURR 1000 ug/mL  
Date Prepared: 1/5/2022  
Date Expires: 4/6/2026  
Department: dropr  
Vendor:  
Lot Number:  
Balance ID: BAL-DRO  
Comments: 2X dilution of Triacotane SURR 2000 ug/mL

Type: Secondary  
BY: Jillian L Bostwick  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC832	14647	5	mL	10/28

**Final Volume:** 10 mL

**Stock Source**  
DRO211006A Triacotane SURR 2000 ug/mL

**Base Units**  
ug/mL

**Amount Added**  
5 mL

**Analtes**  
A Triacotane-d62

**CAS**

**Conc:** ug/mL  
1000

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO211006A  
 Standard Name: Triacontane SURR 2000 ug/mL  
 Date Prepared: 10/6/2021  
 Date Expires: 4/6/2026  
 Department: dropr  
 Vendor:  
 Lot Number:  
 Balance ID: BAL-DRO  
 Comments: Triacontane SURR 2000 ug/mL

Type: Secondary  
 BY: Jillian L Bostwick  
 Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Acetone DZ509	13553	50	mL	7/22/

**Final Volume:** 50 mL

Stock Source  
 DRO210406A Triacontane-d62 Surr For AK103 RRO

**Base Units**  
 ug/mL

**Amount Added**  
 0.1001 g

Analtes  
 A Triacontane-d62

**CAS**

Conc: **ug/mL**  
 2000

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: [www.sigmaaldrich.com](http://www.sigmaaldrich.com)

Email USA: [techserv@sial.com](mailto:techserv@sial.com)

Outside USA: [eurtechserv@sial.com](mailto:eurtechserv@sial.com)

## Certificate of Analysis

Product Name:  
Triacontane-d62 - 98 atom % D

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: \_\_\_\_\_

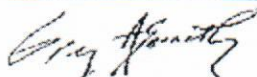
Triacontane-d62-98 atom % D

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](http://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: DRO220112A  
 Standard Name: 50,000 ug/mL Oil Std for RRO-In DCM  
 Date Prepared: 1/12/2022  
 Date Expires: 9/1/2026  
 Department: dropr  
 Vendor:  
 Lot Number:  
 Balance ID: BAL-DRO  
 Comments: .625 g of 30W and 40 W each LCS for Oil range

Type: Secondary  
 BY: Jillian L Bostwick  
 Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC832	14647	25	mL	10/28

**Final Volume:** 25 mL

<u>Stock Source</u>	<u>Base Units</u>	<u>Amount Added</u>
DRO210901B 40W Motor Oil-Valvoline	ug/mL	0.6273 g
DRO210901A 30W Motor Oil-Valvoline	ug/mL	0.6225 g

<u>Analtes</u>	<u>CAS</u>	<u>Conc:</u>	<u>ug/mL</u>
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: DRO210901A  
Standard Name: 30W Motor Oil-Valvoline  
Date Prepared: 9/1/2021  
Date Expires: 9/1/2026  
Department: dropr  
Vendor:  
Lot Number: F1620C1  
Balance ID:  
Comments: Used to make 2nd Source Standard for AK103 method.

Type: Primary  
BY: Jillian L Bostwick  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Valvoline SAE 30 Motor Oil	14232		mL	9/1/26

Final Volume: mL

Stock Source

**Base Units**

**Amount Added**

Analtes

**CAS**

Conc: ug/mL

A 30W-Motor oil

1

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO210901B  
Standard Name: 40W Motor Oil-Valvoline  
Date Prepared: 9/1/2021  
Date Expires: 9/1/2026  
Department: dropr  
Vendor:  
Lot Number: L0717H2  
Balance ID:  
Type: Primary  
BY: Jillian L Bostwick  
Status: New  
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	9/1/26

Final Volume: mL

**Stock Source**

**Base Units**

**Amount Added**

**Analtes**

**CAS**

Conc: ug/mL

A 40W-Motor oil

1

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO220106B  
Standard Name: Triacotane SURR 1000 ug/mL  
Date Prepared: 1/6/2022  
Date Expires: 4/6/2026  
Department: dropr  
Vendor:  
Lot Number:  
Balance ID: BAL-DRO  
Comments: 2X dilution of Triacotane SURR 2000 ug/mL

