

## **DATA PACKAGE GC SEMI-VOLATILES**

**PROJECT NAME : NJ WASTE WATER PT**

**CHEMTECH CONSULTING GROUP  
284 Sheffield St,**

**Mountainside, NJ - 07092  
Phone No: 908-789-8900**

**ORDER ID : P3845  
ATTENTION : QA Officer**



**Laboratory Certification ID # 20012**

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## Cover Page

**Order ID :** P3845

**Project ID :** NJ Waste Water PT

**Client :** Chemtech Consulting Group

### Lab Sample Number

P3845-01  
P3845-02  
P3845-03  
P3845-04  
P3845-05  
P3845-06  
P3845-07  
P3845-08  
P3845-09  
P3845-10  
P3845-11  
P3845-12  
P3845-13  
P3845-14  
P3845-15  
P3845-16  
P3845-17  
P3845-18  
P3845-19  
P3845-20  
P3845-21  
P3845-22

### Client Sample Number

PT-VOA-WP  
PT-VOA-WP  
PT-BN-WP  
PT-BN-WP  
PT-BN-WP  
PT-ACIDS-WP  
PT-ACIDS-WP  
PT-ACIDS-WP  
PT-PEST-WP  
PT-PEST-WP  
PT-CHLR-WP  
PT-CHLR-WP  
PT-TXP-WP  
PT-TXP-WP  
PT-PCBW-WP  
PT-PCBW-WP  
PT-HERB-WP  
RR-GAS-WP  
RR-DIES-WP  
RR-8011-WP  
RR-PAH-WP  
RR-TRIAZINE-WP

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : \_\_\_\_\_

Date: 10/23/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## CASE NARRATIVE

**Chemtech Consulting Group**

**Project Name: NJ Waste Water PT**

**Project # N/A**

**Chemtech Project # P3845**

**Test Name: Gasoline Range Organics**

### **A. Number of Samples and Date of Receipt:**

22 Water samples were received on 09/05/2024.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Diesel Range Organics, Gasoline Range Organics, Herbicide group1, PCB, PESTICIDE Group1, PESTICIDE Group2, PESTICIDE Group3, SVOCMS Group1, SVOCMS Group2, SVOCMS Group3, SVOCMS Group4, SVOCMS Group5, SVOCMS Group6, VOCGC Group 1 and VOCMS Group1. This data package contains results for Gasoline Range Organics.

### **C. Analytical Techniques:**

The analysis performed on instrument FID\_B were done using GC column RTX502.2 which is 60 meters, 0.53mm ID, 3.0 um df, cat#10909. The analysis of Gasoline Range Organics was based on method 8015D.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for RR-GAS-WP [Alpha,Alpha,Alpha-Trifluorotoluene - 203%], RR-GAS-WP [Alpha,Alpha andAlpha-Trifluorotoluene - 213%] the failure sample in surrogates was reanalyzed to confirm the results as per method and reported in the data.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

### **E. Additional Comments:**

### **F. Manual Integration Comments:**



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Phone: 908 789 8900 Fax: 908 789 8922

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_\_\_\_\_

**DATA REPORTING QUALIFIERS- ORGANIC**

For reporting results, the following "Results Qualifiers" are used:

- Value** If the result is a value greater than or equal to the detection limit, report the value
- U** Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
- ND** Indicates the analyte was analyzed for, but not detected
- J** Indicates an estimated value. This flag is used:  
(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)  
(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
- B** Indicates the analyte was found in the blank as well as the sample report as "12 B".
- E** Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
- D** This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- P** This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
- N** This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
- A** This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
- Q** Indicates the LCS did not meet the control limits requirements



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**GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY**

CHEMTECH PROJECT NUMBER: P3845

MATRIX: Water

METHOD: 8015D/3510

	NA	NO	YES
1. Chromatograms Labeled/Compounds Identified.			✓
2. Standard Summary Submitted.			✓
3. Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD.			✓
The Initial Calibration met the requirements .			
The Continuous Calibration met the requirements .			
4. Blank Contamination - If yes, list compounds and concentrations in each blank:			✓
5. Surrogate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
The Surrogate recoveries met the acceptable criteria except for RR-GAS-WP [Alpha,Alpha,Alpha-Trifluorotoluene - 203%], RR-GAS-WP [Alpha,Alpha and Alpha-Trifluorotoluene - 213%] the failure sample in surrogates was reanalyzed to confirm the results as per method and reported in the data.			
6. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
The Blank Spike met requirements for all samples .			
The Blank Spike Duplicate met requirements for all samples .			
The RPD met criteria .			
7. Retention Time Shift Meet Criteria (if applicable)			✓
Comments:			
8. Extraction Holding Time Met			✓
If not met, list number of days exceeded for each sample:			



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**GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)**

NA      NO      YES

9. Analysis Holding Time Met ✓

If not met, list those compounds and their recoveries which fall outside the acceptable range.

The Holding Times were met for all analysis.

**ADDITIONAL COMMENTS:**

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QA REVIEW

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Date

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## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: P3845

Completed

For thorough review, the report must have the following:

#### GENERAL:

Are all original paperwork present (chain of custody, record of communication, airbill, sample management lab chronicle, login page) ✓

Check chain-of-custody for proper relinquish/return of samples ✓

Is the chain of custody signed and complete ✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts ✓

Collect information for each project id from server. Were all requirements followed ✓

#### COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page ✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody ✓

#### CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results ✓

Do requested analyses on Chain of Custody agree with the log-in page ✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody ✓

Were the samples received within hold time ✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle ✓

#### ANALYTICAL:

Was method requirement followed? ✓

Was client requirement followed? ✓

Does the case narrative summarize all QC failure? ✓

All runlogs and manual integration are reviewed for requirements ✓

All manual calculations and /or hand notations verified ✓

QA Review Signature: SOHIL JODHANI

Date: 10/23/2024

## LAB CHRONICLE

<b>OrderID:</b>	P3845	<b>OrderDate:</b>	9/5/2024 2:19:00 PM					
<b>Client:</b>	Chemtech Consulting Group	<b>Project:</b>	NJ Waste Water PT					
<b>Contact:</b>	QA Officer	<b>Location:</b>	QA Office, VOA Lab					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3845-18	RR-GAS-WP	Water	Gasoline Range Organics	8015D	<b>09/03/24</b>		09/09/24	<b>09/05/24</b>
P3845-18RE	RR-GAS-WP	Water	Gasoline Range Organics	8015D	<b>09/03/24</b>		09/09/24	<b>09/05/24</b>
P3845-19	RR-DIES-WP	Water	Diesel Range Organics	8015D	<b>09/03/24</b>	09/09/24	09/10/24	<b>09/05/24</b>
P3845-20	RR-8011-WP	WATER	VOCGC Group 1	8011	<b>09/03/24</b>	09/11/24	09/11/24	<b>09/05/24</b>
P3845-20DL	RR-8011-WPDL	WATER	VOCGC Group 1	8011	<b>09/03/24</b>	09/11/24	09/11/24	<b>09/05/24</b>



# QC

# SUMMARY



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,  
Fax : 908 789 8922

WATER GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: Chemtech Client: Chemtech Consulting Group  
Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845

EPA SAMPLE NO.	S1 AAA-TFT	S2	S3	S4	TOT OUT
VBF0909W1	105				0
BSF0909W1	88				0
RR-GAS-WP	203 *				1
RR-GAS-WPRE	213 *				1
BSF0909W2	78				0

QC LIMITS

AAA-TFT

For Water : 50-150

For Soil : 50-150

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D Surrogate Diluted Out

**WATER GASOLINE RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATES**

<b>Lab Name:</b>	Chemtech	<b>Client:</b>	Chemtech Consulting Group		
<b>Lab Code:</b>	CHEM	<b>Cas No:</b>	P3845	<b>SDG No:</b>	P3845
<b>Matrix Spike - EPA Sample No :</b>		BSF0909W1	<b>Datafile:</b>	FB030910.D	

COMPOUND	SPIKE ADDED ug/L	CONCENTRATION ug/L	LCS/LCSD CONCENTRATION ug/L	% REC	QC LIMITS
GRO	180	0	202	112	50-150

**WATER GASOLINE RANGE ORGANICS LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATES**

<b>Lab Name:</b>	Chemtech		<b>Client:</b>	Chemtech Consulting Group	
<b>Lab Code:</b>	CHEM	<b>Cas No:</b>	P3845	<b>SAS No :</b>	P3845
<b>Matrix Spike - EPA Sample No :</b>		BSF0909W2		<b>Datafile:</b>	FB030915.D

COMPOUND	SPIKE ADDED ug/L	CONCENTRATION ug/L	LCS/LCSD CONCENTRATION ug/L	% REC	QC LIMITS
GRO	180	0	202	112	50-150

LCS/LCSD % Recovery RPD : 0

METHOD BLANK SUMMARY

EPA SAMPLE NO.

**VBF0909W1**

Lab Name: CHEMTECH

Contract: CHEM02

Lab Code: CHEM Case No.: P3845

SAS No.: P3845 SDG NO.: P3845

Lab File ID: FB030909.D

Lab Sample ID: VBF0909W1

Date Analyzed: 09/09/24

Time Analyzed: 10:22

GC Column: RTX-502.2 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: FB

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BSF0909W1	BSF0909W1	FB030910.D	09/09/24
RR-GAS-WP	P3845-18	FB030911.D	09/09/24
RR-GAS-WPRE	P3845-18RE	FB030913.D	09/09/24
BSF0909W2	BSF0909W2	FB030915.D	09/09/24

COMMENTS:

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# SAMPLE

# DATA

## Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	09/03/24
Project:	NJ Waste Water PT	Date Received:	09/05/24
Client Sample ID:	RR-GAS-WP	SDG No.:	P3845
Lab Sample ID:	P3845-18	Matrix:	Water
Analytical Method:	8015D GRO	% Solid:	0 Decanted:
Sample Wt/Vol:	5 mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB030911.D	1	09/09/24 11:40	FB090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
GRO	GRO	671		6.00		45.0 ug/L
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto 40.7	*		50 - 150	203%	SPK: 20

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 E = Value Exceeds Calibration Range  
 P = Indicates >25% difference for detected concentrations between the two GC columns  
 Q = indicates LCS control criteria did not meet requirements  
 M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 D = Dilution  
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.  
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030911.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 11:40  
 Operator : YP/AJ  
 Sample : P3845-18  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**RR-GAS-WP**

Integration File: Calibration.e  
 Quant Time: Sep 10 04:29:58 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
5) s AAA-TFT	8.800	491888	40.655 ng/ml
<hr/>			
Target Compounds			
1) t 2-Methylpentane	4.692	226844	12.695 ng/ml
2) t 2,2,4-Trimethylpentane	7.396	756642	41.268 ng/ml
3) t n-Heptane	7.740	486588	26.310 ng/ml
4) t Benzene	7.876	212141	9.390 ng/ml
6) t Toluene	10.612	2085243	95.474 ng/ml
7) t Ethylbenzene	13.048	580411	27.726 ng/ml
8) t m-Xylene	13.179	1839938	88.677 ng/ml
9) t o-Xylene	13.909	697527	34.609 ng/ml
10) t 1,2,4-Trimethylbenzene	16.184	747396	37.456 ng/ml
<hr/>			

(f)=RT Delta &gt; 1/2 Window

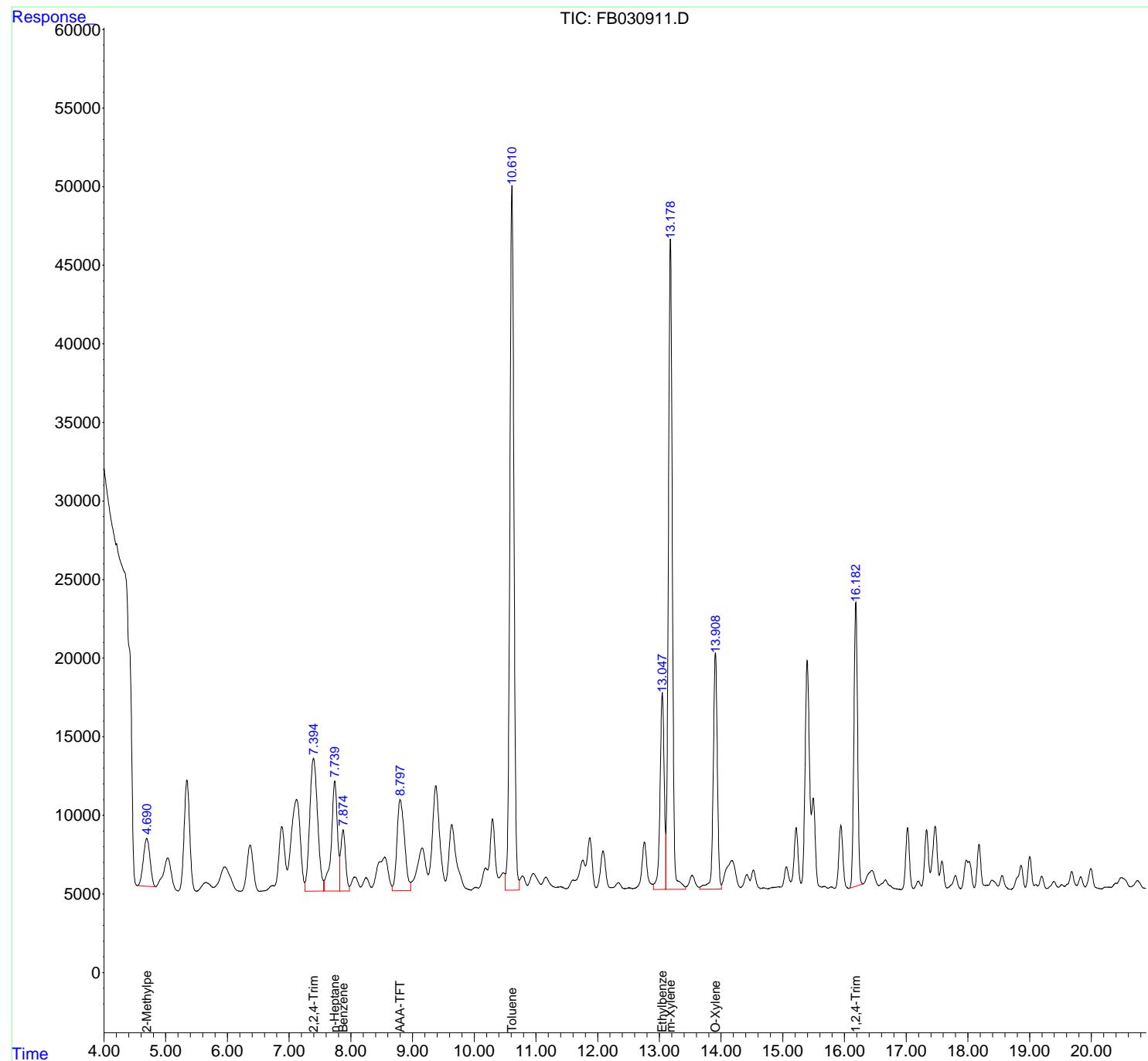
(m)=manual int.

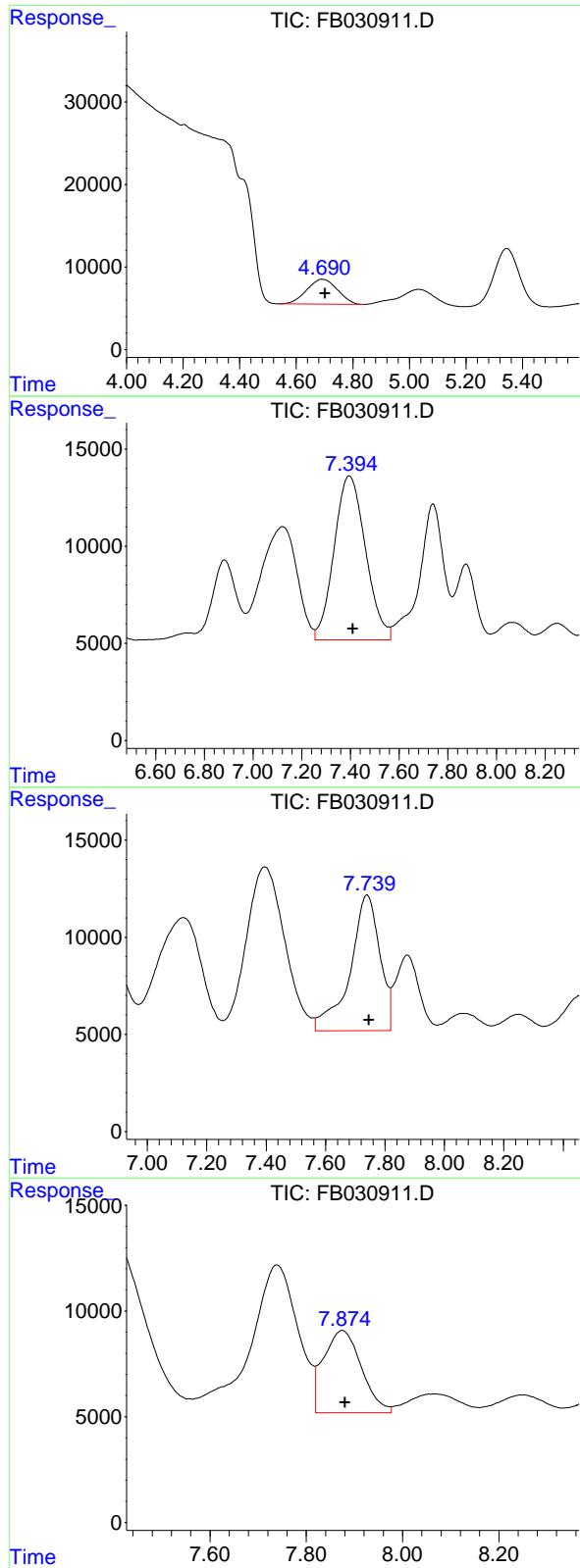
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030911.D  
 Signal(s) : FID2.B.CH  
 Acq On : 9 Sep 2024 11:40  
 Operator : YP/AJ  
 Sample : P3845-18  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 FID\_B  
 ClientSampleId :  
 RR-GAS-WP

Integration File: Calibration.e  
 Quant Time: Sep 10 04:29:58 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um





### #1 2-Methylpentane

R.T.: 4.692 min  
 Delta R.T.: -0.010 min  
 Response: 226844 FID\_B  
 Conc: 12.69 ng/ml ClientSampleId : RR-GAS-WP

### #2 2,2,4-Trimethylpentane

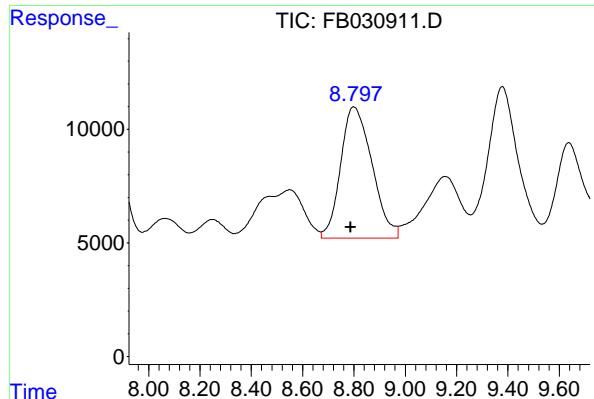
R.T.: 7.396 min  
 Delta R.T.: -0.015 min  
 Response: 756642  
 Conc: 41.27 ng/ml

### #3 n-Heptane

R.T.: 7.740 min  
 Delta R.T.: -0.007 min  
 Response: 486588  
 Conc: 26.31 ng/ml

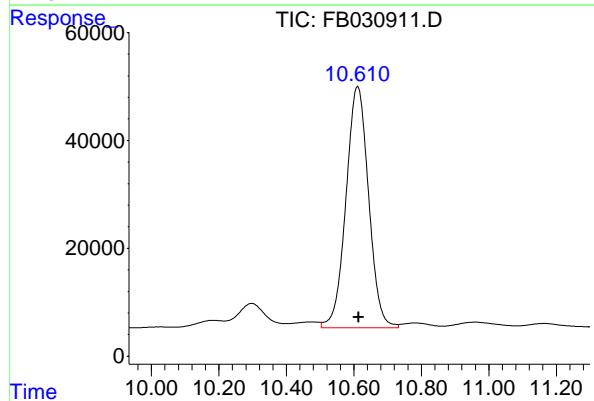
### #4 Benzene

R.T.: 7.876 min  
 Delta R.T.: -0.006 min  
 Response: 212141  
 Conc: 9.39 ng/ml



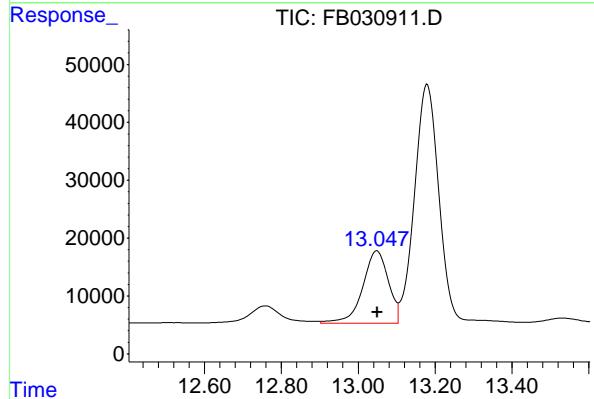
#5 AAA-TFT

R.T.: 8.800 min  
 Delta R.T.: 0.013 min  
 Response: 491888  
 Conc: 40.66 ng/ml  
 Instrument: FID\_B  
 ClientSampleId : RR-GAS-WP



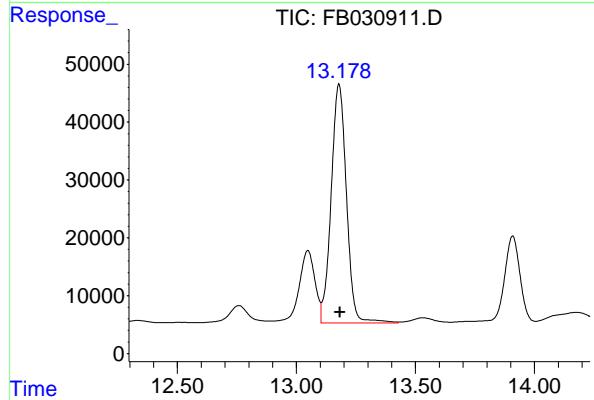
#6 Toluene

R.T.: 10.612 min  
 Delta R.T.: -0.003 min  
 Response: 2085243  
 Conc: 95.47 ng/ml



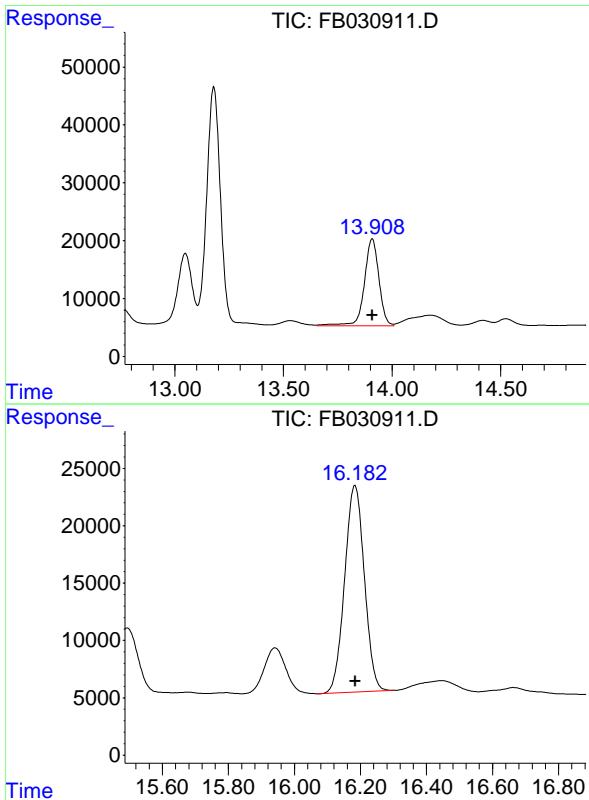
#7 Ethylbenzene

R.T.: 13.048 min  
 Delta R.T.: -0.002 min  
 Response: 580411  
 Conc: 27.73 ng/ml



#8 m-Xylene

R.T.: 13.179 min  
 Delta R.T.: -0.003 min  
 Response: 1839938  
 Conc: 88.68 ng/ml



#9 O-Xylene

R.T.: 13.909 min  
Delta R.T.: 0.000 min  
Instrument: FID\_B  
Response: 697527  
Conc: 34.61 ng/ml  
ClientSampleId : RR-GAS-WP

#10 1,2,4-Trimethylbenzene

R.T.: 16.184 min  
Delta R.T.: 0.000 min  
Response: 747396  
Conc: 37.46 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030911.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 11:40  
 Sample : P3845-18  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: SAMPLE.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4. 692	4. 504	4. 839	BV	2909	201937	9. 68%	1. 459%
2	5. 660	5. 500	5. 779	PV	574	57873	2. 78%	0. 418%
3	5. 960	5. 779	6. 217	VV	1562	186599	8. 95%	1. 348%
4	6. 369	6. 217	6. 518	PV	2949	205892	9. 87%	1. 488%
5	6. 743	6. 518	6. 761	VV	371	21893	1. 05%	0. 158%
6	7. 122	6. 971	7. 254	VV	5832	591852	28. 38%	4. 277%
7	7. 396	7. 254	7. 563	VV	8442	755715	36. 24%	5. 461%
8	7. 740	7. 563	7. 820	VV	6994	488358	23. 42%	3. 529%
9	7. 875	7. 820	7. 978	VV	3896	211561	10. 15%	1. 529%
10	8. 065	7. 978	8. 160	VV	883	64683	3. 10%	0. 467%
11	8. 249	8. 160	8. 335	VV	829	55671	2. 67%	0. 402%
12	8. 549	8. 335	8. 672	VV	2142	259978	12. 47%	1. 879%
13	8. 800	8. 672	8. 970	VV	5786	490996	23. 55%	3. 548%
14	9. 156	8. 970	9. 254	VV	2712	267914	12. 85%	1. 936%
15	9. 378	9. 254	9. 533	VV	6676	548888	26. 32%	3. 966%
16	9. 637	9. 533	9. 945	VV	4194	360523	17. 29%	2. 605%
17	10. 024	9. 945	10. 069	VV	181	9350	0. 45%	0. 068%
18	10. 185	10. 069	10. 219	VV	1405	78124	3. 75%	0. 565%
19	10. 297	10. 219	10. 403	VV	4549	268241	12. 86%	1. 938%
20	10. 472	10. 403	10. 503	VV	1106	59458	2. 85%	0. 430%
21	10. 612	10. 503	10. 731	VV	44799	2085130	100. 00%	15. 067%
22	10. 783	10. 731	10. 863	VV	893	52692	2. 53%	0. 381%
23	10. 959	10. 863	11. 083	VV	1054	91262	4. 38%	0. 659%
24	11. 162	11. 083	11. 328	VV	810	66842	3. 21%	0. 483%
25	11. 401	11. 328	11. 494	VV	191	15017	0. 72%	0. 109%
26	11. 760	11. 494	11. 802	VV	1889	158555	7. 60%	1. 146%
27	11. 873	11. 802	11. 977	VV	3312	188664	9. 05%	1. 363%
28	12. 088	11. 977	12. 232	VV	2460	145785	6. 99%	1. 053%
29	12. 335	12. 232	12. 435	VV	446	28869	1. 38%	0. 209%
30	12. 506	12. 435	12. 566	VV	109	6478	0. 31%	0. 047%
31	12. 759	12. 566	12. 902	VV	3014	181327	8. 70%	1. 310%
32	13. 048	12. 902	13. 103	VV	12526	580257	27. 83%	4. 193%
33	13. 179	13. 103	13. 427	VV	41328	1839680	88. 23%	13. 293%
34	13. 532	13. 427	13. 654	VV	882	59063	2. 83%	0. 427%
35	13. 909	13. 654	14. 008	VV	15045	697221	33. 44%	5. 038%
36	14. 175	14. 008	14. 317	VV	1802	195198	9. 36%	1. 410%

						rteres			
37	14. 419	14. 317	14. 472	VV	916	50344	2. 41%	0. 364%	
38	14. 524	14. 472	14. 646	VV	1189	59385	2. 85%	0. 429%	
39	14. 690	14. 646	14. 757	VV	58	2554	0. 12%	0. 018%	
40	14. 937	14. 757	14. 973	VV	124	10529	0. 50%	0. 076%	
41	15. 060	14. 973	15. 130	VV	1402	69933	3. 35%	0. 505%	
42	15. 218	15. 130	15. 297	VV	3896	182331	8. 74%	1. 317%	
43	15. 397	15. 297	15. 463	VV	14478	712418	34. 17%	5. 148%	
44	15. 493	15. 463	15. 647	VV	5745	235848	11. 31%	1. 704%	
45	15. 674	15. 647	15. 736	VV	138	4999	0. 24%	0. 036%	
46	15. 788	15. 736	15. 842	VV	100	3713	0. 18%	0. 027%	
47	15. 942	15. 842	16. 069	VV	4013	182735	8. 76%	1. 320%	
48	16. 184	16. 069	16. 302	PV	18024	747114	35. 83%	5. 398%	
					Sum of corrected areas:	13839450			

FB082724.M Tue Sep 10 08:41:45 2024

## Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	09/03/24
Project:	NJ Waste Water PT	Date Received:	09/05/24
Client Sample ID:	RR-GAS-WPRE	SDG No.:	P3845
Lab Sample ID:	P3845-18RE	Matrix:	Water
Analytical Method:	8015D GRO	% Solid:	0 Decanted:
Sample Wt/Vol:	5 mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB030913.D	1	09/09/24 12:57	FB090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
GRO	GRO	696		6.00		45.0 ug/L
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	42.5	*	50 - 150	213%	SPK: 20

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 E = Value Exceeds Calibration Range  
 P = Indicates >25% difference for detected concentrations between the two GC columns  
 Q = indicates LCS control criteria did not meet requirements  
 M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 D = Dilution  
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.  
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030913.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 12:57  
 Operator : YP/AJ  
 Sample : P3845-18RE  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 FID\_B  
 ClientSampleId :  
 RR-GAS-WPRE

