

Cover Page

Order ID : P5299

Project ID : Amtrak Sawtooth Bridges 2024

Client : Portal Partners Tri-Venture

Lab Sample Number

P5299-01
P5299-02
P5299-03
P5299-04

Client Sample Number

SB-01
SB-02
SB-01
SB-02

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: 12/26/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

Portal Partners Tri-Venture

Project Name: Amtrak Sawtooth Bridges 2024

Project # N/A

Chemtech Project # P5299

Test Name: EPH

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 12/16/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: EPH, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, SVOC-TCL BNA -20, Trivalent Chromium and VOC-TCLVOA-10. This data package contains results for EPH.

C. Analytical Techniques:

The analysis were performed on instrument FID_C. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analyses were performed on instrument FID_D. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analysis of EPHs was based on method NJEPH and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

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:

The soil samples results are based on a dry weight basis.



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F. Manual Integration Comments:

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

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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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P5299

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: SHREENA PATEL

Date: 12/26/2024

LAB CHRONICLE

OrderID:	P5299	OrderDate:	12/16/2024 12:24:00 PM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2024
Contact:	Joseph Krupansky	Location:	L41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5299-01	SB-01	SOIL	PCB	8082A	12/14/24	12/18/24	12/18/24	12/16/24
			EPH	NJEPH		12/19/24	12/20/24	
P5299-02	SB-02	SOIL	PCB	8082A	12/15/24	12/18/24	12/18/24	12/16/24
			EPH	NJEPH		12/19/24	12/20/24	
P5299-03	SB-01	SOIL	PCB	8082A	12/15/24	12/18/24	12/18/24	12/16/24
			EPH	NJEPH		12/19/24	12/20/24	
P5299-04	SB-02	SOIL	PCB	8082A	12/15/24	12/18/24	12/18/24	12/16/24
			EPH	NJEPH		12/19/24	12/20/24	



QC SUMMARY

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM CASE No.: P5299 SAS No.: P5299 SDG No.: P5299
Run Number: FC122024AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)			TOT OUT
SB-01	101			0
SB-02	89			0
SB-01	95			0
SB-02	113			0
SB-02MS	83			0
SB-02MSD	80			0
PB165775BL	84			0
PB165775BS	100			0
PB165775BSD	109			0

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

Column to be used to flag recovery values
* Values outside of contract required QC Limits
D Surrogate diluted out

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM CASE No.: P5299 SAS No.: P5299 SDG No.: P5299
Run Number: FD122024AR

Client SAMPLE NO.	2-Bromonaphthalene (SURR)	2-Flurobiphenyl (SURR)	ortho-Terphenyl (SURR)	TOT OUT
SB-01	112	119	78	0
SB-02	103	108	66	0
SB-01	110	116	63	0
SB-02	91	95	59	0
SB-02MS	119	126	70	0
SB-02MSD	120	128	71	0
PB165775BL	106	111	95	0
PB165775BS	100	98	90	0
PB165775BSD	100	98	89	0

QC LIMITS

2-Bromonaphthalene (SURR) (40-140)
2-Flurobiphenyl (SURR) (40-140)
ortho-Terphenyl (SURR) (40-140)

Column to be used to flag recovery values
* Values outside of contract required QC Limits
D Surrogate diluted out

SOIL EPH SURROGATE RECOVERY

QC LIMITS

2-Bromonaphthalene (SURR)

(40-140)

2-Fluorobiphenyl (SURR)

(40-140)

ortho-Terphenyl (SURR)

(40-140)

Column to be used to flag recovery values

* Values outside of contract required QC Limits

D Surrogate diluted out

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P5299 **SAS No :** P5299 **SDG No:** P5299
Sample No : P5299-04MS **Datafile:** FC068068.D
Client ID : SB-02MS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	12.6	0	6.56	52		(40-140)
Aliphatic C12-C16	8.4	1.99	7.81	69		(40-140)
Aliphatic C16-C21	12.6	0	9.22	73		(40-140)
Aliphatic C21-C28	16.8	0	12.4	74		(40-140)
Aliphatic C28-C40	25.2	8.03	32.0	95		(40-140)

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P5299 **SAS No :** P5299 **SDG No:** P5299
Sample No : P5299-04MSD **Datafile:** FC068069.D
Client ID : SB-02MSD

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS QC Limit Of RPD
Aliphatic C9-C12	12.6	0	6.42	51		2.14 (40-140) 25
Aliphatic C12-C16	8.4	1.99	7.57	66		4.13 (40-140) 25
Aliphatic C16-C21	12.6	0	8.97	71		2.77 (40-140) 25
Aliphatic C21-C28	16.8	0	12.0	71		3.31 (40-140) 25
Aliphatic C28-C40	25.2	8.03	27.1	76		22.7 (40-140) 25

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P5299 **SAS No :** P5299 **SDG No:** P5299
Sample No : P5299-04MS **Datafile:** FD048906.D
Client ID : SB-02MS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	8.4	0	6.78	81		(40-140)
Aromatic C12-C16	12.6	0.58	15.7	119		(40-140)
Aromatic C16-C21	21.0	1.28	24.6	110		(40-140)
Aromatic C21-C36	33.6	0	42.6	126		(40-140)

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P5299 **SAS No :** P5299 **SDG No:** P5299
Sample No : P5299-04MSD **Datafile:** FD048907.D
Client ID : SB-02MSD

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS QC Limit Of RPD
Aromatic C10-C12	8.4	0	6.85	81		0.99 (40-140) 25
Aromatic C12-C16	12.6	0.58	12.4	94		23.9 (40-140) 25
Aromatic C16-C21	21.0	1.28	25.0	112		1.8 (40-140) 25
Aromatic C21-C36	33.7	0	43.0	127		0.79 (40-140) 25

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P5299 **SAS No :** P5299 **SDG No:** P5299
Sample No : PB165775BS **Datafile:** FC068061.D
Client ID : PB165775BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	10.0	5.50	55		(40-140)
Aliphatic C12-C16	6.7	5.33	80		(40-140)
Aliphatic C16-C21	10.0	8.99	90		(40-140)
Aliphatic C21-C28	13.3	12.4	93		(40-140)
Aliphatic C28-C40	20.0	22.4	112		(40-140)

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P5299 **SAS No :** P5299 **SDG No:** P5299
Sample No : PB165775BSD **Datafile:** FC068062.D
Client ID : PB165775BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS	QC Limit Of RPD
Aliphatic C9-C12	10.0	5.42	54		1.4 (40-140)	50
Aliphatic C12-C16	6.7	5.28	79		0.972 (40-140)	50
Aliphatic C16-C21	10.0	8.95	90		0.413 (40-140)	50
Aliphatic C21-C28	13.3	12.4	93		0.03 (40-140)	50
Aliphatic C28-C40	20.0	22.4	112		0.03 (40-140)	50

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P5299 **SAS No :** P5299 **SDG No:** P5299
Sample No : PB165775BS **Datafile:** FD048899.D
Client ID : PB165775BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	6.7	4.61	69		(40-140)
Aromatic C12-C16	10.0	8.67	87		(40-140)
Aromatic C16-C21	16.7	17.8	106		(40-140)
Aromatic C21-C36	26.7	29.1	109		(40-140)

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P5299 **SAS No :** P5299 **SDG No:** P5299
Sample No : PB165775BSD **Datafile:** FD048900.D
Client ID : PB165775BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS	QC Limit Of RPD
Aromatic C10-C12	6.7	4.62	69		0.17 (40-140)	50
Aromatic C12-C16	10.0	8.69	87		0.26 (40-140)	50
Aromatic C16-C21	16.7	17.3	103		2.1 (40-140)	50
Aromatic C21-C36	26.7	29.0	108		0.196 (40-140)	50

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165775BL

Lab Name: CHEMTECH

Contract: PORT06

Lab Code: CHEM Case No.: P5299

SAS No.: P5299 SDG NO.: P5299

Instrument ID: FID_C

Lab Sample ID: PB165775BL

Matrix: (soil/water) Solid

Date Extracted: 12/19/2024 2:05:00

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB165775BS	PB165775BS
PB165775BSD	PB165775BSD
SB-01	P5299-01
SB-02	P5299-02
SB-01	P5299-03
SB-02	P5299-04
SB-02MS	P5299-04MS
SB-02MSD	P5299-04MSD

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/14/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-01	SDG No.:	P5299
Lab Sample ID:	P5299-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	78.5
Sample Wt/Vol:	30.06 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
12/19/24 14:05	12/20/24 12:45	PB165775

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.48	U	1	0.48	1.27	mg/kg	FC068063.D
Aliphatic C12-C16	Aliphatic C12-C16	1.63		1	0.31	0.85	mg/kg	FC068063.D
Aliphatic C16-C21	Aliphatic C16-C21	0.41	J	1	0.38	1.27	mg/kg	FC068063.D
Aliphatic C21-C28	Aliphatic C21-C28	1.02	U	1	1.02	1.70	mg/kg	FC068063.D
Aliphatic C28-C40	Aliphatic C28-C40	6.99		1	2.29	2.54	mg/kg	FC068063.D
Aromatic C10-C12	Aromatic C10-C12	0.38	U	1	0.38	0.85	mg/kg	FD048901.D
Aromatic C12-C16	Aromatic C12-C16	7.86		1	0.43	1.27	mg/kg	FD048901.D
Aromatic C16-C21	Aromatic C16-C21	6.08		1	1.22	2.12	mg/kg	FD048901.D
Aromatic C21-C36	Aromatic C21-C36	4.34		1	2.54	3.39	mg/kg	FD048901.D
Total AliphaticEPH	Total AliphaticEPH	9.03			4.48	7.63	mg/kg	
Total AromaticEPH	Total AromaticEPH	18.3			4.57	7.63	mg/kg	
Total EPH	Total EPH	27.3			9.05	15.3	mg/kg	

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control 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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/14/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-01	SDG No.:	P5299
Lab Sample ID:	P5299-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	78.5
Sample Wt/Vol:	30.06 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068063.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	0.48	U	0.48	1.27	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	1.63		0.31	0.85	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.41	J	0.38	1.27	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	1.02	U	1.02	1.70	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	6.99		2.29	2.54	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	50.7		40 - 140	101%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5299-01	Acq On:	20 Dec 2024 12:45
Client Sample ID:	SB-01	Operator:	YP/AJ
Data file:	FC068063.D	Misc:	
Instrument:	FID_C	ALS Vial:	14
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.117	6.389	728778	4.604	300	ug/ml
Aliphatic C12-C16	6.390	9.779	3088508	19.27	200	ug/ml
Aliphatic C16-C21	9.780	13.137	738603	4.848	300	ug/ml
Aliphatic C21-C28	13.138	16.791	606541	4.447	400	ug/ml
Aliphatic C28-C40	16.792	21.609	8735105	82.434	600	ug/ml
Aliphatic EPH	3.117	21.609	13897535	115.603		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.892	12.892	6470771	50.71		ug/ml
Aliphatic C9-C28	3.117	16.791	5162430	33.169	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068063.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 12:45
Operator : YP/AJ
Sample : P5299-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
SB-01

Integration File: autoint1.e
Quant Time: Dec 21 01:51:34 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
12) S 1-chlorooctadecane (S...	12.892	6470771	50.714 ug/ml
Spiked Amount 50.000		Recovery =	101.43%

Target Compounds

(f)=RT Delta > 1/2 Window

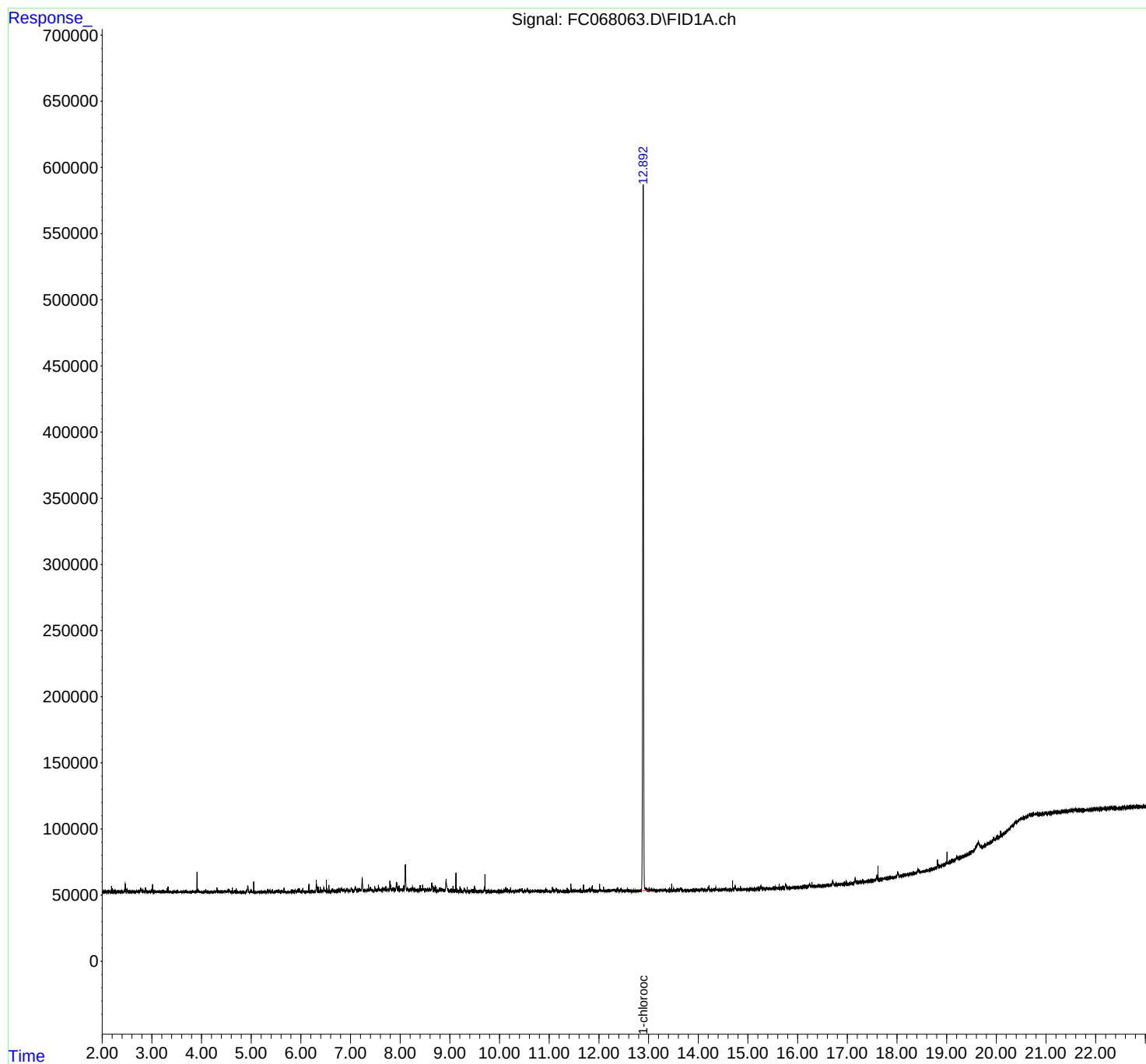
(m)=manual int.

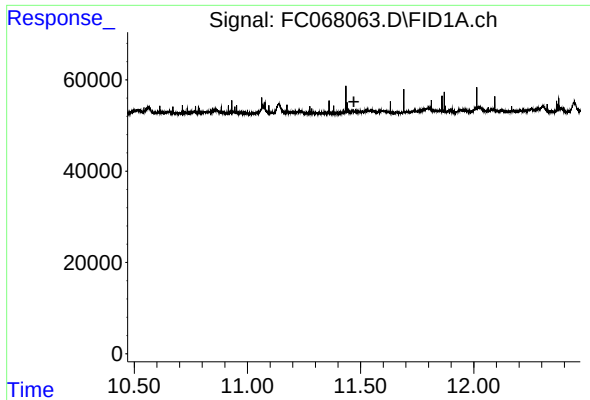
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068063.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 12:45
Operator : YP/AJ
Sample : P5299-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
SB-01

Integration File: autoint1.e
Quant Time: Dec 21 01:51:34 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

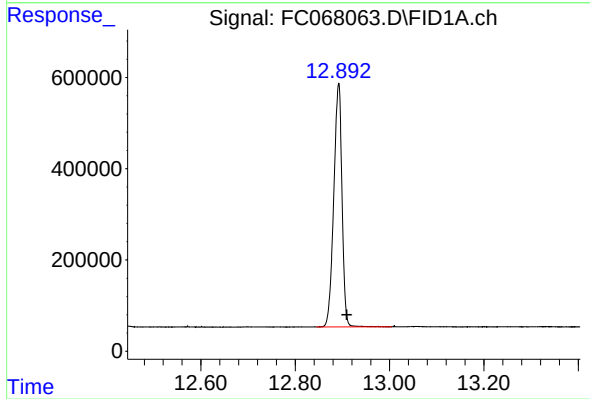




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T.: 11.470 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
SB-01



#12 1-chlorooctadecane (SURR)

R.T.: 12.892 min
Delta R.T.: -0.018 min
Response: 6470771
Conc: 50.71 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068063.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 12:45
Sample : P5299-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.151	3.104	3.175	BV	121	1941	0.03%	0.010%
2	3.218	3.175	3.231	VV	689	5447	0.08%	0.027%
3	3.244	3.231	3.277	VV	429	5023	0.08%	0.025%
4	3.304	3.277	3.314	PV	1073	3189	0.05%	0.016%
5	3.326	3.314	3.354	PV	1033	5971	0.09%	0.029%
6	3.381	3.354	3.459	VV	257	4001	0.06%	0.020%
7	3.488	3.459	3.497	PV	108	1170	0.02%	0.006%
8	3.508	3.497	3.554	VV	664	6168	0.09%	0.030%
9	3.565	3.554	3.600	VV	319	4023	0.06%	0.020%
10	3.614	3.600	3.636	VV	237	2609	0.04%	0.013%
11	3.648	3.636	3.670	VV	129	1260	0.02%	0.006%
12	3.684	3.670	3.711	VV	536	2978	0.05%	0.015%
13	3.734	3.711	3.786	VV	251	5465	0.08%	0.027%
14	3.821	3.786	3.845	VV	808	6968	0.11%	0.034%
15	3.854	3.845	3.862	VV	154	1005	0.02%	0.005%
16	3.909	3.862	3.920	VV	4794	22150	0.34%	0.108%
17	3.933	3.920	3.983	VV	1293	15609	0.24%	0.076%
18	4.000	3.983	4.018	VV	242	3533	0.05%	0.017%
19	4.024	4.018	4.035	VV	137	1154	0.02%	0.006%
20	4.083	4.035	4.102	VV	1109	18836	0.29%	0.092%
21	4.111	4.102	4.125	VV	491	2838	0.04%	0.014%
22	4.135	4.125	4.155	VV	207	2629	0.04%	0.013%
23	4.166	4.155	4.195	VV	189	2895	0.04%	0.014%
24	4.234	4.195	4.244	VV	212	4097	0.06%	0.020%
25	4.255	4.244	4.284	VV	242	3516	0.05%	0.017%
26	4.310	4.284	4.326	VV	1227	14407	0.22%	0.071%
27	4.337	4.326	4.368	VV	531	6705	0.10%	0.033%
28	4.407	4.368	4.435	VV	732	11282	0.17%	0.055%
29	4.470	4.435	4.511	VV	1491	23165	0.36%	0.113%
30	4.526	4.511	4.541	VV	1264	12523	0.19%	0.061%
31	4.556	4.541	4.642	VV	2064	29532	0.45%	0.145%
32	4.677	4.642	4.694	VV	681	7383	0.11%	0.036%
33	4.701	4.694	4.758	VV	1138	7377	0.11%	0.036%
34	4.769	4.758	4.804	VV	224	3391	0.05%	0.017%
35	4.855	4.804	4.884	PV	399	8751	0.13%	0.043%
36	4.933	4.884	4.962	VV	5019	63711	0.98%	0.312%

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37	4.989	4.962	5.026	VV	1114	16778	0.26%	0.082%
38	5.051	5.026	5.074	VV	2778	9964	0.15%	0.049%
39	5.095	5.074	5.104	PV	173	1466	0.02%	0.007%
40	5.127	5.104	5.144	VV	338	5617	0.09%	0.028%
41	5.160	5.144	5.183	VV	240	4770	0.07%	0.023%
42	5.195	5.183	5.211	VV	271	2936	0.05%	0.014%
43	5.220	5.211	5.236	VV	174	2255	0.03%	0.011%
44	5.247	5.236	5.274	VV	191	3918	0.06%	0.019%
45	5.301	5.274	5.315	VV	311	5016	0.08%	0.025%
46	5.334	5.315	5.359	VV	1799	23560	0.36%	0.115%
47	5.375	5.359	5.400	VV	1853	21513	0.33%	0.105%
48	5.428	5.400	5.463	VV	1037	10762	0.17%	0.053%
49	5.515	5.463	5.567	VV	895	21092	0.32%	0.103%
50	5.579	5.567	5.598	VV	277	3796	0.06%	0.019%
51	5.601	5.598	5.651	VV	681	12415	0.19%	0.061%
52	5.661	5.651	5.695	VV	1549	9584	0.15%	0.047%
53	5.721	5.695	5.761	VV	393	9511	0.15%	0.047%
54	5.788	5.761	5.808	VV	389	6323	0.10%	0.031%
55	5.818	5.808	5.848	VV	941	7286	0.11%	0.036%
56	5.884	5.848	5.908	VV	849	19059	0.29%	0.093%
57	5.930	5.908	5.961	VV	1135	21032	0.32%	0.103%
58	5.973	5.961	6.014	VV	1522	19400	0.30%	0.095%
59	6.037	6.014	6.079	VV	1520	25282	0.39%	0.124%
60	6.105	6.079	6.130	VV	646	12809	0.20%	0.063%
61	6.163	6.130	6.220	VV	2313	27905	0.43%	0.137%
62	6.229	6.220	6.258	VV	844	10574	0.16%	0.052%
63	6.313	6.258	6.338	VV	6001	77000	1.18%	0.377%
64	6.351	6.338	6.380	VV	2030	14453	0.22%	0.071%
65	6.395	6.380	6.420	VV	1253	20403	0.31%	0.100%
66	6.431	6.420	6.443	VV	898	9772	0.15%	0.048%
67	6.462	6.443	6.486	VV	3644	45754	0.70%	0.224%
68	6.497	6.486	6.521	VV	1073	19858	0.30%	0.097%
69	6.534	6.521	6.608	VV	1354	34653	0.53%	0.170%
70	6.632	6.608	6.657	VV	1633	21987	0.34%	0.108%
71	6.673	6.657	6.734	VV	1275	28854	0.44%	0.141%
72	6.767	6.734	6.784	VV	1782	27899	0.43%	0.137%
73	6.808	6.784	6.848	VV	2230	56005	0.86%	0.274%
74	6.870	6.848	6.898	VV	1875	39444	0.61%	0.193%
75	6.932	6.898	6.954	VV	2054	49689	0.76%	0.243%
76	6.971	6.954	6.990	VV	1488	21636	0.33%	0.106%
77	7.014	6.990	7.051	VV	3245	58885	0.90%	0.288%
78	7.095	7.051	7.128	VV	4166	82916	1.27%	0.406%
79	7.152	7.128	7.164	VV	1436	27281	0.42%	0.134%
80	7.182	7.164	7.212	VV	1992	47337	0.73%	0.232%
81	7.235	7.212	7.261	VV	10193	125075	1.92%	0.612%
82	7.287	7.261	7.310	VV	1733	38199	0.59%	0.187%
83	7.326	7.310	7.341	VV	1789	27584	0.42%	0.135%
84	7.361	7.341	7.380	VV	3094	34637	0.53%	0.170%
85	7.407	7.380	7.433	VV	2956	58872	0.90%	0.288%
86	7.444	7.433	7.469	VV	1262	22642	0.35%	0.111%
87	7.495	7.469	7.531	VV	2657	59318	0.91%	0.290%
88	7.570	7.531	7.587	VV	2389	60672	0.93%	0.297%
89	7.599	7.587	7.634	VV	1960	41739	0.64%	0.204%

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90	7.658	7.634	7.674	VV	2872	46924	0.72%	0.230%
91	7.689	7.674	7.700	VV	2386	31708	0.49%	0.155%
92	7.713	7.700	7.729	VV	3145	34868	0.54%	0.171%
93	7.755	7.729	7.774	VV	2786	49435	0.76%	0.242%
94	7.799	7.774	7.825	VV	4218	82347	1.26%	0.403%
95	7.855	7.825	7.904	VV	3246	88522	1.36%	0.433%
96	7.925	7.904	7.951	VV	7499	101868	1.56%	0.499%
97	7.976	7.951	7.992	VV	2942	40286	0.62%	0.197%
98	8.012	7.992	8.031	VV	2266	38432	0.59%	0.188%
99	8.103	8.031	8.131	VV	20660	301120	4.62%	1.474%
100	8.151	8.131	8.176	VV	2501	49135	0.75%	0.241%
101	8.200	8.176	8.232	VV	2133	59323	0.91%	0.290%
102	8.251	8.232	8.272	VV	2787	45551	0.70%	0.223%
103	8.295	8.272	8.320	VV	1664	42426	0.65%	0.208%
104	8.336	8.320	8.361	VV	1651	33503	0.51%	0.164%
105	8.402	8.361	8.438	VV	2980	69747	1.07%	0.342%
106	8.452	8.438	8.498	VV	2942	62865	0.97%	0.308%
107	8.516	8.498	8.536	VV	2107	36180	0.56%	0.177%
108	8.553	8.536	8.575	VV	2180	40017	0.61%	0.196%
109	8.592	8.575	8.618	VV	2153	43133	0.66%	0.211%
110	8.639	8.618	8.738	VV	6763	152809	2.35%	0.748%
111	8.758	8.738	8.771	VV	1051	16817	0.26%	0.082%
112	8.790	8.771	8.801	VV	2069	22687	0.35%	0.111%
113	8.822	8.801	8.844	VV	2225	39124	0.60%	0.192%
114	8.860	8.844	8.901	VV	1888	48857	0.75%	0.239%
115	8.924	8.901	8.991	VV	8745	154832	2.38%	0.758%
116	9.009	8.991	9.038	VV	1571	24530	0.38%	0.120%
117	9.062	9.038	9.099	VV	1445	23215	0.36%	0.114%
118	9.121	9.099	9.178	VV	4959	38556	0.59%	0.189%
119	9.189	9.178	9.194	VV	576	4152	0.06%	0.020%
120	9.205	9.194	9.213	VV	1739	8960	0.14%	0.044%
121	9.224	9.213	9.258	VV	1337	14069	0.22%	0.069%
122	9.289	9.258	9.325	VV	2220	35288	0.54%	0.173%
123	9.348	9.325	9.404	VV	1526	21700	0.33%	0.106%
124	9.428	9.404	9.441	VV	872	11226	0.17%	0.055%
125	9.444	9.441	9.455	VV	843	3799	0.06%	0.019%
126	9.494	9.455	9.555	VV	1789	23158	0.36%	0.113%
127	9.571	9.555	9.598	VV	517	4957	0.08%	0.024%
128	9.621	9.598	9.648	VV	547	10117	0.16%	0.050%
129	9.705	9.648	9.748	VV	4282	53092	0.82%	0.260%
130	9.775	9.748	9.951	PV	376	18062	0.28%	0.088%
131	9.978	9.951	9.994	VV	302	3821	0.06%	0.019%
132	10.005	9.994	10.061	VV	705	12081	0.19%	0.059%
133	10.085	10.061	10.111	VV	1051	16364	0.25%	0.080%
134	10.126	10.111	10.167	VV	1630	17887	0.27%	0.088%
135	10.177	10.167	10.202	VV	435	7555	0.12%	0.037%
136	10.208	10.202	10.215	VV	761	2653	0.04%	0.013%
137	10.222	10.215	10.268	VV	806	6935	0.11%	0.034%
138	10.300	10.268	10.314	VV	487	8331	0.13%	0.041%
139	10.326	10.314	10.351	VV	497	8645	0.13%	0.042%
140	10.375	10.351	10.401	VV	661	14979	0.23%	0.073%
141	10.436	10.401	10.478	VV	1330	36332	0.56%	0.178%

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142	10.518	10.478	10.538	VV	935	22706	0.35%	0.111%
143	10.564	10.538	10.597	VV	1437	26681	0.41%	0.131%
144	10.614	10.597	10.638	VV	775	8168	0.13%	0.040%
145	10.656	10.638	10.668	VV	446	6365	0.10%	0.031%
146	10.670	10.668	10.703	VV	680	4642	0.07%	0.023%
147	10.785	10.703	10.798	VV	854	19053	0.29%	0.093%
148	10.861	10.798	10.911	VV	814	28320	0.43%	0.139%
149	10.931	10.911	11.008	VV	1135	14733	0.23%	0.072%
150	11.066	11.008	11.104	PV	1531	28327	0.44%	0.139%
151	11.138	11.104	11.201	VV	2094	35349	0.54%	0.173%
152	11.231	11.201	11.271	VV	495	10857	0.17%	0.053%
153	11.285	11.271	11.344	VV	357	4053	0.06%	0.020%
154	11.361	11.344	11.404	VV	1035	4775	0.07%	0.023%
155	11.435	11.404	11.454	VV	1981	11482	0.18%	0.056%
156	11.466	11.454	11.481	VV	472	5873	0.09%	0.029%
157	11.531	11.481	11.541	VV	608	14502	0.22%	0.071%
158	11.548	11.541	11.571	VV	584	7281	0.11%	0.036%
159	11.592	11.571	11.641	VV	492	13897	0.21%	0.068%
160	11.656	11.641	11.669	VV	93	1194	0.02%	0.006%
161	11.691	11.669	11.751	VV	2046	13868	0.21%	0.068%
162	11.801	11.751	11.838	VV	1038	33908	0.52%	0.166%
163	11.871	11.838	11.881	VV	1402	14674	0.23%	0.072%
164	11.904	11.881	11.920	VV	562	6924	0.11%	0.034%
165	11.942	11.920	11.985	VV	557	15021	0.23%	0.074%
166	12.015	11.985	12.069	VV	2412	33738	0.52%	0.165%
167	12.092	12.069	12.107	VV	1054	12807	0.20%	0.063%
168	12.122	12.107	12.153	VV	526	8341	0.13%	0.041%
169	12.168	12.153	12.194	VV	613	6302	0.10%	0.031%
170	12.254	12.194	12.267	VV	678	18216	0.28%	0.089%
171	12.305	12.267	12.356	VV	1313	30990	0.48%	0.152%
172	12.375	12.356	12.408	VV	1339	18308	0.28%	0.090%
173	12.444	12.408	12.478	VV	2136	30080	0.46%	0.147%
174	12.483	12.478	12.494	VV	275	2215	0.03%	0.011%
175	12.505	12.494	12.538	VV	231	4769	0.07%	0.023%
176	12.571	12.538	12.611	VV	1103	12247	0.19%	0.060%
177	12.617	12.611	12.674	VV	71	1079	0.02%	0.005%
178	12.699	12.674	12.721	PV	478	5532	0.08%	0.027%
179	12.731	12.721	12.752	VV	287	3740	0.06%	0.018%
180	12.765	12.752	12.784	VV	219	2368	0.04%	0.012%
181	12.811	12.784	12.830	VV	260	4940	0.08%	0.024%
182	12.892	12.830	13.004	VV	531419	6511812	100.00%	31.885%
183	13.010	13.004	13.092	VV	1385	37894	0.58%	0.186%
184	13.105	13.092	13.158	VV	600	16801	0.26%	0.082%
185	13.181	13.158	13.189	VV	334	5621	0.09%	0.028%
186	13.201	13.189	13.293	VV	556	21514	0.33%	0.105%
187	13.339	13.293	13.381	VV	637	20317	0.31%	0.099%
188	13.395	13.381	13.413	VV	222	3420	0.05%	0.017%
189	13.421	13.413	13.429	VV	982	3115	0.05%	0.015%
190	13.465	13.429	13.473	VV	2071	8797	0.14%	0.043%
191	13.507	13.473	13.534	VV	761	13224	0.20%	0.065%
192	13.585	13.534	13.612	VV	718	15854	0.24%	0.078%
193	13.641	13.612	13.718	VV	1914	31118	0.48%	0.152%
194	13.736	13.718	13.808	PV	81	1988	0.03%	0.010%

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195	13.848	13.808	13.881	PV	526	4395	0.07%	0.022%
196	13.895	13.881	13.924	VV	244	4165	0.06%	0.020%
197	13.965	13.924	13.988	VV	661	4867	0.07%	0.024%
198	13.992	13.988	14.010	VV	403	1914	0.03%	0.009%
199	14.022	14.010	14.048	VV	366	2851	0.04%	0.014%
200	14.075	14.048	14.118	VV	1313	22936	0.35%	0.112%
201	14.128	14.118	14.134	VV	724	2997	0.05%	0.015%
202	14.201	14.134	14.214	VV	1497	24125	0.37%	0.118%
203	14.217	14.214	14.237	VV	1834	5823	0.09%	0.029%
204	14.259	14.237	14.268	VV	220	2652	0.04%	0.013%
205	14.357	14.268	14.432	VV	817	26134	0.40%	0.128%
206	14.451	14.432	14.468	VV	278	4145	0.06%	0.020%
207	14.511	14.468	14.628	VV	638	26814	0.41%	0.131%
208	14.650	14.628	14.672	VV	236	5213	0.08%	0.026%
209	14.691	14.672	14.717	VV	1877	15708	0.24%	0.077%
210	14.742	14.717	14.830	VV	2821	48765	0.75%	0.239%
211	14.850	14.830	14.893	PV	605	4603	0.07%	0.023%
212	14.917	14.893	14.958	VV	146	4059	0.06%	0.020%
213	14.991	14.958	15.001	VV	124	1649	0.03%	0.008%
214	15.013	15.001	15.022	VV	118	692	0.01%	0.003%
215	15.052	15.022	15.061	PV	134	1149	0.02%	0.006%
216	15.074	15.061	15.108	VV	114	1886	0.03%	0.009%
217	15.121	15.108	15.134	PV	396	2197	0.03%	0.011%
218	15.161	15.134	15.194	VV	356	7805	0.12%	0.038%
219	15.218	15.194	15.228	VV	844	3835	0.06%	0.019%
220	15.261	15.228	15.301	VV	2187	31540	0.48%	0.154%
221	15.316	15.301	15.329	VV	155	1710	0.03%	0.008%
222	15.372	15.329	15.387	VV	498	3310	0.05%	0.016%
223	15.467	15.387	15.504	VV	154	8039	0.12%	0.039%
224	15.518	15.504	15.604	VV	523	12864	0.20%	0.063%
225	15.630	15.604	15.683	VV	1230	11932	0.18%	0.058%
226	15.761	15.683	15.858	PV	2998	54100	0.83%	0.265%
227	15.901	15.858	15.924	PV	234	5079	0.08%	0.025%
228	16.014	15.924	16.090	VV	391	6247	0.10%	0.031%
229	16.243	16.090	16.308	PV	2426	43663	0.67%	0.214%
230	16.321	16.308	16.344	VV	229	3007	0.05%	0.015%
231	16.544	16.344	16.563	PV	211	10526	0.16%	0.052%
232	16.599	16.563	16.644	VV	542	10702	0.16%	0.052%
233	16.708	16.644	16.751	PV	2768	45518	0.70%	0.223%
234	16.772	16.751	16.791	VV	596	1957	0.03%	0.010%
235	17.158	16.791	17.216	PV	3181	46777	0.72%	0.229%
236	17.261	17.216	17.280	PV	453	7229	0.11%	0.035%
237	17.595	17.280	17.641	VV	3066	59234	0.91%	0.290%
238	17.749	17.641	17.773	PV	510	8057	0.12%	0.039%
239	17.876	17.773	17.898	PV	401	7436	0.11%	0.036%
240	18.017	17.898	18.050	VV	3366	47194	0.72%	0.231%
241	18.426	18.050	18.478	VV	2740	49974	0.77%	0.245%
242	18.821	18.478	18.851	PV	1646	-17029	-0.26%	-0.083%
243	19.208	18.851	19.234	PV	2247	93916	1.44%	0.460%
244	19.636	19.234	19.708	VV	6653	546853	8.40%	2.678%
245	19.948	19.708	19.969	VV	4868	474454	7.29%	2.323%
246	20.666	19.969	20.684	VV	12332	3673995	56.42%	17.989%

						rteres		
247	20.788	20.684	20.937	VV	11053	1584117	24.33%	7.757%
248	20.992	20.937	21.019	VV	8355	408880	6.28%	2.002%
249	21.199	21.019	21.222	VV	6217	835407	12.83%	4.091%
250	21.528	21.222	21.561	VV	2816	816090	12.53%	3.996%
251	21.602	21.561	21.654	VV	1976	92521	1.42%	0.453%
252	21.669	21.654	21.704	VV	712	13712	0.21%	0.067%
					Sum of corrected areas:	20423055		

Aliphatic EPH 121024.M Sat Dec 21 02:40:30 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/14/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-01	SDG No.:	P5299
Lab Sample ID:	P5299-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	78.5
Sample Wt/Vol:	30.06 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048901.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.38	U	0.38	0.85	mg/kg
Aromatic C12-C16	Aromatic C12-C16	7.86		0.43	1.27	mg/kg
Aromatic C16-C21	Aromatic C16-C21	6.08		1.22	2.12	mg/kg
Aromatic C21-C36	Aromatic C21-C36	4.34		2.54	3.39	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	56.0		40 - 140	112%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	59.4		40 - 140	119%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	39.1		40 - 140	78%	SPK: 50



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

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P5299-01	Acq On:	20 Dec 2024 12:45
Client Sample ID:	SB-01	Operator:	YP/AJ
Data file:	FD048901.D	Misc:	
Instrument:	FID_D	ALS Vial:	64
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.083	5.800	832264	4.376	200	ug/ml
Aromatic C12-C16	5.801	8.405	17230204	92.694	300	ug/ml
Aromatic C16-C21	8.406	12.669	12150833	71.678	500	ug/ml
Aromatic C21-C36	12.670	18.077	7252965	51.226	800	ug/ml
Aromatic EPH	4.083	18.077	37466266	219.973		ug/ml
ortho-Terphenyl (SURR)	11.245	11.245	6955373	39.15		ug/ml
2-Bromonaphthalene (SURR)	7.359	7.359	9429099	55.98		ug/ml
2-Fluorobiphenyl (SURR)	8.209	8.209	6138195	59.42		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048901.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 12:45
 Operator : YP/AJ
 Sample : P5299-01
 Misc :
 ALS Vial : 64 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 SB-01

Integration File: autoint1.e
 Quant Time: Dec 21 04:03:58 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 06:07:50 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.359	9429099	55.981 ug/ml
Spiked Amount 50.000		Recovery =	111.96%
6) S 2-Fluorobiphenyl (SURR)	8.209	6138195	59.416 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	118.83%
11) S ortho-Terphenyl (SURR)	11.245	6955373	39.150 ug/ml
Spiked Amount 50.000		Recovery =	78.30%

Target Compounds

(f)=RT Delta > 1/2 Window

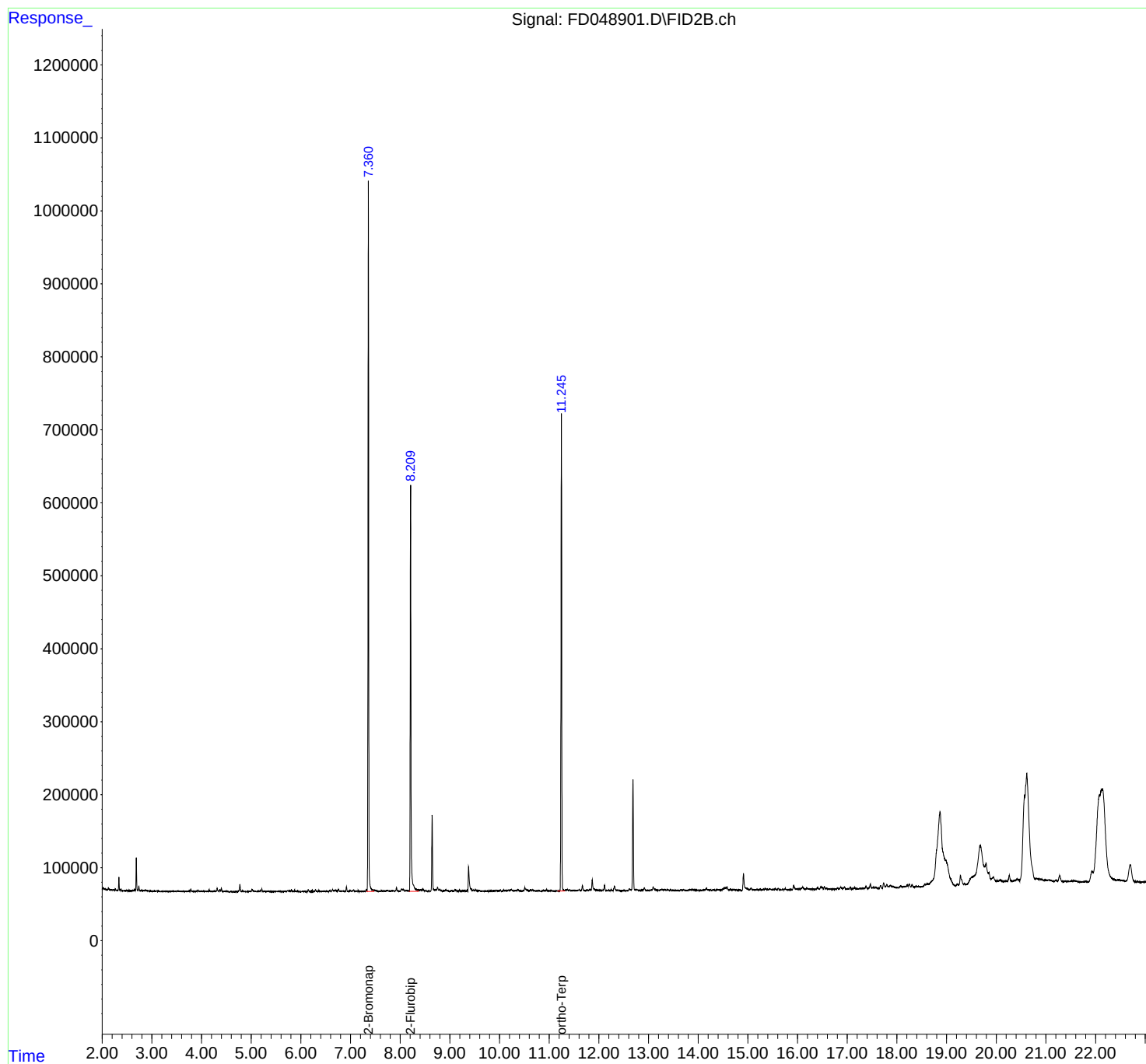
(m)=manual int.

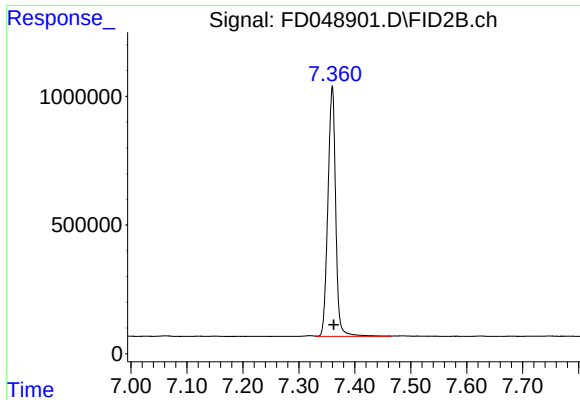
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048901.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 12:45
Operator : YP/AJ
Sample : P5299-01
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
SB-01

Integration File: autoint1.e
Quant Time: Dec 21 04:03:58 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 06:07:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

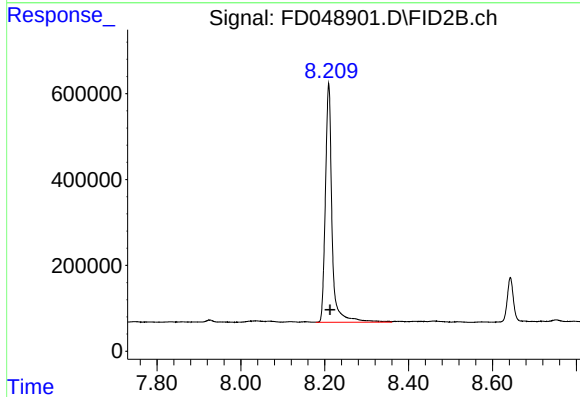




#4 2-Bromonaphthalene (SURR)

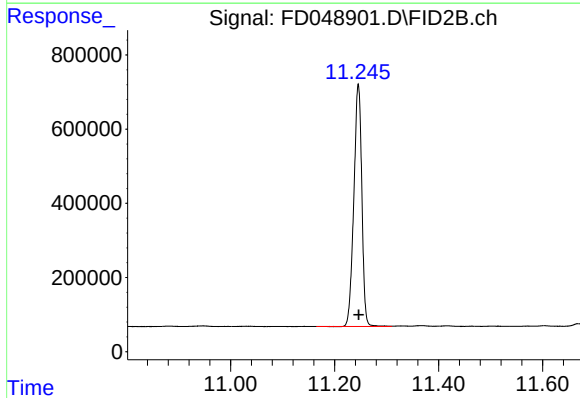
R.T.: 7.359 min
Delta R.T.: -0.003 min
Response: 9429099
Conc: 55.98 ug/ml

Instrument :
FID_D
ClientSampleId :
SB-01



#6 2-Fluorobiphenyl (SURR)

R.T.: 8.209 min
Delta R.T.: -0.004 min
Response: 6138195
Conc: 59.42 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.245 min
Delta R.T.: -0.001 min
Response: 6955373
Conc: 39.15 ug/ml

rteres

Area Percent

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048901.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 12:45
 Sample : P5299-01
 Misc :
 ALS Vial : 64 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH
 121024.M
 Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.115	4.107	4.132	VV	171	1239	0.01%	0.003%
2	4.154	4.132	4.192	VV	1890	23764	0.25%	0.063%
3	4.196	4.192	4.212	VV	357	1925	0.02%	0.005%
4	4.233	4.220	4.242	VV	322	2660	0.03%	0.007%
5	4.260	4.242	4.288	VV	1061	11729	0.12%	0.031%
6	4.315	4.288	4.354	PV	4159	57091	0.60%	0.152%
7	4.370	4.354	4.385	VV	3177	31717	0.34%	0.084%
8	4.399	4.385	4.442	VV	4612	47474	0.50%	0.126%
9	4.447	4.442	4.458	VV	219	1577	0.02%	0.004%
10	4.476	4.458	4.496	VV	934	9812	0.10%	0.026%
11	4.511	4.496	4.555	VV	816	11668	0.12%	0.031%
12	4.586	4.555	4.602	VV	631	7488	0.08%	0.020%
13	4.609	4.602	4.642	PV	251	1871	0.02%	0.005%
14	4.668	4.653	4.674	PV	245	1551	0.02%	0.004%
15	4.693	4.674	4.731	VV	723	11994	0.13%	0.032%
16	4.772	4.731	4.808	VV	9998	137109	1.45%	0.364%
17	4.828	4.808	4.857	VV	2310	27848	0.29%	0.074%
18	4.878	4.857	4.906	VV	435	8757	0.09%	0.023%
19	4.932	4.906	4.943	VV	545	6213	0.07%	0.017%
20	4.963	4.943	4.985	VV	924	15006	0.16%	0.040%
21	5.015	4.985	5.075	VV	3412	84775	0.90%	0.225%
22	5.082	5.075	5.092	VV	807	7191	0.08%	0.019%
23	5.095	5.092	5.109	VV	680	6036	0.06%	0.016%
24	5.138	5.109	5.162	VV	1053	22748	0.24%	0.060%
25	5.178	5.162	5.195	VV	1793	25379	0.27%	0.067%

				rteres				
26	5.214	5.195	5.241	VV	3918	49198	0.52%	0.131%
27	5.245	5.241	5.249	VV	493	2391	0.03%	0.006%
28	5.270	5.249	5.297	VV	1152	19365	0.21%	0.051%
29	5.303	5.297	5.310	VV	553	3646	0.04%	0.010%
30	5.333	5.310	5.354	VV	919	18179	0.19%	0.048%
31	5.362	5.354	5.387	VV	859	11046	0.12%	0.029%
32	5.394	5.387	5.402	VV	502	3710	0.04%	0.010%
33	5.411	5.402	5.420	VV	446	4267	0.05%	0.011%
34	5.424	5.420	5.435	VV	527	3826	0.04%	0.010%
35	5.439	5.435	5.443	VV	416	1920	0.02%	0.005%
36	5.462	5.443	5.504	VV	886	17927	0.19%	0.048%
37	5.529	5.504	5.534	VV	674	9381	0.10%	0.025%
38	5.539	5.534	5.552	VV	586	5346	0.06%	0.014%
39	5.558	5.552	5.568	VV	561	4355	0.05%	0.012%
40	5.584	5.568	5.590	VV	701	5929	0.06%	0.016%
41	5.595	5.590	5.607	VV	556	4224	0.04%	0.011%
42	5.625	5.607	5.644	VV	835	12162	0.13%	0.032%
43	5.672	5.644	5.678	VV	777	11112	0.12%	0.030%
44	5.684	5.678	5.689	VV	846	5102	0.05%	0.014%
45	5.690	5.689	5.700	VV	950	5364	0.06%	0.014%
46	5.739	5.700	5.750	VV	1764	36906	0.39%	0.098%
47	5.767	5.750	5.791	VV	1676	32286	0.34%	0.086%
48	5.809	5.791	5.835	VV	2759	39216	0.42%	0.104%
49	5.840	5.835	5.853	VV	738	7412	0.08%	0.020%
50	5.875	5.853	5.910	VV	1928	35470	0.38%	0.094%
51	5.938	5.910	5.961	VV	1047	22065	0.23%	0.059%
52	5.967	5.961	5.984	VV	409	3744	0.04%	0.010%
53	5.998	5.984	6.010	VV	301	2015	0.02%	0.005%
54	6.034	6.010	6.061	PV	729	13748	0.15%	0.037%
55	6.065	6.061	6.071	VV	478	1981	0.02%	0.005%
56	6.079	6.071	6.087	VV	392	3118	0.03%	0.008%
57	6.094	6.087	6.103	VV	391	3315	0.04%	0.009%
58	6.108	6.103	6.122	VV	444	3590	0.04%	0.010%
59	6.148	6.122	6.169	VV	3181	40666	0.43%	0.108%
60	6.186	6.169	6.208	VV	725	10287	0.11%	0.027%
61	6.227	6.208	6.247	VV	1898	22564	0.24%	0.060%
62	6.263	6.247	6.275	VV	1229	13450	0.14%	0.036%
63	6.295	6.275	6.312	VV	3286	37871	0.40%	0.101%
64	6.327	6.312	6.346	VV	1107	13860	0.15%	0.037%
65	6.364	6.346	6.387	VV	1658	21421	0.23%	0.057%
66	6.402	6.387	6.425	VV	644	11561	0.12%	0.031%
67	6.472	6.425	6.491	VV	904	26336	0.28%	0.070%
68	6.512	6.491	6.558	VV	981	30284	0.32%	0.080%
69	6.583	6.558	6.616	VV	2275	40908	0.43%	0.109%

				rteres				
70	6.638	6.616	6.651	VV	2645	40342	0.43%	0.107%
71	6.659	6.651	6.671	VV	1895	20934	0.22%	0.056%
72	6.684	6.671	6.692	VV	2196	24302	0.26%	0.065%
73	6.701	6.692	6.727	VV	2315	33649	0.36%	0.089%
74	6.761	6.727	6.784	VV	3374	57630	0.61%	0.153%
75	6.796	6.784	6.800	VV	960	7598	0.08%	0.020%
76	6.804	6.800	6.820	VV	1042	9767	0.10%	0.026%
77	6.841	6.820	6.883	VV	1320	32354	0.34%	0.086%
78	6.889	6.883	6.896	VV	537	3236	0.03%	0.009%
79	6.918	6.896	6.950	VV	6917	83656	0.89%	0.222%
80	6.982	6.950	7.015	VV	1493	38541	0.41%	0.102%
81	7.027	7.015	7.040	VV	1413	16313	0.17%	0.043%
82	7.062	7.040	7.089	VV	2863	42229	0.45%	0.112%
83	7.097	7.089	7.105	VV	741	6214	0.07%	0.017%
84	7.118	7.105	7.135	VV	1124	16276	0.17%	0.043%
85	7.151	7.135	7.175	VV	1625	21840	0.23%	0.058%
86	7.179	7.175	7.184	VV	421	1892	0.02%	0.005%
87	7.199	7.184	7.208	VV	501	6107	0.06%	0.016%
88	7.225	7.208	7.252	VV	840	16756	0.18%	0.045%
89	7.264	7.252	7.277	VV	679	9174	0.10%	0.024%
90	7.319	7.277	7.333	VV	3458	50763	0.54%	0.135%
91	7.360	7.333	7.455	VV	976685	9444504	100.00%	25.091%
92	7.462	7.455	7.466	VV	2200	13486	0.14%	0.036%
93	7.488	7.466	7.504	VV	2431	46560	0.49%	0.124%
94	7.512	7.504	7.531	VV	1627	22559	0.24%	0.060%
95	7.537	7.531	7.570	VV	1137	20403	0.22%	0.054%
96	7.583	7.570	7.606	VV	1071	17166	0.18%	0.046%
97	7.626	7.606	7.646	VV	1922	26387	0.28%	0.070%
98	7.656	7.646	7.667	VV	819	9201	0.10%	0.024%
99	7.682	7.667	7.698	VV	1213	17558	0.19%	0.047%
100	7.717	7.698	7.726	VV	1287	18314	0.19%	0.049%
101	7.748	7.726	7.765	VV	1984	32481	0.34%	0.086%
102	7.781	7.765	7.802	VV	1119	21210	0.22%	0.056%
103	7.804	7.802	7.813	VV	877	5355	0.06%	0.014%
104	7.835	7.813	7.847	VV	1415	22467	0.24%	0.060%
105	7.859	7.847	7.874	VV	1354	18466	0.20%	0.049%
106	7.879	7.874	7.883	VV	1080	5267	0.06%	0.014%
107	7.926	7.883	7.987	VV	5713	106666	1.13%	0.283%
108	8.037	7.987	8.059	VV	3590	95399	1.01%	0.253%
109	8.069	8.059	8.099	VV	2899	47643	0.50%	0.127%
110	8.120	8.099	8.137	VV	1755	30061	0.32%	0.080%
111	8.154	8.137	8.184	VV	1629	28356	0.30%	0.075%
112	8.210	8.184	8.337	VV	555625	6157272	65.19%	16.358%

				rteres				
113	8.341	8.337	8.359	VV	2381	29916	0.32%	0.079%
114	8.380	8.359	8.397	VV	2492	49052	0.52%	0.130%
115	8.412	8.397	8.425	VV	2461	37860	0.40%	0.101%
116	8.432	8.425	8.445	VV	2383	25797	0.27%	0.069%
117	8.460	8.445	8.502	VV	3235	72551	0.77%	0.193%
118	8.516	8.502	8.557	VV	1614	27447	0.29%	0.073%
119	8.575	8.557	8.596	VV	1188	20303	0.21%	0.054%
120	8.643	8.596	8.671	VV	104641	1077049	11.40%	2.861%
121	8.676	8.671	8.689	VV	3147	29526	0.31%	0.078%
122	8.695	8.689	8.706	VV	2382	22889	0.24%	0.061%
123	8.718	8.706	8.730	VV	2854	35020	0.37%	0.093%
124	8.752	8.730	8.777	VV	5863	105449	1.12%	0.280%
125	8.794	8.777	8.814	VV	2765	49540	0.52%	0.132%
126	8.827	8.814	8.860	VV	2097	29941	0.32%	0.080%
127	8.877	8.860	8.892	VV	1233	16868	0.18%	0.045%
128	8.924	8.892	8.946	VV	2008	49341	0.52%	0.131%
129	8.950	8.946	8.993	VV	1311	22494	0.24%	0.060%
130	9.041	8.993	9.067	VV	1395	34834	0.37%	0.093%
131	9.102	9.067	9.147	VV	2288	59475	0.63%	0.158%
132	9.151	9.147	9.157	VV	658	3588	0.04%	0.010%
133	9.192	9.157	9.233	VV	1558	43837	0.46%	0.116%
134	9.244	9.233	9.259	VV	1176	13545	0.14%	0.036%
135	9.274	9.259	9.288	VV	1256	16983	0.18%	0.045%
136	9.295	9.288	9.332	VV	1248	22380	0.24%	0.059%
137	9.345	9.332	9.359	VV	1621	17481	0.19%	0.046%
138	9.377	9.359	9.459	VV	34114	573670	6.07%	1.524%
139	9.465	9.459	9.470	VV	1911	11941	0.13%	0.032%
140	9.474	9.470	9.499	VV	1912	24809	0.26%	0.066%
141	9.517	9.499	9.549	VV	2663	46056	0.49%	0.122%
142	9.556	9.549	9.573	VV	1165	13337	0.14%	0.035%
143	9.590	9.573	9.647	VV	1349	41371	0.44%	0.110%
144	9.658	9.647	9.668	VV	768	7743	0.08%	0.021%
145	9.683	9.668	9.704	VV	836	13921	0.15%	0.037%
146	9.717	9.704	9.745	VV	819	15169	0.16%	0.040%
147	9.758	9.745	9.777	VV	922	12538	0.13%	0.033%
148	9.791	9.777	9.806	VV	749	8710	0.09%	0.023%
149	9.829	9.806	9.849	VV	1285	20475	0.22%	0.054%
150	9.862	9.849	9.870	VV	863	9104	0.10%	0.024%
151	9.890	9.870	9.895	VV	1005	12849	0.14%	0.034%
152	9.908	9.895	9.922	VV	1282	16584	0.18%	0.044%
153	9.938	9.922	9.960	VV	1285	23017	0.24%	0.061%
154	9.966	9.960	9.971	VV	753	5299	0.06%	0.014%
155	9.985	9.971	9.999	VV	1047	15234	0.16%	0.040%

rteres									
156	10.017	9.999	10.045	VV	2154	33448	0.35%	0.089%	
157	10.087	10.045	10.101	VV	2090	42845	0.45%	0.114%	
158	10.110	10.101	10.125	VV	1788	19678	0.21%	0.052%	
159	10.140	10.125	10.160	VV	1494	25696	0.27%	0.068%	
160	10.183	10.160	10.202	VV	1740	35831	0.38%	0.095%	
161	10.235	10.202	10.283	VV	2808	86800	0.92%	0.231%	
162	10.299	10.283	10.313	VV	1258	19291	0.20%	0.051%	
163	10.337	10.313	10.350	VV	1594	30622	0.32%	0.081%	
164	10.372	10.350	10.425	VV	3060	68887	0.73%	0.183%	
165	10.432	10.425	10.448	VV	968	11428	0.12%	0.030%	
166	10.466	10.448	10.477	VV	1100	16173	0.17%	0.043%	
167	10.510	10.477	10.588	VV	5212	148425	1.57%	0.394%	
168	10.638	10.588	10.657	VV	2681	72142	0.76%	0.192%	
169	10.668	10.657	10.689	VV	2018	29841	0.32%	0.079%	
170	10.703	10.689	10.725	VV	1175	17734	0.19%	0.047%	
171	10.749	10.725	10.767	VV	793	16657	0.18%	0.044%	
172	10.787	10.767	10.824	VV	1055	24190	0.26%	0.064%	
173	10.883	10.824	10.910	VV	1615	39746	0.42%	0.106%	
174	10.947	10.910	10.976	VV	2247	49704	0.53%	0.132%	
175	10.996	10.976	11.005	VV	904	11735	0.12%	0.031%	
176	11.033	11.005	11.067	VV	1169	30404	0.32%	0.081%	
177	11.092	11.067	11.122	VV	697	16254	0.17%	0.043%	
178	11.141	11.122	11.209	VV	801	27795	0.29%	0.074%	
179	11.246	11.209	11.310	VV	654745	6997948	74.10%	18.591%	
180	11.327	11.310	11.349	VV	2005	39553	0.42%	0.105%	
181	11.367	11.349	11.391	VV	2764	52149	0.55%	0.139%	
182	11.416	11.391	11.450	VV	2387	51951	0.55%	0.138%	
183	11.464	11.450	11.483	VV	1272	20215	0.21%	0.054%	
184	11.504	11.483	11.547	VV	1329	41052	0.43%	0.109%	
185	11.574	11.547	11.589	VV	1544	31652	0.34%	0.084%	
186	11.603	11.589	11.640	VV	2623	52133	0.55%	0.138%	
187	11.668	11.640	11.700	VV	7940	130049	1.38%	0.345%	
188	11.706	11.700	11.730	VV	1679	22322	0.24%	0.059%	
189	11.760	11.730	11.789	VV	1824	50250	0.53%	0.133%	
190	11.824	11.789	11.843	VV	2534	61802	0.65%	0.164%	
191	11.866	11.843	11.932	VV	15855	293795	3.11%	0.781%	
192	11.941	11.932	11.974	VV	1840	38654	0.41%	0.103%	
193	11.982	11.974	11.999	VV	1389	19744	0.21%	0.052%	
194	12.023	11.999	12.050	VV	1631	41320	0.44%	0.110%	
195	12.113	12.050	12.142	VV	8078	152478	1.61%	0.405%	
196	12.150	12.142	12.165	VV	1011	13790	0.15%	0.037%	
197	12.188	12.165	12.220	VV	1862	42889	0.45%	0.114%	
198	12.250	12.220	12.275	VV	2617	46804	0.50%	0.124%	
199	12.314	12.275	12.358	VV	7170	153962	1.63%	0.409%	

				rteres				
200	12.379	12.358	12.409	VV	1961	41867	0.44%	0.111%
201	12.416	12.409	12.427	VV	904	7972	0.08%	0.021%
202	12.443	12.427	12.459	VV	706	12398	0.13%	0.033%
203	12.501	12.459	12.509	VV	1195	26439	0.28%	0.070%
204	12.515	12.509	12.552	VV	1261	24166	0.26%	0.064%
205	12.568	12.552	12.586	VV	886	14902	0.16%	0.040%
206	12.610	12.586	12.636	VV	3208	64994	0.69%	0.173%
207	12.645	12.636	12.653	VV	2138	22232	0.24%	0.059%
208	12.686	12.653	12.737	VV	153636	1853498	19.63%	4.924%
209	12.765	12.737	12.812	VV	2526	78947	0.84%	0.210%
210	12.881	12.812	12.888	VV	1718	64441	0.68%	0.171%
211	12.915	12.888	12.952	VV	4967	102406	1.08%	0.272%
212	12.966	12.952	13.015	VV	1471	50011	0.53%	0.133%
213	13.093	13.015	13.169	VV	6083	222180	2.35%	0.590%
214	13.203	13.169	13.218	VV	1499	39961	0.42%	0.106%
215	13.268	13.218	13.295	VV	2730	87556	0.93%	0.233%
216	13.313	13.295	13.356	VV	2421	61893	0.66%	0.164%
217	13.391	13.356	13.415	VV	2178	58950	0.62%	0.157%
218	13.441	13.415	13.460	VV	2258	42623	0.45%	0.113%
219	13.470	13.460	13.482	VV	1420	15942	0.17%	0.042%
220	13.493	13.482	13.517	VV	1274	23676	0.25%	0.063%
221	13.537	13.517	13.597	VV	1296	50363	0.53%	0.134%
222	13.610	13.597	13.618	VV	1007	11833	0.13%	0.031%
223	13.656	13.618	13.676	VV	1708	48310	0.51%	0.128%
224	13.697	13.676	13.760	VV	2067	74434	0.79%	0.198%
225	13.767	13.760	13.780	VV	1170	12766	0.14%	0.034%
226	13.803	13.780	13.822	VV	1655	35057	0.37%	0.093%
227	13.838	13.822	13.862	VV	1904	42829	0.45%	0.114%
228	13.875	13.862	13.917	VV	2374	59565	0.63%	0.158%
229	13.928	13.917	13.940	VV	1595	20282	0.21%	0.054%
230	13.960	13.940	13.979	VV	1524	32234	0.34%	0.086%
231	14.003	13.979	14.050	VV	1564	56539	0.60%	0.150%
232	14.057	14.050	14.077	VV	1389	19763	0.21%	0.053%
233	14.098	14.077	14.114	VV	1519	29493	0.31%	0.078%
234	14.167	14.114	14.236	VV	3797	142602	1.51%	0.379%
235	14.253	14.236	14.274	VV	1453	29591	0.31%	0.079%
236	14.309	14.274	14.332	VV	1738	52774	0.56%	0.140%
237	14.347	14.332	14.360	VV	1561	24532	0.26%	0.065%
238	14.383	14.360	14.449	VV	2159	85968	0.91%	0.228%
239	14.463	14.449	14.470	VV	1460	17226	0.18%	0.046%
240	14.509	14.470	14.521	VV	3997	85096	0.90%	0.226%
241	14.543	14.521	14.563	VV	4814	104218	1.10%	0.277%
242	14.580	14.563	14.628	VV	5840	125699	1.33%	0.334%

					rteres			
243	14.652	14.628	14.684	VV	2512	63652	0.67%	0.169%
244	14.708	14.684	14.760	VV	1909	76709	0.81%	0.204%
245	14.770	14.760	14.817	VV	1449	45374	0.48%	0.121%
246	14.832	14.817	14.869	VV	1752	41613	0.44%	0.111%
247	14.911	14.869	15.035	PV	23927	555175	5.88%	1.475%
248	15.067	15.035	15.093	VV	3730	83488	0.88%	0.222%
249	15.110	15.093	15.147	VV	1742	45501	0.48%	0.121%
250	15.183	15.147	15.213	VV	1659	58409	0.62%	0.155%
251	15.221	15.213	15.234	VV	1393	17227	0.18%	0.046%
252	15.252	15.234	15.276	VV	1970	41010	0.43%	0.109%
253	15.286	15.276	15.292	VV	1430	11966	0.13%	0.032%
254	15.318	15.292	15.334	VV	1704	37903	0.40%	0.101%
255	15.356	15.334	15.395	VV	2749	73067	0.77%	0.194%
256	15.401	15.395	15.410	VV	1523	13497	0.14%	0.036%
257	15.438	15.410	15.480	VV	2241	72795	0.77%	0.193%
258	15.515	15.480	15.532	VV	1839	43752	0.46%	0.116%
259	15.552	15.532	15.579	VV	2314	46509	0.49%	0.124%
260	15.614	15.579	15.649	VV	2856	64503	0.68%	0.171%
261	15.657	15.649	15.667	VV	742	7529	0.08%	0.020%
262	15.704	15.667	15.729	VV	1987	41788	0.44%	0.111%
263	15.754	15.729	15.822	VV	2148	59003	0.62%	0.157%
264	15.833	15.822	15.846	VV	655	8070	0.09%	0.021%
265	15.869	15.846	15.885	VV	724	13672	0.14%	0.036%
266	15.921	15.885	15.995	VV	6781	161210	1.71%	0.428%
267	16.031	15.995	16.052	VV	1672	42560	0.45%	0.113%
268	16.071	16.052	16.087	VV	2453	41863	0.44%	0.111%
269	16.106	16.087	16.152	VV	3993	93021	0.98%	0.247%
270	16.182	16.152	16.220	VV	2358	65132	0.69%	0.173%
271	16.233	16.220	16.270	VV	1387	34436	0.36%	0.091%
272	16.286	16.270	16.325	VV	888	23826	0.25%	0.063%
273	16.331	16.325	16.337	VV	576	4132	0.04%	0.011%
274	16.344	16.337	16.370	VV	608	9753	0.10%	0.026%
275	16.404	16.370	16.437	VV	2909	61665	0.65%	0.164%
276	16.469	16.437	16.482	VV	3767	64104	0.68%	0.170%
277	16.493	16.482	16.522	VV	3473	58757	0.62%	0.156%
278	16.538	16.522	16.560	VV	3647	54230	0.57%	0.144%
279	16.574	16.560	16.665	VV	1748	49710	0.53%	0.132%
280	16.671	16.665	16.695	VV	252	3977	0.04%	0.011%
281	16.712	16.695	16.739	PV	301	3786	0.04%	0.010%
282	16.802	16.739	16.835	VV	1974	41836	0.44%	0.111%
283	16.865	16.835	16.904	VV	2536	60662	0.64%	0.161%
284	16.943	16.904	17.002	VV	3250	65649	0.70%	0.174%
285	17.060	17.002	17.102	VV	1982	44002	0.47%	0.117%

				rteres				
286	17.149	17.102	17.215	PV	1869	43723	0.46%	0.116%
287	17.253	17.215	17.295	VV	595	16901	0.18%	0.045%
288	17.379	17.295	17.410	VV	3538	78431	0.83%	0.208%
289	17.422	17.410	17.434	VV	574	6856	0.07%	0.018%
290	17.466	17.434	17.504	VV	6361	107944	1.14%	0.287%
291	17.526	17.504	17.552	VV	2009	36577	0.39%	0.097%
292	17.577	17.552	17.617	VV	1300	26745	0.28%	0.071%
293	17.671	17.617	17.705	PV	3932	66087	0.70%	0.176%
294	17.733	17.705	17.768	VV	7561	141895	1.50%	0.377%
295	17.799	17.768	17.822	VV	5060	107413	1.14%	0.285%
296	17.833	17.822	17.840	VV	2240	22578	0.24%	0.060%
297	17.865	17.840	18.029	VV	3634	166922	1.77%	0.443%
298	18.074	18.029	18.119	PV	2242	61112	0.65%	0.162%
299	18.152	18.119	18.162	VV	1190	27222	0.29%	0.072%
300	18.207	18.162	18.225	VV	3864	73088	0.77%	0.194%
301	18.247	18.225	18.280	VV	4307	75025	0.79%	0.199%
				Sum of corrected areas:		37641604		

Aromatic EPH 121024.M Sat Dec 21 05:20:08 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/15/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-02	SDG No.:	P5299
Lab Sample ID:	P5299-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	75.5
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
12/19/24 14:05	12/20/24 13:21	PB165775

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	1.25	J	1	0.50	1.32	mg/kg	FC068064.D
Aliphatic C12-C16	Aliphatic C12-C16	5.84		1	0.32	0.88	mg/kg	FC068064.D
Aliphatic C16-C21	Aliphatic C16-C21	0.40	U	1	0.40	1.32	mg/kg	FC068064.D
Aliphatic C21-C28	Aliphatic C21-C28	1.06	U	1	1.06	1.76	mg/kg	FC068064.D
Aliphatic C28-C40	Aliphatic C28-C40	8.45		1	2.38	2.64	mg/kg	FC068064.D
Aromatic C10-C12	Aromatic C10-C12	0.40	U	1	0.40	0.88	mg/kg	FD048902.D
Aromatic C12-C16	Aromatic C12-C16	1.01	J	1	0.45	1.32	mg/kg	FD048902.D
Aromatic C16-C21	Aromatic C16-C21	1.88	J	1	1.27	2.20	mg/kg	FD048902.D
Aromatic C21-C36	Aromatic C21-C36	2.64	U	1	2.64	3.52	mg/kg	FD048902.D
Total AliphaticEPH	Total AliphaticEPH	15.5			4.66	7.92	mg/kg	
Total AromaticEPH	Total AromaticEPH	4.75	U		4.75	7.92	mg/kg	
Total EPH	Total EPH	18.4			9.41	15.8	mg/kg	

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control 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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/15/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-02	SDG No.:	P5299
Lab Sample ID:	P5299-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	75.5
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068064.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	1.25	J	0.50	1.32	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	5.84		0.32	0.88	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.40	U	0.40	1.32	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	1.06	U	1.06	1.76	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	8.45		2.38	2.64	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	44.4		40 - 140	89%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5299-02	Acq On:	20 Dec 2024 13:21
Client Sample ID:	SB-02	Operator:	YP/AJ
Data file:	FC068064.D	Misc:	
Instrument:	FID_C	ALS Vial:	15
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.117	6.389	2250552	14.217	300	ug/ml
Aliphatic C12-C16	6.390	9.779	10628355	66.313	200	ug/ml
Aliphatic C16-C21	9.780	13.137	610378	4.006	300	ug/ml
Aliphatic C21-C28	13.138	16.791	832467	6.104	400	ug/ml
Aliphatic C28-C40	16.792	21.609	10162160	95.901	600	ug/ml
Aliphatic EPH	3.117	21.609	24483912	186.541		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.888	12.888	5658224	44.35		ug/ml
Aliphatic C9-C28	3.117	16.791	14321752	90.64	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068064.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 13:21
Operator : YP/AJ
Sample : P5299-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
SB-02

Integration File: autoint1.e
Quant Time: Dec 21 01:51:58 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
12) S 1-chlorooctadecane (S...	12.888	5658224	44.345 ug/ml
Spiked Amount 50.000		Recovery =	88.69%

Target Compounds

(f)=RT Delta > 1/2 Window

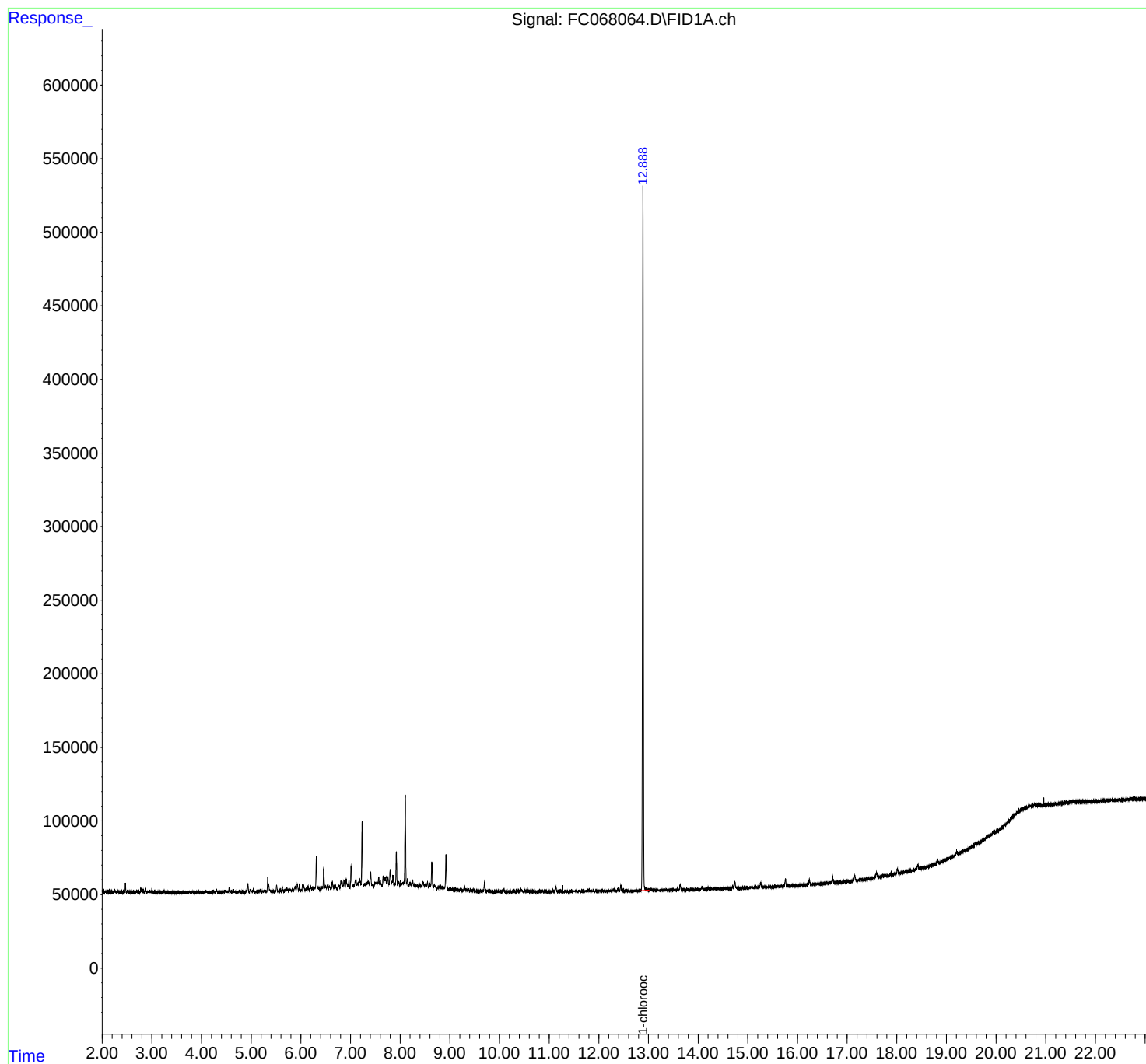
(m)=manual int.

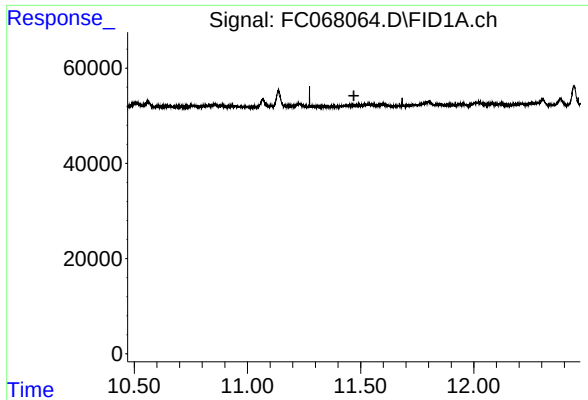
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068064.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 13:21
Operator : YP/AJ
Sample : P5299-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
SB-02

Integration File: autoint1.e
Quant Time: Dec 21 01:51:58 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 u1
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

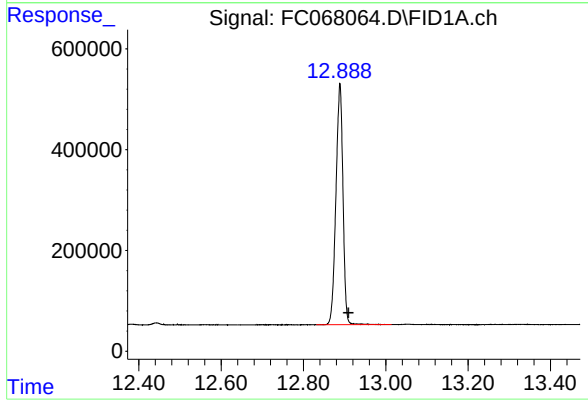




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T.: 11.470 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
SB-02



#12 1-chlorooctadecane (SURR)

R.T.: 12.888 min
Delta R.T.: -0.021 min
Response: 5658224
Conc: 44.35 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068064.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 13:21
Sample : P5299-02
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.180	3.138	3.204	BV	86	569	0.01%	0.002%
2	3.245	3.204	3.284	PV	515	8368	0.15%	0.028%
3	3.290	3.284	3.317	VV	86	967	0.02%	0.003%
4	3.341	3.317	3.379	PV	137	2658	0.05%	0.009%
5	3.388	3.379	3.434	VV	86	1811	0.03%	0.006%
6	3.446	3.434	3.464	VV	194	1427	0.03%	0.005%
7	3.479	3.464	3.490	PV	85	916	0.02%	0.003%
8	3.513	3.490	3.549	VV	231	4853	0.09%	0.016%
9	3.565	3.549	3.586	VV	362	3557	0.06%	0.012%
10	3.614	3.586	3.632	VV	277	3553	0.06%	0.012%
11	3.647	3.632	3.667	VV	113	1631	0.03%	0.005%
12	3.734	3.667	3.798	VV	387	11283	0.20%	0.037%
13	3.816	3.798	3.832	VV	344	3939	0.07%	0.013%
14	3.841	3.832	3.873	VV	159	3278	0.06%	0.011%
15	3.906	3.873	3.919	PV	761	8709	0.15%	0.029%
16	3.934	3.919	3.953	VV	1325	12889	0.23%	0.043%
17	4.000	3.953	4.028	VV	478	9242	0.16%	0.030%
18	4.081	4.028	4.098	VV	1234	21657	0.38%	0.071%
19	4.120	4.098	4.187	VV	382	11740	0.21%	0.039%
20	4.215	4.187	4.242	VV	327	7348	0.13%	0.024%
21	4.255	4.242	4.278	VV	397	4927	0.09%	0.016%
22	4.303	4.278	4.331	VV	2037	24322	0.43%	0.080%
23	4.342	4.331	4.361	VV	372	4670	0.08%	0.015%
24	4.373	4.361	4.389	VV	329	4225	0.07%	0.014%
25	4.406	4.389	4.434	VV	552	9288	0.16%	0.031%
26	4.469	4.434	4.487	VV	1568	21658	0.38%	0.071%
27	4.500	4.487	4.511	VV	623	6905	0.12%	0.023%
28	4.525	4.511	4.539	VV	1197	12395	0.22%	0.041%
29	4.555	4.539	4.571	VV	3071	29543	0.52%	0.097%
30	4.581	4.571	4.597	VV	936	9534	0.17%	0.031%
31	4.628	4.597	4.658	VV	779	17509	0.31%	0.058%
32	4.670	4.658	4.691	VV	691	8303	0.15%	0.027%
33	4.710	4.691	4.731	VV	684	11094	0.19%	0.037%
34	4.769	4.731	4.803	VV	1721	27270	0.48%	0.090%
35	4.820	4.803	4.835	VV	432	6009	0.11%	0.020%
36	4.855	4.835	4.876	VV	838	10110	0.18%	0.033%

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37	4.933	4.876	4.961	PV	5615	88547	1.55%	0.292%
38	4.981	4.961	5.005	VV	1886	30839	0.54%	0.102%
39	5.013	5.005	5.023	VV	881	8563	0.15%	0.028%
40	5.040	5.023	5.078	VV	1874	27520	0.48%	0.091%
41	5.093	5.078	5.108	VV	463	6427	0.11%	0.021%
42	5.134	5.108	5.177	VV	1721	38435	0.67%	0.127%
43	5.194	5.177	5.210	VV	1558	21936	0.38%	0.072%
44	5.224	5.210	5.236	VV	1072	13120	0.23%	0.043%
45	5.251	5.236	5.268	VV	1199	18097	0.32%	0.060%
46	5.281	5.268	5.298	VV	982	15305	0.27%	0.050%
47	5.334	5.298	5.391	VV	10204	182460	3.20%	0.602%
48	5.401	5.391	5.413	VV	774	8666	0.15%	0.029%
49	5.430	5.413	5.441	VV	965	12938	0.23%	0.043%
50	5.452	5.441	5.471	VV	890	13954	0.24%	0.046%
51	5.480	5.471	5.494	VV	1003	11937	0.21%	0.039%
52	5.512	5.494	5.542	VV	4999	66288	1.16%	0.219%
53	5.587	5.542	5.601	VV	1486	32666	0.57%	0.108%
54	5.625	5.601	5.663	VV	3172	64653	1.13%	0.213%
55	5.679	5.663	5.692	VV	1661	21000	0.37%	0.069%
56	5.720	5.692	5.757	VV	3138	61770	1.08%	0.204%
57	5.786	5.757	5.805	VV	2045	41083	0.72%	0.136%
58	5.834	5.805	5.852	VV	1943	44198	0.78%	0.146%
59	5.882	5.852	5.905	VV	3969	82766	1.45%	0.273%
60	5.929	5.905	5.952	VV	5269	90780	1.59%	0.299%
61	5.973	5.952	6.000	VV	5372	79732	1.40%	0.263%
62	6.035	6.000	6.048	VV	5156	82556	1.45%	0.272%
63	6.060	6.048	6.084	VV	4113	64812	1.14%	0.214%
64	6.118	6.084	6.128	VV	2429	55400	0.97%	0.183%
65	6.145	6.128	6.173	VV	4511	72310	1.27%	0.239%
66	6.196	6.173	6.221	VV	3653	82031	1.44%	0.271%
67	6.240	6.221	6.258	VV	3963	64124	1.12%	0.212%
68	6.313	6.258	6.359	VV	24348	382215	6.70%	1.261%
69	6.369	6.359	6.384	VV	2843	35267	0.62%	0.116%
70	6.405	6.384	6.424	VV	3952	75350	1.32%	0.249%
71	6.435	6.424	6.440	VV	3168	28418	0.50%	0.094%
72	6.461	6.440	6.489	VV	16213	229012	4.02%	0.755%
73	6.498	6.489	6.515	VV	4111	55788	0.98%	0.184%
74	6.531	6.515	6.554	VV	4586	78663	1.38%	0.259%
75	6.572	6.554	6.607	VV	3986	97684	1.71%	0.322%
76	6.632	6.607	6.656	VV	6798	128560	2.25%	0.424%
77	6.667	6.656	6.681	VV	4014	50434	0.88%	0.166%
78	6.696	6.681	6.734	VV	3944	100094	1.76%	0.330%
79	6.755	6.734	6.785	VV	4810	115485	2.03%	0.381%
80	6.808	6.785	6.819	VV	7702	117729	2.06%	0.388%
81	6.828	6.819	6.848	VV	7429	104452	1.83%	0.345%
82	6.870	6.848	6.893	VV	7902	145627	2.55%	0.480%
83	6.914	6.893	6.950	VV	8999	194751	3.41%	0.642%
84	6.970	6.950	6.989	VV	8062	126267	2.21%	0.416%
85	7.012	6.989	7.049	VV	17530	295071	5.17%	0.973%
86	7.065	7.049	7.076	VV	4988	73853	1.30%	0.244%
87	7.109	7.076	7.128	VV	9097	210631	3.69%	0.695%
88	7.149	7.128	7.163	VV	5922	117089	2.05%	0.386%
89	7.181	7.163	7.210	VV	9191	195846	3.43%	0.646%

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90	7.234	7.210	7.262	VV	47902	589827	10.34%	1.946%
91	7.284	7.262	7.308	VV	5706	140727	2.47%	0.464%
92	7.325	7.308	7.335	VV	6321	87184	1.53%	0.288%
93	7.353	7.335	7.379	VV	7194	167721	2.94%	0.553%
94	7.406	7.379	7.435	VV	13505	274065	4.81%	0.904%
95	7.449	7.435	7.470	VV	5255	100872	1.77%	0.333%
96	7.493	7.470	7.506	VV	6652	117843	2.07%	0.389%
97	7.518	7.506	7.534	VV	6314	98912	1.73%	0.326%
98	7.569	7.534	7.585	VV	10418	222543	3.90%	0.734%
99	7.599	7.585	7.635	VV	7792	180418	3.16%	0.595%
100	7.658	7.635	7.673	VV	11076	171517	3.01%	0.566%
101	7.688	7.673	7.698	VV	9606	128733	2.26%	0.425%
102	7.710	7.698	7.728	VV	9869	140467	2.46%	0.463%
103	7.754	7.728	7.773	VV	10532	203743	3.57%	0.672%
104	7.799	7.773	7.824	VV	15462	289713	5.08%	0.956%
105	7.854	7.824	7.878	VV	11528	241258	4.23%	0.796%
106	7.892	7.878	7.901	VV	5871	72919	1.28%	0.241%
107	7.923	7.901	7.949	VV	27218	376138	6.60%	1.241%
108	7.970	7.949	7.992	VV	7158	155106	2.72%	0.512%
109	8.011	7.992	8.030	VV	7894	136085	2.39%	0.449%
110	8.053	8.030	8.066	VV	6180	127412	2.23%	0.420%
111	8.102	8.066	8.131	VV	65929	866529	15.19%	2.858%
112	8.150	8.131	8.174	VV	9192	169023	2.96%	0.558%
113	8.196	8.174	8.211	VV	6638	119256	2.09%	0.393%
114	8.221	8.211	8.231	VV	5551	64628	1.13%	0.213%
115	8.252	8.231	8.271	VV	7867	146969	2.58%	0.485%
116	8.294	8.271	8.325	VV	5419	154365	2.71%	0.509%
117	8.342	8.325	8.361	VV	4681	94236	1.65%	0.311%
118	8.375	8.361	8.383	VV	4494	56054	0.98%	0.185%
119	8.400	8.383	8.419	VV	4665	94609	1.66%	0.312%
120	8.456	8.419	8.491	VV	6966	216007	3.79%	0.712%
121	8.516	8.491	8.534	VV	5480	122255	2.14%	0.403%
122	8.550	8.534	8.572	VV	6572	114371	2.01%	0.377%
123	8.591	8.572	8.606	VV	6088	95008	1.67%	0.313%
124	8.637	8.606	8.668	VV	20346	323855	5.68%	1.068%
125	8.688	8.668	8.738	VV	5602	149422	2.62%	0.493%
126	8.759	8.738	8.767	VV	2887	46136	0.81%	0.152%
127	8.783	8.767	8.800	VV	3687	59035	1.04%	0.195%
128	8.821	8.800	8.839	VV	3915	72613	1.27%	0.240%
129	8.859	8.839	8.888	VV	3945	91483	1.60%	0.302%
130	8.922	8.888	8.981	VV	25297	399485	7.00%	1.318%
131	9.006	8.981	9.031	VV	2945	64296	1.13%	0.212%
132	9.054	9.031	9.088	VV	1917	53070	0.93%	0.175%
133	9.112	9.088	9.131	VV	1638	35710	0.63%	0.118%
134	9.156	9.131	9.189	VV	1484	45004	0.79%	0.148%
135	9.221	9.189	9.261	VV	1611	52117	0.91%	0.172%
136	9.292	9.261	9.327	VV	3420	75712	1.33%	0.250%
137	9.340	9.327	9.351	VV	1295	16844	0.30%	0.056%
138	9.377	9.351	9.404	VV	1865	41105	0.72%	0.136%
139	9.426	9.404	9.444	VV	1976	31915	0.56%	0.105%
140	9.456	9.444	9.465	VV	1214	13646	0.24%	0.045%
141	9.478	9.465	9.509	VV	1591	25504	0.45%	0.084%

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142	9.543	9.509	9.564	VV	862	16878	0.30%	0.056%
143	9.570	9.564	9.594	VV	425	6262	0.11%	0.021%
144	9.617	9.594	9.633	VV	870	13739	0.24%	0.045%
145	9.652	9.633	9.671	VV	772	14387	0.25%	0.047%
146	9.699	9.671	9.748	VV	6483	89533	1.57%	0.295%
147	9.767	9.748	9.791	VV	593	13287	0.23%	0.044%
148	9.799	9.791	9.891	VV	546	17228	0.30%	0.057%
149	9.914	9.891	9.951	VV	256	5084	0.09%	0.017%
150	9.973	9.951	9.991	VV	274	3977	0.07%	0.013%
151	10.018	9.991	10.033	VV	400	6025	0.11%	0.020%
152	10.044	10.033	10.055	VV	294	3602	0.06%	0.012%
153	10.087	10.055	10.114	VV	1405	24719	0.43%	0.082%
154	10.130	10.114	10.151	VV	475	6564	0.12%	0.022%
155	10.175	10.151	10.208	VV	412	7641	0.13%	0.025%
156	10.228	10.208	10.270	VV	237	4555	0.08%	0.015%
157	10.296	10.270	10.312	PV	282	4376	0.08%	0.014%
158	10.322	10.312	10.348	VV	278	3998	0.07%	0.013%
159	10.377	10.348	10.396	VV	444	8104	0.14%	0.027%
160	10.435	10.396	10.473	VV	1610	30761	0.54%	0.101%
161	10.509	10.473	10.535	VV	980	20791	0.36%	0.069%
162	10.561	10.535	10.584	VV	1141	17654	0.31%	0.058%
163	10.608	10.584	10.618	VV	163	2550	0.04%	0.008%
164	10.650	10.618	10.676	VV	225	4876	0.09%	0.016%
165	10.688	10.676	10.701	VV	147	1255	0.02%	0.004%
166	10.708	10.701	10.733	VV	117	1724	0.03%	0.006%
167	10.753	10.733	10.790	VV	235	5953	0.10%	0.020%
168	10.857	10.790	10.878	VV	497	14096	0.25%	0.046%
169	10.889	10.878	10.911	VV	335	3571	0.06%	0.012%
170	10.940	10.911	10.978	VV	258	4126	0.07%	0.014%
171	11.068	10.978	11.098	PV	1564	20869	0.37%	0.069%
172	11.137	11.098	11.170	VV	3335	45392	0.80%	0.150%
173	11.230	11.170	11.318	VV	658	18836	0.33%	0.062%
174	11.341	11.318	11.364	PV	116	1371	0.02%	0.005%
175	11.373	11.364	11.400	VV	107	579	0.01%	0.002%
176	11.434	11.400	11.451	PV	276	4976	0.09%	0.016%
177	11.492	11.451	11.508	VV	307	8637	0.15%	0.028%
178	11.537	11.508	11.568	VV	453	12311	0.22%	0.041%
179	11.594	11.568	11.641	VV	436	10852	0.19%	0.036%
180	11.685	11.641	11.701	PV	647	4128	0.07%	0.014%
181	11.709	11.701	11.714	VV	135	1117	0.02%	0.004%
182	11.732	11.714	11.745	VV	275	4354	0.08%	0.014%
183	11.802	11.745	11.827	VV	976	26212	0.46%	0.086%
184	11.847	11.827	11.878	VV	374	8304	0.15%	0.027%
185	11.895	11.878	11.924	VV	292	6126	0.11%	0.020%
186	11.952	11.924	11.981	VV	387	9970	0.17%	0.033%
187	12.019	11.981	12.061	VV	727	21249	0.37%	0.070%
188	12.080	12.061	12.098	VV	563	7921	0.14%	0.026%
189	12.120	12.098	12.154	VV	415	8317	0.15%	0.027%
190	12.211	12.154	12.236	VV	401	11981	0.21%	0.040%
191	12.255	12.236	12.265	VV	541	6994	0.12%	0.023%
192	12.304	12.265	12.341	VV	1311	24831	0.44%	0.082%
193	12.383	12.341	12.407	VV	1475	21536	0.38%	0.071%
194	12.442	12.407	12.544	VV	4054	61957	1.09%	0.204%

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195	12.561	12.544	12.628	VV	469	8366	0.15%	0.028%
196	12.643	12.628	12.674	PV	77	1263	0.02%	0.004%
197	12.701	12.674	12.718	PV	266	4985	0.09%	0.016%
198	12.725	12.718	12.751	VV	258	3958	0.07%	0.013%
199	12.765	12.751	12.787	VV	218	2938	0.05%	0.010%
200	12.888	12.787	13.029	VV	472949	5702879	100.00%	18.811%
201	13.053	13.029	13.098	VV	1063	25156	0.44%	0.083%
202	13.106	13.098	13.144	VV	554	11662	0.20%	0.038%
203	13.166	13.144	13.196	VV	350	8255	0.14%	0.027%
204	13.266	13.196	13.291	VV	541	16260	0.29%	0.054%
205	13.332	13.291	13.381	VV	553	18709	0.33%	0.062%
206	13.434	13.381	13.444	VV	233	6213	0.11%	0.020%
207	13.502	13.444	13.531	VV	435	15133	0.27%	0.050%
208	13.586	13.531	13.609	VV	1456	24958	0.44%	0.082%
209	13.638	13.609	13.688	VV	3523	54544	0.96%	0.180%
210	13.698	13.688	13.708	VV	303	2724	0.05%	0.009%
211	13.720	13.708	13.760	VV	216	4385	0.08%	0.014%
212	13.770	13.760	13.781	VV	110	1133	0.02%	0.004%
213	13.792	13.781	13.804	VV	90	885	0.02%	0.003%
214	13.862	13.804	13.918	PV	435	14779	0.26%	0.049%
215	13.935	13.918	13.953	VV	262	3841	0.07%	0.013%
216	13.969	13.953	14.029	VV	230	5969	0.10%	0.020%
217	14.072	14.029	14.111	VV	1648	29546	0.52%	0.097%
218	14.126	14.111	14.166	VV	245	5633	0.10%	0.019%
219	14.200	14.166	14.231	VV	1373	20973	0.37%	0.069%
220	14.260	14.231	14.308	VV	336	10401	0.18%	0.034%
221	14.358	14.308	14.380	VV	311	10674	0.19%	0.035%
222	14.402	14.380	14.440	VV	391	9156	0.16%	0.030%
223	14.456	14.440	14.470	VV	343	4481	0.08%	0.015%
224	14.483	14.470	14.499	VV	326	3889	0.07%	0.013%
225	14.519	14.499	14.533	VV	241	4265	0.07%	0.014%
226	14.549	14.533	14.577	VV	295	5235	0.09%	0.017%
227	14.585	14.577	14.590	VV	280	1848	0.03%	0.006%
228	14.600	14.590	14.648	VV	281	6623	0.12%	0.022%
229	14.694	14.648	14.713	VV	1390	20003	0.35%	0.066%
230	14.739	14.713	14.776	VV	4559	67436	1.18%	0.222%
231	14.792	14.776	14.835	VV	408	8965	0.16%	0.030%
232	14.940	14.835	14.961	PV	316	9706	0.17%	0.032%
233	14.988	14.961	15.025	VV	186	4990	0.09%	0.016%
234	15.046	15.025	15.056	VV	159	1836	0.03%	0.006%
235	15.078	15.056	15.090	VV	185	2032	0.04%	0.007%
236	15.122	15.090	15.132	VV	325	4354	0.08%	0.014%
237	15.152	15.132	15.206	VV	423	10744	0.19%	0.035%
238	15.258	15.206	15.289	VV	3298	50650	0.89%	0.167%
239	15.303	15.289	15.341	VV	389	8064	0.14%	0.027%
240	15.387	15.341	15.405	VV	98	1651	0.03%	0.005%
241	15.461	15.405	15.480	PV	296	8175	0.14%	0.027%
242	15.490	15.480	15.521	VV	237	2676	0.05%	0.009%
243	15.581	15.521	15.599	VV	489	11289	0.20%	0.037%
244	15.620	15.599	15.674	VV	338	10489	0.18%	0.035%
245	15.720	15.674	15.733	VV	968	13454	0.24%	0.044%
246	15.758	15.733	15.789	VV	5252	73380	1.29%	0.242%

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247	15.804	15.789	15.866	VV	410	8658	0.15%	0.029%
248	15.949	15.866	15.971	PV	336	12127	0.21%	0.040%
249	15.998	15.971	16.022	VV	227	4837	0.08%	0.016%
250	16.072	16.022	16.097	PV	416	10791	0.19%	0.036%
251	16.112	16.097	16.129	VV	437	6220	0.11%	0.021%
252	16.139	16.129	16.154	VV	232	3186	0.06%	0.011%
253	16.179	16.154	16.198	VV	167	3137	0.06%	0.010%
254	16.240	16.198	16.298	VV	3642	57874	1.01%	0.191%
255	16.318	16.298	16.371	VV	287	7075	0.12%	0.023%
256	16.408	16.371	16.421	PV	350	6998	0.12%	0.023%
257	16.427	16.421	16.437	VV	258	2573	0.05%	0.008%
258	16.458	16.437	16.471	VV	246	4828	0.08%	0.016%
259	16.478	16.471	16.501	VV	211	2782	0.05%	0.009%
260	16.540	16.501	16.564	VV	498	9382	0.16%	0.031%
261	16.591	16.564	16.649	VV	534	13846	0.24%	0.046%
262	16.705	16.649	16.744	VV	4463	75347	1.32%	0.249%
263	16.751	16.744	16.770	VV	247	2400	0.04%	0.008%
264	16.858	16.770	16.891	VV	260	9006	0.16%	0.030%
265	16.935	16.891	16.954	PV	229	5817	0.10%	0.019%
266	16.999	16.954	17.016	VV	256	4891	0.09%	0.016%
267	17.057	17.016	17.066	VV	188	4794	0.08%	0.016%
268	17.104	17.066	17.113	VV	137	3360	0.06%	0.011%
269	17.156	17.113	17.208	PV	3679	54813	0.96%	0.181%
270	17.261	17.208	17.284	PV	400	6330	0.11%	0.021%
271	17.432	17.284	17.460	VV	310	11014	0.19%	0.036%
272	17.486	17.460	17.509	VV	260	3716	0.07%	0.012%
273	17.591	17.509	17.648	PV	3643	67606	1.19%	0.223%
274	17.721	17.648	17.731	PV	324	5801	0.10%	0.019%
275	17.745	17.731	17.764	VV	235	3271	0.06%	0.011%
276	17.872	17.764	17.880	VV	303	1969	0.03%	0.006%
277	17.894	17.880	17.931	VV	936	5361	0.09%	0.018%
278	18.013	17.931	18.064	PV	3432	54824	0.96%	0.181%
279	18.086	18.064	18.104	VV	410	4849	0.09%	0.016%
280	18.422	18.104	18.471	PV	3066	63117	1.11%	0.208%
281	18.555	18.471	18.571	PV	199	2439	0.04%	0.008%
282	18.722	18.571	18.738	PV	251	5938	0.10%	0.020%
283	18.821	18.738	18.850	PV	2138	33570	0.59%	0.111%
284	19.206	18.850	19.230	VV	2834	95088	1.67%	0.314%
285	19.581	19.230	19.601	VV	3160	312236	5.48%	1.030%
286	19.945	19.601	19.974	VV	5985	797308	13.98%	2.630%
287	20.661	19.974	20.687	VV	13641	4175242	73.21%	13.772%
288	20.802	20.687	20.849	VV	12125	1187853	20.83%	3.918%
289	20.869	20.849	20.902	VV	11036	343536	6.02%	1.133%
290	20.911	20.902	20.952	VV	10361	303506	5.32%	1.001%
291	20.961	20.952	20.971	VV	11149	113613	1.99%	0.375%
292	21.071	20.971	21.091	VV	8623	643017	11.28%	2.121%
293	21.171	21.091	21.180	VV	7558	418146	7.33%	1.379%
294	21.245	21.180	21.258	VV	6857	326706	5.73%	1.078%
295	21.269	21.258	21.314	VV	6630	214004	3.75%	0.706%
296	21.533	21.314	21.560	VV	4124	718193	12.59%	2.369%
297	21.588	21.560	21.649	VV	3360	161226	2.83%	0.532%
298	21.738	21.649	21.780	VV	1345	122929	2.16%	0.405%
299	21.791	21.780	21.817	VV	507	7320	0.13%	0.024%

rters
Sum of corrected areas: 30317043

Aliphatic EPH 121024.M Sat Dec 21 02:40:53 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/15/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-02	SDG No.:	P5299
Lab Sample ID:	P5299-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	75.5
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048902.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.40	U	0.40	0.88	mg/kg
Aromatic C12-C16	Aromatic C12-C16	1.01	J	0.45	1.32	mg/kg
Aromatic C16-C21	Aromatic C16-C21	1.88	J	1.27	2.20	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.64	U	2.64	3.52	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	51.5		40 - 140	103%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	54.1		40 - 140	108%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.0		40 - 140	66%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P5299-02	Acq On:	20 Dec 2024 13:21
Client Sample ID:	SB-02	Operator:	YP/AJ
Data file:	FD048902.D	Misc:	
Instrument:	FID_D	ALS Vial:	65
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.083	5.800	816903	4.295	200	ug/ml
Aromatic C12-C16	5.801	8.405	2124307	11.428	300	ug/ml
Aromatic C16-C21	8.406	12.669	3608389	21.286	500	ug/ml
Aromatic C21-C36	12.670	18.077	4131492	29.18	800	ug/ml
Aromatic EPH	4.083	18.077	10681091	66.188		ug/ml
ortho-Terphenyl (SURR)	11.245	11.245	5860548	32.99		ug/ml
2-Bromonaphthalene (SURR)	7.361	7.361	8669207	51.47		ug/ml
2-Fluorobiphenyl (SURR)	8.210	8.210	5590089	54.11		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048902.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 13:21
 Operator : YP/AJ
 Sample : P5299-02
 Misc :
 ALS Vial : 65 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 SB-02

Integration File: autoint1.e
 Quant Time: Dec 21 04:04:21 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 06:07:50 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.361	8669207	51.469 ug/ml
Spiked Amount 50.000		Recovery =	102.94%
6) S 2-Fluorobiphenyl (SURR)	8.210	5590089	54.111 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	108.22%
11) S ortho-Terphenyl (SURR)	11.245	5860548	32.987 ug/ml
Spiked Amount 50.000		Recovery =	65.97%

Target Compounds

(f)=RT Delta > 1/2 Window

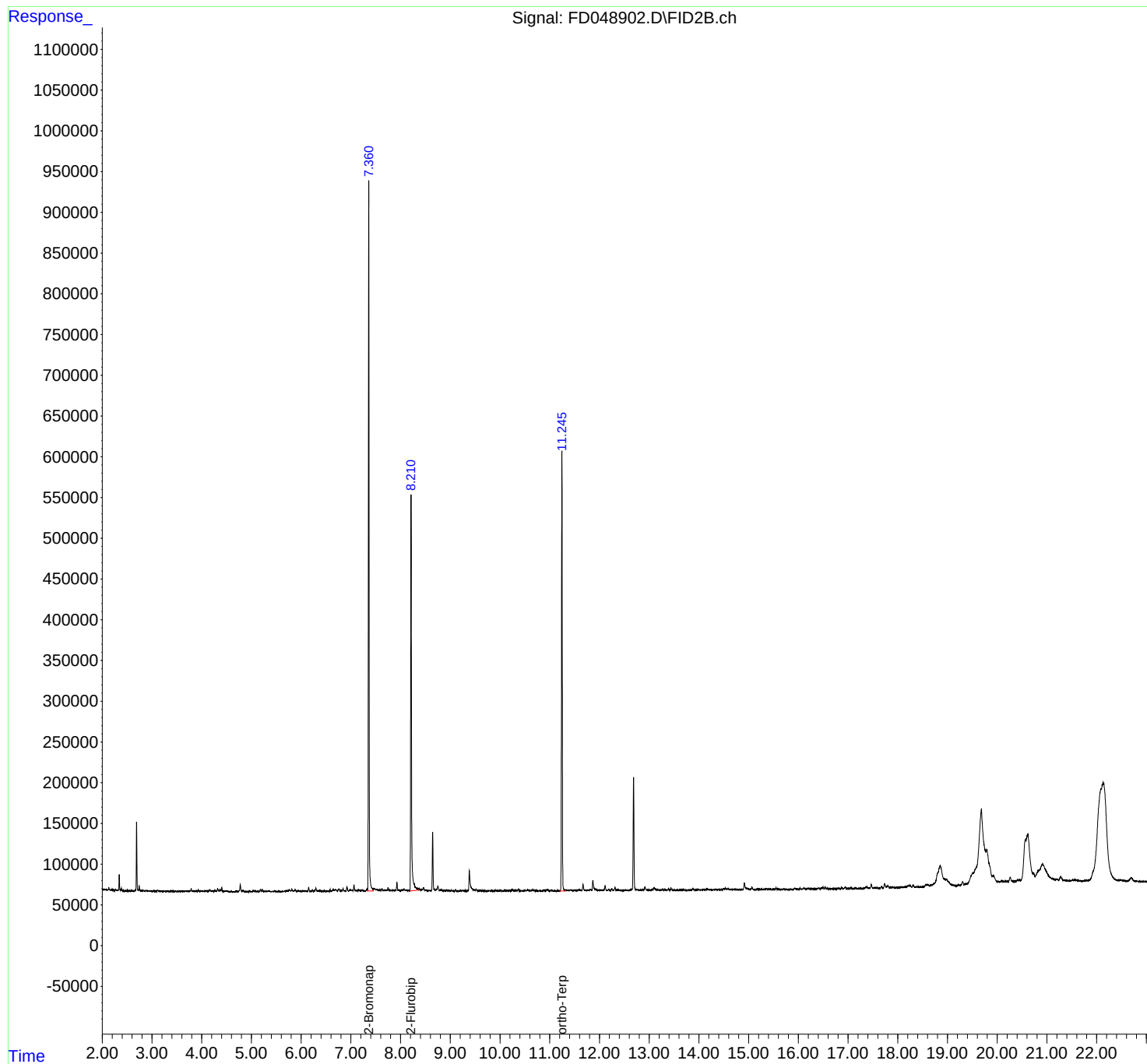
(m)=manual int.