Type: Secondary  
BY: Jillian L Bostwick  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Dichloromethane EC832	14647	5	mL	10/28

**Final Volume:** 10 mL

**Stock Source**  
DRO211006A Triacotane SURR 2000 ug/mL

**Base Units**  
ug/mL

**Amount Added**  
5 mL

**Analtes**  
A Triacotane-d62

**CAS**

**Conc:** ug/mL  
1000

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO211006A  
Standard Name: Triacontane SURR 2000 ug/mL  
Date Prepared: 10/6/2021  
Date Expires: 4/6/2026  
Department: dropr  
Vendor:  
Lot Number:  
Balance ID: BAL-DRO  
Comments: Triacontane SURR 2000 ug/mL

Type: Secondary  
BY: Jillian L Bostwick  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Acetone DZ509	13553	50	mL	7/22/

**Final Volume:** 50 mL

Stock Source  
DRO210406A Triacontane-d62 Surr For AK103 RRO

**Base Units**  
ug/mL

**Amount Added**  
0.1001 g

Analtes  
A Triacontane-d62

**CAS**

Conc: **ug/mL**  
2000

3050 Spruce Street, Saint Louis, MO 63103, USA

Website: [www.sigmaaldrich.com](http://www.sigmaaldrich.com)

Email USA: [techserv@sial.com](mailto:techserv@sial.com)

Outside USA: [eurtechserv@sial.com](mailto:eurtechserv@sial.com)

## Certificate of Analysis

Product Name:  
Triacontane-d62 - 98 atom % D

Product Number: 451789  
 Batch Number: MBBC4347  
 Brand: ALDRICH  
 CAS Number: 93952-07-9  
 MDL Number: MFCD00209794  
 Formula: C30D62  
 Formula Weight: 485.20 g/mol  
 Quality Release Date: 27 APR 2018



ID #: 13736

Opened: \_\_\_\_\_

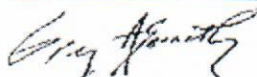
Triacontane-d62-98 atom % D

Expires: 4/6/2026

Rec'd: 4/6/2021

Energy Laboratories Inc 1120 So. 27th Street  
 Billings MT 59107

Test	Specification	Result
Purity (HPLC)	≥ 99.0 %	99.0 %
Proton NMR Spectrum	Conforms to Structure	Conforms
D Enrichment	≥ 98.0 %	99.0 %
Initial Melting Point		60.0 °C
Final Melting Point		62.0 °C



Greg Abernathy, Supervisor  
 Quality Control  
 Miamisburg, Ohio US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO211213A  
Standard Name: OTP only SURR 2000 ug/mL  
Date Prepared: 12/13/2021  
Date Expires: 9/30/2024  
Department: dropr  
Vendor:  
Lot Number:  
Balance ID: BAL-DRO  
Comments: OTP SURR 2000 ug/mL

Type: Secondary  
BY: Jillian L Bostwick  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Acetone DZ509	13553	100	mL	7/22/

**Final Volume:** 100 mL

**Stock Source**

DRO200430B O-Terphenyl

**Base Units**

ug/mL

**Amount Added**

0.2015 g

**Analtes**

A 1-Chlorooctadecane

**CAS**

3386-33-2

Conc:

**ug/mL**

2000

# 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:  
Comments: ID#: 6271

Type: Neat  
BY: Ann Nebel  
Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
o-Terphenyl	12650	500	mg	9/30/

Final Volume: mL

Stock Source

**Base Units**

**Amount Added**

Analtes

**CAS**

Conc: ug/mL

A O-Terphenyl

84-15-1

1



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[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://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 C<sub>18</sub>H<sub>14</sub>  
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