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 09/10/2024  
 Supervised By :Ankita Jodhani 09/10/2024

Integration File: Calibration.e  
 Quant Time: Sep 10 04:30:09 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
5) s AAA-TFT	8.802	514604	42.533 ng/ml
<hr/>			
Target Compounds			
1) t 2-Methylpentane	4.702	246315	13.784 ng/ml
2) t 2,2,4-Trimethylpentane	7.398	744092	40.583 ng/ml
3) t n-Heptane	7.745	521719	28.210 ng/ml
4) t Benzene	7.880	224078	9.918 ng/ml
6) t Toluene	10.615	2212007	101.278 ng/ml
7) t Ethylbenzene	13.050	605900	28.943 ng/ml
8) t m-Xylene	13.181	1906131	91.867 ng/ml
9) t o-Xylene	13.910	714796	35.466 ng/ml
10) t 1,2,4-Trimethylbenzene	16.185	728576	36.513 ng/ml
<hr/>			

(f)=RT Delta &gt; 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030913.D  
 Signal(s) : FID2.B.CH  
 Acq On : 9 Sep 2024 12:57  
 Operator : YP/AJ  
 Sample : P3845-18RE  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

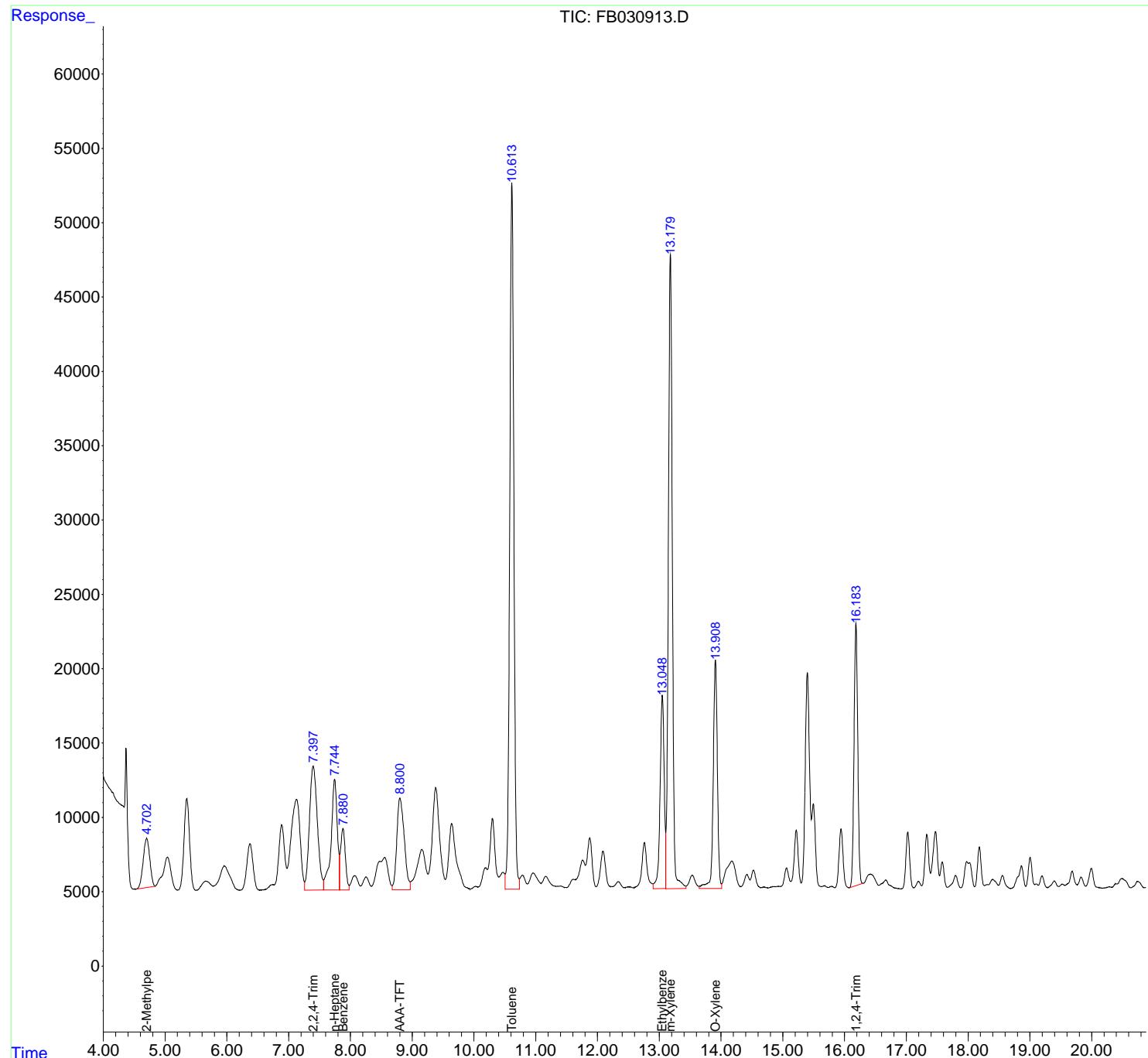
Instrument :  
 FID\_B  
 ClientSampleId :  
 RR-GAS-WPRE

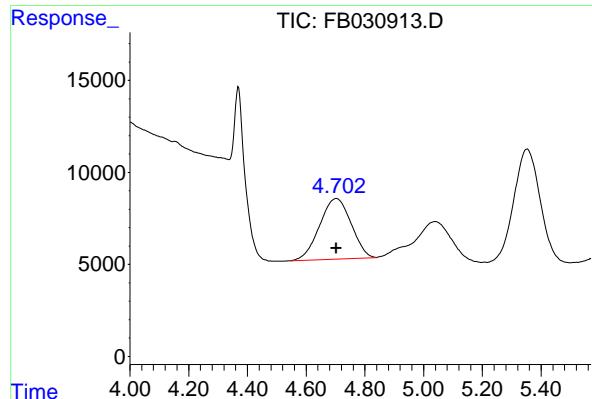
**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 09/10/2024  
 Supervised By :Ankita Jodhani 09/10/2024

Integration File: Calibration.e  
 Quant Time: Sep 10 04:30:09 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um



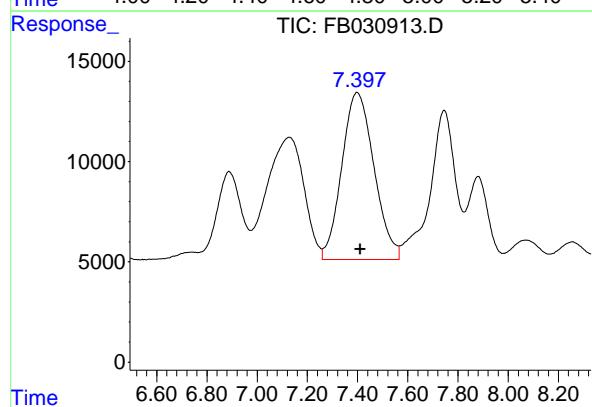


### #1 2-Methylpentane

R.T.: 4.702 min  
 Delta R.T.: 0.000 min  
 Response: 246315 FID\_B  
 Conc: 13.78 ng/ml ClientSampleId : RR-GAS-WPRE

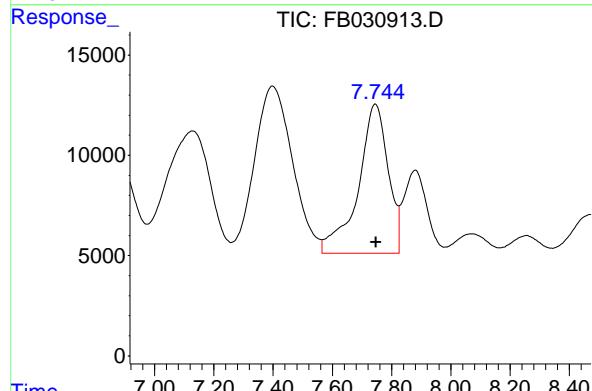
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 09/10/2024  
 Supervised By :Ankita Jodhani 09/10/2024



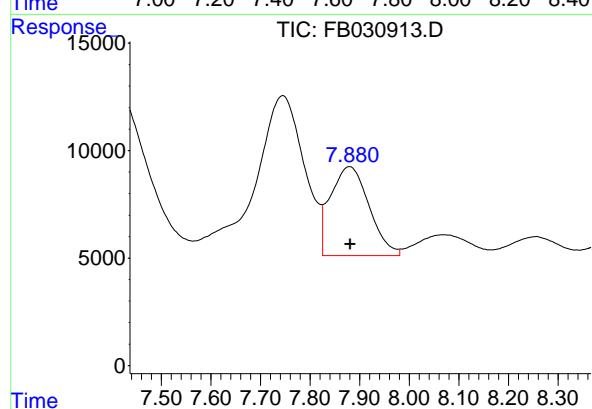
### #2 2,2,4-Trimethylpentane

R.T.: 7.398 min  
 Delta R.T.: -0.013 min  
 Response: 744092  
 Conc: 40.58 ng/ml



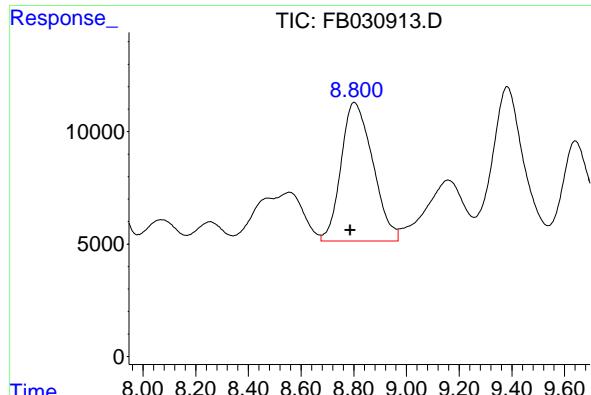
### #3 n-Heptane

R.T.: 7.745 min  
 Delta R.T.: -0.001 min  
 Response: 521719  
 Conc: 28.21 ng/ml



### #4 Benzene

R.T.: 7.880 min  
 Delta R.T.: 0.000 min  
 Response: 224078  
 Conc: 9.92 ng/ml

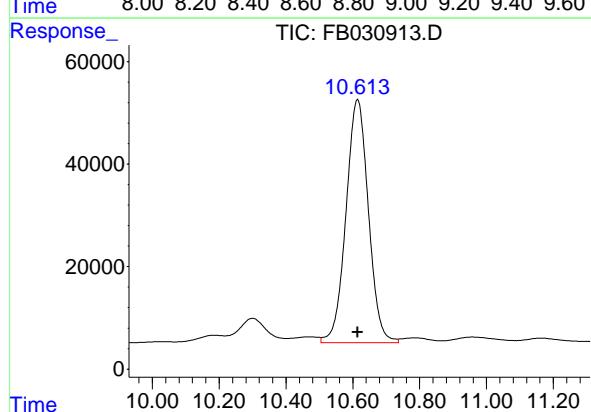


#5 AAA-TFT

R.T.: 8.802 min  
 Delta R.T.: 0.016 min  
 Response: 514604 FID\_B  
 Conc: 42.53 ng/ml ClientSampleId : RR-GAS-WPRE

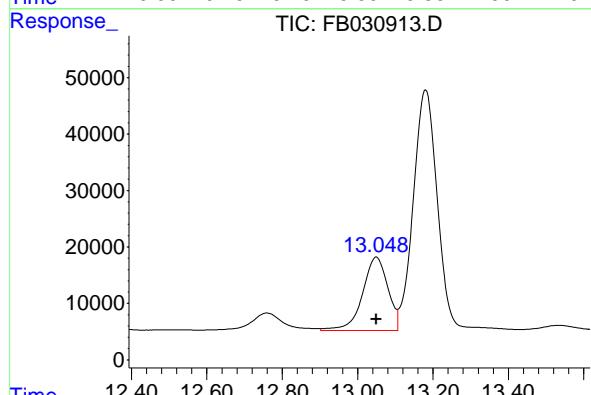
Manual Integrations  
APPROVED

Reviewed By :Yogesh Patel 09/10/2024  
 Supervised By :Ankita Jodhani 09/10/2024



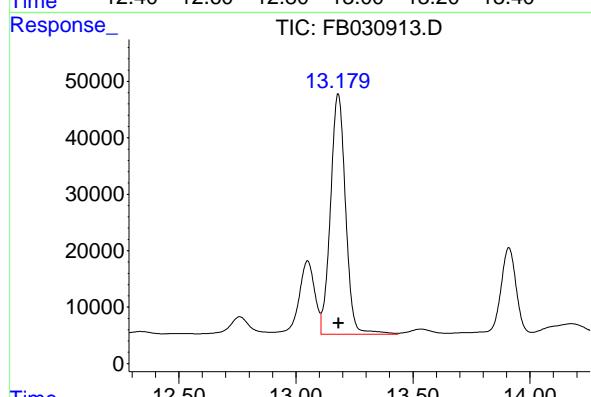
#6 Toluene

R.T.: 10.615 min  
 Delta R.T.: 0.000 min  
 Response: 2212007  
 Conc: 101.28 ng/ml



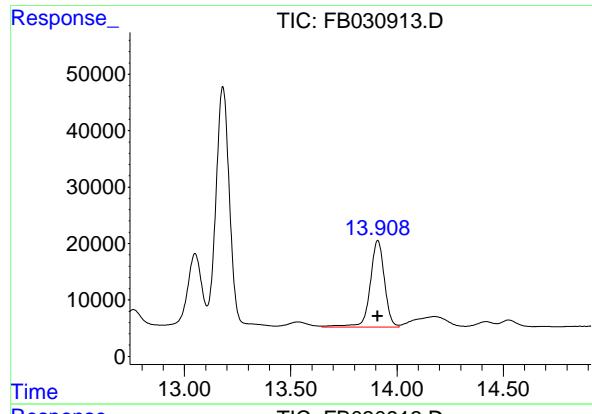
#7 Ethylbenzene

R.T.: 13.050 min  
 Delta R.T.: 0.000 min  
 Response: 605900  
 Conc: 28.94 ng/ml



#8 m-Xylene

R.T.: 13.181 min  
 Delta R.T.: -0.002 min  
 Response: 1906131  
 Conc: 91.87 ng/ml

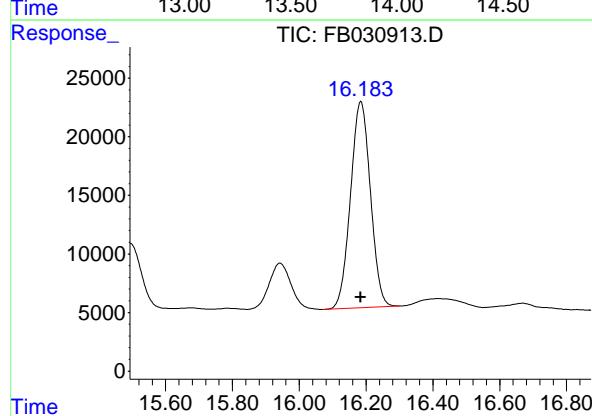


### #9 O-Xylene

R.T.: 13.910 min  
 Delta R.T.: 0.000 min  
 Response: 714796  
 Conc: 35.47 ng/ml  
 Instrument: FID\_B  
 ClientSampleId : RR-GAS-WPRE

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 09/10/2024  
 Supervised By :Ankita Jodhani 09/10/2024



### #10 1,2,4-Trimethylbenzene

R.T.: 16.185 min  
 Delta R.T.: 0.000 min  
 Response: 728576  
 Conc: 36.51 ng/ml

1  
2  
3  
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8  
9  
10  
11  
12  
13  
14  
15

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB09092  
 Data File : FB030913.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 12:57  
 Sample : P3845-18RE  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

**Instrument :**

FID\_B

**ClientSampleId :**

RR-GAS-WPRE

**Area Percent Report**
**Manual Integrations APPROVED**

 Reviewed By :Yogesh Patel 09/10/2024  
 Supervised By :Ankita Jodhani 09/10/2024

**Integration File:** SAMPLE.e

**Method Title :** Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M

**Signal :** FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.703	4.513	4.840	PV	3434	267512	12.08%	1.864%
2	5.660	5.499	5.784	PV	627	63434	2.86%	0.442%
3	5.960	5.784	6.223	VV	1646	193528	8.74%	1.349%
4	6.375	6.223	6.561	VV	3131	216399	9.77%	1.508%
5	6.747	6.561	6.764	VV	377	21979	0.99%	0.153%
6	7.128	6.976	7.260	VV	6101	621126	28.05%	4.329%
7	7.398	7.260	7.566	VV	8340	743465	33.57%	5.182%
8	7.745	7.566	7.825	VV	7446	521603	23.55%	3.635%
9	7.880	7.825	7.983	VV	4138	223545	10.09%	1.558%
10	8.070	7.983	8.166	VV	956	69920	3.16%	0.487%
11	8.255	8.166	8.341	VV	868	57858	2.61%	0.403%
12	8.555	8.341	8.677	VV	2173	265482	11.99%	1.850%
13	8.803	8.677	8.971	VV	6160	514876	23.25%	3.588%
14	9.158	8.971	9.257	VV	2699	269997	12.19%	1.882%
15	9.382	9.257	9.537	VV	6856	566902	25.60%	3.951%
16	9.641	9.537	9.943	VV	4438	381797	17.24%	2.661%
17	10.026	9.943	10.067	VV	208	9758	0.44%	0.068%
18	10.188	10.067	10.219	VV	1443	78407	3.54%	0.546%
19	10.301	10.219	10.405	VV	4765	282634	12.76%	1.970%
20	10.471	10.405	10.501	VV	1136	58607	2.65%	0.408%
21	10.615	10.501	10.737	VV	47454	2214497	100.00%	15.434%
22	10.787	10.737	10.866	VV	950	55147	2.49%	0.384%
23	10.960	10.866	11.086	VV	1084	95787	4.33%	0.668%
24	11.164	11.086	11.333	VV	858	71886	3.25%	0.501%
25	11.403	11.333	11.498	VV	200	15731	0.71%	0.110%
26	11.762	11.498	11.805	VV	1933	165890	7.49%	1.156%
27	11.875	11.805	11.980	VV	3437	196292	8.86%	1.368%
28	12.091	11.980	12.246	VV	2530	154032	6.96%	1.074%
29	12.338	12.246	12.436	VV	486	31517	1.42%	0.220%
30	12.497	12.436	12.577	VV	125	8716	0.39%	0.061%
31	12.760	12.577	12.902	VV	3095	187064	8.45%	1.304%
32	13.050	12.902	13.108	VV	13015	610317	27.56%	4.254%
33	13.181	13.108	13.437	VV	42625	1901360	85.86%	13.251%
34	13.534	13.437	13.648	VV	902	59834	2.70%	0.417%
35	13.910	13.648	14.011	VV	15371	714843	32.28%	4.982%
36	14.177	14.011	14.320	VV	1832	196895	8.89%	1.372%

Instrument : FID_B									
ClientSampleId : RR-GAS-WPRE									
37	14. 420	14. 320	14. 472	VV	934	50865	2.	30%	0. 355%
38	14. 526	14. 472	14. 647	VV	1214	62072	2.	<b>Manual Integrations APPROVED</b>	
39	14. 696	14. 647	14. 767	VV	88	3684	0.		
40	15. 061	14. 767	15. 130	VV	1359	79347	3.		
41	15. 219	15. 130	15. 302	VV	3885	183610	8.	Reviewed By :Yogesh Patel 09/10/2024	
42	15. 398	15. 302	15. 467	VV	14455	718238	32.	Supervised By :Ankita Jodhani 09/10/2024	
43	15. 494	15. 467	15. 630	VV	5676	222893	10.	07%	1. 553%
44	15. 673	15. 630	15. 737	VV	139	6245	0.	28%	0. 044%
45	15. 788	15. 737	15. 847	VV	112	4267	0.	19%	0. 030%
46	15. 943	15. 847	16. 069	VV	3961	179868	8.	12%	1. 254%
47	16. 185	16. 069	16. 302	PV	17611	728643	32.	90%	5. 078%
Sum of corrected areas:							14348366		

FB082724. M Tue Sep 10 09:13:25 2024



# CALIBRATION

# SUMMARY

**GASOLINE RANGE ORGANICS INITIAL CALIBRATION SUMMARY**

Lab Name: Chemtech Contract: CHEM02  
ProjectID: NJ Waste Water PT  
Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845

Calibration Sequence : FB082724		Test : Gasoline Range Organics		
Concentration	(PPB)	Area Count	Reference Factor	File ID
45		823693	18304	FB030884.D
90		1873410	20816	FB030885.D
180		3671455	20397	FB030886.D
450		9039140	20087	FB030887.D
900		17824073	19805	FB030888.D
AVG RF : 19882		% RSD : 4.821		AVG RT : 8.7856

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030884.D  
 Signal(s) : FID2B.CH  
 Acq On : 27 Aug 2024 8:14  
 Operator : YP/AJ  
 Sample : 5 GRO STD  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**5 GRO STD**

Integration File: Calibration.e  
 Quant Time: Aug 27 10:09:02 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 10:06:54 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
5) s AAA-TFT	8.784	53534	4.727 ng/ml
<hr/>			
Target Compounds			
1) t 2-Methylpentane	4.708	114935	6.153 ng/ml
2) t 2,2,4-Trimethylpentane	7.403	128227	6.853 ng/ml
3) t n-Heptane	7.738	36240	1.883 ng/ml
4) t Benzene	7.875	46857	2.008 ng/ml
6) t Toluene	10.608	137019	6.054 ng/ml
7) t Ethylbenzene	13.044	49548	2.311 ng/ml
8) t m-Xylene	13.177	98305	4.619 ng/ml
9) t o-Xylene	13.904	100958	4.952 ng/ml
10) t 1,2,4-Trimethylbenzene	16.178	111604	5.620 ng/ml
<hr/>			

(f)=RT Delta &gt; 1/2 Window

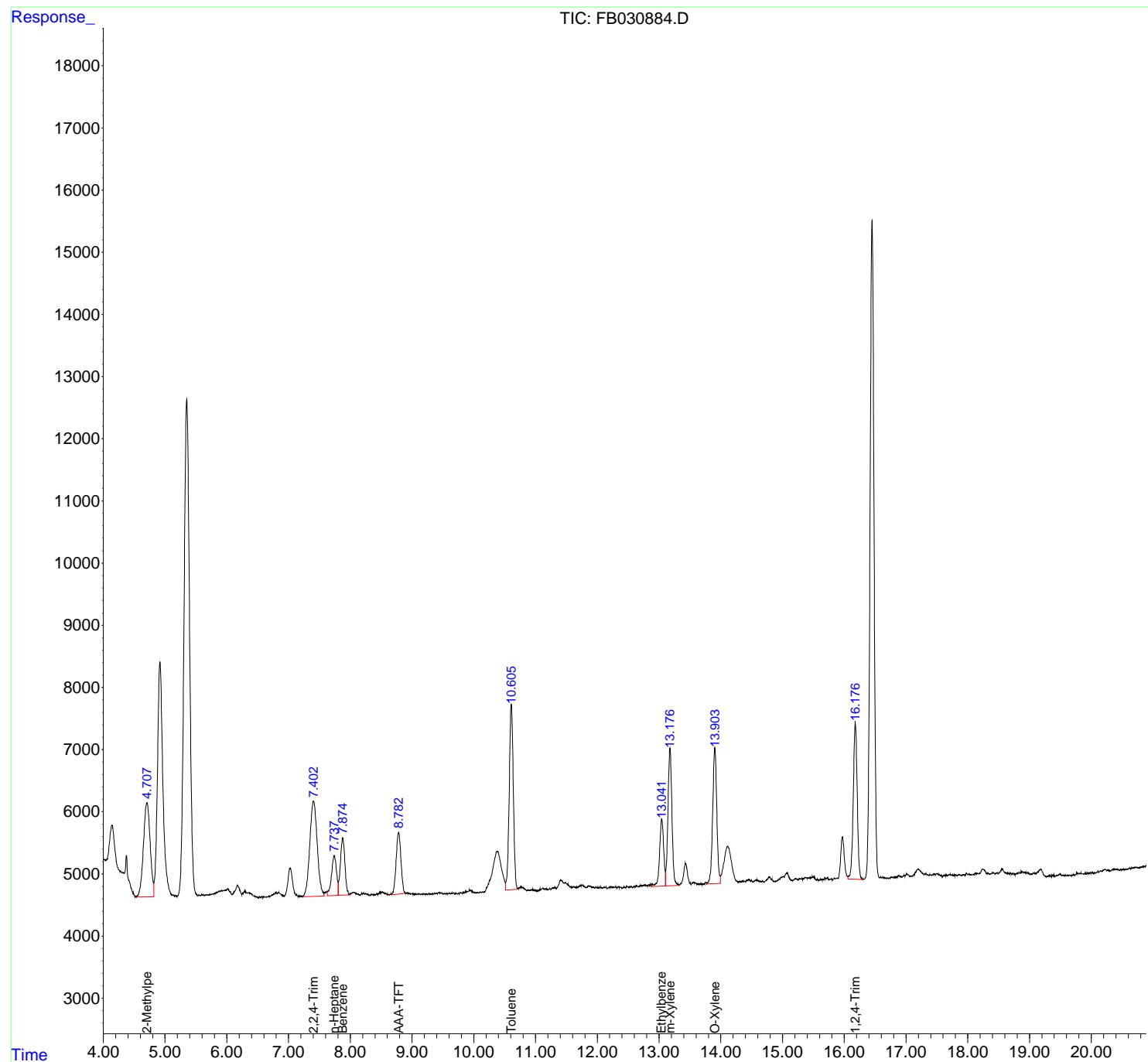
(m)=manual int.

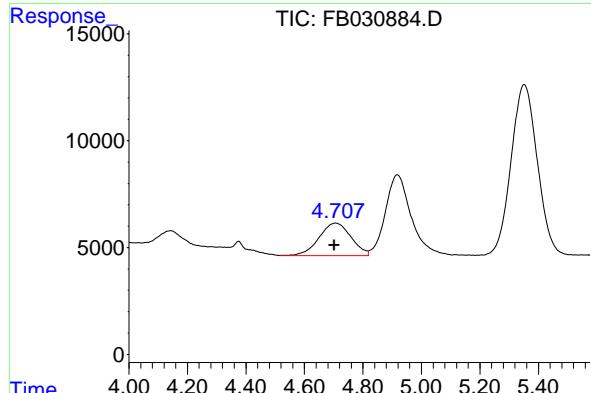
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030884.D  
 Signal(s) : FID2B.CH  
 Acq On : 27 Aug 2024 8:14  
 Operator : YP/AJ  
 Sample : 5 GRO STD  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 FID\_B  
 ClientSampleId :  
 5 GRO STD

Integration File: Calibration.e  
 Quant Time: Aug 27 10:09:02 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 10:06:54 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

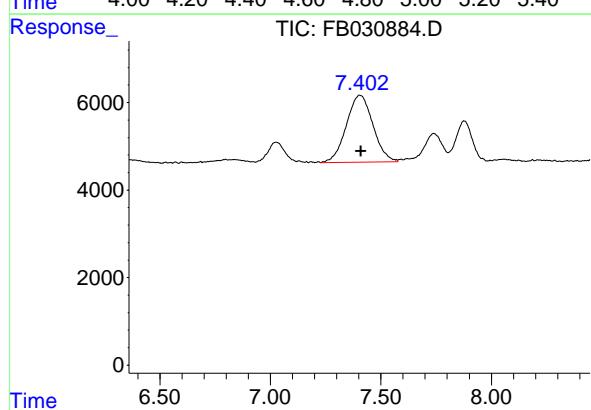
Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um





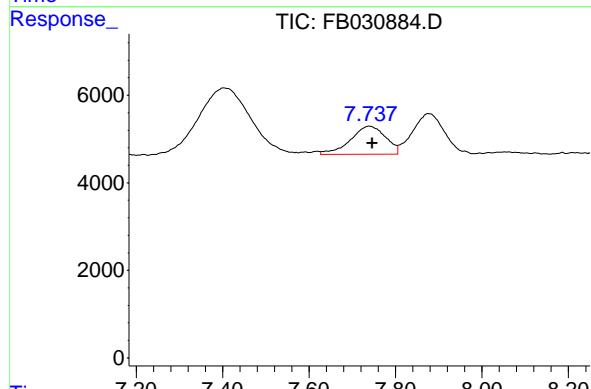
## #1 2-Methylpentane

R.T.: 4.708 min  
Delta R.T.: 0.006 min  
Instrument:  
Response: 114935 FID\_B  
Conc: 6.15 ng/ml ClientSampleId :  
5 GRO STD