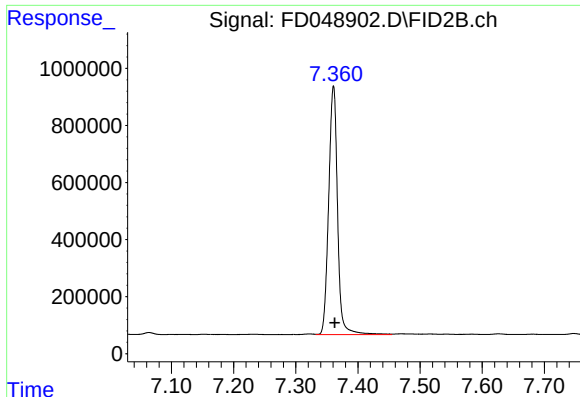
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048902.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 13:21
Operator : YP/AJ
Sample : P5299-02
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
SB-02

Integration File: autoint1.e
Quant Time: Dec 21 04:04:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 06:07:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

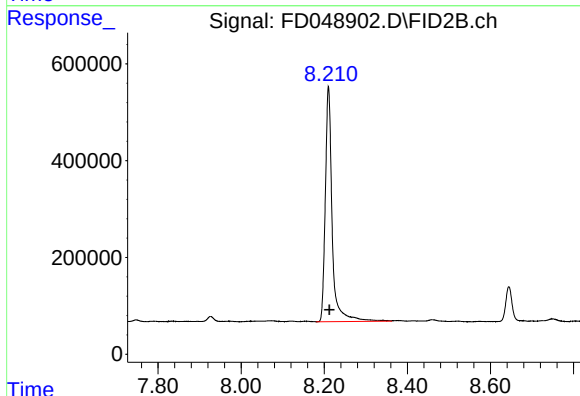




#4 2-Bromonaphthalene (SURR)

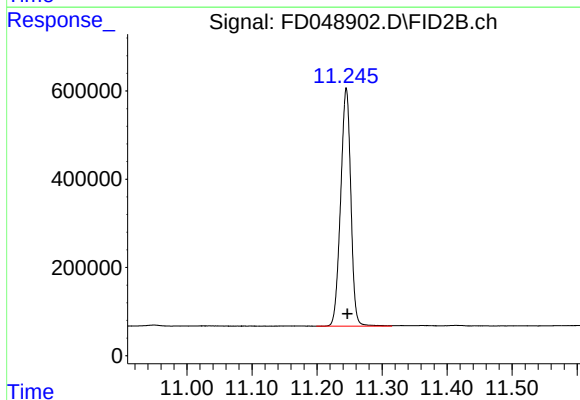
R.T.: 7.361 min
Delta R.T.: -0.002 min
Response: 8669207
Conc: 51.47 ug/ml

Instrument :
FID_D
ClientSampleId :
SB-02



#6 2-Fluorobiphenyl (SURR)

R.T.: 8.210 min
Delta R.T.: -0.003 min
Response: 5590089
Conc: 54.11 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.245 min
Delta R.T.: -0.002 min
Response: 5860548
Conc: 32.99 ug/ml

rteres

Area Percent

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048902.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 13:21
 Sample : P5299-02
 Misc :
 ALS Vial : 65 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH
 121024.M
 Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.051	4.042	4.075	BV	314	3110	0.04%	0.010%
2	4.103	4.084	4.119	VV	365	4937	0.06%	0.016%
3	4.160	4.127	4.206	VV	2010	35651	0.41%	0.115%
4	4.211	4.206	4.215	VV	466	2604	0.03%	0.008%
5	4.218	4.215	4.232	VV	543	4398	0.05%	0.014%
6	4.234	4.232	4.240	VV	367	1804	0.02%	0.006%
7	4.263	4.240	4.290	VV	1090	17996	0.21%	0.058%
8	4.320	4.290	4.344	VV	3351	47276	0.54%	0.152%
9	4.374	4.344	4.388	VV	2877	38394	0.44%	0.123%
10	4.404	4.388	4.447	VV	5035	58935	0.68%	0.189%
11	4.481	4.447	4.502	VV	1132	20297	0.23%	0.065%
12	4.517	4.502	4.562	VV	819	12434	0.14%	0.040%
13	4.600	4.562	4.611	PV	632	9930	0.11%	0.032%
14	4.616	4.611	4.632	VV	365	3009	0.03%	0.010%
15	4.637	4.632	4.644	VV	264	1544	0.02%	0.005%
16	4.661	4.644	4.666	VV	293	2389	0.03%	0.008%
17	4.698	4.677	4.725	PV	682	11056	0.13%	0.036%
18	4.775	4.725	4.810	VV	9172	136473	1.56%	0.439%
19	4.831	4.810	4.873	VV	2303	33211	0.38%	0.107%
20	4.886	4.873	4.917	VV	563	8072	0.09%	0.026%
21	4.923	4.917	4.928	VV	326	1584	0.02%	0.005%
22	4.935	4.928	4.948	VV	395	3178	0.04%	0.010%
23	4.969	4.948	4.985	PV	704	9589	0.11%	0.031%
24	4.991	4.985	5.008	VV	517	5236	0.06%	0.017%
25	5.034	5.008	5.076	VV	1459	36993	0.42%	0.119%

				rteres				
26	5.080	5.076	5.105	VV	916	12538	0.14%	0.040%
27	5.108	5.105	5.115	VV	588	3248	0.04%	0.010%
28	5.128	5.115	5.134	VV	614	6261	0.07%	0.020%
29	5.141	5.134	5.158	VV	719	7655	0.09%	0.025%
30	5.182	5.158	5.200	VV	3107	39365	0.45%	0.127%
31	5.217	5.200	5.255	VV	3238	41882	0.48%	0.135%
32	5.273	5.255	5.318	VV	1004	22067	0.25%	0.071%
33	5.341	5.318	5.353	VV	1154	17589	0.20%	0.057%
34	5.359	5.353	5.387	VV	769	9835	0.11%	0.032%
35	5.390	5.387	5.402	VV	242	1816	0.02%	0.006%
36	5.416	5.402	5.439	VV	424	5318	0.06%	0.017%
37	5.467	5.439	5.503	VV	939	17629	0.20%	0.057%
38	5.522	5.503	5.527	VV	521	5317	0.06%	0.017%
39	5.542	5.527	5.565	VV	756	12284	0.14%	0.039%
40	5.570	5.565	5.598	VV	404	5522	0.06%	0.018%
41	5.622	5.598	5.635	VV	503	7733	0.09%	0.025%
42	5.643	5.635	5.656	VV	661	6255	0.07%	0.020%
43	5.662	5.656	5.678	VV	652	7484	0.09%	0.024%
44	5.695	5.678	5.708	VV	849	12089	0.14%	0.039%
45	5.725	5.708	5.732	VV	1231	14553	0.17%	0.047%
46	5.736	5.732	5.738	VV	1124	4438	0.05%	0.014%
47	5.742	5.738	5.746	VV	1272	5395	0.06%	0.017%
48	5.767	5.746	5.793	VV	2120	43640	0.50%	0.140%
49	5.812	5.793	5.835	VV	2875	43903	0.50%	0.141%
50	5.842	5.835	5.851	VV	1021	8808	0.10%	0.028%
51	5.878	5.851	5.914	VV	2536	51478	0.59%	0.166%
52	5.942	5.914	5.957	VV	1179	22821	0.26%	0.073%
53	5.965	5.957	5.973	VV	752	6512	0.07%	0.021%
54	5.977	5.973	5.992	VV	682	6081	0.07%	0.020%
55	5.995	5.992	6.008	VV	565	4626	0.05%	0.015%
56	6.031	6.008	6.043	VV	837	12232	0.14%	0.039%
57	6.056	6.043	6.081	VV	935	17147	0.20%	0.055%
58	6.086	6.081	6.091	VV	550	2551	0.03%	0.008%
59	6.107	6.091	6.127	VV	611	10307	0.12%	0.033%
60	6.151	6.127	6.210	VV	5219	78078	0.90%	0.251%
61	6.228	6.210	6.248	VV	1968	25732	0.30%	0.083%
62	6.266	6.248	6.275	VV	1137	13273	0.15%	0.043%
63	6.296	6.275	6.314	VV	4557	55887	0.64%	0.180%
64	6.325	6.314	6.346	VV	1106	15749	0.18%	0.051%
65	6.366	6.346	6.389	VV	1749	25593	0.29%	0.082%
66	6.396	6.389	6.441	VV	799	17839	0.20%	0.057%
67	6.458	6.441	6.494	VV	1270	23295	0.27%	0.075%
68	6.497	6.494	6.501	VV	618	2491	0.03%	0.008%
69	6.508	6.501	6.518	VV	648	5847	0.07%	0.019%

				rteres				
70	6.527	6.518	6.541	VV	651	7751	0.09%	0.025%
71	6.546	6.541	6.561	VV	435	4670	0.05%	0.015%
72	6.584	6.561	6.602	VV	2051	25945	0.30%	0.083%
73	6.642	6.602	6.657	VV	2427	50554	0.58%	0.163%
74	6.660	6.657	6.672	VV	2052	16890	0.19%	0.054%
75	6.684	6.672	6.692	VV	2274	24048	0.28%	0.077%
76	6.702	6.692	6.729	VV	2510	36801	0.42%	0.118%
77	6.761	6.729	6.790	VV	3594	70632	0.81%	0.227%
78	6.805	6.790	6.816	VV	1372	16599	0.19%	0.053%
79	6.842	6.816	6.887	VV	3359	67271	0.77%	0.216%
80	6.921	6.887	6.953	VV	6473	95664	1.10%	0.308%
81	6.997	6.953	7.015	VV	2408	59556	0.68%	0.191%
82	7.028	7.015	7.041	VV	1983	23688	0.27%	0.076%
83	7.064	7.041	7.089	VV	8062	101402	1.16%	0.326%
84	7.100	7.089	7.109	VV	1221	12949	0.15%	0.042%
85	7.119	7.109	7.139	VV	1482	21294	0.24%	0.068%
86	7.153	7.139	7.176	VV	1910	30243	0.35%	0.097%
87	7.181	7.176	7.197	VV	1216	13016	0.15%	0.042%
88	7.234	7.197	7.255	VV	2071	45100	0.52%	0.145%
89	7.278	7.255	7.285	VV	990	16073	0.18%	0.052%
90	7.297	7.285	7.302	VV	1069	9458	0.11%	0.030%
91	7.323	7.302	7.334	VV	3082	39955	0.46%	0.128%
92	7.361	7.334	7.455	VV	872521	8720567	100.00%	28.038%
93	7.470	7.455	7.502	VV	3458	79977	0.92%	0.257%
94	7.516	7.502	7.534	VV	2844	45553	0.52%	0.146%
95	7.543	7.534	7.559	VV	2243	29653	0.34%	0.095%
96	7.583	7.559	7.606	VV	2228	46690	0.54%	0.150%
97	7.626	7.606	7.661	VV	3488	62035	0.71%	0.199%
98	7.682	7.661	7.699	VV	2228	35669	0.41%	0.115%
99	7.717	7.699	7.724	VV	1381	18077	0.21%	0.058%
100	7.747	7.724	7.772	VV	4492	63946	0.73%	0.206%
101	7.790	7.772	7.819	VV	1704	35479	0.41%	0.114%
102	7.834	7.819	7.851	VV	1826	26294	0.30%	0.085%
103	7.872	7.851	7.885	VV	1337	25604	0.29%	0.082%
104	7.894	7.885	7.903	VV	1436	14044	0.16%	0.045%
105	7.927	7.903	7.959	VV	11524	147242	1.69%	0.473%
106	7.974	7.959	7.997	VV	1670	29197	0.33%	0.094%
107	8.024	7.997	8.030	VV	1746	24726	0.28%	0.079%
108	8.044	8.030	8.054	VV	1905	26312	0.30%	0.085%
109	8.073	8.054	8.104	VV	2704	55712	0.64%	0.179%
110	8.122	8.104	8.138	VV	1818	27924	0.32%	0.090%
111	8.157	8.138	8.183	VV	1716	30115	0.35%	0.097%
112	8.210	8.183	8.361	VV	486820	5712891	65.51%	18.368%

				rteres				
113	8.375	8.361	8.400	VV	3016	60249	0.69%	0.194%
114	8.415	8.400	8.423	VV	2488	31062	0.36%	0.100%
115	8.430	8.423	8.436	VV	2118	16234	0.19%	0.052%
116	8.460	8.436	8.499	VV	4776	100606	1.15%	0.323%
117	8.520	8.499	8.556	VV	1779	38315	0.44%	0.123%
118	8.575	8.556	8.590	VV	1285	20492	0.23%	0.066%
119	8.603	8.590	8.615	VV	1072	14194	0.16%	0.046%
120	8.644	8.615	8.691	VV	72701	807263	9.26%	2.595%
121	8.700	8.691	8.710	VV	2003	20639	0.24%	0.066%
122	8.749	8.710	8.787	VV	6493	146074	1.68%	0.470%
123	8.804	8.787	8.817	VV	1917	28420	0.33%	0.091%
124	8.827	8.817	8.857	VV	1879	29895	0.34%	0.096%
125	8.878	8.857	8.901	VV	1111	20085	0.23%	0.065%
126	8.936	8.901	8.965	VV	1378	35037	0.40%	0.113%
127	8.981	8.965	8.997	VV	938	14659	0.17%	0.047%
128	9.026	8.997	9.038	VV	941	17360	0.20%	0.056%
129	9.041	9.038	9.078	VV	845	11271	0.13%	0.036%
130	9.106	9.078	9.149	VV	1565	29738	0.34%	0.096%
131	9.184	9.149	9.188	VV	697	11005	0.13%	0.035%
132	9.203	9.188	9.224	VV	924	15337	0.18%	0.049%
133	9.245	9.224	9.265	VV	1097	18292	0.21%	0.059%
134	9.279	9.265	9.284	VV	704	6787	0.08%	0.022%
135	9.300	9.284	9.319	VV	782	13057	0.15%	0.042%
136	9.327	9.319	9.330	VV	523	3257	0.04%	0.010%
137	9.347	9.330	9.363	VV	1093	15340	0.18%	0.049%
138	9.382	9.363	9.500	VV	25260	504288	5.78%	1.621%
139	9.518	9.500	9.550	VV	2756	46084	0.53%	0.148%
140	9.565	9.550	9.570	VV	690	7480	0.09%	0.024%
141	9.598	9.570	9.637	VV	1070	29496	0.34%	0.095%
142	9.650	9.637	9.655	VV	521	4479	0.05%	0.014%
143	9.660	9.655	9.677	VV	587	5977	0.07%	0.019%
144	9.686	9.677	9.705	VV	639	7538	0.09%	0.024%
145	9.718	9.705	9.743	VV	513	7372	0.08%	0.024%
146	9.756	9.743	9.775	VV	544	7541	0.09%	0.024%
147	9.791	9.775	9.808	VV	656	8963	0.10%	0.029%
148	9.826	9.808	9.847	VV	801	13207	0.15%	0.042%
149	9.851	9.847	9.857	VV	371	1841	0.02%	0.006%
150	9.862	9.857	9.872	VV	385	2785	0.03%	0.009%
151	9.883	9.872	9.898	VV	574	7946	0.09%	0.026%
152	9.906	9.898	9.923	VV	923	10664	0.12%	0.034%
153	9.942	9.923	9.965	VV	668	13681	0.16%	0.044%
154	9.975	9.965	10.001	VV	607	11649	0.13%	0.037%
155	10.018	10.001	10.042	VV	1345	16707	0.19%	0.054%

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156	10.054	10.042	10.064	VV	435	5151	0.06%	0.017%
157	10.093	10.064	10.103	VV	911	15442	0.18%	0.050%
158	10.110	10.103	10.127	VV	1036	10393	0.12%	0.033%
159	10.145	10.127	10.165	VV	800	13768	0.16%	0.044%
160	10.185	10.165	10.210	VV	1036	17509	0.20%	0.056%
161	10.234	10.210	10.283	VV	1383	40550	0.46%	0.130%
162	10.301	10.283	10.318	VV	919	14375	0.16%	0.046%
163	10.327	10.318	10.343	VV	855	10756	0.12%	0.035%
164	10.372	10.343	10.395	VV	2178	37715	0.43%	0.121%
165	10.401	10.395	10.416	VV	604	5972	0.07%	0.019%
166	10.438	10.416	10.449	VV	692	9751	0.11%	0.031%
167	10.469	10.449	10.480	VV	654	9018	0.10%	0.029%
168	10.491	10.480	10.498	VV	742	6294	0.07%	0.020%
169	10.512	10.498	10.528	VV	806	11783	0.14%	0.038%
170	10.548	10.528	10.600	VV	1308	40190	0.46%	0.129%
171	10.618	10.600	10.623	VV	638	8181	0.09%	0.026%
172	10.637	10.623	10.655	VV	1179	17703	0.20%	0.057%
173	10.671	10.655	10.691	VV	1416	19834	0.23%	0.064%
174	10.698	10.691	10.718	VV	890	10838	0.12%	0.035%
175	10.723	10.718	10.753	VV	491	8158	0.09%	0.026%
176	10.756	10.753	10.770	VV	286	2704	0.03%	0.009%
177	10.787	10.770	10.808	VV	611	8156	0.09%	0.026%
178	10.829	10.808	10.852	VV	354	6999	0.08%	0.023%
179	10.859	10.852	10.865	VV	487	2849	0.03%	0.009%
180	10.882	10.865	10.913	VV	1507	21668	0.25%	0.070%
181	10.949	10.913	10.977	VV	2521	40927	0.47%	0.132%
182	10.996	10.977	11.002	VV	486	5265	0.06%	0.017%
183	11.025	11.002	11.032	VV	609	8537	0.10%	0.027%
184	11.035	11.032	11.068	VV	683	9389	0.11%	0.030%
185	11.088	11.068	11.093	VV	317	2944	0.03%	0.009%
186	11.098	11.093	11.115	VV	367	2351	0.03%	0.008%
187	11.146	11.115	11.162	PV	453	5997	0.07%	0.019%
188	11.169	11.162	11.174	VV	374	2340	0.03%	0.008%
189	11.179	11.174	11.184	VV	331	1624	0.02%	0.005%
190	11.187	11.184	11.197	VV	234	1014	0.01%	0.003%
191	11.245	11.210	11.318	VV	540022	5866638	67.27%	18.862%
192	11.330	11.318	11.348	VV	1249	19402	0.22%	0.062%
193	11.361	11.348	11.393	VV	1505	27497	0.32%	0.088%
194	11.414	11.393	11.435	VV	1738	27349	0.31%	0.088%
195	11.443	11.435	11.451	VV	578	4913	0.06%	0.016%
196	11.458	11.451	11.475	VV	629	6564	0.08%	0.021%
197	11.486	11.475	11.491	VV	598	4590	0.05%	0.015%
198	11.498	11.491	11.502	VV	524	3004	0.03%	0.010%
199	11.509	11.502	11.555	VV	694	18981	0.22%	0.061%

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200	11.606	11.555	11.636	VV	1405	46282	0.53%	0.149%
201	11.670	11.636	11.707	VV	7846	119012	1.36%	0.383%
202	11.713	11.707	11.724	VV	783	6777	0.08%	0.022%
203	11.765	11.724	11.781	VV	1134	27763	0.32%	0.089%
204	11.826	11.781	11.845	VV	1631	42652	0.49%	0.137%
205	11.867	11.845	11.932	VV	13063	234003	2.68%	0.752%
206	11.943	11.932	11.972	VV	1547	27552	0.32%	0.089%
207	11.978	11.972	11.990	VV	1072	10815	0.12%	0.035%
208	11.997	11.990	12.015	VV	1055	13695	0.16%	0.044%
209	12.021	12.015	12.030	VV	942	7700	0.09%	0.025%
210	12.034	12.030	12.043	VV	821	5814	0.07%	0.019%
211	12.047	12.043	12.052	VV	643	3181	0.04%	0.010%
212	12.114	12.052	12.143	VV	6564	112355	1.29%	0.361%
213	12.155	12.143	12.166	VV	572	6850	0.08%	0.022%
214	12.188	12.166	12.213	VV	1758	27677	0.32%	0.089%
215	12.224	12.213	12.228	VV	610	4095	0.05%	0.013%
216	12.249	12.228	12.280	VV	2822	40616	0.47%	0.131%
217	12.314	12.280	12.333	VV	4083	64024	0.73%	0.206%
218	12.350	12.333	12.362	VV	1192	17353	0.20%	0.056%
219	12.367	12.362	12.424	VV	1116	24959	0.29%	0.080%
220	12.447	12.424	12.465	VV	480	8551	0.10%	0.027%
221	12.472	12.465	12.476	VV	376	1966	0.02%	0.006%
222	12.493	12.476	12.498	VV	574	5632	0.06%	0.018%
223	12.502	12.498	12.512	VV	660	4010	0.05%	0.013%
224	12.529	12.512	12.554	VV	659	11959	0.14%	0.038%
225	12.568	12.554	12.590	VV	598	7484	0.09%	0.024%
226	12.611	12.590	12.615	PV	559	5050	0.06%	0.016%
227	12.686	12.615	12.729	VV	139703	1673920	19.20%	5.382%
228	12.732	12.729	12.809	VV	1542	51505	0.59%	0.166%
229	12.824	12.809	12.834	VV	753	10072	0.12%	0.032%
230	12.856	12.834	12.890	VV	1178	30806	0.35%	0.099%
231	12.915	12.890	12.968	VV	4578	83084	0.95%	0.267%
232	12.989	12.968	13.000	VV	764	11679	0.13%	0.038%
233	13.009	13.000	13.020	VV	723	7485	0.09%	0.024%
234	13.053	13.020	13.074	VV	929	24103	0.28%	0.077%
235	13.096	13.074	13.177	VV	3745	103963	1.19%	0.334%
236	13.182	13.177	13.218	VV	664	14810	0.17%	0.048%
237	13.227	13.218	13.232	VV	733	4733	0.05%	0.015%
238	13.270	13.232	13.298	VV	1240	31937	0.37%	0.103%
239	13.311	13.298	13.340	VV	1146	18556	0.21%	0.060%
240	13.389	13.340	13.421	VV	1724	41896	0.48%	0.135%
241	13.440	13.421	13.462	VV	2563	33841	0.39%	0.109%
242	13.466	13.462	13.471	VV	409	1868	0.02%	0.006%

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243	13.475	13.471	13.493	VV	381	4511	0.05%	0.015%
244	13.500	13.493	13.525	VV	388	4805	0.06%	0.015%
245	13.541	13.525	13.546	VV	288	3017	0.03%	0.010%
246	13.552	13.546	13.572	VV	463	4645	0.05%	0.015%
247	13.578	13.572	13.592	VV	296	2126	0.02%	0.007%
248	13.605	13.592	13.616	VV	365	3036	0.03%	0.010%
249	13.657	13.616	13.676	VV	617	13948	0.16%	0.045%
250	13.690	13.676	13.726	VV	889	16309	0.19%	0.052%
251	13.733	13.726	13.747	VV	356	2602	0.03%	0.008%
252	13.799	13.747	13.810	VV	593	13947	0.16%	0.045%
253	13.815	13.810	13.822	VV	545	2982	0.03%	0.010%
254	13.829	13.822	13.840	VV	489	5073	0.06%	0.016%
255	13.878	13.840	13.918	VV	1995	44396	0.51%	0.143%
256	13.933	13.918	13.945	VV	623	7014	0.08%	0.023%
257	13.950	13.945	13.982	VV	600	10213	0.12%	0.033%
258	14.000	13.982	14.019	VV	694	11380	0.13%	0.037%
259	14.024	14.019	14.035	VV	419	3829	0.04%	0.012%
260	14.037	14.035	14.040	VV	554	1434	0.02%	0.005%
261	14.045	14.040	14.060	VV	460	4559	0.05%	0.015%
262	14.063	14.060	14.068	VV	448	1701	0.02%	0.005%
263	14.090	14.068	14.110	VV	540	11333	0.13%	0.036%
264	14.116	14.110	14.119	VV	534	2458	0.03%	0.008%
265	14.127	14.119	14.133	VV	616	4610	0.05%	0.015%
266	14.165	14.133	14.192	VV	1581	33750	0.39%	0.109%
267	14.201	14.192	14.230	VV	686	13244	0.15%	0.043%
268	14.235	14.230	14.251	VV	538	6458	0.07%	0.021%
269	14.254	14.251	14.275	VV	655	6990	0.08%	0.022%
270	14.287	14.275	14.292	VV	618	4897	0.06%	0.016%
271	14.308	14.292	14.330	VV	728	13395	0.15%	0.043%
272	14.350	14.330	14.363	VV	650	10285	0.12%	0.033%
273	14.377	14.363	14.391	VV	642	8460	0.10%	0.027%
274	14.395	14.391	14.448	VV	542	13786	0.16%	0.044%
275	14.452	14.448	14.465	VV	447	3230	0.04%	0.010%
276	14.503	14.465	14.518	VV	1605	32014	0.37%	0.103%
277	14.535	14.518	14.564	VV	2544	41165	0.47%	0.132%
278	14.584	14.564	14.620	VV	2096	39342	0.45%	0.126%
279	14.627	14.620	14.636	VV	848	6983	0.08%	0.022%
280	14.647	14.636	14.684	VV	1004	20838	0.24%	0.067%
281	14.709	14.684	14.762	VV	970	29585	0.34%	0.095%
282	14.765	14.762	14.788	VV	488	6573	0.08%	0.021%
283	14.791	14.788	14.797	VV	421	1736	0.02%	0.006%
284	14.839	14.797	14.857	VV	716	16296	0.19%	0.052%
285	14.864	14.857	14.888	VV	433	6272	0.07%	0.020%

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286	14.914	14.888	15.011	VV	8352	205766	2.36%	0.662%
287	15.015	15.011	15.038	VV	974	13681	0.16%	0.044%
288	15.069	15.038	15.091	VV	3062	52559	0.60%	0.169%
289	15.096	15.091	15.126	VV	677	11298	0.13%	0.036%
290	15.129	15.126	15.137	VV	375	1786	0.02%	0.006%
291	15.178	15.137	15.203	VV	786	18645	0.21%	0.060%
292	15.208	15.203	15.221	VV	515	4635	0.05%	0.015%
293	15.231	15.221	15.235	VV	522	3946	0.05%	0.013%
294	15.252	15.235	15.276	VV	1048	17491	0.20%	0.056%
295	15.283	15.276	15.290	VV	548	3866	0.04%	0.012%
296	15.323	15.290	15.332	VV	730	12618	0.14%	0.041%
297	15.357	15.332	15.392	VV	1101	27884	0.32%	0.090%
298	15.437	15.392	15.470	VV	1027	31758	0.36%	0.102%
299	15.480	15.470	15.492	VV	467	4759	0.05%	0.015%
300	15.514	15.492	15.530	VV	1180	17553	0.20%	0.056%
301	15.552	15.530	15.585	VV	2193	32726	0.38%	0.105%
302	15.594	15.585	15.600	VV	515	4224	0.05%	0.014%
303	15.621	15.600	15.647	VV	698	11787	0.14%	0.038%
304	15.670	15.647	15.682	PV	266	2512	0.03%	0.008%
305	15.704	15.682	15.729	VV	882	13532	0.16%	0.044%
306	15.756	15.729	15.792	VV	833	16778	0.19%	0.054%
307	15.796	15.792	15.809	VV	158	1422	0.02%	0.005%
308	15.867	15.827	15.876	VV	375	5991	0.07%	0.019%
309	15.880	15.876	15.894	VV	311	2376	0.03%	0.008%
310	15.925	15.894	15.959	VV	1534	31649	0.36%	0.102%
311	15.963	15.959	15.986	VV	586	7516	0.09%	0.024%
312	15.994	15.986	16.005	VV	599	4660	0.05%	0.015%
313	16.031	16.005	16.050	VV	1127	18175	0.21%	0.058%
314	16.109	16.050	16.144	VV	1855	44355	0.51%	0.143%
315	16.210	16.144	16.248	VV	1034	45059	0.52%	0.145%
316	16.253	16.248	16.264	VV	641	4719	0.05%	0.015%
317	16.272	16.264	16.293	VV	611	8288	0.10%	0.027%
318	16.303	16.293	16.310	VV	472	3937	0.05%	0.013%
319	16.315	16.310	16.320	VV	409	2361	0.03%	0.008%
320	16.330	16.320	16.352	VV	510	6784	0.08%	0.022%
321	16.368	16.352	16.378	VV	440	5482	0.06%	0.018%
322	16.406	16.378	16.434	VV	1301	25362	0.29%	0.082%
323	16.441	16.434	16.443	VV	434	1798	0.02%	0.006%
324	16.467	16.443	16.479	VV	1906	27595	0.32%	0.089%
325	16.497	16.479	16.518	VV	2338	36149	0.41%	0.116%
326	16.540	16.518	16.565	VV	2981	43980	0.50%	0.141%
327	16.577	16.565	16.600	VV	919	14229	0.16%	0.046%
328	16.604	16.600	16.615	VV	514	4223	0.05%	0.014%
329	16.623	16.615	16.638	VV	520	5378	0.06%	0.017%

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330	16.668	16.638	16.679	VV	529	8895	0.10%	0.029%
331	16.685	16.679	16.727	VV	360	6988	0.08%	0.022%
332	16.733	16.727	16.750	VV	216	2034	0.02%	0.007%
333	16.803	16.750	16.827	PV	1120	23548	0.27%	0.076%
334	16.833	16.827	16.840	VV	347	2312	0.03%	0.007%
335	16.866	16.840	16.900	VV	1158	24503	0.28%	0.079%
336	16.943	16.900	16.972	VV	2253	44562	0.51%	0.143%
337	16.978	16.972	16.985	VV	308	2290	0.03%	0.007%
338	16.999	16.985	17.002	VV	348	2602	0.03%	0.008%
339	17.012	17.002	17.017	VV	349	2470	0.03%	0.008%
340	17.059	17.017	17.105	VV	1269	27395	0.31%	0.088%
341	17.148	17.105	17.167	PV	914	21156	0.24%	0.068%
342	17.171	17.167	17.200	VV	606	7697	0.09%	0.025%
343	17.208	17.200	17.224	VV	318	2823	0.03%	0.009%
344	17.231	17.224	17.251	VV	349	4144	0.05%	0.013%
345	17.260	17.251	17.292	VV	501	7444	0.09%	0.024%
346	17.320	17.292	17.326	VV	519	7751	0.09%	0.025%
347	17.347	17.326	17.357	VV	1460	17500	0.20%	0.056%
348	17.379	17.357	17.402	VV	2663	42223	0.48%	0.136%
349	17.427	17.402	17.435	VV	522	8280	0.09%	0.027%
350	17.468	17.435	17.505	VV	4721	79462	0.91%	0.255%
351	17.521	17.505	17.549	VV	910	17178	0.20%	0.055%
352	17.553	17.549	17.561	VV	475	3122	0.04%	0.010%
353	17.573	17.561	17.579	VV	746	6319	0.07%	0.020%
354	17.582	17.579	17.593	VV	684	3928	0.05%	0.013%
355	17.600	17.593	17.618	VV	309	2386	0.03%	0.008%
356	17.628	17.618	17.636	VV	197	1080	0.01%	0.003%
357	17.672	17.636	17.703	VV	2228	36335	0.42%	0.117%
358	17.735	17.703	17.767	PV	5496	97204	1.11%	0.313%
359	17.800	17.767	17.833	VV	3389	74561	0.85%	0.240%
360	17.849	17.833	17.872	VV	657	11749	0.13%	0.038%
361	17.897	17.872	17.928	VV	805	18587	0.21%	0.060%
362	17.935	17.928	17.949	VV	301	2158	0.02%	0.007%
363	17.964	17.949	17.973	VV	318	1886	0.02%	0.006%
364	17.993	17.973	18.000	VV	369	3619	0.04%	0.012%
365	18.008	18.000	18.040	VV	415	4524	0.05%	0.015%
366	18.081	18.040	18.098	PV	723	14910	0.17%	0.048%
367	18.103	18.098	18.118	VV	414	2106	0.02%	0.007%
368	18.142	18.118	18.151	VV	609	7455	0.09%	0.024%
369	18.209	18.151	18.225	VV	2308	50498	0.58%	0.162%
370	18.246	18.225	18.285	VV	2473	43776	0.50%	0.141%

Sum of corrected areas: 31103054

rteres

Aromatic EPH 121024.M Sat Dec 21 05:20:33 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/15/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-01	SDG No.:	P5299
Lab Sample ID:	P5299-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	68.8
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
12/19/24 14:05	12/20/24 13:58	PB165775

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	1.13	J	1	0.55	1.45	mg/kg	FC068065.D
Aliphatic C12-C16	Aliphatic C12-C16	10.8		1	0.35	0.97	mg/kg	FC068065.D
Aliphatic C16-C21	Aliphatic C16-C21	0.89	J	1	0.44	1.45	mg/kg	FC068065.D
Aliphatic C21-C28	Aliphatic C21-C28	1.16	U	1	1.16	1.94	mg/kg	FC068065.D
Aliphatic C28-C40	Aliphatic C28-C40	8.94		1	2.61	2.90	mg/kg	FC068065.D
Aromatic C10-C12	Aromatic C10-C12	0.44	U	1	0.44	0.97	mg/kg	FD048903.D
Aromatic C12-C16	Aromatic C12-C16	1.75		1	0.49	1.45	mg/kg	FD048903.D
Aromatic C16-C21	Aromatic C16-C21	2.58		1	1.39	2.42	mg/kg	FD048903.D
Aromatic C21-C36	Aromatic C21-C36	4.39		1	2.90	3.87	mg/kg	FD048903.D
Total AliphaticEPH	Total AliphaticEPH	21.8			5.11	8.71	mg/kg	
Total AromaticEPH	Total AromaticEPH	8.72			5.22	8.71	mg/kg	
Total EPH	Total EPH	30.5			10.3	17.4	mg/kg	

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control 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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/15/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-01	SDG No.:	P5299
Lab Sample ID:	P5299-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	68.8
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068065.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	1.13	J	0.55	1.45	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	10.8		0.35	0.97	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.89	J	0.44	1.45	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	1.16	U	1.16	1.94	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	8.94		2.61	2.90	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	47.5		40 - 140	95%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5299-03	Acq On:	20 Dec 2024 13:58
Client Sample ID:	SB-01	Operator:	YP/AJ
Data file:	FC068065.D	Misc:	
Instrument:	FID_C	ALS Vial:	16
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.117	6.389	1855427	11.721	300	ug/ml
Aliphatic C12-C16	6.390	9.779	17925000	111.839	200	ug/ml
Aliphatic C16-C21	9.780	13.137	1396653	9.167	300	ug/ml
Aliphatic C21-C28	13.138	16.791	890402	6.529	400	ug/ml
Aliphatic C28-C40	16.792	21.609	9782704	92.32	600	ug/ml
Aliphatic EPH	3.117	21.609	31850186	231.575		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.888	12.888	6062473	47.51		ug/ml
Aliphatic C9-C28	3.117	16.791	22067482	139.256	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068065.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 13:58
Operator : YP/AJ
Sample : P5299-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
SB-01

Integration File: autoint1.e
Quant Time: Dec 21 01:52:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
12) S 1-chlorooctadecane (S...	12.888	6062473	47.514 ug/ml
Spiked Amount 50.000		Recovery =	95.03%

Target Compounds

(f)=RT Delta > 1/2 Window

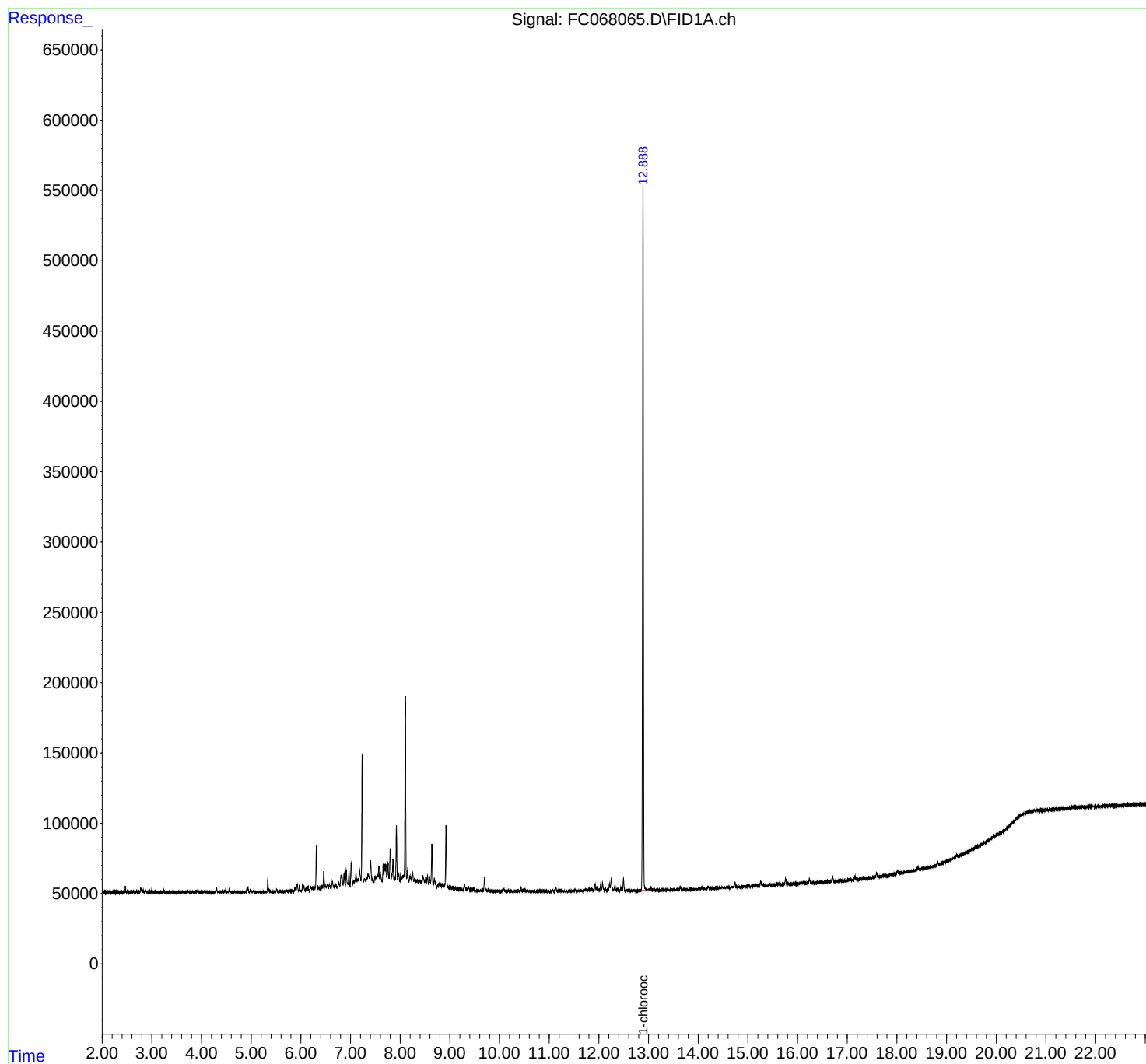
(m)=manual int.

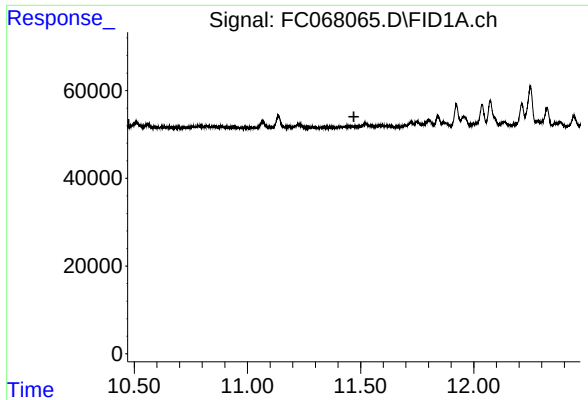
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068065.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 13:58
Operator : YP/AJ
Sample : P5299-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
SB-01

Integration File: autoint1.e
Quant Time: Dec 21 01:52:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

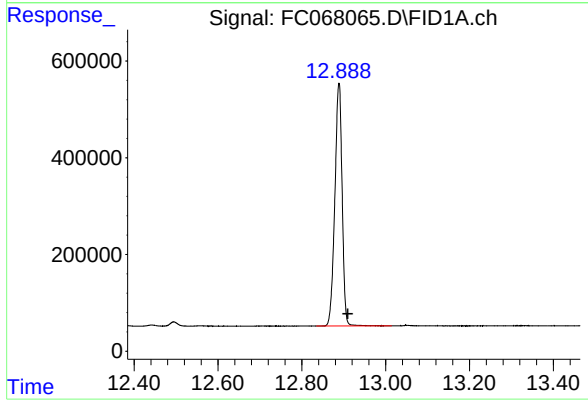




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T.: 11.470 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
SB-01



#12 1-chlorooctadecane (SURR)

R.T.: 12.888 min
Delta R.T.: -0.021 min
Response: 6062473
Conc: 47.51 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068065.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 13:58
Sample : P5299-03
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.138	3.104	3.158	BV	57	1123	0.02%	0.003%
2	3.184	3.158	3.199	PV	80	1157	0.02%	0.003%
3	3.245	3.199	3.273	VV	1189	12732	0.21%	0.033%
4	3.300	3.273	3.331	PV	163	2235	0.04%	0.006%
5	3.342	3.331	3.378	VV	117	1729	0.03%	0.005%
6	3.389	3.378	3.414	VV	149	1541	0.03%	0.004%
7	3.444	3.414	3.456	VV	207	2794	0.05%	0.007%
8	3.472	3.456	3.490	VV	94	1697	0.03%	0.004%
9	3.517	3.490	3.536	VV	412	6512	0.11%	0.017%
10	3.565	3.536	3.591	VV	428	6167	0.10%	0.016%
11	3.613	3.591	3.666	PV	586	9139	0.15%	0.024%
12	3.674	3.666	3.710	VV	175	2889	0.05%	0.008%
13	3.733	3.710	3.798	VV	591	10657	0.17%	0.028%
14	3.818	3.798	3.874	VV	460	9612	0.16%	0.025%
15	3.906	3.874	3.919	VV	1200	15027	0.25%	0.039%
16	3.934	3.919	3.957	VV	1599	15409	0.25%	0.041%
17	3.967	3.957	3.979	VV	288	2757	0.05%	0.007%
18	4.000	3.979	4.031	VV	863	9497	0.16%	0.025%
19	4.068	4.031	4.101	VV	1176	21804	0.36%	0.057%
20	4.106	4.101	4.157	VV	279	6803	0.11%	0.018%
21	4.167	4.157	4.241	VV	218	6973	0.11%	0.018%
22	4.256	4.241	4.278	VV	265	3870	0.06%	0.010%
23	4.303	4.278	4.330	VV	3851	39475	0.65%	0.104%
24	4.343	4.330	4.361	VV	494	5945	0.10%	0.016%
25	4.371	4.361	4.391	VV	243	3169	0.05%	0.008%
26	4.406	4.391	4.438	VV	540	8951	0.15%	0.024%
27	4.469	4.438	4.488	VV	1270	18868	0.31%	0.050%
28	4.501	4.488	4.510	VV	396	4330	0.07%	0.011%
29	4.526	4.510	4.541	VV	943	10505	0.17%	0.028%
30	4.555	4.541	4.572	VV	2053	19282	0.32%	0.051%
31	4.581	4.572	4.595	VV	445	4179	0.07%	0.011%
32	4.608	4.595	4.648	VV	363	7121	0.12%	0.019%
33	4.673	4.648	4.692	VV	532	7519	0.12%	0.020%
34	4.717	4.692	4.735	VV	402	5085	0.08%	0.013%
35	4.767	4.735	4.798	VV	301	5892	0.10%	0.015%
36	4.822	4.798	4.838	VV	184	1932	0.03%	0.005%

					rteres			
37	4.855	4.838	4.881	VV	328	4655	0.08%	0.012%
38	4.909	4.881	4.916	VV	1224	11151	0.18%	0.029%
39	4.934	4.916	4.960	VV	3921	47156	0.77%	0.124%
40	4.979	4.960	5.005	VV	1485	21270	0.35%	0.056%
41	5.015	5.005	5.024	VV	463	3928	0.06%	0.010%
42	5.040	5.024	5.073	VV	1267	13972	0.23%	0.037%
43	5.097	5.073	5.118	PV	176	3040	0.05%	0.008%
44	5.134	5.118	5.151	VV	573	7228	0.12%	0.019%
45	5.161	5.151	5.184	VV	340	5781	0.09%	0.015%
46	5.195	5.184	5.209	VV	486	5410	0.09%	0.014%
47	5.223	5.209	5.238	VV	394	4832	0.08%	0.013%
48	5.251	5.238	5.271	VV	299	4390	0.07%	0.012%
49	5.282	5.271	5.311	VV	320	4825	0.08%	0.013%
50	5.334	5.311	5.365	VV	8942	104493	1.72%	0.275%
51	5.374	5.365	5.414	VV	1388	19252	0.32%	0.051%
52	5.431	5.414	5.444	VV	418	5282	0.09%	0.014%
53	5.454	5.444	5.463	VV	291	2831	0.05%	0.007%
54	5.513	5.463	5.542	VV	2331	38519	0.63%	0.101%
55	5.582	5.542	5.600	VV	770	15717	0.26%	0.041%
56	5.626	5.600	5.661	VV	1539	29760	0.49%	0.078%
57	5.681	5.661	5.696	VV	979	13563	0.22%	0.036%
58	5.721	5.696	5.756	VV	1500	27735	0.46%	0.073%
59	5.785	5.756	5.804	VV	1086	21359	0.35%	0.056%
60	5.835	5.804	5.853	VV	1159	25900	0.43%	0.068%
61	5.886	5.853	5.904	VV	2893	58850	0.97%	0.155%
62	5.928	5.904	5.952	VV	5516	90532	1.49%	0.238%
63	5.972	5.952	6.004	VV	5096	71296	1.17%	0.187%
64	6.035	6.004	6.049	VV	5983	82742	1.36%	0.217%
65	6.060	6.049	6.084	VV	4787	65378	1.07%	0.172%
66	6.103	6.084	6.127	VV	2421	44296	0.73%	0.116%
67	6.145	6.127	6.172	VV	4358	63070	1.04%	0.166%
68	6.200	6.172	6.221	VV	3437	73387	1.20%	0.193%
69	6.239	6.221	6.259	VV	4087	62600	1.03%	0.165%
70	6.312	6.259	6.357	VV	33344	464836	7.63%	1.222%
71	6.367	6.357	6.383	VV	3480	42014	0.69%	0.110%
72	6.404	6.383	6.424	VV	5034	92023	1.51%	0.242%
73	6.434	6.424	6.441	VV	3847	36849	0.60%	0.097%
74	6.461	6.441	6.515	VV	14679	285715	4.69%	0.751%
75	6.532	6.515	6.554	VV	5875	104096	1.71%	0.274%
76	6.573	6.554	6.607	VV	5116	124372	2.04%	0.327%
77	6.634	6.607	6.657	VV	7598	150676	2.47%	0.396%
78	6.667	6.657	6.680	VV	4925	60007	0.99%	0.158%
79	6.697	6.680	6.731	VV	5165	127624	2.09%	0.335%
80	6.769	6.731	6.785	VV	5895	159545	2.62%	0.419%
81	6.809	6.785	6.819	VV	11921	177144	2.91%	0.466%
82	6.828	6.819	6.849	VV	11805	158896	2.61%	0.418%
83	6.870	6.849	6.893	VV	12854	216322	3.55%	0.569%
84	6.913	6.893	6.942	VV	16106	275282	4.52%	0.724%
85	6.970	6.942	6.990	VV	14376	240668	3.95%	0.633%
86	7.013	6.990	7.049	VV	20947	390382	6.41%	1.026%
87	7.065	7.049	7.078	VV	7676	122573	2.01%	0.322%
88	7.110	7.078	7.128	VV	13467	288805	4.74%	0.759%
89	7.149	7.128	7.163	VV	8987	179597	2.95%	0.472%

					rteres			
90	7.181	7.163	7.209	VV	15503	317861	5.22%	0.835%
91	7.234	7.209	7.262	VV	98059	1163514	19.10%	3.058%
92	7.283	7.262	7.308	VV	9436	234920	3.86%	0.617%
93	7.355	7.308	7.381	VV	12645	452586	7.43%	1.190%
94	7.406	7.381	7.434	VV	21976	452096	7.42%	1.188%
95	7.448	7.434	7.470	VV	9711	185305	3.04%	0.487%
96	7.493	7.470	7.505	VV	11226	200949	3.30%	0.528%
97	7.517	7.505	7.530	VV	11044	152211	2.50%	0.400%
98	7.569	7.530	7.585	VV	18090	422096	6.93%	1.109%
99	7.599	7.585	7.638	VV	13968	331315	5.44%	0.871%
100	7.657	7.638	7.672	VV	19270	286094	4.70%	0.752%
101	7.687	7.672	7.699	VV	19566	272017	4.47%	0.715%
102	7.710	7.699	7.728	VV	19487	266825	4.38%	0.701%
103	7.754	7.728	7.774	VV	20825	394270	6.47%	1.036%
104	7.799	7.774	7.824	VV	30412	538706	8.84%	1.416%
105	7.854	7.824	7.878	VV	23025	460939	7.57%	1.212%
106	7.893	7.878	7.901	VV	10322	129859	2.13%	0.341%
107	7.924	7.901	7.949	VV	46815	653965	10.73%	1.719%
108	7.970	7.949	7.993	VV	12914	279673	4.59%	0.735%
109	8.012	7.993	8.030	VV	13657	235400	3.86%	0.619%
110	8.058	8.030	8.068	VV	11109	240196	3.94%	0.631%
111	8.103	8.068	8.132	VV	139861	1727440	28.36%	4.540%
112	8.150	8.132	8.174	VV	15849	293184	4.81%	0.771%
113	8.197	8.174	8.211	VV	11605	212298	3.48%	0.558%
114	8.221	8.211	8.231	VV	10029	115979	1.90%	0.305%
115	8.252	8.231	8.271	VV	13496	256178	4.21%	0.673%
116	8.295	8.271	8.328	VV	9141	279289	4.58%	0.734%
117	8.344	8.328	8.361	VV	8157	149471	2.45%	0.393%
118	8.391	8.361	8.421	VV	7952	263587	4.33%	0.693%
119	8.428	8.421	8.441	VV	6958	80643	1.32%	0.212%
120	8.456	8.441	8.491	VV	11806	274063	4.50%	0.720%
121	8.517	8.491	8.534	VV	9976	219000	3.59%	0.576%
122	8.550	8.534	8.571	VV	11712	190858	3.13%	0.502%
123	8.591	8.571	8.608	VV	10665	174209	2.86%	0.458%
124	8.637	8.608	8.664	VV	34019	517157	8.49%	1.359%
125	8.688	8.664	8.736	VV	9900	259842	4.27%	0.683%
126	8.758	8.736	8.767	VV	4738	77749	1.28%	0.204%
127	8.783	8.767	8.801	VV	5997	100876	1.66%	0.265%
128	8.820	8.801	8.838	VV	5169	97269	1.60%	0.256%
129	8.859	8.838	8.884	VV	5675	129923	2.13%	0.341%
130	8.922	8.884	8.981	VV	47367	705388	11.58%	1.854%
131	9.005	8.981	9.029	VV	4609	97060	1.59%	0.255%
132	9.053	9.029	9.089	VV	2974	89897	1.48%	0.236%
133	9.115	9.089	9.141	VV	2499	67698	1.11%	0.178%
134	9.155	9.141	9.188	VV	2352	57168	0.94%	0.150%
135	9.220	9.188	9.263	VV	2137	79511	1.31%	0.209%
136	9.294	9.263	9.327	VV	5021	110253	1.81%	0.290%
137	9.339	9.327	9.353	VV	2160	30239	0.50%	0.079%
138	9.377	9.353	9.402	VV	2967	61827	1.01%	0.163%
139	9.425	9.402	9.443	VV	3114	49488	0.81%	0.130%
140	9.456	9.443	9.464	VV	1928	21597	0.35%	0.057%
141	9.478	9.464	9.518	VV	2305	43805	0.72%	0.115%

					rteres			
142	9.531	9.518	9.591	VV	958	29867	0.49%	0.079%
143	9.615	9.591	9.631	VV	1031	18983	0.31%	0.050%
144	9.652	9.631	9.672	VV	1333	25117	0.41%	0.066%
145	9.698	9.672	9.741	VV	10002	135184	2.22%	0.355%
146	9.769	9.741	9.788	VV	906	21530	0.35%	0.057%
147	9.798	9.788	9.838	VV	788	17434	0.29%	0.046%
148	9.846	9.838	9.858	VV	430	4538	0.07%	0.012%
149	9.868	9.858	9.895	VV	459	8055	0.13%	0.021%
150	9.908	9.895	9.959	VV	363	12212	0.20%	0.032%
151	9.976	9.959	9.998	VV	470	7050	0.12%	0.019%
152	10.044	9.998	10.057	VV	592	15323	0.25%	0.040%
153	10.085	10.057	10.111	VV	2073	35725	0.59%	0.094%
154	10.132	10.111	10.154	VV	649	11682	0.19%	0.031%
155	10.174	10.154	10.211	VV	650	12817	0.21%	0.034%
156	10.229	10.211	10.271	VV	516	9394	0.15%	0.025%
157	10.296	10.271	10.308	VV	336	5074	0.08%	0.013%
158	10.322	10.308	10.348	VV	333	6128	0.10%	0.016%
159	10.369	10.348	10.395	VV	431	9272	0.15%	0.024%
160	10.435	10.395	10.481	VV	2863	49894	0.82%	0.131%
161	10.508	10.481	10.536	VV	1327	25332	0.42%	0.067%
162	10.560	10.536	10.611	VV	859	17813	0.29%	0.047%
163	10.646	10.611	10.673	VV	277	7084	0.12%	0.019%
164	10.688	10.673	10.702	VV	155	2026	0.03%	0.005%
165	10.718	10.702	10.738	VV	154	2434	0.04%	0.006%
166	10.762	10.738	10.774	VV	402	5836	0.10%	0.015%
167	10.787	10.774	10.804	VV	457	6882	0.11%	0.018%
168	10.825	10.804	10.844	VV	433	8388	0.14%	0.022%
169	10.855	10.844	10.878	VV	407	6004	0.10%	0.016%
170	10.887	10.878	10.914	VV	392	4466	0.07%	0.012%
171	10.939	10.914	10.971	VV	335	4819	0.08%	0.013%
172	10.995	10.971	11.005	VV	111	1061	0.02%	0.003%
173	11.016	11.005	11.035	PV	98	1261	0.02%	0.003%
174	11.067	11.035	11.097	VV	1495	20938	0.34%	0.055%
175	11.136	11.097	11.188	VV	2859	41738	0.69%	0.110%
176	11.191	11.188	11.198	VV	255	1293	0.02%	0.003%
177	11.228	11.198	11.269	VV	807	14599	0.24%	0.038%
178	11.289	11.269	11.308	VV	156	1821	0.03%	0.005%
179	11.338	11.308	11.385	PV	105	3015	0.05%	0.008%
180	11.441	11.385	11.476	VV	304	10258	0.17%	0.027%
181	11.521	11.476	11.574	VV	956	25588	0.42%	0.067%
182	11.588	11.574	11.611	VV	534	9101	0.15%	0.024%
183	11.628	11.611	11.671	VV	409	8623	0.14%	0.023%
184	11.722	11.671	11.738	VV	1206	23086	0.38%	0.061%
185	11.749	11.738	11.769	VV	1341	18159	0.30%	0.048%
186	11.803	11.769	11.822	VV	1623	33523	0.55%	0.088%
187	11.841	11.822	11.859	VV	2568	34094	0.56%	0.090%
188	11.868	11.859	11.897	VV	1048	17430	0.29%	0.046%
189	11.923	11.897	11.941	VV	5216	65919	1.08%	0.173%
190	11.955	11.941	11.988	VV	2412	43476	0.71%	0.114%
191	12.037	11.988	12.054	VV	5191	77693	1.28%	0.204%
192	12.073	12.054	12.111	VV	6086	93428	1.53%	0.246%
193	12.135	12.111	12.163	VV	1145	22770	0.37%	0.060%
194	12.212	12.163	12.226	VV	5268	75482	1.24%	0.198%

					rteres			
195	12.250	12.226	12.274	VV	9301	139348	2.29%	0.366%
196	12.284	12.274	12.296	VV	1308	14581	0.24%	0.038%
197	12.323	12.296	12.346	VV	4284	62594	1.03%	0.165%
198	12.381	12.346	12.409	VV	1033	22813	0.37%	0.060%
199	12.442	12.409	12.467	VV	2460	32738	0.54%	0.086%
200	12.495	12.467	12.531	VV	8953	112514	1.85%	0.296%
201	12.557	12.531	12.634	VV	653	14788	0.24%	0.039%
202	12.669	12.634	12.674	PV	79	1237	0.02%	0.003%
203	12.706	12.674	12.748	PV	216	6477	0.11%	0.017%
204	12.765	12.748	12.783	VV	131	2057	0.03%	0.005%
205	12.806	12.783	12.824	VV	256	4290	0.07%	0.011%
206	12.888	12.824	13.013	VV	501718	6091987	100.00%	16.012%
207	13.049	13.013	13.094	VV	1824	30905	0.51%	0.081%
208	13.105	13.094	13.161	VV	446	12273	0.20%	0.032%
209	13.170	13.161	13.205	VV	251	4472	0.07%	0.012%
210	13.333	13.205	13.372	VV	423	24558	0.40%	0.065%
211	13.504	13.372	13.527	VV	427	19611	0.32%	0.052%
212	13.586	13.527	13.608	VV	698	15277	0.25%	0.040%
213	13.638	13.608	13.677	VV	2301	33894	0.56%	0.089%
214	13.696	13.677	13.715	VV	227	4311	0.07%	0.011%
215	13.727	13.715	13.772	VV	515	4796	0.08%	0.013%
216	13.781	13.772	13.800	VV	120	1108	0.02%	0.003%
217	13.859	13.800	13.898	PV	426	11358	0.19%	0.030%
218	13.904	13.898	13.918	VV	202	1806	0.03%	0.005%
219	13.936	13.918	13.951	VV	174	1968	0.03%	0.005%
220	13.972	13.951	13.993	VV	131	1233	0.02%	0.003%
221	14.002	13.993	14.017	VV	111	816	0.01%	0.002%
222	14.073	14.017	14.118	VV	1398	26373	0.43%	0.069%
223	14.128	14.118	14.147	VV	211	2616	0.04%	0.007%
224	14.201	14.147	14.237	VV	1798	27585	0.45%	0.073%
225	14.256	14.237	14.298	VV	334	7894	0.13%	0.021%
226	14.358	14.298	14.388	VV	254	6865	0.11%	0.018%
227	14.404	14.388	14.424	PV	416	6503	0.11%	0.017%
228	14.440	14.424	14.464	VV	299	5289	0.09%	0.014%
229	14.514	14.464	14.534	VV	293	8528	0.14%	0.022%
230	14.554	14.534	14.563	PV	198	2788	0.05%	0.007%
231	14.596	14.563	14.620	VV	358	8225	0.14%	0.022%
232	14.696	14.620	14.718	VV	769	20484	0.34%	0.054%
233	14.739	14.718	14.774	VV	3711	53130	0.87%	0.140%
234	14.793	14.774	14.851	VV	698	14243	0.23%	0.037%
235	14.859	14.851	14.891	VV	180	2205	0.04%	0.006%
236	14.931	14.891	14.968	VV	628	13358	0.22%	0.035%
237	14.984	14.968	15.001	VV	416	6430	0.11%	0.017%
238	15.016	15.001	15.034	VV	303	4317	0.07%	0.011%
239	15.048	15.034	15.064	VV	259	3300	0.05%	0.009%
240	15.125	15.064	15.135	VV	520	13560	0.22%	0.036%
241	15.158	15.135	15.214	VV	667	21868	0.36%	0.057%
242	15.257	15.214	15.284	VV	3391	54732	0.90%	0.144%
243	15.305	15.284	15.385	VV	872	24650	0.40%	0.065%
244	15.438	15.385	15.472	PV	641	14556	0.24%	0.038%
245	15.487	15.472	15.531	VV	433	10733	0.18%	0.028%
246	15.578	15.531	15.614	VV	733	23654	0.39%	0.062%

					rteres			
247	15.624	15.614	15.671	VV	680	17468	0.29%	0.046%
248	15.688	15.671	15.703	VV	395	6876	0.11%	0.018%
249	15.721	15.703	15.733	VV	618	9580	0.16%	0.025%
250	15.758	15.733	15.788	VV	4350	62693	1.03%	0.165%
251	15.802	15.788	15.841	VV	772	14844	0.24%	0.039%
252	15.849	15.841	15.870	VV	231	2396	0.04%	0.006%
253	15.931	15.870	15.971	PV	629	21510	0.35%	0.057%
254	15.990	15.971	16.020	VV	380	8575	0.14%	0.023%
255	16.068	16.020	16.094	PV	696	19525	0.32%	0.051%
256	16.115	16.094	16.185	VV	599	22738	0.37%	0.060%
257	16.240	16.185	16.268	VV	3308	52516	0.86%	0.138%
258	16.279	16.268	16.298	VV	569	7980	0.13%	0.021%
259	16.308	16.298	16.333	VV	367	5081	0.08%	0.013%
260	16.344	16.333	16.360	VV	133	1603	0.03%	0.004%
261	16.411	16.360	16.445	PV	525	14948	0.25%	0.039%
262	16.462	16.445	16.488	VV	517	8270	0.14%	0.022%
263	16.514	16.488	16.528	VV	304	5498	0.09%	0.014%
264	16.544	16.528	16.557	VV	594	7526	0.12%	0.020%
265	16.591	16.557	16.645	VV	718	22992	0.38%	0.060%
266	16.706	16.645	16.768	PV	3609	66598	1.09%	0.175%
267	16.779	16.768	16.791	VV	232	2091	0.03%	0.005%
268	16.804	16.791	16.813	PV	154	1387	0.02%	0.004%
269	16.863	16.813	16.877	PV	408	8933	0.15%	0.023%
270	16.887	16.877	16.917	VV	320	4830	0.08%	0.013%
271	17.029	16.917	17.048	VV	353	16654	0.27%	0.044%
272	17.075	17.048	17.107	VV	204	5518	0.09%	0.015%
273	17.157	17.107	17.231	VV	2882	51919	0.85%	0.136%
274	17.357	17.231	17.393	PV	257	24616	0.40%	0.065%
275	17.591	17.393	17.624	PV	3080	68962	1.13%	0.181%
276	17.754	17.624	17.774	VV	293	12706	0.21%	0.033%
277	17.802	17.774	17.820	VV	188	2072	0.03%	0.005%
278	17.873	17.820	17.918	PV	521	11725	0.19%	0.031%
279	18.013	17.918	18.041	VV	2517	42763	0.70%	0.112%
280	18.087	18.041	18.101	VV	146	3989	0.07%	0.010%
281	18.338	18.101	18.351	PV	199	18958	0.31%	0.050%
282	18.423	18.351	18.490	VV	2340	47163	0.77%	0.124%
283	18.820	18.490	18.850	PV	1301	-338	-0.01%	-0.001%
284	19.206	18.850	19.234	PV	1885	60182	0.99%	0.158%
285	19.583	19.234	19.598	VV	2819	266363	4.37%	0.700%
286	19.946	19.598	19.965	VV	5582	713326	11.71%	1.875%
287	20.659	19.965	20.683	VV	13332	3983051	65.38%	10.469%
288	20.809	20.683	20.898	VV	11754	1508180	24.76%	3.964%
289	20.905	20.898	20.928	VV	10279	182267	2.99%	0.479%
290	20.993	20.928	21.018	VV	9260	509049	8.36%	1.338%
291	21.395	21.018	21.418	VV	5203	1680898	27.59%	4.418%
292	21.454	21.418	21.471	VV	4549	147069	2.41%	0.387%
293	21.526	21.471	21.561	VV	4158	217089	3.56%	0.571%
294	21.600	21.561	21.676	VV	3154	193373	3.17%	0.508%
295	21.783	21.676	21.828	VV	903	103553	1.70%	0.272%

Sum of corrected areas: 38045728

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/15/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-01	SDG No.:	P5299
Lab Sample ID:	P5299-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	68.8
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048903.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.44	U	0.44	0.97	mg/kg
Aromatic C12-C16	Aromatic C12-C16	1.75		0.49	1.45	mg/kg
Aromatic C16-C21	Aromatic C16-C21	2.58		1.39	2.42	mg/kg
Aromatic C21-C36	Aromatic C21-C36	4.39		2.90	3.87	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	55.1		40 - 140	110%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	58.2		40 - 140	116%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	31.5		40 - 140	63%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P5299-03	Acq On:	20 Dec 2024 13:58
Client Sample ID:	SB-01	Operator:	YP/AJ
Data file:	FD048903.D	Misc:	
Instrument:	FID_D	ALS Vial:	66
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.083	5.800	698495	3.672	200	ug/ml
Aromatic C12-C16	5.801	8.405	3368887	18.124	300	ug/ml
Aromatic C16-C21	8.406	12.669	4515909	26.639	500	ug/ml
Aromatic C21-C36	12.670	18.077	6416442	45.317	800	ug/ml
Aromatic EPH	4.083	18.077	14999733	93.753		ug/ml
ortho-Terphenyl (SURR)	11.245	11.245	5589681	31.46		ug/ml
2-Bromonaphthalene (SURR)	7.361	7.361	9288209	55.14		ug/ml
2-Fluorobiphenyl (SURR)	8.211	8.211	6014948	58.22		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048903.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 13:58
 Operator : YP/AJ
 Sample : P5299-03
 Misc :
 ALS Vial : 66 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 SB-01

Integration File: autoint1.e
 Quant Time: Dec 21 04:04:43 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 06:07:50 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.361	9288209	55.144 ug/ml
Spiked Amount 50.000		Recovery =	110.29%
6) S 2-Fluorobiphenyl (SURR)	8.211	6014948	58.223 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	116.45%
11) S ortho-Terphenyl (SURR)	11.245	5589681	31.462 ug/ml
Spiked Amount 50.000		Recovery =	62.92%

Target Compounds

(f)=RT Delta > 1/2 Window

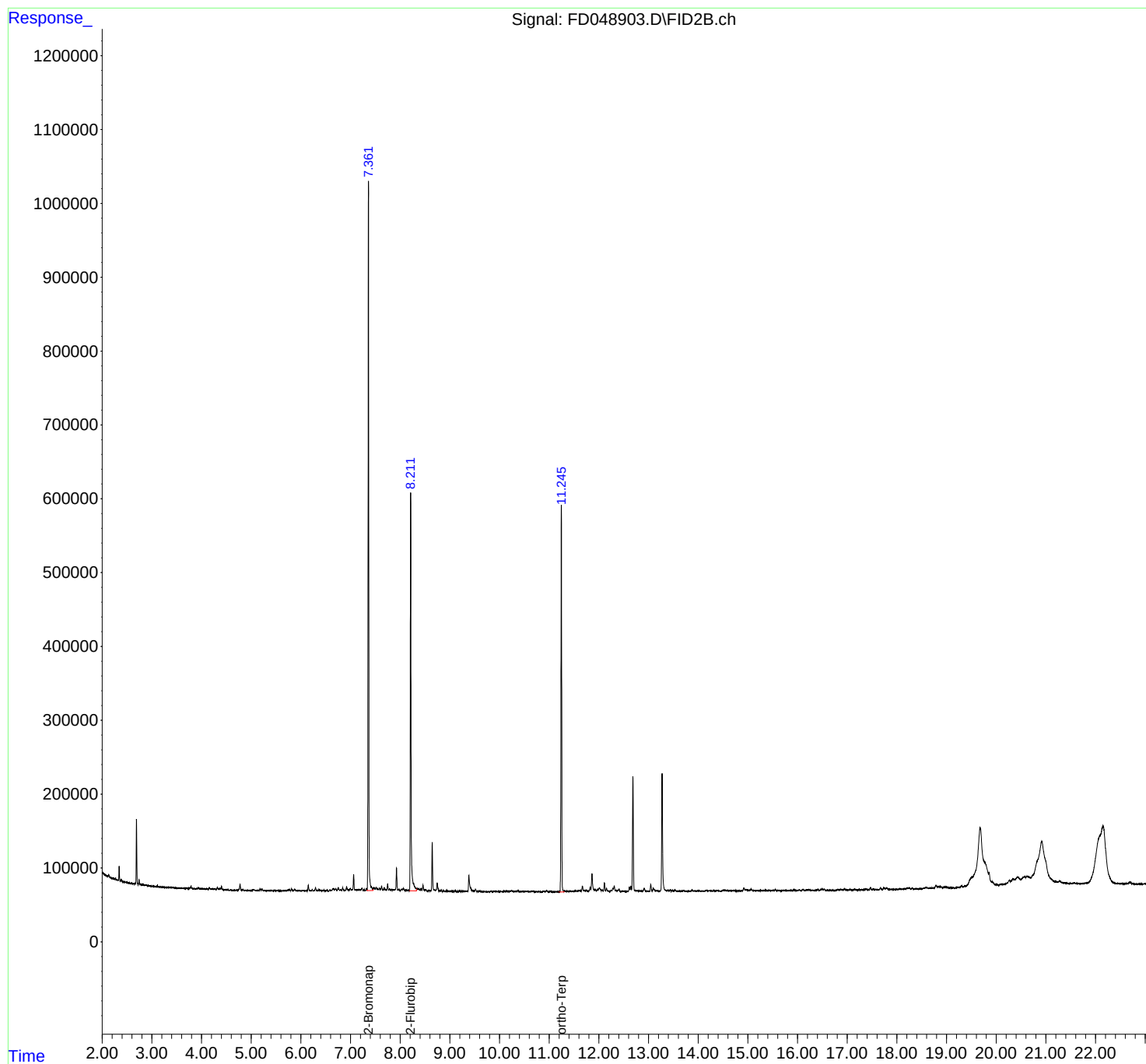
(m)=manual int.

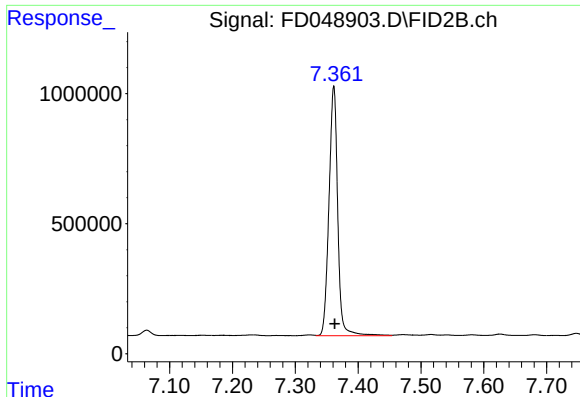
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048903.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 13:58
Operator : YP/AJ
Sample : P5299-03
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
SB-01

Integration File: autoint1.e
Quant Time: Dec 21 04:04:43 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 06:07:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

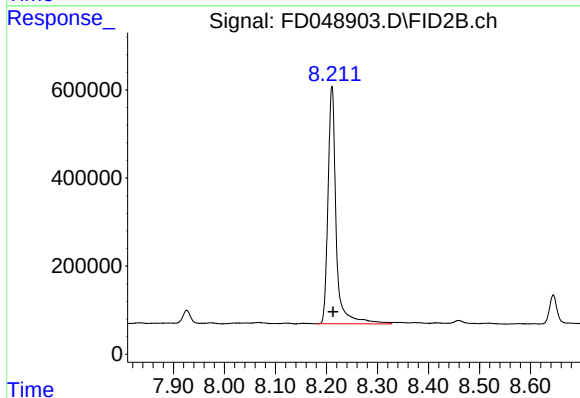




#4 2-Bromonaphthalene (SURRE)

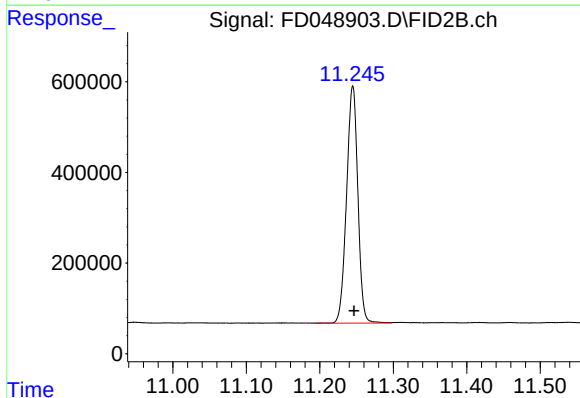
R.T.: 7.361 min
Delta R.T.: -0.002 min
Response: 9288209
Conc: 55.14 ug/ml

Instrument :
FID_D
ClientSampleId :
SB-01



#6 2-Fluorobiphenyl (SURRE)

R.T.: 8.211 min
Delta R.T.: -0.002 min
Response: 6014948
Conc: 58.22 ug/ml



#11 ortho-Terphenyl (SURRE)

R.T.: 11.245 min
Delta R.T.: -0.002 min
Response: 5589681
Conc: 31.46 ug/ml

rteres

Area Percent

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048903.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 13:58
 Sample : P5299-03
 Misc :
 ALS Vial : 66 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH
 121024.M
 Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.050	4.042	4.074	BV	362	2758	0.03%	0.008%
2	4.090	4.074	4.110	PV	479	7016	0.07%	0.019%
3	4.159	4.110	4.200	VV	2598	40666	0.43%	0.112%
4	4.208	4.200	4.222	VV	681	6753	0.07%	0.019%
5	4.233	4.222	4.247	VV	674	7426	0.08%	0.021%
6	4.265	4.247	4.294	VV	1205	18328	0.20%	0.051%
7	4.321	4.294	4.357	VV	3472	54108	0.58%	0.150%
8	4.374	4.357	4.388	VV	2679	30587	0.33%	0.085%
9	4.404	4.388	4.443	VV	4865	54601	0.58%	0.151%
10	4.455	4.443	4.463	VV	404	3192	0.03%	0.009%
11	4.480	4.463	4.503	VV	850	12541	0.13%	0.035%
12	4.521	4.503	4.543	VV	611	9312	0.10%	0.026%
13	4.546	4.543	4.573	VV	203	2466	0.03%	0.007%
14	4.589	4.573	4.614	PV	584	8015	0.09%	0.022%
15	4.619	4.614	4.643	VV	248	2313	0.02%	0.006%
16	4.653	4.643	4.682	VV	402	5053	0.05%	0.014%
17	4.694	4.682	4.737	VV	481	9769	0.10%	0.027%
18	4.775	4.737	4.812	VV	8562	116859	1.25%	0.323%
19	4.831	4.812	4.860	VV	2095	22984	0.25%	0.064%
20	4.882	4.860	4.910	PV	513	8254	0.09%	0.023%
21	4.916	4.910	4.924	VV	202	1241	0.01%	0.003%
22	4.944	4.924	4.955	VV	322	3167	0.03%	0.009%
23	4.971	4.955	4.994	PV	478	5965	0.06%	0.016%
24	5.008	4.994	5.013	VV	379	2763	0.03%	0.008%
25	5.033	5.013	5.054	VV	1476	23770	0.25%	0.066%

					rteres			
26	5.056	5.054	5.120	VV	1140	24390	0.26%	0.067%
27	5.125	5.120	5.130	VV	298	1551	0.02%	0.004%
28	5.139	5.130	5.156	VV	450	4760	0.05%	0.013%
29	5.180	5.156	5.202	VV	3132	38625	0.41%	0.107%
30	5.218	5.202	5.262	VV	3014	38768	0.41%	0.107%
31	5.274	5.262	5.296	VV	673	7206	0.08%	0.020%
32	5.300	5.296	5.318	PV	112	1033	0.01%	0.003%
33	5.341	5.318	5.358	VV	717	9411	0.10%	0.026%
34	5.363	5.358	5.380	VV	445	4180	0.04%	0.012%
35	5.383	5.380	5.404	VV	183	2331	0.02%	0.006%
36	5.426	5.411	5.445	VV	416	4168	0.04%	0.012%
37	5.468	5.445	5.500	VV	789	10737	0.11%	0.030%
38	5.520	5.500	5.541	VV	447	7539	0.08%	0.021%
39	5.547	5.541	5.589	VV	322	4358	0.05%	0.012%
40	5.605	5.589	5.611	PV	251	1827	0.02%	0.005%
41	5.629	5.611	5.638	VV	338	3780	0.04%	0.010%
42	5.643	5.638	5.666	VV	393	3925	0.04%	0.011%
43	5.700	5.666	5.712	VV	575	10883	0.12%	0.030%
44	5.768	5.712	5.796	VV	2049	61874	0.66%	0.171%
45	5.813	5.796	5.845	VV	2686	40696	0.43%	0.113%
46	5.877	5.845	5.914	VV	2412	49631	0.53%	0.137%
47	5.932	5.914	5.960	VV	765	13927	0.15%	0.039%
48	5.972	5.960	5.990	VV	680	7295	0.08%	0.020%
49	5.999	5.990	6.009	VV	216	1328	0.01%	0.004%
50	6.030	6.009	6.044	PV	765	9625	0.10%	0.027%
51	6.064	6.044	6.083	VV	712	10779	0.11%	0.030%
52	6.110	6.083	6.127	VV	593	9431	0.10%	0.026%
53	6.150	6.127	6.198	VV	8255	102004	1.09%	0.282%
54	6.228	6.198	6.250	VV	1789	25641	0.27%	0.071%
55	6.264	6.250	6.275	VV	1142	11741	0.13%	0.032%
56	6.296	6.275	6.322	VV	4833	62652	0.67%	0.173%
57	6.330	6.322	6.350	VV	1013	13810	0.15%	0.038%
58	6.367	6.350	6.387	VV	1745	24559	0.26%	0.068%
59	6.393	6.387	6.440	VV	859	16699	0.18%	0.046%
60	6.455	6.440	6.490	VV	1336	22055	0.24%	0.061%
61	6.524	6.490	6.562	VV	1018	23119	0.25%	0.064%
62	6.584	6.562	6.610	PV	2174	30677	0.33%	0.085%
63	6.643	6.610	6.652	VV	3136	49017	0.52%	0.136%
64	6.661	6.652	6.677	VV	2972	36268	0.39%	0.100%
65	6.686	6.677	6.690	VV	2438	16207	0.17%	0.045%
66	6.702	6.690	6.729	VV	3558	50642	0.54%	0.140%
67	6.747	6.729	6.786	VV	3961	88543	0.94%	0.245%
68	6.803	6.786	6.818	VV	2554	31075	0.33%	0.086%
69	6.842	6.818	6.887	VV	4800	92025	0.98%	0.255%

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70	6.922	6.887	6.955	VV	6469	115638	1.23%	0.320%
71	6.964	6.955	6.975	VV	1864	21309	0.23%	0.059%
72	6.996	6.975	7.015	VV	3864	66848	0.71%	0.185%
73	7.024	7.015	7.040	VV	2475	32553	0.35%	0.090%
74	7.064	7.040	7.089	VV	22506	250349	2.67%	0.692%
75	7.117	7.089	7.135	VV	2260	52846	0.56%	0.146%
76	7.155	7.135	7.172	VV	2678	49043	0.52%	0.136%
77	7.183	7.172	7.202	VV	2624	40839	0.44%	0.113%
78	7.232	7.202	7.257	VV	4242	89506	0.95%	0.248%
79	7.271	7.257	7.298	VV	2102	37731	0.40%	0.104%
80	7.322	7.298	7.335	VV	4054	59038	0.63%	0.163%
81	7.361	7.335	7.455	VV	962338	9375515	100.00%	25.929%
82	7.472	7.455	7.498	VV	5338	105562	1.13%	0.292%
83	7.516	7.498	7.531	VV	5764	86630	0.92%	0.240%
84	7.541	7.531	7.564	VV	4376	63677	0.68%	0.176%
85	7.581	7.564	7.604	VV	4789	80529	0.86%	0.223%
86	7.626	7.604	7.665	VV	7445	139430	1.49%	0.386%
87	7.681	7.665	7.699	VV	4965	68222	0.73%	0.189%
88	7.713	7.699	7.726	VV	2399	35543	0.38%	0.098%
89	7.747	7.726	7.769	VV	10383	133244	1.42%	0.369%
90	7.787	7.769	7.818	VV	3175	69716	0.74%	0.193%
91	7.833	7.818	7.852	VV	3291	50017	0.53%	0.138%
92	7.890	7.852	7.905	VV	2549	75401	0.80%	0.209%
93	7.926	7.905	7.962	VV	31744	368658	3.93%	1.020%
94	7.974	7.962	7.995	VV	3137	44456	0.47%	0.123%
95	8.025	7.995	8.031	VV	2833	42200	0.45%	0.117%
96	8.044	8.031	8.051	VV	3041	33885	0.36%	0.094%
97	8.067	8.051	8.094	VV	3946	73692	0.79%	0.204%
98	8.098	8.094	8.107	VV	1611	11895	0.13%	0.033%
99	8.121	8.107	8.140	VV	2592	37788	0.40%	0.105%
100	8.154	8.140	8.180	VV	2088	37319	0.40%	0.103%
101	8.211	8.180	8.326	VV	540395	6103374	65.10%	16.880%
102	8.334	8.326	8.361	VV	4251	80637	0.86%	0.223%
103	8.372	8.361	8.400	VV	3794	75240	0.80%	0.208%
104	8.416	8.400	8.440	VV	3297	64497	0.69%	0.178%
105	8.459	8.440	8.500	VV	8724	146076	1.56%	0.404%
106	8.518	8.500	8.556	VV	2634	53870	0.57%	0.149%
107	8.578	8.556	8.593	VV	1624	26302	0.28%	0.073%
108	8.607	8.593	8.616	VV	1269	15708	0.17%	0.043%
109	8.645	8.616	8.695	VV	67054	730456	7.79%	2.020%
110	8.699	8.695	8.709	VV	2002	16159	0.17%	0.045%
111	8.745	8.709	8.785	VV	11743	207527	2.21%	0.574%
112	8.806	8.785	8.817	VV	1802	28589	0.30%	0.079%

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113	8.828	8.817	8.856	VV	2035	29814	0.32%	0.082%
114	8.877	8.856	8.903	VV	1181	21717	0.23%	0.060%
115	8.934	8.903	8.962	VV	1396	30559	0.33%	0.085%
116	8.978	8.962	9.009	VV	1064	17951	0.19%	0.050%
117	9.040	9.009	9.079	VV	862	22550	0.24%	0.062%
118	9.105	9.079	9.149	VV	1614	30909	0.33%	0.085%
119	9.164	9.149	9.168	VV	444	3630	0.04%	0.010%
120	9.183	9.168	9.196	VV	764	10935	0.12%	0.030%
121	9.205	9.196	9.228	VV	869	11008	0.12%	0.030%
122	9.244	9.228	9.264	VV	1126	14518	0.15%	0.040%
123	9.281	9.264	9.293	VV	690	9619	0.10%	0.027%
124	9.297	9.293	9.324	VV	701	8991	0.10%	0.025%
125	9.349	9.324	9.359	VV	867	10932	0.12%	0.030%
126	9.383	9.359	9.499	VV	22397	449355	4.79%	1.243%
127	9.518	9.499	9.549	VV	3644	52554	0.56%	0.145%
128	9.561	9.549	9.571	VV	751	8648	0.09%	0.024%
129	9.589	9.571	9.599	VV	918	12900	0.14%	0.036%
130	9.603	9.599	9.632	VV	831	12039	0.13%	0.033%
131	9.635	9.632	9.649	VV	480	3398	0.04%	0.009%
132	9.658	9.649	9.672	VV	425	4252	0.05%	0.012%
133	9.678	9.672	9.710	VV	460	6444	0.07%	0.018%
134	9.731	9.710	9.738	VV	364	3932	0.04%	0.011%
135	9.762	9.738	9.774	PV	355	3967	0.04%	0.011%
136	9.791	9.774	9.808	VV	428	4747	0.05%	0.013%
137	9.830	9.808	9.854	VV	770	11074	0.12%	0.031%
138	9.891	9.854	9.895	VV	677	10776	0.11%	0.030%
139	9.902	9.895	9.925	VV	810	11376	0.12%	0.031%
140	9.938	9.925	9.967	VV	735	11864	0.13%	0.033%
141	9.993	9.967	10.000	VV	629	9257	0.10%	0.026%
142	10.020	10.000	10.072	VV	1065	18887	0.20%	0.052%
143	10.090	10.072	10.129	VV	865	20787	0.22%	0.057%
144	10.145	10.129	10.167	VV	679	11168	0.12%	0.031%
145	10.186	10.167	10.209	VV	903	16724	0.18%	0.046%
146	10.246	10.209	10.283	VV	1682	45285	0.48%	0.125%
147	10.297	10.283	10.307	VV	601	6355	0.07%	0.018%
148	10.324	10.307	10.342	VV	847	14645	0.16%	0.041%
149	10.373	10.342	10.396	VV	1876	33754	0.36%	0.093%
150	10.407	10.396	10.415	VV	367	3317	0.04%	0.009%
151	10.434	10.415	10.452	VV	453	7802	0.08%	0.022%
152	10.470	10.452	10.485	VV	584	8812	0.09%	0.024%
153	10.506	10.485	10.528	VV	734	13869	0.15%	0.038%
154	10.533	10.528	10.538	VV	611	3128	0.03%	0.009%
155	10.554	10.538	10.561	VV	785	9708	0.10%	0.027%

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156	10.571	10.561	10.599	VV	835	15282	0.16%	0.042%
157	10.640	10.599	10.654	VV	1129	22091	0.24%	0.061%
158	10.666	10.654	10.690	VV	1152	18225	0.19%	0.050%
159	10.701	10.690	10.719	VV	596	6957	0.07%	0.019%
160	10.734	10.719	10.738	VV	392	3249	0.03%	0.009%
161	10.744	10.738	10.754	VV	384	3514	0.04%	0.010%
162	10.757	10.754	10.770	VV	375	3158	0.03%	0.009%
163	10.779	10.770	10.800	VV	542	6824	0.07%	0.019%
164	10.804	10.800	10.843	VV	372	5889	0.06%	0.016%
165	10.883	10.843	10.906	VV	1312	22590	0.24%	0.062%
166	10.914	10.906	10.919	VV	564	3154	0.03%	0.009%
167	10.948	10.919	10.985	VV	2070	35399	0.38%	0.098%
168	10.994	10.985	11.011	VV	566	6908	0.07%	0.019%
169	11.034	11.011	11.078	VV	767	16079	0.17%	0.044%
170	11.092	11.078	11.105	PV	341	2792	0.03%	0.008%
171	11.111	11.105	11.124	VV	185	1511	0.02%	0.004%
172	11.134	11.124	11.137	VV	379	2063	0.02%	0.006%
173	11.150	11.137	11.158	VV	512	4840	0.05%	0.013%
174	11.162	11.158	11.167	VV	466	2097	0.02%	0.006%
175	11.170	11.167	11.196	VV	363	3047	0.03%	0.008%
176	11.245	11.196	11.299	PV	523881	5594290	59.67%	15.472%
177	11.311	11.299	11.342	VV	1532	32402	0.35%	0.090%
178	11.367	11.342	11.377	VV	1146	20380	0.22%	0.056%
179	11.381	11.377	11.394	VV	955	7684	0.08%	0.021%
180	11.418	11.394	11.438	VV	1458	24168	0.26%	0.067%
181	11.458	11.438	11.486	VV	1358	21420	0.23%	0.059%
182	11.515	11.486	11.522	VV	1284	17570	0.19%	0.049%
183	11.539	11.522	11.562	VV	1761	30393	0.32%	0.084%
184	11.606	11.562	11.616	VV	1644	45407	0.48%	0.126%
185	11.630	11.616	11.644	VV	1995	27705	0.30%	0.077%
186	11.669	11.644	11.697	VV	7801	121548	1.30%	0.336%
187	11.711	11.697	11.726	VV	2279	29381	0.31%	0.081%
188	11.751	11.726	11.780	VV	2316	50269	0.54%	0.139%
189	11.825	11.780	11.838	VV	6126	92792	0.99%	0.257%
190	11.862	11.838	11.904	VV	24295	408574	4.36%	1.130%
191	11.921	11.904	11.952	VV	2960	67817	0.72%	0.188%
192	11.977	11.952	11.987	VV	3348	55441	0.59%	0.153%
193	12.012	11.987	12.054	VV	5664	145001	1.55%	0.401%
194	12.066	12.054	12.085	VV	2583	37727	0.40%	0.104%
195	12.112	12.085	12.137	VV	12205	161853	1.73%	0.448%
196	12.154	12.137	12.174	VV	4863	62313	0.66%	0.172%
197	12.183	12.174	12.227	VV	1369	25086	0.27%	0.069%
198	12.250	12.227	12.263	VV	2146	29124	0.31%	0.081%
199	12.281	12.263	12.294	VV	4919	61492	0.66%	0.170%

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200	12.309	12.294	12.332	VV	7883	108615	1.16%	0.300%
201	12.345	12.332	12.360	VV	1769	22216	0.24%	0.061%
202	12.384	12.360	12.395	VV	2138	32022	0.34%	0.089%
203	12.407	12.395	12.462	VV	3789	47490	0.51%	0.131%
204	12.467	12.462	12.473	VV	304	1456	0.02%	0.004%
205	12.492	12.473	12.512	VV	922	13495	0.14%	0.037%
206	12.526	12.512	12.557	VV	631	10680	0.11%	0.030%
207	12.574	12.557	12.580	VV	422	2808	0.03%	0.008%
208	12.614	12.580	12.629	VV	6485	80571	0.86%	0.223%
209	12.645	12.629	12.660	VV	7462	92199	0.98%	0.255%
210	12.686	12.660	12.731	VV	156087	1862423	19.86%	5.151%
211	12.734	12.731	12.753	VV	1460	15832	0.17%	0.044%
212	12.765	12.753	12.785	VV	1391	20001	0.21%	0.055%
213	12.798	12.785	12.806	VV	893	9906	0.11%	0.027%
214	12.824	12.806	12.852	VV	945	20224	0.22%	0.056%
215	12.855	12.852	12.875	VV	687	8200	0.09%	0.023%
216	12.913	12.875	12.952	VV	4770	85604	0.91%	0.237%
217	12.988	12.952	13.016	VV	831	23259	0.25%	0.064%
218	13.045	13.016	13.075	VV	9658	125290	1.34%	0.347%
219	13.097	13.075	13.157	VV	4408	106890	1.14%	0.296%
220	13.170	13.157	13.191	VV	1281	19842	0.21%	0.055%
221	13.205	13.191	13.220	VV	732	9949	0.11%	0.028%
222	13.224	13.220	13.227	VV	648	2320	0.02%	0.006%
223	13.273	13.227	13.369	VV	159603	2144179	22.87%	5.930%
224	13.395	13.369	13.416	VV	2023	38527	0.41%	0.107%
225	13.440	13.416	13.460	VV	2349	34672	0.37%	0.096%
226	13.479	13.460	13.504	VV	1266	21396	0.23%	0.059%
227	13.533	13.504	13.587	VV	1538	43276	0.46%	0.120%
228	13.609	13.587	13.642	VV	480	9349	0.10%	0.026%
229	13.667	13.642	13.678	VV	584	7382	0.08%	0.020%
230	13.700	13.678	13.722	VV	1403	22927	0.24%	0.063%
231	13.732	13.722	13.758	VV	605	8496	0.09%	0.023%
232	13.768	13.758	13.787	VV	364	4621	0.05%	0.013%
233	13.805	13.787	13.832	VV	583	9460	0.10%	0.026%
234	13.881	13.832	13.913	VV	1412	37373	0.40%	0.103%
235	13.928	13.913	13.957	VV	663	11853	0.13%	0.033%
236	13.974	13.957	13.988	VV	738	9806	0.10%	0.027%
237	13.999	13.988	14.021	VV	831	13642	0.15%	0.038%
238	14.026	14.021	14.077	VV	691	13448	0.14%	0.037%
239	14.082	14.077	14.095	VV	267	2621	0.03%	0.007%
240	14.098	14.095	14.103	VV	326	1299	0.01%	0.004%
241	14.108	14.103	14.120	VV	258	2168	0.02%	0.006%
242	14.165	14.120	14.194	VV	1364	30285	0.32%	0.084%

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243	14.203	14.194	14.217	VV	552	6145	0.07%	0.017%
244	14.234	14.217	14.282	VV	910	21654	0.23%	0.060%
245	14.310	14.282	14.335	VV	583	12600	0.13%	0.035%
246	14.349	14.335	14.363	VV	566	6103	0.07%	0.017%
247	14.382	14.363	14.439	VV	879	21002	0.22%	0.058%
248	14.445	14.439	14.465	VV	378	4527	0.05%	0.013%
249	14.503	14.465	14.520	VV	1600	30167	0.32%	0.083%
250	14.537	14.520	14.570	VV	2028	36597	0.39%	0.101%
251	14.588	14.570	14.612	VV	1209	19118	0.20%	0.053%
252	14.618	14.612	14.623	VV	444	2463	0.03%	0.007%
253	14.652	14.623	14.688	VV	753	18164	0.19%	0.050%
254	14.713	14.688	14.742	VV	805	18783	0.20%	0.052%
255	14.749	14.742	14.763	VV	461	4764	0.05%	0.013%
256	14.769	14.763	14.773	VV	407	2240	0.02%	0.006%
257	14.784	14.773	14.794	VV	531	5243	0.06%	0.015%
258	14.803	14.794	14.820	VV	570	6172	0.07%	0.017%
259	14.838	14.820	14.859	VV	744	9747	0.10%	0.027%
260	14.870	14.859	14.875	VV	399	2532	0.03%	0.007%
261	14.918	14.875	15.029	VV	4417	157362	1.68%	0.435%
262	15.069	15.029	15.098	VV	2548	59671	0.64%	0.165%
263	15.108	15.098	15.160	VV	943	19657	0.21%	0.054%
264	15.200	15.160	15.205	VV	581	11538	0.12%	0.032%
265	15.230	15.205	15.238	VV	581	8280	0.09%	0.023%
266	15.255	15.238	15.282	VV	1109	17010	0.18%	0.047%
267	15.291	15.282	15.309	VV	515	7418	0.08%	0.021%
268	15.315	15.309	15.320	VV	583	3526	0.04%	0.010%
269	15.324	15.320	15.331	VV	606	3657	0.04%	0.010%
270	15.353	15.331	15.387	VV	1259	25722	0.27%	0.071%
271	15.390	15.387	15.395	VV	507	2158	0.02%	0.006%
272	15.413	15.395	15.423	VV	721	10232	0.11%	0.028%
273	15.442	15.423	15.473	VV	908	20111	0.21%	0.056%
274	15.477	15.473	15.481	VV	634	2396	0.03%	0.007%
275	15.484	15.481	15.490	VV	499	2485	0.03%	0.007%
276	15.509	15.490	15.531	VV	998	17279	0.18%	0.048%
277	15.553	15.531	15.578	VV	1957	31146	0.33%	0.086%
278	15.594	15.578	15.605	VV	677	9218	0.10%	0.025%
279	15.621	15.605	15.658	VV	855	14173	0.15%	0.039%
280	15.705	15.658	15.723	PV	886	15686	0.17%	0.043%
281	15.752	15.723	15.793	VV	960	23898	0.25%	0.066%
282	15.799	15.793	15.810	VV	341	2649	0.03%	0.007%
283	15.827	15.810	15.833	VV	353	3350	0.04%	0.009%
284	15.842	15.833	15.849	VV	380	3061	0.03%	0.008%
285	15.860	15.849	15.890	VV	590	10808	0.12%	0.030%

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286	15.894	15.890	15.898	VV	530	1893	0.02%	0.005%
287	15.925	15.898	15.985	VV	1497	41960	0.45%	0.116%
288	16.002	15.985	16.011	VV	575	7748	0.08%	0.021%
289	16.034	16.011	16.058	VV	1252	21226	0.23%	0.059%
290	16.068	16.058	16.077	VV	595	5435	0.06%	0.015%
291	16.112	16.077	16.145	VV	1736	40860	0.44%	0.113%
292	16.181	16.145	16.197	VV	1136	24351	0.26%	0.067%
293	16.200	16.197	16.205	VV	945	4605	0.05%	0.013%
294	16.208	16.205	16.217	VV	1003	6034	0.06%	0.017%
295	16.224	16.217	16.233	VV	982	8773	0.09%	0.024%
296	16.237	16.233	16.241	VV	920	3839	0.04%	0.011%
297	16.244	16.241	16.279	VV	976	15420	0.16%	0.043%
298	16.289	16.279	16.294	VV	597	4751	0.05%	0.013%
299	16.300	16.294	16.307	VV	620	3744	0.04%	0.010%
300	16.313	16.307	16.321	VV	544	3738	0.04%	0.010%
301	16.329	16.321	16.344	VV	558	6233	0.07%	0.017%
302	16.349	16.344	16.358	VV	544	3659	0.04%	0.010%
303	16.410	16.358	16.440	VV	1404	35643	0.38%	0.099%
304	16.464	16.440	16.482	VV	1675	28792	0.31%	0.080%
305	16.496	16.482	16.520	VV	2073	33351	0.36%	0.092%
306	16.539	16.520	16.570	VV	2234	33900	0.36%	0.094%
307	16.579	16.570	16.591	VV	547	4891	0.05%	0.014%
308	16.601	16.591	16.622	VV	512	6862	0.07%	0.019%
309	16.635	16.622	16.648	VV	425	4555	0.05%	0.013%
310	16.661	16.648	16.682	VV	436	6175	0.07%	0.017%
311	16.689	16.682	16.694	VV	359	2122	0.02%	0.006%
312	16.703	16.694	16.712	VV	496	3448	0.04%	0.010%
313	16.717	16.712	16.731	VV	320	2396	0.03%	0.007%
314	16.742	16.731	16.755	PV	282	2097	0.02%	0.006%
315	16.762	16.755	16.766	VV	302	1423	0.02%	0.004%
316	16.810	16.766	16.835	VV	1328	29800	0.32%	0.082%
317	16.868	16.835	16.897	VV	1344	25320	0.27%	0.070%
318	16.945	16.897	16.989	VV	2001	44759	0.48%	0.124%
319	17.011	16.989	17.018	VV	421	5402	0.06%	0.015%
320	17.059	17.018	17.100	VV	1202	27261	0.29%	0.075%
321	17.150	17.109	17.180	VV	1022	22969	0.24%	0.064%
322	17.183	17.180	17.212	VV	340	2844	0.03%	0.008%
323	17.256	17.212	17.262	PV	412	8288	0.09%	0.023%
324	17.267	17.262	17.280	VV	427	2540	0.03%	0.007%
325	17.289	17.280	17.294	VV	383	2493	0.03%	0.007%
326	17.310	17.294	17.319	VV	410	4875	0.05%	0.013%
327	17.382	17.319	17.408	VV	1941	45060	0.48%	0.125%
328	17.418	17.408	17.436	VV	584	7383	0.08%	0.020%
329	17.470	17.436	17.507	VV	3141	56378	0.60%	0.156%

				rters				
330	17.528	17.507	17.562	VV	1137	23363	0.25%	0.065%
331	17.580	17.562	17.622	VV	836	17390	0.19%	0.048%
332	17.671	17.622	17.708	VV	2581	50039	0.53%	0.138%
333	17.738	17.708	17.767	VV	3027	59619	0.64%	0.165%
334	17.801	17.767	17.831	VV	2678	62024	0.66%	0.172%
335	17.846	17.831	17.857	VV	509	5741	0.06%	0.016%
336	17.860	17.857	17.865	VV	492	2013	0.02%	0.006%
337	17.872	17.865	17.883	VV	603	4655	0.05%	0.013%
338	17.897	17.883	17.917	VV	754	10409	0.11%	0.029%
339	17.929	17.917	17.937	VV	370	2837	0.03%	0.008%
340	17.953	17.937	17.962	VV	238	1833	0.02%	0.005%
341	18.001	17.962	18.015	PV	346	5775	0.06%	0.016%
342	18.026	18.015	18.030	VV	430	2977	0.03%	0.008%
343	18.041	18.030	18.045	VV	407	3203	0.03%	0.009%
344	18.069	18.045	18.119	VV	833	22236	0.24%	0.061%
345	18.163	18.119	18.174	VV	615	14263	0.15%	0.039%
346	18.209	18.174	18.232	VV	1950	40282	0.43%	0.111%
347	18.247	18.232	18.280	VV	1849	27495	0.29%	0.076%
					Sum of corrected areas:	36157718		

Aromatic EPH 121024.M Sat Dec 21 05:20:57 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/15/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-02	SDG No.:	P5299
Lab Sample ID:	P5299-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	79.2
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
12/19/24 14:05	12/20/24 15:12	PB165775

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.48	U	1	0.48	1.26	mg/kg	FC068066.D
Aliphatic C12-C16	Aliphatic C12-C16	1.99		1	0.30	0.84	mg/kg	FC068066.D
Aliphatic C16-C21	Aliphatic C16-C21	0.38	U	1	0.38	1.26	mg/kg	FC068066.D
Aliphatic C21-C28	Aliphatic C21-C28	1.01	U	1	1.01	1.68	mg/kg	FC068066.D
Aliphatic C28-C40	Aliphatic C28-C40	8.03		1	2.27	2.52	mg/kg	FC068066.D
Aromatic C10-C12	Aromatic C10-C12	0.38	U	1	0.38	0.84	mg/kg	FD048904.D
Aromatic C12-C16	Aromatic C12-C16	0.58	J	1	0.43	1.26	mg/kg	FD048904.D
Aromatic C16-C21	Aromatic C16-C21	1.28	J	1	1.21	2.10	mg/kg	FD048904.D
Aromatic C21-C36	Aromatic C21-C36	2.52	U	1	2.52	3.36	mg/kg	FD048904.D
Total AliphaticEPH	Total AliphaticEPH	10.0			4.44	7.56	mg/kg	
Total AromaticEPH	Total AromaticEPH	4.54	U		4.54	7.56	mg/kg	
Total EPH	Total EPH	11.9	J		8.98	15.1	mg/kg	

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control 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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/15/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-02	SDG No.:	P5299
Lab Sample ID:	P5299-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	79.2
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068066.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	0.48	U	0.48	1.26	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	1.99		0.30	0.84	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.38	U	0.38	1.26	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	1.01	U	1.01	1.68	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	8.03		2.27	2.52	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	56.5		40 - 140	113%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5299-04	Acq On:	20 Dec 2024 15:12
Client Sample ID:	SB-02	Operator:	YP/AJ
Data file:	FC068066.D	Misc:	
Instrument:	FID_C	ALS Vial:	17
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.117	6.389	867607	5.481	300	ug/ml
Aliphatic C12-C16	6.390	9.779	3786121	23.623	200	ug/ml
Aliphatic C16-C21	9.780	13.137	443178	2.909	300	ug/ml
Aliphatic C21-C28	13.138	16.791	483355	3.544	400	ug/ml
Aliphatic C28-C40	16.792	21.609	10112684	95.435	600	ug/ml
Aliphatic EPH	3.117	21.609	15692945	130.991		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.889	12.889	7204980	56.47		ug/ml
Aliphatic C9-C28	3.117	16.791	5580261	35.557	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068066.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 15:12
Operator : YP/AJ
Sample : P5299-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
SB-02

Integration File: autoint1.e
Quant Time: Dec 21 01:52:46 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
12) S 1-chlorooctadecane (S...	12.889	7204980	56.468 ug/ml
Spiked Amount 50.000		Recovery	= 112.94%

Target Compounds

(f)=RT Delta > 1/2 Window

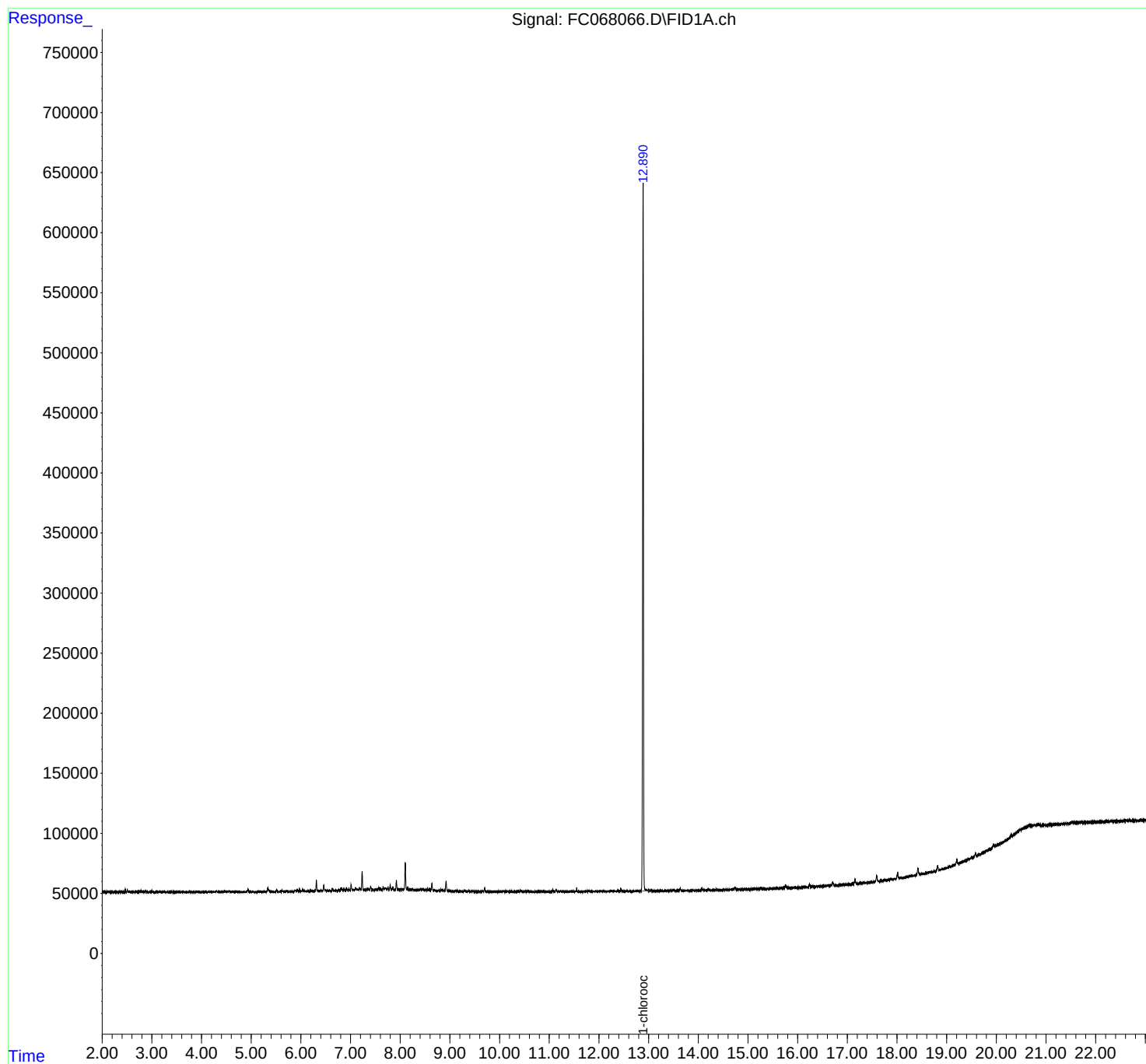
(m)=manual int.

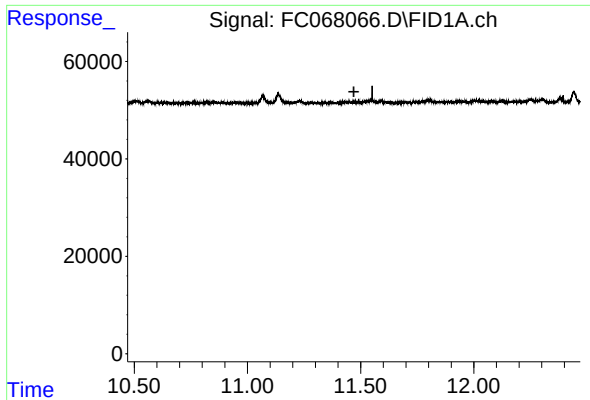
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068066.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 15:12
Operator : YP/AJ
Sample : P5299-04
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
SB-02

Integration File: autoint1.e
Quant Time: Dec 21 01:52:46 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

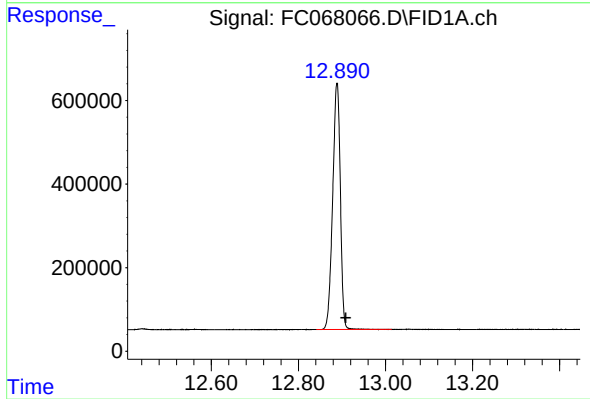




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T.: 11.470 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
SB-02



#12 1-chlorooctadecane (SURR)

R.T.: 12.889 min
Delta R.T.: -0.021 min
Response: 7204980
Conc: 56.47 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
 Data File : FC068066.D
 Signal(s) : FID1A.ch
 Acq On : 20 Dec 2024 15:12
 Sample : P5299-04
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.131	3.104	3.151	BV	102	809	0.01%	0.003%
2	3.160	3.151	3.196	PV	93	1229	0.02%	0.005%
3	3.218	3.196	3.230	VV	125	1766	0.02%	0.008%
4	3.245	3.230	3.331	VV	350	7420	0.10%	0.032%
5	3.341	3.331	3.363	VV	59	787	0.01%	0.003%
6	3.385	3.363	3.393	VV	142	1631	0.02%	0.007%
7	3.403	3.393	3.431	VV	224	2629	0.04%	0.011%
8	3.445	3.431	3.464	VV	98	1313	0.02%	0.006%
9	3.517	3.464	3.526	PV	211	3783	0.05%	0.016%
10	3.538	3.526	3.556	VV	170	2333	0.03%	0.010%
11	3.566	3.556	3.596	VV	167	2339	0.03%	0.010%
12	3.617	3.596	3.637	VV	179	2863	0.04%	0.012%
13	3.647	3.637	3.674	VV	120	1658	0.02%	0.007%
14	3.737	3.674	3.797	VV	307	7414	0.10%	0.032%
15	3.817	3.797	3.832	VV	257	2806	0.04%	0.012%
16	3.843	3.832	3.858	VV	186	1991	0.03%	0.009%
17	3.906	3.858	3.921	VV	329	5905	0.08%	0.026%
18	3.934	3.921	3.958	VV	555	6485	0.09%	0.028%
19	3.972	3.958	3.980	VV	130	1204	0.02%	0.005%
20	3.999	3.980	4.025	VV	211	3633	0.05%	0.016%
21	4.081	4.025	4.099	VV	504	10657	0.15%	0.046%
22	4.115	4.099	4.125	VV	210	2726	0.04%	0.012%
23	4.137	4.125	4.161	VV	183	3140	0.04%	0.014%
24	4.217	4.161	4.231	VV	228	5785	0.08%	0.025%
25	4.258	4.231	4.280	VV	221	5673	0.08%	0.025%
26	4.303	4.280	4.326	VV	929	13005	0.18%	0.056%
27	4.344	4.326	4.365	VV	239	4685	0.06%	0.020%
28	4.373	4.365	4.386	VV	227	1947	0.03%	0.008%
29	4.406	4.386	4.431	VV	434	7304	0.10%	0.032%
30	4.469	4.431	4.486	VV	711	12669	0.17%	0.055%
31	4.498	4.486	4.511	VV	400	4919	0.07%	0.021%
32	4.525	4.511	4.538	VV	597	6326	0.09%	0.027%
33	4.555	4.538	4.572	VV	1220	12683	0.18%	0.055%
34	4.581	4.572	4.596	VV	374	3677	0.05%	0.016%
35	4.609	4.596	4.619	VV	253	2918	0.04%	0.013%
36	4.631	4.619	4.651	VV	324	3546	0.05%	0.015%

					rteres			
37	4.670	4.651	4.688	VV	331	4183	0.06%	0.018%
38	4.709	4.688	4.731	VV	266	4156	0.06%	0.018%
39	4.769	4.731	4.804	VV	677	10977	0.15%	0.047%
40	4.816	4.804	4.838	VV	158	2358	0.03%	0.010%
41	4.857	4.838	4.874	VV	311	3747	0.05%	0.016%
42	4.933	4.874	4.961	VV	2103	33950	0.47%	0.147%
43	4.984	4.961	5.022	VV	669	13476	0.19%	0.058%
44	5.040	5.022	5.078	VV	672	9937	0.14%	0.043%
45	5.092	5.078	5.113	VV	187	2809	0.04%	0.012%
46	5.134	5.113	5.176	VV	584	13109	0.18%	0.057%
47	5.193	5.176	5.209	VV	560	7160	0.10%	0.031%
48	5.226	5.209	5.237	VV	366	4256	0.06%	0.018%
49	5.254	5.237	5.271	VV	411	6518	0.09%	0.028%
50	5.281	5.271	5.297	VV	387	4273	0.06%	0.018%
51	5.334	5.297	5.411	VV	3671	68034	0.94%	0.294%
52	5.429	5.411	5.443	VV	311	5168	0.07%	0.022%
53	5.456	5.443	5.471	VV	328	4086	0.06%	0.018%
54	5.481	5.471	5.491	VV	318	3146	0.04%	0.014%
55	5.512	5.491	5.552	VV	1779	24531	0.34%	0.106%
56	5.586	5.552	5.600	VV	524	9373	0.13%	0.041%
57	5.625	5.600	5.662	VV	1111	22263	0.31%	0.096%
58	5.679	5.662	5.698	VV	663	8506	0.12%	0.037%
59	5.720	5.698	5.757	VV	1118	18861	0.26%	0.082%
60	5.785	5.757	5.806	VV	640	12860	0.18%	0.056%
61	5.837	5.806	5.852	VV	626	13961	0.19%	0.060%
62	5.882	5.852	5.905	VV	1442	31300	0.43%	0.135%
63	5.929	5.905	5.952	VV	1923	32052	0.44%	0.139%
64	5.972	5.952	5.997	VV	2002	27974	0.39%	0.121%
65	6.035	5.997	6.048	VV	1964	31638	0.44%	0.137%
66	6.060	6.048	6.083	VV	1373	21909	0.30%	0.095%
67	6.119	6.083	6.129	VV	858	19651	0.27%	0.085%
68	6.145	6.129	6.173	VV	1584	23947	0.33%	0.104%
69	6.196	6.173	6.218	VV	1304	27106	0.37%	0.117%
70	6.239	6.218	6.258	VV	1293	22926	0.32%	0.099%
71	6.312	6.258	6.384	VV	9784	155748	2.15%	0.673%
72	6.409	6.384	6.424	VV	1332	26033	0.36%	0.113%
73	6.461	6.424	6.488	VV	5855	92557	1.28%	0.400%
74	6.497	6.488	6.516	VV	1461	20670	0.29%	0.089%
75	6.531	6.516	6.554	VV	1659	26712	0.37%	0.115%
76	6.572	6.554	6.604	VV	1382	32414	0.45%	0.140%
77	6.632	6.604	6.656	VV	2496	45482	0.63%	0.197%
78	6.667	6.656	6.681	VV	1421	17664	0.24%	0.076%
79	6.697	6.681	6.738	VV	1414	37261	0.51%	0.161%
80	6.754	6.738	6.788	VV	1674	40034	0.55%	0.173%
81	6.807	6.788	6.818	VV	2772	40182	0.55%	0.174%
82	6.828	6.818	6.847	VV	2707	37169	0.51%	0.161%
83	6.869	6.847	6.893	VV	2794	52195	0.72%	0.226%
84	6.914	6.893	6.949	VV	3212	68300	0.94%	0.295%
85	6.969	6.949	6.989	VV	2849	44253	0.61%	0.191%
86	7.012	6.989	7.049	VV	6089	103370	1.43%	0.447%
87	7.064	7.049	7.078	VV	1697	27293	0.38%	0.118%
88	7.108	7.078	7.127	VV	3105	71072	0.98%	0.307%
89	7.148	7.127	7.163	VV	2081	41406	0.57%	0.179%

					rteres			
90	7.181	7.163	7.209	VV	3280	68428	0.94%	0.296%
91	7.234	7.209	7.263	VV	17089	211754	2.92%	0.915%
92	7.284	7.263	7.307	VV	1963	47829	0.66%	0.207%
93	7.324	7.307	7.335	VV	2192	31476	0.43%	0.136%
94	7.353	7.335	7.378	VV	2528	55281	0.76%	0.239%
95	7.406	7.378	7.438	VV	4634	98365	1.36%	0.425%
96	7.448	7.438	7.469	VV	1756	30234	0.42%	0.131%
97	7.493	7.469	7.506	VV	2427	40934	0.57%	0.177%
98	7.518	7.506	7.530	VV	2116	29478	0.41%	0.127%
99	7.568	7.530	7.584	VV	3582	79496	1.10%	0.344%
100	7.599	7.584	7.634	VV	2657	63054	0.87%	0.273%
101	7.656	7.634	7.672	VV	4114	64487	0.89%	0.279%
102	7.687	7.672	7.698	VV	3352	44516	0.61%	0.192%
103	7.709	7.698	7.728	VV	3368	48230	0.67%	0.208%
104	7.753	7.728	7.772	VV	3637	68615	0.95%	0.297%
105	7.798	7.772	7.822	VV	5489	99320	1.37%	0.429%
106	7.854	7.822	7.878	VV	4057	87582	1.21%	0.379%
107	7.892	7.878	7.901	VV	2034	25371	0.35%	0.110%
108	7.923	7.901	7.948	VV	9495	128841	1.78%	0.557%
109	7.970	7.948	7.994	VV	2460	55278	0.76%	0.239%
110	8.010	7.994	8.029	VV	2765	44334	0.61%	0.192%
111	8.101	8.029	8.131	VV	24374	363205	5.01%	1.570%
112	8.150	8.131	8.176	VV	3285	61716	0.85%	0.267%
113	8.196	8.176	8.230	VV	2310	61158	0.84%	0.264%
114	8.251	8.230	8.274	VV	2800	54983	0.76%	0.238%
115	8.292	8.274	8.324	VV	1872	48674	0.67%	0.210%
116	8.339	8.324	8.361	VV	1632	32541	0.45%	0.141%
117	8.405	8.361	8.437	VV	2515	80831	1.12%	0.349%
118	8.456	8.437	8.494	VV	2505	66582	0.92%	0.288%
119	8.516	8.494	8.533	VV	2003	40942	0.57%	0.177%
120	8.549	8.533	8.571	VV	2388	40523	0.56%	0.175%
121	8.590	8.571	8.604	VV	2122	33860	0.47%	0.146%
122	8.637	8.604	8.667	VV	7232	115034	1.59%	0.497%
123	8.688	8.667	8.737	VV	1949	52777	0.73%	0.228%
124	8.782	8.737	8.799	VV	1194	35716	0.49%	0.154%
125	8.820	8.799	8.841	VV	1922	32364	0.45%	0.140%
126	8.857	8.841	8.888	VV	1346	32510	0.45%	0.141%
127	8.922	8.888	8.987	VV	8790	151135	2.09%	0.653%
128	9.006	8.987	9.028	VV	1113	19349	0.27%	0.084%
129	9.056	9.028	9.087	VV	709	18555	0.26%	0.080%
130	9.112	9.087	9.131	VV	1079	18820	0.26%	0.081%
131	9.140	9.131	9.169	VV	598	11389	0.16%	0.049%
132	9.177	9.169	9.191	VV	406	5079	0.07%	0.022%
133	9.221	9.191	9.261	VV	609	18292	0.25%	0.079%
134	9.292	9.261	9.327	VV	1310	28405	0.39%	0.123%
135	9.339	9.327	9.351	VV	537	6224	0.09%	0.027%
136	9.376	9.351	9.405	VV	723	14833	0.20%	0.064%
137	9.427	9.405	9.442	VV	755	11205	0.15%	0.048%
138	9.479	9.442	9.508	VV	682	16335	0.23%	0.071%
139	9.531	9.508	9.551	VV	326	6010	0.08%	0.026%
140	9.573	9.551	9.594	VV	252	3927	0.05%	0.017%
141	9.617	9.594	9.638	VV	474	7068	0.10%	0.031%

					rteres			
142	9.650	9.638	9.673	VV	306	5479	0.08%	0.024%
143	9.698	9.673	9.741	VV	2869	38893	0.54%	0.168%
144	9.766	9.741	9.778	VV	292	4737	0.07%	0.020%
145	9.789	9.778	9.814	VV	212	3858	0.05%	0.017%
146	9.825	9.814	9.835	VV	128	1223	0.02%	0.005%
147	9.847	9.835	9.861	VV	107	1701	0.02%	0.007%
148	9.868	9.861	9.885	VV	139	1600	0.02%	0.007%
149	9.901	9.885	9.956	VV	149	3282	0.05%	0.014%
150	9.974	9.956	9.998	PV	133	1844	0.03%	0.008%
151	10.042	9.998	10.051	VV	172	4607	0.06%	0.020%
152	10.086	10.051	10.109	VV	661	12480	0.17%	0.054%
153	10.128	10.109	10.153	VV	264	4711	0.07%	0.020%
154	10.166	10.153	10.210	VV	197	5165	0.07%	0.022%
155	10.224	10.210	10.281	VV	193	4158	0.06%	0.018%
156	10.297	10.281	10.314	VV	209	2311	0.03%	0.010%
157	10.329	10.314	10.345	VV	231	3098	0.04%	0.013%
158	10.370	10.345	10.398	VV	675	7220	0.10%	0.031%
159	10.432	10.398	10.473	VV	886	22787	0.31%	0.098%
160	10.509	10.473	10.541	VV	487	12440	0.17%	0.054%
161	10.561	10.541	10.594	VV	582	9578	0.13%	0.041%
162	10.606	10.594	10.615	VV	209	2101	0.03%	0.009%
163	10.622	10.615	10.631	VV	188	1583	0.02%	0.007%
164	10.651	10.631	10.681	VV	177	3893	0.05%	0.017%
165	10.718	10.681	10.734	PV	157	2836	0.04%	0.012%
166	10.818	10.734	10.839	VV	242	10591	0.15%	0.046%
167	10.854	10.839	10.874	VV	313	4592	0.06%	0.020%
168	10.889	10.874	10.918	VV	163	3192	0.04%	0.014%
169	10.942	10.918	10.990	VV	239	5104	0.07%	0.022%
170	11.002	10.990	11.028	VV	103	1666	0.02%	0.007%
171	11.068	11.028	11.101	VV	1429	22759	0.31%	0.098%
172	11.136	11.101	11.197	VV	1965	31505	0.43%	0.136%
173	11.231	11.197	11.260	VV	565	9707	0.13%	0.042%
174	11.271	11.260	11.338	VV	126	3101	0.04%	0.013%
175	11.378	11.338	11.388	VV	99	1818	0.03%	0.008%
176	11.486	11.388	11.504	VV	234	11189	0.15%	0.048%
177	11.551	11.504	11.571	VV	1646	16262	0.22%	0.070%
178	11.590	11.571	11.651	VV	477	10617	0.15%	0.046%
179	11.696	11.651	11.721	PV	173	4394	0.06%	0.019%
180	11.802	11.721	11.832	VV	663	19685	0.27%	0.085%
181	11.856	11.832	11.924	VV	251	9475	0.13%	0.041%
182	11.936	11.924	11.952	VV	275	3893	0.05%	0.017%
183	11.960	11.952	11.977	VV	287	2774	0.04%	0.012%
184	12.011	11.977	12.061	VV	416	13189	0.18%	0.057%
185	12.077	12.061	12.099	VV	396	5941	0.08%	0.026%
186	12.120	12.099	12.198	VV	315	10473	0.14%	0.045%
187	12.211	12.198	12.221	VV	233	2707	0.04%	0.012%
188	12.253	12.221	12.282	VV	641	13436	0.19%	0.058%
189	12.302	12.282	12.338	VV	718	11758	0.16%	0.051%
190	12.382	12.338	12.416	VV	790	13295	0.18%	0.057%
191	12.442	12.416	12.488	VV	2190	29471	0.41%	0.127%
192	12.502	12.488	12.528	VV	186	3337	0.05%	0.014%
193	12.564	12.528	12.608	VV	595	11918	0.16%	0.052%
194	12.656	12.608	12.678	PV	131	2685	0.04%	0.012%

					rteres			
195	12.718	12.678	12.751	VV	200	5681	0.08%	0.025%
196	12.759	12.751	12.781	VV	154	2886	0.04%	0.012%
197	12.799	12.781	12.828	VV	195	4404	0.06%	0.019%
198	12.889	12.828	13.031	VV	591434	7243784	100.00%	31.312%
199	13.053	13.031	13.143	VV	834	27197	0.38%	0.118%
200	13.170	13.143	13.201	VV	281	6569	0.09%	0.028%
201	13.253	13.201	13.284	VV	293	10240	0.14%	0.044%
202	13.289	13.284	13.294	VV	211	1022	0.01%	0.004%
203	13.321	13.294	13.371	VV	313	8671	0.12%	0.037%
204	13.391	13.371	13.401	VV	142	1995	0.03%	0.009%
205	13.408	13.401	13.421	VV	102	1090	0.02%	0.005%
206	13.460	13.421	13.471	VV	398	6495	0.09%	0.028%
207	13.479	13.471	13.483	VV	327	1800	0.02%	0.008%
208	13.505	13.483	13.538	VV	406	8517	0.12%	0.037%
209	13.553	13.538	13.561	VV	129	1492	0.02%	0.006%
210	13.586	13.561	13.609	VV	679	9754	0.13%	0.042%
211	13.637	13.609	13.679	VV	1880	25860	0.36%	0.112%
212	13.694	13.679	13.804	VV	172	4651	0.06%	0.020%
213	13.858	13.804	13.914	PV	166	5754	0.08%	0.025%
214	13.936	13.914	13.954	PV	148	1449	0.02%	0.006%
215	14.073	13.954	14.116	PV	1535	27553	0.38%	0.119%
216	14.143	14.116	14.167	VV	149	3235	0.04%	0.014%
217	14.199	14.167	14.244	VV	873	12199	0.17%	0.053%
218	14.259	14.244	14.317	VV	195	3863	0.05%	0.017%
219	14.363	14.317	14.434	VV	530	13229	0.18%	0.057%
220	14.489	14.434	14.536	VV	168	6079	0.08%	0.026%
221	14.549	14.536	14.556	PV	177	1590	0.02%	0.007%
222	14.580	14.556	14.608	VV	435	6754	0.09%	0.029%
223	14.617	14.608	14.641	VV	166	1779	0.02%	0.008%
224	14.655	14.641	14.671	VV	170	1786	0.02%	0.008%
225	14.694	14.671	14.712	PV	548	8490	0.12%	0.037%
226	14.737	14.712	14.781	VV	2220	32932	0.45%	0.142%
227	14.796	14.781	14.811	VV	232	3211	0.04%	0.014%
228	14.820	14.811	14.841	VV	124	1308	0.02%	0.006%
229	14.848	14.841	14.883	PV	112	1226	0.02%	0.005%
230	14.899	14.883	14.904	VV	124	729	0.01%	0.003%
231	14.938	14.904	14.969	VV	183	4565	0.06%	0.020%
232	14.982	14.969	15.061	VV	109	3362	0.05%	0.015%
233	15.072	15.061	15.104	PV	111	1917	0.03%	0.008%
234	15.155	15.104	15.198	VV	490	11180	0.15%	0.048%
235	15.257	15.198	15.290	VV	1443	24842	0.34%	0.107%
236	15.307	15.290	15.365	VV	289	6891	0.10%	0.030%
237	15.393	15.365	15.408	PV	108	1878	0.03%	0.008%
238	15.480	15.408	15.511	VV	199	6639	0.09%	0.029%
239	15.627	15.511	15.661	VV	226	13446	0.19%	0.058%
240	15.719	15.661	15.732	VV	414	7197	0.10%	0.031%
241	15.757	15.732	15.798	VV	2292	35350	0.49%	0.153%
242	15.810	15.798	15.835	VV	250	2962	0.04%	0.013%
243	15.845	15.835	15.864	PV	143	1082	0.01%	0.005%
244	15.901	15.864	15.964	VV	372	10718	0.15%	0.046%
245	16.003	15.964	16.021	VV	115	3417	0.05%	0.015%
246	16.121	16.021	16.134	PV	207	8785	0.12%	0.038%

					rteres			
247	16.145	16.134	16.170	VV	135	1860	0.03%	0.008%
248	16.239	16.170	16.268	VV	2010	30285	0.42%	0.131%
249	16.278	16.268	16.287	VV	158	1851	0.03%	0.008%
250	16.315	16.287	16.342	VV	261	4853	0.07%	0.021%
251	16.408	16.342	16.431	PV	178	4738	0.07%	0.020%
252	16.601	16.431	16.631	VV	433	17227	0.24%	0.074%
253	16.641	16.631	16.651	VV	85	674	0.01%	0.003%
254	16.706	16.651	16.787	PV	3219	56314	0.78%	0.243%
255	16.868	16.787	16.881	PV	128	4237	0.06%	0.018%
256	16.996	16.881	17.058	VV	151	5224	0.07%	0.023%
257	17.105	17.058	17.118	PV	112	2544	0.04%	0.011%
258	17.155	17.118	17.201	PV	3726	55387	0.76%	0.239%
259	17.266	17.201	17.294	VV	346	6853	0.09%	0.030%
260	17.591	17.294	17.638	PV	4774	67967	0.94%	0.294%
261	17.759	17.638	17.778	PV	208	9788	0.14%	0.042%
262	17.870	17.778	17.894	PV	447	12047	0.17%	0.052%
263	18.013	17.894	18.064	VV	4926	75170	1.04%	0.325%
264	18.279	18.064	18.298	PV	365	4387	0.06%	0.019%
265	18.422	18.298	18.473	PV	5309	86016	1.19%	0.372%
266	18.679	18.473	18.694	VV	283	3608	0.05%	0.016%
267	18.818	18.694	18.848	PV	3898	52904	0.73%	0.229%
268	19.006	18.848	19.013	PV	129	-5857	-0.08%	-0.025%
269	19.204	19.013	19.234	PV	4501	94589	1.31%	0.409%
270	19.579	19.234	19.605	VV	4551	323872	4.47%	1.400%
271	19.943	19.605	19.974	VV	7120	800044	11.04%	3.458%
272	20.301	19.974	20.323	VV	10210	1455446	20.09%	6.291%
273	20.479	20.323	20.488	VV	12328	1069018	14.76%	4.621%
274	20.660	20.488	20.691	VV	14043	1561078	21.55%	6.748%
275	20.828	20.691	20.942	VV	12169	1759568	24.29%	7.606%
276	20.986	20.942	21.021	VV	9476	445029	6.14%	1.924%
277	21.069	21.021	21.131	VV	8873	557598	7.70%	2.410%
278	21.416	21.131	21.434	VV	5115	1160851	16.03%	5.018%
279	21.528	21.434	21.568	VV	4638	355166	4.90%	1.535%
280	21.593	21.568	21.644	VV	3499	150150	2.07%	0.649%
281	21.729	21.644	21.744	VV	1808	130224	1.80%	0.563%
282	21.824	21.744	21.854	VV	770	63800	0.88%	0.276%
283	21.871	21.854	21.881	VV	272	3536	0.05%	0.015%
Sum of corrected areas:					23134296			

Aliphatic EPH 121024.M Sat Dec 21 02:41:36 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	12/15/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	12/16/24
Client Sample ID:	SB-02	SDG No.:	P5299
Lab Sample ID:	P5299-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	79.2
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048904.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.38	U	0.38	0.84	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.58	J	0.43	1.26	mg/kg
Aromatic C16-C21	Aromatic C16-C21	1.28	J	1.21	2.10	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.52	U	2.52	3.36	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	45.5		40 - 140	91%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	47.7		40 - 140	95%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	29.3		40 - 140	59%	SPK: 50



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

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P5299-04	Acq On:	20 Dec 2024 15:12
Client Sample ID:	SB-02	Operator:	YP/AJ
Data file:	FD048904.D	Misc:	
Instrument:	FID_D	ALS Vial:	67
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.083	5.800	615796	3.237	200	ug/ml
Aromatic C12-C16	5.801	8.405	1285626	6.916	300	ug/ml
Aromatic C16-C21	8.406	12.669	2588566	15.27	500	ug/ml
Aromatic C21-C36	12.670	18.077	3570248	25.216	800	ug/ml
Aromatic EPH	4.083	18.077	8060236	50.639		ug/ml
ortho-Terphenyl (SURR)	11.245	11.245	5200786	29.27		ug/ml
2-Bromonaphthalene (SURR)	7.361	7.361	7667113	45.52		ug/ml
2-Fluorobiphenyl (SURR)	8.210	8.210	4932050	47.74		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048904.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 15:12
 Operator : YP/AJ
 Sample : P5299-04
 Misc :
 ALS Vial : 67 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 SB-02

Integration File: autoint1.e
 Quant Time: Dec 21 04:05:02 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 06:07:50 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.361	7667113	45.520 ug/ml
Spiked Amount 50.000		Recovery =	91.04%
6) S 2-Fluorobiphenyl (SURR)	8.210	4932050	47.741 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	95.48%
11) S ortho-Terphenyl (SURR)	11.245	5200786	29.274 ug/ml
Spiked Amount 50.000		Recovery =	58.55%

Target Compounds

(f)=RT Delta > 1/2 Window

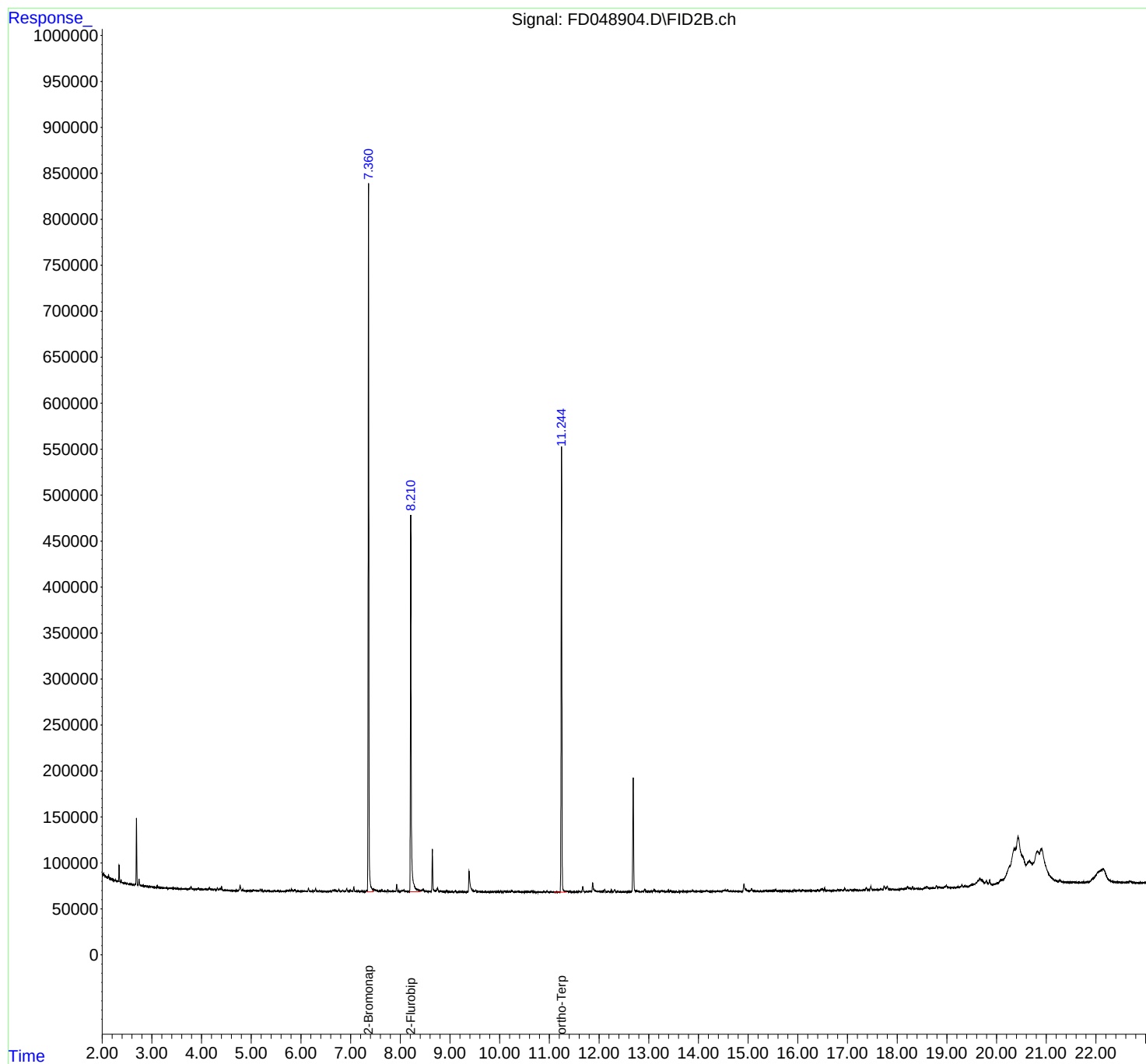
(m)=manual int.