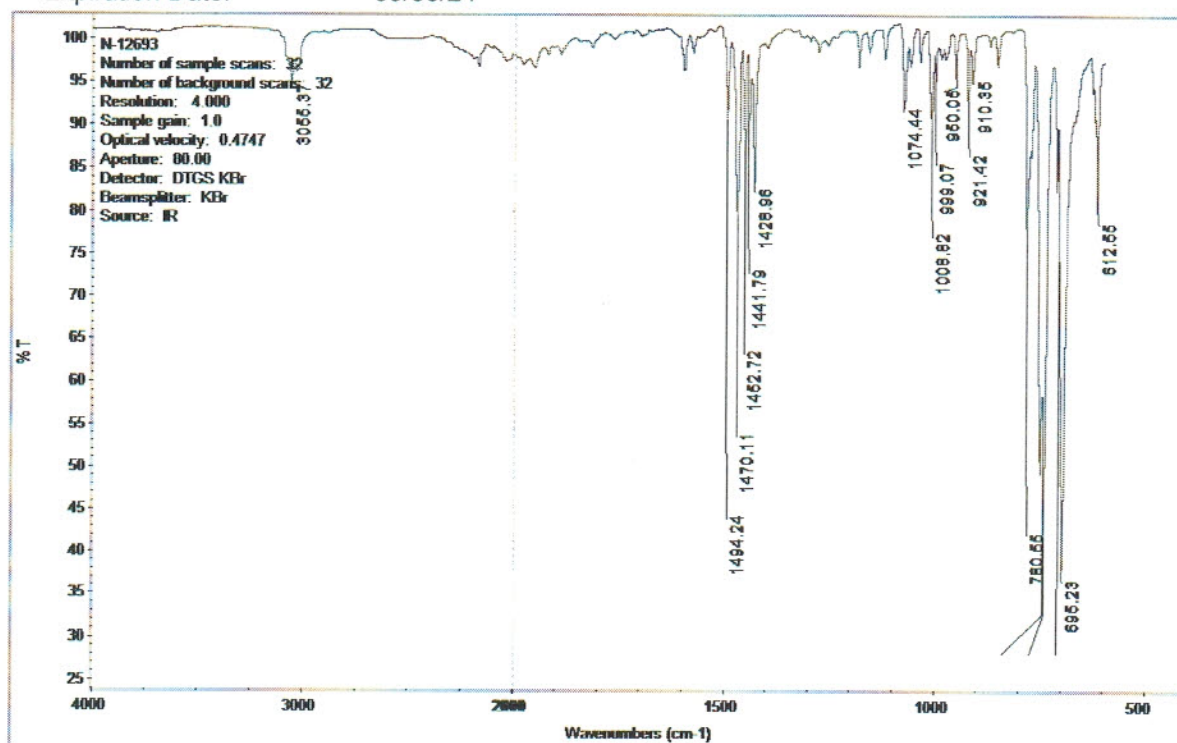
Rec'd: 4/30/2020

Energy Laboratories Inc 1120 So. 27th Street  
Billings MT 59107

## 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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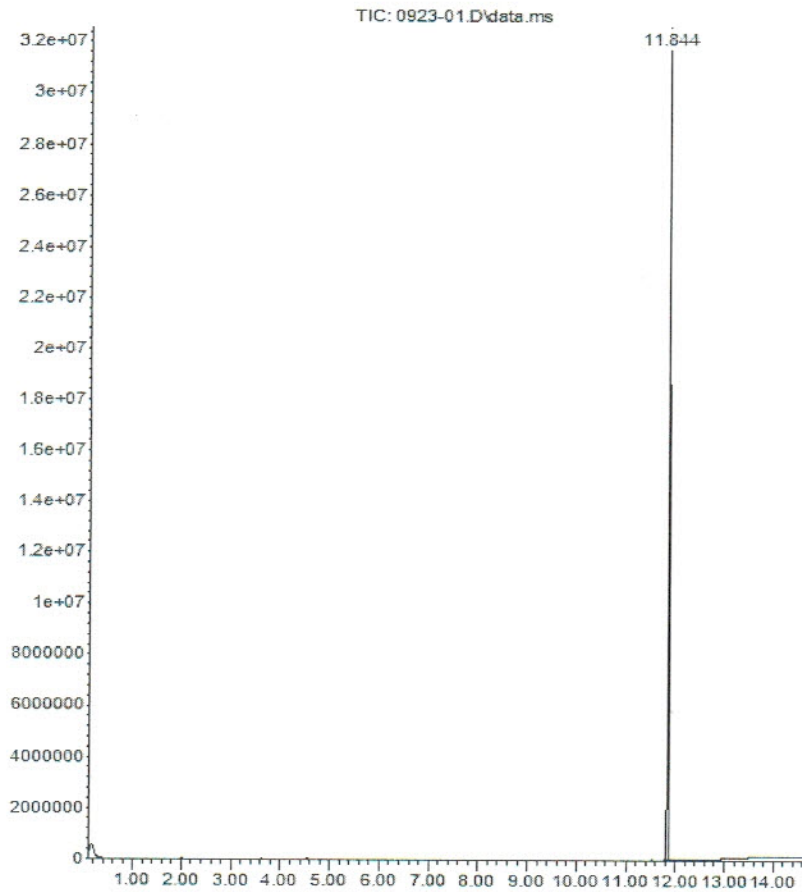
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## CERTIFICATE OF ANALYSIS

### Analysis Method:

Catalog Number: N-12693-500MG  