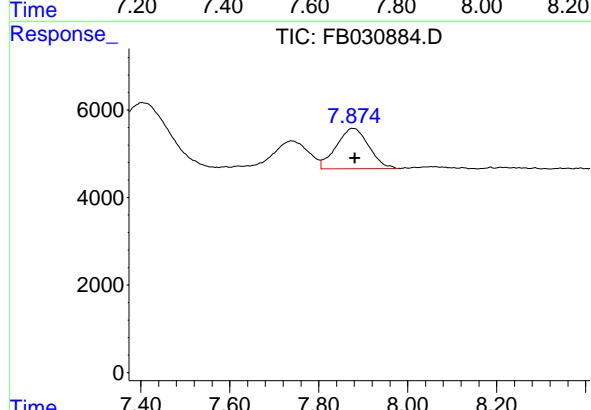
## #2 2,2,4-Trimethylpentane

R.T.: 7.403 min  
Delta R.T.: -0.008 min  
Response: 128227  
Conc: 6.85 ng/ml



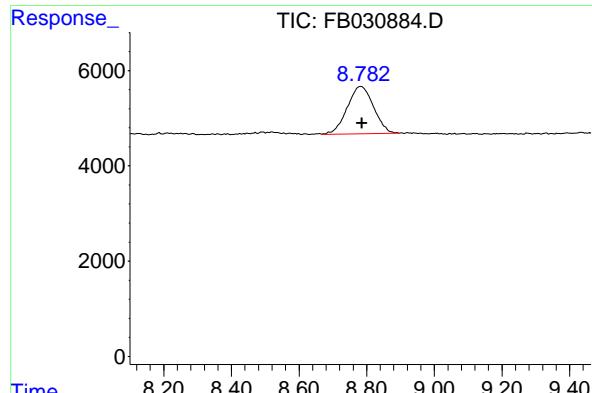
## #3 n-Heptane

R.T.: 7.738 min  
Delta R.T.: -0.008 min  
Response: 36240  
Conc: 1.88 ng/ml



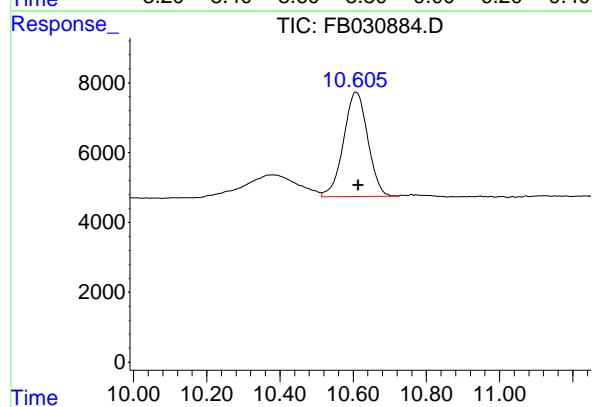
## #4 Benzene

R.T.: 7.875 min  
Delta R.T.: -0.006 min  
Response: 46857  
Conc: 2.01 ng/ml



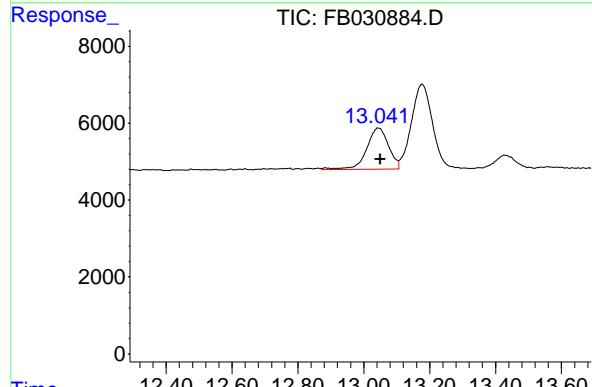
#5 AAA-TFT

R.T.: 8.784 min  
Delta R.T.: -0.003 min  
Instrument: FID\_B  
Response: 53534  
Conc: 4.73 ng/ml  
ClientSampleId : 5 GRO STD



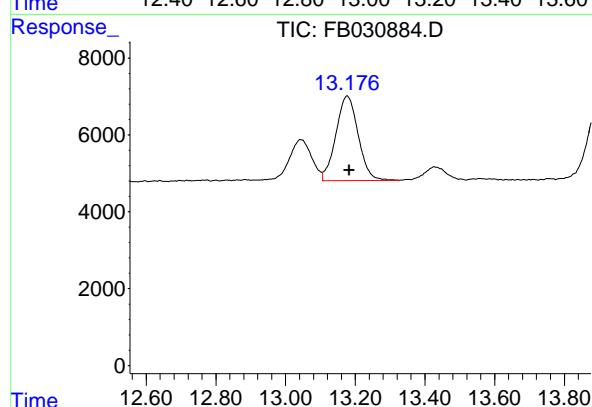
#6 Toluene

R.T.: 10.608 min  
Delta R.T.: -0.006 min  
Response: 137019  
Conc: 6.05 ng/ml



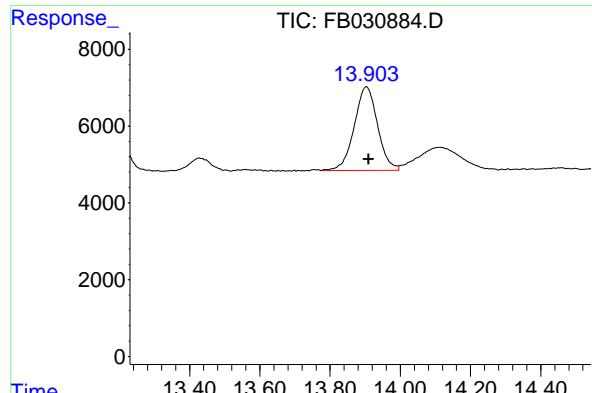
#7 Ethylbenzene

R.T.: 13.044 min  
Delta R.T.: -0.007 min  
Response: 49548  
Conc: 2.31 ng/ml



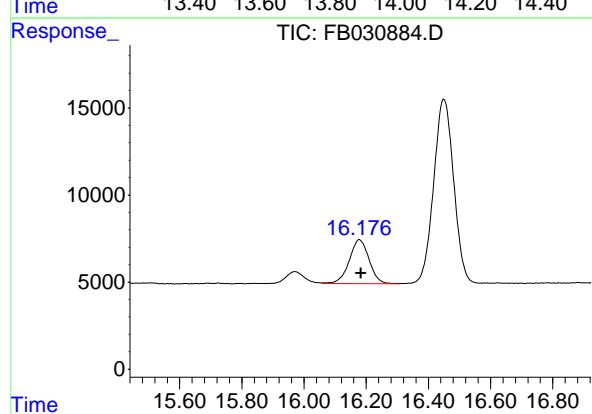
#8 m-Xylene

R.T.: 13.177 min  
Delta R.T.: -0.005 min  
Response: 98305  
Conc: 4.62 ng/ml



#9 O-Xylene

R.T.: 13.904 min  
Delta R.T.: -0.005 min  
Instrument: FID\_B  
Response: 100958  
Conc: 4.95 ng/ml  
ClientSampleId : 5 GRO STD



#10 1,2,4-Trimethylbenzene

R.T.: 16.178 min  
Delta R.T.: -0.006 min  
Response: 111604  
Conc: 5.62 ng/ml

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030884.D  
 Signal (s) : FID2B.CH  
 Acq On : 27 Aug 2024 8:14  
 Sample : 5 GRO STD  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: Calibration.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.708	4.515	4.818	PV	1519	114935	83.88%	13.102%
2	7.403	7.228	7.577	PV	1533	128227	93.58%	14.617%
3	7.738	7.627	7.805	VV	644	36240	26.45%	4.131%
4	7.875	7.805	7.978	VV	922	46857	34.20%	5.341%
5	8.784	8.668	8.896	VV	994	53534	39.07%	6.103%
6	10.608	10.514	10.725	VV	2985	137019	100.00%	15.620%
7	13.044	12.872	13.106	VV	1080	49548	36.16%	5.648%
8	13.177	13.106	13.327	VV	2210	98305	71.75%	11.206%
9	13.904	13.776	13.995	PV	2184	100958	73.68%	11.509%
10	16.178	16.058	16.305	VV	2533	111604	81.45%	12.722%

Sum of corrected areas: 877227

FB082724.M Wed Aug 28 04:27:01 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030885.D  
 Signal(s) : FID2B.CH  
 Acq On : 27 Aug 2024 8:52  
 Operator : YP/AJ  
 Sample : 10 GRO STD  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**10 GRO STD**

Integration File: Calibration.e  
 Quant Time: Aug 27 10:10:04 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 10:06:54 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc	Units
<hr/>				
System Monitoring Compounds				
5) s AAA-TFT	8.786	126677	11.499	ng/ml
<hr/>				
Target Compounds				
1) t 2-Methylpentane	4.701	282267	16.602	ng/ml
2) t 2,2,4-Trimethylpentane	7.409	270873	15.130	ng/ml
3) t n-Heptane	7.744	97473	5.777	ng/ml
4) t Benzene	7.880	118561	5.636	ng/ml
6) t Toluene	10.612	348515	17.042	ng/ml
7) t Ethylbenzene	13.048	109189	5.292	ng/ml
8) t m-Xylene	13.180	218395	10.668	ng/ml
9) t o-Xylene	13.907	213262	10.511	ng/ml
10) t 1,2,4-Trimethylbenzene	16.182	214875	10.189	ng/ml
<hr/>				

(f)=RT Delta &gt; 1/2 Window

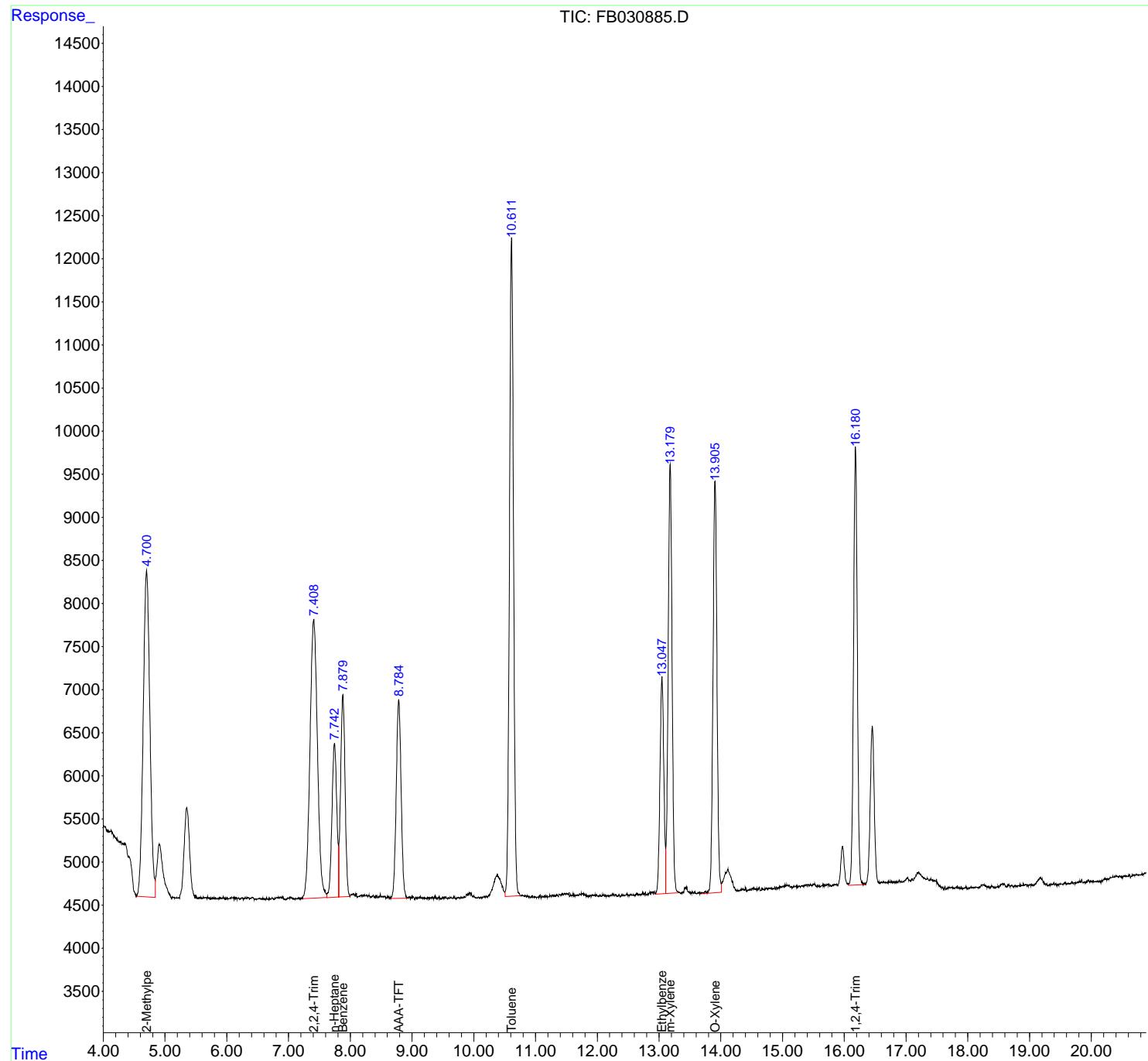
(m)=manual int.

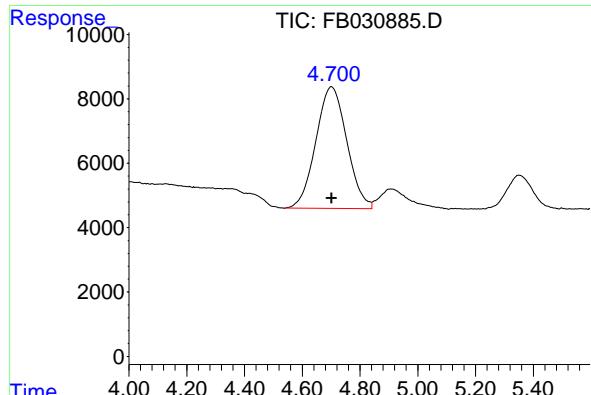
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030885.D  
 Signal(s) : FID2B.CH  
 Acq On : 27 Aug 2024 8:52  
 Operator : YP/AJ  
 Sample : 10 GRO STD  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**10 GRO STD**

Integration File: Calibration.e  
 Quant Time: Aug 27 10:10:04 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 10:06:54 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

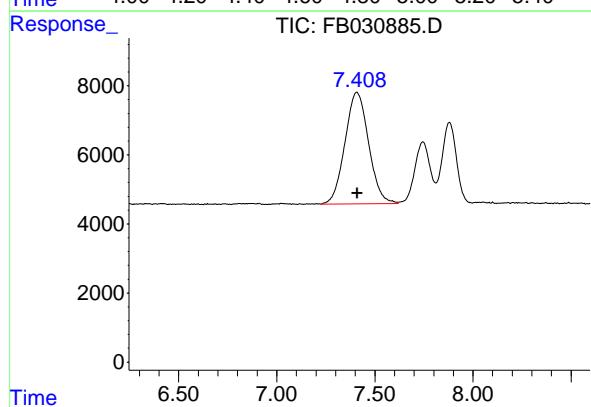
Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um





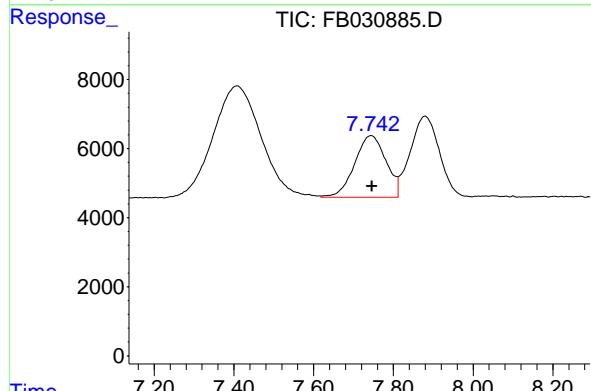
## #1 2-Methylpentane

R.T.: 4.701 min  
Delta R.T.: 0.000 min  
Instrument: FID\_B  
Response: 282267  
Conc: 16.60 ng/ml  
ClientSampleId : 10 GRO STD



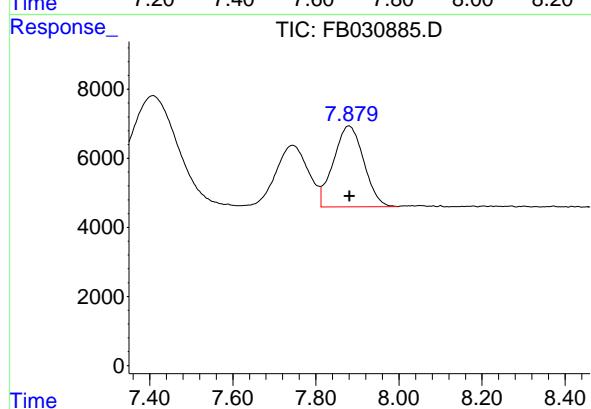
## #2 2,2,4-Trimethylpentane

R.T.: 7.409 min  
Delta R.T.: -0.002 min  
Response: 270873  
Conc: 15.13 ng/ml



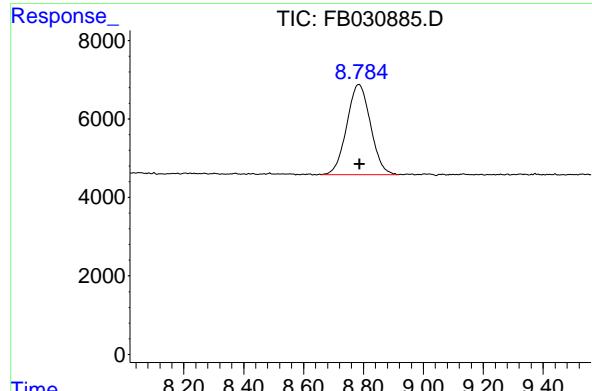
## #3 n-Heptane

R.T.: 7.744 min  
Delta R.T.: -0.002 min  
Response: 97473  
Conc: 5.78 ng/ml



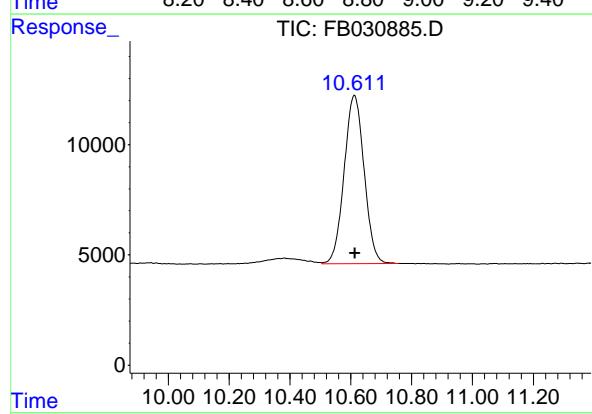
## #4 Benzene

R.T.: 7.880 min  
Delta R.T.: -0.001 min  
Response: 118561  
Conc: 5.64 ng/ml



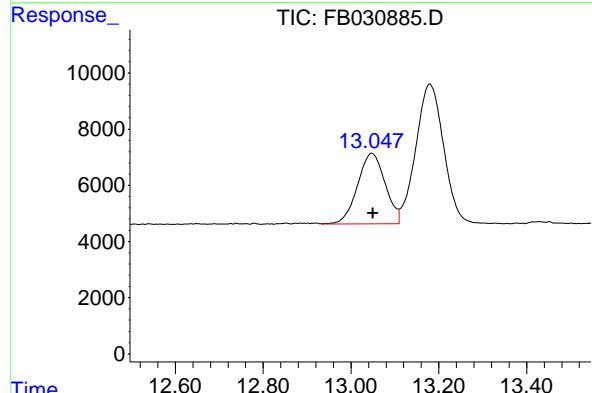
#5 AAA-TFT

R.T.: 8.786 min  
Delta R.T.: 0.000 min  
Instrument: FID\_B  
Response: 126677  
Conc: 11.50 ng/ml  
ClientSampleId :  
10 GRO STD



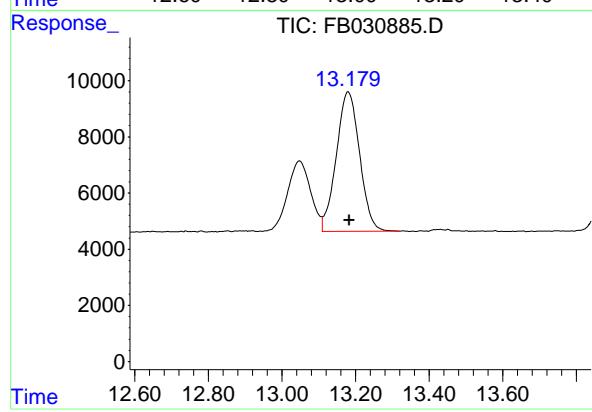
#6 Toluene

R.T.: 10.612 min  
Delta R.T.: -0.002 min  
Response: 348515  
Conc: 17.04 ng/ml



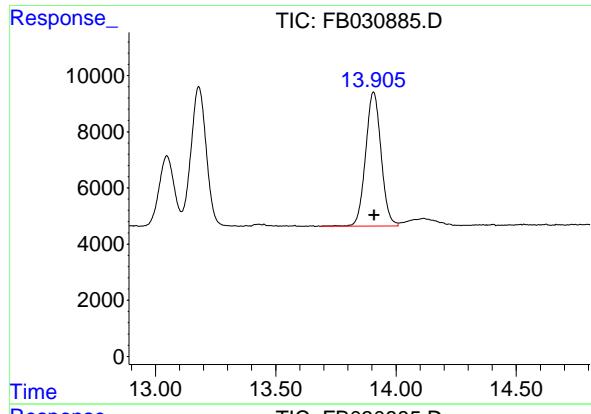
#7 Ethylbenzene

R.T.: 13.048 min  
Delta R.T.: -0.002 min  
Response: 109189  
Conc: 5.29 ng/ml



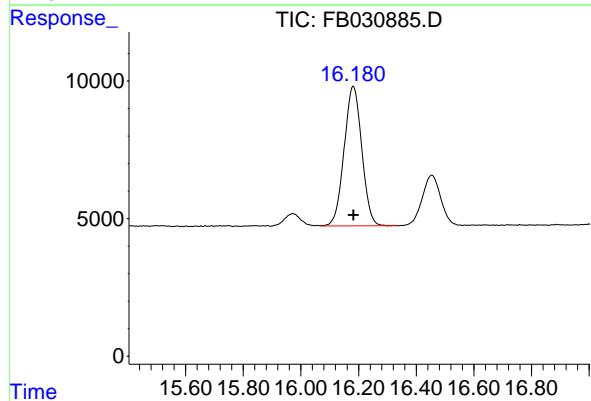
#8 m-Xylene

R.T.: 13.180 min  
Delta R.T.: -0.002 min  
Response: 218395  
Conc: 10.67 ng/ml



#9 O-Xylene

R.T.: 13.907 min  
Delta R.T.: -0.002 min  
Instrument: FID\_B  
Response: 213262  
Conc: 10.51 ng/ml  
ClientSampleId : 10 GRO STD



#10 1,2,4-Trimethylbenzene

R.T.: 16.182 min  
Delta R.T.: -0.002 min  
Response: 214875  
Conc: 10.19 ng/ml

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030885.D  
 Signal (s) : FID2B.CH  
 Acq On : 27 Aug 2024 8: 52  
 Sample : 10 GRO STD  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: Calibration.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4. 701	4. 537	4. 841	PV	3790	282267	80. 99%	14. 113%
2	7. 409	7. 226	7. 618	BV	3237	270873	77. 72%	13. 543%
3	7. 744	7. 618	7. 812	VV	1784	97473	27. 97%	4. 873%
4	7. 880	7. 812	7. 998	VV	2343	118561	34. 02%	5. 928%
5	8. 786	8. 661	8. 918	PV	2301	126677	36. 35%	6. 334%
6	10. 612	10. 505	10. 758	VV	7639	348515	100. 00%	17. 425%
7	13. 048	12. 933	13. 109	PV	2517	109189	31. 33%	5. 459%
8	13. 180	13. 109	13. 319	VV	4969	218395	62. 66%	10. 919%
9	13. 907	13. 688	14. 009	PV	4776	213262	61. 19%	10. 663%
10	16. 182	16. 069	16. 336	VV	5075	214875	61. 65%	10. 743%

Sum of corrected areas: 2000087

FB082724.M Wed Aug 28 04:27:26 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030886.D  
 Signal(s) : FID2B.CH  
 Acq On : 27 Aug 2024 10:09  
 Operator : YP/AJ  
 Sample : 20 GRO STD  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**20 GRO STD**

Integration File: Calibration.e  
 Quant Time: Aug 27 10:08:12 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 10:06:54 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc	Units
<hr/>				
System Monitoring Compounds				
5) s AAA-TFT	8.786	226507	20.000	ng/ml
<hr/>				
Target Compounds				
1) t 2-Methylpentane	4.702	560402	30.000	ng/ml
2) t 2,2,4-Trimethylpentane	7.411	561294	30.000	ng/ml
3) t n-Heptane	7.746	192474	10.000	ng/ml
4) t Benzene	7.881	233322	10.000	ng/ml
6) t Toluene	10.614	678969	30.000	ng/ml
7) t Ethylbenzene	13.050	214443	10.000	ng/ml
8) t m-Xylene	13.183	425650	20.000	ng/ml
9) t o-Xylene	13.909	407750	20.000	ng/ml
10) t 1,2,4-Trimethylbenzene	16.184	397151	20.000	ng/ml
<hr/>				

(f)=RT Delta &gt; 1/2 Window

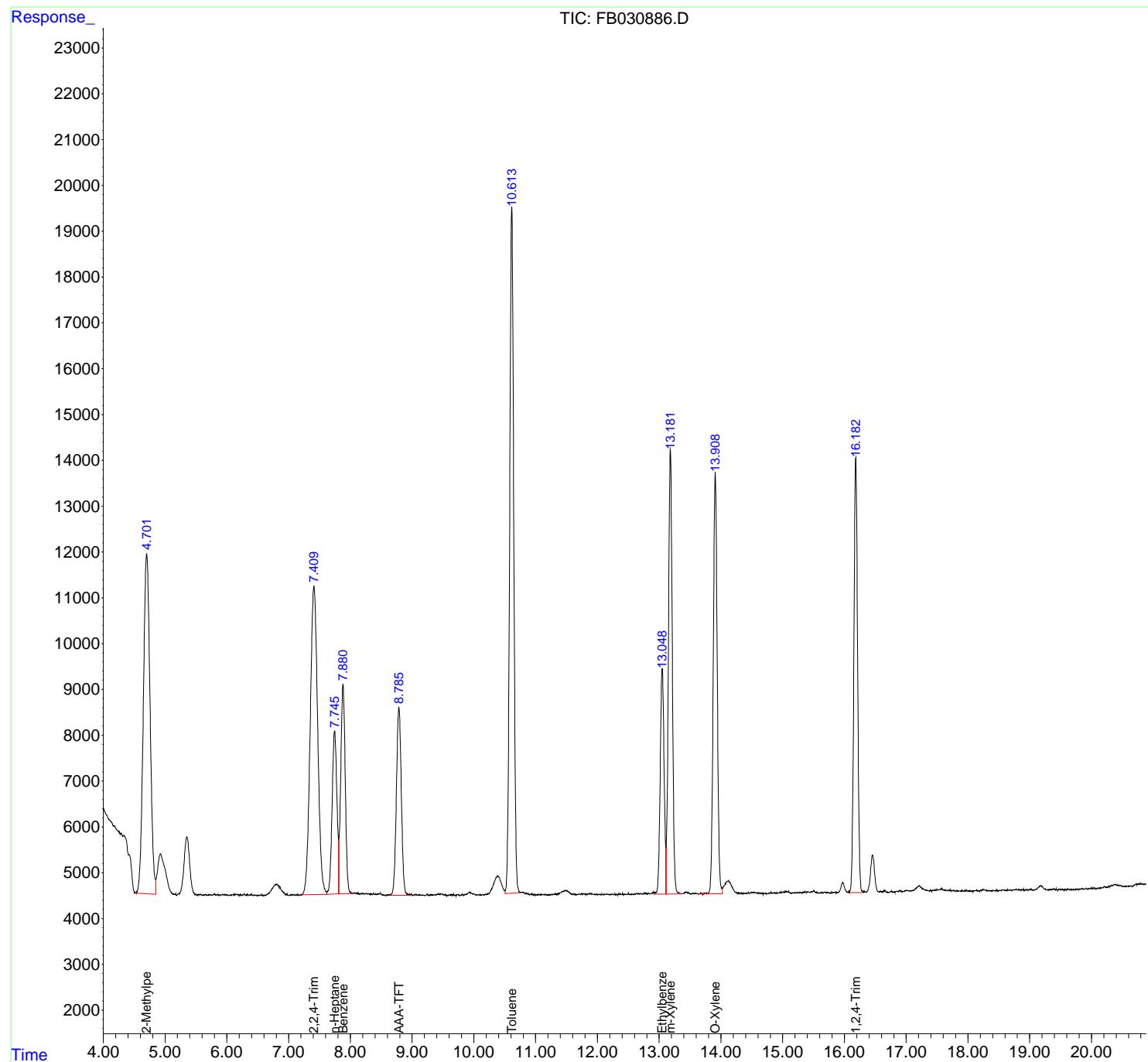
(m)=manual int.