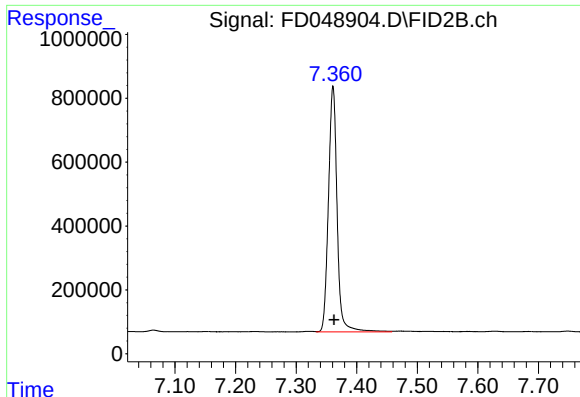
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048904.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 15:12
Operator : YP/AJ
Sample : P5299-04
Misc :
ALS Vial : 67 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
SB-02

Integration File: autoint1.e
Quant Time: Dec 21 04:05:02 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 06:07:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

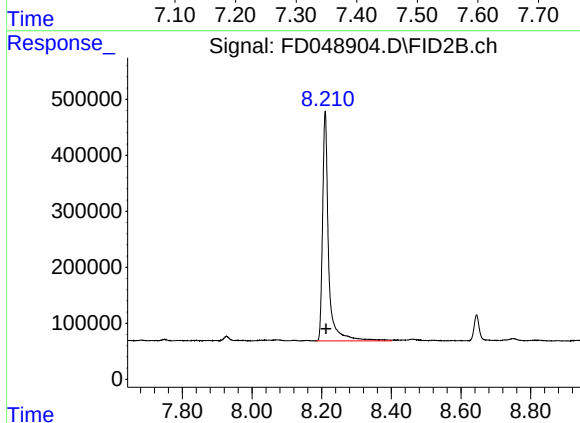




#4 2-Bromonaphthalene (SURRE)

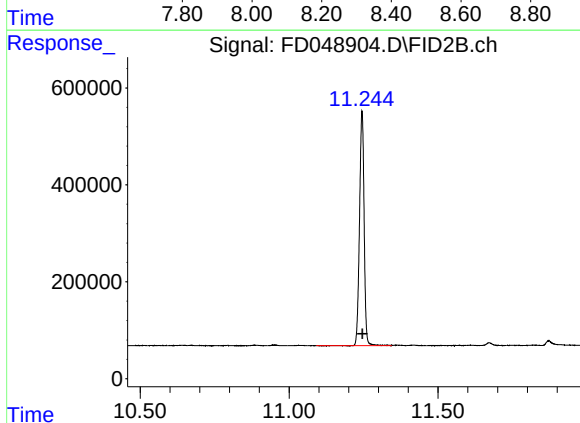
R.T.: 7.361 min
Delta R.T.: -0.002 min
Response: 7667113
Conc: 45.52 ug/ml

Instrument :
FID_D
ClientSampleId :
SB-02



#6 2-Fluorobiphenyl (SURRE)

R.T.: 8.210 min
Delta R.T.: -0.003 min
Response: 4932050
Conc: 47.74 ug/ml



#11 ortho-Terphenyl (SURRE)

R.T.: 11.245 min
Delta R.T.: -0.002 min
Response: 5200786
Conc: 29.27 ug/ml

rteres

Area Percent

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048904.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 15:12
 Sample : P5299-04
 Misc :
 ALS Vial : 67 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH
 121024.M
 Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.054	4.042	4.062	BV	386	2957	0.04%	0.011%
2	4.075	4.062	4.090	VV	515	6773	0.09%	0.026%
3	4.093	4.090	4.117	VV	474	4440	0.06%	0.017%
4	4.121	4.117	4.125	VV	247	1230	0.02%	0.005%
5	4.159	4.125	4.202	VV	2322	41523	0.54%	0.160%
6	4.206	4.202	4.220	VV	557	5397	0.07%	0.021%
7	4.227	4.220	4.244	VV	543	6797	0.09%	0.026%
8	4.260	4.244	4.292	VV	1197	16204	0.21%	0.062%
9	4.319	4.292	4.340	VV	2909	35540	0.46%	0.137%
10	4.349	4.340	4.357	VV	722	6443	0.08%	0.025%
11	4.375	4.357	4.390	VV	2641	29721	0.39%	0.114%
12	4.404	4.390	4.449	VV	4233	48112	0.63%	0.185%
13	4.457	4.449	4.471	VV	434	2921	0.04%	0.011%
14	4.479	4.471	4.504	VV	542	5280	0.07%	0.020%
15	4.516	4.504	4.529	VV	399	4162	0.05%	0.016%
16	4.590	4.575	4.626	VV	648	9712	0.13%	0.037%
17	4.661	4.657	4.683	VV	177	1554	0.02%	0.006%
18	4.695	4.683	4.727	PV	455	7630	0.10%	0.029%
19	4.733	4.727	4.740	VV	370	1640	0.02%	0.006%
20	4.775	4.740	4.811	VV	6330	98845	1.29%	0.381%
21	4.831	4.811	4.858	VV	1487	19846	0.26%	0.076%
22	4.891	4.868	4.908	VV	424	5751	0.07%	0.022%
23	4.931	4.908	4.953	PV	410	5077	0.07%	0.020%
24	4.969	4.953	5.003	VV	507	9896	0.13%	0.038%
25	5.007	5.003	5.018	VV	262	1885	0.02%	0.007%

rteres								
26	5.040	5.018	5.057	VV	977	17249	0.22%	0.066%
27	5.062	5.057	5.088	VV	951	14614	0.19%	0.056%
28	5.092	5.088	5.096	VV	616	2834	0.04%	0.011%
29	5.104	5.096	5.118	VV	625	6987	0.09%	0.027%
30	5.138	5.118	5.158	VV	635	11204	0.15%	0.043%
31	5.182	5.158	5.203	VV	2411	30423	0.40%	0.117%
32	5.217	5.203	5.258	VV	2360	29379	0.38%	0.113%
33	5.275	5.258	5.305	VV	816	10895	0.14%	0.042%
34	5.340	5.305	5.354	PV	737	11612	0.15%	0.045%
35	5.359	5.354	5.390	VV	380	5999	0.08%	0.023%
36	5.399	5.390	5.407	VV	188	1424	0.02%	0.005%
37	5.419	5.407	5.435	VV	354	4016	0.05%	0.015%
38	5.441	5.435	5.446	VV	303	1309	0.02%	0.005%
39	5.466	5.446	5.506	VV	835	14730	0.19%	0.057%
40	5.535	5.506	5.544	VV	447	6952	0.09%	0.027%
41	5.552	5.544	5.564	VV	377	3382	0.04%	0.013%
42	5.570	5.564	5.585	VV	260	3248	0.04%	0.013%
43	5.591	5.585	5.623	VV	367	5773	0.08%	0.022%
44	5.628	5.623	5.635	VV	281	1511	0.02%	0.006%
45	5.648	5.635	5.660	VV	389	4012	0.05%	0.015%
46	5.669	5.660	5.682	VV	520	5404	0.07%	0.021%
47	5.726	5.682	5.748	VV	993	25040	0.33%	0.096%
48	5.770	5.748	5.794	VV	1479	28193	0.37%	0.109%
49	5.813	5.794	5.851	VV	2369	44639	0.58%	0.172%
50	5.879	5.851	5.913	VV	1804	39284	0.51%	0.151%
51	5.922	5.913	5.940	VV	626	9239	0.12%	0.036%
52	5.941	5.940	5.993	VV	730	9613	0.13%	0.037%
53	6.002	5.993	6.013	PV	199	1427	0.02%	0.005%
54	6.028	6.013	6.052	VV	588	7248	0.09%	0.028%
55	6.061	6.052	6.087	VV	570	7539	0.10%	0.029%
56	6.105	6.087	6.123	VV	491	8031	0.10%	0.031%
57	6.152	6.123	6.197	VV	3951	52304	0.68%	0.201%
58	6.229	6.197	6.250	VV	1028	13573	0.18%	0.052%
59	6.266	6.250	6.277	VV	913	9769	0.13%	0.038%
60	6.296	6.277	6.320	VV	3201	40982	0.53%	0.158%
61	6.327	6.320	6.353	VV	754	9351	0.12%	0.036%
62	6.368	6.353	6.392	VV	1353	17721	0.23%	0.068%
63	6.402	6.392	6.422	VV	517	7051	0.09%	0.027%
64	6.425	6.422	6.431	VV	316	1172	0.02%	0.005%
65	6.456	6.443	6.466	VV	693	6159	0.08%	0.024%
66	6.470	6.466	6.495	VV	531	6112	0.08%	0.024%
67	6.506	6.495	6.516	VV	366	2603	0.03%	0.010%
68	6.527	6.516	6.537	VV	399	3481	0.05%	0.013%
69	6.541	6.537	6.563	VV	346	3372	0.04%	0.013%

				rteres				
70	6.584	6.563	6.609	VV	1182	16444	0.21%	0.063%
71	6.645	6.609	6.656	VV	1654	29481	0.38%	0.114%
72	6.664	6.656	6.677	VV	1493	17110	0.22%	0.066%
73	6.685	6.677	6.693	VV	1433	13415	0.17%	0.052%
74	6.704	6.693	6.728	VV	1849	24622	0.32%	0.095%
75	6.763	6.728	6.793	VV	2347	45129	0.59%	0.174%
76	6.806	6.793	6.822	VV	852	10034	0.13%	0.039%
77	6.843	6.822	6.893	VV	2036	39471	0.51%	0.152%
78	6.922	6.893	6.958	VV	3849	55707	0.73%	0.215%
79	6.966	6.958	6.970	VV	656	4303	0.06%	0.017%
80	6.996	6.970	7.016	VV	1385	26784	0.35%	0.103%
81	7.027	7.016	7.042	VV	983	12711	0.17%	0.049%
82	7.064	7.042	7.088	VV	5466	63316	0.83%	0.244%
83	7.101	7.088	7.110	VV	587	6624	0.09%	0.026%
84	7.121	7.110	7.138	VV	831	10075	0.13%	0.039%
85	7.152	7.138	7.170	VV	1044	12950	0.17%	0.050%
86	7.175	7.170	7.179	VV	297	1630	0.02%	0.006%
87	7.194	7.179	7.208	VV	582	7336	0.10%	0.028%
88	7.234	7.208	7.257	VV	1011	17086	0.22%	0.066%
89	7.270	7.257	7.290	VV	423	4931	0.06%	0.019%
90	7.322	7.290	7.335	VV	1740	22549	0.29%	0.087%
91	7.361	7.335	7.456	VV	769520	7674205	100.00%	29.552%
92	7.472	7.456	7.481	VV	2454	33723	0.44%	0.130%
93	7.485	7.481	7.507	VV	2259	27874	0.36%	0.107%
94	7.518	7.507	7.533	VV	1777	23483	0.31%	0.090%
95	7.543	7.533	7.566	VV	1320	20748	0.27%	0.080%
96	7.586	7.566	7.608	VV	1397	24190	0.32%	0.093%
97	7.628	7.608	7.667	VV	2244	40291	0.53%	0.155%
98	7.683	7.667	7.705	VV	1356	18652	0.24%	0.072%
99	7.718	7.705	7.733	VV	739	10741	0.14%	0.041%
100	7.749	7.733	7.777	VV	2543	32604	0.42%	0.126%
101	7.793	7.777	7.821	VV	876	16535	0.22%	0.064%
102	7.833	7.821	7.854	VV	934	14438	0.19%	0.056%
103	7.875	7.854	7.892	VV	852	15174	0.20%	0.058%
104	7.898	7.892	7.907	VV	827	6129	0.08%	0.024%
105	7.927	7.907	7.968	VV	8293	104960	1.37%	0.404%
106	7.974	7.968	8.000	VV	1190	10794	0.14%	0.042%
107	8.024	8.000	8.030	VV	1225	14199	0.19%	0.055%
108	8.048	8.030	8.053	VV	1518	18461	0.24%	0.071%
109	8.076	8.053	8.103	VV	1887	38354	0.50%	0.148%
110	8.120	8.103	8.139	VV	1172	15419	0.20%	0.059%
111	8.157	8.139	8.171	VV	948	11355	0.15%	0.044%
112	8.176	8.171	8.183	VV	393	2563	0.03%	0.010%

				rteres				
113	8.210	8.183	8.365	VV	410050	4934536	64.30%	19.002%
114	8.371	8.365	8.402	VV	2201	42561	0.55%	0.164%
115	8.412	8.402	8.441	VV	1869	38844	0.51%	0.150%
116	8.460	8.441	8.506	VV	3449	71508	0.93%	0.275%
117	8.520	8.506	8.560	VV	1265	27150	0.35%	0.105%
118	8.578	8.560	8.597	VV	837	14221	0.19%	0.055%
119	8.603	8.597	8.616	VV	705	7271	0.09%	0.028%
120	8.645	8.616	8.691	VV	46903	502251	6.54%	1.934%
121	8.701	8.691	8.713	VV	1236	15623	0.20%	0.060%
122	8.750	8.713	8.787	VV	4383	97532	1.27%	0.376%
123	8.813	8.787	8.818	VV	1432	20664	0.27%	0.080%
124	8.825	8.818	8.862	VV	1419	21498	0.28%	0.083%
125	8.877	8.862	8.893	VV	677	8797	0.11%	0.034%
126	8.897	8.893	8.901	VV	401	1345	0.02%	0.005%
127	8.936	8.901	8.970	VV	1227	28009	0.36%	0.108%
128	8.981	8.970	9.003	VV	859	10058	0.13%	0.039%
129	9.024	9.003	9.037	VV	607	9341	0.12%	0.036%
130	9.045	9.037	9.080	VV	716	10422	0.14%	0.040%
131	9.104	9.080	9.153	VV	1312	24315	0.32%	0.094%
132	9.159	9.153	9.166	VV	378	2309	0.03%	0.009%
133	9.176	9.166	9.192	VV	557	6716	0.09%	0.026%
134	9.204	9.192	9.227	VV	792	10806	0.14%	0.042%
135	9.242	9.227	9.262	VV	860	10334	0.13%	0.040%
136	9.279	9.262	9.310	PV	536	9543	0.12%	0.037%
137	9.353	9.310	9.362	VV	733	11765	0.15%	0.045%
138	9.384	9.362	9.476	VV	22945	466753	6.08%	1.797%
139	9.481	9.476	9.500	VV	1498	17991	0.23%	0.069%
140	9.518	9.500	9.547	VV	2293	39570	0.52%	0.152%
141	9.549	9.547	9.554	VV	621	2722	0.04%	0.010%
142	9.563	9.554	9.572	VV	787	6988	0.09%	0.027%
143	9.587	9.572	9.592	VV	817	8237	0.11%	0.032%
144	9.596	9.592	9.639	VV	770	14834	0.19%	0.057%
145	9.658	9.639	9.676	VV	507	7871	0.10%	0.030%
146	9.688	9.676	9.701	VV	566	6237	0.08%	0.024%
147	9.724	9.701	9.742	VV	401	6874	0.09%	0.026%
148	9.765	9.742	9.770	VV	337	4781	0.06%	0.018%
149	9.774	9.770	9.809	VV	356	6735	0.09%	0.026%
150	9.814	9.809	9.817	VV	416	1913	0.02%	0.007%
151	9.832	9.817	9.851	VV	657	8976	0.12%	0.035%
152	9.910	9.851	9.929	VV	727	20956	0.27%	0.081%
153	9.944	9.929	9.958	VV	672	9034	0.12%	0.035%
154	9.971	9.958	9.987	VV	643	8348	0.11%	0.032%
155	9.991	9.987	10.002	VV	503	4000	0.05%	0.015%

					rteres			
156	10.020	10.002	10.048	VV	1230	16550	0.22%	0.064%
157	10.055	10.048	10.070	VV	278	2962	0.04%	0.011%
158	10.091	10.070	10.104	VV	746	10663	0.14%	0.041%
159	10.117	10.104	10.127	VV	657	7481	0.10%	0.029%
160	10.147	10.127	10.166	VV	801	14029	0.18%	0.054%
161	10.190	10.166	10.209	VV	854	16267	0.21%	0.063%
162	10.237	10.209	10.287	VV	1544	39362	0.51%	0.152%
163	10.297	10.287	10.303	VV	542	3768	0.05%	0.015%
164	10.305	10.303	10.317	VV	507	3412	0.04%	0.013%
165	10.331	10.317	10.348	VV	740	9157	0.12%	0.035%
166	10.370	10.348	10.421	VV	1322	24898	0.32%	0.096%
167	10.427	10.421	10.455	VV	468	4483	0.06%	0.017%
168	10.465	10.455	10.479	VV	290	3146	0.04%	0.012%
169	10.485	10.479	10.491	VV	341	2004	0.03%	0.008%
170	10.495	10.491	10.499	VV	324	1260	0.02%	0.005%
171	10.516	10.499	10.527	VV	574	6783	0.09%	0.026%
172	10.535	10.527	10.550	VV	552	6291	0.08%	0.024%
173	10.554	10.550	10.580	VV	492	6508	0.08%	0.025%
174	10.588	10.580	10.598	VV	373	3334	0.04%	0.013%
175	10.640	10.598	10.656	VV	973	20566	0.27%	0.079%
176	10.670	10.656	10.690	VV	848	9914	0.13%	0.038%
177	10.702	10.690	10.747	VV	540	7066	0.09%	0.027%
178	10.753	10.747	10.777	VV	282	3184	0.04%	0.012%
179	10.788	10.777	10.840	VV	570	8662	0.11%	0.033%
180	10.883	10.862	10.917	VV	1040	18514	0.24%	0.071%
181	10.950	10.917	10.987	VV	1425	23873	0.31%	0.092%
182	10.996	10.987	11.002	VV	304	1904	0.02%	0.007%
183	11.033	11.002	11.061	VV	694	14139	0.18%	0.054%
184	11.078	11.061	11.084	VV	272	2456	0.03%	0.009%
185	11.106	11.084	11.122	VV	262	2538	0.03%	0.010%
186	11.162	11.135	11.172	VV	334	4888	0.06%	0.019%
187	11.176	11.172	11.183	VV	295	1449	0.02%	0.006%
188	11.188	11.183	11.202	VV	238	1266	0.02%	0.005%
189	11.245	11.202	11.315	VV	484126	5199003	67.75%	20.020%
190	11.326	11.315	11.345	VV	1019	16731	0.22%	0.064%
191	11.357	11.345	11.393	VV	1077	23489	0.31%	0.090%
192	11.416	11.393	11.442	VV	1160	20649	0.27%	0.080%
193	11.449	11.442	11.463	VV	325	3694	0.05%	0.014%
194	11.474	11.463	11.484	VV	451	4218	0.05%	0.016%
195	11.515	11.484	11.522	VV	531	8581	0.11%	0.033%
196	11.524	11.522	11.531	VV	457	2063	0.03%	0.008%
197	11.546	11.531	11.557	VV	511	6139	0.08%	0.024%
198	11.575	11.557	11.587	VV	685	9450	0.12%	0.036%
199	11.608	11.587	11.633	VV	933	18438	0.24%	0.071%

				rteres				
200	11.671	11.633	11.723	VV	6146	97454	1.27%	0.375%
201	11.746	11.723	11.761	VV	869	14695	0.19%	0.057%
202	11.766	11.761	11.783	VV	756	7176	0.09%	0.028%
203	11.821	11.783	11.847	VV	1108	27970	0.36%	0.108%
204	11.871	11.847	11.938	VV	10164	189329	2.47%	0.729%
205	11.944	11.938	11.975	VV	1230	21338	0.28%	0.082%
206	11.977	11.975	12.002	VV	768	10978	0.14%	0.042%
207	12.005	12.002	12.009	VV	736	2724	0.04%	0.010%
208	12.013	12.009	12.048	VV	675	12474	0.16%	0.048%
209	12.059	12.048	12.065	VV	585	5089	0.07%	0.020%
210	12.091	12.065	12.094	VV	840	11505	0.15%	0.044%
211	12.114	12.094	12.138	VV	3149	41619	0.54%	0.160%
212	12.159	12.138	12.169	VV	462	6593	0.09%	0.025%
213	12.187	12.169	12.217	VV	1006	15172	0.20%	0.058%
214	12.221	12.217	12.227	VV	301	1160	0.02%	0.004%
215	12.250	12.227	12.275	VV	1794	22613	0.29%	0.087%
216	12.314	12.275	12.357	VV	2718	47964	0.63%	0.185%
217	12.380	12.357	12.401	VV	732	10883	0.14%	0.042%
218	12.412	12.401	12.418	VV	251	1603	0.02%	0.006%
219	12.439	12.428	12.475	VV	192	3893	0.05%	0.015%
220	12.507	12.475	12.518	VV	304	4557	0.06%	0.018%
221	12.526	12.518	12.532	VV	303	1953	0.03%	0.008%
222	12.538	12.532	12.545	VV	384	1622	0.02%	0.006%
223	12.569	12.551	12.588	VV	278	2995	0.04%	0.012%
224	12.602	12.588	12.610	PV	355	3215	0.04%	0.012%
225	12.614	12.610	12.628	VV	285	2621	0.03%	0.010%
226	12.687	12.628	12.751	VV	124336	1503785	19.60%	5.791%
227	12.758	12.751	12.798	VV	1362	24049	0.31%	0.093%
228	12.802	12.798	12.813	VV	507	3920	0.05%	0.015%
229	12.818	12.813	12.823	VV	440	2351	0.03%	0.009%
230	12.831	12.823	12.839	VV	450	3480	0.05%	0.013%
231	12.859	12.839	12.870	VV	684	9911	0.13%	0.038%
232	12.877	12.870	12.897	VV	733	9734	0.13%	0.037%
233	12.918	12.897	12.951	VV	3327	50589	0.66%	0.195%
234	12.958	12.951	12.995	VV	626	11648	0.15%	0.045%
235	12.999	12.995	13.019	VV	480	6000	0.08%	0.023%
236	13.029	13.019	13.034	VV	656	4088	0.05%	0.016%
237	13.045	13.034	13.058	VV	593	7236	0.09%	0.028%
238	13.067	13.058	13.072	VV	496	3297	0.04%	0.013%
239	13.075	13.072	13.080	VV	445	1541	0.02%	0.006%
240	13.102	13.080	13.152	VV	2389	54869	0.71%	0.211%
241	13.155	13.152	13.175	VV	633	7700	0.10%	0.030%
242	13.181	13.175	13.220	VV	555	11949	0.16%	0.046%

					riteres			
243	13.230	13.220	13.242	VV	457	5025	0.07%	0.019%
244	13.271	13.242	13.297	VV	1287	26255	0.34%	0.101%
245	13.312	13.297	13.333	VV	872	13074	0.17%	0.050%
246	13.349	13.333	13.366	VV	429	6288	0.08%	0.024%
247	13.392	13.366	13.423	VV	1332	25874	0.34%	0.100%
248	13.441	13.423	13.477	VV	1586	22733	0.30%	0.088%
249	13.480	13.477	13.488	VV	298	1266	0.02%	0.005%
250	13.494	13.488	13.532	PV	150	2442	0.03%	0.009%
251	13.558	13.532	13.573	VV	360	4387	0.06%	0.017%
252	13.600	13.587	13.611	VV	303	2268	0.03%	0.009%
253	13.617	13.611	13.627	VV	300	1769	0.02%	0.007%
254	13.660	13.627	13.682	VV	546	11674	0.15%	0.045%
255	13.695	13.682	13.722	VV	833	11298	0.15%	0.044%
256	13.727	13.722	13.731	VV	284	1200	0.02%	0.005%
257	13.735	13.731	13.744	VV	333	1938	0.03%	0.007%
258	13.749	13.744	13.760	VV	294	1845	0.02%	0.007%
259	13.765	13.760	13.785	VV	303	2976	0.04%	0.011%
260	13.802	13.785	13.814	VV	437	5364	0.07%	0.021%
261	13.819	13.814	13.823	VV	275	1220	0.02%	0.005%
262	13.835	13.823	13.842	VV	614	4305	0.06%	0.017%
263	13.847	13.842	13.850	VV	450	1833	0.02%	0.007%
264	13.858	13.850	13.864	VV	476	3467	0.05%	0.013%
265	13.886	13.864	13.927	VV	1331	24314	0.32%	0.094%
266	13.964	13.927	13.980	VV	443	9420	0.12%	0.036%
267	14.002	13.980	14.031	VV	659	11019	0.14%	0.042%
268	14.042	14.031	14.064	VV	303	3991	0.05%	0.015%
269	14.111	14.064	14.123	VV	537	10908	0.14%	0.042%
270	14.166	14.123	14.230	VV	1411	42245	0.55%	0.163%
271	14.303	14.230	14.330	VV	348	16578	0.22%	0.064%
272	14.346	14.330	14.367	VV	404	6425	0.08%	0.025%
273	14.384	14.367	14.443	VV	836	19504	0.25%	0.075%
274	14.502	14.443	14.522	VV	1357	31813	0.41%	0.123%
275	14.538	14.522	14.569	VV	1876	36649	0.48%	0.141%
276	14.588	14.569	14.618	VV	1911	31021	0.40%	0.119%
277	14.651	14.618	14.687	VV	1069	16933	0.22%	0.065%
278	14.708	14.687	14.772	VV	550	19749	0.26%	0.076%
279	14.788	14.772	14.828	VV	457	9945	0.13%	0.038%
280	14.836	14.828	14.860	VV	372	4805	0.06%	0.019%
281	14.873	14.860	14.882	PV	250	2435	0.03%	0.009%
282	14.915	14.882	15.040	VV	8360	210753	2.75%	0.812%
283	15.070	15.040	15.150	VV	2973	65489	0.85%	0.252%
284	15.183	15.150	15.210	VV	518	13372	0.17%	0.051%
285	15.226	15.210	15.236	VV	381	5213	0.07%	0.020%

					rteres			
286	15.250	15.236	15.277	VV	592	10129	0.13%	0.039%
287	15.357	15.277	15.397	VV	902	34058	0.44%	0.131%
288	15.405	15.397	15.417	VV	629	4750	0.06%	0.018%
289	15.444	15.417	15.489	VV	759	22118	0.29%	0.085%
290	15.518	15.489	15.535	VV	1052	19091	0.25%	0.074%
291	15.554	15.535	15.582	VV	1481	23099	0.30%	0.089%
292	15.590	15.582	15.608	VV	502	5768	0.08%	0.022%
293	15.621	15.608	15.664	VV	605	11585	0.15%	0.045%
294	15.706	15.664	15.732	VV	744	18543	0.24%	0.071%
295	15.755	15.732	15.782	VV	732	15411	0.20%	0.059%
296	15.795	15.782	15.807	VV	336	2916	0.04%	0.011%
297	15.818	15.807	15.845	VV	257	3913	0.05%	0.015%
298	15.864	15.845	15.885	VV	272	3365	0.04%	0.013%
299	15.927	15.885	15.959	VV	1116	23539	0.31%	0.091%
300	15.966	15.959	15.985	VV	434	5529	0.07%	0.021%
301	15.994	15.985	16.010	VV	342	4576	0.06%	0.018%
302	16.034	16.010	16.056	VV	1204	16964	0.22%	0.065%
303	16.113	16.056	16.160	VV	1107	36191	0.47%	0.139%
304	16.182	16.160	16.204	VV	614	12518	0.16%	0.048%
305	16.239	16.204	16.264	VV	667	17978	0.23%	0.069%
306	16.277	16.264	16.301	VV	433	8476	0.11%	0.033%
307	16.312	16.301	16.341	VV	441	7973	0.10%	0.031%
308	16.407	16.341	16.434	VV	1224	33539	0.44%	0.129%
309	16.467	16.434	16.482	VV	1643	30214	0.39%	0.116%
310	16.497	16.482	16.520	VV	2136	34618	0.45%	0.133%
311	16.540	16.520	16.567	VV	2912	42112	0.55%	0.162%
312	16.577	16.567	16.604	VV	681	11571	0.15%	0.045%
313	16.614	16.604	16.652	VV	468	8310	0.11%	0.032%
314	16.660	16.652	16.692	VV	373	6590	0.09%	0.025%
315	16.712	16.692	16.748	VV	442	8390	0.11%	0.032%
316	16.803	16.748	16.840	PV	1353	31050	0.40%	0.120%
317	16.872	16.840	16.900	VV	1045	25334	0.33%	0.098%
318	16.945	16.900	17.002	VV	2543	54548	0.71%	0.210%
319	17.011	17.002	17.020	VV	338	2217	0.03%	0.009%
320	17.058	17.020	17.092	VV	1094	24308	0.32%	0.094%
321	17.147	17.092	17.217	VV	846	30243	0.39%	0.116%
322	17.246	17.217	17.270	PV	494	9861	0.13%	0.038%
323	17.280	17.270	17.297	VV	304	4916	0.06%	0.019%
324	17.380	17.297	17.410	VV	3240	67829	0.88%	0.261%
325	17.418	17.410	17.435	VV	489	6174	0.08%	0.024%
326	17.470	17.435	17.505	VV	4289	74035	0.96%	0.285%
327	17.525	17.505	17.551	VV	820	17695	0.23%	0.068%
328	17.579	17.551	17.626	VV	644	16439	0.21%	0.063%
329	17.672	17.626	17.701	PV	1645	31684	0.41%	0.122%

	rterres							
330	17.737	17.701	17.772	VV	4472	89593	1.17%	0.345%
331	17.801	17.772	17.877	VV	3941	90359	1.18%	0.348%
332	17.898	17.877	17.978	VV	764	20125	0.26%	0.077%
333	18.009	17.978	18.035	PV	274	4810	0.06%	0.019%
334	18.076	18.035	18.117	PV	900	17965	0.23%	0.069%
335	18.207	18.117	18.228	VV	3135	67014	0.87%	0.258%
336	18.247	18.228	18.283	VV	1432	24065	0.31%	0.093%
Sum of corrected areas:						25968784		



CALIBRATION SUMMARY

Initial Calibration Report for SequenceID : FC121024AL

AreaCount

Parameter Range	FC067961.D	FC067962.D	FC067963.D	FC067964.D	FC067965.D	
Aliphatic C9-C12	43219570.000	22812652.000	9633573.000	4956995.000	2543550.000	
Aliphatic C12-C16	29481914.000	15507863.000	6502424.000	3322573.000	1701990.000	
Aliphatic C16-C21	42017389.000	21918249.000	9252854.000	4768030.000	2437274.000	
Aliphatic C21-C28	50542953.000	26061820.000	10946904.000	5674955.000	2930879.000	
Aliphatic C28-C40	58878618.000	30107117.000	12646225.000	6629218.000	3463888.000	
Aliphatic EPH	224140444.000	116407701.000	48981980.000	25351771.000	13077581.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	158302.459333	6.484				
Aliphatic C12-C16	160275.29	5.671				
Aliphatic C16-C21	152362.6246664	6.046				
Aliphatic C21-C28	136384.1215	6.035				
Aliphatic C28-C40	105964.6389996	6.736				
Aliphatic EPH	135215.008444	6.221				

Concentration

Parameter Range	FC067961.D	FC067962.D	FC067963.D	FC067964.D	FC067965.D	
Aliphatic C9-C12	300.000	150.000	60.000	30.000	15.000	
Aliphatic C12-C16	200.000	100.000	40.000	20.000	10.000	
Aliphatic C16-C21	300.000	150.000	60.000	30.000	15.000	
Aliphatic C21-C28	400.000	200.000	80.000	40.000	20.000	
Aliphatic C28-C40	600.000	300.000	120.000	60.000	30.000	
Aliphatic EPH	1800.000	900.000	360.000	180.000	90.000	

Response Factor

Parameter Range	FC067961.D	FC067962.D	FC067963.D	FC067964.D	FC067965.D	
Aliphatic C9-C12	144065.233333	152084.346666	160559.550000	165233.166666	169570.000000	
Aliphatic C12-C16	147409.570000	155078.630000	162560.600000	166128.650000	170199.000000	
Aliphatic C16-C21	140057.963333	146121.660000	154214.233333	158934.333333	162484.933333	

Initial Calibration Report for SequenceID : FC121024AL

Aliphatic C21-C28	126357.382500	130309.100000	136836.300000	141873.875000	146543.950000	
Aliphatic C28-C40	98131.030000	100357.056666	105385.208333	110486.966666	115462.933333	
Aliphatic EPH	124522.468888	129341.890000	136061.055555	140843.172222	145306.455555	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\F121024AL\
 Data File : FC067961.D
 Signal(s) : FID1A.ch
 Acq On : 10 Dec 2024 04:48
 Operator : YP/AJ
 Sample : 100 PPM ALIPHATIC HC STD1
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
 Quant Time: Dec 10 07:48:09 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:47:35 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.480	15877514	91.282 ug/ml
Spiked Amount 50.000		Recovery =	182.56%
12) S 1-chlorooctadecane (S...	12.918	11870508	92.116 ug/ml
Spiked Amount 50.000		Recovery =	184.23%
Target Compounds			
1) T n-Nonane (C9)	3.255	14082462	89.470 ug/ml
2) T n-Decane (C10)	4.319	14433547	89.814 ug/ml
3) T A~Naphthalene (C11.7)	5.896	16106430	90.999 ug/ml
4) T n-Dodecane (C12)	6.335	14703561	89.888 ug/ml
5) T A~2-methylnaphthalene...	6.952	15639596	91.538 ug/ml
6) T n-Tetradecane (C14)	8.128	14593971	90.424 ug/ml
7) T n-Hexadecane (C16)	9.727	14887943	90.932 ug/ml
8) T n-Octadecane (C18)	11.170	14738386	90.361 ug/ml
10) T n-Eicosane (C20)	12.476	13828766	90.965 ug/ml
11) T n-Heneicosane (C21)	13.087	13450237	91.179 ug/ml
13) T n-Docosane (C22)	13.673	13209285	91.611 ug/ml
14) T n-Tetracosane (C24)	14.774	12875285	92.195 ug/ml
15) T n-Hexacosane (C26)	15.792	12442452	92.666 ug/ml
16) T n-Octacosane (C28)	16.741	12015931	92.981 ug/ml
17) T n-Tricontane (C30)	17.627	11946295	92.851 ug/ml
18) T n-Dotriacontane (C32)	18.458	11369911	92.550 ug/ml
19) T n-Tetratriacontane (C34)	19.240	10037386	92.775 ug/ml
20) T n-Hexatriacontane (C36)	19.977	8849215	93.735 ug/ml
21) T n-Octatriacontane (C38)	20.698	8396142	93.025 ug/ml
22) T n-Tetracontane (C40)	21.578	8279669	94.146 ug/ml

(f)=RT Delta > 1/2 Window

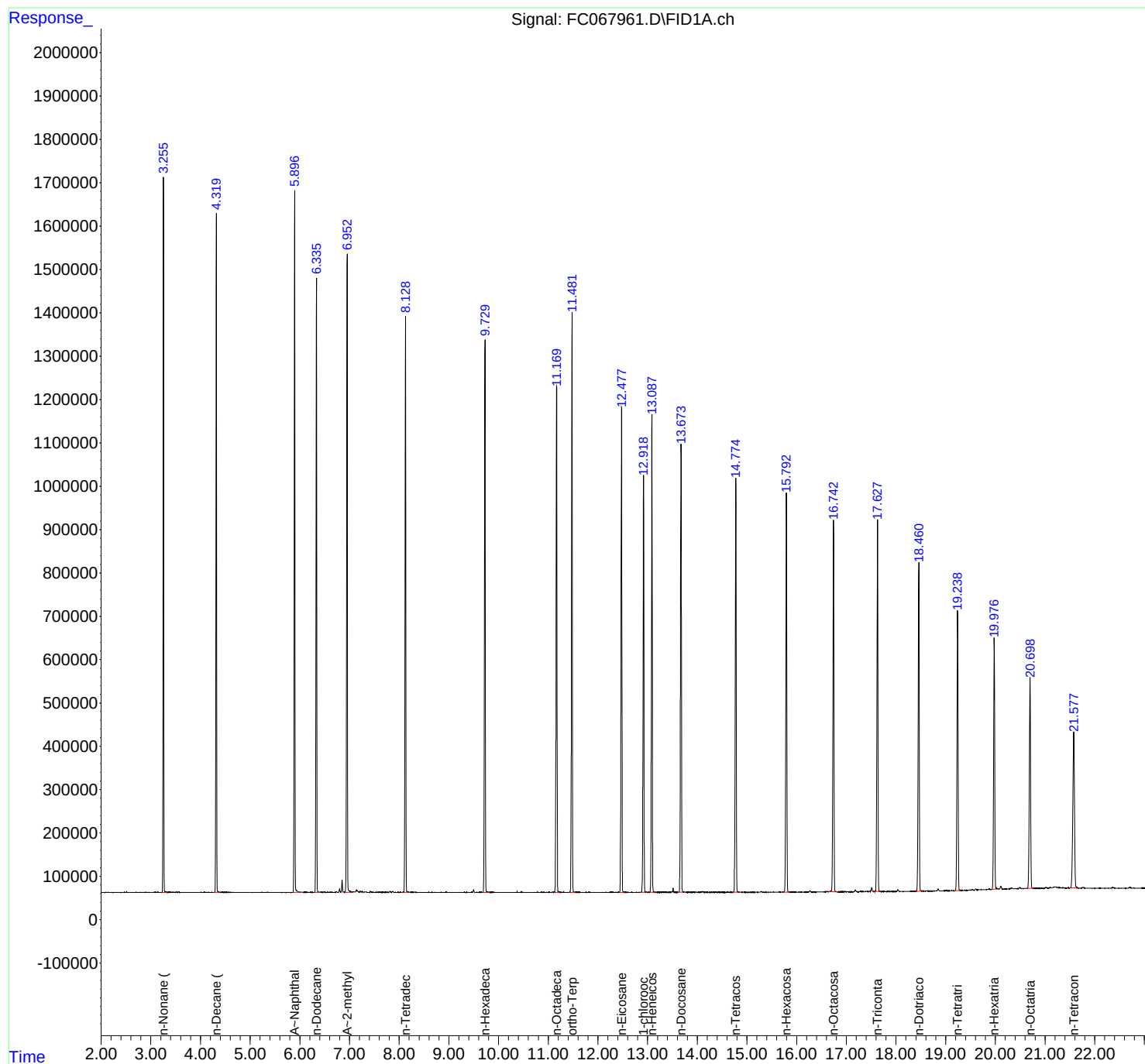
(m)=manual int.

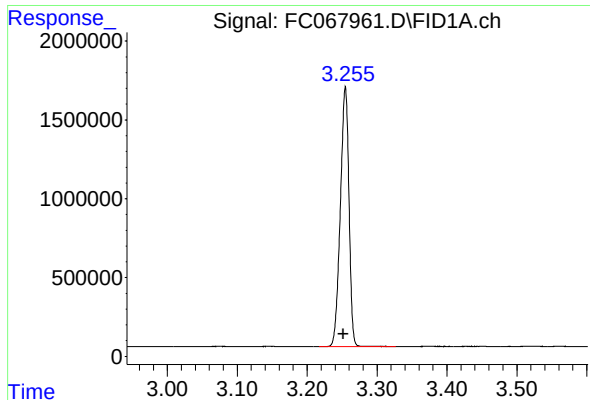
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
Data File : FC067961.D
Signal(s) : FID1A.ch
Acq On : 10 Dec 2024 04:48
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Dec 10 07:48:09 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:47:35 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

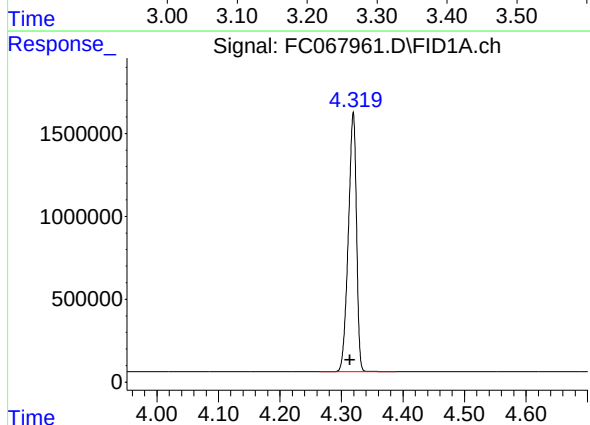




#1 n-Nonane (C9)

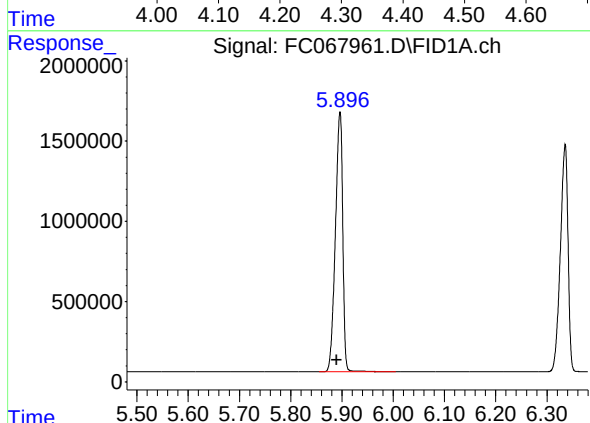
R.T.: 3.255 min
Delta R.T.: 0.003 min
Response: 14082462
Conc: 89.47 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



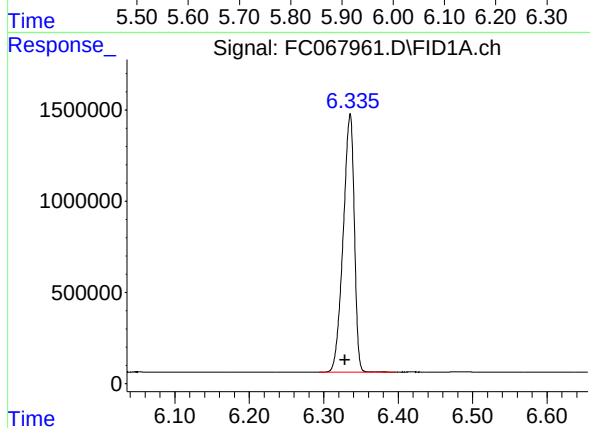
#2 n-Decane (C10)

R.T.: 4.319 min
Delta R.T.: 0.005 min
Response: 14433547
Conc: 89.81 ug/ml



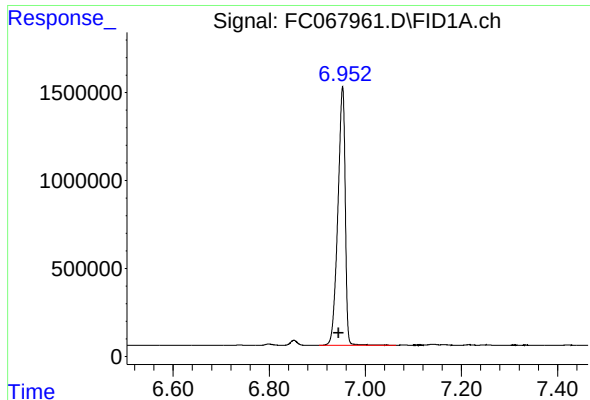
#3 A~Naphthalene (C11.7)

R.T.: 5.896 min
Delta R.T.: 0.006 min
Response: 16106430
Conc: 91.00 ug/ml



#4 n-Dodecane (C12)

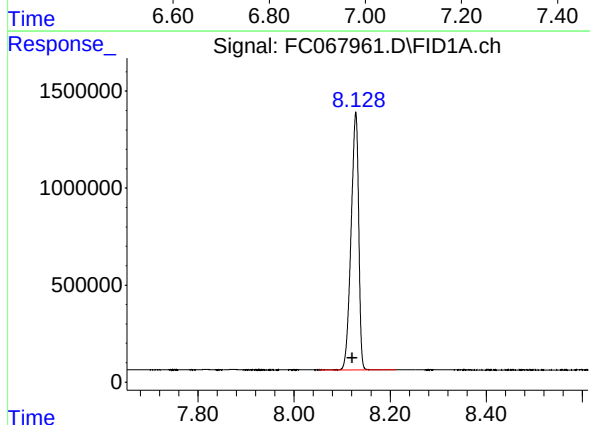
R.T.: 6.335 min
Delta R.T.: 0.006 min
Response: 14703561
Conc: 89.89 ug/ml



#5 A~2-methylnaphthalene (C12.89)

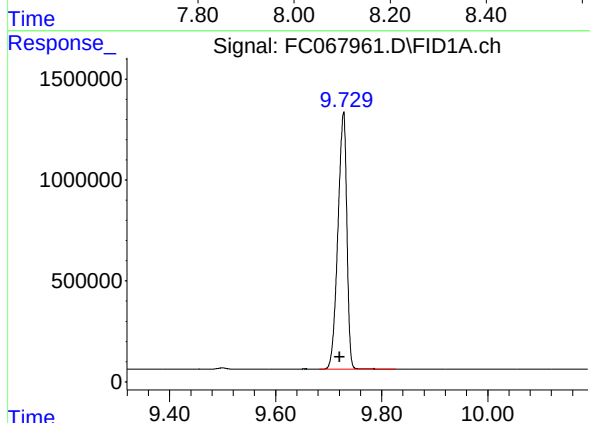
R.T.: 6.952 min
Delta R.T.: 0.008 min
Response: 15639596
Conc: 91.54 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



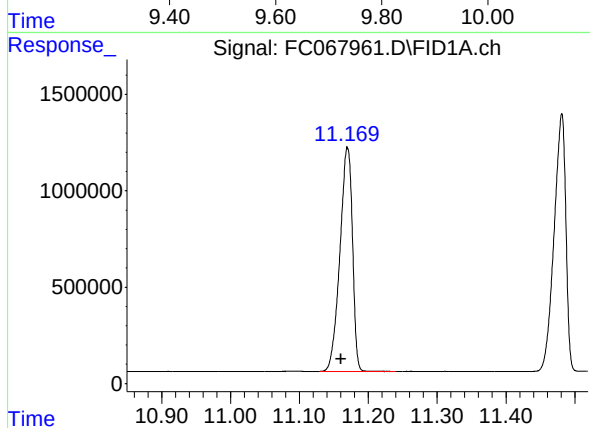
#6 n-Tetradecane (C14)

R.T.: 8.128 min
Delta R.T.: 0.006 min
Response: 14593971
Conc: 90.42 ug/ml



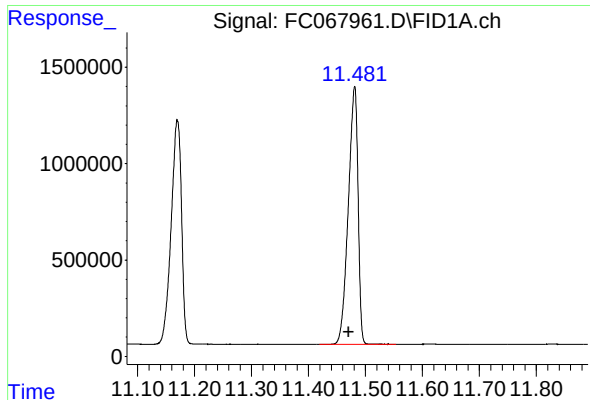
#7 n-Hexadecane (C16)

R.T.: 9.727 min
Delta R.T.: 0.007 min
Response: 14887943
Conc: 90.93 ug/ml



#8 n-Octadecane (C18)

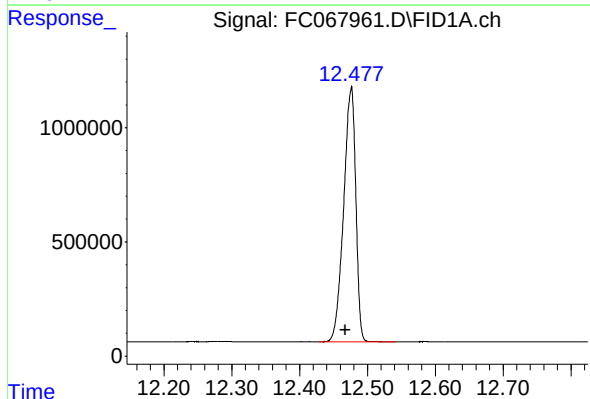
R.T.: 11.170 min
Delta R.T.: 0.009 min
Response: 14738386
Conc: 90.36 ug/ml



#9 ortho-Terphenyl (SURR)

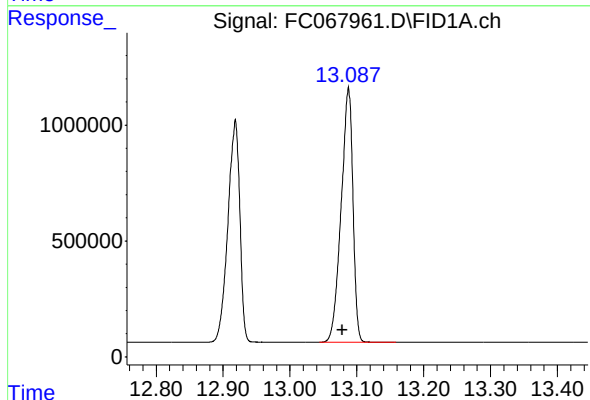
R.T.: 11.480 min
Delta R.T.: 0.010 min
Response: 15877514
Conc: 91.28 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



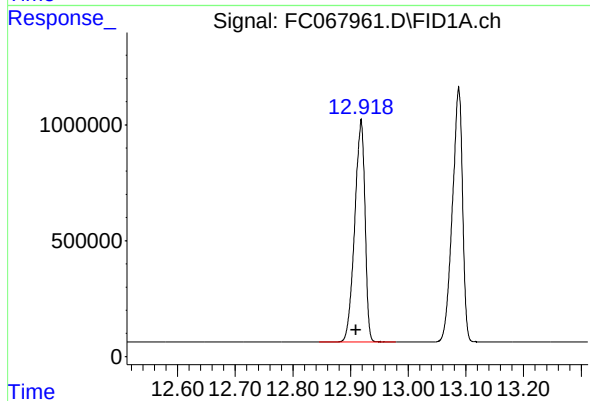
#10 n-Eicosane (C20)

R.T.: 12.476 min
Delta R.T.: 0.008 min
Response: 13828766
Conc: 90.97 ug/ml



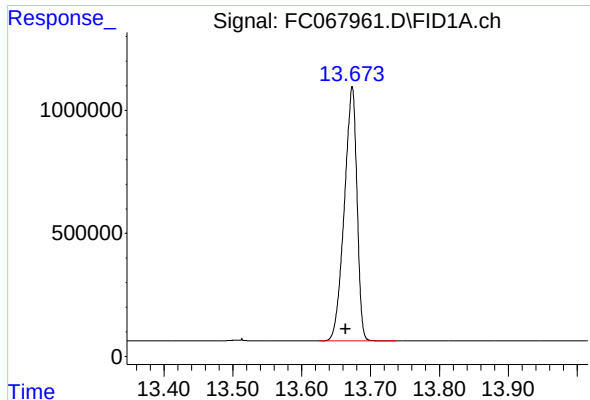
#11 n-Heneicosane (C21)

R.T.: 13.087 min
Delta R.T.: 0.009 min
Response: 13450237
Conc: 91.18 ug/ml



#12 1-chlorooctadecane (SURR)

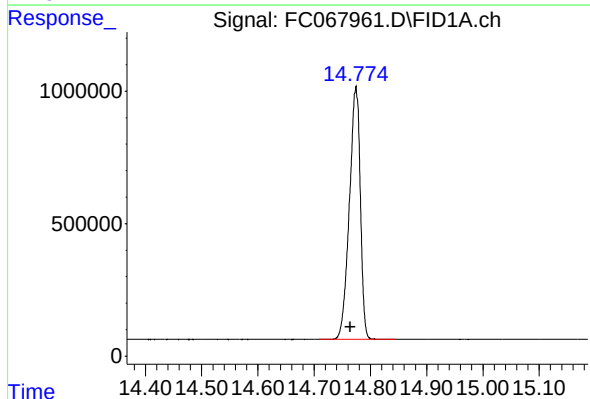
R.T.: 12.918 min
Delta R.T.: 0.009 min
Response: 11870508
Conc: 92.12 ug/ml



#13 n-Docosane (C22)

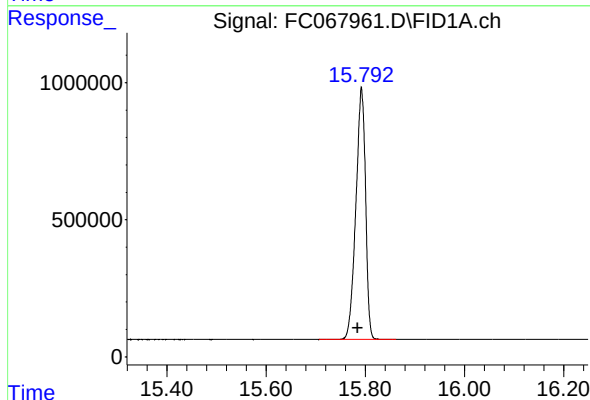
R.T.: 13.673 min
Delta R.T.: 0.009 min
Response: 13209285
Conc: 91.61 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



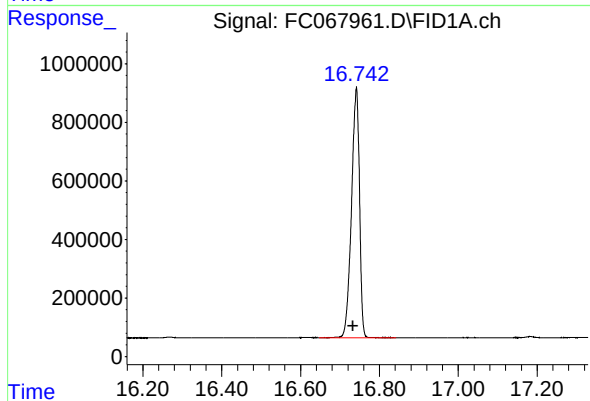
#14 n-Tetracosane (C24)

R.T.: 14.774 min
Delta R.T.: 0.009 min
Response: 12875285
Conc: 92.19 ug/ml



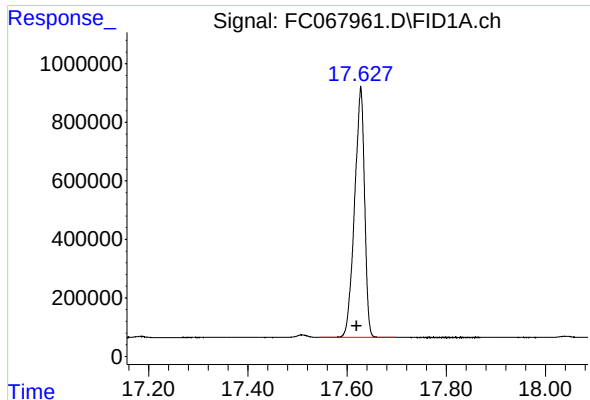
#15 n-Hexacosane (C26)

R.T.: 15.792 min
Delta R.T.: 0.008 min
Response: 12442452
Conc: 92.67 ug/ml



#16 n-Octacosane (C28)

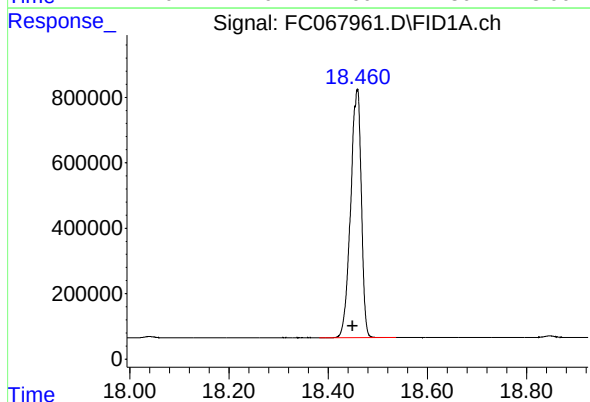
R.T.: 16.741 min
Delta R.T.: 0.008 min
Response: 12015931
Conc: 92.98 ug/ml



#17 n-Tricontane (C30)

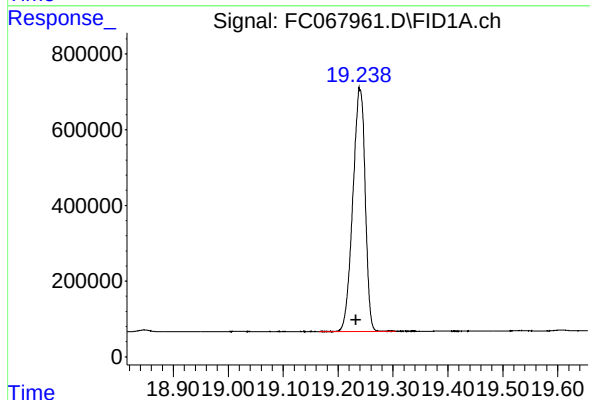
R.T.: 17.627 min
Delta R.T.: 0.009 min
Response: 11946295
Conc: 92.85 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



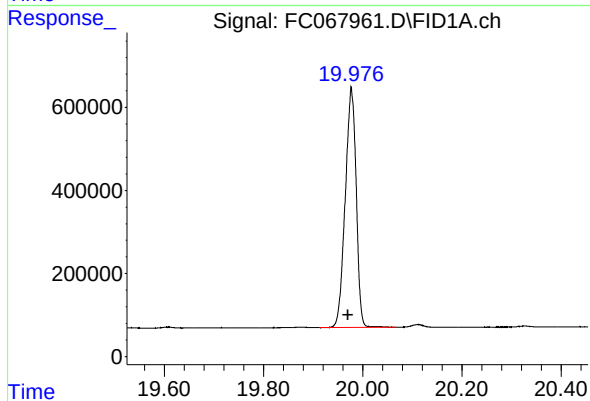
#18 n-Dotriacontane (C32)

R.T.: 18.458 min
Delta R.T.: 0.009 min
Response: 11369911
Conc: 92.55 ug/ml



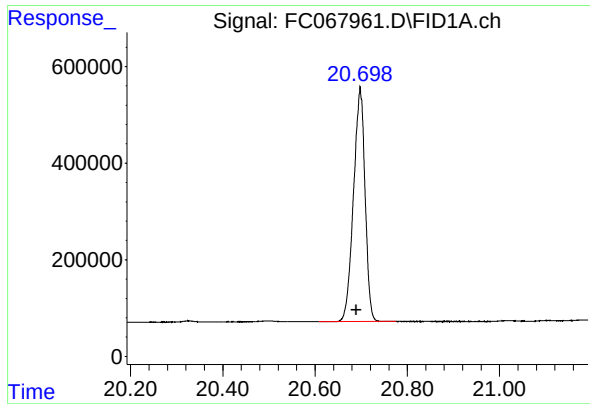
#19 n-Tetratriacontane (C34)

R.T.: 19.240 min
Delta R.T.: 0.008 min
Response: 10037386
Conc: 92.77 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 19.977 min
Delta R.T.: 0.007 min
Response: 8849215
Conc: 93.73 ug/ml



#21 n-Octatriacontane (C38)

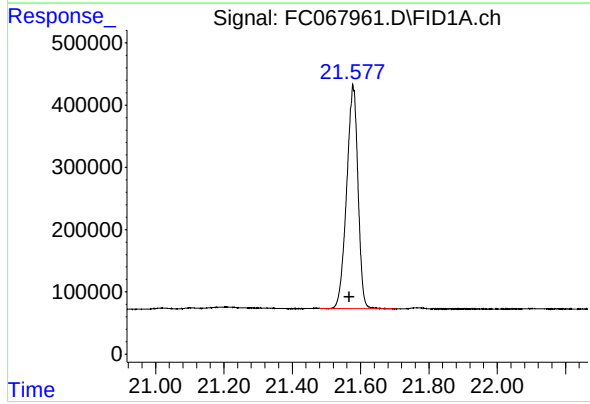
R.T.: 20.698 min
Delta R.T.: 0.009 min
Response: 8396142
Conc: 93.03 ug/ml

Instrument :

FID_C

ClientSampleId :

100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 21.578 min
Delta R.T.: 0.010 min
Response: 8279669
Conc: 94.15 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
Data File : FC067961.D
Signal(s) : FID1A.ch
Acq On : 10 Dec 2024 04:48
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.255	3.217	3.327	BB	1657147	14082462	87.43%	4.965%
2	4.319	4.264	4.389	BB	1558462	14433547	89.61%	5.089%
3	5.896	5.855	6.005	BB	1616858	16106430	100.00%	5.679%
4	6.335	6.294	6.397	BB	1415988	14703561	91.29%	5.184%
5	6.952	6.904	7.064	BV	1467959	15639596	97.10%	5.514%
6	8.128	8.052	8.212	BB	1333411	14593971	90.61%	5.145%
7	9.728	9.682	9.827	BB	1268020	14887943	92.43%	5.249%
8	11.170	11.129	11.240	BB	1160772	14738386	91.51%	5.196%
9	11.480	11.419	11.554	BB	1336651	15877514	98.58%	5.598%
10	12.476	12.429	12.542	BB	1103665	13828766	85.86%	4.876%
11	12.918	12.845	12.979	BB	966125	11870508	73.70%	4.185%
12	13.087	13.044	13.159	PB	1093164	13450237	83.51%	4.742%
13	13.673	13.625	13.737	BB	1037894	13209285	82.01%	4.657%
14	14.774	14.709	14.845	BB	944198	12875285	79.94%	4.539%
15	15.792	15.707	15.862	BB	919565	12442452	77.25%	4.387%
16	16.741	16.647	16.842	BB	860086	12015931	74.60%	4.236%
17	17.627	17.544	17.699	PB	853098	11946295	74.17%	4.212%
18	18.458	18.382	18.537	BB	758668	11369911	70.59%	4.009%
19	19.240	19.165	19.305	BB	637048	10037386	62.32%	3.539%
20	19.977	19.912	20.067	BB	577272	8849215	54.94%	3.120%
21	20.698	20.609	20.775	BB	482723	8396142	52.13%	2.960%
22	21.578	21.479	21.704	BB	355825	8279669	51.41%	2.919%
Sum of corrected areas:						283634492		

Aliphatic EPH 121024.M Tue Dec 10 08:33:34 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
 Data File : FC067962.D
 Signal(s) : FID1A.ch
 Acq On : 10 Dec 2024 05:24
 Operator : YP/AJ
 Sample : 50 PPM ALIPHATIC HC STD2
 Misc :
 ALS Vial : 27 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
 Quant Time: Dec 10 07:48:21 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:47:35 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.475	8263318	47.507 ug/ml
Spiked Amount 50.000		Recovery =	95.01%
12) S 1-chlorooctadecane (S...	12.912	6148518	47.713 ug/ml
Spiked Amount 50.000		Recovery =	95.43%
Target Compounds			
1) T n-Nonane (C9)	3.253	7439779	47.267 ug/ml
2) T n-Decane (C10)	4.316	7616487	47.394 ug/ml
3) T A~Naphthalene (C11.7)	5.892	8456127	47.776 ug/ml
4) T n-Dodecane (C12)	6.331	7756386	47.417 ug/ml
5) T A~2-methylnaphthalene...	6.948	8196212	47.972 ug/ml
6) T n-Tetradecane (C14)	8.124	7677734	47.571 ug/ml
7) T n-Hexadecane (C16)	9.724	7830129	47.824 ug/ml
8) T n-Octadecane (C18)	11.164	7726228	47.369 ug/ml
10) T n-Eicosane (C20)	12.471	7209186	47.422 ug/ml
11) T n-Heneicosane (C21)	13.082	6982835	47.337 ug/ml
13) T n-Docosane (C22)	13.667	6851009	47.514 ug/ml
14) T n-Tetracosane (C24)	14.768	6643747	47.573 ug/ml
15) T n-Hexacosane (C26)	15.788	6396052	47.635 ug/ml
16) T n-Octacosane (C28)	16.737	6171012	47.752 ug/ml
17) T n-Tricontane (C30)	17.622	6122300	47.585 ug/ml
18) T n-Dotriacontane (C32)	18.454	5824606	47.412 ug/ml
19) T n-Tetratriacontane (C34)	19.237	5136813	47.479 ug/ml
20) T n-Hexatriacontane (C36)	19.974	4512465	47.798 ug/ml
21) T n-Octatriacontane (C38)	20.694	4273980	47.354 ug/ml
22) T n-Tetracontane (C40)	21.574	4236953	48.177 ug/ml

(f)=RT Delta > 1/2 Window

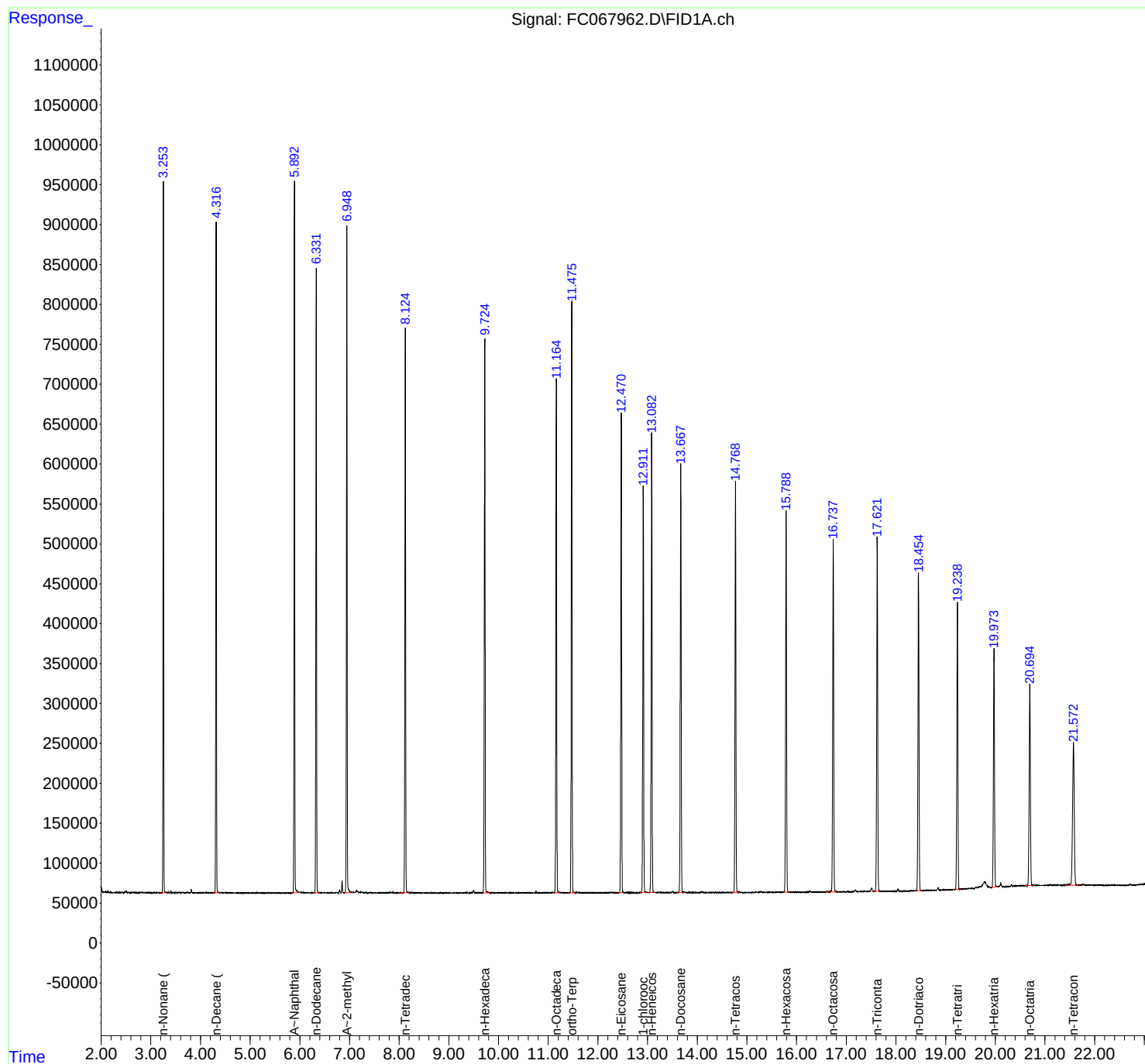
(m)=manual int.

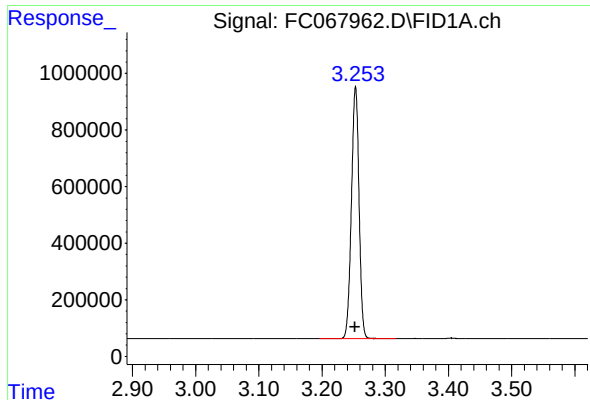
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
Data File : FC067962.D
Signal(s) : FID1A.ch
Acq On : 10 Dec 2024 05:24
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Dec 10 07:48:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:47:35 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

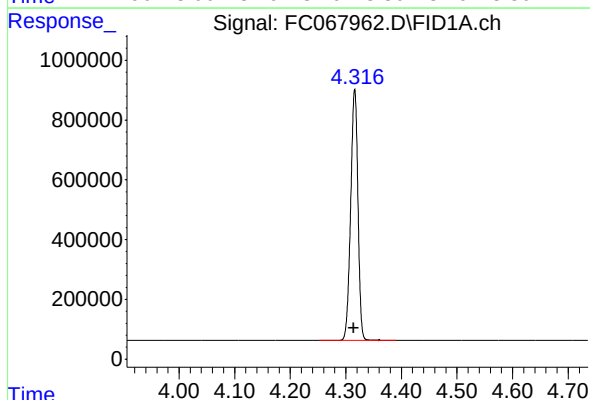




#1 n-Nonane (C9)

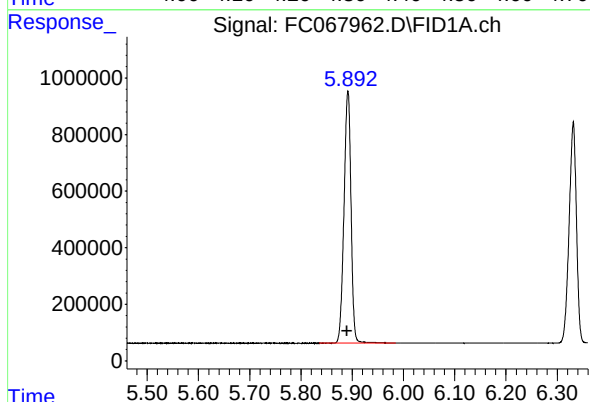
R.T.: 3.253 min
Delta R.T.: 0.000 min
Response: 7439779
Conc: 47.27 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



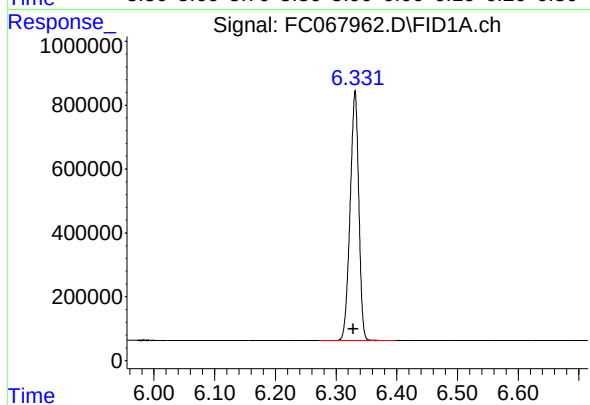
#2 n-Decane (C10)

R.T.: 4.316 min
Delta R.T.: 0.002 min
Response: 7616487
Conc: 47.39 ug/ml



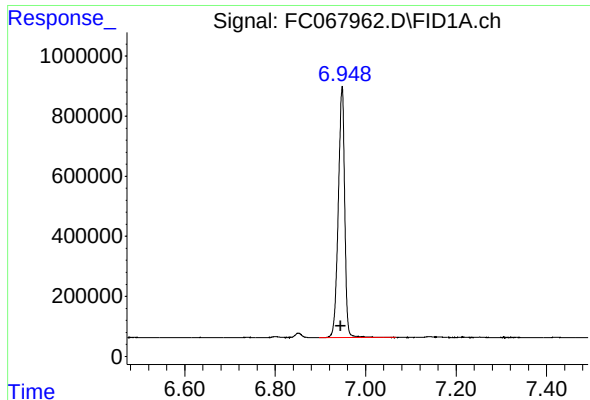
#3 A~Naphthalene (C11.7)

R.T.: 5.892 min
Delta R.T.: 0.002 min
Response: 8456127
Conc: 47.78 ug/ml



#4 n-Dodecane (C12)

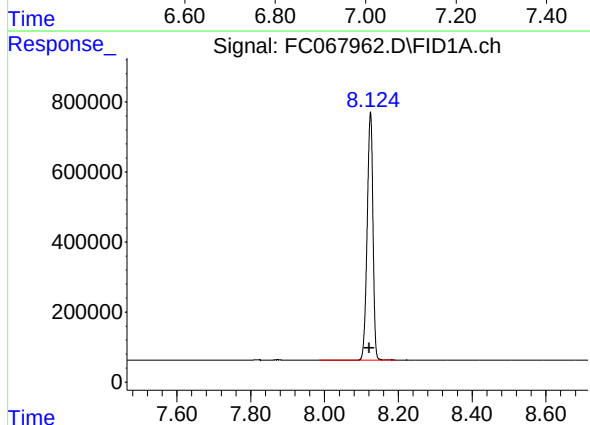
R.T.: 6.331 min
Delta R.T.: 0.003 min
Response: 7756386
Conc: 47.42 ug/ml



#5 A~2-methylnaphthalene (C12.89)

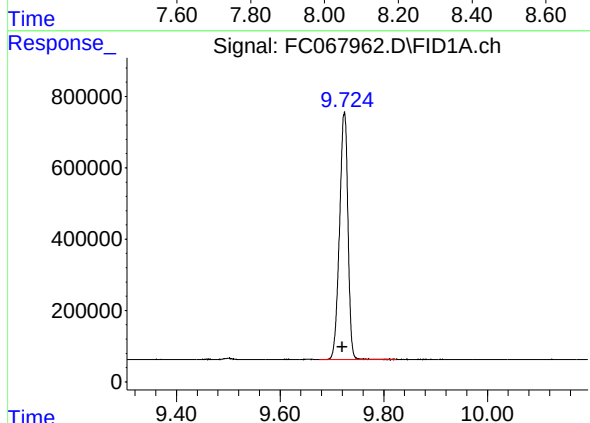
R.T.: 6.948 min
Delta R.T.: 0.003 min
Response: 8196212
Conc: 47.97 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



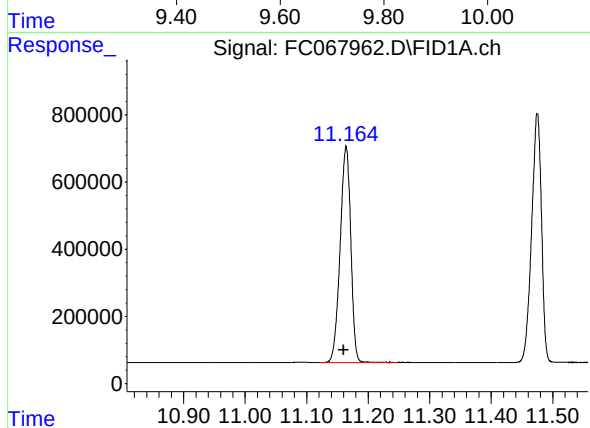
#6 n-Tetradecane (C14)

R.T.: 8.124 min
Delta R.T.: 0.003 min
Response: 7677734
Conc: 47.57 ug/ml



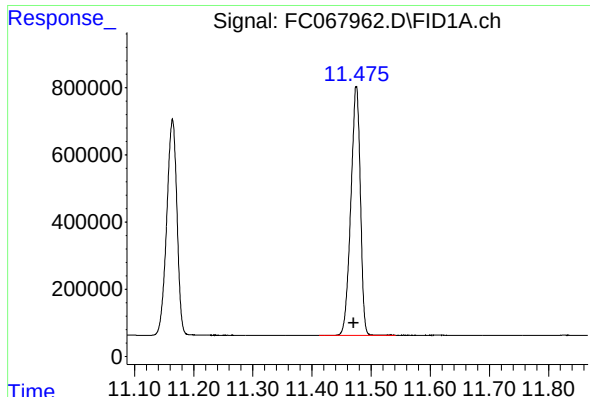
#7 n-Hexadecane (C16)

R.T.: 9.724 min
Delta R.T.: 0.003 min
Response: 7830129
Conc: 47.82 ug/ml



#8 n-Octadecane (C18)

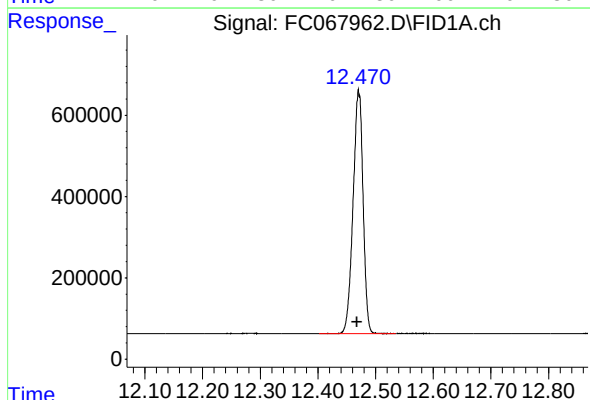
R.T.: 11.164 min
Delta R.T.: 0.004 min
Response: 7726228
Conc: 47.37 ug/ml



#9 ortho-Terphenyl (SURR)

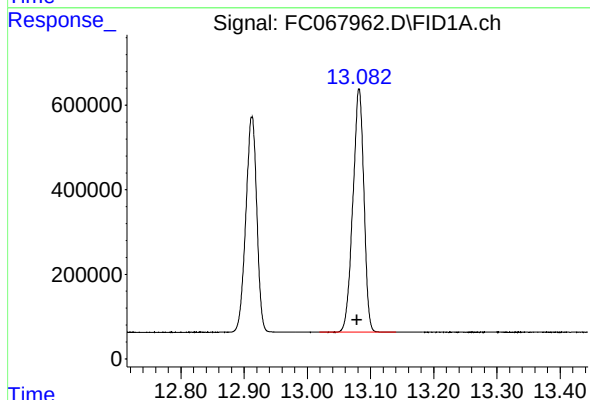
R.T.: 11.475 min
Delta R.T.: 0.005 min
Response: 8263318
Conc: 47.51 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



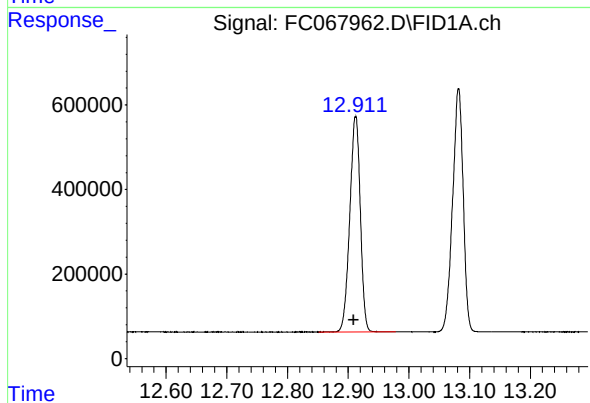
#10 n-Eicosane (C20)

R.T.: 12.471 min
Delta R.T.: 0.003 min
Response: 7209186
Conc: 47.42 ug/ml



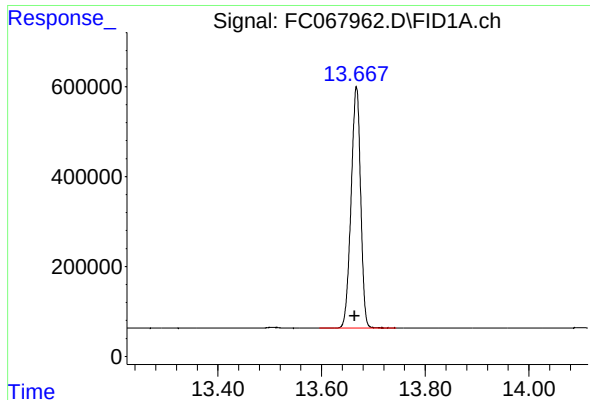
#11 n-Heneicosane (C21)

R.T.: 13.082 min
Delta R.T.: 0.003 min
Response: 6982835
Conc: 47.34 ug/ml



#12 1-chlorooctadecane (SURR)

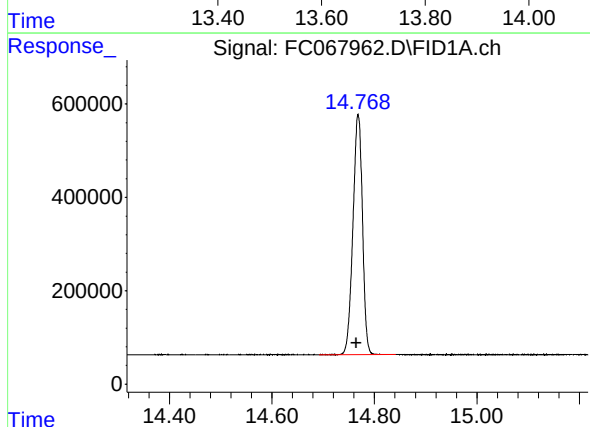
R.T.: 12.912 min
Delta R.T.: 0.003 min
Response: 6148518
Conc: 47.71 ug/ml



#13 n-Docosane (C22)

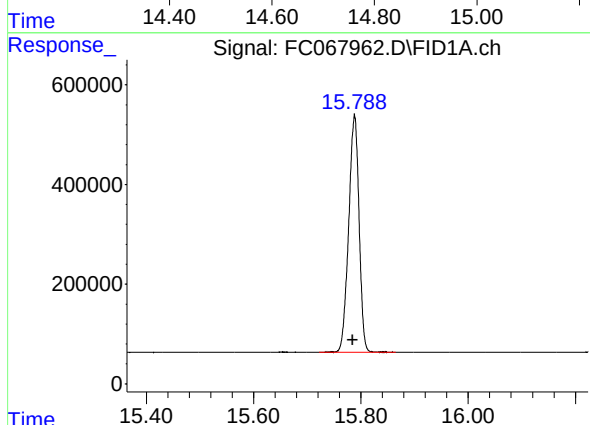
R.T.: 13.667 min
Delta R.T.: 0.003 min
Response: 6851009
Conc: 47.51 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



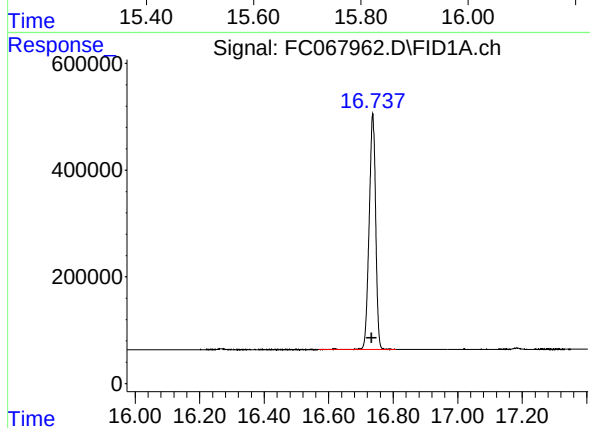
#14 n-Tetracosane (C24)

R.T.: 14.768 min
Delta R.T.: 0.004 min
Response: 6643747
Conc: 47.57 ug/ml



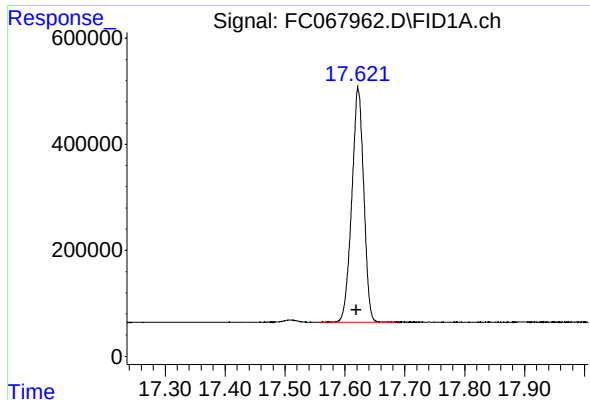
#15 n-Hexacosane (C26)

R.T.: 15.788 min
Delta R.T.: 0.003 min
Response: 6396052
Conc: 47.63 ug/ml



#16 n-Octacosane (C28)

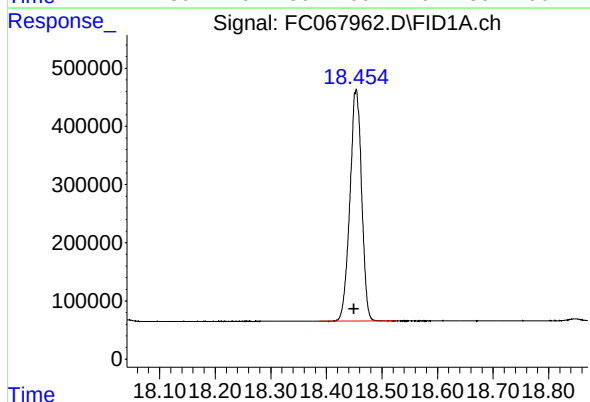
R.T.: 16.737 min
Delta R.T.: 0.004 min
Response: 6171012
Conc: 47.75 ug/ml



#17 n-Tricontane (C30)

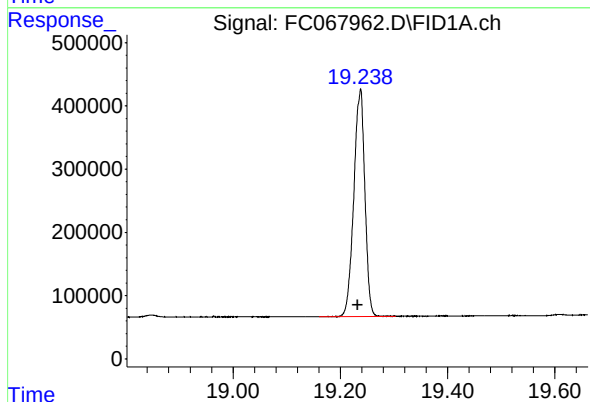
R.T.: 17.622 min
Delta R.T.: 0.003 min
Response: 6122300
Conc: 47.58 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



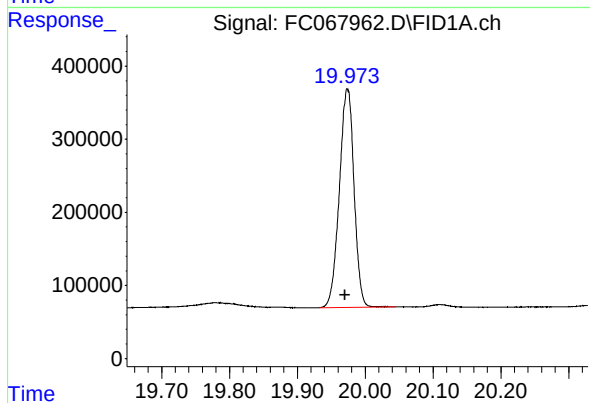
#18 n-Dotriacontane (C32)

R.T.: 18.454 min
Delta R.T.: 0.004 min
Response: 5824606
Conc: 47.41 ug/ml



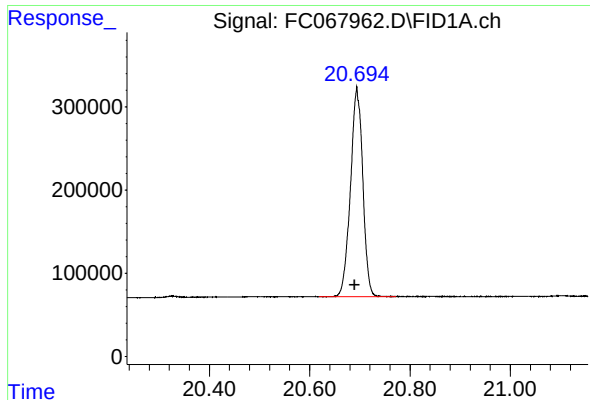
#19 n-Tetatriacontane (C34)

R.T.: 19.237 min
Delta R.T.: 0.004 min
Response: 5136813
Conc: 47.48 ug/ml



#20 n-Hexatriacontane (C36)

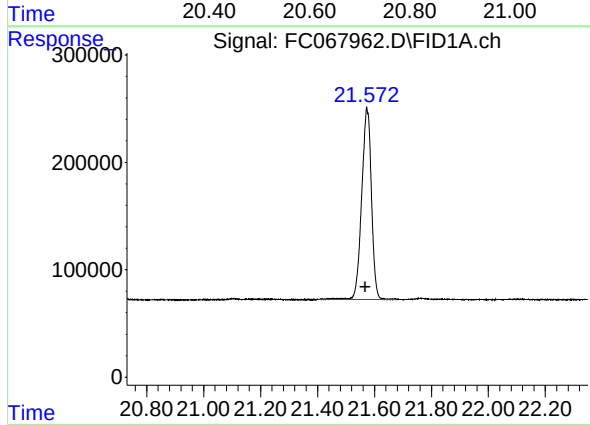
R.T.: 19.974 min
Delta R.T.: 0.004 min
Response: 4512465
Conc: 47.80 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.694 min
Delta R.T.: 0.005 min
Response: 4273980
Conc: 47.35 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 21.574 min
Delta R.T.: 0.006 min
Response: 4236953
Conc: 48.18 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
 Data File : FC067962.D
 Signal(s) : FID1A.ch
 Acq On : 10 Dec 2024 05:24
 Sample : 50 PPM ALIPHATIC HC STD2
 Misc :
 ALS Vial : 27 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.253	3.195	3.317	BB	891397	7439779	87.98%	5.045%
2	4.316	4.252	4.390	BB	840345	7616487	90.07%	5.165%
3	5.892	5.835	5.985	BB	894065	8456127	100.00%	5.734%
4	6.331	6.272	6.399	BB	786548	7756386	91.73%	5.260%
5	6.948	6.897	7.067	BV	826668	8196212	96.93%	5.558%
6	8.124	7.985	8.194	BB	704614	7677734	90.79%	5.206%
7	9.724	9.675	9.824	BB	691052	7830129	92.60%	5.310%
8	11.164	11.120	11.245	BB	641702	7726228	91.37%	5.239%
9	11.475	11.412	11.542	BB	741287	8263318	97.72%	5.603%
10	12.471	12.402	12.535	BB	596698	7209186	85.25%	4.889%
11	12.912	12.852	12.979	BB	509947	6148518	72.71%	4.169%
12	13.082	13.019	13.140	BB	575806	6982835	82.58%	4.735%
13	13.667	13.595	13.744	BB	537075	6851009	81.02%	4.646%
14	14.768	14.692	14.842	BB	514046	6643747	78.57%	4.505%
15	15.788	15.722	15.865	BB	477253	6396052	75.64%	4.337%
16	16.737	16.570	16.809	BB	441505	6171012	72.98%	4.185%
17	17.622	17.557	17.685	BB	440973	6122300	72.40%	4.152%
18	18.454	18.387	18.525	BB	397454	5824606	68.88%	3.950%
19	19.237	19.160	19.304	BB	357041	5136813	60.75%	3.483%
20	19.974	19.932	20.045	BB	299475	4512465	53.36%	3.060%
21	20.694	20.619	20.772	BB	250021	4273980	50.54%	2.898%
22	21.574	21.405	21.675	BB	177211	4236953	50.11%	2.873%
Sum of corrected areas:						147471874		

Aliphatic EPH 121024.M Tue Dec 10 08:34:38 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
 Data File : FC067963.D
 Signal(s) : FID1A.ch
 Acq On : 10 Dec 2024 06:01
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD3
 Misc :
 ALS Vial : 28 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
 Quant Time: Dec 10 07:48:32 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:47:35 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.470	3478796	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
12) S 1-chlorooctadecane (S...	12.909	2577301	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T n-Nonane (C9)	3.252	3147958	20.000 ug/ml
2) T n-Decane (C10)	4.314	3214085	20.000 ug/ml
3) T A~Naphthalene (C11.7)	5.890	3539917	20.000 ug/ml
4) T n-Dodecane (C12)	6.329	3271530	20.000 ug/ml
5) T A~2-methylnaphthalene...	6.944	3417082	20.000 ug/ml
6) T n-Tetradecane (C14)	8.122	3227885	20.000 ug/ml
7) T n-Hexadecane (C16)	9.720	3274539	20.000 ug/ml
8) T n-Octadecane (C18)	11.160	3262121	20.000 ug/ml
10) T n-Eicosane (C20)	12.467	3040444	20.000 ug/ml
11) T n-Heneicosane (C21)	13.078	2950289	20.000 ug/ml
13) T n-Docosane (C22)	13.664	2883779	20.000 ug/ml
14) T n-Tetracosane (C24)	14.765	2793059	20.000 ug/ml
15) T n-Hexacosane (C26)	15.785	2685455	20.000 ug/ml
16) T n-Octacosane (C28)	16.733	2584611	20.000 ug/ml
17) T n-Tricontane (C30)	17.619	2573207	20.000 ug/ml
18) T n-Dotriacontane (C32)	18.450	2457034	20.000 ug/ml
19) T n-Tetratriacontane (C34)	19.232	2163820	20.000 ug/ml
20) T n-Hexatriacontane (C36)	19.970	1888135	20.000 ug/ml
21) T n-Octatriacontane (C38)	20.689	1805134	20.000 ug/ml
22) T n-Tetracontane (C40)	21.568	1758895	20.000 ug/ml

(f)=RT Delta > 1/2 Window

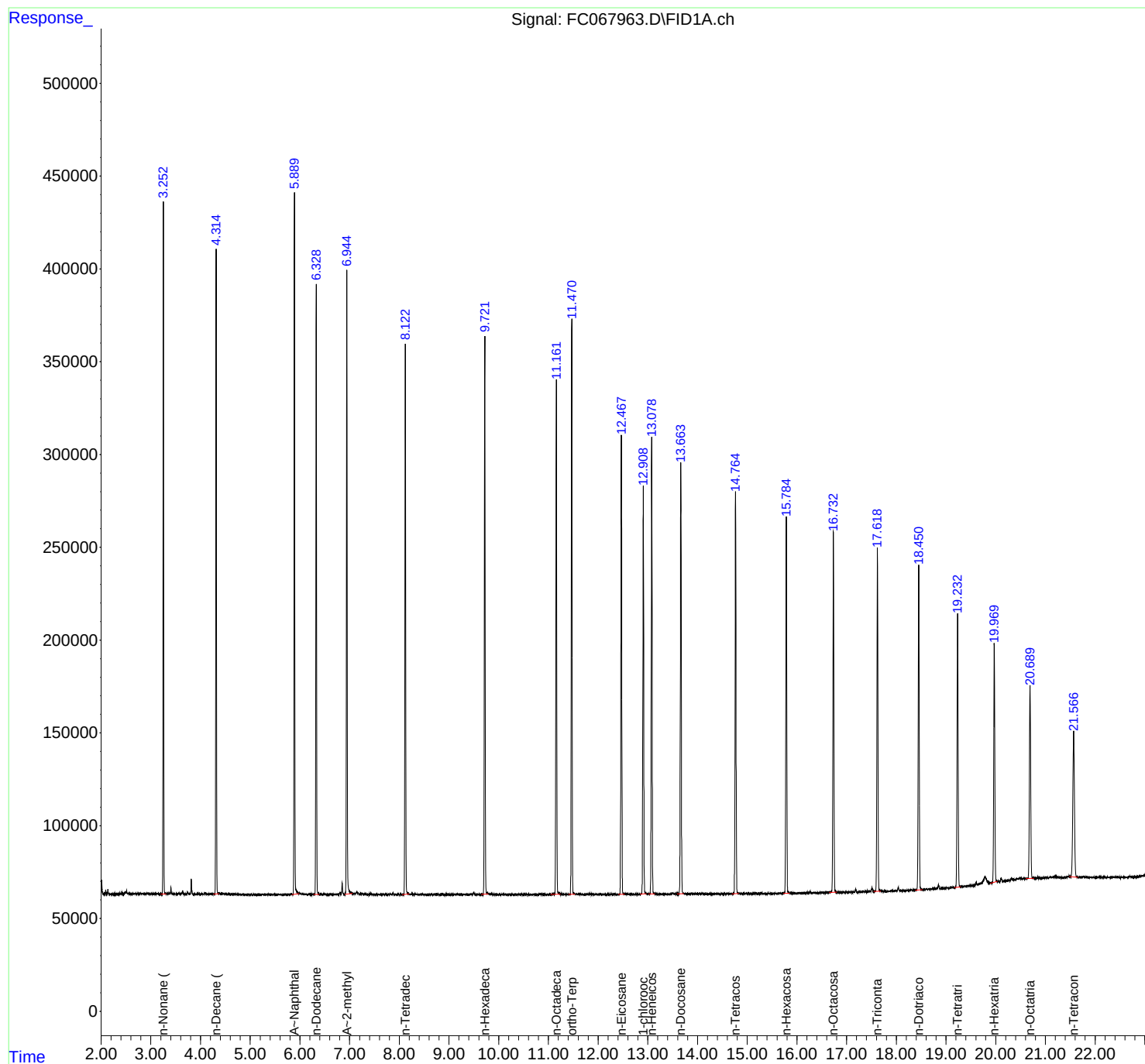
(m)=manual int.

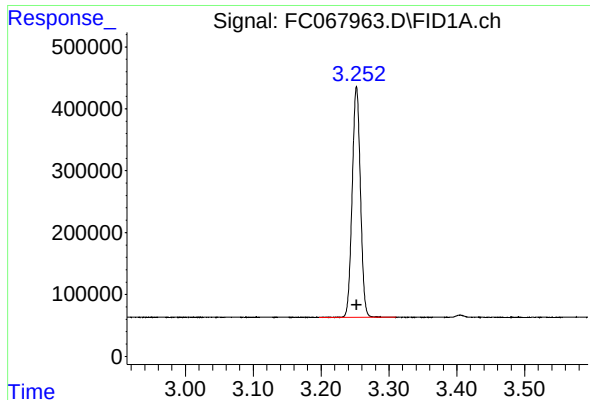
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
Data File : FC067963.D
Signal(s) : FID1A.ch
Acq On : 10 Dec 2024 06:01
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Dec 10 07:48:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:47:35 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

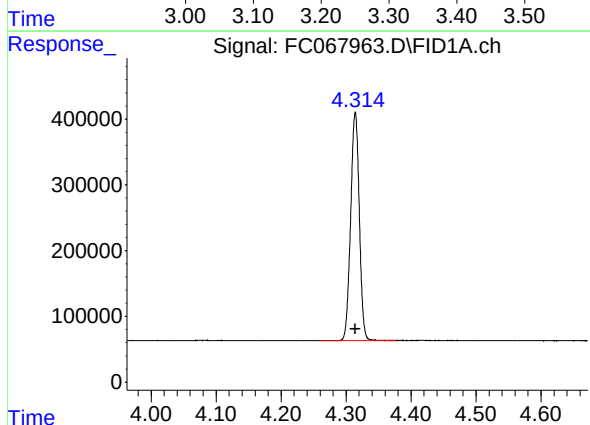




#1 n-Nonane (C9)

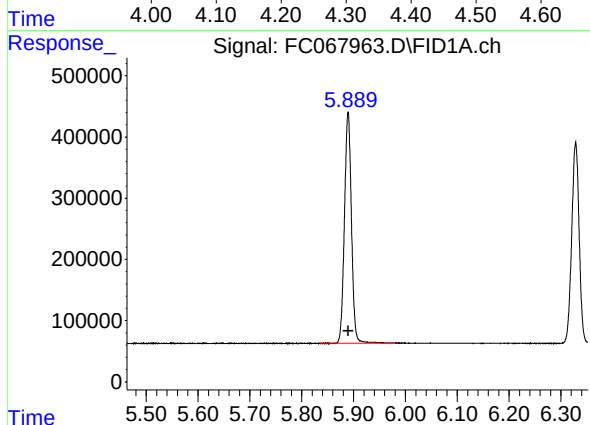
R.T.: 3.252 min
Delta R.T.: 0.000 min
Response: 3147958
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



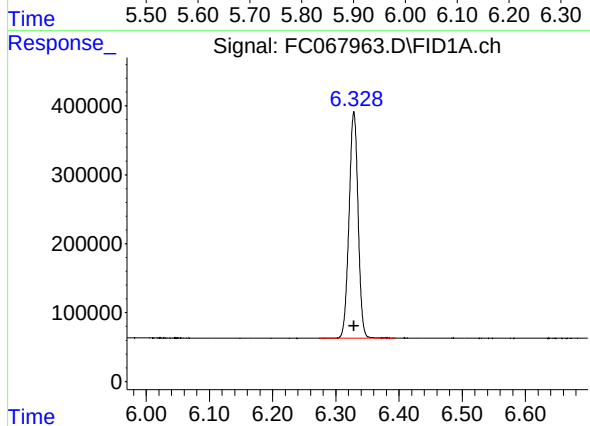
#2 n-Decane (C10)

R.T.: 4.314 min
Delta R.T.: 0.000 min
Response: 3214085
Conc: 20.00 ug/ml



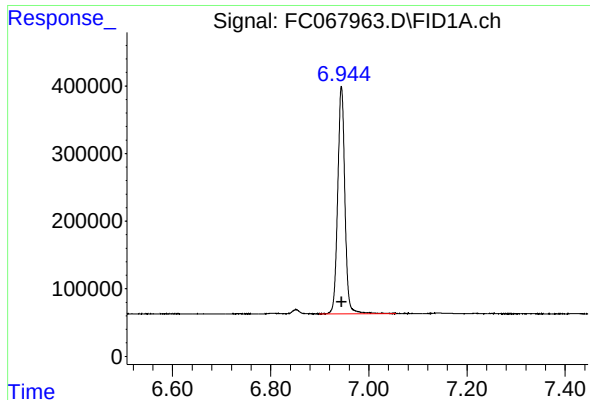
#3 A~Naphthalene (C11.7)

R.T.: 5.890 min
Delta R.T.: 0.000 min
Response: 3539917
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

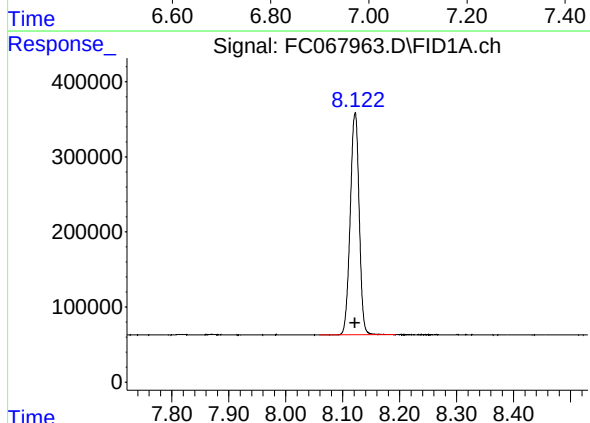
R.T.: 6.329 min
Delta R.T.: 0.000 min
Response: 3271530
Conc: 20.00 ug/ml



#5 A~2-methylnaphthalene (C12.89)

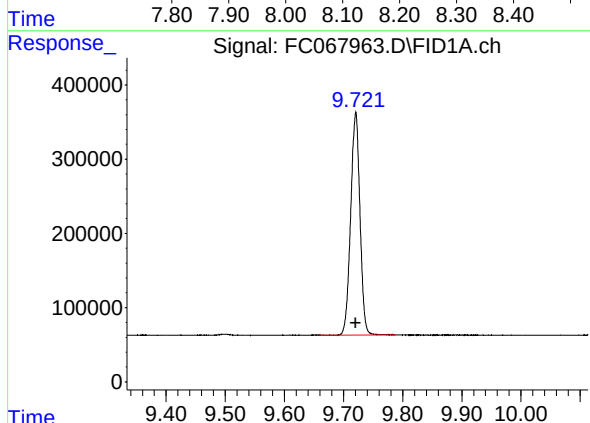
R.T.: 6.944 min
Delta R.T.: 0.000 min
Response: 3417082
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



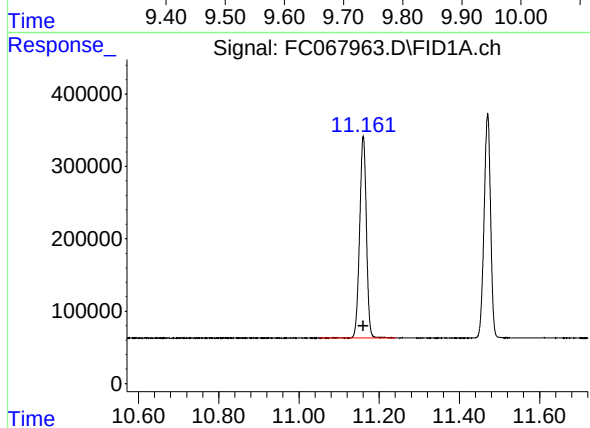
#6 n-Tetradecane (C14)

R.T.: 8.122 min
Delta R.T.: 0.000 min
Response: 3227885
Conc: 20.00 ug/ml



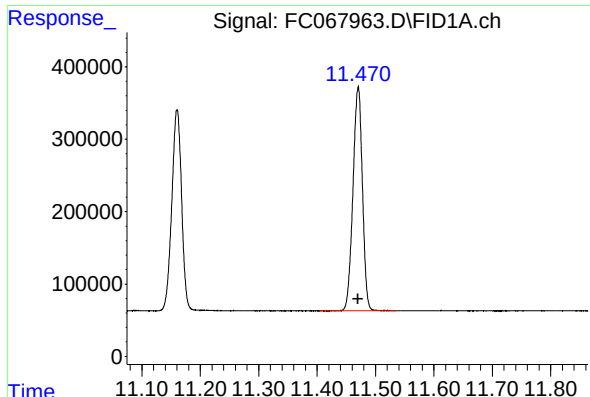
#7 n-Hexadecane (C16)

R.T.: 9.720 min
Delta R.T.: 0.000 min
Response: 3274539
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

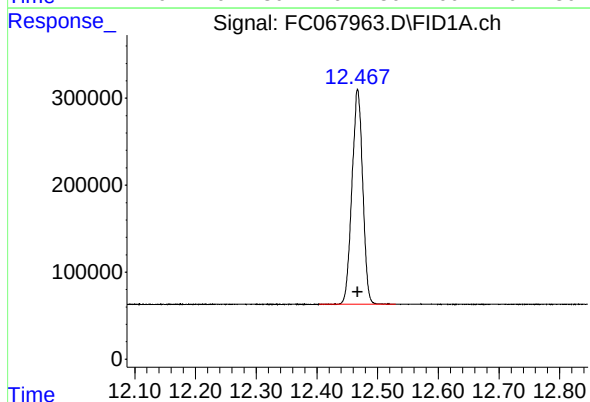
R.T.: 11.160 min
Delta R.T.: 0.000 min
Response: 3262121
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

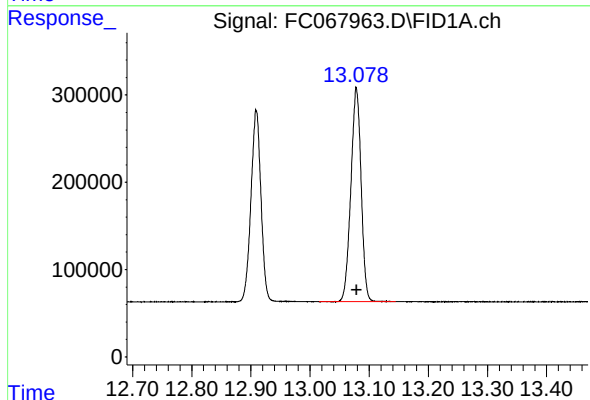
R.T.: 11.470 min
Delta R.T.: 0.000 min
Response: 3478796
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



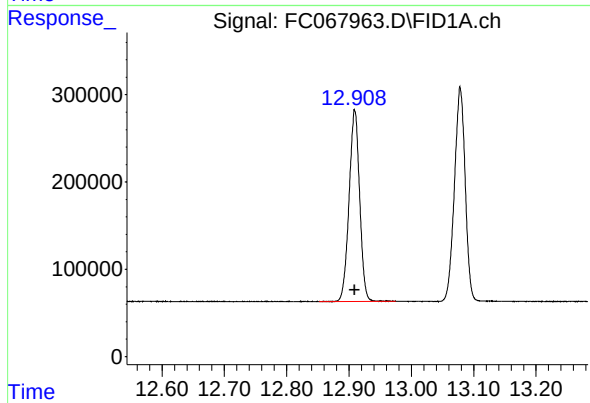
#10 n-Eicosane (C20)

R.T.: 12.467 min
Delta R.T.: 0.000 min
Response: 3040444
Conc: 20.00 ug/ml



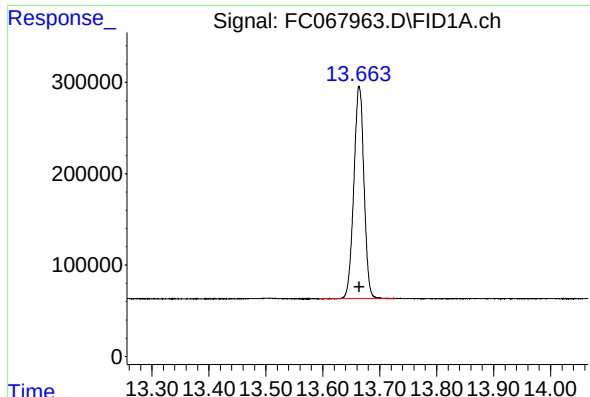
#11 n-Heneicosane (C21)

R.T.: 13.078 min
Delta R.T.: 0.000 min
Response: 2950289
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

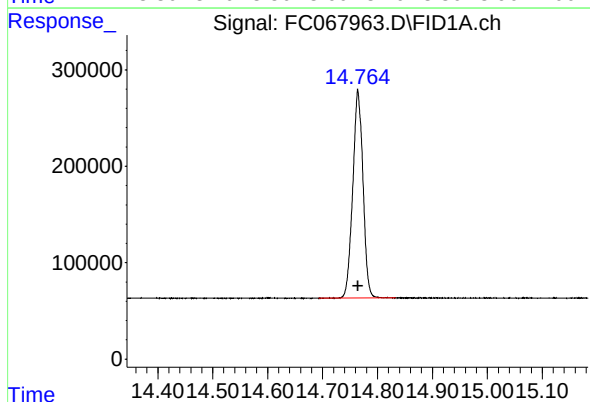
R.T.: 12.909 min
Delta R.T.: 0.000 min
Response: 2577301
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

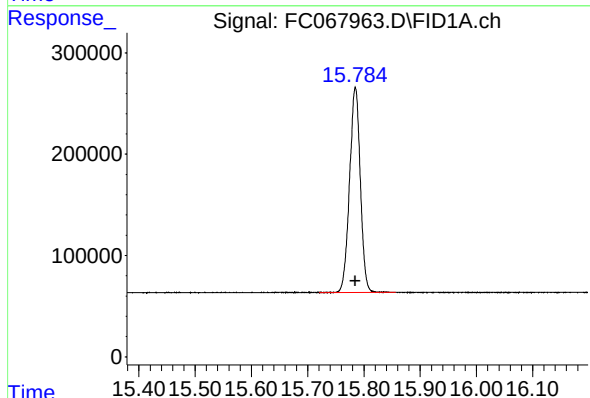
R.T.: 13.664 min
Delta R.T.: 0.000 min
Response: 2883779
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



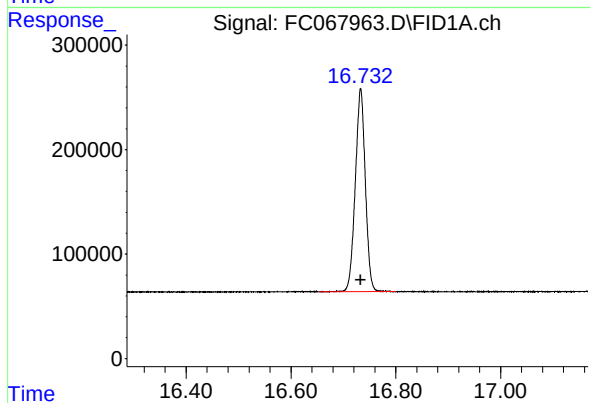
#14 n-Tetracosane (C24)

R.T.: 14.765 min
Delta R.T.: 0.000 min
Response: 2793059
Conc: 20.00 ug/ml



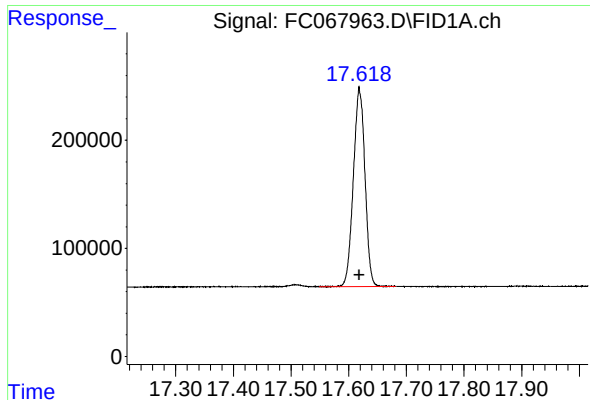
#15 n-Hexacosane (C26)

R.T.: 15.785 min
Delta R.T.: 0.000 min
Response: 2685455
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

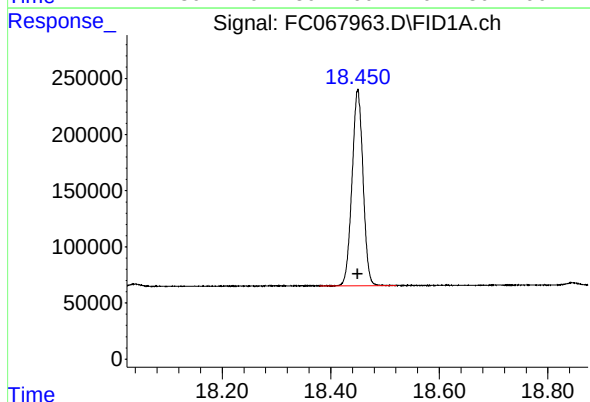
R.T.: 16.733 min
Delta R.T.: 0.000 min
Response: 2584611
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

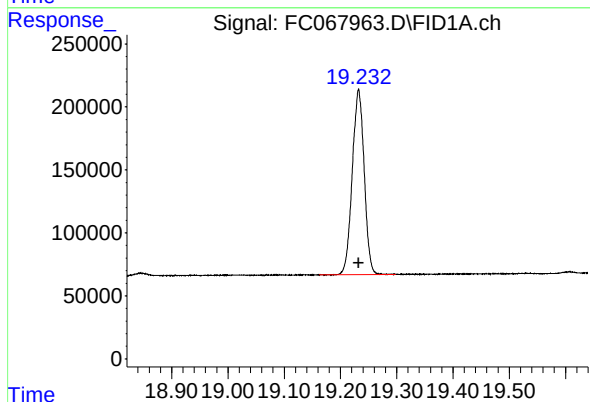
R.T.: 17.619 min
Delta R.T.: 0.000 min
Response: 2573207
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



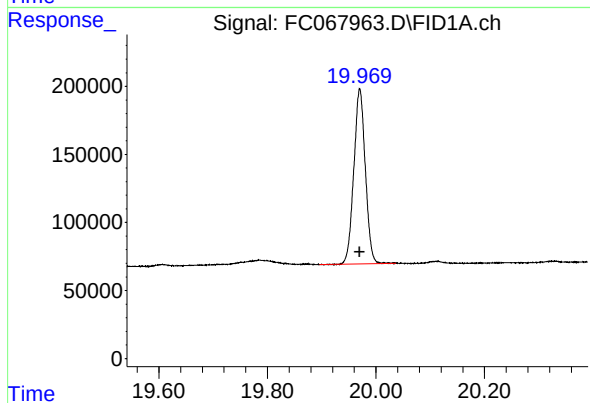
#18 n-Dotriacontane (C32)

R.T.: 18.450 min
Delta R.T.: 0.000 min
Response: 2457034
Conc: 20.00 ug/ml



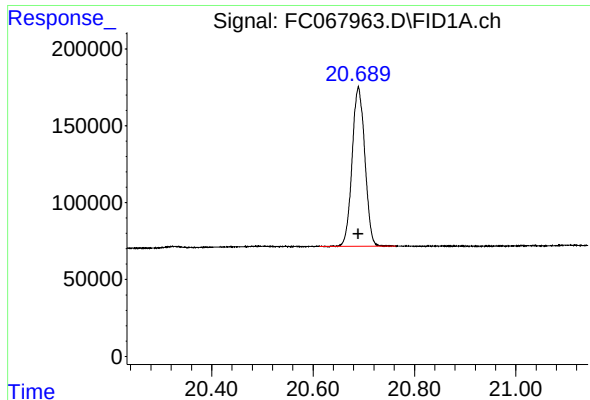
#19 n-Tetratriacontane (C34)

R.T.: 19.232 min
Delta R.T.: 0.000 min
Response: 2163820
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

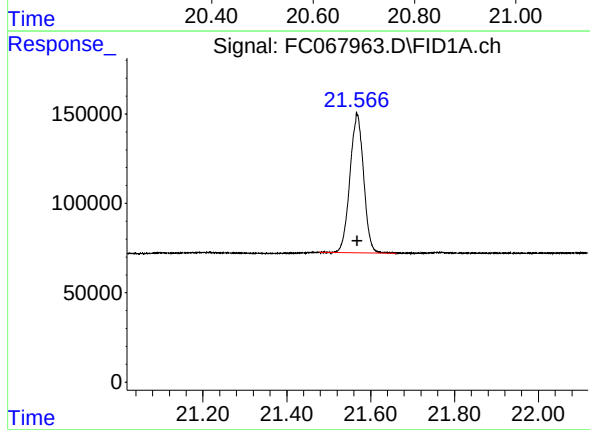
R.T.: 19.970 min
Delta R.T.: 0.000 min
Response: 1888135
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.689 min
Delta R.T.: 0.000 min
Response: 1805134
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 21.568 min
Delta R.T.: 0.000 min
Response: 1758895
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
Data File : FC067963.D
Signal(s) : FID1A.ch
Acq On : 10 Dec 2024 06:01
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.252	3.197	3.310	BB	372980	3147958	88.93%	5.078%
2	4.314	4.258	4.377	BB	346432	3214085	90.80%	5.184%
3	5.890	5.833	5.982	BB	379779	3539917	100.00%	5.710%
4	6.329	6.274	6.395	BB	328341	3271530	92.42%	5.277%
5	6.944	6.899	7.055	BB	336484	3417082	96.53%	5.512%
6	8.122	8.059	8.194	BB	296030	3227885	91.19%	5.207%
7	9.720	9.659	9.789	BB	298772	3274539	92.50%	5.282%
8	11.160	11.050	11.242	BB	277483	3262121	92.15%	5.262%
9	11.470	11.404	11.535	BB	308458	3478796	98.27%	5.611%
10	12.467	12.404	12.530	BB	247040	3040444	85.89%	4.904%
11	12.909	12.852	12.975	BB	220519	2577301	72.81%	4.157%
12	13.078	13.015	13.145	BB	245019	2950289	83.34%	4.759%
13	13.664	13.594	13.729	BB	232655	2883779	81.46%	4.652%
14	14.765	14.694	14.834	BB	212771	2793059	78.90%	4.505%
15	15.785	15.720	15.857	BB	202434	2685455	75.86%	4.332%
16	16.733	16.654	16.800	BB	194383	2584611	73.01%	4.169%
17	17.619	17.549	17.682	BB	183051	2573207	72.69%	4.151%
18	18.450	18.379	18.520	BB	174902	2457034	69.41%	3.963%
19	19.232	19.162	19.299	BB	146887	2163820	61.13%	3.490%
20	19.970	19.895	20.037	BB	128704	1888135	53.34%	3.046%
21	20.689	20.612	20.764	BB	103862	1805134	50.99%	2.912%
22	21.568	21.477	21.660	BB	76658	1758895	49.69%	2.837%
Sum of corrected areas:							61995077	

Aliphatic EPH 121024.M Tue Dec 10 08:35:08 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
 Data File : FC067964.D
 Signal(s) : FID1A.ch
 Acq On : 10 Dec 2024 06:37
 Operator : YP/AJ
 Sample : 10 PPM ALIPHATIC HC STD4
 Misc :
 ALS Vial : 29 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
 Quant Time: Dec 10 07:48:44 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:47:35 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.469	1802533	10.363 ug/ml
Spiked Amount 50.000		Recovery =	20.73%
12) S 1-chlorooctadecane (S...	12.909	1327156	10.299 ug/ml
Spiked Amount 50.000		Recovery =	20.60%
Target Compounds			
1) T n-Nonane (C9)	3.252	1623015	10.312 ug/ml
2) T n-Decane (C10)	4.314	1654011	10.292 ug/ml
3) T A~Naphthalene (C11.7)	5.889	1815911	10.260 ug/ml
4) T n-Dodecane (C12)	6.328	1679969	10.270 ug/ml
5) T A~2-methylnaphthalene...	6.944	1727677	10.112 ug/ml
6) T n-Tetradecane (C14)	8.121	1651716	10.234 ug/ml
7) T n-Hexadecane (C16)	9.719	1670857	10.205 ug/ml
8) T n-Octadecane (C18)	11.159	1670725	10.243 ug/ml
10) T n-Eicosane (C20)	12.467	1572180	10.342 ug/ml
11) T n-Heneicosane (C21)	13.078	1525125	10.339 ug/ml
13) T n-Docosane (C22)	13.664	1490072	10.334 ug/ml
14) T n-Tetracosane (C24)	14.764	1445384	10.350 ug/ml
15) T n-Hexacosane (C26)	15.784	1390261	10.354 ug/ml
16) T n-Octacosane (C28)	16.732	1349238	10.441 ug/ml
17) T n-Tricontane (C30)	17.617	1353242	10.518 ug/ml
18) T n-Dotriacontane (C32)	18.450	1296616	10.554 ug/ml
19) T n-Tetratriacontane (C34)	19.231	1140985	10.546 ug/ml
20) T n-Hexatriacontane (C36)	19.970	982778	10.410 ug/ml
21) T n-Octatriacontane (C38)	20.690	943772	10.457 ug/ml
22) T n-Tetracontane (C40)	21.567	911825	10.368 ug/ml

(f)=RT Delta > 1/2 Window

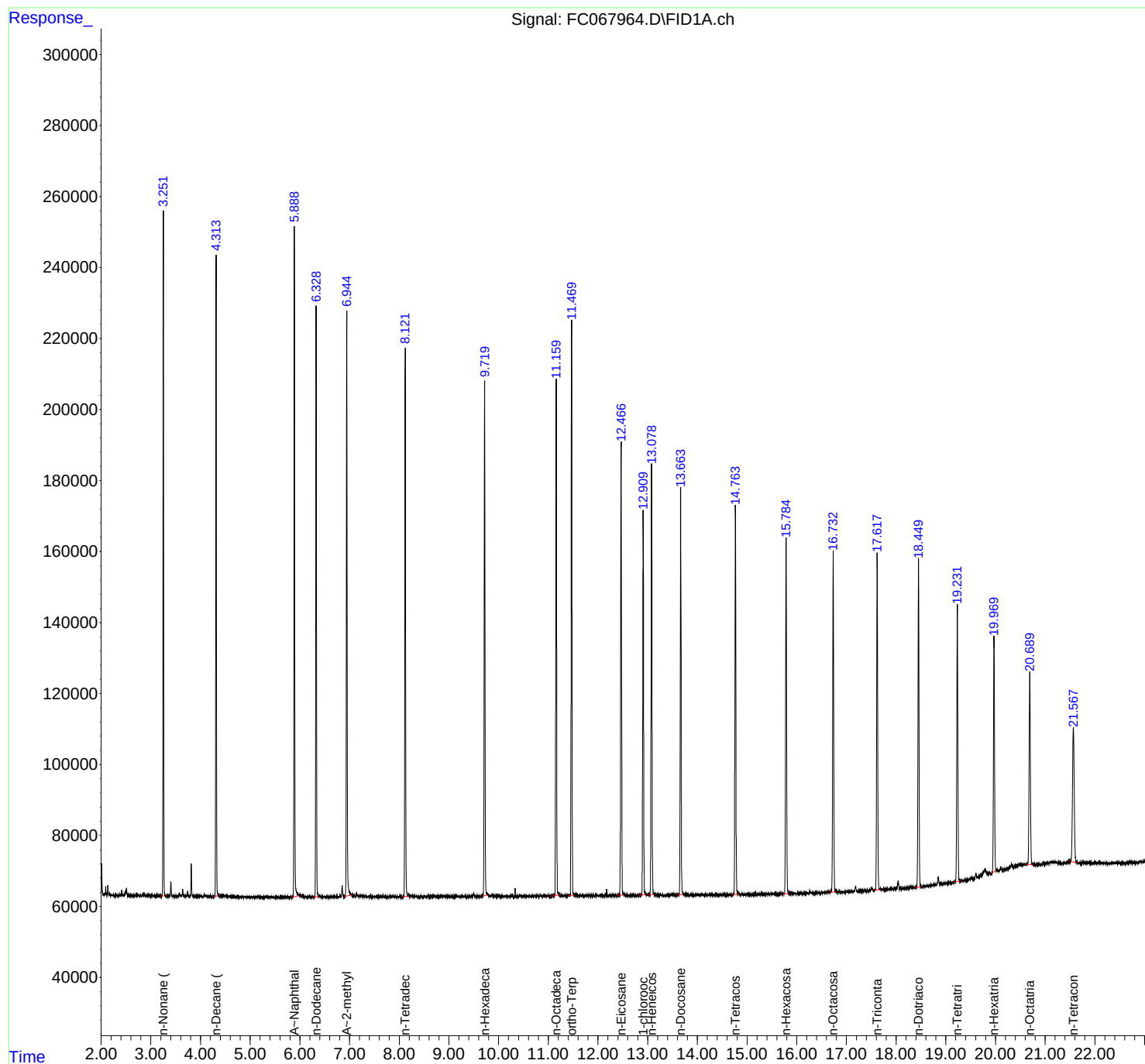
(m)=manual int.

