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

Cover Page

Order ID : P5147

Project ID : North Point

Client : ENTACT

Lab Sample Number	Client Sample Number
P5147-01	EX-8-TPH-1
P5147-02	EX-8-TPH-2

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: 12/12/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

284 Sheffield Street, Mountainside NJ 07092 Tel. 908-789-8900 Fax: 908-789-8922

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 is 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

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **P5147**

	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: **NILESH PRAJAPATI** **Date:** **12/12/2024**

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

LAB CHRONICLE

OrderID:	P5147	**OrderDate:**	12/5/2024 2:58:00 PM
Client:	ENTACT	**Project:**	North Point
Contact:	Wyatt Seel	**Location:**	L41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5147-01	**EX-8-TPH-1**	**SOIL**			**12/05/24**			**12/05/24**
			Diesel Range Organics	8015D		12/06/24	12/09/24	
			Gasoline Range Organics	8015D			12/09/24	
			EPH	NJEPH		12/06/24	12/06/24	
P5147-01DL	**EX-8-TPH-1DL**	**Solid**			**12/05/24**			**12/05/24**
			EPH	NJEPH		12/06/24	12/09/24	
P5147-02	**EX-8-TPH-2**	**SOIL**			**12/05/24**			**12/05/24**
			Diesel Range Organics	8015D		12/06/24	12/09/24	
			Gasoline Range Organics	8015D			12/09/24	
			EPH	NJEPH		12/06/24	12/06/24	
P5147-02DL	**EX-8-TPH-2DL**	**Solid**			**12/05/24**			**12/05/24**
			EPH	NJEPH		12/06/24	12/09/24	
P5147-02DL2	**EX-8-TPH-2DL2**	**Solid**			**12/05/24**			**12/05/24**
			EPH	NJEPH		12/06/24	12/09/24	

QC SUMMARY

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

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: ENTA05

Lab Code: CHEM CASE No.: P5147 SAS No.: P5147 SDG No.: P5147

Run Number: FC120624AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)			TOT OUT
EX-8-TPH-1	123			0
EX-8-TPH-1MS	100			0
EX-8-TPH-1MSD	98			0
EX-8-TPH-2	89			0
PB165427BL	98			0
PB165427BS	60			0
PB165427BSD	99			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

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

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: ENTA05

Lab Code: CHEM CASE No.: P5147 SAS No.: P5147 SDG No.: P5147

Run Number: FC120924AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)			TOT OUT
EX-8-TPH-1DL	158 *			1
EX-8-TPH-2DL	112			0
EX-8-TPH-2DL2	0 *			1

	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

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

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: ENTA05

Lab Code: CHEM CASE No.: P5147 SAS No.: P5147 SDG No.: P5147

Run Number: FD120624AR

Client SAMPLE NO.	2-Bromonaphthalene (SURR)	2-Flurobiphenyl (SURR)	ortho-Terphenyl (SURR)	TOT OUT
EX-8-TPH-1	126	94	89	0
EX-8-TPH-1MS	129	102	85	0
EX-8-TPH-1MSD	136	102	85	0
EX-8-TPH-2	136	128	122	0
PB165427BL	99	79	87	0
PB165427BS	103	97	89	0
PB165427BSD	93	87	83	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

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

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: ENTA05

Lab Code: CHEM CASE No.: P5147 SAS No.: P5147 SDG No.: P5147

Run Number: FD120924AR

Client SAMPLE NO.	2-Bromonaphthalene (SURR)	2-Flurobiphenyl (SURR)	ortho-Terphenyl (SURR)	TOT OUT
EX-8-TPH-1DL	140	89	78	0
EX-8-TPH-2DL	164 *	142 *	103	2

	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

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

SOIL EPH SURROGATE RECOVERY

	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

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

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5147 **SAS No :** P5147 **SDG No:** P5147

Sample No : P5147-01MS **Datafile:** FC067933.D

Client ID : EX-8-TPH-1MS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	12.3	165	174	66		(40-140)
Aliphatic C12-C16	8.2	429	435	71		(40-140)
Aliphatic C16-C21	12.3	152	168	123		(40-140)
Aliphatic C21-C28	16.4	29.0	40.6	71		(40-140)
Aliphatic C28-C40	24.7	15.2	37.4	90		(40-140)

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

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5147 **SAS No :** P5147 **SDG No:** P5147

Sample No : P5147-01MSD **Datafile:** FC067934.D

Client ID : EX-8-TPH-1MSD

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	12.3	165	175	74		11 |	(40-140)	25
Aliphatic C12-C16	8.2	429	435	71		0 |	(40-140)	25
Aliphatic C16-C21	12.3	152	167	115		6.72 |	(40-140)	25
Aliphatic C21-C28	16.4	29.0	41.2	74		4.97 |	(40-140)	25
Aliphatic C28-C40	24.7	15.2	43.1	113		22 |	(40-140)	25

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

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5147 **SAS No :** P5147 **SDG No:** P5147

Sample No : P5147-01MS **Datafile:** FD048841.D

Client ID : EX-8-TPH-1MS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	8.2	17.5	23.6	74		(40-140)
Aromatic C12-C16	12.3	96.7	104	59		(40-140)
Aromatic C16-C21	20.5	115	139	114		(40-140)
Aromatic C21-C36	32.9	17.0	51.8	105		(40-140)

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

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5147 **SAS No :** P5147 **SDG No:** P5147

Sample No : P5147-01MSD **Datafile:** FD048842.D

Client ID : EX-8-TPH-1MSD

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	8.2	17.5	23.4	72		3.28 |	(40-140)	25
Aromatic C12-C16	12.3	96.7	110	107		57 *|	(40-140)	25
Aromatic C16-C21	20.6	115	144	138		19 |	(40-140)	25
Aromatic C21-C36	32.9	17.0	51.3	104		0.96 |	(40-140)	25

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

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5147 **SAS No :** P5147 **SDG No:** P5147

Sample No : PB165427BS **Datafile:** FC067929.D

Client ID : PB165427BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	10.0	4.99	50		(40-140)
Aliphatic C12-C16	6.7	4.72	71		(40-140)
Aliphatic C16-C21	10.0	7.45	74		(40-140)
Aliphatic C21-C28	13.3	9.88	74		(40-140)
Aliphatic C28-C40	20.0	17.2	86		(40-140)

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

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5147 **SAS No :** P5147 **SDG No:** P5147

Sample No : PB165427BSD **Datafile:** FC067930.D

Client ID : PB165427BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aliphatic C9-C12	10	4.30	43		14.8|	(40-140)	50
Aliphatic C12-C16	6.7	4.24	64		10.6|	(40-140)	50
Aliphatic C16-C21	10	6.79	68		9.2|	(40-140)	50
Aliphatic C21-C28	13.3	8.85	66		10.9|	(40-140)	50
Aliphatic C28-C40	20.0	15.1	76		12.9|	(40-140)	50

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

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5147 **SAS No :** P5147 **SDG No:** P5147

Sample No : PB165427BS **Datafile:** FD048837.D

Client ID : PB165427BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	6.7	4.67	70		(40-140)
Aromatic C12-C16	10.0	8.47	85		(40-140)
Aromatic C16-C21	16.7	16.5	99		(40-140)
Aromatic C21-C36	26.7	25.2	94		(40-140)

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

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5147 **SAS No :** P5147 **SDG No:** P5147

Sample No : PB165427BSD **Datafile:** FD048838.D

Client ID : PB165427BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aromatic C10-C12	6.7	3.78	57		21.1|	(40-140)	50
Aromatic C12-C16	10	6.99	70		19.1|	(40-140)	50
Aromatic C16-C21	16.7	14.0	84		16.3|	(40-140)	50
Aromatic C21-C36	26.6	21.9	82		13.9|	(40-140)	50

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

4B

METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165427BL

Lab Name: CHEMTECH Contract: ENTA05

Lab Code: CHEM Case No.: P5147 SAS No.: P5147 SDG NO.: P5147

Instrument ID: FID_C Lab Sample ID: PB165427BL

Matrix: (soil/water) Solid Date Extracted: 12/6/2024 9:50:00 A

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB165427BS	PB165427BS
PB165427BSD	PB165427BSD
EX-8-TPH-1	P5147-01
EX-8-TPH-1MS	P5147-01MS
EX-8-TPH-1MSD	P5147-01MSD
EX-8-TPH-2	P5147-02

COMMENTS:

SAMPLE DATA

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

Report of Analysis

Client:	ENTACT			Date Collected:	12/05/24
Project:	North Point			Date Received:	12/05/24
Client Sample ID:	EX-8-TPH-1			SDG No.:	P5147
Lab Sample ID:	P5147-01			Matrix:	Solid
Analytical Method:	NJEPH			% Solid:	81
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
12/06/24 09:50	12/09/24 9:38	PB165427

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	184		50	23.4	61.6	mg/kg	FC067941.D
Aliphatic C12-C16	Aliphatic C12-C16	517		50	14.8	41.1	mg/kg	FC067941.D
Aliphatic C16-C21	Aliphatic C16-C21	176		50	18.5	61.6	mg/kg	FC067941.D
Aliphatic C21-C28	Aliphatic C21-C28	29.0		1	0.99	1.64	mg/kg	FC067931.D
Aliphatic C28-C40	Aliphatic C28-C40	15.2		1	2.22	2.46	mg/kg	FC067931.D
Aromatic C10-C12	Aromatic C10-C12	20.5		10	3.70	8.21	mg/kg	FD048849.D
Aromatic C12-C16	Aromatic C12-C16	109		10	4.19	12.3	mg/kg	FD048849.D
Aromatic C16-C21	Aromatic C16-C21	133		10	11.8	20.5	mg/kg	FD048849.D
Aromatic C21-C36	Aromatic C21-C36	17.0		1	2.46	3.29	mg/kg	FD048839.D
Total AliphaticEPH	Total AliphaticEPH	921			59.9	168	mg/kg	
Total AromaticEPH	Total AromaticEPH	280			22.1	44.3	mg/kg	
Total EPH	Total EPH	1200			82.1	213	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

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

Report of Analysis

Client:	ENTACT		Date Collected:	12/05/24	
Project:	North Point		Date Received:	12/05/24	
Client Sample ID:	EX-8-TPH-1		SDG No.:	P5147	
Lab Sample ID:	P5147-01		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	81	
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
FC067931.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12		165	E	0.47	1.23	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16		429	E	0.30	0.82	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21		152	E	0.37	1.23	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28		29.0		0.99	1.64	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40		15.2		2.22	2.46	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)		61.6		40 - 140	123%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5147-01	Acq On:	06 Dec 2024 18:02
Client Sample ID:	EX-8-TPH-1	Operator:	YP/AJ
Data file:	FC067931.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	3.154	6.430	334669814	2020	300	ug/ml
Aliphatic C12-C16	6.431	9.821	890287470	5230	200	ug/ml
Aliphatic C16-C21	9.822	13.180	315567855	1860	300	ug/ml
Aliphatic C21-C28	13.181	16.835	55512704	352.954	400	ug/ml
Aliphatic C28-C40	16.836	21.671	22423253	185.146	600	ug/ml
Aliphatic EPH	3.154	21.671	1618461096	9640		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.918	12.918	8940557	61.59		ug/ml
Aliphatic C9-C28	3.154	16.835	1596037843	9460	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067931.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 18:02
Operator : YP/AJ
Sample : P5147-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:06:35 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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...	12.918	8940557	61.591 ug/mlm
Spiked Amount 50.000		Recovery = 123.18%	
Target Compounds			

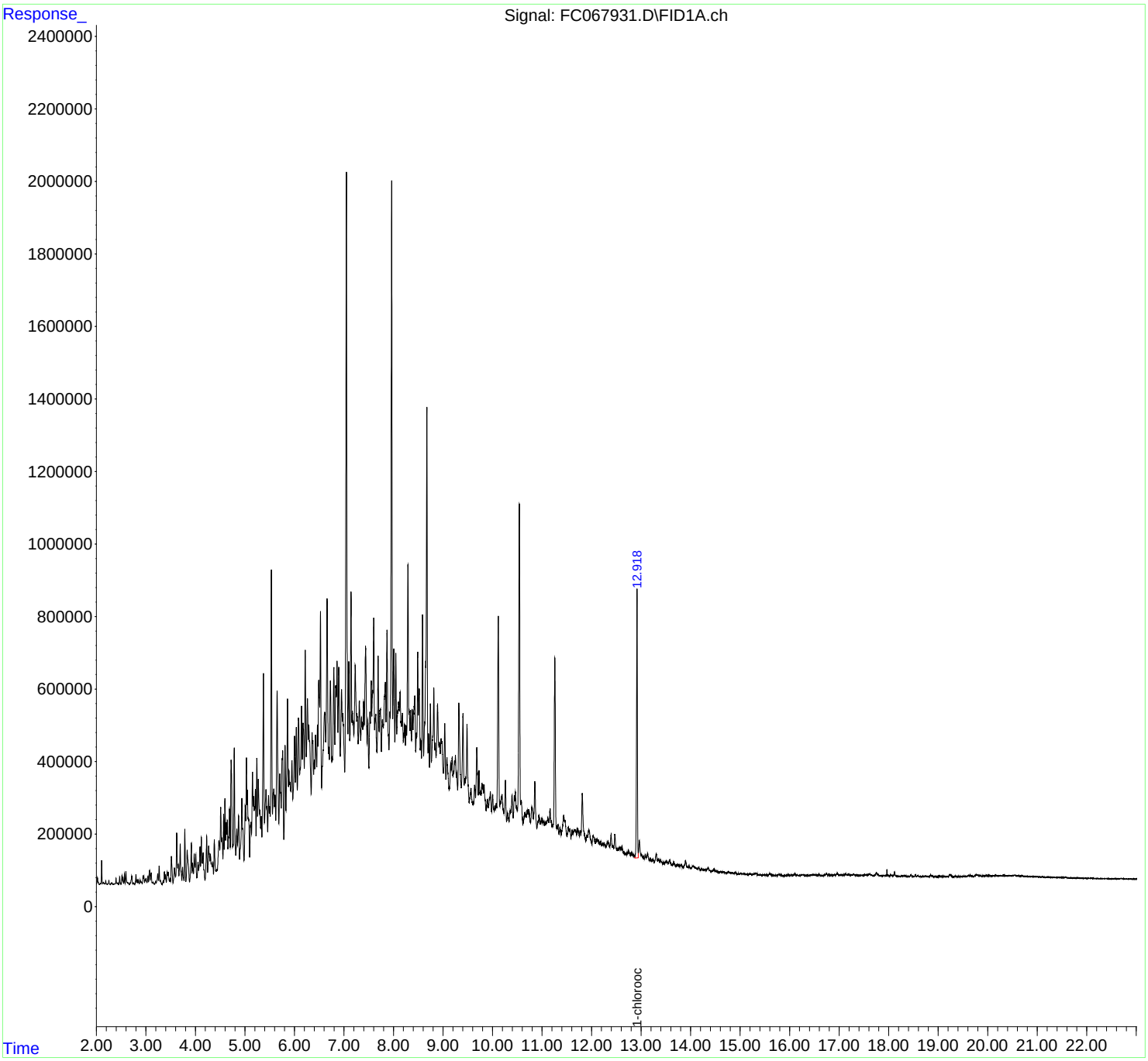
(f)=RT Delta > 1/2 Window (m)=manual int.

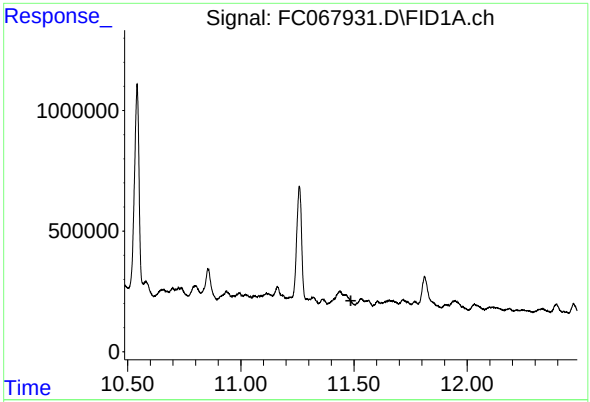
Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067931.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 18:02
Operator : YP/AJ
Sample : P5147-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:06:35 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

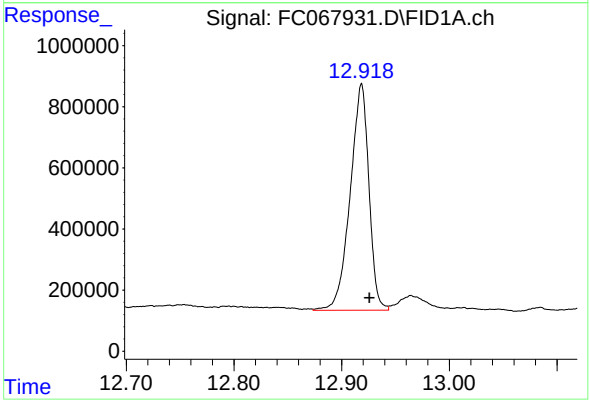
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.486 min
Response: 0
Conc: N.D.



#12 1-chlorooctadecane (SURR)

R.T.: 12.918 min
Delta R.T.: -0.007 min
Response: 8940557
Conc: 61.59 ug/ml m

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067931.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 18:02
Sample : P5147-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.240	3.204	3.254	BV	25836	328607	0.89%	0.020%
2	3.269	3.254	3.286	VV	48979	469801	1.27%	0.029%
3	3.293	3.286	3.328	VV	10097	115230	0.31%	0.007%
4	3.349	3.328	3.359	PV	10105	89516	0.24%	0.005%
5	3.374	3.359	3.386	VV	34210	328370	0.89%	0.020%
6	3.397	3.386	3.413	VV	25726	266099	0.72%	0.016%
7	3.430	3.413	3.476	VV	33300	818950	2.21%	0.050%
8	3.489	3.476	3.498	VV	16879	151035	0.41%	0.009%
9	3.516	3.498	3.549	VV	76414	1115721	3.01%	0.068%
10	3.578	3.549	3.599	VV	44788	751085	2.03%	0.046%
11	3.623	3.599	3.667	VV	140369	2433625	6.57%	0.149%
12	3.694	3.667	3.726	VV	111340	1737692	4.69%	0.107%
13	3.742	3.726	3.768	VV	46292	626082	1.69%	0.038%
14	3.787	3.768	3.807	VV	150653	1412394	3.82%	0.087%
15	3.836	3.807	3.882	VV	92826	2011965	5.44%	0.123%
16	3.918	3.882	3.932	VV	112547	1480129	4.00%	0.091%
17	3.943	3.932	3.961	VV	57452	742317	2.01%	0.046%
18	3.977	3.961	3.994	VV	81584	1098743	2.97%	0.067%
19	4.009	3.994	4.031	VV	80632	1082873	2.93%	0.066%
20	4.052	4.031	4.065	VV	60415	815119	2.20%	0.050%
21	4.093	4.065	4.105	VV	102908	1532420	4.14%	0.094%
22	4.120	4.105	4.140	VV	128895	1754328	4.74%	0.108%
23	4.156	4.140	4.193	VV	85729	1575043	4.26%	0.097%
24	4.227	4.193	4.247	VV	132255	1935764	5.23%	0.119%
25	4.268	4.247	4.291	VV	104165	1954535	5.28%	0.120%

26	4.303	4.291	4.341	VV	80948	1844894	4.98%	0.113%
27	4.351	4.341	4.365	VV	59477	676579	1.83%	0.041%
28	4.382	4.365	4.420	VV	122440	2107922	5.69%	0.129%
29	4.475	4.420	4.492	VV	118828	3107993	8.40%	0.191%
30	4.511	4.492	4.555	VV	210506	4973503	13.44%	0.305%
31	4.570	4.555	4.582	VV	191382	2132750	5.76%	0.131%
32	4.596	4.582	4.610	VV	233301	2851320	7.70%	0.175%
33	4.623	4.610	4.634	VV	167600	2081144	5.62%	0.128%
34	4.643	4.634	4.657	VV	176592	2036418	5.50%	0.125%
35	4.688	4.657	4.703	VV	205929	3972012	10.73%	0.244%
36	4.722	4.703	4.753	VV	340309	6470981	17.48%	0.397%
37	4.784	4.753	4.814	VV	374313	6427529	17.37%	0.394%
38	4.836	4.814	4.849	VV	149991	2460865	6.65%	0.151%
39	4.871	4.849	4.892	VV	187562	3458276	9.34%	0.212%
40	4.938	4.892	4.981	VV	236135	7114772	19.22%	0.436%
41	5.006	4.981	5.015	VV	214796	2957655	7.99%	0.181%
42	5.030	5.015	5.042	VV	346048	4265430	11.52%	0.262%
43	5.049	5.042	5.095	VV	256389	5622297	15.19%	0.345%
44	5.121	5.095	5.133	VV	168849	3209114	8.67%	0.197%
45	5.153	5.133	5.196	VV	308142	8550767	23.10%	0.524%
46	5.210	5.196	5.224	VV	260752	3590403	9.70%	0.220%
47	5.240	5.224	5.256	VV	344253	4753565	12.84%	0.292%
48	5.269	5.256	5.318	VV	284018	7971124	21.54%	0.489%
49	5.330	5.318	5.342	VV	186162	2410430	6.51%	0.148%
50	5.373	5.342	5.395	VV	580982	9913807	26.78%	0.608%
51	5.424	5.395	5.459	VV	259766	8015291	21.65%	0.492%
52	5.477	5.459	5.491	VV	241519	3975309	10.74%	0.244%
53	5.501	5.491	5.510	VV	212136	2254392	6.09%	0.138%
54	5.534	5.510	5.558	VV	864979	12688504	34.28%	0.778%
55	5.582	5.558	5.597	VV	259459	5580603	15.08%	0.342%
56	5.608	5.597	5.622	VV	243995	3347567	9.04%	0.205%
57	5.650	5.622	5.684	VV	530681	11926731	32.22%	0.731%
58	5.704	5.684	5.732	VV	300742	6911274	18.67%	0.424%
59	5.762	5.732	5.786	VV	365344	8880386	23.99%	0.545%
60	5.810	5.786	5.828	VV	378859	6384791	17.25%	0.392%
61	5.860	5.828	5.879	VV	505487	10485211	28.33%	0.643%
62	5.890	5.879	5.901	VV	310865	3820640	10.32%	0.234%
63	5.907	5.901	5.925	VV	279224	3915277	10.58%	0.240%
64	5.949	5.925	5.968	VV	337430	7269368	19.64%	0.446%
65	6.002	5.968	6.020	VV	404743	9742486	26.32%	0.598%
66	6.038	6.020	6.058	VV	429665	7983819	21.57%	0.490%
67	6.083	6.058	6.106	VV	453169	10567912	28.55%	0.648%
68	6.143	6.106	6.159	VV	484880	11817231	31.93%	0.725%
69	6.174	6.159	6.198	VV	439484	9441841	25.51%	0.579%

70	6.218	6.198	6.239	VV	641884	11558962	31.23%	0.709%
71	6.263	6.239	6.280	VV	508530	10572856	28.56%	0.648%
72	6.291	6.280	6.338	VV	434365	12579838	33.99%	0.772%
73	6.358	6.338	6.388	VV	412908	10568852	28.55%	0.648%
74	6.400	6.388	6.410	VV	338982	4218746	11.40%	0.259%
75	6.426	6.410	6.449	VV	404734	8572934	23.16%	0.526%
76	6.465	6.449	6.474	VV	436028	5659470	15.29%	0.347%
77	6.491	6.474	6.511	VV	555509	11023445	29.78%	0.676%
78	6.526	6.511	6.549	VV	742770	11913489	32.19%	0.731%
79	6.610	6.549	6.631	VV	470893	18974388	51.26%	1.164%
80	6.660	6.631	6.705	VV	781171	21927299	59.24%	1.345%
81	6.726	6.705	6.768	VV	556878	15957768	43.11%	0.979%
82	6.795	6.768	6.815	VV	592199	13202669	35.67%	0.810%
83	6.836	6.815	6.846	VV	540981	9062490	24.48%	0.556%
84	6.860	6.846	6.877	VV	609910	9897182	26.74%	0.607%
85	6.896	6.877	6.925	VV	594509	13551957	36.61%	0.831%
86	6.952	6.925	7.016	VV	531957	23390919	63.19%	1.435%
87	7.050	7.016	7.080	VV	1972717	34855842	94.17%	2.138%
88	7.098	7.080	7.118	VV	607639	11606405	31.36%	0.712%
89	7.143	7.118	7.162	VV	804725	15181621	41.02%	0.931%
90	7.170	7.162	7.200	VV	473174	10117566	27.33%	0.621%
91	7.228	7.200	7.288	VV	600248	25090463	67.79%	1.539%
92	7.310	7.288	7.338	VV	498716	13174991	35.59%	0.808%
93	7.353	7.338	7.379	VV	455537	10757293	29.06%	0.660%
94	7.396	7.379	7.410	VV	497441	8475046	22.90%	0.520%
95	7.437	7.410	7.466	VV	646834	17981162	48.58%	1.103%
96	7.481	7.466	7.503	VV	448778	8569972	23.15%	0.526%
97	7.525	7.503	7.533	VV	465587	7489113	20.23%	0.459%
98	7.550	7.533	7.563	VV	553341	8965210	24.22%	0.550%
99	7.600	7.563	7.620	VV	730918	19216116	51.92%	1.179%
100	7.640	7.620	7.666	VV	464310	11681257	31.56%	0.716%
101	7.690	7.666	7.709	VV	623878	12554663	33.92%	0.770%
102	7.733	7.709	7.754	VV	477037	11952700	32.29%	0.733%
103	7.775	7.754	7.794	VV	447225	10181765	27.51%	0.624%
104	7.834	7.794	7.849	VV	552637	16279715	43.98%	0.998%
105	7.869	7.849	7.908	VV	688545	17845295	48.21%	1.094%
106	7.963	7.908	7.984	VV	1934025	37013994	100.00%	2.270%
107	8.005	7.984	8.028	VV	638797	13629809	36.82%	0.836%
108	8.046	8.028	8.066	VV	628535	11490751	31.04%	0.705%
109	8.102	8.066	8.117	VV	495238	14574989	39.38%	0.894%
110	8.132	8.117	8.161	VV	526204	12491801	33.75%	0.766%
111	8.178	8.161	8.200	VV	461814	10229184	27.64%	0.627%
112	8.224	8.200	8.241	VV	433283	10027476	27.09%	0.615%

rteres

113	8.255	8.241	8.265	VV	431746	5954251	16.09%	0.365%
114	8.291	8.265	8.332	VV	877983	22536899	60.89%	1.382%
115	8.345	8.332	8.363	VV	473442	8269169	22.34%	0.507%
116	8.380	8.363	8.394	VV	473907	8151563	22.02%	0.500%
117	8.428	8.394	8.449	VV	514075	15004432	40.54%	0.920%
118	8.489	8.449	8.504	VV	630652	15532495	41.96%	0.953%
119	8.519	8.504	8.541	VV	536735	10345920	27.95%	0.635%
120	8.551	8.541	8.565	VV	389893	5291552	14.30%	0.325%
121	8.586	8.565	8.609	VV	733397	13533079	36.56%	0.830%
122	8.674	8.609	8.697	VV	1311627	32970395	89.08%	2.022%
123	8.709	8.697	8.726	VV	406811	6499870	17.56%	0.399%
124	8.745	8.726	8.766	VV	492092	9426191	25.47%	0.578%
125	8.814	8.766	8.834	VV	537199	16872592	45.58%	1.035%
126	8.843	8.834	8.859	VV	385070	5646375	15.25%	0.346%
127	8.889	8.859	8.944	VV	488742	20195049	54.56%	1.239%
128	8.961	8.944	9.004	VV	394390	13289047	35.90%	0.815%
129	9.035	9.004	9.058	VV	437055	11262613	30.43%	0.691%
130	9.079	9.058	9.124	VV	340003	11918533	32.20%	0.731%
131	9.155	9.124	9.167	VV	328422	7529716	20.34%	0.462%
132	9.186	9.167	9.202	VV	346613	6828366	18.45%	0.419%
133	9.251	9.202	9.295	VV	349879	17167787	46.38%	1.053%
134	9.321	9.295	9.370	VV	487589	15565604	42.05%	0.955%
135	9.403	9.370	9.428	VV	462713	12095010	32.68%	0.742%
136	9.442	9.428	9.451	VV	285083	3748829	10.13%	0.230%
137	9.485	9.451	9.530	VV	433100	14382285	38.86%	0.882%
138	9.566	9.530	9.598	VV	258504	9565588	25.84%	0.587%
139	9.608	9.598	9.615	VV	219578	2311900	6.25%	0.142%
140	9.640	9.615	9.657	VV	266508	6083660	16.44%	0.373%
141	9.683	9.657	9.712	VV	366322	9785047	26.44%	0.600%
142	9.728	9.712	9.748	VV	306010	5834775	15.76%	0.358%
143	9.757	9.748	9.769	VV	248803	3191103	8.62%	0.196%
144	9.786	9.769	9.796	VV	270994	4135102	11.17%	0.254%
145	9.804	9.796	9.818	VV	268711	3367398	9.10%	0.207%
146	9.831	9.818	9.871	VV	268050	7434464	20.09%	0.456%
147	9.897	9.871	9.919	VV	225591	6195614	16.74%	0.380%
148	9.956	9.919	9.981	VV	247664	8293322	22.41%	0.509%
149	10.003	9.981	10.036	VV	239949	7032584	19.00%	0.431%
150	10.049	10.036	10.060	VV	204158	2982216	8.06%	0.183%
151	10.076	10.060	10.088	VV	215325	3425748	9.26%	0.210%
152	10.117	10.088	10.146	VV	736454	14822948	40.05%	0.909%
153	10.191	10.146	10.228	VV	240507	10753342	29.05%	0.660%
154	10.260	10.228	10.284	VV	278970	7359290	19.88%	0.451%
155	10.305	10.284	10.333	VV	188737	5164276	13.95%	0.317%

156	10.362	10.333	10.370	VV	196414	4113518	11.11%	0.252%
157	10.394	10.370	10.419	VV	238217	6165601	16.66%	0.378%
158	10.441	10.419	10.450	VV	237366	4002977	10.81%	0.246%
159	10.462	10.450	10.502	VV	247612	6720108	18.16%	0.412%
160	10.542	10.502	10.569	VV	1035352	19599288	52.95%	1.202%
161	10.580	10.569	10.618	VV	224187	5653052	15.27%	0.347%
162	10.657	10.618	10.681	VV	187824	6856060	18.52%	0.420%
163	10.699	10.681	10.709	VV	196168	3148652	8.51%	0.193%
164	10.725	10.709	10.767	VV	198337	6406162	17.31%	0.393%
165	10.799	10.767	10.823	VV	204598	6304473	17.03%	0.387%
166	10.856	10.823	10.895	VV	275299	8616571	23.28%	0.528%
167	10.936	10.895	10.961	VV	182108	6566876	17.74%	0.403%
168	10.968	10.961	10.974	VV	163681	1286933	3.48%	0.079%
169	10.993	10.974	11.010	VV	173452	3588895	9.70%	0.220%
170	11.020	11.010	11.048	VV	167764	3710685	10.03%	0.228%
171	11.060	11.048	11.071	VV	161846	2230010	6.02%	0.137%
172	11.115	11.071	11.140	VV	172779	6795373	18.36%	0.417%
173	11.162	11.140	11.203	VV	200865	6581744	17.78%	0.404%
174	11.259	11.203	11.308	VV	618293	16298138	44.03%	1.000%
175	11.320	11.308	11.344	VV	156148	3219692	8.70%	0.197%
176	11.361	11.344	11.388	VV	148586	3603719	9.74%	0.221%
177	11.438	11.388	11.504	VV	180871	10704237	28.92%	0.657%
178	11.532	11.504	11.549	VV	149789	3740359	10.11%	0.229%
179	11.563	11.549	11.583	VV	143431	2789986	7.54%	0.171%
180	11.604	11.583	11.631	VV	140427	3820674	10.32%	0.234%
181	11.655	11.631	11.697	VV	142108	5481281	14.81%	0.336%
182	11.717	11.697	11.754	VV	146392	4674011	12.63%	0.287%
183	11.768	11.754	11.783	VV	138465	2289675	6.19%	0.140%
184	11.812	11.783	11.886	VV	242507	9661335	26.10%	0.593%
185	11.908	11.886	11.920	VV	125741	2479549	6.70%	0.152%
186	11.947	11.920	12.006	VV	142111	6361905	17.19%	0.390%
187	12.032	12.006	12.076	VV	126518	4887740	13.21%	0.300%
188	12.099	12.076	12.168	VV	115494	6012173	16.24%	0.369%
189	12.187	12.168	12.205	VV	109600	2326800	6.29%	0.143%
190	12.218	12.205	12.234	VV	102624	1798602	4.86%	0.110%
191	12.242	12.234	12.294	VV	103932	3576301	9.66%	0.219%
192	12.330	12.294	12.367	VV	107610	4430769	11.97%	0.272%
193	12.393	12.367	12.447	VV	127022	4996506	13.50%	0.306%
194	12.470	12.447	12.526	VV	128177	4723928	12.76%	0.290%
195	12.569	12.526	12.595	VV	91963	3643542	9.84%	0.223%
196	12.615	12.595	12.703	VV	96903	5282091	14.27%	0.324%
197	12.753	12.703	12.778	VV	81230	3495006	9.44%	0.214%
198	12.794	12.778	12.864	VV	76640	3792110	10.25%	0.233%
199	12.918	12.864	12.944	VV	800212	12017298	32.47%	0.737%

200	12.965	12.944	13.002	VV	111484	3043051	8.22%	0.187%
201	13.011	13.002	13.064	VV	71029	2515368	6.80%	0.154%
202	13.083	13.064	13.100	VV	72836	1423863	3.85%	0.087%
203	13.132	13.100	13.168	VV	74299	2684662	7.25%	0.165%
204	13.182	13.168	13.231	VV	61244	2214100	5.98%	0.136%
205	13.244	13.231	13.269	VV	59744	1275463	3.45%	0.078%
206	13.306	13.269	13.334	VV	74029	2424247	6.55%	0.149%
207	13.351	13.334	13.374	VV	58641	1338163	3.62%	0.082%
208	13.393	13.374	13.441	VV	56247	2084621	5.63%	0.128%
209	13.458	13.441	13.474	VV	49733	965781	2.61%	0.059%
210	13.514	13.474	13.545	VV	54489	2157203	5.83%	0.132%
211	13.575	13.545	13.623	VV	56826	2316109	6.26%	0.142%
212	13.659	13.623	13.694	VV	51094	1944967	5.25%	0.119%
213	13.717	13.694	13.735	VV	43250	1046433	2.83%	0.064%
214	13.750	13.735	13.769	VV	42971	839979	2.27%	0.052%
215	13.812	13.769	13.851	VV	43988	2001174	5.41%	0.123%
216	13.898	13.851	13.943	VV	55474	2370803	6.41%	0.145%
217	13.963	13.943	14.010	VV	39434	1458220	3.94%	0.089%
218	14.052	14.010	14.090	VV	39874	1801352	4.87%	0.110%
219	14.102	14.090	14.140	VV	35990	1003714	2.71%	0.062%
220	14.165	14.140	14.203	VV	36600	1214280	3.28%	0.074%
221	14.224	14.203	14.261	VV	33637	1036163	2.80%	0.064%
222	14.292	14.261	14.318	VV	30335	996815	2.69%	0.061%
223	14.355	14.318	14.418	VV	34894	1758387	4.75%	0.108%
224	14.472	14.418	14.565	VV	31713	2305914	6.23%	0.141%
225	14.604	14.565	14.614	VV	23474	665078	1.80%	0.041%
226	14.622	14.614	14.644	VV	23142	413670	1.12%	0.025%
227	14.670	14.644	14.713	VV	22819	911800	2.46%	0.056%
228	14.724	14.713	14.737	VV	20408	286723	0.77%	0.018%
229	14.766	14.737	14.808	VV	24300	918753	2.48%	0.056%
230	14.828	14.808	14.867	VV	20926	699785	1.89%	0.043%
231	14.907	14.867	14.946	VV	22324	943662	2.55%	0.058%
232	14.965	14.946	14.987	VV	18343	422851	1.14%	0.026%
233	15.019	14.987	15.044	VV	19108	629169	1.70%	0.039%
234	15.051	15.044	15.063	VV	18014	203077	0.55%	0.012%
235	15.079	15.063	15.118	VV	17846	562019	1.52%	0.034%
236	15.120	15.118	15.162	VV	17024	426546	1.15%	0.026%
237	15.200	15.162	15.263	VV	17557	977479	2.64%	0.060%
238	15.312	15.263	15.362	VV	19272	1015845	2.74%	0.062%
239	15.369	15.362	15.394	VV	15040	280234	0.76%	0.017%
240	15.409	15.394	15.454	VV	15198	510403	1.38%	0.031%
241	15.501	15.454	15.527	VV	15065	610908	1.65%	0.037%
242	15.541	15.527	15.565	VV	14691	311748	0.84%	0.019%

rteres

243	15.600	15.565	15.653	VV	17890	786603	2.13%	0.048%
244	15.664	15.653	15.714	VV	13668	468261	1.27%	0.029%
245	15.788	15.714	15.804	VV	15967	731636	1.98%	0.045%
246	15.821	15.804	15.888	VV	14961	643174	1.74%	0.039%
247	15.967	15.888	16.006	VV	14669	890387	2.41%	0.055%
248	16.025	16.006	16.054	VV	13485	367962	0.99%	0.023%
249	16.102	16.054	16.206	VV	16181	1213380	3.28%	0.074%
250	16.229	16.206	16.239	VV	13312	253945	0.69%	0.016%
251	16.265	16.239	16.294	VV	14489	431484	1.17%	0.026%
252	16.312	16.294	16.341	VV	12340	330712	0.89%	0.020%
253	16.361	16.341	16.385	VV	12524	311220	0.84%	0.019%
254	16.484	16.385	16.560	VV	14354	1363642	3.68%	0.084%
255	16.591	16.560	16.652	VV	13891	683197	1.85%	0.042%
256	16.743	16.652	16.768	VV	16972	935024	2.53%	0.057%
257	16.784	16.768	16.808	VV	13779	302727	0.82%	0.019%
258	16.816	16.808	16.869	VV	13132	455712	1.23%	0.028%
259	16.961	16.869	17.000	VV	17516	1069328	2.89%	0.066%
260	17.042	17.000	17.077	VV	13618	584419	1.58%	0.036%
261	17.130	17.077	17.163	VV	14976	675828	1.83%	0.041%
262	17.184	17.163	17.227	VV	14863	508052	1.37%	0.031%
263	17.246	17.227	17.264	VV	12886	271651	0.73%	0.017%
264	17.292	17.264	17.322	VV	15079	456607	1.23%	0.028%
265	17.337	17.322	17.355	VV	12153	231638	0.63%	0.014%
266	17.366	17.355	17.421	VV	12442	446575	1.21%	0.027%
267	17.462	17.421	17.490	VV	11766	456131	1.23%	0.028%
268	17.515	17.490	17.531	VV	12661	293319	0.79%	0.018%
269	17.549	17.531	17.565	VV	13165	255543	0.69%	0.016%
270	17.583	17.565	17.598	VV	13603	251463	0.68%	0.015%
271	17.615	17.598	17.648	VV	15173	390193	1.05%	0.024%
272	17.657	17.648	17.695	VV	11579	302014	0.82%	0.019%
273	17.751	17.695	17.831	VV	18624	1019538	2.75%	0.063%
274	17.841	17.831	17.877	VV	10237	266263	0.72%	0.016%
275	17.910	17.877	17.934	VV	11043	351866	0.95%	0.022%
276	17.964	17.934	18.019	VV	16212	534556	1.44%	0.033%
277	18.039	18.019	18.068	VV	11916	304361	0.82%	0.019%
278	18.118	18.068	18.204	VV	19580	873532	2.36%	0.054%
279	18.262	18.204	18.284	VV	8985	397523	1.07%	0.024%
280	18.318	18.284	18.345	VV	9087	303861	0.82%	0.019%
281	18.353	18.345	18.374	VV	8053	134309	0.36%	0.008%
282	18.388	18.374	18.398	VV	7347	100937	0.27%	0.006%
283	18.451	18.398	18.506	VV	11567	539202	1.46%	0.033%
284	18.536	18.506	18.563	VV	11226	290640	0.79%	0.018%
285	18.588	18.563	18.618	VV	9790	266397	0.72%	0.016%

286	18.625	18.618	18.662	VV	7729	193711	0.52%	0.012%
287	18.674	18.662	18.696	VV	7453	147098	0.40%	0.009%
288	18.715	18.696	18.731	VV	7993	157717	0.43%	0.010%
289	18.750	18.731	18.784	VV	8565	236373	0.64%	0.014%
290	18.799	18.784	18.828	VV	7195	179477	0.48%	0.011%
291	18.848	18.828	18.914	VV	10145	417707	1.13%	0.026%
292	18.941	18.914	18.976	VV	7653	245427	0.66%	0.015%
293	19.034	18.976	19.098	VV	7901	483070	1.31%	0.030%
294	19.138	19.098	19.155	VV	6801	208770	0.56%	0.013%
295	19.164	19.155	19.173	VV	6343	67200	0.18%	0.004%
296	19.235	19.173	19.310	VV	11434	615904	1.66%	0.038%
297	19.347	19.310	19.388	VV	7373	289270	0.78%	0.018%
298	19.435	19.388	19.458	VV	6781	259764	0.70%	0.016%
299	19.476	19.458	19.490	VV	6688	121188	0.33%	0.007%
300	19.514	19.490	19.534	VV	6855	169984	0.46%	0.010%
301	19.570	19.534	19.581	VV	6851	180844	0.49%	0.011%
302	19.607	19.581	19.624	VV	9400	206149	0.56%	0.013%
303	19.644	19.624	19.701	VV	9318	353464	0.95%	0.022%
304	19.797	19.701	19.895	VV	10069	943312	2.55%	0.058%
305	19.904	19.895	19.914	VV	7325	83824	0.23%	0.005%
306	19.931	19.914	19.947	VV	7537	139951	0.38%	0.009%
307	19.971	19.947	19.998	VV	9122	246211	0.67%	0.015%
308	20.029	19.998	20.098	VV	8714	451426	1.22%	0.028%
309	20.151	20.098	20.197	VV	8351	452650	1.22%	0.028%
310	20.206	20.197	20.218	VV	7970	95637	0.26%	0.006%
311	20.240	20.218	20.274	VV	7949	251058	0.68%	0.015%
312	20.323	20.274	20.351	VV	9042	357868	0.97%	0.022%
313	20.354	20.351	20.398	VV	7483	204784	0.55%	0.013%
314	20.444	20.398	20.474	VV	8717	364182	0.98%	0.022%
315	20.479	20.474	20.484	VV	7654	44841	0.12%	0.003%
316	20.551	20.484	20.594	VV	8834	510807	1.38%	0.031%
317	20.613	20.594	20.636	VV	7124	167075	0.45%	0.010%
318	20.688	20.636	20.748	VV	7373	418997	1.13%	0.026%
319	20.766	20.748	20.800	VV	5765	170152	0.46%	0.010%
320	20.819	20.800	20.839	VV	5102	115663	0.31%	0.007%
321	20.861	20.839	20.872	VV	5095	99896	0.27%	0.006%
322	20.877	20.872	20.901	VV	4843	79818	0.22%	0.005%
323	20.920	20.901	20.953	VV	5046	138656	0.37%	0.009%
324	20.964	20.953	21.042	VV	4354	212505	0.57%	0.013%
325	21.057	21.042	21.071	VV	3898	60067	0.16%	0.004%
326	21.102	21.071	21.168	VV	4235	195741	0.53%	0.012%
327	21.219	21.168	21.254	VV	3565	146147	0.39%	0.009%
328	21.296	21.254	21.341	VV	2261	106877	0.29%	0.007%
329	21.350	21.341	21.422	VV	2108	78949	0.21%	0.005%

rteres

330	21.446	21.422	21.455	VV	1596	28313	0.08%	0.002%
331	21.463	21.455	21.497	VV	1525	33085	0.09%	0.002%
332	21.508	21.497	21.516	VV	1599	15026	0.04%	0.001%
333	21.522	21.516	21.531	VV	1453	11811	0.03%	0.001%
334	21.573	21.531	21.688	VV	2344	89061	0.24%	0.005%

Sum of corrected areas: 1630478402

Aliphatic EPH 111424.M Mon Dec 09 01:28:23 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	12/05/24	
Project:	North Point		Date Received:	12/05/24	
Client Sample ID:	EX-8-TPH-1		SDG No.:	P5147	
Lab Sample ID:	P5147-01		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	81	
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
FD048839.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	17.5	E	0.37	0.82	mg/kg
Aromatic C12-C16	Aromatic C12-C16	96.7	E	0.42	1.23	mg/kg
Aromatic C16-C21	Aromatic C16-C21	115	E	1.18	2.05	mg/kg
Aromatic C21-C36	Aromatic C21-C36	17.0		2.46	3.29	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	63.0		40 - 140	126%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	47.0		40 - 140	94%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	44.5		40 - 140	89%	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:	P5147-01	Acq On:	06 Dec 2024 18:02
Client Sample ID:	EX-8-TPH-1	Operator:	YP/AJ
Data file:	FD048839.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	4.086	5.803	40889098	212.945	200	ug/ml
Aromatic C12-C16	5.804	8.408	226590896	1180	300	ug/ml
Aromatic C16-C21	8.409	12.672	261146529	1410	500	ug/ml
Aromatic C21-C36	12.673	18.079	32479016	206.569	800	ug/ml
Aromatic EPH	4.086	18.079	561105539	3000		ug/ml
ortho-Terphenyl (SURR)	11.252	11.252	8566862	44.54		ug/ml
2-Bromonaphthalene (SURR)	7.367	7.367	11098769	63.04		ug/ml
2-Flurobiphenyl (SURR)	8.217	8.217	5410994	46.98		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048839.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 18:02
Operator : YP/AJ
Sample : P5147-01
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1

Integration File: autoint1.e
Quant Time: Dec 07 03:10:56 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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...	7.367	11098769	63.040 ug/ml
Spiked Amount 50.000		Recovery = 126.08%	
6) S 2-Flurobiphenyl (SURR)	8.217	5410994	46.983 ug/ml
Spiked Amount 50.000	Range 0 - 131	Recovery = 93.97%	
11) S ortho-Terphenyl (SURR)	11.252	8566862	44.541 ug/ml
Spiked Amount 50.000		Recovery = 89.08%	
Target Compounds			

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

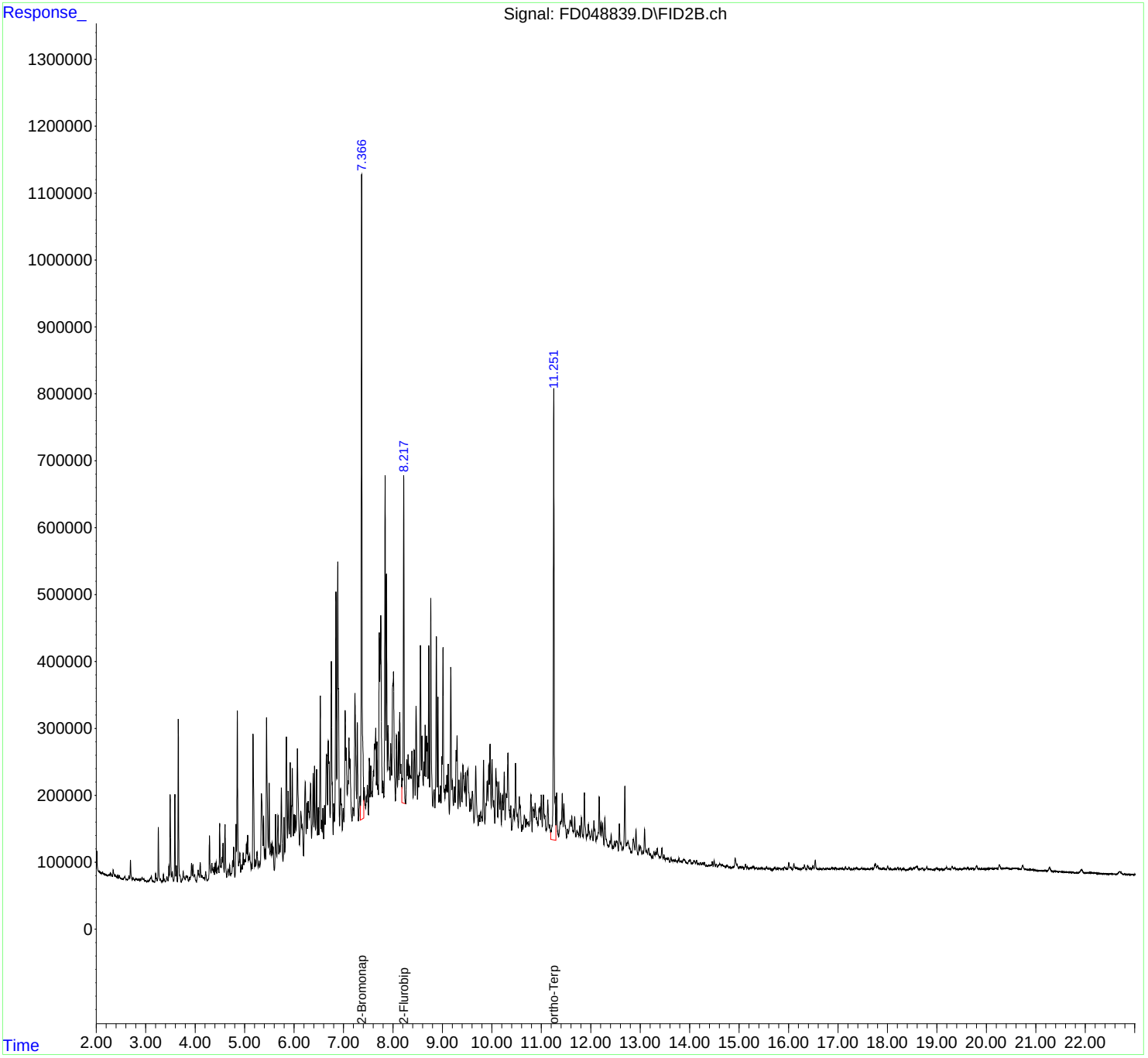
Quantitation Report (QT Reviewed)

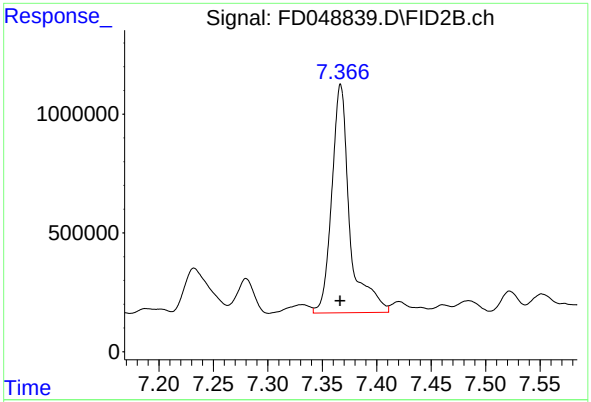
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048839.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 18:02
Operator : YP/AJ
Sample : P5147-01
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1

Integration File: autoint1.e
Quant Time: Dec 07 03:10:56 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

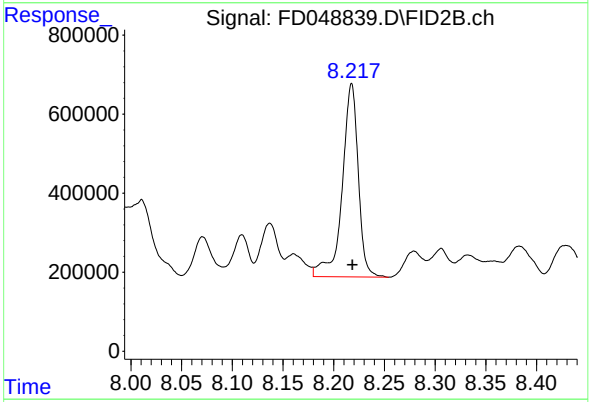




#4 2-Bromonaphthalene (SURR)

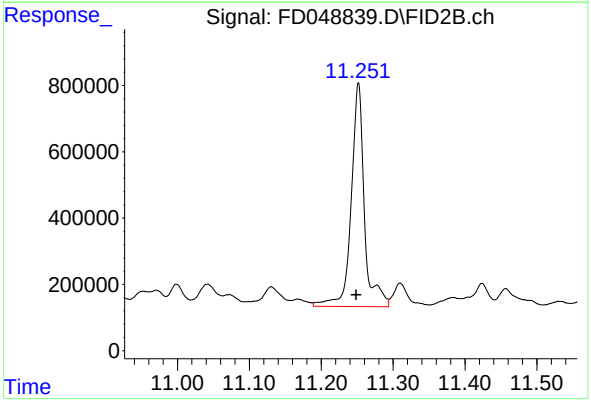
R.T.: 7.367 min
Delta R.T.: 0.000 min
Response: 11098769
Conc: 63.04 ug/ml

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1



#6 2-Flurobiphenyl (SURR)

R.T.: 8.217 min
Delta R.T.: 0.000 min
Response: 5410994
Conc: 46.98 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.252 min
Delta R.T.: 0.003 min
Response: 8566862
Conc: 44.54 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048839.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 18:02
Sample : P5147-01
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.103	4.087	4.124	PV	22820	239068	1.63%	0.041%
2	4.138	4.124	4.173	VV	4440	69389	0.47%	0.012%
3	4.182	4.173	4.197	VV	3319	22489	0.15%	0.004%
4	4.213	4.197	4.251	PV	12704	149512	1.02%	0.026%
5	4.290	4.251	4.323	PV	67245	828008	5.66%	0.141%
6	4.338	4.323	4.367	VV	26377	472022	3.23%	0.081%
7	4.378	4.367	4.390	VV	20182	211414	1.44%	0.036%
8	4.403	4.390	4.413	VV	25734	248232	1.70%	0.042%
9	4.424	4.413	4.438	VV	27848	291917	1.99%	0.050%
10	4.455	4.438	4.461	VV	18853	215254	1.47%	0.037%
11	4.470	4.461	4.481	VV	21072	217681	1.49%	0.037%
12	4.496	4.481	4.515	VV	85212	901532	6.16%	0.154%
13	4.521	4.515	4.527	VV	21322	147058	1.00%	0.025%
14	4.540	4.527	4.548	VV	34929	358969	2.45%	0.061%
15	4.563	4.548	4.586	VV	55682	784805	5.36%	0.134%
16	4.604	4.586	4.638	VV	83285	1038484	7.10%	0.177%
17	4.667	4.638	4.683	VV	16563	323545	2.21%	0.055%
18	4.698	4.683	4.716	VV	22853	280518	1.92%	0.048%
19	4.757	4.716	4.767	VV	29589	479074	3.27%	0.082%
20	4.780	4.767	4.802	VV	50101	557559	3.81%	0.095%
21	4.826	4.802	4.837	VV	83552	829909	5.67%	0.142%
22	4.853	4.837	4.877	VV	252853	2727956	18.64%	0.465%
23	4.904	4.877	4.920	VV	40824	713422	4.88%	0.122%
24	4.941	4.920	4.953	VV	22926	364282	2.49%	0.062%
25	4.971	4.953	4.985	VV	40658	574443	3.93%	0.098%
26	4.995	4.985	5.003	VV	30460	296648	2.03%	0.051%
27	5.011	5.003	5.019	VV	29451	279303	1.91%	0.048%
28	5.035	5.019	5.050	VV	53635	766264	5.24%	0.131%
29	5.062	5.050	5.076	VV	66908	774090	5.29%	0.132%
30	5.084	5.076	5.091	VV	34008	294987	2.02%	0.050%
31	5.102	5.091	5.132	VV	38550	683913	4.67%	0.117%
32	5.143	5.132	5.152	VV	23518	242173	1.65%	0.041%
33	5.170	5.152	5.204	VV	217994	3251809	22.22%	0.555%
34	5.215	5.204	5.227	VV	29436	340319	2.33%	0.058%
35	5.251	5.227	5.274	VV	41853	863847	5.90%	0.147%
36	5.293	5.274	5.307	VV	27840	444358	3.04%	0.076%

rteres

37	5.341	5.307	5.373	VV	128716	2908397	19.88%	0.496%
38	5.384	5.373	5.401	VV	95496	1089703	7.45%	0.186%
39	5.412	5.401	5.426	VV	45669	597773	4.09%	0.102%
40	5.444	5.426	5.480	VV	242523	3814619	26.07%	0.651%
41	5.497	5.480	5.514	VV	144198	1675754	11.45%	0.286%
42	5.535	5.514	5.547	VV	53219	867105	5.93%	0.148%
43	5.558	5.547	5.569	VV	55313	619815	4.24%	0.106%
44	5.578	5.569	5.601	VV	48631	620569	4.24%	0.106%
45	5.626	5.601	5.651	VV	97206	1424628	9.74%	0.243%
46	5.676	5.651	5.692	VV	95712	1582846	10.82%	0.270%
47	5.702	5.692	5.719	VV	50764	710556	4.86%	0.121%
48	5.744	5.719	5.776	VV	136840	2419817	16.54%	0.413%
49	5.797	5.776	5.813	VV	92777	1273263	8.70%	0.217%
50	5.845	5.813	5.867	VV	213071	3785382	25.87%	0.646%
51	5.882	5.867	5.905	VV	131534	2083539	14.24%	0.355%
52	5.922	5.905	5.937	VV	174299	2115201	14.45%	0.361%
53	5.965	5.937	5.987	VV	165544	3179307	21.73%	0.542%
54	6.002	5.987	6.014	VV	96719	1306041	8.93%	0.223%
55	6.027	6.014	6.041	VV	95159	1319550	9.02%	0.225%
56	6.068	6.041	6.110	VV	195248	4670233	31.92%	0.797%
57	6.138	6.110	6.158	VV	101024	2348494	16.05%	0.401%
58	6.166	6.158	6.192	VV	80698	1276531	8.72%	0.218%
59	6.227	6.192	6.246	VV	145079	3116743	21.30%	0.532%
60	6.260	6.246	6.272	VV	113558	1435924	9.81%	0.245%
61	6.285	6.272	6.296	VV	115914	1448154	9.90%	0.247%
62	6.301	6.296	6.312	VV	101278	925833	6.33%	0.158%
63	6.335	6.312	6.355	VV	142239	2822610	19.29%	0.482%
64	6.387	6.355	6.402	VV	157576	2901890	19.83%	0.495%
65	6.415	6.402	6.434	VV	167962	2201080	15.04%	0.375%
66	6.456	6.434	6.474	VV	162995	2572560	17.58%	0.439%
67	6.490	6.474	6.503	VV	106513	1445238	9.88%	0.247%
68	6.531	6.503	6.548	VV	273435	4039413	27.60%	0.689%
69	6.557	6.548	6.568	VV	87200	964334	6.59%	0.165%
70	6.583	6.568	6.599	VV	104964	1569543	10.73%	0.268%
71	6.617	6.599	6.630	VV	109264	1608297	10.99%	0.274%
72	6.656	6.630	6.677	VV	185466	4106790	28.06%	0.701%
73	6.692	6.677	6.705	VV	205718	2905465	19.86%	0.496%
74	6.708	6.705	6.730	VV	174283	1991618	13.61%	0.340%
75	6.755	6.730	6.791	VV	324356	6162415	42.11%	1.051%
76	6.804	6.791	6.819	VV	111816	1516661	10.36%	0.259%
77	6.848	6.819	6.865	VV	427844	6508758	44.48%	1.110%
78	6.884	6.865	6.921	VV	473080	8563445	58.52%	1.461%
79	6.942	6.921	6.976	VV	134102	3513867	24.01%	0.599%
80	6.995	6.976	7.010	VV	104459	1835738	12.55%	0.313%
81	7.034	7.010	7.046	VV	250574	3615644	24.71%	0.617%
82	7.054	7.046	7.077	VV	194764	3072008	20.99%	0.524%
83	7.092	7.077	7.097	VV	145704	1623464	11.09%	0.277%
84	7.111	7.097	7.123	VV	209641	2763495	18.89%	0.471%
85	7.130	7.123	7.174	VV	177869	3935052	26.89%	0.671%
86	7.188	7.174	7.197	VV	105028	1364725	9.33%	0.233%
87	7.201	7.197	7.211	VV	103251	880972	6.02%	0.150%
88	7.232	7.211	7.263	VV	275855	5733647	39.18%	0.978%
89	7.280	7.263	7.301	VV	231855	3546683	24.24%	0.605%

90	7.332	7.301	7.343	VV	121740	2660272	18.18%	0.454%
91	7.367	7.343	7.410	VV	1050385	14633149	100.00%	2.496%
92	7.420	7.410	7.449	VV	134697	2683433	18.34%	0.458%
93	7.461	7.449	7.469	VV	121311	1426400	9.75%	0.243%
94	7.484	7.469	7.504	VV	138163	2514043	17.18%	0.429%
95	7.522	7.504	7.537	VV	178701	2723705	18.61%	0.465%
96	7.552	7.537	7.582	VV	166656	3786751	25.88%	0.646%
97	7.604	7.582	7.612	VV	158714	2549841	17.43%	0.435%
98	7.627	7.612	7.639	VV	200052	3047632	20.83%	0.520%
99	7.651	7.639	7.665	VV	223689	2978338	20.35%	0.508%
100	7.677	7.665	7.691	VV	202766	2626157	17.95%	0.448%
101	7.697	7.691	7.705	VV	136255	1120858	7.66%	0.191%
102	7.723	7.705	7.733	VV	365507	4322069	29.54%	0.737%
103	7.754	7.733	7.785	VV	391597	8385055	57.30%	1.430%
104	7.798	7.785	7.814	VV	143436	2371418	16.21%	0.405%
105	7.842	7.814	7.856	VV	600480	8126313	55.53%	1.386%
106	7.869	7.856	7.886	VV	452418	5385983	36.81%	0.919%
107	7.901	7.886	7.922	VV	227376	4099595	28.02%	0.699%
108	7.928	7.922	7.940	VV	164613	1721629	11.77%	0.294%
109	7.955	7.940	7.973	VV	199759	3428927	23.43%	0.585%
110	8.010	7.973	8.050	VV	306128	9891168	67.59%	1.687%
111	8.071	8.050	8.091	VV	212350	3991581	27.28%	0.681%
112	8.109	8.091	8.122	VV	217406	3169496	21.66%	0.541%
113	8.137	8.122	8.152	VV	246188	3612405	24.69%	0.616%
114	8.161	8.152	8.182	VV	169049	2735004	18.69%	0.467%
115	8.218	8.182	8.255	VV	601117	10192175	69.65%	1.739%
116	8.279	8.255	8.292	VV	175510	3284087	22.44%	0.560%
117	8.306	8.292	8.319	VV	182776	2666435	18.22%	0.455%
118	8.332	8.319	8.350	VV	165479	2899665	19.82%	0.495%
119	8.358	8.350	8.366	VV	150677	1419521	9.70%	0.242%
120	8.383	8.366	8.408	VV	187888	3994596	27.30%	0.681%
121	8.429	8.408	8.449	VV	189401	3960262	27.06%	0.676%
122	8.467	8.449	8.495	VV	254489	5048744	34.50%	0.861%
123	8.509	8.495	8.520	VV	151036	2060626	14.08%	0.352%
124	8.555	8.520	8.575	VV	345460	6981903	47.71%	1.191%
125	8.588	8.575	8.613	VV	210932	3871906	26.46%	0.661%
126	8.627	8.613	8.636	VV	171649	2172342	14.85%	0.371%
127	8.651	8.636	8.666	VV	226320	3428828	23.43%	0.585%
128	8.680	8.666	8.690	VV	210055	2616883	17.88%	0.446%
129	8.696	8.690	8.708	VV	199477	2070707	14.15%	0.353%
130	8.724	8.708	8.741	VV	344090	4432753	30.29%	0.756%
131	8.765	8.741	8.806	VV	415372	8031572	54.89%	1.370%
132	8.831	8.806	8.848	VV	129014	2956500	20.20%	0.504%
133	8.878	8.848	8.895	VV	358082	5838030	39.90%	0.996%
134	8.909	8.895	8.927	VV	267469	3486662	23.83%	0.595%
135	8.935	8.927	8.945	VV	121938	1284948	8.78%	0.219%
136	8.959	8.945	8.973	VV	135523	2057887	14.06%	0.351%
137	8.991	8.973	8.996	VV	178440	2088154	14.27%	0.356%
138	9.012	8.996	9.032	VV	341581	4945696	33.80%	0.844%
139	9.038	9.032	9.051	VV	129658	1384891	9.46%	0.236%
140	9.068	9.051	9.077	VV	136564	2016762	13.78%	0.344%
141	9.089	9.077	9.102	VV	150933	2066600	14.12%	0.353%

142	9.117	9.102	9.140	VV	167429	3089434	21.11%	0.527%
143	9.170	9.140	9.189	VV	312161	5456242	37.29%	0.931%
144	9.199	9.189	9.222	VV	143049	2482131	16.96%	0.423%
145	9.244	9.222	9.258	VV	133582	2624019	17.93%	0.448%
146	9.278	9.258	9.286	VV	188061	2661971	18.19%	0.454%
147	9.296	9.286	9.315	VV	209528	2837234	19.39%	0.484%
148	9.335	9.315	9.359	VV	143487	3150403	21.53%	0.537%
149	9.375	9.359	9.396	VV	153538	2819027	19.26%	0.481%
150	9.416	9.396	9.442	VV	165652	3894773	26.62%	0.664%
151	9.447	9.442	9.455	VV	133640	1046307	7.15%	0.178%
152	9.468	9.455	9.482	VV	154790	2156816	14.74%	0.368%
153	9.501	9.482	9.509	VV	156577	2178787	14.89%	0.372%
154	9.517	9.509	9.555	VV	159813	3633957	24.83%	0.620%
155	9.568	9.555	9.585	VV	113760	1916513	13.10%	0.327%
156	9.606	9.585	9.639	VV	125778	3473793	23.74%	0.593%
157	9.675	9.639	9.726	VV	163908	5492466	37.53%	0.937%
158	9.744	9.726	9.763	VV	89997	1878529	12.84%	0.320%
159	9.777	9.763	9.787	VV	95578	1293933	8.84%	0.221%
160	9.793	9.787	9.806	VV	88044	940095	6.42%	0.160%
161	9.833	9.806	9.858	VV	172324	3552913	24.28%	0.606%
162	9.881	9.858	9.886	VV	106947	1570051	10.73%	0.268%
163	9.905	9.886	9.922	VV	140277	2657044	18.16%	0.453%
164	9.937	9.922	9.947	VV	165193	2201258	15.04%	0.376%
165	9.964	9.947	9.987	VV	195932	3642151	24.89%	0.621%
166	10.004	9.987	10.030	VV	172713	3375586	23.07%	0.576%
167	10.039	10.030	10.060	VV	111411	1791438	12.24%	0.306%
168	10.082	10.060	10.096	VV	159345	2680145	18.32%	0.457%
169	10.102	10.096	10.120	VV	139313	1763564	12.05%	0.301%
170	10.140	10.120	10.161	VV	138475	2765319	18.90%	0.472%
171	10.176	10.161	10.193	VV	122951	1988738	13.59%	0.339%
172	10.215	10.193	10.231	VV	119370	2393146	16.35%	0.408%
173	10.251	10.231	10.269	VV	153689	2666004	18.22%	0.455%
174	10.289	10.269	10.304	VV	121406	2323699	15.88%	0.396%
175	10.325	10.304	10.368	VV	182358	4874868	33.31%	0.832%
176	10.383	10.368	10.401	VV	103210	1734989	11.86%	0.296%
177	10.442	10.401	10.459	VV	98592	2889402	19.75%	0.493%
178	10.479	10.459	10.512	VV	166731	3636156	24.85%	0.620%
179	10.516	10.512	10.535	VV	89240	1120048	7.65%	0.191%
180	10.555	10.535	10.568	VV	116568	1929675	13.19%	0.329%
181	10.574	10.568	10.602	VV	102883	1793909	12.26%	0.306%
182	10.617	10.602	10.630	VV	74841	1174949	8.03%	0.200%
183	10.657	10.630	10.685	VV	89072	2602620	17.79%	0.444%
184	10.699	10.685	10.711	VV	82867	1254373	8.57%	0.214%
185	10.718	10.711	10.724	VV	77459	559610	3.82%	0.095%
186	10.734	10.724	10.751	VV	78356	1258877	8.60%	0.215%
187	10.790	10.751	10.813	VV	119336	3355146	22.93%	0.572%
188	10.830	10.813	10.839	VV	100989	1334153	9.12%	0.228%
189	10.846	10.839	10.860	VV	97038	1200524	8.20%	0.205%
190	10.875	10.860	10.899	VV	106652	2196286	15.01%	0.375%
191	10.906	10.899	10.920	VV	84474	1026008	7.01%	0.175%
192	10.924	10.920	10.935	VV	77294	691455	4.73%	0.118%
193	10.953	10.935	10.961	VV	97525	1379829	9.43%	0.235%
194	10.970	10.961	10.984	VV	101113	1330060	9.09%	0.227%

rteres

195	10.999	10.984	11.019	VV	118898	1996874	13.65%	0.341%
196	11.042	11.019	11.063	VV	118662	2542662	17.38%	0.434%
197	11.072	11.063	11.094	VV	87171	1434940	9.81%	0.245%
198	11.131	11.094	11.158	VV	110991	3152298	21.54%	0.538%
199	11.167	11.158	11.190	VV	73843	1327422	9.07%	0.226%
200	11.252	11.190	11.271	VV	726993	10404815	71.10%	1.775%
201	11.277	11.271	11.295	VV	115963	1407109	9.62%	0.240%
202	11.310	11.295	11.351	VV	121442	2697145	18.43%	0.460%
203	11.384	11.351	11.395	VV	78167	1825648	12.48%	0.311%
204	11.424	11.395	11.441	VV	120711	2519931	17.22%	0.430%
205	11.457	11.441	11.510	VV	104963	3166976	21.64%	0.540%
206	11.531	11.510	11.547	VV	66590	1360964	9.30%	0.232%
207	11.584	11.547	11.603	VV	80320	2415579	16.51%	0.412%
208	11.616	11.603	11.645	VV	86192	1855729	12.68%	0.317%
209	11.674	11.645	11.693	VV	85278	1984379	13.56%	0.339%
210	11.719	11.693	11.760	VV	64805	2406397	16.44%	0.411%
211	11.776	11.760	11.790	VV	71929	1131208	7.73%	0.193%
212	11.811	11.790	11.848	VV	83998	2316542	15.83%	0.395%
213	11.871	11.848	11.911	VV	120996	2896428	19.79%	0.494%
214	11.925	11.911	11.935	VV	58737	793977	5.43%	0.135%
215	11.950	11.935	11.987	VV	73636	1955245	13.36%	0.334%
216	12.021	11.987	12.046	VV	64232	2011112	13.74%	0.343%
217	12.064	12.046	12.077	VV	79146	1260522	8.61%	0.215%
218	12.083	12.077	12.104	VV	66533	920375	6.29%	0.157%
219	12.122	12.104	12.130	VV	53641	822258	5.62%	0.140%
220	12.171	12.130	12.190	VV	114383	2684851	18.35%	0.458%
221	12.206	12.190	12.222	VV	76295	1271504	8.69%	0.217%
222	12.237	12.222	12.266	VV	74881	1586590	10.84%	0.271%
223	12.284	12.266	12.362	VV	82969	3009567	20.57%	0.513%
224	12.389	12.362	12.399	VV	47920	957919	6.55%	0.163%
225	12.413	12.399	12.437	VV	57796	1083053	7.40%	0.185%
226	12.447	12.437	12.460	VV	40707	537764	3.67%	0.092%
227	12.478	12.460	12.494	VV	46574	869671	5.94%	0.148%
228	12.525	12.494	12.558	VV	48246	1653827	11.30%	0.282%
229	12.578	12.558	12.608	VV	73772	1538711	10.52%	0.263%
230	12.614	12.608	12.634	VV	43710	628982	4.30%	0.107%
231	12.654	12.634	12.661	VV	38670	579291	3.96%	0.099%
232	12.690	12.661	12.713	VV	129772	2275813	15.55%	0.388%
233	12.754	12.713	12.781	VV	46106	1739469	11.89%	0.297%
234	12.790	12.781	12.809	VV	36713	588032	4.02%	0.100%
235	12.819	12.809	12.829	VV	30877	354377	2.42%	0.060%
236	12.859	12.829	12.894	VV	50145	1579395	10.79%	0.269%
237	12.915	12.894	12.959	VV	64219	1603975	10.96%	0.274%
238	12.976	12.959	12.990	VV	40734	659835	4.51%	0.113%
239	13.005	12.990	13.034	VV	39872	915500	6.26%	0.156%
240	13.052	13.034	13.066	VV	32396	553011	3.78%	0.094%
241	13.089	13.066	13.119	VV	64466	1340262	9.16%	0.229%
242	13.128	13.119	13.147	VV	32236	512813	3.50%	0.087%
243	13.170	13.147	13.193	VV	35945	866861	5.92%	0.148%
244	13.207	13.193	13.232	VV	27977	601432	4.11%	0.103%
245	13.241	13.232	13.255	VV	24311	318850	2.18%	0.054%
246	13.278	13.255	13.299	VV	31255	697780	4.77%	0.119%

247	13.315	13.299	13.328	VV	30128	486381	3.32%	0.083%
248	13.346	13.328	13.387	VV	35682	993775	6.79%	0.170%
249	13.397	13.387	13.412	VV	23609	334551	2.29%	0.057%
250	13.439	13.412	13.459	VV	35909	777743	5.31%	0.133%
251	13.482	13.459	13.505	VV	25714	607361	4.15%	0.104%
252	13.521	13.505	13.526	VV	20660	243681	1.67%	0.042%
253	13.529	13.526	13.535	VV	20470	110052	0.75%	0.019%
254	13.548	13.535	13.559	VV	20568	289638	1.98%	0.049%
255	13.569	13.559	13.601	VV	20584	446758	3.05%	0.076%
256	13.622	13.601	13.655	VV	21573	588825	4.02%	0.100%
257	13.674	13.655	13.689	VV	17766	343119	2.34%	0.059%
258	13.707	13.689	13.721	VV	17454	321755	2.20%	0.055%
259	13.728	13.721	13.744	VV	16993	216025	1.48%	0.037%
260	13.783	13.744	13.804	VV	20157	600843	4.11%	0.103%
261	13.816	13.804	13.846	VV	15699	382653	2.61%	0.065%
262	13.878	13.846	13.889	VV	18568	430560	2.94%	0.073%
263	13.894	13.889	13.940	VV	17932	473943	3.24%	0.081%
264	13.946	13.940	13.958	VV	13220	131245	0.90%	0.022%
265	13.983	13.958	13.992	VV	16606	296369	2.03%	0.051%
266	14.009	13.992	14.034	VV	18022	391016	2.67%	0.067%
267	14.036	14.034	14.050	VV	12851	119831	0.82%	0.020%
268	14.060	14.050	14.070	VV	13205	152557	1.04%	0.026%
269	14.094	14.070	14.117	VV	16109	413284	2.82%	0.071%
270	14.140	14.117	14.163	VV	17070	371456	2.54%	0.063%
271	14.176	14.163	14.196	VV	12312	221257	1.51%	0.038%
272	14.215	14.196	14.239	VV	12729	291965	2.00%	0.050%
273	14.259	14.239	14.280	VV	13262	284544	1.94%	0.049%
274	14.297	14.280	14.328	VV	13075	305671	2.09%	0.052%
275	14.339	14.328	14.358	VV	8801	146243	1.00%	0.025%
276	14.376	14.358	14.402	VV	8679	221681	1.51%	0.038%
277	14.407	14.402	14.412	VV	8293	47554	0.32%	0.008%
278	14.429	14.412	14.441	VV	9774	157724	1.08%	0.027%
279	14.456	14.441	14.475	VV	14034	224050	1.53%	0.038%
280	14.494	14.475	14.522	VV	15367	317635	2.17%	0.054%
281	14.536	14.522	14.562	VV	10466	204949	1.40%	0.035%
282	14.606	14.562	14.617	VV	10050	278283	1.90%	0.047%
283	14.621	14.617	14.643	VV	9633	143404	0.98%	0.024%
284	14.659	14.643	14.687	VV	9952	224845	1.54%	0.038%
285	14.692	14.687	14.721	VV	7361	136267	0.93%	0.023%
286	14.735	14.721	14.741	VV	7145	76045	0.52%	0.013%
287	14.758	14.741	14.789	VV	8630	195925	1.34%	0.033%
288	14.794	14.789	14.798	VV	5218	28116	0.19%	0.005%
289	14.804	14.798	14.829	VV	5571	97261	0.66%	0.017%
290	14.835	14.829	14.847	VV	5274	52201	0.36%	0.009%
291	14.858	14.847	14.863	VV	4814	41905	0.29%	0.007%
292	14.888	14.863	14.898	VV	5971	111439	0.76%	0.019%
293	14.920	14.898	14.990	VV	18912	540084	3.69%	0.092%
294	15.014	14.990	15.022	VV	5265	87077	0.60%	0.015%
295	15.035	15.022	15.052	VV	5360	87205	0.60%	0.015%
296	15.067	15.052	15.104	VV	5660	137534	0.94%	0.023%
297	15.127	15.104	15.154	VV	9188	183028	1.25%	0.031%
298	15.164	15.154	15.192	VV	4901	87224	0.60%	0.015%
299	15.201	15.192	15.214	VV	3001	35713	0.24%	0.006%