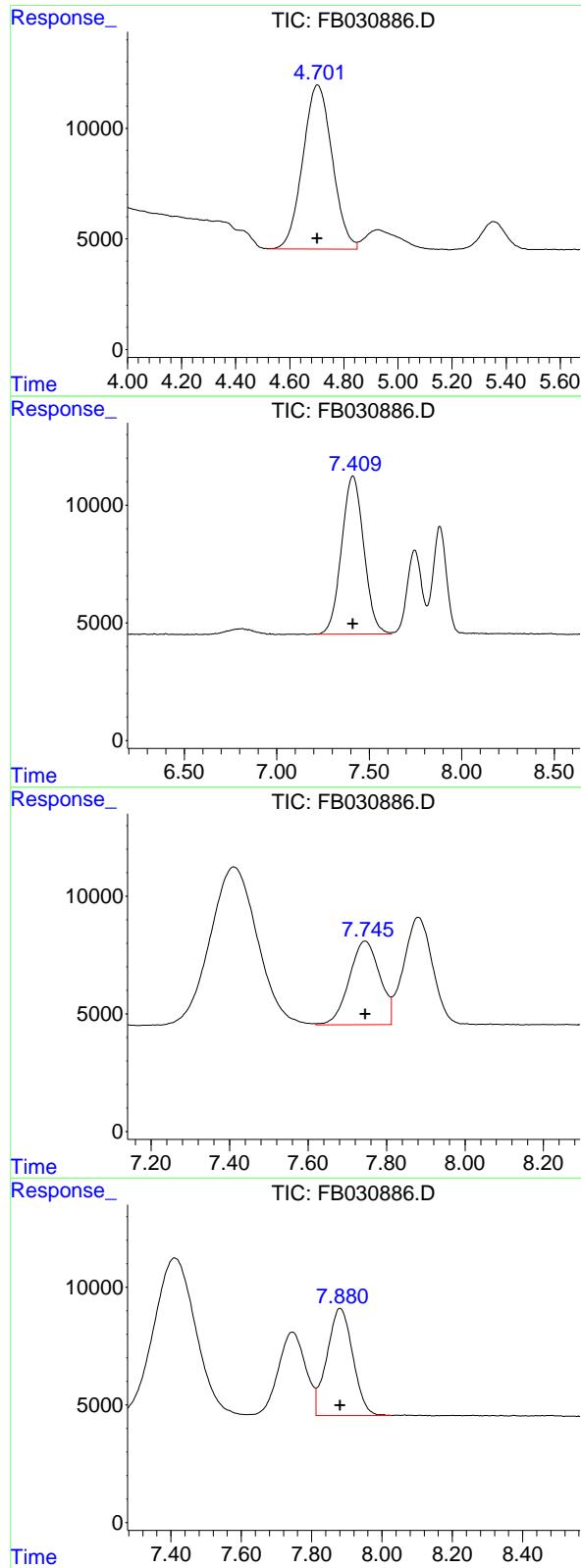
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030886.D  
 Signal(s) : FID2B.CH  
 Acq On : 27 Aug 2024 10:09  
 Operator : YP/AJ  
 Sample : 20 GRO STD  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**20 GRO STD**

Integration File: Calibration.e  
 Quant Time: Aug 27 10:08:12 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 10:06:54 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um





### #1 2-Methylpentane

R.T.: 4.702 min  
 Delta R.T.: 0.000 min  
 Response: 560402 FID\_B  
 Conc: 30.00 ng/ml ClientSampleId :  
 20 GRO STD

### #2 2,2,4-Trimethylpentane

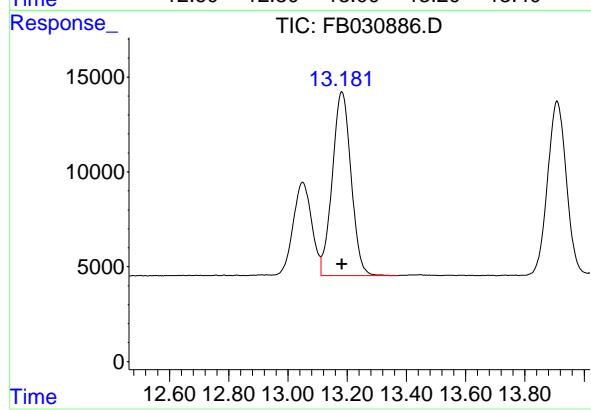
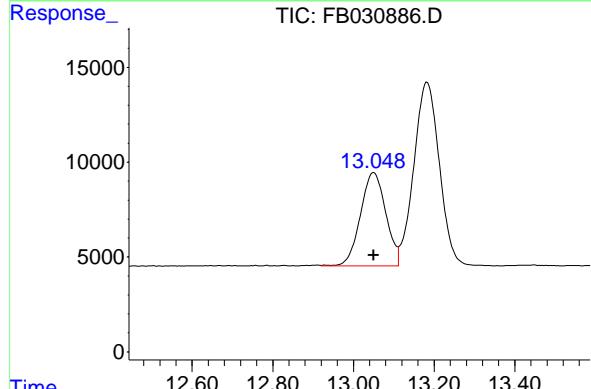
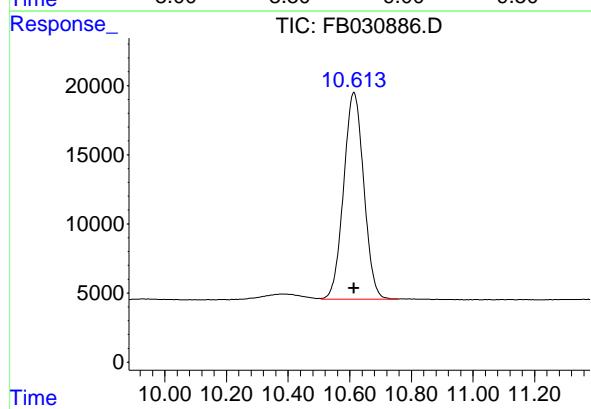
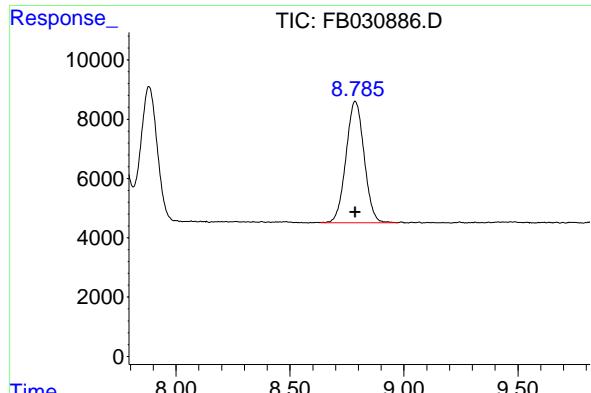
R.T.: 7.411 min  
 Delta R.T.: 0.000 min  
 Response: 561294  
 Conc: 30.00 ng/ml

### #3 n-Heptane

R.T.: 7.746 min  
 Delta R.T.: 0.000 min  
 Response: 192474  
 Conc: 10.00 ng/ml

### #4 Benzene

R.T.: 7.881 min  
 Delta R.T.: 0.000 min  
 Response: 233322  
 Conc: 10.00 ng/ml



## #5 AAA-TFT

R.T.: 8.786 min  
Delta R.T.: 0.000 min  
Instrument: FID\_B  
Response: 226507  
Conc: 20.00 ng/ml  
ClientSampleId : 20 GRO STD

## #6 Toluene

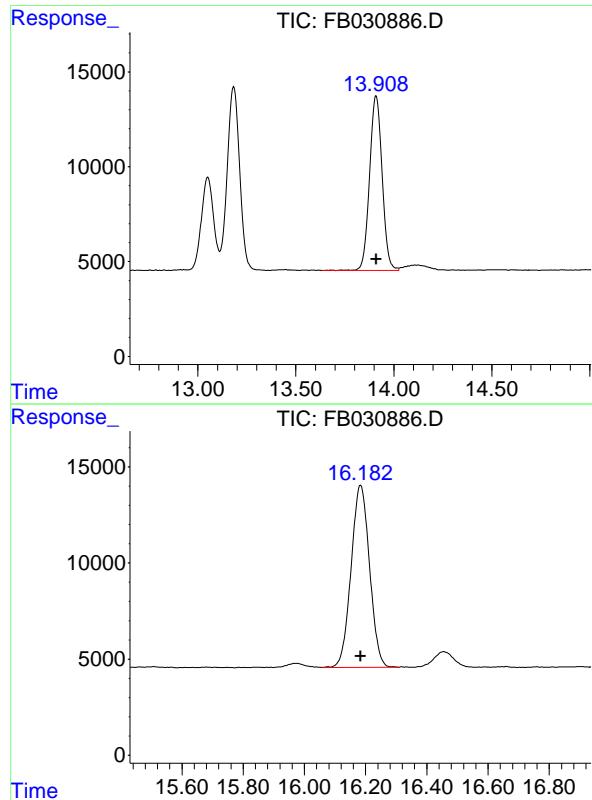
R.T.: 10.614 min  
Delta R.T.: 0.000 min  
Response: 678969  
Conc: 30.00 ng/ml

## #7 Ethylbenzene

R.T.: 13.050 min  
Delta R.T.: 0.000 min  
Response: 214443  
Conc: 10.00 ng/ml

## #8 m-Xylene

R.T.: 13.183 min  
Delta R.T.: 0.000 min  
Response: 425650  
Conc: 20.00 ng/ml



#9 O-Xylene

R.T.: 13.909 min  
Delta R.T.: 0.000 min  
Instrument: FID\_B  
Response: 407750  
Conc: 20.00 ng/ml  
ClientSampleId : 20 GRO STD

#10 1,2,4-Trimethylbenzene

R.T.: 16.184 min  
Delta R.T.: 0.000 min  
Response: 397151  
Conc: 20.00 ng/ml

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030886.D  
 Signal (s) : FID2B.CH  
 Acq On : 27 Aug 2024 10:09  
 Sample : 20 GRO STD  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Integration File: Calibration.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.702	4.518	4.849	PV	7425	560402	82.54%	14.377%
2	7.411	7.212	7.620	PV	6725	561294	82.67%	14.400%
3	7.746	7.620	7.813	VV	3555	192474	28.35%	4.938%
4	7.881	7.813	8.027	VV	4566	233322	34.36%	5.986%
5	8.786	8.636	8.974	VV	4103	226507	33.36%	5.811%
6	10.614	10.507	10.757	VV	14957	678969	100.00%	17.419%
7	13.050	12.920	13.111	VV	4918	214443	31.58%	5.501%
8	13.183	13.111	13.371	VV	9696	425650	62.69%	10.920%
9	13.909	13.633	14.026	BV	9202	407750	60.05%	10.461%
10	16.184	16.057	16.309	PV	9488	397151	58.49%	10.189%

Sum of corrected areas: 3897963

FB082724.M Wed Aug 28 04:27:59 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030887.D  
 Signal(s) : FID2B.CH  
 Acq On : 27 Aug 2024 10:48  
 Operator : YP/AJ  
 Sample : 50 GRO STD  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**50 GRO STD**

Integration File: Calibration.e  
 Quant Time: Aug 27 10:45:57 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 10:44:19 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
5) s AAA-TFT	8.786	623735	53.926 ng/ml
<hr/>			
Target Compounds			
1) t 2-Methylpentane	4.704	1380623	78.411 ng/ml
2) t 2,2,4-Trimethylpentane	7.412	1419851	79.078 ng/ml
3) t n-Heptane	7.746	489614	27.590 ng/ml
4) t Benzene	7.882	580254	26.461 ng/ml
6) t Toluene	10.614	1697725	79.412 ng/ml
7) t Ethylbenzene	13.051	524079	24.916 ng/ml
8) t m-Xylene	13.183	1033602	49.389 ng/ml
9) t o-Xylene	13.910	980083	47.496 ng/ml
10) t 1,2,4-Trimethylbenzene	16.185	933309	43.978 ng/ml
<hr/>			

(f)=RT Delta &gt; 1/2 Window

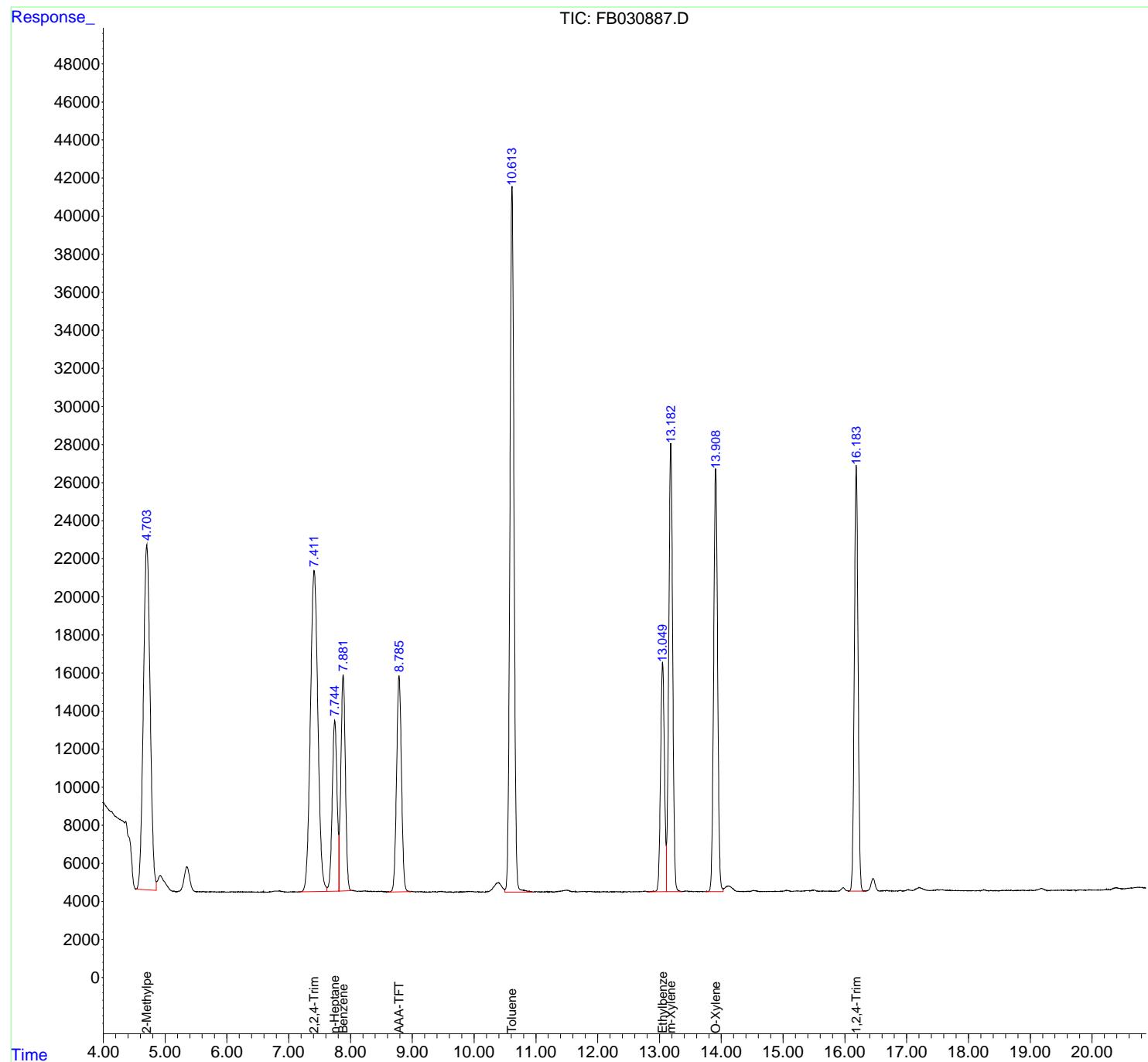
(m)=manual int.

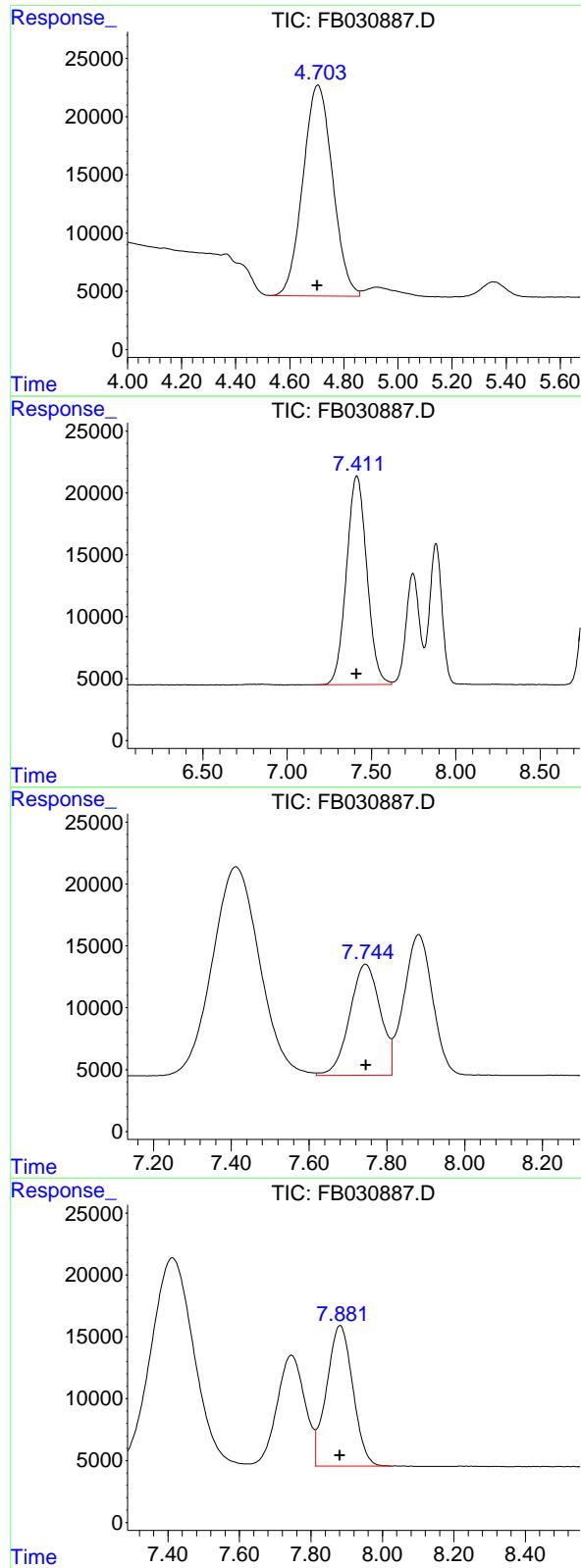
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030887.D  
 Signal(s) : FID2.B.CH  
 Acq On : 27 Aug 2024 10:48  
 Operator : YP/AJ  
 Sample : 50 GRO STD  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**50 GRO STD**

Integration File: Calibration.e  
 Quant Time: Aug 27 10:45:57 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 10:44:19 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um





### #1 2-Methylpentane

R.T.: 4.704 min  
 Delta R.T.: 0.002 min  
 Response: 1380623 FID\_B  
 Conc: 78.41 ng/ml ClientSampleId :  
 50 GRO STD

### #2 2,2,4-Trimethylpentane

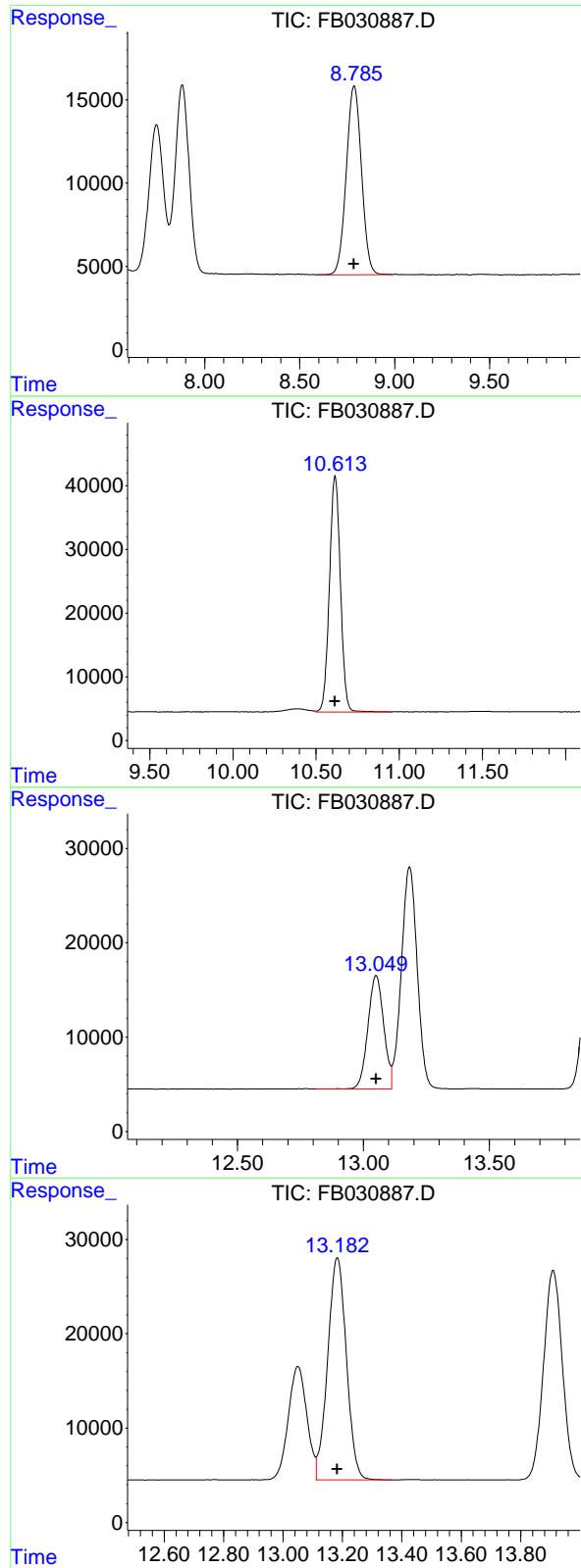
R.T.: 7.412 min  
 Delta R.T.: 0.001 min  
 Response: 1419851  
 Conc: 79.08 ng/ml

### #3 n-Heptane

R.T.: 7.746 min  
 Delta R.T.: 0.000 min  
 Response: 489614  
 Conc: 27.59 ng/ml

### #4 Benzene

R.T.: 7.882 min  
 Delta R.T.: 0.000 min  
 Response: 580254  
 Conc: 26.46 ng/ml



## #5 AAA-TFT

R.T.: 8.786 min  
 Delta R.T.: 0.000 min  
 Response: 623735  
 Conc: 53.93 ng/ml  
**Instrument:** FID\_B  
**ClientSampleId :** 50 GRO STD

## #6 Toluene

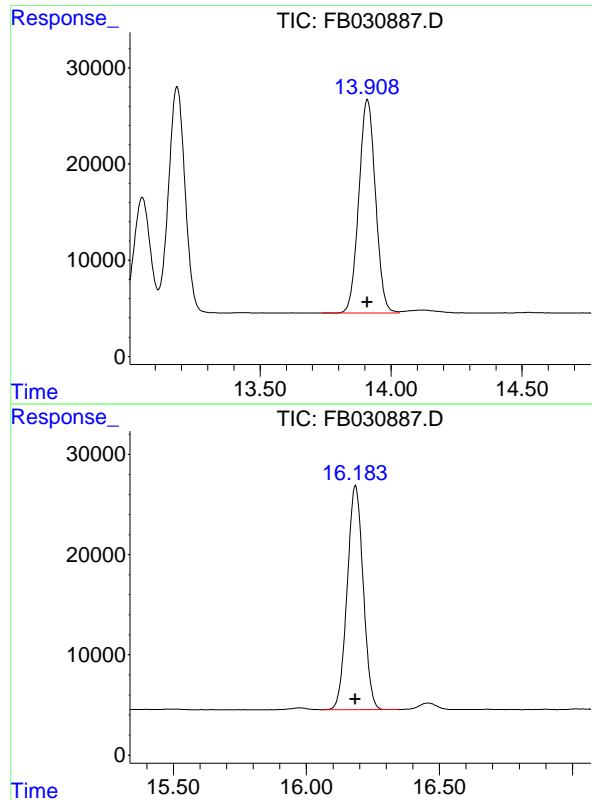
R.T.: 10.614 min  
 Delta R.T.: 0.000 min  
 Response: 1697725  
 Conc: 79.41 ng/ml

## #7 Ethylbenzene

R.T.: 13.051 min  
 Delta R.T.: 0.000 min  
 Response: 524079  
 Conc: 24.92 ng/ml

## #8 m-Xylene

R.T.: 13.183 min  
 Delta R.T.: 0.000 min  
 Response: 1033602  
 Conc: 49.39 ng/ml



#9 O-Xylene

R.T.: 13.910 min  
Delta R.T.: 0.000 min  
Instrument: FID\_B  
Response: 980083  
Conc: 47.50 ng/ml  
ClientSampleId : 50 GRO STD

#10 1,2,4-Trimethylbenzene

R.T.: 16.185 min  
Delta R.T.: 0.000 min  
Response: 933309  
Conc: 43.98 ng/ml

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030887.D  
 Signal (s) : FID2B.CH  
 Acq On : 27 Aug 2024 10:48  
 Sample : 50 GRO STD  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Integration File: Calibration.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.704	4.530	4.858	PV	18128	1380623	81.32%	14.288%
2	7.412	7.171	7.618	PV	16879	1419851	83.63%	14.694%
3	7.746	7.618	7.813	VV	8972	489614	28.84%	5.067%
4	7.882	7.813	8.025	VV	11364	580254	34.18%	6.005%
5	8.786	8.587	8.985	PV	11359	623735	36.74%	6.455%
6	10.614	10.499	10.953	VV	37044	1697725	100.00%	17.570%
7	13.051	12.812	13.112	BV	12034	524079	30.87%	5.424%
8	13.183	13.112	13.366	VV	23557	1033602	60.88%	10.697%
9	13.910	13.736	14.030	BV	22234	980083	57.73%	10.143%
10	16.185	16.057	16.347	PV	22375	933309	54.97%	9.659%

Sum of corrected areas: 9662874

FB082724.M Wed Aug 28 04:28:24 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030888.D  
 Signal(s) : FID2B.CH  
 Acq On : 27 Aug 2024 11:42  
 Operator : YP/AJ  
 Sample : 100 GRO STD  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**100 GRO STD**

Integration File: Calibration.e  
 Quant Time: Aug 27 11:38:56 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 10:46:48 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc	Units
<hr/>				
System Monitoring Compounds				
5) s AAA-TFT	8.786	1332034	112.945	ng/ml
<hr/>				
Target Compounds				
1) t 2-Methylpentane	4.704	2717275	152.590	ng/ml
2) t 2,2,4-Trimethylpentane	7.415	2831768	155.600	ng/ml
3) t n-Heptane	7.745	982407	53.962	ng/ml
4) t Benzene	7.882	1198452	53.865	ng/ml
6) t Toluene	10.614	3364832	155.111	ng/ml
7) t Ethylbenzene	13.051	1030287	49.024	ng/ml
8) t m-Xylene	13.183	2028888	97.245	ng/ml
9) t o-Xylene	13.910	1926502	94.544	ng/ml
10) t 1,2,4-Trimethylbenzene	16.185	1743662	84.714	ng/ml
<hr/>				

(f)=RT Delta &gt; 1/2 Window

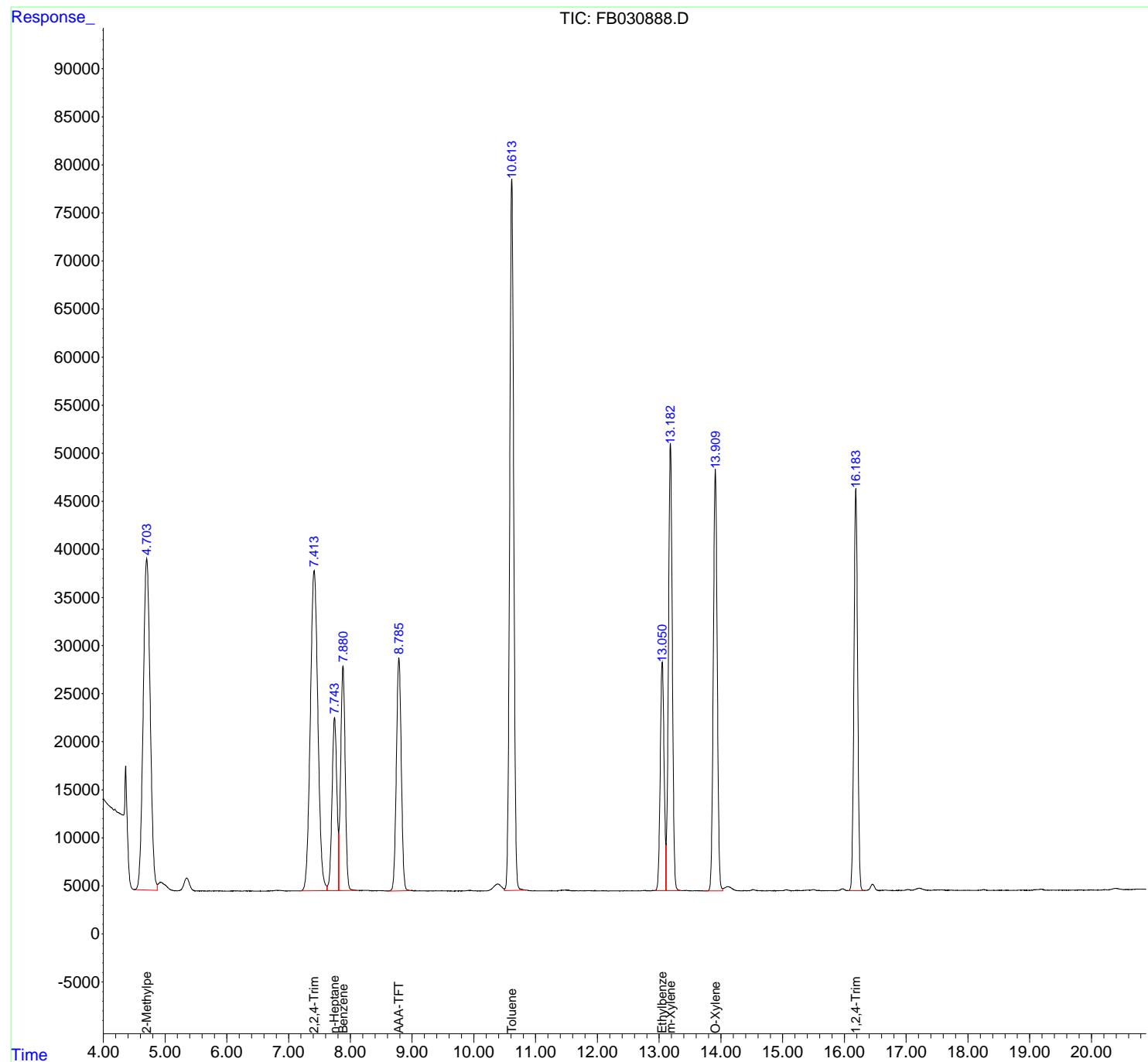
(m)=manual int.