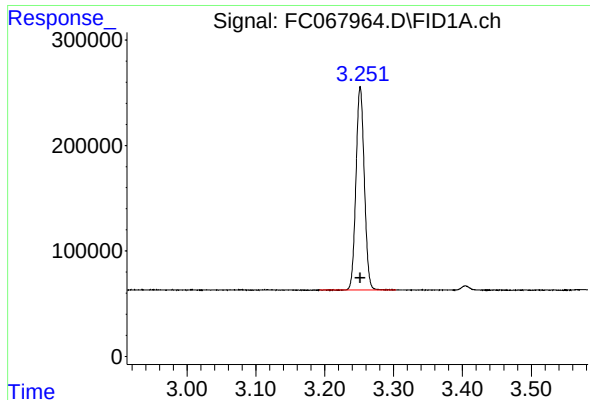
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
Data File : FC067964.D
Signal(s) : FID1A.ch
Acq On : 10 Dec 2024 06:37
Operator : YP/AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Dec 10 07:48:44 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:47:35 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

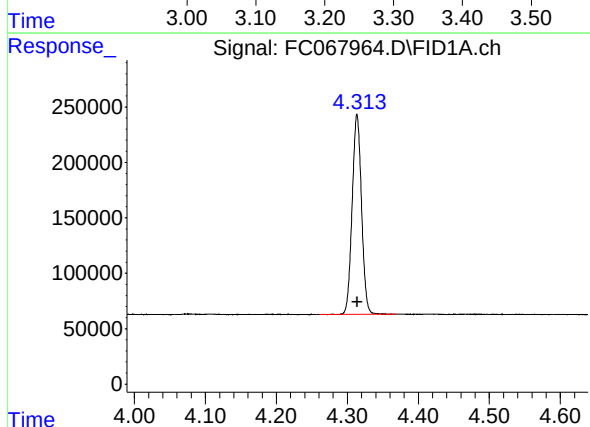




#1 n-Nonane (C9)

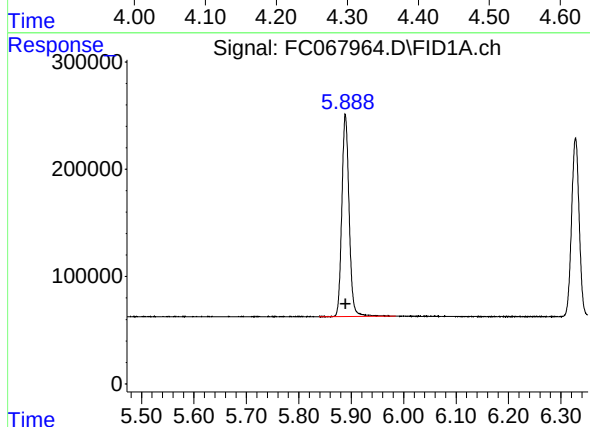
R.T.: 3.252 min
Delta R.T.: 0.000 min
Response: 1623015
Conc: 10.31 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



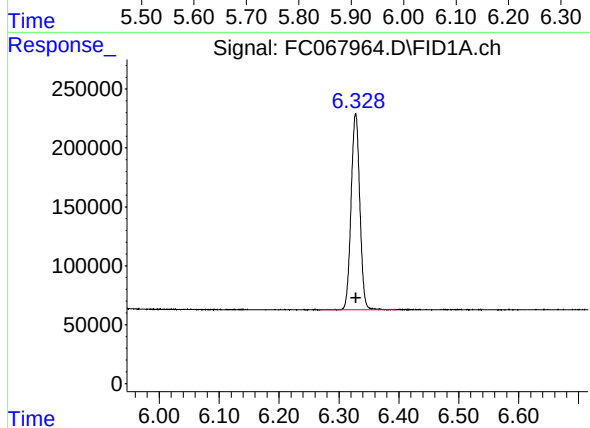
#2 n-Decane (C10)

R.T.: 4.314 min
Delta R.T.: 0.000 min
Response: 1654011
Conc: 10.29 ug/ml



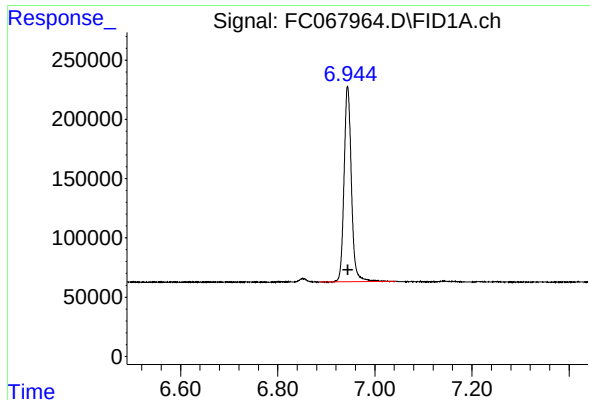
#3 A~Naphthalene (C11.7)

R.T.: 5.889 min
Delta R.T.: 0.000 min
Response: 1815911
Conc: 10.26 ug/ml



#4 n-Dodecane (C12)

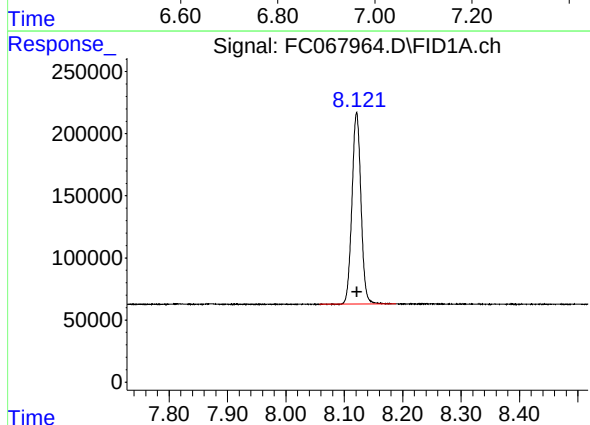
R.T.: 6.328 min
Delta R.T.: 0.000 min
Response: 1679969
Conc: 10.27 ug/ml



#5 A~2-methylnaphthalene (C12.89)

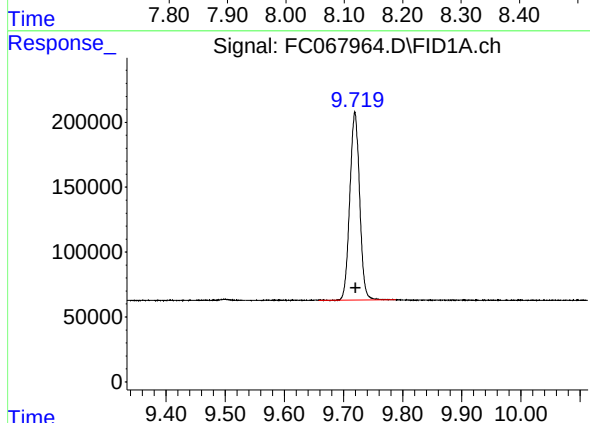
R.T.: 6.944 min
Delta R.T.: 0.000 min
Response: 1727677
Conc: 10.11 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



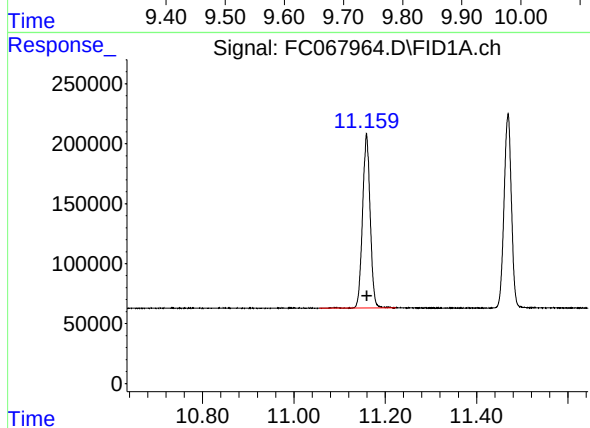
#6 n-Tetradecane (C14)

R.T.: 8.121 min
Delta R.T.: 0.000 min
Response: 1651716
Conc: 10.23 ug/ml



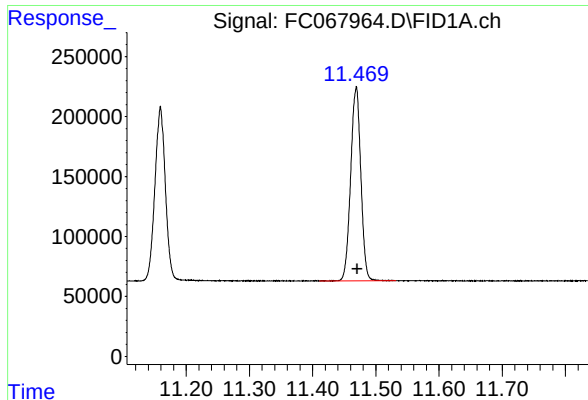
#7 n-Hexadecane (C16)

R.T.: 9.719 min
Delta R.T.: -0.001 min
Response: 1670857
Conc: 10.21 ug/ml



#8 n-Octadecane (C18)

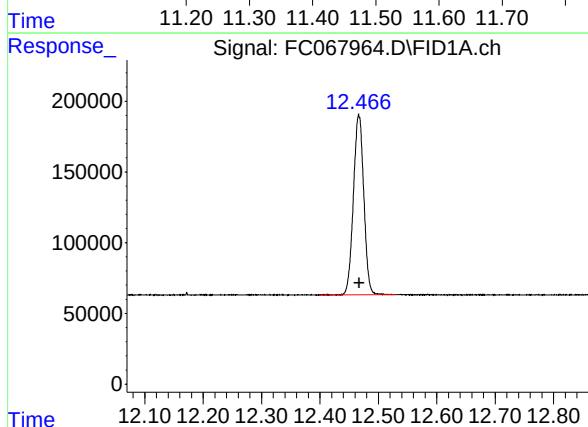
R.T.: 11.159 min
Delta R.T.: -0.001 min
Response: 1670725
Conc: 10.24 ug/ml



#9 ortho-Terphenyl (SURR)

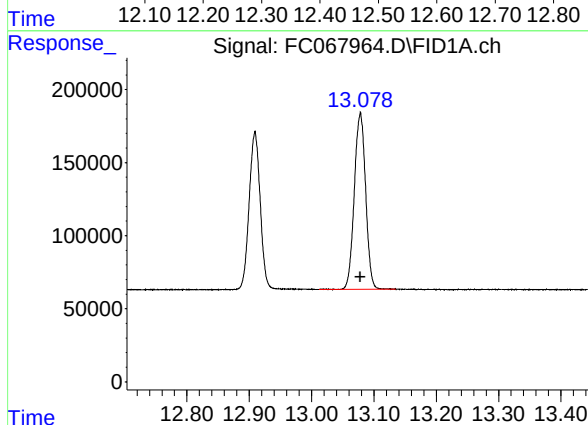
R.T.: 11.469 min
Delta R.T.: -0.002 min
Response: 1802533
Conc: 10.36 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



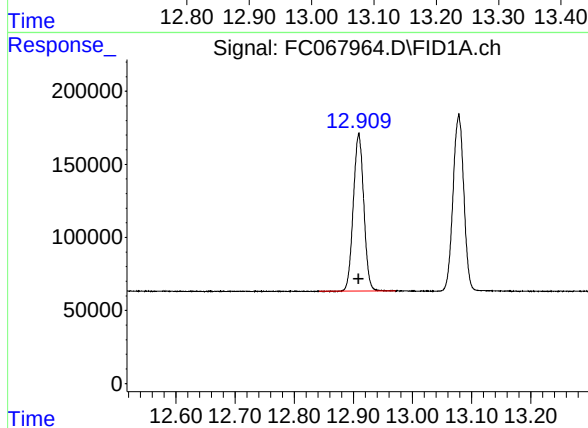
#10 n-Eicosane (C20)

R.T.: 12.467 min
Delta R.T.: 0.000 min
Response: 1572180
Conc: 10.34 ug/ml



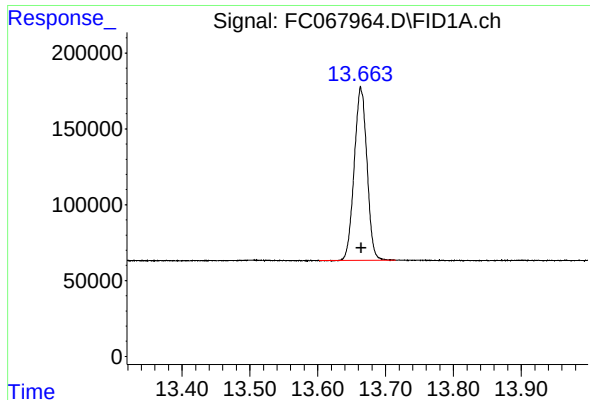
#11 n-Heneicosane (C21)

R.T.: 13.078 min
Delta R.T.: 0.000 min
Response: 1525125
Conc: 10.34 ug/ml



#12 1-chlorooctadecane (SURR)

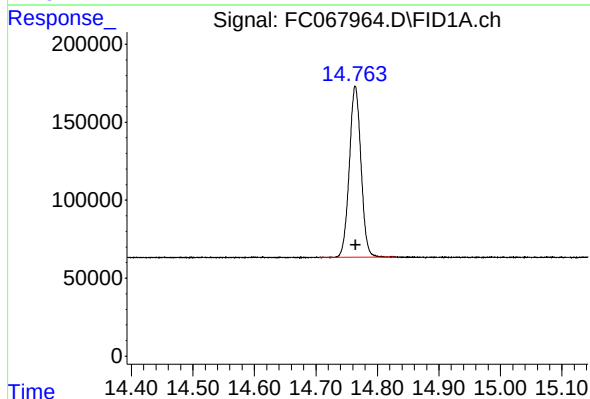
R.T.: 12.909 min
Delta R.T.: 0.000 min
Response: 1327156
Conc: 10.30 ug/ml



#13 n-Docosane (C22)

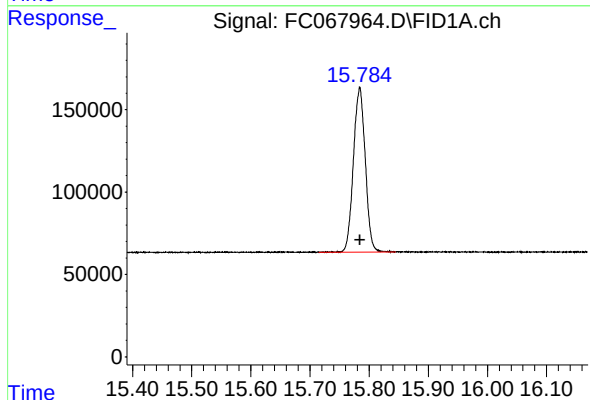
R.T.: 13.664 min
Delta R.T.: 0.000 min
Response: 1490072
Conc: 10.33 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



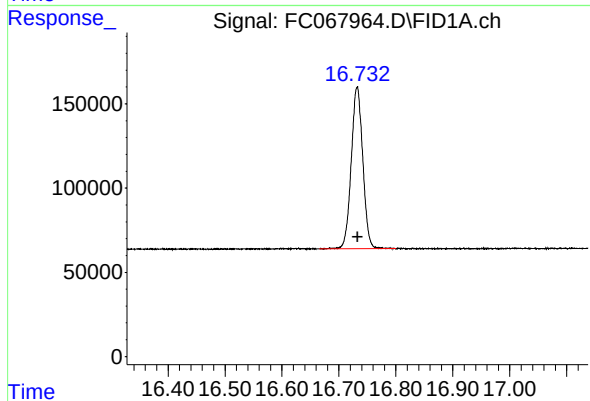
#14 n-Tetracosane (C24)

R.T.: 14.764 min
Delta R.T.: 0.000 min
Response: 1445384
Conc: 10.35 ug/ml



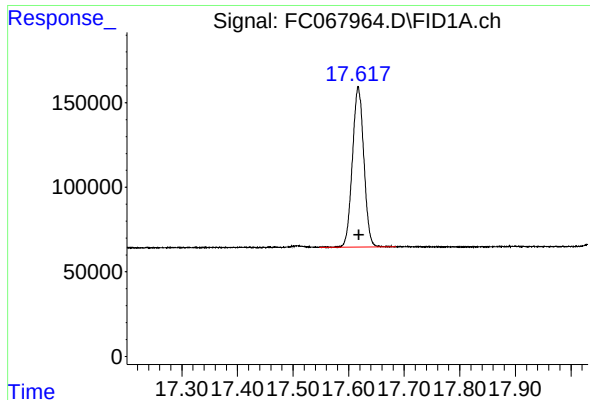
#15 n-Hexacosane (C26)

R.T.: 15.784 min
Delta R.T.: 0.000 min
Response: 1390261
Conc: 10.35 ug/ml



#16 n-Octacosane (C28)

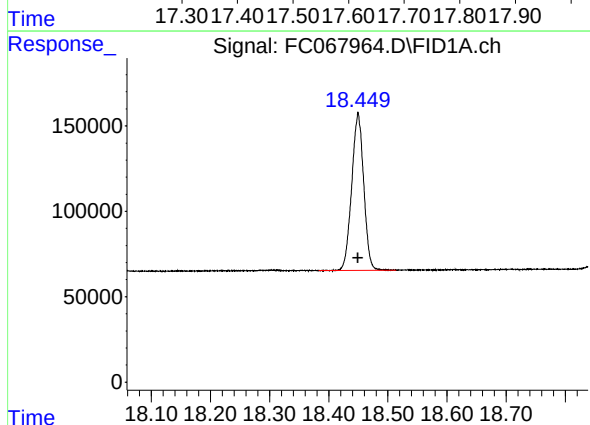
R.T.: 16.732 min
Delta R.T.: 0.000 min
Response: 1349238
Conc: 10.44 ug/ml



#17 n-Tricontane (C30)

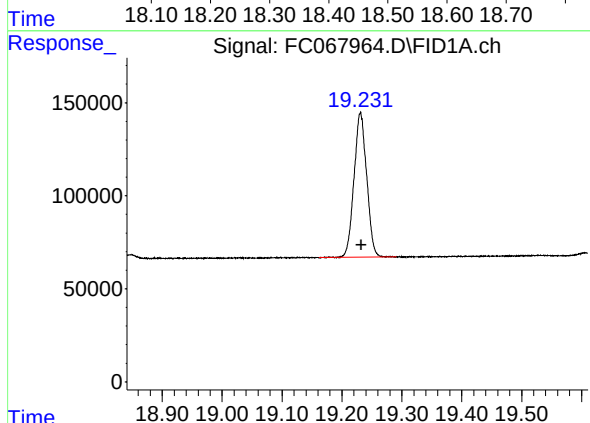
R.T.: 17.617 min
Delta R.T.: -0.001 min
Response: 1353242
Conc: 10.52 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



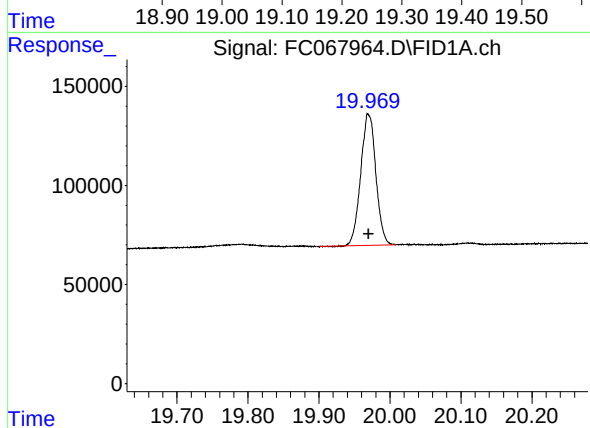
#18 n-Dotriacontane (C32)

R.T.: 18.450 min
Delta R.T.: 0.000 min
Response: 1296616
Conc: 10.55 ug/ml



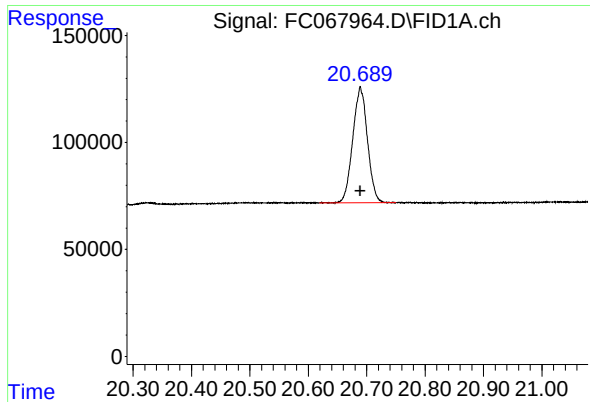
#19 n-Tetratriacontane (C34)

R.T.: 19.231 min
Delta R.T.: -0.001 min
Response: 1140985
Conc: 10.55 ug/ml



#20 n-Hexatriacontane (C36)

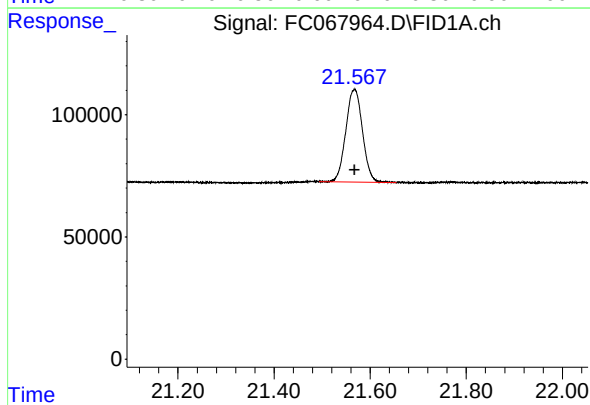
R.T.: 19.970 min
Delta R.T.: 0.000 min
Response: 982778
Conc: 10.41 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.690 min
Delta R.T.: 0.000 min
Response: 943772
Conc: 10.46 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 21.567 min
Delta R.T.: 0.000 min
Response: 911825
Conc: 10.37 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
Data File : FC067964.D
Signal(s) : FID1A.ch
Acq On : 10 Dec 2024 06:37
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.252	3.192	3.304	BB	192733	1623015	89.38%	5.068%
2	4.314	4.260	4.369	BB	180382	1654011	91.08%	5.165%
3	5.889	5.839	5.985	BB	188387	1815911	100.00%	5.670%
4	6.328	6.267	6.395	BB	166716	1679969	92.51%	5.246%
5	6.944	6.885	7.044	BB	165188	1727677	95.14%	5.395%
6	8.121	8.057	8.189	BB	154605	1651716	90.96%	5.158%
7	9.719	9.659	9.789	BB	144741	1670857	92.01%	5.217%
8	11.159	11.055	11.224	BB	144557	1670725	92.00%	5.217%
9	11.469	11.410	11.532	BB	160852	1802533	99.26%	5.629%
10	12.467	12.399	12.530	BB	126952	1572180	86.58%	4.909%
11	12.909	12.842	12.972	BB	107268	1327156	73.08%	4.144%
12	13.078	13.012	13.135	BB	121361	1525125	83.99%	4.762%
13	13.664	13.602	13.715	BB	113928	1490072	82.06%	4.653%
14	14.764	14.705	14.830	BB	110057	1445384	79.60%	4.513%
15	15.784	15.715	15.845	BB	99964	1390261	76.56%	4.341%
16	16.732	16.665	16.800	BB	95942	1349238	74.30%	4.213%
17	17.617	17.547	17.685	BB	94848	1353242	74.52%	4.226%
18	18.450	18.384	18.514	BB	92532	1296616	71.40%	4.049%
19	19.231	19.162	19.290	BB	77570	1140985	62.83%	3.563%
20	19.970	19.900	20.009	BB	65695	982778	54.12%	3.069%
21	20.690	20.619	20.750	BB	53456	943772	51.97%	2.947%
22	21.567	21.494	21.654	BB	37876	911825	50.21%	2.847%
Sum of corrected areas:							32025047	

Aliphatic EPH 121024.M Tue Dec 10 08:35:24 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
 Data File : FC067965.D
 Signal(s) : FID1A.ch
 Acq On : 10 Dec 2024 07:14
 Operator : YP/AJ
 Sample : 5 PPM ALIPHATIC HC STD5
 Misc :
 ALS Vial : 30 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
 Quant Time: Dec 10 07:49:25 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:47:35 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.468	931695	5.356 ug/ml
Spiked Amount 50.000		Recovery =	10.71%
12) S 1-chlorooctadecane (S...	12.908	673575	5.227 ug/ml
Spiked Amount 50.000		Recovery =	10.45%
Target Compounds			
1) T n-Nonane (C9)	3.252	837588	5.321 ug/ml
2) T n-Decane (C10)	4.314	849284	5.285 ug/ml
3) T A~Naphthalene (C11.7)	5.889	920617	5.201 ug/ml
4) T n-Dodecane (C12)	6.328	856678	5.237 ug/ml
5) T A~2-methylnaphthalene...	6.944	869061	5.087 ug/ml
6) T n-Tetradecane (C14)	8.120	844626	5.233 ug/ml
7) T n-Hexadecane (C16)	9.719	857364	5.237 ug/ml
8) T n-Octadecane (C18)	11.159	853140	5.231 ug/ml
10) T n-Eicosane (C20)	12.466	802158	5.277 ug/ml
11) T n-Heneicosane (C21)	13.077	781976	5.301 ug/ml
13) T n-Docosane (C22)	13.662	767100	5.320 ug/ml
14) T n-Tetracosane (C24)	14.763	744614	5.332 ug/ml
15) T n-Hexacosane (C26)	15.783	715051	5.325 ug/ml
16) T n-Octacosane (C28)	16.731	704114	5.449 ug/ml
17) T n-Tricontane (C30)	17.618	709104	5.511 ug/ml
18) T n-Dotriacontane (C32)	18.449	683639	5.565 ug/ml
19) T n-Tetratriacontane (C34)	19.231	601708	5.562 ug/ml
20) T n-Hexatriacontane (C36)	19.970	508095	5.382 ug/ml
21) T n-Octatriacontane (C38)	20.690	491184	5.442 ug/ml
22) T n-Tetracontane (C40)	21.567	470158	5.346 ug/ml

(f)=RT Delta > 1/2 Window

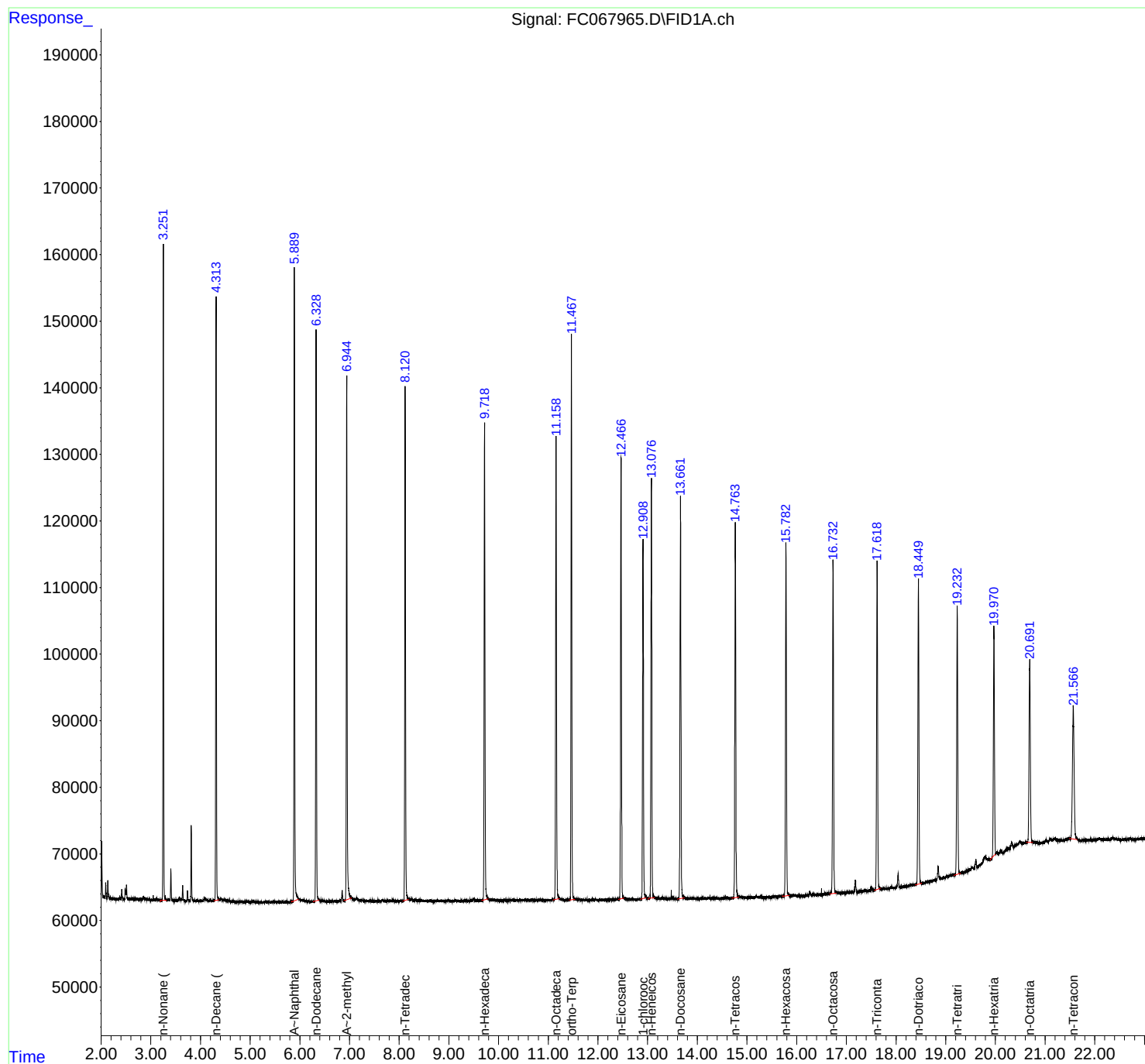
(m)=manual int.

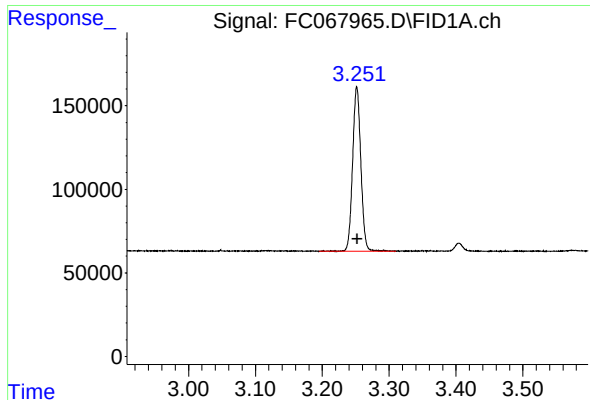
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
Data File : FC067965.D
Signal(s) : FID1A.ch
Acq On : 10 Dec 2024 07:14
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 30 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Dec 10 07:49:25 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:47:35 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

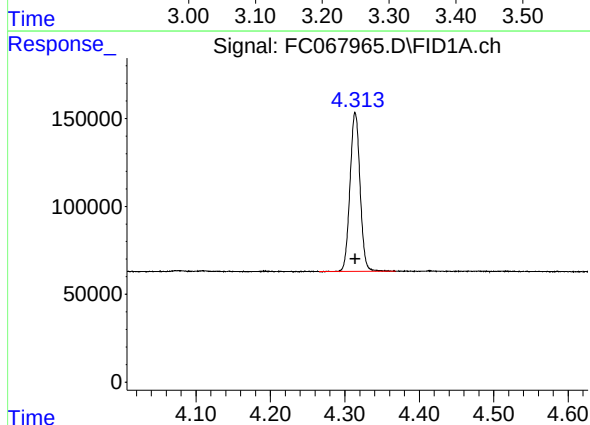




#1 n-Nonane (C9)

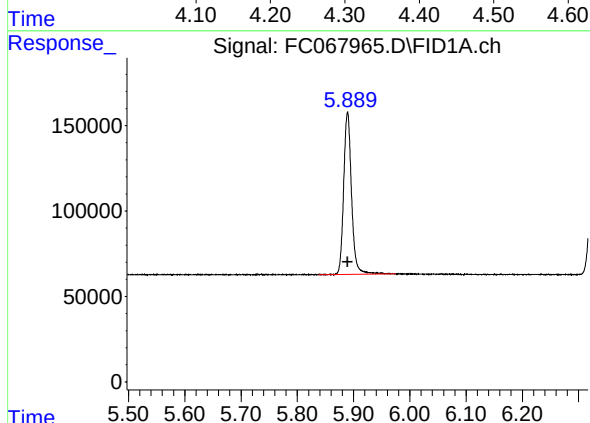
R.T.: 3.252 min
Delta R.T.: 0.000 min
Response: 837588
Conc: 5.32 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



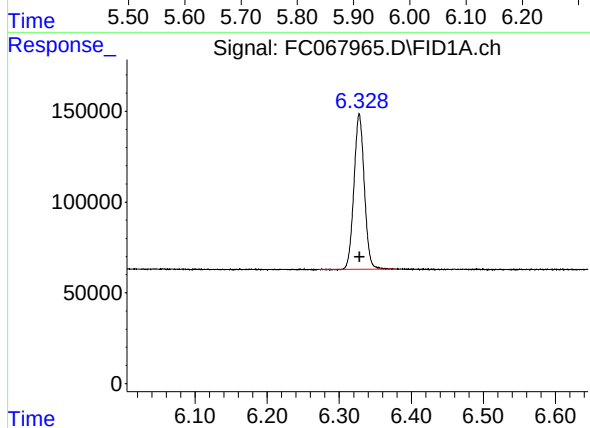
#2 n-Decane (C10)

R.T.: 4.314 min
Delta R.T.: 0.000 min
Response: 849284
Conc: 5.28 ug/ml



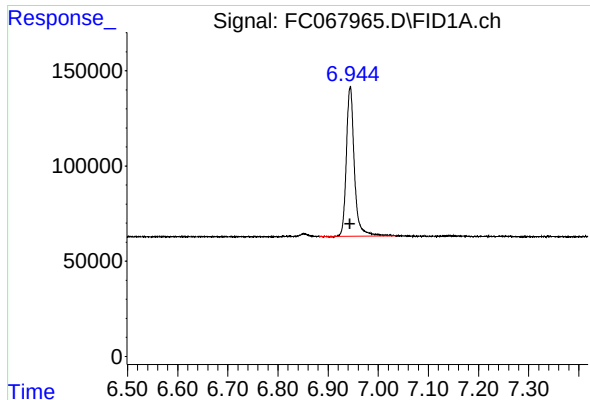
#3 A~Naphthalene (C11.7)

R.T.: 5.889 min
Delta R.T.: 0.000 min
Response: 920617
Conc: 5.20 ug/ml



#4 n-Dodecane (C12)

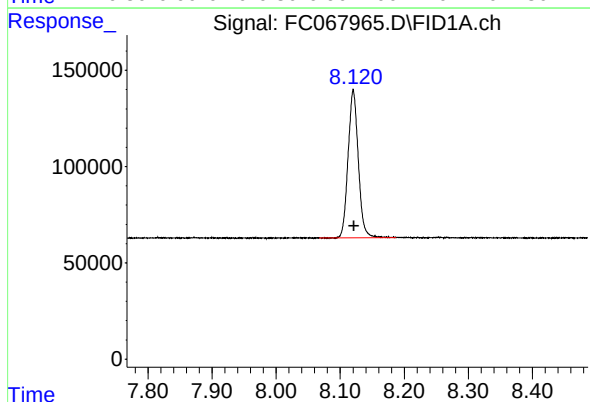
R.T.: 6.328 min
Delta R.T.: 0.000 min
Response: 856678
Conc: 5.24 ug/ml



#5 A~2-methylnaphthalene (C12.89)

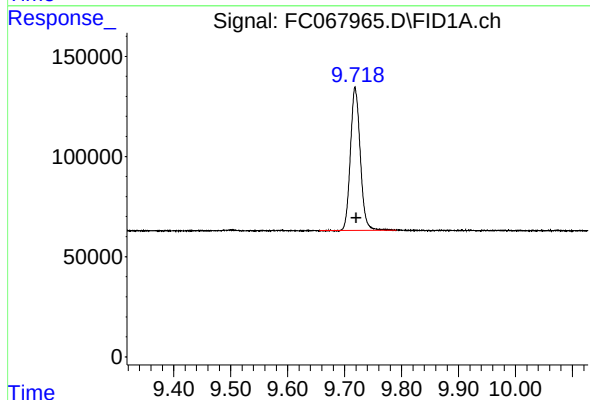
R.T.: 6.944 min
Delta R.T.: 0.000 min
Response: 869061
Conc: 5.09 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



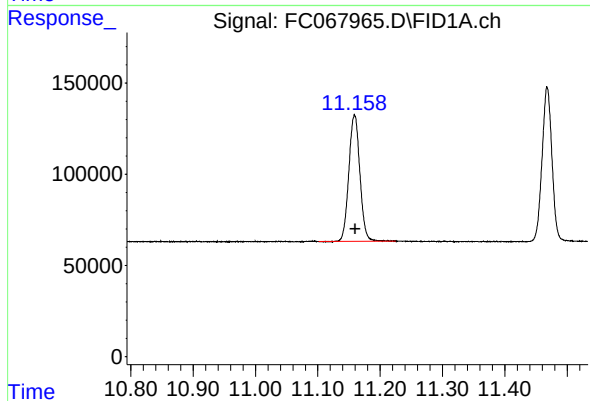
#6 n-Tetradecane (C14)

R.T.: 8.120 min
Delta R.T.: -0.001 min
Response: 844626
Conc: 5.23 ug/ml



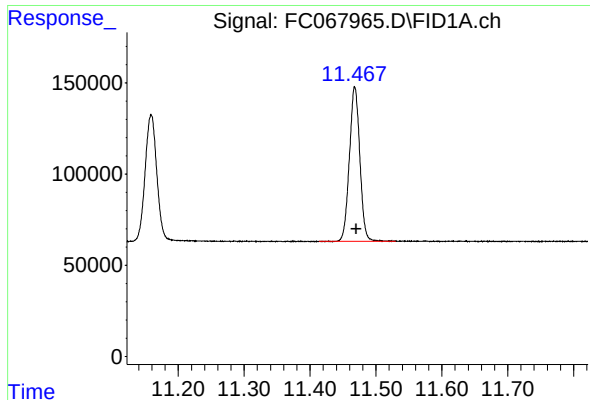
#7 n-Hexadecane (C16)

R.T.: 9.719 min
Delta R.T.: -0.002 min
Response: 857364
Conc: 5.24 ug/ml



#8 n-Octadecane (C18)

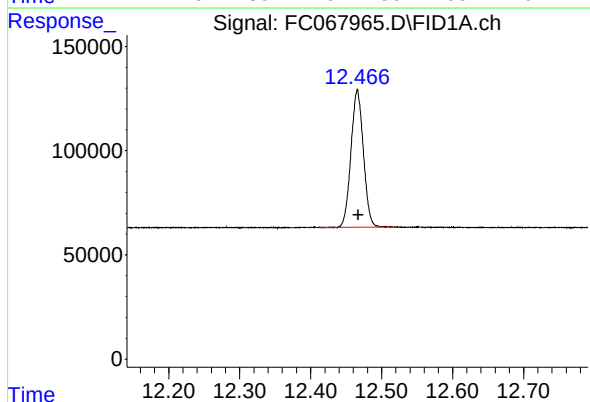
R.T.: 11.159 min
Delta R.T.: -0.001 min
Response: 853140
Conc: 5.23 ug/ml



#9 ortho-Terphenyl (SURR)

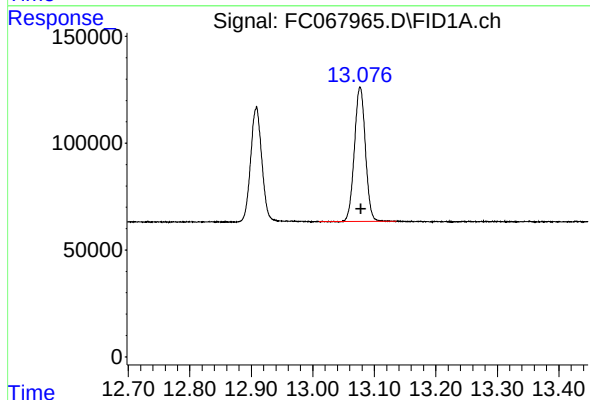
R.T.: 11.468 min
Delta R.T.: -0.002 min
Response: 931695
Conc: 5.36 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



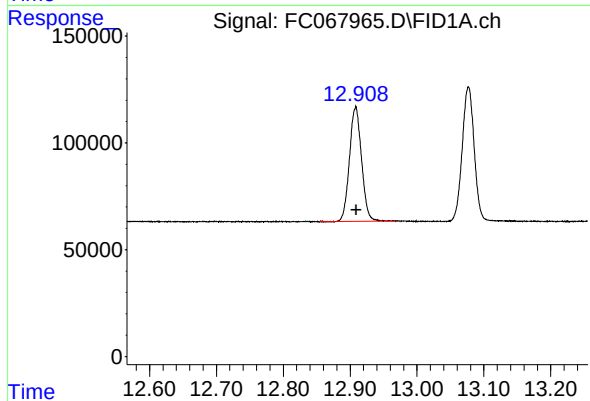
#10 n-Eicosane (C20)

R.T.: 12.466 min
Delta R.T.: -0.002 min
Response: 802158
Conc: 5.28 ug/ml



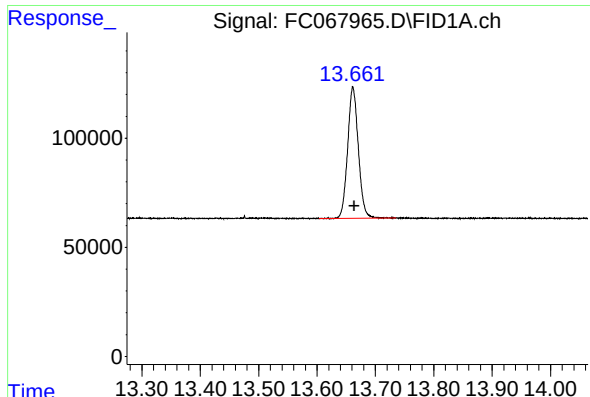
#11 n-Heneicosane (C21)

R.T.: 13.077 min
Delta R.T.: -0.002 min
Response: 781976
Conc: 5.30 ug/ml



#12 1-chlorooctadecane (SURR)

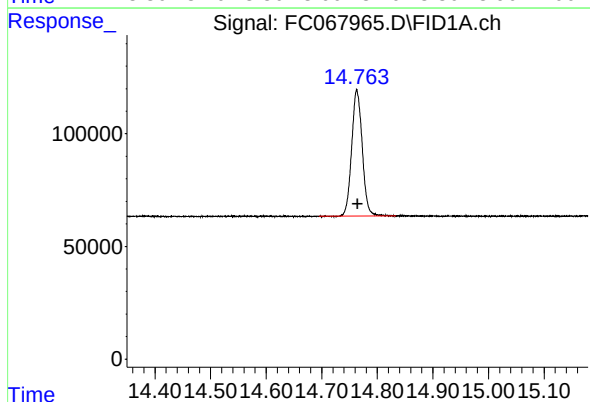
R.T.: 12.908 min
Delta R.T.: -0.001 min
Response: 673575
Conc: 5.23 ug/ml



#13 n-Docosane (C22)

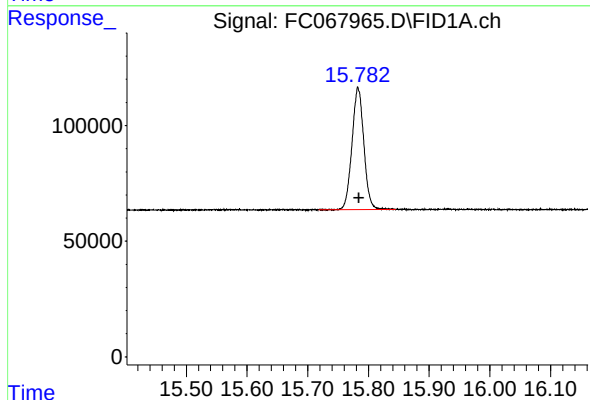
R.T.: 13.662 min
Delta R.T.: -0.002 min
Response: 767100
Conc: 5.32 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



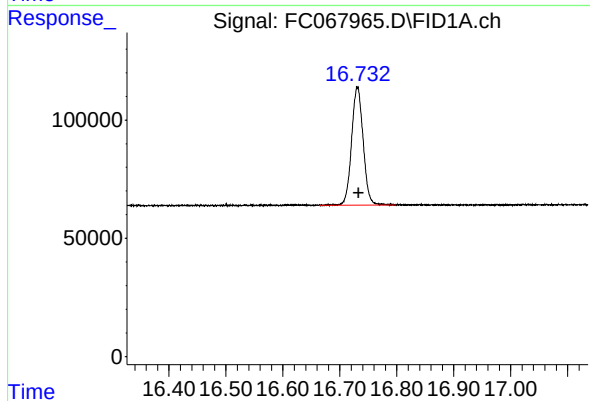
#14 n-Tetracosane (C24)

R.T.: 14.763 min
Delta R.T.: -0.001 min
Response: 744614
Conc: 5.33 ug/ml



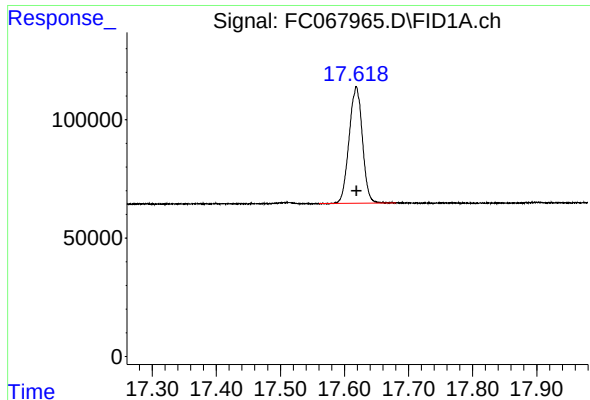
#15 n-Hexacosane (C26)

R.T.: 15.783 min
Delta R.T.: -0.002 min
Response: 715051
Conc: 5.33 ug/ml



#16 n-Octacosane (C28)

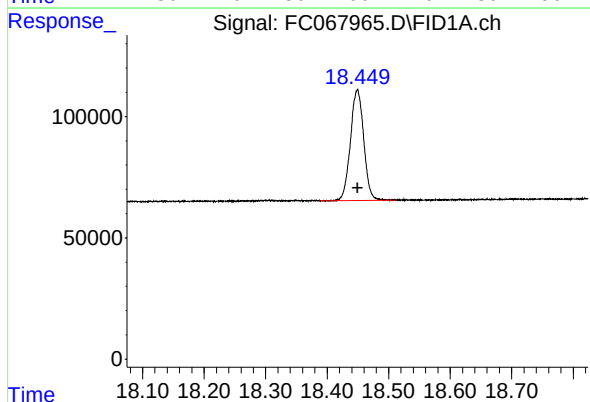
R.T.: 16.731 min
Delta R.T.: -0.002 min
Response: 704114
Conc: 5.45 ug/ml



#17 n-Tricontane (C30)

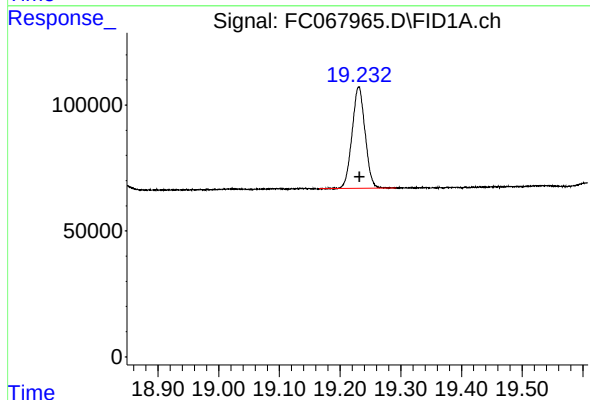
R.T.: 17.618 min
Delta R.T.: 0.000 min
Response: 709104
Conc: 5.51 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



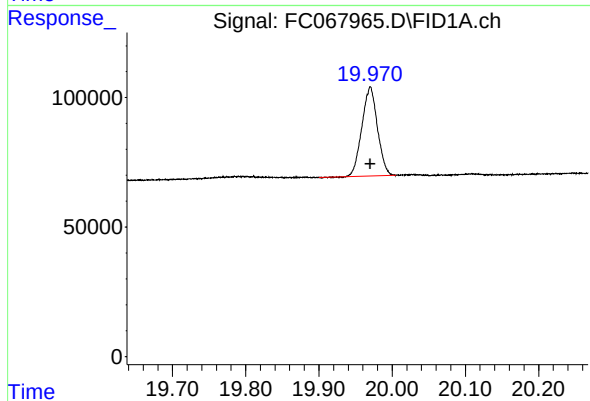
#18 n-Dotriacontane (C32)

R.T.: 18.449 min
Delta R.T.: 0.000 min
Response: 683639
Conc: 5.56 ug/ml



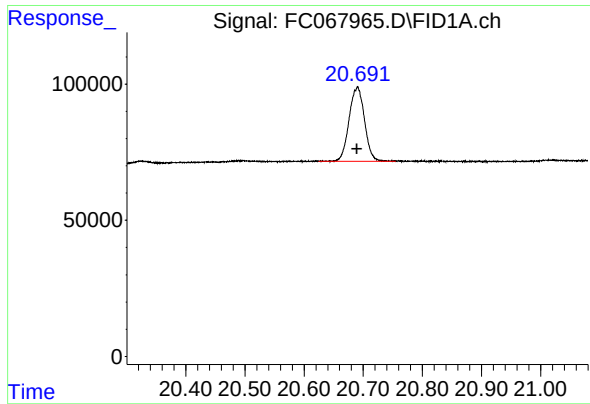
#19 n-Tetratriacontane (C34)

R.T.: 19.231 min
Delta R.T.: -0.002 min
Response: 601708
Conc: 5.56 ug/ml



#20 n-Hexatriacontane (C36)

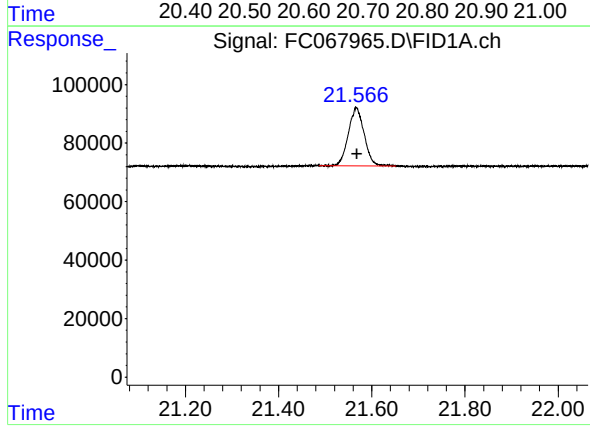
R.T.: 19.970 min
Delta R.T.: 0.000 min
Response: 508095
Conc: 5.38 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.690 min
Delta R.T.: 0.000 min
Response: 491184
Conc: 5.44 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

R.T.: 21.567 min
Delta R.T.: 0.000 min
Response: 470158
Conc: 5.35 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
 Data File : FC067965.D
 Signal(s) : FID1A.ch
 Acq On : 10 Dec 2024 07:14
 Sample : 5 PPM ALIPHATIC HC STD5
 Misc :
 ALS Vial : 30 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.252	3.195	3.310	BB	98464	837588	89.90%	5.085%
2	4.314	4.265	4.369	BB	90579	849284	91.15%	5.156%
3	5.889	5.839	5.975	BB	94582	920617	98.81%	5.589%
4	6.328	6.272	6.379	BB	85381	856678	91.95%	5.201%
5	6.944	6.882	7.035	BB	78290	869061	93.28%	5.276%
6	8.120	8.067	8.187	BB	76887	844626	90.65%	5.127%
7	9.719	9.655	9.790	BB	71298	857364	92.02%	5.205%
8	11.159	11.102	11.225	BB	69339	853140	91.57%	5.179%
9	11.468	11.414	11.530	BB	84392	931695	100.00%	5.656%
10	12.466	12.412	12.520	BB	65591	802158	86.10%	4.870%
11	12.908	12.854	12.969	BB	53827	673575	72.30%	4.089%
12	13.077	13.010	13.135	BB	62999	781976	83.93%	4.747%
13	13.662	13.604	13.735	BB	60235	767100	82.33%	4.657%
14	14.763	14.695	14.834	BB	55934	744614	79.92%	4.520%
15	15.783	15.719	15.845	BB	52306	715051	76.75%	4.341%
16	16.731	16.664	16.799	BB	50095	704114	75.57%	4.274%
17	17.618	17.560	17.680	BB	49392	709104	76.11%	4.305%
18	18.449	18.387	18.512	BB	45576	683639	73.38%	4.150%
19	19.231	19.165	19.292	BB	40235	601708	64.58%	3.653%
20	19.970	19.900	20.005	BB	34623	508095	54.53%	3.084%
21	20.690	20.625	20.755	BB	27363	491184	52.72%	2.982%
22	21.567	21.487	21.652	BB	19977	470158	50.46%	2.854%
Sum of corrected areas:							16472529	

Aliphatic EPH 121024.M Tue Dec 10 08:35:44 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
 Data File : FC067966.D
 Signal(s) : FID1A.ch
 Acq On : 10 Dec 2024 07:51
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD ICV
 Misc :
 ALS Vial : 31 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
 Quant Time: Dec 10 08:28:59 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:59:10 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.470	3272172	18.924 ug/ml
Spiked Amount 50.000		Recovery =	37.85%
12) S 1-chlorooctadecane (S...	12.910	2422368	18.985 ug/ml
Spiked Amount 50.000		Recovery =	37.97%
Target Compounds			
1) T n-Nonane (C9)	3.251	2939755	18.921 ug/ml
2) T n-Decane (C10)	4.314	3002452	18.940 ug/ml
3) T A~Naphthalene (C11.7)	5.889	3305883	18.936 ug/ml
4) T n-Dodecane (C12)	6.329	3047202	18.925 ug/ml
5) T A~2-methylnaphthalene...	6.944	3200059	19.099 ug/ml
6) T n-Tetradecane (C14)	8.121	3014050	18.957 ug/ml
7) T n-Hexadecane (C16)	9.720	3071861	19.015 ug/ml
8) T n-Octadecane (C18)	11.160	3056414	19.038 ug/ml
10) T n-Eicosane (C20)	12.467	2858175	19.000 ug/ml
11) T n-Heneicosane (C21)	13.078	2768356	18.946 ug/ml
13) T n-Docosane (C22)	13.664	2714314	18.962 ug/ml
14) T n-Tetracosane (C24)	14.765	2625090	18.893 ug/ml
15) T n-Hexacosane (C26)	15.784	2526631	18.893 ug/ml
16) T n-Octacosane (C28)	16.732	2447157	18.866 ug/ml
17) T n-Tricontane (C30)	17.619	2446667	18.887 ug/ml
18) T n-Dotriacontane (C32)	18.449	2342650	18.910 ug/ml
19) T n-Tetratriacontane (C34)	19.231	2066031	18.929 ug/ml
20) T n-Hexatriacontane (C36)	19.971	1796559	18.989 ug/ml
21) T n-Octatriacontane (C38)	20.690	1708885	18.891 ug/ml
22) T n-Tetracontane (C40)	21.567	1658551	18.817 ug/ml

(f)=RT Delta > 1/2 Window

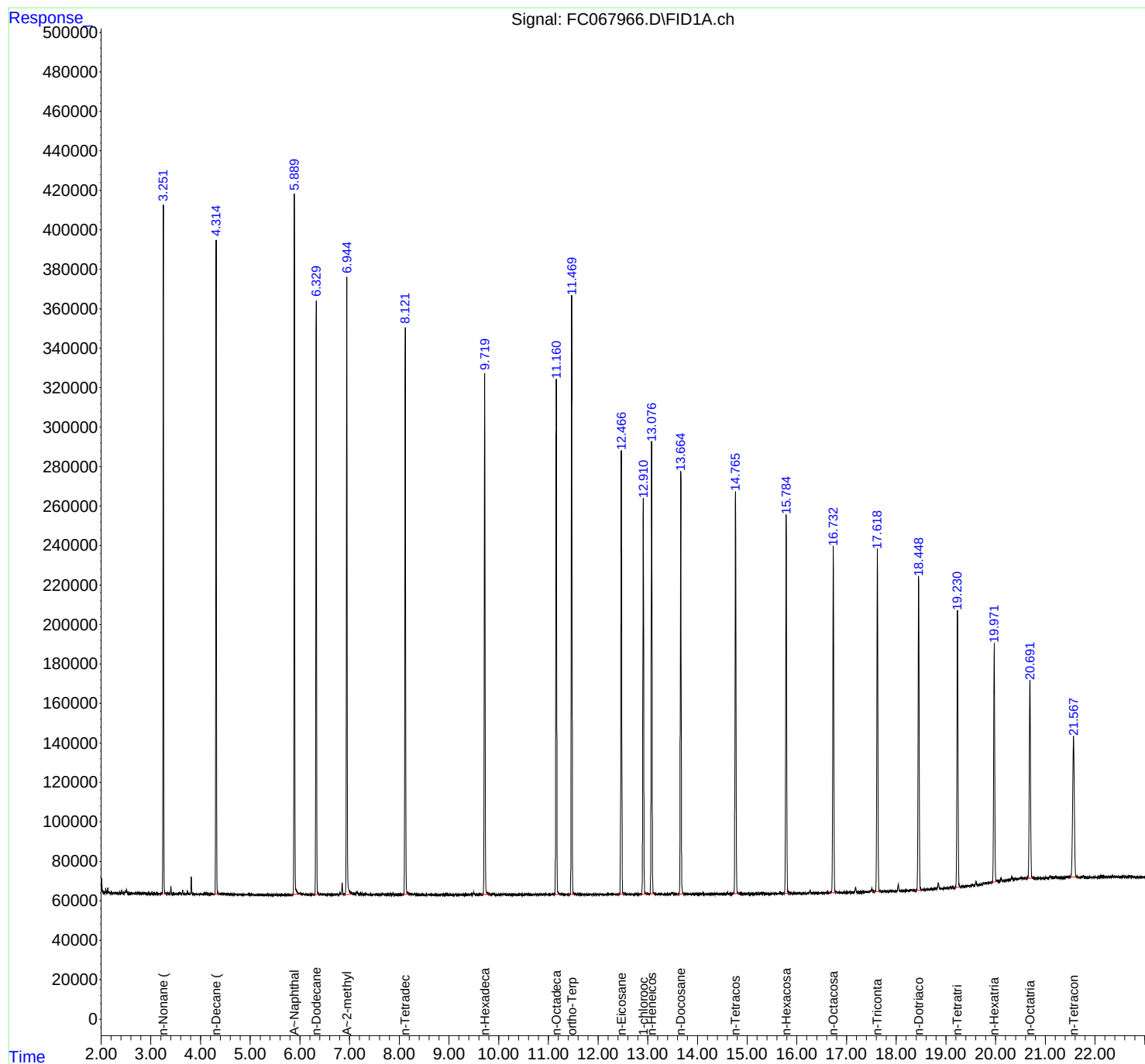
(m)=manual int.

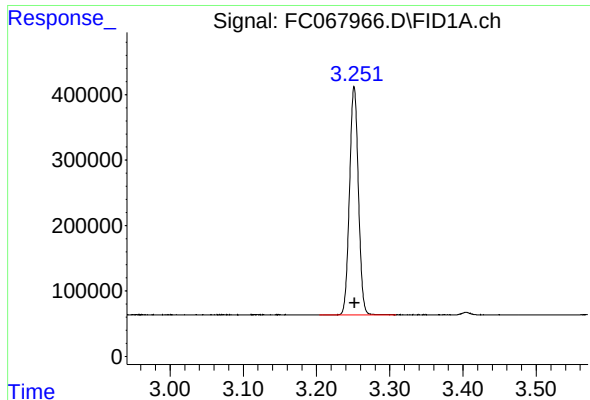
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
Data File : FC067966.D
Signal(s) : FID1A.ch
Acq On : 10 Dec 2024 07:51
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 31 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Dec 10 08:28:59 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um





#1 n-Nonane (C9)

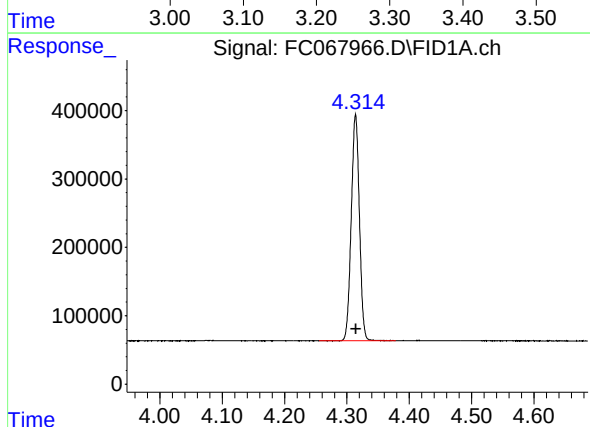
R.T.: 3.251 min
Delta R.T.: 0.000 min
Response: 2939755
Conc: 18.92 ug/ml

Instrument :

FID_C

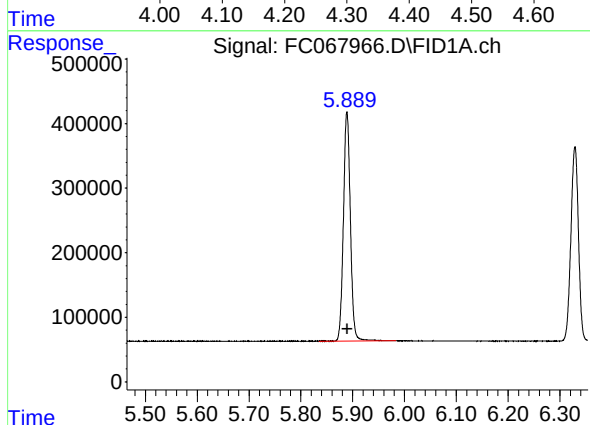
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



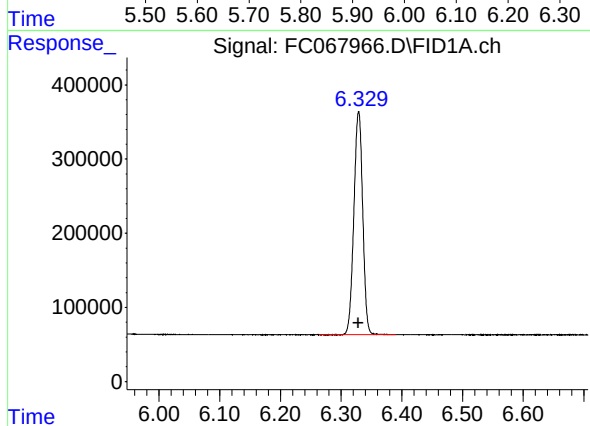
#2 n-Decane (C10)

R.T.: 4.314 min
Delta R.T.: 0.000 min
Response: 3002452
Conc: 18.94 ug/ml



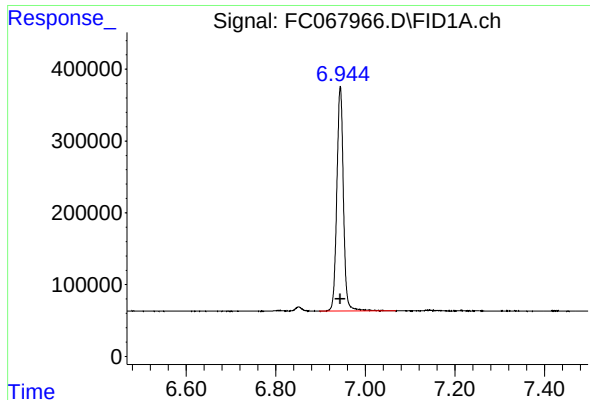
#3 A~Naphthalene (C11.7)

R.T.: 5.889 min
Delta R.T.: 0.000 min
Response: 3305883
Conc: 18.94 ug/ml



#4 n-Dodecane (C12)

R.T.: 6.329 min
Delta R.T.: 0.000 min
Response: 3047202
Conc: 18.93 ug/ml



#5 A~2-methylnaphthalene (C12.89)

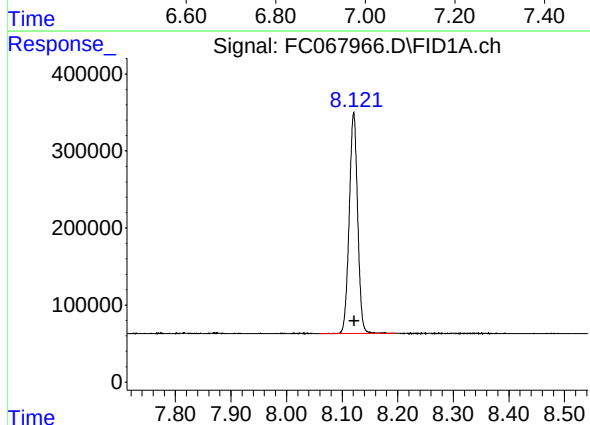
R.T.: 6.944 min
Delta R.T.: 0.000 min
Response: 3200059
Conc: 19.10 ug/ml

Instrument :

FID_C

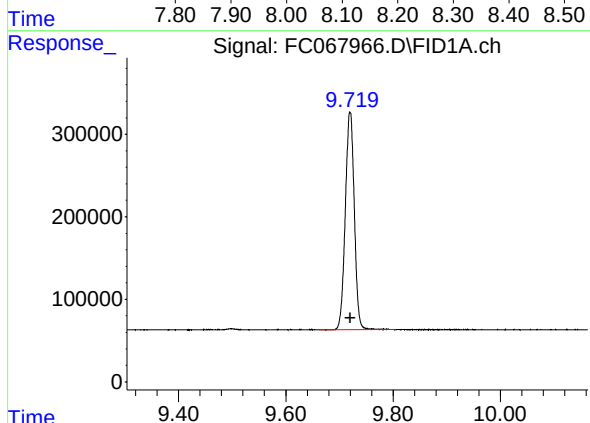
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



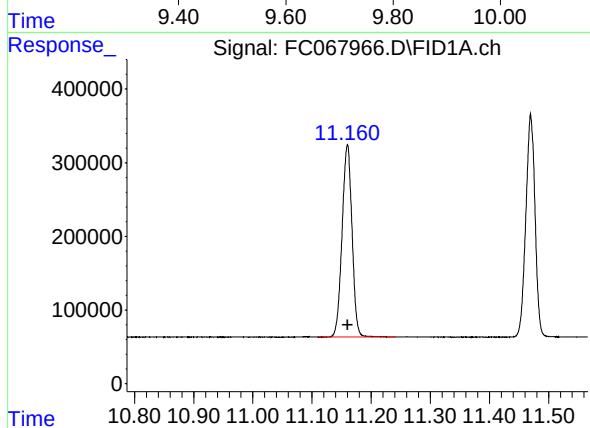
#6 n-Tetradecane (C14)

R.T.: 8.121 min
Delta R.T.: 0.000 min
Response: 3014050
Conc: 18.96 ug/ml



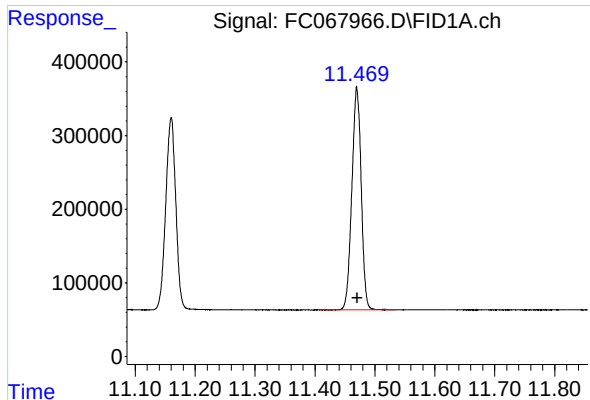
#7 n-Hexadecane (C16)

R.T.: 9.720 min
Delta R.T.: 0.000 min
Response: 3071861
Conc: 19.01 ug/ml



#8 n-Octadecane (C18)

R.T.: 11.160 min
Delta R.T.: 0.000 min
Response: 3056414
Conc: 19.04 ug/ml



#9 ortho-Terphenyl (SURR)

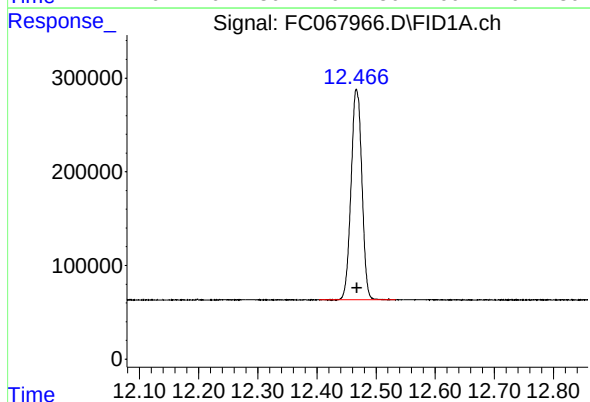
R.T.: 11.470 min
Delta R.T.: 0.000 min
Response: 3272172
Conc: 18.92 ug/ml

Instrument :

FID_C

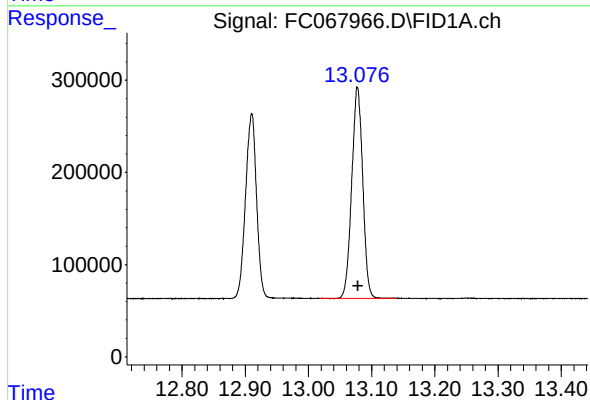
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



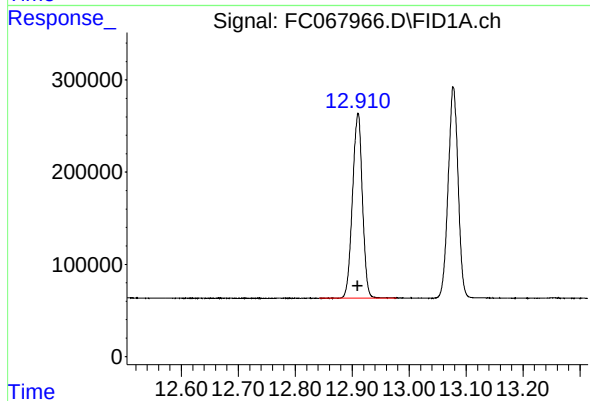
#10 n-Eicosane (C20)

R.T.: 12.467 min
Delta R.T.: 0.000 min
Response: 2858175
Conc: 19.00 ug/ml



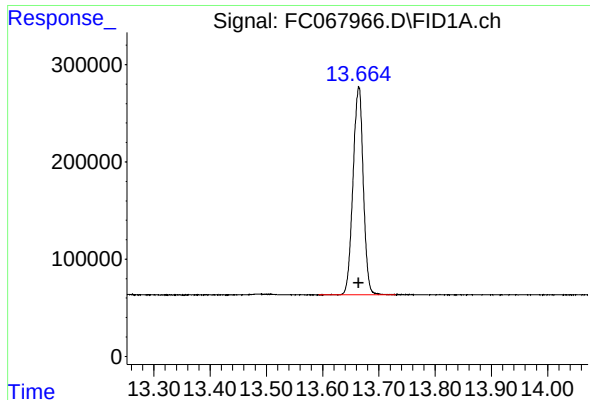
#11 n-Heneicosane (C21)

R.T.: 13.078 min
Delta R.T.: 0.000 min
Response: 2768356
Conc: 18.95 ug/ml



#12 1-chlorooctadecane (SURR)

R.T.: 12.910 min
Delta R.T.: 0.000 min
Response: 2422368
Conc: 18.98 ug/ml



#13 n-Docosane (C22)

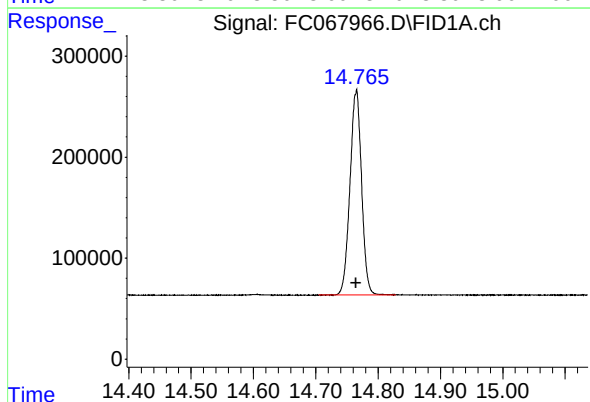
R.T.: 13.664 min
Delta R.T.: 0.000 min
Response: 2714314
Conc: 18.96 ug/ml

Instrument :

FID_C

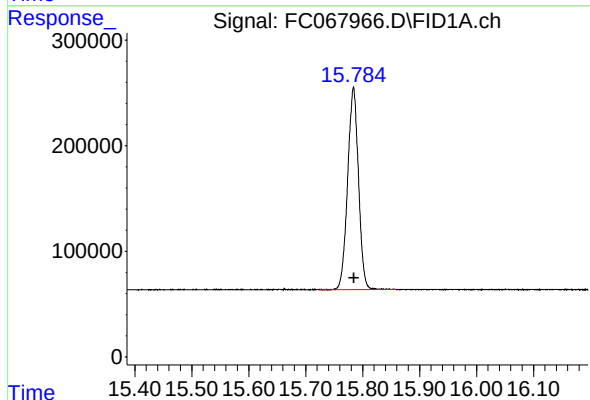
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



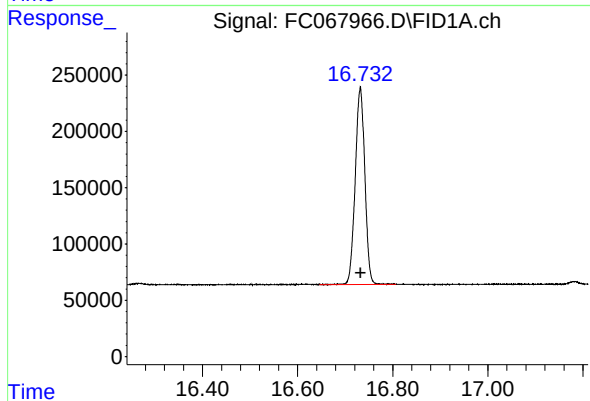
#14 n-Tetracosane (C24)

R.T.: 14.765 min
Delta R.T.: 0.000 min
Response: 2625090
Conc: 18.89 ug/ml



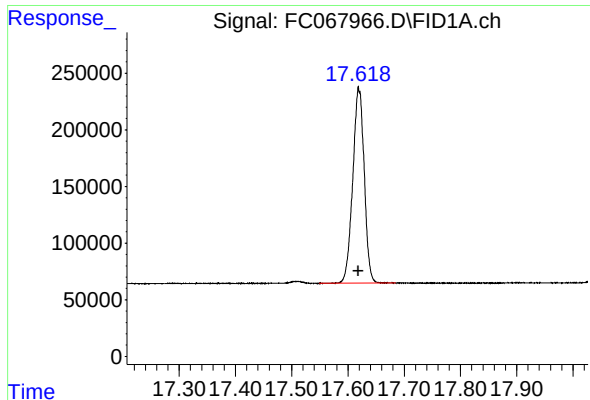
#15 n-Hexacosane (C26)

R.T.: 15.784 min
Delta R.T.: -0.001 min
Response: 2526631
Conc: 18.89 ug/ml



#16 n-Octacosane (C28)

R.T.: 16.732 min
Delta R.T.: -0.001 min
Response: 2447157
Conc: 18.87 ug/ml



#17 n-Tricontane (C30)

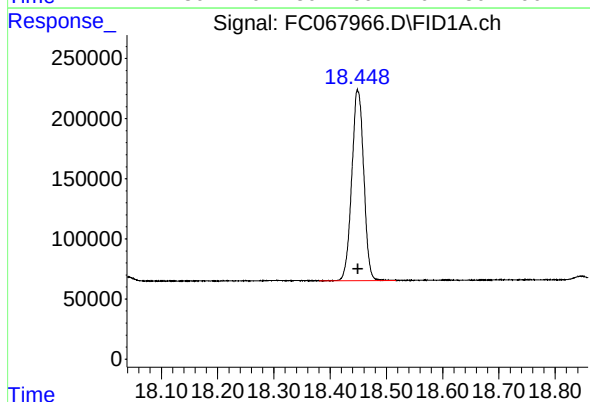
R.T.: 17.619 min
Delta R.T.: 0.000 min
Response: 2446667
Conc: 18.89 ug/ml

Instrument :

FID_C

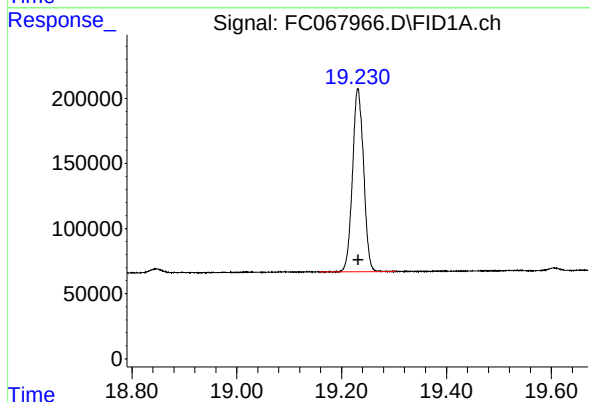
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



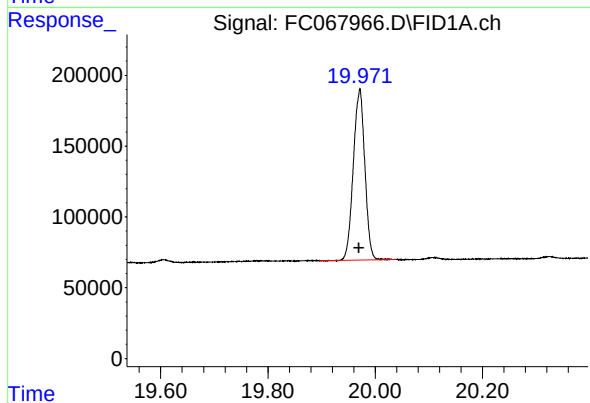
#18 n-Dotriacontane (C32)

R.T.: 18.449 min
Delta R.T.: 0.000 min
Response: 2342650
Conc: 18.91 ug/ml



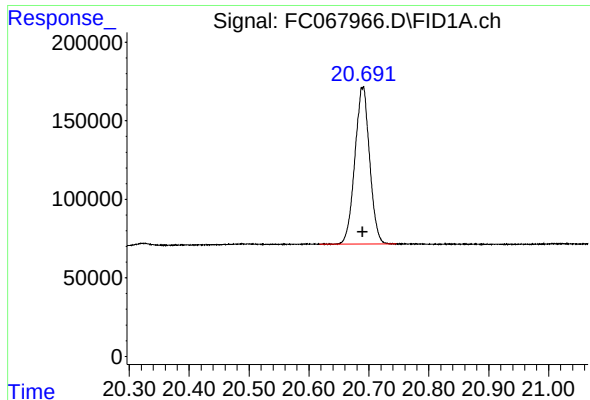
#19 n-Tetatriacontane (C34)

R.T.: 19.231 min
Delta R.T.: -0.001 min
Response: 2066031
Conc: 18.93 ug/ml



#20 n-Hexatriacontane (C36)

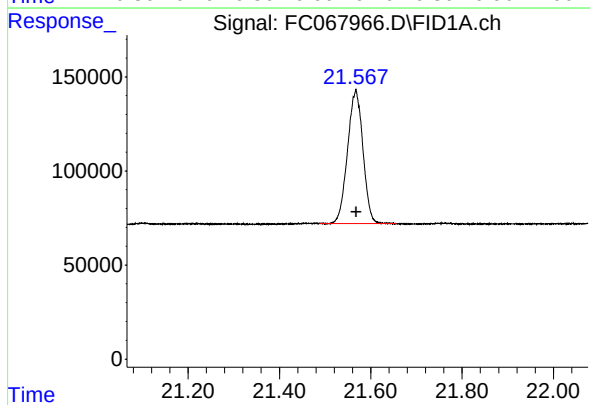
R.T.: 19.971 min
Delta R.T.: 0.000 min
Response: 1796559
Conc: 18.99 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.690 min
Delta R.T.: 0.000 min
Response: 1708885
Conc: 18.89 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 21.567 min
Delta R.T.: 0.000 min
Response: 1658551
Conc: 18.82 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC121024AL\
Data File : FC067966.D
Signal(s) : FID1A.ch
Acq On : 10 Dec 2024 07:51
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.251	3.204	3.309	BB	348769	2939755	88.92%	5.043%
2	4.314	4.255	4.379	BB	329929	3002452	90.82%	5.151%
3	5.889	5.835	5.984	BB	355252	3305883	100.00%	5.671%
4	6.329	6.264	6.390	BB	300692	3047202	92.18%	5.228%
5	6.944	6.897	7.069	BB	311983	3200059	96.80%	5.490%
6	8.121	8.059	8.197	BB	286088	3014050	91.17%	5.171%
7	9.720	9.662	9.805	BB	263353	3071861	92.92%	5.270%
8	11.160	11.112	11.242	BB	261870	3056414	92.45%	5.243%
9	11.470	11.407	11.535	BB	300728	3272172	98.98%	5.613%
10	12.467	12.404	12.534	BB	224337	2858175	86.46%	4.903%
11	12.910	12.842	12.977	BB	201160	2422368	73.27%	4.156%
12	13.078	13.017	13.139	BB	228570	2768356	83.74%	4.749%
13	13.664	13.594	13.730	BB	213690	2714314	82.11%	4.656%
14	14.765	14.705	14.829	BB	202143	2625090	79.41%	4.503%
15	15.784	15.724	15.859	BB	191355	2526631	76.43%	4.334%
16	16.732	16.645	16.807	BB	175283	2447157	74.02%	4.198%
17	17.619	17.549	17.685	BB	168643	2446667	74.01%	4.197%
18	18.449	18.380	18.517	BB	157186	2342650	70.86%	4.019%
19	19.231	19.157	19.304	BB	140632	2066031	62.50%	3.544%
20	19.971	19.895	20.039	BB	119656	1796559	54.34%	3.082%
21	20.690	20.617	20.745	BB	99450	1708885	51.69%	2.932%
22	21.567	21.487	21.655	BB	71034	1658551	50.17%	2.845%
Sum of corrected areas:							58291281	

Aliphatic EPH 121024.M Tue Dec 10 08:40:04 2024

Initial Calibration Report for SequenceID : FD121024AR

AreaCount

Parameter Range	FD048862.D	FD048863.D	FD048864.D	FD048865.D	FD048866.D	
Aromatic C10-C12	36144450.000	18307256.000	7704703.000	4202950.000	1844873.000	
Aromatic C12-C16	52606403.000	26714057.000	11173780.000	6154338.000	2768912.000	
Aromatic C16-C21	65406144.000	33090551.000	13675456.000	7455120.000	3226208.000	
Aromatic C21-C36	122999142.000	62178240.000	25807519.000	13997336.000	6039121.000	
Aromatic EPH	277156139.000	140290104.000	58361458.000	31809744.000	13879114.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aromatic C10-C12	190209.437	6.314				
Aromatic C12-C16	185883.3579996	6.276				
Aromatic C16-C21	169519.943	5.945				
Aromatic C21-C36	141588.6659994	5.992				
Aromatic EPH	160580.3729996	5.982				

Concentration

Parameter Range	FD048862.D	FD048863.D	FD048864.D	FD048865.D	FD048866.D	
Aromatic C10-C12	200.000	100.000	40.000	20.000	10.000	
Aromatic C12-C16	300.000	150.000	60.000	30.000	15.000	
Aromatic C16-C21	400.000	200.000	80.000	40.000	20.000	
Aromatic C21-C36	900.000	450.000	180.000	90.000	45.000	
Aromatic EPH	1800.000	900.000	360.000	180.000	90.000	

Response Factor

Parameter Range	FD048862.D	FD048863.D	FD048864.D	FD048865.D	FD048866.D	
Aromatic C10-C12	180722.250000	183072.560000	192617.575000	210147.500000	184487.300000	
Aromatic C12-C16	175354.676666	178093.713333	186229.666666	205144.600000	184594.133333	
Aromatic C16-C21	163515.360000	165452.755000	170943.200000	186378.000000	161310.400000	
Aromatic C21-C36	136665.713333	138173.866666	143375.105555	155525.955555	134202.688888	
Aromatic EPH	153975.632777	155877.893333	162115.161111	176720.800000	154212.377777	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
 Data File : FD048862.D
 Signal(s) : FID2B.ch
 Acq On : 10 Dec 2024 02:58
 Operator : YP/AJ
 Sample : 100 PPM AROMATIC HC STD1
 Misc :
 ALS Vial : 71 Sample Multiplier: 1

Instrument :

FID_D

ClientSampleId :

100 PPM AROMATIC HC STD1

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 12/10/2024

Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e

Quant Time: Dec 10 06:00:59 2024

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M

Quant Title : GC Extractables

QLast Update : Tue Dec 10 05:59:54 2024

Response via : Initial Calibration

Integrator: ChemStation

Volume Inj. : 1 µl

Signal Phase : Rxi-1ms

Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.368	15921295	93.981 ug/ml
Spiked Amount 50.000		Recovery =	187.96%
6) S 2-Fluorobiphenyl (SURR)	8.220	10548610	98.744 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	197.49%#
11) S ortho-Terphenyl (SURR)	11.256	16688784	93.186 ug/ml
Spiked Amount 50.000		Recovery =	186.37%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.190	17896321	94.195 ug/ml
2) T Naphthalene (C11.7)	5.708	18248129	93.464 ug/ml
3) T 2-Methylnaphthalene (...)	6.756	17647356	94.886 ug/ml
5) T Acenaphthylene (C15.06)	8.023	17689794	94.386 ug/ml
7) T Acenaphthene (C15.5)	8.319	17269253	93.203 ug/ml
8) T Flouorene (C16.55)	9.098	17270251	95.273 ug/ml
9) T Phenanthrene (C19.36)	10.485	16362315	96.999 ug/ml
10) T Anthracene (C19.43)	10.562	16263903	94.872 ug/ml
12) T Fluoranthene (C21.85)	12.291	15655851	94.377 ug/ml
13) T Pyrene (C20.8)	12.584	15509675	95.510 ug/ml
14) T Benzo[a]anthracene (C...	14.454	14161136	101.685 ug/ml
15) T Chrysene (C27.41)	14.500	14249238	90.269 ug/ml
16) T benzo[b]fluoranthene ...	16.004	13748802	98.495 ug/ml
17) T Bnezo[k]fluoranthene ...	16.043	13643820	92.001 ug/mlm
18) T Benzo[a]pyrene (C31.34)	16.381	13033554	93.325 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.749	12448244	116.520 ug/ml
20) T Dibenz[a,h]anthracene...	17.787	12848217	84.867 ug/ml
21) T Benzo[g,h,i]perylene ...	18.006	13210280	93.294 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
Data File : FD048862.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 02:58
Operator : YP/AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 71 Sample Multiplier: 1

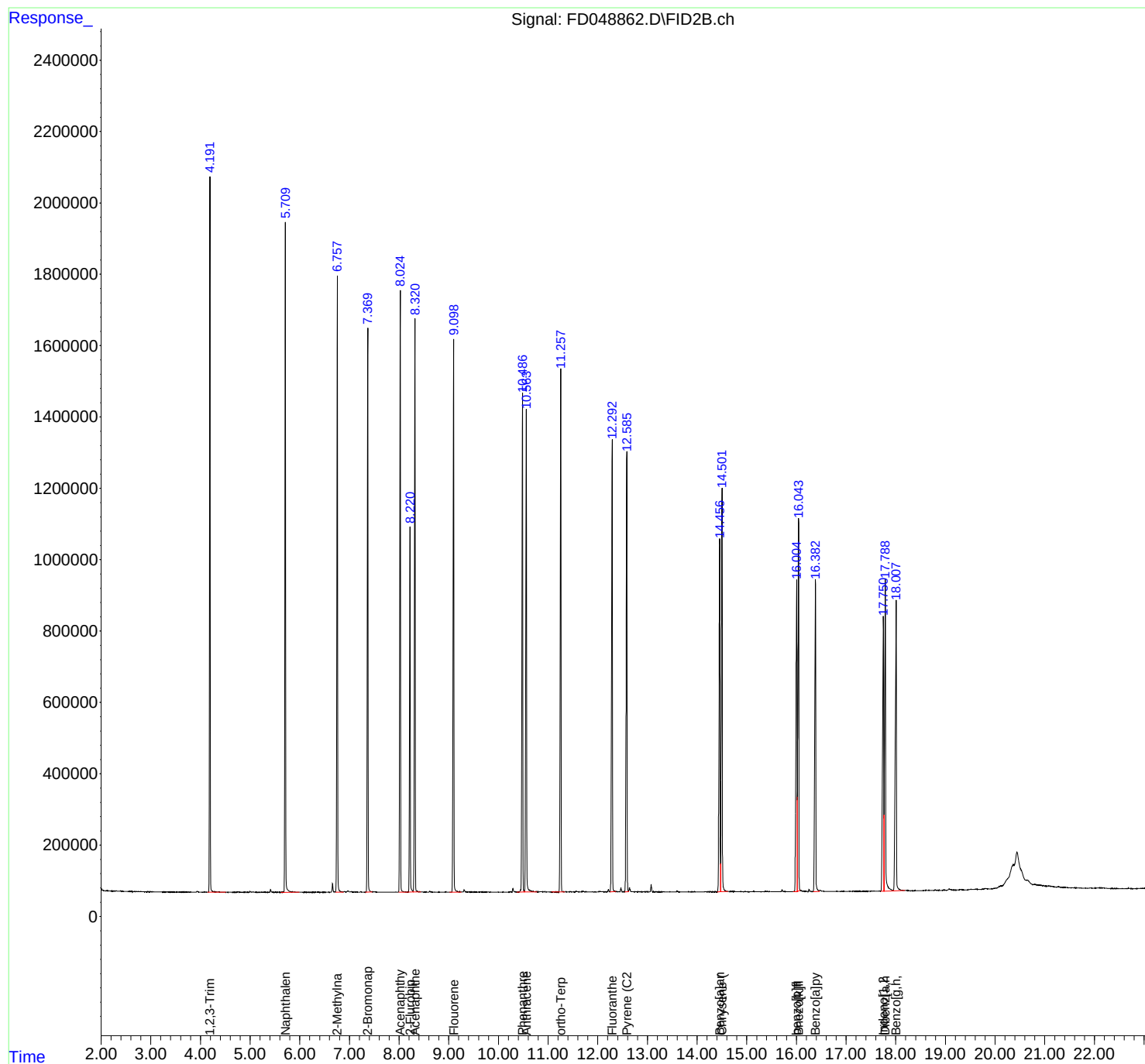
Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1

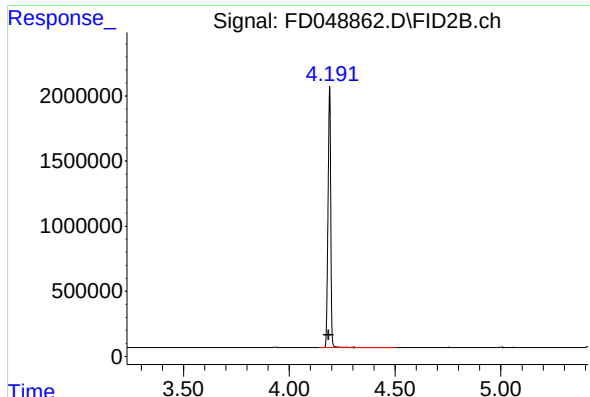
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
Quant Time: Dec 10 06:00:59 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 05:59:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm





#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.190 min
Delta R.T.: 0.004 min
Response: 17896321
Conc: 94.19 ug/ml

Instrument :

FID_D

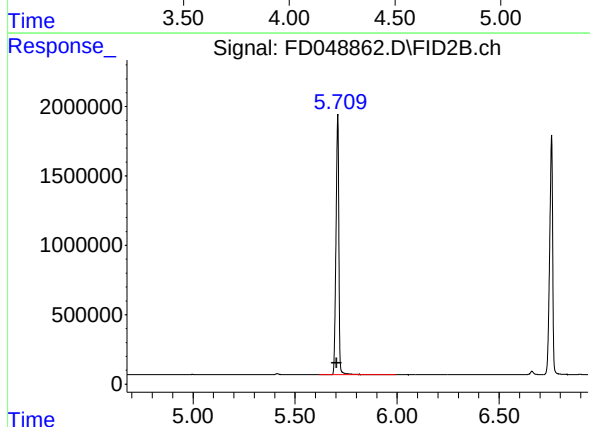
ClientSampleId :

100 PPM AROMATIC HC STD1

Manual Integrations

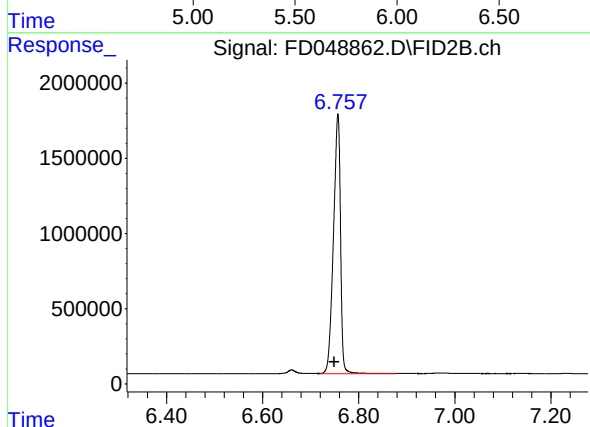
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



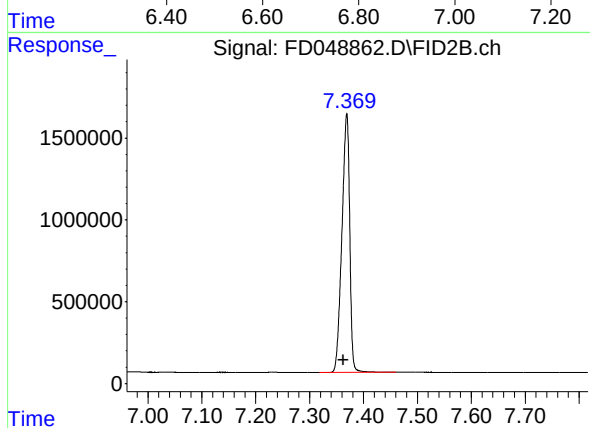
#2 Naphthalene (C11.7)

R.T.: 5.708 min
Delta R.T.: 0.005 min
Response: 18248129
Conc: 93.46 ug/ml



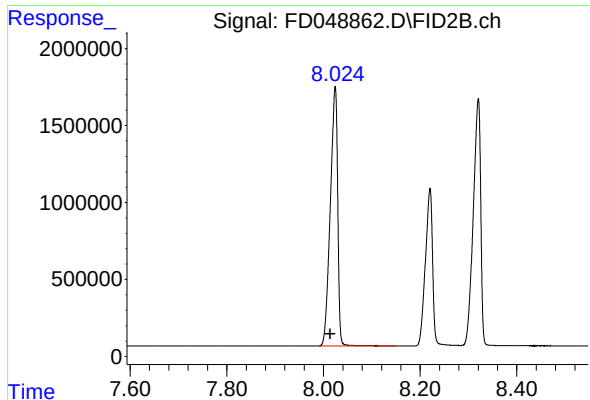
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.756 min
Delta R.T.: 0.006 min
Response: 17647356
Conc: 94.89 ug/ml



#4 2-Bromonaphthalene (SURR)

R.T.: 7.368 min
Delta R.T.: 0.006 min
Response: 15921295
Conc: 93.98 ug/ml



#5 Acenaphthylene (C15.06)

R.T.: 8.023 min
Delta R.T.: 0.009 min
Response: 17689794
Conc: 94.39 ug/ml

Instrument :

FID_D

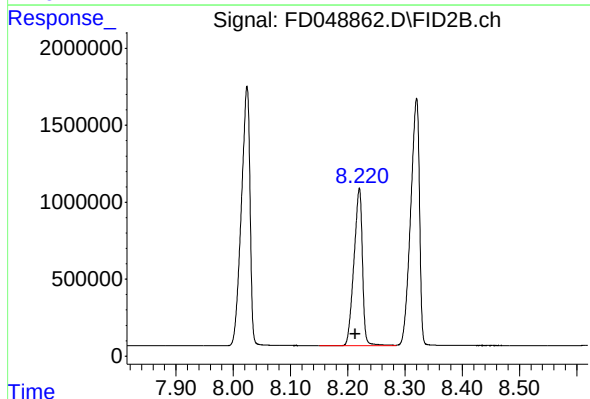
ClientSampleId :

100 PPM AROMATIC HC STD1

Manual Integrations

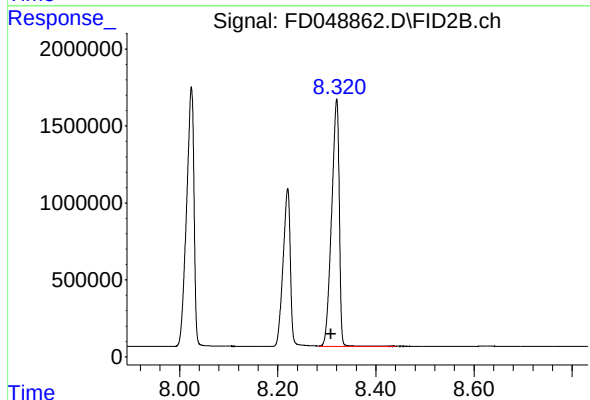
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



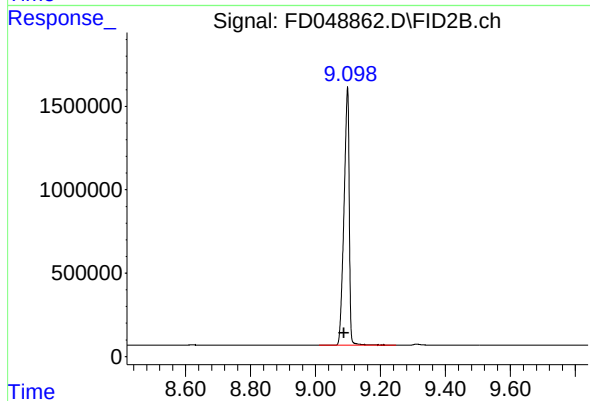
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.220 min
Delta R.T.: 0.007 min
Response: 10548610
Conc: 98.74 ug/ml



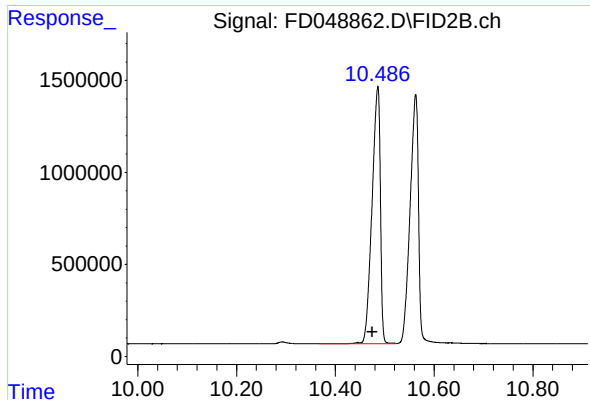
#7 Acenaphthene (C15.5)

R.T.: 8.319 min
Delta R.T.: 0.011 min
Response: 17269253
Conc: 93.20 ug/ml



#8 Flouorene (C16.55)

R.T.: 9.098 min
Delta R.T.: 0.010 min
Response: 17270251
Conc: 95.27 ug/ml



#9 Phenanthrene (C19.36)

R.T.: 10.485 min
Delta R.T.: 0.010 min
Response: 16362315
Conc: 97.00 ug/ml

Instrument :

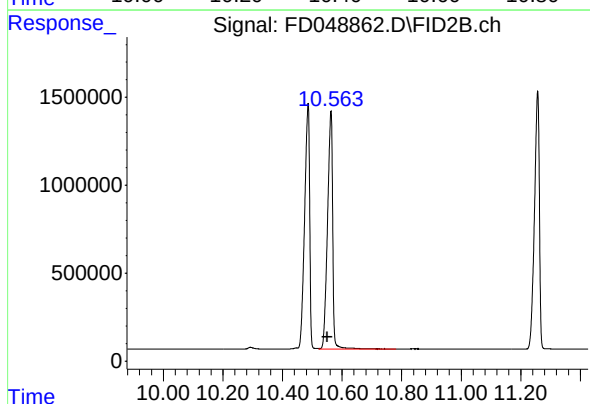
FID_D

ClientSampleId :

100 PPM AROMATIC HC STD1

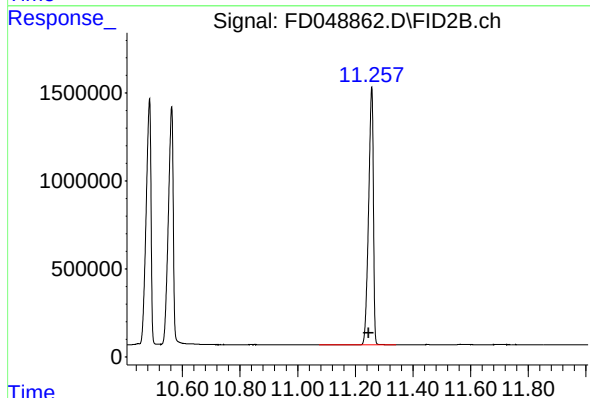
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



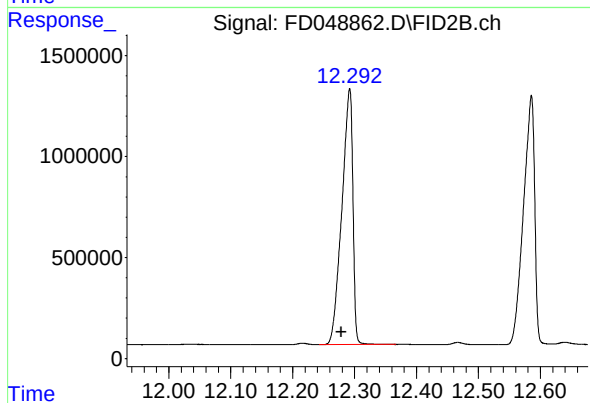
#10 Anthracene (C19.43)

R.T.: 10.562 min
Delta R.T.: 0.011 min
Response: 16263903
Conc: 94.87 ug/ml



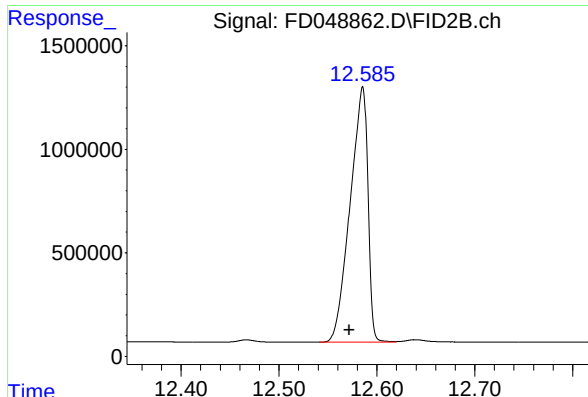
#11 ortho-Terphenyl (SURR)

R.T.: 11.256 min
Delta R.T.: 0.010 min
Response: 16688784
Conc: 93.19 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 12.291 min
Delta R.T.: 0.012 min
Response: 15655851
Conc: 94.38 ug/ml



#13 Pyrene (C20.8)

R.T.: 12.584 min
Delta R.T.: 0.013 min
Response: 15509675
Conc: 95.51 ug/ml

Instrument :

FID_D

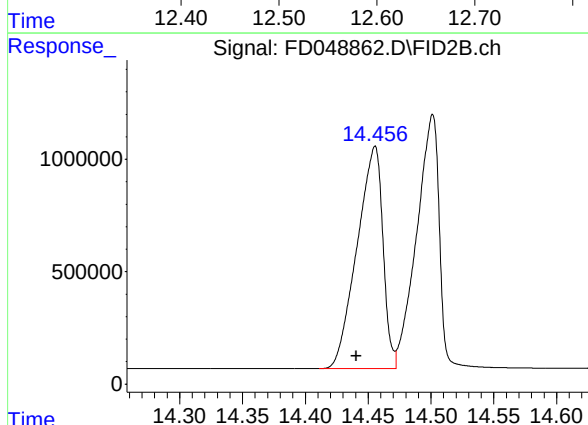
ClientSampleId :

100 PPM AROMATIC HC STD1

Manual Integrations

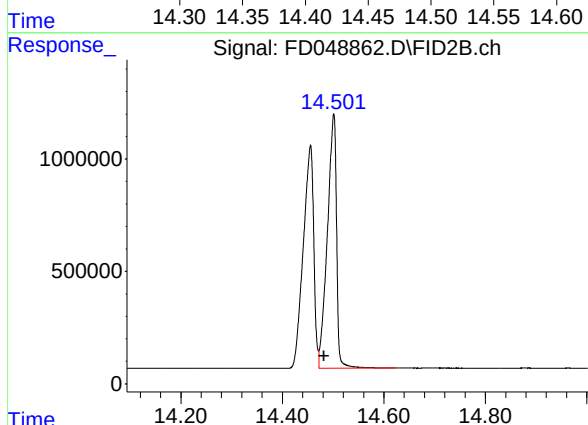
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



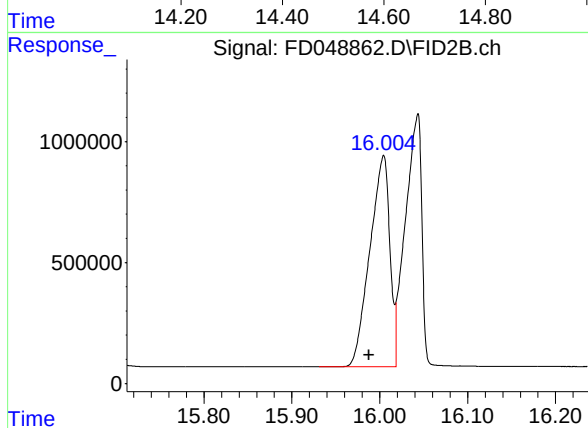
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.454 min
Delta R.T.: 0.014 min
Response: 14161136
Conc: 101.68 ug/ml



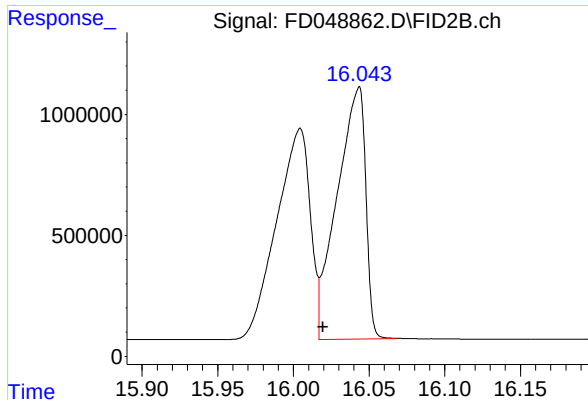
#15 Chrysene (C27.41)

R.T.: 14.500 min
Delta R.T.: 0.019 min
Response: 14249238
Conc: 90.27 ug/ml



#16 benzo[b]fluoranthene (C30.41)

R.T.: 16.004 min
Delta R.T.: 0.016 min
Response: 13748802
Conc: 98.49 ug/ml



#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.043 min
Delta R.T.: 0.024 min
Response: 13643820
Conc: 92.00 ug/ml

Instrument :

FID_D

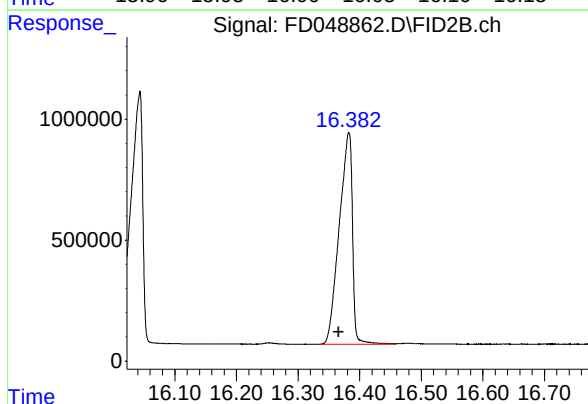
ClientSampleId :

100 PPM AROMATIC HC STD1

Manual Integrations

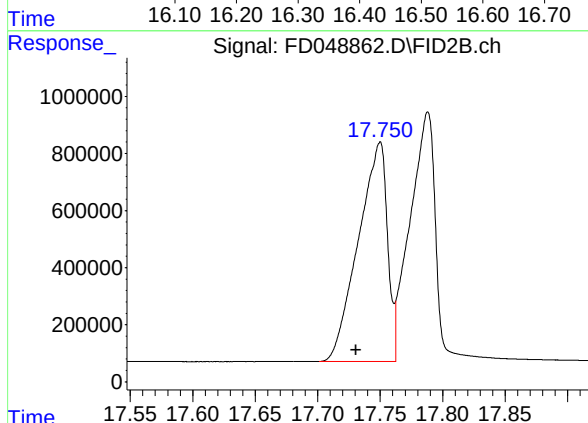
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



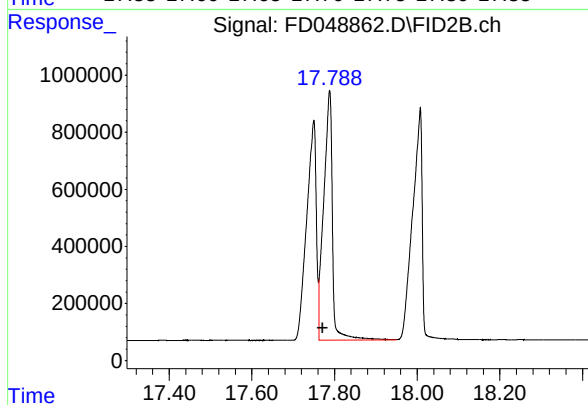
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.381 min
Delta R.T.: 0.015 min
Response: 13033554
Conc: 93.32 ug/ml



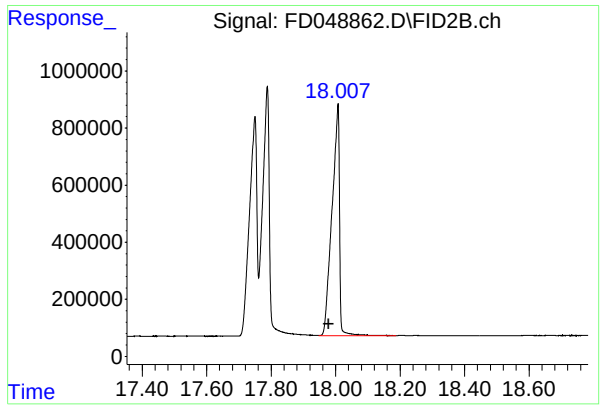
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.749 min
Delta R.T.: 0.018 min
Response: 12448244
Conc: 116.52 ug/ml



#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.787 min
Delta R.T.: 0.016 min
Response: 12848217
Conc: 84.87 ug/ml



#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 18.006 min
Delta R.T.: 0.027 min
Response: 13210280
Conc: 93.29 ug/ml

Instrument :

FID_D

ClientSampleId :

100 PPM AROMATIC HC STD1

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 12/10/2024

Supervised By :Ankita Jodhani 12/10/2024

rteres

Instrument :
FID_D
LabSampleId :
100 PPM AROMATIC HC STD1
Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024
Data File : FD048862.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 02:58
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 71 Sample Multiplier: 1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.190	4.141	4.504	BB	2022212	17896321	98.07%	5.587%
2	5.708	5.618	5.994	VV	1846237	18248129	100.00%	5.697%
3	6.756	6.718	6.878	VV	1759878	17647356	96.71%	5.509%
4	7.368	7.318	7.460	PV	1560518	15921295	87.25%	4.970%
5	8.023	7.991	8.150	BV	1707263	17689794	96.94%	5.522%
6	8.220	8.150	8.284	PV	1042647	10548610	57.81%	3.293%
7	8.319	8.284	8.441	VV	1648008	17269253	94.64%	5.391%
8	9.098	9.011	9.248	BV	1533227	17270251	94.64%	5.392%
9	10.485	10.367	10.523	PV	1375229	16362315	89.67%	5.108%
10	10.562	10.523	10.781	VV	1337293	16263903	89.13%	5.077%
11	11.256	11.074	11.341	BV	1493318	16688784	91.45%	5.210%
12	12.291	12.243	12.367	PV	1259349	15655851	85.79%	4.888%
13	12.584	12.541	12.620	PV	1219791	15509675	84.99%	4.842%
14	14.454	14.411	14.472	BV	981717	14161136	77.60%	4.421%
15	14.500	14.472	14.624	VV	1137801	14249238	78.09%	4.448%
16	16.004	15.931	16.018	BV	876069	13748802	75.34%	4.292%
17	16.042	16.018	16.234	VV	1019255	13652134	74.81%	4.262%
18	16.381	16.334	16.459	VV	870599	13033554	71.42%	4.069%
19	17.749	17.701	17.762	BV	755590	12448244	68.22%	3.886%
20	17.787	17.762	17.949	VV	878040	12848217	70.41%	4.011%
21	18.006	17.949	18.187	VV	837103	13210280	72.39%	4.124%
Sum of corrected areas:						320323141		

Aromatic EPH 121024.M Tue Dec 10 07:08:36 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
 Data File : FD048863.D
 Signal(s) : FID2B.ch
 Acq On : 10 Dec 2024 03:35
 Operator : YP/AJ
 Sample : 50 PPM AROMATIC HC STD2
 Misc :
 ALS Vial : 72 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 50 PPM AROMATIC HC STD2

Integration File: autoint1.e
 Quant Time: Dec 10 06:01:10 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 05:59:54 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.364	8039257	47.454 ug/ml
Spiked Amount 50.000		Recovery =	94.91%
6) S 2-Fluorobiphenyl (SURR)	8.214	5291629	49.534 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	99.07%
11) S ortho-Terphenyl (SURR)	11.250	8496175	47.441 ug/ml
Spiked Amount 50.000		Recovery =	94.88%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.187	9057209	47.671 ug/ml
2) T Naphthalene (C11.7)	5.705	9250047	47.377 ug/ml
3) T 2-Methylnaphthalene (...)	6.751	8909043	47.902 ug/ml
5) T Acenaphthylene (C15.06)	8.018	8950507	47.757 ug/ml
7) T Acenaphthene (C15.5)	8.313	8854507	47.788 ug/ml
8) T Fluorene (C16.55)	9.091	8747897	48.259 ug/ml
9) T Phenanthrene (C19.36)	10.478	8237835	48.835 ug/ml
10) T Anthracene (C19.43)	10.554	8241212	48.074 ug/ml
12) T Fluoranthene (C21.85)	12.283	7953997	47.949 ug/ml
13) T Pyrene (C20.8)	12.576	7863607	48.425 ug/ml
14) T Benzo[a]anthracene (C...	14.446	7072378	50.784 ug/ml
15) T Chrysene (C27.41)	14.488	7315160	46.341 ug/ml
16) T benzo[b]fluoranthene ...	15.994	6901644	49.443 ug/ml
17) T Bnezo[k]fluoranthene ...	16.027	6959962	46.932 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.369	6619739	47.400 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.735	5859994	54.851 ug/ml
20) T Dibenz[a,h]anthracene...	17.772	6804381	44.945 ug/ml
21) T Benzo[g,h,i]perylene ...	17.988	6690985	47.253 ug/ml

(f)=RT Delta > 1/2 Window

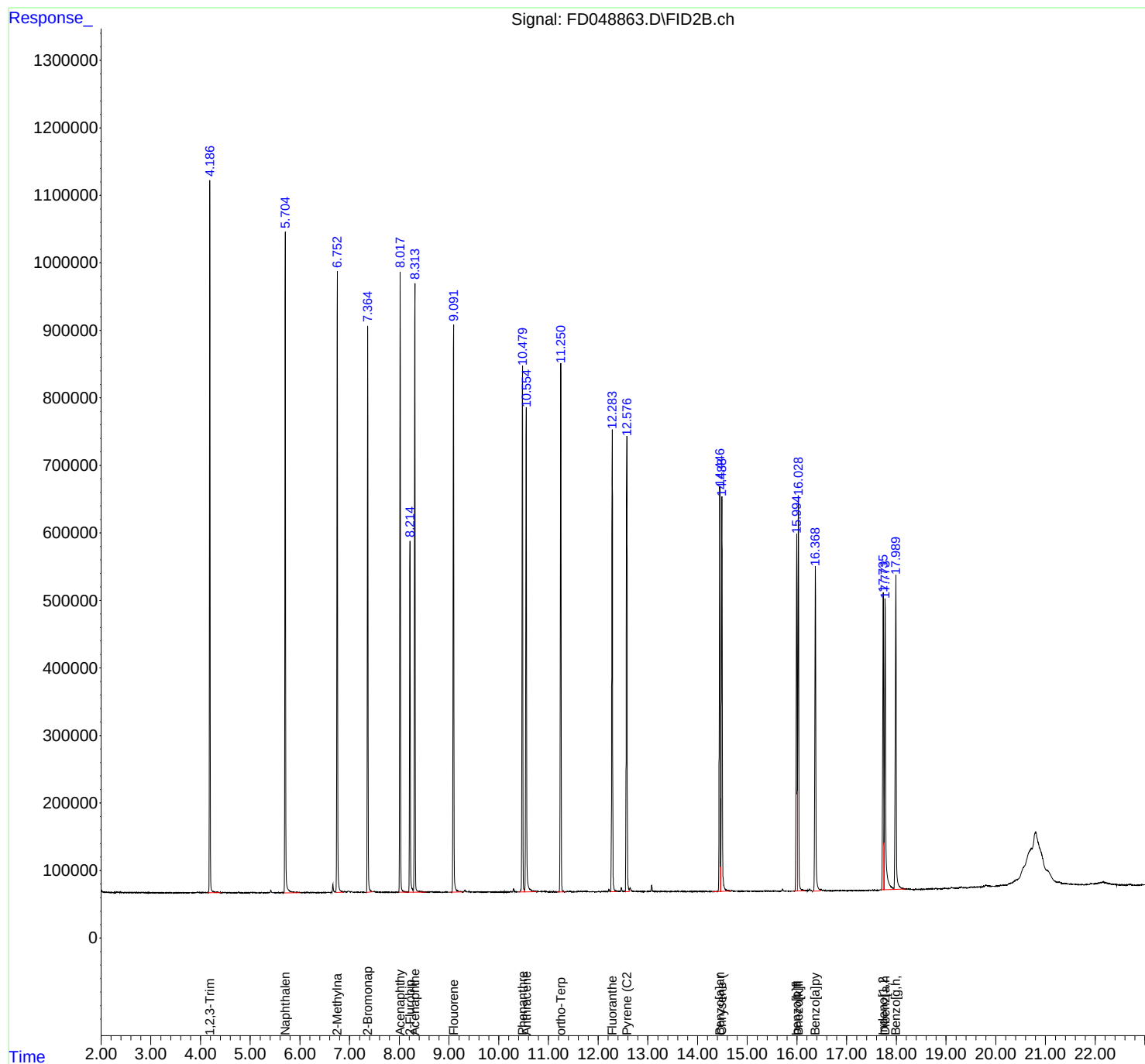
(m)=manual int.