300	15.233	15.214	15.245	VV	4515	69499	0.47%	0.012%
301	15.287	15.245	15.320	VV	6226	204322	1.40%	0.035%
302	15.325	15.320	15.337	VV	3516	30037	0.21%	0.005%
303	15.353	15.337	15.372	VV	3703	62018	0.42%	0.011%
304	15.389	15.372	15.400	VV	3021	41162	0.28%	0.007%
305	15.421	15.400	15.427	VV	3030	42756	0.29%	0.007%
306	15.452	15.427	15.469	VV	3197	70962	0.48%	0.012%
307	15.476	15.469	15.498	VV	2542	39395	0.27%	0.007%
308	15.515	15.498	15.527	VV	2581	37673	0.26%	0.006%
309	15.555	15.527	15.577	VV	4252	89066	0.61%	0.015%
310	15.593	15.577	15.612	VV	2276	40239	0.27%	0.007%
311	15.623	15.612	15.644	VV	2262	31640	0.22%	0.005%
312	15.647	15.644	15.678	VV	1058	12125	0.08%	0.002%
313	15.726	15.678	15.749	VV	4073	86870	0.59%	0.015%
314	15.772	15.749	15.787	VV	2319	33124	0.23%	0.006%
315	15.803	15.787	15.818	VV	2347	35618	0.24%	0.006%
316	15.823	15.818	15.860	VV	2175	34559	0.24%	0.006%
317	15.876	15.860	15.881	VV	2041	19544	0.13%	0.003%
318	15.884	15.881	15.895	VV	1946	14850	0.10%	0.003%
319	15.925	15.895	15.965	VV	3818	94557	0.65%	0.016%
320	15.973	15.965	15.980	VV	1572	10049	0.07%	0.002%
321	16.005	15.980	16.029	VV	10755	155004	1.06%	0.026%
322	16.039	16.029	16.077	VV	3854	63069	0.43%	0.011%
323	16.108	16.077	16.131	VV	8855	133425	0.91%	0.023%
324	16.140	16.131	16.186	VV	2816	66710	0.46%	0.011%
325	16.199	16.186	16.229	VV	1579	25713	0.18%	0.004%
326	16.234	16.229	16.242	VV	897	4988	0.03%	0.001%
327	16.247	16.242	16.254	VV	635	3949	0.03%	0.001%
328	16.261	16.254	16.269	VV	900	5824	0.04%	0.001%
329	16.289	16.269	16.303	VV	2948	41762	0.29%	0.007%
330	16.321	16.303	16.362	VV	6676	95941	0.66%	0.016%
331	16.384	16.362	16.400	PBA	4071	50049	0.34%	0.009%
332	16.465	16.455	16.473	PV	740	4156	0.03%	0.001%
333	16.494	16.473	16.513	VV	3890	55458	0.38%	0.009%
334	16.540	16.513	16.592	VV	13867	202863	1.39%	0.035%
335	16.599	16.592	16.615	PV	806	8597	0.06%	0.001%
336	16.629	16.615	16.640	VV	1048	11167	0.08%	0.002%
337	16.652	16.640	16.671	VV	1017	12401	0.08%	0.002%
338	16.699	16.671	16.729	PV	1742	31872	0.22%	0.005%
339	16.745	16.729	16.760	VV	1507	18996	0.13%	0.003%
340	16.778	16.760	16.811	VV	2104	36726	0.25%	0.006%
341	16.820	16.811	16.847	VV	1119	16720	0.11%	0.003%
342	16.880	16.847	16.898	VV	3004	61980	0.42%	0.011%
343	16.906	16.898	16.929	VV	1858	25111	0.17%	0.004%
344	16.944	16.929	16.964	VV	3129	42535	0.29%	0.007%
345	16.979	16.964	16.999	VV	1700	22948	0.16%	0.004%
346	17.049	16.999	17.071	VV	2124	48343	0.33%	0.008%
347	17.088	17.071	17.117	VV	2082	36007	0.25%	0.006%
348	17.152	17.117	17.170	VV	3940	58157	0.40%	0.010%
349	17.177	17.170	17.187	VV	1500	10546	0.07%	0.002%
350	17.190	17.187	17.198	VV	982	5063	0.03%	0.001%
351	17.222	17.198	17.249	VV	3781	58194	0.40%	0.010%

					rteres			
352	17.260	17.249	17.273	VV	1203	11655	0.08%	0.002%
353	17.280	17.273	17.297	VV	1047	7374	0.05%	0.001%
354	17.311	17.297	17.315	PV	1039	6260	0.04%	0.001%
355	17.343	17.315	17.359	VV	2171	39116	0.27%	0.007%
356	17.381	17.359	17.400	VV	3450	51478	0.35%	0.009%
357	17.409	17.400	17.415	VV	1109	7519	0.05%	0.001%
358	17.431	17.415	17.448	VV	1122	17033	0.12%	0.003%
359	17.474	17.448	17.509	VV	2332	53374	0.36%	0.009%
360	17.523	17.509	17.532	VV	1688	16937	0.12%	0.003%
361	17.535	17.532	17.546	VV	1530	8710	0.06%	0.001%
362	17.552	17.546	17.577	VV	901	10887	0.07%	0.002%
363	17.597	17.577	17.624	VV	1264	25477	0.17%	0.004%
364	17.628	17.624	17.640	VV	745	5714	0.04%	0.001%
365	17.668	17.640	17.692	VV	2584	49677	0.34%	0.008%
366	17.707	17.692	17.715	VV	1655	18009	0.12%	0.003%
367	17.756	17.715	17.782	VV	8901	203315	1.39%	0.035%
368	17.800	17.782	17.835	VV	6342	115748	0.79%	0.020%
369	17.841	17.835	17.874	VV	2121	31954	0.22%	0.005%
370	17.878	17.874	17.882	VV	1215	4759	0.03%	0.001%
371	17.892	17.882	17.909	VV	1571	20138	0.14%	0.003%
372	17.921	17.909	17.973	VV	2159	45598	0.31%	0.008%
373	18.004	17.973	18.044	VV	5490	92730	0.63%	0.016%
374	18.049	18.044	18.090	VV	1434	23560	0.16%	0.004%
375	18.113	18.090	18.118	VV	551	5043	0.03%	0.001%
376	18.131	18.118	18.137	PV	840	6446	0.04%	0.001%
377	18.158	18.137	18.177	VV	1333	18371	0.13%	0.003%
					Sum of corrected areas:	586173354		

Aromatic EPH 111424.M Sat Dec 07 03:40:55 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	12/05/24	
Project:	North Point		Date Received:	12/05/24	
Client Sample ID:	EX-8-TPH-1DL		SDG No.:	P5147	
Lab Sample ID:	P5147-01DL		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	81	
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
FC067941.D	50	12/06/24	12/09/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	184		23.4	61.6	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	517		14.8	41.1	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	176		18.5	61.6	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	22.6	J	49.3	82.1	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	110	U	110	123	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	1.58		40 - 140	158%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5147-01DL	Acq On:	09 Dec 2024 09:38
Client Sample ID:	EX-8-TPH-1DL	Operator:	YP/AJ
Data file:	FC067941.D	Misc:	
Instrument:	FID_C	ALS Vial:	11
Dilution Factor:	50	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.152	6.430	7436320	44.853	300	ug/ml
Aliphatic C12-C16	6.431	9.821	21481413	126.076	200	ug/ml
Aliphatic C16-C21	9.822	13.180	7277147	42.902	300	ug/ml
Aliphatic C21-C28	13.181	16.834	865194	5.501	400	ug/ml
Aliphatic C28-C40	16.835	21.670	858177	7.086	600	ug/ml
Aliphatic EPH	3.152	21.670	37918251	226.419		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.911	12.911	229660	1.58		ug/ml
Aliphatic C9-C28	3.152	16.834	37060074	219.332	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067941.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 09:38
Operator : YP/AJ
Sample : P5147-01DL 50X
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-1DL

Manual Integrations APPROVED

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

Integration File: autoint1.e
Quant Time: Dec 09 12:20:56 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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...	12.911	229660	1.582 ug/mlm
Spiked Amount 50.000		Recovery =	3.16%
Target Compounds			

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067941.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 09:38
Operator : YP/AJ
Sample : P5147-01DL 50X
Misc :
ALS Vial : 11 Sample Multiplier: 1

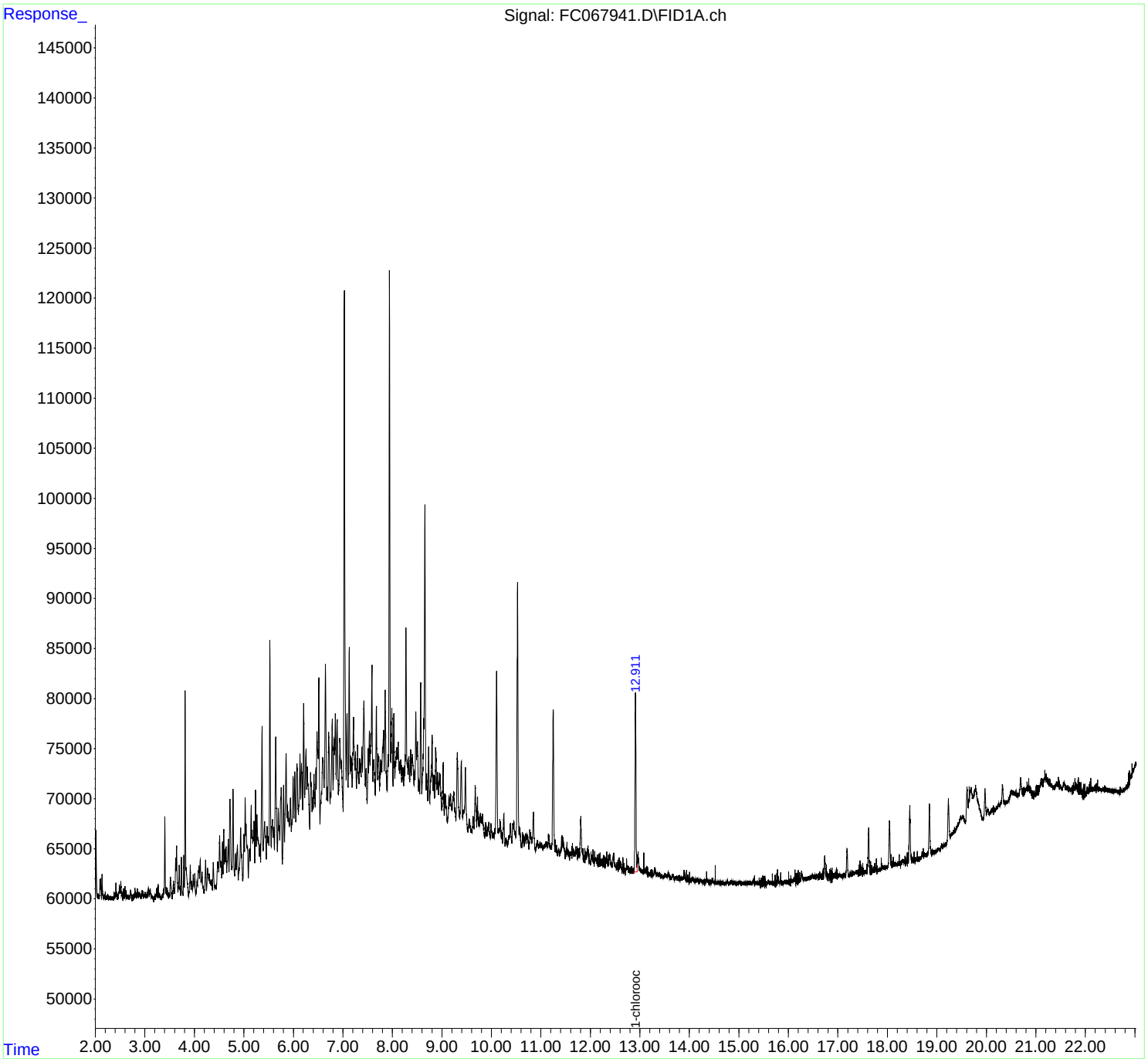
Instrument :
FID_C
ClientSampleId :
EX-8-TPH-1DL

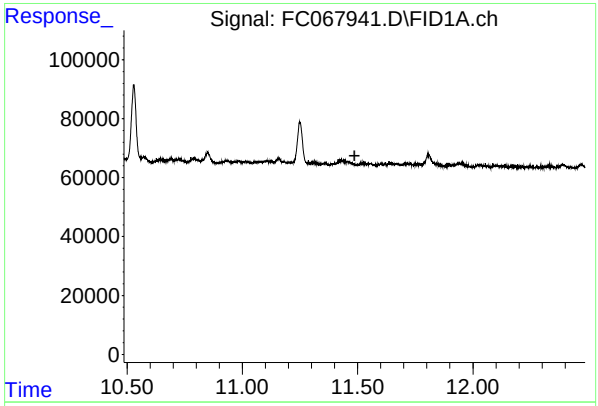
Manual Integrations APPROVED

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

Integration File: autoint1.e
Quant Time: Dec 09 12:20:56 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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





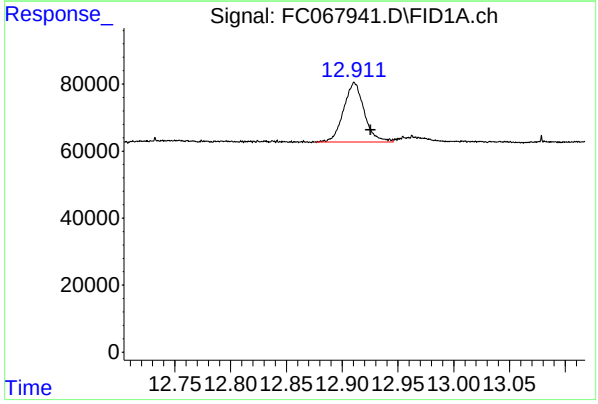
#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.486 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-1DL

Manual Integrations
APPROVED

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



#12 1-chlorooctadecane (SURR)

R.T.: 12.911 min
Delta R.T.: -0.015 min
Response: 229660
Conc: 1.58 ug/ml m

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-1DL

rteres

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_C\Data\FC12092
Data File : FC067941.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 09:38
Sample : P5147-01DL 50X
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.240	3.204	3.255	BV	904	10181	1.03%	0.027%
2	3.270	3.255	3.338	VV	1249	14595	1.47%	0.038%
3	3.349	3.338	3.359	PV	272	2286	0.23%	0.006%
4	3.375	3.359	3.385	VV	800	7811	0.79%	0.020%
5	3.404	3.385	3.440	VV	8038	77354	7.81%	0.203%
6	3.452	3.440	3.478	VV	885	11875	1.20%	0.031%
7	3.489	3.478	3.498	VV	508	3760	0.38%	0.010%
8	3.517	3.498	3.550	VV	2006	30191	3.05%	0.079%
9	3.578	3.550	3.598	PV	1615	23189	2.34%	0.061%
10	3.641	3.598	3.668	VV	5074	102097	10.31%	0.267%
11	3.694	3.668	3.723	VV	3081	46814	4.73%	0.123%
12	3.739	3.723	3.771	VV	3932	41031	4.14%	0.107%
13	3.787	3.771	3.798	VV	4135	35535	3.59%	0.093%
14	3.814	3.798	3.883	VV	20218	224113	22.62%	0.587%
15	3.918	3.883	3.932	PV	3077	37852	3.82%	0.099%
16	3.943	3.932	3.961	VV	1466	17936	1.81%	0.047%
17	3.977	3.961	3.994	VV	2051	25782	2.60%	0.067%
18	4.009	3.994	4.034	VV	2035	24810	2.50%	0.065%
19	4.092	4.034	4.103	VV	2732	64492	6.51%	0.169%
20	4.118	4.103	4.140	VV	3389	50145	5.06%	0.131%
21	4.156	4.140	4.199	VV	2079	32323	3.26%	0.085%
22	4.227	4.199	4.246	PV	3256	39644	4.00%	0.104%
23	4.268	4.246	4.291	VV	2319	39716	4.01%	0.104%
24	4.303	4.291	4.340	VV	1685	30660	3.09%	0.080%
25	4.350	4.340	4.364	VV	913	8578	0.87%	0.022%
26	4.382	4.364	4.441	VV	2664	34509	3.48%	0.090%
27	4.472	4.441	4.492	PV	1483	19296	1.95%	0.051%
28	4.568	4.514	4.580	BV	2708	9882	1.00%	0.026%
29	4.594	4.580	4.609	PV	4332	38909	3.93%	0.102%
30	4.620	4.609	4.631	VV	2352	24065	2.43%	0.063%
31	4.641	4.631	4.655	VV	2744	23693	2.39%	0.062%
32	4.685	4.655	4.700	VV	3554	49373	4.98%	0.129%
33	4.719	4.700	4.760	VV	7394	122163	12.33%	0.320%
34	4.782	4.760	4.814	VV	8673	99332	10.03%	0.260%
35	4.833	4.814	4.846	VV	2401	27791	2.81%	0.073%
36	4.868	4.846	4.889	VV	3309	50015	5.05%	0.131%

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-1DL

Manual IntegrationsAPPROVED

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

rteres

37	4.935	4.889	4.981	PV	5036	103413	10.44%	0.271%
38	5.002	4.981	5.013	PV	4493	49281	4	
39	5.027	5.013	5.039	VV	8153	88870	8	
40	5.046	5.039	5.091	VV	5447	103963	10	
41	5.116	5.091	5.128	VV	3084	50421	5	
42	5.147	5.128	5.194	VV	7366	181700	18	
43	5.205	5.194	5.220	VV	5659	66141	6.68%	0.173%
44	5.237	5.220	5.251	VV	8809	102370	10.33%	0.268%
45	5.265	5.251	5.314	VV	6473	162444	16.40%	0.425%
46	5.326	5.314	5.337	VV	3460	40104	4.05%	0.105%
47	5.367	5.337	5.390	VV	15234	228087	23.02%	0.597%
48	5.419	5.390	5.453	VV	5818	161019	16.25%	0.422%
49	5.471	5.453	5.485	VV	5266	78374	7.91%	0.205%
50	5.494	5.485	5.504	VV	4323	45752	4.62%	0.120%
51	5.526	5.504	5.551	VV	23874	310769	31.37%	0.814%
52	5.577	5.551	5.591	VV	6036	119871	12.10%	0.314%
53	5.603	5.591	5.617	VV	5221	69064	6.97%	0.181%
54	5.644	5.617	5.677	VV	14176	274045	27.66%	0.717%
55	5.696	5.677	5.725	VV	7105	148938	15.03%	0.390%
56	5.755	5.725	5.778	VV	9159	199701	20.16%	0.523%
57	5.802	5.778	5.821	VV	9445	140729	14.20%	0.368%
58	5.853	5.821	5.872	VV	12650	250476	25.28%	0.656%
59	5.881	5.872	5.918	VV	7425	179151	18.08%	0.469%
60	5.941	5.918	5.960	VV	8059	160420	16.19%	0.420%
61	5.995	5.960	6.012	VV	10302	232710	23.49%	0.609%
62	6.030	6.012	6.050	VV	10651	190501	19.23%	0.499%
63	6.073	6.050	6.100	VV	11324	267321	26.98%	0.700%
64	6.134	6.100	6.150	VV	12532	274760	27.73%	0.719%
65	6.165	6.150	6.189	VV	11512	228787	23.09%	0.599%
66	6.208	6.189	6.229	VV	17662	289259	29.20%	0.757%
67	6.255	6.229	6.271	VV	13008	270652	27.32%	0.709%
68	6.282	6.271	6.329	VV	11327	308173	31.11%	0.807%
69	6.349	6.329	6.378	VV	10708	248217	25.05%	0.650%
70	6.388	6.378	6.400	VV	8193	101642	10.26%	0.266%
71	6.418	6.400	6.439	VV	10429	207397	20.93%	0.543%
72	6.479	6.464	6.499	VV	14774	272840	27.54%	0.714%
73	6.515	6.499	6.539	VV	20300	315778	31.87%	0.827%
74	6.593	6.539	6.621	VV	12233	476265	48.07%	1.247%
75	6.649	6.621	6.675	VV	21358	460827	46.51%	1.206%
76	6.685	6.675	6.695	VV	9288	101828	10.28%	0.267%
77	6.715	6.695	6.742	VV	14591	325794	32.88%	0.853%
78	6.785	6.757	6.804	VV	15574	338907	34.21%	0.887%
79	6.822	6.804	6.834	VV	13979	222073	22.41%	0.581%
80	6.848	6.834	6.866	VV	16496	265901	26.84%	0.696%
81	6.884	6.866	6.912	VV	15950	341445	34.46%	0.894%
82	6.941	6.912	7.004	VV	14119	599116	60.47%	1.568%
83	7.030	7.004	7.067	VV	58876	956535	96.55%	2.504%
84	7.084	7.067	7.105	VV	16578	296795	29.96%	0.777%
85	7.129	7.105	7.148	VV	23185	392570	39.62%	1.028%
86	7.156	7.148	7.187	VV	12261	268117	27.06%	0.702%
87	7.214	7.187	7.245	VV	15545	444338	44.85%	1.163%
88	7.255	7.245	7.276	VV	12164	206972	20.89%	0.542%
89	7.298	7.276	7.328	VV	13150	342151	34.53%	0.896%

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-1DL

Manual IntegrationsAPPROVED

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

rteres

90	7.340	7.328	7.368	VV	11700	266585	26.91%	0.698%
91	7.425	7.398	7.455	VV	17670	467142	47	
92	7.469	7.455	7.491	VV	11209	214968	21	
93	7.536	7.491	7.549	VV	14744	409566	41	
94	7.587	7.549	7.604	VV	21029	495330	50	
95	7.677	7.654	7.697	VV	17040	326107	32	
96	7.722	7.697	7.744	VV	12257	321042	32.40%	0.840%
97	7.770	7.744	7.784	VV	11458	257342	25.97%	0.674%
98	7.821	7.784	7.837	VV	14434	410643	41.45%	1.075%
99	7.855	7.837	7.896	VV	19065	468967	47.33%	1.228%
100	7.942	7.896	7.968	VV	60391	990745	100.00%	2.594%
101	7.991	7.968	8.013	VV	16653	379291	38.28%	0.993%
102	8.031	8.013	8.052	VV	16635	306678	30.95%	0.803%
103	8.086	8.052	8.105	VV	13179	391651	39.53%	1.025%
104	8.118	8.105	8.148	VV	13745	314963	31.79%	0.825%
105	8.168	8.148	8.193	VV	11822	304263	30.71%	0.797%
106	8.214	8.193	8.229	VV	11230	224018	22.61%	0.586%
107	8.275	8.229	8.318	VV	25190	742850	74.98%	1.945%
108	8.332	8.318	8.350	VV	12340	219717	22.18%	0.575%
109	8.405	8.382	8.436	VV	12540	375352	37.89%	0.983%
110	8.476	8.436	8.491	VV	16945	408736	41.26%	1.070%
111	8.507	8.491	8.529	VV	13924	278350	28.10%	0.729%
112	8.573	8.552	8.596	VV	19582	354758	35.81%	0.929%
113	8.658	8.596	8.683	VV	37538	885474	89.37%	2.318%
114	8.695	8.683	8.714	VV	10475	180928	18.26%	0.474%
115	8.734	8.714	8.754	VV	13257	244454	24.67%	0.640%
116	8.802	8.754	8.824	VV	14176	450013	45.42%	1.178%
117	8.878	8.851	8.908	VV	12805	361963	36.53%	0.948%
118	8.954	8.933	8.997	VV	10176	354272	35.76%	0.927%
119	9.026	8.997	9.049	VV	11391	277383	28.00%	0.726%
120	9.072	9.049	9.118	VV	8575	302623	30.55%	0.792%
121	9.144	9.118	9.158	VV	8418	181557	18.33%	0.475%
122	9.176	9.158	9.208	VV	8725	236162	23.84%	0.618%
123	9.241	9.208	9.283	VV	8900	347700	35.09%	0.910%
124	9.313	9.283	9.361	VV	12773	409166	41.30%	1.071%
125	9.393	9.361	9.421	VV	11977	314443	31.74%	0.823%
126	9.477	9.421	9.521	VV	11274	448688	45.29%	1.175%
127	9.556	9.521	9.588	VV	6165	225936	22.80%	0.591%
128	9.630	9.610	9.650	VV	6452	143036	14.44%	0.374%
129	9.675	9.650	9.704	VV	9552	242241	24.45%	0.634%
130	9.721	9.704	9.761	VV	8006	217022	21.90%	0.568%
131	9.777	9.761	9.788	VV	6668	101036	10.20%	0.265%
132	9.823	9.811	9.864	VV	6553	179044	18.07%	0.469%
133	9.896	9.864	9.911	VV	5508	142537	14.39%	0.373%
134	9.948	9.911	9.974	VV	5906	199537	20.14%	0.522%
135	9.994	9.974	10.019	VV	5800	138111	13.94%	0.362%
136	10.039	10.019	10.054	VV	4782	97956	9.89%	0.256%
137	10.069	10.054	10.077	VV	5220	66917	6.75%	0.175%
138	10.107	10.077	10.145	VV	20992	424461	42.84%	1.111%
139	10.184	10.145	10.224	VV	5872	246152	24.85%	0.644%
140	10.253	10.224	10.278	VV	6822	164161	16.57%	0.430%
141	10.296	10.278	10.325	VV	4307	113804	11.49%	0.298%

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-1DL

Manual IntegrationsAPPROVED

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

rteres

142	10.387	10.325	10.413	VV	5759	244926	24.72%	0.641%
143	10.435	10.413	10.444	VV	5874	94795	9	
144	10.455	10.444	10.498	VV	5945	166351	16	
145	10.530	10.498	10.564	VV	29848	532237	53	
146	10.572	10.564	10.613	VV	5407	131303	13	
147	10.644	10.613	10.668	VV	4450	135041	13	
148	10.691	10.668	10.704	VV	4601	96216	9.71%	0.252%
149	10.727	10.704	10.760	VV	4574	141113	14.24%	0.369%
150	10.791	10.760	10.817	VV	4837	149127	15.05%	0.390%
151	10.849	10.817	10.894	VV	6905	216395	21.84%	0.567%
152	10.933	10.894	10.961	VV	4165	149822	15.12%	0.392%
153	10.984	10.961	11.000	VV	4012	87603	8.84%	0.229%
154	11.013	11.000	11.041	VV	3885	90908	9.18%	0.238%
155	11.106	11.041	11.134	VV	3996	208963	21.09%	0.547%
156	11.156	11.134	11.218	VV	4685	192900	19.47%	0.505%
157	11.250	11.218	11.298	VV	17173	365911	36.93%	0.958%
158	11.314	11.298	11.337	VV	3417	76083	7.68%	0.199%
159	11.358	11.337	11.375	VV	3263	68635	6.93%	0.180%
160	11.429	11.375	11.494	VV	4377	248094	25.04%	0.649%
161	11.527	11.494	11.581	VV	3514	155010	15.65%	0.406%
162	11.601	11.581	11.627	VV	3030	79210	7.99%	0.207%
163	11.647	11.627	11.694	VV	3317	122443	12.36%	0.321%
164	11.709	11.694	11.744	VV	3357	91022	9.19%	0.238%
165	11.749	11.744	11.779	VV	3045	61332	6.19%	0.161%
166	11.807	11.779	11.884	VV	6199	223401	22.55%	0.585%
167	11.942	11.884	12.001	VV	3235	187037	18.88%	0.490%
168	12.025	12.001	12.051	VV	2731	74296	7.50%	0.195%
169	12.054	12.051	12.076	VV	2760	34663	3.50%	0.091%
170	12.101	12.076	12.152	VV	2453	104350	10.53%	0.273%
171	12.168	12.152	12.224	VV	2431	91191	9.20%	0.239%
172	12.244	12.224	12.268	VV	2132	52789	5.33%	0.138%
173	12.331	12.268	12.374	VV	2516	131478	13.27%	0.344%
174	12.391	12.374	12.443	VV	2889	91328	9.22%	0.239%
175	12.469	12.443	12.524	VV	2884	101273	10.22%	0.265%
176	12.538	12.524	12.556	VV	1807	31900	3.22%	0.084%
177	12.580	12.556	12.654	VV	2046	100717	10.17%	0.264%
178	12.658	12.654	12.707	VV	1850	44675	4.51%	0.117%
179	12.734	12.707	12.808	VV	1700	87833	8.87%	0.230%
180	12.817	12.808	12.871	VV	1385	49254	4.97%	0.129%
181	12.911	12.871	12.944	VV	18860	279697	28.23%	0.732%
182	12.964	12.944	13.061	VV	2756	115834	11.69%	0.303%
183	13.078	13.061	13.098	VV	1832	27748	2.80%	0.073%
184	13.128	13.098	13.164	VV	1564	49260	4.97%	0.129%
185	13.181	13.164	13.205	VV	1055	24126	2.44%	0.063%
186	13.215	13.205	13.222	VV	1144	10720	1.08%	0.028%
187	13.239	13.222	13.276	VV	1025	30427	3.07%	0.080%
188	13.301	13.276	13.331	VV	1558	39030	3.94%	0.102%
189	13.343	13.331	13.374	VV	1051	24481	2.47%	0.064%
190	13.381	13.374	13.452	VV	931	38435	3.88%	0.101%
191	13.460	13.452	13.474	VV	767	9808	0.99%	0.026%
192	13.507	13.474	13.550	VV	1002	37660	3.80%	0.099%
193	13.572	13.550	13.624	VV	1091	34884	3.52%	0.091%
194	13.656	13.624	13.704	VV	883	31803	3.21%	0.083%

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-1DL

Manual IntegrationsAPPROVED

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

					rteres			
195	13.733	13.704	13.789	VV	673	29920	3.02%	0.078%
196	13.800	13.789	13.841	VV	639	17619	1	
197	13.892	13.841	14.035	VV	998	62901	6	
198	14.056	14.035	14.136	VV	561	26937	2	
199	14.162	14.136	14.208	VV	559	14808	1	
200	14.229	14.208	14.253	VV	459	8980	0	
201	14.273	14.253	14.308	VV	388	8792	0.89%	0.023%
202	14.348	14.308	14.431	VV	796	22574	2.28%	0.059%
203	14.473	14.431	14.508	VV	390	12162	1.23%	0.032%
204	14.524	14.508	14.558	VV	673	5896	0.60%	0.015%
205	14.581	14.558	14.590	VV	203	3054	0.31%	0.008%
206	14.611	14.590	14.651	VV	249	6241	0.63%	0.016%
207	14.672	14.651	14.715	VV	219	4722	0.48%	0.012%
208	14.735	14.715	14.744	VV	149	1988	0.20%	0.005%
209	14.766	14.744	14.813	VV	351	8210	0.83%	0.021%
210	14.834	14.813	14.872	VV	239	6750	0.68%	0.018%
211	14.886	14.872	14.973	VV	218	9034	0.91%	0.024%
212	15.009	14.973	15.058	VV	253	8415	0.85%	0.022%
213	15.070	15.058	15.108	VV	145	4113	0.42%	0.011%
214	15.152	15.108	15.166	VV	184	4959	0.50%	0.013%
215	15.188	15.166	15.261	VV	238	9611	0.97%	0.025%
216	15.315	15.261	15.359	VV	347	13993	1.41%	0.037%
217	15.372	15.359	15.449	VV	202	8316	0.84%	0.022%
218	15.464	15.449	15.501	PV	405	4381	0.44%	0.011%
219	15.526	15.501	15.568	VV	350	5646	0.57%	0.015%
220	15.599	15.568	15.641	VV	324	7576	0.76%	0.020%
221	15.676	15.641	15.691	VV	305	3989	0.40%	0.010%
222	15.697	15.691	15.711	VV	118	1064	0.11%	0.003%
223	15.732	15.711	15.744	VV	297	2583	0.26%	0.007%
224	15.768	15.744	15.815	PV	493	10484	1.06%	0.027%
225	15.844	15.815	15.908	VV	439	6926	0.70%	0.018%
226	15.959	15.908	15.993	VV	245	8285	0.84%	0.022%
227	16.004	15.993	16.020	VV	382	2279	0.23%	0.006%
228	16.133	16.020	16.179	VV	605	20491	2.07%	0.054%
229	16.189	16.179	16.211	PV	240	4429	0.45%	0.012%
230	16.213	16.211	16.220	VV	282	1373	0.14%	0.004%
231	16.228	16.220	16.242	VV	536	3910	0.39%	0.010%
232	16.267	16.242	16.309	VV	1024	22096	2.23%	0.058%
233	16.322	16.309	16.348	VV	382	8023	0.81%	0.021%
234	16.378	16.348	16.394	VV	420	9459	0.95%	0.025%
235	16.402	16.394	16.430	VV	391	8196	0.83%	0.021%
236	16.442	16.430	16.451	VV	455	4941	0.50%	0.013%
237	16.488	16.451	16.510	VV	564	17242	1.74%	0.045%
238	16.531	16.510	16.561	VV	515	14606	1.47%	0.038%
239	16.568	16.561	16.584	VV	492	6918	0.70%	0.018%
240	16.637	16.584	16.671	VV	592	25463	2.57%	0.067%
241	16.733	16.671	16.883	VV	2254	83465	8.42%	0.219%
242	16.891	16.883	16.901	VV	660	4734	0.48%	0.012%
243	16.915	16.901	16.921	VV	505	5107	0.52%	0.013%
244	16.957	16.921	17.025	VV	621	30199	3.05%	0.079%
245	17.037	17.025	17.051	VV	464	6801	0.69%	0.018%
246	17.054	17.051	17.068	VV	456	3619	0.37%	0.009%

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-1DL

Manual IntegrationsAPPROVED

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

					rteres			
247	17.077	17.068	17.103	VV	378	7140	0.72%	0.019%
248	17.137	17.103	17.154	VV	457	12599	1	
249	17.185	17.154	17.228	VV	2874	52133	5	
250	17.365	17.228	17.407	VV	654	57724	5	
251	17.453	17.407	17.494	VV	898	33094	3	
252	17.503	17.494	17.568	VV	828	26902	2	
253	17.619	17.568	17.661	VV	4785	93692	9.46%	0.245%
254	17.666	17.661	17.673	VV	930	5205	0.53%	0.014%
255	17.687	17.673	17.710	VV	823	15092	1.52%	0.040%
256	17.774	17.710	17.824	VV	1030	49762	5.02%	0.130%
257	17.828	17.824	17.838	VV	660	5150	0.52%	0.013%
258	17.875	17.838	17.924	VV	1141	42736	4.31%	0.112%
259	17.932	17.924	17.948	VV	945	12342	1.25%	0.032%
260	18.041	17.948	18.100	VV	5411	155583	15.70%	0.407%
261	18.115	18.100	18.139	VV	1484	29305	2.96%	0.077%
262	18.147	18.139	18.199	VV	1151	40062	4.04%	0.105%
263	18.308	18.199	18.330	VV	1482	97167	9.81%	0.254%
264	18.354	18.330	18.406	VV	1495	58128	5.87%	0.152%
265	18.418	18.406	18.423	VV	1629	13901	1.40%	0.036%

Sum of corrected areas: 38197953

Aliphatic EPH 111424.M Tue Dec 10 04:22:26 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	12/05/24	
Project:	North Point		Date Received:	12/05/24	
Client Sample ID:	EX-8-TPH-1DL		SDG No.:	P5147	
Lab Sample ID:	P5147-01DL		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	81	
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
FD048849.D	10	12/06/24	12/09/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	20.5		3.70	8.21	mg/kg
Aromatic C12-C16	Aromatic C12-C16	109		4.19	12.3	mg/kg
Aromatic C16-C21	Aromatic C16-C21	133		11.8	20.5	mg/kg
Aromatic C21-C36	Aromatic C21-C36	21.1	J	24.6	32.9	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	7.00		40 - 140	140%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	4.46		40 - 140	89%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	3.92		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:	P5147-01DL	Acq On:	09 Dec 2024 10:14
Client Sample ID:	EX-8-TPH-1DL	Operator:	YP/AJ
Data file:	FD048849.D	Misc:	
Instrument:	FID_D	ALS Vial:	61
Dilution Factor:	10	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.086	5.802	4781869	24.903	200	ug/ml
Aromatic C12-C16	5.803	8.408	25757267	133.833	300	ug/ml
Aromatic C16-C21	8.409	12.670	30287669	163.008	500	ug/ml
Aromatic C21-C36	12.671	18.079	4033956	25.656	800	ug/ml
Aromatic EPH	4.086	18.079	64860761	347.4		ug/ml
2-Bromonaphthalene (SURR)	7.363	7.363	1231851	7		ug/ml
2-Flurobiphenyl (SURR)	8.216	8.216	513927	4.46		ug/ml
ortho-Terphenyl (SURR)	11.245	11.245	754659	3.92		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120924AR\
Data File : FD048849.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 10:14
Operator : YP/AJ
Sample : P5147-01DL 10X
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1DL

Integration File: autoint1.e
Quant Time: Dec 09 12:47:45 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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	1231851	6.997 ug/ml
Spiked Amount 50.000		Recovery =	13.99%
6) S 2-Flurobiphenyl (SURR)	8.216	513927	4.462 ug/ml
Spiked Amount 50.000	Range 0 - 131	Recovery =	8.92%
11) S ortho-Terphenyl (SURR)	11.245	754659	3.924 ug/ml
Spiked Amount 50.000		Recovery =	7.85%
Target Compounds			

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

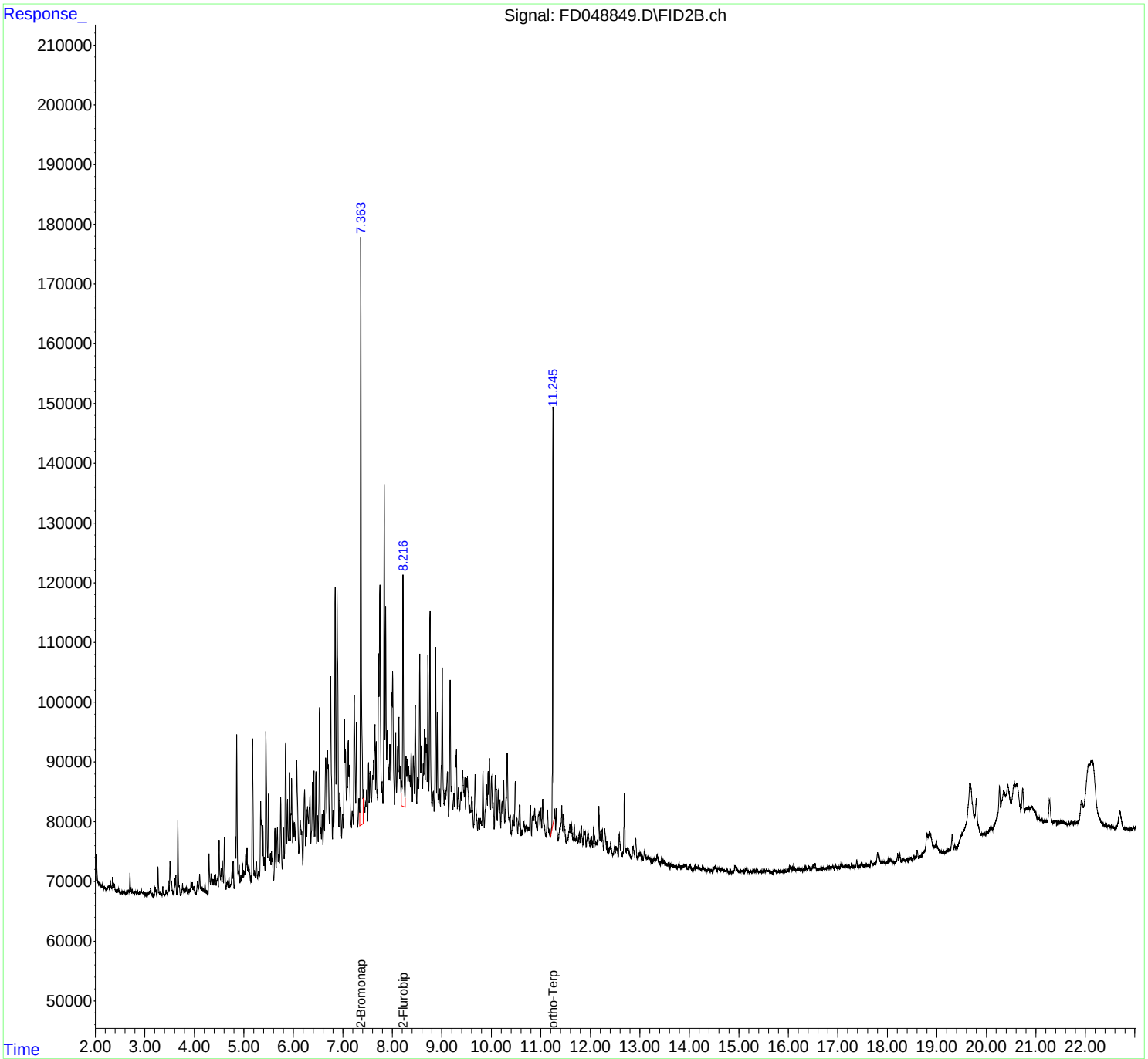
Quantitation Report (QT Reviewed)

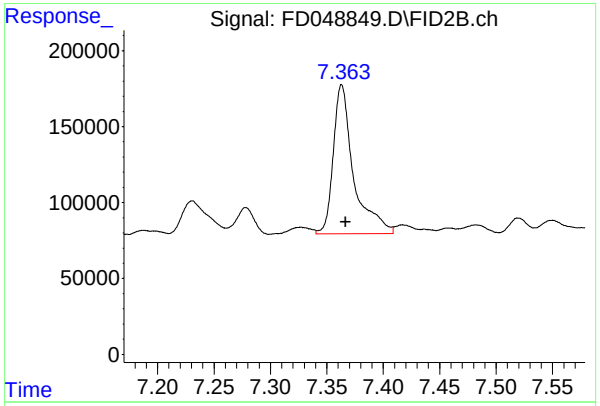
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120924AR\
Data File : FD048849.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 10:14
Operator : YP/AJ
Sample : P5147-01DL 10X
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1DL

Integration File: autoint1.e
Quant Time: Dec 09 12:47:45 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

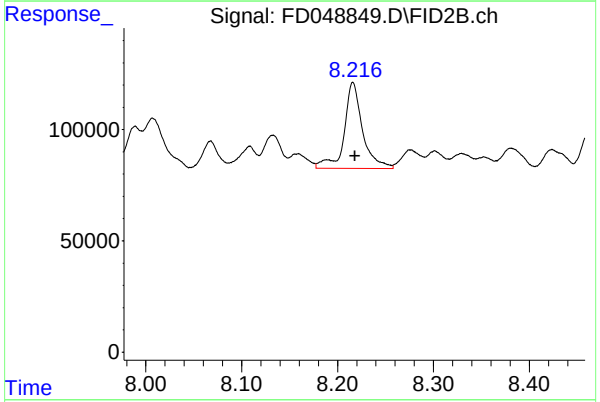




#4 2-Bromonaphthalene (SURR)

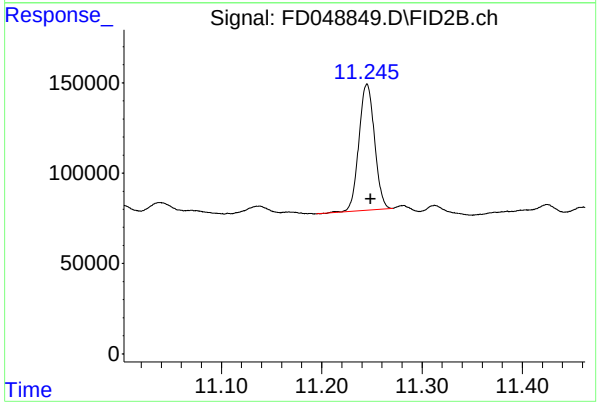
R.T.: 7.363 min
Delta R.T.: -0.003 min
Response: 1231851
Conc: 7.00 ug/ml

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1DL



#6 2-Flurobiphenyl (SURR)

R.T.: 8.216 min
Delta R.T.: -0.002 min
Response: 513927
Conc: 4.46 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.245 min
Delta R.T.: -0.003 min
Response: 754659
Conc: 3.92 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120924AR\
Data File : FD048849.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 10:14
Sample : P5147-01DL 10X
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.107	4.090	4.127	PV	2460	26486	1.61%	0.039%
2	4.143	4.127	4.159	VV	584	6663	0.40%	0.010%
3	4.183	4.159	4.199	VV	535	6863	0.42%	0.010%
4	4.215	4.199	4.242	PV	1639	18192	1.11%	0.027%
5	4.266	4.254	4.274	PV	420	2786	0.17%	0.004%
6	4.296	4.274	4.326	VV	6539	89193	5.42%	0.130%
7	4.340	4.326	4.353	VV	3160	38612	2.35%	0.056%
8	4.359	4.353	4.372	VV	2066	20446	1.24%	0.030%
9	4.380	4.372	4.391	VV	2271	21636	1.31%	0.032%
10	4.404	4.391	4.415	VV	3075	30761	1.87%	0.045%
11	4.426	4.415	4.441	VV	3116	34148	2.07%	0.050%
12	4.457	4.441	4.464	VV	2097	25272	1.54%	0.037%
13	4.472	4.464	4.485	VV	2407	24730	1.50%	0.036%
14	4.501	4.485	4.530	VV	8860	118428	7.19%	0.173%
15	4.542	4.530	4.552	VV	4171	43700	2.65%	0.064%
16	4.564	4.552	4.589	VV	5442	80363	4.88%	0.117%
17	4.607	4.589	4.640	VV	9277	121916	7.41%	0.178%
18	4.670	4.640	4.685	VV	2027	36737	2.23%	0.054%
19	4.700	4.685	4.717	VV	2615	32249	1.96%	0.047%
20	4.730	4.717	4.737	VV	1270	13719	0.83%	0.020%
21	4.759	4.737	4.769	VV	3464	45253	2.75%	0.066%
22	4.783	4.769	4.803	VV	5297	62034	3.77%	0.090%
23	4.830	4.803	4.839	VV	9242	95814	5.82%	0.140%
24	4.856	4.839	4.881	VV	26308	314779	19.12%	0.459%
25	4.906	4.881	4.923	VV	4492	85032	5.17%	0.124%
26	4.942	4.923	4.955	VV	2740	43344	2.63%	0.063%
27	4.972	4.955	4.986	VV	4789	67111	4.08%	0.098%
28	4.996	4.986	5.006	VV	3549	37287	2.27%	0.054%
29	5.038	5.006	5.051	VV	5997	116564	7.08%	0.170%
30	5.065	5.051	5.077	VV	7440	85905	5.22%	0.125%
31	5.085	5.077	5.094	VV	4078	38582	2.34%	0.056%
32	5.105	5.094	5.134	VV	4296	75417	4.58%	0.110%
33	5.144	5.134	5.155	VV	2656	28544	1.73%	0.042%
34	5.174	5.155	5.206	VV	25620	379689	23.07%	0.553%
35	5.216	5.206	5.229	VV	3556	40360	2.45%	0.059%
36	5.255	5.229	5.279	VV	4944	106906	6.49%	0.156%

37	5.294	5.279	5.308	VV	3426	49844	3.03%	0.073%
38	5.341	5.308	5.351	VV	15074	196752	11.95%	0.287%
39	5.357	5.351	5.375	VV	11657	143486	8.72%	0.209%
40	5.387	5.375	5.403	VV	11000	129663	7.88%	0.189%
41	5.415	5.403	5.428	VV	5661	72318	4.39%	0.105%
42	5.446	5.428	5.483	VV	26813	452916	27.51%	0.660%
43	5.499	5.483	5.528	VV	16287	231296	14.05%	0.337%
44	5.537	5.528	5.548	VV	6310	64886	3.94%	0.095%
45	5.559	5.548	5.570	VV	6543	74706	4.54%	0.109%
46	5.577	5.570	5.605	VV	5371	76587	4.65%	0.112%
47	5.628	5.605	5.652	VV	10489	164264	9.98%	0.239%
48	5.678	5.652	5.693	VV	10556	186481	11.33%	0.272%
49	5.702	5.693	5.714	VV	5926	67219	4.08%	0.098%
50	5.746	5.714	5.778	VV	15653	306798	18.64%	0.447%
51	5.799	5.778	5.814	VV	10452	149132	9.06%	0.217%
52	5.846	5.814	5.868	VV	24738	449469	27.30%	0.655%
53	5.882	5.868	5.906	VV	15336	249191	15.14%	0.363%
54	5.924	5.906	5.938	VV	19808	247623	15.04%	0.361%
55	5.966	5.938	5.989	VV	18733	381355	23.17%	0.556%
56	6.005	5.989	6.014	VV	11124	150194	9.12%	0.219%
57	6.025	6.014	6.040	VV	11313	156942	9.53%	0.229%
58	6.069	6.040	6.110	VV	21732	553291	33.61%	0.807%
59	6.138	6.110	6.159	VV	11668	279332	16.97%	0.407%
60	6.168	6.159	6.192	VV	9862	150221	9.13%	0.219%
61	6.228	6.192	6.247	VV	16815	370785	22.52%	0.541%
62	6.262	6.247	6.273	VV	13492	164625	10.00%	0.240%
63	6.287	6.273	6.310	VV	13917	268768	16.33%	0.392%
64	6.336	6.310	6.355	VV	15753	344949	20.96%	0.503%
65	6.388	6.355	6.402	VV	18052	344757	20.94%	0.503%
66	6.416	6.402	6.435	VV	19845	261514	15.89%	0.381%
67	6.456	6.435	6.474	VV	19723	305138	18.54%	0.445%
68	6.490	6.474	6.502	VV	12383	169061	10.27%	0.246%
69	6.531	6.502	6.549	VV	30511	477408	29.00%	0.696%
70	6.556	6.549	6.567	VV	10245	106277	6.46%	0.155%
71	6.582	6.567	6.599	VV	12640	195524	11.88%	0.285%
72	6.618	6.599	6.630	VV	13071	193806	11.77%	0.283%
73	6.655	6.630	6.676	VV	21965	479274	29.12%	0.699%
74	6.691	6.676	6.703	VV	23056	319046	19.38%	0.465%
75	6.708	6.703	6.729	VV	20858	249668	15.17%	0.364%
76	6.755	6.729	6.790	VV	35591	731977	44.47%	1.067%
77	6.803	6.790	6.815	VV	12998	167821	10.19%	0.245%
78	6.846	6.815	6.864	VV	50482	786345	47.77%	1.146%
79	6.884	6.864	6.920	VV	49830	996889	60.56%	1.453%
80	6.940	6.920	6.952	VV	16031	267542	16.25%	0.390%
81	6.957	6.952	6.975	VV	13569	161129	9.79%	0.235%
82	6.995	6.975	7.009	VV	12416	215045	13.06%	0.313%
83	7.033	7.009	7.045	VV	28220	421413	25.60%	0.614%
84	7.054	7.045	7.079	VV	23147	390196	23.70%	0.569%
85	7.110	7.079	7.122	VV	24800	497520	30.22%	0.725%
86	7.131	7.122	7.175	VV	20688	481294	29.24%	0.702%
87	7.188	7.175	7.210	VV	12899	249018	15.13%	0.363%
88	7.231	7.210	7.261	VV	32338	666394	40.48%	0.971%
89	7.278	7.261	7.299	VV	27820	429590	26.10%	0.626%

90	7.327	7.299	7.342	VV	14962	328062	19.93%	0.478%
91	7.363	7.342	7.408	VV	108790	1646141	100.00%	2.400%
92	7.417	7.408	7.447	VV	16425	341702	20.76%	0.498%
93	7.458	7.447	7.465	VV	14226	151017	9.17%	0.220%
94	7.482	7.465	7.502	VV	16361	321242	19.51%	0.468%
95	7.520	7.502	7.534	VV	20833	316664	19.24%	0.462%
96	7.550	7.534	7.579	VV	19409	439892	26.72%	0.641%
97	7.601	7.579	7.609	VV	18792	300820	18.27%	0.439%
98	7.622	7.609	7.627	VV	21293	221223	13.44%	0.322%
99	7.648	7.627	7.662	VV	27235	489099	29.71%	0.713%
100	7.674	7.662	7.689	VV	24347	312917	19.01%	0.456%
101	7.694	7.689	7.704	VV	16382	145087	8.81%	0.211%
102	7.722	7.704	7.731	VV	39085	469464	28.52%	0.684%
103	7.749	7.731	7.781	VV	50591	980292	59.55%	1.429%
104	7.791	7.781	7.811	VV	17627	294128	17.87%	0.429%
105	7.838	7.811	7.853	VV	67495	930619	56.53%	1.357%
106	7.866	7.853	7.885	VV	46892	644091	39.13%	0.939%
107	7.897	7.885	7.936	VV	26204	673812	40.93%	0.982%
108	7.951	7.936	7.970	VV	23963	417054	25.34%	0.608%
109	7.989	7.970	7.996	VV	32416	407738	24.77%	0.594%
110	8.007	7.996	8.046	VV	36124	745451	45.28%	1.087%
111	8.067	8.046	8.086	VV	25735	464275	28.20%	0.677%
112	8.109	8.086	8.118	VV	23483	379015	23.02%	0.553%
113	8.133	8.118	8.149	VV	28343	433826	26.35%	0.632%
114	8.159	8.149	8.178	VV	19976	314937	19.13%	0.459%
115	8.189	8.178	8.199	VV	17328	211566	12.85%	0.308%
116	8.216	8.199	8.257	VV	52169	938686	57.02%	1.368%
117	8.276	8.257	8.291	VV	21721	390651	23.73%	0.569%
118	8.301	8.291	8.317	VV	21309	303719	18.45%	0.443%
119	8.329	8.317	8.345	VV	20085	321459	19.53%	0.469%
120	8.353	8.345	8.364	VV	18552	206006	12.51%	0.300%
121	8.381	8.364	8.406	VV	22489	471048	28.62%	0.687%
122	8.424	8.406	8.446	VV	21872	448779	27.26%	0.654%
123	8.464	8.446	8.493	VV	30236	614568	37.33%	0.896%
124	8.508	8.493	8.518	VV	18220	248196	15.08%	0.362%
125	8.528	8.518	8.535	VV	17910	175800	10.68%	0.256%
126	8.555	8.535	8.574	VV	38877	638998	38.82%	0.931%
127	8.586	8.574	8.612	VV	23454	456555	27.73%	0.666%
128	8.625	8.612	8.634	VV	20420	243487	14.79%	0.355%
129	8.649	8.634	8.664	VV	26073	399658	24.28%	0.583%
130	8.678	8.664	8.686	VV	24623	284744	17.30%	0.415%
131	8.694	8.686	8.706	VV	23674	262649	15.96%	0.383%
132	8.721	8.706	8.738	VV	38504	509683	30.96%	0.743%
133	8.761	8.738	8.804	VV	45953	936428	56.89%	1.365%
134	8.825	8.804	8.845	VV	15638	352197	21.40%	0.513%
135	8.875	8.845	8.894	VV	39964	694181	42.17%	1.012%
136	8.908	8.894	8.930	VV	29002	442988	26.91%	0.646%
137	8.934	8.930	8.943	VV	14785	110873	6.74%	0.162%
138	8.956	8.943	8.971	VV	16172	247769	15.05%	0.361%
139	9.009	8.971	9.047	VV	36441	959277	58.27%	1.398%
140	9.065	9.047	9.080	VV	16117	290319	17.64%	0.423%
141	9.114	9.080	9.139	VV	18934	564217	34.28%	0.822%

142	9.169	9.139	9.189	VV	34312	635754	38.62%	0.927%
143	9.197	9.189	9.225	VV	16524	323099	19.63%	0.471%
144	9.246	9.225	9.258	VV	15292	280402	17.03%	0.409%
145	9.278	9.258	9.287	VV	21736	310019	18.83%	0.452%
146	9.296	9.287	9.316	VV	22609	321449	19.53%	0.469%
147	9.335	9.316	9.363	VV	16197	400923	24.36%	0.584%
148	9.387	9.363	9.398	VV	15475	306460	18.62%	0.447%
149	9.418	9.398	9.440	VV	19005	426717	25.92%	0.622%
150	9.446	9.440	9.454	VV	15650	123184	7.48%	0.180%
151	9.467	9.454	9.481	VV	17867	262101	15.92%	0.382%
152	9.498	9.481	9.510	VV	17681	277340	16.85%	0.404%
153	9.518	9.510	9.554	VV	17939	400012	24.30%	0.583%
154	9.566	9.554	9.587	VV	13334	248153	15.07%	0.362%
155	9.604	9.587	9.640	VV	14666	402831	24.47%	0.587%
156	9.674	9.640	9.724	VV	18352	628026	38.15%	0.916%
157	9.739	9.724	9.764	VV	10994	237918	14.45%	0.347%
158	9.776	9.764	9.806	VV	11063	261609	15.89%	0.381%
159	9.831	9.806	9.859	VV	18806	416805	25.32%	0.608%
160	9.902	9.859	9.920	VV	16610	485272	29.48%	0.707%
161	9.935	9.920	9.947	VV	18810	261893	15.91%	0.382%
162	9.962	9.947	9.989	VV	20969	424296	25.78%	0.619%
163	10.004	9.989	10.029	VV	17823	371616	22.58%	0.542%
164	10.037	10.029	10.059	VV	13560	211827	12.87%	0.309%
165	10.082	10.059	10.119	VV	18060	515473	31.31%	0.751%
166	10.139	10.119	10.160	VV	15581	324573	19.72%	0.473%
167	10.175	10.160	10.192	VV	13891	230270	13.99%	0.336%
168	10.217	10.192	10.232	VV	13692	293142	17.81%	0.427%
169	10.251	10.232	10.269	VV	17282	300657	18.26%	0.438%
170	10.323	10.269	10.366	VV	21720	823807	50.04%	1.201%
171	10.381	10.366	10.410	VV	11410	258136	15.68%	0.376%
172	10.441	10.410	10.459	VV	11423	293468	17.83%	0.428%
173	10.484	10.459	10.535	VV	16892	537334	32.64%	0.783%
174	10.570	10.535	10.602	VV	13010	419086	25.46%	0.611%
175	10.618	10.602	10.629	VV	8742	134115	8.15%	0.196%
176	10.654	10.629	10.686	VV	10151	318476	19.35%	0.464%
177	10.699	10.686	10.724	VV	9392	204240	12.41%	0.298%
178	10.729	10.724	10.732	VV	8929	43082	2.62%	0.063%
179	10.737	10.732	10.754	VV	9279	116476	7.08%	0.170%
180	10.791	10.754	10.812	VV	12891	359876	21.86%	0.525%
181	10.830	10.812	10.837	VV	11046	145191	8.82%	0.212%
182	10.846	10.837	10.862	VV	11084	159810	9.71%	0.233%
183	10.876	10.862	10.934	VV	12331	441653	26.83%	0.644%
184	10.966	10.934	10.985	VV	11683	323437	19.65%	0.471%
185	11.002	10.985	11.020	VV	12355	220309	13.38%	0.321%
186	11.039	11.020	11.065	VV	13814	312579	18.99%	0.456%
187	11.070	11.065	11.104	VV	9539	197361	11.99%	0.288%
188	11.107	11.104	11.110	VV	7804	29988	1.82%	0.044%
189	11.137	11.110	11.159	VV	11739	285531	17.35%	0.416%
190	11.167	11.159	11.198	VV	8600	190914	11.60%	0.278%
191	11.245	11.198	11.270	VV	79392	1149281	69.82%	1.675%
192	11.281	11.270	11.298	VV	12173	175953	10.69%	0.256%
193	11.313	11.298	11.350	VV	12166	289777	17.60%	0.422%
194	11.425	11.350	11.443	VV	12663	513208	31.18%	0.748%

195	11.460	11.443	11.510	VV	11158	357193	21.70%	0.521%
196	11.531	11.510	11.544	VV	7767	143744	8.73%	0.210%
197	11.587	11.544	11.605	VV	9345	299186	18.17%	0.436%
198	11.617	11.605	11.644	VV	9545	194300	11.80%	0.283%
199	11.652	11.644	11.658	VV	7287	61721	3.75%	0.090%
200	11.676	11.658	11.702	VV	9434	205319	12.47%	0.299%
201	11.720	11.702	11.749	VV	7496	196760	11.95%	0.287%
202	11.777	11.749	11.793	VV	7972	186494	11.33%	0.272%
203	11.817	11.793	11.854	VV	8992	271988	16.52%	0.396%
204	11.870	11.854	11.885	VV	8629	146077	8.87%	0.213%
205	11.896	11.885	11.914	VV	8119	125562	7.63%	0.183%
206	11.951	11.914	11.991	VV	8194	318083	19.32%	0.464%
207	12.020	11.991	12.050	VV	7313	228234	13.86%	0.333%
208	12.068	12.050	12.082	VV	8737	143456	8.71%	0.209%
209	12.088	12.082	12.105	VV	7365	94633	5.75%	0.138%
210	12.117	12.105	12.134	VV	6258	103864	6.31%	0.151%
211	12.149	12.134	12.153	VV	6488	74570	4.53%	0.109%
212	12.173	12.153	12.194	VV	12345	222241	13.50%	0.324%
213	12.210	12.194	12.225	VV	8236	139302	8.46%	0.203%
214	12.241	12.225	12.269	VV	8367	178379	10.84%	0.260%
215	12.293	12.269	12.354	VV	8496	316359	19.22%	0.461%
216	12.359	12.354	12.372	VV	4781	51065	3.10%	0.074%
217	12.392	12.372	12.399	VV	5524	81470	4.95%	0.119%
218	12.414	12.399	12.452	VV	6417	163265	9.92%	0.238%
219	12.466	12.452	12.468	VV	4346	42266	2.57%	0.062%
220	12.483	12.468	12.500	VV	5354	92824	5.64%	0.135%
221	12.522	12.500	12.564	VV	5475	185698	11.28%	0.271%
222	12.586	12.564	12.641	VV	7563	249534	15.16%	0.364%
223	12.654	12.641	12.663	VV	4494	57088	3.47%	0.083%
224	12.689	12.663	12.714	VV	14247	244405	14.85%	0.356%
225	12.741	12.714	12.746	VV	5180	95296	5.79%	0.139%
226	12.758	12.746	12.834	VV	5345	227085	13.79%	0.331%
227	12.863	12.834	12.896	VV	5466	171571	10.42%	0.250%
228	12.917	12.896	12.959	VV	6635	176957	10.75%	0.258%
229	12.979	12.959	12.992	VV	4333	76221	4.63%	0.111%
230	13.006	12.992	13.040	VV	4386	110688	6.72%	0.161%
231	13.052	13.040	13.070	VV	3485	61127	3.71%	0.089%
232	13.097	13.070	13.135	VV	4650	148006	8.99%	0.216%
233	13.139	13.135	13.147	VV	3537	25631	1.56%	0.037%
234	13.165	13.147	13.171	VV	3646	50557	3.07%	0.074%
235	13.178	13.171	13.181	VV	3544	19633	1.19%	0.029%
236	13.185	13.181	13.200	VV	3603	39579	2.40%	0.058%
237	13.215	13.200	13.235	VV	3346	63700	3.87%	0.093%
238	13.243	13.235	13.255	VV	2792	30580	1.86%	0.045%
239	13.285	13.255	13.299	VV	3238	80248	4.87%	0.117%
240	13.301	13.299	13.309	VV	3156	18485	1.12%	0.027%
241	13.325	13.309	13.329	VV	3211	38353	2.33%	0.056%
242	13.348	13.329	13.415	VV	3938	157518	9.57%	0.230%
243	13.443	13.415	13.479	VV	3506	109579	6.66%	0.160%
244	13.493	13.479	13.508	VV	2864	44818	2.72%	0.065%
245	13.531	13.508	13.560	VV	2423	69166	4.20%	0.101%
246	13.569	13.560	13.604	VV	2403	51847	3.15%	0.076%

247	13.622	13.604	13.639	VV	2262	41799	2.54%	0.061%
248	13.645	13.639	13.660	VV	2120	24651	1.50%	0.036%
249	13.676	13.660	13.692	VV	2165	37483	2.28%	0.055%
250	13.708	13.692	13.718	VV	1963	28760	1.75%	0.042%
251	13.722	13.718	13.729	VV	1982	11809	0.72%	0.017%
252	13.784	13.729	13.789	VV	2070	63819	3.88%	0.093%
253	13.794	13.789	13.807	VV	2109	20174	1.23%	0.029%
254	13.832	13.807	13.839	VV	1898	32775	1.99%	0.048%
255	13.840	13.839	13.852	VV	1810	13314	0.81%	0.019%
256	13.876	13.852	13.893	VV	1919	44598	2.71%	0.065%
257	13.900	13.893	13.913	VV	1998	22636	1.38%	0.033%
258	13.918	13.913	13.939	VV	1992	27815	1.69%	0.041%
259	13.944	13.939	13.958	VV	1770	18079	1.10%	0.026%
260	13.963	13.958	13.974	VV	1424	13250	0.80%	0.019%
261	14.006	13.974	14.011	VV	1888	37890	2.30%	0.055%
262	14.015	14.011	14.039	VV	1851	27815	1.69%	0.041%
263	14.046	14.039	14.060	VV	1516	17862	1.09%	0.026%
264	14.071	14.060	14.077	VV	1491	13912	0.85%	0.020%
265	14.112	14.077	14.135	VV	1822	51659	3.14%	0.075%
266	14.153	14.135	14.179	VV	1695	39424	2.39%	0.057%
267	14.184	14.179	14.200	VV	1600	18909	1.15%	0.028%
268	14.207	14.200	14.212	VV	1398	9080	0.55%	0.013%
269	14.221	14.212	14.235	VV	1424	17723	1.08%	0.026%
270	14.242	14.235	14.247	VV	1305	8235	0.50%	0.012%
271	14.270	14.247	14.287	VV	1604	32754	1.99%	0.048%
272	14.304	14.287	14.312	VV	1411	19770	1.20%	0.029%
273	14.316	14.312	14.340	VV	1252	18205	1.11%	0.027%
274	14.354	14.340	14.358	VV	1106	10522	0.64%	0.015%
275	14.379	14.358	14.394	VV	1315	23872	1.45%	0.035%
276	14.399	14.394	14.415	VV	1023	12228	0.74%	0.018%
277	14.430	14.415	14.444	VV	1102	18062	1.10%	0.026%
278	14.447	14.444	14.467	VV	953	11649	0.71%	0.017%
279	14.500	14.467	14.508	VV	1517	29841	1.81%	0.044%
280	14.517	14.508	14.530	VV	1629	19083	1.16%	0.028%
281	14.536	14.530	14.562	VV	1804	22683	1.38%	0.033%
282	14.589	14.562	14.599	VV	1306	24472	1.49%	0.036%
283	14.605	14.599	14.627	VV	1243	19204	1.17%	0.028%
284	14.633	14.627	14.639	VV	1149	7514	0.46%	0.011%
285	14.644	14.639	14.651	VV	1098	7644	0.46%	0.011%
286	14.668	14.651	14.698	VV	1157	28831	1.75%	0.042%
287	14.706	14.698	14.724	VV	969	13289	0.81%	0.019%
288	14.740	14.724	14.748	VV	870	11681	0.71%	0.017%
289	14.764	14.748	14.791	VV	1026	20238	1.23%	0.030%
290	14.796	14.791	14.803	VV	816	4739	0.29%	0.007%
291	14.820	14.803	14.836	VV	807	13268	0.81%	0.019%
292	14.843	14.836	14.858	VV	708	8260	0.50%	0.012%
293	14.864	14.858	14.872	VV	689	5122	0.31%	0.007%
294	14.890	14.872	14.897	VV	810	9885	0.60%	0.014%
295	14.921	14.897	14.961	VV	1634	44360	2.69%	0.065%
296	14.965	14.961	15.007	VV	1027	21255	1.29%	0.031%
297	15.027	15.007	15.035	VV	812	10521	0.64%	0.015%
298	15.066	15.035	15.080	VV	835	19750	1.20%	0.029%
299	15.085	15.080	15.104	VV	823	8747	0.53%	0.013%

300	15.145	15.104	15.182	VV	1048	34005	2.07%	0.050%
301	15.189	15.182	15.217	VV	769	11173	0.68%	0.016%
302	15.234	15.217	15.239	VV	643	7133	0.43%	0.010%
303	15.243	15.239	15.264	VV	657	7806	0.47%	0.011%
304	15.295	15.264	15.314	VV	827	19658	1.19%	0.029%
305	15.319	15.314	15.340	VV	652	8853	0.54%	0.013%
306	15.354	15.340	15.364	VV	877	9741	0.59%	0.014%
307	15.370	15.364	15.392	VV	701	10415	0.63%	0.015%
308	15.398	15.392	15.420	VV	552	7874	0.48%	0.011%
309	15.436	15.420	15.443	VV	676	7409	0.45%	0.011%
310	15.448	15.443	15.456	VV	635	4039	0.25%	0.006%
311	15.460	15.456	15.464	VV	620	2195	0.13%	0.003%
312	15.469	15.464	15.483	VV	614	5723	0.35%	0.008%
313	15.488	15.483	15.494	VV	658	3607	0.22%	0.005%
314	15.511	15.494	15.540	VV	757	16032	0.97%	0.023%
315	15.558	15.540	15.565	VV	838	10622	0.65%	0.015%
316	15.566	15.565	15.600	VV	750	12100	0.74%	0.018%
317	15.607	15.600	15.642	VV	597	11311	0.69%	0.016%
318	15.650	15.642	15.678	VV	384	5618	0.34%	0.008%
319	15.711	15.678	15.730	PV	676	12795	0.78%	0.019%
320	15.735	15.730	15.784	VV	568	12397	0.75%	0.018%
321	15.798	15.784	15.810	VV	495	4984	0.30%	0.007%
322	15.825	15.810	15.850	VV	449	7716	0.47%	0.011%
323	15.857	15.850	15.870	VV	429	3401	0.21%	0.005%
324	15.875	15.870	15.912	VV	419	5774	0.35%	0.008%
325	15.923	15.912	15.942	VV	508	5616	0.34%	0.008%
326	15.945	15.942	15.962	VV	269	2183	0.13%	0.003%
327	15.967	15.962	15.980	VV	252	2400	0.15%	0.003%
328	15.990	15.980	16.007	VV	460	4439	0.27%	0.006%
329	16.027	16.007	16.049	VV	1027	17251	1.05%	0.025%
330	16.053	16.049	16.062	VV	609	4077	0.25%	0.006%
331	16.075	16.062	16.087	VV	763	7968	0.48%	0.012%
332	16.110	16.087	16.140	VV	1386	23431	1.42%	0.034%
333	16.143	16.140	16.160	VV	390	3319	0.20%	0.005%
334	16.164	16.160	16.170	VV	318	1493	0.09%	0.002%
335	16.187	16.170	16.192	VV	424	4179	0.25%	0.006%
336	16.197	16.192	16.225	VV	453	5719	0.35%	0.008%
337	16.237	16.225	16.249	VV	296	2239	0.14%	0.003%
338	16.270	16.249	16.285	VV	242	2994	0.18%	0.004%
339	16.350	16.294	16.384	VV	611	13473	0.82%	0.020%
340	16.416	16.400	16.421	BV	378	2916	0.18%	0.004%
341	16.423	16.421	16.442	VV	363	1686	0.10%	0.002%
342	16.450	16.442	16.466	VV	138	1111	0.07%	0.002%
343	16.498	16.466	16.518	PV	820	12127	0.74%	0.018%
344	16.541	16.518	16.564	VV	1045	15568	0.95%	0.023%
345	16.571	16.564	16.598	VV	256	1128	0.07%	0.002%
346	16.654	16.598	16.676	PV	319	8209	0.50%	0.012%
347	16.681	16.676	16.689	VV	325	1862	0.11%	0.003%
348	16.697	16.689	16.716	VV	495	4256	0.26%	0.006%
349	16.722	16.716	16.732	VV	310	2327	0.14%	0.003%
350	16.757	16.732	16.770	VV	398	5844	0.36%	0.009%
351	16.786	16.770	16.800	VV	561	8496	0.52%	0.012%

rteres

352	16.803	16.800	16.814	VV	565	4495	0.27%	0.007%
353	16.822	16.814	16.843	VV	749	8885	0.54%	0.013%
354	16.858	16.843	16.892	VV	613	15614	0.95%	0.023%
355	16.900	16.892	16.929	VV	668	9979	0.61%	0.015%
356	16.948	16.929	16.986	PV	1161	21705	1.32%	0.032%
357	16.993	16.986	17.011	VV	627	6703	0.41%	0.010%
358	17.022	17.011	17.037	VV	603	6100	0.37%	0.009%
359	17.065	17.037	17.084	VV	1032	17334	1.05%	0.025%
360	17.088	17.084	17.102	VV	754	6224	0.38%	0.009%
361	17.110	17.102	17.131	VV	485	7181	0.44%	0.010%
362	17.146	17.131	17.197	VV	742	20459	1.24%	0.030%
363	17.203	17.197	17.208	VV	500	2768	0.17%	0.004%
364	17.222	17.208	17.249	VV	716	10623	0.65%	0.015%
365	17.259	17.249	17.270	VV	402	4215	0.26%	0.006%
366	17.274	17.270	17.289	VV	682	4168	0.25%	0.006%
367	17.292	17.289	17.304	VV	372	2061	0.13%	0.003%
368	17.316	17.304	17.329	VV	425	4225	0.26%	0.006%
369	17.340	17.329	17.347	VV	291	2204	0.13%	0.003%
370	17.382	17.347	17.409	VV	1341	21240	1.29%	0.031%
371	17.474	17.409	17.507	VV	712	21254	1.29%	0.031%
372	17.518	17.507	17.545	VV	420	7032	0.43%	0.010%
373	17.550	17.545	17.559	VV	302	1693	0.10%	0.002%
374	17.568	17.559	17.575	VV	273	2028	0.12%	0.003%
375	17.588	17.575	17.624	VV	353	5428	0.33%	0.008%
376	17.628	17.624	17.639	PV	274	1162	0.07%	0.002%
377	17.677	17.647	17.727	VV	929	22890	1.39%	0.033%
378	17.747	17.727	17.760	VV	457	6952	0.42%	0.010%
379	17.801	17.760	17.869	VV	2159	72363	4.40%	0.105%
380	17.880	17.869	17.901	VV	520	7132	0.43%	0.010%
381	17.909	17.901	17.916	VV	474	3344	0.20%	0.005%
382	17.927	17.916	17.954	VV	576	7878	0.48%	0.011%
383	17.958	17.954	17.972	VV	228	1844	0.11%	0.003%
384	17.995	17.972	18.002	VV	356	4792	0.29%	0.007%
385	18.028	18.002	18.043	VV	854	13938	0.85%	0.020%
386	18.048	18.043	18.065	VV	719	7516	0.46%	0.011%
387	18.070	18.065	18.107	VV	519	9865	0.60%	0.014%
388	18.113	18.107	18.130	VV	323	2718	0.17%	0.004%
389	18.154	18.145	18.167	VV	241	1534	0.09%	0.002%

Sum of corrected areas: 68599120

Aromatic EPH 111424.M Mon Dec 09 13:02:05 2024

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

Report of Analysis

Client:	ENTACT			Date Collected:	12/05/24
Project:	North Point			Date Received:	12/05/24
Client Sample ID:	EX-8-TPH-2			SDG No.:	P5147
Lab Sample ID:	P5147-02			Matrix:	Solid
Analytical Method:	NJEPH			% Solid:	79.3
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
12/06/24 09:50	12/09/24 10:14	PB165427

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	129		10	4.79	12.6	mg/kg	FC067942.D
Aliphatic C12-C16	Aliphatic C12-C16	560		50	15.1	42.0	mg/kg	FC067943.D
Aliphatic C16-C21	Aliphatic C16-C21	417		50	18.9	63.0	mg/kg	FC067943.D
Aliphatic C21-C28	Aliphatic C21-C28	64.7		10	10.1	16.8	mg/kg	FC067942.D
Aliphatic C28-C40	Aliphatic C28-C40	25.1		1	2.27	2.52	mg/kg	FC067935.D
Aromatic C10-C12	Aromatic C10-C12	33.4		10	3.78	8.40	mg/kg	FD048850.D
Aromatic C12-C16	Aromatic C12-C16	125		10	4.29	12.6	mg/kg	FD048850.D
Aromatic C16-C21	Aromatic C16-C21	263		10	12.1	21.0	mg/kg	FD048850.D
Aromatic C21-C36	Aromatic C21-C36	56.9		1	2.52	3.36	mg/kg	FD048843.D
Total AliphaticEPH	Total AliphaticEPH	1200			51.2	137	mg/kg	
Total AromaticEPH	Total AromaticEPH	478			22.7	45.4	mg/kg	
Total EPH	Total EPH	1670			73.8	182	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

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

Report of Analysis

Client:	ENTACT			Date Collected:	12/05/24
Project:	North Point			Date Received:	12/05/24
Client Sample ID:	EX-8-TPH-2			SDG No.:	P5147
Lab Sample ID:	P5147-02			Matrix:	Solid
Analytical Method:	NJEPH			% Solid:	79.3
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
FC067935.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12		126	E	0.48	1.26	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16		400	E	0.30	0.84	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21		300	E	0.38	1.26	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28		73.9	E	1.01	1.68	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40		25.1		2.27	2.52	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)		44.5		40 - 140	89%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5147-02	Acq On:	06 Dec 2024 20:24
Client Sample ID:	EX-8-TPH-2	Operator:	YP/AJ
Data file:	FC067935.D	Misc:	
Instrument:	FID_C	ALS Vial:	18
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.154	6.430	248757622	1500	300	ug/ml
Aliphatic C12-C16	6.431	9.821	812382026	4770	200	ug/ml
Aliphatic C16-C21	9.822	13.180	607429174	3580	300	ug/ml
Aliphatic C21-C28	13.181	16.835	138383766	879.856	400	ug/ml
Aliphatic C28-C40	16.836	21.671	36232567	299.167	600	ug/ml
Aliphatic EPH	3.154	21.671	1843185155	11000		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.918	12.918	6453877	44.46		ug/ml
Aliphatic C9-C28	3.154	16.835	1806952588	10700	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067935.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 20:24
Operator : YP/AJ
Sample : P5147-02
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:08:17 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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...	12.918	6453877	44.460 ug/mlm
Spiked Amount 50.000		Recovery = 88.92%	
Target Compounds			

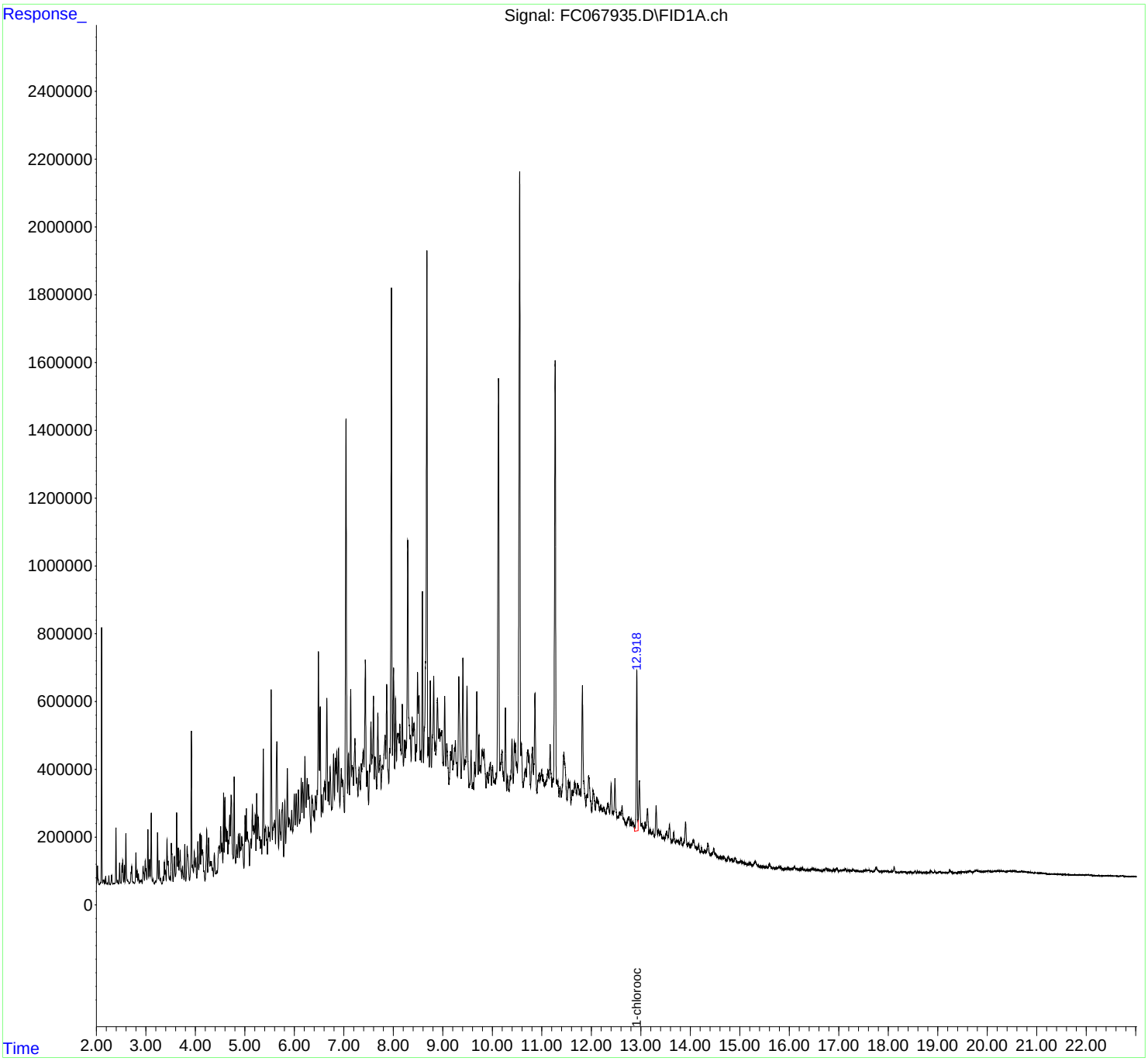
(f)=RT Delta > 1/2 Window (m)=manual int.