Description: o-Terphenyl  
Lot Number: 9972100  
Expiration Date: 09/30/24

Abundance



Time-->

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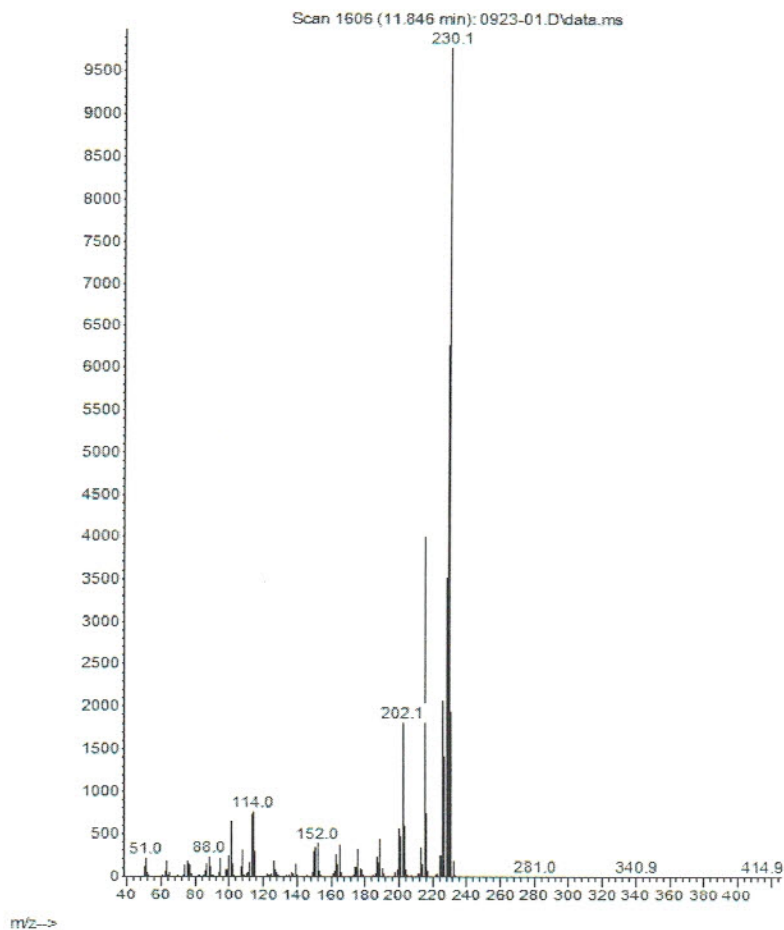
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## CERTIFICATE OF ANALYSIS

### Analysis Method:

Catalog Number: N-12693-500MG  
Description: o-Terphenyl  
Lot Number: 9972100  
Expiration Date: 09/30/24