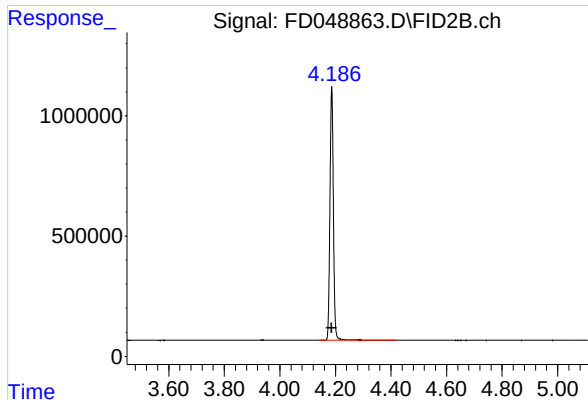
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
Data File : FD048863.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 03:35
Operator : YP/AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 72 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Dec 10 06:01:10 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 05:59:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

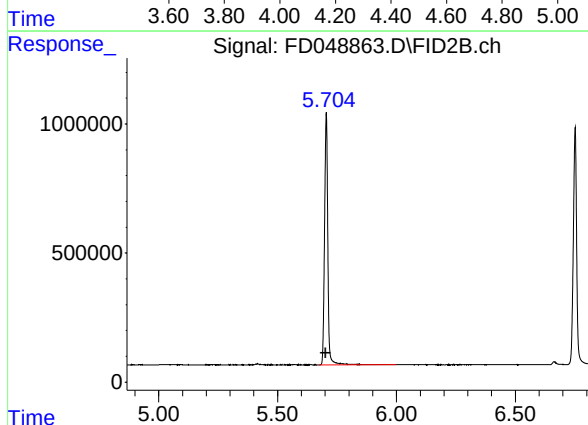




#1 1,2,3-Trimethylbenzene (C10.1)

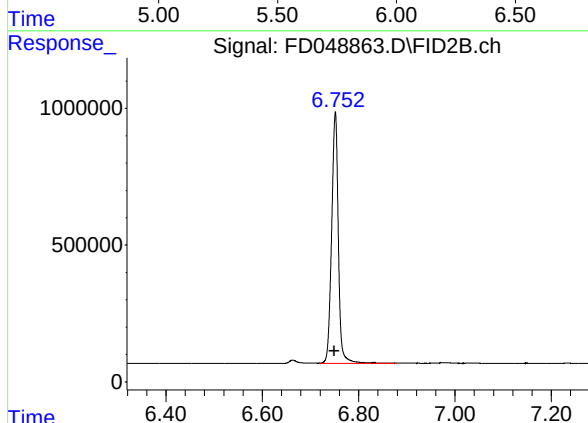
R.T.: 4.187 min
Delta R.T.: 0.000 min
Response: 9057209
Conc: 47.67 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



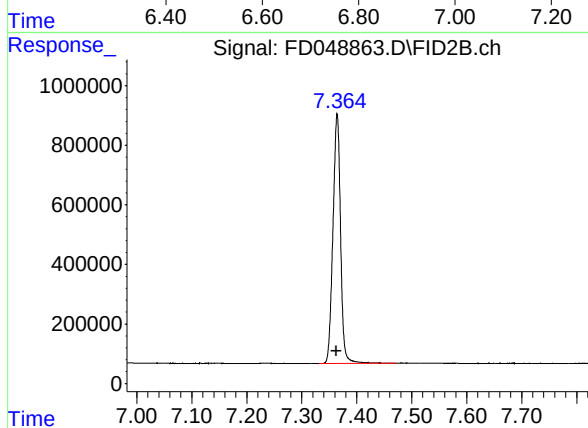
#2 Naphthalene (C11.7)

R.T.: 5.705 min
Delta R.T.: 0.001 min
Response: 9250047
Conc: 47.38 ug/ml



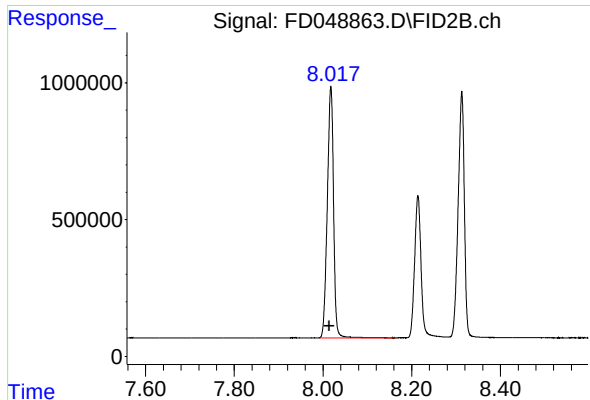
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.751 min
Delta R.T.: 0.002 min
Response: 8909043
Conc: 47.90 ug/ml



#4 2-Bromonaphthalene (SURR)

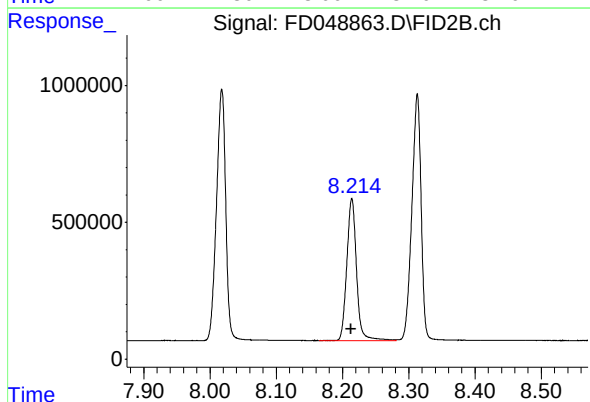
R.T.: 7.364 min
Delta R.T.: 0.002 min
Response: 8039257
Conc: 47.45 ug/ml



#5 Acenaphthylene (C15.06)

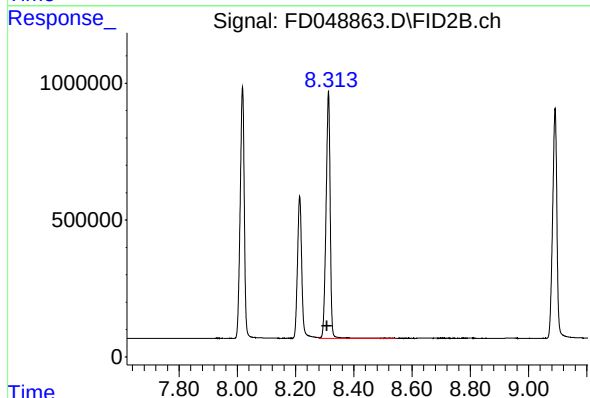
R.T.: 8.018 min
Delta R.T.: 0.003 min
Response: 8950507
Conc: 47.76 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



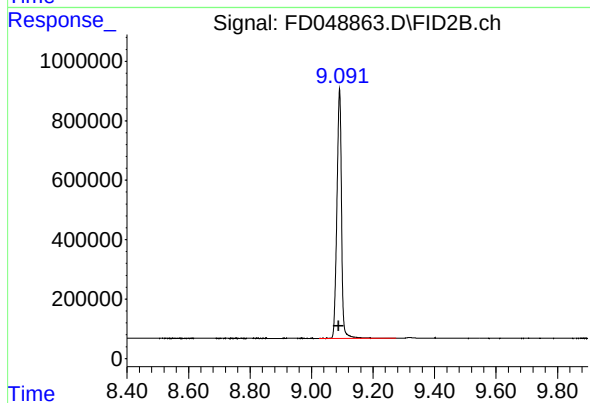
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.214 min
Delta R.T.: 0.001 min
Response: 5291629
Conc: 49.53 ug/ml



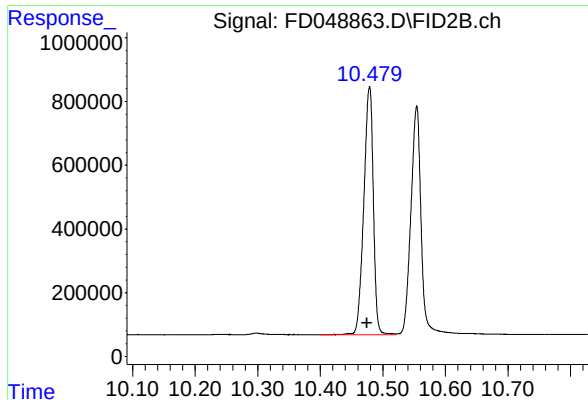
#7 Acenaphthene (C15.5)

R.T.: 8.313 min
Delta R.T.: 0.004 min
Response: 8854507
Conc: 47.79 ug/ml



#8 Fluorene (C16.55)

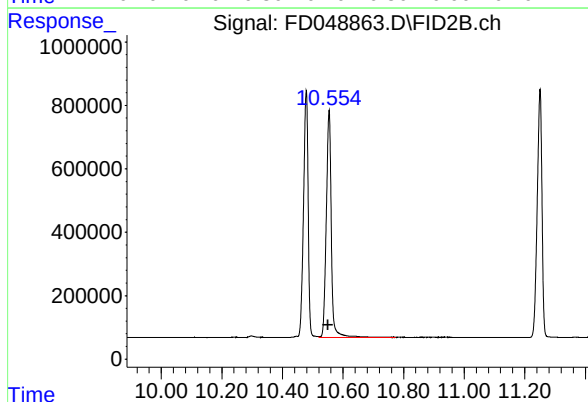
R.T.: 9.091 min
Delta R.T.: 0.003 min
Response: 8747897
Conc: 48.26 ug/ml



#9 Phenanthrene (C19.36)

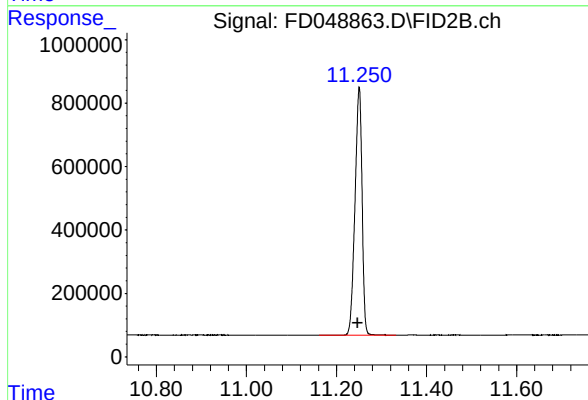
R.T.: 10.478 min
Delta R.T.: 0.003 min
Response: 8237835
Conc: 48.84 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



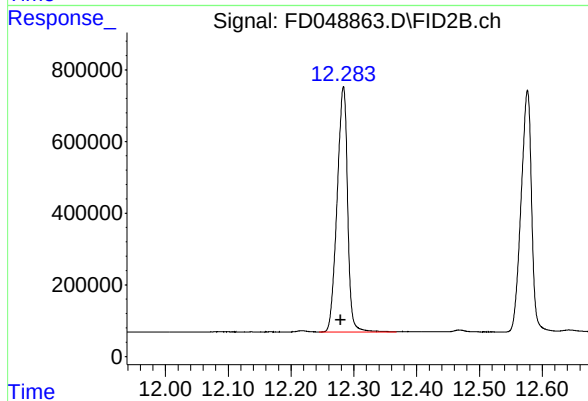
#10 Anthracene (C19.43)

R.T.: 10.554 min
Delta R.T.: 0.003 min
Response: 8241212
Conc: 48.07 ug/ml



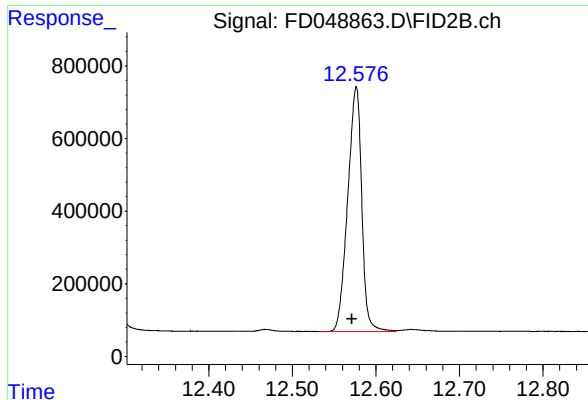
#11 ortho-Terphenyl (SURR)

R.T.: 11.250 min
Delta R.T.: 0.003 min
Response: 8496175
Conc: 47.44 ug/ml



#12 Fluoranthene (C21.85)

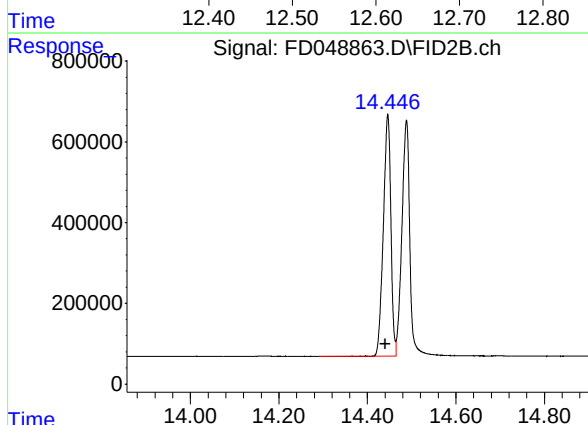
R.T.: 12.283 min
Delta R.T.: 0.005 min
Response: 7953997
Conc: 47.95 ug/ml



#13 Pyrene (C20.8)

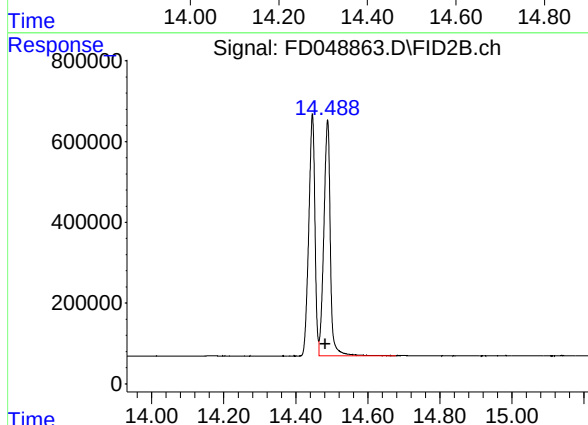
R.T.: 12.576 min
Delta R.T.: 0.005 min
Response: 7863607
Conc: 48.42 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



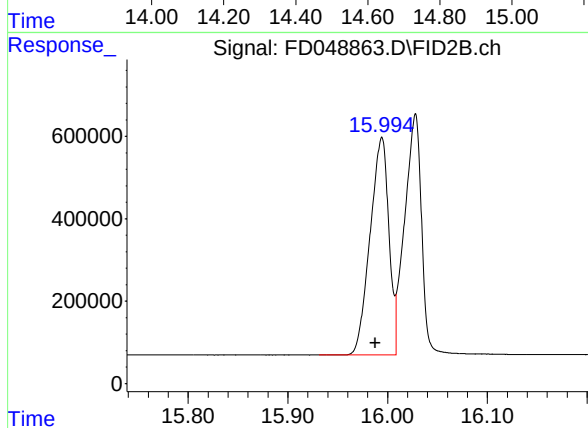
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.446 min
Delta R.T.: 0.005 min
Response: 7072378
Conc: 50.78 ug/ml



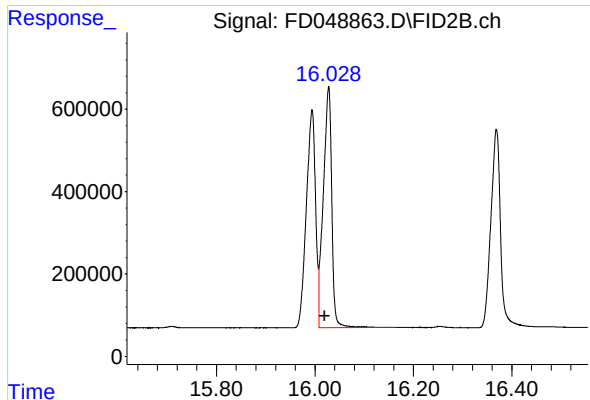
#15 Chrysene (C27.41)

R.T.: 14.488 min
Delta R.T.: 0.006 min
Response: 7315160
Conc: 46.34 ug/ml



#16 benzo[b]fluoranthene (C30.41)

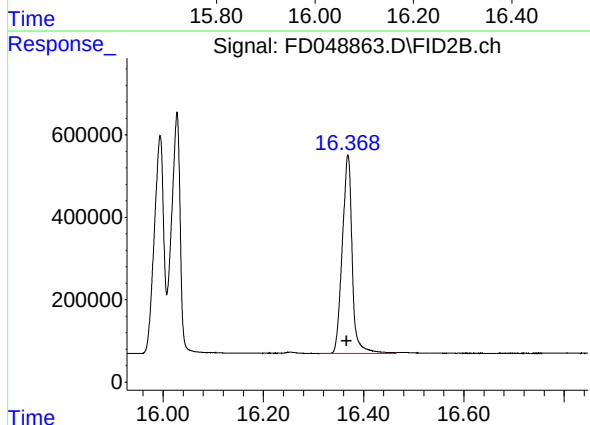
R.T.: 15.994 min
Delta R.T.: 0.006 min
Response: 6901644
Conc: 49.44 ug/ml



#17 Bnezo[k]fluoranthene (C30.14)

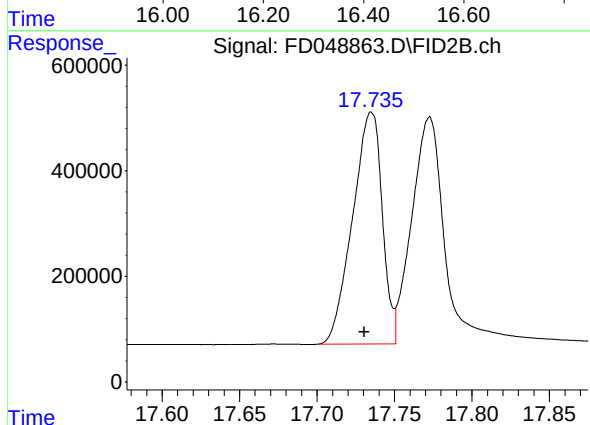
R.T.: 16.027 min
Delta R.T.: 0.008 min
Response: 6959962
Conc: 46.93 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



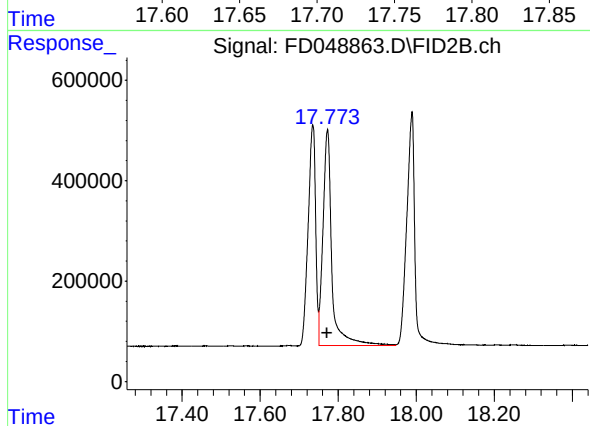
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.369 min
Delta R.T.: 0.002 min
Response: 6619739
Conc: 47.40 ug/ml



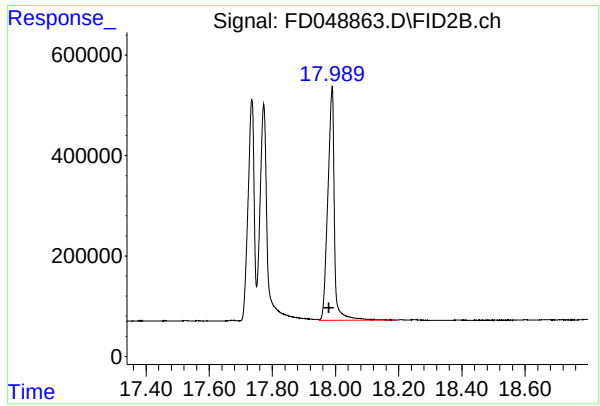
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.735 min
Delta R.T.: 0.004 min
Response: 5859994
Conc: 54.85 ug/ml



#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.772 min
Delta R.T.: 0.001 min
Response: 6804381
Conc: 44.95 ug/ml



#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.988 min

Delta R.T.: 0.009 min

Response: 6690985

Conc: 47.25 ug/ml

Instrument :

FID_D

ClientSampleId :

50 PPM AROMATIC HC STD2

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
Data File : FD048863.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 03:35
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.187	4.141	4.418	BB	1049787	9057209	97.92%	5.587%
2	5.705	5.675	5.998	PB	977324	9250047	100.00%	5.706%
3	6.751	6.718	6.878	VV	916014	8909043	96.31%	5.495%
4	7.364	7.331	7.471	PV	840576	8039257	86.91%	4.959%
5	8.018	7.991	8.165	BV	922385	8950507	96.76%	5.521%
6	8.214	8.165	8.281	PV	519986	5291629	57.21%	3.264%
7	8.313	8.281	8.545	VB	880751	8854507	95.72%	5.462%
8	9.091	9.025	9.275	BV	842709	8747897	94.57%	5.396%
9	10.478	10.398	10.521	PV	777460	8237835	89.06%	5.081%
10	10.554	10.521	10.775	VV	723214	8241212	89.09%	5.083%
11	11.250	11.161	11.332	BV	788935	8496175	91.85%	5.241%
12	12.283	12.245	12.367	VV	692860	7953997	85.99%	4.906%
13	12.576	12.532	12.624	PV	666038	7863607	85.01%	4.851%
14	14.446	14.291	14.465	PV	594062	7072378	76.46%	4.363%
15	14.488	14.465	14.678	VV	584606	7315160	79.08%	4.512%
16	15.994	15.931	16.008	BV	531588	6901644	74.61%	4.257%
17	16.027	16.008	16.165	VV	589067	6959962	75.24%	4.293%
18	16.369	16.311	16.465	PV	481546	6619739	71.56%	4.083%
19	17.735	17.701	17.751	BV	440629	5859994	63.35%	3.615%
20	17.772	17.751	17.948	VV	428816	6804381	73.56%	4.197%
21	17.988	17.948	18.191	VV	460312	6690985	72.33%	4.127%
Sum of corrected areas:						162117165		

Aromatic EPH 121024.M Tue Dec 10 07:09:08 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
 Data File : FD048864.D
 Signal(s) : FID2B.ch
 Acq On : 10 Dec 2024 04:12
 Operator : YP/AJ
 Sample : 20 PPM AROMATIC HC STD3
 Misc :
 ALS Vial : 73 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 20 PPM AROMATIC HC STD3

Integration File: autoint1.e
 Quant Time: Dec 10 06:01:21 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 05:59:54 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.363	3388201	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
6) S 2-Fluorobiphenyl (SURR)	8.213	2136555	20.000 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	40.00%
11) S ortho-Terphenyl (SURR)	11.247	3581810	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.186	3799863	20.000 ug/ml
2) T Naphthalene (C11.7)	5.703	3904840	20.000 ug/ml
3) T 2-Methylnaphthalene (...)	6.750	3719679	20.000 ug/ml
5) T Acenaphthylene (C15.06)	8.014	3748378	20.000 ug/ml
7) T Acenaphthene (C15.5)	8.308	3705723	20.000 ug/ml
8) T Fluorene (C16.55)	9.088	3625415	20.000 ug/ml
9) T Phenanthrene (C19.36)	10.475	3373709	20.000 ug/ml
10) T Anthracene (C19.43)	10.551	3428584	20.000 ug/ml
12) T Fluoranthene (C21.85)	12.279	3317711	20.000 ug/ml
13) T Pyrene (C20.8)	12.572	3247748	20.000 ug/ml
14) T Benzo[a]anthracene (C...	14.441	2785295	20.000 ug/ml
15) T Chrysene (C27.41)	14.482	3157073	20.000 ug/ml
16) T benzo[b]fluoranthene ...	15.988	2791784	20.000 ug/ml
17) T Bnezo[k]fluoranthene ...	16.020	2966008	20.000 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.366	2793165	20.000 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.731	2136680	20.000 ug/ml
20) T Dibenz[a,h]anthracene...	17.771	3027849	20.000 ug/ml
21) T Benzo[g,h,i]perylene ...	17.979	2831954	20.000 ug/ml

(f)=RT Delta > 1/2 Window

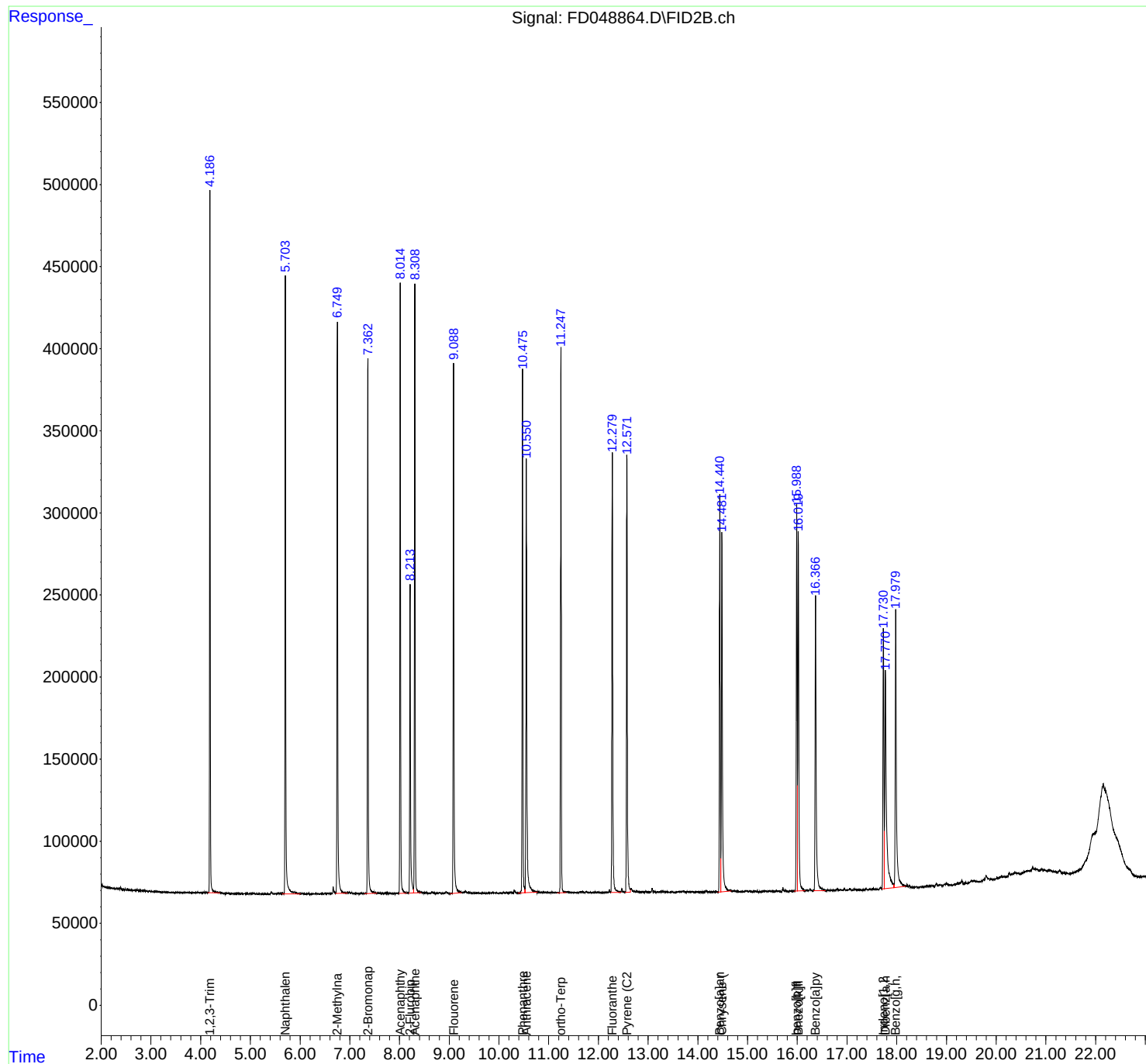
(m)=manual int.

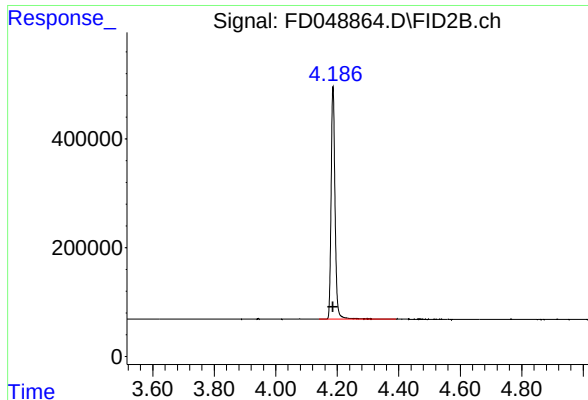
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
Data File : FD048864.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 04:12
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 73 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Dec 10 06:01:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 05:59:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

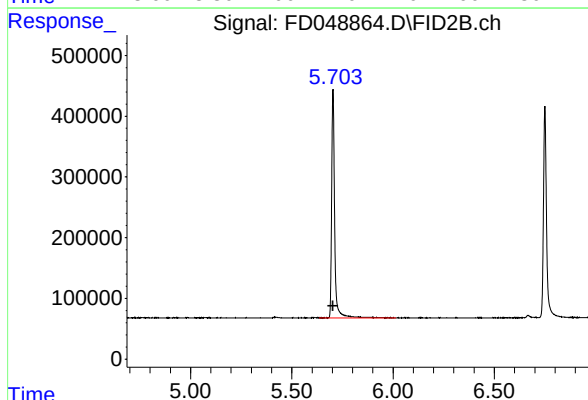




#1 1,2,3-Trimethylbenzene (C10.1)

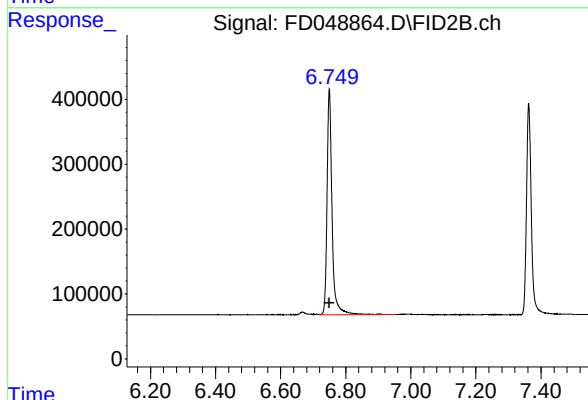
R.T.: 4.186 min
Delta R.T.: 0.000 min
Response: 3799863
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



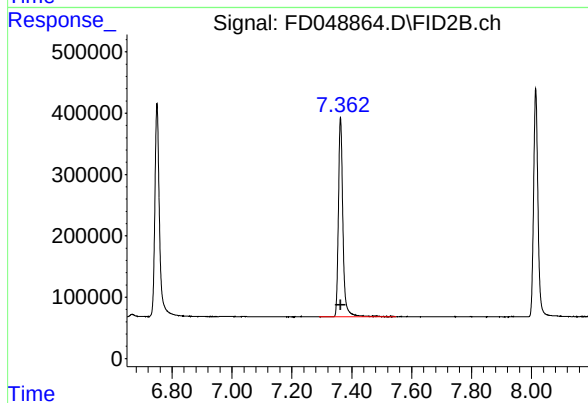
#2 Naphthalene (C11.7)

R.T.: 5.703 min
Delta R.T.: 0.000 min
Response: 3904840
Conc: 20.00 ug/ml



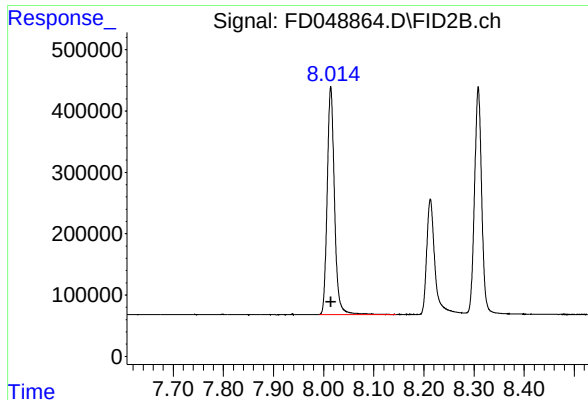
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.750 min
Delta R.T.: 0.000 min
Response: 3719679
Conc: 20.00 ug/ml



#4 2-Bromonaphthalene (SURR)

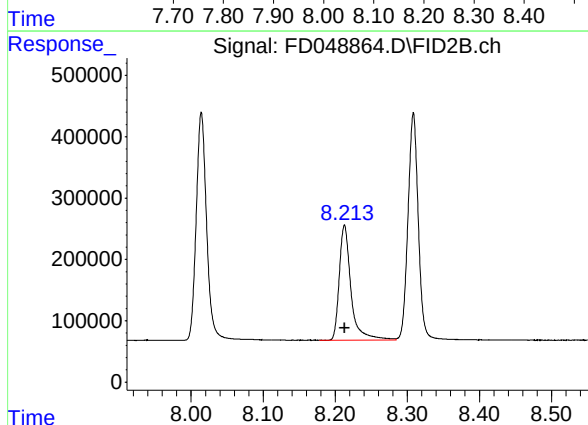
R.T.: 7.363 min
Delta R.T.: 0.000 min
Response: 3388201
Conc: 20.00 ug/ml



#5 Acenaphthylene (C15.06)

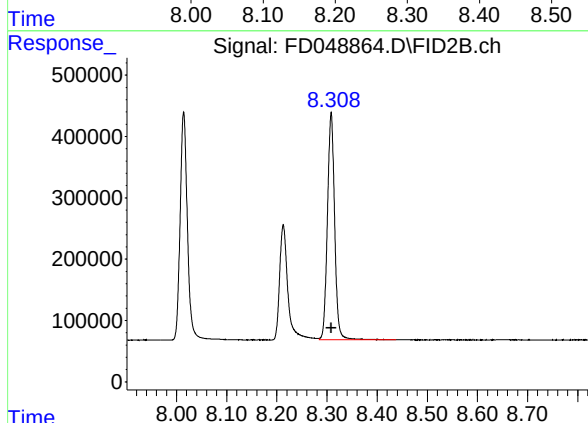
R.T.: 8.014 min
Delta R.T.: 0.000 min
Response: 3748378
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



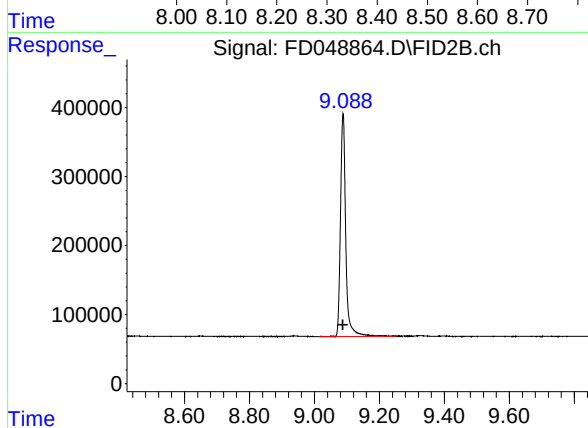
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.213 min
Delta R.T.: 0.000 min
Response: 2136555
Conc: 20.00 ug/ml



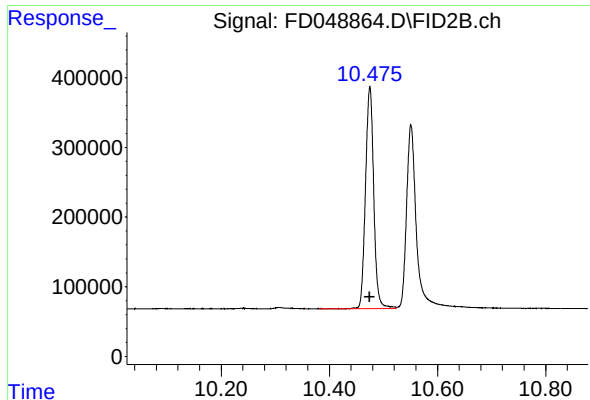
#7 Acenaphthene (C15.5)

R.T.: 8.308 min
Delta R.T.: 0.000 min
Response: 3705723
Conc: 20.00 ug/ml



#8 Flouorene (C16.55)

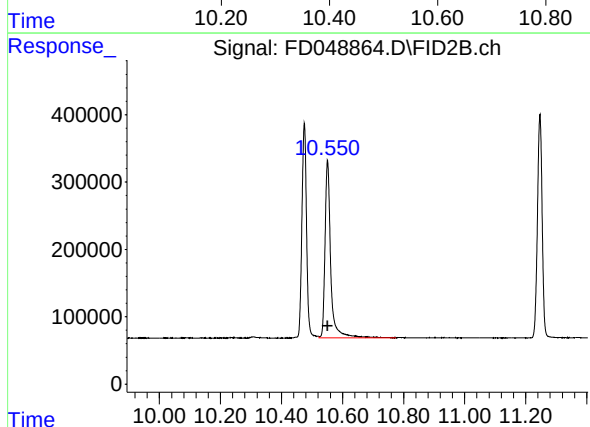
R.T.: 9.088 min
Delta R.T.: 0.000 min
Response: 3625415
Conc: 20.00 ug/ml



#9 Phenanthrene (C19.36)

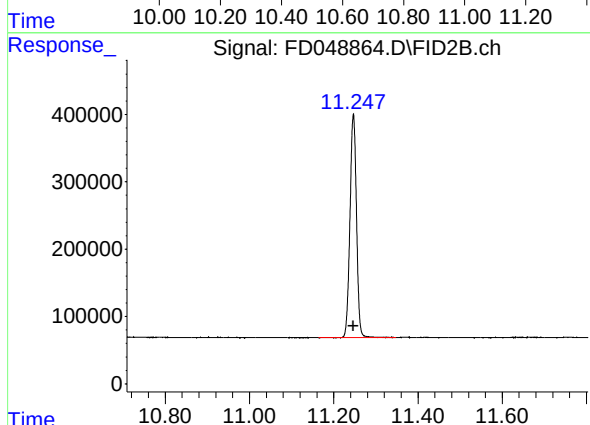
R.T.: 10.475 min
Delta R.T.: 0.000 min
Response: 3373709
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



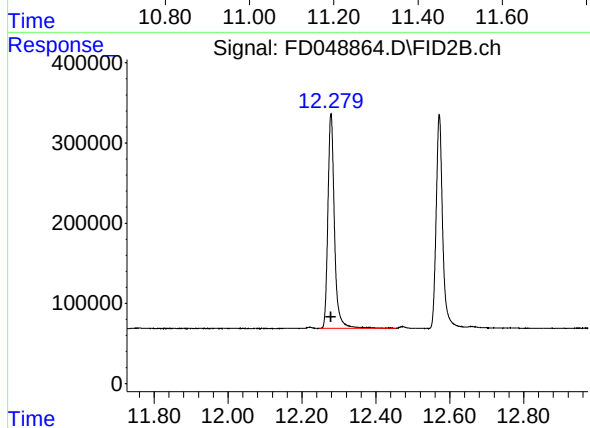
#10 Anthracene (C19.43)

R.T.: 10.551 min
Delta R.T.: 0.000 min
Response: 3428584
Conc: 20.00 ug/ml



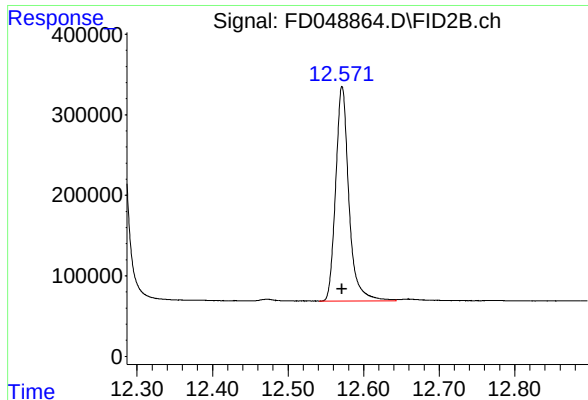
#11 ortho-Terphenyl (SURR)

R.T.: 11.247 min
Delta R.T.: 0.000 min
Response: 3581810
Conc: 20.00 ug/ml



#12 Fluoranthene (C21.85)

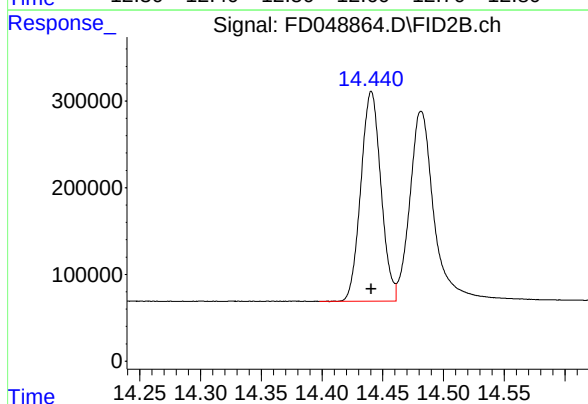
R.T.: 12.279 min
Delta R.T.: 0.000 min
Response: 3317711
Conc: 20.00 ug/ml



#13 Pyrene (C20.8)

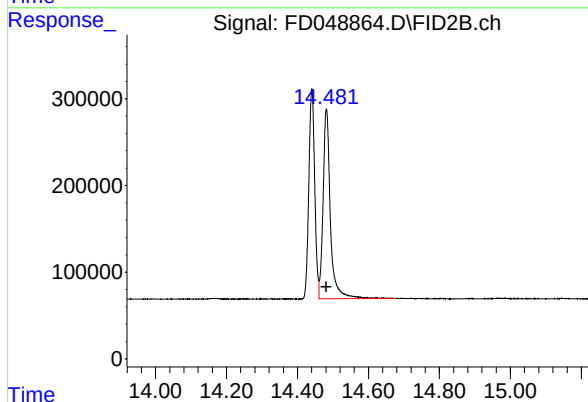
R.T.: 12.572 min
Delta R.T.: 0.000 min
Response: 3247748
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



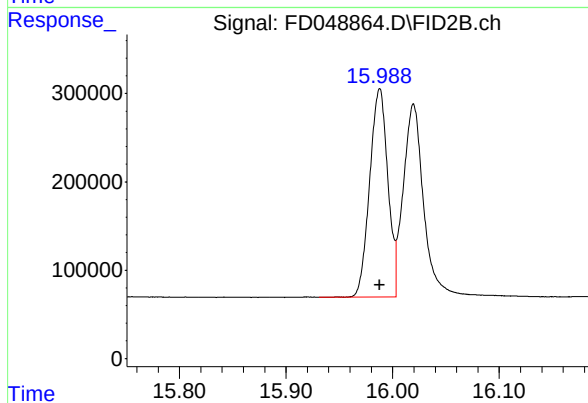
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.441 min
Delta R.T.: 0.000 min
Response: 2785295
Conc: 20.00 ug/ml



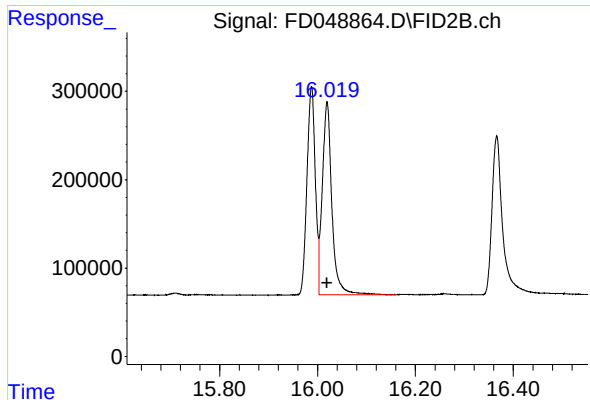
#15 Chrysene (C27.41)

R.T.: 14.482 min
Delta R.T.: 0.000 min
Response: 3157073
Conc: 20.00 ug/ml



#16 benzo[b]fluoranthene (C30.41)

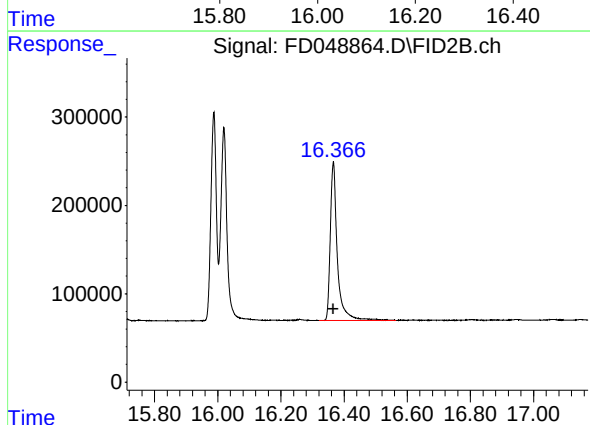
R.T.: 15.988 min
Delta R.T.: 0.000 min
Response: 2791784
Conc: 20.00 ug/ml



#17 Bnezo[k]fluoranthene (C30.14)

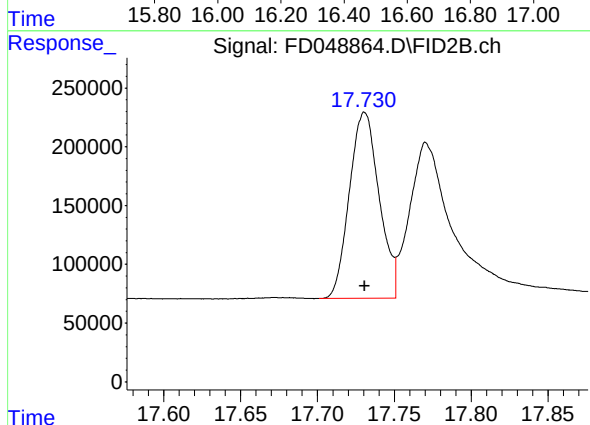
R.T.: 16.020 min
Delta R.T.: 0.000 min
Response: 2966008
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



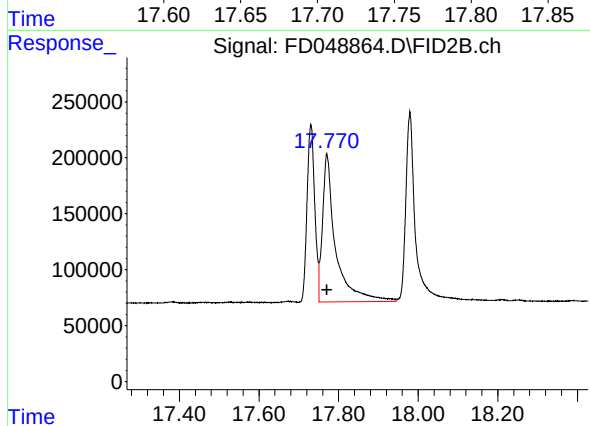
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.366 min
Delta R.T.: 0.000 min
Response: 2793165
Conc: 20.00 ug/ml



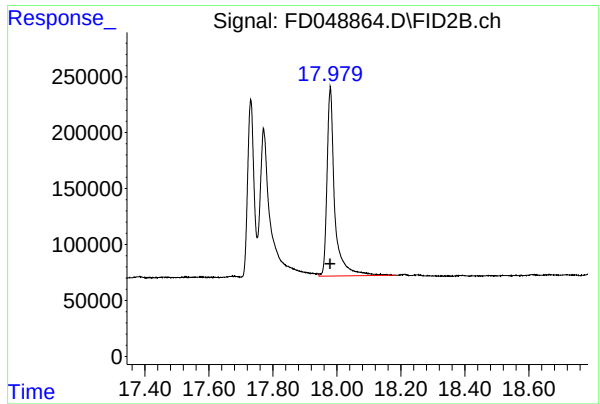
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.731 min
Delta R.T.: 0.000 min
Response: 2136680
Conc: 20.00 ug/ml



#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.771 min
Delta R.T.: 0.000 min
Response: 3027849
Conc: 20.00 ug/ml



#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.979 min
Delta R.T.: 0.000 min
Response: 2831954
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
Data File : FD048864.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 04:12
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.186	4.141	4.391	BB	424412	3799863	97.31%	5.632%
2	5.703	5.635	6.014	VB	372221	3904840	100.00%	5.788%
3	6.750	6.718	6.954	VV	346277	3719679	95.26%	5.513%
4	7.363	7.291	7.548	BB	324535	3388201	86.77%	5.022%
5	8.014	7.991	8.144	BB	371081	3748378	95.99%	5.556%
6	8.213	8.178	8.284	BV	186223	2136555	54.72%	3.167%
7	8.308	8.284	8.438	VV	368117	3705723	94.90%	5.493%
8	9.088	9.014	9.251	PV	322076	3625415	92.84%	5.374%
9	10.475	10.381	10.523	BV	317583	3373709	86.40%	5.000%
10	10.551	10.523	10.775	VV	263763	3428584	87.80%	5.082%
11	11.247	11.165	11.348	PV	331652	3581810	91.73%	5.309%
12	12.279	12.246	12.454	VV	268543	3317711	84.96%	4.917%
13	12.572	12.541	12.643	BV	267108	3247748	83.17%	4.814%
14	14.441	14.398	14.461	BV	242468	2785295	71.33%	4.128%
15	14.482	14.461	14.678	VB	219837	3157073	80.85%	4.679%
16	15.988	15.931	16.003	BV	236061	2791784	71.50%	4.138%
17	16.020	16.003	16.160	VV	218879	2966008	75.96%	4.396%
18	16.366	16.321	16.564	BV	180609	2793165	71.53%	4.140%
19	17.731	17.701	17.751	BV	158582	2136680	54.72%	3.167%
20	17.771	17.751	17.944	VV	132069	3027849	77.54%	4.488%
21	17.979	17.944	18.184	VV	167117	2831954	72.52%	4.197%
Sum of corrected areas:						67468024		

Aromatic EPH 121024.M Tue Dec 10 07:09:33 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
 Data File : FD048865.D
 Signal(s) : FID2B.ch
 Acq On : 10 Dec 2024 04:48
 Operator : YP/AJ
 Sample : 10 PPM AROMATIC HC STD4
 Misc :
 ALS Vial : 74 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 10 PPM AROMATIC HC STD4

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/10/2024
 Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
 Quant Time: Dec 10 06:01:32 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 05:59:54 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.363	1801246	10.632 ug/ml
Spiked Amount 50.000		Recovery =	21.26%
6) S 2-Fluorobiphenyl (SURR)	8.216	1109904	10.390 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	20.78%
11) S ortho-Terphenyl (SURR)	11.246	1959151	10.939 ug/ml
Spiked Amount 50.000		Recovery =	21.88%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.187	2071069	10.901 ug/ml
2) T Naphthalene (C11.7)	5.704	2131881	10.919 ug/mlm
3) T 2-Methylnaphthalene (...)	6.751	2042623	10.983 ug/ml
5) T Acenaphthylene (C15.06)	8.015	2048400	10.930 ug/ml
7) T Acenaphthene (C15.5)	8.307	2063315	11.136 ug/ml
8) T Fluorene (C16.55)	9.090	1967074	10.852 ug/ml
9) T Phenanthrene (C19.36)	10.475	1818745	10.782 ug/ml
10) T Anthracene (C19.43)	10.553	1860334	10.852 ug/ml
12) T Fluoranthene (C21.85)	12.281	1813128	10.930 ug/ml
13) T Pyrene (C20.8)	12.574	1808967	11.140 ug/ml
14) T Benzo[a]anthracene (C...	14.444	1368072	9.824 ug/ml
15) T Chrysene (C27.41)	14.483	1837551	11.641 ug/ml
16) T benzo[b]fluoranthene ...	15.988	1450632	10.392 ug/ml
17) T Bnezo[k]fluoranthene ...	16.020	1704463	11.493 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.372	1522903	10.904 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.737	1050378	9.832 ug/ml
20) T Dibenz[a,h]anthracene...	17.781	1689181	11.158 ug/ml
21) T Benzo[g,h,i]perylene ...	17.983	1561028	11.024 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
Data File : FD048865.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 04:48
Operator : YP/AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 74 Sample Multiplier: 1

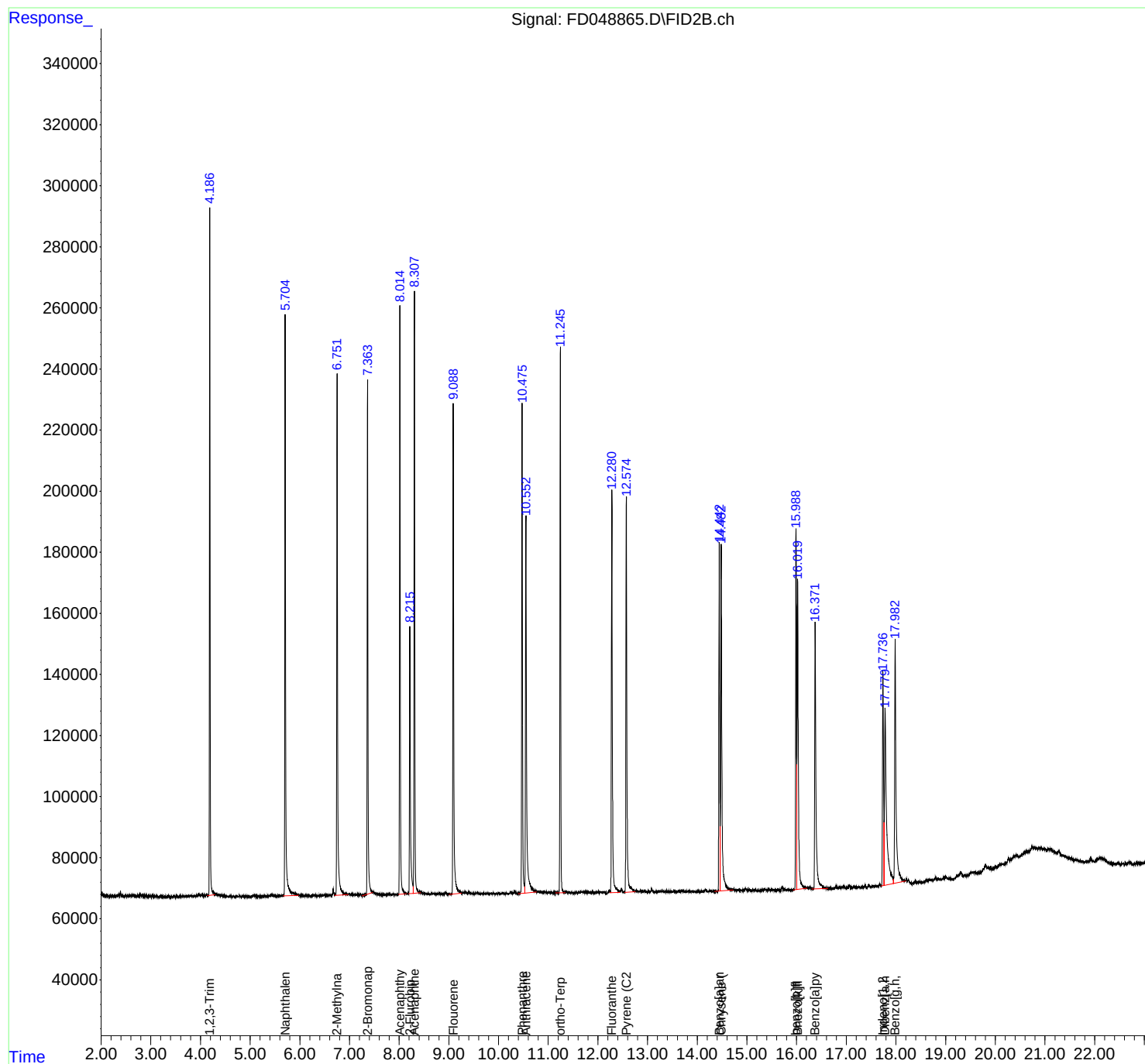
Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

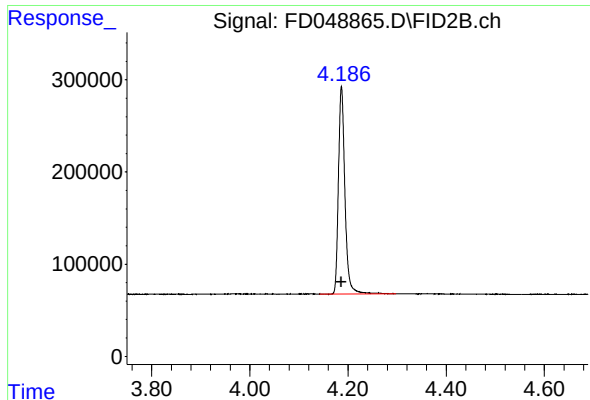
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
Quant Time: Dec 10 06:01:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 05:59:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm





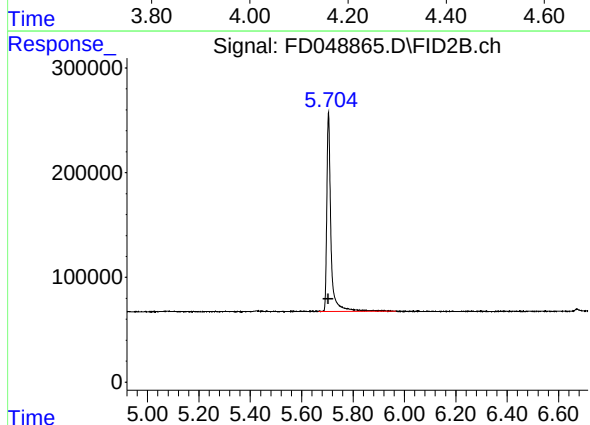
#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.187 min
Delta R.T.: 0.001 min
Response: 2071069
Conc: 10.90 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

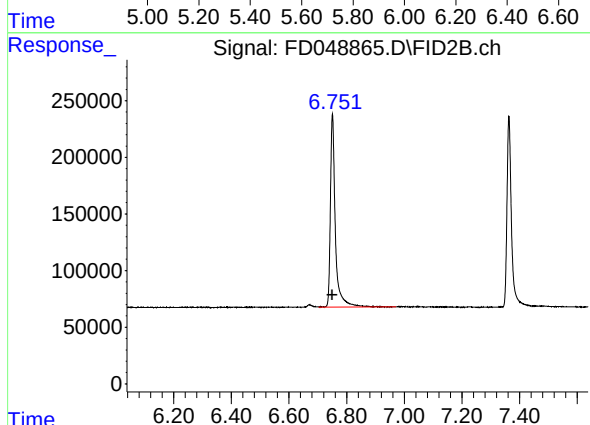
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



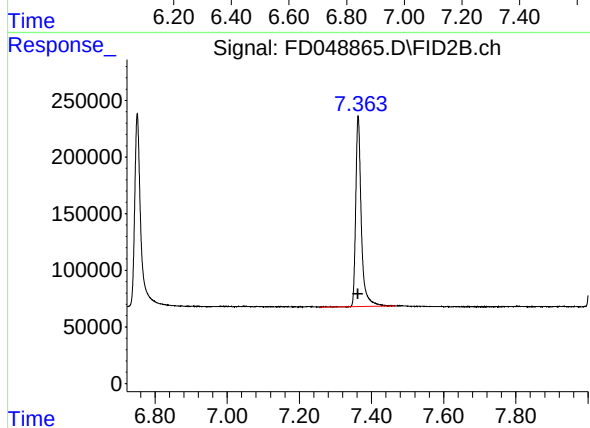
#2 Naphthalene (C11.7)

R.T.: 5.704 min
Delta R.T.: 0.000 min
Response: 2131881
Conc: 10.92 ug/ml m



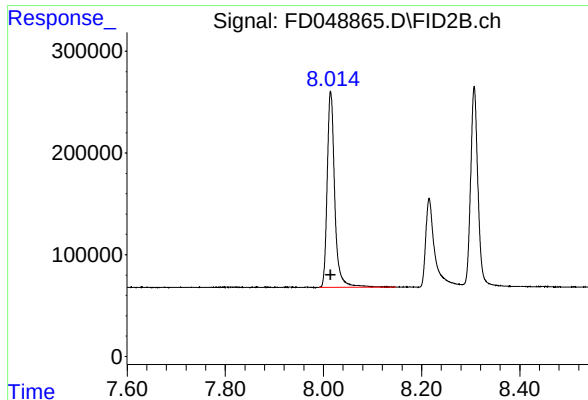
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.751 min
Delta R.T.: 0.001 min
Response: 2042623
Conc: 10.98 ug/ml



#4 2-Bromonaphthalene (SURR)

R.T.: 7.363 min
Delta R.T.: 0.000 min
Response: 1801246
Conc: 10.63 ug/ml



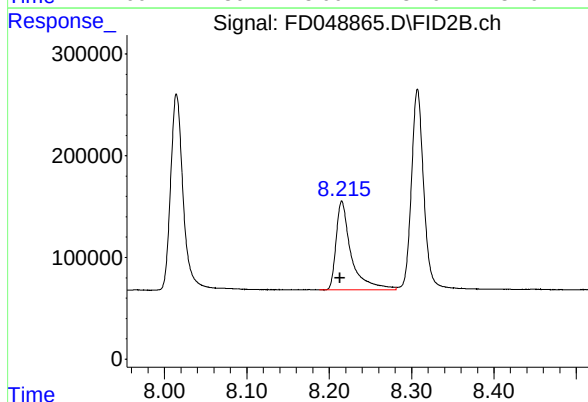
#5 Acenaphthylene (C15.06)

R.T.: 8.015 min
Delta R.T.: 0.000 min
Response: 2048400
Conc: 10.93 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

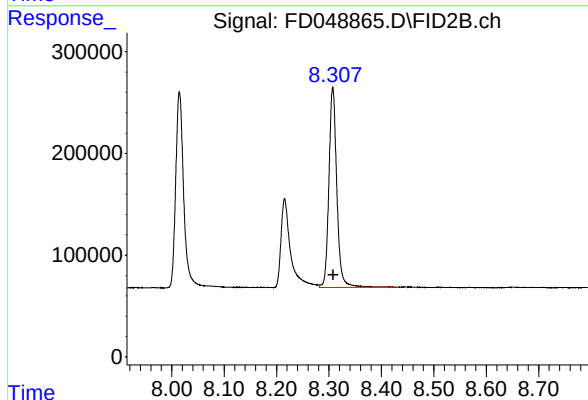
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



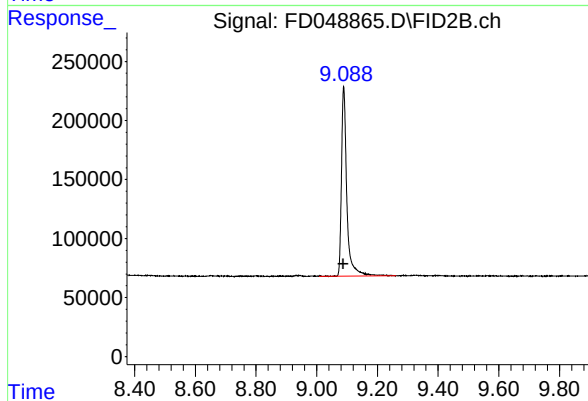
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.216 min
Delta R.T.: 0.003 min
Response: 1109904
Conc: 10.39 ug/ml



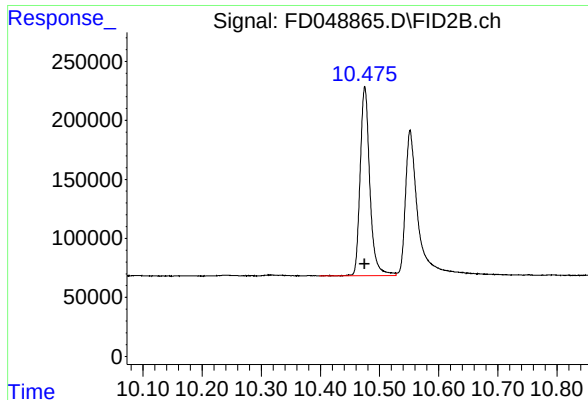
#7 Acenaphthene (C15.5)

R.T.: 8.307 min
Delta R.T.: 0.000 min
Response: 2063315
Conc: 11.14 ug/ml



#8 Flouorene (C16.55)

R.T.: 9.090 min
Delta R.T.: 0.002 min
Response: 1967074
Conc: 10.85 ug/ml



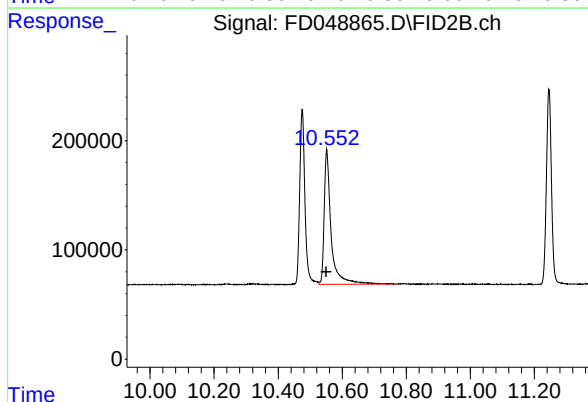
#9 Phenanthrene (C19.36)

R.T.: 10.475 min
Delta R.T.: 0.000 min
Response: 1818745
Conc: 10.78 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

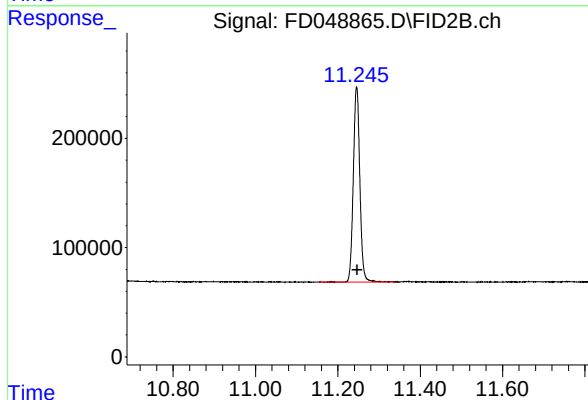
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



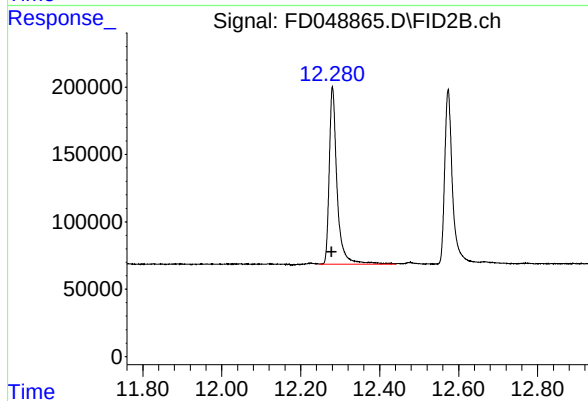
#10 Anthracene (C19.43)

R.T.: 10.553 min
Delta R.T.: 0.002 min
Response: 1860334
Conc: 10.85 ug/ml



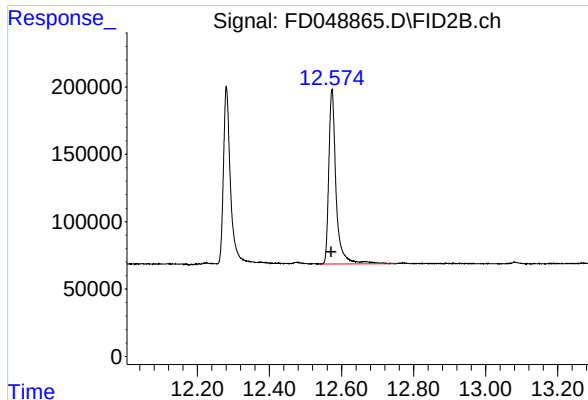
#11 ortho-Terphenyl (SURRE)

R.T.: 11.246 min
Delta R.T.: -0.001 min
Response: 1959151
Conc: 10.94 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 12.281 min
Delta R.T.: 0.003 min
Response: 1813128
Conc: 10.93 ug/ml



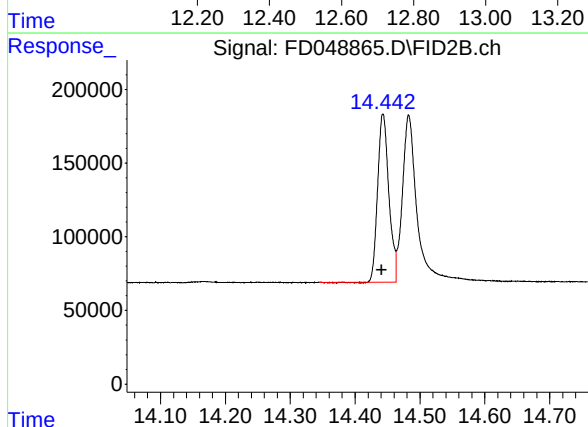
#13 Pyrene (C20.8)

R.T.: 12.574 min
Delta R.T.: 0.002 min
Response: 1808967
Conc: 11.14 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

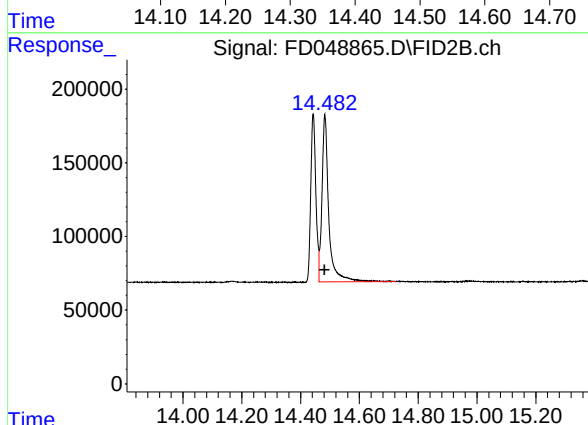
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



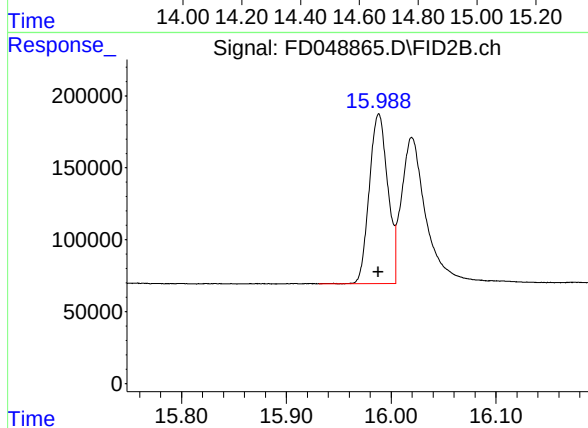
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.444 min
Delta R.T.: 0.003 min
Response: 1368072
Conc: 9.82 ug/ml



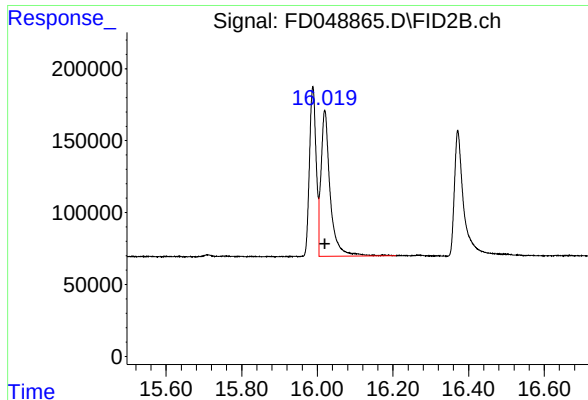
#15 Chrysene (C27.41)

R.T.: 14.483 min
Delta R.T.: 0.001 min
Response: 1837551
Conc: 11.64 ug/ml



#16 benzo[b]fluoranthene (C30.41)

R.T.: 15.988 min
Delta R.T.: 0.000 min
Response: 1450632
Conc: 10.39 ug/ml



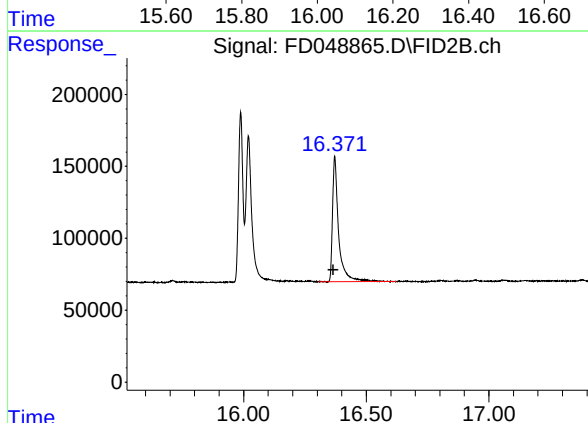
#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.020 min
Delta R.T.: 0.000 min
Response: 1704463
Conc: 11.49 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

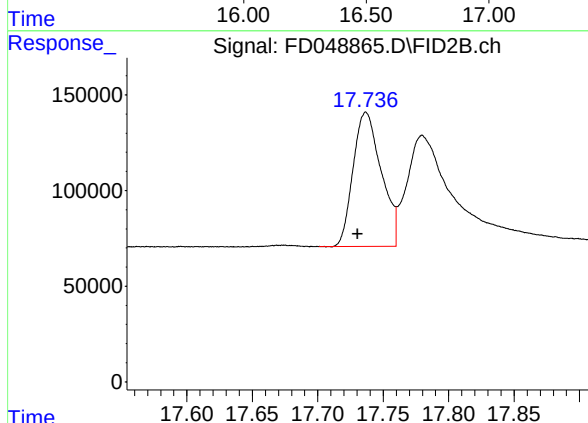
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



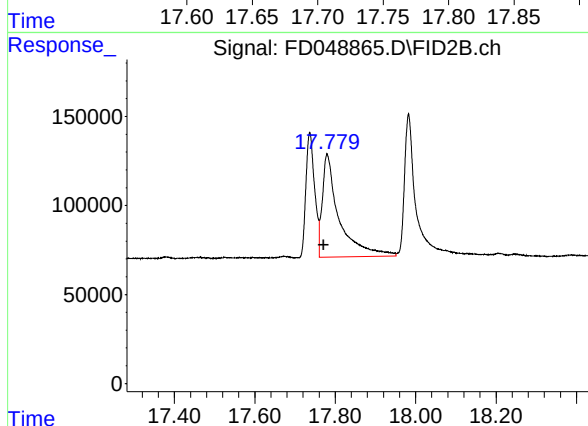
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.372 min
Delta R.T.: 0.006 min
Response: 1522903
Conc: 10.90 ug/ml



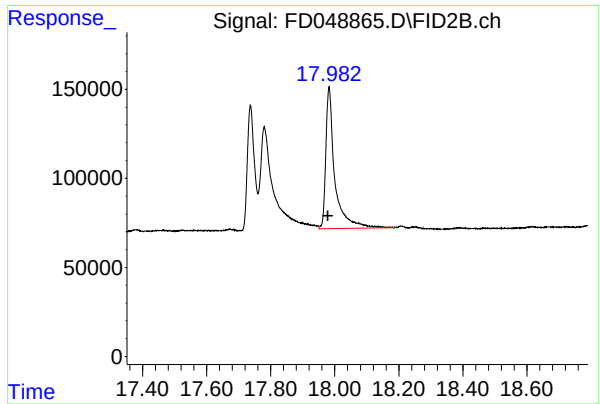
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.737 min
Delta R.T.: 0.007 min
Response: 1050378
Conc: 9.83 ug/ml



#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.781 min
Delta R.T.: 0.010 min
Response: 1689181
Conc: 11.16 ug/ml



#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.983 min
Delta R.T.: 0.004 min
Response: 1561028
Conc: 11.02 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

rteres

Instrument :
FID_D
LabSampleId :
10 PPM AROMATIC HC STD4
Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024
Data File : FD048865.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 04:48
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 74 Sample Multiplier: 1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.187	4.141	4.298	BV	222432	2071069	96.26%	5.643%
2	5.705	5.488	5.974	BB	188880	2151601	100.00%	5.863%
3	6.751	6.704	6.971	VB	170298	2042623	94.94%	5.566%
4	7.363	7.255	7.468	PV	166485	1801246	83.72%	4.908%
5	8.015	7.991	8.148	BB	192145	2048400	95.20%	5.582%
6	8.216	8.188	8.281	BV	82800	1109904	51.59%	3.024%
7	8.308	8.281	8.428	VV	196012	2063315	95.90%	5.622%
8	9.090	9.008	9.261	BV	155815	1967074	91.42%	5.360%
9	10.475	10.398	10.528	BV	159549	1818745	84.53%	4.956%
10	10.553	10.528	10.768	VV	121963	1860334	86.46%	5.069%
11	11.246	11.154	11.341	BV	179084	1959151	91.06%	5.338%
12	12.281	12.246	12.441	VV	130035	1813128	84.27%	4.940%
13	12.574	12.538	12.751	PV	128701	1808967	84.08%	4.929%
14	14.444	14.344	14.463	BV	113009	1368072	63.58%	3.728%
15	14.483	14.463	14.724	VB	112053	1837551	85.40%	5.007%
16	15.988	15.931	16.004	BV	117662	1450632	67.42%	3.953%
17	16.020	16.004	16.208	VB	101231	1704463	79.22%	4.644%
18	16.372	16.308	16.621	BB	86887	1522903	70.78%	4.150%
19	17.737	17.701	17.760	BV	69561	1050378	48.82%	2.862%
20	17.781	17.760	17.951	VV	57090	1689181	78.51%	4.603%
21	17.983	17.951	18.191	VV	78482	1561028	72.55%	4.254%
Sum of corrected areas:						36699766		

Aromatic EPH 121024.M Tue Dec 10 07:09:53 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
 Data File : FD048866.D
 Signal(s) : FID2B.ch
 Acq On : 10 Dec 2024 05:24
 Operator : YP/AJ
 Sample : 5 PPM AROMATIC HC STD5
 Misc :
 ALS Vial : 75 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 5 PPM AROMATIC HC STD5

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/10/2024
 Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
 Quant Time: Dec 10 06:02:03 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 05:59:54 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.368	863222	5.095 ug/ml
Spiked Amount 50.000		Recovery =	10.19%
6) S 2-Fluorobiphenyl (SURR)	8.227	437018	4.091 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	8.18%
11) S ortho-Terphenyl (SURR)	11.248	882460	4.927 ug/ml
Spiked Amount 50.000		Recovery =	9.85%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.189	947332	4.986 ug/ml
2) T Naphthalene (C11.7)	5.708	897541	4.597 ug/mlm
3) T 2-Methylnaphthalene (...)	6.757	895007	4.812 ug/ml
5) T Acenaphthylene (C15.06)	8.019	924981	4.935 ug/ml
7) T Acenaphthene (C15.5)	8.310	948924	5.121 ug/ml
8) T Fluorene (C16.55)	9.096	839037	4.629 ug/ml
9) T Phenanthrene (C19.36)	10.483	780930	4.630 ug/ml
10) T Anthracene (C19.43)	10.564	818431	4.774 ug/ml
12) T Fluoranthene (C21.85)	12.291	777996	4.690 ug/ml
13) T Pyrene (C20.8)	12.580	787810	4.851 ug/ml
14) T Benzo[a]anthracene (C...	14.455	507076	3.641 ug/ml
15) T Chrysene (C27.41)	14.492	883975	5.600 ug/ml
16) T benzo[b]fluoranthene ...	15.999	564845	4.046 ug/ml
17) T Bnezo[k]fluoranthene ...	16.032	836054	5.638 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.389	684346	4.900 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.759	396470	3.711 ug/ml
20) T Dibenz[a,h]anthracene...	17.803	701278	4.632 ug/mlm
21) T Benzo[g,h,i]perylene ...	17.996	687081	4.852 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
Data File : FD048866.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 05:24
Operator : YP/AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 75 Sample Multiplier: 1

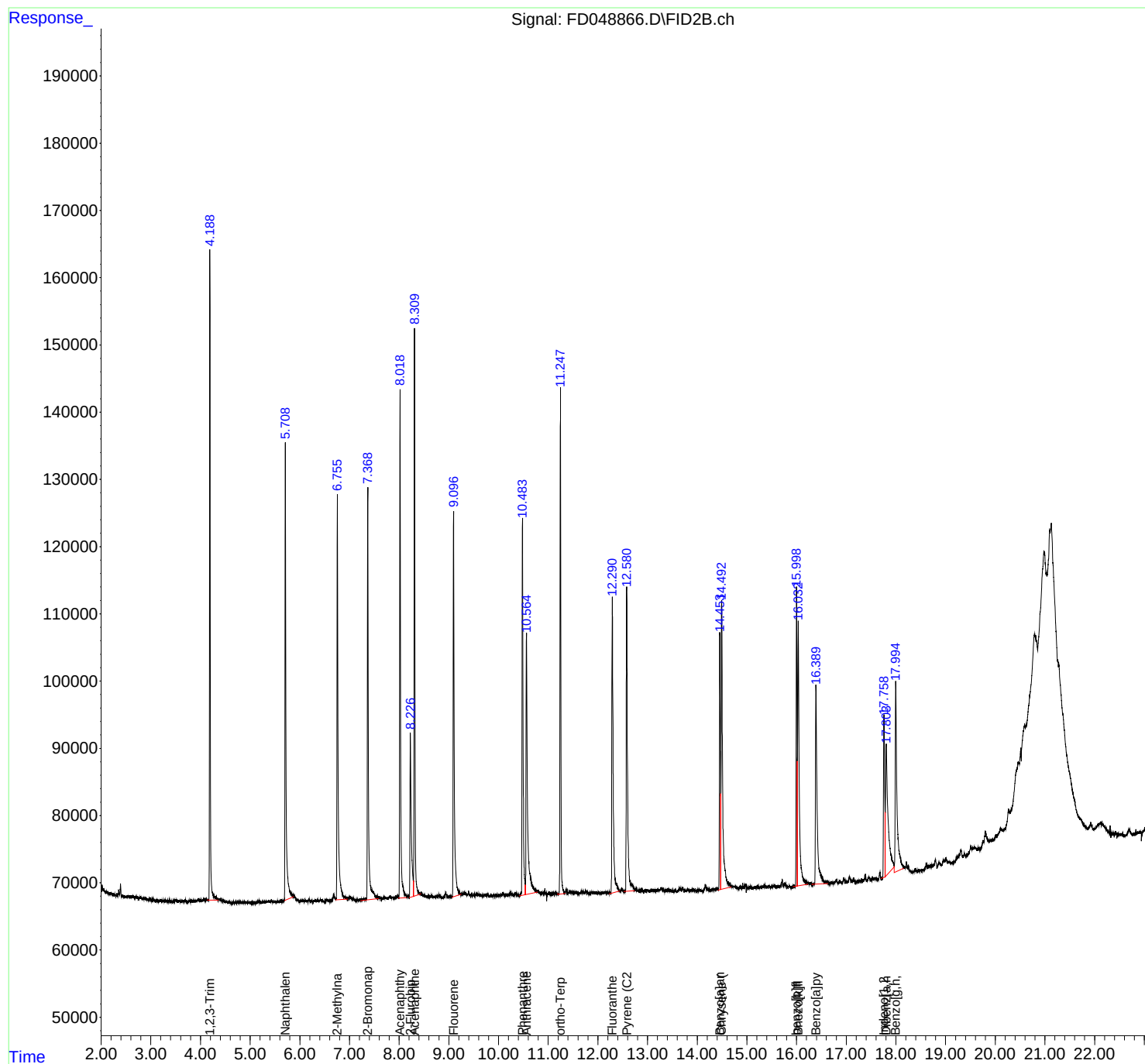
Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

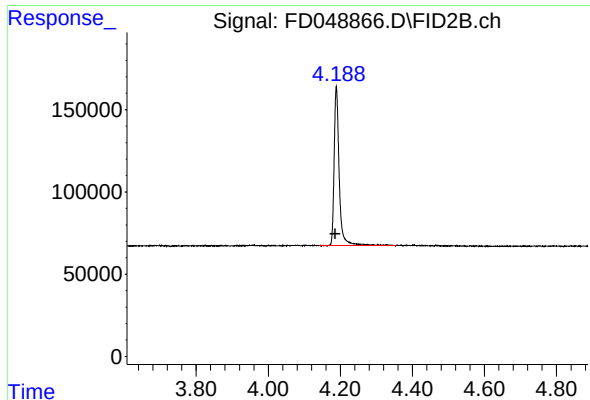
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
Quant Time: Dec 10 06:02:03 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 05:59:54 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm





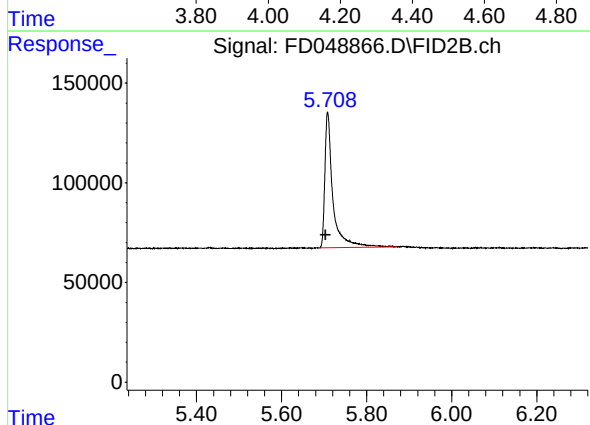
#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.189 min
Delta R.T.: 0.003 min
Response: 947332
Conc: 4.99 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

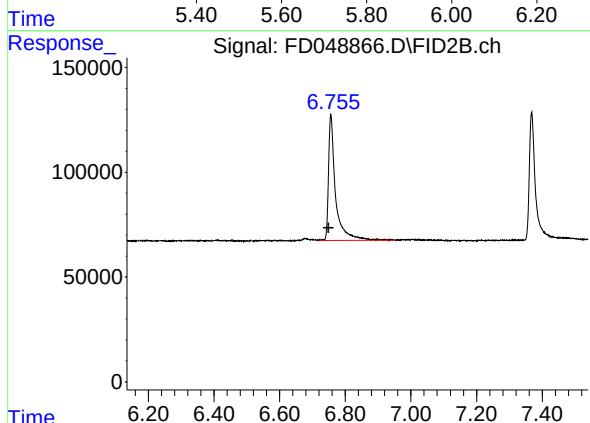
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



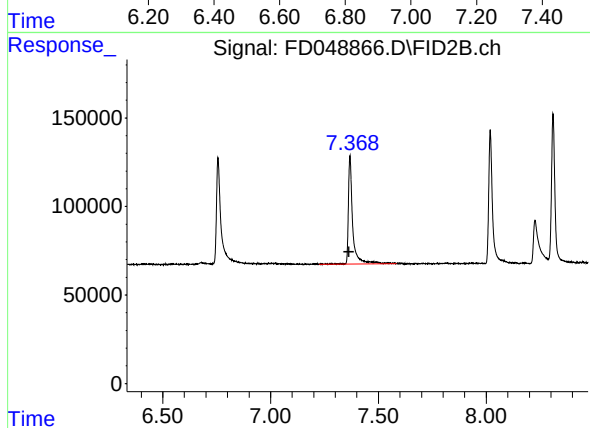
#2 Naphthalene (C11.7)

R.T.: 5.708 min
Delta R.T.: 0.004 min
Response: 897541
Conc: 4.60 ug/ml m



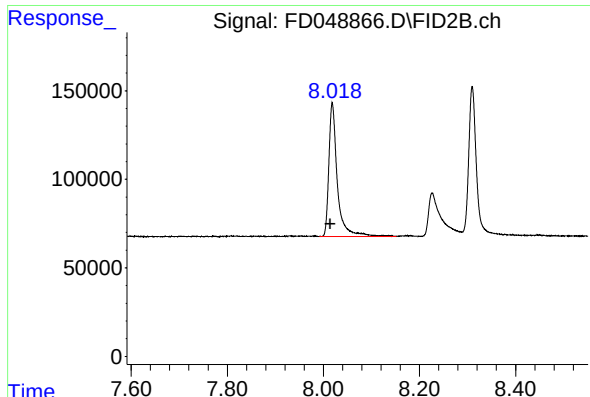
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.757 min
Delta R.T.: 0.007 min
Response: 895007
Conc: 4.81 ug/ml



#4 2-Bromonaphthalene (SURR)

R.T.: 7.368 min
Delta R.T.: 0.006 min
Response: 863222
Conc: 5.10 ug/ml



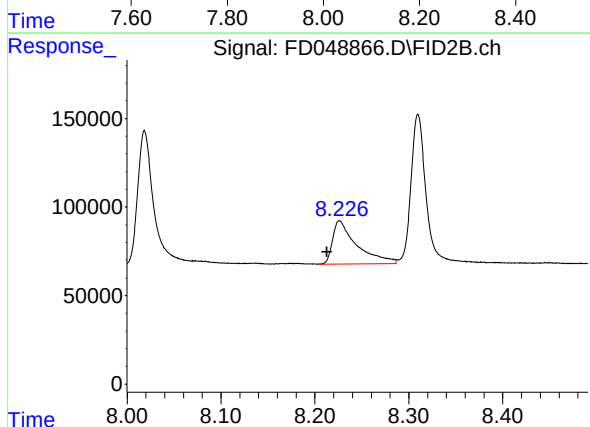
#5 Acenaphthylene (C15.06)

R.T.: 8.019 min
Delta R.T.: 0.004 min
Response: 924981
Conc: 4.94 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

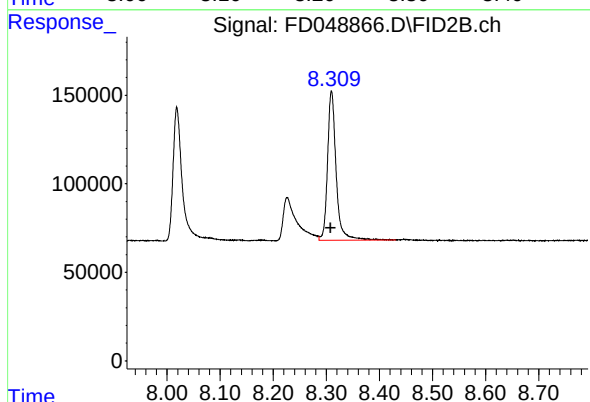
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



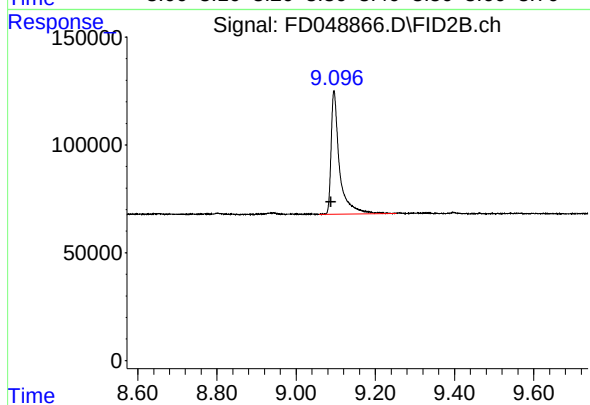
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.227 min
Delta R.T.: 0.014 min
Response: 437018
Conc: 4.09 ug/ml



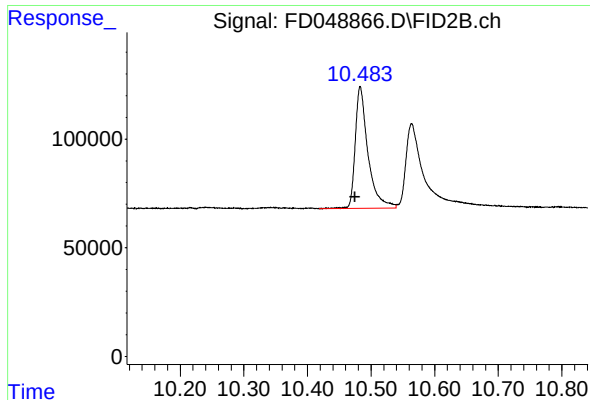
#7 Acenaphthene (C15.5)

R.T.: 8.310 min
Delta R.T.: 0.002 min
Response: 948924
Conc: 5.12 ug/ml



#8 Flouorene (C16.55)

R.T.: 9.096 min
Delta R.T.: 0.008 min
Response: 839037
Conc: 4.63 ug/ml



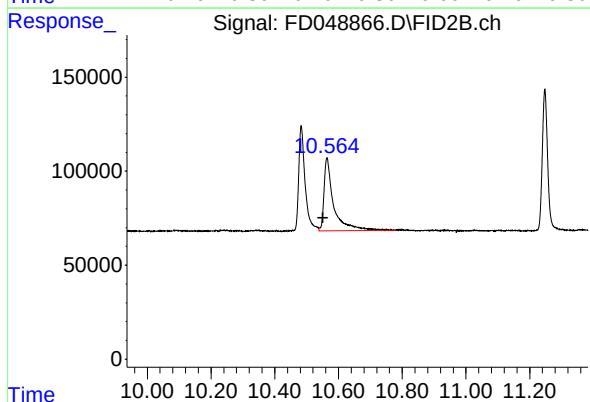
#9 Phenanthrene (C19.36)

R.T.: 10.483 min
Delta R.T.: 0.009 min
Response: 780930
Conc: 4.63 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

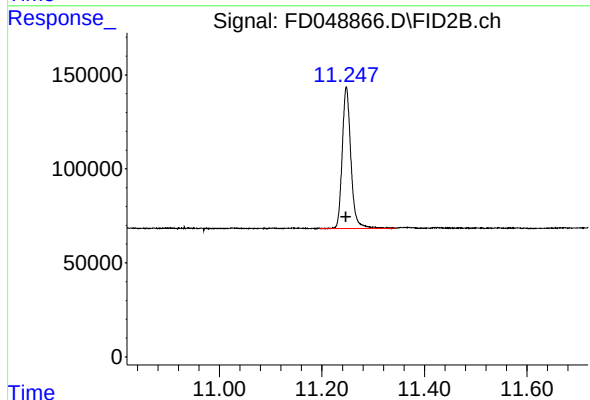
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



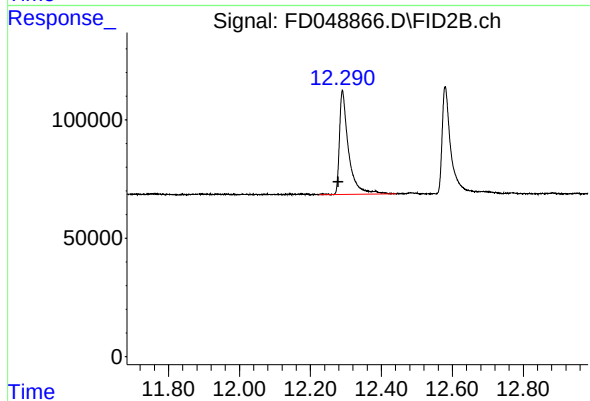
#10 Anthracene (C19.43)

R.T.: 10.564 min
Delta R.T.: 0.013 min
Response: 818431
Conc: 4.77 ug/ml



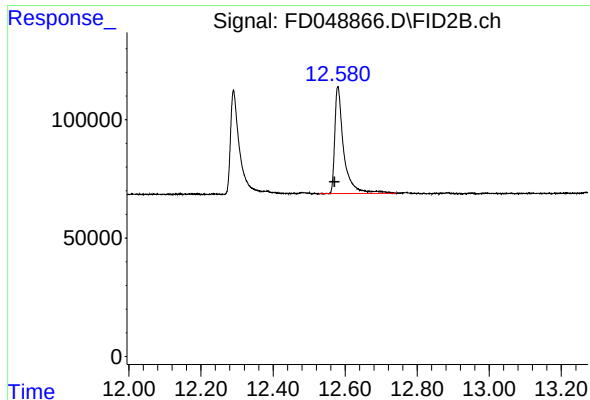
#11 ortho-Terphenyl (SURR)

R.T.: 11.248 min
Delta R.T.: 0.001 min
Response: 882460
Conc: 4.93 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 12.291 min
Delta R.T.: 0.012 min
Response: 777996
Conc: 4.69 ug/ml



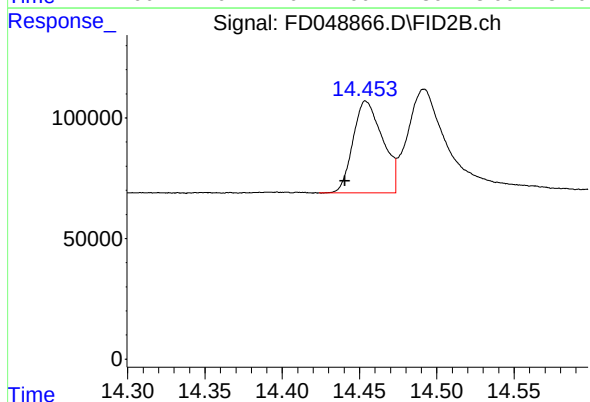
#13 Pyrene (C20.8)

R.T.: 12.580 min
Delta R.T.: 0.009 min
Response: 787810
Conc: 4.85 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

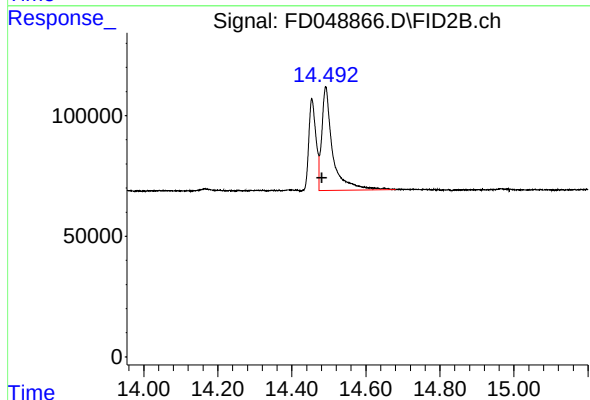
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



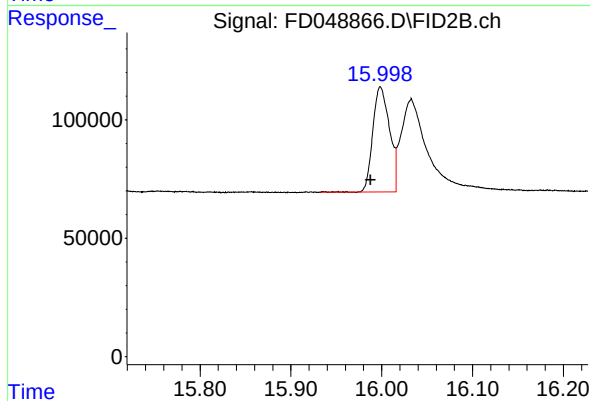
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.455 min
Delta R.T.: 0.014 min
Response: 507076
Conc: 3.64 ug/ml



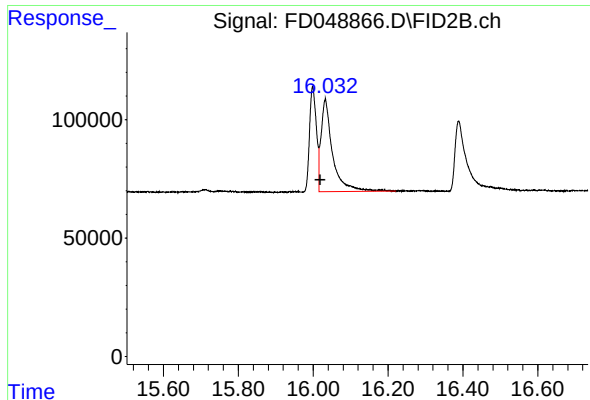
#15 Chrysene (C27.41)

R.T.: 14.492 min
Delta R.T.: 0.010 min
Response: 883975
Conc: 5.60 ug/ml



#16 benzo[b]fluoranthene (C30.41)

R.T.: 15.999 min
Delta R.T.: 0.011 min
Response: 564845
Conc: 4.05 ug/ml



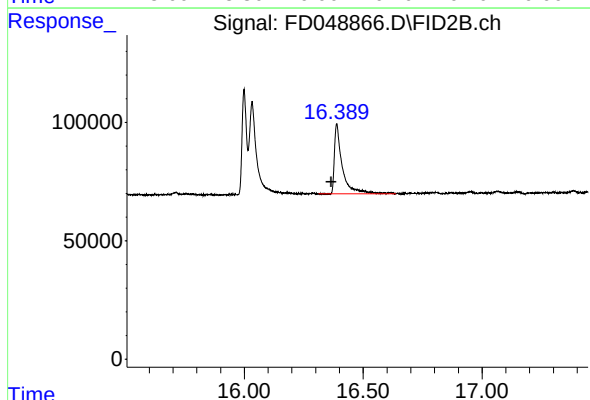
#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.032 min
Delta R.T.: 0.013 min
Response: 836054
Conc: 5.64 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

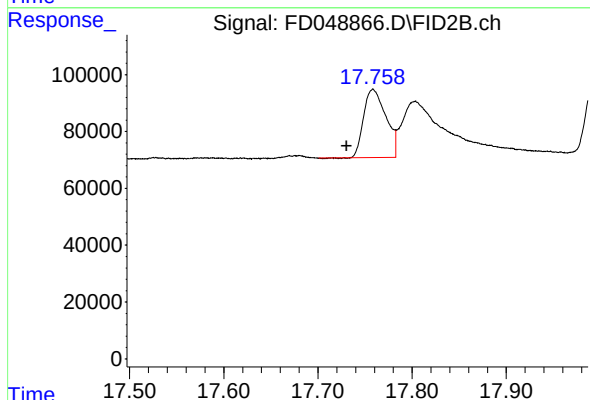
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



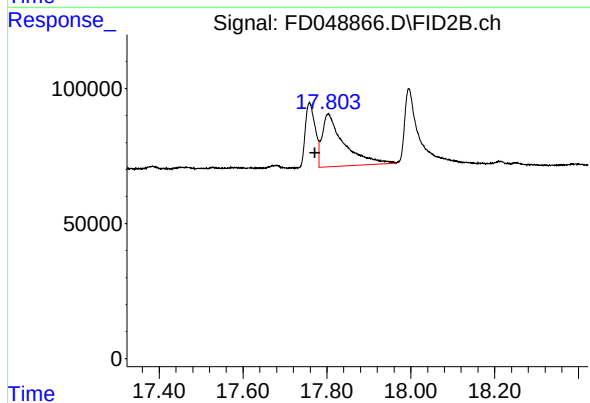
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.389 min
Delta R.T.: 0.023 min
Response: 684346
Conc: 4.90 ug/ml



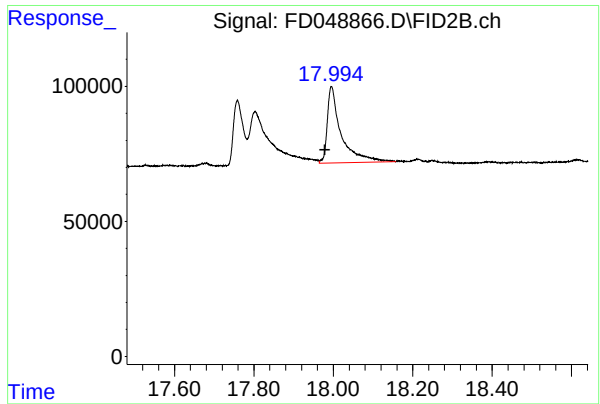
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.759 min
Delta R.T.: 0.028 min
Response: 396470
Conc: 3.71 ug/ml



#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.803 min
Delta R.T.: 0.032 min
Response: 701278
Conc: 4.63 ug/ml m



#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.996 min
Delta R.T.: 0.017 min
Response: 687081
Conc: 4.85 ug/ml

Instrument :

FID_D

ClientSampleId :

5 PPM AROMATIC HC STD5

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

nteres

Instrument :

FID_D

LabSampleId :

5 PPM AROMATIC HC STD5

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/10/2024

Supervised By :Ankita Jodhani 12/10/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024
Data File : FD048866.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 05:24
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.189	4.141	4.354	BB	96180	947332	99.83%	5.896%
2	5.709	5.504	5.874	BV	68017	868319	91.51%	5.404%
3	6.757	6.720	6.954	VV	58927	895007	94.32%	5.570%
4	7.368	7.225	7.581	VV	60961	863222	90.97%	5.372%
5	8.019	7.991	8.151	BV	75240	924981	97.48%	5.757%
6	8.227	8.204	8.286	PV	24121	437018	46.05%	2.720%
7	8.310	8.286	8.431	VV	83714	948924	100.00%	5.906%
8	9.096	9.058	9.252	BV	57359	839037	88.42%	5.222%
9	10.483	10.418	10.539	PV	55264	780930	82.30%	4.860%
10	10.564	10.539	10.780	VV	38785	818431	86.25%	5.094%
11	11.248	11.194	11.344	BV	75144	882460	93.00%	5.492%
12	12.291	12.224	12.441	PB	43647	777996	81.99%	4.842%
13	12.580	12.528	12.741	BV	45032	787810	83.02%	4.903%
14	14.455	14.424	14.473	PV	37959	507076	53.44%	3.156%
15	14.492	14.473	14.681	VB	42972	883975	93.16%	5.502%
16	15.999	15.931	16.016	BV	44293	564845	59.52%	3.515%
17	16.032	16.016	16.221	VV	38834	836054	88.11%	5.203%
18	16.389	16.314	16.638	BB	29661	684346	72.12%	4.259%
19	17.759	17.701	17.783	BV	23979	396470	41.78%	2.467%
20	17.803	17.783	17.964	VV	19606	736450	77.61%	4.583%
21	17.996	17.964	18.158	VV	28378	687081	72.41%	4.276%
Sum of corrected areas:						16067761		

Aromatic EPH 121024.M Tue Dec 10 07:10:52 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
 Data File : FD048867.D
 Signal(s) : FID2B.ch
 Acq On : 10 Dec 2024 06:01
 Operator : YP/AJ
 Sample : 20 PPM AROMATIC HC STD ICV
 Misc :
 ALS Vial : 76 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 20 PPM AROMATIC HC STD ICV

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/10/2024
 Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
 Quant Time: Dec 10 07:06:10 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 06:07:50 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.363	3313381	19.672 ug/ml
Spiked Amount 50.000		Recovery =	39.34%
6) S 2-Fluorobiphenyl (SURR)	8.213	2069271	20.030 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	40.06%
11) S ortho-Terphenyl (SURR)	11.246	3446740	19.401 ug/ml
Spiked Amount 50.000		Recovery =	38.80%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.186	3701153	19.548 ug/ml
2) T Naphthalene (C11.7)	5.703	3740432	19.575 ug/ml
3) T 2-Methylnaphthalene (...)	6.750	3629123	19.640 ug/ml
5) T Acenaphthylene (C15.06)	8.014	3654040	19.579 ug/ml
7) T Acenaphthene (C15.5)	8.308	3616915	19.421 ug/ml
8) T Fluorene (C16.55)	9.088	3518743	19.692 ug/ml
9) T Phenanthrene (C19.36)	10.474	3288341	19.688 ug/ml
10) T Anthracene (C19.43)	10.551	3378394	19.905 ug/ml
12) T Fluoranthene (C21.85)	12.279	3234389	19.760 ug/ml
13) T Pyrene (C20.8)	12.571	3220981	19.804 ug/ml
14) T Benzo[a]anthracene (C...	14.440	2679502	20.282 ug/ml
15) T Chrysene (C27.41)	14.482	3056237	18.931 ug/ml
16) T benzo[b]fluoranthene ...	15.987	2683723	19.934 ug/mlm
17) T Bnezo[k]fluoranthene ...	16.018	2817570	18.498 ug/mlm
18) T Benzo[a]pyrene (C31.34)	16.365	2721975	19.680 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.729	2035411	19.099 ug/ml
20) T Dibenz[a,h]anthracene...	17.770	2920346	20.137 ug/ml
21) T Benzo[g,h,i]perylene ...	17.978	2749325	19.609 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024AR\
Data File : FD048867.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 06:01
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 76 Sample Multiplier: 1

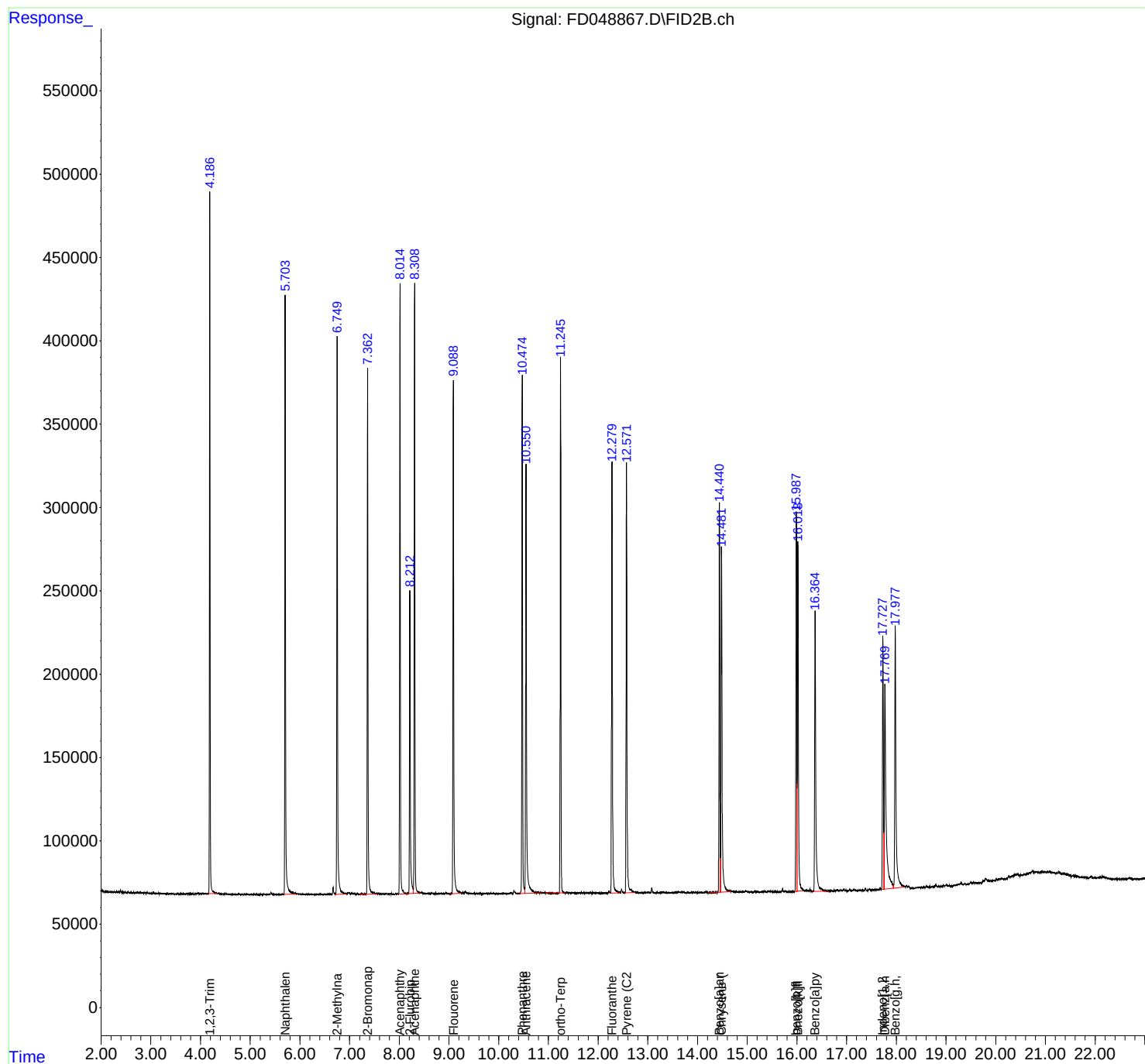
Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

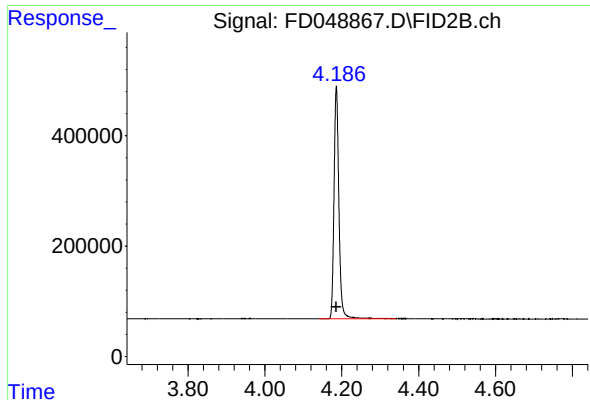
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
Quant Time: Dec 10 07:06:10 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 06:07:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm





#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.186 min
Delta R.T.: 0.000 min
Response: 3701153
Conc: 19.55 ug/ml

Instrument :

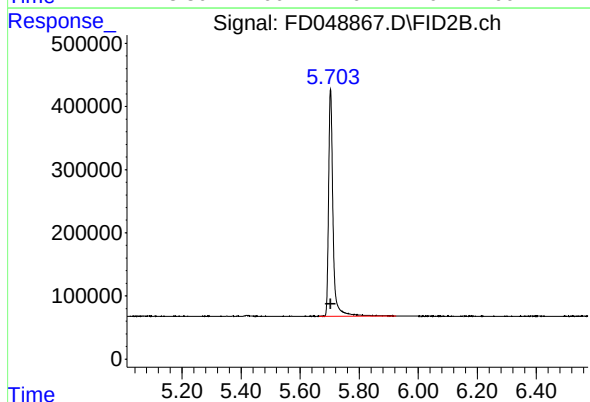
FID_D

ClientSampleId :

20 PPM AROMATIC HC STD ICV

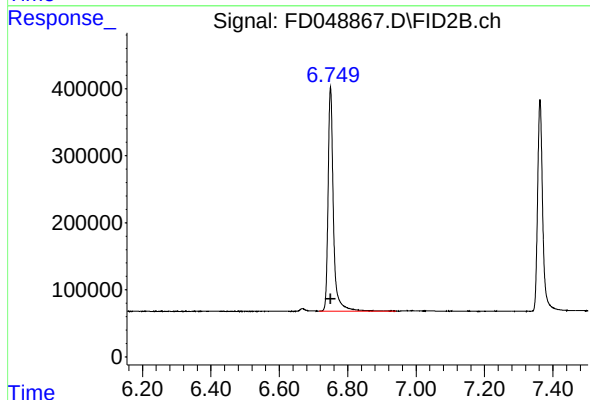
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