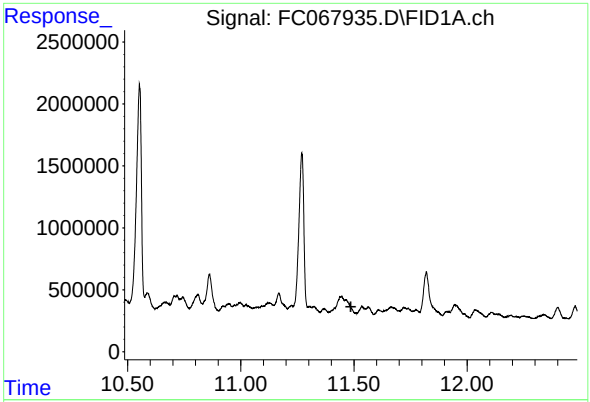
Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067935.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 20:24
Operator : YP/AJ
Sample : P5147-02
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:08:17 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

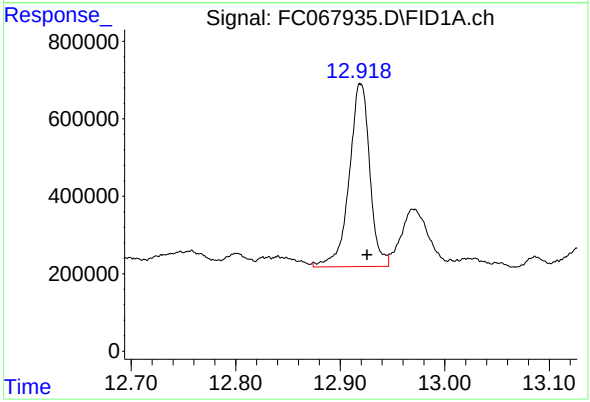
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.486 min
Response: 0
Conc: N.D.



#12 1-chlorooctadecane (SURR)

R.T.: 12.918 min
Delta R.T.: -0.008 min
Response: 6453877
Conc: 44.46 ug/ml m

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067935.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 20:24
Sample : P5147-02
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.237	3.204	3.255	BV	146489	1443626	2.94%	0.078%
2	3.269	3.255	3.285	VV	65420	614977	1.25%	0.033%
3	3.295	3.285	3.326	VV	14783	171847	0.35%	0.009%
4	3.349	3.326	3.358	PV	20490	178956	0.36%	0.010%
5	3.374	3.358	3.388	VV	63835	686815	1.40%	0.037%
6	3.396	3.388	3.410	VV	39033	370246	0.75%	0.020%
7	3.428	3.410	3.442	VV	129551	1348545	2.74%	0.073%
8	3.450	3.442	3.477	VV	67221	837926	1.71%	0.045%
9	3.489	3.477	3.497	VV	21871	196358	0.40%	0.011%
10	3.515	3.497	3.549	VV	118297	1871849	3.81%	0.102%
11	3.575	3.549	3.597	VV	79708	1193033	2.43%	0.065%
12	3.623	3.597	3.642	VV	206224	2436988	4.96%	0.132%
13	3.655	3.642	3.669	VV	104903	1175429	2.39%	0.064%
14	3.693	3.669	3.727	VV	97702	1894511	3.86%	0.103%
15	3.742	3.727	3.770	VV	49835	739233	1.50%	0.040%
16	3.787	3.770	3.807	VV	115986	1094661	2.23%	0.059%
17	3.835	3.807	3.883	VV	109810	2386840	4.86%	0.129%
18	3.920	3.883	3.961	VV	448274	5239142	10.66%	0.284%
19	3.978	3.961	3.996	VV	94439	1311641	2.67%	0.071%
20	4.009	3.996	4.029	VV	74441	943092	1.92%	0.051%
21	4.051	4.029	4.068	VV	123693	1509315	3.07%	0.082%
22	4.094	4.068	4.107	VV	145674	1925348	3.92%	0.104%
23	4.120	4.107	4.132	VV	141308	1603935	3.26%	0.087%
24	4.141	4.132	4.194	VV	98624	2125637	4.33%	0.115%
25	4.228	4.194	4.249	VV	158758	2230613	4.54%	0.121%

rteres

26	4.268	4.249	4.292	VV	134510	2056183	4.19%	0.112%
27	4.304	4.292	4.315	VV	65412	812555	1.65%	0.044%
28	4.324	4.315	4.342	VV	64496	861167	1.75%	0.047%
29	4.350	4.342	4.365	VV	45424	508152	1.03%	0.028%
30	4.384	4.365	4.421	VV	89552	1573319	3.20%	0.085%
31	4.433	4.421	4.443	VV	36883	441765	0.90%	0.024%
32	4.483	4.443	4.495	VV	109202	2646031	5.39%	0.144%
33	4.512	4.495	4.527	VV	166012	2389771	4.86%	0.130%
34	4.537	4.527	4.554	VV	115445	1564622	3.18%	0.085%
35	4.570	4.554	4.583	VV	264116	2779116	5.66%	0.151%
36	4.598	4.583	4.614	VV	252314	3211826	6.54%	0.174%
37	4.624	4.614	4.635	VV	158731	1833269	3.73%	0.099%
38	4.644	4.635	4.657	VV	154122	1632921	3.32%	0.089%
39	4.669	4.657	4.674	VV	124392	1146649	2.33%	0.062%
40	4.693	4.674	4.707	VV	200128	3182239	6.48%	0.173%
41	4.724	4.707	4.764	VV	258248	5650108	11.50%	0.307%
42	4.784	4.764	4.814	VV	313283	4397643	8.95%	0.239%
43	4.835	4.814	4.849	VV	112696	1851123	3.77%	0.100%
44	4.871	4.849	4.887	VV	143744	2506105	5.10%	0.136%
45	4.900	4.887	4.914	VV	145373	1867661	3.80%	0.101%
46	4.938	4.914	4.980	VV	136255	3896886	7.93%	0.211%
47	5.004	4.980	5.017	VV	198226	2705257	5.51%	0.147%
48	5.029	5.017	5.042	VV	218844	2565227	5.22%	0.139%
49	5.050	5.042	5.093	VV	151413	3617613	7.36%	0.196%
50	5.121	5.093	5.132	VV	129866	2388577	4.86%	0.130%
51	5.152	5.132	5.193	VV	230244	6054412	12.32%	0.328%
52	5.209	5.193	5.223	VV	199094	2904296	5.91%	0.158%
53	5.239	5.223	5.255	VV	263824	3525400	7.18%	0.191%
54	5.270	5.255	5.292	VV	193599	3622958	7.37%	0.197%
55	5.299	5.292	5.315	VV	136356	1668981	3.40%	0.091%
56	5.330	5.315	5.342	VV	128529	1774718	3.61%	0.096%
57	5.372	5.342	5.394	VV	392893	6315977	12.86%	0.343%
58	5.420	5.394	5.456	VV	164636	4960365	10.10%	0.269%
59	5.475	5.456	5.488	VV	162920	2632420	5.36%	0.143%
60	5.497	5.488	5.511	VV	147960	1856136	3.78%	0.101%
61	5.531	5.511	5.557	VV	569038	8343671	16.98%	0.453%
62	5.602	5.557	5.619	VV	183480	5912720	12.03%	0.321%
63	5.646	5.619	5.681	VV	417421	9232973	18.79%	0.501%
64	5.700	5.681	5.729	VV	213925	4490279	9.14%	0.244%
65	5.760	5.729	5.784	VV	236413	5664118	11.53%	0.307%
66	5.808	5.784	5.826	VV	241823	3947317	8.03%	0.214%
67	5.859	5.826	5.878	VV	336393	6681866	13.60%	0.363%
68	5.888	5.878	5.925	VV	187899	4944769	10.06%	0.268%
69	5.947	5.925	5.965	VV	212747	4303033	8.76%	0.233%

70	5.999	5.965	6.018	VV	261709	6265983	12.75%	0.340%
71	6.038	6.018	6.059	VV	260605	5326760	10.84%	0.289%
72	6.081	6.059	6.105	VV	273123	5987485	12.19%	0.325%
73	6.140	6.105	6.155	VV	306340	6926819	14.10%	0.376%
74	6.171	6.155	6.195	VV	291441	6012317	12.24%	0.326%
75	6.214	6.195	6.236	VV	369545	6817918	13.88%	0.370%
76	6.260	6.236	6.276	VV	307297	6363499	12.95%	0.345%
77	6.288	6.276	6.336	VV	288699	8164969	16.62%	0.443%
78	6.355	6.336	6.385	VV	256172	6494343	13.22%	0.352%
79	6.395	6.385	6.407	VV	210759	2609416	5.31%	0.142%
80	6.426	6.407	6.447	VV	254198	5335356	10.86%	0.289%
81	6.487	6.447	6.507	VV	677916	13978683	28.45%	0.758%
82	6.522	6.507	6.545	VV	514842	8153362	16.60%	0.442%
83	6.557	6.545	6.576	VV	257938	4309587	8.77%	0.234%
84	6.613	6.576	6.629	VV	296193	8272584	16.84%	0.449%
85	6.657	6.629	6.681	VV	540006	11401062	23.21%	0.619%
86	6.693	6.681	6.705	VV	295989	3711874	7.56%	0.201%
87	6.722	6.705	6.754	VV	339856	8268800	16.83%	0.449%
88	6.793	6.754	6.811	VV	379549	9561540	19.46%	0.519%
89	6.831	6.811	6.844	VV	364183	6238876	12.70%	0.338%
90	6.857	6.844	6.874	VV	384643	6073985	12.36%	0.330%
91	6.894	6.874	6.920	VV	394936	8650409	17.61%	0.469%
92	6.948	6.920	6.964	VV	335472	7462500	15.19%	0.405%
93	6.978	6.964	7.014	VV	299055	7951367	16.18%	0.431%
94	7.044	7.014	7.076	VV	1371993	23878456	48.60%	1.295%
95	7.094	7.076	7.114	VV	378070	7159450	14.57%	0.388%
96	7.139	7.114	7.158	VV	570089	10621639	21.62%	0.576%
97	7.169	7.158	7.196	VV	341848	7289584	14.84%	0.395%
98	7.224	7.196	7.254	VV	422765	12327921	25.09%	0.669%
99	7.266	7.254	7.285	VV	306395	5257148	10.70%	0.285%
100	7.308	7.285	7.334	VV	335541	8753681	17.82%	0.475%
101	7.351	7.334	7.361	VV	347083	5180455	10.54%	0.281%
102	7.391	7.361	7.407	VV	382918	9870329	20.09%	0.536%
103	7.434	7.407	7.462	VV	654040	14670933	29.86%	0.796%
104	7.476	7.462	7.499	VV	322602	6541730	13.32%	0.355%
105	7.547	7.499	7.564	VV	469896	13675060	27.83%	0.742%
106	7.598	7.564	7.615	VV	545782	12645787	25.74%	0.686%
107	7.629	7.615	7.663	VV	365262	9329813	18.99%	0.506%
108	7.687	7.663	7.708	VV	495151	10276145	20.92%	0.558%
109	7.733	7.708	7.753	VV	370665	9335140	19.00%	0.506%
110	7.781	7.753	7.796	VV	340345	8285078	16.86%	0.449%
111	7.831	7.796	7.846	VV	426735	11622848	23.66%	0.631%
112	7.866	7.846	7.907	VV	584092	14959597	30.45%	0.812%

rteres

113	7.961	7.907	7.982	VV	1745493	31523046	64.16%	1.710%
114	8.004	7.982	8.026	VV	628143	12706920	25.86%	0.689%
115	8.045	8.026	8.064	VV	537363	9821904	19.99%	0.533%
116	8.089	8.064	8.117	VV	435479	13286865	27.04%	0.721%
117	8.132	8.117	8.159	VV	463868	10532831	21.44%	0.571%
118	8.181	8.159	8.204	VV	520014	11383392	23.17%	0.618%
119	8.227	8.204	8.241	VV	417656	8383740	17.06%	0.455%
120	8.292	8.241	8.360	VV	1007009	37015044	75.34%	2.008%
121	8.380	8.360	8.398	VV	483803	9766106	19.88%	0.530%
122	8.418	8.398	8.448	VV	464152	12940592	26.34%	0.702%
123	8.489	8.448	8.503	VV	615493	15161477	30.86%	0.823%
124	8.517	8.503	8.542	VV	543924	11337380	23.08%	0.615%
125	8.553	8.542	8.564	VV	383560	4773216	9.72%	0.259%
126	8.586	8.564	8.609	VV	850388	14743701	30.01%	0.800%
127	8.678	8.609	8.699	VV	1855204	41475001	84.42%	2.250%
128	8.710	8.699	8.726	VV	423299	6444345	13.12%	0.350%
129	8.746	8.726	8.771	VV	592693	11832861	24.08%	0.642%
130	8.815	8.771	8.859	VV	600724	23114036	47.05%	1.254%
131	8.891	8.859	8.915	VV	538629	15368457	31.28%	0.834%
132	8.931	8.915	8.943	VV	447401	7247863	14.75%	0.393%
133	8.959	8.943	8.968	VV	437544	6288625	12.80%	0.341%
134	8.978	8.968	9.008	VV	443423	9507949	19.35%	0.516%
135	9.038	9.008	9.060	VV	543476	13189067	26.85%	0.716%
136	9.081	9.060	9.123	VV	400605	13380845	27.24%	0.726%
137	9.157	9.123	9.168	VV	379456	9005261	18.33%	0.489%
138	9.187	9.168	9.204	VV	401432	8060049	16.41%	0.437%
139	9.253	9.204	9.293	VV	410301	19404567	39.50%	1.053%
140	9.324	9.293	9.370	VV	596061	19457561	39.60%	1.056%
141	9.406	9.370	9.431	VV	648001	16132720	32.84%	0.875%
142	9.444	9.431	9.453	VV	354357	4744533	9.66%	0.257%
143	9.489	9.453	9.532	VV	573094	18303044	37.25%	0.993%
144	9.571	9.532	9.596	VV	383696	12146153	24.72%	0.659%
145	9.611	9.596	9.621	VV	289181	4127956	8.40%	0.224%
146	9.642	9.621	9.660	VV	348682	7276053	14.81%	0.395%
147	9.686	9.660	9.714	VV	556530	13854594	28.20%	0.752%
148	9.730	9.714	9.749	VV	428312	7667126	15.61%	0.416%
149	9.758	9.749	9.770	VV	338792	4256537	8.66%	0.231%
150	9.791	9.770	9.820	VV	383976	11005186	22.40%	0.597%
151	9.832	9.820	9.873	VV	386878	10654374	21.69%	0.578%
152	9.900	9.873	9.924	VV	318844	9296536	18.92%	0.504%
153	9.960	9.924	9.984	VV	348206	11359762	23.12%	0.616%
154	10.006	9.984	10.044	VV	336742	11089314	22.57%	0.602%
155	10.126	10.044	10.153	VV	1467640	37560189	76.45%	2.038%

156	10.196	10.153	10.238	VV	384198	17220882	35.05%	0.934%
157	10.265	10.238	10.291	VV	506609	11904214	24.23%	0.646%
158	10.307	10.291	10.335	VV	307356	7540714	15.35%	0.409%
159	10.398	10.335	10.424	VV	416148	17170326	34.95%	0.932%
160	10.446	10.424	10.507	VV	406181	17794189	36.22%	0.965%
161	10.553	10.507	10.621	VV	2077067	49129619	100.00%	2.665%
162	10.666	10.621	10.686	VV	323978	11916955	24.26%	0.647%
163	10.717	10.686	10.738	VV	382316	10965508	22.32%	0.595%
164	10.744	10.738	10.773	VV	368422	6957875	14.16%	0.377%
165	10.810	10.773	10.830	VV	390035	11565906	23.54%	0.627%
166	10.861	10.830	10.902	VV	550635	16170516	32.91%	0.877%
167	10.948	10.902	10.962	VV	313303	10618950	21.61%	0.576%
168	10.996	10.962	11.014	VV	323993	9626808	19.59%	0.522%
169	11.023	11.014	11.052	VV	310024	6593385	13.42%	0.358%
170	11.121	11.052	11.148	VV	319298	17112560	34.83%	0.928%
171	11.168	11.148	11.206	VV	398901	11560845	23.53%	0.627%
172	11.270	11.206	11.314	VV	1537483	36975500	75.26%	2.006%
173	11.323	11.314	11.350	VV	289244	5766984	11.74%	0.313%
174	11.368	11.350	11.388	VV	273885	5930317	12.07%	0.322%
175	11.445	11.388	11.514	VV	368705	22707203	46.22%	1.232%
176	11.536	11.514	11.554	VV	292052	6497551	13.23%	0.353%
177	11.563	11.554	11.588	VV	288365	5308852	10.81%	0.288%
178	11.609	11.588	11.626	VV	264570	5737301	11.68%	0.311%
179	11.665	11.626	11.700	VV	286205	11860919	24.14%	0.644%
180	11.721	11.700	11.758	VV	283057	9285790	18.90%	0.504%
181	11.774	11.758	11.789	VV	265410	4832920	9.84%	0.262%
182	11.820	11.789	11.891	VV	573001	20258051	41.23%	1.099%
183	11.912	11.891	11.924	VV	249805	4770937	9.71%	0.259%
184	11.946	11.924	12.014	VV	305535	13713921	27.91%	0.744%
185	12.036	12.014	12.083	VV	264135	9756883	19.86%	0.529%
186	12.109	12.083	12.164	VV	242137	10922575	22.23%	0.593%
187	12.193	12.164	12.233	VV	218027	8637310	17.58%	0.469%
188	12.250	12.233	12.294	VV	212335	7532867	15.33%	0.409%
189	12.338	12.294	12.371	VV	224113	9574156	19.49%	0.519%
190	12.400	12.371	12.447	VV	282829	10198742	20.76%	0.553%
191	12.477	12.447	12.542	VV	296555	12264390	24.96%	0.665%
192	12.576	12.542	12.600	VV	198362	6605038	13.44%	0.358%
193	12.621	12.600	12.712	VV	216971	12277680	24.99%	0.666%
194	12.756	12.712	12.784	VV	184263	7407661	15.08%	0.402%
195	12.801	12.784	12.818	VV	176752	3367425	6.85%	0.183%
196	12.841	12.818	12.871	VV	168671	5152579	10.49%	0.280%
197	12.920	12.871	12.945	VV	616075	12765580	25.98%	0.693%
198	12.971	12.945	13.014	VV	289989	8749530	17.81%	0.475%
199	13.025	13.014	13.067	VV	162870	4870496	9.91%	0.264%

200	13.087	13.067	13.101	VV	167545	3165540	6.44%	0.172%
201	13.135	13.101	13.167	VV	206303	6725049	13.69%	0.365%
202	13.189	13.167	13.227	VV	146197	5023369	10.22%	0.273%
203	13.248	13.227	13.272	VV	144272	3599221	7.33%	0.195%
204	13.310	13.272	13.338	VV	216033	6366720	12.96%	0.345%
205	13.356	13.338	13.378	VV	147922	3348894	6.82%	0.182%
206	13.397	13.378	13.458	VV	140003	6077238	12.37%	0.330%
207	13.463	13.458	13.481	VV	122442	1666349	3.39%	0.090%
208	13.522	13.481	13.548	VV	138789	5181346	10.55%	0.281%
209	13.579	13.548	13.620	VV	160225	5742037	11.69%	0.312%
210	13.666	13.620	13.700	VV	134775	5608430	11.42%	0.304%
211	13.724	13.700	13.741	VV	112606	2713683	5.52%	0.147%
212	13.751	13.741	13.780	VV	113185	2519359	5.13%	0.137%
213	13.813	13.780	13.850	VV	118392	4619392	9.40%	0.251%
214	13.905	13.850	13.947	VV	164414	7002072	14.25%	0.380%
215	13.967	13.947	14.004	VV	105386	3390035	6.90%	0.184%
216	14.055	14.004	14.104	VV	112116	6125441	12.47%	0.332%
217	14.115	14.104	14.147	VV	93365	2313616	4.71%	0.126%
218	14.170	14.147	14.211	VV	103132	3360497	6.84%	0.182%
219	14.228	14.211	14.264	VV	91389	2611521	5.32%	0.142%
220	14.289	14.264	14.324	VV	81633	2830850	5.76%	0.154%
221	14.355	14.324	14.411	VV	103566	4401126	8.96%	0.239%
222	14.474	14.411	14.570	VV	87835	6815284	13.87%	0.370%
223	14.584	14.570	14.594	VV	62495	904224	1.84%	0.049%
224	14.604	14.594	14.644	VV	63014	1859683	3.79%	0.101%
225	14.655	14.644	14.664	VV	61227	708731	1.44%	0.038%
226	14.679	14.664	14.739	VV	63445	2614495	5.32%	0.142%
227	14.766	14.739	14.808	VV	64702	2358804	4.80%	0.128%
228	14.831	14.808	14.873	VV	58039	2108229	4.29%	0.114%
229	14.906	14.873	14.954	VV	59884	2548419	5.19%	0.138%
230	14.970	14.954	14.983	VV	47465	801621	1.63%	0.043%
231	15.023	14.983	15.058	VV	50613	2122754	4.32%	0.115%
232	15.068	15.058	15.081	VV	47113	642994	1.31%	0.035%
233	15.085	15.081	15.092	VV	45537	289323	0.59%	0.016%
234	15.097	15.092	15.114	VV	46164	594592	1.21%	0.032%
235	15.124	15.114	15.173	VV	42535	1455073	2.96%	0.079%
236	15.203	15.173	15.254	VV	43371	1961677	3.99%	0.106%
237	15.314	15.254	15.401	VV	49153	3543488	7.21%	0.192%
238	15.415	15.401	15.451	VV	35202	1002870	2.04%	0.054%
239	15.476	15.451	15.487	VV	34277	721462	1.47%	0.039%
240	15.499	15.487	15.521	VV	33814	656085	1.34%	0.036%
241	15.542	15.521	15.564	VV	33317	828574	1.69%	0.045%
242	15.596	15.564	15.664	VV	41376	2009824	4.09%	0.109%

rteres

243	15.671	15.664	15.724	VV	29255	1018008	2.07%	0.055%
244	15.744	15.724	15.756	VV	29294	554396	1.13%	0.030%
245	15.790	15.756	15.808	VV	31437	925315	1.88%	0.050%
246	15.825	15.808	15.860	VV	31035	915029	1.86%	0.050%
247	15.876	15.860	15.893	VV	25766	508842	1.04%	0.028%
248	15.910	15.893	15.930	VV	25612	545065	1.11%	0.030%
249	15.968	15.930	16.011	VV	28573	1291147	2.63%	0.070%
250	16.036	16.011	16.068	VV	26641	872932	1.78%	0.047%
251	16.102	16.068	16.185	VV	31266	1883744	3.83%	0.102%
252	16.228	16.185	16.248	VV	25792	904895	1.84%	0.049%
253	16.267	16.248	16.287	VV	26652	575714	1.17%	0.031%
254	16.305	16.287	16.331	VV	23513	590768	1.20%	0.032%
255	16.366	16.331	16.384	VV	22521	681066	1.39%	0.037%
256	16.404	16.384	16.417	VV	22052	422922	0.86%	0.023%
257	16.453	16.417	16.464	VV	23957	643529	1.31%	0.035%
258	16.484	16.464	16.552	VV	25925	1238300	2.52%	0.067%
259	16.584	16.552	16.638	VV	23258	1115272	2.27%	0.061%
260	16.645	16.638	16.671	VV	20027	391882	0.80%	0.021%
261	16.746	16.671	16.778	VV	27163	1434678	2.92%	0.078%
262	16.786	16.778	16.807	VV	21580	372941	0.76%	0.020%
263	16.827	16.807	16.844	VV	20706	447919	0.91%	0.024%
264	16.859	16.844	16.872	VV	20187	330358	0.67%	0.018%
265	16.911	16.872	16.921	VV	21839	611604	1.24%	0.033%
266	16.964	16.921	17.009	VV	27416	1175874	2.39%	0.064%
267	17.037	17.009	17.071	VV	21754	755624	1.54%	0.041%
268	17.089	17.071	17.096	VV	20656	299437	0.61%	0.016%
269	17.130	17.096	17.161	VV	23166	813277	1.66%	0.044%
270	17.185	17.161	17.195	VV	20524	389963	0.79%	0.021%
271	17.204	17.195	17.228	VV	20562	387659	0.79%	0.021%
272	17.247	17.228	17.268	VV	19702	443966	0.90%	0.024%
273	17.291	17.268	17.333	VV	23595	788302	1.60%	0.043%
274	17.345	17.333	17.361	VV	18571	299878	0.61%	0.016%
275	17.371	17.361	17.402	VV	18683	433644	0.88%	0.024%
276	17.408	17.402	17.438	VV	17007	352119	0.72%	0.019%
277	17.449	17.438	17.477	VV	17684	397420	0.81%	0.022%
278	17.554	17.477	17.578	VV	20660	1107431	2.25%	0.060%
279	17.584	17.578	17.592	VV	19292	163672	0.33%	0.009%
280	17.614	17.592	17.634	VV	21218	488096	0.99%	0.026%
281	17.653	17.634	17.671	VV	18822	383667	0.78%	0.021%
282	17.681	17.671	17.697	VV	16392	252187	0.51%	0.014%
283	17.751	17.697	17.823	VV	28412	1485128	3.02%	0.081%
284	17.852	17.823	17.878	VV	16812	506320	1.03%	0.027%
285	17.904	17.878	17.918	VV	16914	373378	0.76%	0.020%

286	17.950	17.918	17.970	VV	17341	511243	1.04%	0.028%
287	17.984	17.970	18.025	VV	16917	498592	1.01%	0.027%
288	18.045	18.025	18.066	VV	15836	358574	0.73%	0.019%
289	18.118	18.066	18.221	VV	29480	1473784	3.00%	0.080%
290	18.245	18.221	18.256	VV	13907	272755	0.56%	0.015%
291	18.275	18.256	18.295	VV	14067	308836	0.63%	0.017%
292	18.317	18.295	18.387	VV	14457	707826	1.44%	0.038%
293	18.413	18.387	18.430	VV	13227	310751	0.63%	0.017%
294	18.454	18.430	18.481	VV	14905	392495	0.80%	0.021%
295	18.505	18.481	18.511	VV	11594	196564	0.40%	0.011%
296	18.541	18.511	18.567	VV	16782	451500	0.92%	0.024%
297	18.588	18.567	18.631	VV	16007	483016	0.98%	0.026%
298	18.647	18.631	18.687	VV	12577	388928	0.79%	0.021%
299	18.721	18.687	18.747	VV	12169	421792	0.86%	0.023%
300	18.760	18.747	18.788	VV	11723	264169	0.54%	0.014%
301	18.872	18.788	18.905	VV	15453	854975	1.74%	0.046%
302	18.941	18.905	18.967	VV	13515	431117	0.88%	0.023%
303	18.980	18.967	18.989	VV	10278	130748	0.27%	0.007%
304	19.036	18.989	19.114	VV	12889	835814	1.70%	0.045%
305	19.131	19.114	19.156	VV	11078	258214	0.53%	0.014%
306	19.166	19.156	19.191	VV	10652	212105	0.43%	0.012%
307	19.248	19.191	19.317	VV	16131	909413	1.85%	0.049%
308	19.341	19.317	19.378	VV	11488	363150	0.74%	0.020%
309	19.429	19.378	19.441	VV	11313	385210	0.78%	0.021%
310	19.465	19.441	19.478	VV	11555	241112	0.49%	0.013%
311	19.501	19.478	19.531	VV	12472	368065	0.75%	0.020%
312	19.550	19.531	19.565	VV	11853	236696	0.48%	0.013%
313	19.645	19.565	19.701	VV	14526	1020953	2.08%	0.055%
314	19.771	19.701	19.888	VV	15922	1503770	3.06%	0.082%
315	19.902	19.888	19.914	VV	13040	196012	0.40%	0.011%
316	19.929	19.914	19.942	VV	13279	220138	0.45%	0.012%
317	19.986	19.942	19.998	VV	14147	436394	0.89%	0.024%
318	20.024	19.998	20.104	VV	15359	832134	1.69%	0.045%
319	20.136	20.104	20.150	VV	13289	348305	0.71%	0.019%
320	20.171	20.150	20.187	VV	14096	293940	0.60%	0.016%
321	20.206	20.187	20.224	VV	14171	303127	0.62%	0.016%
322	20.241	20.224	20.265	VV	14457	335060	0.68%	0.018%
323	20.284	20.265	20.305	VV	14271	326199	0.66%	0.018%
324	20.322	20.305	20.349	VV	14065	355735	0.72%	0.019%
325	20.356	20.349	20.381	VV	12841	228400	0.46%	0.012%
326	20.460	20.381	20.478	VV	13811	734570	1.50%	0.040%
327	20.492	20.478	20.507	VV	13985	233990	0.48%	0.013%
328	20.545	20.507	20.608	VV	14155	781244	1.59%	0.042%
329	20.684	20.608	20.711	VV	12098	690217	1.40%	0.037%

rteres

330	20.723	20.711	20.748	VV	11335	247250	0.50%	0.013%
331	20.754	20.748	20.806	VV	11809	368110	0.75%	0.020%
332	20.822	20.806	20.904	VV	9632	509522	1.04%	0.028%
333	20.910	20.904	20.955	VV	7928	211251	0.43%	0.011%
334	20.965	20.955	21.015	VV	6825	236661	0.48%	0.013%
335	21.025	21.015	21.064	VV	6349	182000	0.37%	0.010%
336	21.088	21.064	21.248	VV	6926	557977	1.14%	0.030%
337	21.327	21.248	21.374	VV	3923	249249	0.51%	0.014%
338	21.383	21.374	21.534	VV	3218	221878	0.45%	0.012%
339	21.541	21.534	21.551	VV	1833	15925	0.03%	0.001%
340	21.575	21.551	21.611	VV	1844	47400	0.10%	0.003%
341	21.634	21.611	21.694	VV	1536	38708	0.08%	0.002%

Sum of corrected areas: 1843185158

Aliphatic EPH 111424.M Mon Dec 09 01:27:54 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	12/05/24	
Project:	North Point		Date Received:	12/05/24	
Client Sample ID:	EX-8-TPH-2		SDG No.:	P5147	
Lab Sample ID:	P5147-02		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	79.3	
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
FD048843.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	28.6	E	0.38	0.84	mg/kg
Aromatic C12-C16	Aromatic C12-C16	118	E	0.43	1.26	mg/kg
Aromatic C16-C21	Aromatic C16-C21	247	E	1.21	2.10	mg/kg
Aromatic C21-C36	Aromatic C21-C36	56.9		2.52	3.36	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	68.2		40 - 140	136%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	63.8		40 - 140	128%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	60.8		40 - 140	122%	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:	P5147-02	Acq On:	06 Dec 2024 20:24
Client Sample ID:	EX-8-TPH-2	Operator:	YP/AJ
Data file:	FD048843.D	Misc:	
Instrument:	FID_D	ALS Vial:	68
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.086	5.803	65362616	340.399	200	ug/ml
Aromatic C12-C16	5.804	8.408	271127927	1410	300	ug/ml
Aromatic C16-C21	8.409	12.672	547953056	2950	500	ug/ml
Aromatic C21-C36	12.673	18.079	106519418	677.471	800	ug/ml
Aromatic EPH	4.086	18.079	990963017	5380		ug/ml
2-Bromonaphthalene (SURR)	7.367	7.367	12004144	68.18		ug/ml
2-Flurobiphenyl (SURR)	8.220	8.220	7347362	63.8		ug/ml
ortho-Terphenyl (SURR)	11.257	11.257	11691228	60.79		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048843.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 20:24
Operator : YP/AJ
Sample : P5147-02
Misc :
ALS Vial : 68 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Integration File: autoint1.e
Quant Time: Dec 07 03:12:31 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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...	7.367	12004144	68.183 ug/ml
Spiked Amount 50.000		Recovery = 136.37%	
6) S 2-Flurobiphenyl (SURR)	8.220	7347362	63.796 ug/ml
Spiked Amount 50.000	Range 0 - 131	Recovery = 127.59%	
11) S ortho-Terphenyl (SURR)	11.257	11691228	60.786 ug/mlm
Spiked Amount 50.000		Recovery = 121.57%	
Target Compounds			

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048843.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 20:24
Operator : YP/AJ
Sample : P5147-02
Misc :
ALS Vial : 68 Sample Multiplier: 1

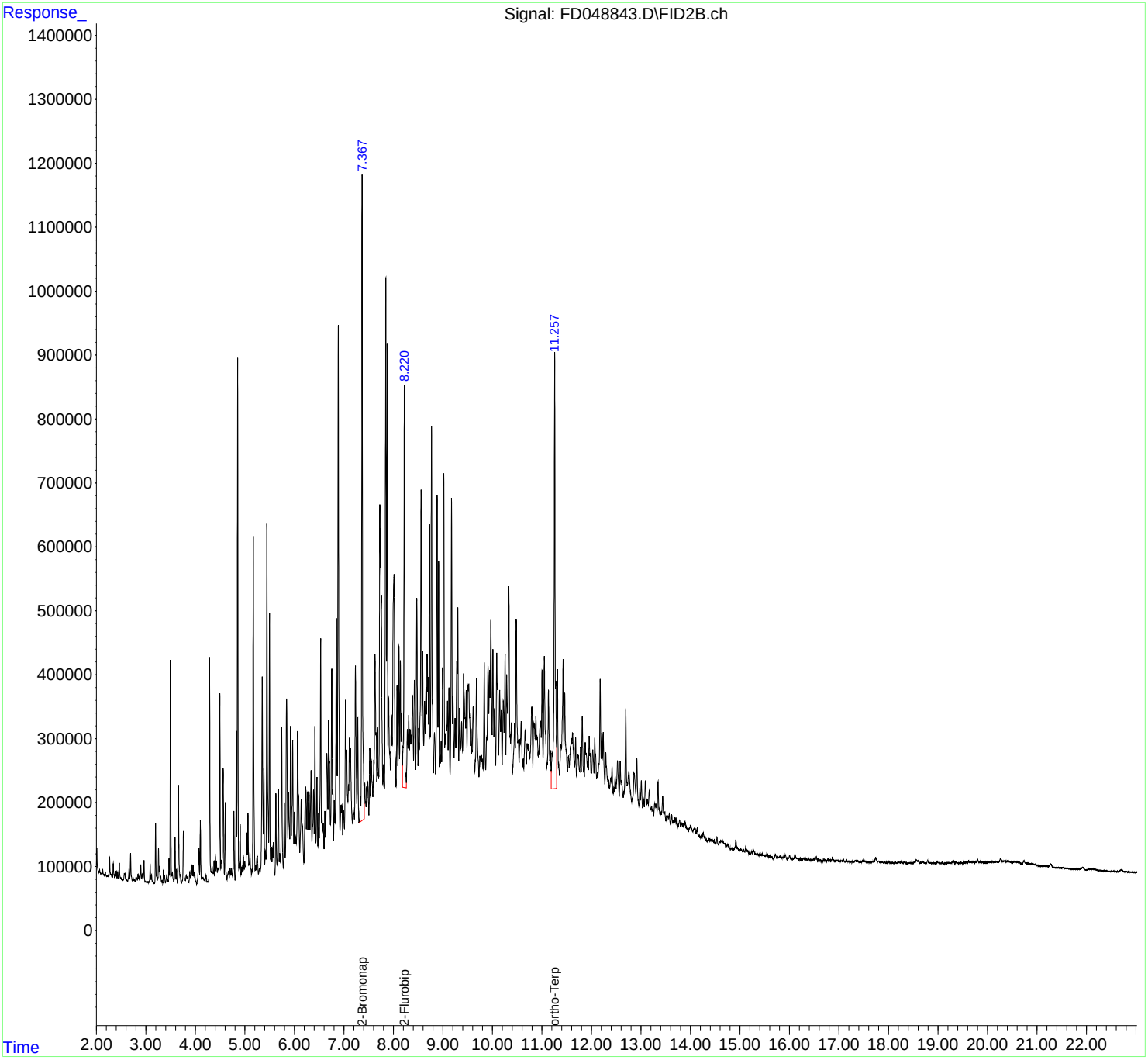
Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2

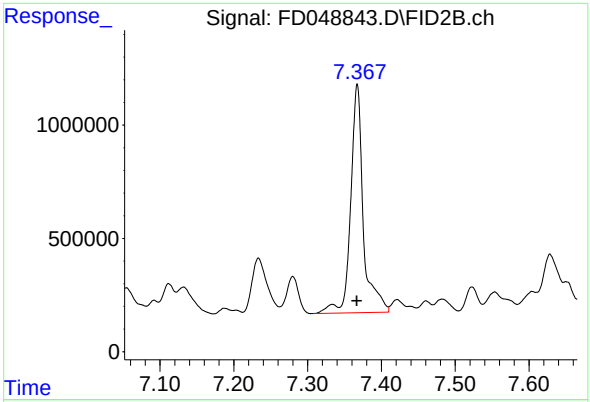
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Integration File: autoint1.e
Quant Time: Dec 07 03:12:31 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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





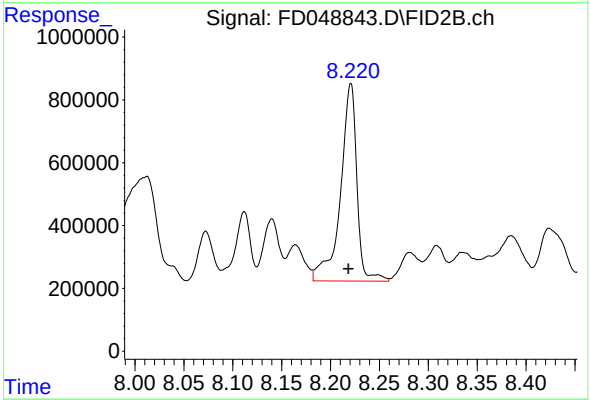
#4 2-Bromonaphthalene (SURR)

R.T.: 7.367 min
Delta R.T.: 0.000 min
Response: 12004144
Conc: 68.18 ug/ml

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2

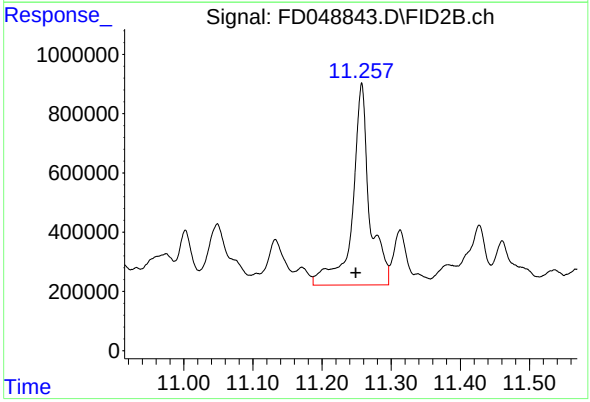
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024



#6 2-Flurobiphenyl (SURR)

R.T.: 8.220 min
Delta R.T.: 0.002 min
Response: 7347362
Conc: 63.80 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.257 min
Delta R.T.: 0.009 min
Response: 11691228
Conc: 60.79 ug/ml m

rteres

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD12062
Data File : FD048843.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 20:24
Sample : P5147-02
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.100	4.086	4.124	PV	72772	478299	3.16%	0.047%
2	4.138	4.124	4.145	PV	3489	28719	0.19%	0.003%
3	4.150	4.145	4.173	VV	3372	51036	0.34%	0.005%
4	4.182	4.173	4.197	VV	3654	28526	0.19%	0.003%
5	4.215	4.197	4.237	PV	11141	124884	0.83%	0.012%
6	4.244	4.237	4.253	PV	502	3003	0.02%	0.000%
7	4.287	4.253	4.324	PV	351977	3261601	21.56%	0.320%
8	4.338	4.324	4.362	VV	24682	397703	2.63%	0.039%
9	4.377	4.362	4.389	VV	33164	349656	2.31%	0.034%
10	4.403	4.389	4.414	VV	40946	384197	2.54%	0.038%
11	4.424	4.414	4.443	VV	33275	411367	2.72%	0.040%
12	4.456	4.443	4.463	VV	21250	233832	1.55%	0.023%
13	4.471	4.463	4.477	VV	22116	166469	1.10%	0.016%
14	4.494	4.477	4.514	VV	293895	2669744	17.65%	0.262%
15	4.525	4.514	4.533	VV	33476	334886	2.21%	0.033%
16	4.561	4.533	4.586	VV	178042	2657681	17.57%	0.260%
17	4.603	4.586	4.638	VV	123811	1296264	8.57%	0.127%
18	4.668	4.638	4.683	VV	15845	282760	1.87%	0.028%
19	4.698	4.683	4.711	VV	20426	225895	1.49%	0.022%
20	4.724	4.711	4.740	VV	20733	244513	1.62%	0.024%
21	4.757	4.740	4.761	VV	20169	193095	1.28%	0.019%
22	4.777	4.761	4.802	VV	109707	1066889	7.05%	0.105%
23	4.825	4.802	4.837	VV	234789	2081552	13.76%	0.204%
24	4.854	4.837	4.876	VV	817530	7627799	50.42%	0.747%
25	4.904	4.876	4.922	VV	88807	1110902	7.34%	0.109%
26	4.939	4.922	4.951	VV	21838	305721	2.02%	0.030%
27	4.968	4.951	4.985	VV	37892	560182	3.70%	0.055%
28	4.997	4.985	5.016	VV	30695	464785	3.07%	0.046%
29	5.035	5.016	5.048	VV	74438	935540	6.18%	0.092%
30	5.062	5.048	5.078	VV	105804	1164578	7.70%	0.114%
31	5.101	5.078	5.132	VV	44275	830857	5.49%	0.081%
32	5.144	5.132	5.150	VV	17697	159561	1.05%	0.016%
33	5.169	5.150	5.206	VV	537826	5940995	39.27%	0.582%
34	5.216	5.206	5.225	VV	23098	231932	1.53%	0.023%
35	5.251	5.225	5.273	VV	38053	753022	4.98%	0.074%
36	5.293	5.273	5.306	VV	18760	299757	1.98%	0.029%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

37	5.350	5.306	5.371	VV	318025	4435797	29.32%	0.435%
38	5.383	5.371	5.401	VV	174373	1744822	11	
39	5.413	5.401	5.424	VV	46127	539498	3	
40	5.444	5.424	5.480	VV	556247	6967645	46	
41	5.497	5.480	5.518	VV	417748	4028200	26	
42	5.535	5.518	5.547	VV	51678	668654	4	
43	5.558	5.547	5.567	VV	49292	500646	3.31%	0.049%
44	5.578	5.567	5.602	VV	58635	676392	4.47%	0.066%
45	5.626	5.602	5.650	VV	134797	1529076	10.11%	0.150%
46	5.677	5.650	5.693	VV	140976	1860255	12.30%	0.182%
47	5.703	5.693	5.716	VV	41092	476710	3.15%	0.047%
48	5.743	5.716	5.776	VV	238276	3173364	20.98%	0.311%
49	5.796	5.776	5.813	VV	120066	1403355	9.28%	0.138%
50	5.842	5.813	5.868	VV	282503	4959193	32.78%	0.486%
51	5.881	5.868	5.907	VV	135876	2175792	14.38%	0.213%
52	5.922	5.907	5.938	VV	239349	2634575	17.41%	0.258%
53	5.965	5.938	5.989	VV	217665	3710135	24.52%	0.364%
54	6.003	5.989	6.017	VV	105059	1328727	8.78%	0.130%
55	6.025	6.017	6.036	VV	65178	680523	4.50%	0.067%
56	6.066	6.036	6.081	VV	230724	3518639	23.26%	0.345%
57	6.085	6.081	6.109	VV	128467	1479775	9.78%	0.145%
58	6.137	6.109	6.155	VV	123976	2370788	15.67%	0.232%
59	6.163	6.155	6.192	VV	82388	1249478	8.26%	0.122%
60	6.225	6.192	6.241	VV	143171	2763364	18.27%	0.271%
61	6.258	6.241	6.271	VV	134407	1875531	12.40%	0.184%
62	6.284	6.271	6.291	VV	135989	1394349	9.22%	0.137%
63	6.298	6.291	6.314	VV	131279	1555494	10.28%	0.152%
64	6.336	6.314	6.355	VV	168934	2751550	18.19%	0.270%
65	6.386	6.355	6.400	VV	138302	2555898	16.89%	0.250%
66	6.414	6.400	6.435	VV	237611	2778964	18.37%	0.272%
67	6.456	6.435	6.474	VV	157751	2314016	15.30%	0.227%
68	6.490	6.474	6.502	VV	102188	1324487	8.75%	0.130%
69	6.531	6.502	6.548	VV	374884	4939928	32.65%	0.484%
70	6.556	6.548	6.572	VV	99853	1295787	8.56%	0.127%
71	6.582	6.572	6.599	VV	85621	1154826	7.63%	0.113%
72	6.615	6.599	6.630	VV	104595	1482004	9.80%	0.145%
73	6.655	6.630	6.677	VV	194447	3940013	26.04%	0.386%
74	6.692	6.677	6.727	VV	245994	5091848	33.66%	0.499%
75	6.755	6.727	6.770	VV	326702	4739565	31.33%	0.464%
76	6.775	6.770	6.791	VV	138284	1355635	8.96%	0.133%
77	6.806	6.791	6.820	VV	121008	1642336	10.86%	0.161%
78	6.849	6.820	6.865	VV	405121	6317087	41.76%	0.619%
79	6.887	6.865	6.921	VV	864384	12295610	81.27%	1.205%
80	6.942	6.921	6.952	VV	112862	1753618	11.59%	0.172%
81	6.960	6.952	6.977	VV	112252	1429762	9.45%	0.140%
82	6.995	6.977	7.010	VV	103640	1796714	11.88%	0.176%
83	7.034	7.010	7.046	VV	277135	3831772	25.33%	0.375%
84	7.054	7.046	7.081	VV	199337	3332125	22.02%	0.327%
85	7.092	7.081	7.098	VV	144065	1323756	8.75%	0.130%
86	7.112	7.098	7.122	VV	217272	2680643	17.72%	0.263%
87	7.132	7.122	7.173	VV	201746	4260732	28.16%	0.418%
88	7.187	7.173	7.199	VV	108151	1554548	10.28%	0.152%
89	7.203	7.199	7.212	VV	99817	754180	4.99%	0.074%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

90	7.234	7.212	7.262	VV	329889	6047149	39.97%	0.593%
91	7.280	7.262	7.305	VV	248243	4022134	26	
92	7.334	7.305	7.343	VV	125337	2346434	15	
93	7.367	7.343	7.410	VV	1096998	15128899	100	
94	7.421	7.410	7.448	VV	146479	2837029	18	
95	7.461	7.448	7.470	VV	140197	1693537	11	
96	7.483	7.470	7.505	VV	147587	2643649	17.47%	0.259%
97	7.523	7.505	7.537	VV	201042	2997259	19.81%	0.294%
98	7.554	7.537	7.584	VV	179125	4220064	27.89%	0.414%
99	7.629	7.584	7.665	VV	346088	10489637	69.34%	1.028%
100	7.679	7.665	7.694	VV	232563	3252694	21.50%	0.319%
101	7.699	7.694	7.705	VV	161978	1022705	6.76%	0.100%
102	7.726	7.705	7.734	VV	580167	6799208	44.94%	0.666%
103	7.741	7.734	7.751	VV	542618	5079639	33.58%	0.498%
104	7.756	7.751	7.787	VV	439723	5934963	39.23%	0.582%
105	7.800	7.787	7.818	VV	173995	2877296	19.02%	0.282%
106	7.847	7.818	7.861	VV	935211	12915127	85.37%	1.266%
107	7.874	7.861	7.891	VV	831324	9241851	61.09%	0.906%
108	7.904	7.891	7.942	VV	277632	6542794	43.25%	0.641%
109	7.958	7.942	7.974	VV	251141	4237085	28.01%	0.415%
110	8.012	7.974	8.053	VV	470157	14405570	95.22%	1.412%
111	8.072	8.053	8.089	VV	295968	4661367	30.81%	0.457%
112	8.112	8.089	8.125	VV	358165	5328801	35.22%	0.522%
113	8.140	8.125	8.154	VV	335376	4592659	30.36%	0.450%
114	8.164	8.154	8.182	VV	252331	3692832	24.41%	0.362%
115	8.221	8.182	8.260	VV	766250	13772488	91.03%	1.350%
116	8.281	8.260	8.294	VV	227442	3936402	26.02%	0.386%
117	8.309	8.294	8.322	VV	249840	3680453	24.33%	0.361%
118	8.335	8.322	8.352	VV	226931	3853058	25.47%	0.378%
119	8.385	8.352	8.407	VV	280681	7610276	50.30%	0.746%
120	8.424	8.407	8.451	VV	304308	6485538	42.87%	0.636%
121	8.472	8.451	8.496	VV	432015	7889405	52.15%	0.773%
122	8.512	8.496	8.523	VV	228742	3232493	21.37%	0.317%
123	8.559	8.523	8.577	VV	599809	11419406	75.48%	1.119%
124	8.590	8.577	8.611	VV	348201	5590124	36.95%	0.548%
125	8.629	8.611	8.641	VV	270753	4233894	27.99%	0.415%
126	8.658	8.641	8.668	VV	292968	4241573	28.04%	0.416%
127	8.681	8.668	8.692	VV	344033	4358245	28.81%	0.427%
128	8.700	8.692	8.712	VV	308312	3318746	21.94%	0.325%
129	8.728	8.712	8.744	VV	547427	7113573	47.02%	0.697%
130	8.770	8.744	8.807	VV	700765	13232379	87.46%	1.297%
131	8.829	8.807	8.853	VV	220662	5317277	35.15%	0.521%
132	8.883	8.853	8.899	VV	593091	9548803	63.12%	0.936%
133	8.913	8.899	8.930	VV	489010	6061670	40.07%	0.594%
134	8.941	8.930	8.950	VV	185435	2146492	14.19%	0.210%
135	8.964	8.950	8.975	VV	206413	2860870	18.91%	0.280%
136	8.994	8.975	9.000	VV	321343	3871720	25.59%	0.379%
137	9.017	9.000	9.036	VV	625875	8790160	58.10%	0.861%
138	9.045	9.036	9.057	VV	219081	2673249	17.67%	0.262%
139	9.072	9.057	9.077	VV	231108	2637607	17.43%	0.258%
140	9.092	9.077	9.105	VV	269397	3902197	25.79%	0.382%
141	9.121	9.105	9.144	VV	290932	5304896	35.06%	0.520%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

142	9.174	9.144	9.192	VV	585776	9656714	63.83%	0.946%
143	9.203	9.192	9.225	VV	275704	4646768	30	
144	9.245	9.225	9.260	VV	242310	4517767	29	
145	9.280	9.260	9.288	VV	331040	4698760	31	
146	9.301	9.288	9.319	VV	414787	5778026	38	
147	9.339	9.319	9.362	VV	257921	5499951	36	
148	9.377	9.362	9.396	VV	236301	4444394	29.38%	0.436%
149	9.418	9.396	9.459	VV	311448	9529581	62.99%	0.934%
150	9.471	9.459	9.487	VV	285048	4073007	26.92%	0.399%
151	9.507	9.487	9.514	VV	292592	4327812	28.61%	0.424%
152	9.522	9.514	9.558	VV	295526	6707207	44.33%	0.657%
153	9.570	9.558	9.587	VV	224358	3485056	23.04%	0.342%
154	9.613	9.587	9.642	VV	258836	7005760	46.31%	0.687%
155	9.679	9.642	9.729	VV	302825	10601173	70.07%	1.039%
156	9.747	9.729	9.766	VV	181933	3797631	25.10%	0.372%
157	9.780	9.766	9.791	VV	182209	2647525	17.50%	0.259%
158	9.797	9.791	9.810	VV	177053	1910082	12.63%	0.187%
159	9.835	9.810	9.864	VV	327470	7280125	48.12%	0.713%
160	9.912	9.864	9.928	VV	320908	9124925	60.31%	0.894%
161	9.941	9.928	9.952	VV	315090	4053929	26.80%	0.397%
162	9.968	9.952	9.994	VV	394834	7810388	51.63%	0.765%
163	10.010	9.994	10.030	VV	347476	5970124	39.46%	0.585%
164	10.044	10.030	10.065	VV	254661	4594137	30.37%	0.450%
165	10.087	10.065	10.100	VV	342227	5706738	37.72%	0.559%
166	10.106	10.100	10.125	VV	293652	3616321	23.90%	0.354%
167	10.147	10.125	10.165	VV	283470	5808731	38.39%	0.569%
168	10.180	10.165	10.197	VV	253625	4161758	27.51%	0.408%
169	10.220	10.197	10.236	VV	266088	5422064	35.84%	0.531%
170	10.256	10.236	10.272	VV	340119	5523221	36.51%	0.541%
171	10.289	10.272	10.306	VV	307457	5276574	34.88%	0.517%
172	10.332	10.306	10.367	VV	445526	10941668	72.32%	1.072%
173	10.384	10.367	10.404	VV	230368	4519579	29.87%	0.443%
174	10.448	10.404	10.462	VV	230701	6665570	44.06%	0.653%
175	10.482	10.462	10.513	VV	393606	8234701	54.43%	0.807%
176	10.524	10.513	10.540	VV	204128	3013389	19.92%	0.295%
177	10.557	10.540	10.566	VV	205446	3069087	20.29%	0.301%
178	10.581	10.566	10.608	VV	233246	5033767	33.27%	0.493%
179	10.621	10.608	10.633	VV	174702	2585519	17.09%	0.253%
180	10.660	10.633	10.686	VV	218587	6077926	40.17%	0.596%
181	10.703	10.686	10.709	VV	198277	2561245	16.93%	0.251%
182	10.722	10.709	10.757	VV	195805	5418322	35.81%	0.531%
183	10.796	10.757	10.817	VV	255559	7600037	50.24%	0.745%
184	10.834	10.817	10.863	VV	229856	5933751	39.22%	0.581%
185	10.878	10.863	10.923	VV	240286	7572970	50.06%	0.742%
186	10.932	10.923	10.938	VV	186699	1572219	10.39%	0.154%
187	10.974	10.938	10.987	VV	233189	6277413	41.49%	0.615%
188	11.002	10.987	11.022	VV	312323	5205833	34.41%	0.510%
189	11.049	11.022	11.096	VV	333821	10226101	67.59%	1.002%
190	11.106	11.096	11.110	VV	166672	1320957	8.73%	0.129%
191	11.132	11.110	11.158	VV	280475	6305970	41.68%	0.618%
192	11.171	11.158	11.187	VV	186733	2924011	19.33%	0.287%
193	11.205	11.187	11.210	VV	182175	2415968	15.97%	0.237%
194	11.257	11.210	11.275	VV	806769	14324727	94.68%	1.404%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

195	11.280	11.275	11.297	VV	294978	3375122	22.31%	0.331%
196	11.313	11.297	11.333	VV	313019	5145716	34	
197	11.338	11.333	11.357	VV	164260	2170584	14	
198	11.382	11.357	11.397	VV	194472	4323365	28	
199	11.427	11.397	11.445	VV	328159	7159915	47	
200	11.461	11.445	11.514	VV	275315	8425594	55	
201	11.536	11.514	11.550	VV	177272	3577021	23.64%	0.351%
202	11.597	11.550	11.606	VV	203354	6274816	41.48%	0.615%
203	11.617	11.606	11.664	VV	212782	6393140	42.26%	0.626%
204	11.680	11.664	11.697	VV	206066	3489425	23.06%	0.342%
205	11.725	11.697	11.762	VV	178124	6408652	42.36%	0.628%
206	11.779	11.762	11.794	VV	190030	3222736	21.30%	0.316%
207	11.815	11.794	11.856	VV	237942	6721328	44.43%	0.659%
208	11.874	11.856	11.886	VV	197190	3141205	20.76%	0.308%
209	11.892	11.886	11.916	VV	180085	3104670	20.52%	0.304%
210	11.925	11.916	11.937	VV	166372	2060397	13.62%	0.202%
211	11.954	11.937	11.968	VV	206496	3439842	22.74%	0.337%
212	11.975	11.968	12.002	VV	179038	3215889	21.26%	0.315%
213	12.026	12.002	12.052	VV	185291	5011452	33.13%	0.491%
214	12.067	12.052	12.104	VV	203623	5368518	35.49%	0.526%
215	12.124	12.104	12.132	VV	148624	2508215	16.58%	0.246%
216	12.149	12.132	12.153	VV	162873	1934512	12.79%	0.190%
217	12.176	12.153	12.195	VV	295239	5551626	36.70%	0.544%
218	12.210	12.195	12.225	VV	210908	3425253	22.64%	0.336%
219	12.238	12.225	12.271	VV	211300	4715484	31.17%	0.462%
220	12.289	12.271	12.327	VV	180238	5190991	34.31%	0.509%
221	12.332	12.327	12.370	VV	138975	3427580	22.66%	0.336%
222	12.390	12.370	12.402	VV	139960	2564179	16.95%	0.251%
223	12.416	12.402	12.440	VV	157821	3153258	20.84%	0.309%
224	12.451	12.440	12.462	VV	124080	1573842	10.40%	0.154%
225	12.479	12.462	12.498	VV	141211	2820640	18.64%	0.276%
226	12.526	12.498	12.561	VV	165984	5272894	34.85%	0.517%
227	12.580	12.561	12.597	VV	165239	3004424	19.86%	0.294%
228	12.604	12.597	12.642	VV	134780	3398202	22.46%	0.333%
229	12.694	12.642	12.723	VV	245223	7405849	48.95%	0.726%
230	12.757	12.723	12.812	VV	149458	6809497	45.01%	0.667%
231	12.823	12.812	12.831	VV	106169	1165579	7.70%	0.114%
232	12.865	12.831	12.898	VV	144917	5111176	33.78%	0.501%
233	12.917	12.898	12.962	VV	169226	4731961	31.28%	0.464%
234	12.977	12.962	12.992	VV	119203	1953108	12.91%	0.191%
235	13.008	12.992	13.037	VV	134273	3053839	20.19%	0.299%
236	13.053	13.037	13.068	VV	103812	1809184	11.96%	0.177%
237	13.089	13.068	13.117	VV	133537	3297087	21.79%	0.323%
238	13.131	13.117	13.150	VV	103132	1959858	12.95%	0.192%
239	13.168	13.150	13.190	VV	117728	2542011	16.80%	0.249%
240	13.196	13.190	13.203	VV	89744	671988	4.44%	0.066%
241	13.217	13.203	13.229	VV	92704	1430678	9.46%	0.140%
242	13.244	13.229	13.257	VV	89064	1448352	9.57%	0.142%
243	13.279	13.257	13.299	VV	97571	2308207	15.26%	0.226%
244	13.311	13.299	13.326	VV	95948	1499004	9.91%	0.147%
245	13.345	13.326	13.384	VV	131287	3449155	22.80%	0.338%
246	13.401	13.384	13.407	VV	81947	1089110	7.20%	0.107%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

247	13.439	13.407	13.465	VV	108215	3151960	20.83%	0.309%
248	13.481	13.465	13.504	VV	83260	1846966	12	
249	13.520	13.504	13.540	VV	77364	1605293	10	
250	13.544	13.540	13.557	VV	76657	756347	5	
251	13.572	13.557	13.601	VV	79780	1928601	12	
252	13.621	13.601	13.643	VV	78549	1799850	11	
253	13.649	13.643	13.663	VV	69733	789904	5.22%	0.077%
254	13.681	13.663	13.693	VV	72467	1276912	8.44%	0.125%
255	13.707	13.693	13.723	VV	73783	1241428	8.21%	0.122%
256	13.731	13.723	13.744	VV	65768	813242	5.38%	0.080%
257	13.756	13.744	13.760	VV	63578	598447	3.96%	0.059%
258	13.783	13.760	13.798	VV	70402	1503126	9.94%	0.147%
259	13.818	13.798	13.849	VV	64506	1875503	12.40%	0.184%
260	13.878	13.849	13.910	VV	67081	2361136	15.61%	0.231%
261	13.918	13.910	13.957	VV	59398	1545066	10.21%	0.151%
262	14.007	13.957	14.048	VV	61010	3085604	20.40%	0.302%
263	14.077	14.048	14.086	VV	56188	1227678	8.11%	0.120%
264	14.095	14.086	14.117	VV	55806	968176	6.40%	0.095%
265	14.135	14.117	14.159	VV	55567	1266905	8.37%	0.124%
266	14.174	14.159	14.194	VV	44851	938298	6.20%	0.092%
267	14.228	14.194	14.238	VV	45893	1136151	7.51%	0.111%
268	14.255	14.238	14.280	VV	48655	1126300	7.44%	0.110%
269	14.290	14.280	14.322	VV	43723	1023642	6.77%	0.100%
270	14.326	14.322	14.342	VV	37137	447926	2.96%	0.044%
271	14.384	14.342	14.397	VV	39297	1241167	8.20%	0.122%
272	14.401	14.397	14.407	VV	37281	214917	1.42%	0.021%
273	14.422	14.407	14.444	VV	37299	797288	5.27%	0.078%
274	14.455	14.444	14.474	VV	36449	634628	4.19%	0.062%
275	14.486	14.474	14.508	VV	37833	719106	4.75%	0.070%
276	14.535	14.508	14.562	VV	41519	1091087	7.21%	0.107%
277	14.585	14.562	14.591	VV	34193	561197	3.71%	0.055%
278	14.604	14.591	14.616	VV	35297	518109	3.42%	0.051%
279	14.621	14.616	14.644	VV	35236	555877	3.67%	0.054%
280	14.652	14.644	14.681	VV	35124	732575	4.84%	0.072%
281	14.693	14.681	14.713	VV	31279	557507	3.69%	0.055%
282	14.727	14.713	14.732	VV	27008	291658	1.93%	0.029%
283	14.753	14.732	14.793	VV	28507	951377	6.29%	0.093%
284	14.799	14.793	14.807	VV	23910	189336	1.25%	0.019%
285	14.811	14.807	14.817	VV	22736	139784	0.92%	0.014%
286	14.832	14.817	14.857	VV	22980	517737	3.42%	0.051%
287	14.863	14.857	14.868	VV	21205	137089	0.91%	0.013%
288	14.915	14.868	14.948	VV	35898	1254037	8.29%	0.123%
289	14.954	14.948	14.986	VV	22967	468305	3.10%	0.046%
290	15.007	14.986	15.053	VV	20523	762616	5.04%	0.075%
291	15.069	15.053	15.095	VV	21020	467520	3.09%	0.046%
292	15.118	15.095	15.146	VV	24700	615783	4.07%	0.060%
293	15.154	15.146	15.190	VV	18449	420206	2.78%	0.041%
294	15.200	15.190	15.215	VV	13688	204116	1.35%	0.020%
295	15.234	15.215	15.255	VV	17006	359524	2.38%	0.035%
296	15.279	15.255	15.299	VV	17566	413274	2.73%	0.040%
297	15.303	15.299	15.326	VV	13868	203416	1.34%	0.020%
298	15.330	15.326	15.333	VV	11541	52503	0.35%	0.005%
299	15.347	15.333	15.363	VV	13193	219533	1.45%	0.022%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

300	15.368	15.363	15.383	VV	11498	134462	0.89%	0.013%
301	15.389	15.383	15.394	VV	11429	72910		
302	15.410	15.394	15.418	VV	11889	164099		
303	15.421	15.418	15.427	VV	11072	54170		
304	15.446	15.427	15.464	VV	12627	248170		
305	15.478	15.464	15.492	VV	10784	164646		
306	15.508	15.492	15.523	VV	10480	178409	1.18%	0.017%
307	15.550	15.523	15.573	VV	12487	314223	2.08%	0.031%
308	15.577	15.573	15.592	VV	8635	90409	0.60%	0.009%
309	15.611	15.592	15.674	VV	8334	328086	2.17%	0.032%
310	15.711	15.674	15.738	VV	9911	286410	1.89%	0.028%
311	15.755	15.738	15.769	VV	6767	108171	0.71%	0.011%
312	15.774	15.769	15.780	VV	5765	34434	0.23%	0.003%
313	15.815	15.780	15.848	VV	7702	246956	1.63%	0.024%
314	15.857	15.848	15.874	VV	5955	84948	0.56%	0.008%
315	15.882	15.874	15.889	VV	5991	48095	0.32%	0.005%
316	15.918	15.889	15.948	VV	9287	216013	1.43%	0.021%
317	15.959	15.948	15.968	VV	3818	42268	0.28%	0.004%
318	16.002	15.968	16.021	VV	8527	171844	1.14%	0.017%
319	16.036	16.021	16.056	VV	4482	73055	0.48%	0.007%
320	16.065	16.056	16.072	VV	2759	22146	0.15%	0.002%
321	16.110	16.072	16.149	VV	10182	236839	1.57%	0.023%
322	16.154	16.149	16.156	VV	3130	12922	0.09%	0.001%
323	16.161	16.156	16.163	VV	3369	13124	0.09%	0.001%
324	16.167	16.163	16.197	VV	3142	48856	0.32%	0.005%
325	16.220	16.197	16.248	VV	2181	49416	0.33%	0.005%
326	16.287	16.248	16.297	VV	3160	51794	0.34%	0.005%
327	16.319	16.297	16.341	VV	3833	57439	0.38%	0.006%
328	16.350	16.341	16.364	VV	1439	12296	0.08%	0.001%
329	16.378	16.364	16.400	PBA	1256	26676	0.18%	0.003%
330	16.429	16.400	16.451	BV	1179	4114	0.03%	0.000%
331	16.464	16.451	16.473	PV	1159	9809	0.06%	0.001%
332	16.491	16.473	16.521	VV	2919	60265	0.40%	0.006%
333	16.542	16.521	16.570	VV	6979	106341	0.70%	0.010%
334	16.582	16.570	16.601	VV	1649	18651	0.12%	0.002%
335	16.628	16.601	16.646	VV	1889	25952	0.17%	0.003%
336	16.657	16.646	16.674	PV	1878	15112	0.10%	0.001%
337	16.691	16.674	16.728	VV	2713	53807	0.36%	0.005%
338	16.741	16.728	16.754	VV	2071	22502	0.15%	0.002%
339	16.776	16.754	16.802	VV	3189	47382	0.31%	0.005%
340	16.825	16.802	16.845	VV	2274	37935	0.25%	0.004%
341	16.865	16.845	16.887	VV	4725	70593	0.47%	0.007%
342	16.893	16.887	16.919	VV	1975	26047	0.17%	0.003%
343	16.950	16.919	16.970	VV	2223	43736	0.29%	0.004%
344	16.976	16.970	17.001	VV	1535	20211	0.13%	0.002%
345	17.019	17.001	17.028	VV	1404	16167	0.11%	0.002%
346	17.034	17.028	17.037	VV	1193	4806	0.03%	0.000%
347	17.046	17.037	17.058	VV	1501	14641	0.10%	0.001%
348	17.095	17.058	17.113	VV	2638	55752	0.37%	0.005%
349	17.153	17.113	17.170	PV	2421	39310	0.26%	0.004%
350	17.185	17.170	17.192	VV	1466	14057	0.09%	0.001%
351	17.195	17.192	17.203	VV	903	4425	0.03%	0.000%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

352	17.217	17.203	17.237	VV	2489	29000	0.19%	0.003%
353	17.241	17.237	17.275	VV	1368	21932		
354	17.279	17.275	17.293	VV	1450	8932		
355	17.344	17.293	17.362	VV	2604	65095		
356	17.377	17.362	17.408	VV	2855	43963		
357	17.414	17.408	17.417	VV	1052	4231		
358	17.420	17.417	17.448	VV	934	14216	0.09%	0.001%
359	17.450	17.448	17.458	VV	767	3653	0.02%	0.000%
360	17.479	17.458	17.501	VV	3252	50607	0.33%	0.005%
361	17.526	17.501	17.540	VV	2332	39304	0.26%	0.004%
362	17.543	17.540	17.550	VV	1438	6975	0.05%	0.001%
363	17.555	17.550	17.565	VV	1363	8583	0.06%	0.001%
364	17.571	17.565	17.580	VV	818	5728	0.04%	0.001%
365	17.589	17.580	17.594	VV	1328	6682	0.04%	0.001%
366	17.599	17.594	17.612	VV	1117	6796	0.04%	0.001%
367	17.630	17.612	17.653	VV	1294	18079	0.12%	0.002%
368	17.687	17.653	17.693	VV	2352	40597	0.27%	0.004%
369	17.699	17.693	17.706	VV	2186	13255	0.09%	0.001%
370	17.741	17.706	17.783	VV	8386	207934	1.37%	0.020%
371	17.802	17.783	17.826	VV	3503	63279	0.42%	0.006%
372	17.846	17.826	17.864	VV	2906	44223	0.29%	0.004%
373	17.875	17.864	17.895	VV	1656	23233	0.15%	0.002%
374	17.919	17.895	17.949	VV	2165	40235	0.27%	0.004%
375	17.960	17.949	17.968	VV	1498	13000	0.09%	0.001%
376	18.001	17.968	18.035	VV	3055	66641	0.44%	0.007%
377	18.039	18.035	18.058	VV	1118	13496	0.09%	0.001%
378	18.062	18.058	18.081	VV	1347	13472	0.09%	0.001%
379	18.091	18.081	18.099	VV	1106	8093	0.05%	0.001%
380	18.106	18.099	18.113	PV	971	4367	0.03%	0.000%
381	18.120	18.113	18.126	VV	825	4435	0.03%	0.000%
382	18.139	18.126	18.165	VV	1474	17689	0.12%	0.002%
383	18.177	18.165	18.187	PV	675	5189	0.03%	0.001%
384	18.191	18.187	18.197	VV	399	1271	0.01%	0.000%

Sum of corrected areas: 1020457689

Aromatic EPH 111424.M Sat Dec 07 03:42:42 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	12/05/24	
Project:	North Point		Date Received:	12/05/24	
Client Sample ID:	EX-8-TPH-2DL		SDG No.:	P5147	
Lab Sample ID:	P5147-02DL		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	79.3	
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
FC067942.D	10	12/06/24	12/09/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	129		4.79	12.6	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	509	E	3.03	8.40	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	381	E	3.78	12.6	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	64.7		10.1	16.8	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	31.0		22.7	25.2	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	5.61		40 - 140	112%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5147-02DL	Acq On:	09 Dec 2024 10:14
Client Sample ID:	EX-8-TPH-2DL	Operator:	YP/AJ
Data file:	FC067942.D	Misc:	
Instrument:	FID_C	ALS Vial:	12
Dilution Factor:	10	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.152	6.430	25543189	154.068	300	ug/ml
Aliphatic C12-C16	6.431	9.821	103269232	606.096	200	ug/ml
Aliphatic C16-C21	9.822	13.180	76976899	453.816	300	ug/ml
Aliphatic C21-C28	13.181	16.834	12108518	76.987	400	ug/ml
Aliphatic C28-C40	16.835	21.670	4463189	36.852	600	ug/ml
Aliphatic EPH	3.152	21.670	222361027	1330		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.909	12.909	814960	5.61		ug/ml
Aliphatic C9-C28	3.152	16.834	217897838	1290	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067942.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 10:14
Operator : YP/AJ
Sample : P5147-02DL 10X
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL

Manual Integrations APPROVED

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

Integration File: autoint1.e
Quant Time: Dec 09 12:27:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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...	12.909	814960	5.614 ug/mlm
Spiked Amount 50.000		Recovery = 11.23%	
Target Compounds			

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067942.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 10:14
Operator : YP/AJ
Sample : P5147-02DL 10X
Misc :
ALS Vial : 12 Sample Multiplier: 1

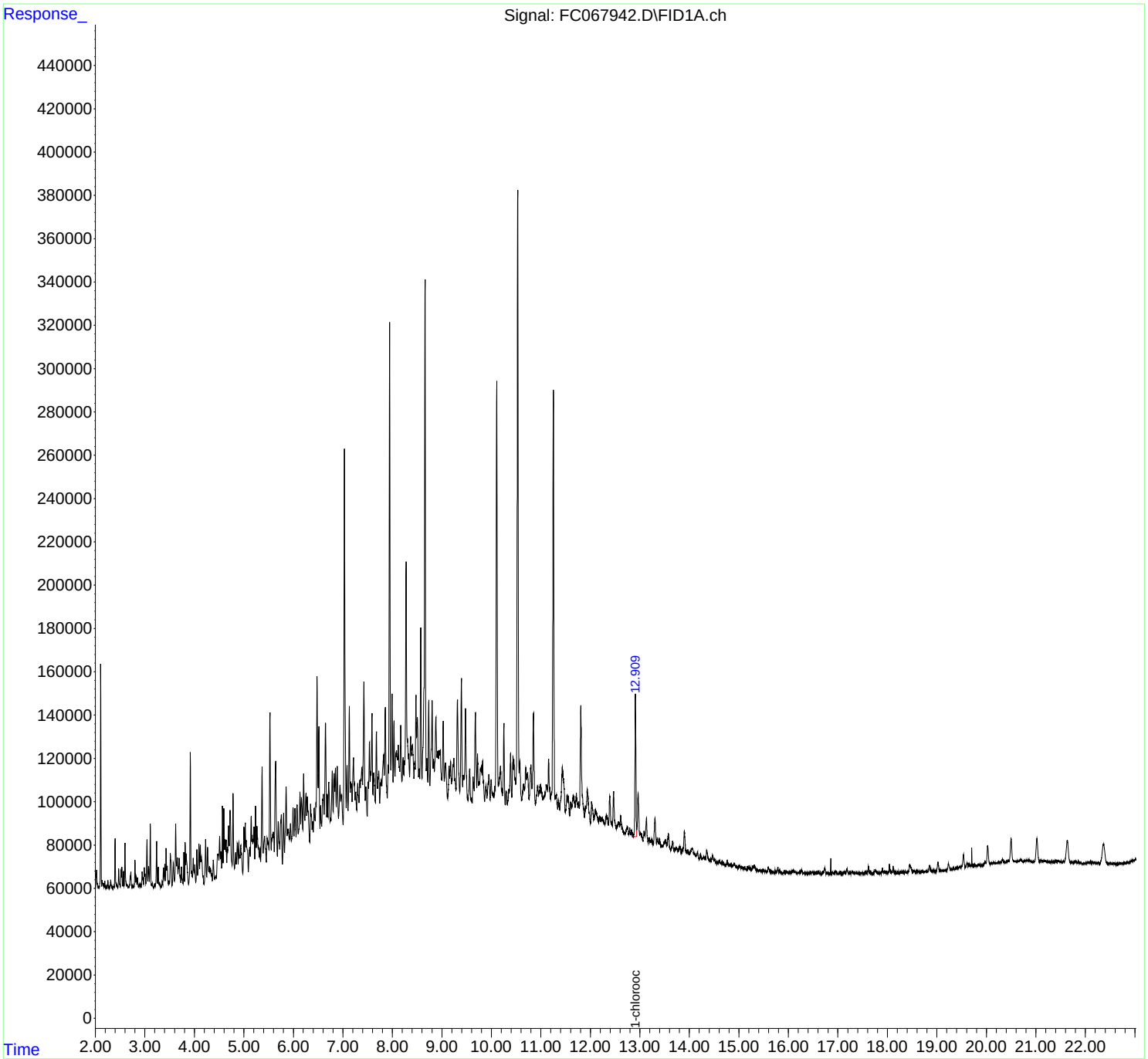
Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL

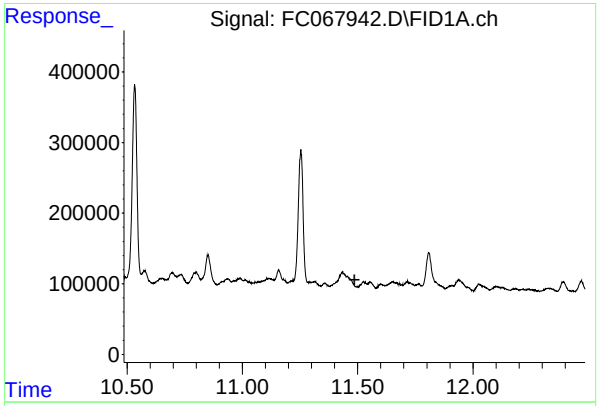
Manual Integrations APPROVED

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

Integration File: autoint1.e
Quant Time: Dec 09 12:27:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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





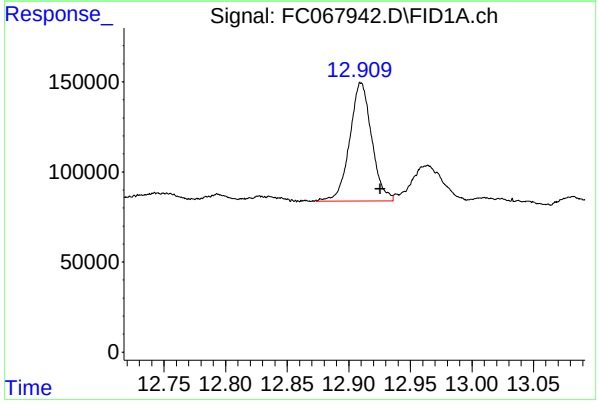
#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.486 mi
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL

Manual Integrations
APPROVED

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



#12 1-chlorooctadecane (SURR)

R.T.: 12.909 min
Delta R.T.: -0.017 min
Response: 814960
Conc: 5.61 ug/ml m

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL

rteres

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_C\Data\FC12092
Data File : FC067942.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 10:14
Sample : P5147-02DL 10X
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.238	3.204	3.256	PH	5673	-262339	-4.74%	-0.118%
2	3.270	3.256	3.286	PV	475	-61280	-1.11%	-0.028%
3	3.296	3.286	3.328	PV	1314	11731	0.21%	0.005%
4	3.350	3.328	3.360	PV	2653	24249	0.44%	0.011%
5	3.376	3.360	3.388	VV	8900	90653	1.64%	0.041%
6	3.402	3.388	3.414	VV	10796	105436	1.91%	0.047%
7	3.429	3.414	3.442	VV	17715	181534	3.28%	0.082%
8	3.450	3.442	3.478	VV	9335	113684	2.06%	0.051%
9	3.489	3.478	3.498	VV	2804	23679	0.43%	0.011%
10	3.516	3.498	3.550	VV	14994	246717	4.46%	0.111%
11	3.576	3.550	3.598	VV	11044	157148	2.84%	0.071%
12	3.623	3.598	3.644	VV	28578	354667	6.41%	0.160%
13	3.656	3.644	3.669	VV	13331	151579	2.74%	0.068%
14	3.693	3.669	3.726	VV	12958	242462	4.38%	0.109%
15	3.740	3.726	3.770	VV	8576	109747	1.98%	0.049%
16	3.788	3.770	3.801	VV	15330	134976	2.44%	0.061%
17	3.815	3.801	3.825	VV	19821	178725	3.23%	0.080%
18	3.835	3.825	3.883	VV	14572	274166	4.96%	0.123%
19	3.919	3.883	3.960	VV	61099	686390	12.41%	0.309%
20	3.977	3.960	3.995	VV	12219	157641	2.85%	0.071%
21	4.009	3.995	4.029	VV	9285	113036	2.04%	0.051%
22	4.051	4.029	4.067	VV	16234	182965	3.31%	0.082%
23	4.093	4.067	4.106	VV	18870	251042	4.54%	0.113%
24	4.120	4.106	4.132	VV	18126	208181	3.76%	0.094%
25	4.141	4.132	4.195	VV	12645	249751	4.52%	0.112%
26	4.228	4.195	4.248	PV	20329	258266	4.67%	0.116%
27	4.268	4.248	4.291	VV	16358	235148	4.25%	0.106%
28	4.304	4.291	4.315	VV	6745	81595	1.48%	0.037%
29	4.325	4.315	4.342	VV	6303	77602	1.40%	0.035%
30	4.350	4.342	4.365	VV	3562	32931	0.60%	0.015%
31	4.383	4.365	4.416	PV	9215	112005	2.03%	0.050%
32	4.432	4.416	4.443	VV	1440	13718	0.25%	0.006%
33	4.473	4.443	4.501	PBA	5416	98894	1.79%	0.044%
34	4.536	4.501	4.554	BV	4201	48764	0.88%	0.022%
35	4.568	4.554	4.581	PV	28367	226649	4.10%	0.102%
36	4.596	4.581	4.612	VV	27411	293498	5.31%	0.132%