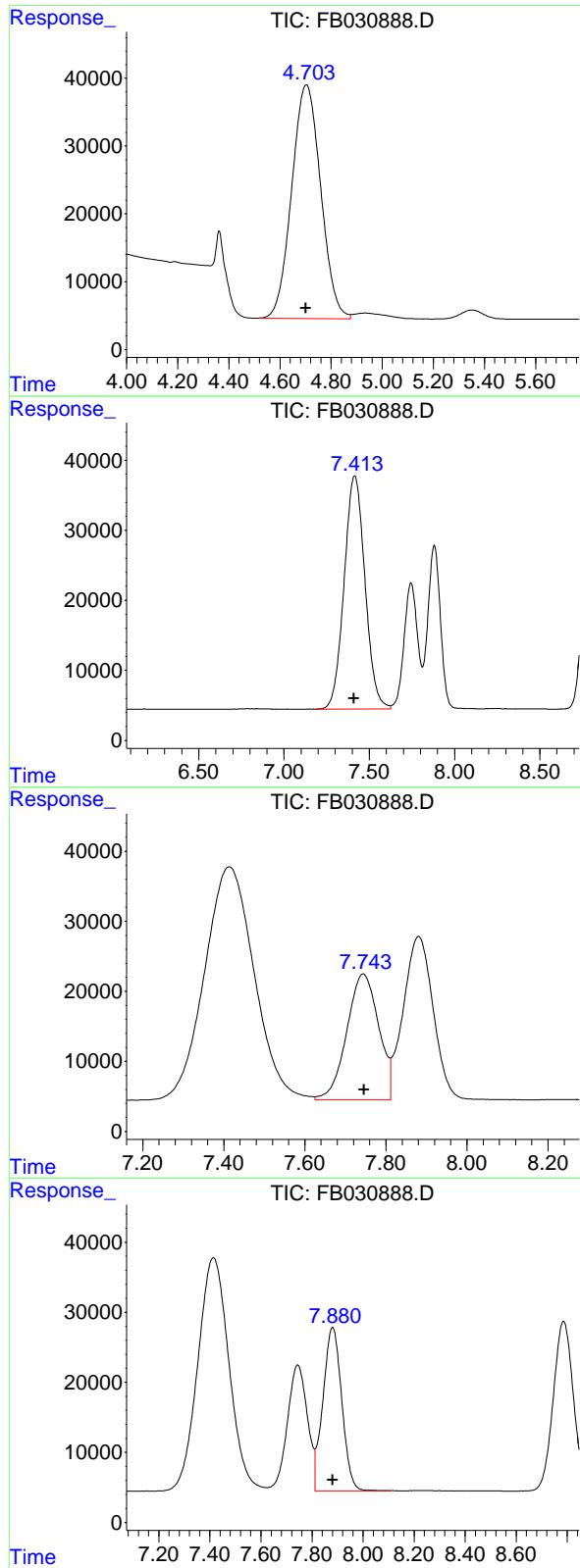
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030888.D  
 Signal(s) : FID2B.CH  
 Acq On : 27 Aug 2024 11:42  
 Operator : YP/AJ  
 Sample : 100 GRO STD  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 FID\_B  
 ClientSampleId :  
 100 GRO STD

Integration File: Calibration.e  
 Quant Time: Aug 27 11:38:56 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 10:46:48 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um





### #1 2-Methylpentane

R.T.: 4.704 min  
 Delta R.T.: 0.002 min  
 Response: 2717275  
 Conc: 152.59 ng/ml  
 ClientSampleId : 100 GRO STD

### #2 2,2,4-Trimethylpentane

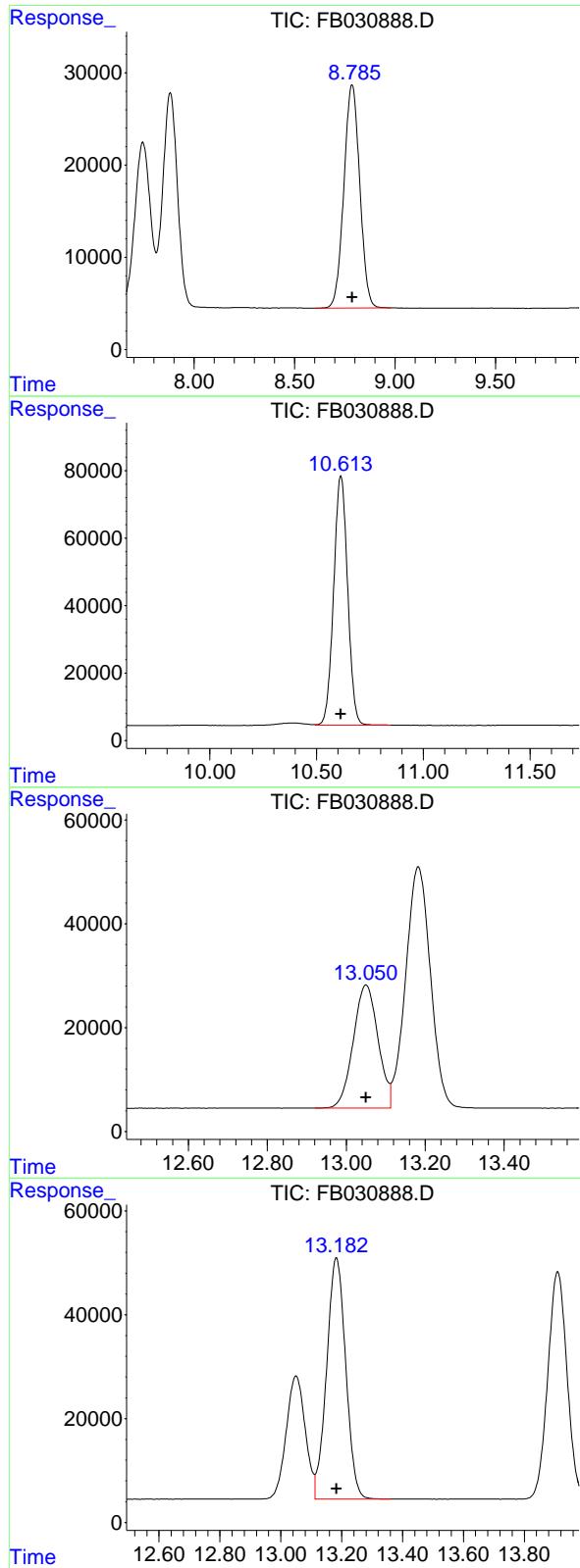
R.T.: 7.415 min  
 Delta R.T.: 0.004 min  
 Response: 2831768  
 Conc: 155.60 ng/ml

### #3 n-Heptane

R.T.: 7.745 min  
 Delta R.T.: -0.002 min  
 Response: 982407  
 Conc: 53.96 ng/ml

### #4 Benzene

R.T.: 7.882 min  
 Delta R.T.: 0.000 min  
 Response: 1198452  
 Conc: 53.86 ng/ml



## #5 AAA-TFT

R.T.: 8.786 min  
 Delta R.T.: 0.000 min  
 Response: 1332034  
 Conc: 112.95 ng/ml  
 Instrument: FID\_B  
 ClientSampleId : 100 GRO STD

## #6 Toluene

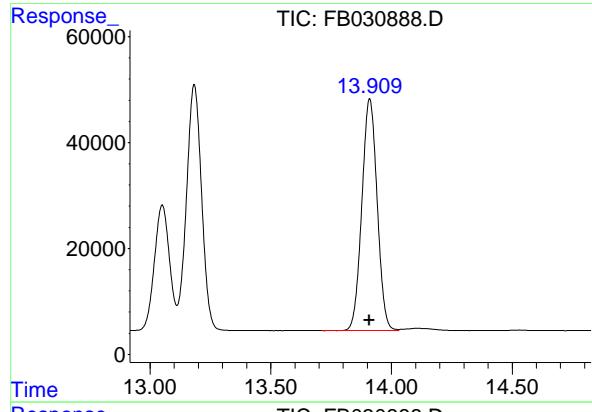
R.T.: 10.614 min  
 Delta R.T.: 0.000 min  
 Response: 3364832  
 Conc: 155.11 ng/ml

## #7 Ethylbenzene

R.T.: 13.051 min  
 Delta R.T.: 0.000 min  
 Response: 1030287  
 Conc: 49.02 ng/ml

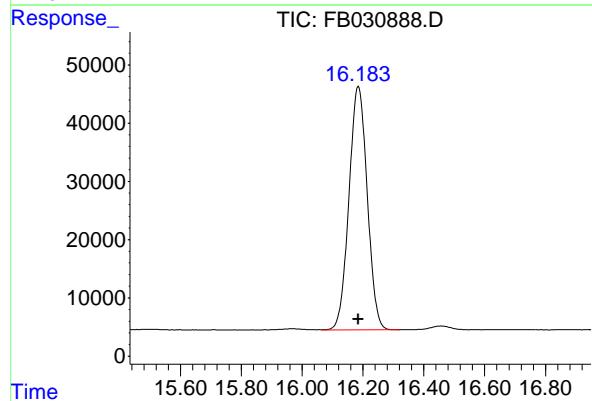
## #8 m-Xylene

R.T.: 13.183 min  
 Delta R.T.: 0.000 min  
 Response: 2028888  
 Conc: 97.24 ng/ml



#9 O-Xylene

R.T.: 13.910 min  
Delta R.T.: 0.000 min  
Instrument:  
Response: 1926502 FID\_B  
Conc: 94.54 ng/ml ClientSampleId :  
100 GRO STD



#10 1,2,4-Trimethylbenzene

R.T.: 16.185 min  
Delta R.T.: 0.001 min  
Response: 1743662  
Conc: 84.71 ng/ml

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030888.D  
 Signal (s) : FID2B.CH  
 Acq On : 27 Aug 2024 11:42  
 Sample : 100 GRO STD  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Integration File: Calibration.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.704	4.517	4.875	VV	34472	2717275	80.76%	14.185%
2	7.415	7.183	7.625	PV	33300	2831768	84.16%	14.783%
3	7.745	7.625	7.812	VV	17989	982407	29.20%	5.128%
4	7.882	7.812	8.108	VV	23336	1198452	35.62%	6.256%
5	8.786	8.603	8.979	PV	24240	1332034	39.59%	6.954%
6	10.614	10.494	10.847	VV	73969	3364832	100.00%	17.565%
7	13.051	12.921	13.112	BV	23738	1030287	30.62%	5.378%
8	13.183	13.112	13.360	VV	46522	2028888	60.30%	10.591%
9	13.910	13.711	14.030	BV	43848	1926502	57.25%	10.057%
10	16.185	16.066	16.319	PV	41781	1743662	51.82%	9.102%

Sum of corrected areas: 19156108

FB082724.M Wed Aug 28 04:29:04 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030889.D  
 Signal(s) : FID2B.CH  
 Acq On : 27 Aug 2024 12:21  
 Operator : YP/AJ  
 Sample : FB082724GROICV  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**FB082724GROICV**

Integration File: Calibration.e  
 Quant Time: Aug 27 12:17:36 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc	Units
<hr/>				
System Monitoring Compounds				
5) s AAA-TFT	8.788	236567	19.553	ng/ml
<hr/>				
Target Compounds				
1) t 2-Methylpentane	4.705	492178	27.543	ng/ml
2) t 2,2,4-Trimethylpentane	7.412	493656	26.924	ng/ml
3) t n-Heptane	7.748	168731	9.124	ng/ml
4) t Benzene	7.884	208425	9.225	ng/ml
6) t Toluene	10.615	610875	27.969	ng/ml
7) t Ethylbenzene	13.052	192708	9.205	ng/ml
8) t m-Xylene	13.184	382302	18.425	ng/ml
9) t o-Xylene	13.911	366388	18.179	ng/ml
10) t 1,2,4-Trimethylbenzene	16.186	356832	17.883	ng/ml
<hr/>				

(f)=RT Delta &gt; 1/2 Window

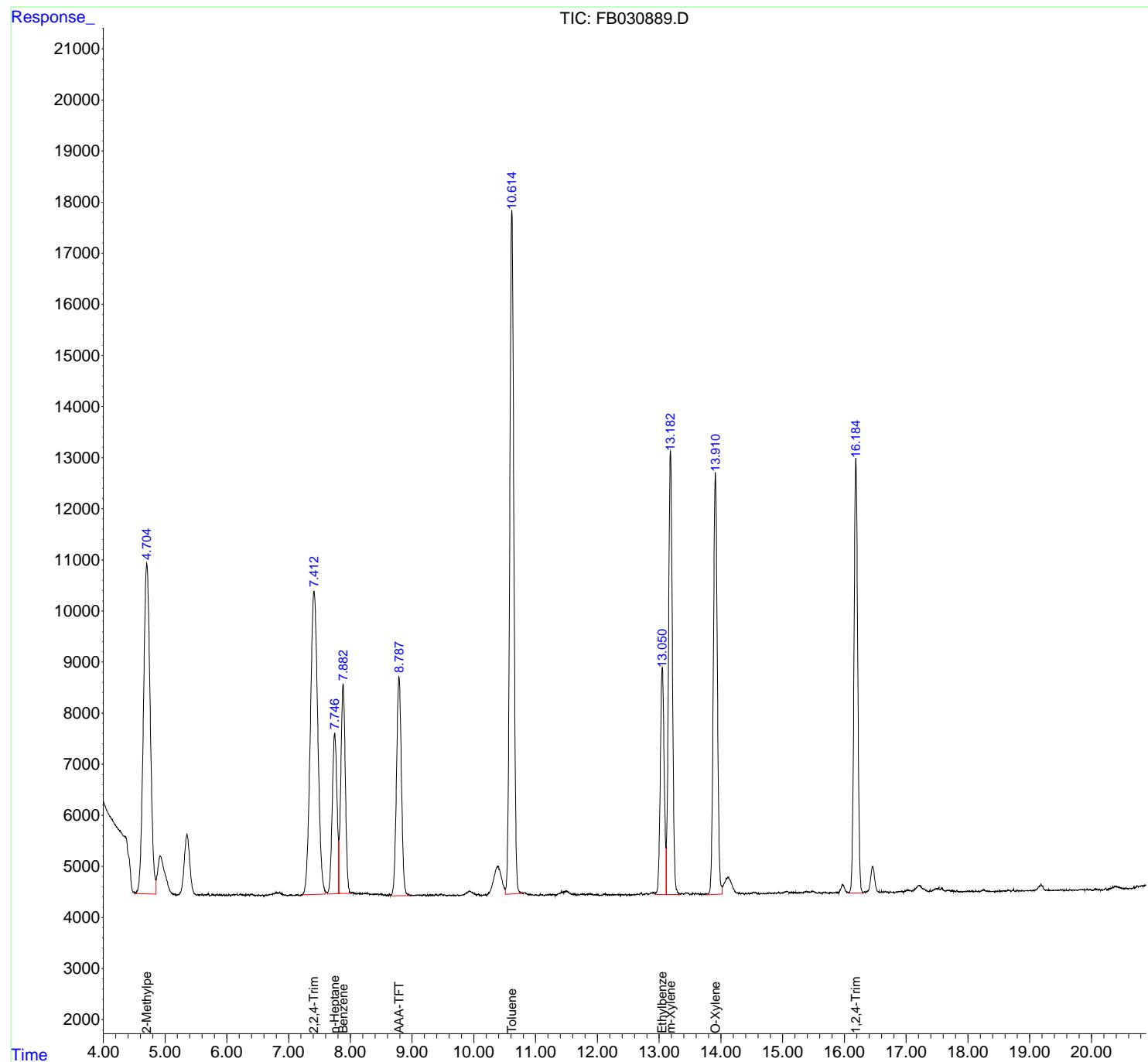
(m)=manual int.

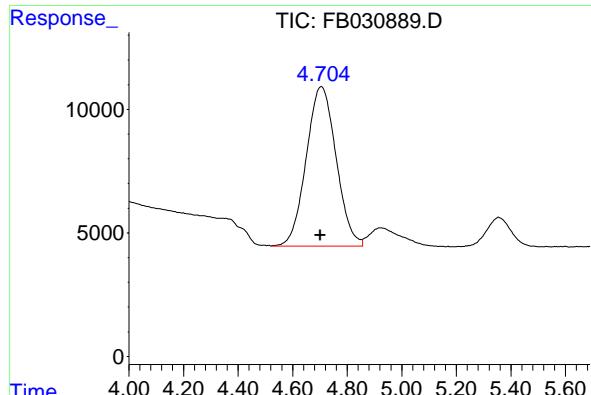
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030889.D  
 Signal(s) : FID2B.CH  
 Acq On : 27 Aug 2024 12:21  
 Operator : YP/AJ  
 Sample : FB082724GROICV  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**FB082724GROICV**

Integration File: Calibration.e  
 Quant Time: Aug 27 12:17:36 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

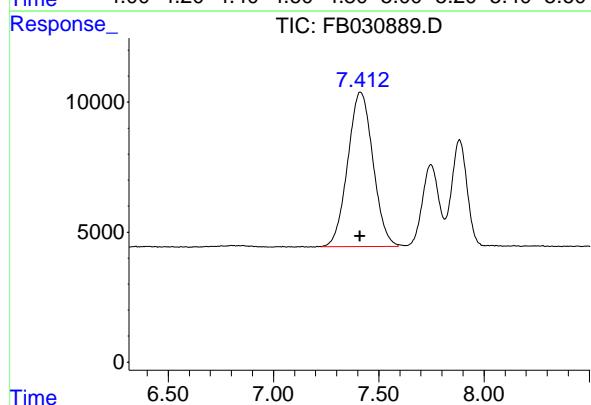
Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um





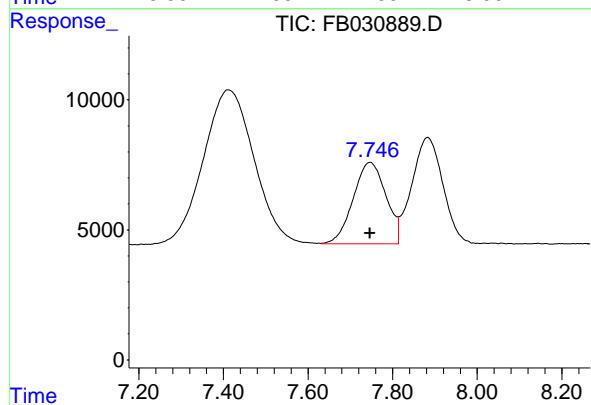
#1 2-Methylpentane

R.T.: 4.705 min  
Delta R.T.: 0.003 min  
Instrument: FID\_B  
Response: 492178  
Conc: 27.54 ng/ml  
ClientSampleId : FB082724GROICV



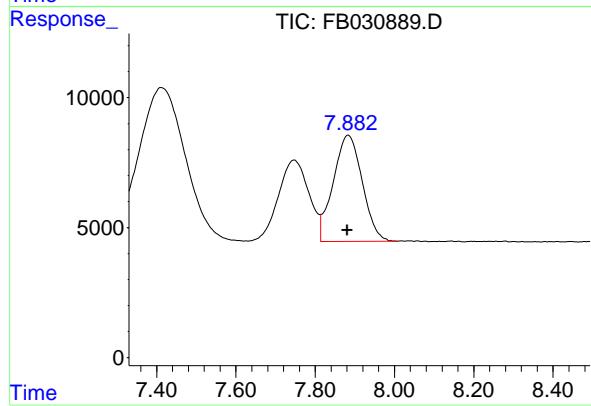
#2 2,2,4-Trimethylpentane

R.T.: 7.412 min  
Delta R.T.: 0.001 min  
Response: 493656  
Conc: 26.92 ng/ml



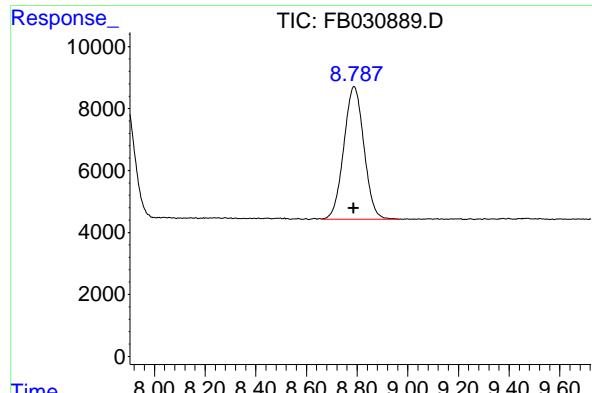
#3 n-Heptane

R.T.: 7.748 min  
Delta R.T.: 0.001 min  
Response: 168731  
Conc: 9.12 ng/ml



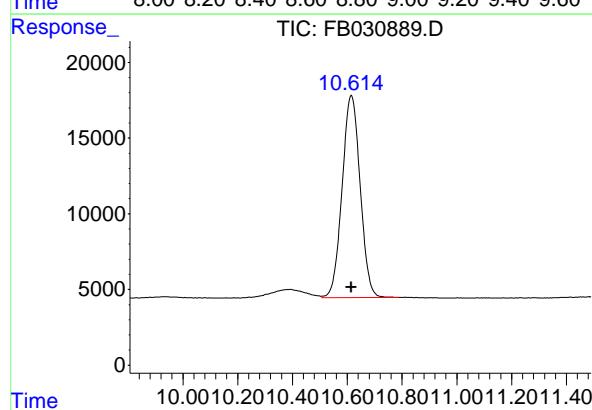
#4 Benzene

R.T.: 7.884 min  
Delta R.T.: 0.002 min  
Response: 208425  
Conc: 9.23 ng/ml



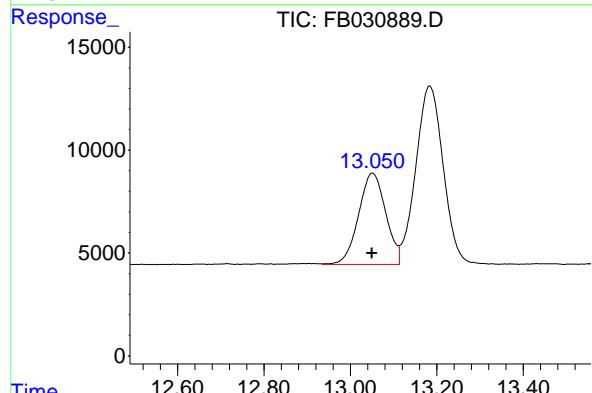
#5 AAA-TFT

R.T.: 8.788 min  
Delta R.T.: 0.002 min  
Instrument: FID\_B  
Response: 236567  
Conc: 19.55 ng/ml  
ClientSampleId : FB082724GROICV



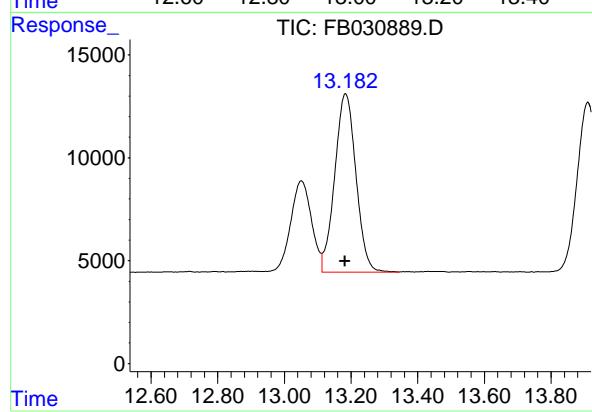
#6 Toluene

R.T.: 10.615 min  
Delta R.T.: 0.001 min  
Response: 610875  
Conc: 27.97 ng/ml



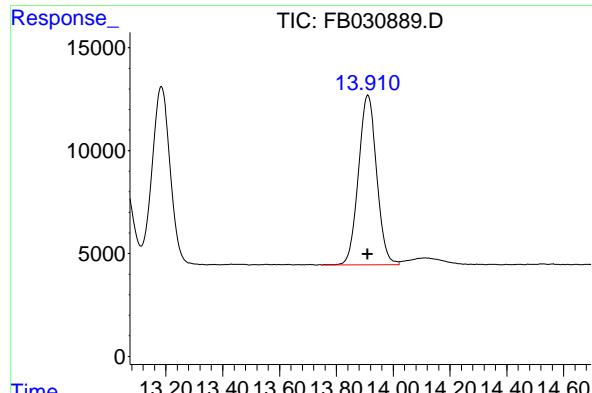
#7 Ethylbenzene

R.T.: 13.052 min  
Delta R.T.: 0.002 min  
Response: 192708  
Conc: 9.21 ng/ml



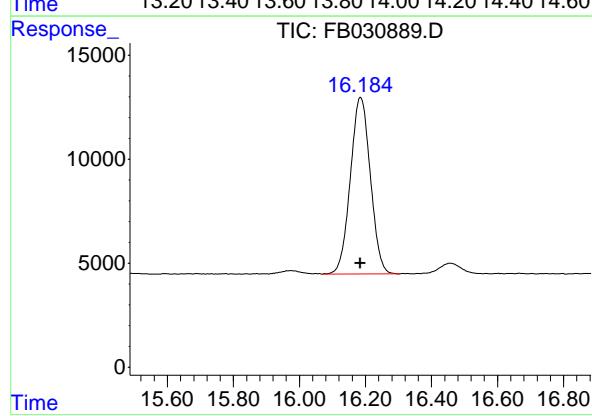
#8 m-Xylene

R.T.: 13.184 min  
Delta R.T.: 0.001 min  
Response: 382302  
Conc: 18.43 ng/ml



#9 O-Xylene

R.T.: 13.911 min  
Delta R.T.: 0.002 min  
Instrument: FID\_B  
Response: 366388  
Conc: 18.18 ng/ml  
ClientSampleId : FB082724GROICV



#10 1,2,4-Trimethylbenzene

R.T.: 16.186 min  
Delta R.T.: 0.002 min  
Response: 356832  
Conc: 17.88 ng/ml

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB082724\  
 Data File : FB030889.D  
 Signal (s) : FID2B.CH  
 Acq On : 27 Aug 2024 12:21  
 Sample : FB082724GROI CV  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Integration File: Calibration.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.705	4.521	4.856	PV	6463	492178	80.57%	14.028%
2	7.412	7.226	7.591	BV	5937	493656	80.81%	14.070%
3	7.748	7.631	7.814	VV	3142	168731	27.62%	4.809%
4	7.884	7.814	8.008	VV	4093	208425	34.12%	5.940%
5	8.788	8.662	8.965	VV	4288	236567	38.73%	6.742%
6	10.615	10.507	10.789	VV	13367	610875	100.00%	17.410%
7	13.052	12.935	13.113	VV	4438	192708	31.55%	5.492%
8	13.184	13.113	13.344	VV	8669	382302	62.58%	10.896%
9	13.911	13.750	14.021	VV	8250	366388	59.98%	10.442%
10	16.186	16.069	16.302	PV	8502	356832	58.41%	10.170%

Sum of corrected areas: 3508662

FB082724.M Wed Aug 28 04:29:28 2024

**GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY****20 PPB GRO STD**

Lab Name: Chemtech Contract: CHEM02  
ProjectID: NJ Waste Water PT  
Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845  
DataFile: FB030908.D Analyst Name: YP/AJ Analyst Date: 09-09-2024

Conc. (PPB)	Area Count	RF	Average RF	%D
180	3812731	21182	19882	6.539

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030908.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 9:44  
 Operator : YP/AJ  
 Sample : 20 PPB GRO STD  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**20 PPB GRO STD**

Integration File: Calibration.e  
 Quant Time: Sep 10 04:29:37 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
5) s AAA-TFT	8.783	234604	19.390 ng/ml
<hr/>			
Target Compounds			
1) t 2-Methylpentane	4.701	605446	33.882 ng/ml
2) t 2,2,4-Trimethylpentane	7.406	573273	31.267 ng/ml
3) t n-Heptane	7.742	214275	11.586 ng/ml
4) t Benzene	7.878	240521	10.646 ng/ml
6) t Toluene	10.611	697091	31.917 ng/ml
7) t Ethylbenzene	13.047	222981	10.652 ng/ml
8) t m-Xylene	13.180	436311	21.028 ng/ml
9) t o-Xylene	13.907	410832	20.384 ng/ml
10) t 1,2,4-Trimethylbenzene	16.182	412001	20.648 ng/ml
<hr/>			

(f)=RT Delta &gt; 1/2 Window

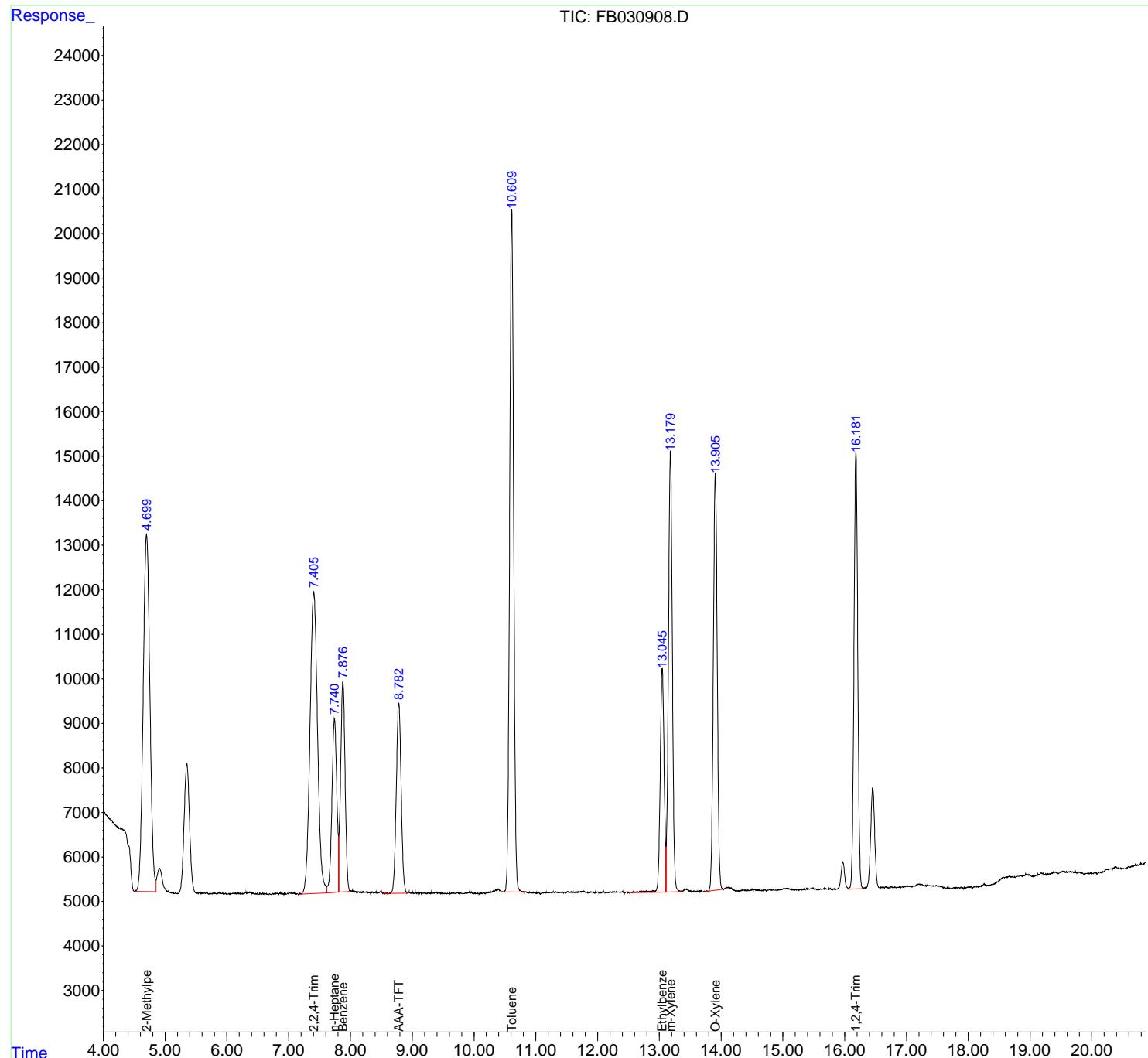
(m)=manual int.