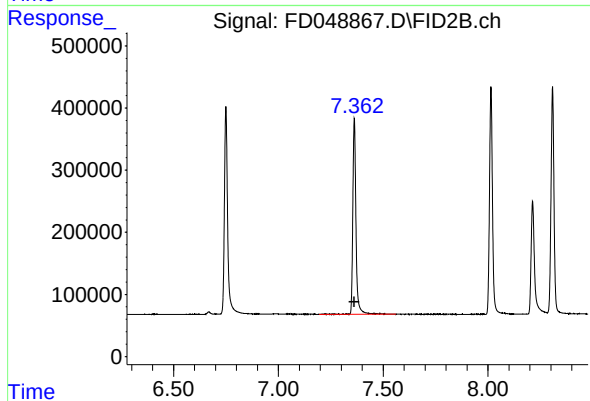
#2 Naphthalene (C11.7)

R.T.: 5.703 min
Delta R.T.: 0.000 min
Response: 3740432
Conc: 19.57 ug/ml



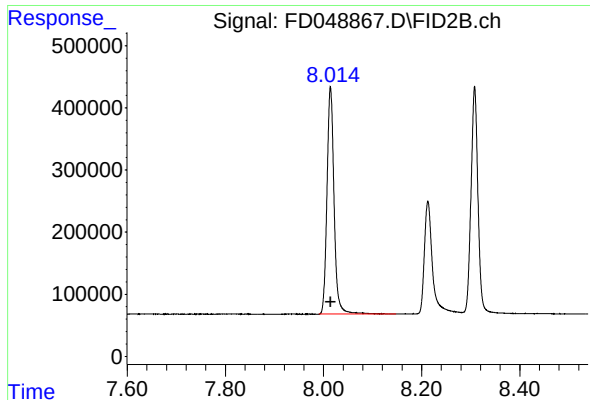
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.750 min
Delta R.T.: 0.000 min
Response: 3629123
Conc: 19.64 ug/ml



#4 2-Bromonaphthalene (SURR)

R.T.: 7.363 min
Delta R.T.: 0.000 min
Response: 3313381
Conc: 19.67 ug/ml



#5 Acenaphthylene (C15.06)

R.T.: 8.014 min
Delta R.T.: 0.000 min
Response: 3654040
Conc: 19.58 ug/ml

Instrument :

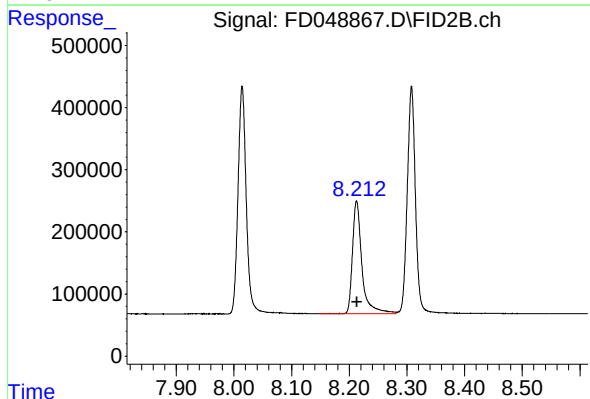
FID_D

ClientSampleId :

20 PPM AROMATIC HC STD ICV

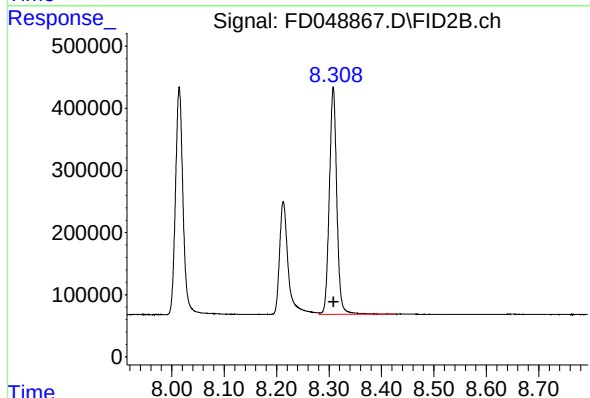
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



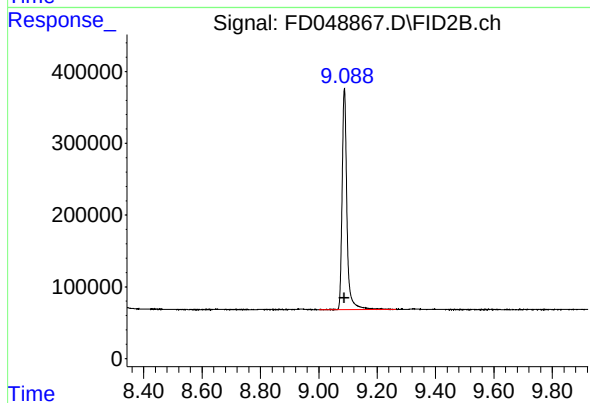
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.213 min
Delta R.T.: 0.000 min
Response: 2069271
Conc: 20.03 ug/ml



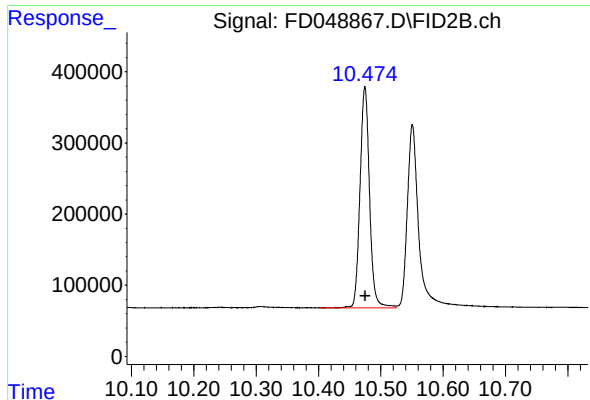
#7 Acenaphthene (C15.5)

R.T.: 8.308 min
Delta R.T.: 0.000 min
Response: 3616915
Conc: 19.42 ug/ml



#8 Flouorene (C16.55)

R.T.: 9.088 min
Delta R.T.: 0.000 min
Response: 3518743
Conc: 19.69 ug/ml



#9 Phenanthrene (C19.36)

R.T.: 10.474 min
Delta R.T.: 0.000 min
Response: 3288341
Conc: 19.69 ug/ml

Instrument :

FID_D

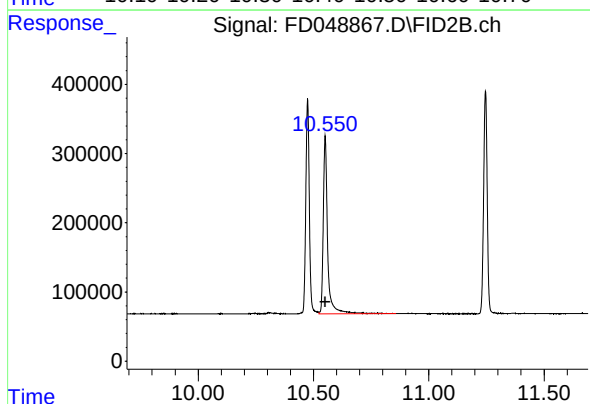
ClientSampleId :

20 PPM AROMATIC HC STD ICV

Manual Integrations

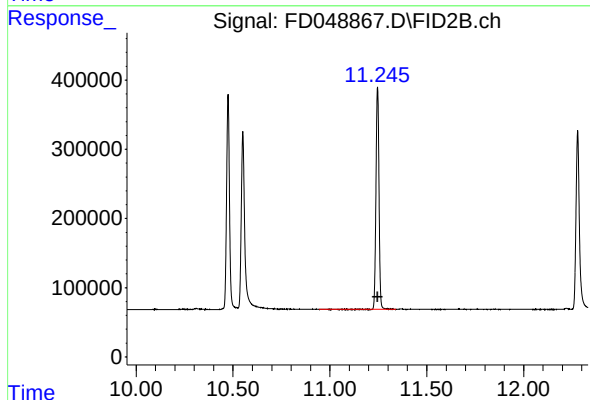
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



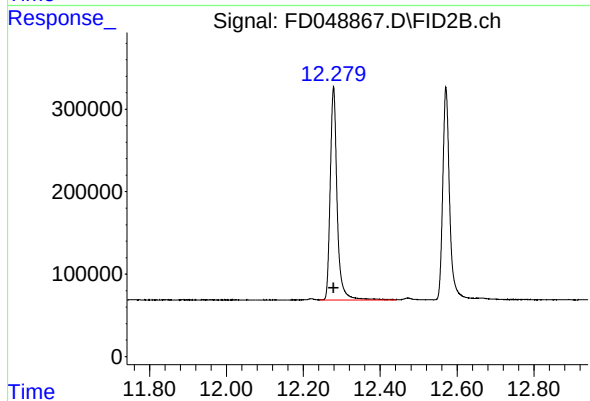
#10 Anthracene (C19.43)

R.T.: 10.551 min
Delta R.T.: 0.000 min
Response: 3378394
Conc: 19.91 ug/ml



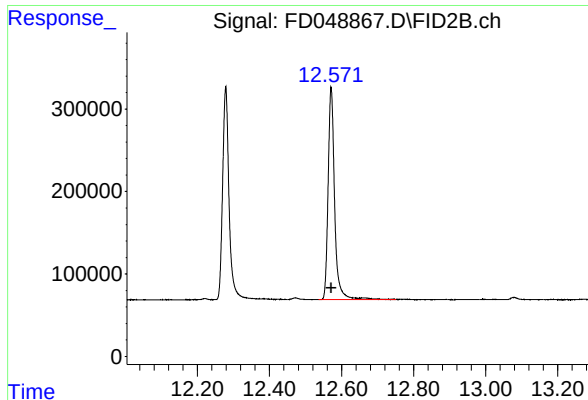
#11 ortho-Terphenyl (SURR)

R.T.: 11.246 min
Delta R.T.: 0.000 min
Response: 3446740
Conc: 19.40 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 12.279 min
Delta R.T.: 0.000 min
Response: 3234389
Conc: 19.76 ug/ml



#13 Pyrene (C20.8)

R.T.: 12.571 min
Delta R.T.: 0.000 min
Response: 3220981
Conc: 19.80 ug/ml

Instrument :

FID_D

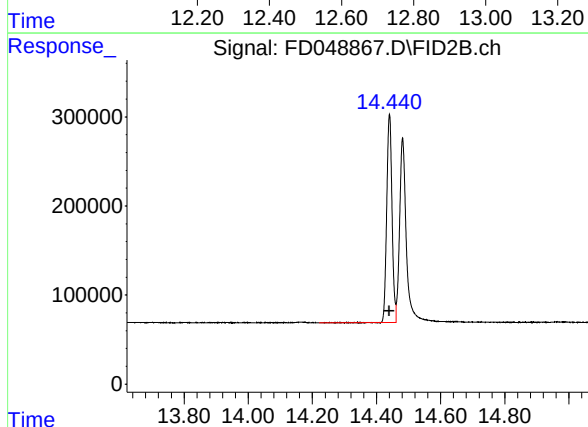
ClientSampleId :

20 PPM AROMATIC HC STD ICV

Manual Integrations

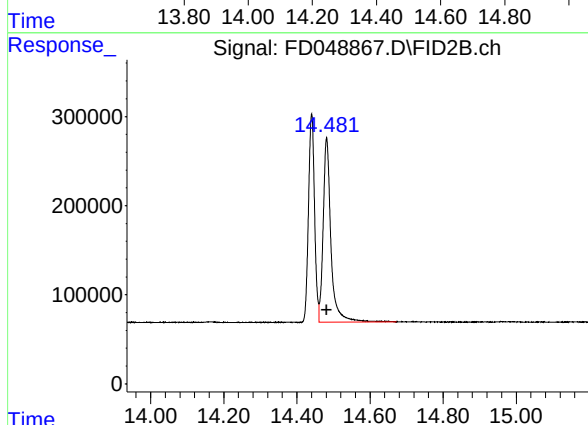
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



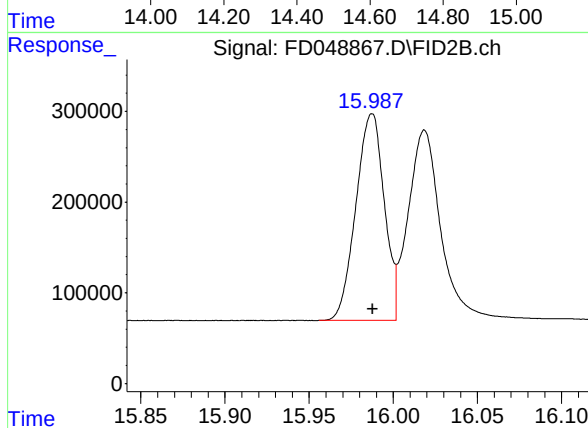
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.440 min
Delta R.T.: 0.000 min
Response: 2679502
Conc: 20.28 ug/ml



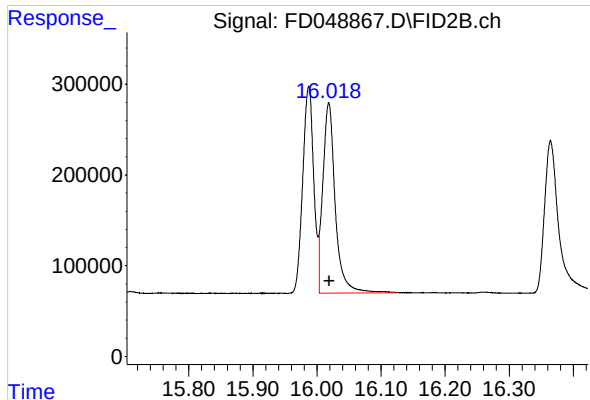
#15 Chrysene (C27.41)

R.T.: 14.482 min
Delta R.T.: 0.000 min
Response: 3056237
Conc: 18.93 ug/ml



#16 benzo[b]fluoranthene (C30.41)

R.T.: 15.987 min
Delta R.T.: 0.000 min
Response: 2683723
Conc: 19.93 ug/ml m



#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.018 min
Delta R.T.: -0.001 min
Response: 2817570
Conc: 18.50 ug/ml

Instrument :

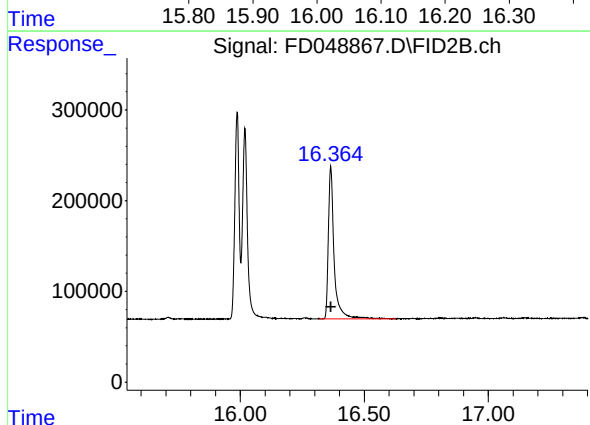
FID_D

ClientSampleId :

20 PPM AROMATIC HC STD ICV

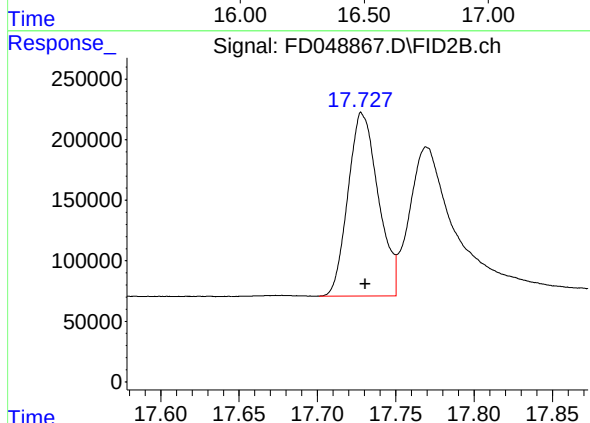
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024



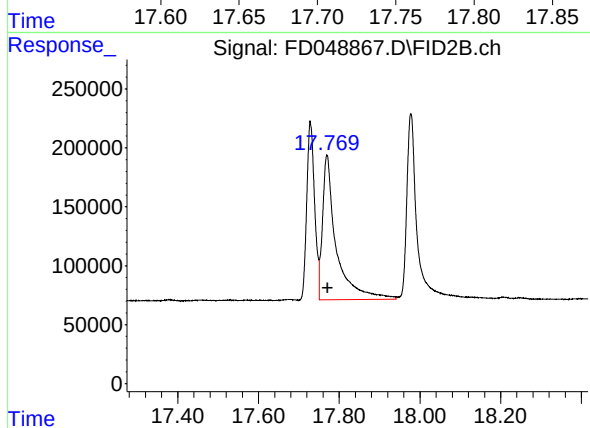
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.365 min
Delta R.T.: -0.001 min
Response: 2721975
Conc: 19.68 ug/ml



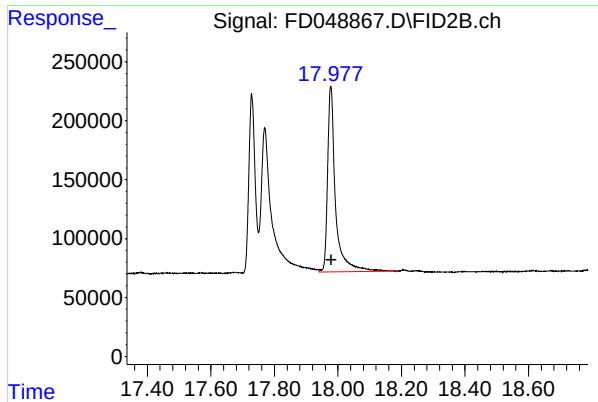
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.729 min
Delta R.T.: -0.001 min
Response: 2035411
Conc: 19.10 ug/ml



#20 Dibenz[a,h]anthracene (C30.36)

R.T.: 17.770 min
Delta R.T.: 0.000 min
Response: 2920346
Conc: 20.14 ug/ml



#21 Benzo[g,h,i]perylene (C34.01)

R.T.: 17.978 min
Delta R.T.: -0.001 min
Response: 2749325
Conc: 19.61 ug/ml

Instrument :

FID_D

ClientSampleId :

20 PPM AROMATIC HC STD ICV

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

riteres

Instrument :

FID_D

ClientSampleId :

20 PPM AROMATIC HC STD ICV

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/10/2024

Supervised By :Ankita Jodhani 12/10/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD121024
Data File : FD048867.D
Signal(s) : FID2B.ch
Acq On : 10 Dec 2024 06:01
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.186	4.141	4.341	BB	413941	3701153	98.95%	5.649%
2	5.703	5.664	5.924	PV	356377	3740432	100.00%	5.709%
3	6.750	6.716	6.941	VV	332871	3629123	97.02%	5.539%
4	7.363	7.194	7.561	BB	313738	3313381	88.58%	5.057%
5	8.014	7.991	8.148	BV	365126	3654040	97.69%	5.577%
6	8.213	8.148	8.281	PV	177876	2069271	55.32%	3.158%
7	8.308	8.281	8.428	VB	365024	3616915	96.70%	5.520%
8	9.088	9.001	9.264	BB	307951	3518743	94.07%	5.370%
9	10.474	10.401	10.524	BV	310501	3288341	87.91%	5.019%
10	10.551	10.524	10.858	VB	256242	3378394	90.32%	5.156%
11	11.246	10.944	11.341	BV	321232	3446740	92.15%	5.261%
12	12.279	12.241	12.441	VV	256842	3234389	86.47%	4.936%
13	12.571	12.538	12.751	PB	257405	3220981	86.11%	4.916%
14	14.440	14.221	14.461	BV	234909	2679502	71.64%	4.090%
15	14.482	14.461	14.671	VB	206406	3056237	81.71%	4.665%
16	15.987	15.955	16.001	M	228220	2664317	71.23%	4.066%
17	16.018	16.001	16.118	M	210292	2882005	77.05%	4.399%
18	16.365	16.318	16.628	BB	167296	2721975	72.77%	4.154%
19	17.729	17.701	17.750	BV	151435	2035411	54.42%	3.107%
20	17.770	17.750	17.941	VV	122115	2920346	78.08%	4.457%
21	17.978	17.941	18.183	VV	157312	2749325	73.50%	4.196%
Sum of corrected areas:						65521022		

Aromatic EPH 121024.M Tue Dec 10 08:27:13 2024

Continuing Calibration Report for SequenceID : FC122024AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FC068059.D

Aliphatic C28-C40	12271986.000	120.000	16.792	21.609	102266.550	105964.639	3.490
Aliphatic EPH	46593571.000	360.000	3.117	21.609	129426.586	135215.008	4.281
Aliphatic C9-C12	9123272.000	60.000	3.117	6.389	152054.533	158302.459	3.947
Aliphatic C12-C16	6147282.000	40.000	6.390	9.779	153682.050	160275.290	4.114
Aliphatic C16-C21	8675091.000	60.000	9.780	13.137	144584.850	152362.625	5.105
Aliphatic C21-C28	10375940.000	80.000	13.138	16.791	129699.250	136384.122	4.902

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	20 Dec 2024 09:05
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068059.D	Misc:	
Instrument:	FID_C	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.117	6.389	9123272.000	60.000	ug/ml
Aliphatic C12-C16	6.390	9.779	6147282.000	40.000	ug/ml
Aliphatic C16-C21	9.780	13.137	8675091.000	60.000	ug/ml
Aliphatic C21-C28	13.138	16.791	10375940.000	80.000	ug/ml
Aliphatic C28-C40	16.792	21.609	12271986.000	120.000	ug/ml
Aliphatic EPH	3.117	21.609	46593571.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
 Data File : FC068059.D
 Signal(s) : FID1A.ch
 Acq On : 20 Dec 2024 09:05
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/23/2024
 Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
 Quant Time: Dec 21 01:49:39 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:59:10 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.425	3244981	18.766 ug/ml
Spiked Amount 50.000		Recovery =	37.53%
12) S 1-chlorooctadecane (S...	12.866	2410220	18.890 ug/ml
Spiked Amount 50.000		Recovery =	37.78%
Target Compounds			
1) T n-Nonane (C9)	3.217	2980985	19.187 ug/ml
2) T n-Decane (C10)	4.277	3048154	19.228 ug/ml
3) T A~Naphthalene (C11.7)	5.848	3354487	19.215 ug/ml
4) T n-Dodecane (C12)	6.289	3094133	19.216 ug/ml
5) T A~2-methylnaphthalene...	6.902	3237958	19.325 ug/ml
6) T n-Tetradecane (C14)	8.081	3049369	19.179 ug/ml
7) T n-Hexadecane (C16)	9.679	3097913	19.176 ug/ml
8) T n-Octadecane (C18)	11.119	3051077	19.005 ug/ml
10) T n-Eicosane (C20)	12.426	2851189	18.954 ug/ml
11) T n-Heneicosane (C21)	13.037	2772825	18.977 ug/ml
13) T n-Docosane (C22)	13.622	2714646	18.964 ug/ml
14) T n-Tetracosane (C24)	14.723	2637809	18.984 ug/ml
15) T n-Hexacosane (C26)	15.742	2544423	19.026 ug/ml
16) T n-Octacosane (C28)	16.691	2479062	19.112 ug/ml
17) T n-Tricontane (C30)	17.576	2473907	19.097 ug/ml
18) T n-Dotriacontane (C32)	18.410	2408670	19.443 ug/mlm
19) T n-Tetratriacontane (C34)	19.190	2064244	18.912 ug/ml
20) T n-Hexatriacontane (C36)	19.928	1807028	19.100 ug/ml
21) T n-Octatriacontane (C38)	20.645	1782781	19.707 ug/ml
22) T n-Tetracontane (C40)	21.509	1735356	19.689 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068059.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 09:05
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

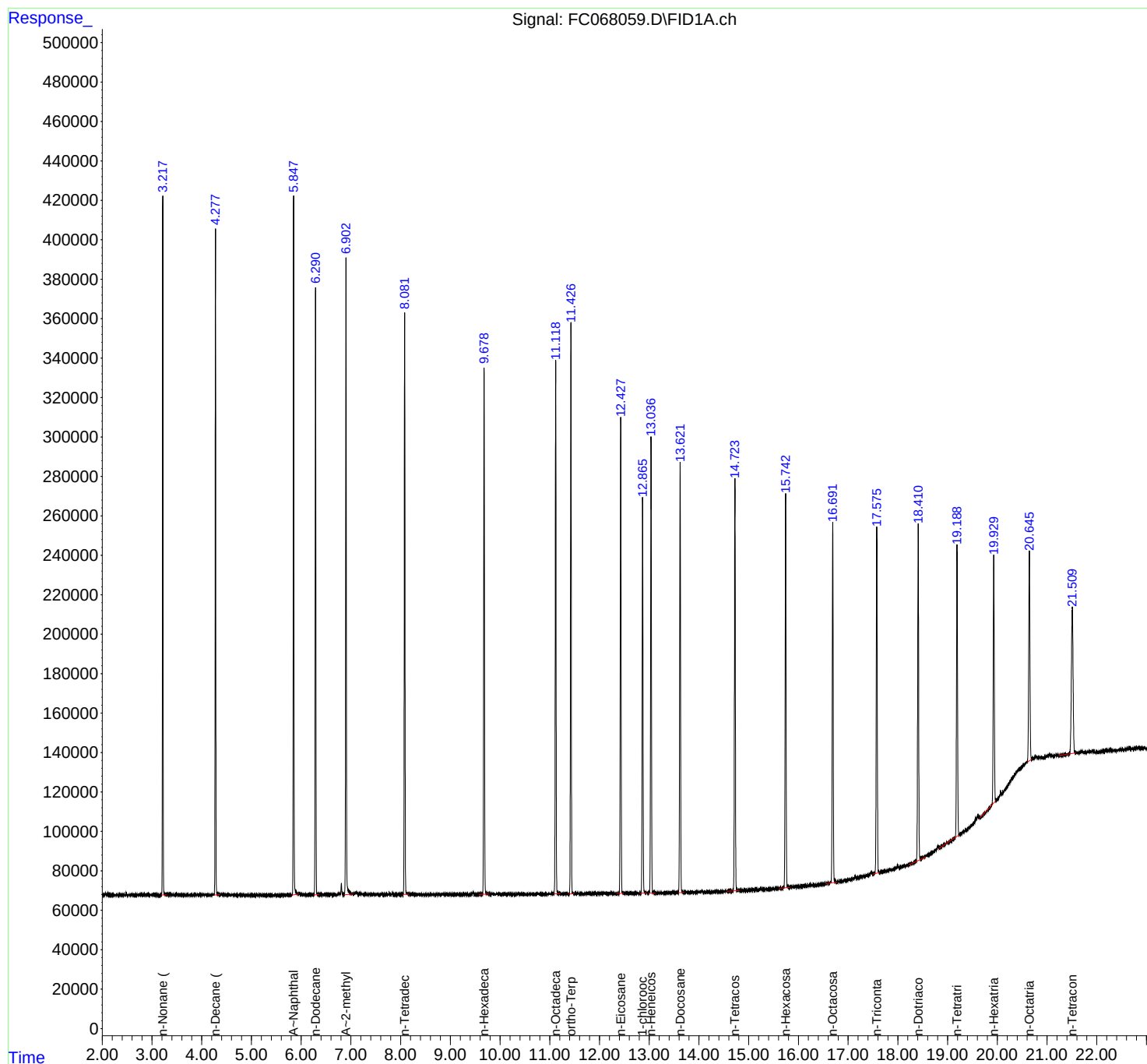
Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
Quant Time: Dec 21 01:49:39 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um



rteres

Instrument :

FID_C

LabSampleId :

20 PPM ALIPHATIC HC STD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC12202
Data File : FC068059.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 09:05
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.217	3.181	3.298	BB	354215	2980985	88.87%	5.078%
2	4.277	4.244	4.361	BB	336840	3048154	90.87%	5.193%
3	5.848	5.818	5.954	BB	354679	3354487	100.00%	5.715%
4	6.289	6.248	6.351	BB	308398	3094133	92.24%	5.271%
5	6.902	6.864	7.048	PB	318850	3237958	96.53%	5.516%
6	8.081	8.048	8.164	BB	293756	3049369	90.90%	5.195%
7	9.679	9.581	9.778	BB	266879	3097913	92.35%	5.277%
8	11.119	11.081	11.204	BB	268725	3051077	90.96%	5.198%
9	11.425	11.374	11.494	BB	288263	3244981	96.74%	5.528%
10	12.426	12.338	12.491	BB	243009	2851189	85.00%	4.857%
11	12.866	12.821	12.944	BB	197706	2410220	71.85%	4.106%
12	13.037	12.994	13.114	BB	230583	2772825	82.66%	4.724%
13	13.622	13.584	13.698	BB	217383	2714646	80.93%	4.625%
14	14.723	14.561	14.808	BB	209704	2637809	78.64%	4.494%
15	15.742	15.614	15.824	BB	196538	2544423	75.85%	4.335%
16	16.691	16.544	16.771	BB	181373	2479062	73.90%	4.223%
17	17.576	17.491	17.631	PB	174879	2473907	73.75%	4.214%
18	18.409	18.024	18.448	PV	169753	2268748	67.63%	3.865%
19	19.190	18.831	19.231	PV	145484	2064244	61.54%	3.517%
20	19.928	19.653	19.968	PV	124589	1807028	53.87%	3.078%
21	20.645	20.601	20.697	BV	105227	1782781	53.15%	3.037%
22	21.509	21.234	21.574	BB	74049	1735356	51.73%	2.956%
Sum of corrected areas:						58701294		

Aliphatic EPH 121024.M Sat Dec 21 02:25:58 2024

Continuing Calibration Report for SequenceID : FC122024AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FC068071.D

Aliphatic C28-C40	12785603.000	120.000	16.792	21.609	106546.692	105964.639	-0.549
Aliphatic EPH	42958637.000	360.000	3.117	21.609	119329.547	135215.008	11.748
Aliphatic C9-C12	7756045.000	60.000	3.117	6.389	129267.417	158302.459	18.341
Aliphatic C12-C16	5307951.000	40.000	6.390	9.779	132698.775	160275.290	17.206
Aliphatic C16-C21	7636984.000	60.000	9.780	13.137	127283.067	152362.625	16.460
Aliphatic C21-C28	9472054.000	80.000	13.138	16.791	118400.675	136384.122	13.186

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	20 Dec 2024 18:17
Client Sample ID:		Operator:	YP/AJ
Data file:	FC068071.D	Misc:	
Instrument:	FID_C	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.117	6.389	7756045.000	60.000	ug/ml
Aliphatic C12-C16	6.390	9.779	5307951.000	40.000	ug/ml
Aliphatic C16-C21	9.780	13.137	7636984.000	60.000	ug/ml
Aliphatic C21-C28	13.138	16.791	9472054.000	80.000	ug/ml
Aliphatic C28-C40	16.792	21.609	12785603.000	120.000	ug/ml
Aliphatic EPH	3.117	21.609	42958637.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
 Data File : FC068071.D
 Signal(s) : FID1A.ch
 Acq On : 20 Dec 2024 18:17
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/23/2024
 Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
 Quant Time: Dec 21 01:54:55 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:59:10 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
9) S ortho-Terphenyl (SURR)	11.444	2845628	16.457 ug/ml
Spiked Amount 50.000		Recovery =	32.91%
12) S 1-chlorooctadecane (S...	12.883	2119423	16.611 ug/ml
Spiked Amount 50.000		Recovery =	33.22%
Target Compounds			
1) T n-Nonane (C9)	3.242	2537642	16.333 ug/ml
2) T n-Decane (C10)	4.302	2597451	16.385 ug/ml
3) T A~Naphthalene (C11.7)	5.873	2848994	16.319 ug/ml
4) T n-Dodecane (C12)	6.312	2620952	16.278 ug/ml
5) T A~2-methylnaphthalene...	6.926	2753837	16.436 ug/ml
6) T n-Tetradecane (C14)	8.101	2615578	16.450 ug/ml
7) T n-Hexadecane (C16)	9.697	2692373	16.666 ug/ml
8) T n-Octadecane (C18)	11.136	2679241	16.689 ug/ml
10) T n-Eicosane (C20)	12.442	2515136	16.720 ug/ml
11) T n-Heneicosane (C21)	13.052	2442607	16.717 ug/ml
13) T n-Docosane (C22)	13.637	2407368	16.818 ug/ml
14) T n-Tetracosane (C24)	14.738	2365433	17.024 ug/ml
15) T n-Hexacosane (C26)	15.756	2305597	17.241 ug/ml
16) T n-Octacosane (C28)	16.704	2393656	18.454 ug/ml
17) T n-Tricontane (C30)	17.591	2630829	20.309 ug/ml
18) T n-Dotriacontane (C32)	18.422	2651894	21.406 ug/ml
19) T n-Tetratriacontane (C34)	19.202	2289281	20.974 ug/ml
20) T n-Hexatriacontane (C36)	19.942	1892386	20.002 ug/ml
21) T n-Octatriacontane (C38)	20.656	1706534	18.865 ug/ml
22) T n-Tetracontane (C40)	21.524	1614679	18.320 ug/mlm

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068071.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 18:17
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

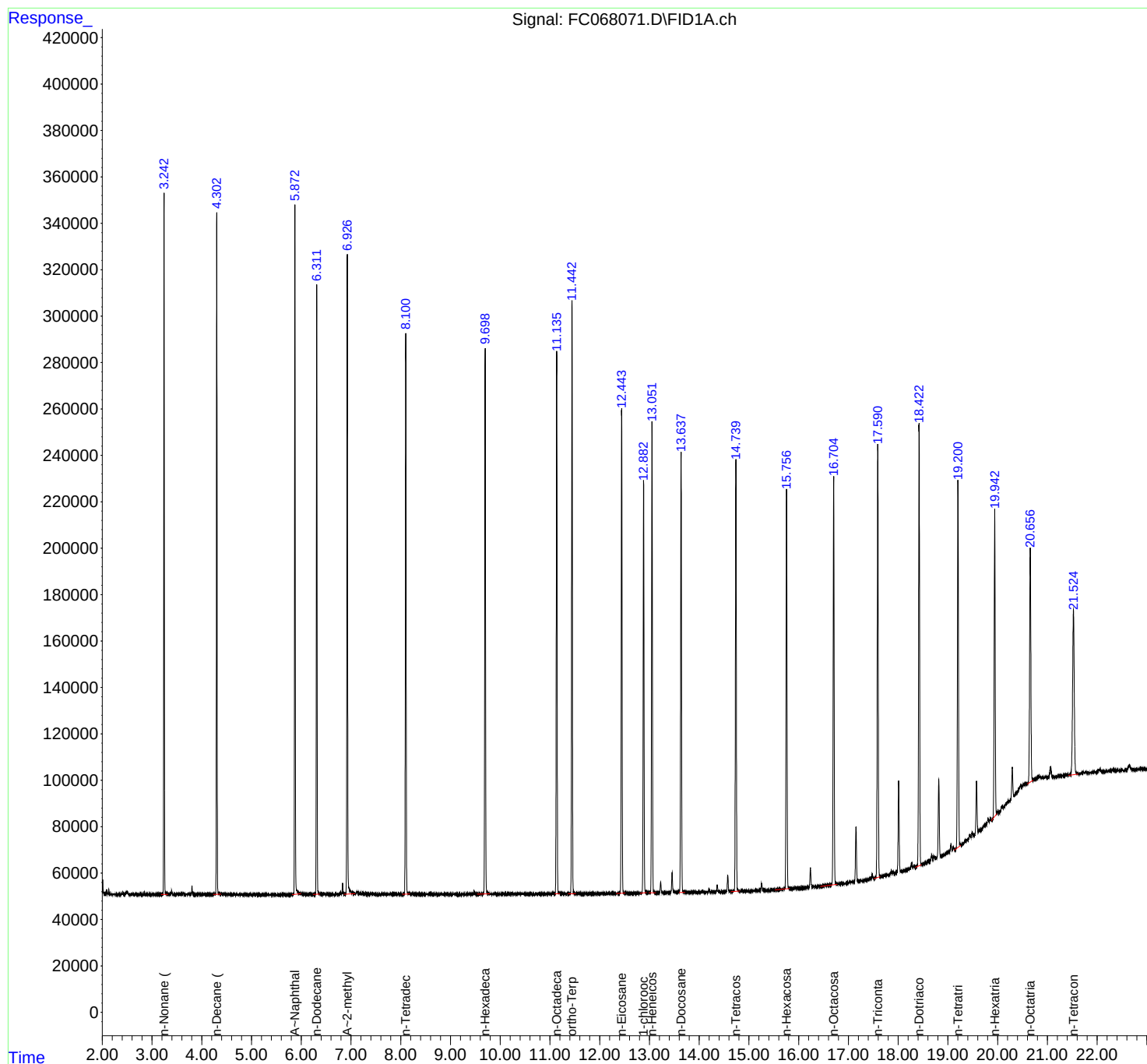
Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
Quant Time: Dec 21 01:54:55 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um



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Instrument :
FID_C
LabSampleId :
20 PPM ALIPHATIC HC STD
Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC12202
Data File : FC068071.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 18:17
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.242	3.191	3.314	BB	298785	2537642	89.07%	4.741%
2	4.302	4.234	4.381	BB	291925	2597451	91.17%	4.853%
3	5.873	5.814	5.991	BB	295667	2848994	100.00%	5.323%
4	6.312	6.241	6.374	BB	263248	2620952	92.00%	4.897%
5	6.926	6.858	7.084	PB	272278	2753837	96.66%	5.145%
6	8.101	8.034	8.184	BB	241944	2615578	91.81%	4.887%
7	9.697	9.541	9.788	BB	235372	2692373	94.50%	5.030%
8	11.136	11.094	11.201	BB	233828	2679241	94.04%	5.005%
9	11.444	11.368	11.518	BB	256171	2845628	99.88%	5.316%
10	12.442	12.334	12.508	BB	209390	2515136	88.28%	4.699%
11	12.883	12.811	12.944	BB	177576	2119423	74.39%	3.960%
12	13.052	12.984	13.124	BB	201585	2442607	85.74%	4.563%
13	13.637	13.603	13.714	VB	188985	2407368	84.50%	4.498%
14	14.738	14.638	14.814	BB	184257	2365433	83.03%	4.419%
15	15.756	15.531	15.818	BB	171196	2305597	80.93%	4.307%
16	16.704	16.441	16.774	BB	175166	2393656	84.02%	4.472%
17	17.591	17.511	17.634	PB	186046	2630829	92.34%	4.915%
18	18.422	18.351	18.471	BV	190517	2651894	93.08%	4.954%
19	19.202	19.131	19.261	PV	158404	2289281	80.35%	4.277%
20	19.942	19.878	19.979	PV	129110	1892386	66.42%	3.535%
21	20.656	20.601	20.711	BV	100121	1706534	59.90%	3.188%
22	21.524	21.378	21.621	BB	70987	1614372	56.66%	3.016%
Sum of corrected areas:						53526210		

Aliphatic EPH 121024.M Sat Dec 21 02:30:56 2024

Continuing Calibration Report for SequenceID : FD122024AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
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File ID : FD048897.D

Aromatic C10-C12	7444754.000	40.000	4.083	5.800	186118.850	190209.437	2.151
Aromatic C12-C16	10696363.000	60.000	5.801	8.405	178272.717	185883.358	4.094
Aromatic C16-C21	12508773.000	80.000	8.406	12.669	156359.663	169519.943	7.763
Aromatic C21-C36	24222747.000	180.000	12.670	18.077	134570.817	141588.666	4.957
Aromatic EPH	54872637.000	360.000	4.083	18.077	152423.992	160580.373	5.079

Lab Sample ID:	20 PPM AROMATIC HC	Acq On:	20 Dec 2024 09:05
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048897.D	Misc:	
Instrument:	FID_D	ALS Vial:	53
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.083	5.800	7444754.000	40.000	ug/ml
Aromatic C12-C16	5.801	8.405	10696363.000	60.000	ug/ml
Aromatic C16-C21	8.406	12.669	12508773.000	80.000	ug/ml
Aromatic C21-C36	12.670	18.077	24222747.000	180.000	ug/ml
Aromatic EPH	4.083	18.077	54872637.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048897.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 09:05
 Operator : YP/AJ
 Sample : 20 PPM AROMATIC HC STD
 Misc :
 ALS Vial : 53 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 20 PPM AROMATIC HC STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/23/2024
 Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
 Quant Time: Dec 21 04:02:13 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 06:07:50 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.360	3252401	19.309 ug/ml
Spiked Amount 50.000		Recovery =	38.62%
6) S 2-Fluorobiphenyl (SURR)	8.211	1950670	18.882 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	37.76%
11) S ortho-Terphenyl (SURR)	11.243	3336120	18.778 ug/ml
Spiked Amount 50.000		Recovery =	37.56%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.183	3713381	19.613 ug/ml
2) T Naphthalene (C11.7)	5.700	3731373	19.527 ug/ml
3) T 2-Methylnaphthalene (...)	6.747	3567263	19.305 ug/ml
5) T Acenaphthylene (C15.06)	8.012	3524033	18.882 ug/ml
7) T Acenaphthene (C15.5)	8.305	3605067	19.357 ug/ml
8) T Flouorene (C16.55)	9.085	3371969	18.871 ug/ml
9) T Phenanthrene (C19.36)	10.471	3060913	18.326 ug/ml
10) T Anthracene (C19.43)	10.548	3092138	18.219 ug/ml
12) T Fluoranthene (C21.85)	12.276	2963371	18.104 ug/ml
13) T Pyrene (C20.8)	12.569	2983753	18.345 ug/ml
14) T Benzo[a]anthracene (C...	14.439	2466941	18.673 ug/ml
15) T Chrysene (C27.41)	14.480	3029341	18.765 ug/ml
16) T benzo[b]fluoranthene ...	15.985	2686532	19.955 ug/ml
17) T Bnezo[k]fluoranthene ...	16.016	2909035	19.098 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.363	2693007	19.471 ug/mlm
19) T Indeno[1,2,3-cd]pyren...	17.730	1893700	17.770 ug/ml
20) T Dibenz[a,h]anthracene...	17.772	2839636	19.580 ug/ml
21) T Benzo[g,h,i]perylene ...	17.977	2741184	19.551 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048897.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 09:05
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

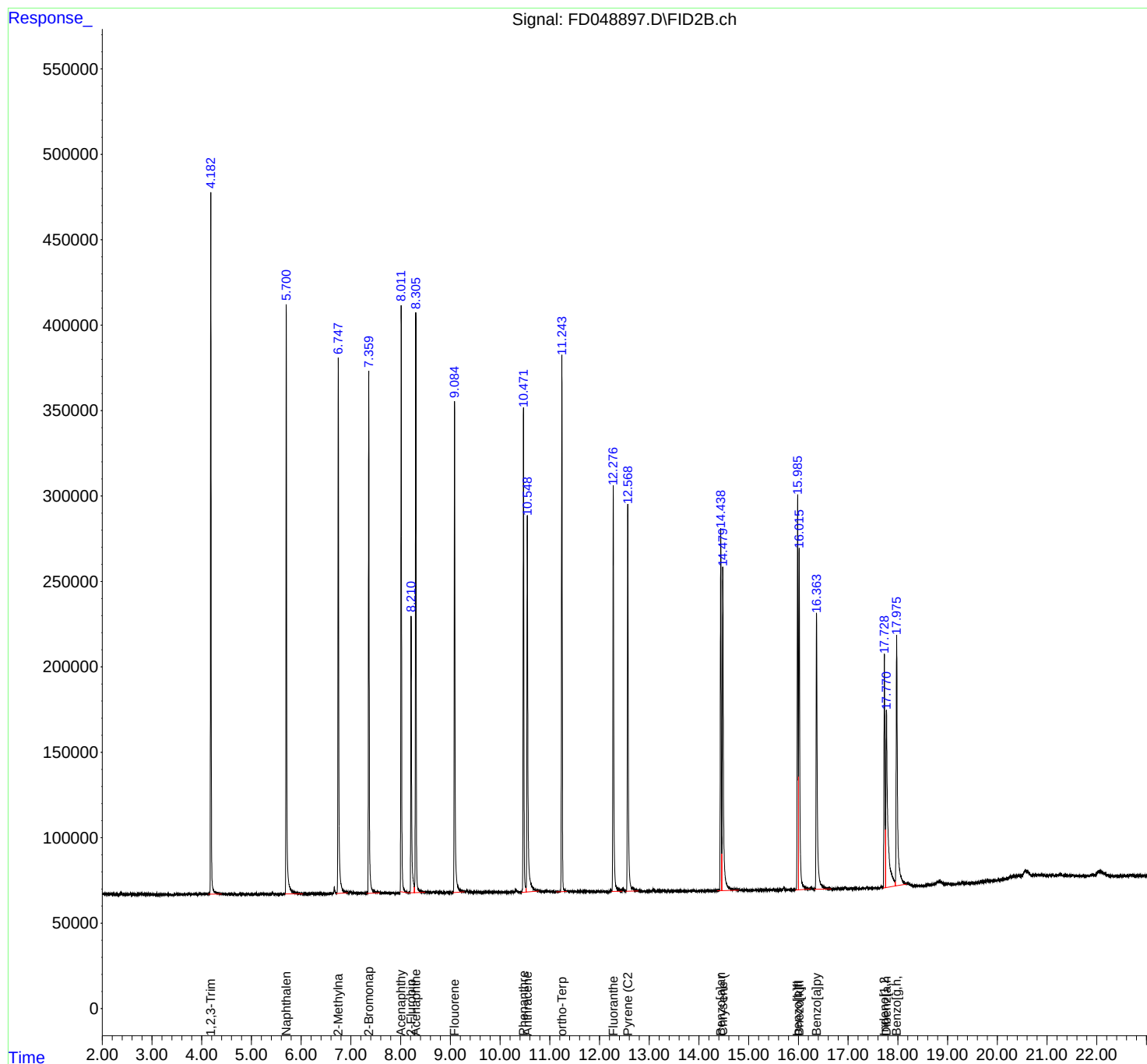
Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
Quant Time: Dec 21 04:02:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 06:07:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm



rteres

Instrument :
FID_D
LabSampleId :
20 PPM AROMATIC HC STD

Area Percent

Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data
Data File : FD048897.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 09:05
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH
121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.183	4.131	4.398	BV	402645	3713381	99.52%	5.860%
2	5.700	5.674	6.031	BV	342202	3731373	100.00%	5.889%
3	6.747	6.706	6.941	VV	312909	3567263	95.60%	5.630%
4	7.360	7.318	7.584	PV	301734	3252401	87.16%	5.133%
5	8.012	7.991	8.156	BV	341389	3524033	94.44%	5.561%
6	8.211	8.156	8.278	PV	161565	1950670	52.28%	3.078%
7	8.305	8.278	8.491	VB	339054	3605067	96.62%	5.689%
8	9.085	9.048	9.281	BV	286165	3371969	90.37%	5.321%
9	10.471	10.431	10.524	BV	283904	3060913	82.03%	4.830%
10	10.548	10.524	10.778	VV	220954	3092138	82.87%	4.880%
11	11.243	11.134	11.344	BV	312808	3336120	89.41%	5.265%
12	12.276	12.244	12.454	VV	235107	2963371	79.42%	4.677%
13	12.569	12.524	12.784	PB	224948	2983753	79.96%	4.709%
14	14.439	14.368	14.459	BV	211809	2466941	66.11%	3.893%
15	14.480	14.459	14.798	VB	188268	3029341	81.19%	4.781%
16	15.985	15.931	16.001	BV	230946	2686532	72.00%	4.240%
17	16.016	16.001	16.244	VB	199415	2909035	77.96%	4.591%
18	16.365	16.274	16.648	BB	161258	2647697	70.96%	4.178%
19	17.730	17.701	17.751	BV	131608	1893700	50.75%	2.988%
20	17.772	17.751	17.948	VV	103253	2839636	76.10%	4.481%
21	17.977	17.948	18.184	VV	145016	2741184	73.46%	4.326%
Sum of corrected areas:						63366518		

Aromatic EPH 121024.M Sat Dec 21 04:57:56 2024

Continuing Calibration Report for SequenceID : FD122024AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
-----------	-----------	-------	--------	--------	-----------------	-------	------

File ID : FD048909.D

Aromatic C10-C12	7122880.000	40.000	4.083	5.800	178072.000	190209.437	6.381
Aromatic C12-C16	10357272.000	60.000	5.801	8.405	172621.200	185883.358	7.135
Aromatic C16-C21	11644106.000	80.000	8.406	12.669	145551.325	169519.943	14.139
Aromatic C21-C36	23719010.000	180.000	12.670	18.077	131772.278	141588.666	6.933
Aromatic EPH	52843268.000	360.000	4.083	18.077	146786.856	160580.373	8.590

Lab Sample ID:	20 PPM AROMATIC HC	Acq On:	20 Dec 2024 18:17
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048909.D	Misc:	
Instrument:	FID_D	ALS Vial:	52
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.083	5.800	7122880.000	40.000	ug/ml
Aromatic C12-C16	5.801	8.405	10357272.000	60.000	ug/ml
Aromatic C16-C21	8.406	12.669	11644106.000	80.000	ug/ml
Aromatic C21-C36	12.670	18.077	23719010.000	180.000	ug/ml
Aromatic EPH	4.083	18.077	52843268.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048909.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 18:17
 Operator : YP/AJ
 Sample : 20 PPM AROMATIC HC STD
 Misc :
 ALS Vial : 52 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 20 PPM AROMATIC HC STD

Integration File: autoint1.e
 Quant Time: Dec 21 04:06:55 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 06:07:50 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.360	3065566	18.200 ug/ml
Spiked Amount 50.000		Recovery =	36.40%
6) S 2-Fluorobiphenyl (SURR)	8.212	1815977	17.578 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	35.16%
11) S ortho-Terphenyl (SURR)	11.243	3214761	18.095 ug/ml
Spiked Amount 50.000		Recovery =	36.19%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.183	3487184	18.418 ug/ml
2) T Naphthalene (C11.7)	5.700	3635696	19.027 ug/ml
3) T 2-Methylnaphthalene (...)	6.747	3507899	18.984 ug/ml
5) T Acenaphthylene (C15.06)	8.012	3355970	17.982 ug/ml
7) T Acenaphthene (C15.5)	8.305	3493403	18.758 ug/ml
8) T Flouorene (C16.55)	9.085	3218899	18.014 ug/ml
9) T Phenanthrene (C19.36)	10.472	2977896	17.829 ug/ml
10) T Anthracene (C19.43)	10.550	2635414	15.528 ug/ml
12) T Fluoranthene (C21.85)	12.277	2851692	17.422 ug/ml
13) T Pyrene (C20.8)	12.570	2811897	17.289 ug/ml
14) T Benzo[a]anthracene (C...	14.439	2397528	18.148 ug/ml
15) T Chrysene (C27.41)	14.481	3020362	18.709 ug/ml
16) T benzo[b]fluoranthene ...	15.986	2628350	19.523 ug/ml
17) T Bnezo[k]fluoranthene ...	16.017	2689692	17.658 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.366	2658377	19.220 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.731	1892608	17.759 ug/ml
20) T Dibenz[a,h]anthracene...	17.772	2917357	20.116 ug/ml
21) T Benzo[g,h,i]perylene ...	17.979	2663044	18.994 ug/ml

(f)=RT Delta > 1/2 Window

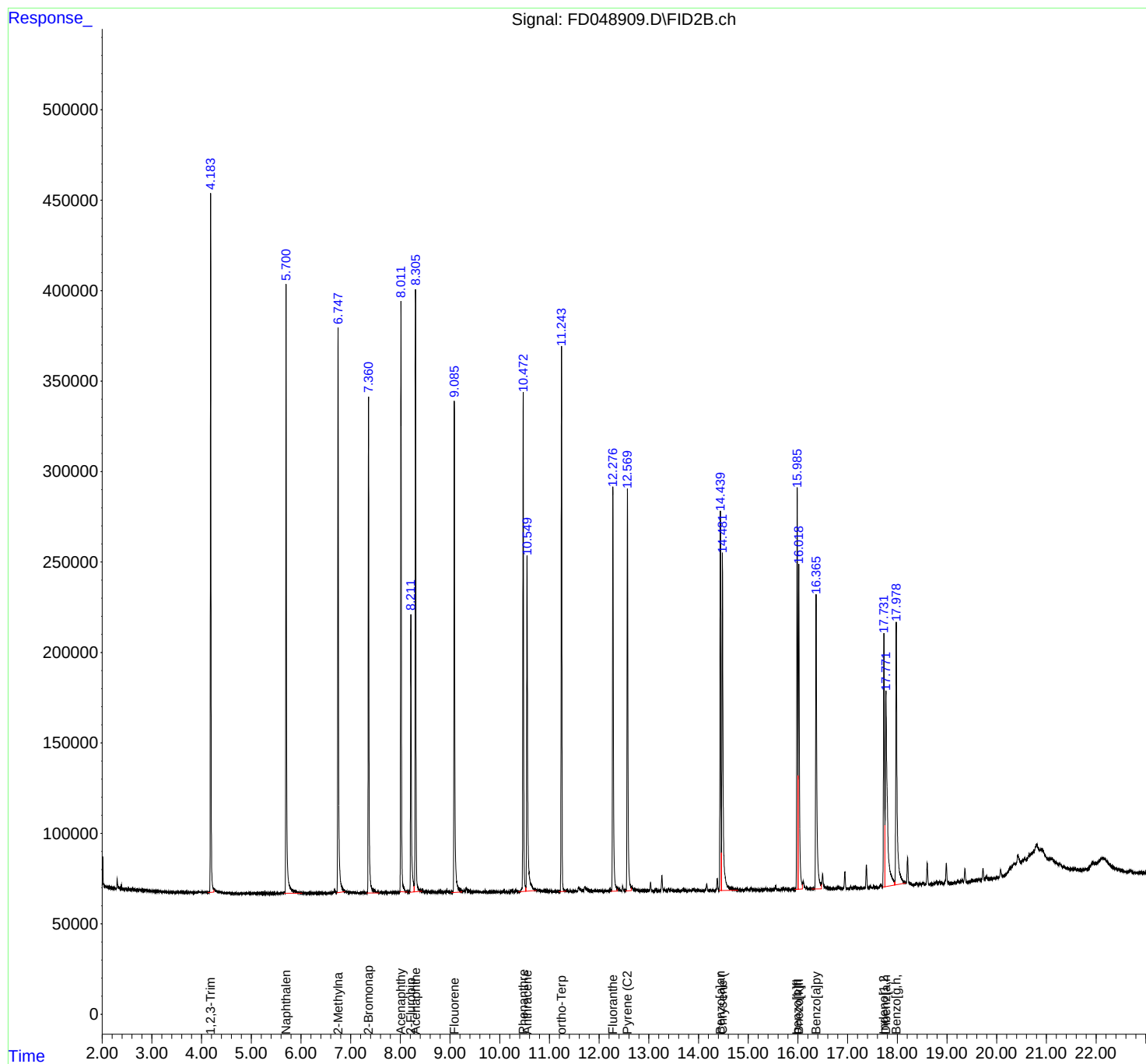
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048909.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 18:17
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Dec 21 04:06:55 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 06:07:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm



rteres

Area Percent

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048909.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 18:17
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH
121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.183	4.121	4.248	BV	382592	3487184	95.92%	5.722%
2	5.700	5.661	6.024	BV	330718	3635696	100.00%	5.966%
3	6.747	6.717	6.881	PV	310497	3507899	96.48%	5.756%
4	7.360	7.321	7.573	VV	272703	3065566	84.32%	5.031%
5	8.012	7.991	8.148	BV	324194	3355970	92.31%	5.507%
6	8.212	8.181	8.278	PV	152941	1815977	49.95%	2.980%
7	8.305	8.278	8.434	VV	330292	3493403	96.09%	5.733%
8	9.085	9.034	9.234	BV	270611	3218899	88.54%	5.282%
9	10.472	10.378	10.523	BV	273441	2977896	81.91%	4.887%
10	10.550	10.523	10.741	VV	184579	2635414	72.49%	4.325%
11	11.243	11.194	11.341	BV	300770	3214761	88.42%	5.275%
12	12.277	12.244	12.365	VV	221747	2851692	78.44%	4.680%
13	12.570	12.528	12.648	PV	221073	2811897	77.34%	4.614%
14	14.439	14.411	14.460	VV	205914	2397528	65.94%	3.934%
15	14.481	14.460	14.798	VB	186174	3020362	83.08%	4.956%
16	15.986	15.931	16.002	BV	220645	2628350	72.29%	4.313%
17	16.017	16.002	16.088	VV	179150	2689692	73.98%	4.414%
18	16.366	16.274	16.474	BV	160794	2658377	73.12%	4.362%
19	17.731	17.701	17.752	BV	139063	1892608	52.06%	3.106%
20	17.772	17.752	17.948	VV	107502	2917357	80.24%	4.787%
21	17.979	17.948	18.174	VV	144901	2663044	73.25%	4.370%
Sum of corrected areas:						60939572		

Aromatic EPH 121024.M Sat Dec 21 05:11:22 2024



QC SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB165775BL	SDG No.:	P5299
Lab Sample ID:	PB165775BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
12/19/24 14:05	12/20/24 10:34	PB165775

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.38	U	1	0.38	1.00	mg/kg	FC068060.D
Aliphatic C12-C16	Aliphatic C12-C16	0.24	U	1	0.24	0.67	mg/kg	FC068060.D
Aliphatic C16-C21	Aliphatic C16-C21	0.30	U	1	0.30	1.00	mg/kg	FC068060.D
Aliphatic C21-C28	Aliphatic C21-C28	0.80	U	1	0.80	1.33	mg/kg	FC068060.D
Aliphatic C28-C40	Aliphatic C28-C40	1.80	U	1	1.80	2.00	mg/kg	FC068060.D
Aromatic C10-C12	Aromatic C10-C12	0.30	U	1	0.30	0.67	mg/kg	FD048898.D
Aromatic C12-C16	Aromatic C12-C16	0.34	U	1	0.34	1.00	mg/kg	FD048898.D
Aromatic C16-C21	Aromatic C16-C21	0.96	U	1	0.96	1.67	mg/kg	FD048898.D
Aromatic C21-C36	Aromatic C21-C36	2.00	U	1	2.00	2.66	mg/kg	FD048898.D
Total AliphaticEPH	Total AliphaticEPH	3.52	U		3.52	5.99	mg/kg	
Total AromaticEPH	Total AromaticEPH	3.60	U		3.60	6.00	mg/kg	
Total EPH	Total EPH	7.12	U		7.12	12.0	mg/kg	

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control 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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB165775BL	SDG No.:	P5299
Lab Sample ID:	PB165775BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068060.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	0.38	U	0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	0.24	U	0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.30	U	0.30	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	0.80	U	0.80	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	1.80	U	1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	42.1		40 - 140	84%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB165775BL	Acq On:	20 Dec 2024 10:34
Client Sample ID:	PB165775BL	Operator:	YP/AJ
Data file:	FC068060.D	Misc:	
Instrument:	FID_C	ALS Vial:	11
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.117	6.389	0	0	300	ug/ml
Aliphatic C12-C16	6.390	9.779	0	0	200	ug/ml
Aliphatic C16-C21	9.780	13.137	0	0	300	ug/ml
Aliphatic C21-C28	13.138	16.791	0	0	400	ug/ml
Aliphatic C28-C40	16.792	21.609	0	0	600	ug/ml
Aliphatic EPH	3.117	21.609	0	0		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.870	12.870	5367336	42.07		ug/ml
Aliphatic C9-C28	3.117	16.791	0	0	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068060.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 10:34
Operator : YP/AJ
Sample : PB165775BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB165775BL

Integration File: autoint1.e
Quant Time: Dec 21 01:50:12 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
12) S 1-chlorooctadecane (S...	12.870	5367336	42.066 ug/ml
Spiked Amount 50.000		Recovery =	84.13%

Target Compounds

(f)=RT Delta > 1/2 Window

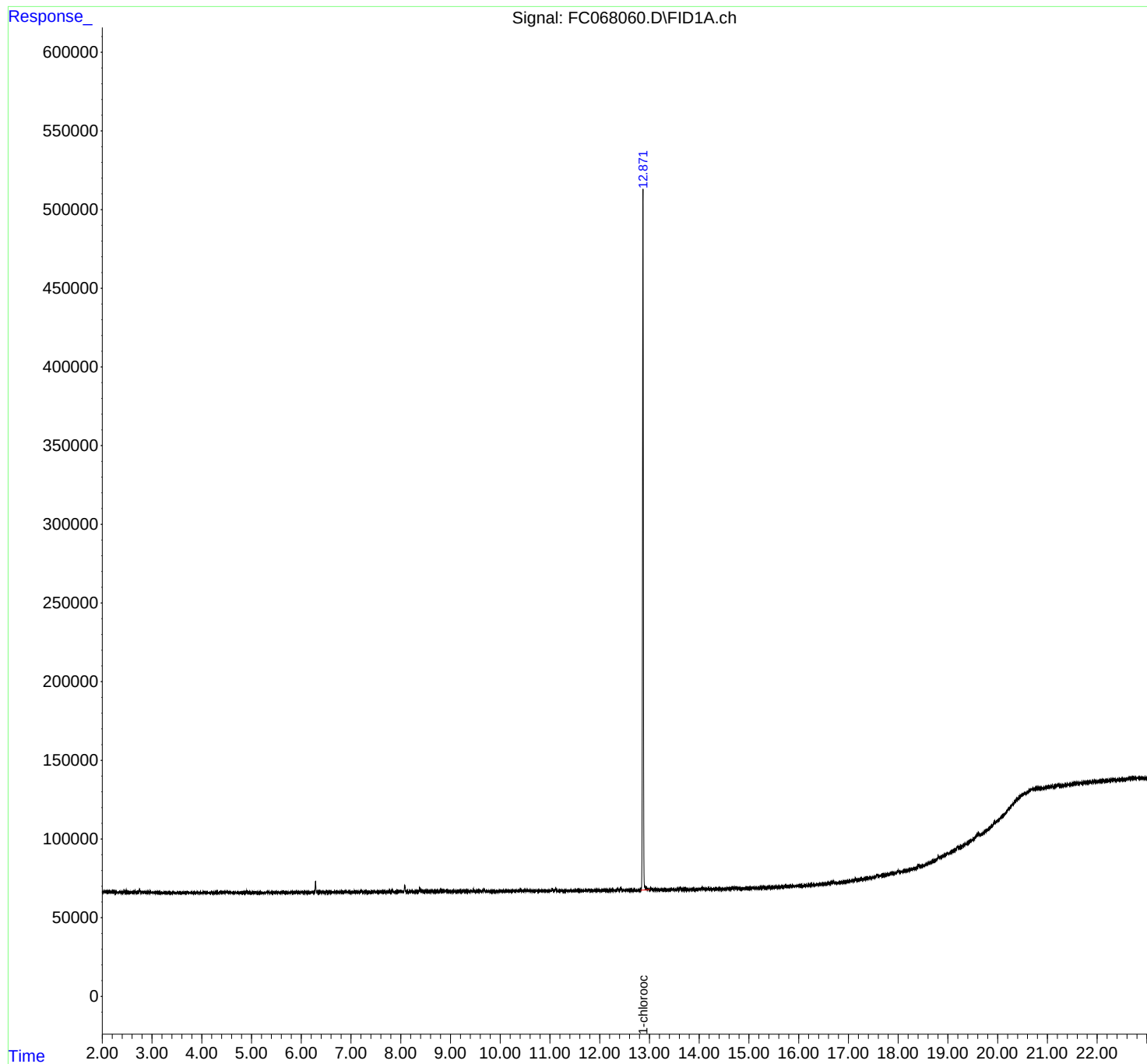
(m)=manual int.

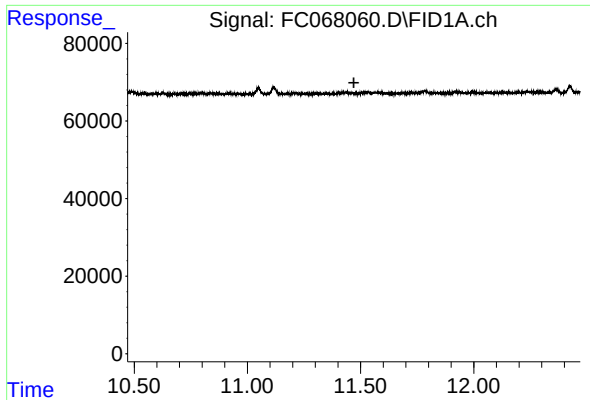
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068060.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 10:34
Operator : YP/AJ
Sample : PB165775BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB165775BL

Integration File: autoint1.e
Quant Time: Dec 21 01:50:12 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 uL
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

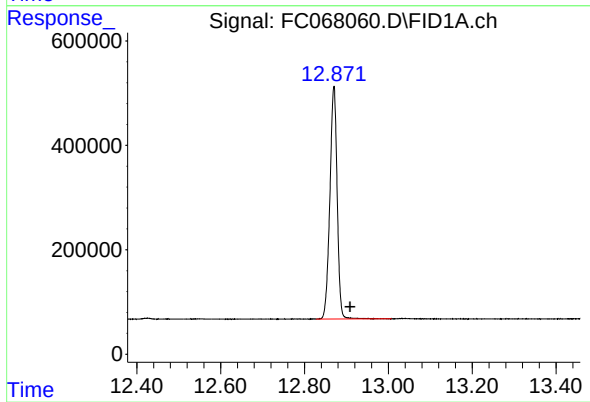




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T.: 11.470 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
PB165775BL



#12 1-chlorooctadecane (SURR)

R.T.: 12.870 min
Delta R.T.: -0.039 min
Response: 5367336
Conc: 42.07 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068060.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 10:34
Sample : PB165775BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	12.870	12.828	13.008	BV	448331	5367336	100.00%	100.000%
Sum of corrected areas:						5367336		

Aliphatic EPH 121024.M Sat Dec 21 02:26:20 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB165775BL	SDG No.:	P5299
Lab Sample ID:	PB165775BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.03 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048898.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.30	U	0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.34	U	0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	0.96	U	0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.00	U	2.00	2.66	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	53.1		40 - 140	106%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	55.4		40 - 140	111%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	47.6		40 - 140	95%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB165775BL	Acq On:	20 Dec 2024 10:34
Client Sample ID:	PB165775BL	Operator:	YP/AJ
Data file:	FD048898.D	Misc:	
Instrument:	FID_D	ALS Vial:	61
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.083	5.800	0	0	200	ug/ml
Aromatic C12-C16	5.801	8.405	0	0	300	ug/ml
Aromatic C16-C21	8.406	12.669	0	0	500	ug/ml
Aromatic C21-C36	12.670	18.077	0	0	800	ug/ml
Aromatic EPH	4.083	18.077	0	0		ug/ml
ortho-Terphenyl (SURR)	11.245	11.245	8452422	47.58		ug/ml
2-Bromonaphthalene (SURR)	7.358	7.358	8936524	53.06		ug/ml
2-Fluorobiphenyl (SURR)	8.207	8.207	5726704	55.43		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048898.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 10:34
 Operator : YP/AJ
 Sample : PB165775BL
 Misc :
 ALS Vial : 61 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 PB165775BL

Integration File: autoint1.e
 Quant Time: Dec 21 04:02:45 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 06:07:50 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.358	8936524	53.056 ug/ml
Spiked Amount 50.000		Recovery =	106.11%
6) S 2-Fluorobiphenyl (SURR)	8.207	5726704	55.433 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	110.87%
11) S ortho-Terphenyl (SURR)	11.245	8452422	47.576 ug/ml
Spiked Amount 50.000		Recovery =	95.15%

Target Compounds

(f)=RT Delta > 1/2 Window

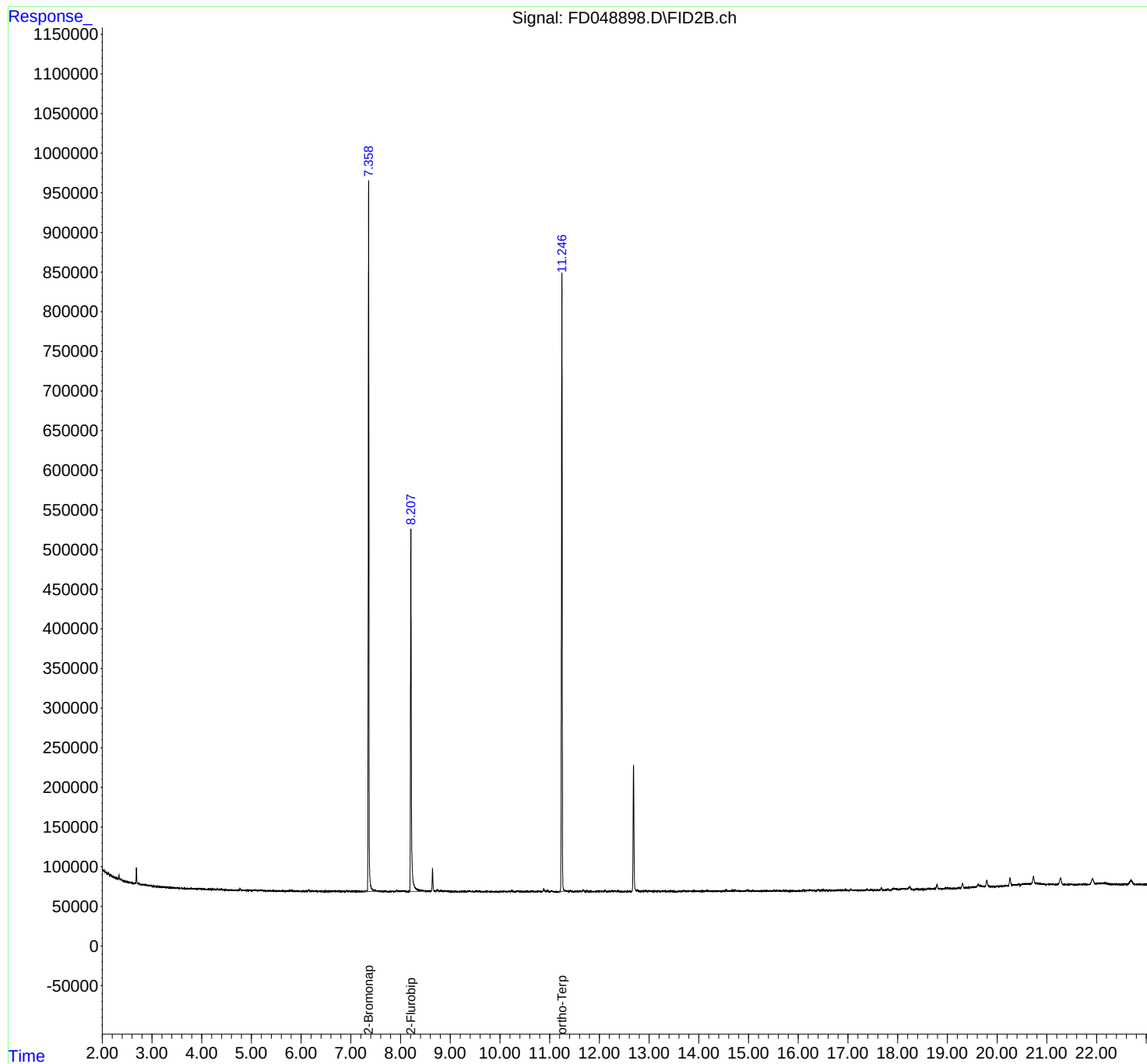
(m)=manual int.

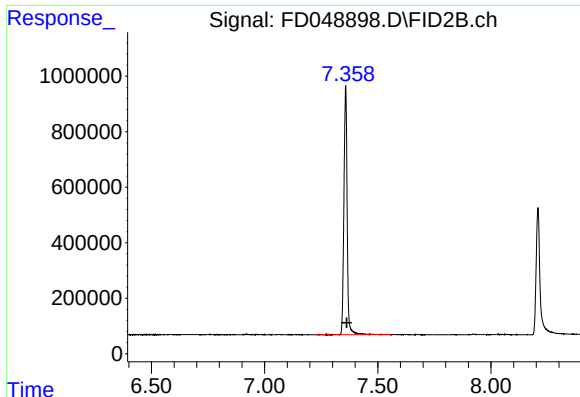
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048898.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 10:34
Operator : YP/AJ
Sample : PB165775BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB165775BL

Integration File: autoint1.e
Quant Time: Dec 21 04:02:45 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 06:07:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

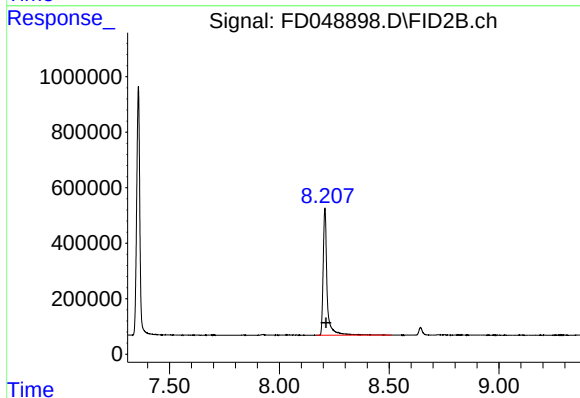




#4 2-Bromonaphthalene (SURRE)

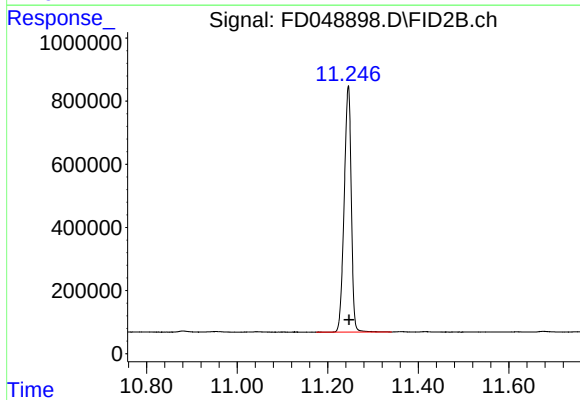
R.T.: 7.358 min
Delta R.T.: -0.005 min
Response: 8936524
Conc: 53.06 ug/ml

Instrument :
FID_D
ClientSampleId :
PB165775BL



#6 2-Fluorobiphenyl (SURRE)

R.T.: 8.207 min
Delta R.T.: -0.006 min
Response: 5726704
Conc: 55.43 ug/ml



#11 ortho-Terphenyl (SURRE)

R.T.: 11.245 min
Delta R.T.: -0.002 min
Response: 8452422
Conc: 47.58 ug/ml

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048898.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 10:34
Sample : PB165775BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH
121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	7.358	7.228	7.561	BV	893339	8936524	100.00%	38.660%
2	8.207	8.168	8.511	PV	458446	5726704	64.08%	24.774%
3	11.245	11.175	11.341	BV	775222	8452422	94.58%	36.566%
Sum of corrected areas:						23115650		

Aromatic EPH 121024.M Sat Dec 21 04:58:47 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB165775BS	SDG No.:	P5299
Lab Sample ID:	PB165775BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
12/19/24 14:05	12/20/24 11:10	PB165775

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12	5.50		1	0.38	1.00	mg/kg FC068061.D
Aliphatic C12-C16	Aliphatic C12-C16	5.33		1	0.24	0.67	mg/kg FC068061.D
Aliphatic C16-C21	Aliphatic C16-C21	8.99		1	0.30	1.00	mg/kg FC068061.D
Aliphatic C21-C28	Aliphatic C21-C28	12.4		1	0.80	1.33	mg/kg FC068061.D
Aliphatic C28-C40	Aliphatic C28-C40	22.4		1	1.80	2.00	mg/kg FC068061.D
Aromatic C10-C12	Aromatic C10-C12	4.61		1	0.30	0.67	mg/kg FD048899.D
Aromatic C12-C16	Aromatic C12-C16	8.67		1	0.34	1.00	mg/kg FD048899.D
Aromatic C16-C21	Aromatic C16-C21	17.8		1	0.96	1.67	mg/kg FD048899.D
Aromatic C21-C36	Aromatic C21-C36	29.1		1	2.00	2.67	mg/kg FD048899.D
Total AliphaticEPH	Total AliphaticEPH	54.6			3.52	6.00	mg/kg
Total AromaticEPH	Total AromaticEPH	60.2			3.60	6.01	mg/kg
Total EPH	Total EPH	115			7.12	12.0	mg/kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control 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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB165775BS	SDG No.:	P5299
Lab Sample ID:	PB165775BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068061.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.50		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	5.33		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	8.99		0.30	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	12.4		0.80	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	22.4		1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	50.0		40 - 140	100%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB165775BS	Acq On:	20 Dec 2024 11:10
Client Sample ID:	PB165775BS	Operator:	YP/AJ
Data file:	FC068061.D	Misc:	
Instrument:	FID_C	ALS Vial:	12
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.117	6.389	13054415	82.465	300	ug/ml
Aliphatic C12-C16	6.390	9.779	12817154	79.97	200	ug/ml
Aliphatic C16-C21	9.780	13.137	20559850	134.94	300	ug/ml
Aliphatic C21-C28	13.138	16.791	25414808	186.347	400	ug/ml
Aliphatic C28-C40	16.792	21.609	35644993	336.386	600	ug/ml
Aliphatic EPH	3.117	21.609	107491220	820.108		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.870	12.870	6377412	49.98		ug/ml
Aliphatic C9-C28	3.117	16.791	71846227	483.722	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
 Data File : FC068061.D
 Signal(s) : FID1A.ch
 Acq On : 20 Dec 2024 11:10
 Operator : YP/AJ
 Sample : PB165775BS
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 PB165775BS

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/23/2024
 Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
 Quant Time: Dec 21 01:50:32 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:59:10 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
12) S 1-chlorooctadecane (S...	12.870	6377412	49.982 ug/ml
Spiked Amount 50.000		Recovery =	99.96%
Target Compounds			
1) T n-Nonane (C9)	3.217	3263109	21.003 ug/ml
2) T n-Decane (C10)	4.276	4320689	27.255 ug/ml
4) T n-Dodecane (C12)	6.290	5476287	34.011 ug/ml
6) T n-Tetradecane (C14)	8.083	6225826	39.157 ug/ml
7) T n-Hexadecane (C16)	9.680	6591328	40.800 ug/ml
8) T n-Octadecane (C18)	11.120	6815635	42.454 ug/ml
10) T n-Eicosane (C20)	12.428	7020867	46.672 ug/ml
11) T n-Heneicosane (C21)	13.039	6723348	46.014 ug/ml
13) T n-Docosane (C22)	13.624	6644880	46.420 ug/ml
14) T n-Tetracosane (C24)	14.726	6433915	46.304 ug/ml
15) T n-Hexacosane (C26)	15.745	6244097	46.691 ug/ml
16) T n-Octacosane (C28)	16.693	6091916	46.965 ug/ml
17) T n-Tricontane (C30)	17.581	6090176	47.013 ug/ml
18) T n-Dotriacontane (C32)	18.411	5983539	48.299 ug/ml
19) T n-Tetratriacontane (C34)	19.194	5964683	54.648 ug/ml
20) T n-Hexatriacontane (C36)	19.932	5799620	61.301 ug/ml
21) T n-Octatriacontane (C38)	20.649	5884573	65.050 ug/ml
22) T n-Tetracontane (C40)	21.513	5922402	67.194 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068061.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 11:10
Operator : YP/AJ
Sample : PB165775BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

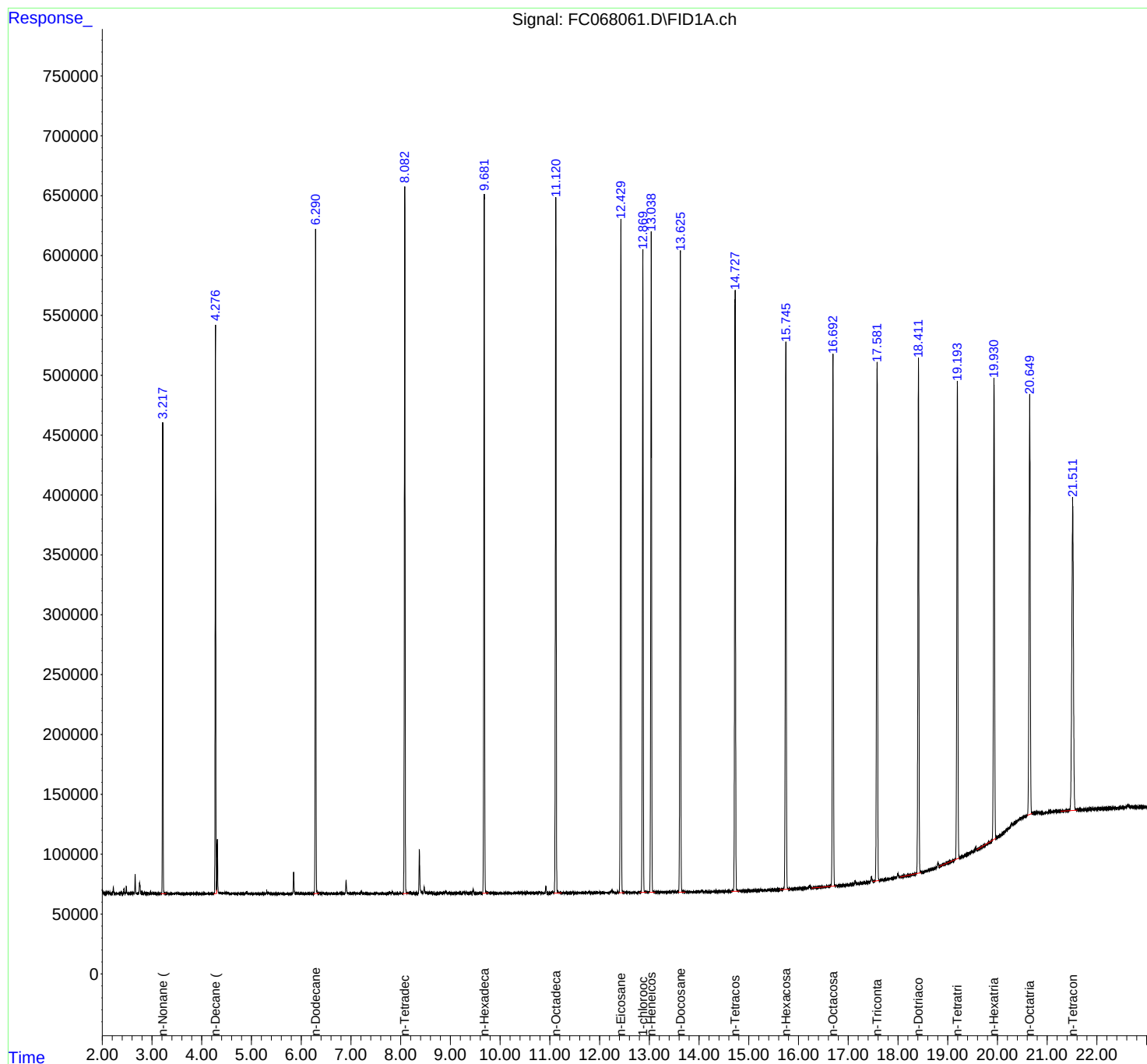
Instrument :
FID_C
ClientSampleId :
PB165775BS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
Quant Time: Dec 21 01:50:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um



rteres

Instrument :

FID_C

ClientSampleId :

PB165775BS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC12202
Data File : FC068061.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 11:10
Sample : PB165775BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.217	3.181	3.284	BB	393459	3263109	46.48%	2.866%
2	4.276	4.164	4.299	BV	477553	4315019	61.46%	3.789%
3	6.290	6.248	6.358	BV	553941	5476287	78.00%	4.809%
4	8.083	8.044	8.158	BV	582561	6225826	88.68%	5.468%
5	9.680	9.644	9.761	PB	589570	6591328	93.88%	5.789%
6	11.120	11.079	11.234	PB	581320	6815635	97.08%	5.986%
7	12.428	12.387	12.498	PB	561438	7020867	100.00%	6.166%
8	12.870	12.808	12.948	BB	534871	6377412	90.84%	5.601%
9	13.039	12.994	13.114	BB	545696	6723348	95.76%	5.904%
10	13.624	13.588	13.724	VB	538866	6644880	94.64%	5.836%
11	14.726	14.644	14.814	BB	499834	6433915	91.64%	5.650%
12	15.745	15.624	15.824	BB	447204	6244097	88.94%	5.484%
13	16.693	16.256	16.754	PB	437353	6091916	86.77%	5.350%
14	17.581	17.494	17.621	PV	433434	6090176	86.74%	5.348%
15	18.411	18.038	18.464	PV	430082	5983539	85.23%	5.255%
16	19.194	18.831	19.234	PV	400345	5964683	84.96%	5.238%
17	19.932	19.588	19.972	PV	383647	5799620	82.61%	5.093%
18	20.649	20.601	20.698	BV	344391	5884573	83.82%	5.168%
19	21.513	21.271	21.604	BB	254486	5922402	84.35%	5.201%

Sum of corrected areas: 113868630

Aliphatic EPH 121024.M Sat Dec 21 02:28:12 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB165775BS	SDG No.:	P5299
Lab Sample ID:	PB165775BS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048899.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	4.61		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	8.67		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	17.8		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	29.1		2.00	2.67	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	50.1		40 - 140	100%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	49.0		40 - 140	98%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	45.0		40 - 140	90%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB165775BS	Acq On:	20 Dec 2024 11:10
Client Sample ID:	PB165775BS	Operator:	YP/AJ
Data file:	FD048899.D	Misc:	
Instrument:	FID_D	ALS Vial:	62
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.083	5.800	13155513	69.163	200	ug/ml
Aromatic C12-C16	5.801	8.405	24173347	130.046	300	ug/ml
Aromatic C16-C21	8.406	12.669	45164582	266.426	500	ug/ml
Aromatic C21-C36	12.670	18.077	61919189	437.317	800	ug/ml
Aromatic EPH	4.083	18.077	144412631	902.953		ug/ml
ortho-Terphenyl (SURR)	11.247	11.247	7987359	44.96		ug/ml
2-Bromonaphthalene (SURR)	7.361	7.361	8441270	50.12		ug/ml
2-Fluorobiphenyl (SURR)	8.211	8.211	5057775	48.96		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048899.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 11:10
 Operator : YP/AJ
 Sample : PB165775BS
 Misc :
 ALS Vial : 62 Sample Multiplier: 1

Instrument :

FID_D

ClientSampleId :

PB165775BS

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
 Quant Time: Dec 21 04:03:03 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 06:07:50 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.361	8441270	50.116 ug/ml
Spiked Amount 50.000		Recovery =	100.23%
6) S 2-Fluorobiphenyl (SURR)	8.211	5057775	48.958 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	97.92%
11) S ortho-Terphenyl (SURR)	11.247	7987359	44.958 ug/ml
Spiked Amount 50.000		Recovery =	89.92%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.184	5796574	30.615 ug/ml
2) T Naphthalene (C11.7)	5.701	7358939	38.512 ug/ml
3) T 2-Methylnaphthalene (...)	6.747	7362678	39.846 ug/ml
5) T Acenaphthylene (C15.06)	8.013	8037048	43.063 ug/ml
7) T Acenaphthene (C15.5)	8.309	8773621	47.110 ug/ml
8) T Flouorene (C16.55)	9.088	8877905	49.684 ug/ml
9) T Phenanthrene (C19.36)	10.475	8702708	52.104 ug/ml
10) T Anthracene (C19.43)	10.551	8869696	52.260 ug/ml
12) T Fluoranthene (C21.85)	12.281	8660485	52.909 ug/mlm
13) T Pyrene (C20.8)	12.574	9122601	56.090 ug/ml
14) T Benzo[a]anthracene (C...	14.444	7786261	58.938 ug/ml
15) T Chrysene (C27.41)	14.487	7970670	49.372 ug/ml
16) T benzo[b]fluoranthene ...	15.993	7844868	58.271 ug/ml
17) T Bnezo[k]fluoranthene ...	16.027	7920356	51.998 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.368	7875529	56.941 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.737	7465507	70.053 ug/ml
20) T Dibenz[a,h]anthracene...	17.773	7743038	53.390 ug/ml
21) T Benzo[g,h,i]perylene ...	17.990	7312960	52.158 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048899.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 11:10
Operator : YP/AJ
Sample : PB165775BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :

FID_D

ClientSampleId :

PB165775BS

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e

Quant Time: Dec 21 04:03:03 2024

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M

Quant Title : GC Extractables

QLast Update : Tue Dec 10 06:07:50 2024

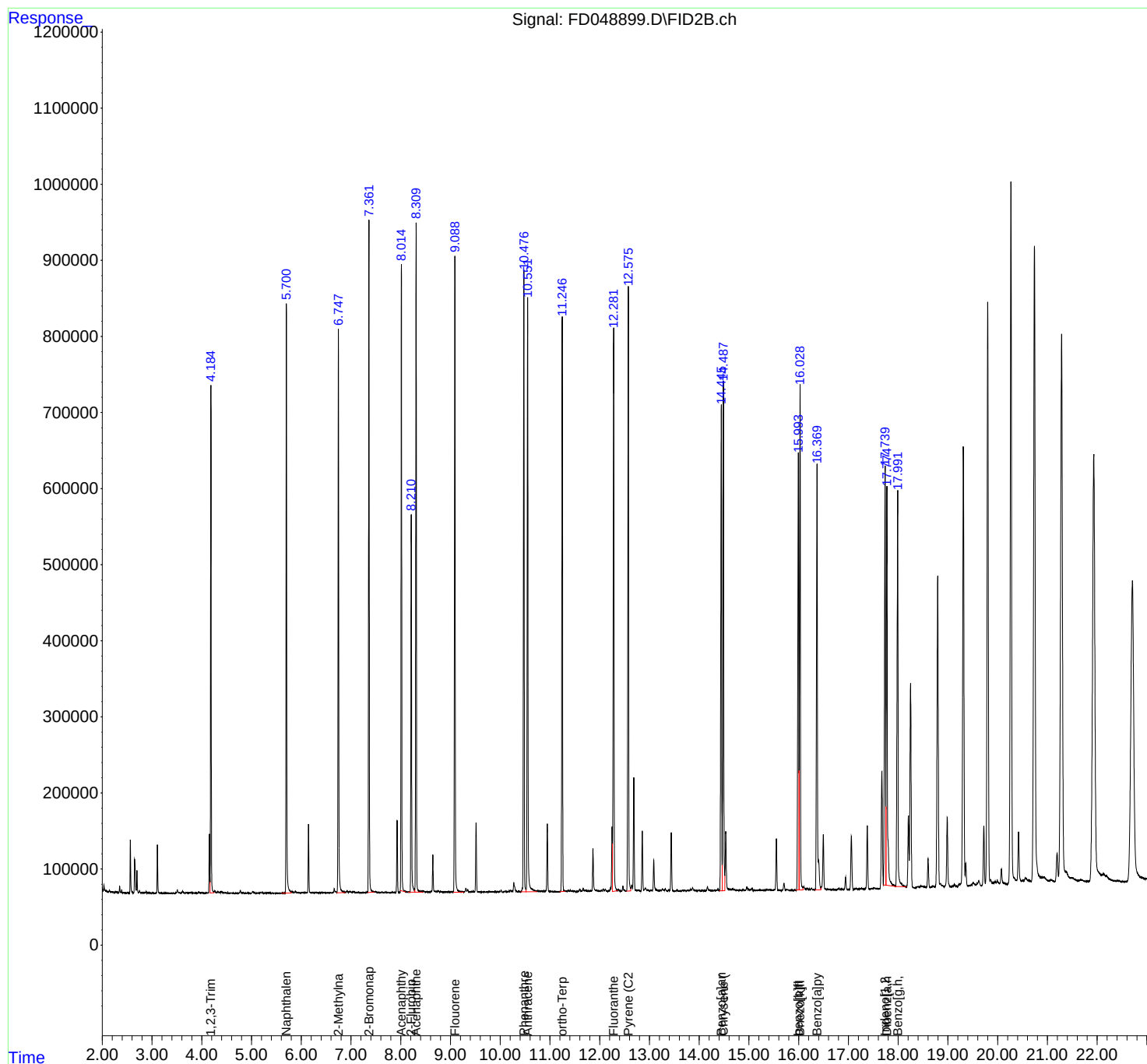
Response via : Initial Calibration

Integrator: ChemStation

Volume Inj. : 1 µl

Signal Phase : Rxi-1ms

Signal Info : 20M x 0.18mm x 0.18µm



Instrument :

FID_D

ClientSampleId :

PB165775BS

rteres

Area Percent

Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data
Data File : FD048899.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 11:10
Sample : PB165775BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH
121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.184	4.168	4.244	VV	669344	5796574	60.43%	3.494%
2	5.701	5.608	5.798	BV	773544	7358939	76.72%	4.436%
3	6.747	6.718	6.883	VV	741865	7362678	76.76%	4.438%
4	7.361	7.334	7.471	PV	883437	8441270	88.01%	5.088%
5	8.013	7.991	8.101	BV	828098	8037048	83.79%	4.845%
6	8.211	8.148	8.281	BV	496428	5057775	52.73%	3.049%
7	8.309	8.281	8.444	VV	869340	8773621	91.47%	5.289%
8	9.088	9.054	9.268	PV	829994	8877905	92.56%	5.351%
9	10.475	10.411	10.519	BV	807046	8702708	90.73%	5.246%
10	10.551	10.519	10.733	VV	777058	8869696	92.47%	5.346%
11	11.247	11.196	11.311	PV	757963	7987359	83.27%	4.815%
12	12.280	12.223	12.356	VV	747930	9591672	100.00%	5.782%
13	12.574	12.538	12.623	PV	783149	9122601	95.11%	5.499%
14	14.444	14.406	14.462	VV	638299	7786261	81.18%	4.693%
15	14.487	14.462	14.514	VV	674903	7970670	83.10%	4.805%
16	15.993	15.931	16.008	BV	574410	7844868	81.79%	4.729%
17	16.027	16.008	16.088	VV	664731	7920356	82.58%	4.774%
18	16.368	16.321	16.446	VV	556676	7875529	82.11%	4.747%
19	17.737	17.701	17.752	BV	548514	7465507	77.83%	4.500%
20	17.773	17.752	17.946	VV	526185	7743038	80.73%	4.667%
21	17.990	17.946	18.168	PV	525190	7312960	76.24%	4.408%
Sum of corrected areas:						165899036		

Aromatic EPH 121024.M Sat Dec 21 05:07:04 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB165775BSD	SDG No.:	P5299
Lab Sample ID:	PB165775BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
12/19/24 14:05	12/20/24 11:46	PB165775

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12	5.42		1	0.38	1.00	mg/kg FC068062.D
Aliphatic C12-C16	Aliphatic C12-C16	5.28		1	0.24	0.67	mg/kg FC068062.D
Aliphatic C16-C21	Aliphatic C16-C21	8.95		1	0.30	1.00	mg/kg FC068062.D
Aliphatic C21-C28	Aliphatic C21-C28	12.4		1	0.80	1.33	mg/kg FC068062.D
Aliphatic C28-C40	Aliphatic C28-C40	22.4		1	1.80	2.00	mg/kg FC068062.D
Aromatic C10-C12	Aromatic C10-C12	4.62		1	0.30	0.67	mg/kg FD048900.D
Aromatic C12-C16	Aromatic C12-C16	8.69		1	0.34	1.00	mg/kg FD048900.D
Aromatic C16-C21	Aromatic C16-C21	17.3		1	0.96	1.67	mg/kg FD048900.D
Aromatic C21-C36	Aromatic C21-C36	29.0		1	2.00	2.67	mg/kg FD048900.D
Total AliphaticEPH	Total AliphaticEPH	54.5			3.52	6.00	mg/kg
Total AromaticEPH	Total AromaticEPH	59.6			3.60	6.01	mg/kg
Total EPH	Total EPH	114			7.12	12.0	mg/kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control 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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB165775BSD	SDG No.:	P5299
Lab Sample ID:	PB165775BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068062.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.42		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	5.28		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	8.95		0.30	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	12.4		0.80	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	22.4		1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	54.7		40 - 140	109%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB165775BSD	Acq On:	20 Dec 2024 11:46
Client Sample ID:	PB165775BSD	Operator:	YP/AJ
Data file:	FC068062.D	Misc:	
Instrument:	FID_C	ALS Vial:	13
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.117	6.389	12876644	81.342	300	ug/ml
Aliphatic C12-C16	6.390	9.779	12708105	79.289	200	ug/ml
Aliphatic C16-C21	9.780	13.137	20452390	134.235	300	ug/ml
Aliphatic C21-C28	13.138	16.791	25340505	185.802	400	ug/ml
Aliphatic C28-C40	16.792	21.609	35595769	335.921	600	ug/ml
Aliphatic EPH	3.117	21.609	106973413	816.59		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.870	12.870	6982791	54.73		ug/ml
Aliphatic C9-C28	3.117	16.791	71377644	480.668	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
 Data File : FC068062.D
 Signal(s) : FID1A.ch
 Acq On : 20 Dec 2024 11:46
 Operator : YP/AJ
 Sample : PB165775BSD
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 PB165775BSD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/23/2024
 Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
 Quant Time: Dec 21 01:51:03 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:59:10 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
12) S 1-chlorooctadecane (S...	12.870	6982791	54.727 ug/ml
Spiked Amount 50.000		Recovery =	109.45%
Target Compounds			
1) T n-Nonane (C9)	3.217	3207919	20.647 ug/ml
2) T n-Decane (C10)	4.277	4240784	26.751 ug/ml
4) T n-Dodecane (C12)	6.290	5415981	33.637 ug/ml
6) T n-Tetradecane (C14)	8.082	6158582	38.734 ug/ml
7) T n-Hexadecane (C16)	9.680	6549523	40.541 ug/ml
8) T n-Octadecane (C18)	11.120	6768347	42.159 ug/ml
10) T n-Eicosane (C20)	12.428	6983821	46.426 ug/ml
11) T n-Heneicosane (C21)	13.039	6700222	45.855 ug/ml
13) T n-Docosane (C22)	13.624	6618144	46.234 ug/ml
14) T n-Tetracosane (C24)	14.725	6418378	46.193 ug/ml
15) T n-Hexacosane (C26)	15.745	6238703	46.651 ug/ml
16) T n-Octacosane (C28)	16.694	6065280	46.760 ug/ml
17) T n-Tricontane (C30)	17.581	6063740	46.809 ug/ml
18) T n-Dotriacontane (C32)	18.412	5968914	48.181 ug/ml
19) T n-Tetratriacontane (C34)	19.195	5939577	54.418 ug/ml
20) T n-Hexatriacontane (C36)	19.934	5812965	61.442 ug/ml
21) T n-Octatriacontane (C38)	20.650	5863802	64.820 ug/ml
22) T n-Tetracontane (C40)	21.514	5946771	67.470 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068062.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 11:46
Operator : YP/AJ
Sample : PB165775BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

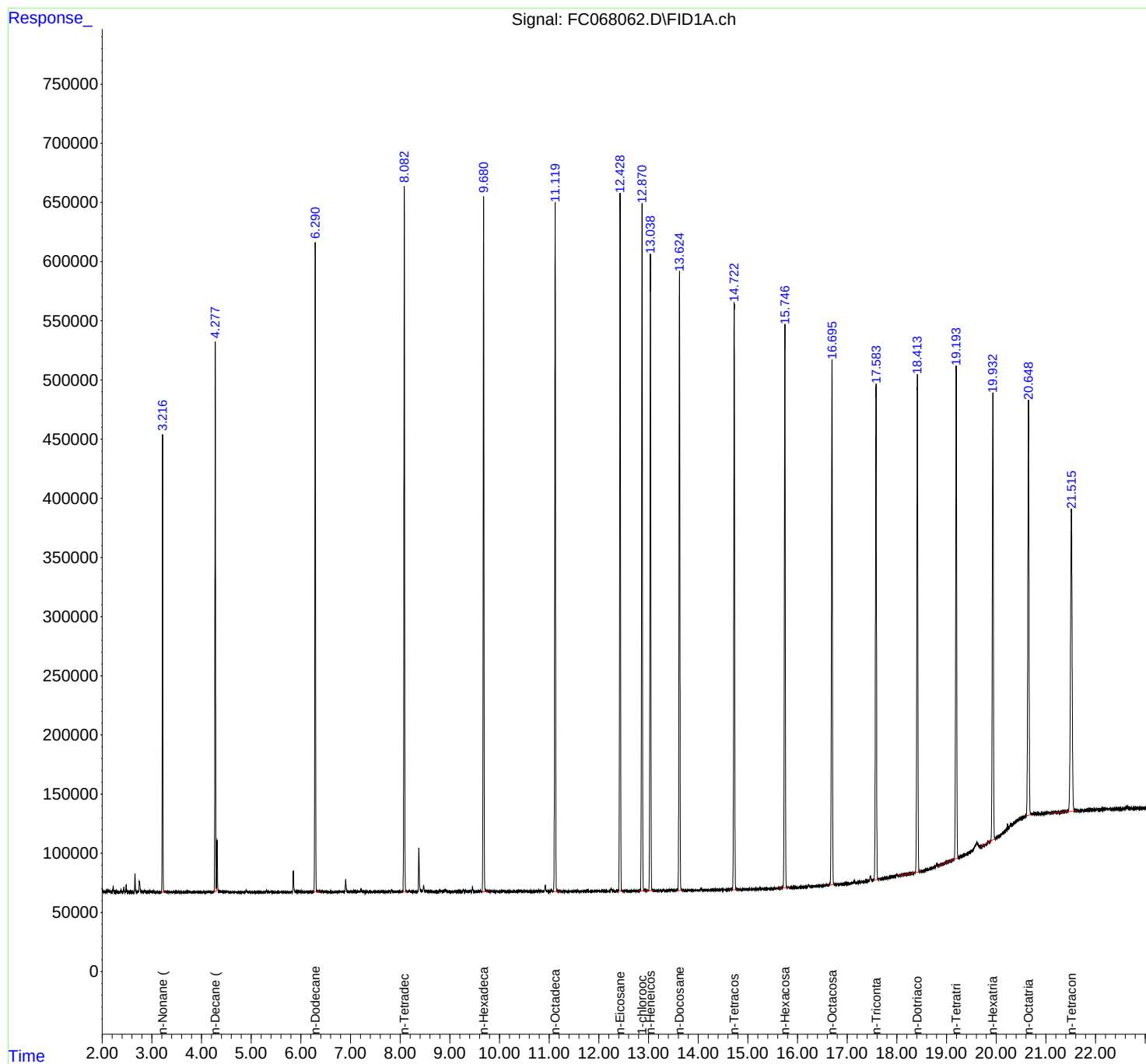
Instrument :
FID_C
ClientSampleId :
PB165775BSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
Quant Time: Dec 21 01:51:03 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um



rteres

Instrument :

FID_C

ClientSampleId :

PB165775BSD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC12202
Data File : FC068062.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 11:46
Sample : PB165775BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.217	3.185	3.288	BB	384354	3207919	45.93%	2.815%
2	4.277	4.238	4.299	BV	467460	4252744	60.89%	3.732%
3	6.290	6.248	6.388	BV	553145	5415981	77.55%	4.753%
4	8.082	8.045	8.151	BV	589328	6158582	88.18%	5.404%
5	9.680	9.645	9.785	BB	589866	6549523	93.78%	5.747%
6	11.120	11.078	11.238	PB	579032	6768347	96.91%	5.939%
7	12.428	12.385	12.498	VB	586313	6983821	100.00%	6.129%
8	12.870	12.795	12.958	BB	582280	6982791	99.99%	6.128%
9	13.039	12.961	13.121	BB	534743	6700222	95.94%	5.880%
10	13.624	13.585	13.701	VB	519298	6618144	94.76%	5.808%
11	14.725	14.651	14.798	BB	495522	6418378	91.90%	5.632%
12	15.745	15.631	15.835	BB	464373	6238703	89.33%	5.475%
13	16.694	16.615	16.749	BV	442809	6065280	86.85%	5.322%
14	17.581	17.508	17.638	PB	414227	6063740	86.83%	5.321%
15	18.412	18.028	18.471	PV	414849	5968914	85.47%	5.238%
16	19.195	18.835	19.241	PV	417174	5939577	85.05%	5.212%
17	19.934	19.681	19.974	PV	377463	5812965	83.23%	5.101%
18	20.650	20.601	20.715	BB	346890	5863802	83.96%	5.146%
19	21.514	21.095	21.618	BV	255537	5946771	85.15%	5.218%

Sum of corrected areas: 113956203

Aliphatic EPH 121024.M Sat Dec 21 02:29:06 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB165775BSD	SDG No.:	P5299
Lab Sample ID:	PB165775BSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048900.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	4.62		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	8.69		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	17.3		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	29.0		2.00	2.67	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	50.2		40 - 140	100%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	49.0		40 - 140	98%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	44.6		40 - 140	89%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB165775BSD	Acq On:	20 Dec 2024 11:46
Client Sample ID:	PB165775BSD	Operator:	YP/AJ
Data file:	FD048900.D	Misc:	
Instrument:	FID_D	ALS Vial:	63
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.083	5.800	13180743	69.296	200	ug/ml
Aromatic C12-C16	5.801	8.405	24237417	130.39	300	ug/ml
Aromatic C16-C21	8.406	12.669	43938977	259.197	500	ug/ml
Aromatic C21-C36	12.670	18.077	61594432	435.024	800	ug/ml
Aromatic EPH	4.083	18.077	142951569	893.907		ug/ml
ortho-Terphenyl (SURR)	11.247	11.247	7922276	44.59		ug/ml
2-Bromonaphthalene (SURR)	7.361	7.361	8454965	50.2		ug/ml
2-Fluorobiphenyl (SURR)	8.211	8.211	5060351	48.98		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048900.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 11:46
 Operator : YP/AJ
 Sample : PB165775BSD
 Misc :
 ALS Vial : 63 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 PB165775BSD

Integration File: autoint1.e
 Quant Time: Dec 21 04:03:30 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 06:07:50 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.361	8454965	50.197 ug/ml
Spiked Amount 50.000		Recovery =	100.39%
6) S 2-Fluorobiphenyl (SURR)	8.211	5060351	48.983 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	97.97%
11) S ortho-Terphenyl (SURR)	11.247	7922276	44.592 ug/ml
Spiked Amount 50.000		Recovery =	89.18%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.184	5801081	30.639 ug/ml
2) T Naphthalene (C11.7)	5.701	7379662	38.620 ug/ml
3) T 2-Methylnaphthalene (...)	6.748	7387304	39.979 ug/ml
5) T Acenaphthylene (C15.06)	8.014	8060997	43.192 ug/ml
7) T Acenaphthene (C15.5)	8.309	8789116	47.193 ug/ml
8) T Flouorene (C16.55)	9.088	8824048	49.382 ug/ml
9) T Phenanthrene (C19.36)	10.476	8669054	51.903 ug/ml
10) T Anthracene (C19.43)	10.552	8754163	51.579 ug/ml
12) T Fluoranthene (C21.85)	12.281	8670068	52.967 ug/ml
13) T Pyrene (C20.8)	12.574	9021644	55.469 ug/ml
14) T Benzo[a]anthracene (C...	14.445	7784726	58.926 ug/ml
15) T Chrysene (C27.41)	14.488	7929200	49.115 ug/ml
16) T benzo[b]fluoranthene ...	15.994	7823973	58.115 ug/ml
17) T Bnezo[k]fluoranthene ...	16.029	7936750	52.106 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.370	7560389	54.663 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.739	7629189	71.589 ug/ml
20) T Dibenz[a,h]anthracene...	17.774	7628370	52.600 ug/ml
21) T Benzo[g,h,i]perylene ...	17.991	7301835	52.079 ug/ml

(f)=RT Delta > 1/2 Window

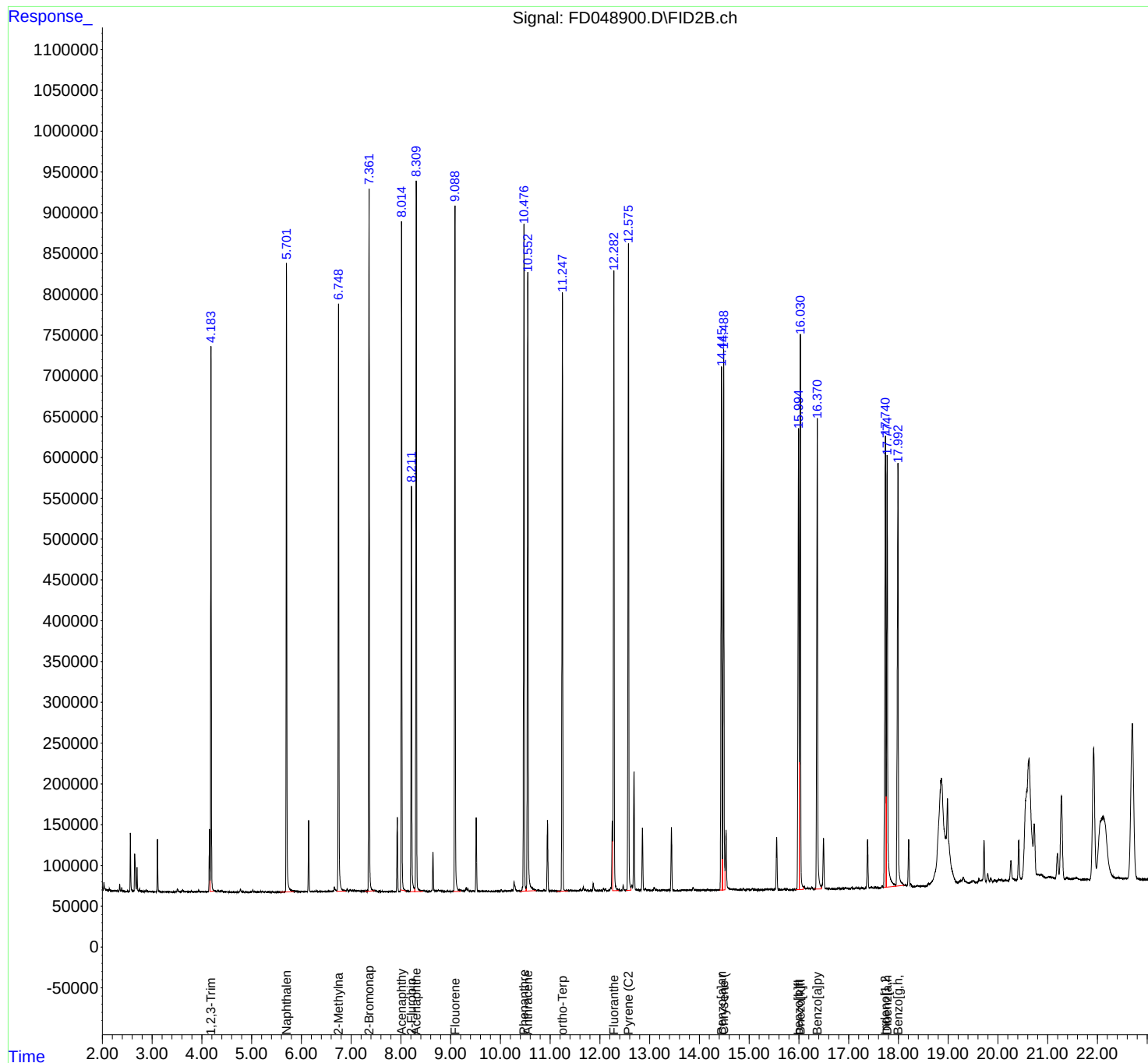
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048900.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 11:46
Operator : YP/AJ
Sample : PB165775BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB165775BSD

Integration File: autoint1.e
Quant Time: Dec 21 04:03:30 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 06:07:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm



rteres

Area Percent

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048900.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 11:46
Sample : PB165775BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH
121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.184	4.166	4.246	VV	664122	5801081	64.30%	3.529%
2	5.701	5.571	5.853	BV	770744	7379662	81.80%	4.489%
3	6.748	6.714	6.886	VV	721254	7387304	81.88%	4.494%
4	7.361	7.281	7.475	PV	860875	8454965	93.72%	5.143%
5	8.014	7.991	8.111	BV	823911	8060997	89.35%	4.904%
6	8.211	8.188	8.281	BV	494139	5060351	56.09%	3.078%
7	8.309	8.281	8.435	VV	861048	8789116	97.42%	5.347%
8	9.088	9.054	9.193	VV	841877	8824048	97.81%	5.368%
9	10.476	10.395	10.520	PV	809547	8669054	96.09%	5.273%
10	10.552	10.520	10.722	VV	756731	8754163	97.04%	5.325%
11	11.247	11.135	11.351	BV	738795	7922276	87.81%	4.819%
12	12.281	12.256	12.370	VV	760574	8670068	96.10%	5.274%
13	12.574	12.528	12.625	PV	794291	9021644	100.00%	5.488%
14	14.445	14.405	14.463	BV	639844	7784726	86.29%	4.736%
15	14.488	14.463	14.516	VV	660873	7929200	87.89%	4.823%
16	15.994	15.931	16.010	BV	566256	7823973	86.72%	4.759%
17	16.029	16.010	16.088	VV	662336	7936750	87.97%	4.828%
18	16.370	16.311	16.454	VV	583800	7560389	83.80%	4.599%
19	17.739	17.701	17.754	BV	544750	7629189	84.57%	4.641%
20	17.774	17.754	17.947	VV	528872	7628370	84.56%	4.640%
21	17.991	17.947	18.124	VV	517191	7301835	80.94%	4.442%
Sum of corrected areas:						164389162		

Aromatic EPH 121024.M Sat Dec 21 05:09:27 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	SB-02MS	SDG No.:	P5299
Lab Sample ID:	P5299-04MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	79.2
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
12/19/24 14:05	12/20/24 16:26	PB165775

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12	6.56		1	0.48	1.26	mg/kg FC068068.D
Aliphatic C12-C16	Aliphatic C12-C16	7.81		1	0.30	0.84	mg/kg FC068068.D
Aliphatic C16-C21	Aliphatic C16-C21	9.22		1	0.38	1.26	mg/kg FC068068.D
Aliphatic C21-C28	Aliphatic C21-C28	12.4		1	1.01	1.68	mg/kg FC068068.D
Aliphatic C28-C40	Aliphatic C28-C40	32.0		1	2.27	2.52	mg/kg FC068068.D
Aromatic C10-C12	Aromatic C10-C12	6.78		1	0.38	0.84	mg/kg FD048906.D
Aromatic C12-C16	Aromatic C12-C16	15.7		1	0.43	1.26	mg/kg FD048906.D
Aromatic C16-C21	Aromatic C16-C21	24.6		1	1.21	2.10	mg/kg FD048906.D
Aromatic C21-C36	Aromatic C21-C36	42.6		1	2.52	3.36	mg/kg FD048906.D
Total AliphaticEPH	Total AliphaticEPH	68.0			4.44	7.56	mg/kg
Total AromaticEPH	Total AromaticEPH	89.7			4.54	7.56	mg/kg
Total EPH	Total EPH	158			8.98	15.1	mg/kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control 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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	SB-02MS	SDG No.:	P5299
Lab Sample ID:	P5299-04MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	79.2
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068068.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	6.56		0.48	1.26	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	7.81		0.30	0.84	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	9.22		0.38	1.26	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	12.4		1.01	1.68	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	32.0		2.27	2.52	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	41.3		40 - 140	83%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5299-04MS	Acq On:	20 Dec 2024 16:26
Client Sample ID:	SB-02MS	Operator:	YP/AJ
Data file:	FC068068.D	Misc:	
Instrument:	FID_C	ALS Vial:	19
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.117	6.389	12344745	77.982	300	ug/ml
Aliphatic C12-C16	6.390	9.779	14883432	92.862	200	ug/ml
Aliphatic C16-C21	9.780	13.137	16693928	109.567	300	ug/ml
Aliphatic C21-C28	13.138	16.791	20027798	146.848	400	ug/ml
Aliphatic C28-C40	16.792	21.609	40325392	380.555	600	ug/ml
Aliphatic EPH	3.117	21.609	104275295	807.814		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.887	12.887	5270189	41.3		ug/ml
Aliphatic C9-C28	3.117	16.791	63949903	427.259	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
 Data File : FC068068.D
 Signal(s) : FID1A.ch
 Acq On : 20 Dec 2024 16:26
 Operator : YP/AJ
 Sample : P5299-04MS
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 SB-02MS

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/23/2024
 Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
 Quant Time: Dec 21 01:53:32 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:59:10 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
12) S 1-chlorooctadecane (S...	12.887	5270189	41.304 ug/ml
Spiked Amount 50.000		Recovery =	82.61%
Target Compounds			
1) T n-Nonane (C9)	3.244	3124534	20.111 ug/ml
2) T n-Decane (C10)	4.303	3783067	23.864 ug/ml
4) T n-Dodecane (C12)	6.313	4383048	27.221 ug/ml
6) T n-Tetradecane (C14)	8.104	5146476	32.368 ug/ml
7) T n-Hexadecane (C16)	9.700	5295861	32.781 ug/ml
8) T n-Octadecane (C18)	11.139	5479253	34.130 ug/ml
10) T n-Eicosane (C20)	12.445	5526034	36.735 ug/ml
11) T n-Heneicosane (C21)	13.056	5229709	35.791 ug/ml
13) T n-Docosane (C22)	13.641	5147967	35.963 ug/ml
14) T n-Tetracosane (C24)	14.741	4987405	35.894 ug/ml
15) T n-Hexacosane (C26)	15.760	4823076	36.066 ug/ml
16) T n-Octacosane (C28)	16.709	4703302	36.260 ug/ml
17) T n-Tricontane (C30)	17.593	4718531	36.424 ug/ml
18) T n-Dotriacontane (C32)	18.424	4645251	37.496 ug/ml
19) T n-Tetratriacontane (C34)	19.206	4507922	41.301 ug/ml
20) T n-Hexatriacontane (C36)	19.943	4435369	46.881 ug/mlm
21) T n-Octatriacontane (C38)	20.661	4330161	47.867 ug/ml
22) T n-Tetracontane (C40)	21.530	4277434	48.531 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068068.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 16:26
Operator : YP/AJ
Sample : P5299-04MS
Misc :
ALS Vial : 19 Sample Multiplier: 1

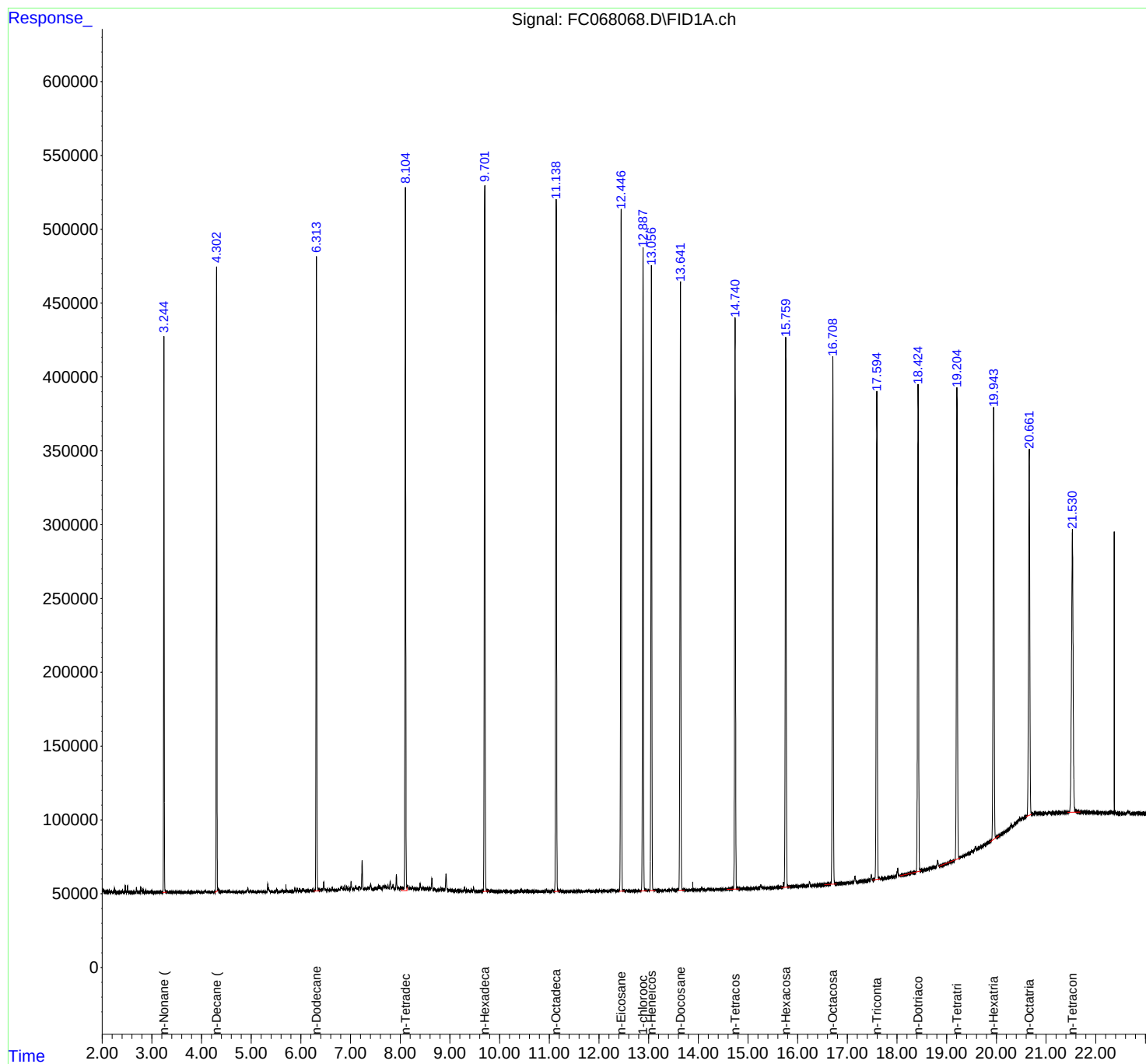
Instrument :
FID_C
ClientSampleId :
SB-02MS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
Quant Time: Dec 21 01:53:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um