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL

Manual IntegrationsAPPROVED

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

rteres

37	4.621	4.612	4.634	VV	13311	146664	2.65%	0.066%
38	4.642	4.634	4.655	VV	12924	110211		
39	4.692	4.655	4.705	VV	19937	362133		
40	4.722	4.705	4.764	VV	27237	515773		
41	4.782	4.764	4.812	VV	35539	377860		
42	4.834	4.812	4.847	VV	8879	107771		
43	4.868	4.847	4.885	VV	13216	191018	3.45%	0.086%
44	4.897	4.885	4.912	VV	13763	151483	2.74%	0.068%
45	4.936	4.912	4.978	VV	12812	290674	5.26%	0.131%
46	5.002	4.978	5.015	PV	21590	242215	4.38%	0.109%
47	5.028	5.015	5.091	VV	23455	571423	10.33%	0.257%
48	5.118	5.091	5.129	VV	12288	190676	3.45%	0.086%
49	5.148	5.129	5.191	VV	26539	627386	11.35%	0.282%
50	5.205	5.191	5.220	VV	21417	285975	5.17%	0.129%
51	5.237	5.220	5.252	VV	31256	375951	6.80%	0.169%
52	5.266	5.252	5.312	VV	21814	514162	9.30%	0.231%
53	5.326	5.312	5.339	VV	11738	147630	2.67%	0.066%
54	5.368	5.339	5.390	VV	49184	684830	12.38%	0.308%
55	5.418	5.390	5.453	VV	17223	466939	8.44%	0.210%
56	5.472	5.453	5.508	VV	16525	425033	7.69%	0.191%
57	5.527	5.508	5.553	VV	73978	984766	17.81%	0.443%
58	5.597	5.553	5.614	VV	18694	597735	10.81%	0.269%
59	5.642	5.614	5.677	VV	51546	1065388	19.27%	0.479%
60	5.696	5.677	5.725	VV	24099	449249	8.12%	0.202%
61	5.756	5.725	5.780	VV	27531	593637	10.73%	0.267%
62	5.803	5.780	5.822	VV	27915	395938	7.16%	0.178%
63	5.855	5.822	5.918	VV	40089	1247453	22.56%	0.561%
64	5.942	5.918	5.961	VV	23093	482553	8.73%	0.217%
65	5.995	5.961	6.013	VV	30458	682752	12.35%	0.307%
66	6.033	6.013	6.055	VV	30169	593720	10.74%	0.267%
67	6.075	6.055	6.098	VV	31733	651541	11.78%	0.293%
68	6.135	6.098	6.150	VV	37571	811879	14.68%	0.365%
69	6.165	6.150	6.190	VV	35183	696233	12.59%	0.313%
70	6.208	6.190	6.231	VV	46006	809411	14.64%	0.364%
71	6.255	6.231	6.270	VV	37138	734453	13.28%	0.330%
72	6.283	6.270	6.330	VV	35455	932616	16.86%	0.419%
73	6.349	6.330	6.403	VV	31226	1037674	18.76%	0.467%
74	6.420	6.403	6.441	VV	30055	584774	10.57%	0.263%
75	6.479	6.441	6.501	VV	90242	1734285	31.36%	0.780%
76	6.516	6.501	6.538	VV	67806	1017182	18.39%	0.457%
77	6.551	6.538	6.572	VV	31259	518718	9.38%	0.233%
78	6.606	6.572	6.622	VV	36345	947950	17.14%	0.426%
79	6.650	6.622	6.675	VV	68970	1408366	25.47%	0.633%
80	6.686	6.675	6.698	VV	36330	445681	8.06%	0.200%
81	6.715	6.698	6.758	VV	42256	1128384	20.40%	0.507%
82	6.786	6.758	6.805	VV	47052	993503	17.97%	0.447%
83	6.823	6.805	6.837	VV	46172	751165	13.58%	0.338%
84	6.850	6.837	6.867	VV	48422	753731	13.63%	0.339%
85	6.887	6.867	6.912	VV	49532	1023679	18.51%	0.460%
86	6.942	6.912	6.958	VV	40742	927486	16.77%	0.417%
87	6.974	6.958	7.005	VV	36081	894918	16.18%	0.402%
88	7.032	7.005	7.068	VV	194602	3166630	57.26%	1.424%
89	7.085	7.068	7.105	VV	49919	856910	15.50%	0.385%

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL

rteres

Manual IntegrationsAPPROVED

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

90	7.131	7.105	7.149	VV	77293	1326502	23.99%	0.597%
91	7.161	7.149	7.188	VV	42052	920998	16	
92	7.215	7.188	7.248	VV	53355	1549101	28	
93	7.260	7.248	7.278	VV	37712	616789	11	
94	7.301	7.278	7.327	VV	41486	1067303	19	
95	7.343	7.327	7.351	VV	43222	559210	10	
96	7.384	7.351	7.399	VV	48592	1279357	23.13%	0.575%
97	7.426	7.399	7.454	VV	87749	1877932	33.96%	0.845%
98	7.468	7.454	7.491	VV	39991	782490	14.15%	0.352%
99	7.512	7.491	7.520	VV	42305	620094	11.21%	0.279%
100	7.538	7.520	7.555	VV	60856	1040299	18.81%	0.468%
101	7.589	7.555	7.607	VV	73650	1629839	29.47%	0.733%
102	7.624	7.607	7.655	VV	46338	1180221	21.34%	0.531%
103	7.678	7.655	7.701	VV	65391	1317680	23.83%	0.593%
104	7.726	7.701	7.744	VV	47581	1098742	19.87%	0.494%
105	7.774	7.744	7.788	VV	43031	1041207	18.83%	0.468%
106	7.823	7.788	7.838	VV	54524	1451898	26.25%	0.653%
107	7.857	7.838	7.896	VV	76321	1859952	33.63%	0.836%
108	7.945	7.896	7.971	VV	251171	4195784	75.87%	1.887%
109	7.995	7.971	8.016	VV	82511	1659810	30.01%	0.746%
110	8.033	8.016	8.053	VV	70583	1254230	22.68%	0.564%
111	8.086	8.053	8.105	VV	56424	1640497	29.67%	0.738%
112	8.121	8.105	8.150	VV	59117	1441656	26.07%	0.648%
113	8.170	8.150	8.193	VV	67929	1423558	25.74%	0.640%
114	8.217	8.193	8.231	VV	53709	1096918	19.84%	0.493%
115	8.278	8.231	8.350	VV	143562	4786592	86.56%	2.153%
116	8.369	8.350	8.384	VV	63239	1168114	21.12%	0.525%
117	8.407	8.384	8.438	VV	59362	1744824	31.55%	0.785%
118	8.452	8.438	8.460	VV	51485	646719	11.69%	0.291%
119	8.478	8.460	8.491	VV	82151	1266004	22.89%	0.569%
120	8.505	8.491	8.532	VV	71646	1515846	27.41%	0.682%
121	8.543	8.532	8.553	VV	48076	599709	10.84%	0.270%
122	8.575	8.553	8.598	VV	112555	1936408	35.02%	0.871%
123	8.661	8.598	8.687	VV	273523	5530010	100.00%	2.487%
124	8.699	8.687	8.716	VV	53286	864892	15.64%	0.389%
125	8.736	8.716	8.759	VV	79585	1481609	26.79%	0.666%
126	8.805	8.759	8.849	VV	80044	3038345	54.94%	1.366%
127	8.879	8.849	8.908	VV	71921	2069770	37.43%	0.931%
128	8.922	8.908	8.934	VV	56414	867212	15.68%	0.390%
129	8.947	8.934	9.004	VV	56988	2181626	39.45%	0.981%
130	9.028	9.004	9.051	VV	70531	1525480	27.59%	0.686%
131	9.070	9.051	9.115	VV	50294	1711202	30.94%	0.770%
132	9.147	9.115	9.159	VV	49625	1137264	20.57%	0.511%
133	9.177	9.159	9.195	VV	51475	1018208	18.41%	0.458%
134	9.243	9.195	9.284	VV	53206	2434932	44.03%	1.095%
135	9.315	9.284	9.362	VV	79882	2534487	45.83%	1.140%
136	9.396	9.362	9.421	VV	89130	2068157	37.40%	0.930%
137	9.436	9.421	9.448	VV	45310	720373	13.03%	0.324%
138	9.479	9.448	9.528	VV	76016	2352697	42.54%	1.058%
139	9.562	9.528	9.614	VV	48045	1962414	35.49%	0.883%
140	9.633	9.614	9.651	VV	44268	890664	16.11%	0.401%
141	9.677	9.651	9.706	VV	74370	1800167	32.55%	0.810%

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL

rteres

Manual IntegrationsAPPROVED

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

142	9.722	9.706	9.744	VV	55288	1058472	19.14%	0.476%
143	9.796	9.744	9.812	VV	49163	1856380	33	
144	9.824	9.812	9.864	VV	51476	1360205	24	
145	9.890	9.864	9.911	VV	41043	1045794	18	
146	9.950	9.911	9.975	VV	44364	1526758	27	
147	9.996	9.975	10.038	VV	42989	1449196	26	
148	10.044	10.038	10.054	VV	36807	347315	6.28%	0.156%
149	10.109	10.054	10.148	VV	225342	4759976	86.08%	2.141%
150	10.185	10.148	10.224	VV	49589	1974056	35.70%	0.888%
151	10.254	10.224	10.281	VV	68476	1595185	28.85%	0.717%
152	10.298	10.281	10.324	VV	38151	913152	16.51%	0.411%
153	10.388	10.324	10.414	VV	55255	2199502	39.77%	0.989%
154	10.436	10.414	10.447	VV	53689	904979	16.36%	0.407%
155	10.457	10.447	10.496	VV	52749	1375374	24.87%	0.619%
156	10.533	10.496	10.562	VV	315103	5433521	98.26%	2.444%
157	10.575	10.562	10.611	VV	51779	1261956	22.82%	0.568%
158	10.652	10.611	10.668	VV	40933	1307362	23.64%	0.588%
159	10.696	10.668	10.717	VV	49097	1298478	23.48%	0.584%
160	10.733	10.717	10.764	VV	46621	1176091	21.27%	0.529%
161	10.799	10.764	10.821	VV	50553	1483951	26.83%	0.667%
162	10.851	10.821	10.890	VV	73907	2046964	37.02%	0.921%
163	10.937	10.890	10.953	VV	40671	1380709	24.97%	0.621%
164	10.989	10.953	11.045	VV	41357	2087120	37.74%	0.939%
165	11.114	11.045	11.137	VV	40708	2076031	37.54%	0.934%
166	11.158	11.137	11.197	VV	52827	1509198	27.29%	0.679%
167	11.254	11.197	11.300	VV	221410	4860740	87.90%	2.186%
168	11.314	11.300	11.340	VV	36236	819842	14.83%	0.369%
169	11.356	11.340	11.381	VV	33445	785494	14.20%	0.353%
170	11.434	11.381	11.496	VV	49510	2659140	48.09%	1.196%
171	11.526	11.496	11.542	VV	35773	898235	16.24%	0.404%
172	11.555	11.542	11.580	VV	35802	746866	13.51%	0.336%
173	11.600	11.580	11.621	VV	32779	760499	13.75%	0.342%
174	11.651	11.621	11.696	VV	36221	1510222	27.31%	0.679%
175	11.715	11.696	11.748	VV	35985	1045124	18.90%	0.470%
176	11.764	11.748	11.778	VV	32860	573730	10.37%	0.258%
177	11.808	11.778	11.881	VV	77862	2624037	47.45%	1.180%
178	11.938	11.881	12.002	VV	38858	2239311	40.49%	1.007%
179	12.026	12.002	12.074	VV	33011	1243271	22.48%	0.559%
180	12.100	12.074	12.161	VV	29619	1402815	25.37%	0.631%
181	12.185	12.161	12.198	VV	26402	566276	10.24%	0.255%
182	12.216	12.198	12.227	VV	25926	445878	8.06%	0.201%
183	12.241	12.227	12.291	VV	25620	934526	16.90%	0.420%
184	12.331	12.291	12.365	VV	26907	1113269	20.13%	0.501%
185	12.391	12.365	12.441	VV	35651	1253162	22.66%	0.564%
186	12.470	12.441	12.521	VV	37747	1280015	23.15%	0.576%
187	12.577	12.521	12.591	VV	23946	954659	17.26%	0.429%
188	12.615	12.591	12.704	VV	26773	1446487	26.16%	0.651%
189	12.745	12.704	12.774	VV	21623	836394	15.12%	0.376%
190	12.794	12.774	12.811	VV	21070	435051	7.87%	0.196%
191	12.829	12.811	12.869	VV	19948	646656	11.69%	0.291%
192	12.910	12.869	12.938	VV	82619	1528715	27.64%	0.687%
193	12.963	12.938	12.998	VV	37071	969948	17.54%	0.436%
194	13.009	12.998	13.064	VV	19010	699305	12.65%	0.314%

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL

Manual IntegrationsAPPROVED

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

rteres

195	13.081	13.064	13.098	VV	19607	362042	6.55%	0.163%
196	13.131	13.098	13.168	VV	25522	822317	14	
197	13.187	13.168	13.205	VV	16814	347660	6	
198	13.240	13.205	13.274	VV	16075	622473	11	
199	13.304	13.274	13.333	VV	25621	681234	12	
200	13.352	13.333	13.371	VV	16291	345691	6	
201	13.391	13.371	13.468	VV	16100	796678	14.41%	0.358%
202	13.520	13.468	13.541	VV	15552	633450	11.45%	0.285%
203	13.573	13.541	13.619	VV	18618	677614	12.25%	0.305%
204	13.660	13.619	13.694	VV	15213	567857	10.27%	0.255%
205	13.723	13.694	13.734	VV	12082	280036	5.06%	0.126%
206	13.742	13.734	13.773	VV	11951	268484	4.86%	0.121%
207	13.801	13.773	13.844	VV	12567	483409	8.74%	0.217%
208	13.898	13.844	13.941	VV	19710	751925	13.60%	0.338%
209	13.964	13.941	14.002	VV	10585	368400	6.66%	0.166%
210	14.057	14.002	14.092	VV	12124	569392	10.30%	0.256%
211	14.101	14.092	14.127	VV	9369	189128	3.42%	0.085%
212	14.163	14.127	14.194	VV	10144	353922	6.40%	0.159%
213	14.224	14.194	14.252	VV	9192	271128	4.90%	0.122%
214	14.279	14.252	14.321	VV	7683	304833	5.51%	0.137%
215	14.350	14.321	14.423	VV	10821	485263	8.78%	0.218%
216	14.469	14.423	14.567	VV	8789	554267	10.02%	0.249%
217	14.575	14.567	14.581	VV	5264	41971	0.76%	0.019%
218	14.603	14.581	14.652	VV	6024	226983	4.10%	0.102%
219	14.673	14.652	14.724	VV	5482	206583	3.74%	0.093%
220	14.766	14.724	14.801	VV	6203	215141	3.89%	0.097%
221	14.827	14.801	14.839	VV	4615	100137	1.81%	0.045%
222	14.844	14.839	14.866	VV	4357	62853	1.14%	0.028%
223	14.905	14.866	14.948	VV	4859	194434	3.52%	0.087%
224	14.965	14.948	14.984	VV	3373	66907	1.21%	0.030%
225	15.020	14.984	15.068	VV	3677	161203	2.92%	0.072%
226	15.072	15.068	15.164	VV	3323	151847	2.75%	0.068%
227	15.207	15.164	15.258	VV	3243	135845	2.46%	0.061%
228	15.310	15.258	15.389	VV	3824	202937	3.67%	0.091%
229	15.408	15.389	15.464	VV	1887	67670	1.22%	0.030%
230	15.477	15.464	15.521	VV	1709	47795	0.86%	0.021%
231	15.538	15.521	15.567	VV	1505	36568	0.66%	0.016%
232	15.592	15.567	15.704	VV	2606	115035	2.08%	0.052%
233	15.732	15.704	15.758	VV	1380	27909	0.50%	0.013%
234	15.787	15.758	15.808	VV	2492	49276	0.89%	0.022%
235	15.816	15.808	15.869	VV	1506	36150	0.65%	0.016%
236	15.915	15.869	15.936	VV	958	23367	0.42%	0.011%
237	15.968	15.936	15.996	VV	1198	29371	0.53%	0.013%
238	16.022	15.996	16.072	VV	965	32234	0.58%	0.014%
239	16.102	16.072	16.154	VV	1552	53927	0.98%	0.024%
240	16.158	16.154	16.188	VV	910	12622	0.23%	0.006%
241	16.219	16.188	16.235	VV	951	19010	0.34%	0.009%
242	16.267	16.235	16.292	VV	1932	38939	0.70%	0.018%
243	16.301	16.292	16.341	VV	681	14058	0.25%	0.006%
244	16.494	16.341	16.551	VV	828	69295	1.25%	0.031%
245	16.605	16.551	16.681	VV	982	33703	0.61%	0.015%
246	16.736	16.681	16.802	VV	2773	72861	1.32%	0.033%

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL

Manual IntegrationsAPPROVED

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

rteres

247	16.818	16.802	16.839	VV	561	9043	0.16%	0.004%
248	16.855	16.839	16.874	VV	1792	10202	0	
249	16.960	16.874	16.998	VV	1339	47220	0	
250	17.025	16.998	17.089	VV	806	23273	0	
251	17.133	17.089	17.161	VV	877	24338	0	
252	17.184	17.161	17.228	VV	2597	46188	0	
253	17.287	17.228	17.334	PV	1434	42392	0.77%	0.019%
254	17.361	17.334	17.441	VV	564	24632	0.45%	0.011%
255	17.462	17.441	17.486	VV	617	10880	0.20%	0.005%
256	17.556	17.486	17.578	VV	847	32217	0.58%	0.014%
257	17.618	17.578	17.708	VV	3589	79664	1.44%	0.036%
258	17.750	17.708	17.819	PV	2139	61624	1.11%	0.028%
259	17.851	17.819	17.874	VV	465	12907	0.23%	0.006%
260	17.900	17.874	18.014	VV	2155	72597	1.31%	0.033%
261	18.041	18.014	18.071	VV	3719	57517	1.04%	0.026%
262	18.116	18.071	18.206	VV	2811	66125	1.20%	0.030%
263	18.307	18.206	18.383	PV	846	55777	1.01%	0.025%
264	18.452	18.383	18.511	VV	3884	117995	2.13%	0.053%
265	18.539	18.511	18.566	VV	1018	18812	0.34%	0.008%
266	18.588	18.566	18.673	VV	798	26400	0.48%	0.012%
267	18.710	18.673	18.774	VV	534	18891	0.34%	0.008%
268	18.849	18.774	18.912	VV	2790	68584	1.24%	0.031%
269	18.940	18.912	18.971	VV	549	9117	0.16%	0.004%
270	19.022	18.971	19.078	PV	4206	80583	1.46%	0.036%
271	19.096	19.078	19.124	VV	314	6386	0.12%	0.003%
272	19.234	19.124	19.297	VV	3334	89475	1.62%	0.040%
273	19.537	19.297	19.581	VV	6880	270497	4.89%	0.122%
274	19.609	19.581	19.634	VV	2995	66468	1.20%	0.030%
275	19.647	19.634	19.701	VV	2013	72496	1.31%	0.033%
276	19.705	19.701	19.745	VV	4058	48808	0.88%	0.022%
277	19.760	19.745	19.809	VV	1750	63730	1.15%	0.029%
278	19.839	19.809	19.895	VV	1790	83778	1.51%	0.038%
279	19.973	19.895	19.994	VV	3413	120273	2.17%	0.054%
280	20.027	19.994	20.081	VV	10168	250081	4.52%	0.112%
281	20.157	20.081	20.218	VV	2282	168542	3.05%	0.076%
282	20.327	20.218	20.384	VV	3453	245271	4.44%	0.110%
283	20.499	20.384	20.622	VV	13252	556880	10.07%	0.250%
284	20.692	20.622	20.743	VV	3093	174356	3.15%	0.078%
285	20.853	20.743	20.961	VV	2243	261847	4.74%	0.118%
286	21.020	20.961	21.081	VV	12148	353573	6.39%	0.159%
287	21.104	21.081	21.145	VV	1984	64256	1.16%	0.029%
288	21.163	21.145	21.311	VV	1597	119718	2.16%	0.054%
289	21.325	21.311	21.351	VV	936	21307	0.39%	0.010%
290	21.460	21.351	21.525	VV	1048	88956	1.61%	0.040%
291	21.635	21.525	21.701	VBA	10388	328556	5.94%	0.148%

Sum of corrected areas: 222361031

Aliphatic EPH 111424.M Tue Dec 10 04:23:17 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	12/05/24	
Project:	North Point		Date Received:	12/05/24	
Client Sample ID:	EX-8-TPH-2DL		SDG No.:	P5147	
Lab Sample ID:	P5147-02DL		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	79.3	
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
FD048850.D	10	12/06/24	12/09/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	33.4		3.78	8.40	mg/kg
Aromatic C12-C16	Aromatic C12-C16	125		4.29	12.6	mg/kg
Aromatic C16-C21	Aromatic C16-C21	263		12.1	21.0	mg/kg
Aromatic C21-C36	Aromatic C21-C36	50.1		25.2	33.6	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	8.19		40 - 140	164%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	7.08		40 - 140	142%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	5.16		40 - 140	103%	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:	P5147-02DL	Acq On:	09 Dec 2024 10:50
Client Sample ID:	EX-8-TPH-2DL	Operator:	YP/AJ
Data file:	FD048850.D	Misc:	
Instrument:	FID_D	ALS Vial:	62
Dilution Factor:	10	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.086	5.802	7636736	39.771	200	ug/ml
Aromatic C12-C16	5.803	8.408	28725690	149.256	300	ug/ml
Aromatic C16-C21	8.409	12.670	58331667	313.941	500	ug/ml
Aromatic C21-C36	12.671	18.079	9370180	59.595	800	ug/ml
Aromatic EPH	4.086	18.079	104064273	562.563		ug/ml
2-Bromonaphthalene (SURR)	7.363	7.363	1441772	8.19		ug/ml
2-Flurobiphenyl (SURR)	8.214	8.214	815834	7.08		ug/ml
ortho-Terphenyl (SURR)	11.245	11.245	992493	5.16		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120924AR\
Data File : FD048850.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 10:50
Operator : YP/AJ
Sample : P5147-02DL 10X
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2DL

Manual Integrations APPROVED

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

Integration File: autoint1.e
Quant Time: Dec 09 12:48:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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	1441772	8.189 ug/ml
Spiked Amount 50.000		Recovery =	16.38%
6) S 2-Flurobiphenyl (SURR)	8.214	815834	7.084 ug/ml
Spiked Amount 50.000 Range	0 - 131	Recovery =	14.17%
11) S ortho-Terphenyl (SURR)	11.245	992493	5.160 ug/mlm
Spiked Amount 50.000		Recovery =	10.32%
Target Compounds			

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120924AR\
Data File : FD048850.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 10:50
Operator : YP/AJ
Sample : P5147-02DL 10X
Misc :
ALS Vial : 62 Sample Multiplier: 1

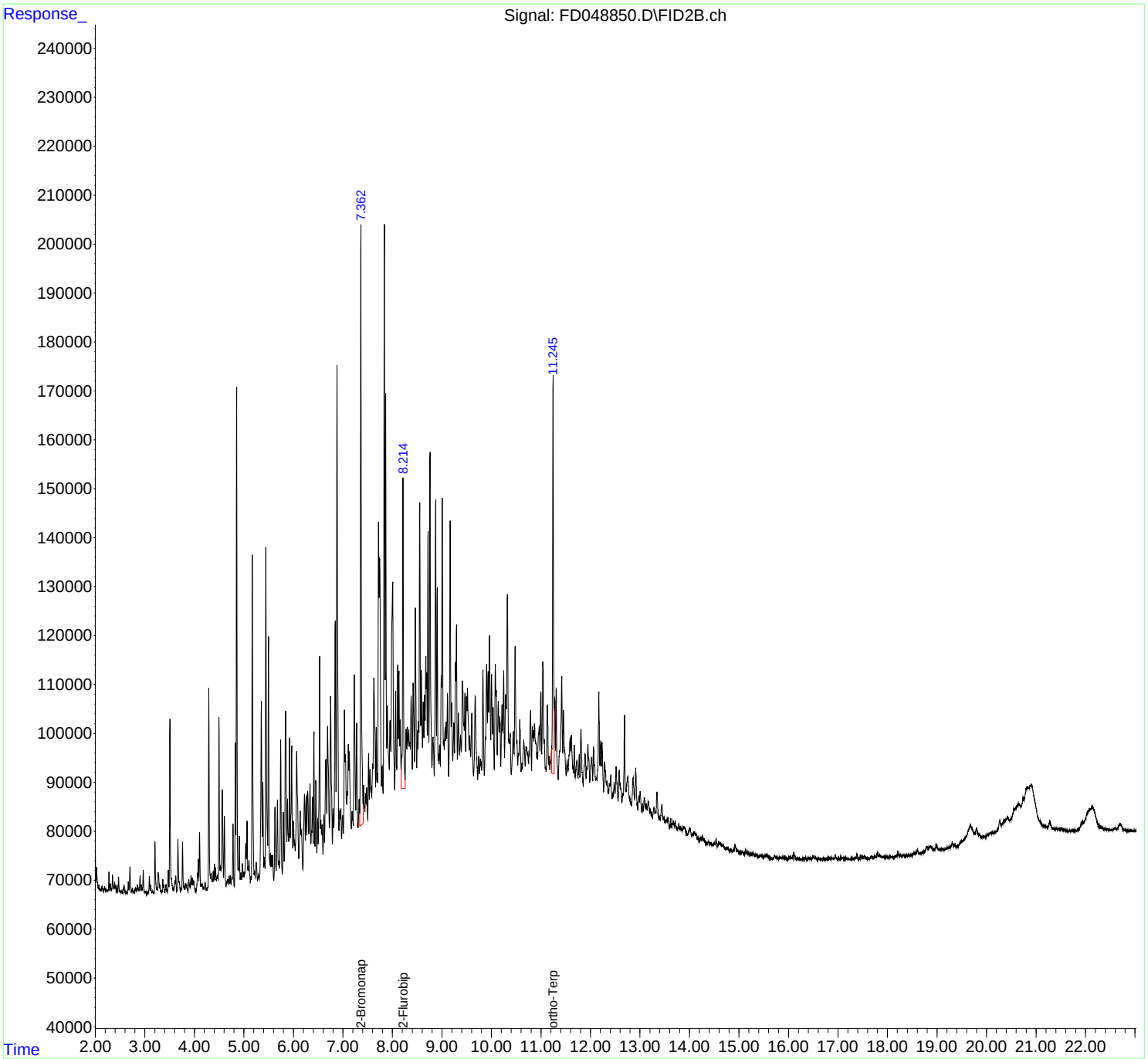
Integration File: autoint1.e
Quant Time: Dec 09 12:48:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 2024
Response via : Initial Calibration
Integrator: ChemStation

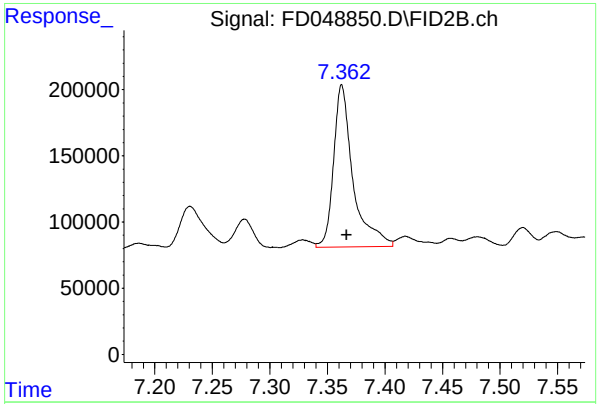
Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2DL

Manual Integrations APPROVED

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





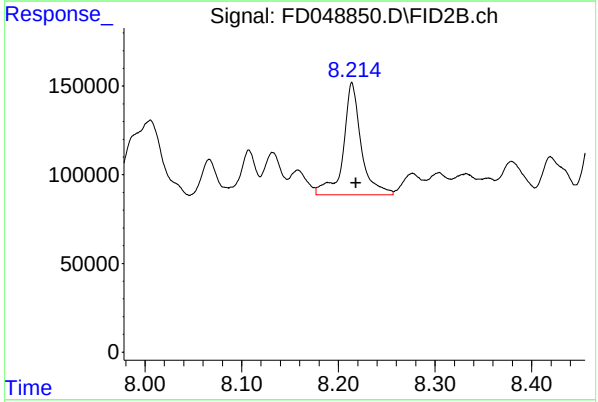
#4 2-Bromonaphthalene (SURR)

R.T.: 7.363 min
Delta R.T.: -0.004 min
Response: 1441772
Conc: 8.19 ug/ml

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2DL

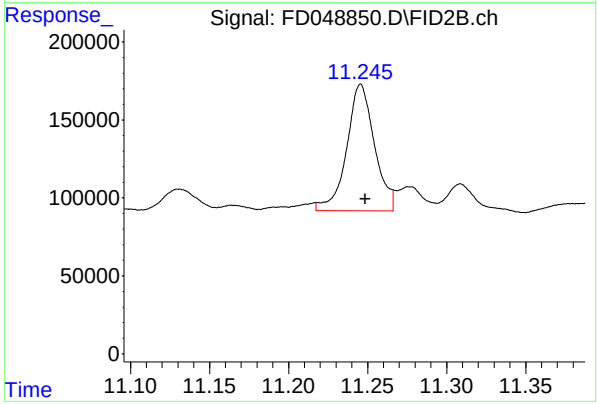
Manual Integrations
APPROVED

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



#6 2-Flurobiphenyl (SURR)

R.T.: 8.214 min
Delta R.T.: -0.004 min
Response: 815834
Conc: 7.08 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.245 min
Delta R.T.: -0.003 min
Response: 992493
Conc: 5.16 ug/ml m

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2DL

rteres

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\FD12092
Data File : FD048850.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 10:50
Sample : P5147-02DL 10X
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.163	4.156	4.175	PV	382	1020	0.05%	0.001%
2	4.183	4.175	4.199	PV	170	1084	0.05%	0.001%
3	4.218	4.199	4.255	PV	1315	15451	0.77%	0.014%
4	4.292	4.255	4.328	PV	41034	413855	20.70%	0.386%
5	4.340	4.328	4.364	VV	3289	51872	2.59%	0.048%
6	4.381	4.364	4.392	VV	3650	42164	2.11%	0.039%
7	4.404	4.392	4.416	VV	5104	48477	2.42%	0.045%
8	4.426	4.416	4.445	VV	4265	50724	2.54%	0.047%
9	4.457	4.445	4.465	VV	2481	26642	1.33%	0.025%
10	4.473	4.465	4.481	VV	2595	21356	1.07%	0.020%
11	4.498	4.481	4.517	VV	34877	332608	16.64%	0.310%
12	4.526	4.517	4.535	VV	4621	43585	2.18%	0.041%
13	4.564	4.535	4.590	VV	20049	325159	16.26%	0.303%
14	4.606	4.590	4.640	VV	14609	164676	8.24%	0.154%
15	4.670	4.640	4.684	VV	1522	28100	1.41%	0.026%
16	4.699	4.684	4.712	VV	2271	23093	1.16%	0.022%
17	4.725	4.712	4.738	VV	2302	23914	1.20%	0.022%
18	4.758	4.738	4.765	VV	2138	23301	1.17%	0.022%
19	4.781	4.765	4.805	VV	12828	120726	6.04%	0.113%
20	4.828	4.805	4.839	PV	29206	257563	12.88%	0.240%
21	4.854	4.839	4.882	VV	101805	987445	49.39%	0.921%
22	4.907	4.882	4.925	VV	10113	129390	6.47%	0.121%
23	4.940	4.925	4.953	VV	2561	32762	1.64%	0.031%
24	4.970	4.953	4.987	VV	4398	59314	2.97%	0.055%
25	4.996	4.987	5.004	VV	2652	23099	1.16%	0.022%
26	5.038	5.004	5.051	VV	8456	130935	6.55%	0.122%
27	5.064	5.051	5.087	VV	12922	148986	7.45%	0.139%
28	5.104	5.087	5.133	VV	4829	71865	3.59%	0.067%
29	5.144	5.133	5.151	VV	1491	11348	0.57%	0.011%
30	5.170	5.151	5.207	VV	67143	739540	36.99%	0.690%
31	5.215	5.207	5.228	VV	2556	24781	1.24%	0.023%
32	5.248	5.228	5.274	VV	4219	72434	3.62%	0.068%
33	5.293	5.274	5.309	VV	1655	20285	1.01%	0.019%
34	5.352	5.309	5.373	VV	36952	524314	26.22%	0.489%
35	5.384	5.373	5.402	VV	20373	209630	10.49%	0.196%
36	5.413	5.402	5.425	VV	4887	55970	2.80%	0.052%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2DL

Manual IntegrationsAPPROVED

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

rteres

37	5.444	5.425	5.481	VV	68277	853058	42.67%	0.796%
38	5.497	5.481	5.525	VV	49883	518175	25	
39	5.536	5.525	5.548	VV	5654	59592	2	
40	5.559	5.548	5.570	VV	5085	52548	2	
41	5.581	5.570	5.605	VV	4957	53806	2	
42	5.627	5.605	5.651	PV	14795	160989	8	
43	5.678	5.651	5.695	VV	15813	197741	9.89%	0.184%
44	5.703	5.695	5.713	VV	3224	28907	1.45%	0.027%
45	5.744	5.713	5.776	VV	27709	336350	16.82%	0.314%
46	5.798	5.776	5.814	PV	12030	118102	5.91%	0.110%
47	5.843	5.814	5.869	VV	31676	512540	25.64%	0.478%
48	5.881	5.869	5.907	VV	12800	162918	8.15%	0.152%
49	5.923	5.907	5.938	VV	24090	231237	11.57%	0.216%
50	5.965	5.938	5.989	VV	21464	266918	13.35%	0.249%
51	6.066	6.037	6.108	PV	21100	383375	19.18%	0.358%
52	6.138	6.108	6.157	VV	10681	176927	8.85%	0.165%
53	6.165	6.157	6.192	VV	7370	85196	4.26%	0.079%
54	6.225	6.192	6.243	PV	15270	268587	13.43%	0.251%
55	6.259	6.243	6.272	VV	14834	186295	9.32%	0.174%
56	6.288	6.272	6.313	VV	15907	297445	14.88%	0.277%
57	6.337	6.313	6.355	VV	17441	286366	14.32%	0.267%
58	6.386	6.355	6.400	VV	14673	249105	12.46%	0.232%
59	6.414	6.400	6.436	VV	27966	302531	15.13%	0.282%
60	6.455	6.436	6.473	VV	17903	222606	11.13%	0.208%
61	6.490	6.473	6.502	VV	10281	118362	5.92%	0.110%
62	6.530	6.502	6.548	VV	43449	548130	27.42%	0.511%
63	6.555	6.548	6.570	VV	9909	117220	5.86%	0.109%
64	6.581	6.570	6.599	VV	8961	114862	5.75%	0.107%
65	6.616	6.599	6.630	VV	11048	141981	7.10%	0.132%
66	6.654	6.630	6.675	VV	22283	422173	21.12%	0.394%
67	6.691	6.675	6.728	VV	28886	591729	29.60%	0.552%
68	6.754	6.728	6.789	VV	35141	658848	32.95%	0.615%
69	6.802	6.789	6.816	VV	12169	151876	7.60%	0.142%
70	6.845	6.816	6.862	VV	50638	745867	37.31%	0.696%
71	6.882	6.862	6.920	VV	102738	1473779	73.71%	1.375%
72	6.937	6.920	6.949	VV	11656	181031	9.05%	0.169%
73	6.958	6.949	6.975	VV	12124	149520	7.48%	0.139%
74	6.993	6.975	7.009	VV	10773	178578	8.93%	0.167%
75	7.032	7.009	7.045	VV	32205	429752	21.50%	0.401%
76	7.053	7.045	7.079	VV	23195	368341	18.42%	0.344%
77	7.090	7.079	7.097	VV	15657	154830	7.74%	0.144%
78	7.110	7.097	7.121	VV	25252	304602	15.24%	0.284%
79	7.130	7.121	7.171	VV	23657	466613	23.34%	0.435%
80	7.186	7.171	7.210	VV	11471	228502	11.43%	0.213%
81	7.231	7.210	7.260	VV	39378	694804	34.75%	0.648%
82	7.278	7.260	7.309	VV	29594	476716	23.84%	0.445%
83	7.329	7.309	7.341	VV	13983	221844	11.10%	0.207%
84	7.363	7.341	7.407	VV	131190	1785465	89.30%	1.665%
85	7.418	7.407	7.445	VV	16668	314632	15.74%	0.293%
86	7.457	7.445	7.467	VV	15093	177200	8.86%	0.165%
87	7.480	7.467	7.502	VV	16201	291728	14.59%	0.272%
88	7.520	7.502	7.534	VV	23258	322322	16.12%	0.301%
89	7.549	7.534	7.565	VV	20035	330567	16.53%	0.308%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2DL

Manual IntegrationsAPPROVED

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

rteres

90	7.572	7.565	7.582	VV	16030	155437	7.77%	0.145%
91	7.601	7.582	7.608	VV	20889	280590	14	
92	7.627	7.608	7.661	VV	38484	920124	46	
93	7.674	7.661	7.688	VV	28399	353045	17	
94	7.695	7.688	7.702	VV	19048	157837	7	
95	7.720	7.702	7.730	VV	70424	783081	39	
96	7.739	7.730	7.780	VV	63049	1331574	66.60%	1.242%
97	7.793	7.780	7.812	VV	20382	346188	17.32%	0.323%
98	7.837	7.812	7.852	VV	130989	1537657	76.91%	1.434%
99	7.864	7.852	7.885	VV	96615	1167201	58.38%	1.089%
100	7.898	7.885	7.937	VV	32758	793254	39.68%	0.740%
101	7.951	7.937	7.969	VV	29662	500515	25.03%	0.467%
102	8.005	7.969	8.046	VV	57977	1710995	85.58%	1.596%
103	8.066	8.046	8.086	VV	35874	597911	29.91%	0.558%
104	8.107	8.086	8.119	VV	41107	582012	29.11%	0.543%
105	8.132	8.119	8.147	VV	39748	548279	27.42%	0.511%
106	8.158	8.147	8.176	VV	29818	442160	22.12%	0.412%
107	8.190	8.176	8.194	VV	22641	234884	11.75%	0.219%
108	8.214	8.194	8.257	VV	79077	1348514	67.45%	1.258%
109	8.277	8.257	8.290	VV	27904	464428	23.23%	0.433%
110	8.304	8.290	8.316	VV	28195	420617	21.04%	0.392%
111	8.332	8.316	8.348	VV	27607	488215	24.42%	0.455%
112	8.355	8.348	8.362	VV	25181	215219	10.76%	0.201%
113	8.379	8.362	8.403	VV	34553	686012	34.31%	0.640%
114	8.420	8.403	8.445	VV	37046	730187	36.52%	0.681%
115	8.463	8.445	8.491	VV	52499	972157	48.62%	0.907%
116	8.506	8.491	8.516	VV	27413	366197	18.32%	0.342%
117	8.528	8.516	8.535	VV	29358	299432	14.98%	0.279%
118	8.553	8.535	8.573	VV	74204	1108576	55.45%	1.034%
119	8.585	8.573	8.609	VV	39595	695728	34.80%	0.649%
120	8.624	8.609	8.636	VV	33110	467799	23.40%	0.436%
121	8.651	8.636	8.662	VV	34710	490001	24.51%	0.457%
122	8.675	8.662	8.685	VV	42575	513927	25.71%	0.479%
123	8.693	8.685	8.705	VV	39237	409771	20.50%	0.382%
124	8.720	8.705	8.737	VV	68110	859513	42.99%	0.802%
125	8.760	8.737	8.799	VV	84356	1582178	79.14%	1.476%
126	8.820	8.799	8.845	VV	26055	626616	31.34%	0.585%
127	8.874	8.845	8.892	VV	74260	1172137	58.63%	1.093%
128	8.906	8.892	8.924	VV	56587	724514	36.24%	0.676%
129	8.932	8.924	8.942	VV	22556	239457	11.98%	0.223%
130	8.957	8.942	8.970	VV	24398	378779	18.95%	0.353%
131	8.988	8.970	8.993	VV	38557	426037	21.31%	0.397%
132	9.008	8.993	9.030	VV	74816	1085431	54.29%	1.012%
133	9.037	9.030	9.048	VV	25395	262559	13.13%	0.245%
134	9.065	9.048	9.076	VV	27795	432394	21.63%	0.403%
135	9.088	9.076	9.099	VV	29040	374841	18.75%	0.350%
136	9.114	9.099	9.137	VV	34819	629608	31.49%	0.587%
137	9.197	9.187	9.220	VV	32809	543378	27.18%	0.507%
138	9.243	9.220	9.256	VV	28811	543880	27.20%	0.507%
139	9.275	9.256	9.283	VV	41151	557525	27.89%	0.520%
140	9.295	9.283	9.314	VV	48886	672888	33.66%	0.628%
141	9.334	9.314	9.358	VV	30748	684629	34.24%	0.639%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2DL

rteres

Manual IntegrationsAPPROVED

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

142	9.377	9.358	9.394	VV	26259	512330	25.63%	0.478%
143	9.415	9.394	9.439	VV	37201	847961	42	
144	9.445	9.439	9.453	VV	28854	240806	12	
145	9.466	9.453	9.480	VV	34736	488859	24	
146	9.496	9.480	9.507	VV	33924	483476	24	
147	9.518	9.507	9.552	VV	35736	813729	40	
148	9.565	9.552	9.582	VV	26119	429529	21.48%	0.401%
149	9.605	9.582	9.639	VV	30619	836747	41.85%	0.781%
150	9.742	9.725	9.762	VV	21753	431216	21.57%	0.402%
151	9.776	9.762	9.784	VV	21112	264361	13.22%	0.247%
152	9.793	9.784	9.805	VV	20543	254918	12.75%	0.238%
153	9.830	9.805	9.857	VV	39345	830816	41.56%	0.775%
154	9.904	9.857	9.921	VV	40508	1098422	54.94%	1.025%
155	9.934	9.921	9.945	VV	38991	493422	24.68%	0.460%
156	9.962	9.945	9.987	VV	46281	930250	46.53%	0.868%
157	10.003	9.987	10.024	VV	38396	693342	34.68%	0.647%
158	10.036	10.024	10.059	VV	31610	554488	27.73%	0.517%
159	10.099	10.093	10.119	VV	34986	452651	22.64%	0.422%
160	10.140	10.119	10.159	VV	32816	680101	34.02%	0.634%
161	10.215	10.190	10.232	VV	32139	669615	33.49%	0.625%
162	10.249	10.232	10.267	VV	39106	639398	31.98%	0.596%
163	10.288	10.267	10.302	VV	34046	636563	31.84%	0.594%
164	10.323	10.302	10.364	VV	54579	1333586	66.70%	1.244%
165	10.379	10.364	10.402	VV	26153	525667	26.29%	0.490%
166	10.442	10.402	10.458	VV	26527	745543	37.29%	0.695%
167	10.480	10.458	10.510	VV	43926	979874	49.01%	0.914%
168	10.517	10.510	10.534	VV	24406	317018	15.86%	0.296%
169	10.547	10.534	10.555	VV	22050	273992	13.70%	0.256%
170	10.618	10.602	10.626	VV	19953	278523	13.93%	0.260%
171	10.697	10.682	10.705	VV	23332	303190	15.16%	0.283%
172	10.713	10.705	10.730	VV	23265	337849	16.90%	0.315%
173	10.736	10.730	10.751	VV	22051	266699	13.34%	0.249%
174	10.792	10.751	10.812	VV	30761	887758	44.40%	0.828%
175	10.827	10.812	10.837	VV	27261	361504	18.08%	0.337%
176	10.848	10.837	10.858	VV	26630	325751	16.29%	0.304%
177	10.871	10.858	10.917	VV	27890	871314	43.58%	0.813%
178	10.924	10.917	10.932	VV	22133	190961	9.55%	0.178%
179	10.966	10.932	10.982	VV	27374	734815	36.75%	0.685%
180	10.998	10.982	11.017	VV	34453	591771	29.60%	0.552%
181	11.039	11.017	11.062	VV	40431	837410	41.89%	0.781%
182	11.069	11.062	11.095	VV	24689	432516	21.63%	0.403%
183	11.098	11.095	11.106	VV	18788	118541	5.93%	0.111%
184	11.131	11.106	11.155	VV	31532	723893	36.21%	0.675%
185	11.164	11.155	11.181	VV	21183	319428	15.98%	0.298%
186	11.246	11.181	11.269	VV	98873	1999302	100.00%	1.865%
187	11.277	11.269	11.293	VV	32912	427874	21.40%	0.399%
188	11.309	11.293	11.349	VV	34899	793448	39.69%	0.740%
189	11.421	11.349	11.440	VV	37473	1355749	67.81%	1.265%
190	11.528	11.509	11.543	VV	20181	378082	18.91%	0.353%
191	11.588	11.543	11.602	VV	24608	765981	38.31%	0.714%
192	11.615	11.602	11.658	VV	25120	716988	35.86%	0.669%
193	11.675	11.658	11.691	VV	23275	385419	19.28%	0.360%
194	11.727	11.691	11.749	VV	20121	641223	32.07%	0.598%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2DL

Manual IntegrationsAPPROVED

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

rteres

195	11.775	11.749	11.789	VV	21293	445225	22.27%	0.415%
196	11.810	11.789	11.854	VV	26444	780387	39	
197	11.895	11.854	11.912	VV	21207	645684	32	
198	11.926	11.912	11.932	VV	18400	215082	10	
199	11.950	11.932	11.986	VV	23292	651940	32	
200	12.027	11.986	12.046	VV	20583	654096	32	
201	12.063	12.046	12.104	VV	22681	667528	33.39%	0.623%
202	12.112	12.104	12.128	VV	16307	228156	11.41%	0.213%
203	12.170	12.128	12.190	VV	33938	841123	42.07%	0.785%
204	12.235	12.222	12.267	VV	23575	516722	25.85%	0.482%
205	12.287	12.267	12.317	VV	19448	513290	25.67%	0.479%
206	12.322	12.317	12.371	VV	15508	469866	23.50%	0.438%
207	12.383	12.371	12.398	VV	15053	235318	11.77%	0.220%
208	12.412	12.398	12.439	VV	16888	354809	17.75%	0.331%
209	12.520	12.496	12.558	VV	18428	561331	28.08%	0.524%
210	12.655	12.637	12.664	VV	13144	196302	9.82%	0.183%
211	12.688	12.664	12.722	VV	29057	640437	32.03%	0.597%
212	12.749	12.722	12.788	VV	16203	576678	28.84%	0.538%
213	12.793	12.788	12.827	VV	12272	267287	13.37%	0.249%
214	12.860	12.827	12.893	VV	16126	529925	26.51%	0.494%
215	12.915	12.893	12.958	VV	18155	510142	25.52%	0.476%
216	12.975	12.958	12.988	VV	12260	202987	10.15%	0.189%
217	13.004	12.988	13.037	VV	13334	338437	16.93%	0.316%
218	13.052	13.037	13.066	VV	10822	176057	8.81%	0.164%
219	13.087	13.066	13.114	VV	11949	313991	15.71%	0.293%
220	13.125	13.114	13.144	VV	10507	177847	8.90%	0.166%
221	13.170	13.144	13.194	VV	11139	310464	15.53%	0.290%
222	13.210	13.194	13.228	VV	9480	185206	9.26%	0.173%
223	13.240	13.228	13.255	VV	9007	139567	6.98%	0.130%
224	13.283	13.255	13.309	VV	9926	293077	14.66%	0.273%
225	13.318	13.309	13.325	VV	9130	82179	4.11%	0.077%
226	13.343	13.325	13.412	VV	13074	488485	24.43%	0.456%
227	13.441	13.412	13.470	VV	10524	306969	15.35%	0.286%
228	13.483	13.470	13.506	VV	7920	156537	7.83%	0.146%
229	13.513	13.506	13.518	VV	7068	50755	2.54%	0.047%
230	13.524	13.518	13.528	VV	7083	44533	2.23%	0.042%
231	13.546	13.528	13.554	VV	7361	107618	5.38%	0.100%
232	13.571	13.554	13.594	VV	7707	163502	8.18%	0.153%
233	13.597	13.594	13.602	VV	5769	29070	1.45%	0.027%
234	13.620	13.602	13.637	VV	7555	138629	6.93%	0.129%
235	13.655	13.637	13.661	VV	6448	91165	4.56%	0.085%
236	13.668	13.661	13.670	VV	6682	33245	1.66%	0.031%
237	13.678	13.670	13.693	VV	6921	91026	4.55%	0.085%
238	13.710	13.693	13.750	VV	6949	205150	10.26%	0.191%
239	13.779	13.750	13.804	VV	6283	182290	9.12%	0.170%
240	13.810	13.804	13.818	VV	5863	46094	2.31%	0.043%
241	13.822	13.818	13.829	VV	5597	36059	1.80%	0.034%
242	13.833	13.829	13.853	VV	5475	75285	3.77%	0.070%
243	13.879	13.853	13.940	VV	5776	275774	13.79%	0.257%
244	13.948	13.940	13.959	VV	4428	46561	2.33%	0.043%
245	14.014	13.959	14.041	VV	5353	232662	11.64%	0.217%
246	14.055	14.041	14.073	VV	4228	76741	3.84%	0.072%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2DL

Manual IntegrationsAPPROVED

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

rteres

247	14.091	14.073	14.100	VV	4686	72074	3.60%	0.067%
248	14.103	14.100	14.122	VV	4302	53774	2	
249	14.129	14.122	14.136	VV	4285	34808	1	
250	14.140	14.136	14.164	VV	4120	60706	3	
251	14.175	14.164	14.202	VV	3515	71925	3	
252	14.227	14.202	14.242	VV	3321	73256	3	
253	14.259	14.242	14.283	VV	3812	79303	3.97%	0.074%
254	14.294	14.283	14.357	VV	3083	109278	5.47%	0.102%
255	14.378	14.357	14.406	VV	2566	67687	3.39%	0.063%
256	14.417	14.406	14.425	VV	2207	24691	1.23%	0.023%
257	14.433	14.425	14.461	VV	2320	42956	2.15%	0.040%
258	14.473	14.461	14.485	VV	2006	25799	1.29%	0.024%
259	14.499	14.485	14.515	VV	2251	37372	1.87%	0.035%
260	14.539	14.515	14.567	VV	3054	69708	3.49%	0.065%
261	14.592	14.567	14.603	VV	2396	41566	2.08%	0.039%
262	14.609	14.603	14.616	VV	2129	15829	0.79%	0.015%
263	14.619	14.616	14.624	VV	1985	9433	0.47%	0.009%
264	14.633	14.624	14.650	VV	1978	28439	1.42%	0.027%
265	14.666	14.650	14.695	VV	1821	42951	2.15%	0.040%
266	14.700	14.695	14.727	VV	1383	20585	1.03%	0.019%
267	14.734	14.727	14.746	VV	1160	10623	0.53%	0.010%
268	14.754	14.746	14.774	VV	1145	17427	0.87%	0.016%
269	14.780	14.774	14.829	VV	1058	22237	1.11%	0.021%
270	14.837	14.829	14.856	VV	848	9038	0.45%	0.008%
271	14.860	14.856	14.867	VV	441	2443	0.12%	0.002%
272	14.874	14.867	14.878	VV	562	2669	0.13%	0.002%
273	14.884	14.878	14.898	VV	678	5998	0.30%	0.006%
274	14.920	14.898	14.948	VV	1672	30669	1.53%	0.029%
275	14.954	14.948	14.957	VV	683	3085	0.15%	0.003%
276	14.963	14.957	14.989	VV	640	7223	0.36%	0.007%
277	15.010	15.000	15.036	BV	359	3454	0.17%	0.003%
278	15.039	15.036	15.052	VV	178	1344	0.07%	0.001%
279	15.064	15.052	15.070	PV	599	4287	0.21%	0.004%
280	15.073	15.070	15.112	VV	689	7693	0.38%	0.007%
281	15.134	15.112	15.158	PV	1145	19743	0.99%	0.018%
282	15.163	15.158	15.172	VV	654	4636	0.23%	0.004%
283	15.177	15.172	15.214	VV	666	9920	0.50%	0.009%
284	15.236	15.214	15.255	VV	704	9658	0.48%	0.009%
285	15.270	15.255	15.277	VV	680	6043	0.30%	0.006%
286	15.283	15.277	15.313	VV	570	11521	0.58%	0.011%
287	15.321	15.313	15.334	VV	405	4167	0.21%	0.004%
288	15.349	15.334	15.354	VV	561	4947	0.25%	0.005%
289	15.363	15.354	15.386	VV	676	7686	0.38%	0.007%
290	15.401	15.386	15.414	VV	384	3934	0.20%	0.004%
291	15.426	15.414	15.444	VV	513	6643	0.33%	0.006%
292	15.447	15.444	15.469	VV	474	5417	0.27%	0.005%
293	15.475	15.469	15.489	VV	546	4091	0.20%	0.004%
294	15.494	15.489	15.499	VV	259	1316	0.07%	0.001%
295	15.512	15.499	15.524	VV	567	5992	0.30%	0.006%
296	15.535	15.524	15.542	VV	571	5018	0.25%	0.005%
297	15.552	15.542	15.572	VV	720	10471	0.52%	0.010%
298	15.580	15.572	15.590	VV	642	5589	0.28%	0.005%
299	15.595	15.590	15.602	VV	619	3165	0.16%	0.003%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2DL

Manual IntegrationsAPPROVED

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

rteres

300	15.612	15.602	15.635	VV	419	4965	0.25%	0.005%
301	15.639	15.635	15.652	VV	298	1954		
302	15.658	15.652	15.680	VV	267	2566		
303	15.715	15.692	15.727	VV	726	10713		
304	15.731	15.727	15.744	VV	616	5494		
305	15.753	15.744	15.762	VV	546	4405		
306	15.772	15.762	15.793	VV	647	7494	0.37%	0.007%
307	15.798	15.793	15.805	VV	403	1990	0.10%	0.002%
308	15.828	15.805	15.845	VV	556	9689	0.48%	0.009%
309	15.850	15.845	15.865	VV	464	3555	0.18%	0.003%
310	15.879	15.865	15.890	VV	549	5895	0.29%	0.005%
311	15.920	15.896	15.940	VV	806	12550	0.63%	0.012%
312	15.944	15.940	15.969	VV	420	4147	0.21%	0.004%
313	15.983	15.977	15.993	VV	262	1596	0.08%	0.001%
314	16.008	15.993	16.019	VV	599	6211	0.31%	0.006%
315	16.032	16.019	16.053	VV	743	10705	0.54%	0.010%
316	16.067	16.053	16.085	VV	554	8629	0.43%	0.008%
317	16.107	16.085	16.163	VV	1540	31098	1.56%	0.029%
318	16.180	16.163	16.197	VV	442	6635	0.33%	0.006%
319	16.207	16.197	16.230	VV	466	6515	0.33%	0.006%
320	16.245	16.230	16.250	VV	334	2505	0.13%	0.002%
321	16.257	16.250	16.270	VV	318	2412	0.12%	0.002%
322	16.299	16.270	16.317	PV	404	6542	0.33%	0.006%
323	16.337	16.317	16.343	VV	682	7540	0.38%	0.007%
324	16.345	16.343	16.377	VV	599	7770	0.39%	0.007%
325	16.401	16.377	16.405	VV	602	5839	0.29%	0.005%
326	16.409	16.405	16.412	VV	506	1949	0.10%	0.002%
327	16.416	16.412	16.422	VV	568	2891	0.14%	0.003%
328	16.430	16.422	16.447	VV	467	5604	0.28%	0.005%
329	16.457	16.447	16.464	VV	407	3345	0.17%	0.003%
330	16.466	16.464	16.472	VV	412	1751	0.09%	0.002%
331	16.494	16.472	16.517	VV	976	17880	0.89%	0.017%
332	16.536	16.517	16.560	VV	753	13460	0.67%	0.013%
333	16.567	16.560	16.580	VV	359	3284	0.16%	0.003%
334	16.588	16.580	16.595	PV	411	1924	0.10%	0.002%
335	16.606	16.595	16.630	VV	442	5459	0.27%	0.005%
336	16.639	16.630	16.654	VV	416	3878	0.19%	0.004%
337	16.697	16.654	16.709	VV	423	8841	0.44%	0.008%
338	16.717	16.709	16.740	VV	321	4080	0.20%	0.004%
339	16.779	16.740	16.805	VV	528	12600	0.63%	0.012%
340	16.820	16.805	16.850	VV	515	10071	0.50%	0.009%
341	16.866	16.850	16.902	VV	514	11656	0.58%	0.011%
342	16.907	16.902	16.915	VV	329	1995	0.10%	0.002%
343	16.946	16.915	16.989	VV	1090	21918	1.10%	0.020%
344	17.014	16.989	17.042	VV	368	7981	0.40%	0.007%
345	17.061	17.042	17.085	VV	646	10004	0.50%	0.009%
346	17.095	17.085	17.133	VV	429	7481	0.37%	0.007%
347	17.146	17.133	17.170	VV	370	5587	0.28%	0.005%
348	17.177	17.170	17.197	VV	278	3102	0.16%	0.003%
349	17.223	17.197	17.235	VV	208	3226	0.16%	0.003%
350	17.260	17.235	17.270	PV	371	3375	0.17%	0.003%
351	17.289	17.270	17.300	VV	313	3819	0.19%	0.004%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-2DL

Manual IntegrationsAPPROVED

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

					rteres			
352	17.312	17.300	17.323	VV	255	2476	0.12%	0.002%
353	17.381	17.323	17.416	VV	1095	22277	1	
354	17.424	17.416	17.449	VV	243	3901	0	
355	17.472	17.449	17.502	VV	729	13300	0	
356	17.521	17.502	17.562	VV	481	13381	0	
357	17.569	17.562	17.597	VV	296	3932	0	
358	17.609	17.597	17.645	VV	211	3340	0.17%	0.003%
359	17.664	17.645	17.715	VV	519	13087	0.65%	0.012%
360	17.746	17.715	17.772	VV	582	11880	0.59%	0.011%
361	17.801	17.772	17.830	VV	1291	26094	1.31%	0.024%
362	17.841	17.830	17.929	VV	642	21717	1.09%	0.020%
363	17.938	17.929	17.969	VV	520	5735	0.29%	0.005%
364	17.976	17.969	18.015	VV	263	3284	0.16%	0.003%
365	18.053	18.015	18.073	PV	428	6483	0.32%	0.006%
366	18.085	18.073	18.139	VV	333	4936	0.25%	0.005%
367	18.160	18.139	18.170	PV	302	2308	0.12%	0.002%

Sum of corrected areas: 107205502

Aromatic EPH 111424.M Tue Dec 10 04:32:38 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	12/05/24	
Project:	North Point		Date Received:	12/05/24	
Client Sample ID:	EX-8-TPH-2DL2		SDG No.:	P5147	
Lab Sample ID:	P5147-02DL2		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	79.3	
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
FC067943.D	50	12/06/24	12/09/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	152		24.0	63.0	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	560		15.1	42.0	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	417		18.9	63.0	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	63.3	J	50.4	84.0	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	113	U	113	126	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	0.00		40 - 140	0%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5147-02DL2	Acq On:	09 Dec 2024 10:50
Client Sample ID:	EX-8-TPH-2DL2	Operator:	YP/AJ
Data file:	FC067943.D	Misc:	
Instrument:	FID_C	ALS Vial:	13
Dilution Factor:	50	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.152	6.430	6017876	36.298	300	ug/ml
Aliphatic C12-C16	6.431	9.821	22714175	133.311	200	ug/ml
Aliphatic C16-C21	9.822	13.180	16842214	99.293	300	ug/ml
Aliphatic C21-C28	13.181	16.834	2367979	15.056	400	ug/ml
Aliphatic C28-C40	16.835	21.670	279091	2.304	600	ug/ml
Aliphatic EPH	3.152	21.670	48221335	286.262		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	0.000	0.000	0	0		ug/ml
Aliphatic C9-C28	3.152	16.834	47942244	283.958	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067943.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 10:50
Operator : YP/AJ
Sample : P5147-02DL2 50X
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL2

Integration File: autoint1.e
Quant Time: Dec 09 12:21:45 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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

Target Compounds

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

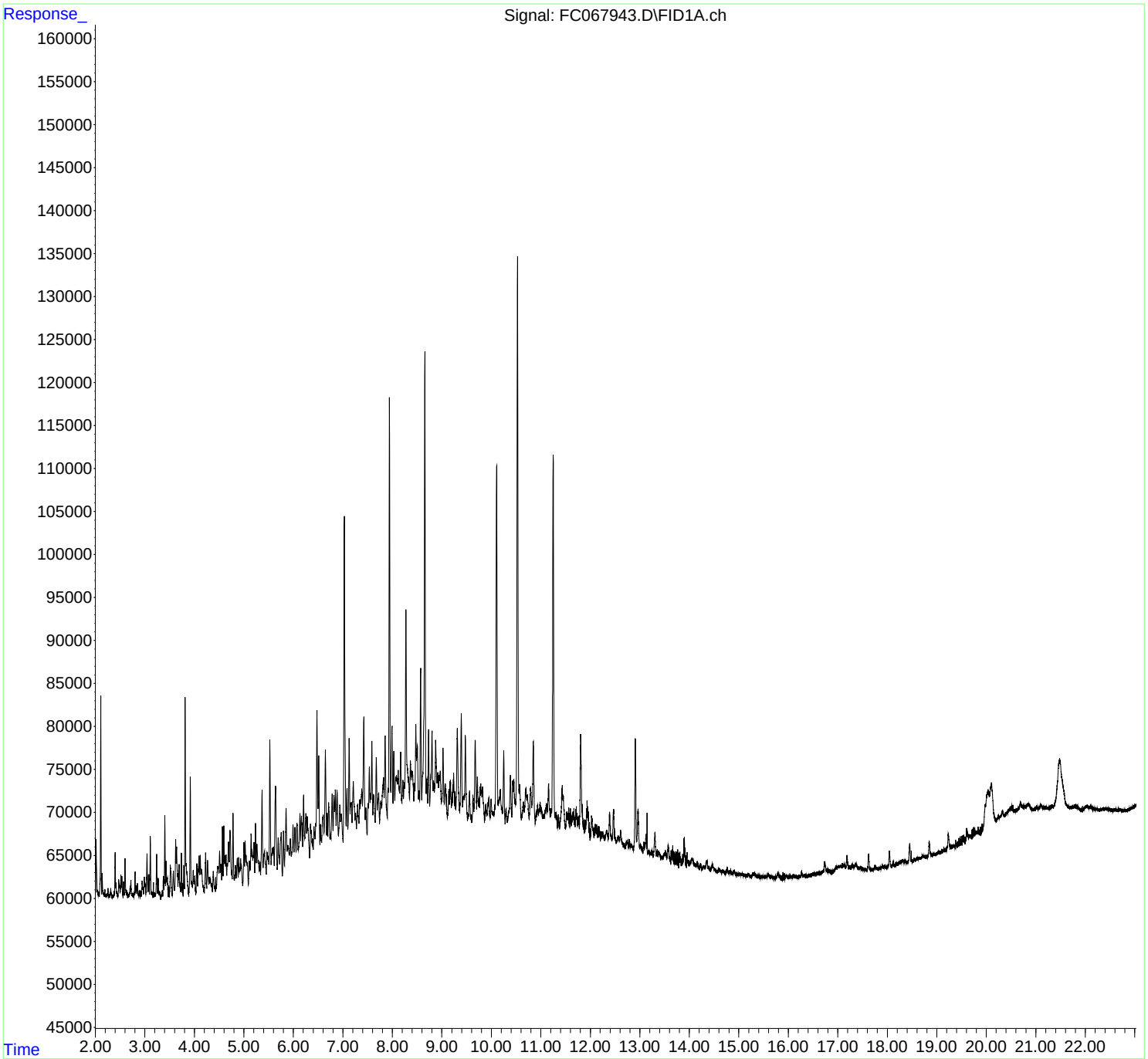
Quantitation Report (QT Reviewed)

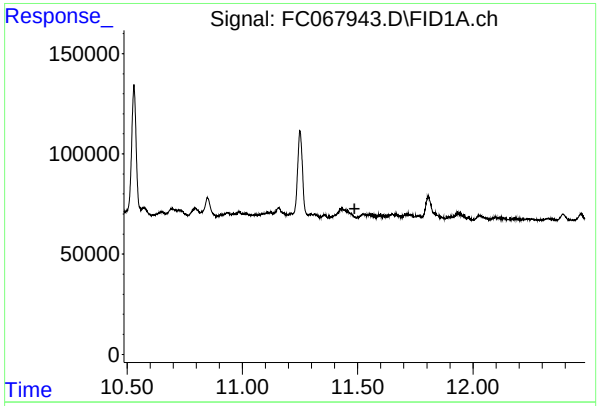
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067943.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 10:50
Operator : YP/AJ
Sample : P5147-02DL2 50X
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL2

Integration File: autoint1.e
Quant Time: Dec 09 12:21:45 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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

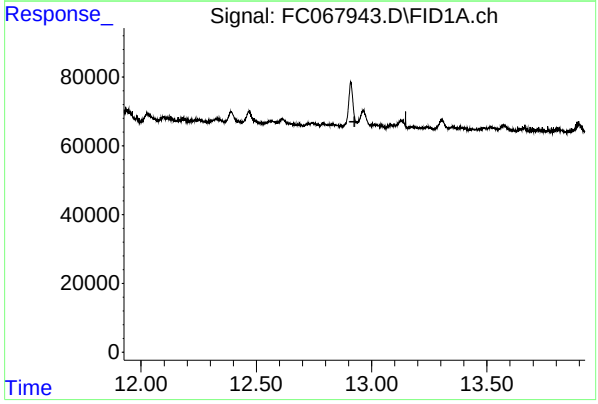




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.486 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
EX-8-TPH-2DL2



#12 1-chlorooctadecane (SURR)

R.T.: 0.000 min
Exp R.T. : 12.926 min
Response: 0
Conc: N.D.

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067943.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 10:50
Sample : P5147-02DL2 50X
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.238	3.204	3.257	BV	4662	45027	3.66%	0.093%
2	3.271	3.257	3.329	VV	2032	23742	1.93%	0.049%
3	3.351	3.329	3.361	PV	672	6633	0.54%	0.014%
4	3.376	3.361	3.387	VV	2064	19166	1.56%	0.040%
5	3.404	3.387	3.418	VV	9202	79832	6.49%	0.166%
6	3.429	3.418	3.481	VV	4023	64782	5.27%	0.134%
7	3.489	3.481	3.498	VV	664	5173	0.42%	0.011%
8	3.517	3.498	3.550	VV	3278	53907	4.38%	0.112%
9	3.576	3.550	3.597	VV	2838	37965	3.09%	0.079%
10	3.623	3.597	3.670	VV	6286	143746	11.69%	0.298%
11	3.693	3.670	3.723	VV	3080	53696	4.37%	0.111%
12	3.739	3.723	3.771	VV	4649	49175	4.00%	0.102%
13	3.788	3.771	3.798	PV	3339	28951	2.35%	0.060%
14	3.814	3.798	3.884	VV	22522	252323	20.52%	0.523%
15	3.919	3.884	3.964	VV	13498	153633	12.49%	0.319%
16	3.977	3.964	3.995	VV	2649	31311	2.55%	0.065%
17	4.009	3.995	4.028	VV	1972	22502	1.83%	0.047%
18	4.050	4.028	4.065	VV	3288	37848	3.08%	0.078%
19	4.093	4.065	4.106	VV	4202	66917	5.44%	0.139%
20	4.119	4.106	4.132	VV	4102	49505	4.03%	0.103%
21	4.140	4.132	4.199	VV	2627	52206	4.25%	0.108%
22	4.228	4.199	4.248	PV	4438	54525	4.43%	0.113%
23	4.268	4.248	4.291	VV	3551	51514	4.19%	0.107%
24	4.301	4.291	4.314	VV	1512	17499	1.42%	0.036%
25	4.324	4.314	4.341	VV	1416	17798	1.45%	0.037%
26	4.350	4.341	4.364	VV	791	7437	0.60%	0.015%
27	4.383	4.364	4.424	PV	2127	26732	2.17%	0.055%
28	4.431	4.424	4.442	VV	405	2063	0.17%	0.004%
29	4.472	4.442	4.501	PBA	1193	19581	1.59%	0.041%
30	4.535	4.501	4.551	BV	998	11545	0.94%	0.024%
31	4.568	4.551	4.581	PV	6044	49664	4.04%	0.103%
32	4.596	4.581	4.611	VV	6223	64706	5.26%	0.134%
33	4.621	4.611	4.632	VV	2825	28764	2.34%	0.060%
34	4.641	4.632	4.654	VV	2893	26232	2.13%	0.054%
35	4.691	4.654	4.704	VV	4510	78742	6.40%	0.163%
36	4.721	4.704	4.764	VV	5854	110969	9.02%	0.230%

37	4.782	4.764	4.810	VV	7917	81995	6.67%	0.170%
38	4.833	4.810	4.846	VV	1857	23229	1.89%	0.048%
39	4.868	4.846	4.884	VV	2881	41639	3.39%	0.086%
40	4.897	4.884	4.920	VV	2949	40483	3.29%	0.084%
41	4.936	4.920	4.977	VV	2883	55429	4.51%	0.115%
42	5.001	4.977	5.014	PV	4783	53100	4.32%	0.110%
43	5.027	5.014	5.090	VV	5064	123265	10.03%	0.256%
44	5.117	5.090	5.129	VV	2649	41376	3.37%	0.086%
45	5.148	5.129	5.179	VV	5817	114239	9.29%	0.237%
46	5.205	5.179	5.220	VV	4778	83861	6.82%	0.174%
47	5.236	5.220	5.251	VV	6992	81540	6.63%	0.169%
48	5.265	5.251	5.312	VV	4592	113878	9.26%	0.236%
49	5.325	5.312	5.338	VV	2601	31145	2.53%	0.065%
50	5.368	5.338	5.390	VV	10895	151436	12.32%	0.314%
51	5.417	5.390	5.452	VV	3870	102064	8.30%	0.212%
52	5.472	5.452	5.504	VV	3620	90343	7.35%	0.187%
53	5.526	5.504	5.552	VV	16626	221290	18.00%	0.459%
54	5.597	5.552	5.614	VV	4232	131426	10.69%	0.273%
55	5.641	5.614	5.676	VV	11409	234372	19.06%	0.486%
56	5.695	5.676	5.724	VV	5391	98608	8.02%	0.204%
57	5.755	5.724	5.779	VV	5996	130129	10.58%	0.270%
58	5.802	5.779	5.821	VV	6137	88121	7.17%	0.183%
59	5.853	5.821	5.873	VV	8781	165293	13.44%	0.343%
60	5.882	5.873	5.919	VV	4445	113121	9.20%	0.235%
61	5.940	5.919	5.959	VV	5137	99922	8.13%	0.207%
62	5.994	5.959	6.013	VV	6853	154069	12.53%	0.320%
63	6.033	6.013	6.054	VV	6563	130476	10.61%	0.271%
64	6.074	6.054	6.099	VV	6968	148019	12.04%	0.307%
65	6.134	6.099	6.149	VV	8154	171556	13.95%	0.356%
66	6.164	6.149	6.189	VV	7849	154316	12.55%	0.320%
67	6.207	6.189	6.230	VV	10279	179676	14.61%	0.373%
68	6.254	6.230	6.269	VV	8182	158488	12.89%	0.329%
69	6.281	6.269	6.329	VV	7778	207174	16.85%	0.430%
70	6.348	6.329	6.378	VV	6816	160106	13.02%	0.332%
71	6.388	6.378	6.401	VV	5177	67069	5.45%	0.139%
72	6.419	6.401	6.440	VV	6630	129812	10.56%	0.269%
73	6.478	6.440	6.499	VV	19977	379921	30.90%	0.788%
74	6.514	6.499	6.537	VV	14798	224690	18.27%	0.466%
75	6.549	6.537	6.571	VV	6890	114593	9.32%	0.238%
76	6.603	6.571	6.621	VV	7983	207980	16.91%	0.431%
77	6.648	6.621	6.673	VV	15357	308100	25.06%	0.639%
78	6.685	6.673	6.697	VV	8074	97491	7.93%	0.202%
79	6.714	6.697	6.742	VV	9316	200914	16.34%	0.417%
80	6.753	6.742	6.758	VV	5580	50627	4.12%	0.105%
81	6.785	6.758	6.803	VV	10392	211000	17.16%	0.438%
82	6.820	6.803	6.835	VV	10133	164591	13.39%	0.341%
83	6.849	6.835	6.865	VV	10703	166605	13.55%	0.345%
84	6.885	6.865	6.912	VV	10796	228419	18.58%	0.474%
85	6.940	6.912	6.955	VV	9075	197014	16.02%	0.409%
86	6.971	6.955	7.003	VV	8020	198488	16.14%	0.412%
87	7.030	7.003	7.067	VV	42652	702931	57.17%	1.458%
88	7.084	7.067	7.103	VV	10966	185272	15.07%	0.384%
89	7.129	7.103	7.147	VV	16887	293094	23.84%	0.608%

90	7.170	7.147	7.186	VV	9358	203436	16.55%	0.422%
91	7.213	7.186	7.246	VV	11731	338791	27.55%	0.703%
92	7.257	7.246	7.276	VV	8064	135411	11.01%	0.281%
93	7.300	7.276	7.325	VV	9181	231836	18.86%	0.481%
94	7.341	7.325	7.351	VV	9603	130995	10.65%	0.272%
95	7.383	7.351	7.397	VV	10970	276124	22.46%	0.573%
96	7.424	7.397	7.452	VV	19314	414567	33.72%	0.860%
97	7.466	7.452	7.489	VV	8676	168917	13.74%	0.350%
98	7.536	7.489	7.551	VV	13483	355909	28.95%	0.738%
99	7.562	7.551	7.569	VV	10362	107446	8.74%	0.223%
100	7.587	7.569	7.605	VV	16525	262274	21.33%	0.544%
101	7.620	7.605	7.653	VV	10195	258900	21.06%	0.537%
102	7.677	7.653	7.697	VV	14481	281827	22.92%	0.584%
103	7.724	7.697	7.743	VV	10441	250888	20.40%	0.520%
104	7.769	7.743	7.787	VV	9466	231833	18.85%	0.481%
105	7.820	7.787	7.836	VV	12154	315663	25.67%	0.655%
106	7.855	7.836	7.898	VV	16970	427450	34.76%	0.886%
107	7.943	7.898	7.969	VV	56285	912551	74.22%	1.892%
108	7.993	7.969	8.014	VV	18177	370725	30.15%	0.769%
109	8.031	8.014	8.050	VV	15265	269181	21.89%	0.558%
110	8.084	8.050	8.108	VV	12412	404324	32.88%	0.838%
111	8.119	8.108	8.148	VV	12967	285130	23.19%	0.591%
112	8.169	8.148	8.192	VV	15045	315241	25.64%	0.654%
113	8.214	8.192	8.228	VV	11827	229446	18.66%	0.476%
114	8.276	8.228	8.347	VV	31649	1066797	86.76%	2.212%
115	8.367	8.347	8.382	VV	14025	253404	20.61%	0.526%
116	8.396	8.382	8.435	VV	12889	379733	30.88%	0.787%
117	8.476	8.435	8.489	VV	18215	430525	35.01%	0.893%
118	8.504	8.489	8.529	VV	15804	330091	26.85%	0.685%
119	8.542	8.529	8.551	VV	10616	130918	10.65%	0.271%
120	8.572	8.551	8.596	VV	24771	428819	34.88%	0.889%
121	8.658	8.596	8.684	VV	61790	1229350	99.98%	2.549%
122	8.696	8.684	8.713	VV	11864	188823	15.36%	0.392%
123	8.733	8.713	8.756	VV	17650	326745	26.57%	0.678%
124	8.803	8.756	8.822	VV	17408	505479	41.11%	1.048%
125	8.833	8.822	8.848	VV	11702	175067	14.24%	0.363%
126	8.878	8.848	8.902	VV	16157	424025	34.49%	0.879%
127	8.919	8.902	8.933	VV	12732	221861	18.04%	0.460%
128	8.949	8.933	8.955	VV	12280	161173	13.11%	0.334%
129	8.967	8.955	8.993	VV	12757	252199	20.51%	0.523%
130	9.025	8.993	9.049	VV	15571	391386	31.83%	0.812%
131	9.068	9.049	9.111	VV	11236	366649	29.82%	0.760%
132	9.142	9.111	9.156	VV	10684	250369	20.36%	0.519%
133	9.175	9.156	9.208	VV	11208	308837	25.12%	0.640%
134	9.241	9.208	9.284	VV	11899	463212	37.67%	0.961%
135	9.313	9.284	9.361	VV	17462	545109	44.33%	1.130%
136	9.394	9.361	9.419	VV	19275	449954	36.59%	0.933%
137	9.477	9.419	9.520	VV	17041	647085	52.63%	1.342%
138	9.560	9.520	9.608	VV	10616	433730	35.27%	0.899%
139	9.630	9.608	9.649	VV	9613	212816	17.31%	0.441%
140	9.675	9.649	9.704	VV	16383	393208	31.98%	0.815%
141	9.720	9.704	9.760	VV	11986	334060	27.17%	0.693%

142	9.788	9.760	9.809	VV	11049	302156	24.57%	0.627%
143	9.822	9.809	9.862	VV	10942	298484	24.28%	0.619%
144	9.889	9.862	9.908	VV	8705	226534	18.42%	0.470%
145	9.949	9.908	9.974	VV	9682	345340	28.09%	0.716%
146	9.995	9.974	10.052	VV	9470	383791	31.21%	0.796%
147	10.108	10.052	10.141	VV	48301	1020759	83.02%	2.117%
148	10.182	10.141	10.224	VV	10619	466925	37.97%	0.968%
149	10.253	10.224	10.278	VV	14983	336248	27.35%	0.697%
150	10.298	10.278	10.318	VV	8375	180981	14.72%	0.375%
151	10.387	10.318	10.413	VV	12097	504371	41.02%	1.046%
152	10.435	10.413	10.444	VV	11614	186626	15.18%	0.387%
153	10.455	10.444	10.491	VV	11833	282575	22.98%	0.586%
154	10.530	10.491	10.561	VV	72179	1229570	100.00%	2.550%
155	10.572	10.561	10.621	VV	11189	326437	26.55%	0.677%
156	10.650	10.621	10.668	VV	9029	240676	19.57%	0.499%
157	10.695	10.668	10.717	VV	10680	282514	22.98%	0.586%
158	10.730	10.717	10.763	VV	9908	249296	20.28%	0.517%
159	10.796	10.763	10.817	VV	11037	306975	24.97%	0.637%
160	10.849	10.817	10.888	VV	16182	452371	36.79%	0.938%
161	10.936	10.888	10.954	VV	8741	316134	25.71%	0.656%
162	10.962	10.954	10.968	VV	8241	67819	5.52%	0.141%
163	10.986	10.968	11.004	VV	9084	183700	14.94%	0.381%
164	11.013	11.004	11.051	VV	8366	219373	17.84%	0.455%
165	11.056	11.051	11.064	VV	7683	60767	4.94%	0.126%
166	11.112	11.064	11.134	VV	8919	348309	28.33%	0.722%
167	11.157	11.134	11.197	VV	11202	342864	27.88%	0.711%
168	11.250	11.197	11.285	VV	49336	999898	81.32%	2.074%
169	11.294	11.285	11.334	VV	7737	218300	17.75%	0.453%
170	11.357	11.334	11.371	VV	7403	156023	12.69%	0.324%
171	11.433	11.371	11.494	VV	10703	607470	49.41%	1.260%
172	11.525	11.494	11.539	VV	7904	191115	15.54%	0.396%
173	11.553	11.539	11.581	VV	7756	185298	15.07%	0.384%
174	11.596	11.581	11.621	VV	7266	168532	13.71%	0.349%
175	11.649	11.621	11.694	VV	7874	319337	25.97%	0.662%
176	11.717	11.694	11.745	VV	7822	224217	18.24%	0.465%
177	11.765	11.745	11.777	VV	7141	132451	10.77%	0.275%
178	11.806	11.777	11.879	VV	16749	565222	45.97%	1.172%
179	11.936	11.879	11.997	VV	8494	474528	38.59%	0.984%
180	12.027	11.997	12.072	VV	7254	274581	22.33%	0.569%
181	12.098	12.072	12.158	VV	6371	297538	24.20%	0.617%
182	12.182	12.158	12.205	VV	5829	154594	12.57%	0.321%
183	12.239	12.205	12.289	VV	5565	264203	21.49%	0.548%
184	12.326	12.289	12.361	VV	5738	232007	18.87%	0.481%
185	12.390	12.361	12.437	VV	7823	267855	21.78%	0.555%
186	12.468	12.437	12.521	VV	7896	289577	23.55%	0.601%
187	12.566	12.521	12.588	VV	5065	192420	15.65%	0.399%
188	12.612	12.588	12.708	VV	5772	326136	26.52%	0.676%
189	12.744	12.708	12.775	VV	4665	171717	13.97%	0.356%
190	12.792	12.775	12.808	VV	4335	82243	6.69%	0.171%
191	12.833	12.808	12.871	VV	4138	147316	11.98%	0.306%
192	12.910	12.871	12.938	VV	16270	315438	25.65%	0.654%
193	12.963	12.938	13.061	VV	8143	356363	28.98%	0.739%
194	13.081	13.061	13.092	VV	4095	70297	5.72%	0.146%