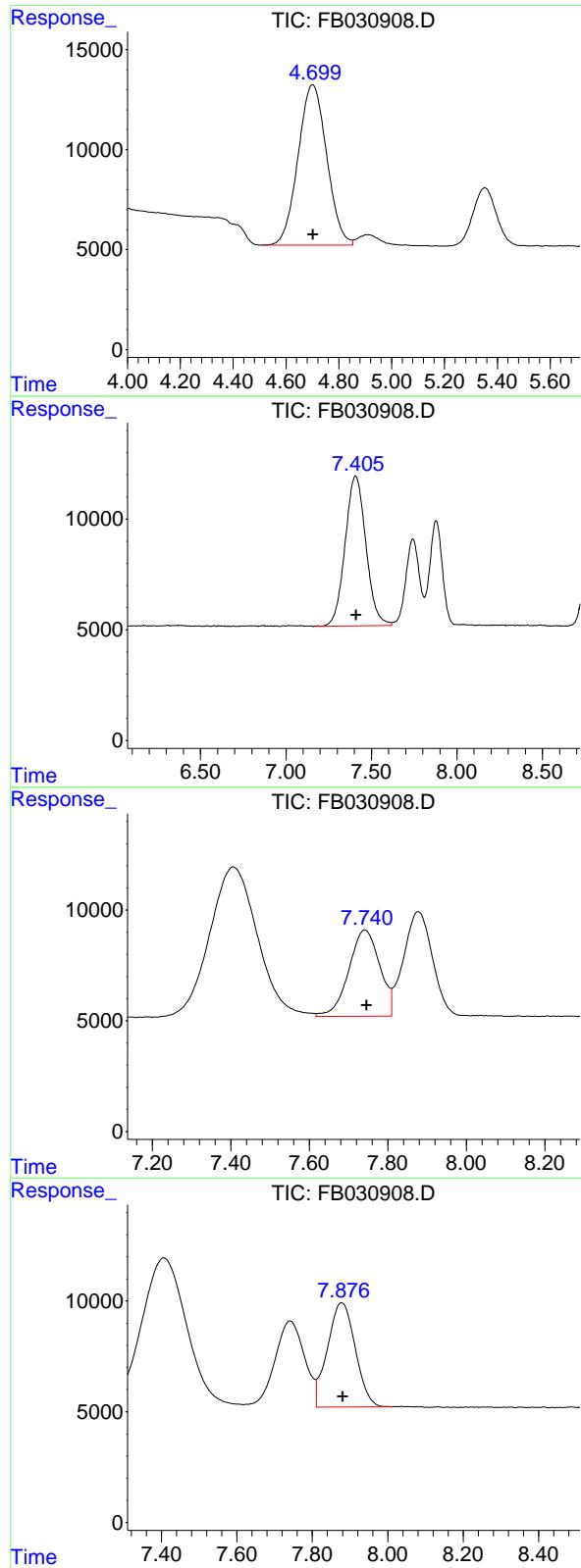
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030908.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 9:44  
 Operator : YP/AJ  
 Sample : 20 PPB GRO STD  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**20 PPB GRO STD**

Integration File: Calibration.e  
 Quant Time: Sep 10 04:29:37 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um





### #1 2-Methylpentane

R.T.: 4.701 min  
 Delta R.T.: -0.001 min  
 Response: 605446 FID\_B  
 Conc: 33.88 ng/ml ClientSampleId :  
 20 PPB GRO STD

### #2 2,2,4-Trimethylpentane

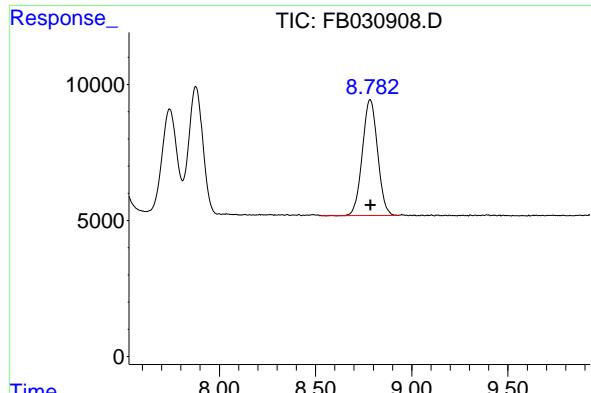
R.T.: 7.406 min  
 Delta R.T.: -0.005 min  
 Response: 573273  
 Conc: 31.27 ng/ml

### #3 n-Heptane

R.T.: 7.742 min  
 Delta R.T.: -0.005 min  
 Response: 214275  
 Conc: 11.59 ng/ml

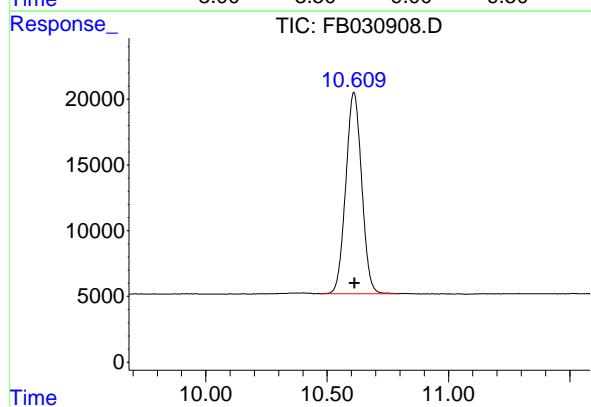
### #4 Benzene

R.T.: 7.878 min  
 Delta R.T.: -0.003 min  
 Response: 240521  
 Conc: 10.65 ng/ml



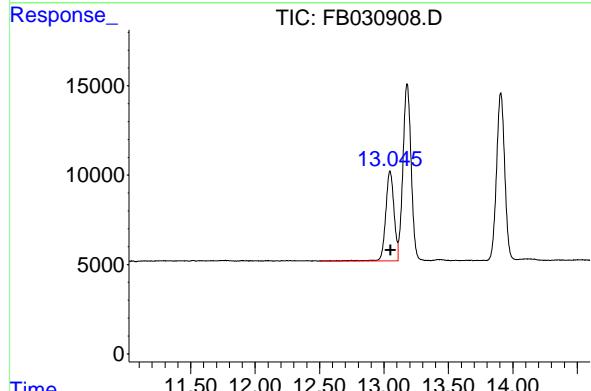
#5 AAA-TFT

R.T.: 8.783 min  
 Delta R.T.: -0.003 min  
 Response: 234604 FID\_B  
 Conc: 19.39 ng/ml ClientSampleId :  
 20 PPB GRO STD



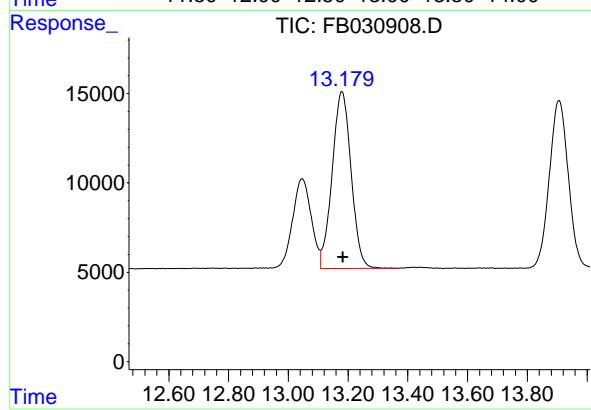
#6 Toluene

R.T.: 10.611 min  
 Delta R.T.: -0.004 min  
 Response: 697091  
 Conc: 31.92 ng/ml



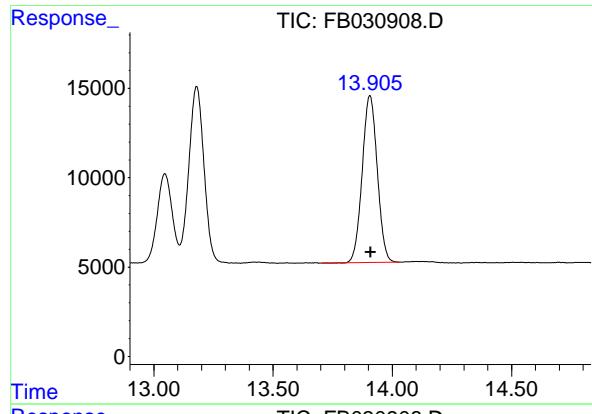
#7 Ethylbenzene

R.T.: 13.047 min  
 Delta R.T.: -0.003 min  
 Response: 222981  
 Conc: 10.65 ng/ml



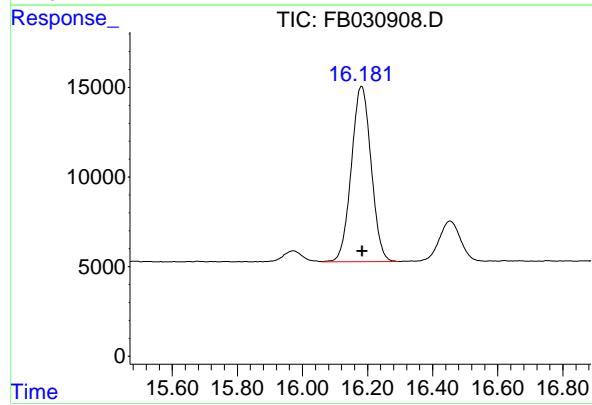
#8 m-Xylene

R.T.: 13.180 min  
 Delta R.T.: -0.003 min  
 Response: 436311  
 Conc: 21.03 ng/ml



#9 O-Xylene

R.T.: 13.907 min  
Delta R.T.: -0.003 min  
Instrument: FID\_B  
Response: 410832  
Conc: 20.38 ng/ml  
ClientSampleId : 20 PPB GRO STD



#10 1,2,4-Trimethylbenzene

R.T.: 16.182 min  
Delta R.T.: -0.002 min  
Response: 412001  
Conc: 20.65 ng/ml

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030908.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 9:44  
 Sample : 20 PPB GRO STD  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: Calibration.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.701	4.507	4.852	PV	8028	605446	86.85%	14.959%
2	7.406	7.175	7.617	PV	6785	573273	82.24%	14.164%
3	7.742	7.617	7.810	VV	3900	214275	30.74%	5.294%
4	7.878	7.810	8.011	VV	4717	240521	34.50%	5.943%
5	8.783	8.528	8.928	BV	4271	234604	33.65%	5.796%
6	10.611	10.474	10.791	BV	15327	697091	100.00%	17.223%
7	13.047	12.511	13.108	BV	5025	222981	31.99%	5.509%
8	13.180	13.108	13.366	VV	9902	436311	62.59%	10.780%
9	13.907	13.705	14.028	BV	9356	410832	58.94%	10.151%
10	16.182	16.060	16.297	VV	9792	412001	59.10%	10.180%

Sum of corrected areas: 4047334

FB082724.M Tue Sep 10 05:23:56 2024

**GASOLINE RANGE ORGANICS CONTINUING CALIBRATION SUMMARY****20 PPB GRO STD**

Lab Name: Chemtech Contract: CHEM02  
ProjectID: NJ Waste Water PT  
Lab Code: CHEM Case No.: P3845 SAS No.: P3845 SDG No.: P3845  
DataFile: FB030916.D Analyst Name: YP/AJ Analyst Date: 09-09-2024

Conc. (PPB)	Area Count	RF	Average RF	%D
180	3601397	20008	19882	0.634

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030916.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 16:50  
 Operator : YP/AJ  
 Sample : 20 PPB GRO STD  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**20 PPB GRO STD**

Integration File: Calibration.e  
 Quant Time: Sep 10 04:30:23 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
5) s AAA-TFT	8.787	233860	19.329 ng/ml
<hr/>			
Target Compounds			
1) t 2-Methylpentane	4.705	554105	31.009 ng/ml
2) t 2,2,4-Trimethylpentane	7.413	555062	30.273 ng/ml
3) t n-Heptane	7.747	198642	10.741 ng/ml
4) t Benzene	7.883	229067	10.139 ng/ml
6) t Toluene	10.616	660425	30.238 ng/ml
7) t Ethylbenzene	13.052	208183	9.945 ng/ml
8) t m-Xylene	13.184	413852	19.946 ng/ml
9) t o-Xylene	13.912	392734	19.486 ng/ml
10) t 1,2,4-Trimethylbenzene	16.187	389327	19.511 ng/ml
<hr/>			

(f)=RT Delta &gt; 1/2 Window

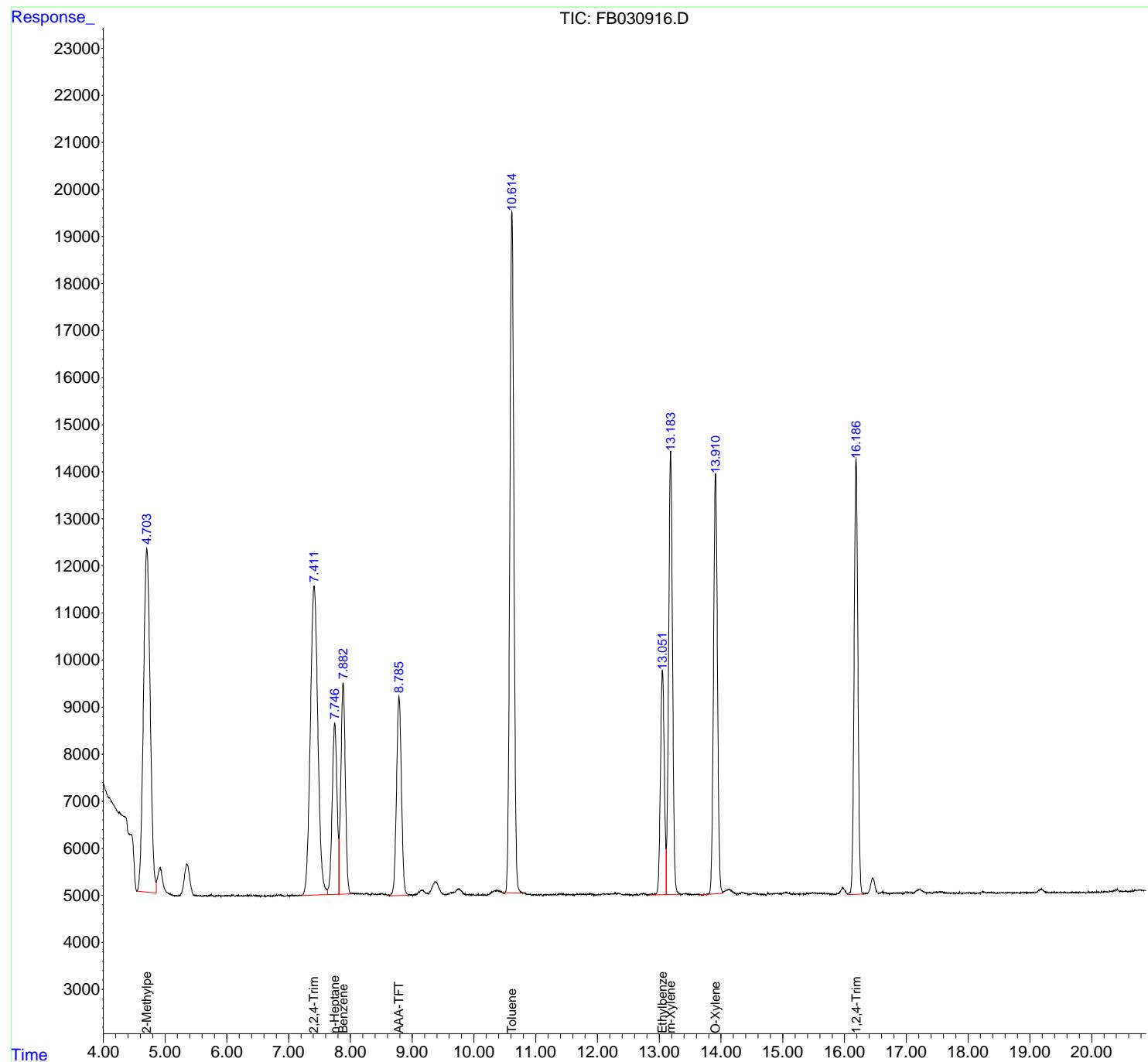
(m)=manual int.

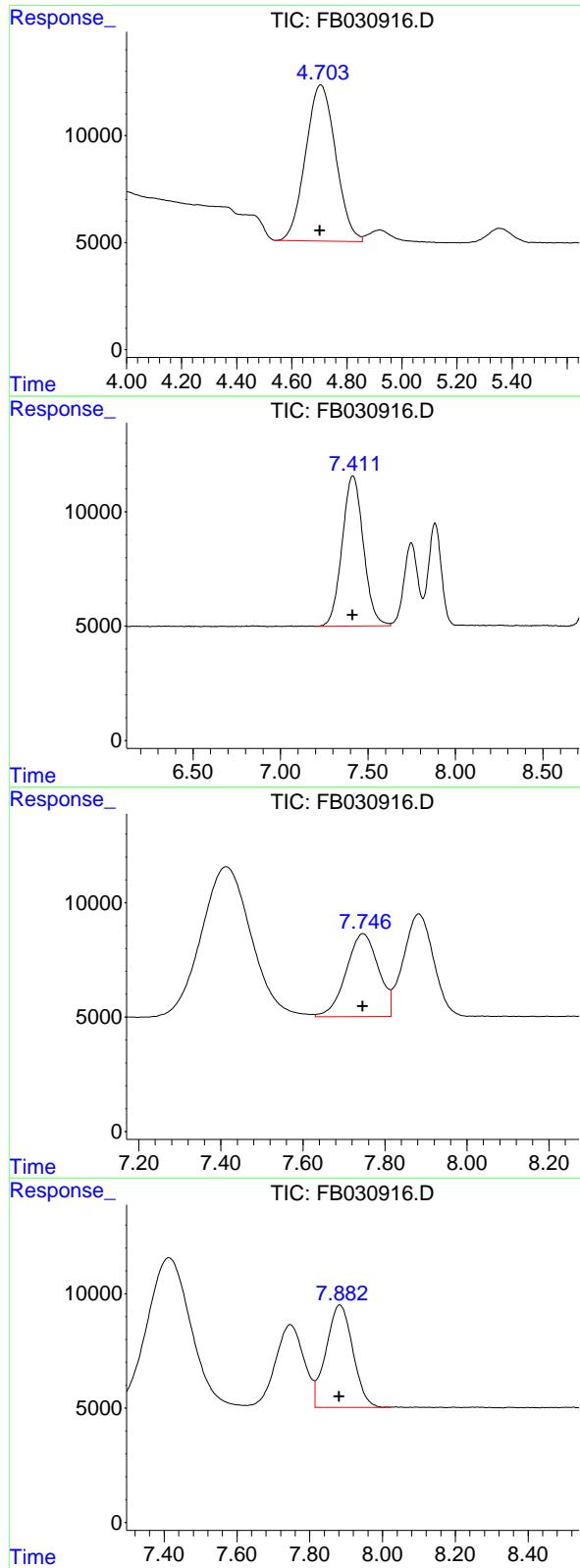
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030916.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 16:50  
 Operator : YP/AJ  
 Sample : 20 PPB GRO STD  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**20 PPB GRO STD**

Integration File: Calibration.e  
 Quant Time: Sep 10 04:30:23 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um





### #1 2-Methylpentane

R.T.: 4.705 min  
 Delta R.T.: 0.003 min  
 Response: 554105  
 Conc: 31.01 ng/ml  
 ClientSampleId : 20 PPB GRO STD

### #2 2,2,4-Trimethylpentane

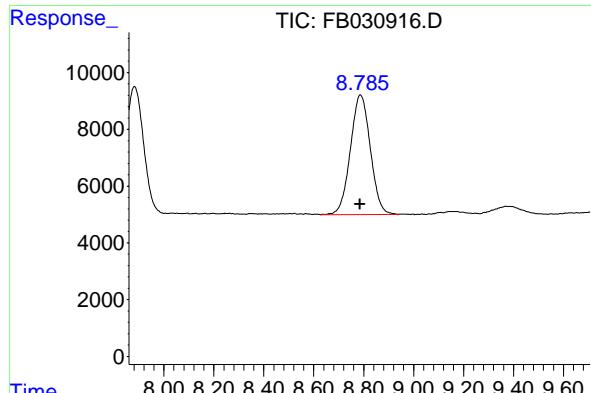
R.T.: 7.413 min  
 Delta R.T.: 0.002 min  
 Response: 555062  
 Conc: 30.27 ng/ml

### #3 n-Heptane

R.T.: 7.747 min  
 Delta R.T.: 0.000 min  
 Response: 198642  
 Conc: 10.74 ng/ml

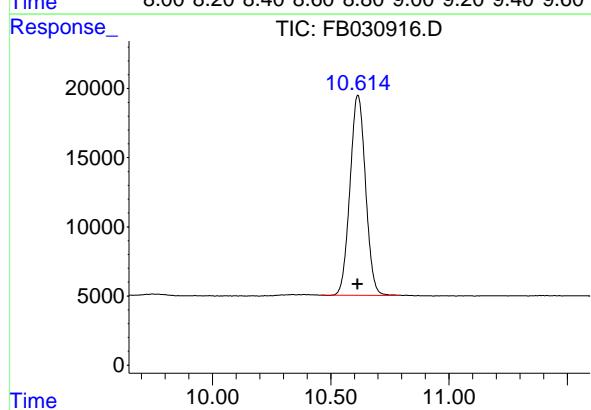
### #4 Benzene

R.T.: 7.883 min  
 Delta R.T.: 0.002 min  
 Response: 229067  
 Conc: 10.14 ng/ml



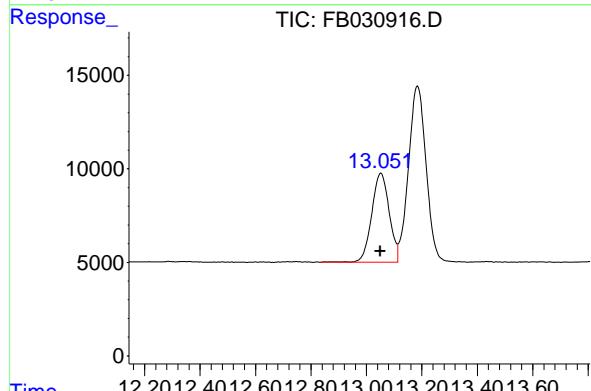
#5 AAA-TFT

R.T.: 8.787 min  
 Delta R.T.: 0.000 min  
 Response: 233860  
 Conc: 19.33 ng/ml  
 Instrument: FID\_B  
 ClientSampleId : 20 PPB GRO STD



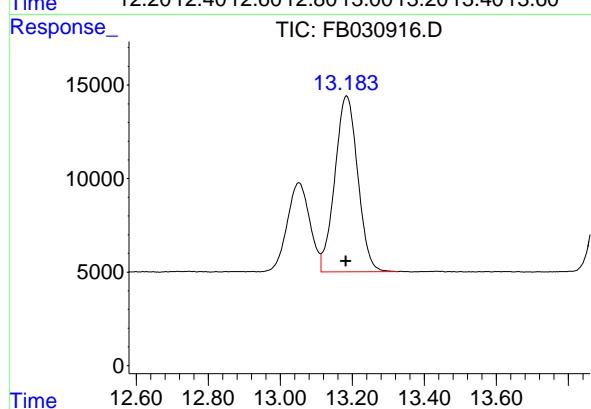
#6 Toluene

R.T.: 10.616 min  
 Delta R.T.: 0.001 min  
 Response: 660425  
 Conc: 30.24 ng/ml



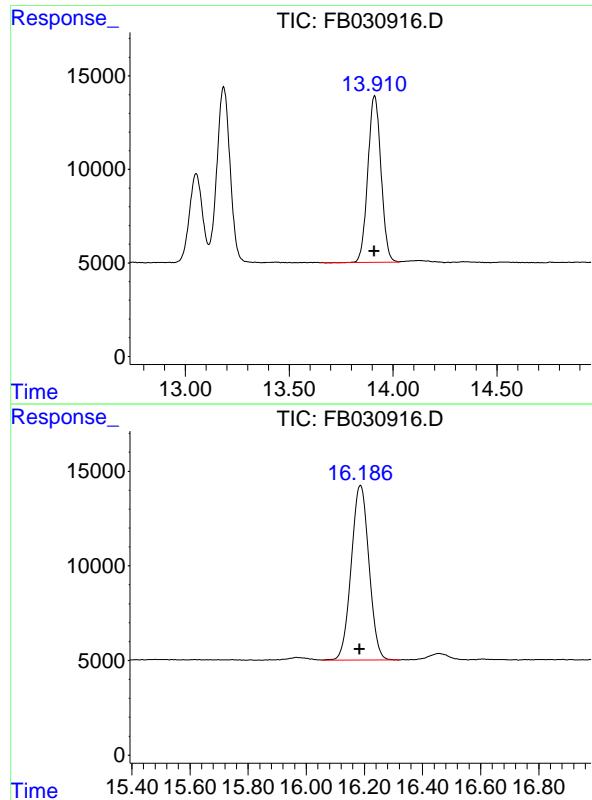
#7 Ethylbenzene

R.T.: 13.052 min  
 Delta R.T.: 0.002 min  
 Response: 208183  
 Conc: 9.94 ng/ml



#8 m-Xylene

R.T.: 13.184 min  
 Delta R.T.: 0.002 min  
 Response: 413852  
 Conc: 19.95 ng/ml



#9 O-Xylene

R.T.: 13.912 min  
Delta R.T.: 0.002 min  
Instrument: FID\_B  
Response: 392734  
Conc: 19.49 ng/ml  
ClientSampleId : 20 PPB GRO STD

#10 1,2,4-Trimethylbenzene

R.T.: 16.187 min  
Delta R.T.: 0.003 min  
Response: 389327  
Conc: 19.51 ng/ml

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030916.D  
 Signal (s) : FID2B.CH  
 Acq On : 9 Sep 2024 16:50  
 Sample : 20 PPB GRO STD  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Integration File: Calibration.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.705	4.541	4.856	PV	7301	554105	83.90%	14.448%
2	7.413	7.198	7.630	BV	6572	555062	84.05%	14.473%
3	7.747	7.630	7.815	VV	3634	198642	30.08%	5.179%
4	7.883	7.815	8.022	VV	4489	229067	34.68%	5.973%
5	8.787	8.629	8.938	PV	4227	233860	35.41%	6.098%
6	10.616	10.460	10.786	BV	14472	660425	100.00%	17.220%
7	13.052	12.835	13.113	PV	4765	208183	31.52%	5.428%
8	13.184	13.113	13.327	VV	9417	413852	62.66%	10.791%
9	13.912	13.658	14.029	BV	8918	392734	59.47%	10.240%
10	16.187	16.055	16.320	PV	9244	389327	58.95%	10.151%

Sum of corrected areas: 3835256

FB082724.M Tue Sep 10 05:32:33 2024

### Analytical Sequence

Client:	Chemtech Consulting Group	SDG No.:	P3845
Project:	NJ Waste Water PT	Instrument ID:	FID_B
GC Column:	RTX-502.2	ID:	0.53 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SUROGATE RT FROM INITIAL CALIBRATION		8.7856			
EPA SAMPLE NO.	LAB SAMPLE ID	DATE AND TIME ANALYZED	DATAFILE	RT	#
20 PPB GRO STD	20 PPB GRO STD	9 Sep 2024 9:44	FB030908.D	8.783	
VBF0909W1	VBF0909W1	9 Sep 2024 10:22	FB030909.D	8.785	
BSF0909W1	BSF0909W1	9 Sep 2024 11:01	FB030910.D	8.786	
RR-GAS-WP	P3845-18	9 Sep 2024 11:40	FB030911.D	8.800	
RR-GAS-WPRE	P3845-18RE	9 Sep 2024 12:57	FB030913.D	8.803	
BSF0909W2	BSF0909W2	9 Sep 2024 14:14	FB030915.D	8.787	
20 PPB GRO STD	20 PPB GRO STD	9 Sep 2024 16:50	FB030916.D	8.787	

# Column used to flag RT values with an \* values outside of QC limits

<u>QC Limits</u> (± 0.10 minutes)	<u>Lower Limit</u> 8.6856	<u>Upper Limits</u> 8.8856
--------------------------------------	------------------------------	-------------------------------



# QC SAMPLE

# DATA

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15

## Report of Analysis

Client:	Chemtech Consulting Group			Date Collected:	
Project:	NJ Waste Water PT			Date Received:	
Client Sample ID:	VBF0909W1			SDG No.:	P3845
Lab Sample ID:	VBF0909W1			Matrix:	Water
Analytical Method:	8015D GRO			% Solid:	0 Decanted:
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5 mL
Soil Aliquot Vol:			uL	Test:	Gasoline Range Organics
Extraction Type:				Injection Volume :	
GPC Factor :	PH :				
Prep Method :					

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB030909.D	1	09/09/24 10:22	FB090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
GRO	GRO	6.00	U	6.00		45.0 ug/L
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto 21.0			50 - 150		105% SPK: 20

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
Data File : FB030909.D  
Signal(s) : FID2B.CH  
Acq On : 9 Sep 2024 10:22  
Operator : YP/AJ  
Sample : VBF0909W1  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
FID\_B  
ClientSampleId :  
VBF0909W1

Integration File: Calibration.e  
Quant Time: Sep 10 04:29:44 2024  
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
Quant Title :  
QLast Update : Tue Aug 27 11:54:45 2024  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 5 g/ml  
Signal Phase : RTX-502.2  
Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

5) s AAA-TFT	8.785	254334	21.021 ng/ml
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Target Compounds

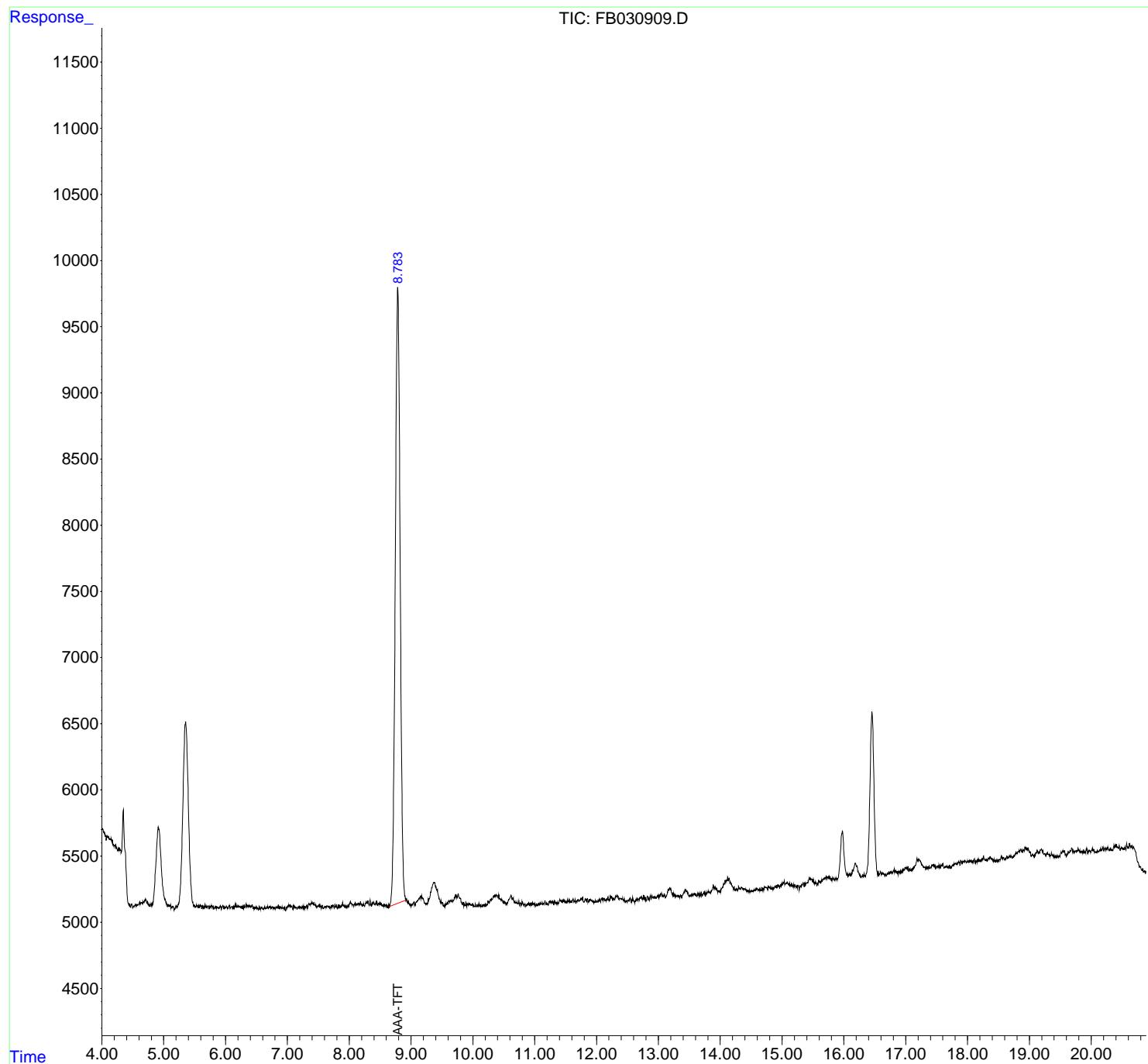
(f)=RT Delta > 1/2 Window (m)=manual int.