Instrument :

FID_C

ClientSampleId :

SB-02MS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

rteres

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC12202
Data File : FC068068.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 16:26
Sample : P5299-04MS
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.137	3.104	3.184	BV	111	2405	0.04%	0.002%
2	3.198	3.184	3.214	PV	83	770	0.01%	0.001%
3	3.244	3.214	3.338	PV	376943	3134798	49.88%	2.849%
4	3.346	3.338	3.353	VV	216	1709	0.03%	0.002%
5	3.364	3.353	3.402	VV	313	5371	0.09%	0.005%
6	3.443	3.402	3.464	VV	272	5204	0.08%	0.005%
7	3.504	3.464	3.535	PV	325	7491	0.12%	0.007%
8	3.563	3.535	3.592	VV	285	6544	0.10%	0.006%
9	3.611	3.592	3.691	VV	215	5486	0.09%	0.005%
10	3.701	3.691	3.714	VV	202	1237	0.02%	0.001%
11	3.732	3.714	3.764	VV	431	6358	0.10%	0.006%
12	3.777	3.764	3.796	VV	194	2065	0.03%	0.002%
13	3.816	3.796	3.834	VV	310	4029	0.06%	0.004%
14	3.907	3.834	3.918	VV	581	7776	0.12%	0.007%
15	3.933	3.918	3.957	VV	884	8616	0.14%	0.008%
16	4.000	3.957	4.031	VV	352	6513	0.10%	0.006%
17	4.068	4.031	4.101	VV	986	18581	0.30%	0.017%
18	4.107	4.101	4.131	VV	190	3226	0.05%	0.003%
19	4.140	4.131	4.198	VV	192	4507	0.07%	0.004%
20	4.218	4.198	4.235	VV	237	3904	0.06%	0.004%
21	4.252	4.235	4.271	VV	201	3461	0.06%	0.003%
22	4.303	4.271	4.331	VV	419298	3809037	60.61%	3.462%
23	4.342	4.331	4.391	VV	2492	36463	0.58%	0.033%
24	4.403	4.391	4.431	VV	637	11883	0.19%	0.011%
25	4.468	4.431	4.487	VV	1053	19857	0.32%	0.018%
26	4.498	4.487	4.511	VV	536	5848	0.09%	0.005%
27	4.524	4.511	4.537	VV	771	8406	0.13%	0.008%
28	4.554	4.537	4.570	VV	1765	18442	0.29%	0.017%
29	4.579	4.570	4.595	VV	585	5443	0.09%	0.005%
30	4.628	4.595	4.642	VV	456	7876	0.13%	0.007%
31	4.670	4.642	4.688	VV	366	7340	0.12%	0.007%
32	4.705	4.688	4.731	VV	360	6146	0.10%	0.006%
33	4.767	4.731	4.803	VV	822	14581	0.23%	0.013%
34	4.820	4.803	4.841	VV	258	3742	0.06%	0.003%
35	4.857	4.841	4.874	VV	336	4696	0.07%	0.004%
36	4.932	4.874	4.960	VV	3038	46645	0.74%	0.042%

					rters			
37	4.981	4.960	5.001	VV	907	14311	0.23%	0.013%
38	5.011	5.001	5.023	VV	531	5707		
39	5.039	5.023	5.075	VV	780	11448		
40	5.091	5.075	5.108	PV	182	2680		
41	5.132	5.108	5.146	VV	714	9036		
42	5.155	5.146	5.178	VV	446	7757		
43	5.194	5.178	5.211	VV	673	9193	0.15%	0.008%
44	5.223	5.211	5.234	VV	475	5227	0.08%	0.005%
45	5.249	5.234	5.268	VV	521	7411	0.12%	0.007%
46	5.279	5.268	5.295	VV	451	6247	0.10%	0.006%
47	5.333	5.295	5.391	VV	5694	92635	1.47%	0.084%
48	5.401	5.391	5.411	VV	344	3270	0.05%	0.003%
49	5.428	5.411	5.464	VV	444	10339	0.16%	0.009%
50	5.511	5.464	5.547	VV	2027	34766	0.55%	0.032%
51	5.586	5.547	5.600	VV	614	13200	0.21%	0.012%
52	5.624	5.600	5.661	VV	1327	28447	0.45%	0.026%
53	5.678	5.661	5.704	VV	728	16768	0.27%	0.015%
54	5.720	5.704	5.757	VV	1283	22742	0.36%	0.021%
55	5.786	5.757	5.804	VV	865	16619	0.26%	0.015%
56	5.835	5.804	5.852	VV	830	19137	0.30%	0.017%
57	5.880	5.852	5.905	VV	2179	42809	0.68%	0.039%
58	5.928	5.905	5.951	VV	2309	39618	0.63%	0.036%
59	5.972	5.951	5.998	VV	2596	37107	0.59%	0.034%
60	6.034	5.998	6.048	VV	2433	39949	0.64%	0.036%
61	6.058	6.048	6.081	VV	1740	26069	0.41%	0.024%
62	6.107	6.081	6.127	VV	1082	26430	0.42%	0.024%
63	6.144	6.127	6.172	VV	1925	31719	0.50%	0.029%
64	6.194	6.172	6.220	VV	1625	35099	0.56%	0.032%
65	6.240	6.220	6.258	VV	1713	28098	0.45%	0.026%
66	6.313	6.258	6.383	VV	430265	4454451	70.88%	4.048%
67	6.402	6.383	6.422	VV	1854	37764	0.60%	0.034%
68	6.460	6.422	6.488	VV	6980	115832	1.84%	0.105%
69	6.497	6.488	6.518	VV	1899	28620	0.46%	0.026%
70	6.531	6.518	6.554	VV	2118	33670	0.54%	0.031%
71	6.572	6.554	6.607	VV	1768	42981	0.68%	0.039%
72	6.632	6.607	6.655	VV	2896	55843	0.89%	0.051%
73	6.666	6.655	6.680	VV	1740	22163	0.35%	0.020%
74	6.697	6.680	6.730	VV	1657	42000	0.67%	0.038%
75	6.754	6.730	6.788	VV	2050	55508	0.88%	0.050%
76	6.808	6.788	6.818	VV	3315	48342	0.77%	0.044%
77	6.828	6.818	6.847	VV	3267	44156	0.70%	0.040%
78	6.869	6.847	6.893	VV	3418	63782	1.01%	0.058%
79	6.913	6.893	6.948	VV	3896	85506	1.36%	0.078%
80	6.969	6.948	6.988	VV	3407	55285	0.88%	0.050%
81	7.011	6.988	7.051	VV	7127	124872	1.99%	0.113%
82	7.065	7.051	7.078	VV	2135	31848	0.51%	0.029%
83	7.107	7.078	7.128	VV	3612	87579	1.39%	0.080%
84	7.151	7.128	7.163	VV	2579	50163	0.80%	0.046%
85	7.180	7.163	7.209	VV	3878	81834	1.30%	0.074%
86	7.233	7.209	7.262	VV	21281	263286	4.19%	0.239%
87	7.283	7.262	7.308	VV	2395	59647	0.95%	0.054%
88	7.324	7.308	7.333	VV	2656	34706	0.55%	0.032%
89	7.351	7.333	7.378	VV	2939	69795	1.11%	0.063%

Instrument :

FID_C

ClientSampleId :

SB-02MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

					retention			
90	7.405	7.378	7.432	VV	5644	112443	1.79%	0.102%
91	7.446	7.432	7.468	VV	2173	41945		
92	7.494	7.468	7.529	VV	2958	87821		
93	7.568	7.529	7.584	VV	4482	99166		
94	7.598	7.584	7.633	VV	3389	75977		
95	7.656	7.633	7.672	VV	4725	75592		
96	7.687	7.672	7.698	VV	4132	55577	0.88%	0.051%
97	7.709	7.698	7.728	VV	4209	60604	0.96%	0.055%
98	7.752	7.728	7.772	VV	4566	85614	1.36%	0.078%
99	7.798	7.772	7.822	VV	7093	127104	2.02%	0.116%
100	7.854	7.822	7.877	VV	5280	109708	1.75%	0.100%
101	7.892	7.877	7.901	VV	2544	32034	0.51%	0.029%
102	7.923	7.901	7.947	VV	11696	155307	2.47%	0.141%
103	7.969	7.947	7.991	VV	2973	66747	1.06%	0.061%
104	8.010	7.991	8.029	VV	3470	61257	0.97%	0.056%
105	8.053	8.029	8.067	VV	2748	57165	0.91%	0.052%
106	8.104	8.067	8.136	VV	478896	5151108	81.97%	4.681%
107	8.149	8.136	8.175	VV	4481	76881	1.22%	0.070%
108	8.196	8.175	8.231	VV	3032	84613	1.35%	0.077%
109	8.251	8.231	8.272	VV	3449	66725	1.06%	0.061%
110	8.294	8.272	8.319	VV	2431	62906	1.00%	0.057%
111	8.338	8.319	8.359	VV	2081	46152	0.73%	0.042%
112	8.403	8.359	8.437	VV	5125	130058	2.07%	0.118%
113	8.455	8.437	8.491	VV	3241	80733	1.28%	0.073%
114	8.517	8.491	8.533	VV	2508	55748	0.89%	0.051%
115	8.549	8.533	8.574	VV	3089	55354	0.88%	0.050%
116	8.590	8.574	8.606	VV	2838	41538	0.66%	0.038%
117	8.637	8.606	8.664	VV	9191	143287	2.28%	0.130%
118	8.687	8.664	8.734	VV	2616	67768	1.08%	0.062%
119	8.758	8.734	8.767	VV	1342	22577	0.36%	0.021%
120	8.782	8.767	8.798	VV	1619	25971	0.41%	0.024%
121	8.820	8.798	8.839	VV	2561	42442	0.68%	0.039%
122	8.856	8.839	8.880	VV	1819	38443	0.61%	0.035%
123	8.921	8.880	8.985	VV	12172	206766	3.29%	0.188%
124	9.005	8.985	9.028	VV	1384	26860	0.43%	0.024%
125	9.056	9.028	9.084	VV	986	25327	0.40%	0.023%
126	9.112	9.084	9.128	VV	994	19435	0.31%	0.018%
127	9.160	9.128	9.190	VV	784	26620	0.42%	0.024%
128	9.218	9.190	9.261	VV	1008	27494	0.44%	0.025%
129	9.293	9.261	9.322	VV	2357	44151	0.70%	0.040%
130	9.339	9.322	9.361	VV	1187	18906	0.30%	0.017%
131	9.376	9.361	9.401	VV	872	15994	0.25%	0.015%
132	9.429	9.401	9.452	VV	1189	23359	0.37%	0.021%
133	9.478	9.452	9.509	VV	2841	38639	0.61%	0.035%
134	9.532	9.509	9.555	VV	439	8720	0.14%	0.008%
135	9.629	9.555	9.663	VV	639	25554	0.41%	0.023%
136	9.700	9.663	9.881	VV	481081	5344060	85.04%	4.857%
137	9.889	9.881	9.920	VV	282	4075	0.06%	0.004%
138	9.934	9.920	9.954	VV	179	3115	0.05%	0.003%
139	9.972	9.954	9.990	VV	249	3547	0.06%	0.003%
140	10.018	9.990	10.028	VV	268	4229	0.07%	0.004%
141	10.045	10.028	10.055	VV	265	3897	0.06%	0.004%

Instrument :

FID_C

ClientSampleId :

SB-02MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

142	10.084	10.055	10.108	VV	728	14110	0.22%	0.013%
143	10.131	10.108	10.150	VV	396	6533		
144	10.175	10.150	10.218	VV	279	7546		
145	10.233	10.218	10.271	VV	179	3592		
146	10.297	10.271	10.309	VV	221	3363		
147	10.328	10.309	10.345	VV	238	3972		
148	10.372	10.345	10.394	VV	365	7302	0.12%	0.007%
149	10.433	10.394	10.471	VV	1088	22884	0.36%	0.021%
150	10.514	10.471	10.534	VV	532	12912	0.21%	0.012%
151	10.560	10.534	10.598	VV	639	11012	0.18%	0.010%
152	10.611	10.598	10.638	VV	132	2507	0.04%	0.002%
153	10.661	10.638	10.700	VV	194	3807	0.06%	0.003%
154	10.719	10.700	10.732	PV	124	1498	0.02%	0.001%
155	10.759	10.732	10.791	VV	344	6205	0.10%	0.006%
156	10.808	10.791	10.841	VV	411	7668	0.12%	0.007%
157	10.855	10.841	10.878	VV	345	5244	0.08%	0.005%
158	10.887	10.878	10.918	VV	213	2861	0.05%	0.003%
159	10.940	10.918	10.973	VV	1699	21165	0.34%	0.019%
160	10.997	10.973	11.033	VV	94	2482	0.04%	0.002%
161	11.067	11.033	11.097	VV	1523	20953	0.33%	0.019%
162	11.139	11.097	11.212	VV	468942	5496829	87.47%	4.995%
163	11.228	11.212	11.307	VV	662	16346	0.26%	0.015%
164	11.331	11.307	11.354	VV	203	3767	0.06%	0.003%
165	11.360	11.354	11.392	VV	149	2400	0.04%	0.002%
166	11.426	11.392	11.483	PV	263	8867	0.14%	0.008%
167	11.495	11.483	11.504	VV	211	2222	0.04%	0.002%
168	11.524	11.504	11.535	VV	424	5086	0.08%	0.005%
169	11.550	11.535	11.571	VV	401	6611	0.11%	0.006%
170	11.589	11.571	11.641	VV	382	9359	0.15%	0.009%
171	11.651	11.641	11.665	VV	119	1340	0.02%	0.001%
172	11.804	11.665	11.831	VV	745	23837	0.38%	0.022%
173	11.851	11.831	11.868	VV	240	4218	0.07%	0.004%
174	11.889	11.868	11.911	VV	208	3967	0.06%	0.004%
175	11.938	11.911	11.984	VV	261	7826	0.12%	0.007%
176	12.019	11.984	12.055	VV	488	12705	0.20%	0.012%
177	12.078	12.055	12.104	VV	512	9674	0.15%	0.009%
178	12.122	12.104	12.168	VV	355	9789	0.16%	0.009%
179	12.177	12.168	12.194	VV	126	1867	0.03%	0.002%
180	12.267	12.194	12.291	VV	1590	32636	0.52%	0.030%
181	12.304	12.291	12.351	VV	903	12832	0.20%	0.012%
182	12.382	12.351	12.408	VV	909	12551	0.20%	0.011%
183	12.445	12.408	12.541	VV	458132	5537130	88.11%	5.032%
184	12.560	12.541	12.648	VV	482	12276	0.20%	0.011%
185	12.653	12.648	12.665	VV	77	554	0.01%	0.001%
186	12.763	12.665	12.782	VV	197	8130	0.13%	0.007%
187	12.812	12.782	12.824	PV	182	3115	0.05%	0.003%
188	12.887	12.824	12.971	VV	435486	5285189	84.10%	4.803%
189	12.996	12.971	13.014	VV	417	9035	0.14%	0.008%
190	13.056	13.014	13.165	VV	420290	5252480	83.58%	4.773%
191	13.174	13.165	13.190	VV	285	2647	0.04%	0.002%
192	13.219	13.190	13.238	VV	181	3513	0.06%	0.003%
193	13.335	13.238	13.382	VV	257	15041	0.24%	0.014%
194	13.406	13.382	13.413	VV	242	2572	0.04%	0.002%

Instrument :

FID_C

ClientSampleId :

SB-02MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

					rters			
195	13.431	13.413	13.448	VV	526	6574	0.10%	0.006%
196	13.481	13.448	13.537	VV	809	17797		
197	13.584	13.537	13.601	VV	941	13062		
198	13.641	13.601	13.754	VV	414027	5162535	82	
199	13.765	13.754	13.811	VV	192	3025		
200	13.863	13.811	13.875	PV	221	4136		
201	13.888	13.875	13.951	VV	2087	8785	0.14%	0.008%
202	13.969	13.951	13.979	VV	79	967	0.02%	0.001%
203	14.002	13.979	14.010	PV	114	1033	0.02%	0.001%
204	14.071	14.010	14.113	VV	1292	22870	0.36%	0.021%
205	14.197	14.113	14.231	VV	1127	20454	0.33%	0.019%
206	14.261	14.231	14.278	VV	207	2963	0.05%	0.003%
207	14.360	14.278	14.384	PV	199	5964	0.09%	0.005%
208	14.401	14.384	14.438	VV	187	3869	0.06%	0.004%
209	14.444	14.438	14.464	VV	141	1341	0.02%	0.001%
210	14.597	14.464	14.634	VV	258	11469	0.18%	0.010%
211	14.652	14.634	14.663	VV	136	1474	0.02%	0.001%
212	14.741	14.663	14.838	PV	384576	4992641	79.44%	4.537%
213	14.852	14.838	14.862	VV	148	1750	0.03%	0.002%
214	14.944	14.862	14.963	VV	218	8380	0.13%	0.008%
215	14.977	14.963	14.995	VV	174	2657	0.04%	0.002%
216	15.003	14.995	15.034	VV	154	1823	0.03%	0.002%
217	15.043	15.034	15.061	PV	143	995	0.02%	0.001%
218	15.076	15.061	15.091	VV	133	1773	0.03%	0.002%
219	15.099	15.091	15.104	VV	87	592	0.01%	0.001%
220	15.159	15.104	15.199	VV	327	11564	0.18%	0.011%
221	15.209	15.199	15.224	VV	102	1414	0.02%	0.001%
222	15.257	15.224	15.292	VV	2321	34942	0.56%	0.032%
223	15.305	15.292	15.371	VV	310	7981	0.13%	0.007%
224	15.382	15.371	15.388	VV	107	599	0.01%	0.001%
225	15.395	15.388	15.407	VV	90	859	0.01%	0.001%
226	15.448	15.407	15.463	PV	287	6407	0.10%	0.006%
227	15.486	15.463	15.527	VV	198	5296	0.08%	0.005%
228	15.568	15.527	15.601	VV	310	7990	0.13%	0.007%
229	15.631	15.601	15.678	VV	256	6987	0.11%	0.006%
230	15.760	15.678	15.875	VV	366816	4831102	76.87%	4.390%
231	15.935	15.875	15.958	VV	236	6732	0.11%	0.006%
232	16.071	15.958	16.085	VV	194	5247	0.08%	0.005%
233	16.118	16.085	16.132	VV	231	3907	0.06%	0.004%
234	16.142	16.132	16.181	VV	122	1225	0.02%	0.001%
235	16.238	16.181	16.268	PV	2893	41189	0.66%	0.037%
236	16.283	16.268	16.308	VV	198	3339	0.05%	0.003%
237	16.315	16.308	16.338	VV	405	2454	0.04%	0.002%
238	16.408	16.338	16.488	PV	284	8390	0.13%	0.008%
239	16.541	16.488	16.561	PV	111	3195	0.05%	0.003%
240	16.591	16.561	16.638	VV	542	10832	0.17%	0.010%
241	16.708	16.638	16.780	VV	352781	4703445	74.84%	4.274%
242	16.936	16.780	16.950	VV	98	8170	0.13%	0.007%
243	17.040	16.950	17.061	PV	148	6311	0.10%	0.006%
244	17.153	17.061	17.194	PV	3982	58840	0.94%	0.053%
245	17.262	17.194	17.278	PV	222	4616	0.07%	0.004%
246	17.482	17.278	17.518	VV	3698	52328	0.83%	0.048%

Instrument :

FID_C

ClientSampleId :

SB-02MS

Manual IntegrationsAPPROVED

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Supervised By :Ankita Jodhani 12/27/2024

rteres								
247	17.593	17.518	17.657	PV	335100	4720282	75.11%	4.290%
248	17.872	17.657	17.894	VV	345	5815		
249	18.012	17.894	18.051	PV	4976	71255		
250	18.424	18.051	18.485	PV	330710	4647066	73	
251	18.818	18.485	18.861	PV	4231	64818	1	
252	19.206	18.861	19.261	PV	320947	4662282	74	
253	19.579	19.261	19.604	VV	5429	472668	7.52%	0.430%
254	19.945	19.604	19.988	VV	299557	5543854	88.21%	5.038%
255	20.299	19.988	20.328	VV	12322	1816150	28.90%	1.651%
256	20.476	20.328	20.493	VV	14198	1253087	19.94%	1.139%
257	20.661	20.493	20.713	VV	261744	6235523	99.22%	5.667%
258	20.845	20.713	20.953	VV	14129	2018729	32.12%	1.835%
259	20.986	20.953	21.024	VV	12815	538904	8.58%	0.490%
260	21.066	21.024	21.124	VV	12302	703292	11.19%	0.639%
261	21.291	21.124	21.313	VV	9658	1156907	18.41%	1.051%
262	21.530	21.313	21.791	VV	198275	6284495	100.00%	5.711%
263	21.799	21.791	22.024	VV	4346	414044	6.59%	0.376%
264	22.051	22.024	22.148	VV	1427	61791	0.98%	0.056%
Sum of corrected areas:					110036315			

Instrument :

FID_C

ClientSampleId :

SB-02MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Aliphatic EPH 121024.M Sat Dec 21 02:43:20 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	SB-02MS	SDG No.:	P5299
Lab Sample ID:	P5299-04MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	79.2
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048906.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	6.78		0.38	0.84	mg/kg
Aromatic C12-C16	Aromatic C12-C16	15.7		0.43	1.26	mg/kg
Aromatic C16-C21	Aromatic C16-C21	24.6		1.21	2.10	mg/kg
Aromatic C21-C36	Aromatic C21-C36	42.6		2.52	3.36	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	59.5		40 - 140	119%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	62.8		40 - 140	126%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	35.0		40 - 140	70%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P5299-04MS	Acq On:	20 Dec 2024 16:26
Client Sample ID:	SB-02MS	Operator:	YP/AJ
Data file:	FD048906.D	Misc:	
Instrument:	FID_D	ALS Vial:	69
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.083	5.800	15339278	80.644	200	ug/ml
Aromatic C12-C16	5.801	8.405	34652720	186.422	300	ug/ml
Aromatic C16-C21	8.406	12.669	49484502	291.91	500	ug/ml
Aromatic C21-C36	12.670	18.077	71743901	506.707	800	ug/ml
Aromatic EPH	4.083	18.077	171220401	1070		ug/ml
ortho-Terphenyl (SURR)	11.245	11.245	6211910	34.96		ug/ml
2-Bromonaphthalene (SURR)	7.361	7.361	10012703	59.45		ug/ml
2-Fluorobiphenyl (SURR)	8.212	8.212	6489680	62.82		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048906.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 16:26
 Operator : YP/AJ
 Sample : P5299-04MS
 Misc :
 ALS Vial : 69 Sample Multiplier: 1

Instrument :

FID_D

ClientSampleId :

SB-02MS

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e

Quant Time: Dec 21 04:05:41 2024

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M

Quant Title : GC Extractables

QLast Update : Tue Dec 10 06:07:50 2024

Response via : Initial Calibration

Integrator: ChemStation

Volume Inj. : 1 µl

Signal Phase : Rx1-1ms

Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.361	10012703	59.445 ug/ml
Spiked Amount 50.000		Recovery =	118.89%
6) S 2-Fluorobiphenyl (SURR)	8.212	6489680	62.819 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	125.64%
11) S ortho-Terphenyl (SURR)	11.245	6211910	34.965 ug/ml
Spiked Amount 50.000		Recovery =	69.93%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.184	6584574	34.777 ug/ml
2) T Naphthalene (C11.7)	5.701	7256934	37.978 ug/ml
3) T 2-Methylnaphthalene (...)	6.747	6985047	37.802 ug/ml
5) T Acenaphthylene (C15.06)	8.013	7826476	41.935 ug/ml
7) T Acenaphthene (C15.5)	8.309	8543432	45.874 ug/ml
8) T Flouorene (C16.55)	9.087	8508422	47.616 ug/ml
9) T Phenanthrene (C19.36)	10.474	8579585	51.367 ug/ml
10) T Anthracene (C19.43)	10.551	8672415	51.098 ug/ml
12) T Fluoranthene (C21.85)	12.281	8549657	52.232 ug/mlm
13) T Pyrene (C20.8)	12.573	8446838	51.935 ug/ml
14) T Benzo[a]anthracene (C...	14.443	7761048	58.747 ug/ml
15) T Chrysene (C27.41)	14.486	7667487	47.494 ug/ml
16) T benzo[b]fluoranthene ...	15.992	7752671	57.586 ug/ml
17) T Bnezo[k]fluoranthene ...	16.026	7983197	52.411 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.369	7568353	54.720 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.736	7614643	71.452 ug/ml
20) T Dibenz[a,h]anthracene...	17.772	7354473	50.711 ug/ml
21) T Benzo[g,h,i]perylene ...	17.988	7490086	53.421 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
Data File : FD048906.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 16:26
Operator : YP/AJ
Sample : P5299-04MS
Misc :
ALS Vial : 69 Sample Multiplier: 1

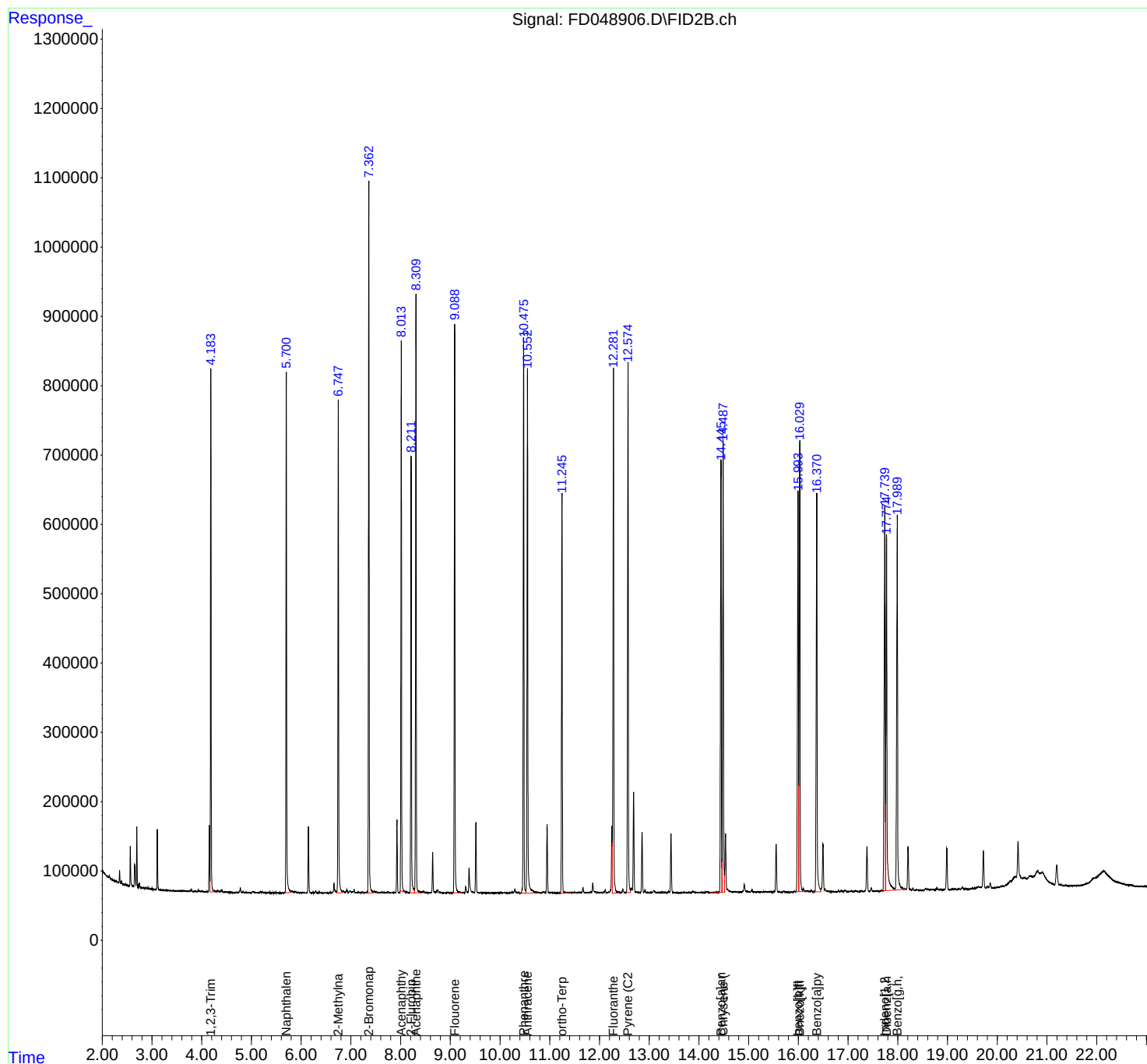
Instrument :
FID_D
ClientSampleId :
SB-02MS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
Quant Time: Dec 21 04:05:41 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 06:07:50 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm



Instrument :

FID_D

ClientSampleId :

SB-02MS

rteres

Area Percent

Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data
Data File : FD048906.D
Signal(s) : FID2B.ch
Acq On : 20 Dec 2024 16:26
Sample : P5299-04MS
Misc :
ALS Vial : 69 Sample Multiplier: 1

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH
121024.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.051	4.042	4.071	BV	293	2256	0.02%	0.001%
2	4.079	4.071	4.101	PV	209	2852	0.03%	0.002%
3	4.106	4.101	4.109	VV	306	1236	0.01%	0.001%
4	4.115	4.109	4.129	VV	317	2402	0.02%	0.001%
5	4.153	4.129	4.166	VV	96011	849075	8.47%	0.459%
6	4.183	4.166	4.257	VV	754064	6564870	65.49%	3.551%
7	4.261	4.257	4.298	VV	1800	26847	0.27%	0.015%
8	4.321	4.298	4.360	VV	3273	57490	0.57%	0.031%
9	4.375	4.360	4.388	VV	2531	28132	0.28%	0.015%
10	4.405	4.388	4.445	VV	4372	53846	0.54%	0.029%
11	4.451	4.445	4.457	VV	372	1916	0.02%	0.001%
12	4.482	4.457	4.504	VV	1089	17542	0.18%	0.009%
13	4.513	4.504	4.548	VV	605	10991	0.11%	0.006%
14	4.559	4.548	4.569	VV	492	3420	0.03%	0.002%
15	4.590	4.569	4.635	VV	892	17350	0.17%	0.009%
16	4.660	4.645	4.679	PV	513	5240	0.05%	0.003%
17	4.696	4.679	4.705	VV	628	7263	0.07%	0.004%
18	4.715	4.705	4.725	VV	565	5083	0.05%	0.003%
19	4.731	4.725	4.739	VV	510	3473	0.03%	0.002%
20	4.776	4.739	4.813	VV	7371	112682	1.12%	0.061%
21	4.833	4.813	4.877	VV	1865	28153	0.28%	0.015%
22	4.886	4.877	4.912	VV	599	8777	0.09%	0.005%
23	4.923	4.912	4.928	VV	383	2454	0.02%	0.001%
24	4.958	4.928	4.967	VV	446	7102	0.07%	0.004%
25	4.971	4.967	4.981	VV	394	3134	0.03%	0.002%

				rteres	
26	4.987	4.981	5.004	VV	670
27	5.027	5.004	5.090	VV	2444
28	5.097	5.090	5.114	VV	569
29	5.116	5.114	5.122	VV	435
30	5.128	5.122	5.131	VV	409
31	5.137	5.131	5.160	VV	796
32	5.181	5.160	5.199	VV	2542
33	5.216	5.199	5.254	VV	2661
34	5.268	5.254	5.304	VV	952
35	5.315	5.304	5.327	VV	437
36	5.341	5.327	5.369	VV	994
37	5.373	5.369	5.389	VV	887
38	5.422	5.405	5.446	PV	622
39	5.466	5.446	5.504	VV	698
40	5.521	5.504	5.537	VV	468
41	5.545	5.537	5.557	VV	330
42	5.560	5.557	5.567	VV	193
43	5.570	5.567	5.574	VV	226
44	5.579	5.574	5.587	VV	412
45	5.594	5.587	5.602	VV	207
46	5.618	5.602	5.635	VV	473
47	5.642	5.635	5.658	VV	350
48	5.701	5.658	5.799	VV	749986
49	5.812	5.799	5.855	VV	3428
50	5.877	5.855	5.919	VV	2327
51	5.943	5.919	5.965	VV	1275
52	5.970	5.965	5.987	VV	614
53	5.993	5.987	6.007	VV	474
54	6.027	6.007	6.034	VV	702
55	6.037	6.034	6.051	VV	717
56	6.058	6.051	6.097	VV	629
57	6.102	6.097	6.107	VV	391
58	6.113	6.107	6.124	VV	383
59	6.231	6.210	6.252	VV	1204
60	6.269	6.252	6.276	VV	946
61	6.296	6.276	6.313	VV	3113
62	6.324	6.313	6.352	VV	611
63	6.367	6.352	6.386	PV	1181
64	6.395	6.386	6.404	VV	593
65	6.408	6.404	6.420	VV	356
66	6.428	6.420	6.445	VV	299
67	6.460	6.445	6.500	VV	776
68	6.504	6.500	6.514	VV	373
69	6.536	6.514	6.559	VV	353

Instrument :

FID_D

ClientSampleId :

SB-02MS

4170 0.04% 0.002%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

6808 0.07% 0.004%

30702 0.31% 0.017%

34427 0.34% 0.019%

15147 0.15% 0.008%

4012 0.04% 0.002%

14884 0.15% 0.008%

4078 0.04% 0.002%

6488 0.06% 0.004%

12223 0.12% 0.007%

6006 0.06% 0.003%

2788 0.03% 0.002%

1171 0.01% 0.001%

1053 0.01% 0.001%

1856 0.02% 0.001%

1164 0.01% 0.001%

4632 0.05% 0.003%

2886 0.03% 0.002%

7299792 72.82% 3.948%

73471 0.73% 0.040%

53284 0.53% 0.029%

21052 0.21% 0.011%

5595 0.06% 0.003%

3561 0.04% 0.002%

6719 0.07% 0.004%

5948 0.06% 0.003%

8465 0.08% 0.005%

1684 0.02% 0.001%

2838 0.03% 0.002%

14973 0.15% 0.008%

7611 0.08% 0.004%

34795 0.35% 0.019%

7912 0.08% 0.004%

13951 0.14% 0.008%

4212 0.04% 0.002%

2556 0.03% 0.001%

2870 0.03% 0.002%

13958 0.14% 0.008%

2009 0.02% 0.001%

6737 0.07% 0.004%

70	6.584	6.559	6.602	VV	1524	17306	0.17%	0.009%
71	6.748	6.717	6.829	VV	708337	708337	100.00%	5.422%
72	6.844	6.829	6.878	VV	2993	2993	100.00%	0.012%
73	6.921	6.878	6.947	VV	4999	4999	100.00%	0.018%
74	7.031	7.019	7.047	VV	2071	2071	100.00%	0.004%
75	7.064	7.047	7.087	VV	5616	68060	0.68%	0.037%
76	7.122	7.087	7.137	VV	1185	28548	0.28%	0.015%
77	7.151	7.137	7.172	VV	1602	22707	0.23%	0.012%
78	7.233	7.205	7.260	VV	1836	33074	0.33%	0.018%
79	7.271	7.260	7.283	VV	729	7916	0.08%	0.004%
80	7.290	7.283	7.300	VV	859	5095	0.05%	0.003%
81	7.324	7.300	7.335	VV	2084	26534	0.26%	0.014%
82	7.362	7.335	7.459	VV	1029103	10023906	100.00%	5.422%
83	7.472	7.459	7.502	VV	2385	51172	0.51%	0.028%
84	7.516	7.502	7.532	VV	1667	27278	0.27%	0.015%
85	7.542	7.532	7.565	VV	1301	21205	0.21%	0.011%
86	7.582	7.565	7.601	VV	1130	18486	0.18%	0.010%
87	7.626	7.601	7.656	VV	2205	35273	0.35%	0.019%
88	7.660	7.656	7.669	VV	663	4524	0.05%	0.002%
89	7.680	7.669	7.703	VV	1205	16766	0.17%	0.009%
90	7.716	7.703	7.725	VV	764	9001	0.09%	0.005%
91	7.748	7.725	7.772	VV	2441	32802	0.33%	0.018%
92	7.805	7.800	7.818	VV	703	5558	0.06%	0.003%
93	7.835	7.818	7.854	VV	1243	17048	0.17%	0.009%
94	7.862	7.854	7.882	VV	1039	12168	0.12%	0.007%
95	7.978	7.959	7.984	VV	826	11830	0.12%	0.006%
96	8.013	7.984	8.112	VV	797480	7999822	79.81%	4.327%
97	8.121	8.112	8.142	VV	1592	21085	0.21%	0.011%
98	8.155	8.142	8.169	VV	1221	15579	0.16%	0.008%
99	8.173	8.169	8.185	VV	717	5907	0.06%	0.003%
100	8.212	8.185	8.267	VV	631259	6473368	64.58%	3.501%
101	8.272	8.267	8.281	VV	6016	48263	0.48%	0.026%
102	8.309	8.281	8.373	VV	862655	8544377	85.24%	4.622%
103	8.378	8.373	8.402	VV	2476	33139	0.33%	0.018%
104	8.413	8.402	8.430	VV	1885	29152	0.29%	0.016%
105	8.459	8.430	8.509	VV	3318	78824	0.79%	0.043%
106	8.521	8.509	8.550	VV	1080	15304	0.15%	0.008%
107	8.574	8.550	8.597	VV	825	15187	0.15%	0.008%
108	8.601	8.597	8.616	VV	660	6987	0.07%	0.004%
109	8.644	8.616	8.705	VV	58958	644644	6.43%	0.349%
110	8.721	8.705	8.730	VV	2296	27495	0.27%	0.015%
111	8.748	8.730	8.779	VV	4310	79111	0.79%	0.043%
112	8.795	8.779	8.818	VV	1944	30005	0.30%	0.016%

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						rteres		
113	8.832	8.818	8.849	VV	1017			
114	8.854	8.849	8.857	VV	389			
115	8.861	8.857	8.865	VV	428			
116	8.878	8.865	8.903	VV	737			
117	8.937	8.903	8.955	VV	1099			
118	8.961	8.955	8.995	VV	863			
119	9.022	9.004	9.029	PV	627			
120	9.050	9.029	9.058	VV	896			
121	9.088	9.058	9.199	VV	822914	8545159	85.25%	4.622%
122	9.205	9.199	9.228	VV	1503	19541	0.19%	0.011%
123	9.245	9.228	9.265	VV	1236	19600	0.20%	0.011%
124	9.274	9.265	9.281	VV	878	6521	0.07%	0.004%
125	9.310	9.281	9.359	VV	9191	150683	1.50%	0.082%
126	9.377	9.359	9.454	VV	36677	559893	5.59%	0.303%
127	9.460	9.454	9.489	VV	1566	25436	0.25%	0.014%
128	9.515	9.489	9.572	VV	102300	1105344	11.03%	0.598%
129	9.590	9.572	9.597	VV	694	8327	0.08%	0.005%
130	9.603	9.597	9.611	VV	613	4268	0.04%	0.002%
131	9.617	9.611	9.643	VV	477	7095	0.07%	0.004%
132	9.652	9.643	9.676	VV	375	5277	0.05%	0.003%
133	9.682	9.676	9.700	VV	444	4060	0.04%	0.002%
134	9.717	9.700	9.736	VV	340	4441	0.04%	0.002%
135	9.742	9.736	9.752	VV	392	2974	0.03%	0.002%
136	9.768	9.752	9.774	VV	428	4676	0.05%	0.003%
137	9.790	9.774	9.805	VV	516	5482	0.05%	0.003%
138	9.831	9.805	9.846	VV	633	10540	0.11%	0.006%
139	9.886	9.846	9.890	VV	434	8157	0.08%	0.004%
140	9.902	9.890	9.927	VV	542	9283	0.09%	0.005%
141	9.940	9.927	9.963	VV	674	10158	0.10%	0.005%
142	9.969	9.963	9.984	VV	442	3988	0.04%	0.002%
143	9.989	9.984	9.993	VV	393	1683	0.02%	0.001%
144	9.995	9.993	10.003	VV	356	1785	0.02%	0.001%
145	10.019	10.003	10.041	VV	1081	12377	0.12%	0.007%
146	10.054	10.041	10.065	VV	358	3937	0.04%	0.002%
147	10.089	10.065	10.099	VV	777	10231	0.10%	0.006%
148	10.106	10.099	10.121	VV	687	8052	0.08%	0.004%
149	10.131	10.121	10.155	VV	680	8978	0.09%	0.005%
150	10.187	10.155	10.201	VV	710	12739	0.13%	0.007%
151	10.241	10.201	10.270	VV	1466	38810	0.39%	0.021%
152	10.297	10.270	10.350	VV	5142	101419	1.01%	0.055%
153	10.373	10.350	10.396	VV	1687	23495	0.23%	0.013%
154	10.475	10.396	10.521	VV	802331	8588488	85.68%	4.646%
155	10.552	10.521	10.691	VV	755431	8661884	86.41%	4.685%

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						rteres		
156	10.695	10.691	10.739	VV	1951			
157	10.755	10.739	10.810	VV	1379			
158	10.815	10.810	10.835	VV	513			
159	10.854	10.835	10.861	VV	1242			
160	10.878	10.861	10.910	VV	2079			
161	10.947	10.910	11.004	VV	98912	1135762	11.33%	0.614%
162	11.036	11.004	11.062	VV	886	24105	0.24%	0.013%
163	11.068	11.062	11.073	VV	587	3668	0.04%	0.002%
164	11.078	11.073	11.114	VV	517	9760	0.10%	0.005%
165	11.117	11.114	11.141	VV	520	4733	0.05%	0.003%
166	11.159	11.141	11.176	VV	327	4419	0.04%	0.002%
167	11.192	11.176	11.213	VV	632	3459	0.03%	0.002%
168	11.245	11.213	11.308	PV	577440	6197254	61.82%	3.352%
169	11.315	11.308	11.320	VV	906	6229	0.06%	0.003%
170	11.332	11.320	11.354	VV	1054	17178	0.17%	0.009%
171	11.363	11.354	11.392	VV	1136	16494	0.16%	0.009%
172	11.419	11.392	11.448	VV	1537	30445	0.30%	0.016%
173	11.464	11.448	11.480	VV	972	14895	0.15%	0.008%
174	11.492	11.480	11.496	VV	1198	7575	0.08%	0.004%
175	11.501	11.496	11.550	VV	958	20479	0.20%	0.011%
176	11.582	11.550	11.590	VV	896	15214	0.15%	0.008%
177	11.608	11.590	11.626	VV	1445	25061	0.25%	0.014%
178	11.635	11.626	11.644	VV	957	8960	0.09%	0.005%
179	11.668	11.644	11.734	VV	8217	125978	1.26%	0.068%
180	11.749	11.734	11.753	VV	758	7766	0.08%	0.004%
181	11.763	11.753	11.791	VV	1064	17881	0.18%	0.010%
182	11.825	11.791	11.843	VV	1484	31303	0.31%	0.017%
183	11.864	11.843	11.907	VV	14484	208124	2.08%	0.113%
184	11.913	11.907	11.932	VV	1835	22122	0.22%	0.012%
185	11.942	11.932	11.970	VV	1310	23054	0.23%	0.012%
186	11.976	11.970	12.002	VV	1091	11908	0.12%	0.006%
187	12.018	12.002	12.040	VV	861	14512	0.14%	0.008%
188	12.084	12.040	12.093	VV	1416	27731	0.28%	0.015%
189	12.114	12.093	12.139	VV	4602	64893	0.65%	0.035%
190	12.152	12.139	12.163	VV	804	9603	0.10%	0.005%
191	12.186	12.163	12.199	VV	1723	25253	0.25%	0.014%
192	12.217	12.199	12.224	VV	4467	42330	0.42%	0.023%
193	12.249	12.224	12.257	VV	96610	999892	9.98%	0.541%
194	12.281	12.257	12.359	VV	756618	8614255	85.94%	4.659%
195	12.363	12.359	12.370	VV	1672	10526	0.11%	0.006%
196	12.374	12.370	12.377	VV	1627	6535	0.07%	0.004%
197	12.386	12.377	12.424	VV	1701	31018	0.31%	0.017%
198	12.438	12.424	12.451	VV	890	13039	0.13%	0.007%
199	12.469	12.451	12.519	VV	6105	89051	0.89%	0.048%

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40729 0.41% 0.022%

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200	12.574	12.519	12.627	VV	768987	8493637	84.73%	4.594%
201	12.644	12.627	12.660	VV	7341			
202	12.686	12.660	12.742	VV	145695	1		
203	12.767	12.742	12.794	VV	1442			
204	12.795	12.794	12.805	VV	878			
205	12.818	12.805	12.825	VV	832	8516	0.08%	0.005%
206	12.857	12.825	12.892	VV	87739	1042744	10.40%	0.564%
207	12.914	12.892	12.953	VV	4737	78904	0.79%	0.043%
208	12.960	12.953	12.990	VV	932	16875	0.17%	0.009%
209	12.999	12.990	13.005	VV	691	5341	0.05%	0.003%
210	13.012	13.005	13.021	VV	712	5669	0.06%	0.003%
211	13.025	13.021	13.030	VV	667	3547	0.04%	0.002%
212	13.092	13.030	13.183	VV	3867	119028	1.19%	0.064%
213	13.191	13.183	13.205	VV	662	7741	0.08%	0.004%
214	13.210	13.205	13.218	VV	568	4187	0.04%	0.002%
215	13.232	13.218	13.237	VV	780	6582	0.07%	0.004%
216	13.242	13.237	13.249	VV	834	5227	0.05%	0.003%
217	13.268	13.249	13.300	VV	1140	26298	0.26%	0.014%
218	13.310	13.300	13.317	VV	1013	8378	0.08%	0.005%
219	13.318	13.317	13.349	VV	990	11079	0.11%	0.006%
220	13.391	13.349	13.410	VV	2093	39462	0.39%	0.021%
221	13.439	13.410	13.492	VV	85358	1034042	10.32%	0.559%
222	13.500	13.492	13.517	VV	644	4670	0.05%	0.003%
223	13.525	13.517	13.542	VV	447	3660	0.04%	0.002%
224	13.546	13.542	13.548	VV	378	1094	0.01%	0.001%
225	13.553	13.548	13.597	VV	394	4882	0.05%	0.003%
226	13.646	13.604	13.658	VV	437	7666	0.08%	0.004%
227	13.666	13.658	13.676	VV	547	4352	0.04%	0.002%
228	13.695	13.676	13.734	VV	948	18975	0.19%	0.010%
229	13.739	13.734	13.744	VV	427	2428	0.02%	0.001%
230	13.760	13.744	13.770	VV	557	5980	0.06%	0.003%
231	13.792	13.770	13.815	VV	645	14426	0.14%	0.008%
232	13.829	13.815	13.845	VV	749	10713	0.11%	0.006%
233	13.873	13.845	13.939	VV	1751	51984	0.52%	0.028%
234	13.944	13.939	13.960	VV	663	6968	0.07%	0.004%
235	13.965	13.960	13.975	VV	514	3742	0.04%	0.002%
236	13.998	13.975	14.030	VV	817	15753	0.16%	0.009%
237	14.044	14.030	14.052	VV	556	6132	0.06%	0.003%
238	14.057	14.052	14.073	VV	452	4778	0.05%	0.003%
239	14.095	14.073	14.113	VV	724	12213	0.12%	0.007%
240	14.127	14.113	14.135	VV	743	7201	0.07%	0.004%
241	14.159	14.135	14.200	VV	1291	32973	0.33%	0.018%
242	14.208	14.200	14.225	VV	748	5774	0.06%	0.003%

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						rteres		
243	14.229	14.225	14.235	VV	282			
244	14.254	14.235	14.270	VV	508			
245	14.287	14.270	14.329	VV	498			
246	14.345	14.329	14.362	VV	597			
247	14.369	14.362	14.379	VV	560			
248	14.382	14.379	14.393	VV	647			
249	14.397	14.393	14.406	VV	675			
250	14.445	14.406	14.463	VV	624102	7716058	76.98%	4.174%
251	14.487	14.463	14.515	VV	650489	7731393	77.13%	4.182%
252	14.535	14.515	14.569	VV	85486	1233340	12.30%	0.667%
253	14.579	14.569	14.628	VV	4770	107569	1.07%	0.058%
254	14.634	14.628	14.639	VV	1853	11684	0.12%	0.006%
255	14.643	14.639	14.690	VV	1760	39814	0.40%	0.022%
256	14.707	14.690	14.720	VV	1350	21737	0.22%	0.012%
257	14.728	14.720	14.784	VV	1310	35370	0.35%	0.019%
258	14.795	14.784	14.816	VV	868	10690	0.11%	0.006%
259	14.837	14.816	14.849	VV	804	12582	0.13%	0.007%
260	14.853	14.849	14.862	VV	647	4896	0.05%	0.003%
261	14.882	14.862	14.888	VV	2197	24222	0.24%	0.013%
262	14.911	14.888	14.953	VV	12269	213660	2.13%	0.116%
263	14.957	14.953	15.024	VV	2186	57496	0.57%	0.031%
264	15.029	15.024	15.033	VV	800	3868	0.04%	0.002%
265	15.066	15.033	15.097	VV	4169	72271	0.72%	0.039%
266	15.113	15.097	15.142	VV	877	16375	0.16%	0.009%
267	15.146	15.142	15.150	VV	498	2118	0.02%	0.001%
268	15.163	15.150	15.178	VV	658	8866	0.09%	0.005%
269	15.195	15.178	15.209	VV	778	11048	0.11%	0.006%
270	15.213	15.209	15.229	VV	680	5280	0.05%	0.003%
271	15.250	15.229	15.275	VV	912	17681	0.18%	0.010%
272	15.279	15.275	15.294	VV	517	3850	0.04%	0.002%
273	15.355	15.294	15.390	VV	1133	43264	0.43%	0.023%
274	15.435	15.390	15.444	VV	1263	28378	0.28%	0.015%
275	15.447	15.444	15.466	VV	1091	9389	0.09%	0.005%
276	15.472	15.466	15.492	VV	748	7618	0.08%	0.004%
277	15.512	15.492	15.522	VV	1400	18191	0.18%	0.010%
278	15.553	15.522	15.587	VV	69733	929070	9.27%	0.503%
279	15.607	15.587	15.668	VV	1168	25514	0.25%	0.014%
280	15.708	15.668	15.733	PV	1737	29843	0.30%	0.016%
281	15.753	15.733	15.772	VV	797	11963	0.12%	0.006%
282	15.777	15.772	15.800	VV	372	2901	0.03%	0.002%
283	15.819	15.813	15.832	PV	183	1239	0.01%	0.001%
284	15.835	15.832	15.857	VV	456	1898	0.02%	0.001%
285	15.870	15.857	15.880	VV	379	2970	0.03%	0.002%

Instrument :

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1325 0.01% 0.001%

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286	15.921	15.880	15.955	VV	1725
287	15.993	15.955	16.008	VV	578580
288	16.028	16.008	16.090	VV	651172
289	16.105	16.090	16.160	VV	4256
290	16.181	16.160	16.210	VV	1713

291	16.223	16.210	16.240	VV	1244
292	16.259	16.240	16.309	VV	2783
293	16.324	16.309	16.331	VV	793
294	16.370	16.331	16.450	VV	576272
295	16.495	16.450	16.524	VV	69005

296	16.538	16.524	16.564	VV	4850
297	16.572	16.564	16.610	VV	1319
298	16.615	16.610	16.641	VV	861
299	16.652	16.641	16.675	VV	590
300	16.680	16.675	16.687	VV	383

301	16.692	16.687	16.708	VV	400
302	16.718	16.708	16.745	VV	459
303	16.755	16.745	16.770	VV	222
304	16.805	16.770	16.838	PV	1392
305	16.867	16.838	16.909	VV	1354

306	16.942	16.909	16.971	VV	2155
307	16.977	16.971	16.991	VV	310
308	16.997	16.991	17.005	VV	407
309	17.026	17.005	17.039	VV	476
310	17.063	17.039	17.090	VV	1177

311	17.095	17.090	17.104	VV	253
312	17.124	17.104	17.132	VV	445
313	17.147	17.132	17.210	VV	1101
314	17.246	17.210	17.254	VV	494
315	17.268	17.254	17.300	VV	1050

316	17.303	17.300	17.314	VV	279
317	17.380	17.314	17.437	VV	64521
318	17.466	17.437	17.507	VV	5420
319	17.522	17.507	17.534	VV	823
320	17.538	17.534	17.562	VV	604

321	17.574	17.562	17.623	VV	619
322	17.673	17.630	17.696	VV	1537
323	17.739	17.696	17.752	VV	555719
324	17.774	17.752	17.947	VV	513901
325	17.990	17.947	18.118	VV	541535

326	18.139	18.118	18.160	VV	2104
327	18.206	18.160	18.237	VV	63066
328	18.244	18.237	18.284	VV	1823

Sum of corrected areas: 184875472

Instrument :		
FID_D		
ClientSampleId :		
SB-02MS		
33648	0.34%	0.018%
Manual IntegrationsAPPROVED		
Reviewed By :Yogesh Patel 12/23/2024		
Supervised By :Ankita Jodhani 12/27/2024		

rteres

Instrument :
FID_D
ClientSampleId :
SB-02MS

Aromatic EPH 121024.M Sat Dec 21 05:55:15 20

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	SB-02MSD	SDG No.:	P5299
Lab Sample ID:	P5299-04MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	79.2
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
12/19/24 14:05	12/20/24 17:03	PB165775

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12	6.42		1	0.48	1.26	mg/kg FC068069.D
Aliphatic C12-C16	Aliphatic C12-C16	7.57		1	0.30	0.84	mg/kg FC068069.D
Aliphatic C16-C21	Aliphatic C16-C21	8.97		1	0.38	1.26	mg/kg FC068069.D
Aliphatic C21-C28	Aliphatic C21-C28	12.0		1	1.01	1.68	mg/kg FC068069.D
Aliphatic C28-C40	Aliphatic C28-C40	27.1		1	2.27	2.52	mg/kg FC068069.D
Aromatic C10-C12	Aromatic C10-C12	6.85		1	0.38	0.84	mg/kg FD048907.D
Aromatic C12-C16	Aromatic C12-C16	12.4		1	0.43	1.26	mg/kg FD048907.D
Aromatic C16-C21	Aromatic C16-C21	25.0		1	1.21	2.10	mg/kg FD048907.D
Aromatic C21-C36	Aromatic C21-C36	43.0		1	2.52	3.37	mg/kg FD048907.D
Total AliphaticEPH	Total AliphaticEPH	62.1			4.44	7.56	mg/kg
Total AromaticEPH	Total AromaticEPH	87.3			4.54	7.57	mg/kg
Total EPH	Total EPH	149			8.98	15.1	mg/kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control 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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	SB-02MSD	SDG No.:	P5299
Lab Sample ID:	P5299-04MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	79.2
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC068069.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	6.42		0.48	1.26	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	7.57		0.30	0.84	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	8.97		0.38	1.26	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	12.0		1.01	1.68	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	27.1		2.27	2.52	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	39.9		40 - 140	80%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5299-04MSD	Acq On:	20 Dec 2024 17:03
Client Sample ID:	SB-02MSD	Operator:	YP/AJ
Data file:	FC068069.D	Misc:	
Instrument:	FID_C	ALS Vial:	20
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.117	6.389	12086067	76.348	300	ug/ml
Aliphatic C12-C16	6.390	9.779	14426671	90.012	200	ug/ml
Aliphatic C16-C21	9.780	13.137	16244898	106.62	300	ug/ml
Aliphatic C21-C28	13.138	16.791	19514459	143.085	400	ug/ml
Aliphatic C28-C40	16.792	21.609	34167095	322.439	600	ug/ml
Aliphatic EPH	3.117	21.609	96439190	738.503		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.886	12.886	5087208	39.87		ug/ml
Aliphatic C9-C28	3.117	16.791	62272095	416.065	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
 Data File : FC068069.D
 Signal(s) : FID1A.ch
 Acq On : 20 Dec 2024 17:03
 Operator : YP/AJ
 Sample : P5299-04MSD
 Misc :
 ALS Vial : 20 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 SB-02MSD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 12/23/2024
 Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
 Quant Time: Dec 21 01:54:03 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 07:59:10 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 ul
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18um

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
12) S 1-chlorooctadecane (S...	12.886	5087208	39.870 ug/ml
Spiked Amount 50.000		Recovery =	79.74%
Target Compounds			
1) T n-Nonane (C9)	3.244	3053174	19.651 ug/ml
2) T n-Decane (C10)	4.303	3700073	23.341 ug/ml
4) T n-Dodecane (C12)	6.313	4282078	26.594 ug/ml
6) T n-Tetradecane (C14)	8.103	4910579	30.885 ug/ml
7) T n-Hexadecane (C16)	9.700	5152539	31.894 ug/ml
8) T n-Octadecane (C18)	11.138	5324188	33.164 ug/ml
10) T n-Eicosane (C20)	12.445	5374336	35.727 ug/ml
11) T n-Heneicosane (C21)	13.055	5089173	34.830 ug/ml
13) T n-Docosane (C22)	13.640	5010283	35.001 ug/ml
14) T n-Tetracosane (C24)	14.740	4852342	34.922 ug/ml
15) T n-Hexacosane (C26)	15.759	4700973	35.152 ug/ml
16) T n-Octacosane (C28)	16.707	4570081	35.233 ug/ml
17) T n-Tricontane (C30)	17.593	4557589	35.182 ug/ml
18) T n-Dotriacontane (C32)	18.424	4458604	35.989 ug/ml
19) T n-Tetratriacontane (C34)	19.205	4439369	40.673 ug/mlm
20) T n-Hexatriacontane (C36)	19.945	4261514	45.043 ug/ml
21) T n-Octatriacontane (C38)	20.660	4190307	46.321 ug/ml
22) T n-Tetracontane (C40)	21.528	4148424	47.067 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC122024AL\
Data File : FC068069.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 17:03
Operator : YP/AJ
Sample : P5299-04MSD
Misc :
ALS Vial : 20 Sample Multiplier: 1

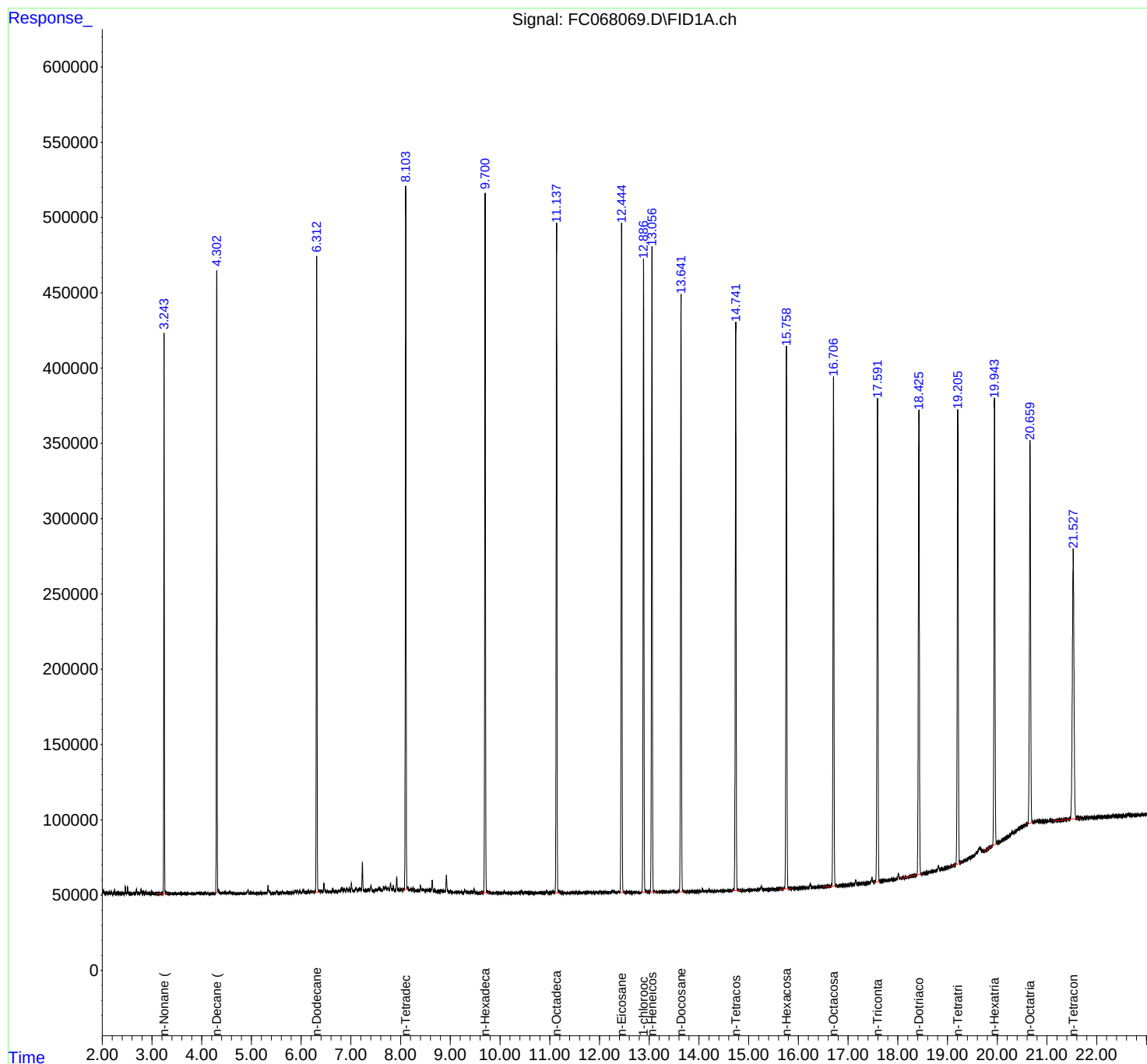
Instrument :
FID_C
ClientSampleId :
SB-02MSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Integration File: autoint1.e
Quant Time: Dec 21 01:54:03 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Quant Title : GC Extractables
QLast Update : Tue Dec 10 07:59:10 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um



rtres

Instrument :

FID_C

ClientSampleId :

SB-02MSD

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC12202
Data File : FC068069.D
Signal(s) : FID1A.ch
Acq On : 20 Dec 2024 17:03
Sample : P5299-04MSD
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 121024.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.138	3.104	3.161	BV	218	2145	0.03%	0.002%
2	3.244	3.161	3.327	PV	369926	3069903	47.62%	3.018%
3	3.336	3.327	3.351	VV	245	2920	0.05%	0.003%
4	3.363	3.351	3.401	VV	286	6802	0.11%	0.007%
5	3.418	3.401	3.431	VV	238	2957	0.05%	0.003%
6	3.443	3.431	3.464	VV	279	3356	0.05%	0.003%
7	3.517	3.464	3.538	VV	366	9612	0.15%	0.009%
8	3.551	3.538	3.596	VV	343	7069	0.11%	0.007%
9	3.614	3.596	3.638	PV	234	3545	0.05%	0.003%
10	3.649	3.638	3.668	VV	181	2222	0.03%	0.002%
11	3.679	3.668	3.698	VV	158	1782	0.03%	0.002%
12	3.731	3.698	3.771	VV	456	9158	0.14%	0.009%
13	3.815	3.771	3.831	VV	390	5908	0.09%	0.006%
14	3.841	3.831	3.872	VV	250	3344	0.05%	0.003%
15	3.905	3.872	3.918	VV	592	7393	0.11%	0.007%
16	3.933	3.918	3.958	VV	855	9959	0.15%	0.010%
17	3.999	3.958	4.018	VV	391	7008	0.11%	0.007%
18	4.068	4.018	4.096	VV	989	19871	0.31%	0.020%
19	4.107	4.096	4.152	VV	273	6389	0.10%	0.006%
20	4.168	4.152	4.189	VV	170	2962	0.05%	0.003%
21	4.216	4.189	4.237	VV	297	5183	0.08%	0.005%
22	4.254	4.237	4.271	VV	250	4041	0.06%	0.004%
23	4.303	4.271	4.330	VV	412902	3727602	57.82%	3.664%
24	4.342	4.330	4.385	VV	2569	36657	0.57%	0.036%
25	4.403	4.385	4.431	VV	700	13341	0.21%	0.013%
26	4.469	4.431	4.511	VV	978	25657	0.40%	0.025%
27	4.524	4.511	4.537	VV	725	8337	0.13%	0.008%
28	4.554	4.537	4.571	VV	1782	18302	0.28%	0.018%
29	4.581	4.571	4.598	VV	554	6180	0.10%	0.006%
30	4.608	4.598	4.615	VV	305	2665	0.04%	0.003%
31	4.630	4.615	4.644	VV	442	5207	0.08%	0.005%
32	4.673	4.644	4.688	VV	397	6430	0.10%	0.006%
33	4.709	4.688	4.734	VV	357	6814	0.11%	0.007%
34	4.767	4.734	4.805	VV	771	13541	0.21%	0.013%
35	4.817	4.805	4.834	VV	160	2410	0.04%	0.002%
36	4.854	4.834	4.874	VV	339	4742	0.07%	0.005%

					rters			
37	4.932	4.874	4.960	VV	2990	44841	0.70%	0.044%
38	4.982	4.960	5.002	VV	813	12886		
39	5.013	5.002	5.024	VV	497	5284		
40	5.039	5.024	5.080	VV	737	11028		
41	5.132	5.080	5.147	VV	711	11890		
42	5.158	5.147	5.167	VV	419	4704		
43	5.194	5.167	5.211	VV	696	11880	0.18%	0.012%
44	5.224	5.211	5.235	VV	478	5207	0.08%	0.005%
45	5.249	5.235	5.266	VV	491	7195	0.11%	0.007%
46	5.279	5.266	5.311	VV	409	9349	0.15%	0.009%
47	5.333	5.311	5.411	VV	5455	90043	1.40%	0.089%
48	5.429	5.411	5.439	VV	401	5373	0.08%	0.005%
49	5.453	5.439	5.467	VV	388	5914	0.09%	0.006%
50	5.511	5.467	5.539	VV	1893	31888	0.49%	0.031%
51	5.585	5.539	5.599	VV	622	13790	0.21%	0.014%
52	5.623	5.599	5.660	VV	1337	27639	0.43%	0.027%
53	5.678	5.660	5.691	VV	677	9222	0.14%	0.009%
54	5.718	5.691	5.755	VV	1280	24988	0.39%	0.025%
55	5.785	5.755	5.804	VV	857	16831	0.26%	0.017%
56	5.835	5.804	5.850	VV	781	18013	0.28%	0.018%
57	5.879	5.850	5.905	VV	2151	42707	0.66%	0.042%
58	5.928	5.905	5.951	VV	2315	38461	0.60%	0.038%
59	5.971	5.951	5.998	VV	2518	36722	0.57%	0.036%
60	6.033	5.998	6.048	VV	2301	38752	0.60%	0.038%
61	6.058	6.048	6.081	VV	1689	25601	0.40%	0.025%
62	6.117	6.081	6.128	VV	1001	24413	0.38%	0.024%
63	6.144	6.128	6.170	VV	1891	29599	0.46%	0.029%
64	6.195	6.170	6.219	VV	1541	33853	0.53%	0.033%
65	6.238	6.219	6.261	VV	1586	28556	0.44%	0.028%
66	6.313	6.261	6.382	VV	427574	4348024	67.44%	4.274%
67	6.402	6.382	6.423	VV	1813	37403	0.58%	0.037%
68	6.460	6.423	6.488	VV	6870	114020	1.77%	0.112%
69	6.497	6.488	6.518	VV	1677	26067	0.40%	0.026%
70	6.530	6.518	6.553	VV	2089	31540	0.49%	0.031%
71	6.572	6.553	6.606	VV	1613	40658	0.63%	0.040%
72	6.631	6.606	6.654	VV	2844	52704	0.82%	0.052%
73	6.666	6.654	6.679	VV	1685	21496	0.33%	0.021%
74	6.695	6.679	6.733	VV	1623	42308	0.66%	0.042%
75	6.754	6.733	6.784	VV	1996	47561	0.74%	0.047%
76	6.807	6.784	6.817	VV	3185	48406	0.75%	0.048%
77	6.827	6.817	6.846	VV	3109	43397	0.67%	0.043%
78	6.868	6.846	6.893	VV	3279	62034	0.96%	0.061%
79	6.912	6.893	6.951	VV	3774	85645	1.33%	0.084%
80	6.968	6.951	6.988	VV	3289	49965	0.78%	0.049%
81	7.011	6.988	7.047	VV	6960	117377	1.82%	0.115%
82	7.065	7.047	7.074	VV	2065	30989	0.48%	0.030%
83	7.107	7.074	7.126	VV	3554	86730	1.35%	0.085%
84	7.149	7.126	7.162	VV	2451	49232	0.76%	0.048%
85	7.179	7.162	7.208	VV	3724	78030	1.21%	0.077%
86	7.232	7.208	7.260	VV	20761	255487	3.96%	0.251%
87	7.283	7.260	7.307	VV	2259	57840	0.90%	0.057%
88	7.323	7.307	7.334	VV	2534	36124	0.56%	0.036%
89	7.353	7.334	7.377	VV	2896	65115	1.01%	0.064%

Instrument :

FID_C

ClientSampleId :

SB-02MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

					retention			
90	7.404	7.377	7.431	VV	5535	108205	1.68%	0.106%
91	7.447	7.431	7.468	VV	2101	41473		
92	7.492	7.468	7.506	VV	2902	51441		
93	7.516	7.506	7.531	VV	2505	35168		
94	7.566	7.531	7.583	VV	4239	92259		
95	7.597	7.583	7.632	VV	3272	71922		
96	7.655	7.632	7.671	VV	4642	73946	1.15%	0.073%
97	7.686	7.671	7.697	VV	3990	54913	0.85%	0.054%
98	7.708	7.697	7.728	VV	4085	59464	0.92%	0.058%
99	7.752	7.728	7.771	VV	4329	81183	1.26%	0.080%
100	7.797	7.771	7.822	VV	7046	123865	1.92%	0.122%
101	7.853	7.822	7.876	VV	5235	104819	1.63%	0.103%
102	7.891	7.876	7.900	VV	2421	30879	0.48%	0.030%
103	7.922	7.900	7.948	VV	11191	153175	2.38%	0.151%
104	7.969	7.948	7.991	VV	2926	62698	0.97%	0.062%
105	8.009	7.991	8.029	VV	3371	57561	0.89%	0.057%
106	8.103	8.029	8.136	VV	469479	5075832	78.73%	4.989%
107	8.149	8.136	8.176	VV	4244	75778	1.18%	0.074%
108	8.195	8.176	8.234	VV	2956	85853	1.33%	0.084%
109	8.251	8.234	8.271	VV	3319	58199	0.90%	0.057%
110	8.294	8.271	8.323	VV	2250	64907	1.01%	0.064%
111	8.340	8.323	8.360	VV	1984	41200	0.64%	0.040%
112	8.372	8.360	8.381	VV	1835	21929	0.34%	0.022%
113	8.402	8.381	8.437	VV	5060	100134	1.55%	0.098%
114	8.454	8.437	8.494	VV	3133	81419	1.26%	0.080%
115	8.515	8.494	8.533	VV	2425	50103	0.78%	0.049%
116	8.548	8.533	8.570	VV	2944	48502	0.75%	0.048%
117	8.589	8.570	8.605	VV	2676	44224	0.69%	0.043%
118	8.636	8.605	8.664	VV	8681	138301	2.15%	0.136%
119	8.688	8.664	8.734	VV	2462	65097	1.01%	0.064%
120	8.755	8.734	8.768	VV	1276	21743	0.34%	0.021%
121	8.783	8.768	8.798	VV	1565	22701	0.35%	0.022%
122	8.820	8.798	8.839	VV	2470	40555	0.63%	0.040%
123	8.856	8.839	8.876	VV	1808	32990	0.51%	0.032%
124	8.921	8.876	8.988	VV	12127	205194	3.18%	0.202%
125	9.005	8.988	9.028	VV	1342	23811	0.37%	0.023%
126	9.053	9.028	9.090	VV	803	24260	0.38%	0.024%
127	9.112	9.090	9.134	VV	897	18036	0.28%	0.018%
128	9.157	9.134	9.190	VV	757	22188	0.34%	0.022%
129	9.218	9.190	9.261	VV	929	25752	0.40%	0.025%
130	9.293	9.261	9.322	VV	2193	41518	0.64%	0.041%
131	9.339	9.322	9.358	VV	1106	17756	0.28%	0.017%
132	9.376	9.358	9.402	VV	910	16710	0.26%	0.016%
133	9.429	9.402	9.454	VV	1148	23750	0.37%	0.023%
134	9.477	9.454	9.514	VV	2640	37014	0.57%	0.036%
135	9.532	9.514	9.560	VV	520	8685	0.13%	0.009%
136	9.617	9.560	9.660	VV	590	22619	0.35%	0.022%
137	9.700	9.660	9.818	VV	464645	5186812	80.46%	5.098%
138	9.824	9.818	9.849	VV	381	5685	0.09%	0.006%
139	9.867	9.849	9.955	VV	376	12725	0.20%	0.013%
140	9.976	9.955	9.998	VV	236	4253	0.07%	0.004%
141	10.016	9.998	10.031	VV	315	3928	0.06%	0.004%

Instrument :

FID_C

ClientSampleId :

SB-02MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

				rters			
142	10.046	10.031	10.056	VV	226	3169	0.05% 0.003%
143	10.086	10.056	10.112	VV	791	15295	
144	10.131	10.112	10.148	VV	324	5055	
145	10.173	10.148	10.214	VV	273	7903	
146	10.229	10.214	10.281	VV	204	5169	
147	10.293	10.281	10.308	VV	182	2343	
148	10.325	10.308	10.344	VV	271	4131	0.06% 0.004%
149	10.365	10.344	10.398	VV	393	8561	0.13% 0.008%
150	10.433	10.398	10.478	VV	1147	21959	0.34% 0.022%
151	10.502	10.478	10.541	VV	576	14320	0.22% 0.014%
152	10.561	10.541	10.588	VV	658	10212	0.16% 0.010%
153	10.617	10.588	10.638	VV	233	4271	0.07% 0.004%
154	10.652	10.638	10.696	VV	238	3839	0.06% 0.004%
155	10.755	10.696	10.787	PV	270	7515	0.12% 0.007%
156	10.806	10.787	10.840	VV	381	8292	0.13% 0.008%
157	10.857	10.840	10.876	VV	281	4691	0.07% 0.005%
158	10.888	10.876	10.914	VV	208	2730	0.04% 0.003%
159	10.940	10.914	10.984	VV	1765	21630	0.34% 0.021%
160	10.992	10.984	11.033	VV	104	1518	0.02% 0.001%
161	11.066	11.033	11.097	VV	1404	19472	0.30% 0.019%
162	11.138	11.097	11.211	VV	442999	5337880	82.80% 5.247%
163	11.229	11.211	11.276	VV	642	12141	0.19% 0.012%
164	11.285	11.276	11.314	VV	112	1666	0.03% 0.002%
165	11.325	11.314	11.338	VV	120	1270	0.02% 0.001%
166	11.341	11.338	11.348	VV	99	453	0.01% 0.000%
167	11.367	11.348	11.398	VV	171	2235	0.03% 0.002%
168	11.427	11.398	11.470	PV	192	6158	0.10% 0.006%
169	11.483	11.470	11.503	VV	161	2806	0.04% 0.003%
170	11.523	11.503	11.538	VV	352	5370	0.08% 0.005%
171	11.547	11.538	11.571	VV	337	4471	0.07% 0.004%
172	11.589	11.571	11.674	VV	397	10096	0.16% 0.010%
173	11.712	11.674	11.718	VV	142	2845	0.04% 0.003%
174	11.738	11.718	11.754	VV	181	3469	0.05% 0.003%
175	11.801	11.754	11.828	VV	695	16470	0.26% 0.016%
176	11.854	11.828	11.868	VV	311	5073	0.08% 0.005%
177	11.884	11.868	11.910	VV	260	4477	0.07% 0.004%
178	11.937	11.910	11.948	VV	274	4648	0.07% 0.005%
179	11.956	11.948	11.979	VV	268	3419	0.05% 0.003%
180	12.006	11.979	12.051	VV	488	12546	0.19% 0.012%
181	12.077	12.051	12.107	VV	492	11206	0.17% 0.011%
182	12.123	12.107	12.164	VV	422	9551	0.15% 0.009%
183	12.182	12.164	12.194	VV	173	2604	0.04% 0.003%
184	12.265	12.194	12.288	VV	1559	32681	0.51% 0.032%
185	12.303	12.288	12.341	VV	830	13639	0.21% 0.013%
186	12.351	12.341	12.361	PV	193	1403	0.02% 0.001%
187	12.381	12.361	12.404	VV	950	13059	0.20% 0.013%
188	12.445	12.404	12.536	VV	440377	5383749	83.51% 5.292%
189	12.561	12.536	12.608	VV	423	10673	0.17% 0.010%
190	12.618	12.608	12.674	VV	134	3343	0.05% 0.003%
191	12.717	12.674	12.742	VV	191	5080	0.08% 0.005%
192	12.886	12.742	12.982	PV	420805	5117660	79.38% 5.030%
193	12.998	12.982	13.012	VV	404	6333	0.10% 0.006%
194	13.055	13.012	13.219	VV	421592	5115418	79.35% 5.028%

Instrument :

FID_C

ClientSampleId :

SB-02MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024

Supervised By :Ankita Jodhani 12/27/2024

195	13.249	13.219	13.261	VV	239	4516	0.07%	0.004%
196	13.274	13.261	13.301	VV	219	4785		
197	13.338	13.301	13.381	VV	301	9901		
198	13.429	13.381	13.454	VV	613	11787		
199	13.481	13.454	13.537	VV	853	19620		
200	13.585	13.537	13.601	VV	881	14732		
201	13.640	13.601	13.806	VV	399017	5031964	78.05%	4.946%
202	13.870	13.806	13.956	PV	310	15031	0.23%	0.015%
203	13.969	13.956	13.998	VV	188	2778	0.04%	0.003%
204	14.011	13.998	14.020	VV	180	1156	0.02%	0.001%
205	14.029	14.020	14.034	VV	163	861	0.01%	0.001%
206	14.073	14.034	14.099	VV	1334	20118	0.31%	0.020%
207	14.108	14.099	14.118	VV	198	1780	0.03%	0.002%
208	14.127	14.118	14.147	VV	172	2158	0.03%	0.002%
209	14.198	14.147	14.244	PV	1177	19796	0.31%	0.019%
210	14.269	14.244	14.306	VV	212	5624	0.09%	0.006%
211	14.358	14.306	14.390	VV	251	7405	0.11%	0.007%
212	14.403	14.390	14.439	VV	146	3866	0.06%	0.004%
213	14.453	14.439	14.465	VV	134	1265	0.02%	0.001%
214	14.484	14.465	14.503	VV	186	2450	0.04%	0.002%
215	14.516	14.503	14.534	VV	138	1437	0.02%	0.001%
216	14.587	14.534	14.620	VV	263	7399	0.11%	0.007%
217	14.740	14.620	14.870	VV	375829	4861790	75.41%	4.779%
218	14.928	14.870	14.961	VV	217	5739	0.09%	0.006%
219	14.994	14.961	15.017	VV	139	2851	0.04%	0.003%
220	15.045	15.017	15.060	VV	122	1558	0.02%	0.002%
221	15.119	15.060	15.128	PV	285	4656	0.07%	0.005%
222	15.161	15.128	15.208	VV	363	9142	0.14%	0.009%
223	15.256	15.208	15.294	VV	2219	33596	0.52%	0.033%
224	15.308	15.294	15.329	VV	258	3753	0.06%	0.004%
225	15.439	15.329	15.461	VV	238	5292	0.08%	0.005%
226	15.488	15.461	15.508	VV	141	2603	0.04%	0.003%
227	15.517	15.508	15.537	VV	122	923	0.01%	0.001%
228	15.590	15.537	15.609	PV	213	6745	0.10%	0.007%
229	15.629	15.609	15.683	VV	266	7018	0.11%	0.007%
230	15.759	15.683	15.874	VV	353775	4702134	72.94%	4.622%
231	15.895	15.874	15.917	VV	287	4571	0.07%	0.004%
232	15.931	15.917	15.955	VV	234	4318	0.07%	0.004%
233	15.962	15.955	15.978	VV	181	2220	0.03%	0.002%
234	15.981	15.978	16.027	VV	182	2245	0.03%	0.002%
235	16.068	16.027	16.079	PV	262	4840	0.08%	0.005%
236	16.113	16.079	16.137	VV	265	5744	0.09%	0.006%
237	16.174	16.137	16.183	VV	188	2581	0.04%	0.003%
238	16.238	16.183	16.281	VV	2713	40299	0.63%	0.040%
239	16.316	16.281	16.348	VV	247	6691	0.10%	0.007%
240	16.362	16.348	16.370	PV	99	951	0.01%	0.001%
241	16.404	16.370	16.419	VV	310	5725	0.09%	0.006%
242	16.429	16.419	16.458	VV	233	4271	0.07%	0.004%
243	16.476	16.458	16.498	VV	193	3482	0.05%	0.003%
244	16.596	16.498	16.644	VV	523	21032	0.33%	0.021%
245	16.707	16.644	16.773	VV	332320	4567260	70.85%	4.489%
246	16.804	16.773	16.817	VV	195	4097	0.06%	0.004%

Instrument :

FID_C

ClientSampleId :

SB-02MSD

Manual IntegrationsAPPROVED

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Supervised By :Ankita Jodhani 12/27/2024

rteres							
247	16.855	16.817	16.888	VV	190	4919	0.08%
248	17.042	16.888	17.067	PV	160	10096	0.005%
249	17.153	17.067	17.185	VV	2962	46576	
250	17.195	17.185	17.210	VV	134	1308	
251	17.262	17.210	17.284	PV	270	6355	
252	17.481	17.284	17.512	VV	3605	54240	
253	17.593	17.512	17.651	PV	323515	4565675	70.82%
254	17.659	17.651	17.665	VV	229	1543	4.488%
255	17.719	17.665	17.731	VV	225	6796	0.02%
256	17.744	17.731	17.764	VV	196	2493	0.002%
257	17.875	17.764	17.901	PV	329	6529	0.10%
258	17.911	17.901	17.920	VV	128	962	0.006%
259	18.011	17.920	18.055	PV	3312	50022	0.01%
260	18.093	18.055	18.104	VV	124	3125	0.78%
261	18.424	18.104	18.480	PV	307527	4476217	0.049%
262	18.817	18.480	18.848	PV	2722	26761	0.05%
263	19.206	18.848	19.250	PV	299336	4359803	0.003%
264	19.580	19.250	19.594	VV	3204	180705	69.43%
265	19.646	19.594	19.724	VV	5378	296038	0.42%
266	19.945	19.724	19.987	VV	299391	4790550	0.026%
267	20.298	19.987	20.319	VV	8465	1168005	67.63%
268	20.660	20.319	20.714	VV	260563	6446805	2.80%
269	20.827	20.714	20.851	VV	9809	821703	4.59%
270	20.864	20.851	20.908	VV	9352	309878	74.31%
271	20.914	20.908	20.951	VV	8625	220952	18.12%
272	20.997	20.951	21.028	VV	7824	358274	1.148%
273	21.066	21.028	21.112	VV	7712	369373	0.337%
274	21.119	21.112	21.128	VV	6600	63319	5.73%
275	21.528	21.128	21.644	VV	182085	5513976	0.98%
276	21.666	21.644	21.685	VV	2257	54354	0.062%
277	21.715	21.685	21.728	VV	1709	45096	85.53%
278	21.867	21.728	21.881	VV	377	76422	5.420%

Sum of corrected areas: 101732722

Instrument :
FID_C
ClientSampleId :
SB-02MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/23/2024
Supervised By :Ankita Jodhani 12/27/2024

Aliphatic EPH 121024.M Sat Dec 21 02:44:47 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	SB-02MSD	SDG No.:	P5299
Lab Sample ID:	P5299-04MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	79.2
Sample Wt/Vol:	30.01 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048907.D	1	12/19/24	12/20/24	PB165775

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	6.85		0.38	0.84	mg/kg
Aromatic C12-C16	Aromatic C12-C16	12.4		0.43	1.26	mg/kg
Aromatic C16-C21	Aromatic C16-C21	25.0		1.21	2.10	mg/kg
Aromatic C21-C36	Aromatic C21-C36	43.0		2.52	3.37	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	60.2		40 - 140	120%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	63.9		40 - 140	128%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	35.6		40 - 140	71%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P5299-04MSD	Acq On:	20 Dec 2024 17:03
Client Sample ID:	SB-02MSD	Operator:	YP/AJ
Data file:	FD048907.D	Misc:	
Instrument:	FID_D	ALS Vial:	70
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.083	5.800	15490160	81.437	200	ug/ml
Aromatic C12-C16	5.801	8.405	27484098	147.857	300	ug/ml
Aromatic C16-C21	8.406	12.669	50354206	297.04	500	ug/ml
Aromatic C21-C36	12.670	18.077	72322214	510.791	800	ug/ml
Aromatic EPH	4.083	18.077	165650678	1040		ug/ml
ortho-Terphenyl (SURR)	11.246	11.246	6325440	35.6		ug/ml
2-Bromonaphthalene (SURR)	7.362	7.362	10138982	60.2		ug/ml
2-Fluorobiphenyl (SURR)	8.212	8.212	6604556	63.93		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048907.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 17:03
 Operator : YP/AJ
 Sample : P5299-04MSD
 Misc :
 ALS Vial : 70 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 SB-02MSD

Integration File: autoint1.e
 Quant Time: Dec 21 04:06:11 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 121024.M
 Quant Title : GC Extractables
 QLast Update : Tue Dec 10 06:07:50 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal Phase : Rxi-1ms
 Signal Info : 20M x 0.18mm x 0.18µm

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.362	10138982	60.195 ug/ml
Spiked Amount 50.000		Recovery =	120.39%
6) S 2-Fluorobiphenyl (SURR)	8.212	6604556	63.931 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	127.86%
11) S ortho-Terphenyl (SURR)	11.246	6325440	35.604 ug/ml
Spiked Amount 50.000		Recovery =	71.21%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.184	6617523	34.951 ug/ml
2) T Naphthalene (C11.7)	5.701	7339717	38.411 ug/ml
3) T 2-Methylnaphthalene (...)	6.747	7083980	38.337 ug/ml
5) T Acenaphthylene (C15.06)	8.014	7969509	42.702 ug/ml
7) T Acenaphthene (C15.5)	8.310	8688275	46.652 ug/ml
8) T Flouorene (C16.55)	9.087	8727531	48.842 ug/ml
9) T Phenanthrene (C19.36)	10.475	8730455	52.270 ug/ml
10) T Anthracene (C19.43)	10.552	8872725	52.278 ug/ml
12) T Fluoranthene (C21.85)	12.281	8747915	53.443 ug/ml
13) T Pyrene (C20.8)	12.574	8560803	52.636 ug/ml
14) T Benzo[a]anthracene (C...	14.445	7789443	58.962 ug/ml
15) T Chrysene (C27.41)	14.487	7717598	47.805 ug/ml
16) T benzo[b]fluoranthene ...	15.994	7842202	58.251 ug/ml
17) T Bnezo[k]fluoranthene ...	16.028	7897196	51.846 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.370	7573436	54.757 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.738	7611290	71.421 ug/ml
20) T Dibenz[a,h]anthracene...	17.774	7608904	52.465 ug/ml
21) T Benzo[g,h,i]perylene ...	17.990	7539269	53.772 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

rteres

Area Percent

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD122024AR\
 Data File : FD048907.D
 Signal(s) : FID2B.ch
 Acq On : 20 Dec 2024 17:03
 Sample : P5299-04MSD
 Misc :
 ALS Vial : 70 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH
 121024.M
 Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.057	4.042	4.107	BV	553	10212	0.10%	0.005%
2	4.112	4.107	4.125	VV	229	1834	0.02%	0.001%
3	4.154	4.125	4.167	VV	97433	859409	8.44%	0.453%
4	4.184	4.167	4.252	VV	773932	6627207	65.10%	3.492%
5	4.260	4.252	4.282	VV	2014	27869	0.27%	0.015%
6	4.284	4.282	4.304	VV	1122	11605	0.11%	0.006%
7	4.321	4.304	4.358	VV	3297	57314	0.56%	0.030%
8	4.377	4.358	4.390	VV	2658	32835	0.32%	0.017%
9	4.405	4.390	4.438	VV	4459	52190	0.51%	0.028%
10	4.447	4.438	4.467	VV	511	6236	0.06%	0.003%
11	4.481	4.467	4.505	VV	1062	15003	0.15%	0.008%
12	4.520	4.505	4.572	VV	1116	14526	0.14%	0.008%
13	4.592	4.572	4.632	VV	732	14146	0.14%	0.007%
14	4.643	4.632	4.666	VV	335	3059	0.03%	0.002%
15	4.672	4.666	4.682	VV	499	1752	0.02%	0.001%
16	4.697	4.682	4.708	PV	609	6173	0.06%	0.003%
17	4.713	4.708	4.727	VV	601	3192	0.03%	0.002%
18	4.733	4.727	4.739	VV	392	1910	0.02%	0.001%
19	4.776	4.739	4.815	VV	7631	112654	1.11%	0.059%
20	4.833	4.815	4.866	VV	1841	23337	0.23%	0.012%
21	4.875	4.866	4.925	VV	516	10704	0.11%	0.006%
22	4.929	4.925	4.945	VV	467	3267	0.03%	0.002%
23	4.974	4.945	5.001	VV	531	9964	0.10%	0.005%
24	5.027	5.001	5.051	VV	2457	38075	0.37%	0.020%
25	5.054	5.051	5.084	VV	942	14379	0.14%	0.008%

				rteres				
26	5.089	5.084	5.102	VV	574	4775	0.05%	0.003%
27	5.105	5.102	5.131	VV	530	6459	0.06%	0.003%
28	5.139	5.131	5.144	VV	576	3093	0.03%	0.002%
29	5.147	5.144	5.161	VV	591	3513	0.03%	0.002%
30	5.180	5.161	5.203	VV	2414	31560	0.31%	0.017%
31	5.218	5.203	5.246	VV	2482	30161	0.30%	0.016%
32	5.274	5.246	5.308	VV	972	16923	0.17%	0.009%
33	5.341	5.308	5.379	VV	691	17640	0.17%	0.009%
34	5.392	5.387	5.407	VV	383	1439	0.01%	0.001%
35	5.420	5.407	5.445	VV	436	4153	0.04%	0.002%
36	5.465	5.445	5.479	PV	830	7830	0.08%	0.004%
37	5.517	5.479	5.533	VV	608	9601	0.09%	0.005%
38	5.544	5.533	5.570	VV	445	5256	0.05%	0.003%
39	5.577	5.570	5.589	VV	218	1351	0.01%	0.001%
40	5.597	5.589	5.606	VV	314	1326	0.01%	0.001%
41	5.617	5.606	5.653	VV	394	8601	0.08%	0.005%
42	5.701	5.653	5.800	VV	779313	7387839	72.57%	3.893%
43	5.814	5.800	5.856	VV	3229	67798	0.67%	0.036%
44	5.877	5.856	5.914	VV	2288	49252	0.48%	0.026%
45	5.925	5.914	5.929	VV	948	7288	0.07%	0.004%
46	5.947	5.929	5.970	VV	1114	19214	0.19%	0.010%
47	5.975	5.970	5.989	VV	651	5818	0.06%	0.003%
48	5.993	5.989	6.009	VV	496	3365	0.03%	0.002%
49	6.027	6.009	6.042	VV	714	9436	0.09%	0.005%
50	6.047	6.042	6.084	VV	592	10415	0.10%	0.005%
51	6.092	6.084	6.099	VV	527	2543	0.02%	0.001%
52	6.101	6.099	6.121	VV	647	3616	0.04%	0.002%
53	6.147	6.121	6.207	VV	99412	989531	9.72%	0.521%
54	6.229	6.207	6.248	VV	1194	17168	0.17%	0.009%
55	6.266	6.248	6.278	VV	1097	11845	0.12%	0.006%
56	6.296	6.278	6.316	VV	3360	39418	0.39%	0.021%
57	6.323	6.316	6.345	VV	723	6619	0.07%	0.003%
58	6.368	6.345	6.388	PV	1351	15919	0.16%	0.008%
59	6.393	6.388	6.435	VV	535	9795	0.10%	0.005%
60	6.459	6.435	6.498	PV	984	10453	0.10%	0.006%
61	6.526	6.498	6.567	VV	670	12383	0.12%	0.007%
62	6.585	6.567	6.612	VV	1205	16274	0.16%	0.009%
63	6.661	6.612	6.716	VV	14886	237752	2.34%	0.125%
64	6.748	6.716	6.827	VV	680541	7106611	69.80%	3.745%
65	6.845	6.827	6.877	VV	3777	66814	0.66%	0.035%
66	6.921	6.877	6.950	VV	5229	105685	1.04%	0.056%
67	6.982	6.950	7.017	VV	3559	88040	0.86%	0.046%
68	7.032	7.017	7.045	VV	2130	30746	0.30%	0.016%
69	7.064	7.045	7.087	VV	5702	71416	0.70%	0.038%

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70	7.119	7.087	7.138	VV	1310	29439	0.29%	0.016%
71	7.154	7.138	7.185	VV	1668	26992	0.27%	0.014%
72	7.234	7.185	7.254	VV	2002	40902	0.40%	0.022%
73	7.277	7.254	7.282	VV	798	10802	0.11%	0.006%
74	7.283	7.282	7.294	VV	831	3446	0.03%	0.002%
75	7.322	7.294	7.335	VV	2216	31458	0.31%	0.017%
76	7.362	7.335	7.462	VV	1029584	10180705	100.00%	5.365%
77	7.469	7.462	7.482	VV	2549	26337	0.26%	0.014%
78	7.489	7.482	7.504	VV	3021	29198	0.29%	0.015%
79	7.507	7.504	7.572	VV	2491	55682	0.55%	0.029%
80	7.588	7.572	7.604	VV	1188	18096	0.18%	0.010%
81	7.606	7.604	7.610	VV	1290	3754	0.04%	0.002%
82	7.628	7.610	7.647	VV	2415	33109	0.33%	0.017%
83	7.648	7.647	7.658	VV	1573	5701	0.06%	0.003%
84	7.664	7.658	7.669	VV	1350	5625	0.06%	0.003%
85	7.681	7.669	7.699	VV	1470	17622	0.17%	0.009%
86	7.724	7.699	7.729	VV	1226	13147	0.13%	0.007%
87	7.749	7.729	7.775	VV	2767	37993	0.37%	0.020%
88	7.782	7.775	7.824	VV	1056	20986	0.21%	0.011%
89	7.834	7.824	7.849	VV	1396	14249	0.14%	0.008%
90	7.854	7.849	7.881	VV	782	14009	0.14%	0.007%
91	7.889	7.881	7.898	VV	1028	8471	0.08%	0.004%
92	7.927	7.898	7.967	VV	106670	1103760	10.84%	0.582%
93	7.974	7.967	7.984	VV	1306	9845	0.10%	0.005%
94	8.014	7.984	8.110	VV	813747	8135450	79.91%	4.287%
95	8.119	8.110	8.142	VV	1681	26580	0.26%	0.014%
96	8.157	8.142	8.183	VV	1279	24512	0.24%	0.013%
97	8.212	8.183	8.281	VV	655200	6643271	65.25%	3.501%
98	8.310	8.281	8.404	VV	872943	8721719	85.67%	4.596%
99	8.415	8.404	8.430	VV	1893	26150	0.26%	0.014%
100	8.459	8.430	8.499	VV	3381	79619	0.78%	0.042%
101	8.506	8.499	8.511	VV	1465	7207	0.07%	0.004%
102	8.520	8.511	8.545	VV	914	14936	0.15%	0.008%
103	8.548	8.545	8.552	VV	517	2030	0.02%	0.001%
104	8.570	8.552	8.599	VV	1015	19231	0.19%	0.010%
105	8.603	8.599	8.615	VV	789	5946	0.06%	0.003%
106	8.645	8.615	8.675	VV	60527	626434	6.15%	0.330%
107	8.678	8.675	8.691	VV	2139	16764	0.16%	0.009%
108	8.697	8.691	8.707	VV	1756	14727	0.14%	0.008%
109	8.719	8.707	8.730	VV	2409	26224	0.26%	0.014%
110	8.749	8.730	8.780	VV	4419	82650	0.81%	0.044%
111	8.796	8.780	8.819	VV	2081	31623	0.31%	0.017%
112	8.829	8.819	8.854	VV	1006	13668	0.13%	0.007%

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113	8.877	8.863	8.899	VV	574	6926	0.07%	0.004%
114	8.903	8.899	8.909	VV	230	1398	0.01%	0.001%
115	8.937	8.909	8.957	VV	1247	19416	0.19%	0.010%
116	8.967	8.957	8.995	VV	758	9799	0.10%	0.005%
117	9.025	8.995	9.037	VV	618	8760	0.09%	0.005%
118	9.049	9.037	9.058	VV	1185	9468	0.09%	0.005%
119	9.088	9.058	9.226	VV	831276	8727688	85.73%	4.599%
120	9.245	9.226	9.265	VV	1808	26015	0.26%	0.014%
121	9.309	9.265	9.343	VV	9150	148285	1.46%	0.078%
122	9.347	9.343	9.357	VV	1842	12265	0.12%	0.006%
123	9.377	9.357	9.488	VV	36807	597850	5.87%	0.315%
124	9.515	9.488	9.548	VV	103313	1117018	10.97%	0.589%
125	9.553	9.548	9.565	VV	821	6675	0.07%	0.004%
126	9.585	9.565	9.642	VV	856	22730	0.22%	0.012%
127	9.650	9.642	9.658	VV	342	2141	0.02%	0.001%
128	9.667	9.658	9.675	VV	485	2685	0.03%	0.001%
129	9.686	9.675	9.704	VV	605	4147	0.04%	0.002%
130	9.713	9.704	9.719	VV	289	2123	0.02%	0.001%
131	9.729	9.719	9.746	VV	551	3924	0.04%	0.002%
132	9.764	9.746	9.779	PV	262	3849	0.04%	0.002%
133	9.788	9.779	9.796	VV	271	2065	0.02%	0.001%
134	9.836	9.796	9.850	VV	826	13815	0.14%	0.007%
135	9.864	9.850	9.869	VV	430	3800	0.04%	0.002%
136	9.878	9.869	9.899	VV	622	8441	0.08%	0.004%
137	9.901	9.899	9.904	VV	593	1642	0.02%	0.001%
138	9.909	9.904	9.924	VV	656	6075	0.06%	0.003%
139	9.931	9.924	9.944	VV	693	7141	0.07%	0.004%
140	9.947	9.944	9.967	VV	612	5860	0.06%	0.003%
141	9.969	9.967	9.988	VV	592	5146	0.05%	0.003%
142	9.994	9.988	10.000	VV	441	2588	0.03%	0.001%
143	10.019	10.000	10.037	VV	1543	15219	0.15%	0.008%
144	10.040	10.037	10.062	VV	638	5355	0.05%	0.003%
145	10.106	10.062	10.123	VV	865	20556	0.20%	0.011%
146	10.138	10.123	10.165	VV	528	9569	0.09%	0.005%
147	10.181	10.165	10.195	VV	818	10112	0.10%	0.005%
148	10.245	10.195	10.270	VV	1451	41117	0.40%	0.022%
149	10.298	10.270	10.352	VV	5480	105905	1.04%	0.056%
150	10.372	10.352	10.417	VV	1438	27644	0.27%	0.015%
151	10.476	10.417	10.520	VV	833426	8742349	85.87%	4.607%
152	10.552	10.520	10.745	VV	758380	8888767	87.31%	4.684%
153	10.752	10.745	10.782	VV	1232	22808	0.22%	0.012%
154	10.788	10.782	10.832	VV	958	20586	0.20%	0.011%
155	10.880	10.832	10.912	VV	1762	49964	0.49%	0.026%

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156	10.947	10.912	10.985	VV	101419	1140185	11.20%	0.601%
157	10.991	10.985	11.002	VV	625	4516	0.04%	0.002%
158	11.032	11.002	11.077	VV	788	21321	0.21%	0.011%
159	11.173	11.077	11.214	VV	662	24008	0.24%	0.013%
160	11.246	11.214	11.314	VV	600375	6312316	62.00%	3.327%
161	11.332	11.314	11.343	VV	1109	16262	0.16%	0.009%
162	11.366	11.343	11.394	VV	1413	29212	0.29%	0.015%
163	11.416	11.394	11.450	VV	1914	35731	0.35%	0.019%
164	11.464	11.450	11.480	VV	1143	14625	0.14%	0.008%
165	11.502	11.480	11.530	VV	890	20944	0.21%	0.011%
166	11.544	11.530	11.557	VV	616	8172	0.08%	0.004%
167	11.604	11.557	11.635	VV	1329	41243	0.41%	0.022%
168	11.668	11.635	11.698	VV	8339	116702	1.15%	0.062%
169	11.706	11.698	11.728	VV	899	11308	0.11%	0.006%
170	11.741	11.728	11.789	VV	795	22282	0.22%	0.012%
171	11.827	11.789	11.844	VV	1152	26189	0.26%	0.014%
172	11.865	11.844	11.930	VV	14908	233016	2.29%	0.123%
173	11.940	11.930	11.963	VV	1197	19036	0.19%	0.010%
174	11.988	11.963	12.002	VV	1028	18446	0.18%	0.010%
175	12.012	12.002	12.059	VV	1057	26422	0.26%	0.014%
176	12.081	12.059	12.097	VV	1314	23790	0.23%	0.013%
177	12.115	12.097	12.142	VV	5088	62457	0.61%	0.033%
178	12.151	12.142	12.169	VV	582	7830	0.08%	0.004%
179	12.189	12.169	12.200	VV	1628	22518	0.22%	0.012%
180	12.249	12.200	12.259	VV	99552	1102977	10.83%	0.581%
181	12.281	12.259	12.418	VV	765190	8755128	86.00%	4.614%
182	12.433	12.418	12.449	VV	900	14152	0.14%	0.007%
183	12.469	12.449	12.514	VV	6469	89972	0.88%	0.047%
184	12.574	12.514	12.628	VV	746758	8616603	84.64%	4.541%
185	12.645	12.628	12.660	VV	7381	112264	1.10%	0.059%
186	12.686	12.660	12.724	VV	143995	1795596	17.64%	0.946%
187	12.741	12.724	12.752	VV	1780	25376	0.25%	0.013%
188	12.768	12.752	12.823	VV	1592	47288	0.46%	0.025%
189	12.857	12.823	12.891	VV	91085	1073891	10.55%	0.566%
190	12.915	12.891	13.029	VV	4865	114851	1.13%	0.061%
191	13.051	13.029	13.069	VV	1049	19843	0.19%	0.010%
192	13.092	13.069	13.171	VV	3983	93873	0.92%	0.049%
193	13.189	13.171	13.214	VV	589	13323	0.13%	0.007%
194	13.269	13.214	13.297	VV	1237	38627	0.38%	0.020%
195	13.313	13.297	13.344	VV	1017	20764	0.20%	0.011%
196	13.391	13.344	13.412	VV	2303	45241	0.44%	0.024%
197	13.439	13.412	13.522	VV	85453	1063735	10.45%	0.561%
198	13.547	13.522	13.584	VV	425	9541	0.09%	0.005%
199	13.598	13.584	13.607	PV	267	3074	0.03%	0.002%

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200	13.659	13.607	13.680	VV	630	17090	0.17%	0.009%
201	13.698	13.680	13.752	VV	923	22802	0.22%	0.012%
202	13.762	13.752	13.774	VV	411	3866	0.04%	0.002%
203	13.807	13.774	13.828	VV	721	17464	0.17%	0.009%
204	13.836	13.828	13.854	VV	747	10392	0.10%	0.005%
205	13.874	13.854	13.975	VV	1729	52792	0.52%	0.028%
206	14.003	13.975	14.016	VV	601	11824	0.12%	0.006%
207	14.024	14.016	14.070	VV	546	10728	0.11%	0.006%
208	14.094	14.070	14.127	VV	674	17842	0.18%	0.009%
209	14.165	14.127	14.217	VV	1417	41414	0.41%	0.022%
210	14.225	14.217	14.269	VV	524	10450	0.10%	0.006%
211	14.272	14.269	14.280	VV	344	2228	0.02%	0.001%
212	14.303	14.280	14.332	VV	543	10607	0.10%	0.006%
213	14.345	14.332	14.359	VV	454	5859	0.06%	0.003%
214	14.382	14.359	14.400	VV	527	9900	0.10%	0.005%
215	14.445	14.400	14.463	VV	625689	7824785	76.86%	4.124%
216	14.487	14.463	14.515	VV	644029	7795514	76.57%	4.108%
217	14.535	14.515	14.570	VV	87656	1259167	12.37%	0.664%
218	14.577	14.570	14.617	VV	4653	86071	0.85%	0.045%
219	14.630	14.617	14.680	VV	1958	51899	0.51%	0.027%
220	14.705	14.680	14.750	VV	1156	39514	0.39%	0.021%
221	14.773	14.750	14.815	VV	823	25728	0.25%	0.014%
222	14.832	14.815	14.859	VV	878	17708	0.17%	0.009%
223	14.911	14.859	14.947	VV	12711	232387	2.28%	0.122%
224	14.961	14.947	15.039	VV	1981	68313	0.67%	0.036%
225	15.065	15.039	15.096	VV	4082	64371	0.63%	0.034%
226	15.109	15.096	15.160	VV	850	17767	0.17%	0.009%
227	15.185	15.160	15.204	VV	556	10665	0.10%	0.006%
228	15.253	15.204	15.276	VV	796	19789	0.19%	0.010%
229	15.358	15.276	15.389	VV	1026	35686	0.35%	0.019%
230	15.434	15.389	15.488	VV	950	38580	0.38%	0.020%
231	15.513	15.488	15.524	VV	1368	17688	0.17%	0.009%
232	15.553	15.524	15.597	VV	75518	938487	9.22%	0.495%
233	15.616	15.597	15.677	VV	762	16917	0.17%	0.009%
234	15.708	15.677	15.735	VV	1679	25999	0.26%	0.014%
235	15.754	15.735	15.818	VV	691	16533	0.16%	0.009%
236	15.826	15.818	15.845	PV	167	1717	0.02%	0.001%
237	15.923	15.845	15.957	VV	1449	36288	0.36%	0.019%
238	15.994	15.957	16.009	VV	593690	7857456	77.18%	4.141%
239	16.028	16.009	16.089	VV	670393	7969602	78.28%	4.200%
240	16.106	16.089	16.155	VV	4053	94202	0.93%	0.050%
241	16.179	16.155	16.210	VV	1883	42734	0.42%	0.023%
242	16.216	16.210	16.237	VV	985	14955	0.15%	0.008%

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243	16.260	16.237	16.294	VV	2631	45534	0.45%	0.024%
244	16.370	16.294	16.445	VV	584853	7631300	74.96%	4.022%
245	16.496	16.445	16.524	VV	71776	1066016	10.47%	0.562%
246	16.538	16.524	16.690	VV	4705	117722	1.16%	0.062%
247	16.703	16.690	16.728	VV	345	4668	0.05%	0.002%
248	16.803	16.728	16.830	PV	1357	29222	0.29%	0.015%
249	16.863	16.830	16.897	VV	1175	28641	0.28%	0.015%
250	16.943	16.897	17.000	VV	2205	47150	0.46%	0.025%
251	17.060	17.000	17.105	VV	966	21254	0.21%	0.011%
252	17.148	17.105	17.197	VV	1057	23116	0.23%	0.012%
253	17.271	17.197	17.300	VV	741	23288	0.23%	0.012%
254	17.380	17.300	17.434	VV	66435	913440	8.97%	0.481%
255	17.466	17.434	17.509	VV	5570	89454	0.88%	0.047%
256	17.525	17.509	17.558	VV	618	13714	0.13%	0.007%
257	17.576	17.558	17.617	VV	667	12247	0.12%	0.006%
258	17.674	17.617	17.696	PV	1171	21096	0.21%	0.011%
259	17.738	17.696	17.753	VV	572542	7624299	74.89%	4.018%
260	17.774	17.753	17.949	VV	510333	7714596	75.78%	4.065%
261	17.990	17.949	18.125	VV	528202	7664654	75.29%	4.039%
262	18.132	18.125	18.167	VV	2085	46191	0.45%	0.024%
263	18.207	18.167	18.277	VV	63878	914540	8.98%	0.482%
Sum of corrected areas:						189757909		

Aromatic EPH 121024.M Sat Dec 21 05:22:42 2024

Manual Integration Report

Sequence:	FC121024AL	Instrument	FID_c
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM ALIPHATIC HC	FC067971.D	A~2-methylnaphthalene (C12.89)	yogesh	12/11/2024 8:10:30 AM	Ankita	12/11/2024 9:05:13	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC067971.D	n-Tetracontane (C40)	yogesh	12/11/2024 8:10:30 AM	Ankita	12/11/2024 9:05:13	Peak Integrated by Software
PB165523BS	FC067973.D	1-chlorooctadecane (SURR)	yogesh	12/11/2024 8:10:31 AM	Ankita	12/11/2024 9:05:25	Peak Integrated by Software
PB165523BS	FC067973.D	A~2-methylnaphthalene (C12.89)	yogesh	12/11/2024 8:10:31 AM	Ankita	12/11/2024 9:05:25	Peak Integrated by Software
PB165523BS	FC067973.D	n-Hexatriacontane (C36)	yogesh	12/11/2024 8:10:31 AM	Ankita	12/11/2024 9:05:25	Peak Integrated by Software
PB165523BS	FC067973.D	n-Tetracosane (C24)	yogesh	12/11/2024 8:10:31 AM	Ankita	12/11/2024 9:05:25	Peak Integrated by Software
PB165523BSD	FC067974.D	1-chlorooctadecane (SURR)	yogesh	12/11/2024 8:10:33 AM	Ankita	12/11/2024 9:05:15	Peak Integrated by Software
PB165523BSD	FC067974.D	A~2-methylnaphthalene (C12.89)	yogesh	12/11/2024 8:10:33 AM	Ankita	12/11/2024 9:05:15	Peak Integrated by Software
PB165523BSD	FC067974.D	n-Tetracosane (C24)	yogesh	12/11/2024 8:10:33 AM	Ankita	12/11/2024 9:05:15	Peak Integrated by Software
P5216-09MS	FC067977.D	A~2-methylnaphthalene (C12.89)	yogesh	12/11/2024 8:10:34 AM	Ankita	12/11/2024 9:05:17	Peak Integrated by Software
P5216-09MS	FC067977.D	n-Octacosane (C28)	yogesh	12/11/2024 8:10:34 AM	Ankita	12/11/2024 9:05:17	Peak Integrated by Software
P5216-09MS	FC067977.D	n-Tetracosane (C24)	yogesh	12/11/2024 8:10:34 AM	Ankita	12/11/2024 9:05:17	Peak Integrated by Software
P5216-09MSD	FC067978.D	1-chlorooctadecane (SURR)	yogesh	12/11/2024 8:10:35 AM	Ankita	12/11/2024 9:05:18	Peak Integrated by Software

Manual Integration Report

Sequence:

FC121024AL

Instrument

FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
P5216-09MSD	FC067978.D	A~2-methylnaphthalene (C12.89)	yogesh	12/11/2024 8:10:35 AM	Ankita	12/11/2024 9:05:18	Peak Integrated by Software
P5216-09MSD	FC067978.D	n-Octacosane (C28)	yogesh	12/11/2024 8:10:35 AM	Ankita	12/11/2024 9:05:18	Peak Integrated by Software
P5216-09MSD	FC067978.D	n-Tetracosane (C24)	yogesh	12/11/2024 8:10:35 AM	Ankita	12/11/2024 9:05:18	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC067980.D	A~2-methylnaphthalene (C12.89)	yogesh	12/11/2024 8:10:37 AM	Ankita	12/11/2024 9:05:19	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC067980.D	n-Tetracontane (C40)	yogesh	12/11/2024 8:10:37 AM	Ankita	12/11/2024 9:05:19	Peak Integrated by Software

Manual Integration Report

Sequence:

FC122024AL

Instrument

FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM ALIPHATIC HC	FC068059.D	n-Dotriacontane (C32)	yogesh	12/23/2024 9:21:17 AM	Ankita	12/27/2024 7:45:42	Peak Integrated by Software
PB165775BS	FC068061.D	n-Decane (C10)	yogesh	12/23/2024 9:21:19 AM	Ankita	12/27/2024 7:45:44	Peak Integrated by Software
PB165775BSD	FC068062.D	n-Decane (C10)	yogesh	12/23/2024 9:21:21 AM	Ankita	12/27/2024 7:45:45	Peak Integrated by Software
P5299-04MS	FC068068.D	n-Hexatriacontane (C36)	yogesh	12/23/2024 9:21:23 AM	Ankita	12/27/2024 7:45:47	Peak Integrated by Software
P5299-04MSD	FC068069.D	n-Tetratriacontane (C34)	yogesh	12/23/2024 9:21:25 AM	Ankita	12/27/2024 7:45:49	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC068071.D	n-Tetracontane (C40)	yogesh	12/23/2024 9:21:27 AM	Ankita	12/27/2024 7:45:50	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC068077.D	n-Tetracontane (C40)	yogesh	12/23/2024 9:21:29 AM	Ankita	12/27/2024 7:45:51	Peak Integrated by Software

Manual Integration Report

Sequence:

FD121024AR

Instrument

FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
100 PPM AROMATIC HC	FD048862.D	Bnezo[k]fluoranthene (C30.14)	yogesh	12/10/2024 8:36:02 AM	Ankita	12/10/2024 10:25:17	Peak Integrated by Software
10 PPM AROMATIC HC	FD048865.D	Naphthalene (C11.7)	yogesh	12/10/2024 8:36:04 AM	Ankita	12/10/2024 10:25:18	Peak Integrated by Software
5 PPM AROMATIC HC	FD048866.D	Dibenz[a,h]anthracene (C30.36)	yogesh	12/10/2024 8:36:05 AM	Ankita	12/10/2024 10:25:20	Peak Integrated by Software
5 PPM AROMATIC HC	FD048866.D	Naphthalene (C11.7)	yogesh	12/10/2024 8:36:05 AM	Ankita	12/10/2024 10:25:20	Peak Integrated by Software
20 PPM AROMATIC HC	FD048867.D	benzo[b]fluoranthene (C30.41)	yogesh	12/10/2024 8:36:07 AM	Ankita	12/10/2024 10:25:22	Peak Integrated by Software
20 PPM AROMATIC HC	FD048867.D	Bnezo[k]fluoranthene (C30.14)	yogesh	12/10/2024 8:36:07 AM	Ankita	12/10/2024 10:25:22	Peak Integrated by Software

Manual Integration Report

Sequence:

FD122024AR

Instrument

FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM AROMATIC HC	FD048897.D	Benzo[a]pyrene (C31.34)	yogesh	12/23/2024 9:21:53 AM	Ankita	12/27/2024 7:46:11	Peak Integrated by Software
PB165775BS	FD048899.D	Fluoranthene (C21.85)	yogesh	12/23/2024 9:21:55 AM	Ankita	12/27/2024 7:46:12	Peak Integrated by Software
P5299-04MS	FD048906.D	Fluoranthene (C21.85)	yogesh	12/23/2024 9:21:57 AM	Ankita	12/27/2024 7:46:14	Peak Integrated by Software
20 PPM AROMATIC HC	FD048915.D	1,2,3-Trimethylbenzene (C10.1)	yogesh	12/23/2024 9:21:59 AM	Ankita	12/27/2024 7:46:15	Peak Integrated by Software
20 PPM AROMATIC HC	FD048915.D	benzo[b]fluoranthene (C30.41)	yogesh	12/23/2024 9:21:59 AM	Ankita	12/27/2024 7:46:15	Peak Integrated by Software

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC121024AL

Review By	yogesh	Review On	12/9/2024 4:27:54 PM
Supervise By	Ankita	Supervise On	12/11/2024 9:05:29 AM
SubDirectory	FC121024AL	HP Acquire Method	HP Processing Method FC121024AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649		
CCC Internal Standard/PEM	PP23647		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23645,PP23650		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC067959.D	10 Dec 2024 03:35	YP/AJ	Ok
2	I.BLK	FC067960.D	10 Dec 2024 04:12	YP/AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FC067961.D	10 Dec 2024 04:48	YP/AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FC067962.D	10 Dec 2024 05:24	YP/AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FC067963.D	10 Dec 2024 06:01	YP/AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FC067964.D	10 Dec 2024 06:37	YP/AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FC067965.D	10 Dec 2024 07:14	YP/AJ	Ok
8	20 PPM ALIPHATIC HC STD ICV	FC067966.D	10 Dec 2024 07:51	YP/AJ	Ok
9	I.BLK	FC067967.D	10 Dec 2024 09:03	YP/AJ	Ok
10	20 PPM ALIPHATIC HC STD	FC067968.D	10 Dec 2024 09:40	YP/AJ	Ok
11	P5145-01DL	FC067969.D	10 Dec 2024 10:16	YP/AJ	Ok
12	I.BLK	FC067970.D	10 Dec 2024 11:29	YP/AJ	Ok
13	20 PPM ALIPHATIC HC STD	FC067971.D	10 Dec 2024 12:59	YP/AJ	Ok,M
14	PB165523BL	FC067972.D	10 Dec 2024 13:36	YP/AJ	Ok
15	PB165523BS	FC067973.D	10 Dec 2024 14:12	YP/AJ	Ok,M
16	PB165523BSD	FC067974.D	10 Dec 2024 14:49	YP/AJ	Ok,M
17	P5216-09	FC067975.D	10 Dec 2024 15:25	YP/AJ	Ok
18	P5216-09D	FC067976.D	10 Dec 2024 16:02	YP/AJ	Ok
19	P5216-09MS	FC067977.D	10 Dec 2024 16:38	YP/AJ	Ok,M
20	P5216-09MSD	FC067978.D	10 Dec 2024 17:14	YP/AJ	Ok,M
21	I.BLK	FC067979.D	10 Dec 2024 17:50	YP/AJ	Ok

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC121024AL

Review By	yogesh	Review On	12/9/2024 4:27:54 PM
Supervise By	Ankita	Supervise On	12/11/2024 9:05:29 AM
SubDirectory	FC121024AL	HP Acquire Method	HP Processing Method FC121024AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649		
CCC Internal Standard/PEM	PP23647		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23645,PP23650		

22	20 PPM ALIPHATIC HC STD	FC067980.D	10 Dec 2024 19:03	YP/AJ	Ok,M
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M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC122024AL

Review By	yogesh	Review On	12/20/2024 10:31:09 AM
Supervise By	Ankita	Supervise On	12/27/2024 7:46:00 AM
SubDirectory	FC122024AL	HP Acquire Method	HP Processing Method FC121024AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649		
CCC Internal Standard/PEM	PP23647		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23645,PP23650		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC068057.D	20 Dec 2024 06:40	YP/AJ	Ok
2	I.BLK	FC068058.D	20 Dec 2024 07:15	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC068059.D	20 Dec 2024 09:05	YP/AJ	Ok,M
4	PB165775BL	FC068060.D	20 Dec 2024 10:34	YP/AJ	Ok
5	PB165775BS	FC068061.D	20 Dec 2024 11:10	YP/AJ	Ok,M
6	PB165775BSD	FC068062.D	20 Dec 2024 11:46	YP/AJ	Ok,M
7	P5299-01	FC068063.D	20 Dec 2024 12:45	YP/AJ	Ok
8	P5299-02	FC068064.D	20 Dec 2024 13:21	YP/AJ	Ok
9	P5299-03	FC068065.D	20 Dec 2024 13:58	YP/AJ	Ok
10	P5299-04	FC068066.D	20 Dec 2024 15:12	YP/AJ	Ok
11	P5299-04D	FC068067.D	20 Dec 2024 15:49	YP/AJ	Ok
12	P5299-04MS	FC068068.D	20 Dec 2024 16:26	YP/AJ	Ok,M
13	P5299-04MSD	FC068069.D	20 Dec 2024 17:03	YP/AJ	Ok,M
14	I.BLK	FC068070.D	20 Dec 2024 17:40	YP/AJ	Ok
15	20 PPM ALIPHATIC HC STD	FC068071.D	20 Dec 2024 18:17	YP/AJ	Ok,M
16	PB165783BL	FC068072.D	20 Dec 2024 19:29	YP/AJ	Ok
17	PB165783BS	FC068073.D	20 Dec 2024 20:05	YP/AJ	Ok
18	PB165783BSD	FC068074.D	20 Dec 2024 20:41	YP/AJ	Ok
19	P5356-01	FC068075.D	20 Dec 2024 21:17	YP/AJ	Ok
20	I.BLK	FC068076.D	20 Dec 2024 21:54	YP/AJ	Ok
21	20 PPM ALIPHATIC HC STD	FC068077.D	20 Dec 2024 22:30	YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD121024AR