195	13.128	13.092	13.158	VV	5249	170353	13.85%	0.353%
196	13.179	13.158	13.225	VV	3345	127746	10.39%	0.265%
197	13.241	13.225	13.269	VV	3319	83356	6.78%	0.173%
198	13.303	13.269	13.332	VV	5447	149150	12.13%	0.309%
199	13.353	13.332	13.369	VV	3508	69622	5.66%	0.144%
200	13.386	13.369	13.432	VV	3219	109975	8.94%	0.228%
201	13.455	13.432	13.464	VV	2727	51907	4.22%	0.108%
202	13.489	13.464	13.501	VV	3053	62370	5.07%	0.129%
203	13.517	13.501	13.548	VV	3333	85163	6.93%	0.177%
204	13.573	13.548	13.636	VV	3971	152381	12.39%	0.316%
205	13.663	13.636	13.710	VV	3324	113025	9.19%	0.234%
206	13.742	13.710	13.758	VV	2591	66653	5.42%	0.138%
207	13.765	13.758	13.783	VV	2689	34510	2.81%	0.072%
208	13.807	13.783	13.843	VV	2683	82883	6.74%	0.172%
209	13.898	13.843	13.943	VV	4284	156814	12.75%	0.325%
210	13.955	13.943	14.001	VV	2380	70901	5.77%	0.147%
211	14.056	14.001	14.097	VV	2456	120459	9.80%	0.250%
212	14.111	14.097	14.129	VV	1880	32830	2.67%	0.068%
213	14.161	14.129	14.200	VV	1959	71811	5.84%	0.149%
214	14.226	14.200	14.251	VV	1791	46812	3.81%	0.097%
215	14.293	14.251	14.311	VV	1560	50599	4.12%	0.105%
216	14.352	14.311	14.424	VV	2176	103957	8.45%	0.216%
217	14.469	14.424	14.563	VV	1703	103065	8.38%	0.214%
218	14.605	14.563	14.664	VV	1213	59688	4.85%	0.124%
219	14.671	14.664	14.728	VV	1059	33192	2.70%	0.069%
220	14.766	14.728	14.819	VV	1302	50538	4.11%	0.105%
221	14.840	14.819	14.872	VV	920	25429	2.07%	0.053%
222	14.910	14.872	14.951	VV	982	35283	2.87%	0.073%
223	14.965	14.951	14.995	VV	674	15645	1.27%	0.032%
224	15.022	14.995	15.041	VV	672	16529	1.34%	0.034%
225	15.052	15.041	15.059	VV	619	6118	0.50%	0.013%
226	15.070	15.059	15.151	VV	651	26398	2.15%	0.055%
227	15.159	15.151	15.167	VV	411	3937	0.32%	0.008%
228	15.197	15.167	15.258	VV	644	23877	1.94%	0.050%
229	15.315	15.258	15.356	VV	750	30457	2.48%	0.063%
230	15.364	15.356	15.391	VV	390	6344	0.52%	0.013%
231	15.404	15.391	15.434	VV	391	6713	0.55%	0.014%
232	15.447	15.434	15.458	VV	254	3159	0.26%	0.007%
233	15.463	15.458	15.490	VV	282	5031	0.41%	0.010%
234	15.515	15.490	15.535	VV	291	6701	0.54%	0.014%
235	15.541	15.535	15.552	VV	317	2607	0.21%	0.005%
236	15.592	15.552	15.623	VV	553	15183	1.23%	0.031%
237	15.634	15.623	15.655	VV	321	4606	0.37%	0.010%
238	15.663	15.655	15.683	VV	227	3678	0.30%	0.008%
239	15.744	15.683	15.758	VV	272	7941	0.65%	0.016%
240	15.785	15.758	15.814	VV	621	13180	1.07%	0.027%
241	15.823	15.814	15.881	VV	374	7318	0.60%	0.015%
242	15.893	15.881	15.914	PV	208	2855	0.23%	0.006%
243	15.925	15.914	15.948	VV	320	3492	0.28%	0.007%
244	15.970	15.948	15.997	VV	338	5975	0.49%	0.012%
245	16.012	15.997	16.024	VV	165	2159	0.18%	0.004%
246	16.062	16.024	16.073	VV	212	4351	0.35%	0.009%

rteres

247	16.093	16.073	16.161	VV	286	8560	0.70%	0.018%
248	16.163	16.161	16.184	VV	166	755	0.06%	0.002%
249	16.224	16.184	16.240	PV	201	2926	0.24%	0.006%
250	16.268	16.240	16.298	VV	721	9610	0.78%	0.020%
251	16.354	16.298	16.391	VV	213	5693	0.46%	0.012%
252	16.504	16.391	16.550	VV	258	13952	1.13%	0.029%
253	16.601	16.550	16.631	VV	314	11073	0.90%	0.023%
254	16.736	16.631	16.765	VV	1457	44713	3.64%	0.093%
255	16.779	16.765	16.795	VV	587	9260	0.75%	0.019%
256	16.804	16.795	16.874	VV	456	14810	1.20%	0.031%
257	16.963	16.874	16.983	VV	821	29514	2.40%	0.061%
258	17.018	16.983	17.027	VV	816	20387	1.66%	0.042%
259	17.051	17.027	17.101	VV	900	34697	2.82%	0.072%
260	17.135	17.101	17.157	VV	909	26818	2.18%	0.056%
261	17.184	17.157	17.234	VV	1933	46637	3.79%	0.097%
262	17.245	17.234	17.268	VV	610	10507	0.85%	0.022%
263	17.292	17.268	17.314	VV	773	18787	1.53%	0.039%
264	17.322	17.314	17.331	VV	654	6327	0.51%	0.013%
265	17.363	17.331	17.426	VV	811	33678	2.74%	0.070%
266	17.461	17.426	17.494	VV	484	15469	1.26%	0.032%
267	17.503	17.494	17.538	VV	279	5351	0.44%	0.011%
268	17.621	17.538	17.674	VV	1686	30919	2.51%	0.064%

Sum of corrected areas: 48221338

Aliphatic EPH 111424.M Tue Dec 10 03:56:24 2024

CALIBRATION SUMMARY

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

Inital Calibration Report for SequenceID : FC111424AL

AreaCount

Parameter Range	FC067748.D	FC067749.D	FC067750.D	FC067751.D	FC067752.D	
Aliphatic C9-C12	46442029.000	24666595.000	9992394.000	5182647.000	2556169.000	
Aliphatic C12-C16	31783530.000	16951541.000	6841286.000	3561240.000	1743949.000	
Aliphatic C16-C21	45893154.000	24733385.000	10219387.000	5444223.000	2676662.000	
Aliphatic C21-C28	55776518.000	29828483.000	12486021.000	6692087.000	3488783.000	
Aliphatic C28-C40	63293952.000	33876340.000	14624061.000	7555903.000	4180402.000	
Aliphatic EPH	243189183.000	130056344.000	54163149.000	28436100.000	14645965.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	165791.359333	4.188				
Aliphatic C12-C16	170384.422	4.229				
Aliphatic C16-C21	169621.5526664	6.711				
Aliphatic C21-C28	157280.0595	8.883				
Aliphatic C28-C40	121111.3356664	10.666				
Aliphatic EPH	150155.3239994	7.279				

Concentration

Parameter Range	FC067748.D	FC067749.D	FC067750.D	FC067751.D	FC067752.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	FC067748.D	FC067749.D	FC067750.D	FC067751.D	FC067752.D	
Aliphatic C9-C12	154806.763333	164443.966666	166539.900000	172754.900000	170411.266666	
Aliphatic C12-C16	158917.650000	169515.410000	171032.150000	178062.000000	174394.900000	
Aliphatic C16-C21	152977.180000	164889.233333	170323.116666	181474.100000	178444.133333	

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

Inital Calibration Report for SequenceID : FC111424AL

Aliphatic C21-C28	139441.295000	149142.415000	156075.262500	167302.175000	174439.150000	
Aliphatic C28-C40	105489.920000	112921.133333	121867.175000	125931.716666	139346.733333	
Aliphatic EPH	135105.101666	144507.048888	150453.191666	157978.333333	162732.944444	

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067748.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 10:39
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Nov 14 12:31:16 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:28:54 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)	11.500	17738644	95.322 ug/ml
Spiked Amount	50.000		Recovery =	190.64%
12) S	1-chlorooctadecane (S...	12.935	13130093	94.678 ug/ml
Spiked Amount	50.000		Recovery =	189.36%
	Target Compounds			
1) T	n-Nonane (C9)	3.276	15187907	96.260 ug/ml
2) T	n-Decane (C10)	4.339	15507468	96.388 ug/ml
3) T	A~Naphthalene (C11.7)	5.917	17205086	96.635 ug/ml
4) T	n-Dodecane (C12)	6.354	15746654	96.395 ug/ml
5) T	A~2-methylnaphthalene...	6.973	16843025	97.053 ug/ml
6) T	n-Tetradecane (C14)	8.147	15675095	96.512 ug/ml
7) T	n-Hexadecane (C16)	9.746	16108435	96.150 ug/ml
8) T	n-Octadecane (C18)	11.187	16039699	95.046 ug/ml
10) T	n-Eicosane (C20)	12.493	15119356	94.475 ug/ml
11) T	n-Heneicosane (C21)	13.103	14734099	94.353 ug/ml
13) T	n-Docosane (C22)	13.688	14509212	94.210 ug/ml
14) T	n-Tetracosane (C24)	14.790	14199393	94.386 ug/ml
15) T	n-Hexacosane (C26)	15.809	13771253	94.721 ug/ml
16) T	n-Octacosane (C28)	16.757	13296660	94.172 ug/ml
17) T	n-Tricontane (C30)	17.643	13215277	93.043 ug/ml
18) T	n-Dotriacontane (C32)	18.473	12505064	92.088 ug/ml
19) T	n-Tetratriacontane (C34)	19.253	10875356	92.712 ug/ml
20) T	n-Hexatriacontane (C36)	19.992	9396830	94.927 ug/ml
21) T	n-Octatriacontane (C38)	20.714	8796691	94.705 ug/ml
22) T	n-Tetracontane (C40)	21.598	8504734	89.462 ug/ml

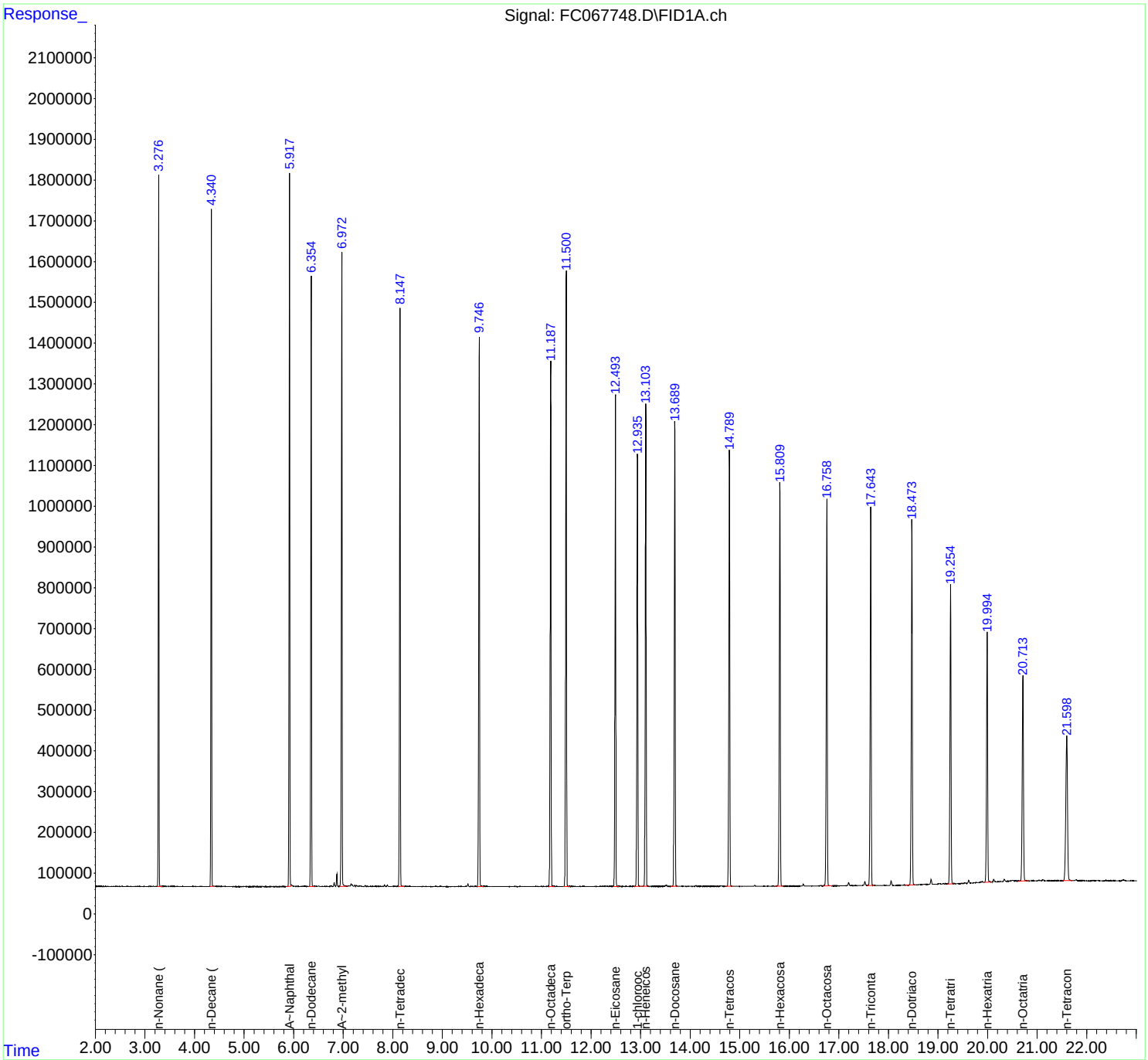
(f)=RT Delta > 1/2 Window (m)=manual int.

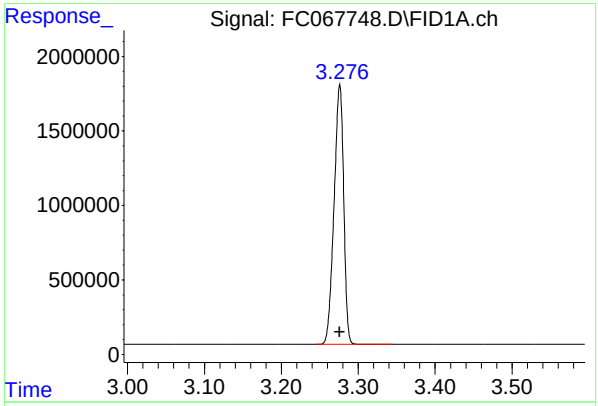
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067748.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 10:39
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Nov 14 12:31:16 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:28:54 2024
Response via : Initial Calibration
Integrator: ChemStation

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

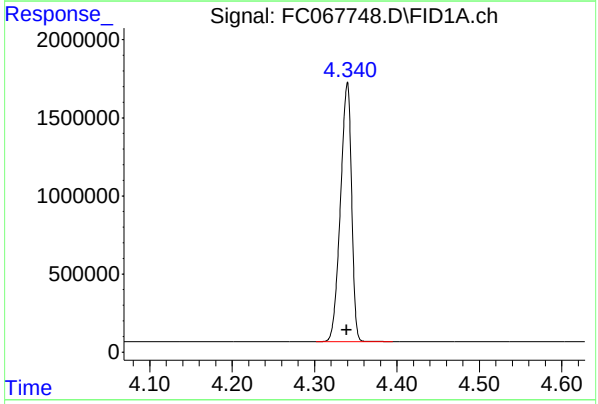




#1 n-Nonane (C9)

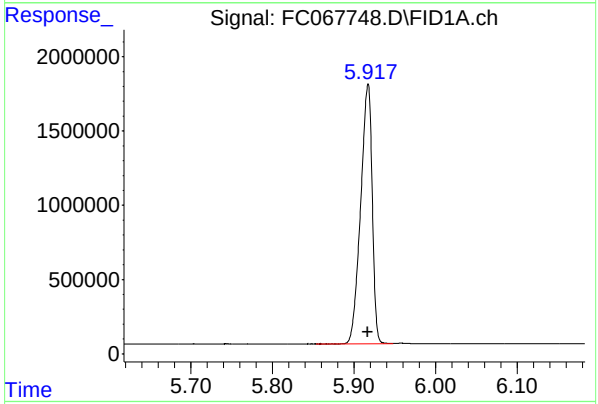
R.T.: 3.276 min
Delta R.T.: 0.000 min
Response: 15187907
Conc: 96.26 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



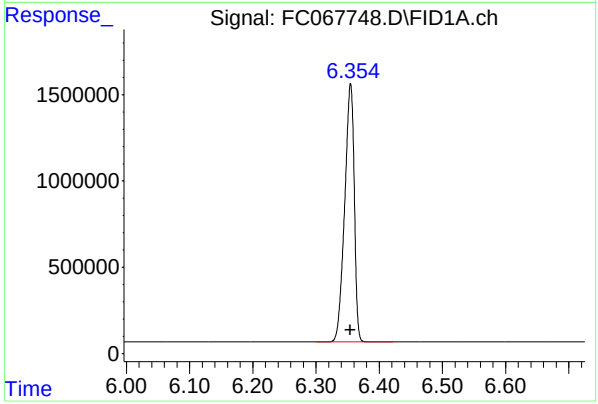
#2 n-Decane (C10)

R.T.: 4.339 min
Delta R.T.: 0.000 min
Response: 15507468
Conc: 96.39 ug/ml



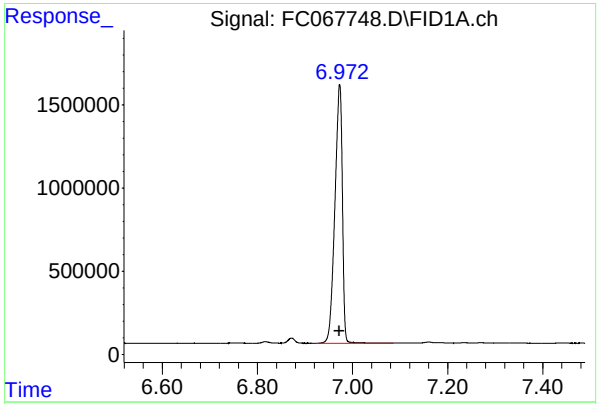
#3 A~Naphthalene (C11.7)

R.T.: 5.917 min
Delta R.T.: 0.000 min
Response: 17205086
Conc: 96.63 ug/ml



#4 n-Dodecane (C12)

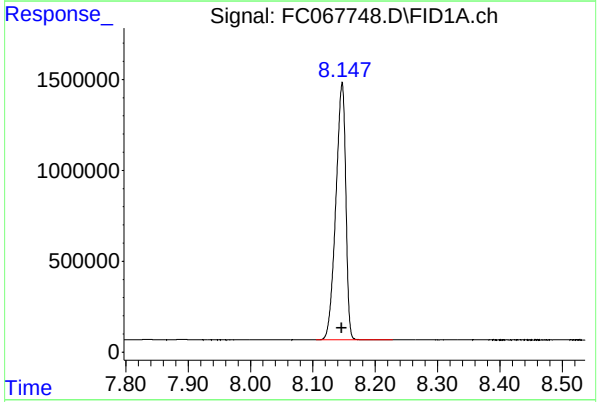
R.T.: 6.354 min
Delta R.T.: 0.000 min
Response: 15746654
Conc: 96.40 ug/ml



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

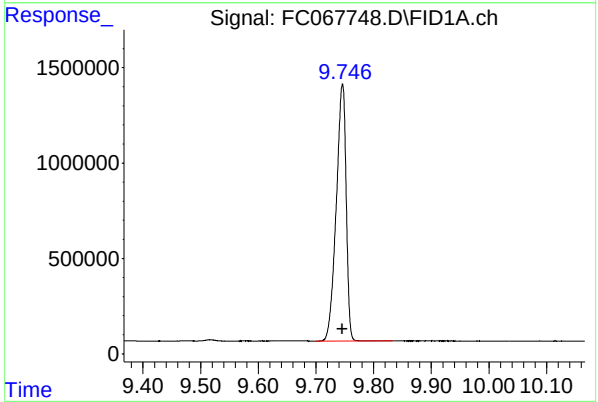
R.T.: 6.973 min
Delta R.T.: 0.000 min
Response: 16843025
Conc: 97.05 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



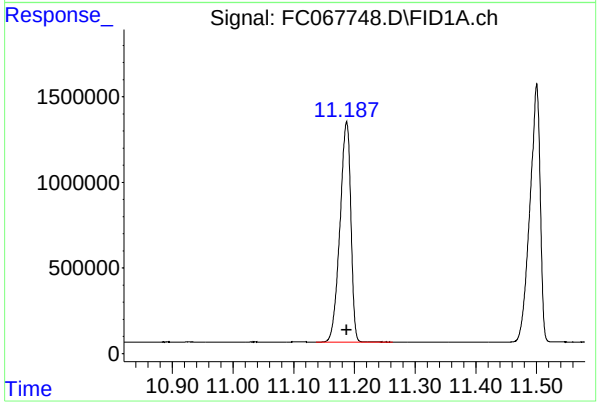
#6 n-Tetradecane (C14)

R.T.: 8.147 min
Delta R.T.: 0.000 min
Response: 15675095
Conc: 96.51 ug/ml



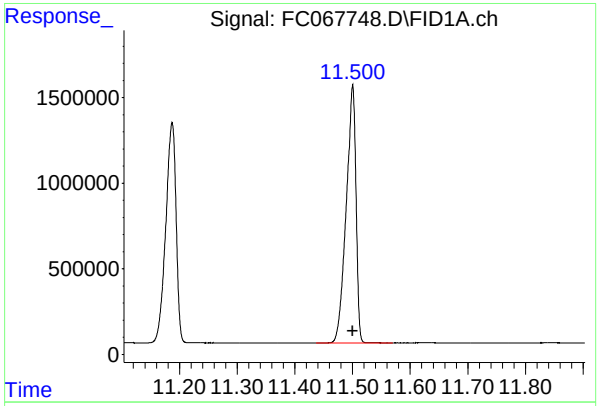
#7 n-Hexadecane (C16)

R.T.: 9.746 min
Delta R.T.: 0.000 min
Response: 16108435
Conc: 96.15 ug/ml



#8 n-Octadecane (C18)

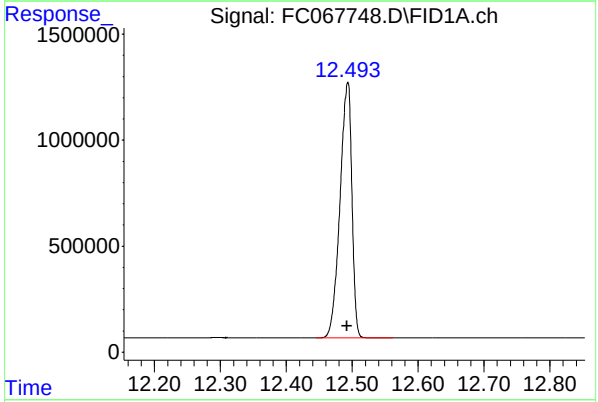
R.T.: 11.187 min
Delta R.T.: 0.000 min
Response: 16039699
Conc: 95.05 ug/ml



#9 ortho-Terphenyl (SURR)

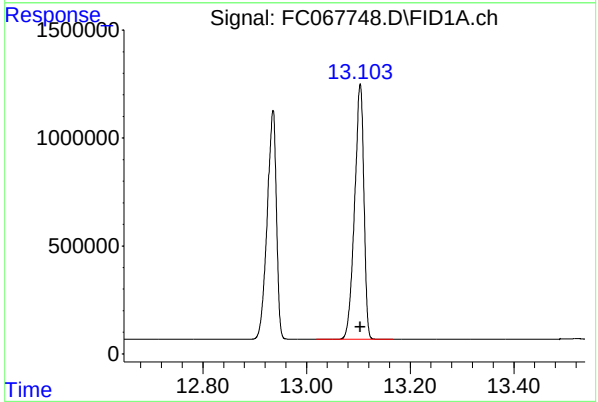
R.T.: 11.500 min
Delta R.T.: 0.000 min
Response: 17738644
Conc: 95.32 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



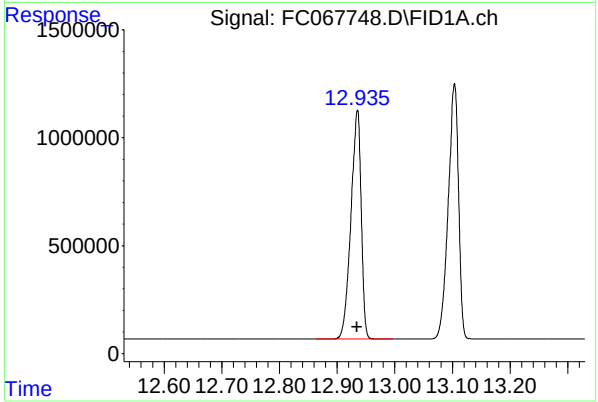
#10 n-Eicosane (C20)

R.T.: 12.493 min
Delta R.T.: 0.000 min
Response: 15119356
Conc: 94.48 ug/ml



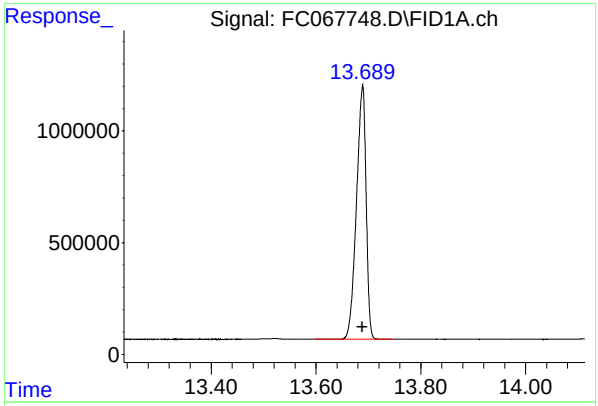
#11 n-Heneicosane (C21)

R.T.: 13.103 min
Delta R.T.: 0.000 min
Response: 14734099
Conc: 94.35 ug/ml



#12 1-chlorooctadecane (SURR)

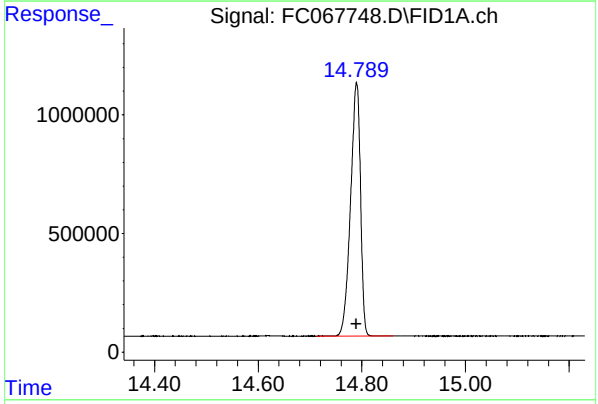
R.T.: 12.935 min
Delta R.T.: 0.000 min
Response: 13130093
Conc: 94.68 ug/ml



#13 n-Docosane (C22)

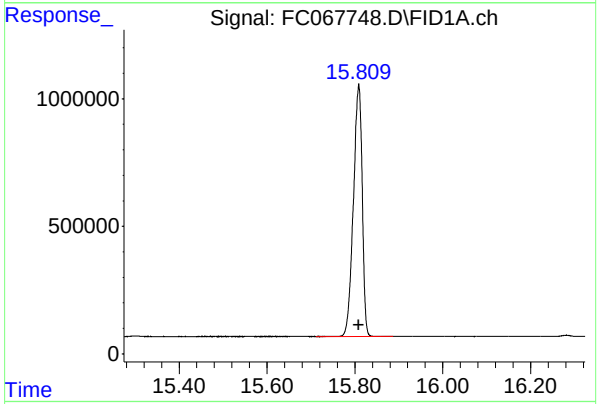
R.T.: 13.688 min
Delta R.T.: 0.000 min
Response: 14509212
Conc: 94.21 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



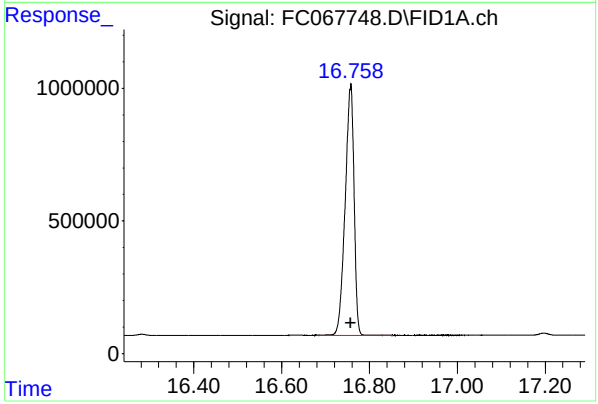
#14 n-Tetracosane (C24)

R.T.: 14.790 min
Delta R.T.: 0.000 min
Response: 14199393
Conc: 94.39 ug/ml



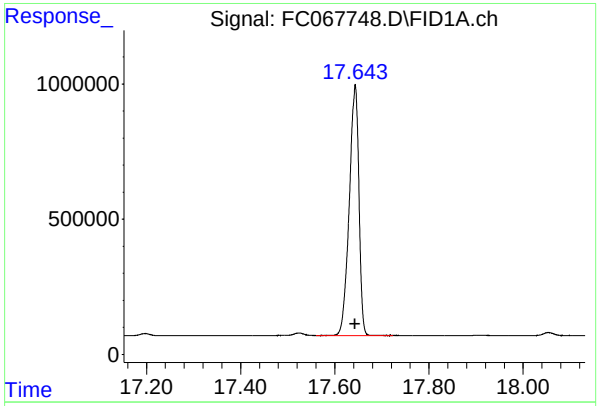
#15 n-Hexacosane (C26)

R.T.: 15.809 min
Delta R.T.: 0.000 min
Response: 13771253
Conc: 94.72 ug/ml



#16 n-Octacosane (C28)

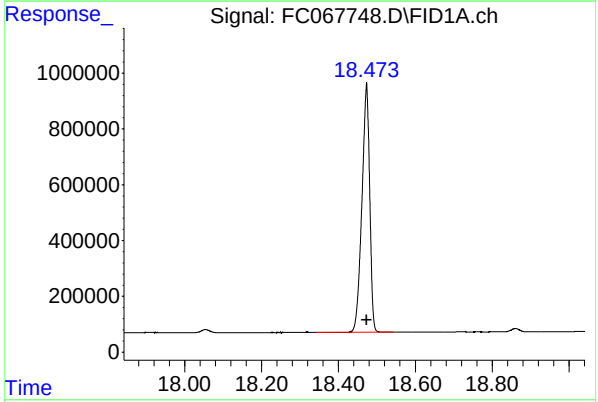
R.T.: 16.757 min
Delta R.T.: 0.000 min
Response: 13296660
Conc: 94.17 ug/ml



#17 n-Tricontane (C30)

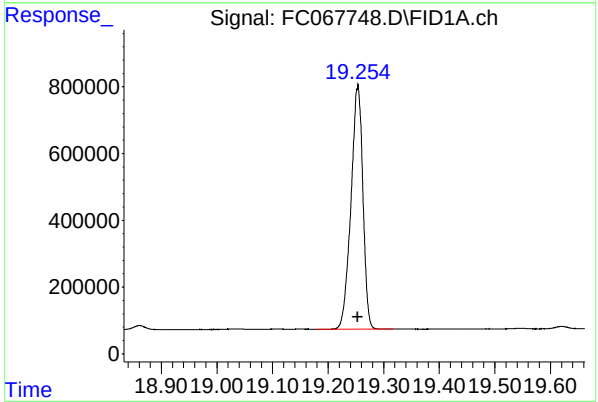
R.T.: 17.643 min
Delta R.T.: 0.000 min
Response: 13215277
Conc: 93.04 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



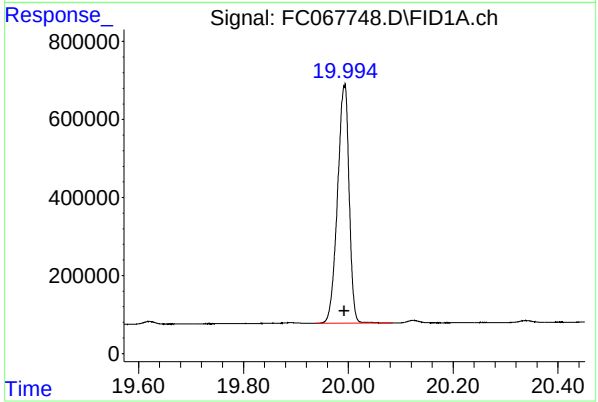
#18 n-Dotriacontane (C32)

R.T.: 18.473 min
Delta R.T.: 0.000 min
Response: 12505064
Conc: 92.09 ug/ml



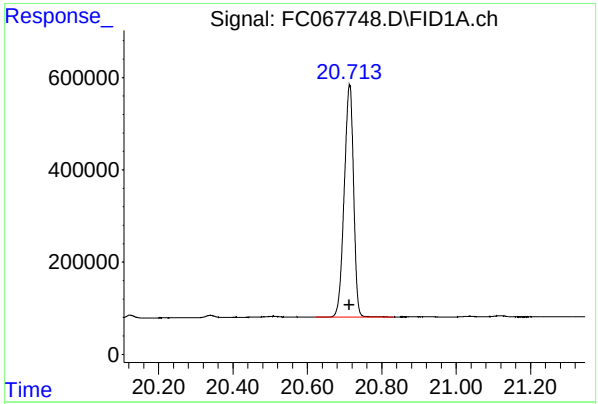
#19 n-Tetratriacontane (C34)

R.T.: 19.253 min
Delta R.T.: 0.000 min
Response: 10875356
Conc: 92.71 ug/ml



#20 n-Hexatriacontane (C36)

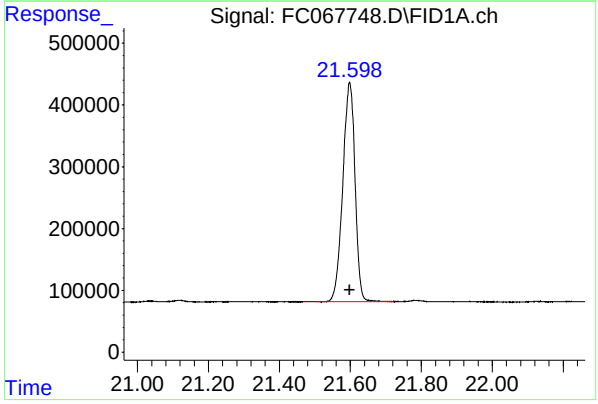
R.T.: 19.992 min
Delta R.T.: 0.000 min
Response: 9396830
Conc: 94.93 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.714 min
Delta R.T.: 0.000 min
Response: 8796691
Conc: 94.71 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 21.598 min
Delta R.T.: 0.000 min
Response: 8504734
Conc: 89.46 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067748.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 10:39
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.276	3.245	3.345	BB	1734686	15187907	85.62%	4.929%
2	4.339	4.302	4.395	BB	1671634	15507468	87.42%	5.033%
3	5.917	5.853	5.948	BV	1741603	17205086	96.99%	5.584%
4	6.354	6.300	6.422	BB	1504993	15746654	88.77%	5.111%
5	6.973	6.923	7.085	BV	1555512	16843025	94.95%	5.467%
6	8.147	8.105	8.228	BB	1414819	15675095	88.37%	5.088%
7	9.746	9.700	9.833	BB	1343957	16108435	90.81%	5.228%
8	11.187	11.137	11.263	BB	1287050	16039699	90.42%	5.206%
9	11.500	11.437	11.570	BB	1506943	17738644	100.00%	5.757%
10	12.493	12.445	12.562	BB	1210292	15119356	85.23%	4.907%
11	12.935	12.863	12.997	BB	1061835	13130093	74.02%	4.262%
12	13.103	13.018	13.167	BB	1184295	14734099	83.06%	4.782%
13	13.688	13.600	13.747	BB	1129888	14509212	81.79%	4.709%
14	14.790	14.712	14.860	BB	1068773	14199393	80.05%	4.609%
15	15.809	15.712	15.887	BB	986127	13771253	77.63%	4.470%
16	16.757	16.678	16.853	BB	935979	13296660	74.96%	4.316%
17	17.643	17.560	17.723	VB	932069	13215277	74.50%	4.289%
18	18.473	18.342	18.542	BB	896427	12505064	70.50%	4.059%
19	19.253	19.178	19.317	BB	726903	10875356	61.31%	3.530%
20	19.992	19.938	20.085	BV	609569	9396830	52.97%	3.050%
21	20.714	20.623	20.830	BB	503719	8796691	49.59%	2.855%
22	21.598	21.503	21.720	BB	355009	8504734	47.94%	2.760%
			Sum of corrected areas:			308106031		

Aliphatic EPH 111424.M Fri Nov 15 03:28:31 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067749.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 11:15
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Nov 14 12:33:01 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:28:54 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)	11.494	9494610	50.676 ug/ml
Spiked Amount	50.000		Recovery =	101.35%
12) S	1-chlorooctadecane (S...	12.930	7061712	50.610 ug/ml
Spiked Amount	50.000		Recovery =	101.22%
	Target Compounds			
1) T	n-Nonane (C9)	3.274	8066160	50.743 ug/ml
2) T	n-Decane (C10)	4.337	8240656	50.807 ug/ml
3) T	A~Naphthalene (C11.7)	5.913	9139963	50.883 ug/ml
4) T	n-Dodecane (C12)	6.351	8359779	50.778 ug/ml
5) T	A~2-methylnaphthalene...	6.968	8894913	50.829 ug/ml
6) T	n-Tetradecane (C14)	8.143	8337977	50.884 ug/ml
7) T	n-Hexadecane (C16)	9.741	8613564	50.934 ug/ml
8) T	n-Octadecane (C18)	11.182	8636330	50.778 ug/ml
10) T	n-Eicosane (C20)	12.488	8156976	50.643 ug/ml
11) T	n-Heneicosane (C21)	13.099	7940079	50.561 ug/ml
13) T	n-Docosane (C22)	13.684	7804830	50.450 ug/ml
14) T	n-Tetracosane (C24)	14.786	7604012	50.362 ug/ml
15) T	n-Hexacosane (C26)	15.804	7328788	50.272 ug/ml
16) T	n-Octacosane (C28)	16.752	7090853	50.146 ug/ml
17) T	n-Tricontane (C30)	17.638	7057449	49.792 ug/ml
18) T	n-Dotriacontane (C32)	18.468	6727381	49.693 ug/ml
19) T	n-Tetratriacontane (C34)	19.251	5796180	49.607 ug/ml
20) T	n-Hexatriacontane (C36)	19.987	5004110	50.366 ug/ml
21) T	n-Octatriacontane (C38)	20.710	4618407	49.814 ug/ml
22) T	n-Tetracontane (C40)	21.592	4672813	49.433 ug/ml

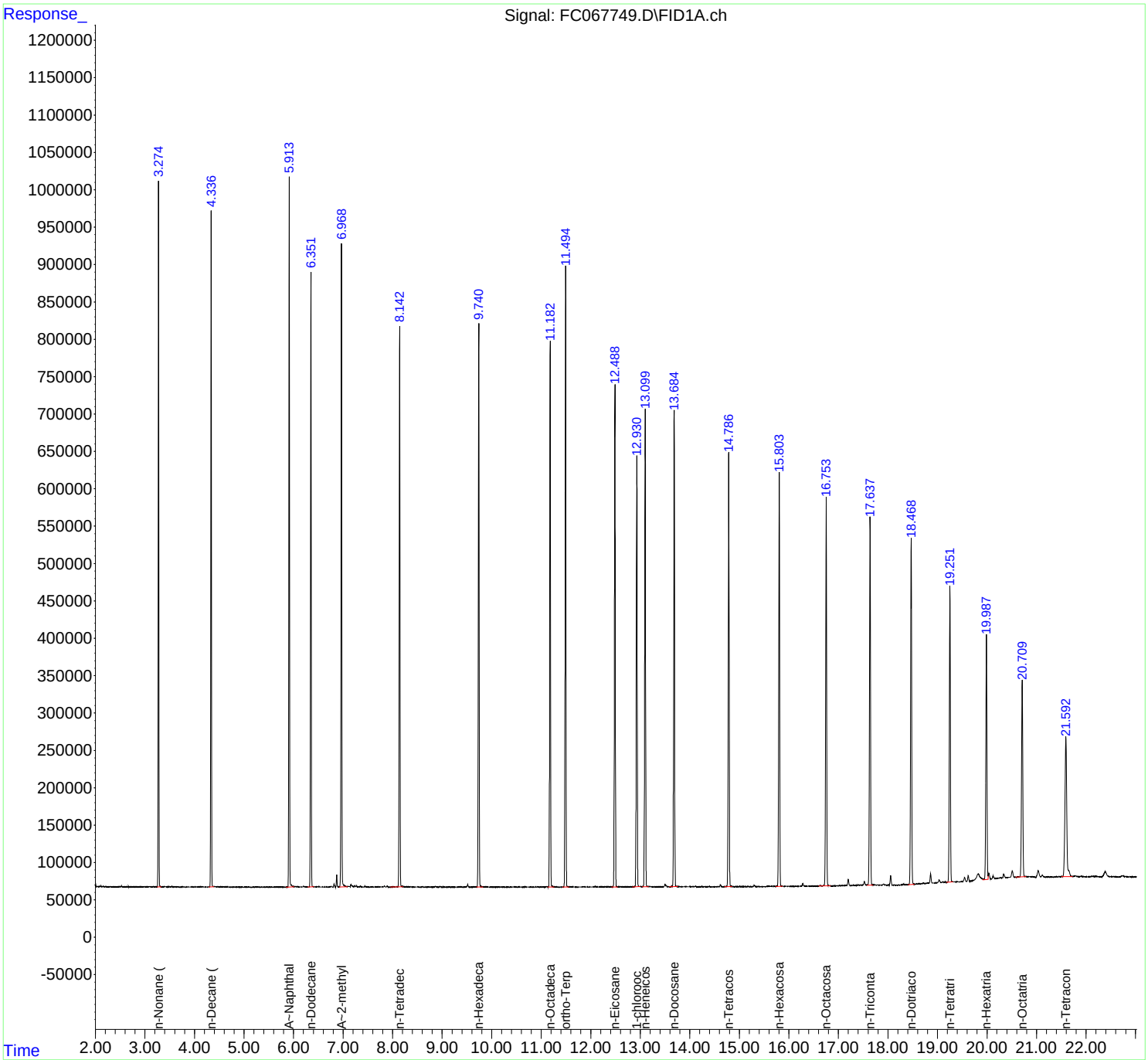
(f)=RT Delta > 1/2 Window (m)=manual int.

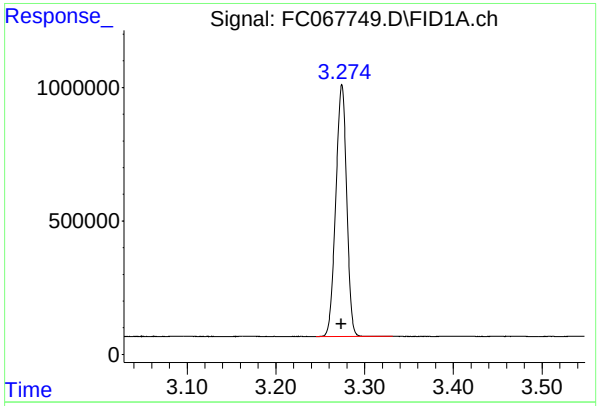
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067749.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 11:15
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Nov 14 12:33:01 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:28:54 2024
Response via : Initial Calibration
Integrator: ChemStation

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

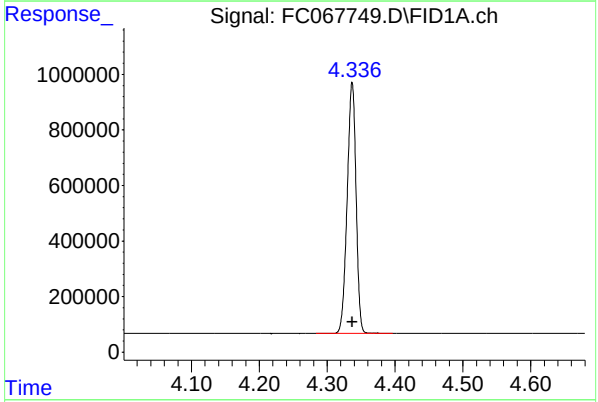




#1 n-Nonane (C9)

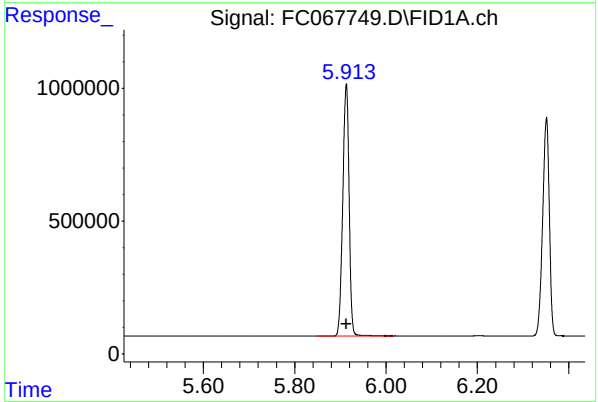
R.T.: 3.274 min
Delta R.T.: 0.000 min
Response: 8066160
Conc: 50.74 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



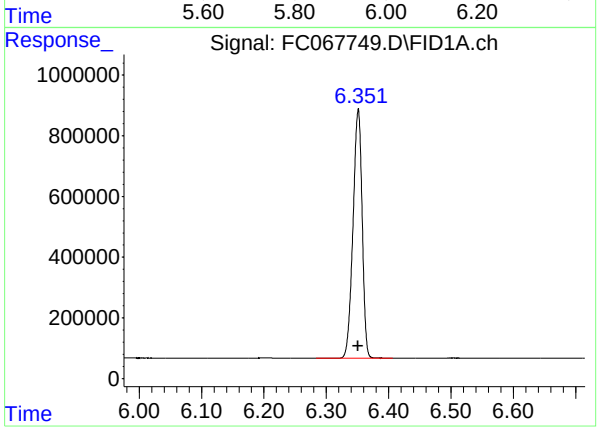
#2 n-Decane (C10)

R.T.: 4.337 min
Delta R.T.: 0.000 min
Response: 8240656
Conc: 50.81 ug/ml



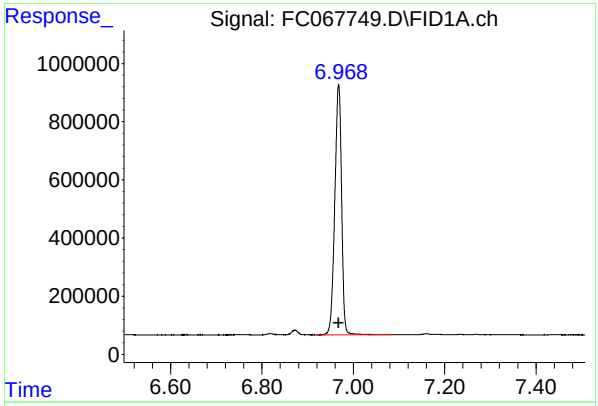
#3 A~Naphthalene (C11.7)

R.T.: 5.913 min
Delta R.T.: 0.000 min
Response: 9139963
Conc: 50.88 ug/ml



#4 n-Dodecane (C12)

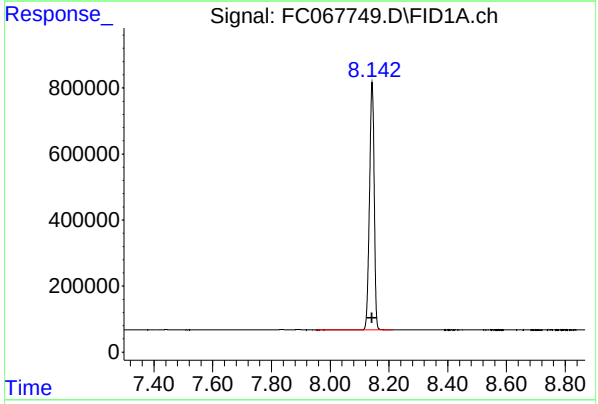
R.T.: 6.351 min
Delta R.T.: 0.000 min
Response: 8359779
Conc: 50.78 ug/ml



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

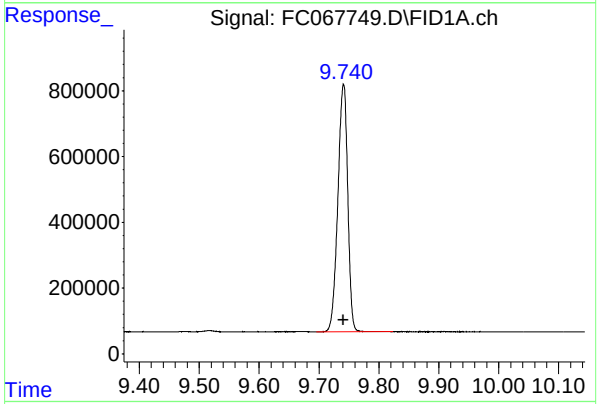
R.T.: 6.968 min
Delta R.T.: 0.000 min
Response: 8894913
Conc: 50.83 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



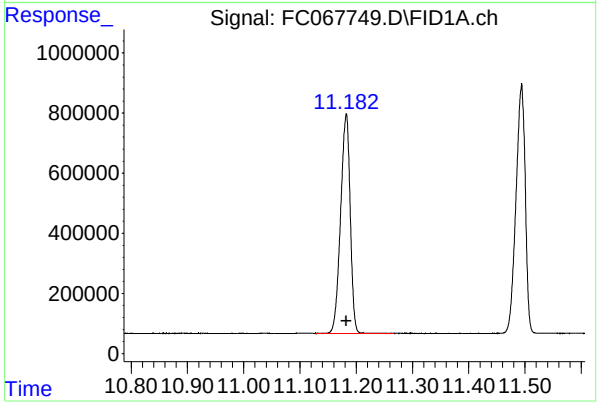
#6 n-Tetradecane (C14)

R.T.: 8.143 min
Delta R.T.: 0.000 min
Response: 8337977
Conc: 50.88 ug/ml



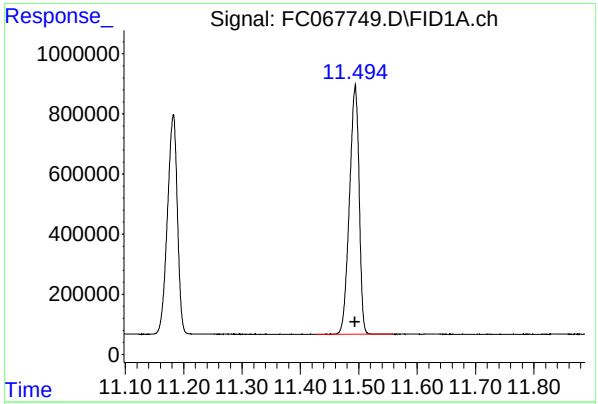
#7 n-Hexadecane (C16)

R.T.: 9.741 min
Delta R.T.: 0.000 min
Response: 8613564
Conc: 50.93 ug/ml



#8 n-Octadecane (C18)

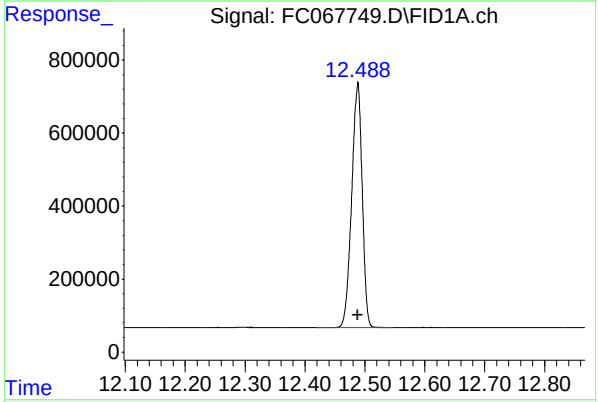
R.T.: 11.182 min
Delta R.T.: 0.000 min
Response: 8636330
Conc: 50.78 ug/ml



#9 ortho-Terphenyl (SURR)

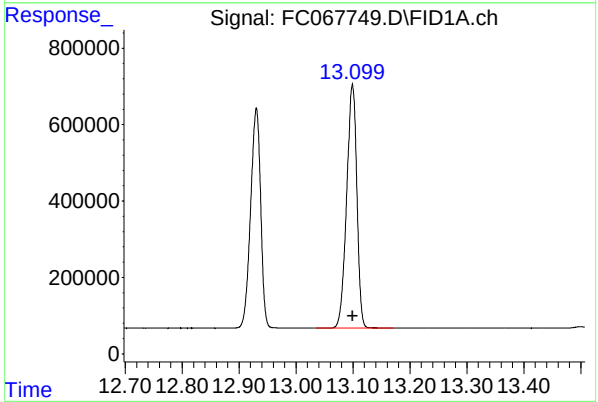
R.T.: 11.494 min
Delta R.T.: 0.000 min
Response: 9494610
Conc: 50.68 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



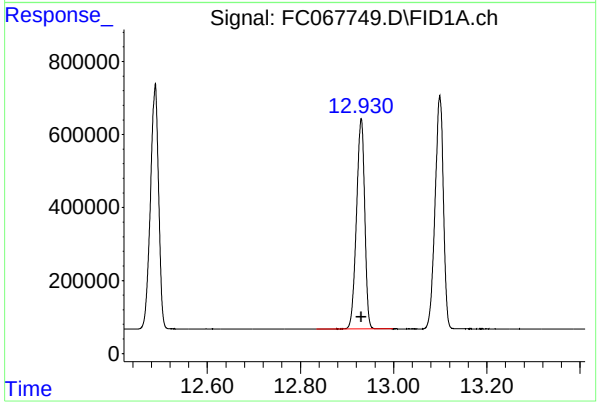
#10 n-Eicosane (C20)

R.T.: 12.488 min
Delta R.T.: 0.000 min
Response: 8156976
Conc: 50.64 ug/ml



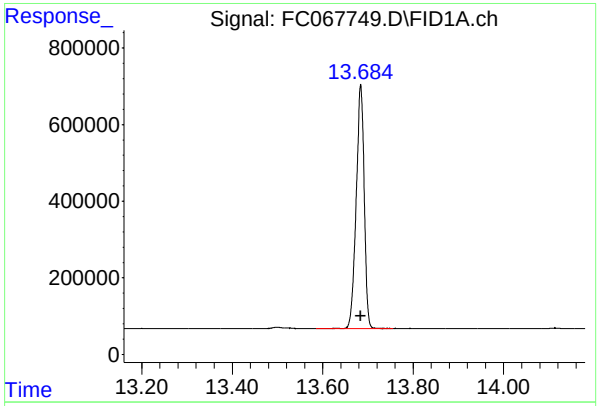
#11 n-Heneicosane (C21)

R.T.: 13.099 min
Delta R.T.: 0.000 min
Response: 7940079
Conc: 50.56 ug/ml



#12 1-chlorooctadecane (SURR)

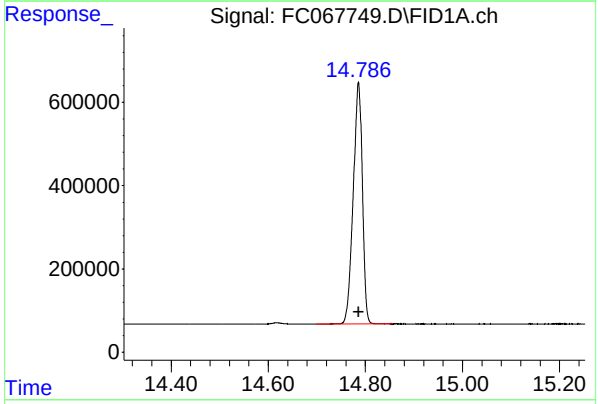
R.T.: 12.930 min
Delta R.T.: 0.000 min
Response: 7061712
Conc: 50.61 ug/ml



#13 n-Docosane (C22)

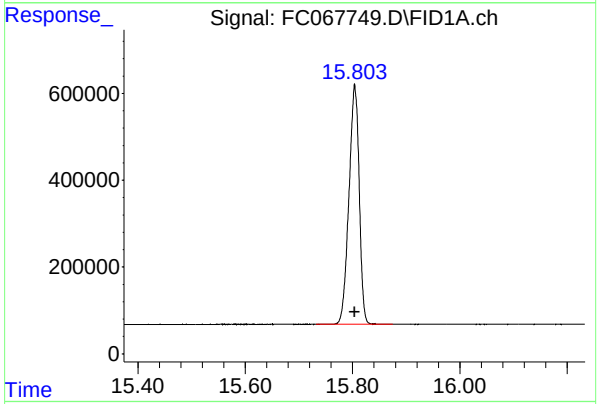
R.T.: 13.684 min
Delta R.T.: 0.000 min
Response: 7804830
Conc: 50.45 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



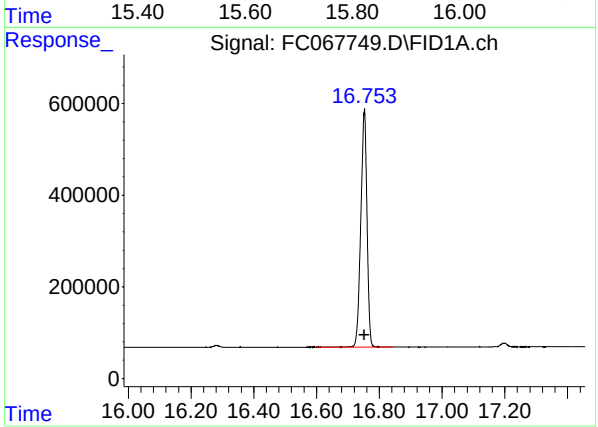
#14 n-Tetracosane (C24)

R.T.: 14.786 min
Delta R.T.: 0.000 min
Response: 7604012
Conc: 50.36 ug/ml



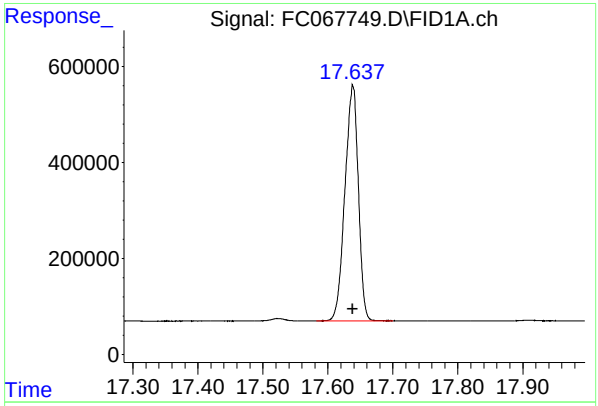
#15 n-Hexacosane (C26)

R.T.: 15.804 min
Delta R.T.: 0.000 min
Response: 7328788
Conc: 50.27 ug/ml



#16 n-Octacosane (C28)

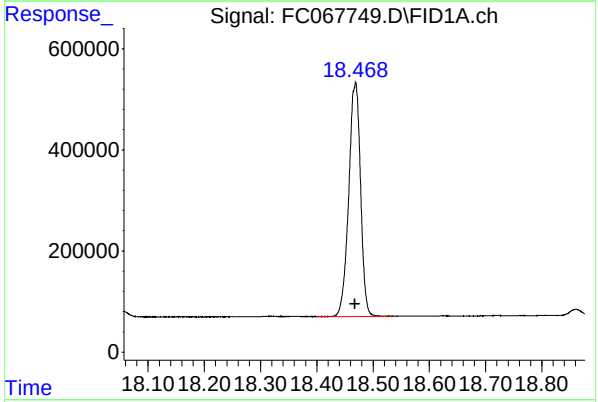
R.T.: 16.752 min
Delta R.T.: 0.000 min
Response: 7090853
Conc: 50.15 ug/ml



#17 n-Tricontane (C30)

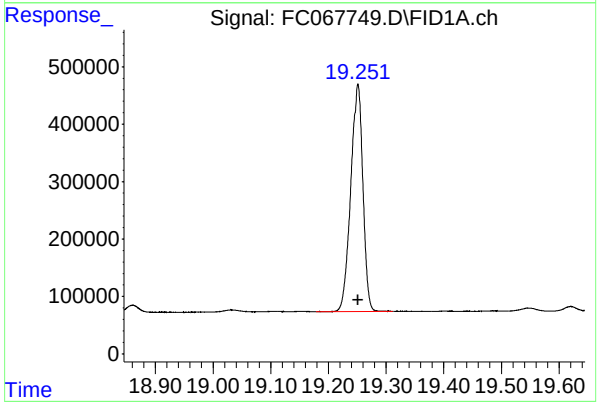
R.T.: 17.638 min
Delta R.T.: 0.000 min
Response: 7057449
Conc: 49.79 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



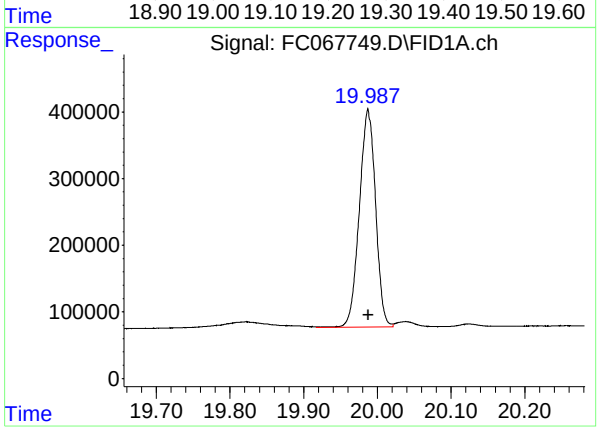
#18 n-Dotriacontane (C32)

R.T.: 18.468 min
Delta R.T.: 0.000 min
Response: 6727381
Conc: 49.69 ug/ml



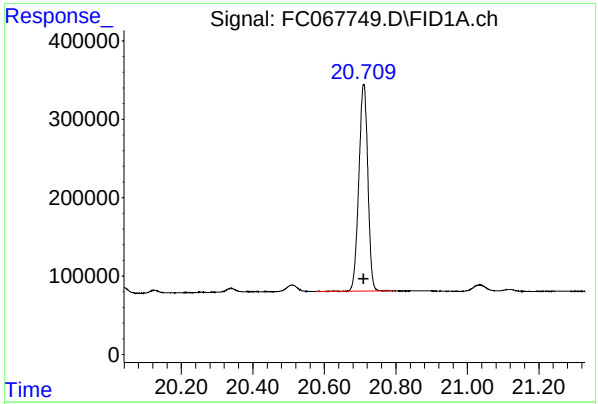
#19 n-Tetratriacontane (C34)

R.T.: 19.251 min
Delta R.T.: 0.000 min
Response: 5796180
Conc: 49.61 ug/ml



#20 n-Hexatriacontane (C36)

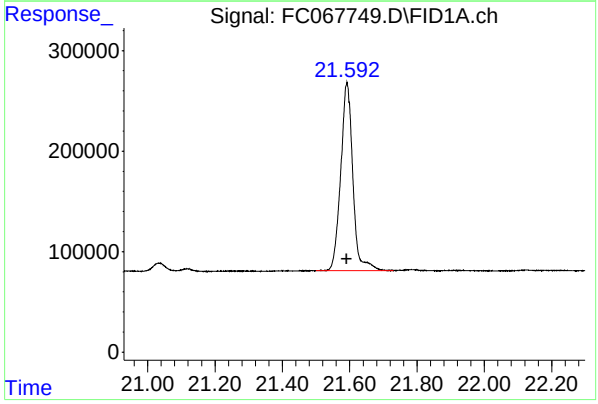
R.T.: 19.987 min
Delta R.T.: 0.000 min
Response: 5004110
Conc: 50.37 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.710 min
Delta R.T.: 0.000 min
Response: 4618407
Conc: 49.81 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 21.592 min
Delta R.T.: 0.000 min
Response: 4672813
Conc: 49.43 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067749.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 11:15
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.274	3.245	3.332	BB	942017	8066160	84.96%	4.899%
2	4.337	4.284	4.397	BB	906477	8240656	86.79%	5.005%
3	5.913	5.847	6.015	BB	954751	9139963	96.26%	5.551%
4	6.351	6.284	6.407	BB	826267	8359779	88.05%	5.077%
5	6.968	6.919	7.087	BV	862389	8894913	93.68%	5.402%
6	8.143	7.952	8.214	BB	747890	8337977	87.82%	5.064%
7	9.741	9.695	9.824	BB	752166	8613564	90.72%	5.232%
8	11.182	11.129	11.265	BB	729025	8636330	90.96%	5.245%
9	11.494	11.427	11.559	BB	822061	9494610	100.00%	5.767%
10	12.488	12.419	12.547	BB	675029	8156976	85.91%	4.954%
11	12.930	12.834	12.999	BB	577252	7061712	74.38%	4.289%
12	13.099	13.035	13.170	BB	635946	7940079	83.63%	4.822%
13	13.684	13.585	13.755	BB	635229	7804830	82.20%	4.740%
14	14.786	14.699	14.857	BB	581408	7604012	80.09%	4.618%
15	15.804	15.732	15.875	BB	553132	7328788	77.19%	4.451%
16	16.752	16.599	16.844	BB	514869	7090853	74.68%	4.307%
17	17.638	17.582	17.700	BB	491920	7057449	74.33%	4.286%
18	18.468	18.399	18.535	BB	461341	6727381	70.85%	4.086%
19	19.251	19.179	19.312	BB	397522	5796180	61.05%	3.520%
20	19.987	19.917	20.021	VV	325943	5004110	52.70%	3.039%
21	20.710	20.577	20.792	BB	263622	4618407	48.64%	2.805%
22	21.592	21.500	21.729	BB	187315	4672813	49.22%	2.838%

Sum of corrected areas: 164647542

Aliphatic EPH 111424.M Fri Nov 15 03:29:21 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067750.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 11:51
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Nov 14 12:29:11 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:28:54 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)	11.489	3895981	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
12) S	1-chlorooctadecane (S...	12.927	2921225	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
	Target Compounds			
1) T	n-Nonane (C9)	3.273	3273618	20.000 ug/ml
2) T	n-Decane (C10)	4.334	3333913	20.000 ug/ml
3) T	A~Naphthalene (C11.7)	5.910	3680682	20.000 ug/ml
4) T	n-Dodecane (C12)	6.349	3384863	20.000 ug/ml
5) T	A~2-methylnaphthalene...	6.965	3573153	20.000 ug/ml
6) T	n-Tetradecane (C14)	8.140	3361591	20.000 ug/ml
7) T	n-Hexadecane (C16)	9.738	3479695	20.000 ug/ml
8) T	n-Octadecane (C18)	11.178	3542342	20.000 ug/ml
10) T	n-Eicosane (C20)	12.484	3377516	20.000 ug/ml
11) T	n-Heneicosane (C21)	13.095	3299529	20.000 ug/ml
13) T	n-Docosane (C22)	13.681	3258558	20.000 ug/ml
14) T	n-Tetracosane (C24)	14.781	3177702	20.000 ug/ml
15) T	n-Hexacosane (C26)	15.801	3061261	20.000 ug/ml
16) T	n-Octacosane (C28)	16.748	2988500	20.000 ug/ml
17) T	n-Tricontane (C30)	17.635	3038323	20.000 ug/ml
18) T	n-Dotriacontane (C32)	18.465	2930784	20.000 ug/ml
19) T	n-Tetratriacontane (C34)	19.247	2517007	20.000 ug/ml
20) T	n-Hexatriacontane (C36)	19.984	2080234	20.000 ug/ml
21) T	n-Octatriacontane (C38)	20.706	1956058	20.000 ug/ml
22) T	n-Tetracontane (C40)	21.587	2101655	20.000 ug/ml

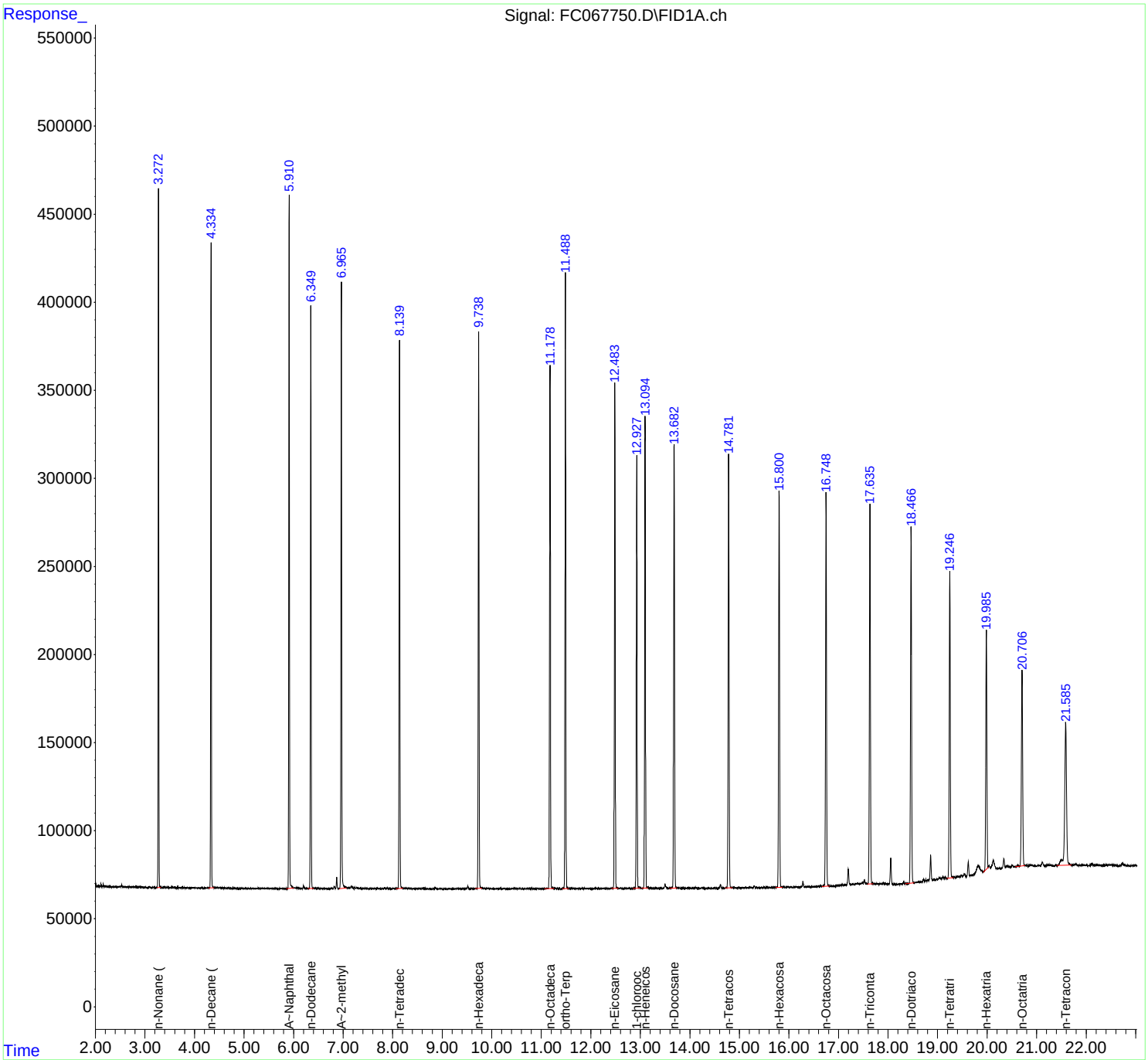
(f)=RT Delta > 1/2 Window (m)=manual int.