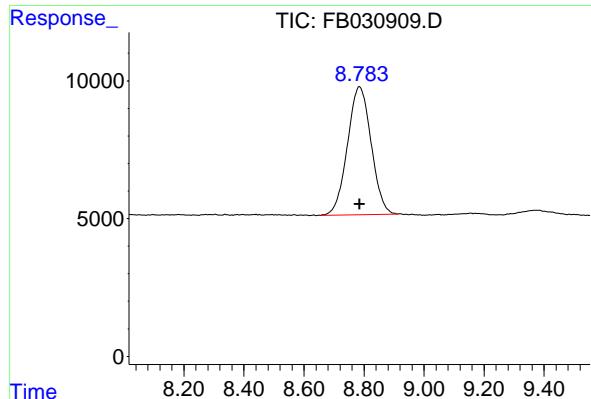
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
Data File : FB030909.D  
Signal(s) : FID2B.CH  
Acq On : 9 Sep 2024 10:22  
Operator : YP/AJ  
Sample : VBF0909W1  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
FID\_B  
ClientSampleId :  
VBF0909W1

Integration File: Calibration.e  
Quant Time: Sep 10 04:29:44 2024  
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
Quant Title :  
QLast Update : Tue Aug 27 11:54:45 2024  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 5 g/ml  
Signal Phase : RTX-502.2  
Signal Info : 60mx0.53mmx3.00um





#5 AAA-TFT

R.T.: 8.785 min  
Delta R.T.: -0.001 min  
Instrument: FID\_B  
Response: 254334  
Conc: 21.02 ng/ml  
ClientSampleId: VBF0909W1

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
Data File : FB030909.D  
Signal (s) : FID2B.CH  
Acq On : 9 Sep 2024 10:22  
Sample : VBF0909W1  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Integration File: Calibration.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	8.785	8.656	8.913	PV	4652	254334	100.00%	100.000%
					Sum of corrected areas:			254334

FB082724.M Tue Sep 10 05:24:25 2024

## Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	BSF0909W1	SDG No.:	P3845
Lab Sample ID:	BSF0909W1	Matrix:	Water
Analytical Method:	8015D GRO	% Solid:	0
Sample Wt/Vol:	5 mL	Final Vol:	5 mL
Soil Aliquot Vol:	uL	Test:	Gasoline Range Organics
Extraction Type:		Injection Volume :	
GPC Factor :	PH :		
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB030910.D	1	09/09/24 11:01	FB090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
GRO	GRO	202		6.00		45.0 ug/L
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto 17.6			50 - 150		88% SPK: 20

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 E = Value Exceeds Calibration Range  
 P = Indicates >25% difference for detected concentrations between the two GC columns  
 Q = indicates LCS control criteria did not meet requirements  
 M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 D = Dilution  
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.  
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030910.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 11:01  
 Operator : YP/AJ  
 Sample : BSF0909W1  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**BSF0909W1**

Integration File: Calibration.e  
 Quant Time: Sep 10 04:29:52 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
5) s AAA-TFT	8.786	212482	17.562 ng/ml
<hr/>			
Target Compounds			
1) t 2-Methylpentane	4.705	590458	33.043 ng/ml
2) t 2,2,4-Trimethylpentane	7.409	659652	35.978 ng/ml
3) t n-Heptane	7.743	189175	10.229 ng/ml
4) t Benzene	7.880	238302	10.547 ng/ml
6) t Toluene	10.613	683447	31.292 ng/ml
7) t Ethylbenzene	13.049	228419	10.911 ng/ml
8) t m-Xylene	13.182	467102	22.512 ng/ml
9) t o-Xylene	13.909	467095	23.176 ng/ml
10) t 1,2,4-Trimethylbenzene	16.183	493932	24.754 ng/ml
<hr/>			

(f)=RT Delta &gt; 1/2 Window

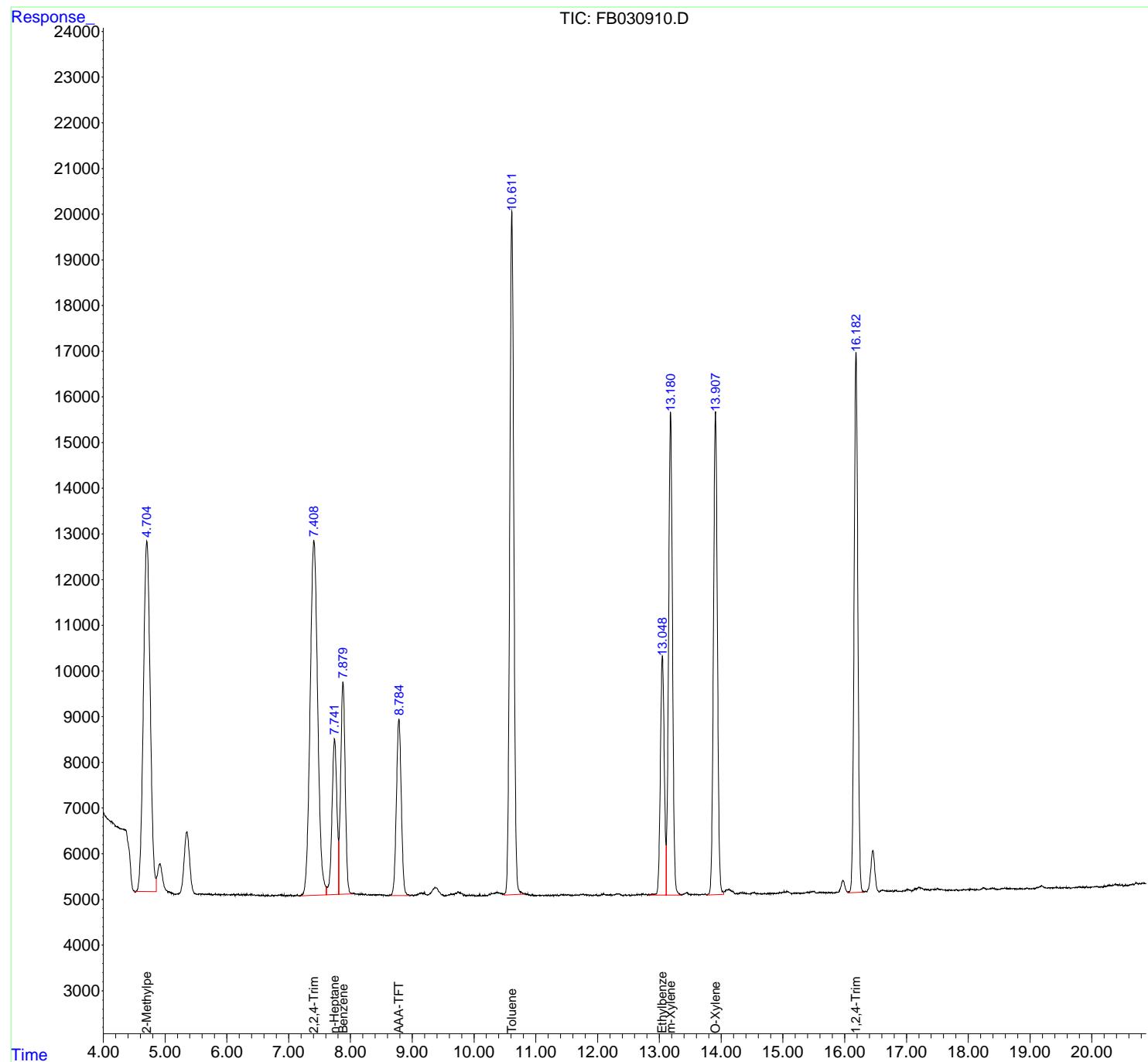
(m)=manual int.

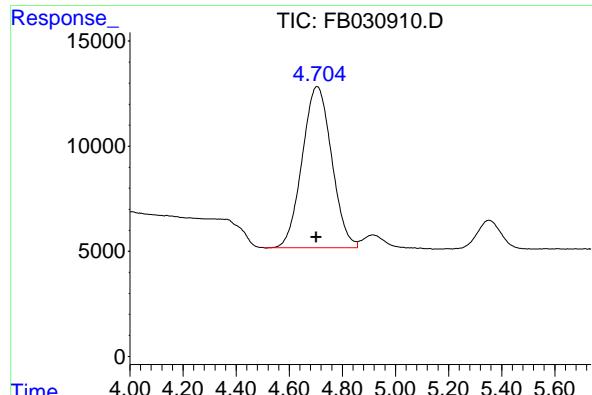
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030910.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 11:01  
 Operator : YP/AJ  
 Sample : BSF0909W1  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 FID\_B  
 ClientSampleId :  
 BSF0909W1

Integration File: Calibration.e  
 Quant Time: Sep 10 04:29:52 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

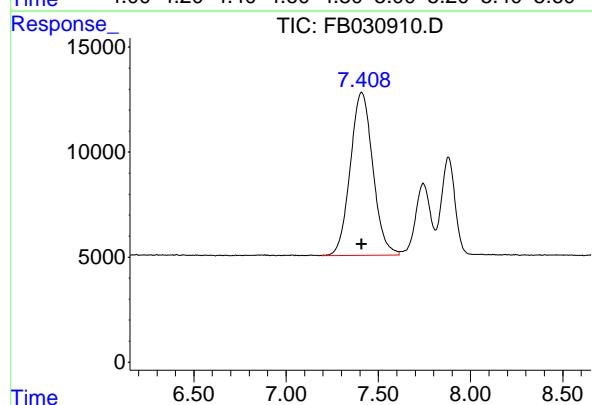
Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um





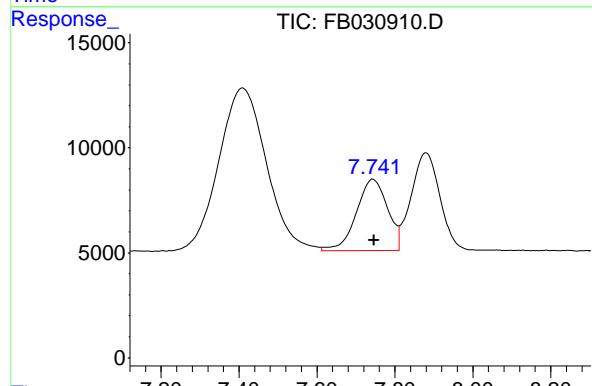
## #1 2-Methylpentane

R.T.: 4.705 min  
Delta R.T.: 0.003 min  
Instrument: FID\_B  
Response: 590458  
Conc: 33.04 ng/ml  
ClientSampleId : BSF0909W1



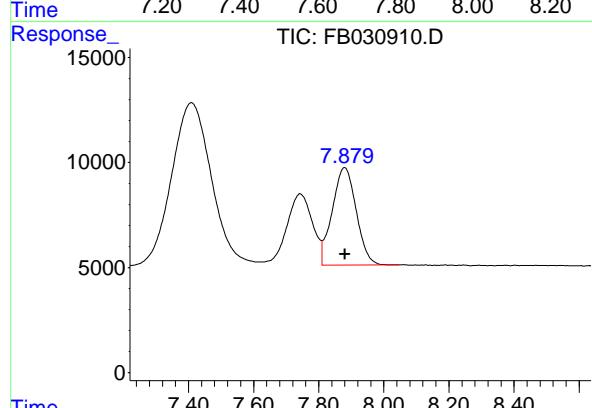
## #2 2,2,4-Trimethylpentane

R.T.: 7.409 min  
Delta R.T.: -0.002 min  
Response: 659652  
Conc: 35.98 ng/ml



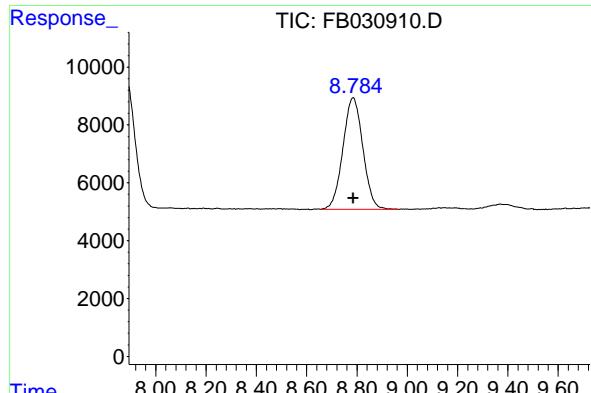
## #3 n-Heptane

R.T.: 7.743 min  
Delta R.T.: -0.003 min  
Response: 189175  
Conc: 10.23 ng/ml



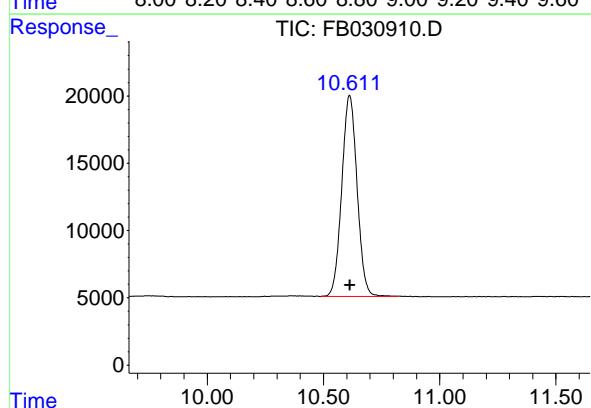
## #4 Benzene

R.T.: 7.880 min  
Delta R.T.: -0.001 min  
Response: 238302  
Conc: 10.55 ng/ml



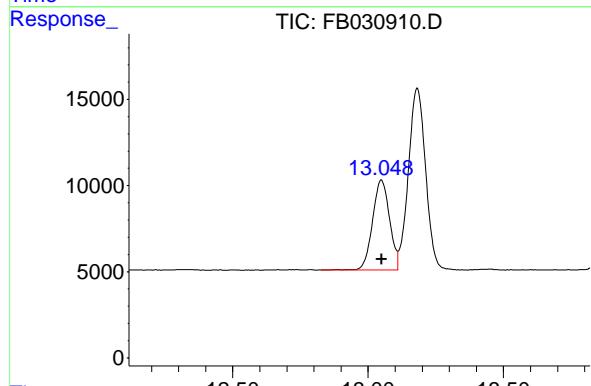
#5 AAA-TFT

R.T.: 8.786 min  
Delta R.T.: 0.000 min  
Instrument: FID\_B  
Response: 212482  
Conc: 17.56 ng/ml  
ClientSampleId: BSF0909W1



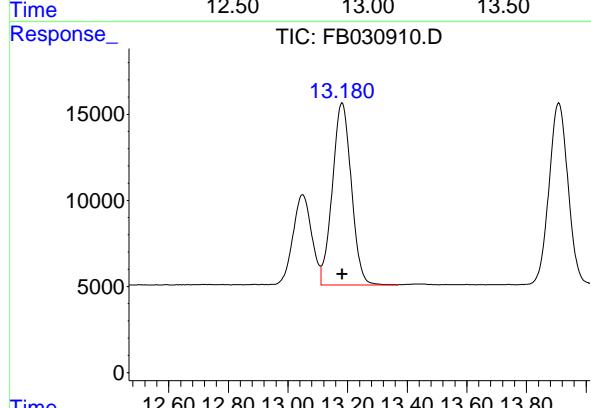
#6 Toluene

R.T.: 10.613 min  
Delta R.T.: -0.002 min  
Response: 683447  
Conc: 31.29 ng/ml



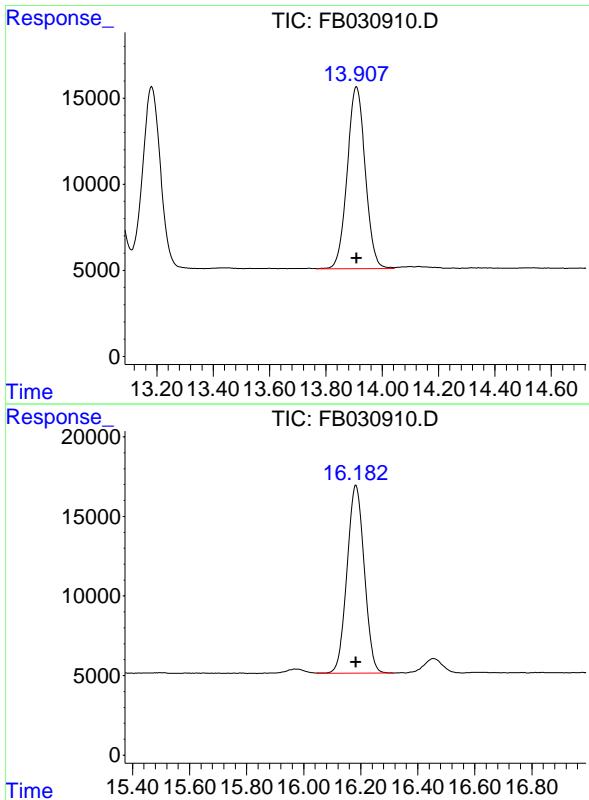
#7 Ethylbenzene

R.T.: 13.049 min  
Delta R.T.: 0.000 min  
Response: 228419  
Conc: 10.91 ng/ml



#8 m-Xylene

R.T.: 13.182 min  
Delta R.T.: 0.000 min  
Response: 467102  
Conc: 22.51 ng/ml



## #9 O-Xylene

R.T.: 13.909 min  
Delta R.T.: 0.000 min  
Instrument: FID\_B  
Response: 467095  
Conc: 23.18 ng/ml  
ClientSampleId : BSF0909W1

## #10 1,2,4-Trimethylbenzene

R.T.: 16.183 min  
Delta R.T.: 0.000 min  
Response: 493932  
Conc: 24.75 ng/ml

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030910.D  
 Signal (s) : FID2B.CH  
 Acq On : 9 Sep 2024 11:01  
 Sample : BSF0909W1  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Integration File: Calibration.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.705	4.504	4.856	BV	7673	590458	86.39%	13.959%
2	7.409	7.195	7.612	PV	7769	659652	96.52%	15.594%
3	7.743	7.612	7.810	VV	3407	189175	27.68%	4.472%
4	7.880	7.810	8.047	VV	4642	238302	34.87%	5.634%
5	8.786	8.657	8.963	PV	3861	212482	31.09%	5.023%
6	10.613	10.488	10.819	VV	14955	683447	100.00%	16.157%
7	13.049	12.826	13.110	BV	5240	228419	33.42%	5.400%
8	13.182	13.110	13.369	VV	10570	467102	68.35%	11.042%
9	13.909	13.769	14.042	PV	10564	467095	68.34%	11.042%
10	16.183	16.046	16.316	VV	11828	493932	72.27%	11.677%

Sum of corrected areas: 4230064

FB082724.M Tue Sep 10 05:24:56 2024

## Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	
Project:	NJ Waste Water PT	Date Received:	
Client Sample ID:	BSF0909W2	SDG No.:	P3845
Lab Sample ID:	BSF0909W2	Matrix:	Water
Analytical Method:	8015D GRO	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:		uL	
Extraction Type:		Test:	Gasoline Range Organics
GPC Factor :	PH :	Injection Volume :	
Prep Method :			

File ID/Qc Batch:	Dilution:	Date Analyzed	Prep Batch ID
FB030915.D	1	09/09/24 14:14	FB090924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
GRO	GRO	202		6.00		45.0 ug/L
<b>SURROGATES</b>						
98-08-8	Alpha,Alpha,Alpha-Trifluoroto	15.6		50 - 150	78%	SPK: 20

Comments:

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
 LOD = Limit of Detection  
 E = Value Exceeds Calibration Range  
 P = Indicates >25% difference for detected concentrations between the two GC columns  
 Q = indicates LCS control criteria did not meet requirements  
 M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value  
 B = Analyte Found in Associated Method Blank  
 N = Presumptive Evidence of a Compound  
 \* = Values outside of QC limits  
 D = Dilution  
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.  
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030915.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 14:14  
 Operator : YP/AJ  
 Sample : BSF0909W2  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**BSF0909W2**

Integration File: Calibration.e  
 Quant Time: Sep 10 04:30:18 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
5) s AAA-TFT	8.787	189246	15.641 ng/ml
<hr/>			
Target Compounds			
1) t 2-Methylpentane	4.709	615039	34.419 ng/ml
2) t 2,2,4-Trimethylpentane	7.413	664511	36.243 ng/ml
3) t n-Heptane	7.745	200931	10.865 ng/ml
4) t Benzene	7.882	241223	10.677 ng/ml
6) t Toluene	10.615	701767	32.131 ng/ml
7) t Ethylbenzene	13.051	224357	10.717 ng/ml
8) t m-Xylene	13.184	456266	21.990 ng/ml
9) t o-Xylene	13.911	445733	22.116 ng/ml
10) t 1,2,4-Trimethylbenzene	16.185	460874	23.097 ng/ml
<hr/>			

(f)=RT Delta &gt; 1/2 Window

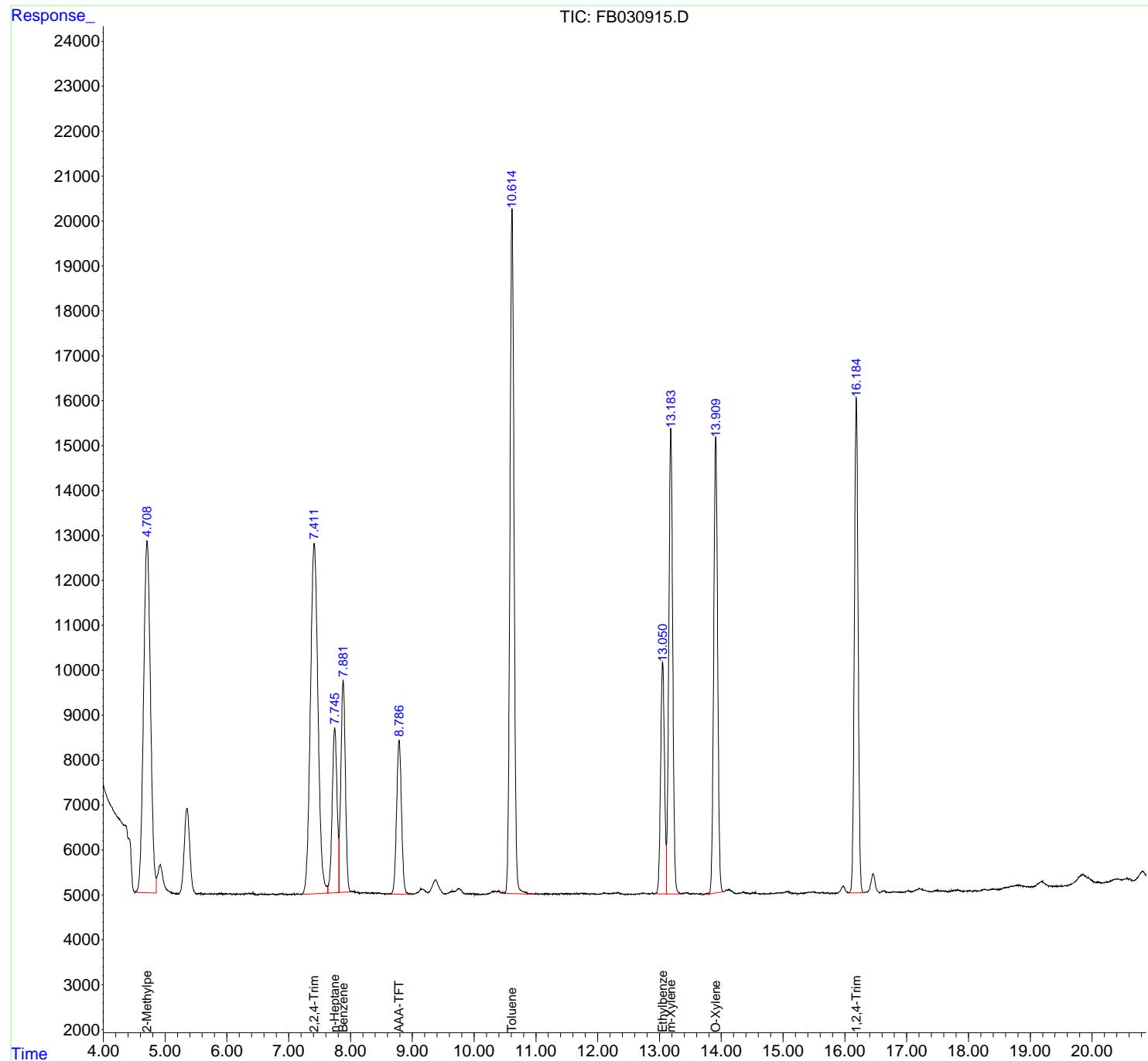
(m)=manual int.