Review By	yogesh	Review On	12/9/2024 4:28:57 PM
Supervise By	Ankita	Supervise On	12/10/2024 10:25:25 AM
SubDirectory	FD121024AR	HP Acquire Method	HP Processing Method FD121024AR
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23968,PP23970,PP23971,PP23972,PP23973		
CCC Internal Standard/PEM	PP23971		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23969,PP23974		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FD048860.D	10 Dec 2024 01:46	YP/AJ	Ok
2	I.BLK	FD048861.D	10 Dec 2024 02:22	YP/AJ	Ok
3	100 PPM AROMATIC HC STD1	FD048862.D	10 Dec 2024 02:58	YP/AJ	Ok,M
4	50 PPM AROMATIC HC STD2	FD048863.D	10 Dec 2024 03:35	YP/AJ	Ok
5	20 PPM AROMATIC HC STD3	FD048864.D	10 Dec 2024 04:12	YP/AJ	Ok
6	10 PPM AROMATIC HC STD4	FD048865.D	10 Dec 2024 04:48	YP/AJ	Ok,M
7	5 PPM AROMATIC HC STD5	FD048866.D	10 Dec 2024 05:24	YP/AJ	Ok,M
8	20 PPM AROMATIC HC STD ICV	FD048867.D	10 Dec 2024 06:01	YP/AJ	Ok,M
9	I.BLK	FD048868.D	10 Dec 2024 07:14	YP/AJ	Ok
10	20 PPM AROMATIC HC STD	FD048869.D	10 Dec 2024 07:51	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD122024AR

Review By	yogesh	Review On	12/20/2024 10:32:17 AM
Supervise By	Ankita	Supervise On	12/27/2024 7:46:24 AM
SubDirectory	FD122024AR	HP Acquire Method	HP Processing Method FD121024AR
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23968,PP23970,PP23971,PP23972,PP23973		
CCC Internal Standard/PEM	PP23971		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23969,PP23974		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FD048895.D	20 Dec 2024 06:40	YP/AJ	Ok
2	I.BLK	FD048896.D	20 Dec 2024 07:15	YP/AJ	Ok
3	20 PPM AROMATIC HC STD	FD048897.D	20 Dec 2024 09:05	YP/AJ	Ok,M
4	PB165775BL	FD048898.D	20 Dec 2024 10:34	YP/AJ	Ok
5	PB165775BS	FD048899.D	20 Dec 2024 11:10	YP/AJ	Ok,M
6	PB165775BSD	FD048900.D	20 Dec 2024 11:46	YP/AJ	Ok
7	P5299-01	FD048901.D	20 Dec 2024 12:45	YP/AJ	Ok
8	P5299-02	FD048902.D	20 Dec 2024 13:21	YP/AJ	Ok
9	P5299-03	FD048903.D	20 Dec 2024 13:58	YP/AJ	Ok
10	P5299-04	FD048904.D	20 Dec 2024 15:12	YP/AJ	Ok
11	P5299-04D	FD048905.D	20 Dec 2024 15:49	YP/AJ	Ok
12	P5299-04MS	FD048906.D	20 Dec 2024 16:26	YP/AJ	Ok,M
13	P5299-04MSD	FD048907.D	20 Dec 2024 17:03	YP/AJ	Ok
14	I.BLK	FD048908.D	20 Dec 2024 17:40	YP/AJ	Ok
15	20 PPM AROMATIC HC STD	FD048909.D	20 Dec 2024 18:17	YP/AJ	Ok
16	PB165783BL	FD048910.D	20 Dec 2024 19:29	YP/AJ	Ok
17	PB165783BS	FD048911.D	20 Dec 2024 20:05	YP/AJ	Ok
18	PB165783BSD	FD048912.D	20 Dec 2024 20:41	YP/AJ	Ok
19	P5356-01	FD048913.D	20 Dec 2024 21:17	YP/AJ	Ok
20	I.BLK	FD048914.D	20 Dec 2024 21:54	YP/AJ	Ok
21	20 PPM AROMATIC HC STD	FD048915.D	20 Dec 2024 22:30	YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC121024AL

Review By	yogesh	Review On	12/9/2024 4:27:54 PM
Supervise By	Ankita	Supervise On	12/11/2024 9:05:29 AM
SubDirectory	FC121024AL	HP Acquire Method	HP Processing Method FC121024AL

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649
CCC Internal Standard/PEM	PP23647
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23645,PP23650

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FC067959.D	10 Dec 2024 03:35		YP/AJ	Ok
2	I.BLK	I.BLK	FC067960.D	10 Dec 2024 04:12		YP/AJ	Ok
3	100 PPM ALIPHATIC HC	100 PPM ALIPHATIC HC	FC067961.D	10 Dec 2024 04:48		YP/AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FC067962.D	10 Dec 2024 05:24		YP/AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067963.D	10 Dec 2024 06:01		YP/AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FC067964.D	10 Dec 2024 06:37		YP/AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FC067965.D	10 Dec 2024 07:14		YP/AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067966.D	10 Dec 2024 07:51		YP/AJ	Ok
9	I.BLK	I.BLK	FC067967.D	10 Dec 2024 09:03		YP/AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067968.D	10 Dec 2024 09:40		YP/AJ	Ok
11	P5145-01DL	286085DL	FC067969.D	10 Dec 2024 10:16		YP/AJ	Ok
12	I.BLK	I.BLK	FC067970.D	10 Dec 2024 11:29		YP/AJ	Ok
13	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067971.D	10 Dec 2024 12:59		YP/AJ	Ok,M
14	PB165523BL	PB165523BL	FC067972.D	10 Dec 2024 13:36		YP/AJ	Ok
15	PB165523BS	PB165523BS	FC067973.D	10 Dec 2024 14:12		YP/AJ	Ok,M
16	PB165523BSD	PB165523BSD	FC067974.D	10 Dec 2024 14:49		YP/AJ	Ok,M
17	P5216-09	MH-744	FC067975.D	10 Dec 2024 15:25		YP/AJ	Ok
18	P5216-09D	P5216-09D	FC067976.D	10 Dec 2024 16:02		YP/AJ	Ok

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC121024AL

Review By	yogesh	Review On	12/9/2024 4:27:54 PM
Supervise By	Ankita	Supervise On	12/11/2024 9:05:29 AM
SubDirectory	FC121024AL	HP Acquire Method	HP Processing Method FC121024AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649		
CCC	PP23647		
Internal Standard/PEM			
ICV/I.BLK	PP23645,PP23650		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	P5216-09MS	MH-744MS	FC067977.D	10 Dec 2024 16:38	FC067975.D	YP/AJ	Ok,M
20	P5216-09MSD	MH-744MSD	FC067978.D	10 Dec 2024 17:14	FC067975.D!FC067977.D	YP/AJ	Ok,M
21	I.BLK	I.BLK	FC067979.D	10 Dec 2024 17:50		YP/AJ	Ok
22	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067980.D	10 Dec 2024 19:03		YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC122024AL

Review By	yogesh	Review On	12/20/2024 10:31:09 AM
Supervise By	Ankita	Supervise On	12/27/2024 7:46:00 AM
SubDirectory	FC122024AL	HP Acquire Method	HP Processing Method FC121024AL

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649
CCC Internal Standard/PEM	PP23647
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23645,PP23650

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FC068057.D	20 Dec 2024 06:40		YP/AJ	Ok
2	I.BLK	I.BLK	FC068058.D	20 Dec 2024 07:15		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068059.D	20 Dec 2024 09:05		YP/AJ	Ok,M
4	PB165775BL	PB165775BL	FC068060.D	20 Dec 2024 10:34		YP/AJ	Ok
5	PB165775BS	PB165775BS	FC068061.D	20 Dec 2024 11:10		YP/AJ	Ok,M
6	PB165775BSD	PB165775BSD	FC068062.D	20 Dec 2024 11:46		YP/AJ	Ok,M
7	P5299-01	SB-01	FC068063.D	20 Dec 2024 12:45		YP/AJ	Ok
8	P5299-02	SB-02	FC068064.D	20 Dec 2024 13:21		YP/AJ	Ok
9	P5299-03	SB-01	FC068065.D	20 Dec 2024 13:58		YP/AJ	Ok
10	P5299-04	SB-02	FC068066.D	20 Dec 2024 15:12		YP/AJ	Ok
11	P5299-04D	P5299-04D	FC068067.D	20 Dec 2024 15:49		YP/AJ	Ok
12	P5299-04MS	SB-02MS	FC068068.D	20 Dec 2024 16:26	FC068066.D	YP/AJ	Ok,M
13	P5299-04MSD	SB-02MSD	FC068069.D	20 Dec 2024 17:03	FC068066.D!FC068068.D	YP/AJ	Ok,M
14	I.BLK	I.BLK	FC068070.D	20 Dec 2024 17:40		YP/AJ	Ok
15	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068071.D	20 Dec 2024 18:17		YP/AJ	Ok,M
16	PB165783BL	PB165783BL	FC068072.D	20 Dec 2024 19:29		YP/AJ	Ok
17	PB165783BS	PB165783BS	FC068073.D	20 Dec 2024 20:05		YP/AJ	Ok
18	PB165783BSD	PB165783BSD	FC068074.D	20 Dec 2024 20:41		YP/AJ	Ok

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC122024AL

Review By	yogesh	Review On	12/20/2024 10:31:09 AM
Supervise By	Ankita	Supervise On	12/27/2024 7:46:00 AM
SubDirectory	FC122024AL	HP Acquire Method	HP Processing Method FC121024AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649		
CCC	PP23647		
Internal Standard/PEM			
ICV/I.BLK	PP23645,PP23650		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	P5356-01	STAND-PIPE	FC068075.D	20 Dec 2024 21:17		YP/AJ	Ok
20	I.BLK	I.BLK	FC068076.D	20 Dec 2024 21:54		YP/AJ	Ok
21	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC068077.D	20 Dec 2024 22:30		YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD121024AR

Review By	yogesh	Review On	12/9/2024 4:28:57 PM
Supervise By	Ankita	Supervise On	12/10/2024 10:25:25 AM
SubDirectory	FD121024AR	HP Acquire Method	HP Processing Method
			FD121024AR

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP23968,PP23970,PP23971,PP23972,PP23973
CCC Internal Standard/PEM	PP23971
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23969,PP23974

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FD048860.D	10 Dec 2024 01:46		YP/AJ	Ok
2	I.BLK	I.BLK	FD048861.D	10 Dec 2024 02:22		YP/AJ	Ok
3	100 PPM AROMATIC HC	100 PPM AROMATIC HC	FD048862.D	10 Dec 2024 02:58		YP/AJ	Ok,M
4	50 PPM AROMATIC HC	50 PPM AROMATIC HC	FD048863.D	10 Dec 2024 03:35		YP/AJ	Ok
5	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048864.D	10 Dec 2024 04:12		YP/AJ	Ok
6	10 PPM AROMATIC HC	10 PPM AROMATIC HC	FD048865.D	10 Dec 2024 04:48		YP/AJ	Ok,M
7	5 PPM AROMATIC HC	5 PPM AROMATIC HC	FD048866.D	10 Dec 2024 05:24		YP/AJ	Ok,M
8	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048867.D	10 Dec 2024 06:01		YP/AJ	Ok,M
9	I.BLK	I.BLK	FD048868.D	10 Dec 2024 07:14		YP/AJ	Ok
10	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048869.D	10 Dec 2024 07:51		YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD122024AR

Review By	yogesh	Review On	12/20/2024 10:32:17 AM
Supervise By	Ankita	Supervise On	12/27/2024 7:46:24 AM
SubDirectory	FD122024AR	HP Acquire Method	HP Processing Method
			FD121024AR

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP23968,PP23970,PP23971,PP23972,PP23973
CCC Internal Standard/PEM	PP23971
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23969,PP23974

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FD048895.D	20 Dec 2024 06:40		YP/AJ	Ok
2	I.BLK	I.BLK	FD048896.D	20 Dec 2024 07:15		YP/AJ	Ok
3	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048897.D	20 Dec 2024 09:05		YP/AJ	Ok,M
4	PB165775BL	PB165775BL	FD048898.D	20 Dec 2024 10:34		YP/AJ	Ok
5	PB165775BS	PB165775BS	FD048899.D	20 Dec 2024 11:10		YP/AJ	Ok,M
6	PB165775BSD	PB165775BSD	FD048900.D	20 Dec 2024 11:46		YP/AJ	Ok
7	P5299-01	SB-01	FD048901.D	20 Dec 2024 12:45		YP/AJ	Ok
8	P5299-02	SB-02	FD048902.D	20 Dec 2024 13:21		YP/AJ	Ok
9	P5299-03	SB-01	FD048903.D	20 Dec 2024 13:58		YP/AJ	Ok
10	P5299-04	SB-02	FD048904.D	20 Dec 2024 15:12		YP/AJ	Ok
11	P5299-04D	P5299-04D	FD048905.D	20 Dec 2024 15:49		YP/AJ	Ok
12	P5299-04MS	SB-02MS	FD048906.D	20 Dec 2024 16:26	FD048904.D	YP/AJ	Ok,M
13	P5299-04MSD	SB-02MSD	FD048907.D	20 Dec 2024 17:03	FD048904.D!FD048906.D	YP/AJ	Ok
14	I.BLK	I.BLK	FD048908.D	20 Dec 2024 17:40		YP/AJ	Ok
15	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048909.D	20 Dec 2024 18:17		YP/AJ	Ok
16	PB165783BL	PB165783BL	FD048910.D	20 Dec 2024 19:29		YP/AJ	Ok
17	PB165783BS	PB165783BS	FD048911.D	20 Dec 2024 20:05		YP/AJ	Ok
18	PB165783BSD	PB165783BSD	FD048912.D	20 Dec 2024 20:41		YP/AJ	Ok

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD122024AR

Review By	yogesh	Review On	12/20/2024 10:32:17 AM
Supervise By	Ankita	Supervise On	12/27/2024 7:46:24 AM
SubDirectory	FD122024AR	HP Acquire Method	HP Processing Method FD121024AR
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23968,PP23970,PP23971,PP23972,PP23973		
CCC	PP23971		
Internal Standard/PEM			
ICV/I.BLK	PP23969,PP23974		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	P5356-01	STAND-PIPE	FD048913.D	20 Dec 2024 21:17		YP/AJ	Ok
20	I.BLK	I.BLK	FD048914.D	20 Dec 2024 21:54		YP/AJ	Ok
21	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048915.D	20 Dec 2024 22:30		YP/AJ	Ok,M

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 12/18/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 12/17/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:12
Out Date: 12/18/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133976

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
P5245-03	72-12016	1	1.15	8.37	9.52	8.99	93.7	
P5299-01	SB-01	2	1.15	8.40	9.55	7.74	78.5	
P5299-02	SB-02	3	1.16	8.70	9.86	7.73	75.5	
P5299-03	SB-01	33	1.13	8.61	9.74	7.05	68.8	
P5299-04	SB-02	4	1.15	8.75	9.9	8.08	79.2	
P5306-01	OU4-VSL-07-121224	5	1.16	8.52	9.68	8.9	90.8	
P5306-03	OU4-VSL-08-121224	6	1.17	8.73	9.9	9.1	90.8	
P5306-05	OU4-VSL-09-121224	7	1.19	8.45	9.64	8.8	90.1	
P5306-07	OU4-VSL-10-121224	8	1.15	8.65	9.8	9.37	95.0	
P5306-09	OU4-VSL-11-121224	9	1.11	8.77	9.88	9.32	93.6	
P5306-11	OU4-VSL-12-121224	10	1.12	8.65	9.77	8.97	90.8	
P5306-13	OU4-VSL-13-121224	11	1.13	8.72	9.85	8.98	90.0	
P5306-15	OU4-VSL-14-121224	12	1.18	8.46	9.64	9.29	95.9	
P5306-17	OU4-VSL-06R-121224	13	1.15	8.80	9.95	9.22	91.7	
P5307-01	1A-1B-1C-ROOF-2	14	1.00	1.00	2.00	2.00	100.0	caluk
P5307-02	2A-2B-2C-ROOF-2	15	1.00	1.00	2.00	2.00	100.0	caluk
P5307-03	3A-3B-3C-1907	16	1.00	1.00	2.00	2.00	100.0	caluk
P5307-04	4A-4B-4C-1907	17	1.00	1.00	2.00	2.00	100.0	caluk
P5307-05	5A-5B-5C-1907	18	1.00	1.00	2.00	2.00	100.0	caluk
P5307-06	6A-6B-6C-1952	19	1.00	1.00	2.00	2.00	100.0	caluk
P5307-07	1907-BLDG-GRAY	20	1.00	1.00	2.00	2.00	100.0	caluk
P5307-08	1952-BLDG	21	1.00	1.00	2.00	2.00	100.0	caluk
P5307-09	9A-9B-9C-1907	22	1.00	1.00	2.00	2.00	100.0	caluk
P5307-10	1907-BLDG-OFF-WHITE	23	1.00	1.00	2.00	2.00	100.0	caluk
P5307-11	11A-11B-11C-1952-BLDG	24	1.00	1.00	2.00	2.00	100.0	caluk
P5307-12	12A-12B-12C-1952	25	1.00	1.00	2.00	2.00	100.0	caluk
P5307-13	13A-13B-13C-1952	26	1.00	1.00	2.00	2.00	100.0	caluk
P5307-14	14A-14B-14C-1907	27	1.00	1.00	2.00	2.00	100.0	caluk



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 12/18/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 12/17/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:12
Out Date: 12/18/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133976

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
P5307-15	15A-15B-15C-ROOF-7	28	1.00	1.00	2.00	2.00	100.0	caluk
P5312-01	SOIL-VNJ-222	29	1.15	8.43	9.58	8.55	87.8	
P5312-02	SOIL-VNJ-222	30	1.12	8.66	9.78	9.35	95.0	
P5312-03	CONCRETE-VNJ-222	31	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P5312-04	CONCRETE-VNJ-222	32	1.00	1.00	2.00	2.00	100.0	CONCRETE sample

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

SOP ID: MNJDEP-EPH-7

Clean Up SOP #: N/A

Matrix: Solid

Weigh By: RJ

Balance check: RJ

Balance ID: EX-SC-2

pH Strip Lot#: N/A

Extraction By: RJ

Filter By: RJ

pH Meter ID: N/A

Hood ID: 3,7

Extraction Start Date: 12/19/2024

Extraction Start Time: 14:05

Extraction End Date: 12/20/2024

Extraction End Time: 10:25

Concentration By: EH

Supervisor By: rajesh

Extraction Method: ☐ Separatory Funnel ☐ Continuous Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☒ Soxhlet

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	100 PPM	PP24092
Surrogate	1.0ML	100 PPM	PP23989
Fractionation Surrogate	1.0ML	100 PPM	PP24097
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
MeCl2/Acetone/1:1	N/A	EP2560
Baked Na2SO4	N/A	EP2573
Sand	N/A	E2865
Hexane	N/A	E3847
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

KD Bath ID: N/A

KD Bath Temperature: N/A

Envap ID: NEVAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/20/24	RP (Sat Lab)	Y.P. PESTIPCB
10:30	Preparation Group	Analysis Group

Analytical Method: MNJDEP-EPH-7

Concentration Date: 12/20/2024

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB165775BL	PB165775BL	EPH	30.03	N/A	RUPESH	ritesh	2			U5-1
PB165775BS	PB165775BS	EPH	30.01	N/A	RUPESH	ritesh	2			2
PB165775BSD	PB165775BSD	EPH	30.01	N/A	RUPESH	ritesh	2			3
P5299-01	SB-01	EPH	30.06	N/A	RUPESH	ritesh	2	E		4
P5299-02	SB-02	EPH	30.07	N/A	RUPESH	ritesh	2	E		5
P5299-03	SB-01	EPH	30.03	N/A	RUPESH	ritesh	2	E		6
P5299-04	SB-02	EPH	30.03	N/A	RUPESH	ritesh	2	E		U4-1
P5299-04DUP	SB-02DUP	EPH	30.01	N/A	ritesh	Evelyn	2	E		2
P5299-04MS	SB-02MS	EPH	30.02	N/A	RUPESH	ritesh	2	E		2
P5299-04MS D	SB-02MSD	EPH	30.01	N/A	RUPESH	ritesh	2	E		3

* Extracts relinquished on the same date as received.

[Signature]
12/20/24

12/19/24

WORKLIST(Hardcopy Internal Chain)

WorkList Name : P5299N

WorkList ID : 186502

Department : Extraction

Date : 12-19-2024 13:57:01

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5299-01	SB-01	Solid	EPH	Cool 4 deg C	PORT06	L41	12/14/2024	NJEPH
P5299-02	SB-02	Solid	EPH	Cool 4 deg C	PORT06	L41	12/15/2024	NJEPH
P5299-03	SB-01	Solid	EPH	Cool 4 deg C	PORT06	L41	12/15/2024	NJEPH
P5299-04	SB-02	Solid	EPH	Cool 4 deg C	PORT06	L41	12/15/2024	NJEPH

Date/Time 12/19/24 14:00
Raw Sample Received by: RJ (Get play)
Raw Sample Relinquished by: [Signature]

Date/Time 12/19/24 14:25
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: RJ (Get play)

Prep Standard - Chemical Standard Summary

Order ID : P5299

Test : EPH

Prepbatch ID : PB165775,

Sequence ID/Qc Batch ID: FC122024AL,FD122024AR,

Standard ID :

EP2560,EP2573,PP23644,PP23645,PP23646,PP23647,PP23648,PP23649,PP23650,PP23968,PP23969,PP23970,PP
23971,PP23972,PP23973,PP23974,PP23989,PP24092,PP24097,

Chemical ID :

E2865,E3551,E3789,E3827,E3828,E3847,P10260,P11139,P12362,P12972,P13017,P13278,P13465,P13472,P13599,P
13600,P13604,P13622,P13636,P13646,P13647,P13648,P13649,P13656,P13689,P13801,P13806,P13810,P13812,P13
813,P13814,P13815,P13823,P13824,P13835,P13837,P13838,P13841,P13847,P13848,P13849,P13852,P13853,P1385
4,W3110,

Extractions 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>
2017	1:1 ACETONE/METHYLENE CHLORIDE	EP2560	11/14/2024	05/08/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/14/2024

FROM 8000.00000ml of E3827 + 8000.00000ml of E3828 = Final Quantity: 16000.000 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>
3923	Baked Sodium Sulfate	EP2573	12/16/2024	06/16/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 12/16/2024

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

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>
781	100 PPM Aliphatic HC Working STD (Restek)	PP23644	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
								09/10/2024

FROM 0.25000ml of P12972 + 0.25000ml of P13017 + 1.25000ml of P12362 + 23.25000ml of E3789 = Final Quantity: 25.000 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>
2900	100 PPM Aliphatic HC STD (Absolute)	PP23645	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
								09/10/2024

FROM 0.25000ml of P12972 + 0.25000ml of P13017 + 2.50000ml of P13278 + 22.00000ml of E3789 = Final Quantity: 25.000 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>
783	50 PPM Aliphatic HC STD	PP23646	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
09/10/2024								

FROM 0.50000ml of E3789 + 0.50000ml of PP23644 = Final Quantity: 1.000 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>
784	20 PPM Aliphatic HC STD	PP23647	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
09/10/2024								

FROM 0.80000ml of E3789 + 0.20000ml of PP23644 = Final Quantity: 1.000 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>
785	10 PPM Aliphatic HC STD	PP23648	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
09/10/2024								

FROM 0.90000ml of E3789 + 0.10000ml of PP23644 = Final Quantity: 1.000 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>
786	5 PPM Aliphatic HC STD	PP23649	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
09/10/2024								

FROM 0.90000ml of E3789 + 0.10000ml of PP23646 = Final Quantity: 1.000 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>
2901	20 PPM Aliphatic HC STD ICV (Absolute)	PP23650	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
								09/10/2024

FROM 0.80000ml of E3789 + 0.20000ml of PP23645 = Final Quantity: 1.000 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>
782	100 PPM Aromatic HC Working STD	PP23968	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/21/2024

FROM 0.25000ml of P13646 + 0.62500ml of P13465 + 1.25000ml of P10260 + 22.87500ml of E3828 = Final Quantity: 25.000 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>
2945	100 PPM Aromatic HC Working STD (Absolute)	PP23969	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/21/2024

FROM 0.25000ml of P13647 + 0.62500ml of P13472 + 1.25000ml of P11139 + 22.87500ml of E3828 = Final Quantity: 25.000 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>
787	50 PPM Aromatic HC STD	PP23970	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/21/2024

FROM 0.50000ml of E3828 + 0.50000ml of PP23968 = Final Quantity: 1.000 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>
788	20 PPM Aromatic HC STD	PP23971	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/21/2024

FROM 0.80000ml of E3828 + 0.20000ml of PP23968 = Final Quantity: 1.000 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>
789	10 PPM Aromatic HC STD	PP23972	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/21/2024

FROM 0.90000ml of E3828 + 0.10000ml of PP23968 = Final Quantity: 1.000 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>
790	5 PPM Aromatic HC STD	PP23973	11/14/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/21/2024

FROM 0.90000ml of E3828 + 0.10000ml of PP23970 = Final Quantity: 1.000 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>
2901	20 PPM Aliphatic HC STD ICV (Absolute)	PP23974	11/14/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
								11/21/2024

FROM 0.80000ml of W3110 + 0.20000ml of PP23645 = Final Quantity: 1.000 ml



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

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Fax : 908 789 8922

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	12/31/2024	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	07/01/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	24C1862008	02/13/2025	08/13/2024 / Rajesh	08/13/2024 / Rajesh	E3789

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	05/08/2025	11/08/2024 / Rajesh	11/07/2024 / Rajesh	E3827

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24G0862003	05/09/2025	11/09/2024 / Rajesh	11/04/2024 / Rajesh	E3828

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	24G1962003	06/16/2025	12/16/2024 / Rajesh	12/13/2024 / Rajesh	E3847

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30541 / Custom NJEPH Aromatics Calibration Standard	A0165529	05/14/2025	11/14/2024 / yogesh	01/26/2021 / dhaval	P10260

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95709 / NJ EPH Aromatic Hydrocarbons, 2000 PPM	060420	05/14/2025	11/14/2024 / yogesh	10/29/2021 / Abdul	P11139

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30540 / Custom NJEPH Aliphatics Calibration Standard	A0190424	03/09/2025	09/09/2024 / yogesh	03/16/2023 / Yogesh	P12362

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0204989	03/09/2025	09/09/2024 / yogesh	12/20/2023 / Yogesh	P12972

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0204177	03/09/2025	09/09/2024 / yogesh	12/21/2023 / Yogesh	P13017

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95899 / NJ EPH Aliphatic n-Hydrocarbons-Revised, 1000 PPM	040524	03/09/2025	09/09/2024 / yogesh	04/11/2024 / yogesh	P13278

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0210831	05/14/2025	11/14/2024 / yogesh	07/23/2024 / yogesh	P13465

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0210831	05/14/2025	11/14/2024 / yogesh	07/23/2024 / yogesh	P13472

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13599

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13600

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13604

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0213283	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13622

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0211112	06/18/2025	12/18/2024 / yogesh	10/16/2024 / yogesh	P13636

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	05/14/2025	11/14/2024 / yogesh	10/16/2024 / yogesh	P13646

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	05/14/2025	11/14/2024 / yogesh	10/16/2024 / yogesh	P13647

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13648

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13649

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13656

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0216631	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13689

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13801

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13806

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13810

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13812

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13813

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13814

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13823

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0217408	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13824

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13835

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13837

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13838

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13841

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13847

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13848

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13849

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13852

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13853

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	06/18/2025	12/18/2024 / yogesh	12/09/2024 / yogesh	P13854

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	235898	02/28/2029	06/27/2024 / jignesh	06/26/2024 / jignesh	W3110



110 Benner Circle
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CERTIFIED REFERENCE MATERIAL

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.

DD
06/17/2021

Catalog No. : 30541 **Lot No.:** A0172403

Description : NJEPH Aromatics Calibration Standard
NJEPH Aromatics Calibration Standard 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P10758
TO
P10762
- (S)

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene CAS # 526-73-8 (Lot 8776.10-36) Purity 98%	2,010.0 µg/mL	+/- 11.7957 µg/mL Gravimetric +/- 90.5449 µg/mL Unstressed +/- 100.4678 µg/mL Stressed
2	Naphthalene CAS # 91-20-3 (Lot MKBZ8680V) Purity 99%	2,006.0 µg/mL	+/- 11.7723 µg/mL Gravimetric +/- 90.3656 µg/mL Unstressed +/- 100.2689 µg/mL Stressed
3	2-Methylnaphthalene CAS # 91-57-6 (Lot STBG8884) Purity 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL Gravimetric +/- 90.4557 µg/mL Unstressed +/- 100.3688 µg/mL Stressed
4	Acenaphthylene CAS # 208-96-8 (Lot N19U) Purity 95%	2,002.6 µg/mL	+/- 11.7524 µg/mL Gravimetric +/- 90.2125 µg/mL Unstressed +/- 100.0989 µg/mL Stressed
5	Acenaphthene CAS # 83-32-9 (Lot MKCN0610) Purity 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL Gravimetric +/- 90.0953 µg/mL Unstressed +/- 99.9689 µg/mL Stressed
6	Fluorene CAS # 86-73-7 (Lot 10217947) Purity 99%	2,016.0 µg/mL	+/- 11.8310 µg/mL Gravimetric +/- 90.8161 µg/mL Unstressed +/- 100.7687 µg/mL Stressed
7	Phenanthrene CAS # 85-01-8 (Lot MKCL7390) Purity 99%	2,012.0 µg/mL	+/- 11.8075 µg/mL Gravimetric +/- 90.6359 µg/mL Unstressed +/- 100.5688 µg/mL Stressed

8	Anthracene			2,002.0	µg/mL	+/-	11.7489	µg/mL	Gravimetric
	CAS #	120-12-7	(Lot MKCM0015)			+/-	90.1854	µg/mL	Unstressed
	Purity	99%				+/-	100.0689	µg/mL	Stressed
9	Fluoranthene			2,003.0	µg/mL	+/-	11.7547	µg/mL	Gravimetric
	CAS #	206-44-0	(Lot MKCF7378)			+/-	90.2305	µg/mL	Unstressed
	Purity	99%				+/-	100.1189	µg/mL	Stressed
10	Pyrene			2,011.0	µg/mL	+/-	11.8017	µg/mL	Gravimetric
	CAS #	129-00-0	(Lot BCCB9880)			+/-	90.5909	µg/mL	Unstressed
	Purity	99%				+/-	100.5188	µg/mL	Stressed
11	Benz(a)anthracene			2,011.0	µg/mL	+/-	11.8014	µg/mL	Gravimetric
	CAS #	56-55-3	(Lot P0022018-0505)			+/-	90.5890	µg/mL	Unstressed
	Purity	98%				+/-	100.5168	µg/mL	Stressed
12	Chrysene			2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS #	218-01-9	(Lot STBJ8094)			+/-	90.0953	µg/mL	Unstressed
	Purity	99%				+/-	99.9689	µg/mL	Stressed
13	Benzo(b)fluoranthene			2,006.0	µg/mL	+/-	11.7721	µg/mL	Gravimetric
	CAS #	205-99-2	(Lot 012012B)			+/-	90.3638	µg/mL	Unstressed
	Purity	97%				+/-	100.2669	µg/mL	Stressed
14	Benzo(k)fluoranthene			2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS #	207-08-9	(Lot 012019K)			+/-	90.5458	µg/mL	Unstressed
	Purity	99%				+/-	100.4688	µg/mL	Stressed
15	Benzo(a)pyrene			2,004.0	µg/mL	+/-	11.7606	µg/mL	Gravimetric
	CAS #	50-32-8	(Lot RP210113)			+/-	90.2755	µg/mL	Unstressed
	Purity	99%				+/-	100.1689	µg/mL	Stressed
16	Indeno(1,2,3-cd)pyrene			2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS #	193-39-5	(Lot 1-RAK-33-4)			+/-	90.5458	µg/mL	Unstressed
	Purity	99%				+/-	100.4688	µg/mL	Stressed
17	Dibenz(a,h)anthracene			2,017.0	µg/mL	+/-	11.8369	µg/mL	Gravimetric
	CAS #	53-70-3	(Lot ER032211-01)			+/-	90.8611	µg/mL	Unstressed
	Purity	99%				+/-	100.8187	µg/mL	Stressed
18	Benzo(g,h,i)perylene			2,003.0	µg/mL	+/-	11.7547	µg/mL	Gravimetric
	CAS #	191-24-2	(Lot 8GFYJ)			+/-	90.2305	µg/mL	Unstressed
	Purity	99%				+/-	100.1189	µg/mL	Stressed
Solvent:	Methylene chloride								
	CAS #	75-09-2							
	Purity	99%							

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

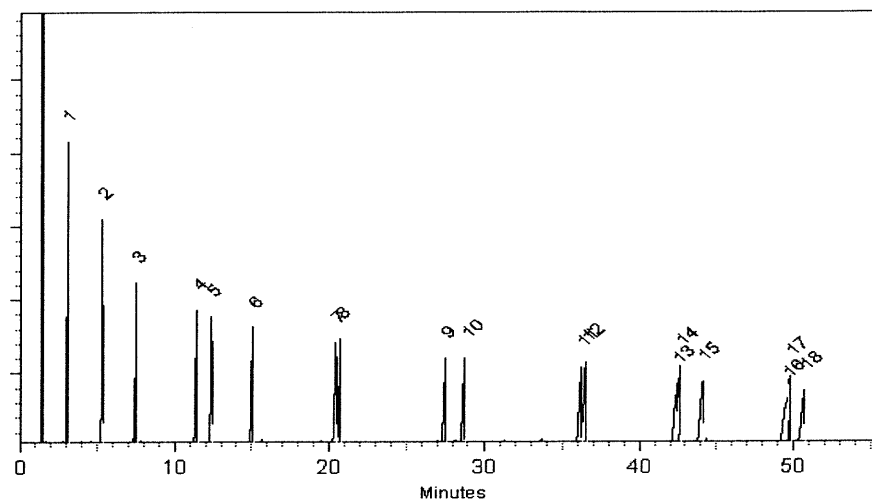
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

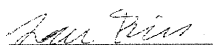
Inj. Temp:
250°C

Det. Temp:
330°C

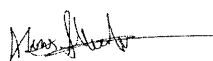
Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Lane Kibe - Mix Technician

Date Mixed: 14-May-2021 **Balance:** B345965662


Alexis Shelow - Operations Tech I

Date Passed: 18-May-2021

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 www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Sand
Purified
Washed and Ignited



Material No.: 3382-05
Batch No.: 0000243821
Manufactured Date: 2018/04/09
Retest Date: 2025/04/07
Revision No: 1

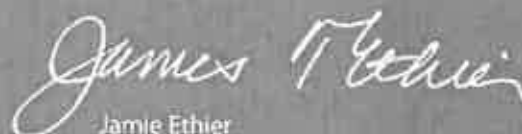
Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	$\leq 0.16\%$	0.01

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

E 2865


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700



**PRODUCTOS
QUÍMICOS
MONTERREY, S.A. DE C.V.**

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na ₂ SO ₄
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3

Material No.: 926
Batch No.: 24C186
Manufactured Date: 2024-0
Expiration Date: 2025-0
Revision N

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	≥ 99.5 %	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.4 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

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

Recd. by RP on 8/13/24

E 3789



Jamie Croak
Director Quality Operations, Bioscience Products

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087, U.S.A. Phone 610.386.1700

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	<= 0.3	0.2
Titration Base (μeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3827

Rec'd by RS on ~~11/8/24~~ 11/7/24

$\frac{RS}{11/7}$

Jamie Croak

Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials LLC

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

 **avantor**™



Material No.: 9266-A4

Batch No.: 24J0862003

Manufactured Date: 2024-09-12

Expiration Date: 2025-12-12

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	1
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02\%$	$< 0.01\%$

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3828



Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials LLC

Material No.: 9262-03
Batch No.: 24G1962003
Manufactured Date: 2024-05-23
Expiration Date: 2025-08-22
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	≥ 99.5 %	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

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

Recd. by RP on 12/13/24

E3847



Jamie Croak
Director Quality Operations, Bioscience Production



Certified Reference Material CRM



CERTIFIED WEIGHT REPORT

Part Number: 95709
Lot Number: 060420
Description: NJ EPH Aromatic Hydrocarbons
18 components
Expiration Date: 060425
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 23060
Weight(s) shown below were combined and diluted to (mL): 500.0
Balance Uncertainty: 5E-05
Flask Uncertainty: 0.058

Solvent(s): Methylene chloride
Lot# 104923

Formulated By:	Benson Chan	060420
Reviewed By:	Pedro L. Renteria	060420
		DATE

Compound	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	CAS#	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
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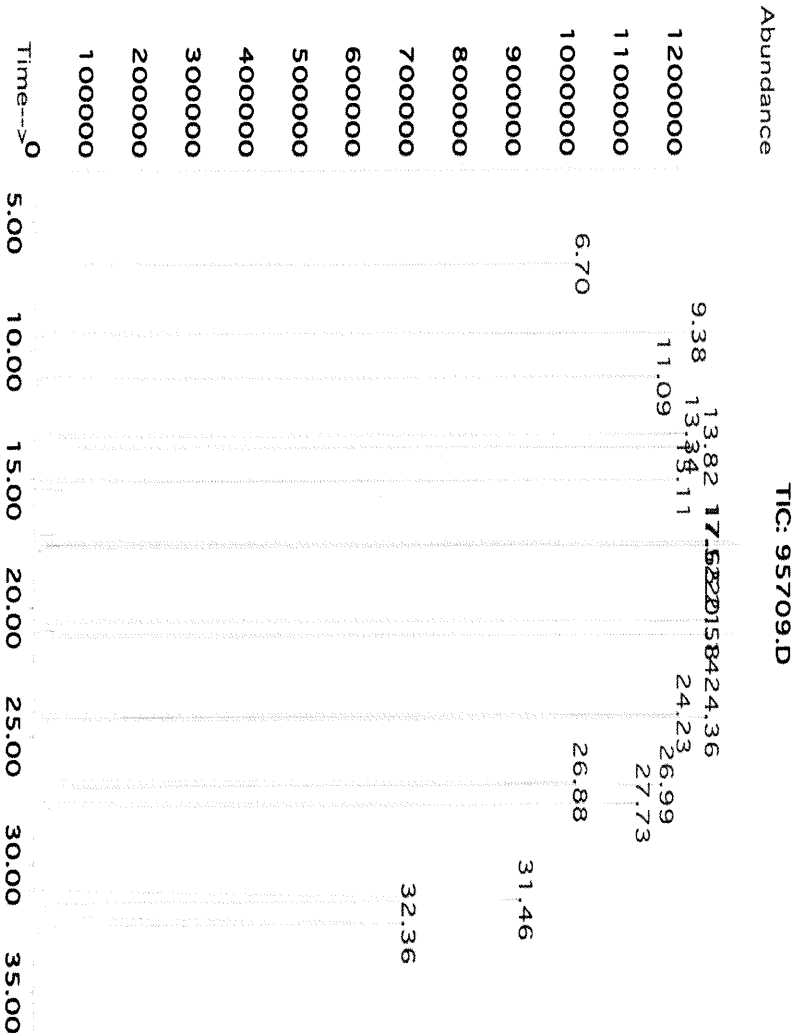
1. Acenaphthene	1	MKB14871V	2000	99	0.2	1.01003	1.01010	2000.1	8.1	83-32-9	N/A	ip-tral 600mg/kg
2. Acenaphthylene	3	012014	2000	98	0.2	1.02033	1.02053	2000.4	8.2	208-96-6	N/A	N/A
3. Anthracene	13	A0210580	2000	99	0.2	1.01003	1.01009	2000.1	8.1	120-12-7	0.2mg/m3 (8h)	ip-trus 430mg/kg
4. Benz(a)anthracene	28	JY2TD-JT	2000	98	0.2	1.02033	1.02051	2000.3	8.2	56-55-3	N/A	N/A
5. Benz(e)pyrene	30	012012	2000	99.5	0.2	1.00495	1.00511	2000.3	8.1	50-32-8	0.2mg/m3 (8h)	scu-tral 50mg/kg
6. Benz(b)fluoranthene	31	012012b	2000	99	0.2	1.01003	1.01012	2000.2	8.1	205-99-2	N/A	N/A
7. Benz(k)fluoranthene	33	012012k	2000	99	0.2	1.01003	1.01018	2000.3	8.1	207-08-9	N/A	N/A
8. Benz(g,h,i)perylene	32	012018	2000	99	0.2	1.01003	1.01019	2000.3	8.1	191-24-2	N/A	N/A
9. Chrysene	91	012015	2000	98	0.2	1.02033	1.02040	2000.1	8.2	218-01-9	0.2mg/m3	N/A
10. Dibenzo(a,h)anthracene	112	012011	2000	98	0.2	1.02033	1.02050	2000.3	8.2	53-70-3	0.2mg/m3	N/A
11. Fluoranthene	183	04221PV	2000	98	0.2	1.02033	1.02050	2000.3	8.2	206-44-0	N/A	of-tral 2000mg/kg
12. Fluorene	184	07211MV	2000	98	0.2	1.02033	1.02047	2000.3	8.2	86-73-7	N/A	ip-trus 2 g/kg
13. Indeno(1,2,3-cd)pyrene	202	012014	2000	99.9	0.2	1.00093	1.00119	2000.5	8.0	193-39-5	N/A	N/A
14. 2-Methylnaphthalene	214	MKB13783V	2000	97	0.2	1.03085	1.03090	2000.1	8.3	91-57-6	N/A	of-tral 1630mg/kg
15. Naphthalene	222	MKB28690V	2000	100	0.2	0.99993	0.99999	2000.1	8.0	91-20-3	10 ppm (50mg/m3/8h)	of-tral 490mg/kg
16. Phenanthrene	248	03410PV	2000	99	0.2	1.01003	1.01030	2000.5	8.1	85-01-8	0.2mg/m3/8h	of-trus 700mg/kg
17. Pyrene	259	010197	2000	98	0.2	1.02033	1.02042	2000.2	8.2	129-00-0	0.2mg/m3/8h	of-tral 2700mg/kg
18. 1,2,3-Trimethylbenzene	944	031097	2000	99	0.2	1.01003	1.01025	2000.4	8.1	526-73-8	N/A	N/A

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certified (±) 0.5% of the stated value, unless otherwise stated.
* All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.F., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

P11137
P11141
11/10/21



Method GC8MSD-2.M: Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (14min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Melissa Stonier.



Peak No.	Name	MSD RT (min.)
1	1,2,3-Trimethylbenzene	6.70
2	Naphthalene	9.38
3	2-Methylnaphthalene	11.09
4	Acenaphthylene	13.34
5	Acenaphthene	13.82
6	Fluorene	15.11
7	Phenanthrene	17.52
8	Anthracene	17.65
9	Fluoranthene	20.58
10	Pyrene	21.14
11	Chrysene	24.23
12	Benzo(a)anthracene	24.36
13	Benzo(b)fluoranthene/Benzo(k)fluoranthene	26.98
14	Benzo(a)pyrene	27.73
15	Indeno(1,2,3-cd)pyrene/Dibenzo(a,h)anthracene	31.46
16	Benzo(g,h,i)perylene	32.36



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

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. : 30540 **Lot No.:** A0190424

Description : NJEPH Aliphatics Calibration Standard

Aliphatics Calibration Standard 2000µg/mL, Hexane/Carbon Disulfide (80:20), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2029 **Storage:** 25°C nominal

Handling: Sonicate prior to use. **Ship:** Ambient

P12361
↓
P12370 } Y.P.
031/6/23

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Nonane (C9) CAS # 111-84-2 Purity 99% (Lot SHBN5361)	2,014.0 µg/mL	+/- 11.8193 +/- 50.0027 +/- 59.9491	µg/mL Gravimetric Unstressed Stressed
2	n-Decane (C10) CAS # 124-18-5 Purity 99% (Lot SHBN8619)	2,014.7 µg/mL	+/- 11.8232 +/- 50.0193 +/- 59.9689	µg/mL Gravimetric Unstressed Stressed
3	Naphthalene CAS # 91-20-3 Purity 99% (Lot MKCH0219)	2,015.3 µg/mL	+/- 11.8271 +/- 50.0358 +/- 59.9888	µg/mL Gravimetric Unstressed Stressed
4	n-Dodecane (C12) CAS # 112-40-3 Purity 99% (Lot SHBN7174)	2,008.0 µg/mL	+/- 11.7841 +/- 49.8538 +/- 59.7705	µg/mL Gravimetric Unstressed Stressed
5	2-Methylnaphthalene CAS # 91-57-6 Purity 96% (Lot STBK0259)	2,007.0 µg/mL	+/- 11.7784 +/- 49.8299 +/- 59.7419	µg/mL Gravimetric Unstressed Stressed
6	n-Tetradecane (C14) CAS # 629-59-4 Purity 99% (Lot STBK2282)	2,016.7 µg/mL	+/- 11.8349 +/- 50.0689 +/- 60.0284	µg/mL Gravimetric Unstressed Stressed
7	n-Hexadecane (C16) CAS # 544-76-3 Purity 98% (Lot SHBM4146)	2,014.9 µg/mL	+/- 11.8244 +/- 50.0246 +/- 59.9753	µg/mL Gravimetric Unstressed Stressed

8	n-Octadecane (C18) CAS # 593-45-3 Purity 97%	(Lot VZKOJ)	2,004.7 µg/mL	+/-	11.7645	µg/mL	Gravimetric
				+/-	49.7710	µg/mL	Unstressed
				+/-	59.6712	µg/mL	Stressed
9	n-Eicosane (C20) CAS # 112-95-8 Purity 99%	(Lot MKCF7888)	2,018.0 µg/mL	+/-	11.8428	µg/mL	Gravimetric
				+/-	50.1020	µg/mL	Unstressed
				+/-	60.0681	µg/mL	Stressed
10	n-Heneicosane (C21) CAS # 629-94-7 Purity 99%	(Lot MKCL3226)	2,000.7 µg/mL	+/-	11.7410	µg/mL	Gravimetric
				+/-	49.6717	µg/mL	Unstressed
				+/-	59.5522	µg/mL	Stressed
11	n-Docosane (C22) CAS # 629-97-0 Purity 99%	(Lot MKCL8918)	2,005.3 µg/mL	+/-	11.7684	µg/mL	Gravimetric
				+/-	49.7876	µg/mL	Unstressed
				+/-	59.6911	µg/mL	Stressed
12	n-Tetracosane (C24) CAS # 646-31-1 Purity 99%	(Lot MKCN2863)	2,018.0 µg/mL	+/-	11.8428	µg/mL	Gravimetric
				+/-	50.1020	µg/mL	Unstressed
				+/-	60.0681	µg/mL	Stressed
13	n-Hexacosane (C26) CAS # 630-01-3 Purity 99%	(Lot MKCD4540)	2,014.0 µg/mL	+/-	11.8193	µg/mL	Gravimetric
				+/-	50.0027	µg/mL	Unstressed
				+/-	59.9491	µg/mL	Stressed
14	n-Octacosane (C28) CAS # 630-02-4 Purity 99%	(Lot BCCG0084)	2,002.0 µg/mL	+/-	11.7489	µg/mL	Gravimetric
				+/-	49.7048	µg/mL	Unstressed
				+/-	59.5919	µg/mL	Stressed
15	n-Triacontane (C30) CAS # 638-68-6 Purity 97%	(Lot MKCQ9436)	2,011.1 µg/mL	+/-	11.8025	µg/mL	Gravimetric
				+/-	49.9316	µg/mL	Unstressed
				+/-	59.8637	µg/mL	Stressed
16	n-Dotriacontane (C32) CAS # 544-85-4 Purity 99%	(Lot BCBW0661)	2,012.0 µg/mL	+/-	11.8075	µg/mL	Gravimetric
				+/-	49.9531	µg/mL	Unstressed
				+/-	59.8895	µg/mL	Stressed
17	n-Tetratriacontane (C34) CAS # 14167-59-0 Purity 99%	(Lot OML4N)	2,006.7 µg/mL	+/-	11.7762	µg/mL	Gravimetric
				+/-	49.8207	µg/mL	Unstressed
				+/-	59.7308	µg/mL	Stressed
18	n-Hexatriacontane (C36) CAS # 630-06-8 Purity 99%	(Lot Z27H018)	2,017.3 µg/mL	+/-	11.8388	µg/mL	Gravimetric
				+/-	50.0855	µg/mL	Unstressed
				+/-	60.0483	µg/mL	Stressed
19	n-Octatriacontane (C38) CAS # 7194-85-6 Purity 96%	(Lot 0000145137)	2,017.3 µg/mL	+/-	11.8385	µg/mL	Gravimetric
				+/-	50.0842	µg/mL	Unstressed
				+/-	60.0467	µg/mL	Stressed
20	n-Tetracontane (C40) CAS # 4181-95-7 Purity 99%	(Lot BSBME)	2,008.7 µg/mL	+/-	11.7880	µg/mL	Gravimetric
				+/-	49.8703	µg/mL	Unstressed
				+/-	59.7903	µg/mL	Stressed
Solvent: Hexane/Carbon disulfide (80:20)							
	CAS # 110-54-3/75-15-0						
	Purity 99%						

Column:
30m x 0.25mm x 0.25µm
Pxx-5 (cat.#10223)

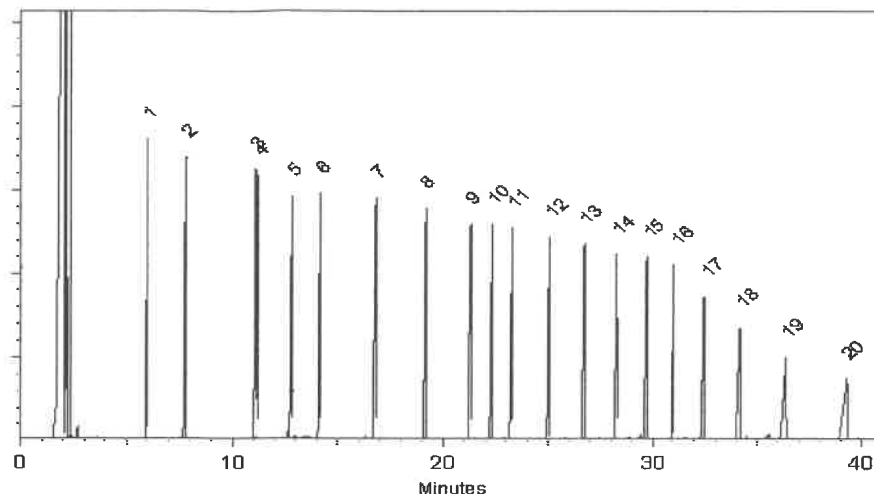
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Morgan Craighead - Mix Technician

Date Mixed: 10-Oct-2022

Balance: 1128360905


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Oct-2022

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 www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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.: 31098 **Lot No.:** A0204989

Description: 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: January 31, 2031 **Storage:** 10°C or colder

Ship: Ambient

P12960
↓
P12991 } Y.P.
12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	14738400	99%	10,097.3 µg/mL	+/- 567.2675

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

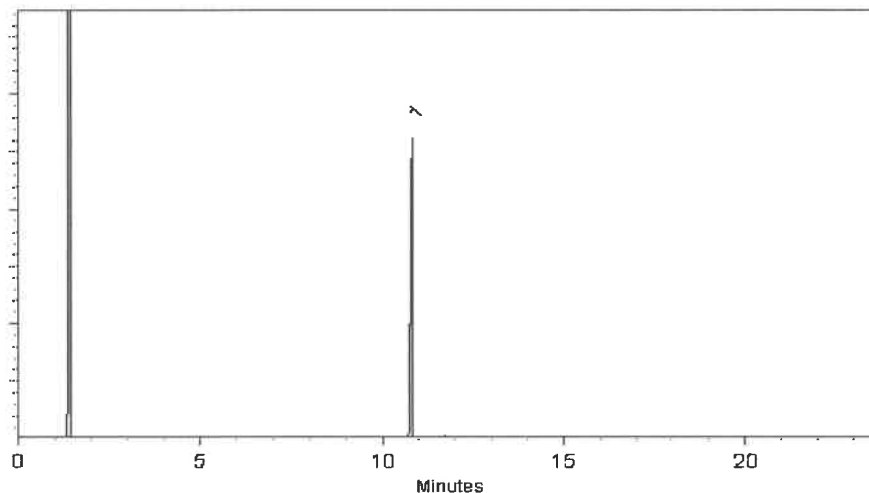
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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.

Peter Robbins - Operations Technician I

Date Mixed: 02-Dec-2023

Balance Serial # B345965662

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Dec-2023

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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.: 31097 **Lot No.:** A0204177

Description: o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: June 30, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P12992 } Y.P.
↓
P13031 } 12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

* Expanded Uncertainty displayed in same units as Grav. Conc.

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

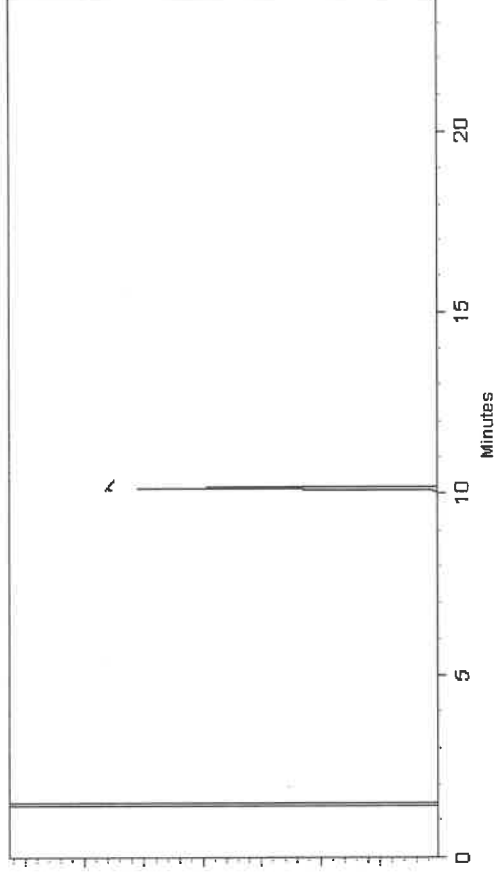
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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.


Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905


Dillian Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

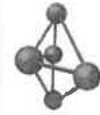
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



CERTIFIED WEIGHT REPORT

Part Number: 95999

Lot Number: 040524

Description: NJ EPH Aliphatic n-Hydrocarbons - Revised
20 components

Expiration Date: 040534

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test ID#: 6UTB

Weight(s) shown below were combined and diluted to (mL):

CAUTION: Sonicate Before Use

Solvent(s):
Cyclohexane

Lot#
28930

P13278
2
P13287
Y.P.
04/11/24

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

Formulated By:	Anthony Mahoney	040524	DATE
Reviewed By:	Pedro L. Rentas	040524	DATE

Compound		Part Number	Lot Number	DIL	Factor	Vol. (mL)	Initial Conc. (µg/mL)	Nominal Conc. (µg/mL)	Purity (%)	Purity Uncertainty	Pipette	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information	
		(RM#)														(Solvent Safety Info. On Attached pg.)	OSHA PEL (TWA)
1.	2-Methylnaphthalene	(0214)	MKB3783V	NA	NA	NA	NA	1000	97	0.2	NA	0.02579	0.02594	1005.7	5.7	91-57-6	N/A
2.	Naphthalene	(0222)	MKB28680V	NA	NA	NA	NA	1000	100	0.2	NA	0.02502	0.02511	1003.7	5.7	91-20-3	10 ppm (50mg/m ³ 8H) orl-rat 1630mg/kg
3.	n-Nonane	95708	120222	1.00	25.00	1000.7	1000.7	1000	NA	NA	0.013	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m ³ 8H) orl-rat 490mg/kg
4.	n-Decane	95708	120222	1.00	25.00	1000.9	1000.9	1000	NA	NA	0.013	NA	NA	1000.2	4.2	124-18-5	ivn-mus 218mg/kg
5.	n-Dodecane	95708	120222	1.00	25.00	1000.7	1000.7	1000	NA	NA	0.013	NA	NA	1000.0	4.2	112-40-3	N/A
6.	n-Tetradecane	95708	120222	1.00	25.00	1002.1	1002.1	1000	NA	NA	0.013	NA	NA	1001.3	4.2	629-59-4	ivn-mus 3494mg/kg
7.	n-Hexadecane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.7	4.2	544-76-3	N/A
8.	n-Octadecane	95708	120222	1.00	25.00	1001.0	1001.0	1000	NA	NA	0.013	NA	NA	1000.3	4.1	589-45-3	N/A
9.	n-Eicosane	95708	120222	1.00	25.00	1001.0	1001.0	1000	NA	NA	0.013	NA	NA	1000.3	4.2	112-95-8	N/A
10.	n-Henicosane	95708	120222	1.00	25.00	1002.4	1002.4	1000	NA	NA	0.013	NA	NA	1001.6	4.2	629-94-7	N/A
11.	n-Docosane	95708	120222	1.00	25.00	1001.9	1001.9	1000	NA	NA	0.013	NA	NA	1001.2	4.2	629-97-0	N/A
12.	n-Tetracosane	95708	120222	1.00	25.00	1000.8	1000.8	1000	NA	NA	0.013	NA	NA	1000.1	4.2	646-31-1	N/A
13.	n-Hexacosane	95708	120222	1.00	25.00	1001.2	1001.2	1000	NA	NA	0.013	NA	NA	1000.4	4.2	630-01-3	N/A
14.	n-Octacosane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.2	630-02-4	N/A
15.	n-Triacontane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.2	638-68-6	N/A
16.	n-Dotriacontane	95708	120222	1.00	25.00	1000.5	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.3	544-85-4	ivn-mus 100mg/kg
17.	n-Tetraacontane	95708	120222	1.00	25.00	1000.4	1000.4	1000	NA	NA	0.013	NA	NA	999.7	4.2	14167-59-0	N/A
18.	n-Hexatriacontane	95708	120222	1.00	25.00	1001.5	1001.5	1000	NA	NA	0.013	NA	NA	1000.8	4.2	630-06-8	N/A
19.	n-Octatriacontane	95708	120222	1.00	25.00	1000.3	1000.3	1000	NA	NA	0.013	NA	NA	999.6	4.3	7184-86-6	N/A
20.	n-Tetracontane	95708	120222	1.00	25.00	1000.6	1000.6	1000	NA	NA	0.013	NA	NA	999.9	4.3	4181-95-7	N/A

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



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Certificate of Analysis

chromatographic plus



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. : 31480 **Lot No.:** A0210831
Description : MA Fractionation Surrogate Spike Mix
MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2030 **Storage:** 10°C or colder
Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13h57
↓
P13h78 } Y.P.
67/23/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,031.0 µg/mL	+/- 181.5871
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,037.5 µg/mL	+/- 181.8799

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

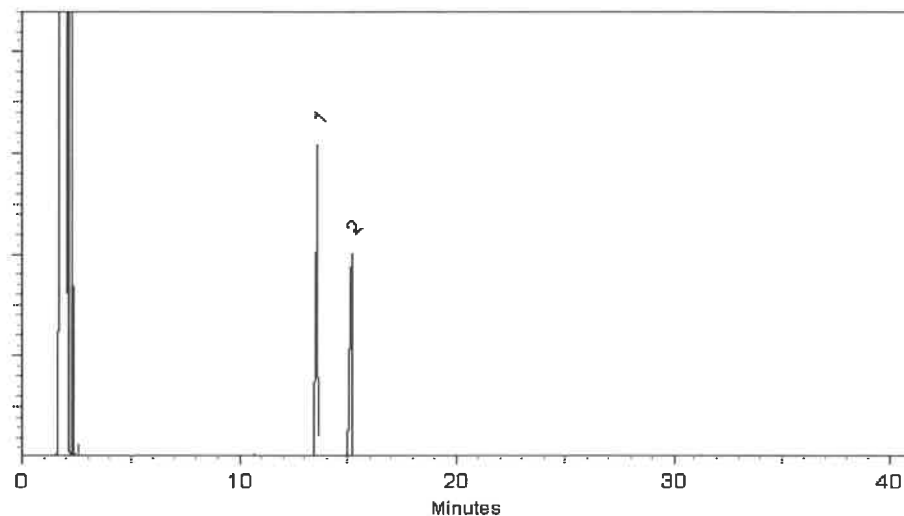
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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.

Stacey Wanner - Operations Technician I

Date Mixed: 29-Apr-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 30-Apr-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. 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.
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Catalog No. : 31480 **Lot No.:** A0210831
Description : MA Fractionation Surrogate Spike Mix
MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2030 **Storage:** 10°C or colder
Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13h57
↓
P13h78 } Y.P.
67/23/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,031.0 µg/mL	+/- 181.5871
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,037.5 µg/mL	+/- 181.8799

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

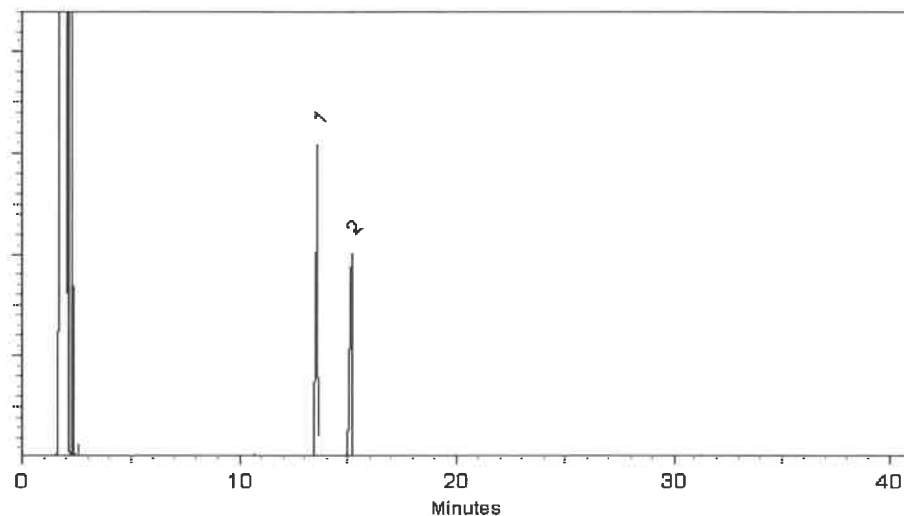
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



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.

Stacey Wanner - Operations Technician I

Date Mixed: 29-Apr-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 30-Apr-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Handling Notes:

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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. : 31098 **Lot No.:** A0213283

Description : 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2031 **Storage:** 10°C or colder

Ship: Ambient

P13595
↓
P13624 } Y.P.
10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	15018900	99%	10,058.0 µg/mL	+/- 565.0578

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-S (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

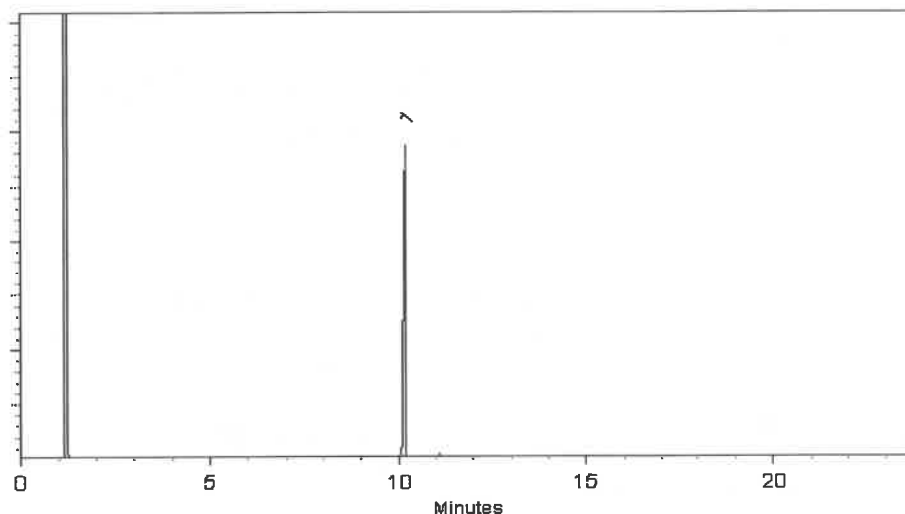
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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.

Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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chromatographic plus



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. : 31098 **Lot No.:** A0213283

Description : 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2031 **Storage:** 10°C or colder

Ship: Ambient

P13595
↓
P13624 } Y.P.
10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	15018900	99%	10,058.0 µg/mL	+/- 565.0578

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-S (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

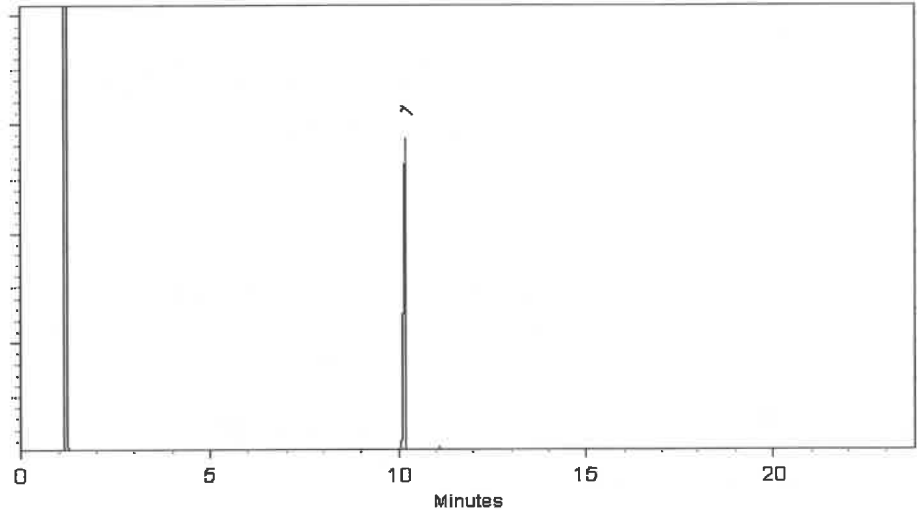
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Catalog No. : 31098 **Lot No.:** A0213283

Description : 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2031 **Storage:** 10°C or colder

Ship: Ambient

P13595
↓
P13624 } Y.P.
10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	15018900	99%	10,058.0 µg/mL	+/- 565.0578

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-S (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

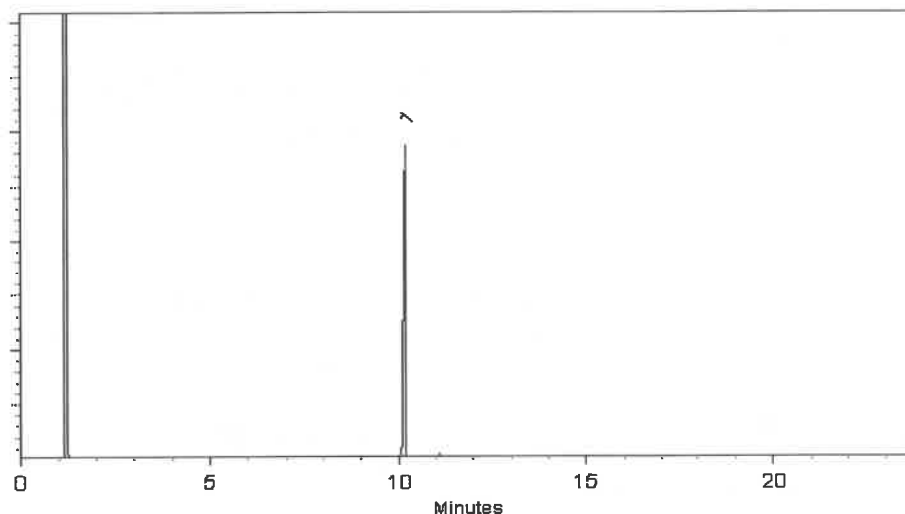
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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:

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Manufacturing Notes:

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Catalog No. : 31098 **Lot No.:** A0213283

Description : 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2031 **Storage:** 10°C or colder

Ship: Ambient

P13595
↓
P13624 } Y.P.
10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	15018900	99%	10,058.0 µg/mL	+/- 565.0578

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-S (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

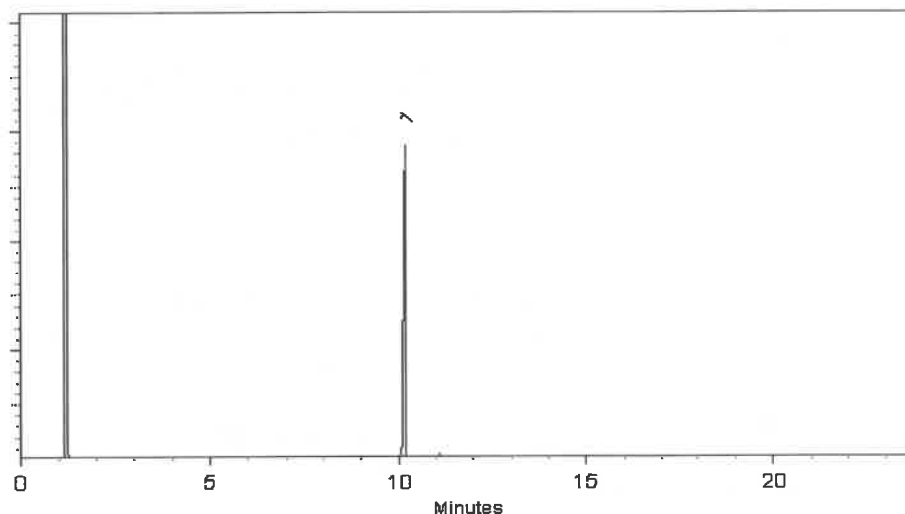
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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.

Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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:

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Handling Notes:

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chromatographic plus



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. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13625
↓
P13644 } Y.P.
10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

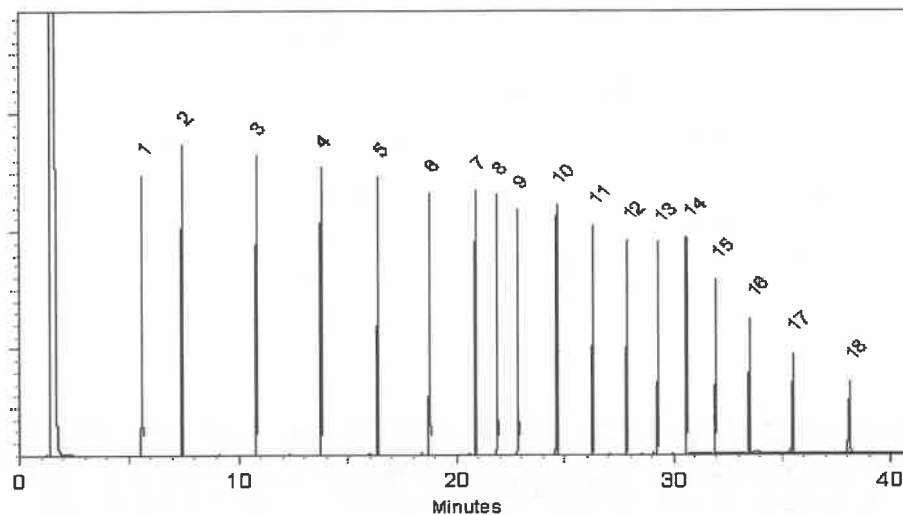
FID

Split Vent:

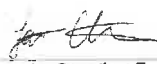
2 ml/min.

Inj. Vol

1µl

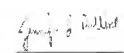


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Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024

Balance Serial # 1128360905


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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.
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- 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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Certificate of Analysis

chromatographic plus



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. : 31097 Lot No.: A0216631
Description : o-Terphenyl Standard
o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : April 30, 2028 Storage: 10°C or colder
Handling: Sonicate prior to use. Ship: Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

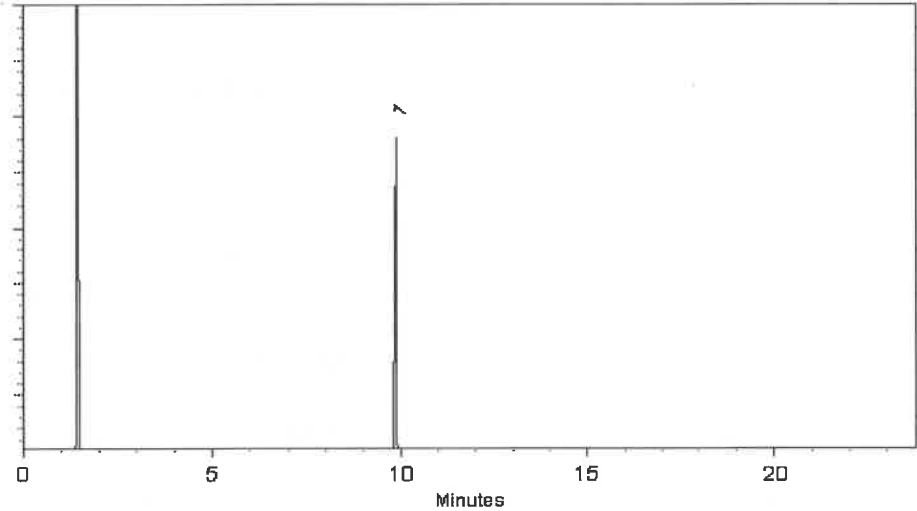
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Manufacturing Notes:

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Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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. : 31097 **Lot No.:** A0216631
Description : o-Terphenyl Standard
o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

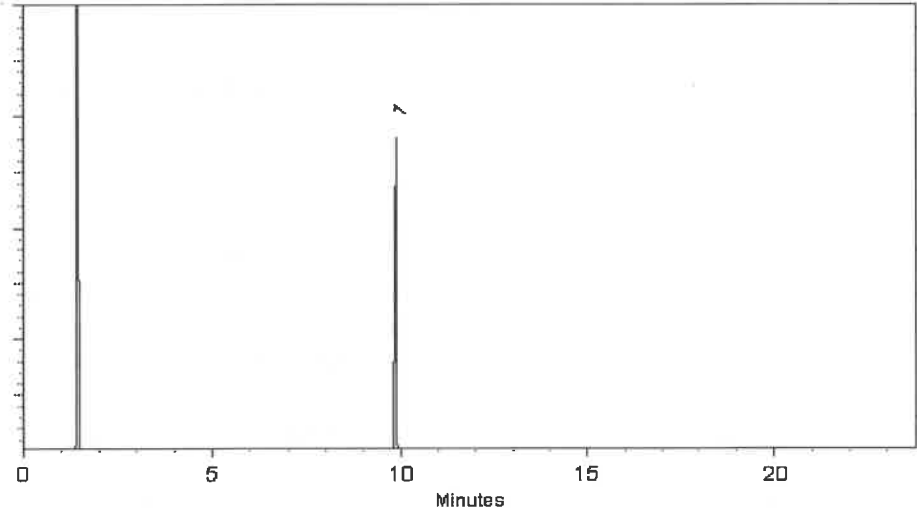
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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.

Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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Certificate of Analysis

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Catalog No. : 31097 **Lot No.:** A0216631
Description : o-Terphenyl Standard
o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

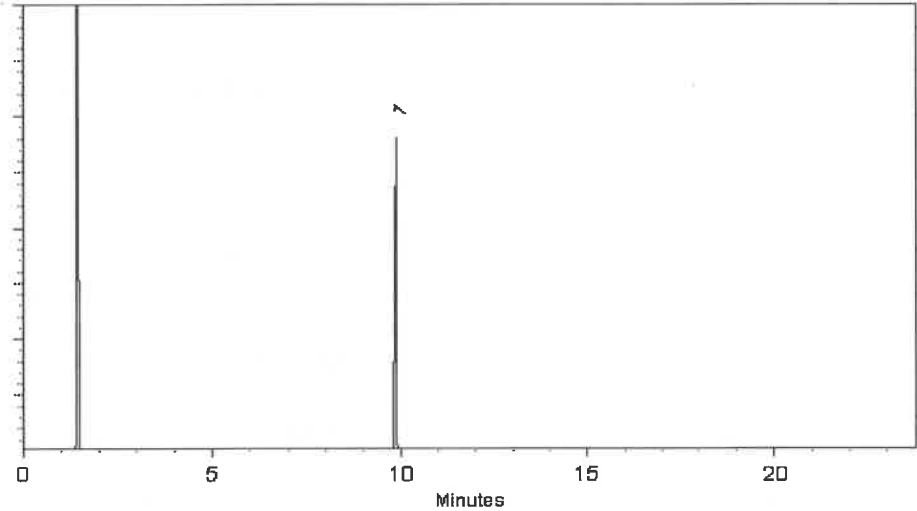
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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:

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- 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:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Handling Notes:

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Catalog No. : 31097 **Lot No.:** A0216631
Description : o-Terphenyl Standard
o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

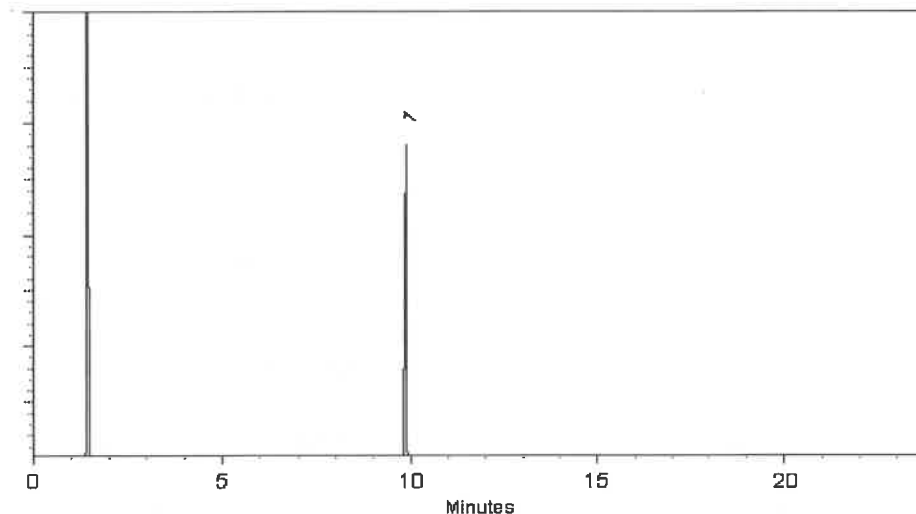
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Catalog No. : 31097 **Lot No.:** A0216631
Description : o-Terphenyl Standard
o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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Inj. Temp:

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Det. Temp:

330°C

Det. Type:

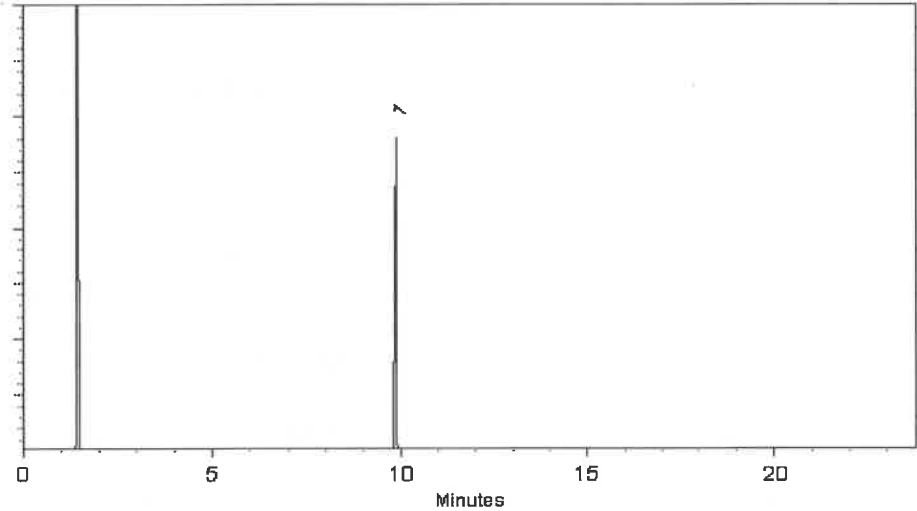
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

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Catalog No. : 31097 **Lot No.:** A0216631
Description : o-Terphenyl Standard
o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

P13645 } Y.P.
↓
P13694 } 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,065.0 µg/mL	+/- 453.3336

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

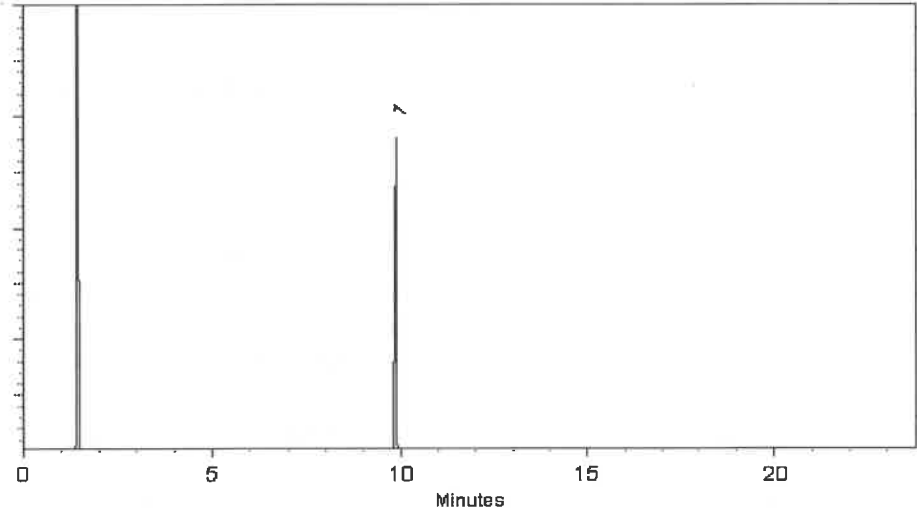
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024

Balance Serial # 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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- Purity values are rounded to the nearest whole number.

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Catalog No. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

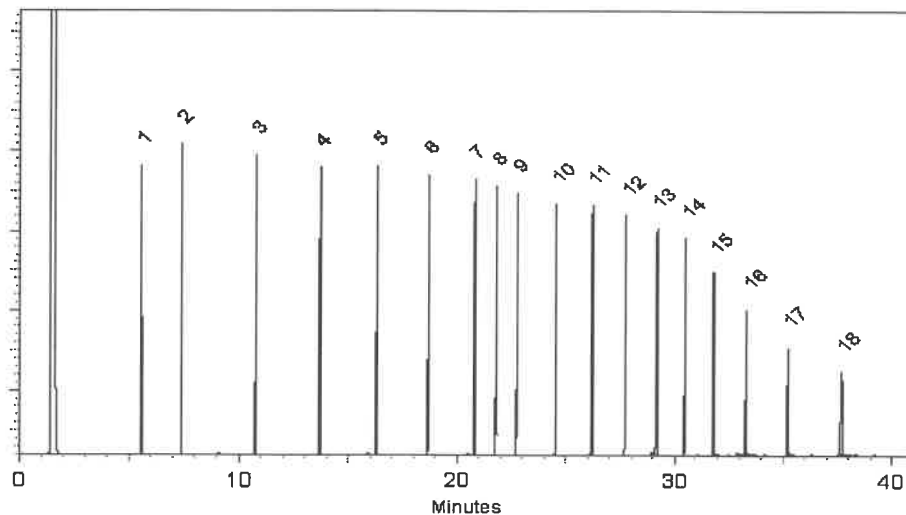
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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Penelope S. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

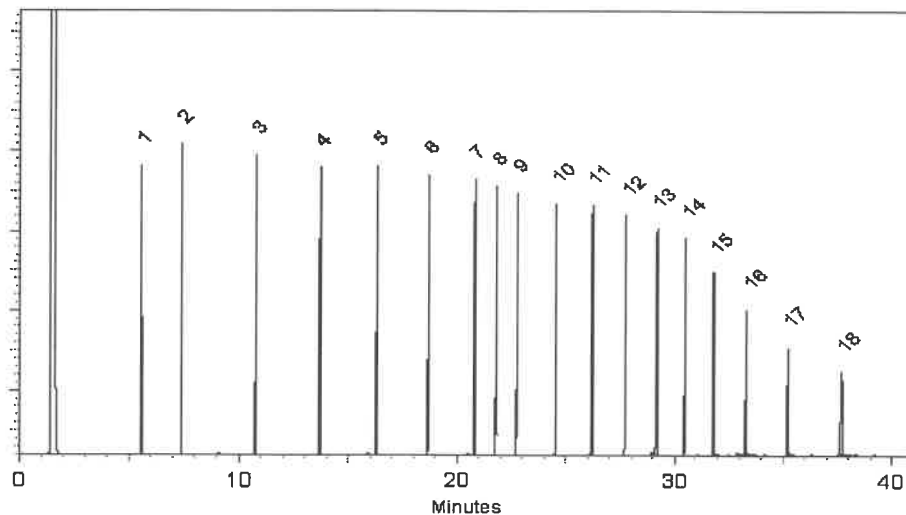
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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Penelope S. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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Manufacturing Notes:

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Catalog No. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
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P13829 } YIP
12/09/24

CERTIFIED VALUES

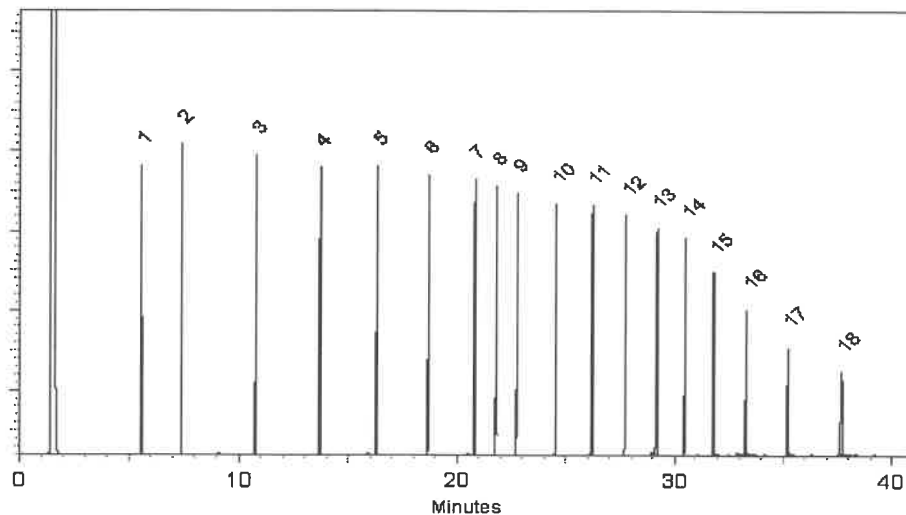
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3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
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9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.
Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)
Inj. Temp:
250°C
Det. Temp:
330°C
Det. Type:
FID
Split Vent:
2 ml/min.
Inj. Vol
1µl



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Penelope S. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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Certificate #FM 80397

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NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
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P13829 } YIP
12/09/24

CERTIFIED VALUES

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6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
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Solvent: n-Pentane
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Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
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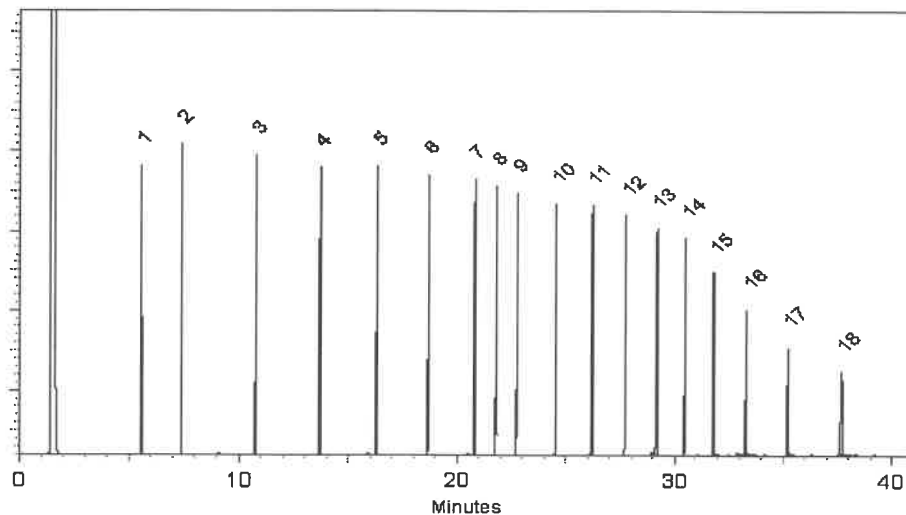
Inj. Temp:
250°C

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Det. Type:
FID

Split Vent:
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Inj. Vol
1µl



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Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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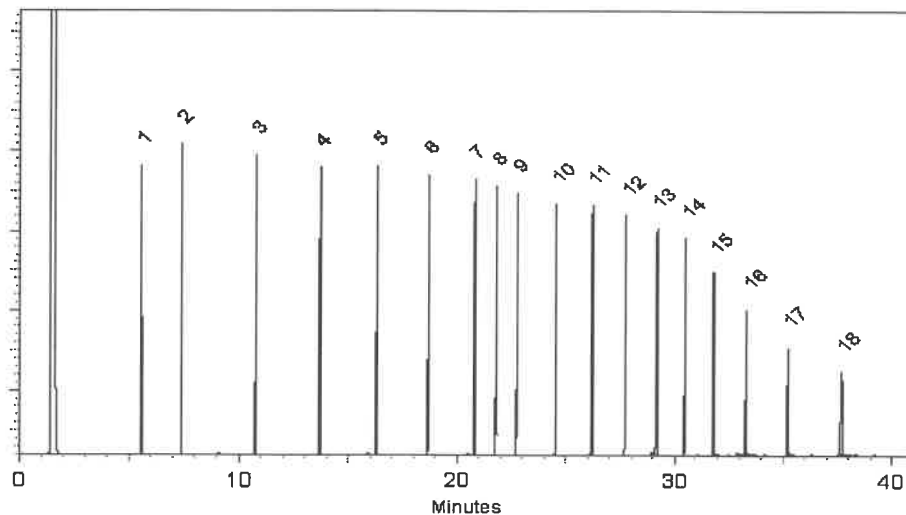
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Inj. Vol
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- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product 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/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
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P13829 } YIP
12/09/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
 30m x 0.25mm x 0.25µm
 Rtx-5 (cat.#10223)
Carrier Gas:
 hydrogen-constant pressure 10 psi.

Temp. Program:
 40°C (hold 2 min.) to 330°C
 @ 10°C/min. (hold 10 min.)

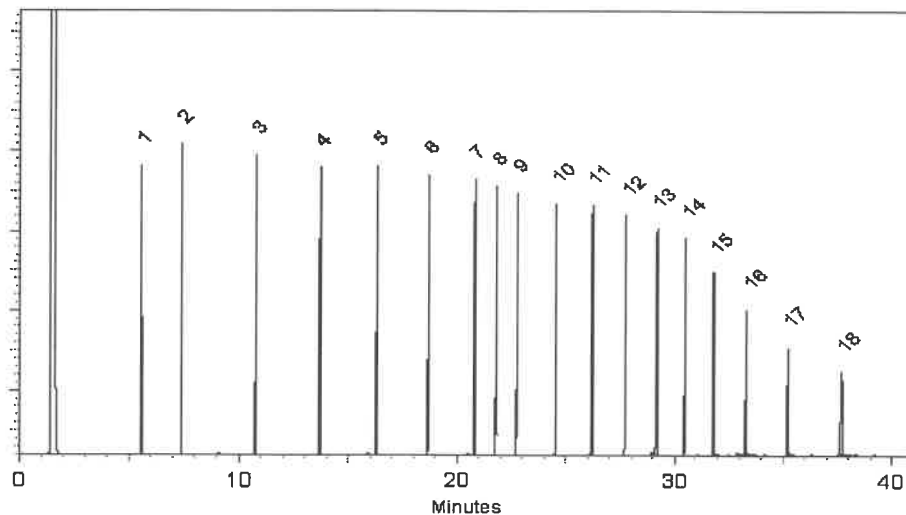
Inj. Temp:
 250°C

Det. Temp:
 330°C

Det. Type:
 FID

Split Vent:
 2 ml/min.

Inj. Vol
 1µl



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.

Penelope S. Riglin
 Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino
 Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. 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.
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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. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

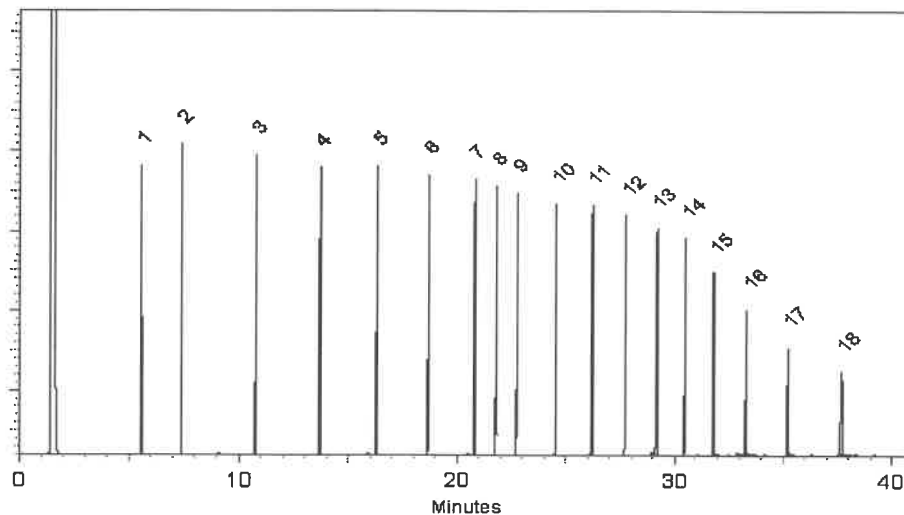
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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.

Penelope S. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. 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.
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chromatographic plus



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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. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
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P13829 } YIP
12/09/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.9 µg/mL	+/- 5.1891
15	n-Tetratriacontane (C34)	14167-59-0	6JNHB	99%	200.8 µg/mL	+/- 5.1865
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

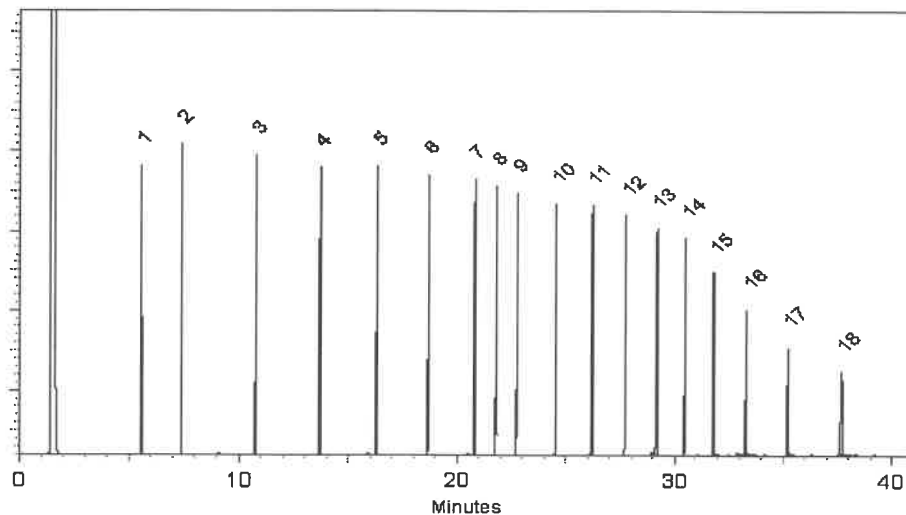
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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.

Penelope S. Riglin
Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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.
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Purity Notes:

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

Certified Uncertainty Value Notes:

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

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. 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.
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Catalog No. : 30542 **Lot No.:** A0217408

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13800
↓
P13829 } YIP
12/09/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.7 µg/mL	+/- 5.1839
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	201.0 µg/mL	+/- 5.1917
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.5 µg/mL	+/- 5.1805
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.5 µg/mL	+/- 5.1805
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.7 µg/mL	+/- 5.1857
6	n-Octadecane (C18)	593-45-3	UE5NG	99%	200.7 µg/mL	+/- 5.1857
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.9 µg/mL	+/- 5.1888
8	n-Heneicosane (C21)	629-94-7	MKCP1960	99%	200.5 µg/mL	+/- 5.1805
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.5 µg/mL	+/- 5.1788
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.6 µg/mL	+/- 5.1822
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCJ4566	99%	200.6 µg/mL	+/- 5.1822
13	n-Triacontane (C30)	638-68-6	MKCV7007	98%	201.1 µg/mL	+/- 5.1942
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16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000207852	96%	199.3 µg/mL	+/- 5.1477

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
 30m x 0.25mm x 0.25µm
 Rtx-5 (cat.#10223)
Carrier Gas:
 hydrogen-constant pressure 10 psi.

Temp. Program:
 40°C (hold 2 min.) to 330°C
 @ 10°C/min. (hold 10 min.)

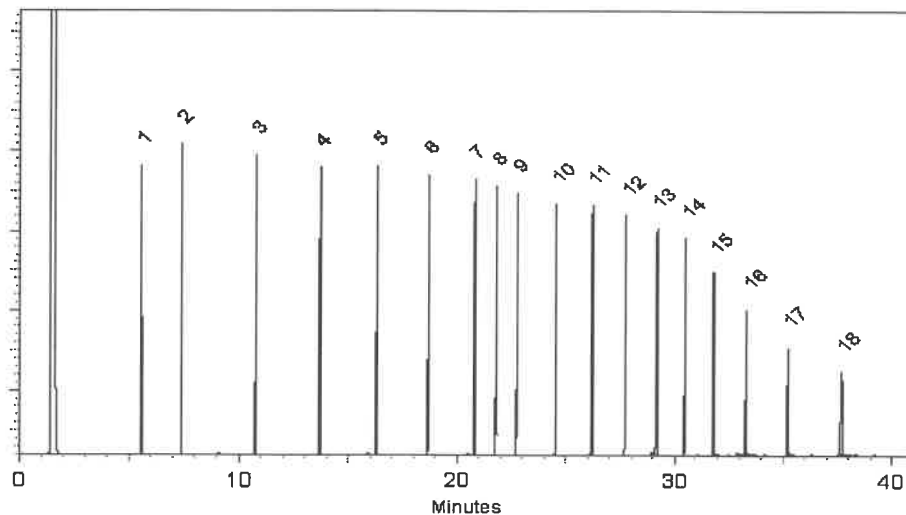
Inj. Temp:
 250°C

Det. Temp:
 330°C

Det. Type:
 FID

Split Vent:
 2 ml/min.

Inj. Vol
 1µl



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Penelope S. Riglin
 Penelope Riglin - Operations Tech I

Date Mixed: 03-Oct-2024 **Balance Serial #** 1128353505

Jennifer Pollino
 Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 07-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13835
2
P13860 } Y-P.
12/09/12

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

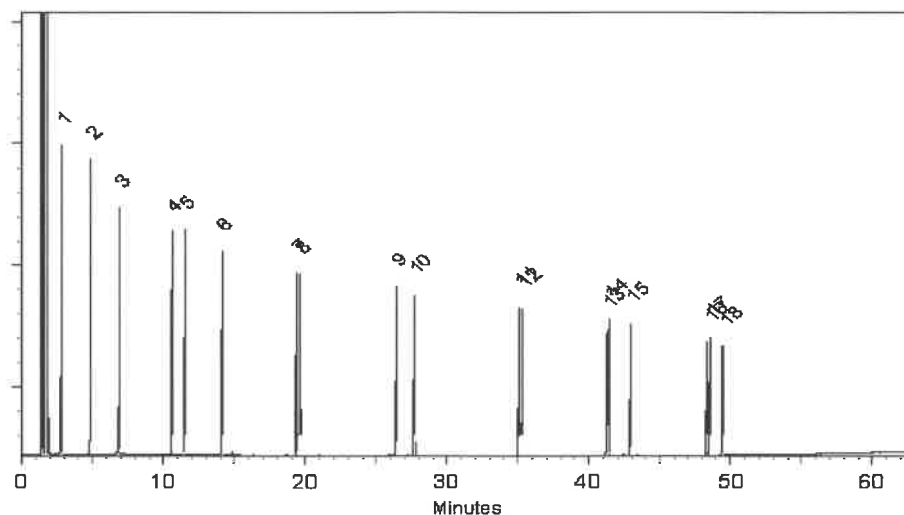
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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.

Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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.
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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Handling Notes:

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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13835
2
P13860 } Y-P.
12/09/12

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

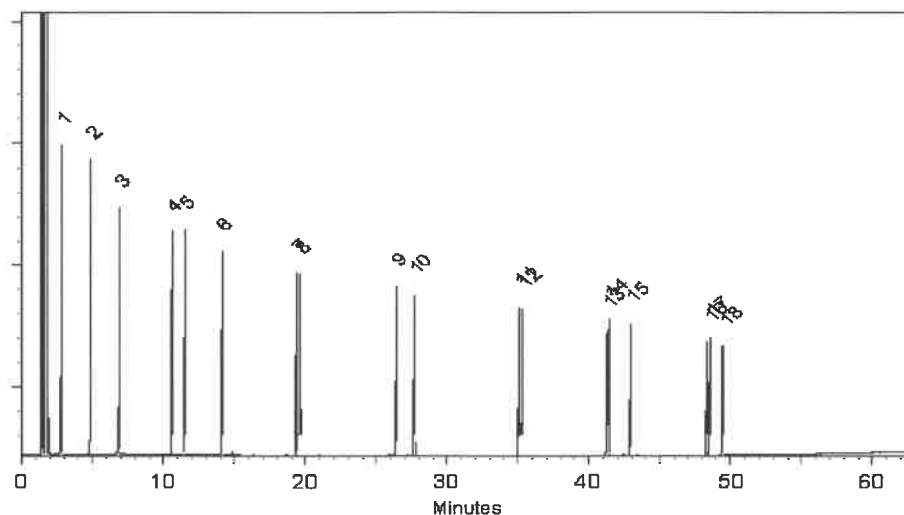
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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.
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Manufacturing Notes:

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chromatographic plus



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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix
NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13835
2
P13860 } Y-P.
12/09/12

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

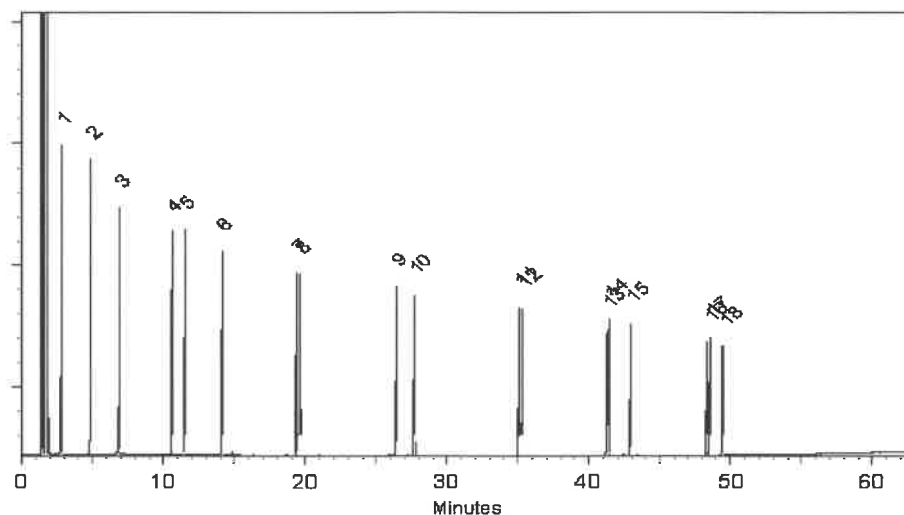
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.
Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)
Inj. Temp:
250°C
Det. Temp:
330°C
Det. Type:
FID
Split Vent:
20 ml/min.
Inj. Vol
1µl



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Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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.
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Purity Notes:

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chromatographic plus



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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13835
2
P13860 } Y-P.
12/09/12

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

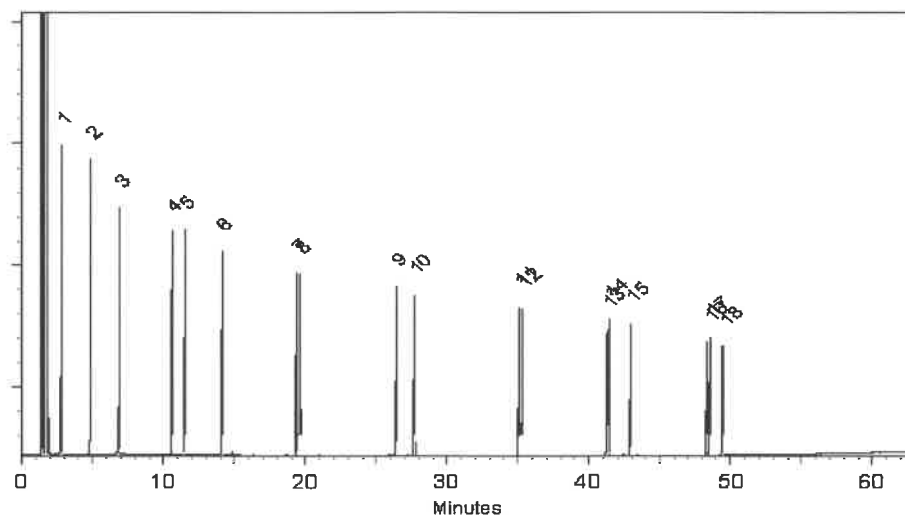
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



110 Benner Circle
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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix
NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13835
2
P13860 } Y-P.
12/09/12

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

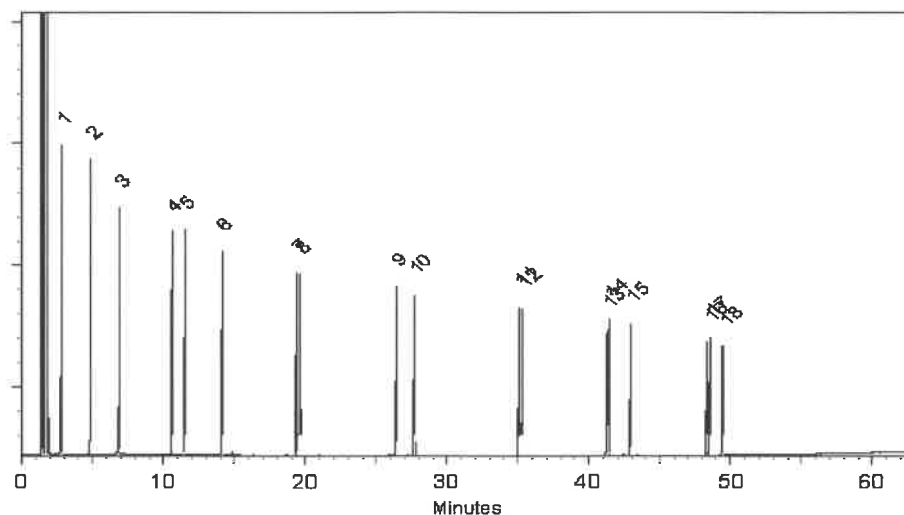
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.
Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)
Inj. Temp:
250°C
Det. Temp:
330°C
Det. Type:
FID
Split Vent:
20 ml/min.
Inj. Vol
1µl



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.

Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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.

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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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. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix
NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13835
2
P13860 } Y-P.
12/09/12

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

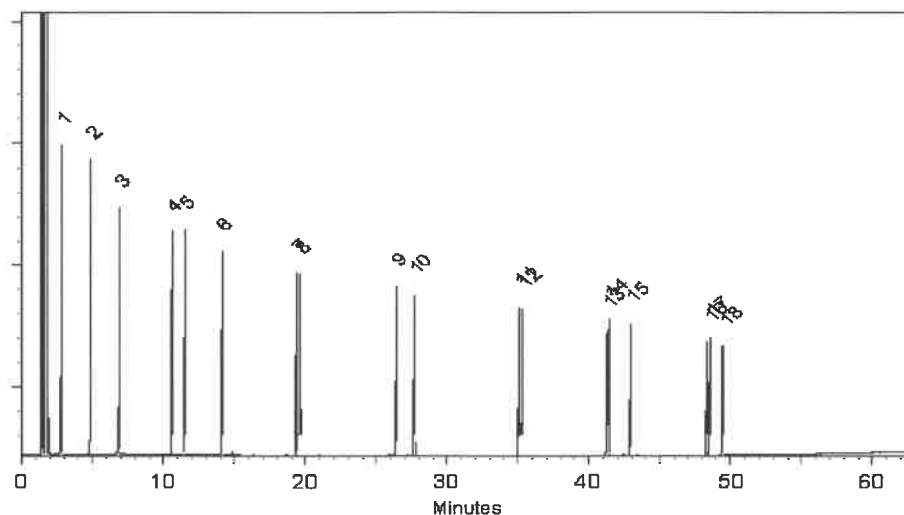
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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.
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Manufacturing Notes:

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chromatographic plus



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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13835
2
P13860 } Y-P.
12/09/12

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

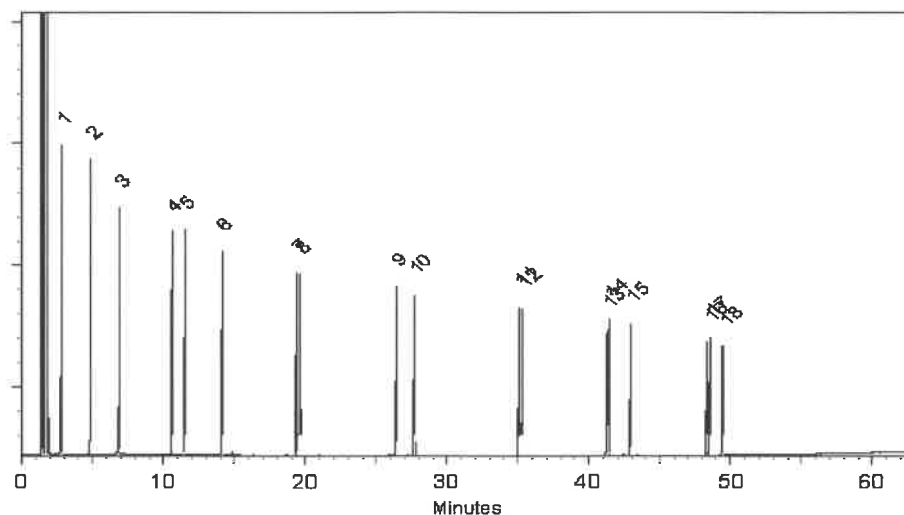
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905


Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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.
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Manufacturing Notes:

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Handling Notes:

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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix
NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13835
2
P13860 } Y-P.
12/09/12

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
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3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
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9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
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13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
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15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
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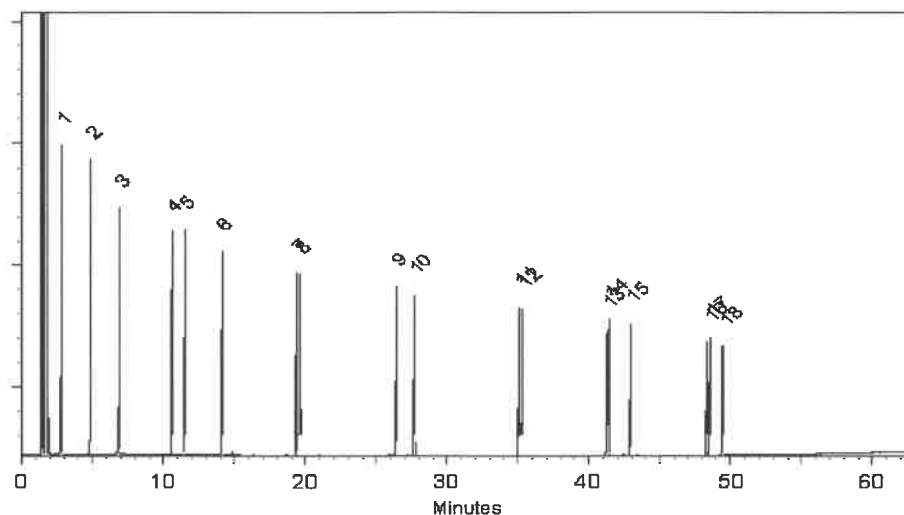
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.
Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)
Inj. Temp:
250°C
Det. Temp:
330°C
Det. Type:
FID
Split Vent:
20 ml/min.
Inj. Vol
1µl



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Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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- 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 expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. 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.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix
NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13835
2
P13860 } Y-P.
12/09/12

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

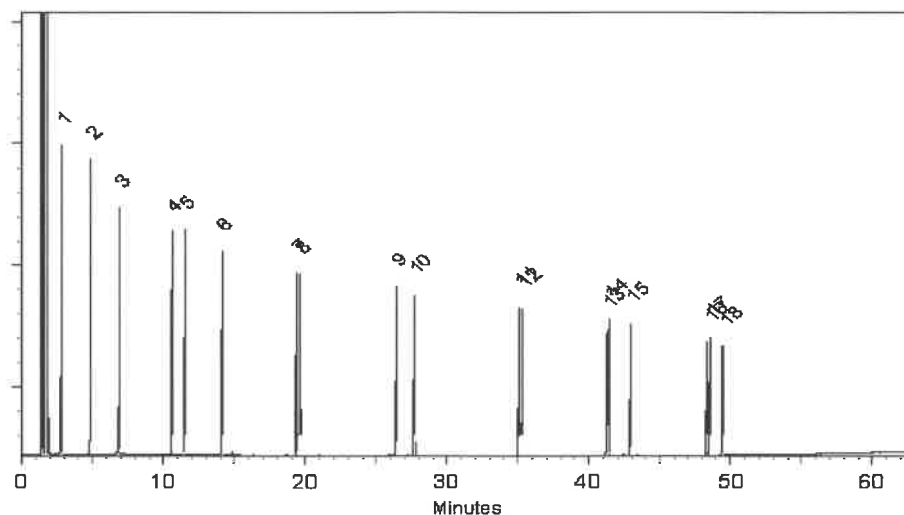
17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0 µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0 µg/mL	+/- 8.9683

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)
Carrier Gas:
hydrogen-constant pressure 10 psi.
Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)
Inj. Temp:
250°C
Det. Temp:
330°C
Det. Type:
FID
Split Vent:
20 ml/min.
Inj. Vol
1µl



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.

Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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.

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chromatographic plus



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NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

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Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13835
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P13860 } Y-P.
12/09/12

CERTIFIED VALUES

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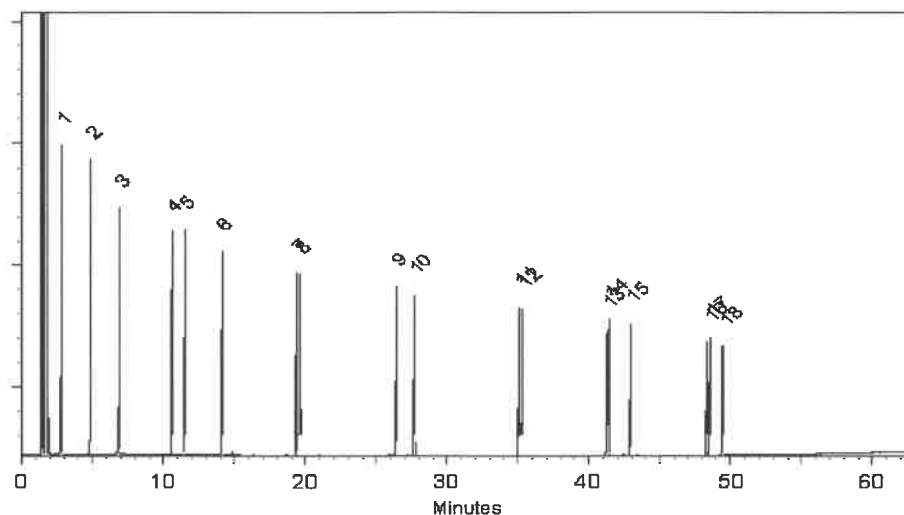
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@ 4°C/min. (hold 5 min.)
Inj. Temp:
250°C
Det. Temp:
330°C
Det. Type:
FID
Split Vent:
20 ml/min.
Inj. Vol
1µl



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.

Rebecca Gingerich
Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

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W3110
58
operate!
06/27/2024

Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System
Standard ISO9001:2015 by SAI Global Certificate Number CERT - 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	H303	Quality Test / Release Date	02/23/2024
Lot Number	235898		
Description	HEXANES - OPTIMA		
Country of Origin	United States	Suggested Retest Date	Feb/2029
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid
ASSAY (N-HEXANE)	%	>= 60	73
ASSAY (SUM C6 HYDROCARBONS)	%	>= 99.9	>99.9
COLOR	APHA	<= 5	<5
DENSITY AT 25 DEGREES C	GM/ML	Inclusive Between 0.653 - 0.673	0.670
EVAPORATION RESIDUE	ppm	<= 1	0.3
FLUORESCENCE BACKGROUND	ppb	<= 1	<1
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
OPTICAL ABS AT 195 NM	ABS. UNITS	<= 1	0.64
OPTICAL ABS AT 210 NM	ABS. UNITS	<= 0.25	0.16
OPTICAL ABS AT 220 NM	ABS. UNITS	<= 0.07	0.06
OPTICAL ABS AT 254 NM	ABS. UNITS	<= 0.005	0.002
PESTICIDE RESIDUE ANALYSIS	NG/L	<= 10	<10
REFRACTIVE INDEX @ 25 DEG C		Inclusive Between 1.375 - 1.385	1.380
SUITABILITY FOR GC/MS		= PASS TEST	PASS TEST
SULFUR COMPOUNDS	%	<= 0.005	<0.005
THIOPHENE	PASS/FAIL	= PASS TEST	PASS TEST
WATER (H2O)	%	<= 0.01	<0.01
WATER-SOLUBLE TITRABLE ACID	MEQ/G	<= 0.0003	0.0001

Harout Sahagian
Harout Sahagian - Quality Control Manager - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.

*Based on suggested storage condition.



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Gannett Fleming
ADDRESS: 1010 Adams Ave
CITY: Audobon STATE: PA ZIP: 19405
ATTENTION: Joe Krupansky
PHONE: 610-301-8342 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Amtrak Replacement of
PROJECT NO: 950000313 LOCATION: Kearny NJ
PROJECT MANAGER: Joe Krupansky
e-mail: QAQC@PEMSYS.COM
PHONE: 610-301-8342 FAX:

CLIENT BILLING INFORMATION

BILL TO: Alliance PO#:
ADDRESS: 284 Sheffield St
CITY: Mountainside STATE: NJ ZIP: 07093
ATTENTION: Samantha Beans PHONE: 908-788-3148

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 10 DAYS*
EDD: 10 DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other _____
☐ EDD FORMAT BEM EDD1 TCL VECTO
2 TCL FAHS
3 TAL PCBs
4 TAL metals
5 C(L)(II)
6 C(L)(VI)
7 EPH
8
9

PRESERVATIVES

COMMENTS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER	
1. B-124	SB-01	S		X	12/14	4:14 PM	5	X	X	X	X	X	X	X				
2. B-124	SB-02				12/15	10:17 AM	6	X	X	X	X	X	X	X				
3. B-134	SB-01				12/15	4:02 PM	6	X	X	X	X	X	X	X				
4. B-134	SB-02				12/15	5:27 PM	6	X	X	X	X	X	X	X				
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME: 1100	RECEIVED BY:	1100	Conditions of bottles or containers receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.5 °C
1. Dylan Grana	12-16-24	1.	12-16-24	Comments: [Signature]
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:		
2.		2.		
RELINQUISHED BY SAMPLER:	DATE/TIME: 1700	RECEIVED BY:		
3.	12-16-24	3.		
Page ____ of ____		CLIENT: ☐ Hand Delivered ☐ Other _____		Shipment Complete
		CHEMTECH: ☐ Picked Up ☐ Field Sampling		☐ YES ☐ NO



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P5299	PORT06	Order Date : 12/16/2024 12:24:00 PM	Project Mgr :
Client Name : Portal Partners Tri-Venture		Project Name : Amtrak Sawtooth Bridges 2	Report Type : NJ Reduced
Client Contact : Joseph Krupansky		Receive DateTime : 12/16/2024 11:00:00 AM	EDD Type : EXCEL NJCLEANUP
Invoice Name : Portal Partners Tri-Venture		Purchase Order :	Hard Copy Date :
Invoice Contact : Joseph Krupansky			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P5299-01	SB-01	Solid	12/14/2024	16:14	VOC-TCLVOA-10		8260D	10 Bus. Days	
P5299-02	SB-02	Solid	12/15/2024	10:17	VOC-TCLVOA-10		8260D	10 Bus. Days	
P5299-03	SB-01	Solid	12/15/2024	16:02	VOC-TCLVOA-10		8260D	10 Bus. Days	
P5299-04	SB-02	Solid	12/15/2024	17:27	VOC-TCLVOA-10		8260D	10 Bus. Days	

Relinquished By :

Date / Time : 12/17/24 0900

Received By :

Date / Time :

Storage Area : VOA Refridgerator Room