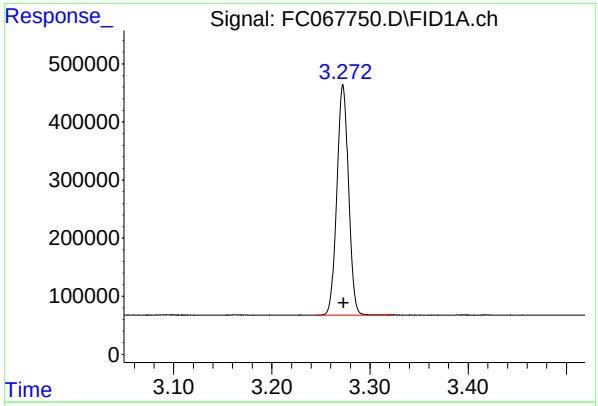
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067750.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 11:51
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Nov 14 12:29:11 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:28:54 2024
Response via : Initial Calibration
Integrator: ChemStation

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

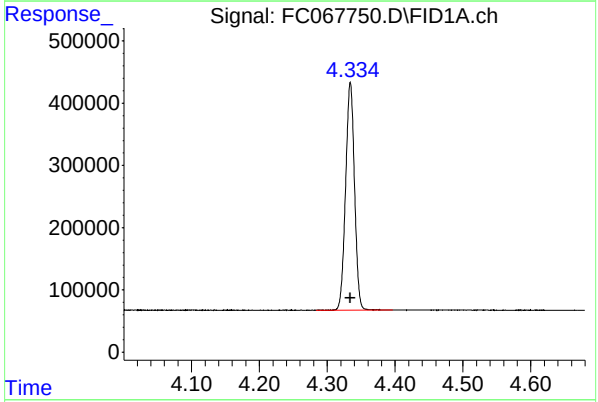




#1 n-Nonane (C9)

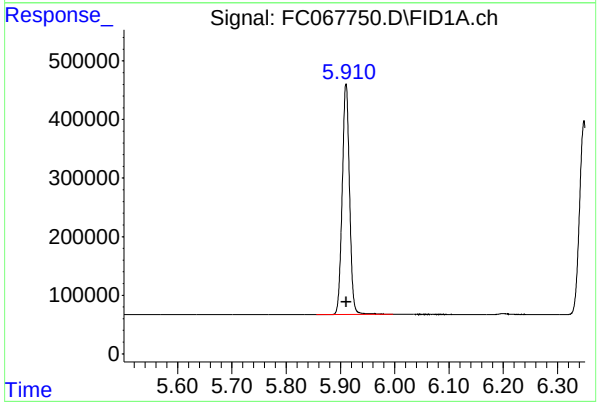
R.T.: 3.273 min
Delta R.T.: 0.000 min
Response: 3273618
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



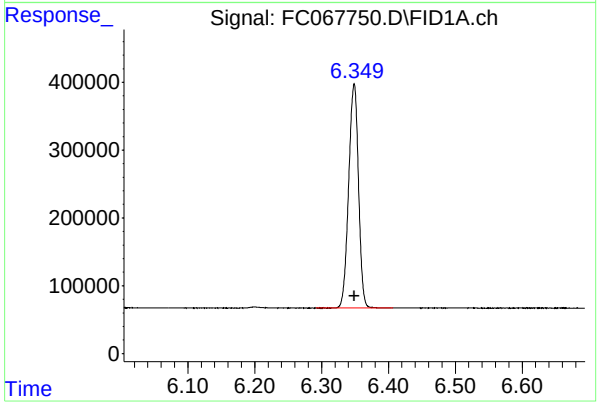
#2 n-Decane (C10)

R.T.: 4.334 min
Delta R.T.: 0.000 min
Response: 3333913
Conc: 20.00 ug/ml



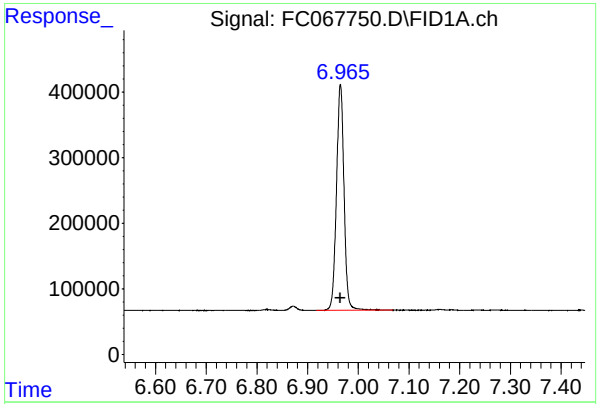
#3 A~Naphthalene (C11.7)

R.T.: 5.910 min
Delta R.T.: 0.000 min
Response: 3680682
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

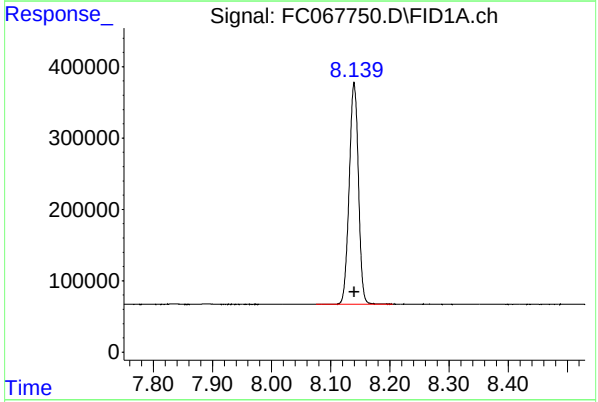
R.T.: 6.349 min
Delta R.T.: 0.000 min
Response: 3384863
Conc: 20.00 ug/ml



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

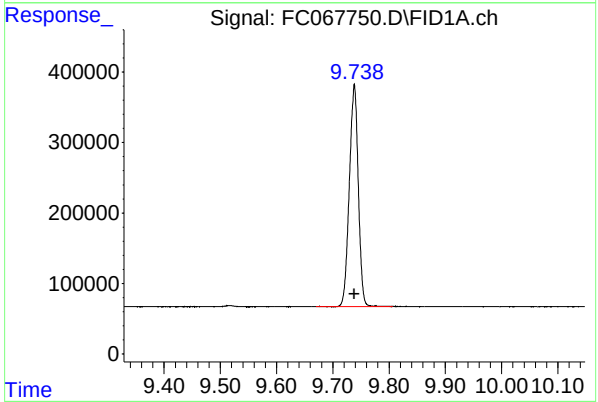
R.T.: 6.965 min
Delta R.T.: 0.000 min
Response: 3573153
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



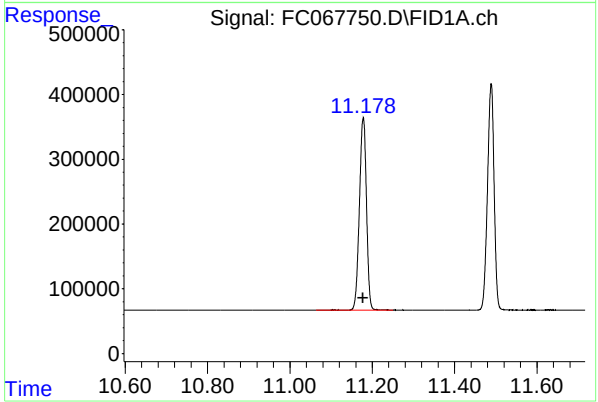
#6 n-Tetradecane (C14)

R.T.: 8.140 min
Delta R.T.: 0.000 min
Response: 3361591
Conc: 20.00 ug/ml



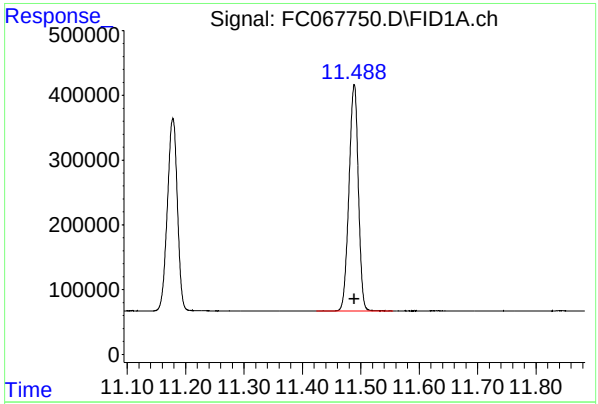
#7 n-Hexadecane (C16)

R.T.: 9.738 min
Delta R.T.: 0.000 min
Response: 3479695
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

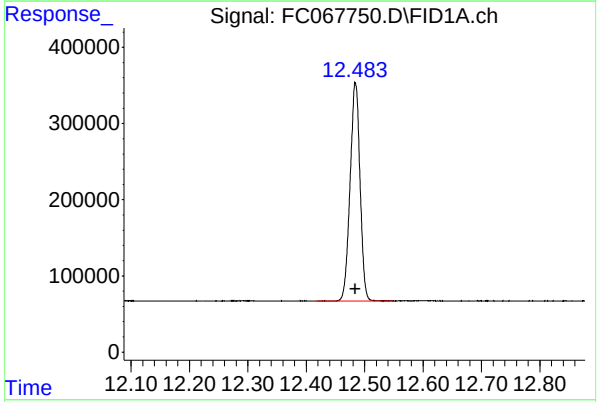
R.T.: 11.178 min
Delta R.T.: 0.000 min
Response: 3542342
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

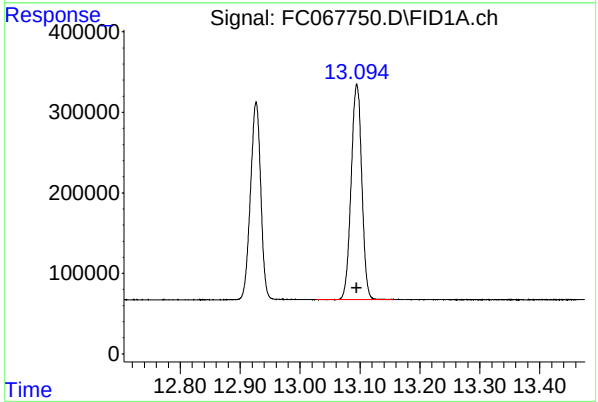
R.T.: 11.489 min
Delta R.T.: 0.000 min
Response: 3895981
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



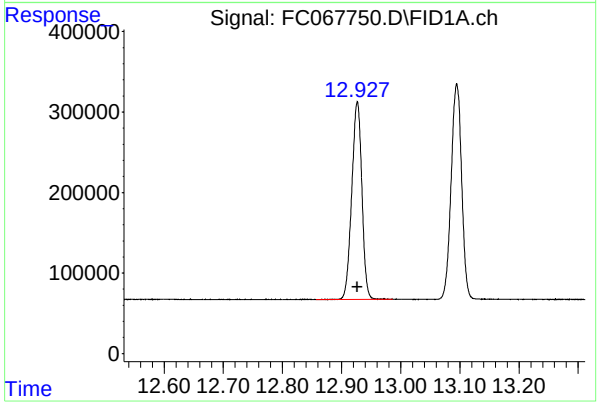
#10 n-Eicosane (C20)

R.T.: 12.484 min
Delta R.T.: 0.000 min
Response: 3377516
Conc: 20.00 ug/ml



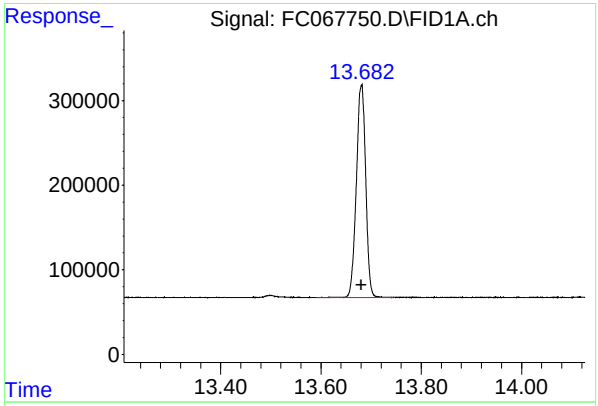
#11 n-Heneicosane (C21)

R.T.: 13.095 min
Delta R.T.: 0.000 min
Response: 3299529
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

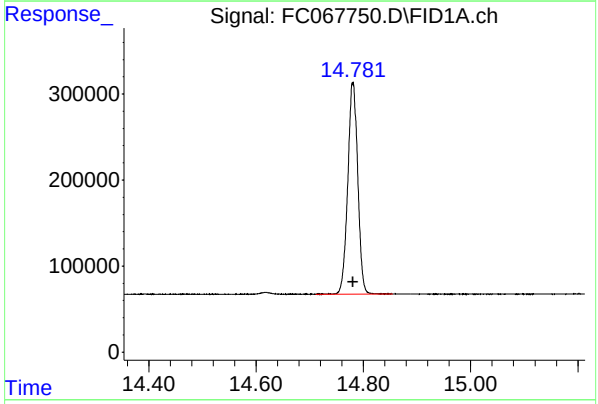
R.T.: 12.927 min
Delta R.T.: 0.000 min
Response: 2921225
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

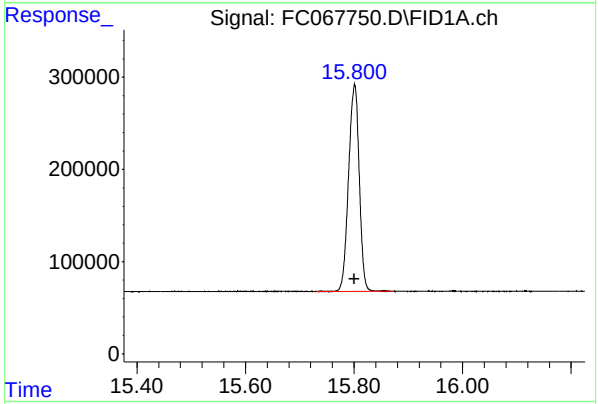
R.T.: 13.681 min
Delta R.T.: 0.000 min
Response: 3258558
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



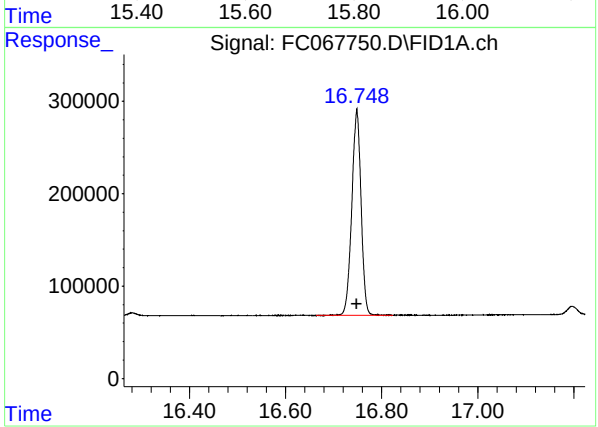
#14 n-Tetracosane (C24)

R.T.: 14.781 min
Delta R.T.: 0.000 min
Response: 3177702
Conc: 20.00 ug/ml



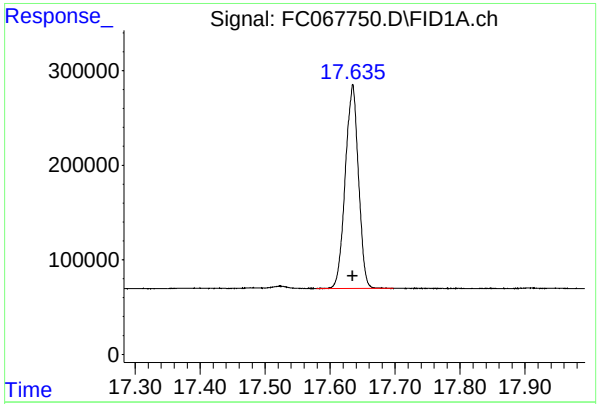
#15 n-Hexacosane (C26)

R.T.: 15.801 min
Delta R.T.: 0.000 min
Response: 3061261
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

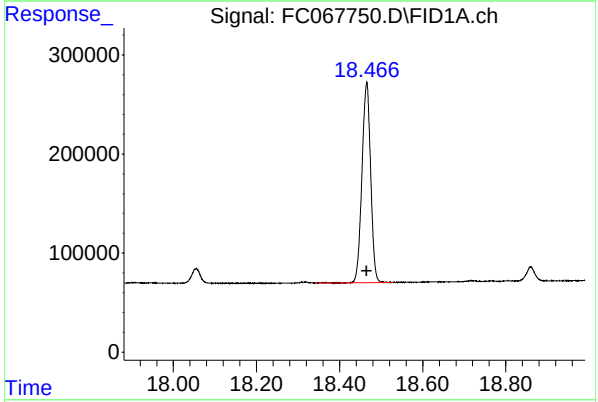
R.T.: 16.748 min
Delta R.T.: 0.000 min
Response: 2988500
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

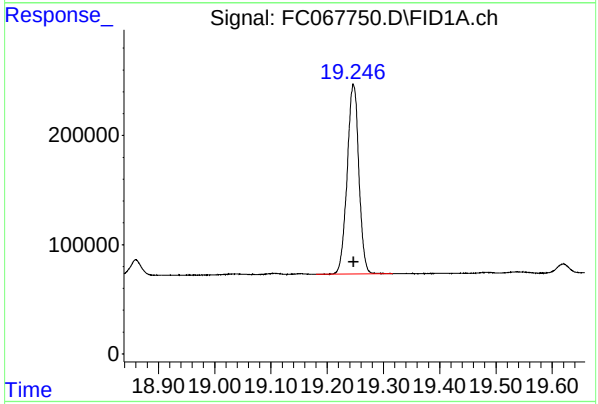
R.T.: 17.635 min
Delta R.T.: 0.000 min
Response: 3038323
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



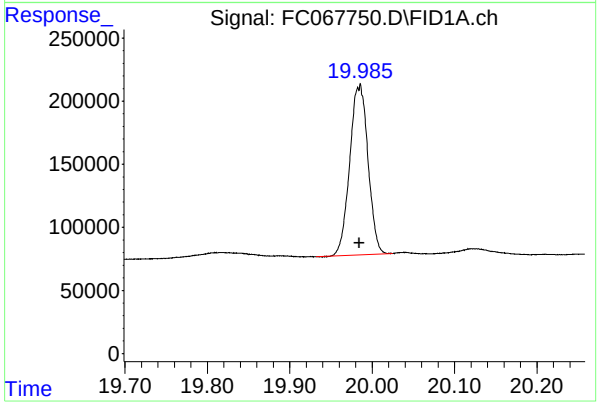
#18 n-Dotriacontane (C32)

R.T.: 18.465 min
Delta R.T.: 0.000 min
Response: 2930784
Conc: 20.00 ug/ml



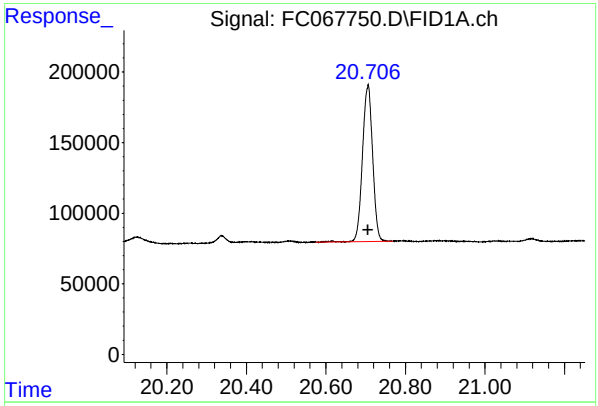
#19 n-Tetratriacontane (C34)

R.T.: 19.247 min
Delta R.T.: 0.000 min
Response: 2517007
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

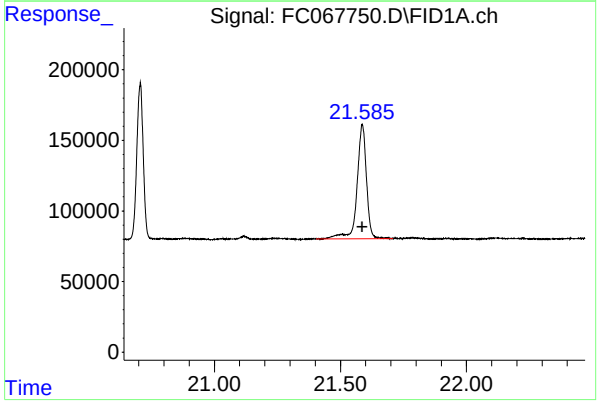
R.T.: 19.984 min
Delta R.T.: 0.000 min
Response: 2080234
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.706 min
Delta R.T.: 0.000 min
Response: 1956058
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 21.587 min
Delta R.T.: 0.000 min
Response: 2101655
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067750.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 11:51
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.273	3.245	3.323	BB	395062	3273618	84.03%	4.798%
2	4.334	4.283	4.397	BB	366166	3333913	85.57%	4.886%
3	5.910	5.855	5.997	BB	394058	3680682	94.47%	5.394%
4	6.349	6.292	6.407	BB	330915	3384863	86.88%	4.961%
5	6.965	6.917	7.068	BB	344646	3573153	91.71%	5.237%
6	8.140	8.075	8.205	BB	309895	3361591	86.28%	4.927%
7	9.738	9.670	9.807	BB	316926	3479695	89.31%	5.100%
8	11.178	11.063	11.250	BB	297212	3542342	90.92%	5.191%
9	11.489	11.423	11.555	BB	350190	3895981	100.00%	5.710%
10	12.484	12.417	12.548	BB	287428	3377516	86.69%	4.950%
11	12.927	12.857	12.987	BB	245590	2921225	74.98%	4.281%
12	13.095	13.027	13.155	BB	267596	3299529	84.69%	4.836%
13	13.681	13.590	13.743	BB	250378	3258558	83.64%	4.776%
14	14.781	14.712	14.855	BB	245027	3177702	81.56%	4.657%
15	15.801	15.730	15.872	BB	223856	3061261	78.57%	4.486%
16	16.748	16.663	16.823	BB	222546	2988500	76.71%	4.380%
17	17.635	17.578	17.697	BB	217007	3038323	77.99%	4.453%
18	18.465	18.343	18.528	VB	201712	2930784	75.23%	4.295%
19	19.247	19.180	19.317	BB	173564	2517007	64.61%	3.689%
20	19.984	19.932	20.025	BV	133807	2080234	53.39%	3.049%
21	20.706	20.575	20.768	BB	109828	1956058	50.21%	2.867%
22	21.587	21.403	21.708	BB	80516	2101655	53.94%	3.080%
			Sum of corrected areas:			68234191		

Aliphatic EPH 111424.M Fri Nov 15 03:29:46 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067751.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 12:27
Operator : YP/AJ
Sample : 10 PPM ALIHPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Nov 14 13:15:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 13:15:05 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)	11.487	2050947	10.694 ug/ml
Spiked Amount	50.000		Recovery =	21.39%
12) S	1-chlorooctadecane (S...	12.925	1552495	10.822 ug/ml
Spiked Amount	50.000		Recovery =	21.64%
	Target Compounds			
1) T	n-Nonane (C9)	3.272	1699554	10.510 ug/ml
2) T	n-Decane (C10)	4.334	1727323	10.479 ug/ml
3) T	A~Naphthalene (C11.7)	5.910	1904344	10.445 ug/ml
4) T	n-Dodecane (C12)	6.348	1755770	10.490 ug/ml
5) T	A~2-methylnaphthalene...	6.964	1839874	10.380 ug/ml
6) T	n-Tetradecane (C14)	8.139	1744653	10.478 ug/ml
7) T	n-Hexadecane (C16)	9.737	1816587	10.546 ug/ml
8) T	n-Octadecane (C18)	11.176	1866614	10.714 ug/ml
10) T	n-Eicosane (C20)	12.483	1808575	10.894 ug/ml
11) T	n-Heneicosane (C21)	13.094	1769034	10.920 ug/ml
13) T	n-Docosane (C22)	13.679	1749101	10.949 ug/ml
14) T	n-Tetracosane (C24)	14.780	1707779	10.952 ug/ml
15) T	n-Hexacosane (C26)	15.799	1641995	10.918 ug/ml
16) T	n-Octacosane (C28)	16.747	1593212	10.921 ug/ml
17) T	n-Tricontane (C30)	17.634	1615415	11.012 ug/ml
18) T	n-Dotriacontane (C32)	18.464	1566436	11.134 ug/ml
19) T	n-Tetratriacontane (C34)	19.246	1350731	11.126 ug/ml
20) T	n-Hexatriacontane (C36)	19.985	1081784	10.652 ug/ml
21) T	n-Octatriacontane (C38)	20.705	1043301	10.911 ug/ml
22) T	n-Tetracontane (C40)	21.587	898236	9.622 ug/ml

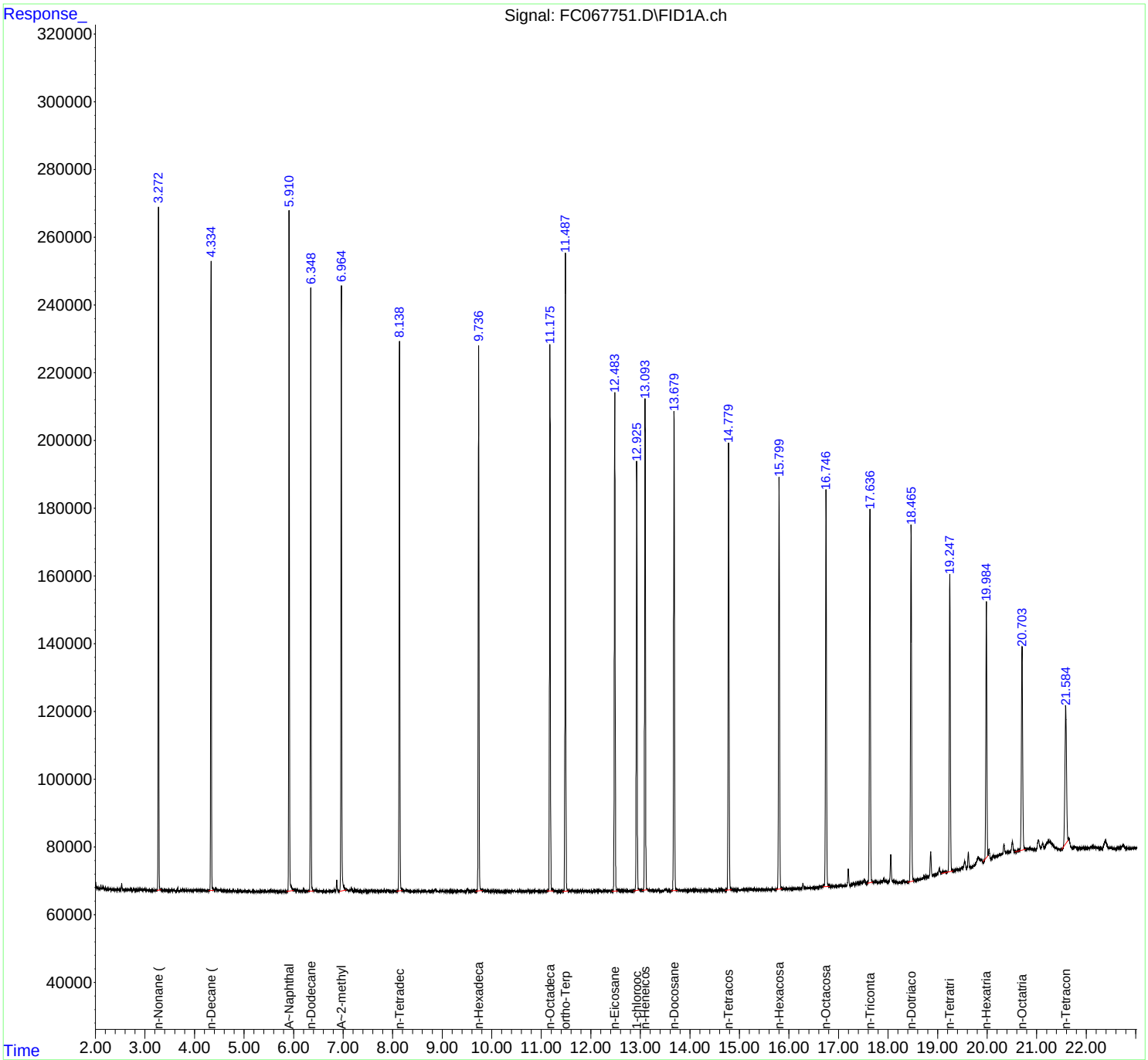
(f)=RT Delta > 1/2 Window (m)=manual int.

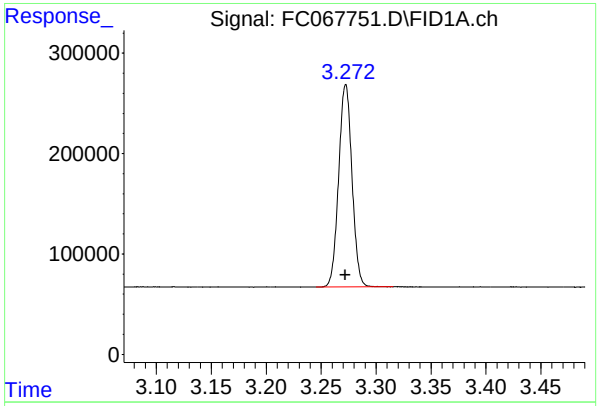
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067751.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 12:27
Operator : YP/AJ
Sample : 10 PPM ALIHPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Nov 14 13:15:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 13:15:05 2024
Response via : Initial Calibration
Integrator: ChemStation

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

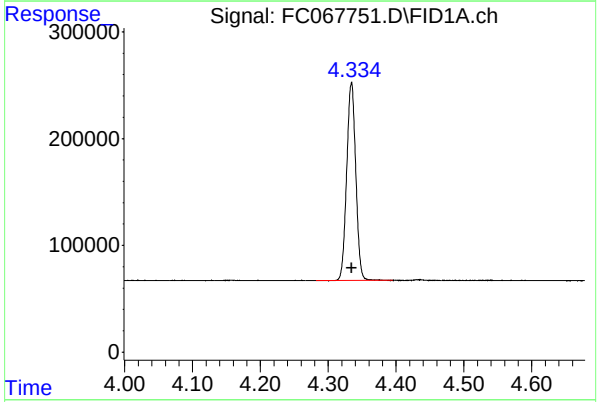




#1 n-Nonane (C9)

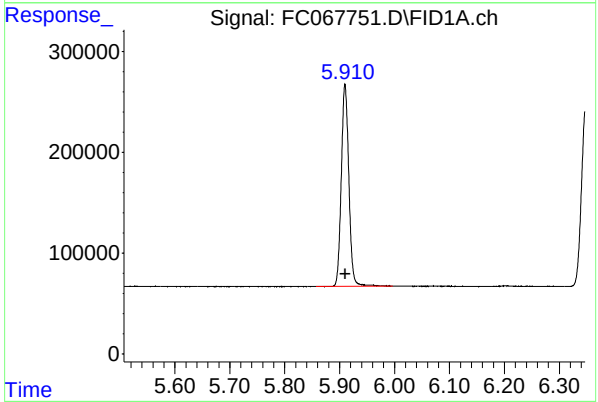
R.T.: 3.272 min
Delta R.T.: 0.000 min
Response: 1699554
Conc: 10.51 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4



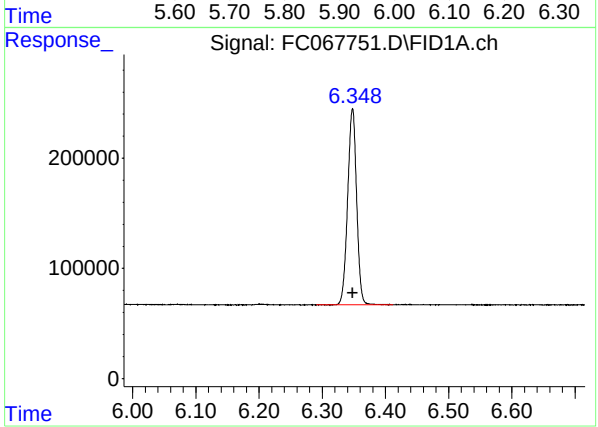
#2 n-Decane (C10)

R.T.: 4.334 min
Delta R.T.: 0.000 min
Response: 1727323
Conc: 10.48 ug/ml



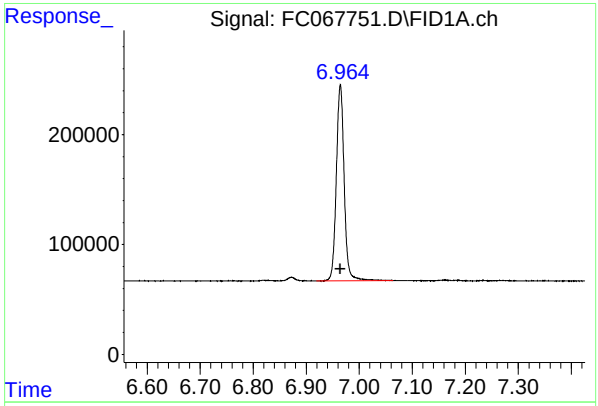
#3 A~Naphthalene (C11.7)

R.T.: 5.910 min
Delta R.T.: 0.000 min
Response: 1904344
Conc: 10.44 ug/ml



#4 n-Dodecane (C12)

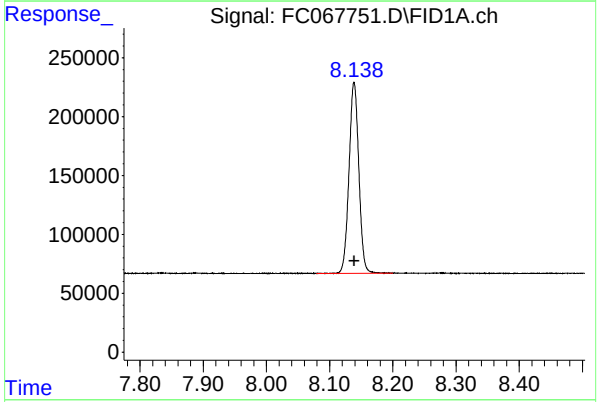
R.T.: 6.348 min
Delta R.T.: 0.000 min
Response: 1755770
Conc: 10.49 ug/ml



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

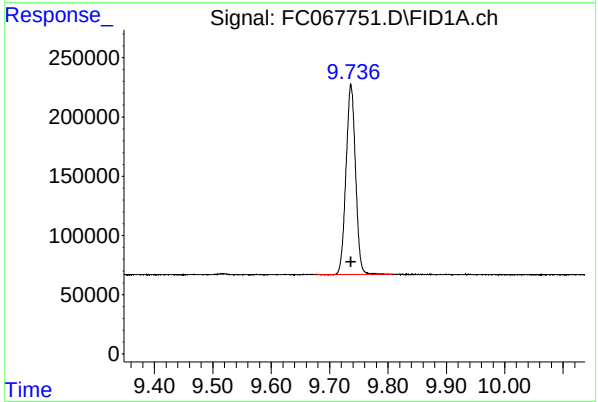
R.T.: 6.964 min
Delta R.T.: 0.000 min
Response: 1839874
Conc: 10.38 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4



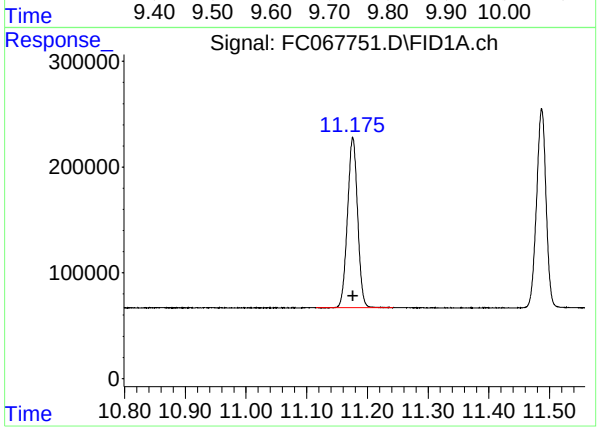
#6 n-Tetradecane (C14)

R.T.: 8.139 min
Delta R.T.: 0.000 min
Response: 1744653
Conc: 10.48 ug/ml



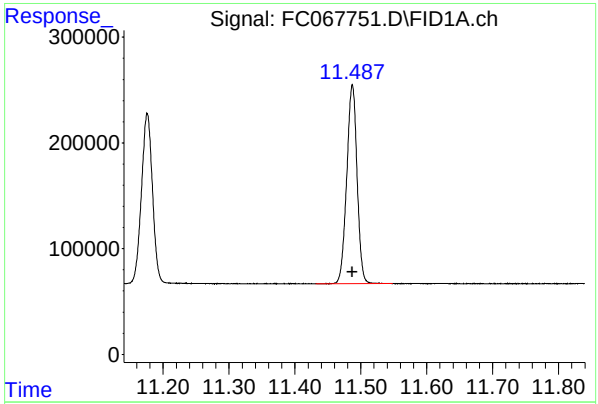
#7 n-Hexadecane (C16)

R.T.: 9.737 min
Delta R.T.: 0.000 min
Response: 1816587
Conc: 10.55 ug/ml



#8 n-Octadecane (C18)

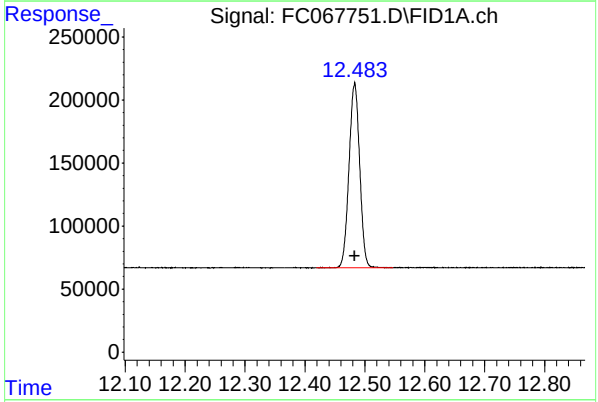
R.T.: 11.176 min
Delta R.T.: 0.000 min
Response: 1866614
Conc: 10.71 ug/ml



#9 ortho-Terphenyl (SURR)

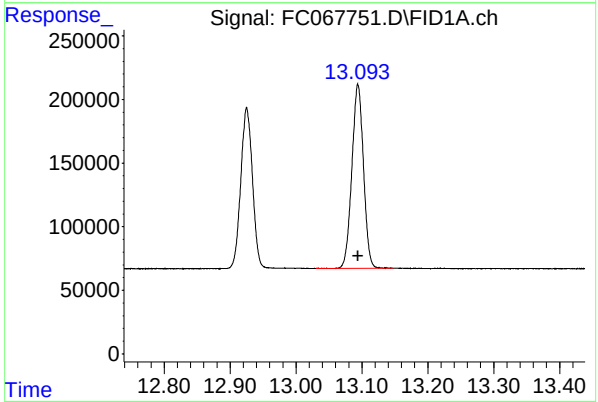
R.T.: 11.487 min
Delta R.T.: 0.000 min
Response: 2050947
Conc: 10.69 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4



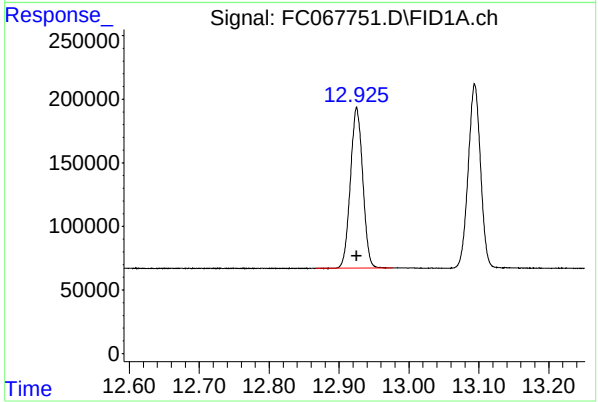
#10 n-Eicosane (C20)

R.T.: 12.483 min
Delta R.T.: 0.000 min
Response: 1808575
Conc: 10.89 ug/ml



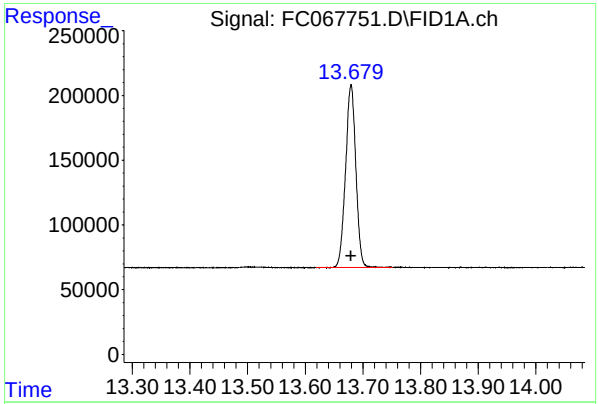
#11 n-Heneicosane (C21)

R.T.: 13.094 min
Delta R.T.: 0.000 min
Response: 1769034
Conc: 10.92 ug/ml



#12 1-chlorooctadecane (SURR)

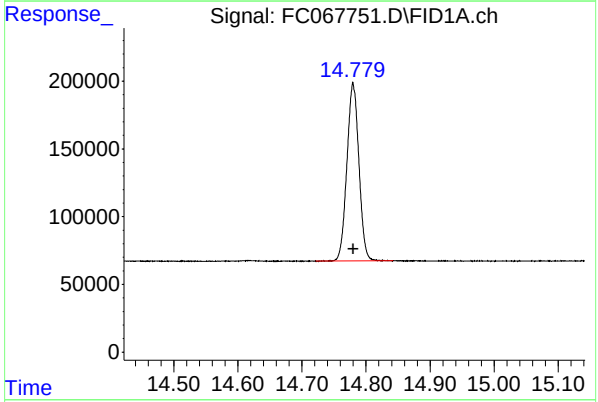
R.T.: 12.925 min
Delta R.T.: 0.000 min
Response: 1552495
Conc: 10.82 ug/ml



#13 n-Docosane (C22)

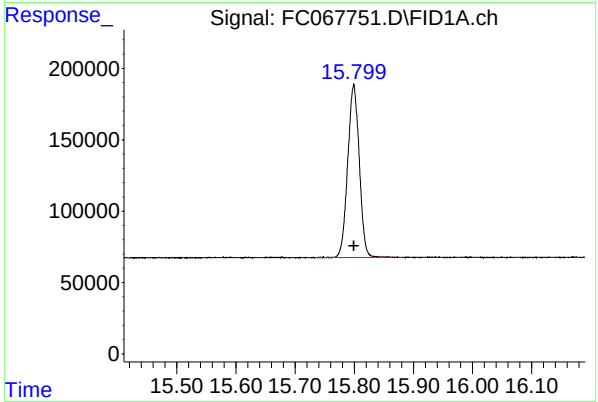
R.T.: 13.679 min
Delta R.T.: 0.000 min
Response: 1749101
Conc: 10.95 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4



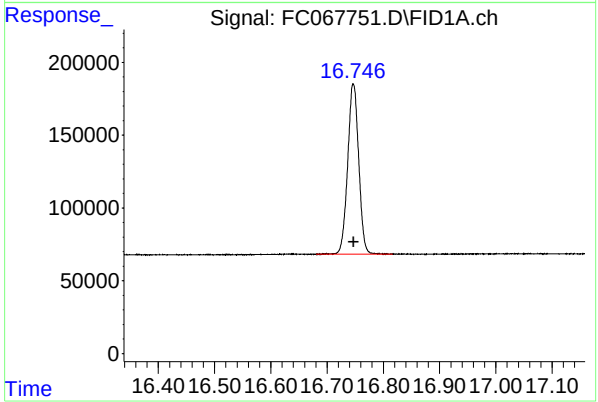
#14 n-Tetracosane (C24)

R.T.: 14.780 min
Delta R.T.: 0.000 min
Response: 1707779
Conc: 10.95 ug/ml



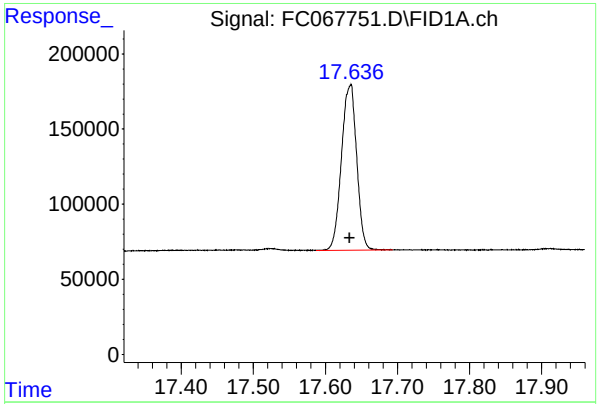
#15 n-Hexacosane (C26)

R.T.: 15.799 min
Delta R.T.: 0.000 min
Response: 1641995
Conc: 10.92 ug/ml



#16 n-Octacosane (C28)

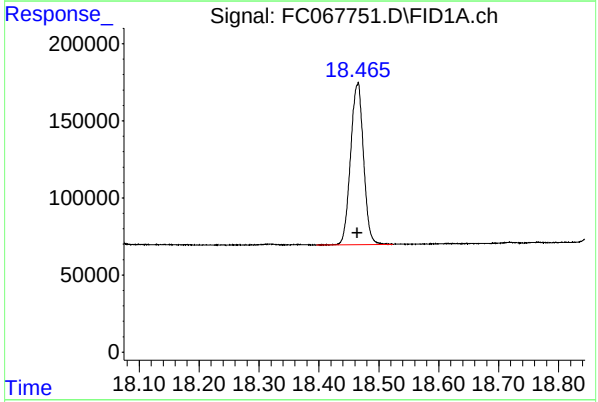
R.T.: 16.747 min
Delta R.T.: 0.000 min
Response: 1593212
Conc: 10.92 ug/ml



#17 n-Tricontane (C30)

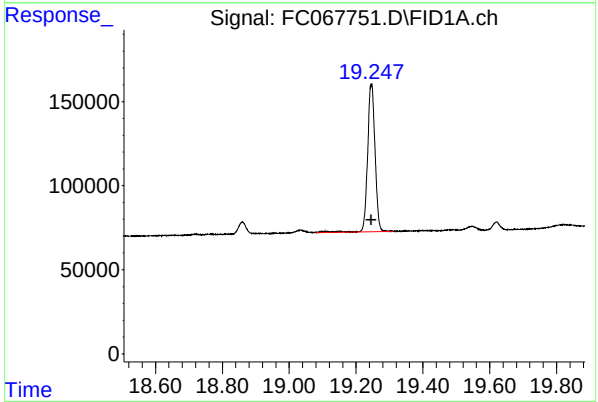
R.T.: 17.634 min
Delta R.T.: 0.000 min
Response: 1615415
Conc: 11.01 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4



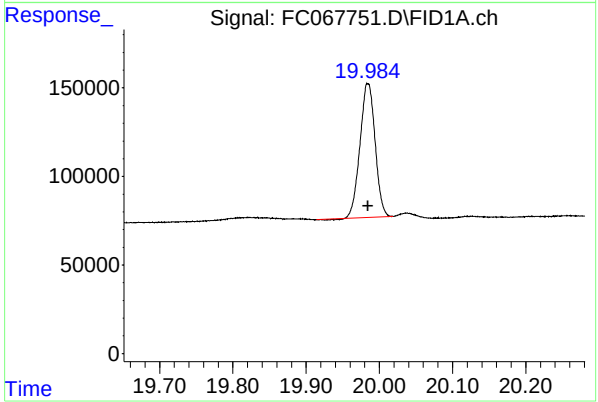
#18 n-Dotriacontane (C32)

R.T.: 18.464 min
Delta R.T.: 0.000 min
Response: 1566436
Conc: 11.13 ug/ml



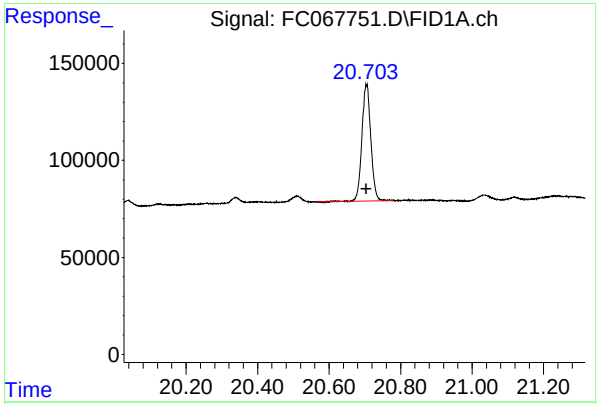
#19 n-Tetratriacontane (C34)

R.T.: 19.246 min
Delta R.T.: 0.000 min
Response: 1350731
Conc: 11.13 ug/ml



#20 n-Hexatriacontane (C36)

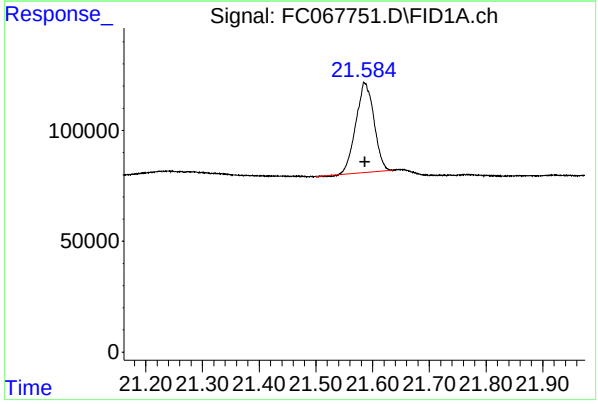
R.T.: 19.985 min
Delta R.T.: 0.000 min
Response: 1081784
Conc: 10.65 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.705 min
Delta R.T.: 0.000 min
Response: 1043301
Conc: 10.91 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 21.587 min
Delta R.T.: 0.000 min
Response: 898236
Conc: 9.62 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067751.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 12:27
Sample : 10 PPM ALIHPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.272	3.245	3.315	BB	201392	1699554	82.87%	4.750%
2	4.334	4.282	4.395	BB	184772	1727323	84.22%	4.827%
3	5.910	5.857	5.997	BB	200085	1904344	92.85%	5.322%
4	6.348	6.290	6.412	BB	179174	1755770	85.61%	4.907%
5	6.964	6.919	7.064	BB	178091	1839874	89.71%	5.142%
6	8.139	8.079	8.200	BB	162189	1744653	85.07%	4.876%
7	9.737	9.677	9.809	BB	160226	1816587	88.57%	5.077%
8	11.176	11.115	11.242	BB	161006	1866614	91.01%	5.216%
9	11.487	11.432	11.549	BB	188405	2050947	100.00%	5.732%
10	12.483	12.419	12.547	BB	147330	1808575	88.18%	5.054%
11	12.925	12.867	12.977	BB	126208	1552495	75.70%	4.339%
12	13.094	13.030	13.147	BB	144889	1769034	86.25%	4.944%
13	13.679	13.619	13.752	BB	140684	1749101	85.28%	4.888%
14	14.780	14.722	14.842	BB	130778	1707779	83.27%	4.772%
15	15.799	15.735	15.865	BB	120759	1641995	80.06%	4.589%
16	16.747	16.680	16.817	BB	116868	1593212	77.68%	4.452%
17	17.634	17.587	17.694	BB	109291	1615415	78.76%	4.514%
18	18.464	18.395	18.524	BB	103977	1566436	76.38%	4.378%
19	19.246	19.080	19.310	BB	87049	1350731	65.86%	3.775%
20	19.985	19.914	20.019	BV	75557	1081784	52.75%	3.023%
21	20.705	20.564	20.779	BB	59219	1043301	50.87%	2.916%
22	21.587	21.500	21.636	BV	39943	898236	43.80%	2.510%
			Sum of corrected areas:			35783760		

Aliphatic EPH 111424.M Fri Nov 15 03:30:12 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067752.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 13:03
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024

Integration File: autoint1.e
Quant Time: Nov 14 14:12:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:12:01 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)	11.486	1011043	5.215 ug/ml
Spiked Amount	50.000		Recovery =	10.43%
12) S	1-chlorooctadecane (S...	12.926	759794	5.234 ug/ml
Spiked Amount	50.000		Recovery =	10.47%
	Target Compounds			
1) T	n-Nonane (C9)	3.272	843654	5.172 ug/ml
2) T	n-Decane (C10)	4.334	849229	5.121 ug/ml
3) T	A~Naphthalene (C11.7)	5.911	932344	5.090 ug/ml
4) T	n-Dodecane (C12)	6.348	863286	5.126 ug/ml
5) T	A~2-methylnaphthalene...	6.965	888961	5.012 ug/ml
6) T	n-Tetradecane (C14)	8.139	856517	5.114 ug/ml
7) T	n-Hexadecane (C16)	9.737	887432	5.121 ug/ml
8) T	n-Octadecane (C18)	11.176	913982	5.195 ug/ml
10) T	n-Eicosane (C20)	12.482	889327	5.281 ug/ml
11) T	n-Heneicosane (C21)	13.094	873353	5.308 ug/ml
13) T	n-Docosane (C22)	13.679	876194	5.380 ug/ml
14) T	n-Tetracosane (C24)	14.780	890863	5.555 ug/ml
15) T	n-Hexacosane (C26)	15.799	863791	5.578 ug/ml
16) T	n-Octacosane (C28)	16.747	857935	5.681 ug/ml
17) T	n-Tricontane (C30)	17.633	893915	5.838 ug/ml
18) T	n-Dotriacontane (C32)	18.465	878383	5.947 ug/ml
19) T	n-Tetratriacontane (C34)	19.245	725252	5.750 ug/ml
20) T	n-Hexatriacontane (C36)	19.986	583478	5.580 ug/mlm
21) T	n-Octatriacontane (C38)	20.705	529758	5.423 ug/ml
22) T	n-Tetracontane (C40)	21.585	569616	5.844 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067752.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 13:03
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

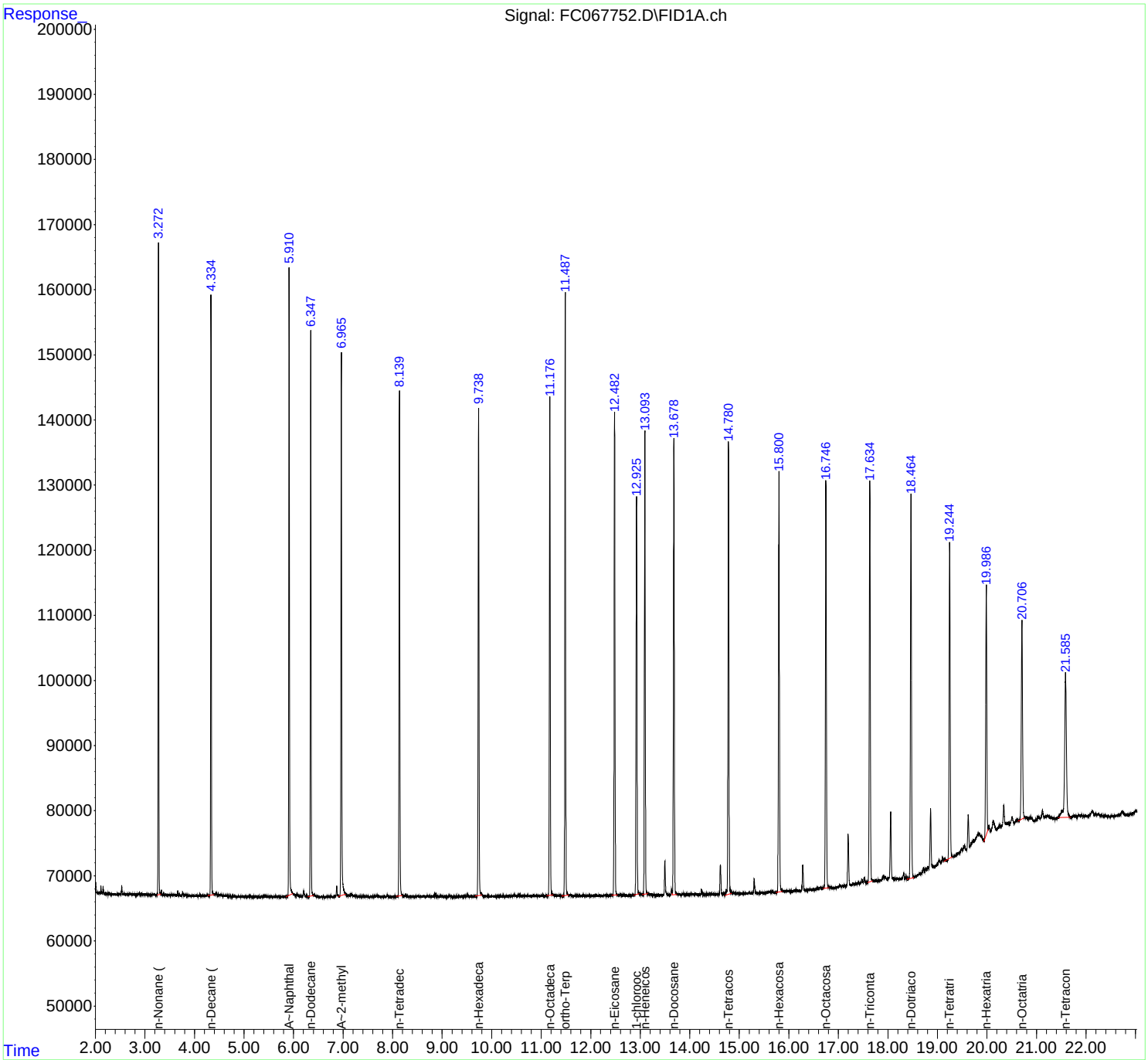
Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

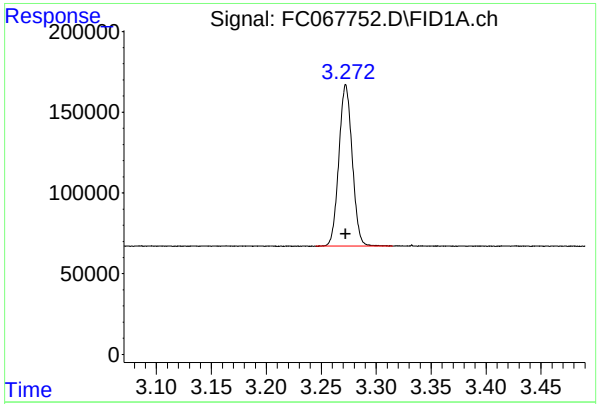
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024

Integration File: autoint1.e
Quant Time: Nov 14 14:12:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:12:01 2024
Response via : Initial Calibration
Integrator: ChemStation

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





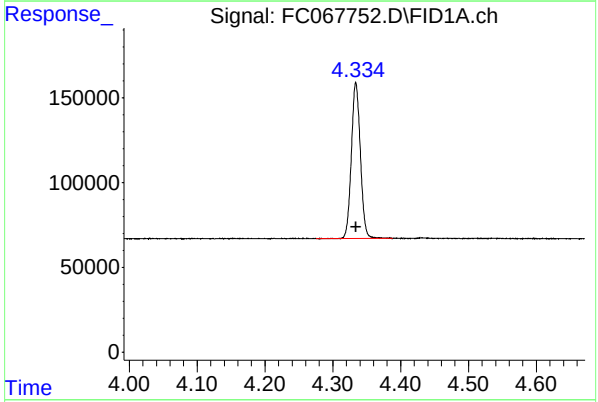
#1 n-Nonane (C9)

R.T.: 3.272 min
Delta R.T.: 0.000 min
Response: 843654
Conc: 5.17 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

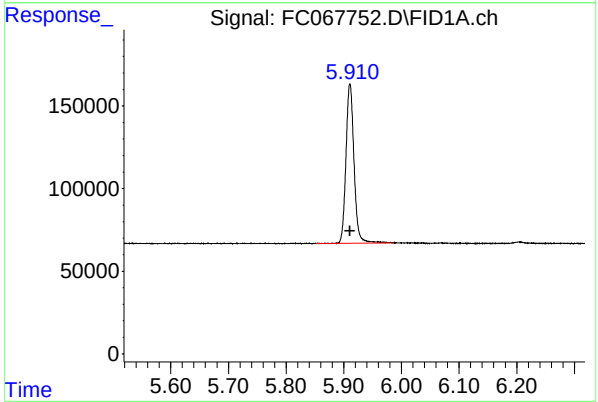
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



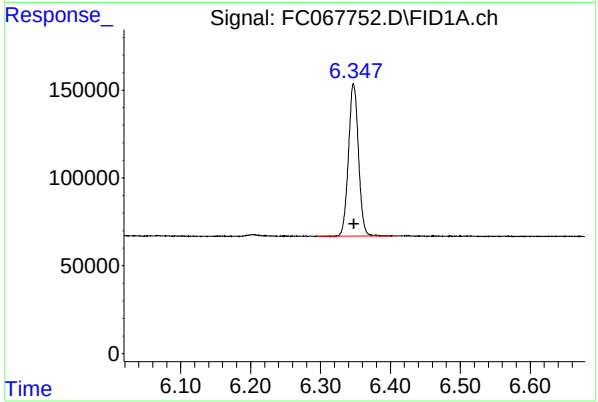
#2 n-Decane (C10)

R.T.: 4.334 min
Delta R.T.: 0.000 min
Response: 849229
Conc: 5.12 ug/ml



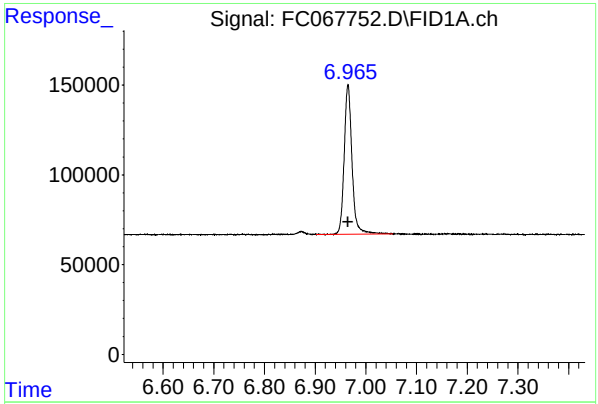
#3 A~Naphthalene (C11.7)

R.T.: 5.911 min
Delta R.T.: 0.000 min
Response: 932344
Conc: 5.09 ug/ml



#4 n-Dodecane (C12)

R.T.: 6.348 min
Delta R.T.: 0.000 min
Response: 863286
Conc: 5.13 ug/ml



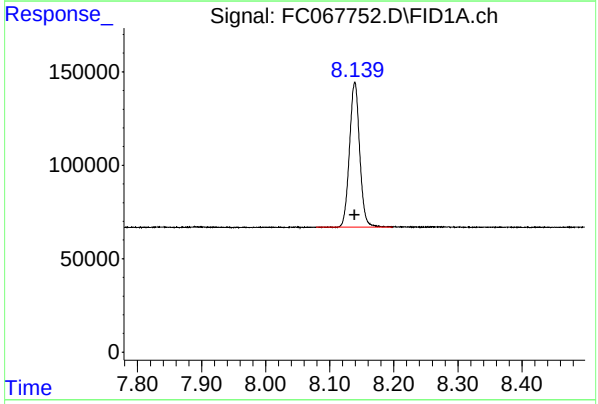
#5 A~2-methylnaphthalene (C12.89)

R.T.: 6.965 min
Delta R.T.: 0.000 min
Response: 888961
Conc: 5.01 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

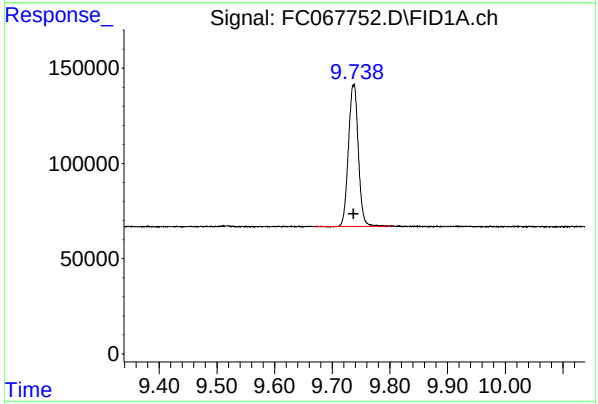
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



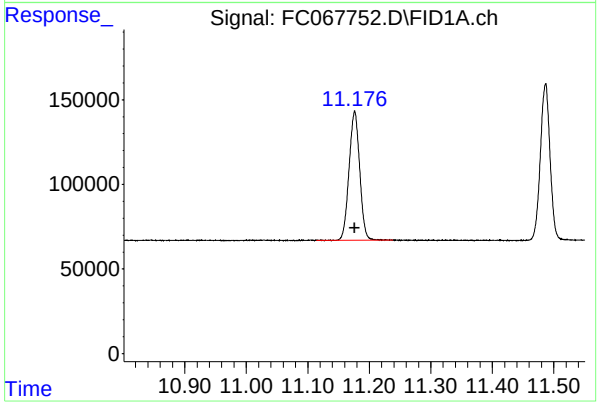
#6 n-Tetradecane (C14)

R.T.: 8.139 min
Delta R.T.: 0.000 min
Response: 856517
Conc: 5.11 ug/ml



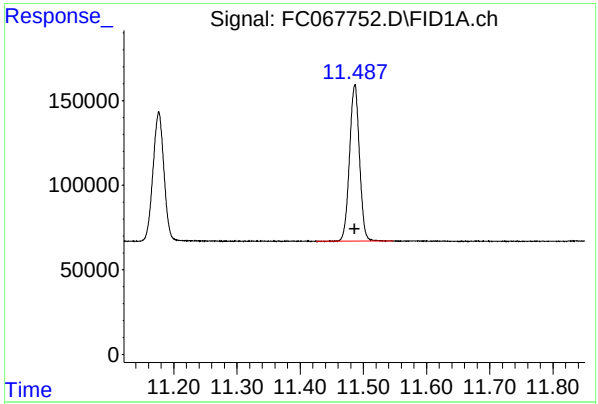
#7 n-Hexadecane (C16)

R.T.: 9.737 min
Delta R.T.: 0.000 min
Response: 887432
Conc: 5.12 ug/ml



#8 n-Octadecane (C18)

R.T.: 11.176 min
Delta R.T.: 0.000 min
Response: 913982
Conc: 5.19 ug/ml



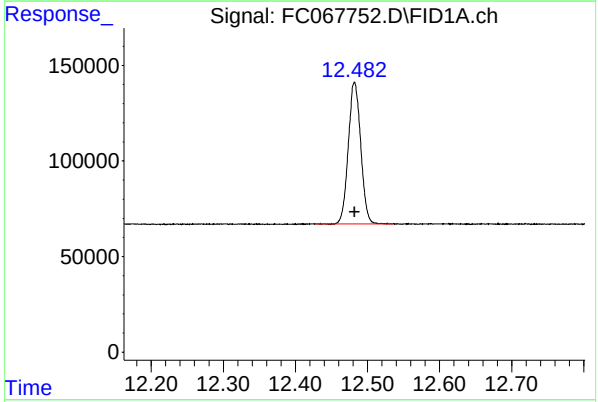
#9 ortho-Terphenyl (SURR)

R.T.: 11.486 min
Delta R.T.: 0.000 min
Response: 1011043
Conc: 5.21 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

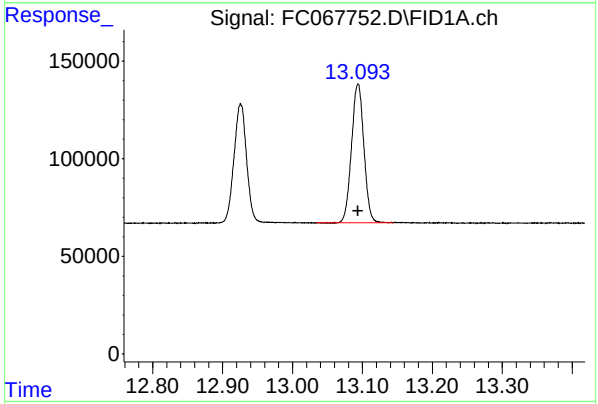
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



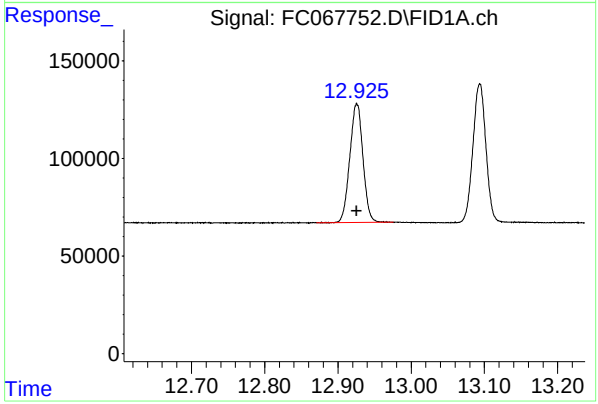
#10 n-Eicosane (C20)

R.T.: 12.482 min
Delta R.T.: 0.000 min
Response: 889327
Conc: 5.28 ug/ml



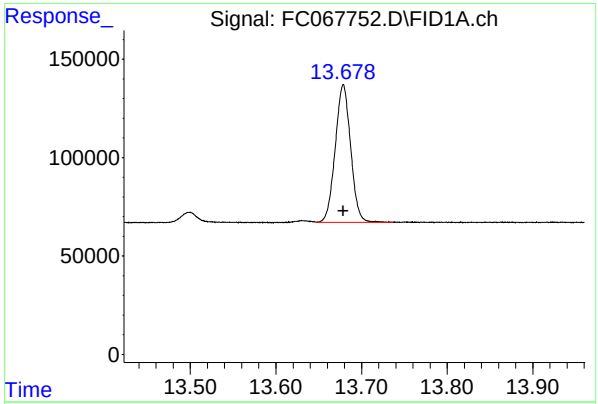
#11 n-Heneicosane (C21)

R.T.: 13.094 min
Delta R.T.: 0.000 min
Response: 873353
Conc: 5.31 ug/ml



#12 1-chlorooctadecane (SURR)

R.T.: 12.926 min
Delta R.T.: 0.000 min
Response: 759794
Conc: 5.23 ug/ml



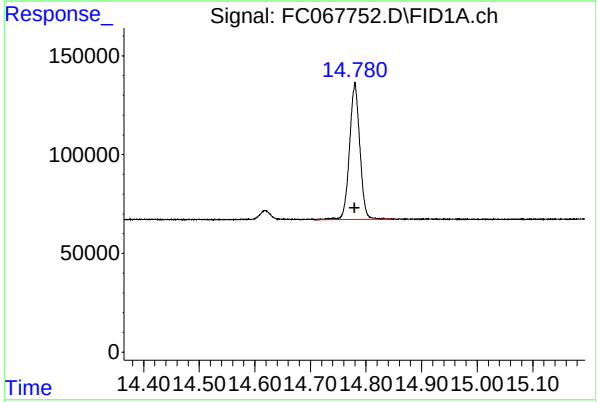
#13 n-Docosane (C22)

R.T.: 13.679 min
Delta R.T.: 0.000 min
Response: 876194
Conc: 5.38 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

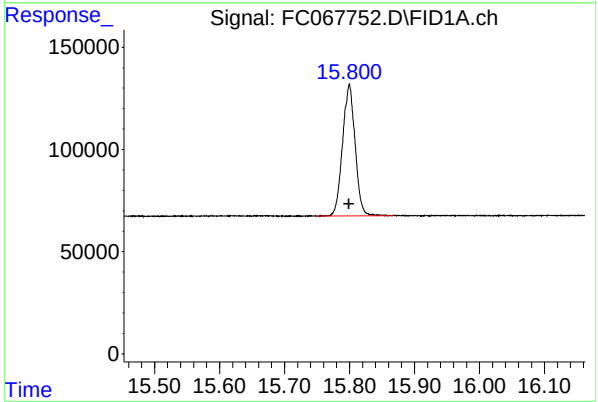
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



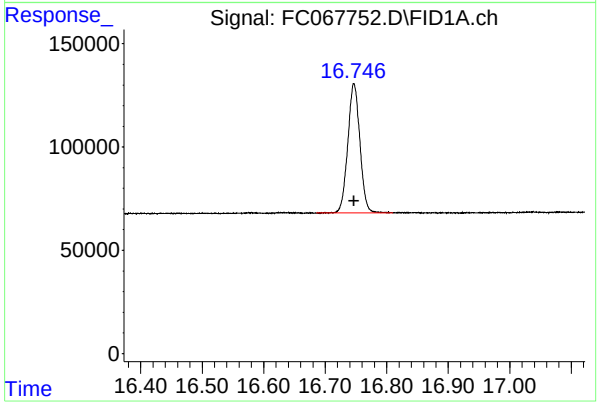
#14 n-Tetracosane (C24)

R.T.: 14.780 min
Delta R.T.: 0.000 min
Response: 890863
Conc: 5.55 ug/ml



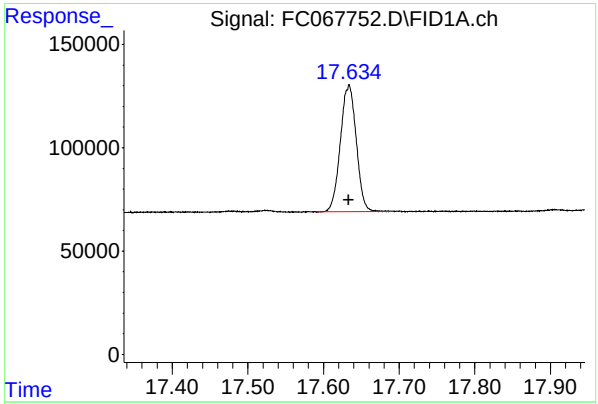
#15 n-Hexacosane (C26)

R.T.: 15.799 min
Delta R.T.: 0.000 min
Response: 863791
Conc: 5.58 ug/ml



#16 n-Octacosane (C28)

R.T.: 16.747 min
Delta R.T.: 0.000 min
Response: 857935
Conc: 5.68 ug/ml



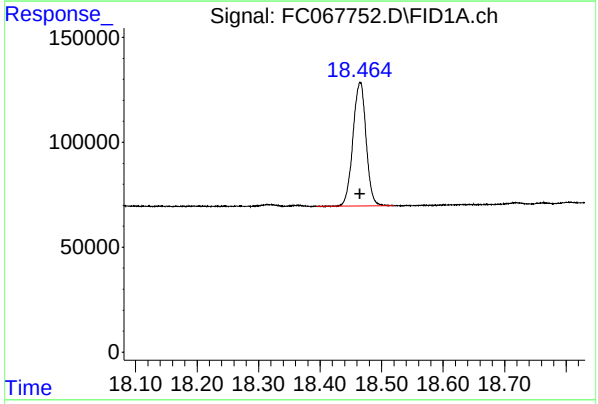
#17 n-Tricontane (C30)

R.T.: 17.633 min
Delta R.T.: 0.000 mi
Response: 893915
Conc: 5.84 ug/m

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

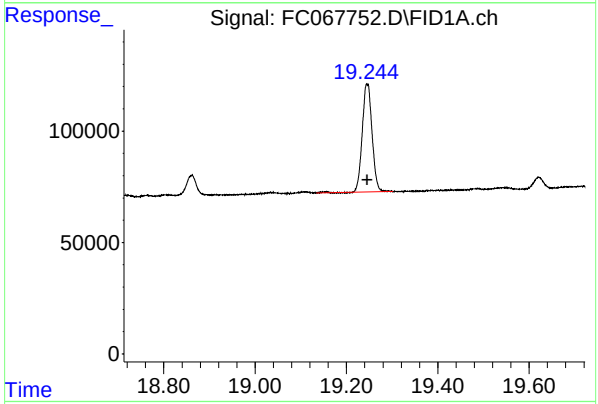
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



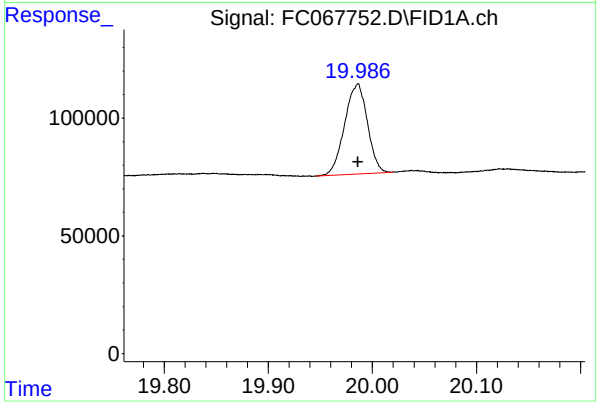
#18 n-Dotriacontane (C32)

R.T.: 18.465 min
Delta R.T.: 0.000 min
Response: 878383
Conc: 5.95 ug/ml



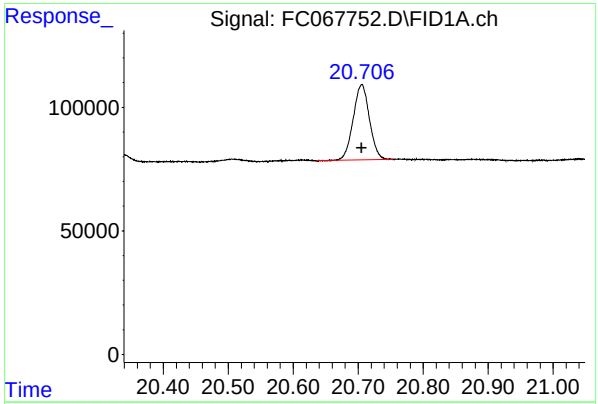
#19 n-Tetratriacontane (C34)

R.T.: 19.245 min
Delta R.T.: 0.000 min
Response: 725252
Conc: 5.75 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 19.986 min
Delta R.T.: 0.000 min
Response: 583478
Conc: 5.58 ug/ml m



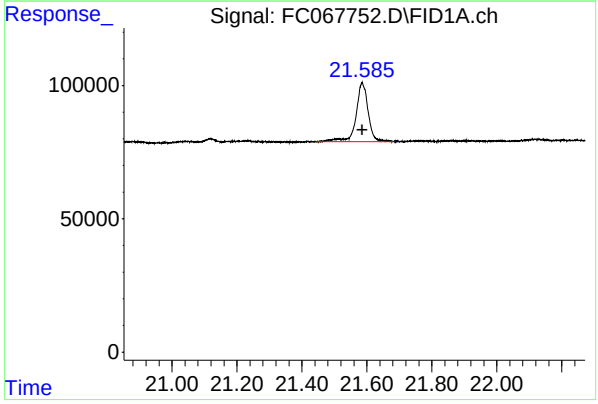
#21 n-Octatriacontane (C38)

R.T.: 20.705 min
Delta R.T.: 0.000 min
Response: 529758
Conc: 5.42 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



#22 n-Tetracontane (C40)

R.T.: 21.585 min
Delta R.T.: 0.000 min
Response: 569616
Conc: 5.84 ug/ml

rteres

Instrument :
FID_C
LabSampleId :
5 PPM ALIPHATIC HC STD5

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC11142
Data File : FC067752.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 13:03
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.272	3.245	3.315	BB	99725	843654	83.44%	4.631%
2	4.334	4.275	4.389	BB	91882	849229	84.00%	4.661%
3	5.911	5.852	5.985	BB	96582	932344	92.22%	5.118%
4	6.348	6.294	6.404	BB	86656	863286	85.39%	4.739%
5	6.965	6.902	7.054	BB	83408	888961	87.93%	4.880%
6	8.139	8.079	8.199	BB	77381	856517	84.72%	4.701%
7	9.737	9.672	9.805	BB	74117	887432	87.77%	4.871%
8	11.176	11.114	11.239	BB	76599	913982	90.40%	5.017%
9	11.486	11.425	11.547	BB	92885	1011043	100.00%	5.550%
10	12.482	12.429	12.535	BB	73997	889327	87.96%	4.882%
11	12.926	12.870	12.975	BB	60743	759794	75.15%	4.171%
12	13.094	13.034	13.144	BB	71100	873353	86.38%	4.794%
13	13.679	13.647	13.737	VB	69955	876194	86.66%	4.809%
14	14.780	14.710	14.849	BB	69378	890863	88.11%	4.890%
15	15.799	15.749	15.867	BB	64631	863791	85.44%	4.741%
16	16.747	16.685	16.810	BB	62562	857935	84.86%	4.709%
17	17.633	17.590	17.692	BB	61372	893915	88.42%	4.907%
18	18.465	18.394	18.519	BB	59084	878383	86.88%	4.822%
19	19.245	19.134	19.302	BB	48182	725252	71.73%	3.981%
20	19.985	19.915	20.019	BV	37829	563385	55.72%	3.092%
21	20.705	20.635	20.754	BB	30516	529758	52.40%	2.908%
22	21.585	21.444	21.680	BB	22241	569616	56.34%	3.127%
			Sum of corrected areas:			18218016		

Aliphatic EPH 111424.M Fri Nov 15 03:30:38 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067753.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 13:49
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Nov 14 16:43:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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)	11.490	3947572	20.361 ug/ml
Spiked Amount	50.000		Recovery =	40.72%
12) S	1-chlorooctadecane (S...	12.928	2977474	20.512 ug/ml
Spiked Amount	50.000		Recovery =	41.02%
	Target Compounds			
1) T	n-Nonane (C9)	3.272	3273252	20.067 ug/ml
2) T	n-Decane (C10)	4.334	3340748	20.145 ug/ml
3) T	A~Naphthalene (C11.7)	5.911	3690809	20.151 ug/ml
4) T	n-Dodecane (C12)	6.348	3400656	20.191 ug/ml
5) T	A~2-methylnaphthalene...	6.965	3590183	20.243 ug/ml
6) T	n-Tetradecane (C14)	8.140	3396495	20.281 ug/ml
7) T	n-Hexadecane (C16)	9.738	3529343	20.366 ug/ml
8) T	n-Octadecane (C18)	11.179	3598310	20.452 ug/ml
10) T	n-Eicosane (C20)	12.485	3453724	20.511 ug/ml
11) T	n-Heneicosane (C21)	13.097	3372726	20.498 ug/ml
13) T	n-Docosane (C22)	13.682	3336664	20.489 ug/ml
14) T	n-Tetracosane (C24)	14.782	3259223	20.322 ug/ml
15) T	n-Hexacosane (C26)	15.801	3138531	20.267 ug/ml
16) T	n-Octacosane (C28)	16.750	3091639	20.471 ug/ml
17) T	n-Tricontane (C30)	17.635	3156621	20.617 ug/ml
18) T	n-Dotriacontane (C32)	18.466	3113422	21.081 ug/ml
19) T	n-Tetratriacontane (C34)	19.248	2614033	20.725 ug/ml
20) T	n-Hexatriacontane (C36)	19.986	2189342	20.933 ug/ml
21) T	n-Octatriacontane (C38)	20.708	1993396	20.407 ug/ml
22) T	n-Tetracontane (C40)	21.591	1922623	19.726 ug/ml

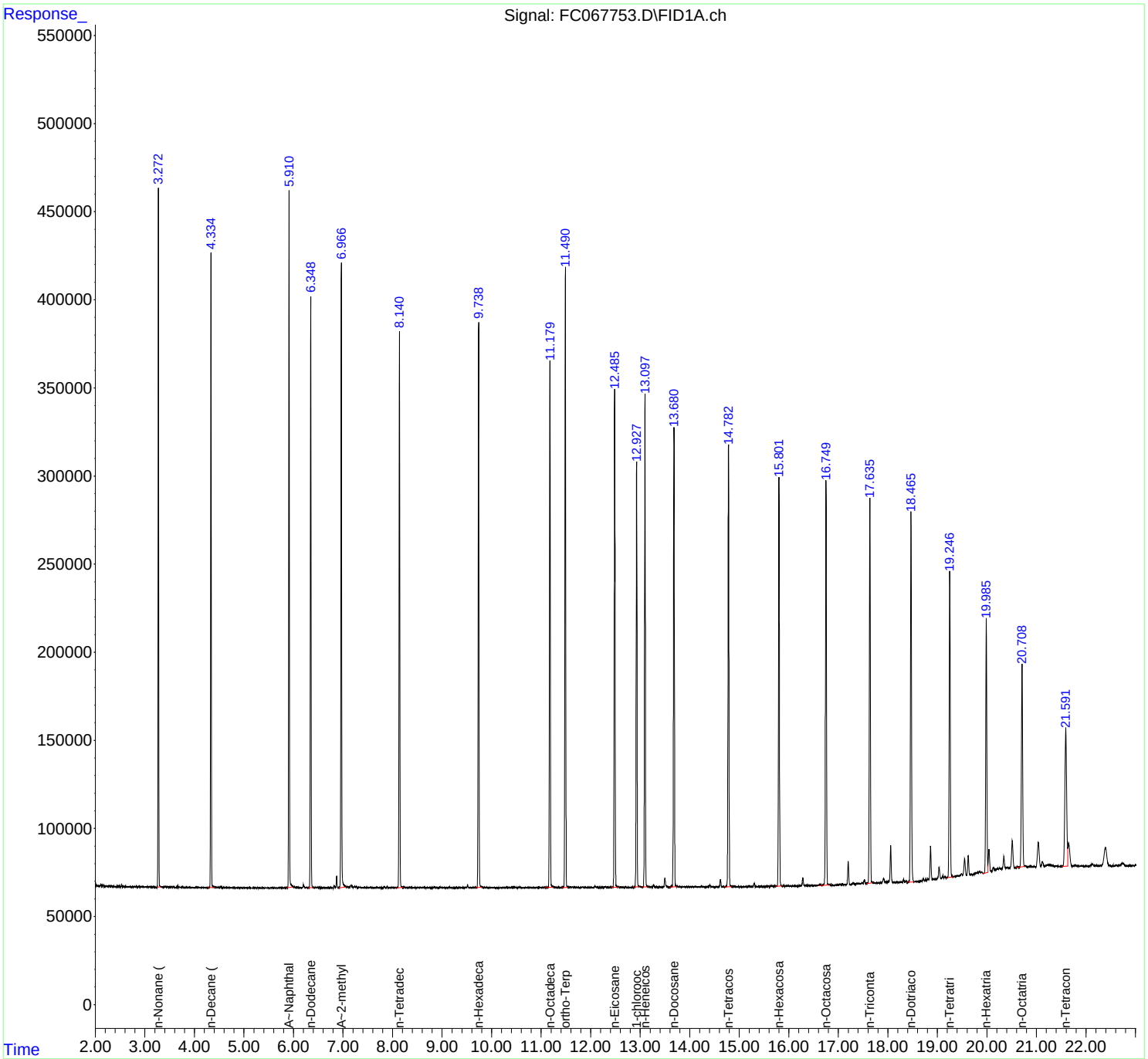
(f)=RT Delta > 1/2 Window (m)=manual int.