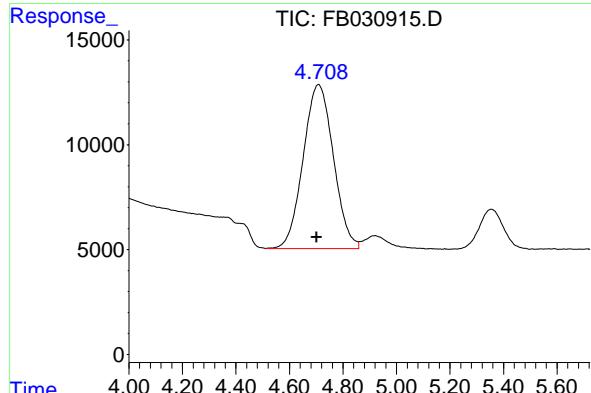
Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030915.D  
 Signal(s) : FID2B.CH  
 Acq On : 9 Sep 2024 14:14  
 Operator : YP/AJ  
 Sample : BSF0909W2  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

**Instrument :**  
**FID\_B**  
**ClientSampleId :**  
**BSF0909W2**

Integration File: Calibration.e  
 Quant Time: Sep 10 04:30:18 2024  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Quant Title :  
 QLast Update : Tue Aug 27 11:54:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

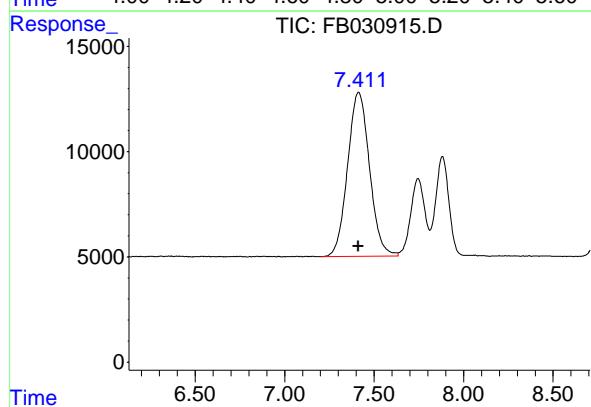
Volume Inj. : 5 g/ml  
 Signal Phase : RTX-502.2  
 Signal Info : 60mx0.53mmx3.00um





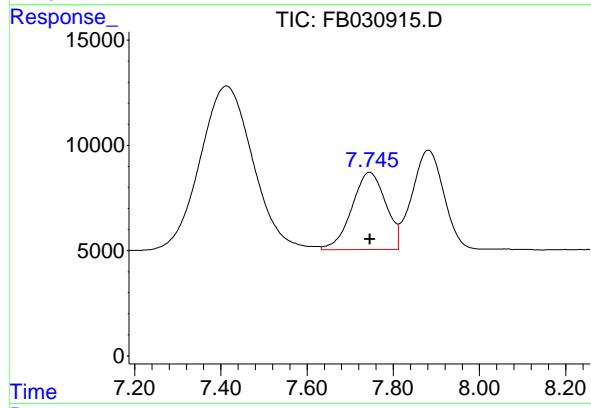
## #1 2-Methylpentane

R.T.: 4.709 min  
Delta R.T.: 0.007 min  
Instrument: FID\_B  
Response: 615039  
Conc: 34.42 ng/ml  
ClientSampleId : BSF0909W2



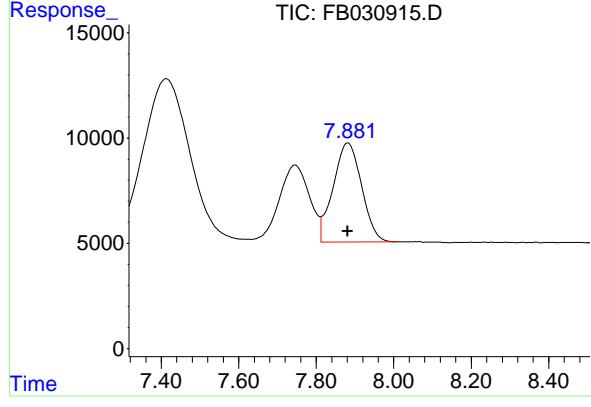
## #2 2,2,4-Trimethylpentane

R.T.: 7.413 min  
Delta R.T.: 0.002 min  
Response: 664511  
Conc: 36.24 ng/ml



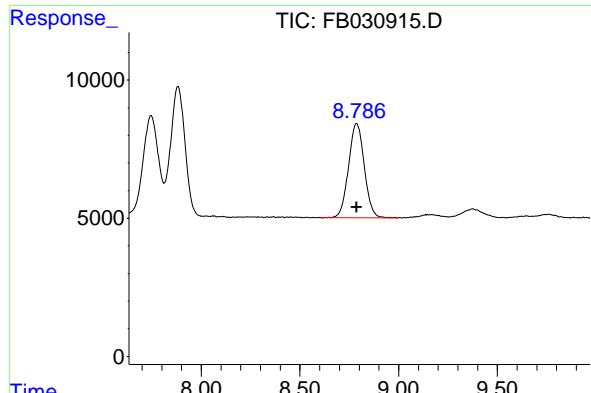
## #3 n-Heptane

R.T.: 7.745 min  
Delta R.T.: 0.000 min  
Response: 200931  
Conc: 10.86 ng/ml



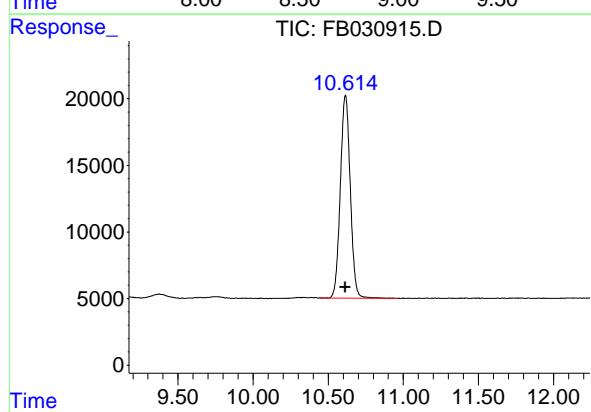
## #4 Benzene

R.T.: 7.882 min  
Delta R.T.: 0.000 min  
Response: 241223  
Conc: 10.68 ng/ml



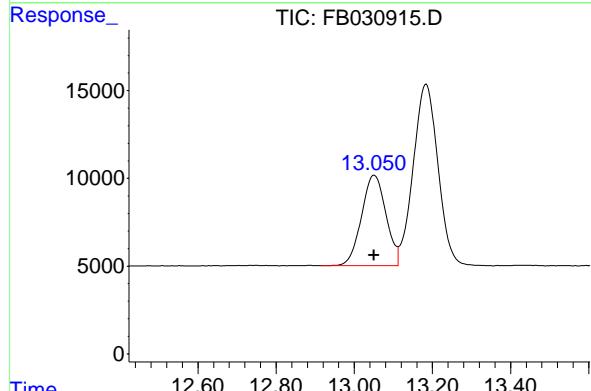
#5 AAA-TFT

R.T.: 8.787 min  
Delta R.T.: 0.000 min  
Instrument: FID\_B  
Response: 189246  
Conc: 15.64 ng/ml  
ClientSampleId: BSF0909W2



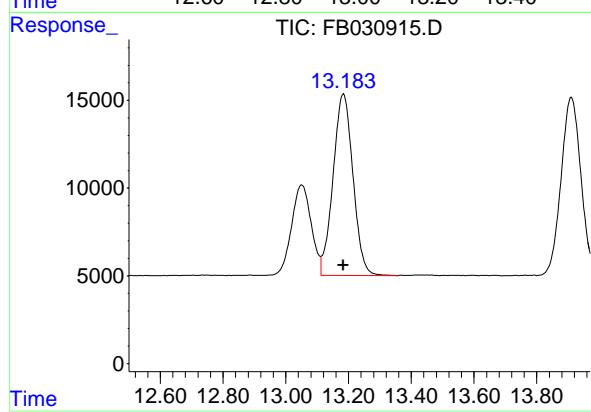
#6 Toluene

R.T.: 10.615 min  
Delta R.T.: 0.000 min  
Response: 701767  
Conc: 32.13 ng/ml



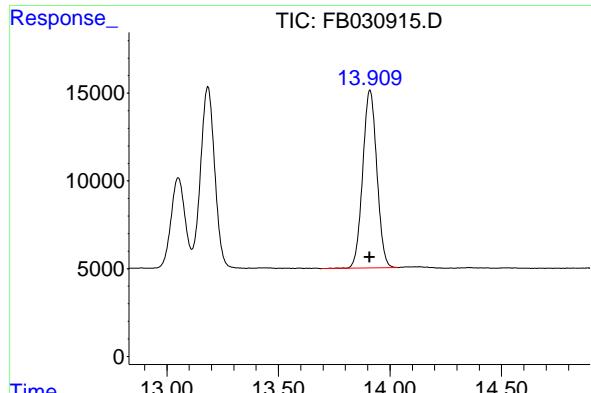
#7 Ethylbenzene

R.T.: 13.051 min  
Delta R.T.: 0.001 min  
Response: 224357  
Conc: 10.72 ng/ml



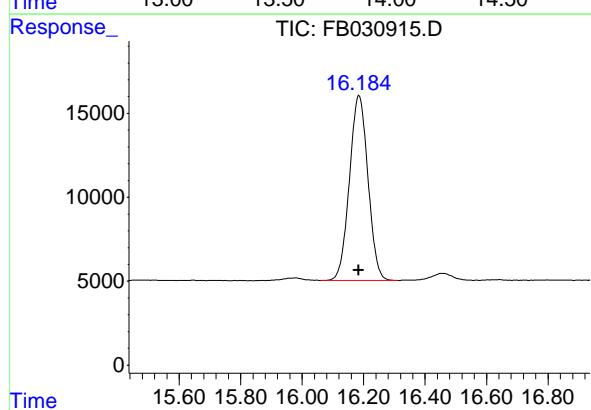
#8 m-Xylene

R.T.: 13.184 min  
Delta R.T.: 0.001 min  
Response: 456266  
Conc: 21.99 ng/ml



#9 O-Xylene

R.T.: 13.911 min  
Delta R.T.: 0.001 min  
Instrument: FID\_B  
Response: 445733  
Conc: 22.12 ng/ml  
ClientSampleId : BSF0909W2



#10 1,2,4-Trimethylbenzene

R.T.: 16.185 min  
Delta R.T.: 0.001 min  
Response: 460874  
Conc: 23.10 ng/ml

## rteres

## Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID\_B\Data\FB090924\  
 Data File : FB030915.D  
 Signal (s) : FID2B.CH  
 Acq On : 9 Sep 2024 14:14  
 Sample : BSF0909W2  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Integration File: Calibration.e

Method : Z:\pestpcbsrv\HPCHEM1\FID\_B\Method\FB082724.M  
 Title :

Signal : FID2B.CH

peak #	R. T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.709	4.512	4.859	PV	7833	615039	87.64%	14.644%
2	7.413	7.204	7.633	BV	7806	664511	94.69%	15.822%
3	7.746	7.633	7.812	VV	3674	200931	28.63%	4.784%
4	7.882	7.812	8.011	VV	4716	241223	34.37%	5.743%
5	8.787	8.606	8.996	BV	3425	189246	26.97%	4.506%
6	10.615	10.452	10.964	BB	15236	701767	100.00%	16.709%
7	13.051	12.915	13.112	BV	5159	224357	31.97%	5.342%
8	13.184	13.112	13.358	VB	10364	456266	65.02%	10.864%
9	13.911	13.692	14.037	PV	10136	445733	63.52%	10.613%
10	16.185	16.060	16.311	PV	11028	460874	65.67%	10.973%

Sum of corrected areas: 4199949

FB082724.M Tue Sep 10 05:32:02 2024

## Manual Integration Report

Sample ID	ClientID ID	File ID	Sequence ID	Parameter	Supervised By	Supervised On	Reason
P3845-18RE		FB030913.D	FB090924	2-Methylpentane	Ankita	9/10/2024 1:06:25 PM	Peak Integrated by Software incorrectly

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15

Instrument ID: FID\_B

**Daily Analysis Runlog For Sequence/QCBatch ID # FB082724**

Review By	yogesh	Review On	8/27/2024 12:49:44 PM
Supervise By	Ankita	Supervise On	8/28/2024 10:02:28 AM
SubDirectory	FB082724	HP Acquire Method	HP Processing Method FB082724
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23534,PP23625,PP23626,PP23627,PP23628,PP23629		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23631,PP23632 PP23535,PP23630		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	5 GRO STD	FB030884.D	27 Aug 2024 8:14	YP/AJ	Ok
2	10 GRO STD	FB030885.D	27 Aug 2024 8:52	YP/AJ	Ok
3	20 GRO STD	FB030886.D	27 Aug 2024 10:09	YP/AJ	Ok
4	50 GRO STD	FB030887.D	27 Aug 2024 10:48	YP/AJ	Ok
5	100 GRO STD	FB030888.D	27 Aug 2024 11:42	YP/AJ	Ok
6	FB082724GROICV	FB030889.D	27 Aug 2024 12:21	YP/AJ	Ok
7	20 PPB GRO STD	FB030890.D	27 Aug 2024 14:18	YP/AJ	Ok
8	VBF0827S1	FB030891.D	27 Aug 2024 15:37	YP/AJ	Ok
9	VBF0827S2	FB030892.D	27 Aug 2024 16:16	YP/AJ	Ok
10	BSF0827S1	FB030893.D	27 Aug 2024 16:56	YP/AJ	Ok
11	P3751-01	FB030894.D	27 Aug 2024 17:35	YP/AJ	Ok
12	P3751-01MS	FB030895.D	27 Aug 2024 19:34	YP/AJ	Ok
13	P3751-01MSD	FB030896.D	27 Aug 2024 20:14	YP/AJ	Ok
14	BSF0827S2	FB030897.D	27 Aug 2024 20:53	YP/AJ	Ok
15	20 PPB GRO STD	FB030898.D	27 Aug 2024 22:12	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID\_B

**Daily Analysis Runlog For Sequence/QCBatch ID # FB090924**

Review By	yogesh	Review On	9/9/2024 1:29:17 PM
Supervise By	Ankita	Supervise On	9/10/2024 1:06:30 PM
SubDirectory	FB090924	HP Acquire Method	HP Processing Method FB082724
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23534,PP23625,PP23626,PP23627,PP23628,PP23629		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23642,PP23643 PP23535,PP23630		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	20 PPB GRO STD	FB030908.D	9 Sep 2024 9:44	YP/AJ	Ok
2	VBF0909W1	FB030909.D	9 Sep 2024 10:22	YP/AJ	Ok
3	BSF0909W1	FB030910.D	9 Sep 2024 11:01	YP/AJ	Ok
4	P3845-18	FB030911.D	9 Sep 2024 11:40	YP/AJ	ReRun
5	I.BLK	FB030912.D	9 Sep 2024 12:18	YP/AJ	Ok
6	P3845-18RE	FB030913.D	9 Sep 2024 12:57	YP/AJ	Confirms
7	I.BLK	FB030914.D	9 Sep 2024 13:36	YP/AJ	Ok
8	BSF0909W2	FB030915.D	9 Sep 2024 14:14	YP/AJ	Ok
9	20 PPB GRO STD	FB030916.D	9 Sep 2024 16:50	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID\_B

### Daily Analysis Runlog For Sequence/QCBatch ID # FB082724

Review By	yogesh	Review On	8/27/2024 12:49:44 PM
Supervise By	Ankita	Supervise On	8/28/2024 10:02:28 AM
SubDirectory	FB082724	HP Acquire Method	HP Processing Method FB082724
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23534,PP23625,PP23626,PP23627,PP23628,PP23629		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23631,PP23632 PP23535,PP23630		

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	5 GRO STD		FB030884.D	27 Aug 2024 8:14		YP/AJ	Ok
2	10 GRO STD		FB030885.D	27 Aug 2024 8:52		YP/AJ	Ok
3	20 GRO STD		FB030886.D	27 Aug 2024 10:09		YP/AJ	Ok
4	50 GRO STD		FB030887.D	27 Aug 2024 10:48		YP/AJ	Ok
5	100 GRO STD		FB030888.D	27 Aug 2024 11:42		YP/AJ	Ok
6	FB082724GROICV		FB030889.D	27 Aug 2024 12:21		YP/AJ	Ok
7	20 PPB GRO STD		FB030890.D	27 Aug 2024 14:18		YP/AJ	Ok
8	VBF0827S1		FB030891.D	27 Aug 2024 15:37		YP/AJ	Ok
9	VBF0827S2		FB030892.D	27 Aug 2024 16:16		YP/AJ	Ok
10	BSF0827S1		FB030893.D	27 Aug 2024 16:56		YP/AJ	Ok
11	P3751-01		FB030894.D	27 Aug 2024 17:35	Vial A	YP/AJ	Ok
12	P3751-01MS		FB030895.D	27 Aug 2024 19:34	Vial A	YP/AJ	Ok
13	P3751-01MSD		FB030896.D	27 Aug 2024 20:14	Vial A	YP/AJ	Ok
14	BSF0827S2		FB030897.D	27 Aug 2024 20:53		YP/AJ	Ok
15	20 PPB GRO STD		FB030898.D	27 Aug 2024 22:12		YP/AJ	Ok

M : Manual Integration

Instrument ID: FID\_B

### Daily Analysis Runlog For Sequence/QCBatch ID # FB090924

Review By	yogesh	Review On	9/9/2024 1:29:17 PM
Supervise By	Ankita	Supervise On	9/10/2024 1:06:30 PM
SubDirectory	FB090924	HP Acquire Method	HP Processing Method FB082724
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23534,PP23625,PP23626,PP23627,PP23628,PP23629		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23642,PP23643 PP23535,PP23630		

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	20 PPB GRO STD		FB030908.D	9 Sep 2024 9:44		YP/AJ	Ok
2	VBF0909W1		FB030909.D	9 Sep 2024 10:22		YP/AJ	Ok
3	BSF0909W1		FB030910.D	9 Sep 2024 11:01		YP/AJ	Ok
4	P3845-18		FB030911.D	9 Sep 2024 11:40	Surrogate fail	YP/AJ	ReRun
5	I.BLK		FB030912.D	9 Sep 2024 12:18		YP/AJ	Ok
6	P3845-18RE		FB030913.D	9 Sep 2024 12:57	Surrogate fail	YP/AJ	Confirms
7	I.BLK		FB030914.D	9 Sep 2024 13:36		YP/AJ	Ok
8	BSF0909W2		FB030915.D	9 Sep 2024 14:14		YP/AJ	Ok
9	20 PPB GRO STD		FB030916.D	9 Sep 2024 16:50		YP/AJ	Ok

M : Manual Integration

## Prep Standard - Chemical Standard Summary

**Order ID :** P3845

**Test :** Gasoline Range Organics

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** FB090924,

**Standard ID :**

PP23534,PP23535,PP23538,PP23625,PP23626,PP23627,PP23628,PP23629,PP23630,PP23642,PP23643,

**Chemical ID :**

P11121,P9826,V11252,V14143,W3112,

### Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
231	10 PPM GRO STD 1ST SOURCE	<a href="#">PP23534</a>	07/29/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani 07/30/2024

FROM 0.11100ml of P9826 + 9.89000ml of V14143 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
233	10 PPM GRO STD 2nd SOURCE	<a href="#">PP23535</a>	07/29/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani 07/30/2024

FROM 0.11100ml of P11121 + 9.89000ml of V14143 = Final Quantity: 10.000 ml

## Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3619	25 PPM AAA-TFT Surg	<a href="#">PP23538</a>	07/29/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani 07/30/2024

FROM 0.10000ml of V11252 + 9.90000ml of V14143 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
238	5 PPB ICC GRO STD	<a href="#">PP23625</a>	08/27/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani 08/28/2024

FROM 5.00000ml of W3112 + 0.00100ml of PP23538 + 0.00250ml of PP23534 = Final Quantity: 5.004 ml

## Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
237	10 PPB ICC GRO STD	<a href="#">PP23626</a>	08/27/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani 08/28/2024

FROM 5.00000ml of W3112 + 0.00200ml of PP23538 + 0.00500ml of PP23534 = Final Quantity: 5.007 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
239	20 PPB ICC GRO STD	<a href="#">PP23627</a>	08/27/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani 08/28/2024

FROM 5.00000ml of W3112 + 0.00400ml of PP23538 + 0.01000ml of PP23534 = Final Quantity: 5.014 ml

## Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
235	50 PPB ICC GRO STD	<a href="#">PP23628</a>	08/27/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani 08/28/2024

FROM 5.00000ml of W3112 + 0.01000ml of PP23538 + 0.02500ml of PP23534 = Final Quantity: 5.035 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
234	100 PPB ICC GRO STD	<a href="#">PP23629</a>	08/27/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani 08/28/2024

FROM 5.00000ml of W3112 + 0.02000ml of PP23538 + 0.05000ml of PP23534 = Final Quantity: 5.070 ml

## Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
240	20 PPB ICV GRO STD	<a href="#">PP23630</a>	08/27/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani 08/28/2024

FROM 5.00000ml of W3112 + 0.00400ml of PP23538 + 0.01000ml of PP23535 = Final Quantity: 5.014 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
241	20 PPB CCC GRO STD	<a href="#">PP23642</a>	09/09/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani 09/10/2024

FROM 5.00000ml of W3112 + 0.00400ml of PP23538 + 0.01000ml of PP23534 = Final Quantity: 5.014 ml

## Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
241	20 PPB CCC GRO STD	<a href="#">PP23643</a>	09/09/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani 09/10/2024

FROM 5.00000ml of W3112 + 0.00400ml of PP23538 + 0.01000ml of PP23534 = Final Quantity: 5.014 ml

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### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30065 / GRO Mix (EPA)	A0161776	01/25/2025	07/25/2024 / yogesh	02/10/2021 / Sohil	P11121

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30065 / GRO Mix (EPA)	A0155991	01/25/2025	07/25/2024 / yogesh	09/11/2020 / DHAVAL	P9826

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30068 / VOA Mix, a, a, a-trifluorotoluene 2500uq/ml, P&T methanol, 1ml	A0158026	05/31/2028	11/27/2023 / yogesh	09/11/2020 / DHAVAL	V11252

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	01/22/2025	07/22/2024 / SAM	02/06/2024 / SAM	V14143

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112



## CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

[www.restek.com](http://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. : 30065

Lot No.: A0161776

Description : Gasoline Range Organics Mix (EPA)

Gasoline Range Organics Mix (EPA) 500 - 1500 $\mu$ g/mL, P&T Methanol,  
1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : July 31, 2027

Storage: 0°C or colder

## C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Methylpentane <b>CAS #</b> 107-83-5 <b>Purity</b> 99%	1,507.0 $\mu$ g/mL	+/- 8.9511 $\mu$ g/mL	+/- 84.5158 $\mu$ g/mL	+/- 86.4925 $\mu$ g/mL
2	2,2,4-Trimethylpentane ( isoctane ) <b>CAS #</b> 540-84-1 <b>Purity</b> 99%	1,511.0 $\mu$ g/mL	+/- 8.9749 $\mu$ g/mL	+/- 84.7402 $\mu$ g/mL	+/- 86.7221 $\mu$ g/mL
3	n-Heptane (C7) <b>CAS #</b> 142-82-5 <b>Purity</b> 98%	498.8 $\mu$ g/mL	+/- 2.9628 $\mu$ g/mL	+/- 27.9749 $\mu$ g/mL	+/- 28.6292 $\mu$ g/mL
4	Benzene <b>CAS #</b> 71-43-2 <b>Purity</b> 99%	500.0 $\mu$ g/mL	+/- 2.9698 $\mu$ g/mL	+/- 28.0411 $\mu$ g/mL	+/- 28.6969 $\mu$ g/mL
5	Toluene <b>CAS #</b> 108-88-3 <b>Purity</b> 99%	1,510.0 $\mu$ g/mL	+/- 8.9689 $\mu$ g/mL	+/- 84.6841 $\mu$ g/mL	+/- 86.6647 $\mu$ g/mL
6	Ethylbenzene <b>CAS #</b> 100-41-4 <b>Purity</b> 99%	504.0 $\mu$ g/mL	+/- 2.9936 $\mu$ g/mL	+/- 28.2654 $\mu$ g/mL	+/- 28.9265 $\mu$ g/mL
7	m-Xylene <b>CAS #</b> 108-38-3 <b>Purity</b> 99%	1,005.0 $\mu$ g/mL	+/- 5.9694 $\mu$ g/mL	+/- 56.3626 $\mu$ g/mL	+/- 57.6808 $\mu$ g/mL

8 o-Xylene 1,007.0 µg/mL +/- 5.9813 µg/mL Gravimetric  
CAS # 95-47-6 (Lot SHBK7739) +/- 56.4747 µg/mL Unstressed  
Purity 99% +/- 57.7956 µg/mL Stressed

9 1,2,4-Trimethylbenzene 1,008.0 µg/mL +/- 5.9872 µg/mL Gravimetric  
CAS # 95-63-6 (Lot WXBC4246V) +/- 56.5308 µg/mL Unstressed  
Purity 99% +/- 57.8530 µg/mL Stressed

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Column:**  
105m x 0.53mm x 3.0µm  
Rtx-502.2 (cat.#10910)

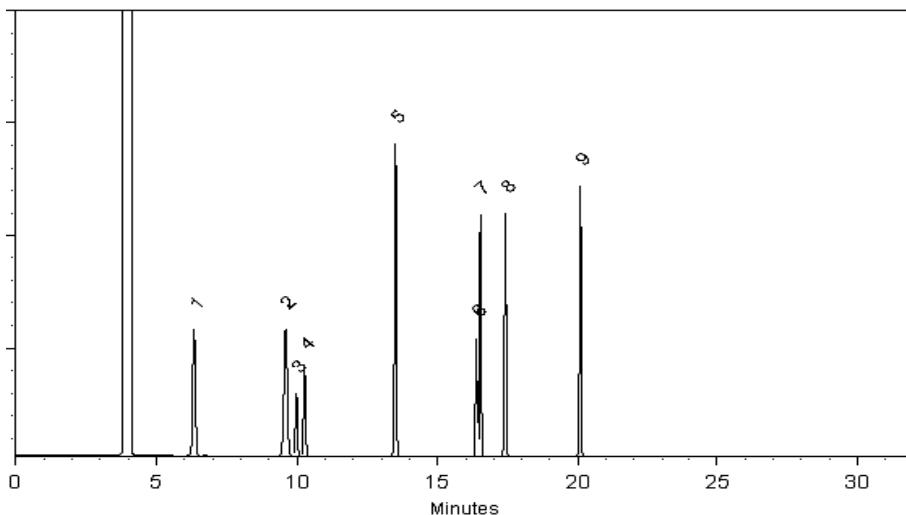
**Carrier Gas:**  
hydrogen-constant pressure 11.0 psi.

**Temp. Program:**  
40°C (hold 2 min.) to 240°C  
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°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.

Cydney L. Crust

Date Mixed: 15-Jun-2020 Balance: B251644995

Fang-Yun Lo - QC Analyst

Date Passed: 17-Jun-2020

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value ( includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

*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 [| 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 \(Freezer\)<br>-20°C or colder \(Deep Freezer\) | < 25°C              | ≥ 25°C up to 7 days     |](http://www.restek.com>Contact-Us</a> for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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 [### Manufacturing Notes:](http://www.restek.com>Contact-Us</a>.</li><li>• 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.</li></ul></div><div data-bbox=)

- 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.

Methanol  
ULTRA RESI-ANALYZED  
For Purge and Trap Analysis



Material No.: 9077-02  
Batch No.: 22L0562016  
Manufactured Date: 2022-10-26  
Expiration Date: 2025-10-25  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
Assay ( $\text{CH}_3\text{OH}$ ) (by GC, corrected for water)	$\geq 99.9 \%$	100.0 %
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.2 ppm
Titrable Acid ( $\mu\text{eq/g}$ )	$\leq 0.3$	0.2
Titrable Base ( $\mu\text{eq/g}$ )	$\leq 0.10$	0.03
Water (by KF, coulometric)	$\leq 0.08 \%$	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory, Research, or Manufacturing Use  
Performance Tested for Use in EPA Methods  
500 Series for Drinking Water  
600 Series for Wastewater  
846 for Solid Waste

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Ethier  
Vice President Global Quality



# SHIPPING DOCUMENTS

6390 Joyce Dr., #100  
Golden, CO 80403

Tel: +1-303-940-0033  
Fax: +1-303-940-0043  
info@phenova.com  
www.phenova.com

For terms and conditions of your order, please visit:  
[www.phenova.com/home/termsofsale](http://www.phenova.com/home/termsofsale)

## Packing List

Date	Order #
09/03/2024	318988



### Ship To

Chemtech - NJ  
ATTN: Sohil Jodhani  
284 Sheffield St., #1  
Mountainside, NJ 07092  
USA

Received by : SJ  
9/5/2024  
9:50

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240802-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
			PT-TMSET-WP	WP Trace Metals Set : (TM1, HG and SNTI)		
1	1	0	PT-TM1-WP	WP Trace Metals 1	WP0924	8259-04
1	1	0	PT-HG-WP	WP Mercury	WP0924	8259-05
1	1	0	PT-SNTI-WP	WP Tin & Titanium	WP0924	8259-38
1	1	0	PT-CR6-WP	WP Hexavalent Chromium	WP0924	8259-06
1	1	0	PT-DEM-WP	WP Demand	WP0924	8259-07
			PT-MINSET-WP	WP Minerals Set : (MIN1, MIN2 and COND)		
1	1	0	PT-MIN1-WP	WP Minerals 1 Only	WP0924	8259-08
1	1	0	PT-MIN2-WP	WP Minerals 2 Only	WP0924	8259-102
1	1	0	PT-COND-WP	WP Conductivity Only	WP0924	8259-72
1	1	0	PT-SOL-WP	WP Solids	WP0924	8259-09
			PT-NUTSET-WP	WP Nutrients Set : (NUT1, NUT2 and NUT3)		
1	1	0	PT-NUT1-WP	WP NUT1 Simple Nutrients Only	WP0924	8259-10
1	1	0	PT-NUT2-WP	WP NUT2 - Complex Nutrients	WP0924	8259-11
1	1	0	PT-NUT3-WP	WP NUT3 - Nitrite Only	WP0924	8259-69
1	1	0	PT-OGR1L-WP	WP Oil and Grease 1L	WP0924	8259-103
1	1	0	PT-CL-WP	WP Residual Chlorine	WP0924	8259-13
1	1	0	PT-PH-WP	WP pH	WP0924	8259-15
1	1	0	PT-CN-WP	WP Cyanide	WP0924	8259-14
1	1	0	PT-PHEN-WP	WP Phenolics	WP0924	8259-16

6390 Joyce Dr., #100  
Golden, CO 80403

Tel: +1-303-940-0033  
Fax: +1-303-940-0043  
info@phenova.com  
www.phenova.com

For terms and conditions of your order, please visit:  
[www.phenova.com/home/termsofsale](http://www.phenova.com/home/termsofsale)

## Packing List

Date	Order #
09/03/2024	318988



### Ship To

Chemtech - NJ  
ATTN: Sohil Jodhani  
284 Sheffield St., #1  
Mountainside, NJ 07092  
USA

Received by: SJ

9/5/2024

9:50

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240802-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-S2-WP	WP Sulfide	WP0924	8259-22
1	1	0	PT-SSOL-WP	WP Settleable Solids	WP0924	8259-17
1	1	0	PT-VSOL-WP	WP Volatile Solids	WP0924	8259-18
1	1	0	PT-TURB-WP	WP Turbidity	WP0924	8259-20
1	1	0	PT-SIO2-WP	WP Silica	WP0924	8259-21
1	1	0	PT-COL-WP	WP Color	WP0924	8259-51
1	1	0	PT-VOA-WP	WP Volatiles	WP0924	8259-26
1	1	0	PT-BN-WP	WP Base Neutrals	WP0924	8259-27
1	1	0	PT-ACIDS-WP	WP Acids	WP0924	8259-28
1	1	0	PT-PEST-WP	WP Pesticides	WP0924	8259-29
1	1	0	PT-CHLR-WP	WP Chlordane	WP0924	8259-30
1	1	0	PT-TXP-WP	WP Toxaphene	WP0924	8259-31
1	1	0	PT-PCBW-WP	WP PCBs in Water	WP0924	8259-32
1	1	0	PT-HERB-WP	WP Herbicides	WP0924	8259-36
1	1	0	RR-TPH1L-WP	WP TPH 1L	R39151	R39151-104
1	1	0	RR-PAH-WP	WP PAH-Low Level	R39151	R39151-37
1	1	0	RR-GAS-WP	WP Gasoline Range Organics	R39151	R39151-62
1	1	0	RR-DIES-WP	WP Diesel Range Organics	R39151	R39151-63
1	1	0	RR-8011-WP	WP EDB/DBCP/TCP	R39151	R39151-98
1	1	0	RR-TRIAZINE-WP	WP Triazine Pesticides	R39151	R39151-108

**Laboratory Certification**

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488