Abundance



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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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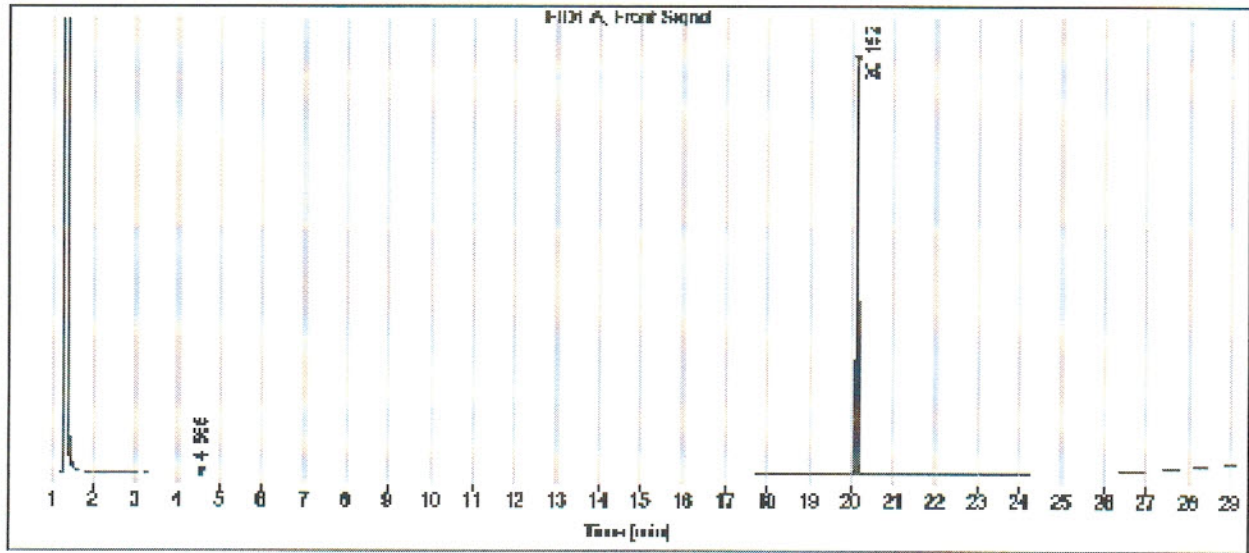
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[info@chemservice.com](mailto:info@chemservice.com) • [www.chemservice.com](http://www.chemservice.com)

Gas

Data file: C:\CHEM3\  
 Sample name: N-12683  
 Instrument: GC 2  
 Injection date: 9/23/2019 9:58:34 AM  
 Acq. method: SCREEN.M  
 Column name: HP-5

## CERTIFICATE OF ANALYSIS

Sample type:   
 Location: Vial 141  
 Injection volume: 1.0uL



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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# Energy Laboratories Inc

# Standard LOG

Standard ID: DRO220106C  
 Standard Name #2 Diesel in Acetone 150,000 ug/mL  
 Date Prepared 1/6/2022  
 Date Expires: 11/5/2023  
 Department dropr  
 Vendor:  
 Lot Number:  
 Balance ID: BAL-DRO  
 Comments:

Type: Secondary  
 BY: Ann Nebel  
 Status: New

---

Chemical / Solvent Used	BottleNo	Amt	Units	Exp
Acetone DZ509	13553	25	mL	7/22/

**Final Volume:** 25 mL

Stock Source  
 DRO181105A #2 Diesel (NEAT)

**Base Units**  
 ug/mL

**Amount Added**  
 3.7506 g

Analtes  
 A #2 Diesel

**CAS**  
 68476-34-6

Conc: **ug/mL**  
 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

---

<u>Stock Source</u>	<u>Base Units</u>	<u>Final Volume:</u>	<u>Amount Added</u>
<u>Analvtes</u>	<u>CAS</u>	<u>Conc:</u>	<u>ug/mL</u>
A #2 Diesel	68476-34-6	250 mL	1