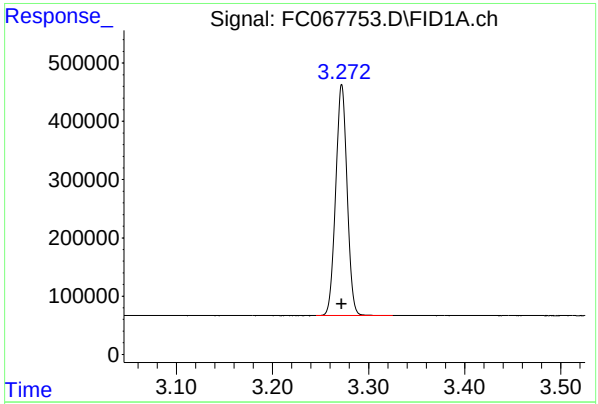
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067753.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 13:49
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Nov 14 16:43:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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

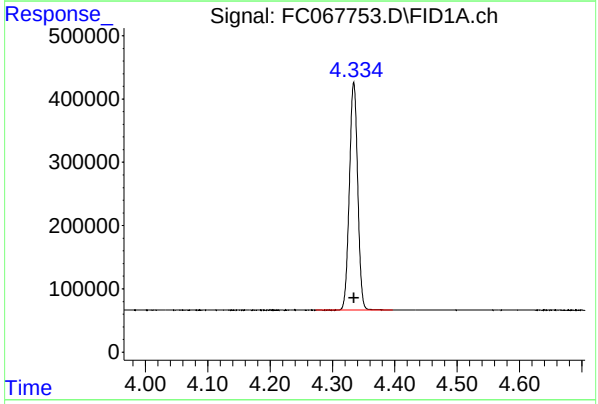




#1 n-Nonane (C9)

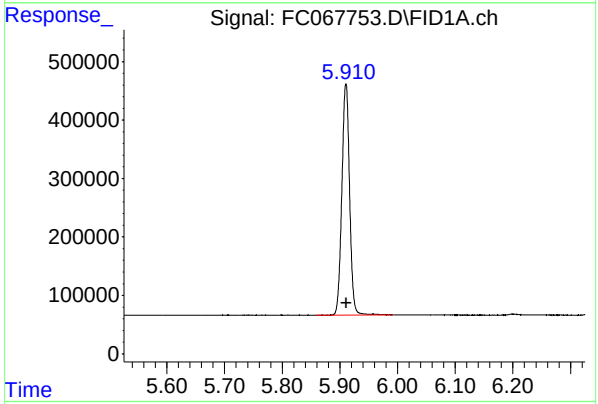
R.T.: 3.272 min
Delta R.T.: 0.000 min
Response: 3273252
Conc: 20.07 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



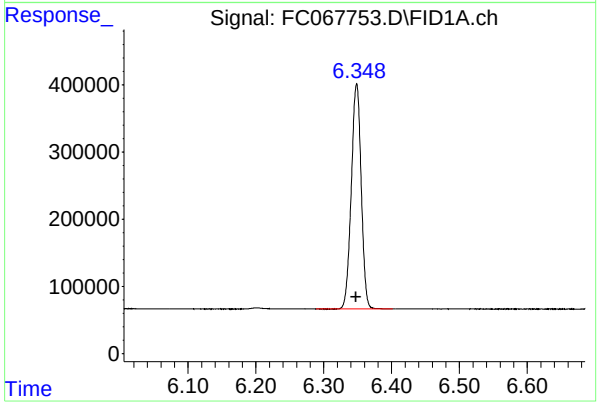
#2 n-Decane (C10)

R.T.: 4.334 min
Delta R.T.: 0.000 min
Response: 3340748
Conc: 20.15 ug/ml



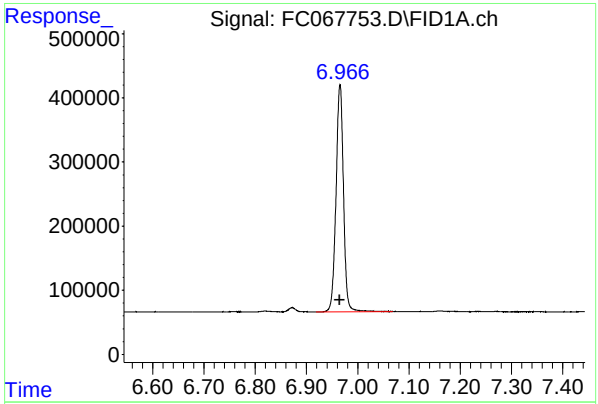
#3 A~Naphthalene (C11.7)

R.T.: 5.911 min
Delta R.T.: 0.000 min
Response: 3690809
Conc: 20.15 ug/ml



#4 n-Dodecane (C12)

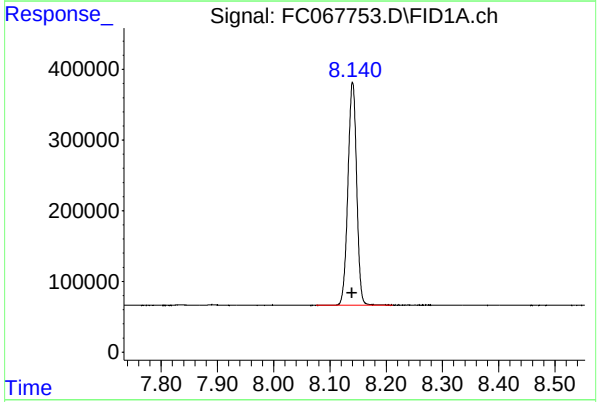
R.T.: 6.348 min
Delta R.T.: 0.000 min
Response: 3400656
Conc: 20.19 ug/ml



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

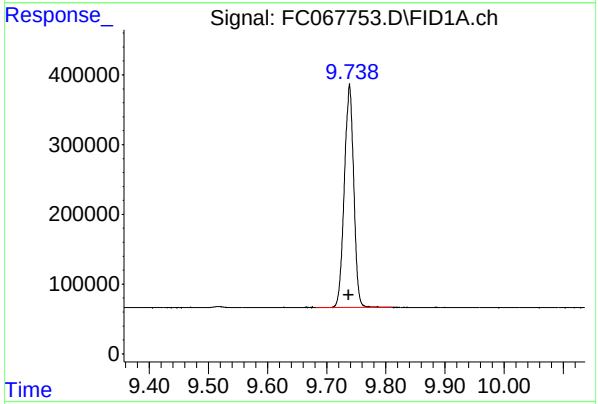
R.T.: 6.965 min
Delta R.T.: 0.000 min
Response: 3590183
Conc: 20.24 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



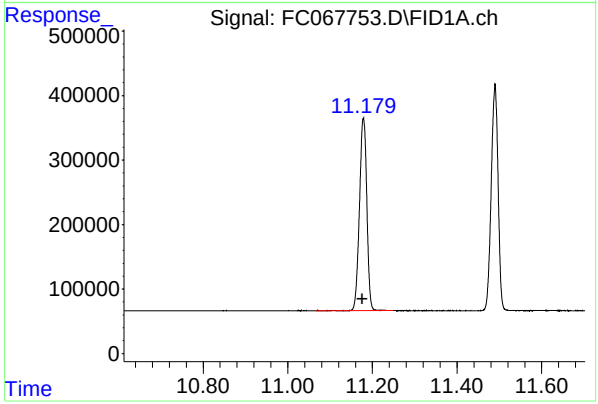
#6 n-Tetradecane (C14)

R.T.: 8.140 min
Delta R.T.: 0.001 min
Response: 3396495
Conc: 20.28 ug/ml



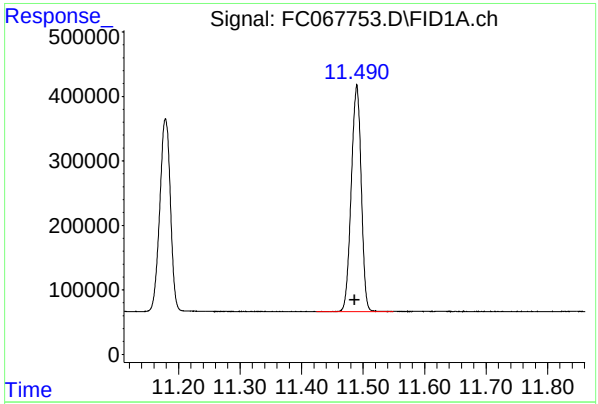
#7 n-Hexadecane (C16)

R.T.: 9.738 min
Delta R.T.: 0.001 min
Response: 3529343
Conc: 20.37 ug/ml



#8 n-Octadecane (C18)

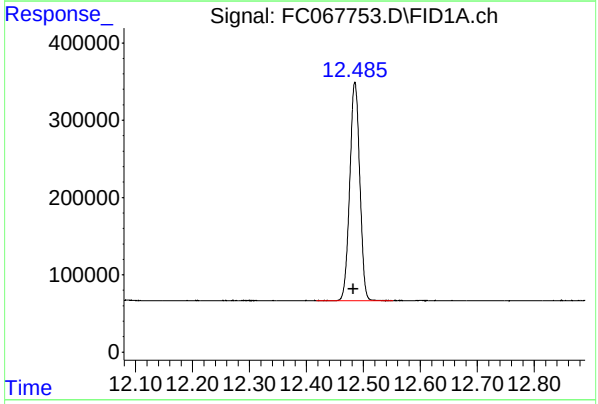
R.T.: 11.179 min
Delta R.T.: 0.003 min
Response: 3598310
Conc: 20.45 ug/ml



#9 ortho-Terphenyl (SURR)

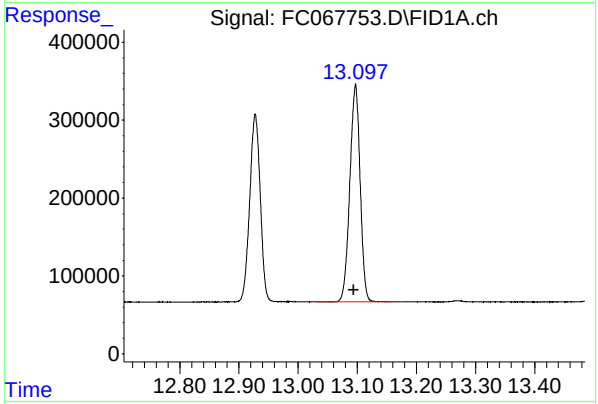
R.T.: 11.490 min
Delta R.T.: 0.003 min
Response: 3947572
Conc: 20.36 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



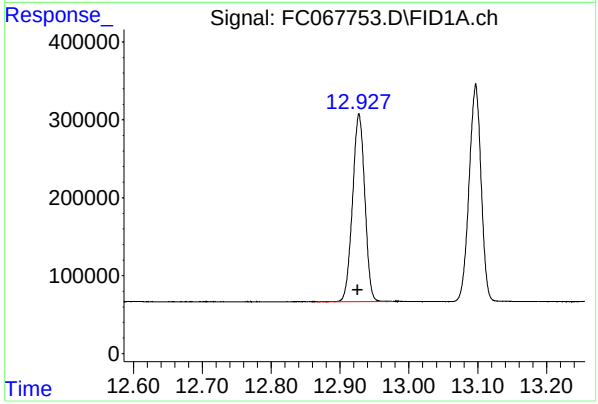
#10 n-Eicosane (C20)

R.T.: 12.485 min
Delta R.T.: 0.003 min
Response: 3453724
Conc: 20.51 ug/ml



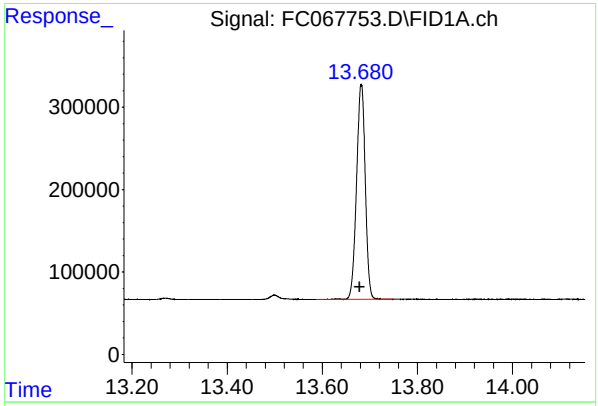
#11 n-Heneicosane (C21)

R.T.: 13.097 min
Delta R.T.: 0.003 min
Response: 3372726
Conc: 20.50 ug/ml



#12 1-chlorooctadecane (SURR)

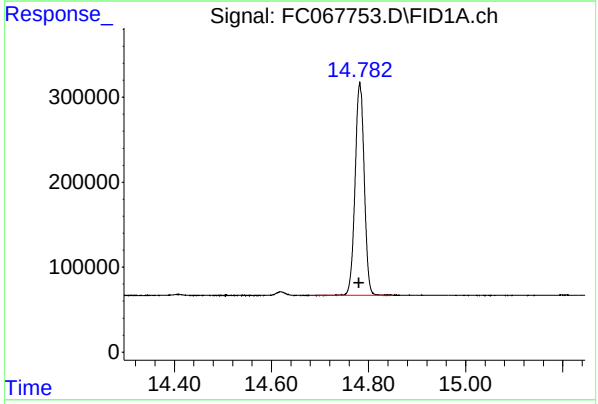
R.T.: 12.928 min
Delta R.T.: 0.002 min
Response: 2977474
Conc: 20.51 ug/ml



#13 n-Docosane (C22)

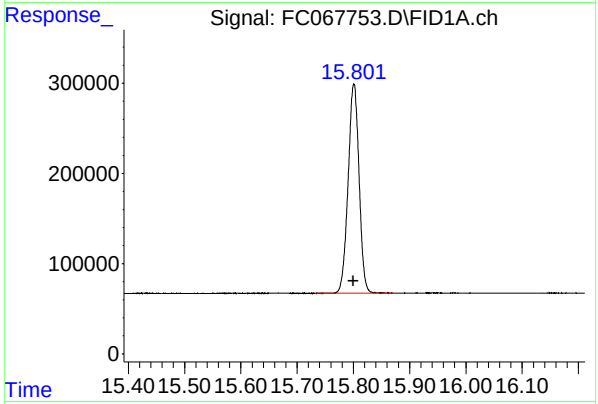
R.T.: 13.682 min
Delta R.T.: 0.003 min
Response: 3336664
Conc: 20.49 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



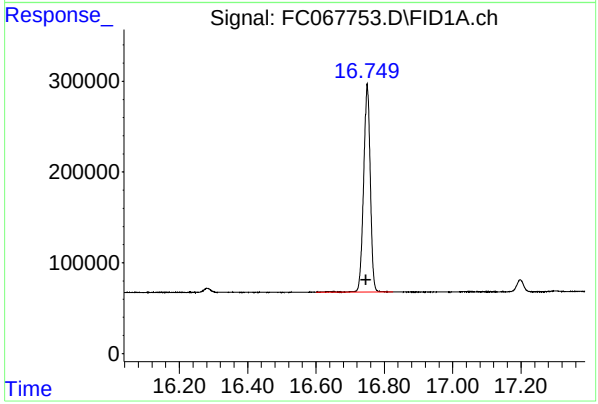
#14 n-Tetracosane (C24)

R.T.: 14.782 min
Delta R.T.: 0.002 min
Response: 3259223
Conc: 20.32 ug/ml



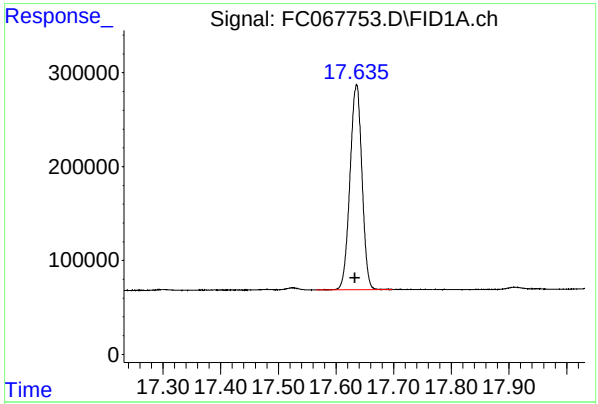
#15 n-Hexacosane (C26)

R.T.: 15.801 min
Delta R.T.: 0.001 min
Response: 3138531
Conc: 20.27 ug/ml



#16 n-Octacosane (C28)

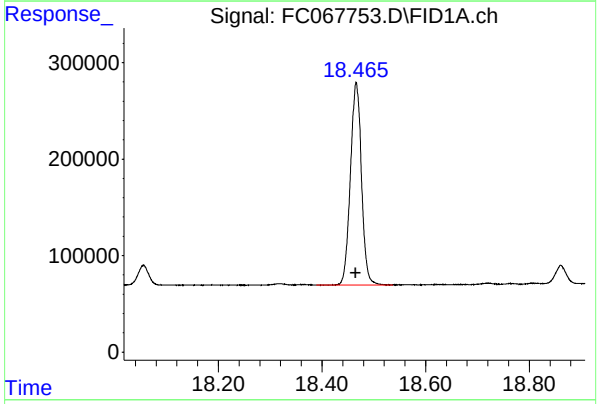
R.T.: 16.750 min
Delta R.T.: 0.003 min
Response: 3091639
Conc: 20.47 ug/ml



#17 n-Tricontane (C30)

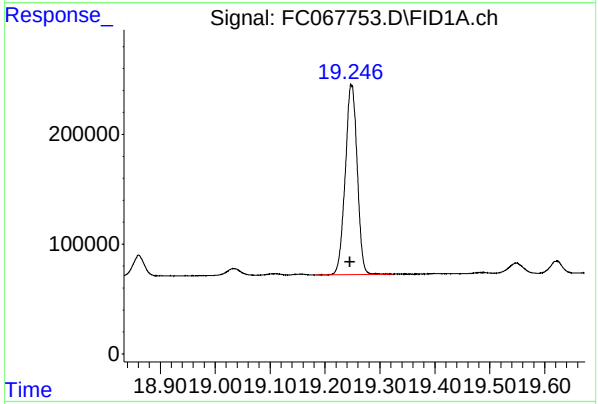
R.T.: 17.635 min
Delta R.T.: 0.002 min
Response: 3156621
Conc: 20.62 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



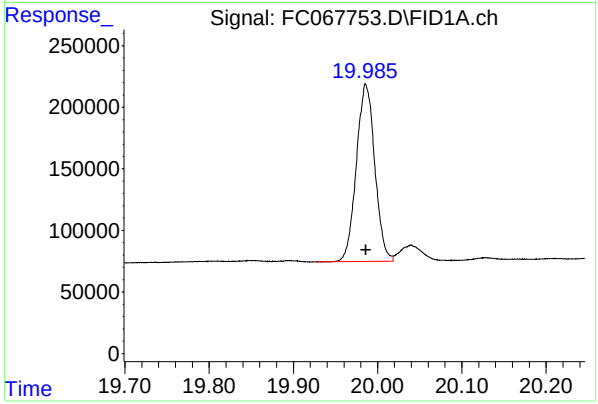
#18 n-Dotriacontane (C32)

R.T.: 18.466 min
Delta R.T.: 0.001 min
Response: 3113422
Conc: 21.08 ug/ml



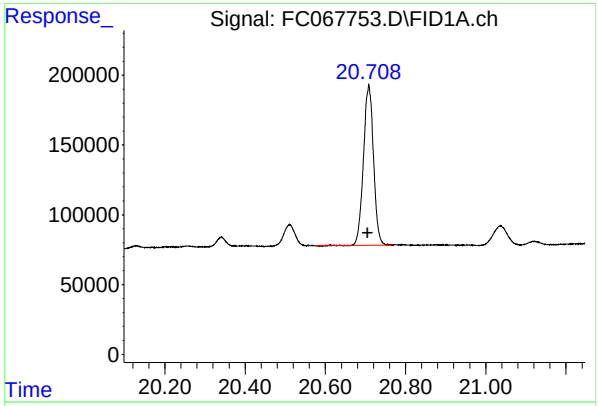
#19 n-Tetratriacontane (C34)

R.T.: 19.248 min
Delta R.T.: 0.003 min
Response: 2614033
Conc: 20.72 ug/ml



#20 n-Hexatriacontane (C36)

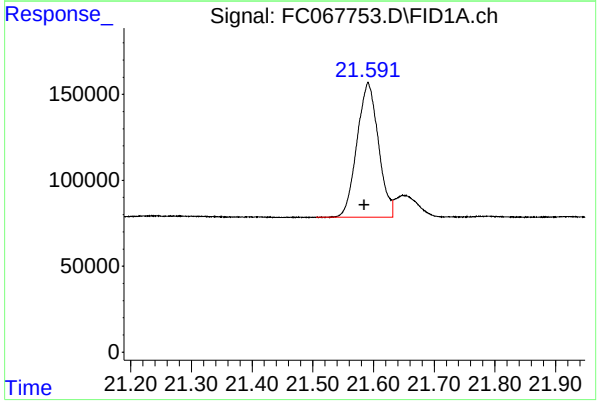
R.T.: 19.986 min
Delta R.T.: 0.000 min
Response: 2189342
Conc: 20.93 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.708 min
Delta R.T.: 0.003 min
Response: 1993396
Conc: 20.41 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 21.591 min
Delta R.T.: 0.006 min
Response: 1922623
Conc: 19.73 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067753.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 13:49
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.272	3.245	3.325	BB	397207	3273252	82.92%	4.717%
2	4.334	4.274	4.397	BB	359161	3340748	84.63%	4.815%
3	5.911	5.859	5.992	BB	395819	3690809	93.50%	5.319%
4	6.349	6.289	6.402	BB	335407	3400656	86.15%	4.901%
5	6.965	6.919	7.069	BB	354092	3590183	90.95%	5.174%
6	8.140	8.075	8.212	BB	315820	3396495	86.04%	4.895%
7	9.738	9.682	9.812	BB	320549	3529343	89.41%	5.086%
8	11.179	11.067	11.249	BB	298392	3598310	91.15%	5.186%
9	11.490	11.424	11.549	BB	353294	3947572	100.00%	5.689%
10	12.485	12.417	12.552	BB	282430	3453724	87.49%	4.977%
11	12.928	12.865	12.977	BB	241045	2977474	75.43%	4.291%
12	13.097	13.030	13.160	BB	278431	3372726	85.44%	4.861%
13	13.682	13.587	13.749	BB	259524	3336664	84.52%	4.809%
14	14.782	14.692	14.850	BB	249647	3259223	82.56%	4.697%
15	15.801	15.734	15.870	BB	232224	3138531	79.51%	4.523%
16	16.750	16.600	16.825	BB	228528	3091639	78.32%	4.456%
17	17.635	17.565	17.699	BB	218395	3156621	79.96%	4.549%
18	18.466	18.389	18.537	BB	209581	3113422	78.87%	4.487%
19	19.248	19.184	19.324	BB	171350	2614033	66.22%	3.767%
20	19.986	19.927	20.018	BV	142350	2189342	55.46%	3.155%
21	20.708	20.577	20.769	BB	115321	1993396	50.50%	2.873%
22	21.591	21.505	21.632	BV	78477	1922623	48.70%	2.771%
			Sum of corrected areas:			69386786		

Aliphatic EPH 111424.M Fri Nov 15 03:31:23 2024

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

Inital Calibration Report for SequenceID : FD111424AR

AreaCount

Parameter Range	FD048729.D	FD048730.D	FD048731.D	FD048732.D	FD048733.D	
Aromatic C10-C12	35969884.000	18267930.000	7601024.000	4048482.000	2051093.000	
Aromatic C12-C16	53799266.000	27329767.000	11363305.000	6130468.000	3105423.000	
Aromatic C16-C21	68956735.000	35122486.000	14626807.000	7814027.000	4056681.000	
Aromatic C21-C36	129641639.000	66976017.000	28128596.000	14930708.000	7699801.000	
Aromatic EPH	288367524.000	147696200.000	61719732.000	32923685.000	16912998.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aromatic C10-C12	192017.544	5.932				
Aromatic C12-C16	192458.9766662	6.576				
Aromatic C16-C21	185804.816	6.985				
Aromatic C21-C36	157231.0562216	7.202				
Aromatic EPH	173317.2659998	6.861				

Concentration

Parameter Range	FD048729.D	FD048730.D	FD048731.D	FD048732.D	FD048733.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	FD048729.D	FD048730.D	FD048731.D	FD048732.D	FD048733.D	
Aromatic C10-C12	179849.420000	182679.300000	190025.600000	202424.100000	205109.300000	
Aromatic C12-C16	179330.886666	182198.446666	189388.416666	204348.933333	207028.200000	
Aromatic C16-C21	172391.837500	175612.430000	182835.087500	195350.675000	202834.050000	
Aromatic C21-C36	144046.265555	148835.593333	156269.977777	165896.755555	171106.688888	
Aromatic EPH	160204.180000	164106.888888	171443.700000	182909.361111	187922.200000	

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048729.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 10:39
Operator : YP/AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1

Integration File: autoint1.e
Quant Time: Nov 14 12:42:47 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:40:13 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...	7.373	16279710	96.638 ug/ml
Spiked Amount 50.000		Recovery = 193.28%	
6) S 2-Flurobiphenyl (SURR)	8.224	10978429	98.038 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 196.08%#	
11) S ortho-Terphenyl (SURR)	11.261	17593385	96.618 ug/ml
Spiked Amount 50.000		Recovery = 193.24%	
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.194	17620031	97.215 ug/ml
2) T Naphthalene (C11.7)	5.713	18349853	97.281 ug/ml
3) T 2-Methylnaphthalene (...	6.761	17920924	97.298 ug/ml
5) T Acenaphthylene (C15.06)	8.028	18165782	97.718 ug/ml
7) T Acenaphthene (C15.5)	8.324	17712560	96.795 ug/ml
8) T Flouorene (C16.55)	9.102	17936029	97.266 ug/ml
9) T Phenanthrene (C19.36)	10.490	17155776	97.334 ug/ml
10) T Anthracene (C19.43)	10.567	17179222	96.460 ug/ml
12) T Fluoranthene (C21.85)	12.296	16826726	96.772 ug/ml
13) T Pyrene (C20.8)	12.590	16685708	97.181 ug/ml
14) T Benzo[a]anthracene (C...	14.460	15682702	97.315 ug/ml
15) T Chrysene (C27.41)	14.507	15579339	95.080 ug/ml
16) T benzo[b]fluoranthene ...	16.009	14749238	96.630 ug/ml
17) T Bnezo[k]fluoranthene ...	16.047	14449844	95.199 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.387	13748521	95.913 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.753	12754859	101.169 ug/ml
20) T Dibenz[a,h]anthracene...	17.793	12899293	92.101 ug/ml
21) T Benzo[g,h,i]perylene ...	18.010	12951117	95.291 ug/ml

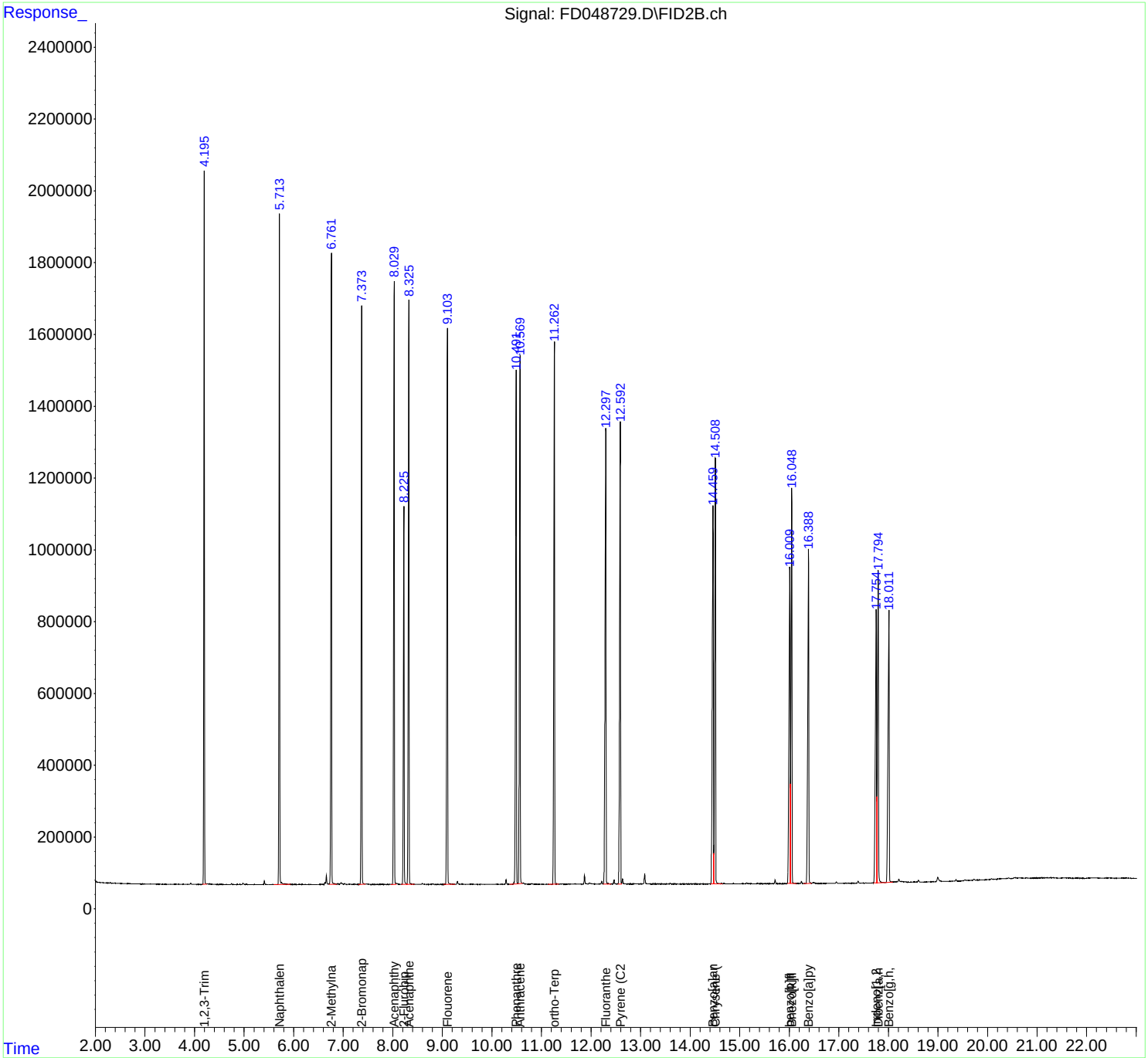
(f)=RT Delta > 1/2 Window (m)=manual int.

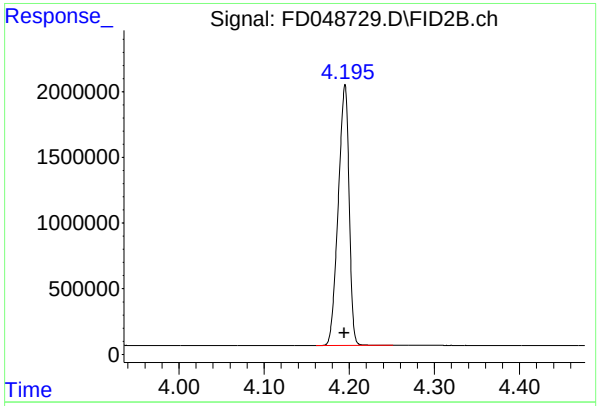
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048729.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 10:39
Operator : YP/AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1

Integration File: autoint1.e
Quant Time: Nov 14 12:42:47 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:40:13 2024
Response via : Initial Calibration
Integrator: ChemStation

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

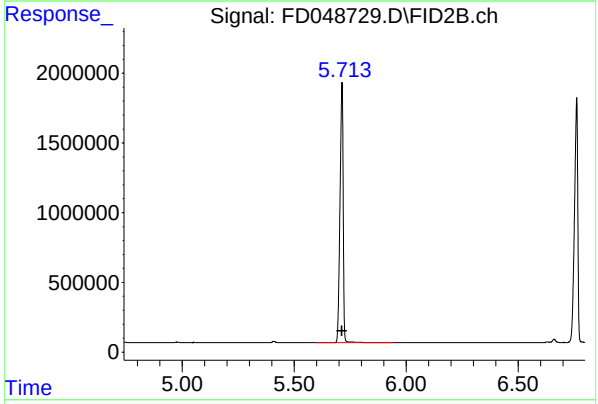




#1 1,2,3-Trimethylbenzene (C10.1)

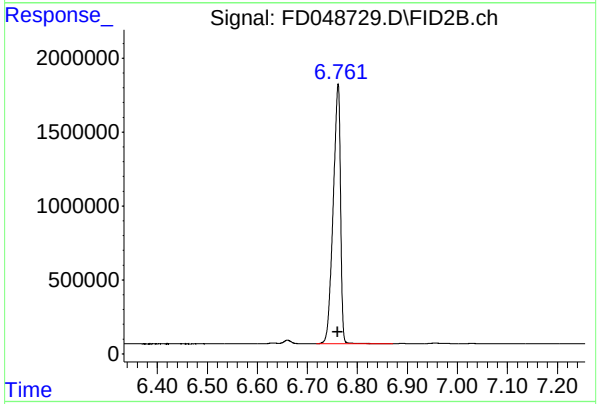
R.T.: 4.194 min
Delta R.T.: 0.000 min
Response: 17620031
Conc: 97.22 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



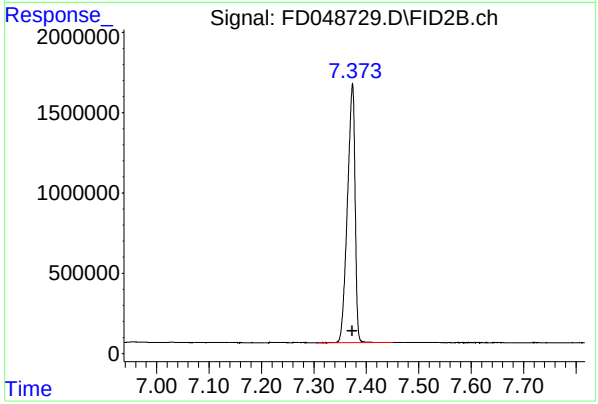
#2 Naphthalene (C11.7)

R.T.: 5.713 min
Delta R.T.: 0.000 min
Response: 18349853
Conc: 97.28 ug/ml



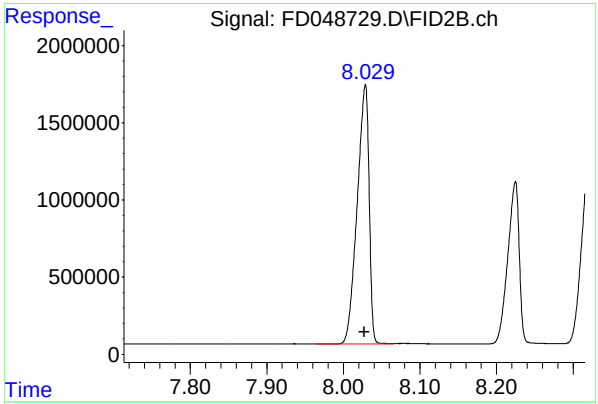
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.761 min
Delta R.T.: 0.000 min
Response: 17920924
Conc: 97.30 ug/ml



#4 2-Bromonaphthalene (SURR)

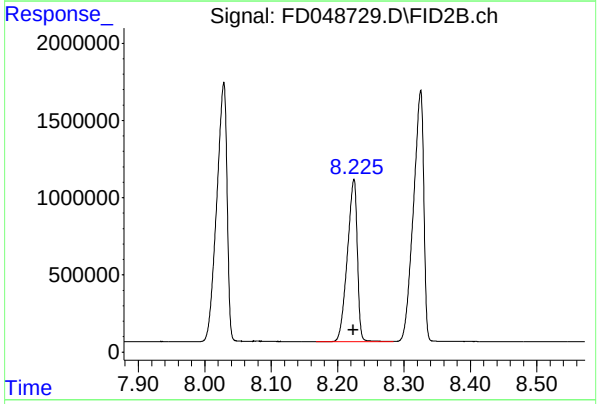
R.T.: 7.373 min
Delta R.T.: 0.000 min
Response: 16279710
Conc: 96.64 ug/ml



#5 Acenaphthylene (C15.06)

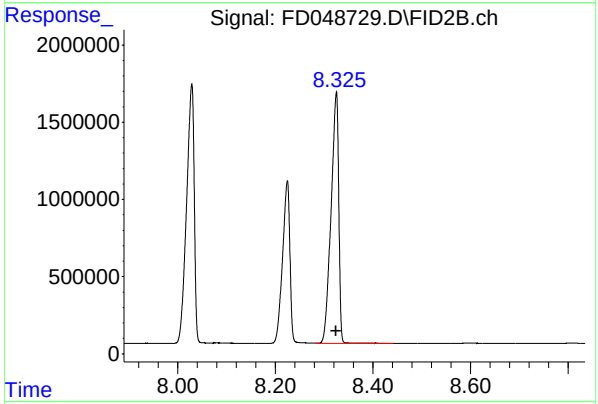
R.T.: 8.028 min
Delta R.T.: 0.000 min
Response: 18165782
Conc: 97.72 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



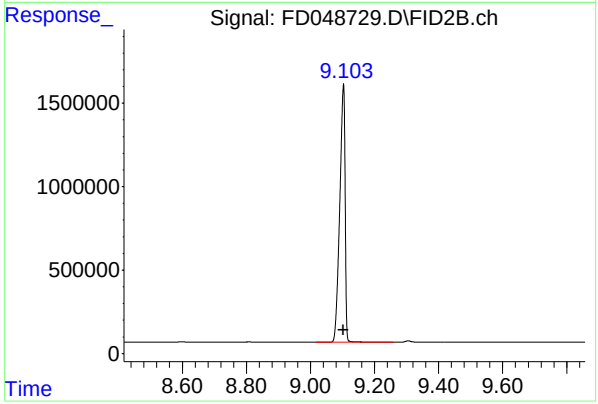
#6 2-Flurobiphenyl (SURR)

R.T.: 8.224 min
Delta R.T.: 0.000 min
Response: 10978429
Conc: 98.04 ug/ml



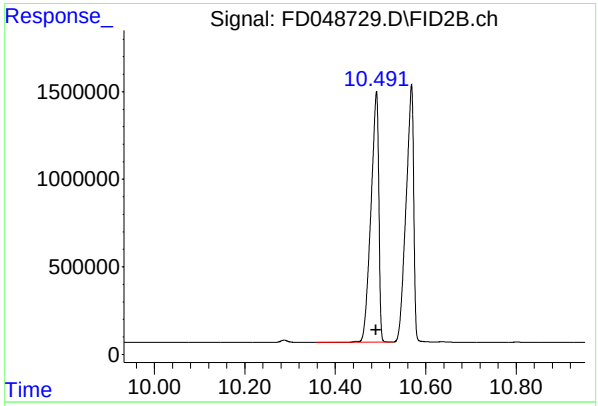
#7 Acenaphthene (C15.5)

R.T.: 8.324 min
Delta R.T.: 0.000 min
Response: 17712560
Conc: 96.79 ug/ml



#8 Flouorene (C16.55)

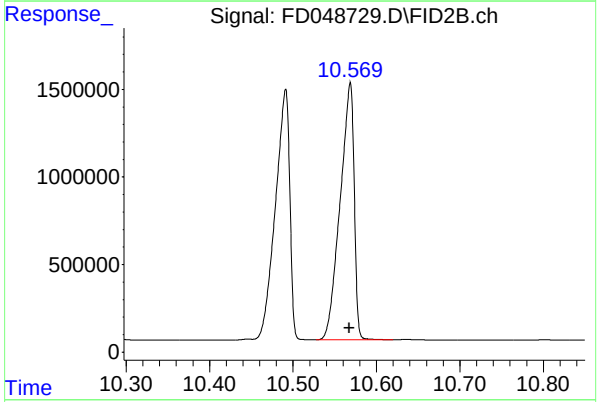
R.T.: 9.102 min
Delta R.T.: 0.000 min
Response: 17936029
Conc: 97.27 ug/ml



#9 Phenanthrene (C19.36)

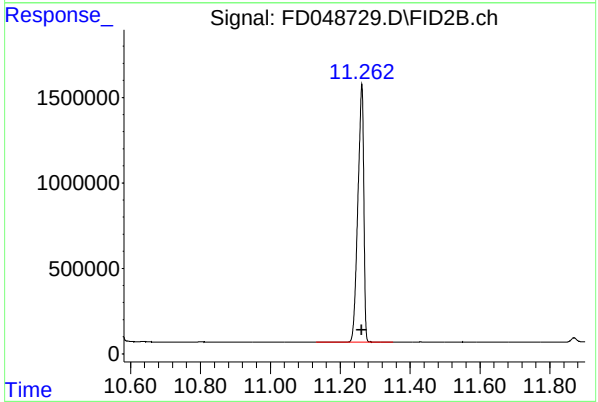
R.T.: 10.490 min
Delta R.T.: 0.000 min
Response: 17155776
Conc: 97.33 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



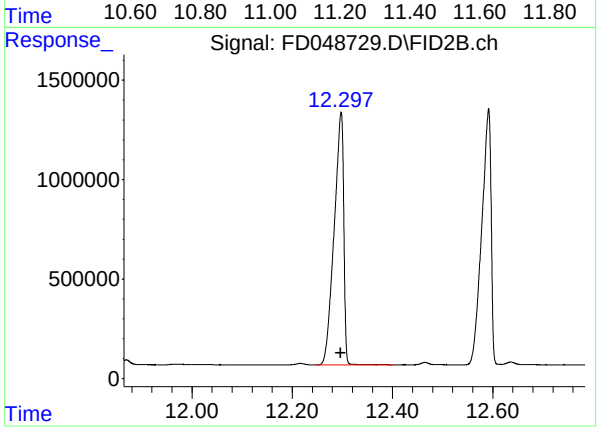
#10 Anthracene (C19.43)

R.T.: 10.567 min
Delta R.T.: 0.000 min
Response: 17179222
Conc: 96.46 ug/ml



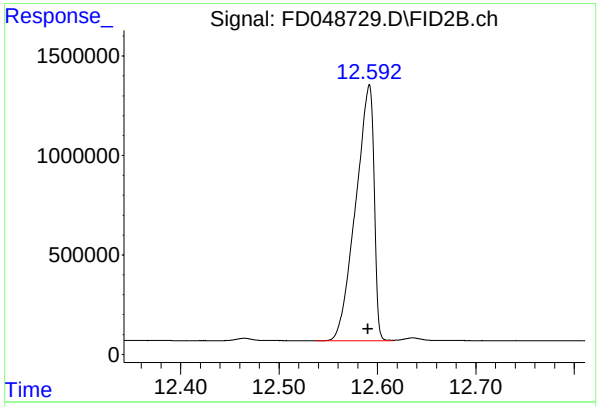
#11 ortho-Terphenyl (SURR)

R.T.: 11.261 min
Delta R.T.: 0.000 min
Response: 17593385
Conc: 96.62 ug/ml



#12 Fluoranthene (C21.85)

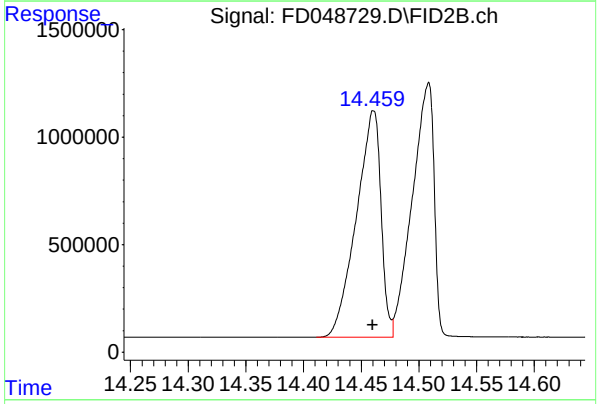
R.T.: 12.296 min
Delta R.T.: 0.000 min
Response: 16826726
Conc: 96.77 ug/ml



#13 Pyrene (C20.8)

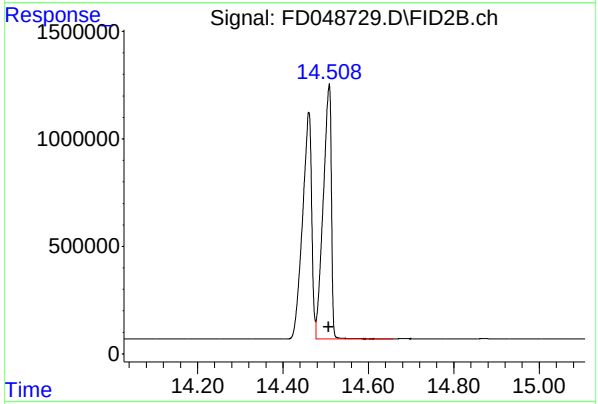
R.T.: 12.590 min
Delta R.T.: 0.000 min
Response: 16685708
Conc: 97.18 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



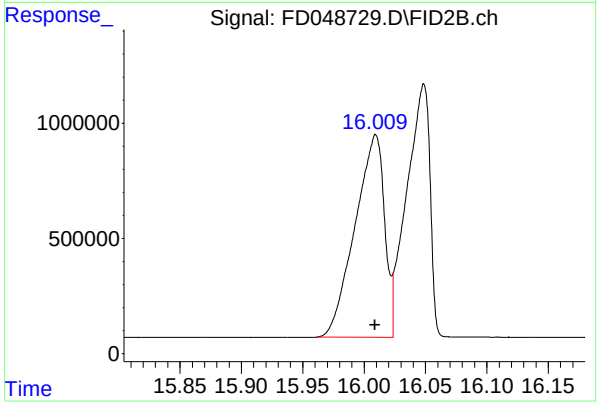
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.460 min
Delta R.T.: 0.000 min
Response: 15682702
Conc: 97.32 ug/ml



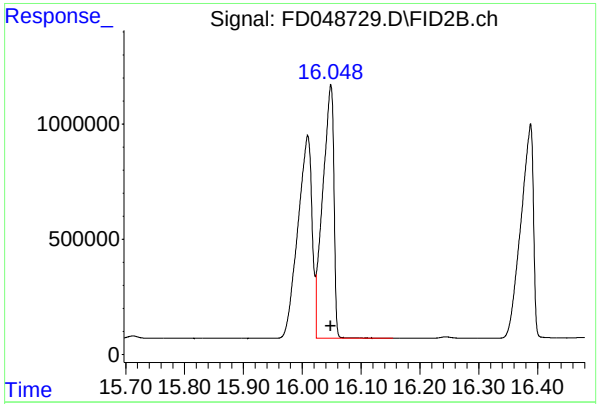
#15 Chrysene (C27.41)

R.T.: 14.507 min
Delta R.T.: 0.000 min
Response: 15579339
Conc: 95.08 ug/ml



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

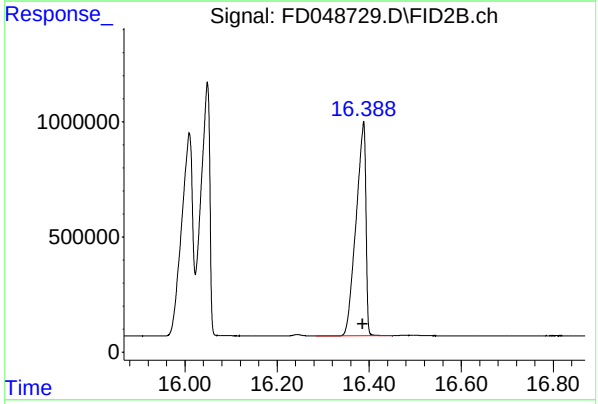
R.T.: 16.009 min
Delta R.T.: 0.000 min
Response: 14749238
Conc: 96.63 ug/ml



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

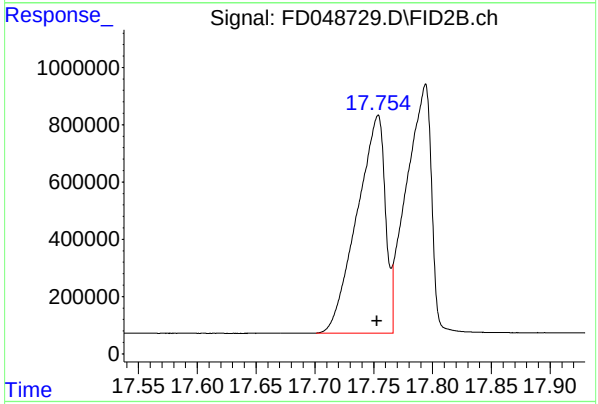
R.T.: 16.047 min
Delta R.T.: 0.000 mi
Response: 14449844
Conc: 95.20 ug/m

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



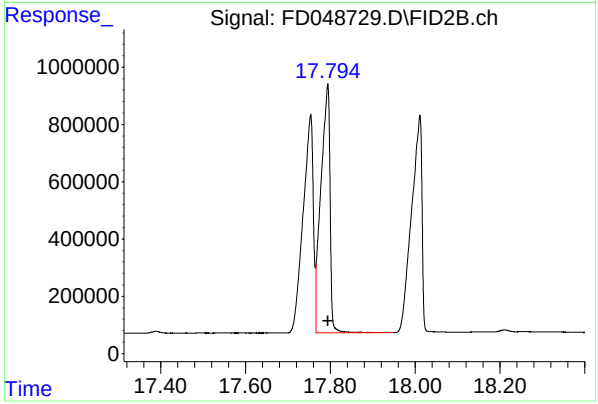
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.387 min
Delta R.T.: 0.000 min
Response: 13748521
Conc: 95.91 ug/ml



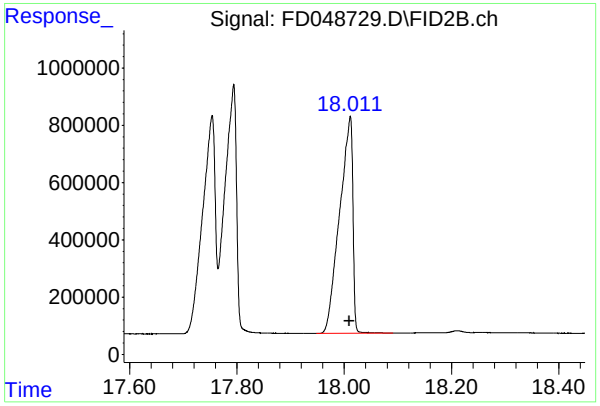
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.753 min
Delta R.T.: 0.000 min
Response: 12754859
Conc: 101.17 ug/ml



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

R.T.: 17.793 min
Delta R.T.: -0.001 min
Response: 12899293
Conc: 92.10 ug/ml



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

R.T.: 18.010 min
Delta R.T.: 0.000 mi
Response: 12951117
Conc: 95.29 ug/m

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048729.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 10:39
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.194	4.161	4.251	BV	1968987	17620031	96.02%	5.288%
2	5.713	5.598	5.941	BB	1911565	18349853	100.00%	5.507%
3	6.761	6.718	6.871	VV	1752861	17920924	97.66%	5.378%
4	7.373	7.304	7.451	BV	1649420	16279710	88.72%	4.886%
5	8.028	7.964	8.065	VV	1662481	18165782	99.00%	5.452%
6	8.224	8.168	8.283	PV	1055066	10978429	59.83%	3.295%
7	8.324	8.283	8.441	VB	1619247	17712560	96.53%	5.316%
8	9.102	9.018	9.258	BB	1516197	17936029	97.74%	5.383%
9	10.490	10.358	10.528	PV	1445226	17155776	93.49%	5.148%
10	10.567	10.528	10.620	VV	1455857	17179222	93.62%	5.156%
11	11.261	11.131	11.351	BV	1503276	17593385	95.88%	5.280%
12	12.296	12.248	12.401	PV	1287669	16826726	91.70%	5.050%
13	12.590	12.538	12.616	PV	1284099	16685708	90.93%	5.007%
14	14.460	14.411	14.478	BV	1066457	15682702	85.47%	4.706%
15	14.507	14.478	14.658	VV	1184558	15579339	84.90%	4.675%
16	16.009	15.961	16.024	BV	870846	14749238	80.38%	4.426%
17	16.047	16.024	16.154	VB	1095885	14449844	78.75%	4.336%
18	16.387	16.285	16.452	PV	935309	13748521	74.92%	4.126%
19	17.753	17.701	17.766	BV	775079	12754859	69.51%	3.828%
20	17.793	17.766	17.948	VV	889008	12899293	70.30%	3.871%
21	18.010	17.948	18.091	PV	765798	12951117	70.58%	3.887%
			Sum of corrected areas:			333219047		

Aromatic EPH 111424.M Fri Nov 15 02:36:20 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048730.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 11:15
Operator : YP/AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Nov 14 12:44:35 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:40:13 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	8283088	49.443 ug/ml
Spiked Amount	50.000		Recovery =	98.89%
6) S	2-Flurobiphenyl (SURR)	8.218	5559238	49.762 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	99.52%
11) S	ortho-Terphenyl (SURR)	11.254	8996437	49.602 ug/ml
Spiked Amount	50.000		Recovery =	99.20%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.190	8939308	49.545 ug/ml
2) T	Naphthalene (C11.7)	5.708	9328622	49.636 ug/ml
3) T	2-Methylnaphthalene (...	6.755	9099861	49.602 ug/ml
5) T	Acenaphthylene (C15.06)	8.022	9189135	49.619 ug/ml
7) T	Acenaphthene (C15.5)	8.317	9040771	49.602 ug/ml
8) T	Flouorene (C16.55)	9.095	9136727	49.698 ug/ml
9) T	Phenanthrene (C19.36)	10.482	8716439	49.634 ug/ml
10) T	Anthracene (C19.43)	10.558	8726580	49.328 ug/ml
12) T	Fluoranthene (C21.85)	12.287	8602468	49.648 ug/ml
13) T	Pyrene (C20.8)	12.581	8542740	49.836 ug/ml
14) T	Benzo[a]anthracene (C...	14.450	8014439	49.821 ug/ml
15) T	Chrysene (C27.41)	14.494	8069480	49.496 ug/ml
16) T	benzo[b]fluoranthene ...	15.999	7563737	49.702 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.034	7564689	49.676 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.375	7116324	49.763 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.740	6332404	50.151 ug/ml
20) T	Dibenz[a,h]anthracene...	17.778	6967880	49.424 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.993	6744596	49.749 ug/ml

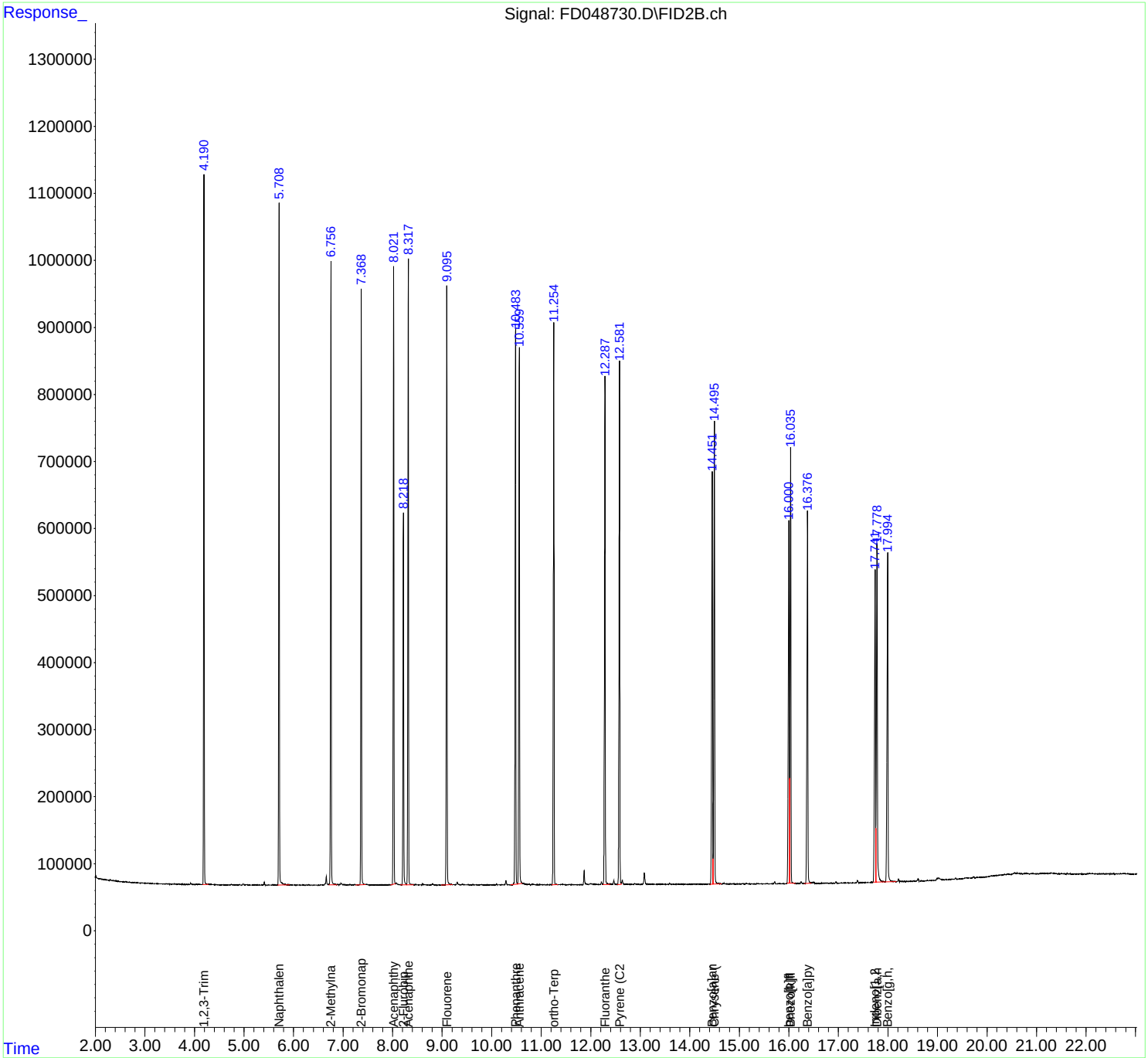
(f)=RT Delta > 1/2 Window (m)=manual int.

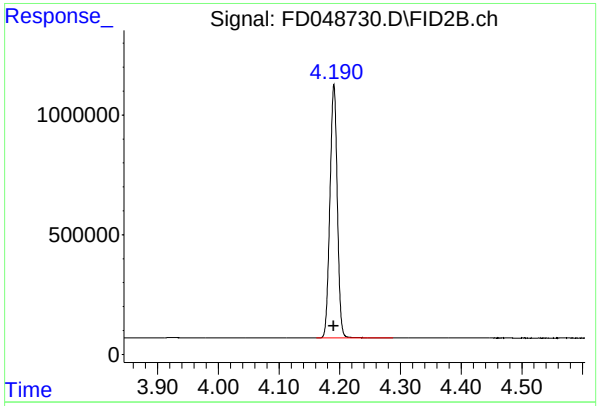
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048730.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 11:15
Operator : YP/AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Nov 14 12:44:35 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:40:13 2024
Response via : Initial Calibration
Integrator: ChemStation

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

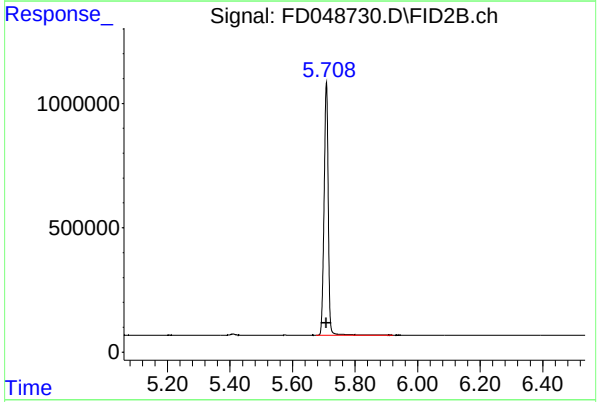




#1 1,2,3-Trimethylbenzene (C10.1)

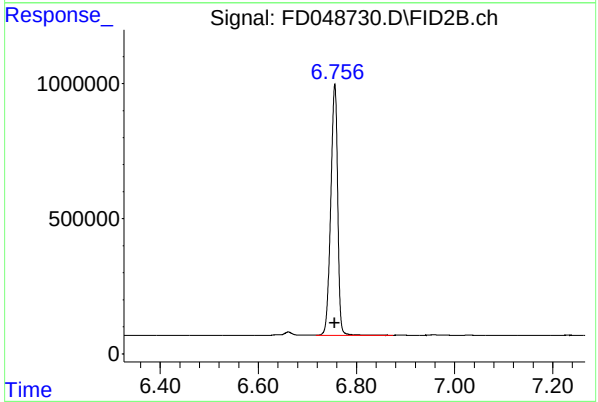
R.T.: 4.190 min
Delta R.T.: 0.000 min
Response: 8939308
Conc: 49.55 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



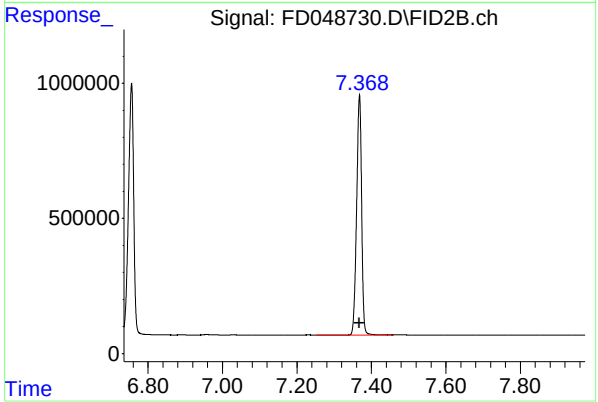
#2 Naphthalene (C11.7)

R.T.: 5.708 min
Delta R.T.: 0.000 min
Response: 9328622
Conc: 49.64 ug/ml



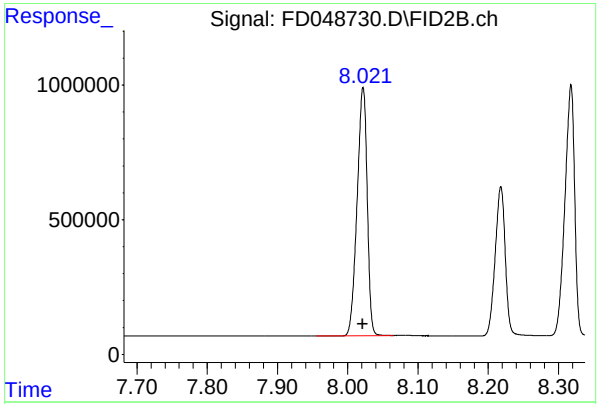
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.755 min
Delta R.T.: 0.000 min
Response: 9099861
Conc: 49.60 ug/ml



#4 2-Bromonaphthalene (SURR)

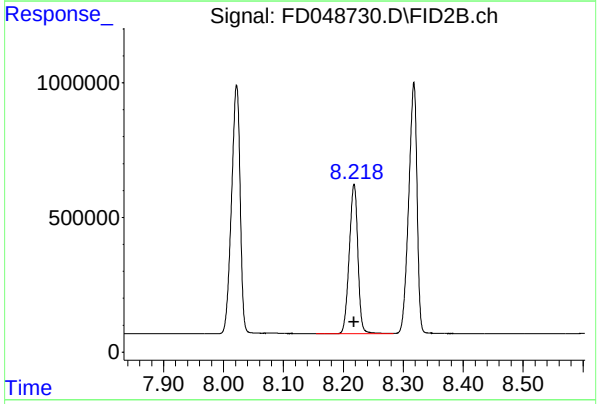
R.T.: 7.368 min
Delta R.T.: 0.000 min
Response: 8283088
Conc: 49.44 ug/ml



#5 Acenaphthylene (C15.06)

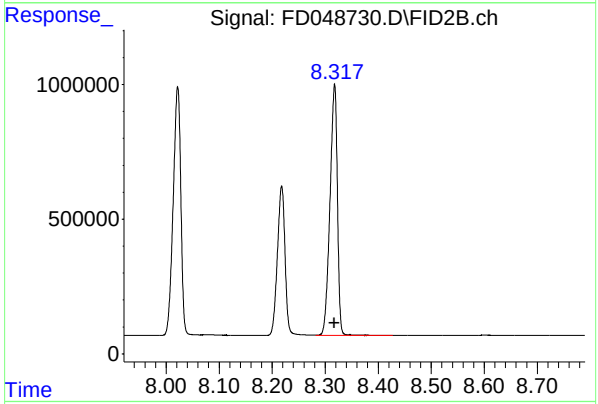
R.T.: 8.022 min
Delta R.T.: 0.000 min
Response: 9189135
Conc: 49.62 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



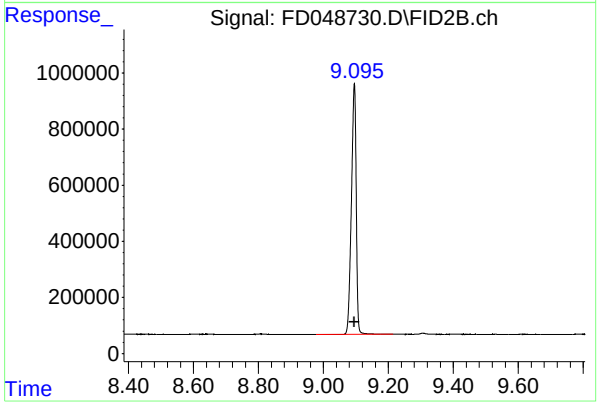
#6 2-Flurobiphenyl (SURR)

R.T.: 8.218 min
Delta R.T.: 0.000 min
Response: 5559238
Conc: 49.76 ug/ml



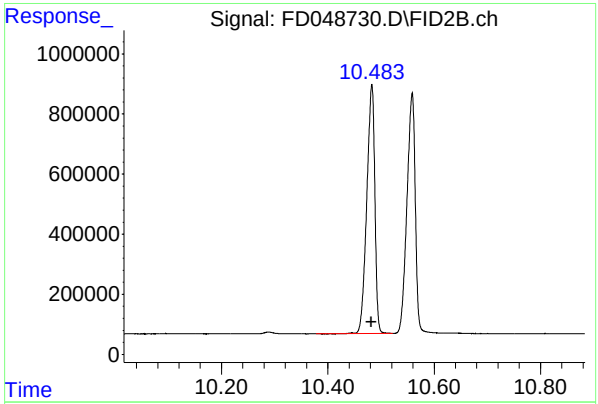
#7 Acenaphthene (C15.5)

R.T.: 8.317 min
Delta R.T.: 0.000 min
Response: 9040771
Conc: 49.60 ug/ml



#8 Flouorene (C16.55)

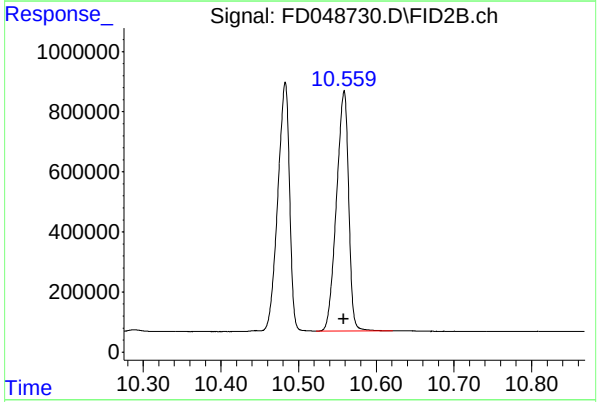
R.T.: 9.095 min
Delta R.T.: 0.000 min
Response: 9136727
Conc: 49.70 ug/ml



#9 Phenanthrene (C19.36)

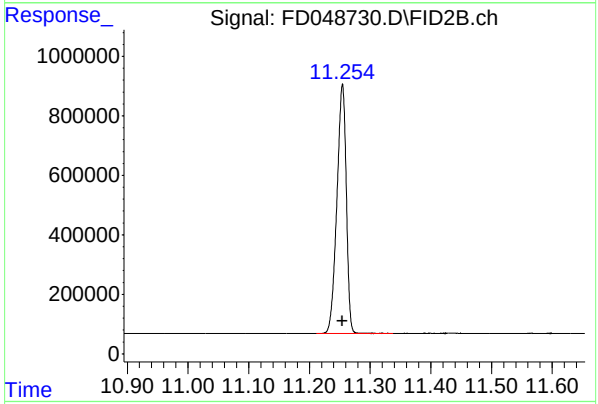
R.T.: 10.482 min
Delta R.T.: 0.000 min
Response: 8716439
Conc: 49.63 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



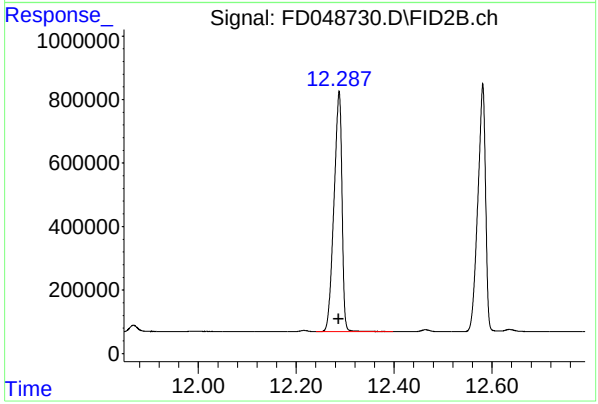
#10 Anthracene (C19.43)

R.T.: 10.558 min
Delta R.T.: 0.000 min
Response: 8726580
Conc: 49.33 ug/ml



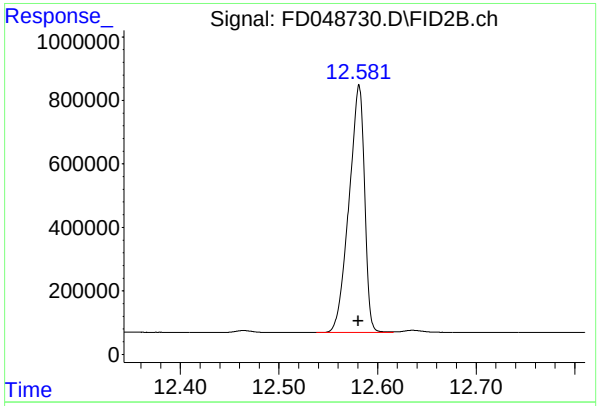
#11 ortho-Terphenyl (SURR)

R.T.: 11.254 min
Delta R.T.: 0.000 min
Response: 8996437
Conc: 49.60 ug/ml



#12 Fluoranthene (C21.85)

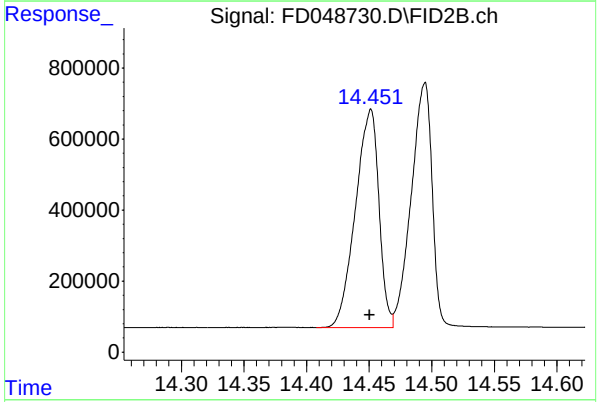
R.T.: 12.287 min
Delta R.T.: 0.000 min
Response: 8602468
Conc: 49.65 ug/ml



#13 Pyrene (C20.8)

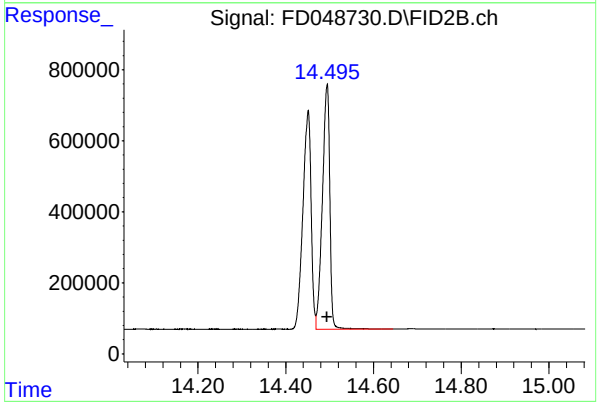
R.T.: 12.581 min
Delta R.T.: 0.000 min
Response: 8542740
Conc: 49.84 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



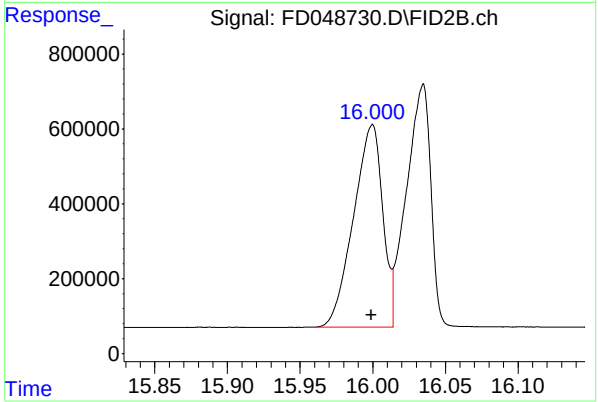
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.450 min
Delta R.T.: 0.000 min
Response: 8014439
Conc: 49.82 ug/ml



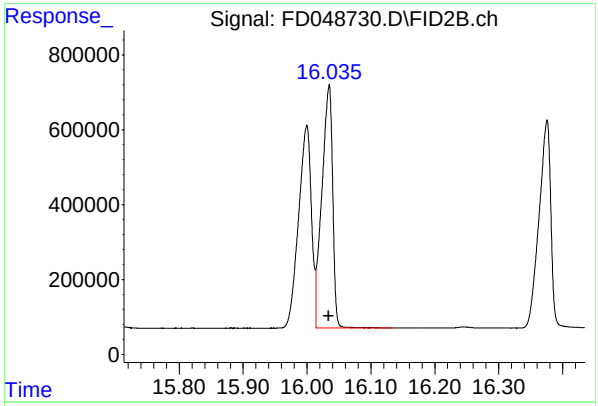
#15 Chrysene (C27.41)

R.T.: 14.494 min
Delta R.T.: 0.000 min
Response: 8069480
Conc: 49.50 ug/ml



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

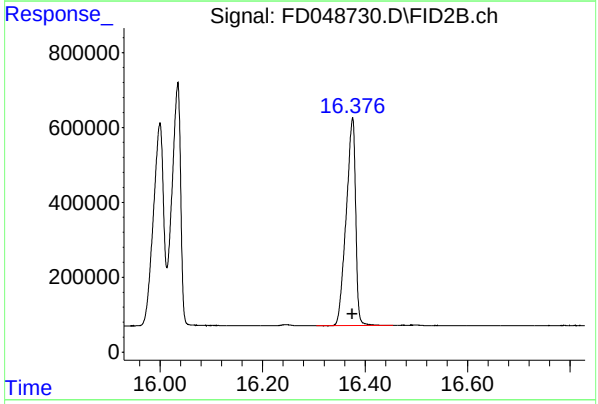
R.T.: 15.999 min
Delta R.T.: 0.000 min
Response: 7563737
Conc: 49.70 ug/ml



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

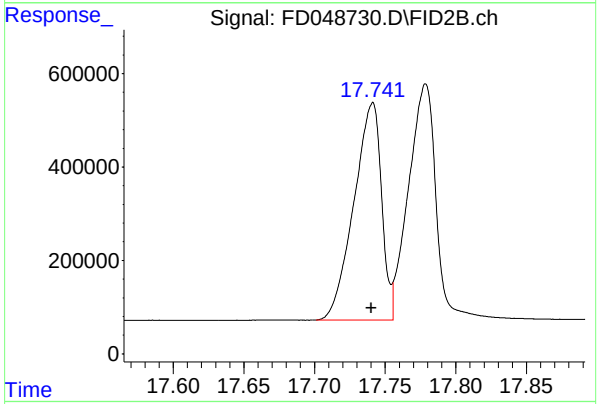
R.T.: 16.034 min
Delta R.T.: 0.000 min
Response: 7564689
Conc: 49.68 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



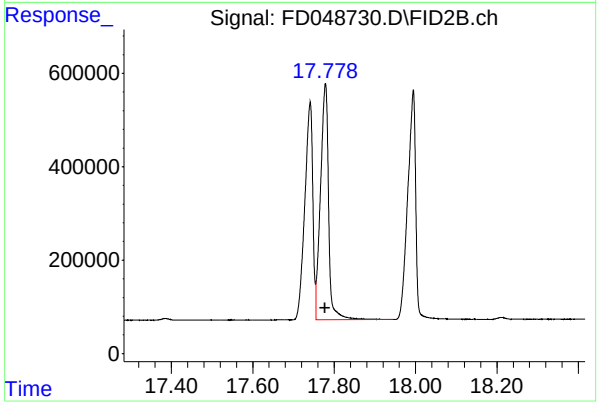
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.375 min
Delta R.T.: 0.000 min
Response: 7116324
Conc: 49.76 ug/ml



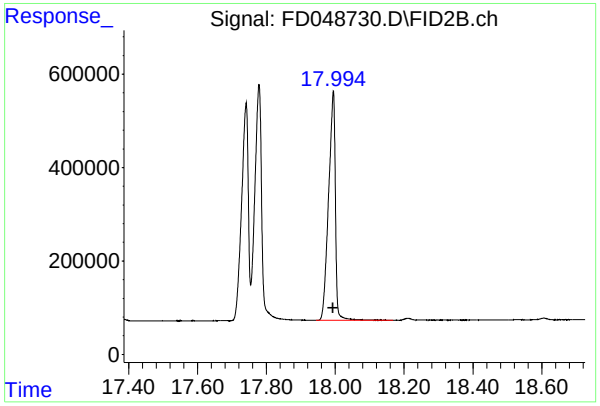
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.740 min
Delta R.T.: 0.000 min
Response: 6332404
Conc: 50.15 ug/ml



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

R.T.: 17.778 min
Delta R.T.: 0.000 min
Response: 6967880
Conc: 49.42 ug/ml



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

R.T.: 17.993 min
Delta R.T.: 0.000 mi
Response: 6744596
Conc: 49.75 ug/m

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048730.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 11:15
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.161	4.288	BB	1058435	8939308	95.83%	5.242%
2	5.708	5.675	5.921	PB	1013202	9328622	100.00%	5.470%
3	6.756	6.718	6.874	VV	916108	9099861	97.55%	5.336%
4	7.368	7.251	7.458	PV	886378	8283088	88.79%	4.857%
5	8.022	7.955	8.064	PV	921926	9189135	98.50%	5.388%
6	8.218	8.154	8.283	BV	555239	5559238	59.59%	3.260%
7	8.317	8.283	8.428	VB	936635	9040771	96.91%	5.301%
8	9.095	8.978	9.214	BV	884094	9136727	97.94%	5.358%
9	10.482	10.378	10.522	BV	814217	8716439	93.44%	5.111%
10	10.558	10.522	10.621	VV	794255	8726580	93.55%	5.117%
11	11.254	11.211	11.338	BB	838716	8996437	96.44%	5.275%
12	12.287	12.241	12.398	PB	761177	8602468	92.22%	5.044%
13	12.581	12.538	12.616	BV	781058	8542740	91.58%	5.009%
14	14.450	14.408	14.469	BV	616472	8014439	85.91%	4.700%
15	14.494	14.469	14.644	VB	694071	8069480	86.50%	4.732%
16	15.999	15.961	16.014	BV	535600	7563737	81.08%	4.435%
17	16.034	16.014	16.134	VB	652251	7564689	81.09%	4.436%
18	16.375	16.304	16.454	BV	549270	7116324	76.28%	4.173%
19	17.740	17.701	17.755	BV	468119	6332404	67.88%	3.713%
20	17.778	17.755	17.944	VV	504433	6967880	74.69%	4.086%
21	17.993	17.944	18.168	VV	496008	6744596	72.30%	3.955%
			Sum of corrected areas:			170534960		

Aromatic EPH 111424.M Fri Nov 15 02:36:53 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048731.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 11:51
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Nov 14 12:40:33 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:40:13 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...	7.365	3482492	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
6) S	2-Flurobiphenyl (SURR)	8.215	2283559	20.000 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	40.00%
11) S	ortho-Terphenyl (SURR)	11.250	3765042	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.189	3725913	20.000 ug/ml
2) T	Naphthalene (C11.7)	5.706	3875111	20.000 ug/ml
3) T	2-Methylnaphthalene (...	6.752	3783290	20.000 ug/ml
5) T	Acenaphthylene (C15.06)	8.018	3802878	20.000 ug/ml
7) T	Acenaphthene (C15.5)	8.312	3777137	20.000 ug/ml
8) T	Flouorene (C16.55)	9.091	3788895	20.000 ug/ml
9) T	Phenanthrene (C19.36)	10.478	3619123	20.000 ug/ml
10) T	Anthracene (C19.43)	10.553	3688027	20.000 ug/ml
12) T	Fluoranthene (C21.85)	12.282	3589859	20.000 ug/ml
13) T	Pyrene (C20.8)	12.574	3530762	20.000 ug/ml
14) T	Benzo[a]anthracene (C...	14.443	3309617	20.000 ug/ml
15) T	Chrysene (C27.41)	14.485	3438362	20.000 ug/ml
16) T	benzo[b]fluoranthene ...	15.990	3155598	20.000 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.022	3220964	20.000 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.366	2984019	20.000 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.730	2492029	20.000 ug/ml
20) T	Dibenz[a,h]anthracene...	17.770	3091940	20.000 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.980	2846208	20.000 ug/ml

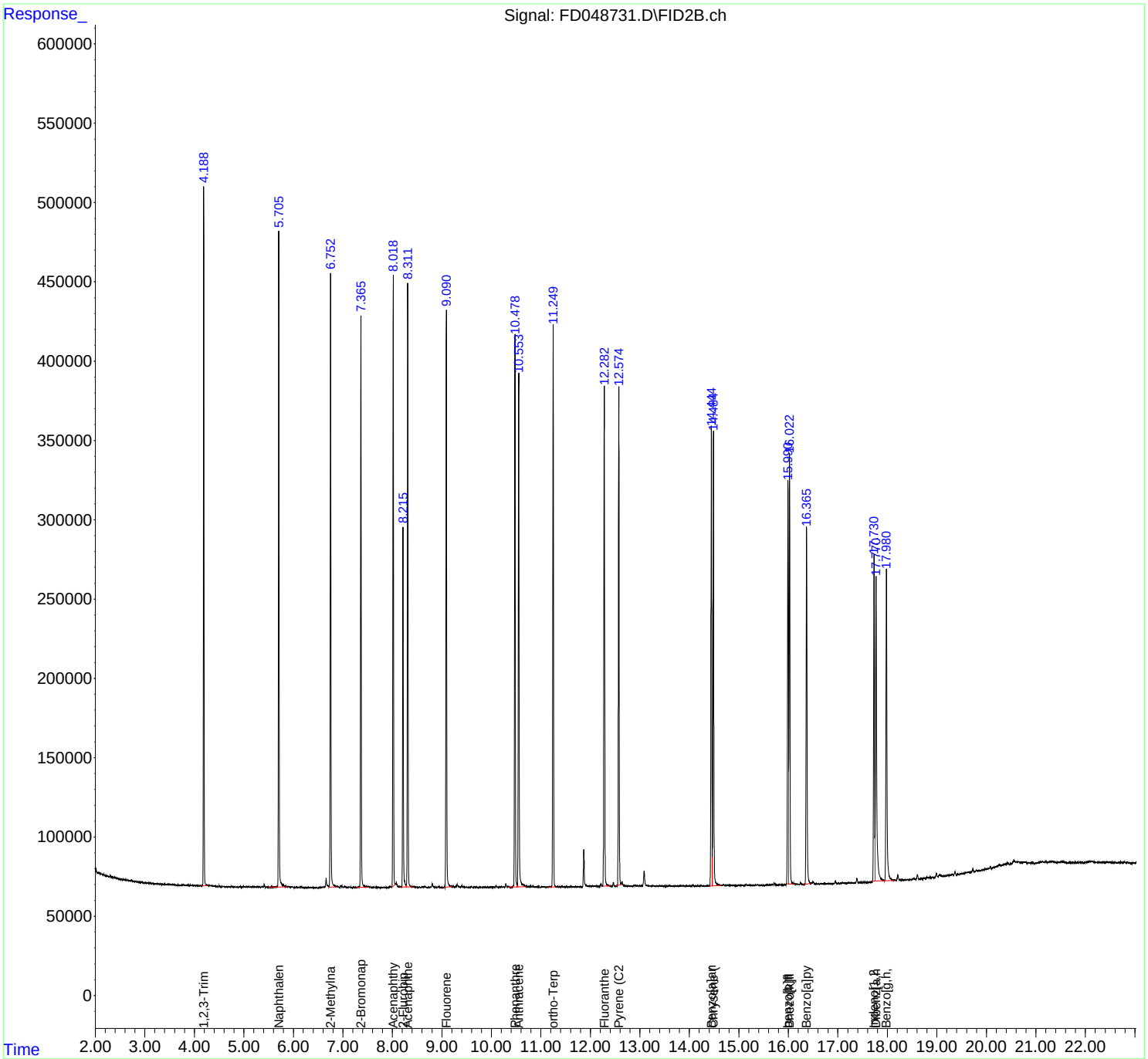
(f)=RT Delta > 1/2 Window (m)=manual int.

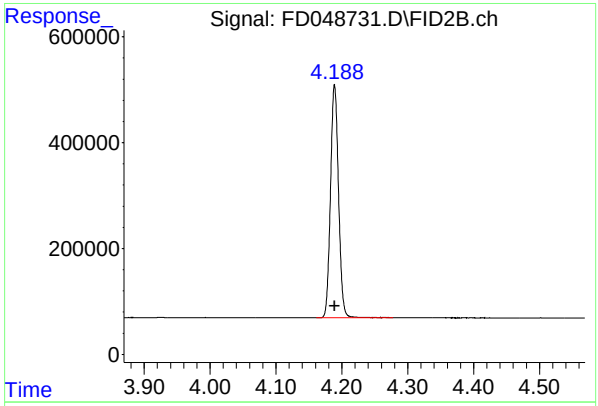
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048731.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 11:51
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Nov 14 12:40:33 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 12:40:13 2024
Response via : Initial Calibration
Integrator: ChemStation

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

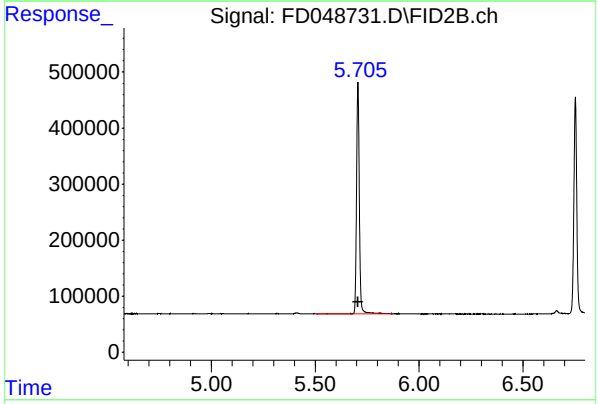




#1 1,2,3-Trimethylbenzene (C10.1)

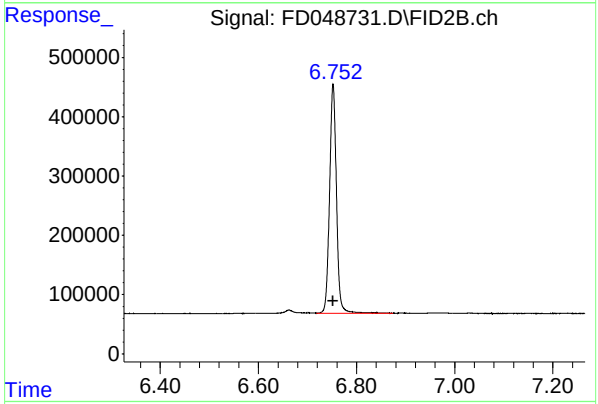
R.T.: 4.189 min
Delta R.T.: 0.000 min
Response: 3725913
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



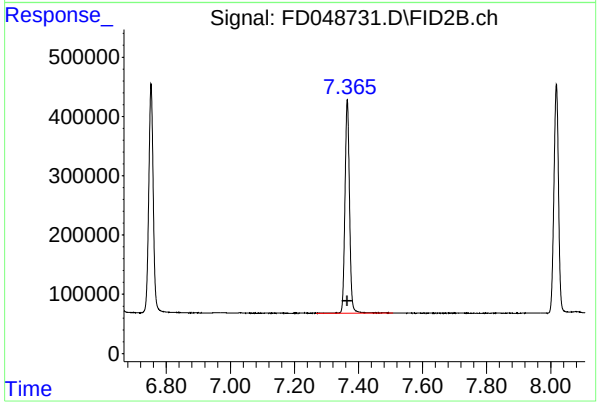
#2 Naphthalene (C11.7)

R.T.: 5.706 min
Delta R.T.: 0.000 min
Response: 3875111
Conc: 20.00 ug/ml



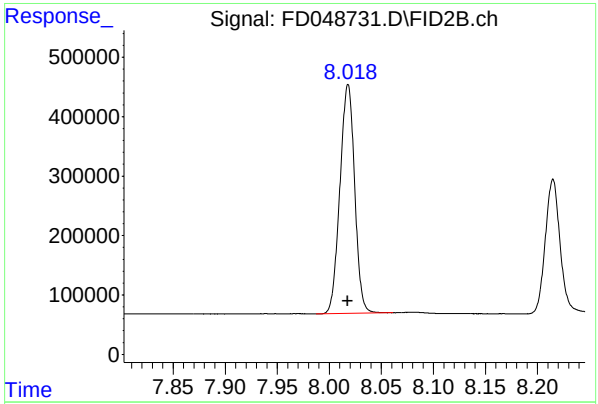
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.752 min
Delta R.T.: 0.000 min
Response: 3783290
Conc: 20.00 ug/ml



#4 2-Bromonaphthalene (SURR)

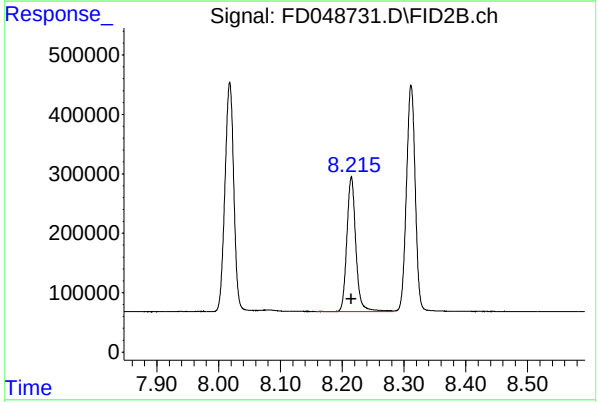
R.T.: 7.365 min
Delta R.T.: 0.000 min
Response: 3482492
Conc: 20.00 ug/ml



#5 Acenaphthylene (C15.06)

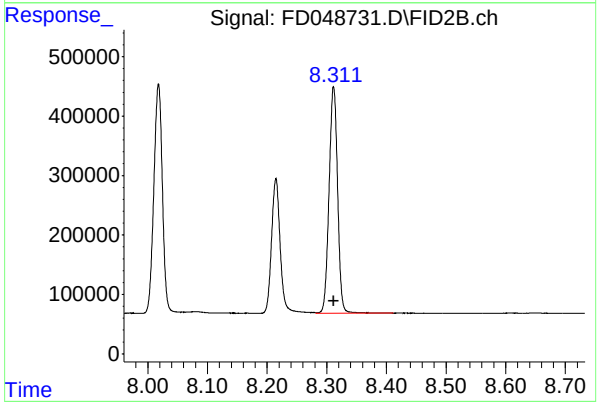
R.T.: 8.018 min
Delta R.T.: 0.000 min
Response: 3802878
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



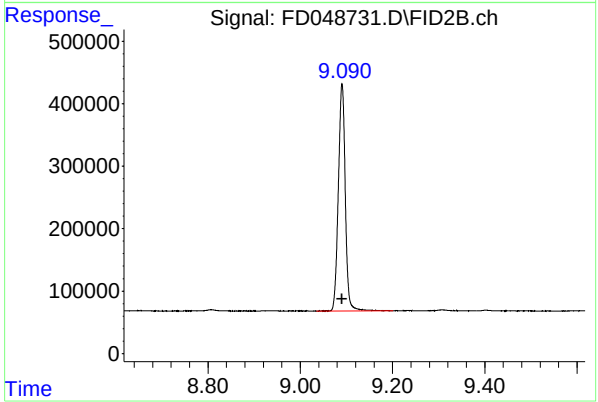
#6 2-Flurobiphenyl (SURR)

R.T.: 8.215 min
Delta R.T.: 0.000 min
Response: 2283559
Conc: 20.00 ug/ml



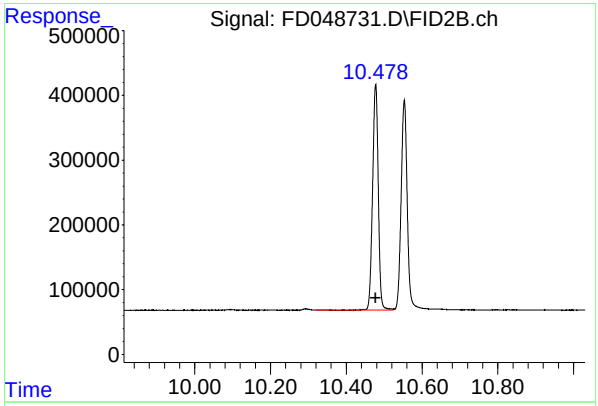
#7 Acenaphthene (C15.5)

R.T.: 8.312 min
Delta R.T.: 0.000 min
Response: 3777137
Conc: 20.00 ug/ml



#8 Flouorene (C16.55)

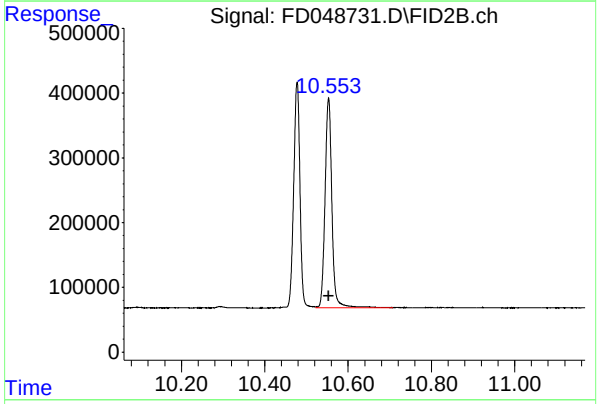
R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 3788895
Conc: 20.00 ug/ml



#9 Phenanthrene (C19.36)

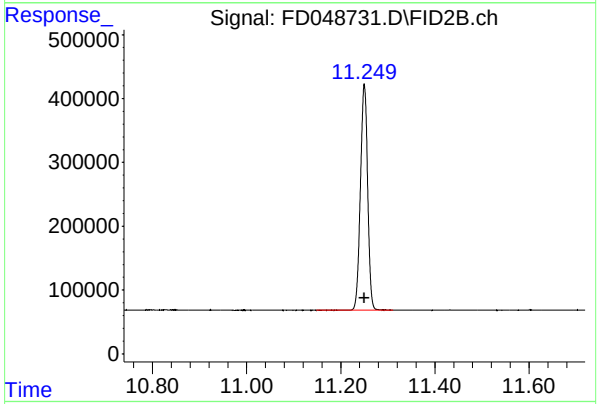
R.T.: 10.478 min
Delta R.T.: 0.000 min
Response: 3619123
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



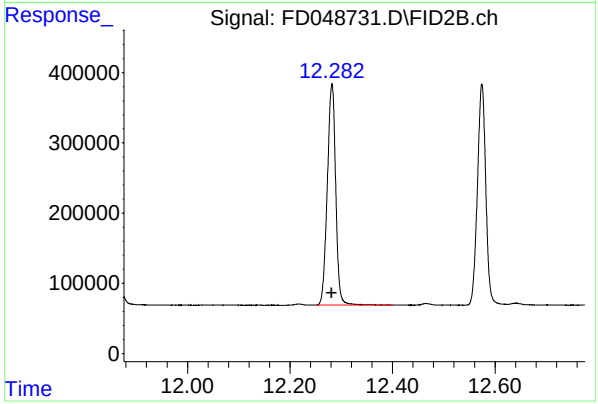
#10 Anthracene (C19.43)

R.T.: 10.553 min
Delta R.T.: 0.000 min
Response: 3688027
Conc: 20.00 ug/ml



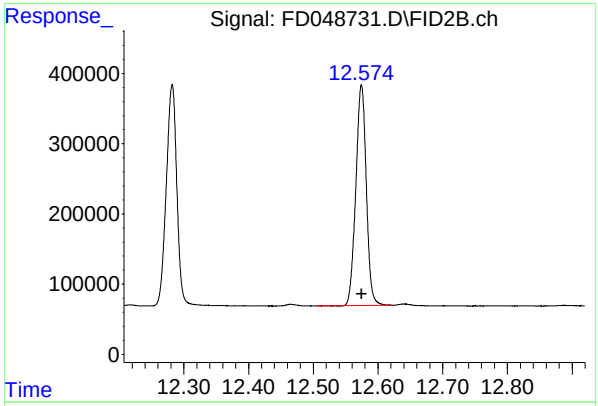
#11 ortho-Terphenyl (SURR)

R.T.: 11.250 min
Delta R.T.: 0.000 min
Response: 3765042
Conc: 20.00 ug/ml



#12 Fluoranthene (C21.85)

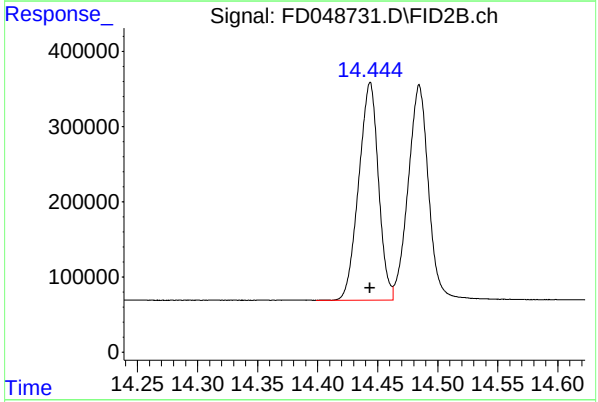
R.T.: 12.282 min
Delta R.T.: 0.000 min
Response: 3589859
Conc: 20.00 ug/ml



#13 Pyrene (C20.8)

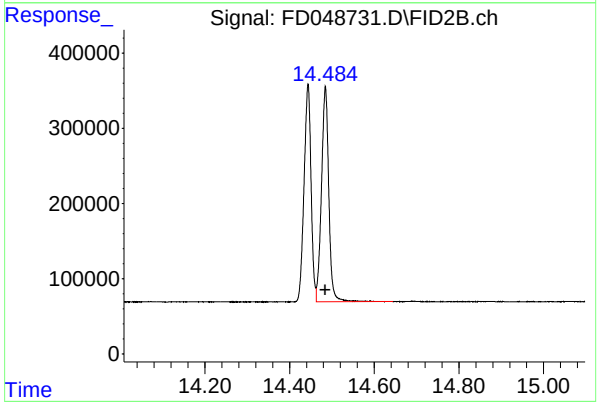
R.T.: 12.574 min
Delta R.T.: 0.000 min
Response: 3530762
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



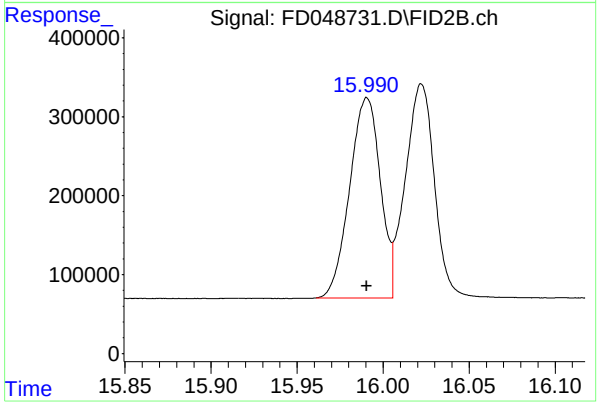
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.443 min
Delta R.T.: 0.000 min
Response: 3309617
Conc: 20.00 ug/ml



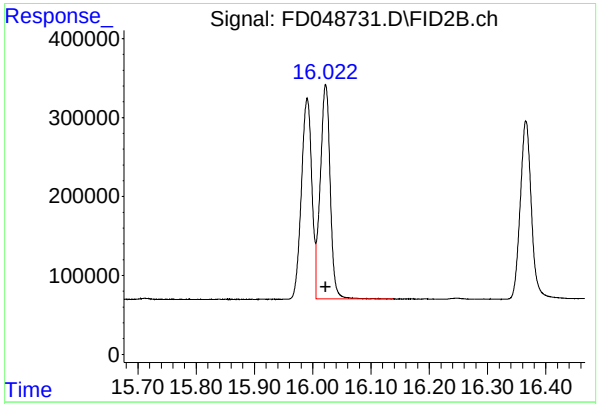
#15 Chrysene (C27.41)

R.T.: 14.485 min
Delta R.T.: 0.000 min
Response: 3438362
Conc: 20.00 ug/ml



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

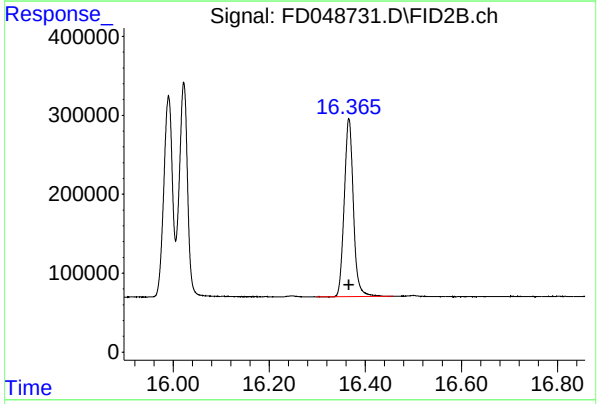
R.T.: 15.990 min
Delta R.T.: 0.000 min
Response: 3155598
Conc: 20.00 ug/ml



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

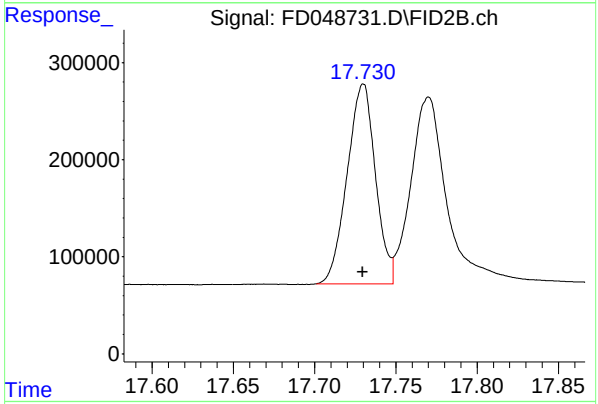
R.T.: 16.022 min
Delta R.T.: 0.000 mi
Response: 3220964
Conc: 20.00 ug/m

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



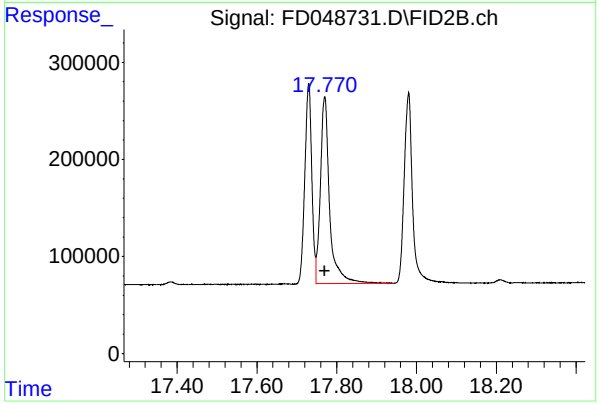
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.366 min
Delta R.T.: 0.000 min
Response: 2984019
Conc: 20.00 ug/ml



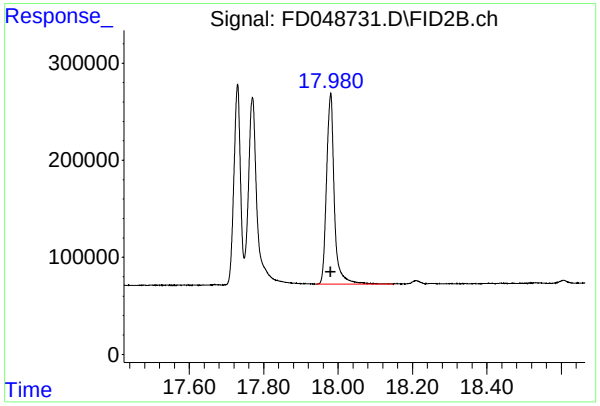
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.730 min
Delta R.T.: 0.000 min
Response: 2492029
Conc: 20.00 ug/ml



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

R.T.: 17.770 min
Delta R.T.: 0.000 min
Response: 3091940
Conc: 20.00 ug/ml



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

R.T.: 17.980 min
Delta R.T.: 0.000 mi
Response: 2846208
Conc: 20.00 ug/m

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048731.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 11:51
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.161	4.278	BB	437777	3725913	96.15%	5.229%
2	5.706	5.504	5.874	BB	410892	3875111	100.00%	5.439%
3	6.752	6.718	6.874	VV	383306	3783290	97.63%	5.310%
4	7.365	7.268	7.508	BB	358504	3482492	89.87%	4.888%
5	8.018	7.987	8.061	PV	385080	3802878	98.14%	5.337%
6	8.215	8.158	8.282	BV	225425	2283559	58.93%	3.205%
7	8.312	8.282	8.411	VV	381333	3777137	97.47%	5.301%
8	9.091	9.034	9.201	BV	364311	3788895	97.78%	5.318%
9	10.478	10.320	10.523	VV	349456	3619123	93.39%	5.079%
10	10.553	10.523	10.708	VV	325247	3688027	95.17%	5.176%
11	11.250	11.148	11.311	BB	352977	3765042	97.16%	5.284%
12	12.282	12.251	12.401	PB	314199	3589859	92.64%	5.038%
13	12.574	12.504	12.623	BV	314367	3530762	91.11%	4.955%
14	14.443	14.399	14.463	PV	291252	3309617	85.41%	4.645%
15	14.485	14.463	14.644	VB	285404	3438362	88.73%	4.826%
16	15.990	15.961	16.006	BV	254269	3155598	81.43%	4.429%
17	16.022	16.006	16.138	VB	270938	3220964	83.12%	4.521%
18	16.366	16.298	16.458	BV	225537	2984019	77.00%	4.188%
19	17.730	17.701	17.748	BV	208499	2492029	64.31%	3.498%
20	17.770	17.748	17.941	VV	193652	3091940	79.79%	4.340%
21	17.980	17.941	18.148	VB	198480	2846208	73.45%	3.995%
			Sum of corrected areas:			71250824		

Aromatic EPH 111424.M Fri Nov 15 02:37:36 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048732.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 12:27
Operator : YP/AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024

Integration File: autoint1.e
Quant Time: Nov 14 13:17:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 13:17:05 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...	7.365	1863801	10.821 ug/ml
Spiked Amount	50.000		Recovery =	21.64%
6) S	2-Flurobiphenyl (SURR)	8.215	1201178	10.554 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	21.11%
11) S	ortho-Terphenyl (SURR)	11.249	2040759	10.910 ug/ml
Spiked Amount	50.000		Recovery =	21.82%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.189	1983747	10.728 ug/ml
2) T	Naphthalene (C11.7)	5.706	2064735	10.722 ug/ml
3) T	2-Methylnaphthalene (...	6.752	2042165	10.825 ug/ml
5) T	Acenaphthylene (C15.06)	8.017	2046764	10.849 ug/mlm
7) T	Acenaphthene (C15.5)	8.311	2041539	10.874 ug/ml
8) T	Flouorene (C16.55)	9.090	2022487	10.732 ug/ml
9) T	Phenanthrene (C19.36)	10.476	1926152	10.709 ug/ml
10) T	Anthracene (C19.43)	10.552	1984238	10.885 ug/ml
12) T	Fluoranthene (C21.85)	12.281	1932115	10.839 ug/ml
13) T	Pyrene (C20.8)	12.574	1881150	10.713 ug/ml
14) T	Benzo[a]anthracene (C...	14.443	1716582	10.495 ug/ml
15) T	Chrysene (C27.41)	14.484	1873731	11.079 ug/ml
16) T	benzo[b]fluoranthene ...	15.988	1642501	10.583 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.019	1721554	10.948 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.368	1568595	10.709 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.732	1231117	9.811 ug/ml
20) T	Dibenz[a,h]anthracene...	17.772	1732686	11.625 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.981	1511827	10.839 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048732.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 12:27
Operator : YP/AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 64 Sample Multiplier: 1

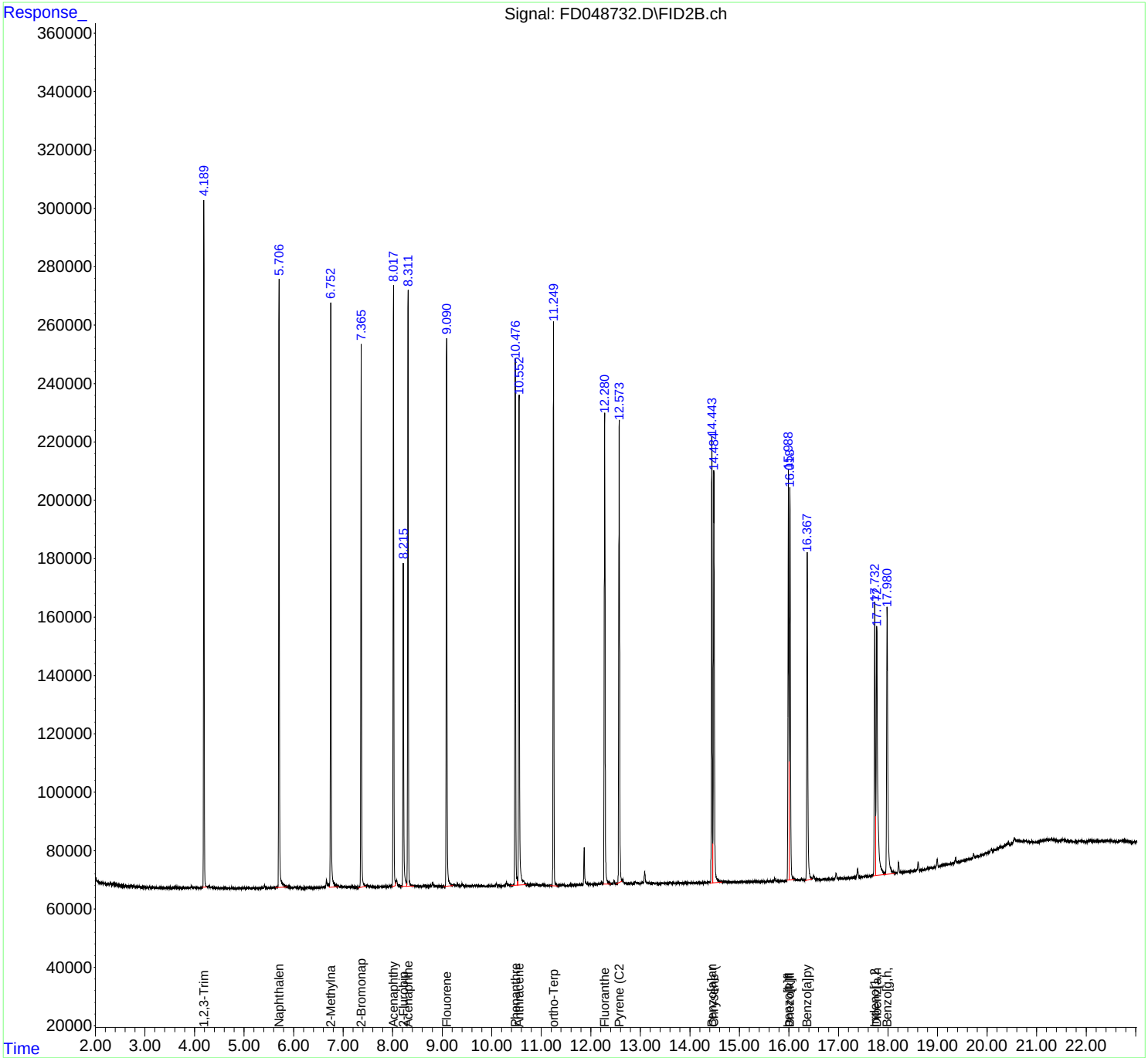
Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

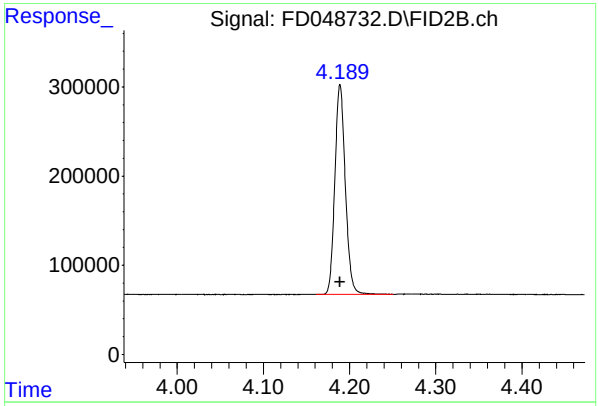
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024

Integration File: autoint1.e
Quant Time: Nov 14 13:17:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 13:17:05 2024
Response via : Initial Calibration
Integrator: ChemStation

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





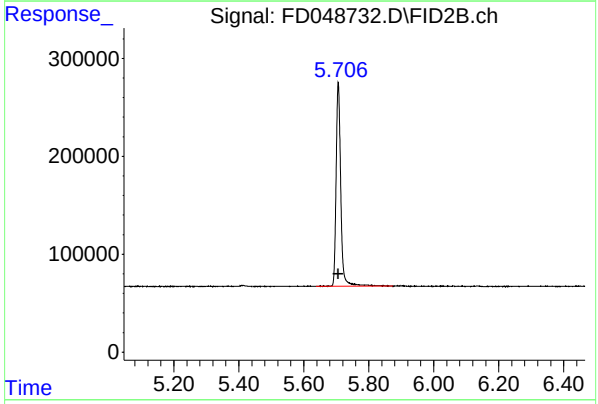
#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.189 min
Delta R.T.: 0.000 min
Response: 1983747
Conc: 10.73 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

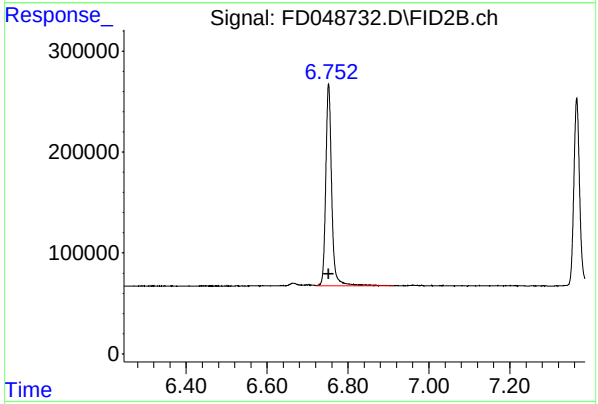
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



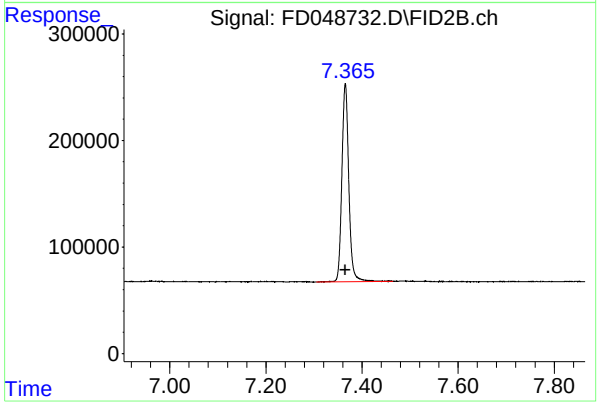
#2 Naphthalene (C11.7)

R.T.: 5.706 min
Delta R.T.: 0.000 min
Response: 2064735
Conc: 10.72 ug/ml



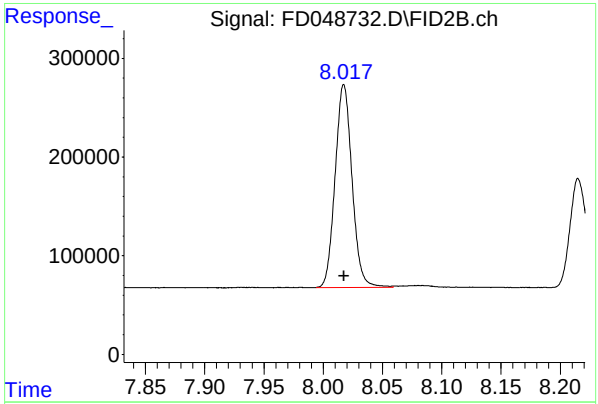
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.752 min
Delta R.T.: 0.000 min
Response: 2042165
Conc: 10.83 ug/ml



#4 2-Bromonaphthalene (SURR)

R.T.: 7.365 min
Delta R.T.: 0.000 min
Response: 1863801
Conc: 10.82 ug/ml



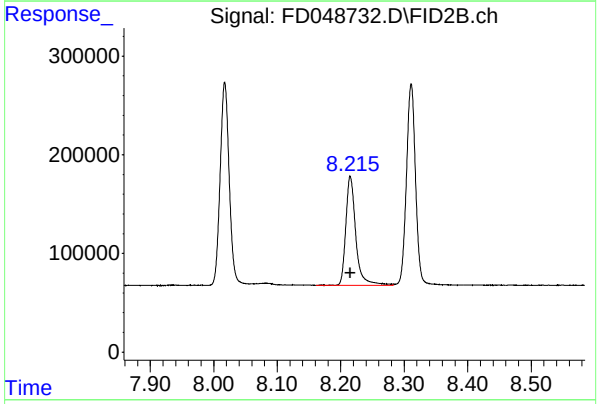
#5 Acenaphthylene (C15.06)

R.T.: 8.017 min
Delta R.T.: 0.000 min
Response: 2046764
Conc: 10.85 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

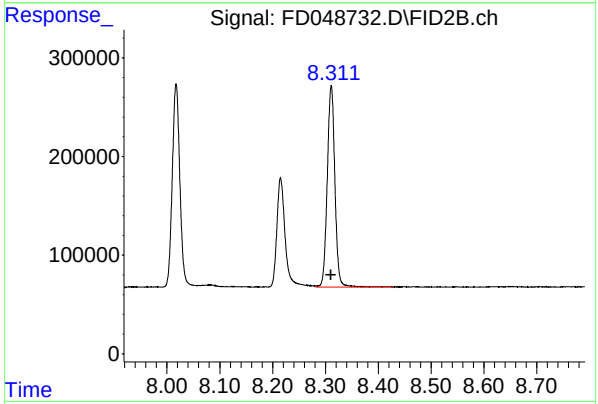
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



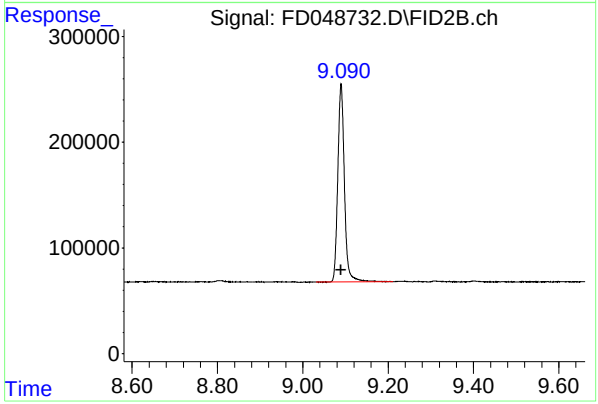
#6 2-Flurobiphenyl (SURR)

R.T.: 8.215 min
Delta R.T.: 0.000 min
Response: 1201178
Conc: 10.55 ug/ml



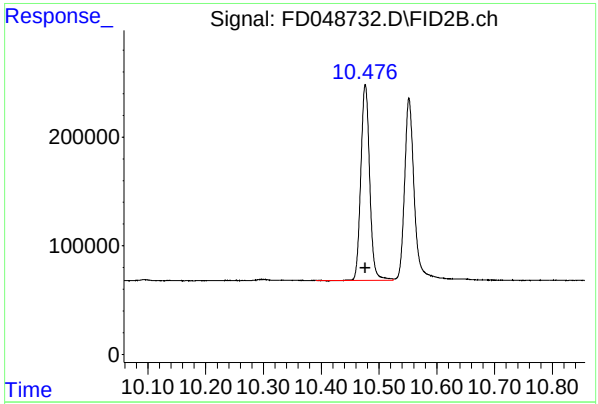
#7 Acenaphthene (C15.5)

R.T.: 8.311 min
Delta R.T.: 0.000 min
Response: 2041539
Conc: 10.87 ug/ml



#8 Flouorene (C16.55)

R.T.: 9.090 min
Delta R.T.: 0.000 min
Response: 2022487
Conc: 10.73 ug/ml



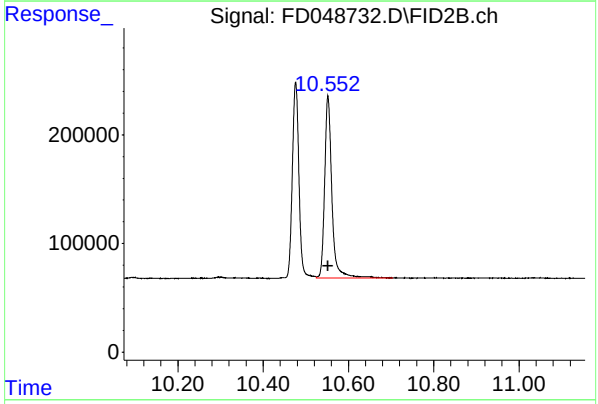
#9 Phenanthrene (C19.36)

R.T.: 10.476 min
Delta R.T.: 0.000 min
Response: 1926152
Conc: 10.71 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

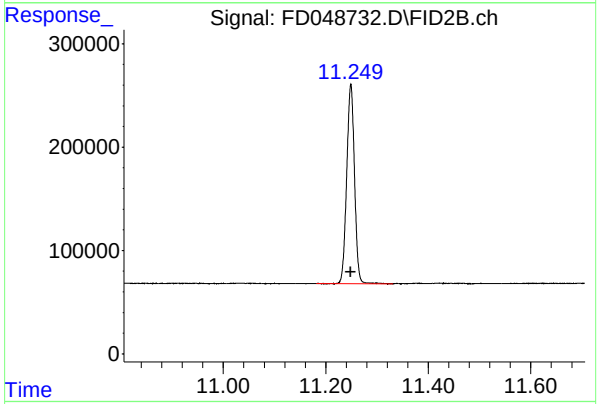
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



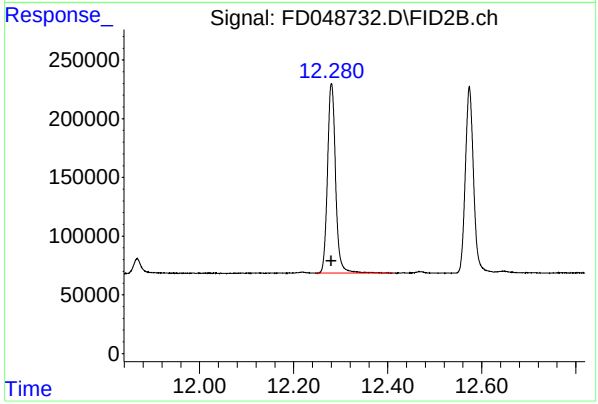
#10 Anthracene (C19.43)

R.T.: 10.552 min
Delta R.T.: 0.000 min
Response: 1984238
Conc: 10.89 ug/ml



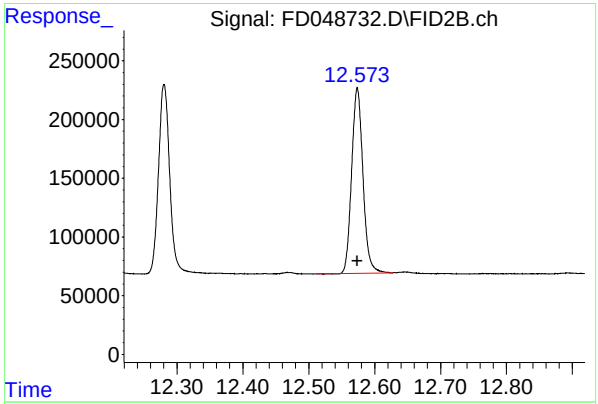
#11 ortho-Terphenyl (SURR)

R.T.: 11.249 min
Delta R.T.: 0.000 min
Response: 2040759
Conc: 10.91 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 12.281 min
Delta R.T.: 0.000 min
Response: 1932115
Conc: 10.84 ug/ml



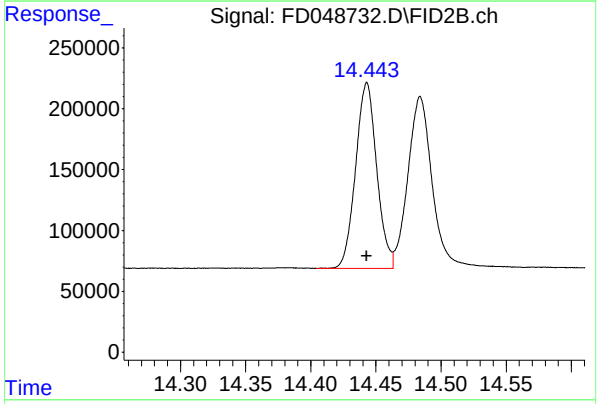
#13 Pyrene (C20.8)

R.T.: 12.574 min
Delta R.T.: 0.000 min
Response: 1881150
Conc: 10.71 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

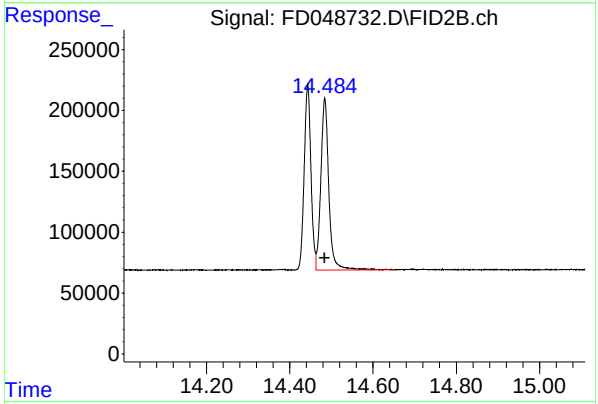
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



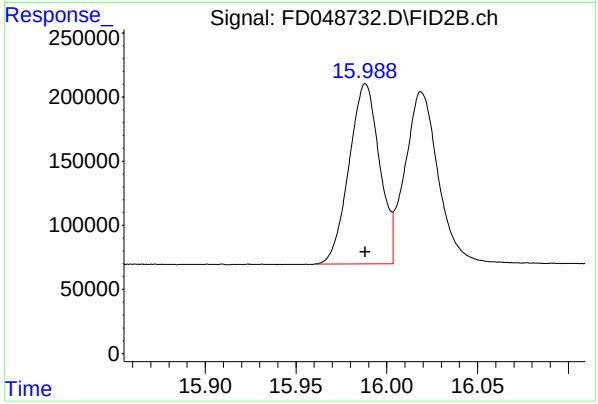
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.443 min
Delta R.T.: 0.000 min
Response: 1716582
Conc: 10.49 ug/ml



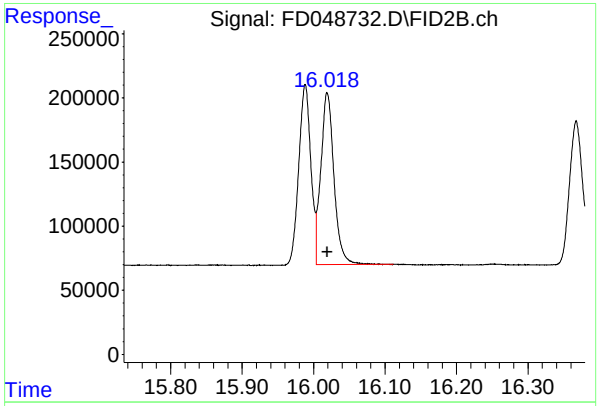
#15 Chrysene (C27.41)

R.T.: 14.484 min
Delta R.T.: 0.000 min
Response: 1873731
Conc: 11.08 ug/ml



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

R.T.: 15.988 min
Delta R.T.: 0.000 min
Response: 1642501
Conc: 10.58 ug/ml



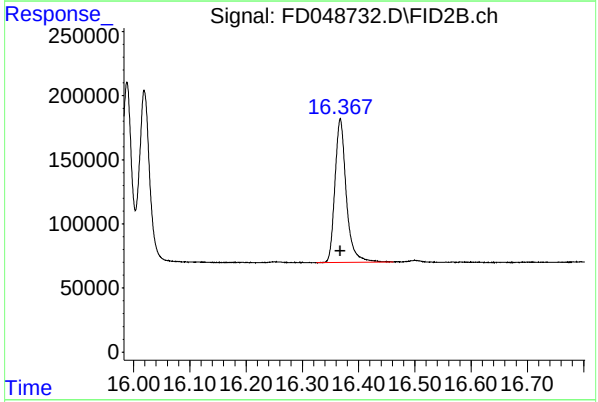
#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.019 min
Delta R.T.: 0.000 min
Response: 1721554
Conc: 10.95 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

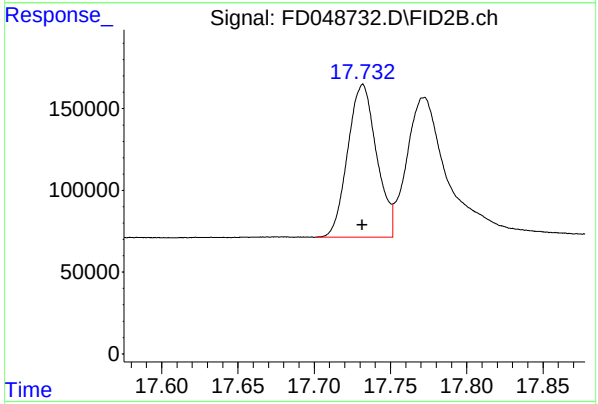
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



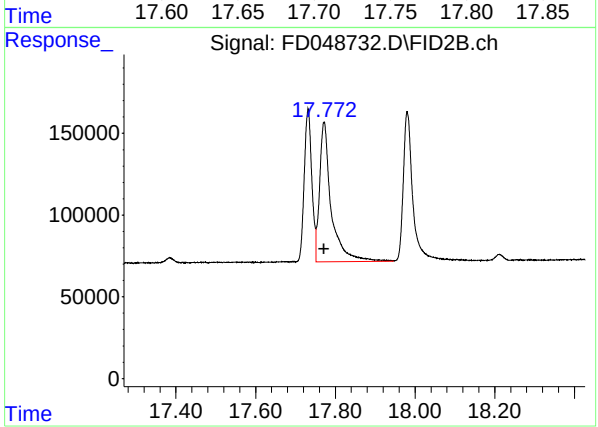
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.368 min
Delta R.T.: 0.000 min
Response: 1568595
Conc: 10.71 ug/ml



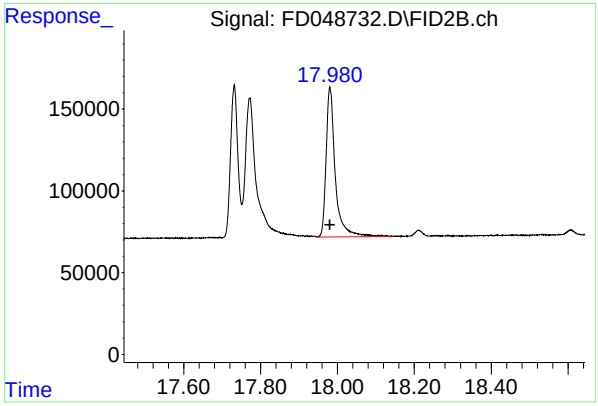
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.732 min
Delta R.T.: 0.000 min
Response: 1231117
Conc: 9.81 ug/ml



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

R.T.: 17.772 min
Delta R.T.: 0.000 min
Response: 1732686
Conc: 11.62 ug/ml



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

R.T.: 17.981 min
Delta R.T.: 0.000 mi
Response: 1511827
Conc: 10.84 ug/m

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024

Instrument :
FID_D
LabSampleId :
10 PPM AROMATIC HC STD4

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD11142
Data File : FD048732.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 12:27
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.161	4.250	BV	233609	1983747	96.08%	5.224%
2	5.706	5.638	5.874	BB	205733	2064735	100.00%	5.437%
3	6.752	6.721	6.911	VB	199787	2042165	98.91%	5.378%
4	7.365	7.304	7.464	BV	185172	1863801	90.27%	4.908%
5	8.017	7.908	8.058	BV	204705	1990251	96.39%	5.241%
6	8.215	8.161	8.282	BV	110440	1201178	58.18%	3.163%
7	8.311	8.282	8.428	VB	204004	2041539	98.88%	5.376%
8	9.090	9.031	9.211	BV	185906	2022487	97.95%	5.326%
9	10.476	10.391	10.524	BV	179662	1926152	93.29%	5.072%
10	10.552	10.524	10.704	VB	167359	1984238	96.10%	5.225%
11	11.249	11.181	11.331	BB	191260	2040759	98.84%	5.374%
12	12.281	12.248	12.411	PB	161313	1932115	93.58%	5.088%
13	12.574	12.511	12.628	BV	157685	1881150	91.11%	4.954%
14	14.443	14.404	14.463	PV	152971	1716582	83.14%	4.521%
15	14.484	14.463	14.648	VB	141132	1873731	90.75%	4.934%
16	15.988	15.961	16.004	BV	140342	1642501	79.55%	4.325%
17	16.019	16.004	16.111	VB	134248	1721554	83.38%	4.534%
18	16.368	16.324	16.461	BV	112062	1568595	75.97%	4.131%
19	17.732	17.701	17.752	BV	92959	1231117	59.63%	3.242%
20	17.772	17.752	17.944	VV	85540	1732686	83.92%	4.563%
21	17.981	17.944	18.144	VB	90909	1511827	73.22%	3.981%
			Sum of corrected areas:			37972909		

Aromatic EPH 111424.M Fri Nov 15 02:38:18 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048733.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 13:03
Operator : YP/AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024

Integration File: autoint1.e
Quant Time: Nov 14 14:15:10 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:14:59 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...	7.366	956649	5.434 ug/ml
Spiked Amount	50.000		Recovery =	10.87%
6) S	2-Flurobiphenyl (SURR)	8.218	602930	5.235 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	10.47%
11) S	ortho-Terphenyl (SURR)	11.249	1067441	5.550 ug/ml
Spiked Amount	50.000		Recovery =	11.10%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.191	1013256	5.376 ug/ml
2) T	Naphthalene (C11.7)	5.708	1037837	5.307 ug/ml
3) T	2-Methylnaphthalene (...	6.754	1004705	5.257 ug/ml
5) T	Acenaphthylene (C15.06)	8.018	1046849	5.401 ug/mlm
7) T	Acenaphthene (C15.5)	8.311	1053869	5.479 ug/ml
8) T	Flouorene (C16.55)	9.091	1027378	5.355 ug/ml
9) T	Phenanthrene (C19.36)	10.478	985284	5.375 ug/ml
10) T	Anthracene (C19.43)	10.555	1036004	5.532 ug/ml
12) T	Fluoranthene (C21.85)	12.283	1012953	5.532 ug/ml
13) T	Pyrene (C20.8)	12.575	1008015	5.576 ug/ml
14) T	Benzo[a]anthracene (C...	14.445	841277	5.114 ug/ml
15) T	Chrysene (C27.41)	14.484	992963	5.674 ug/ml
16) T	benzo[b]fluoranthene ...	15.991	823966	5.244 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.023	934929	5.729 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.373	798077	5.353 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.737	578696	4.685 ug/ml
20) T	Dibenz[a,h]anthracene...	17.779	939261	5.990 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.984	777679	5.450 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048733.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 13:03
Operator : YP/AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 65 Sample Multiplier: 1

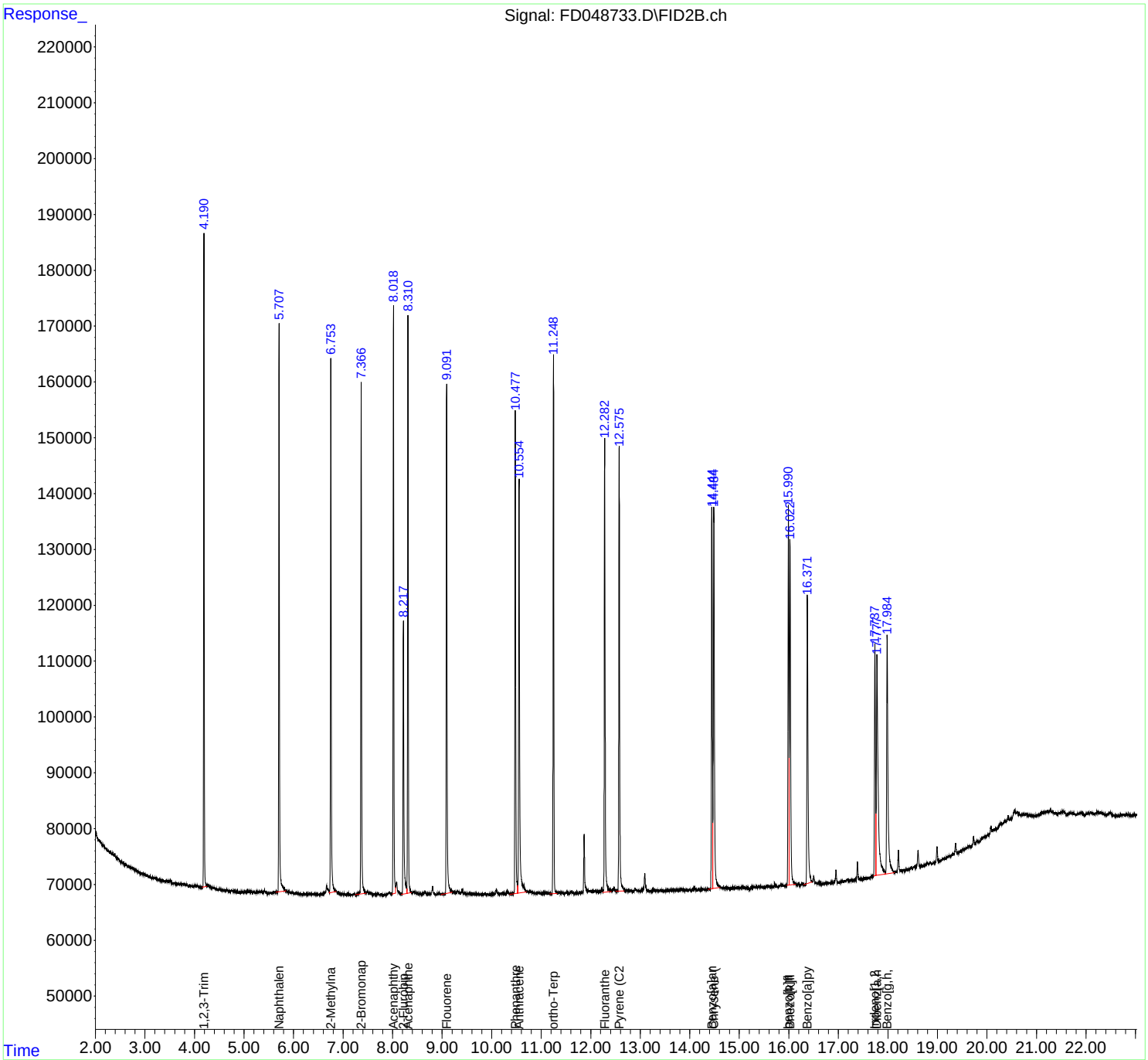
Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

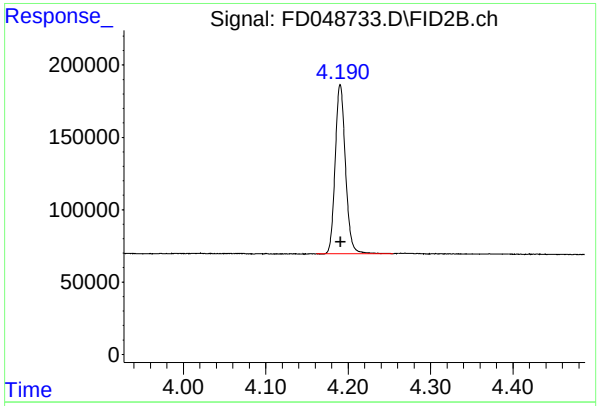
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024

Integration File: autoint1.e
Quant Time: Nov 14 14:15:10 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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





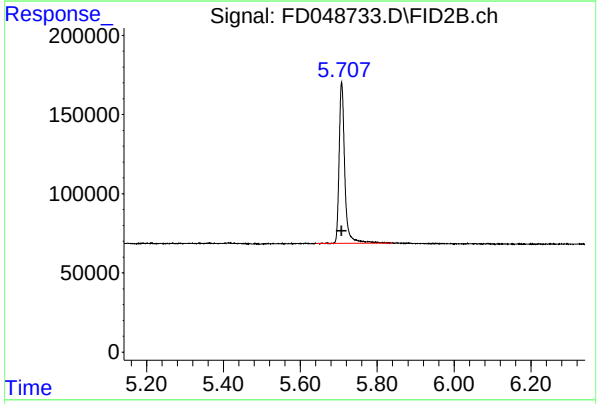
#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.191 min
Delta R.T.: 0.000 min
Response: 1013256
Conc: 5.38 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

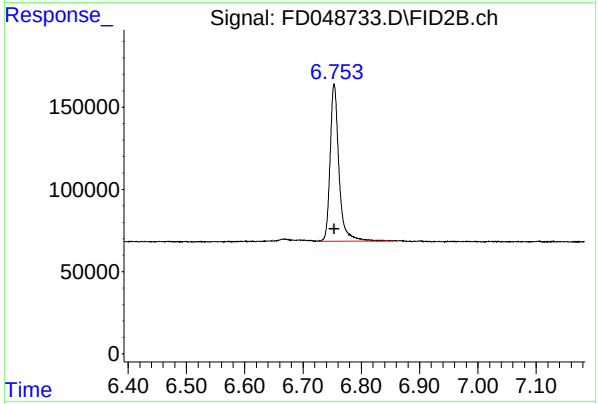
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



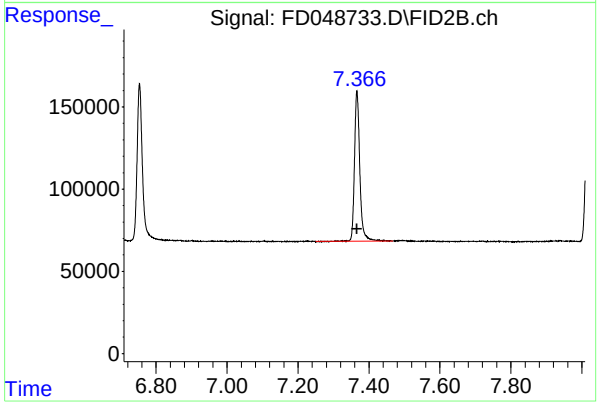
#2 Naphthalene (C11.7)

R.T.: 5.708 min
Delta R.T.: 0.000 min
Response: 1037837
Conc: 5.31 ug/ml



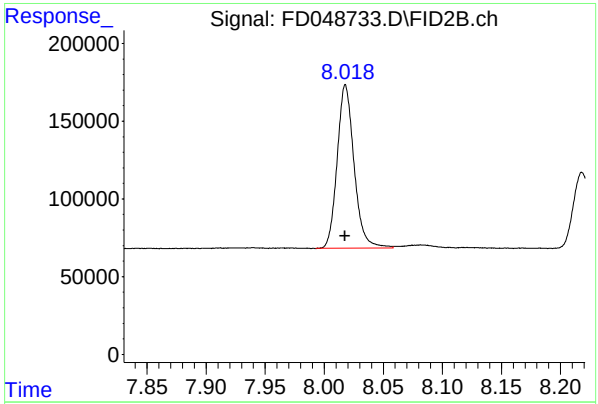
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.754 min
Delta R.T.: 0.000 min
Response: 1004705
Conc: 5.26 ug/ml



#4 2-Bromonaphthalene (SURR)

R.T.: 7.366 min
Delta R.T.: 0.000 min
Response: 956649
Conc: 5.43 ug/ml



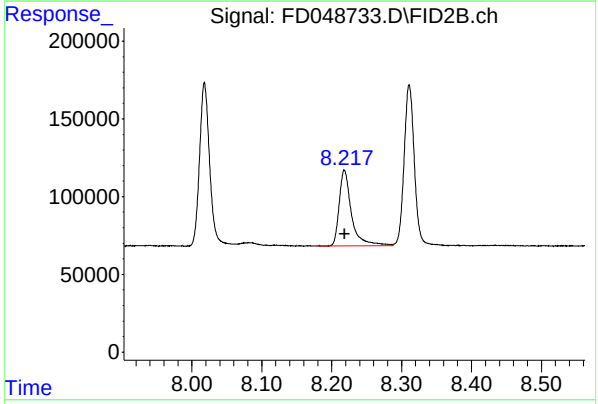
#5 Acenaphthylene (C15.06)

R.T.: 8.018 min
Delta R.T.: 0.000 min
Response: 1046849
Conc: 5.40 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

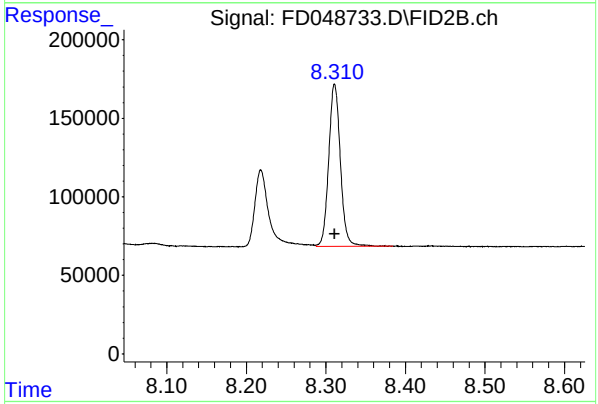
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



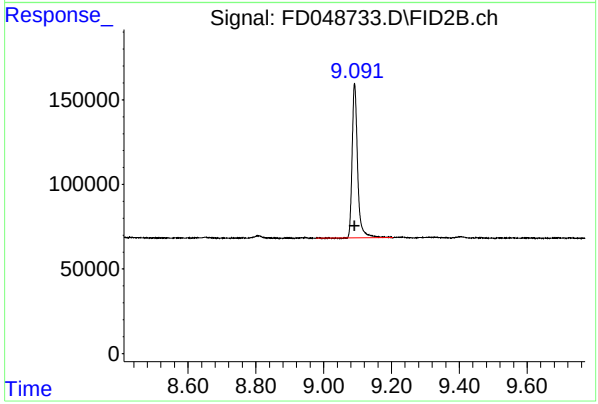
#6 2-Flurobiphenyl (SURR)

R.T.: 8.218 min
Delta R.T.: 0.000 min
Response: 602930
Conc: 5.24 ug/ml



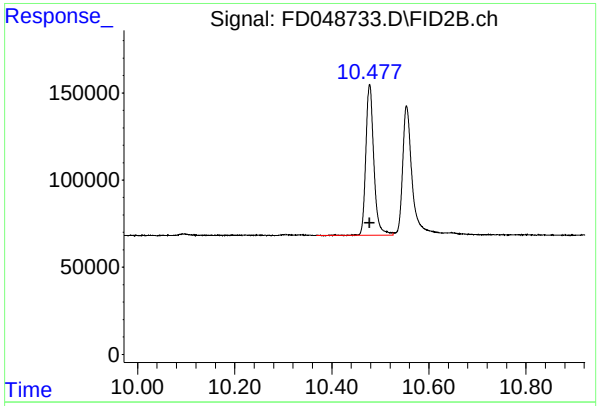
#7 Acenaphthene (C15.5)

R.T.: 8.311 min
Delta R.T.: 0.000 min
Response: 1053869
Conc: 5.48 ug/ml



#8 Flouorene (C16.55)

R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 1027378
Conc: 5.36 ug/ml



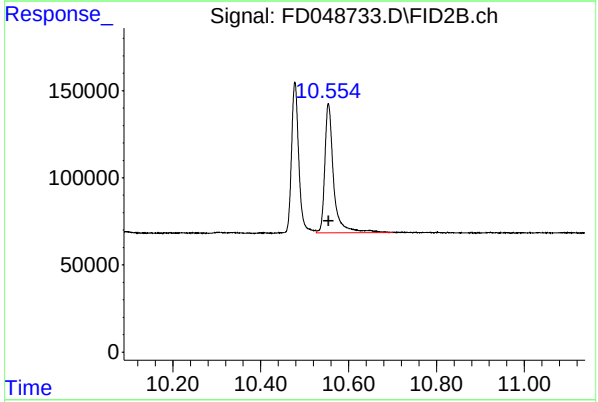
#9 Phenanthrene (C19.36)

R.T.: 10.478 min
Delta R.T.: 0.000 min
Response: 985284
Conc: 5.38 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

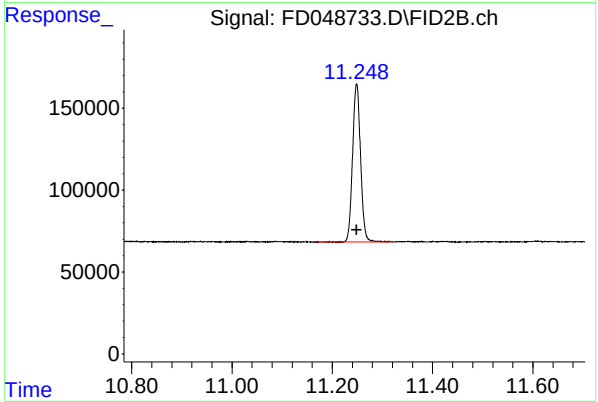
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



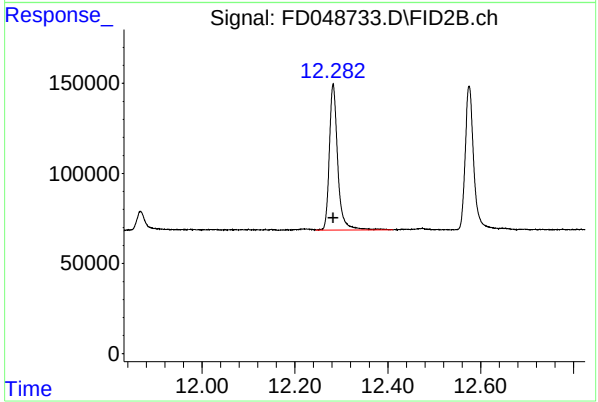
#10 Anthracene (C19.43)

R.T.: 10.555 min
Delta R.T.: 0.000 min
Response: 1036004
Conc: 5.53 ug/ml



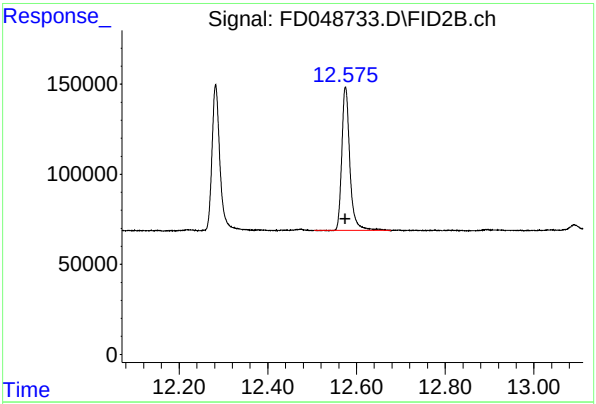
#11 ortho-Terphenyl (SURR)

R.T.: 11.249 min
Delta R.T.: 0.000 min
Response: 1067441
Conc: 5.55 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 12.283 min
Delta R.T.: 0.000 min
Response: 1012953
Conc: 5.53 ug/ml



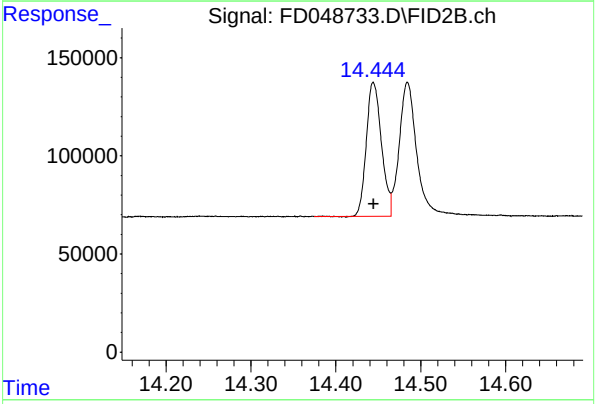
#13 Pyrene (C20.8)

R.T.: 12.575 min
Delta R.T.: 0.000 min
Response: 1008015
Conc: 5.58 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

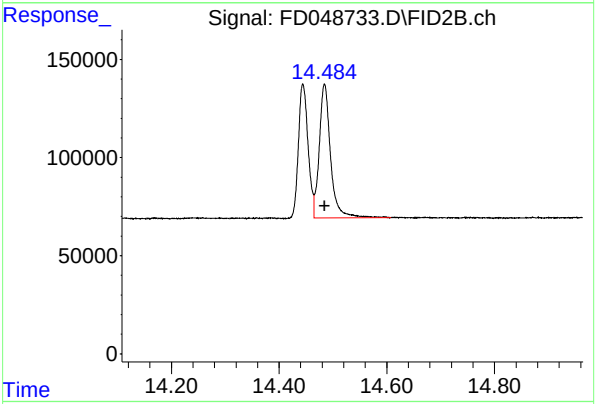
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



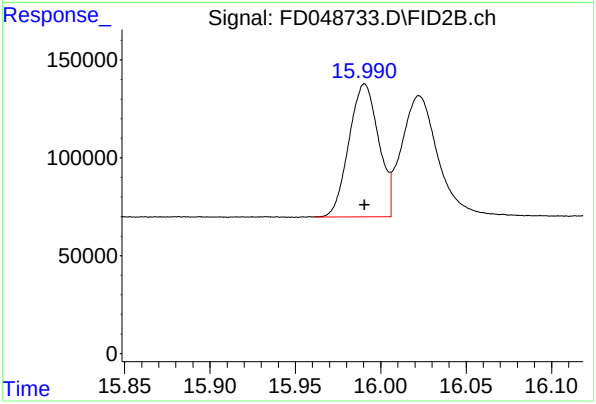
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.445 min
Delta R.T.: 0.000 min
Response: 841277
Conc: 5.11 ug/ml



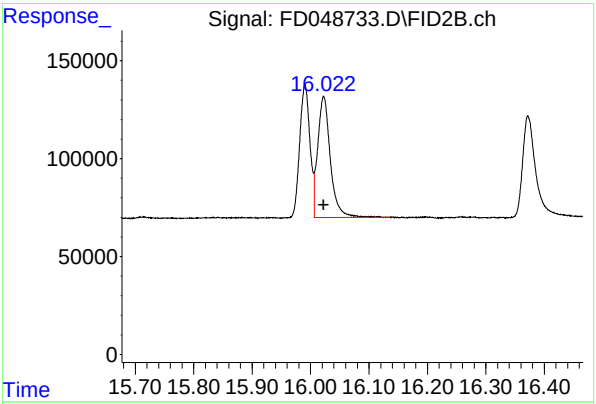
#15 Chrysene (C27.41)

R.T.: 14.484 min
Delta R.T.: 0.000 min
Response: 992963
Conc: 5.67 ug/ml



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

R.T.: 15.991 min
Delta R.T.: 0.000 min
Response: 823966
Conc: 5.24 ug/ml



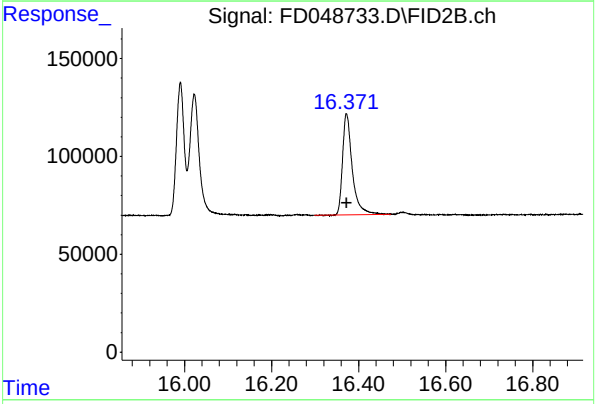
#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.023 min
Delta R.T.: 0.000 min
Response: 934929
Conc: 5.73 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

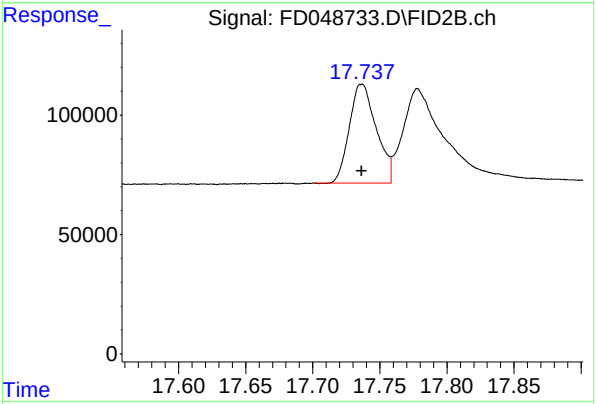
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024



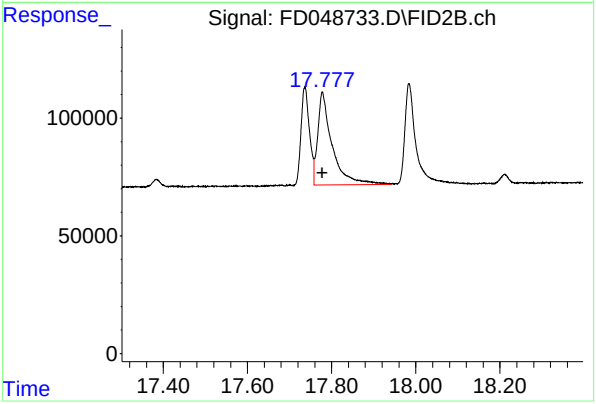
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.373 min
Delta R.T.: 0.000 min
Response: 798077
Conc: 5.35 ug/ml



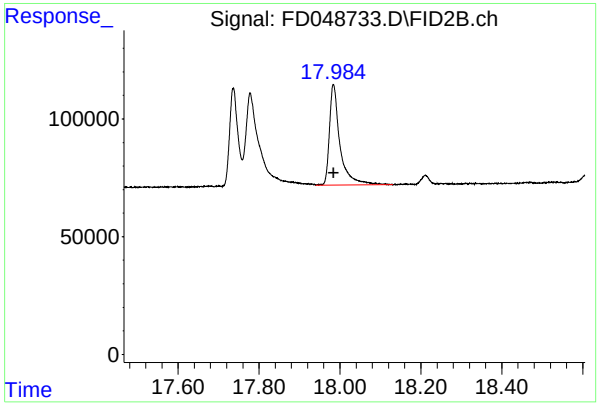
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.737 min
Delta R.T.: 0.000 min
Response: 578696
Conc: 4.68 ug/ml



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

R.T.: 17.779 min
Delta R.T.: 0.000 min
Response: 939261
Conc: 5.99 ug/ml



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

R.T.: 17.984 min
Delta R.T.: 0.000 mi
Response: 777679
Conc: 5.45 ug/m

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024

Instrument :
FID_D
LabSampleId :
5 PPM AROMATIC HC STD5

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/15/2024
Supervised By :Ankita Jodhani 11/15/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD11142
Data File : FD048733.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 13:03
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.191	4.161	4.254	BV	116503	1013460	94.97%	5.156%
2	5.708	5.468	5.881	BB	101464	1062095	99.53%	5.404%
3	6.754	6.722	6.888	VV	95110	1033950	96.89%	5.261%
4	7.366	7.254	7.468	PV	90022	967818	90.70%	4.924%
5	8.018	7.991	8.061	BV	105007	1055306	98.90%	5.369%
6	8.218	8.188	8.288	BV	48864	605370	56.73%	3.080%
7	8.311	8.288	8.401	VV	103482	1061536	99.48%	5.401%
8	9.091	9.061	9.204	BV	91282	1037710	97.25%	5.280%
9	10.478	10.423	10.526	PV	86515	986679	92.46%	5.020%
10	10.555	10.526	10.701	VB	73924	1038026	97.28%	5.281%
11	11.249	11.161	11.321	BV	96018	1067091	100.00%	5.429%
12	12.283	12.245	12.366	PV	80793	992105	92.97%	5.048%
13	12.575	12.544	12.678	PV	79897	1010468	94.69%	5.141%
14	14.445	14.410	14.465	PV	68221	849481	79.61%	4.322%
15	14.484	14.465	14.621	VB	68412	1002369	93.93%	5.100%
16	15.991	15.961	16.006	BV	68030	824535	77.27%	4.195%
17	16.023	16.006	16.151	VV	61813	944585	88.52%	4.806%
18	16.373	16.308	16.474	BV	51971	804914	75.43%	4.095%
19	17.737	17.701	17.758	BV	41491	578719	54.23%	2.944%
20	17.779	17.758	17.948	VV	39405	940654	88.15%	4.786%
21	17.984	17.948	18.132	VV	42709	777552	72.87%	3.956%
			Sum of corrected areas:			19654423		

Aromatic EPH 111424.M Fri Nov 15 02:40:01 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048734.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 13:49
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Nov 14 16:39:35 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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	3456068	19.630 ug/ml
Spiked Amount	50.000		Recovery =	39.26%
6) S	2-Flurobiphenyl (SURR)	8.214	2270429	19.714 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	39.43%
11) S	ortho-Terphenyl (SURR)	11.250	3749525	19.495 ug/ml
Spiked Amount	50.000		Recovery =	38.99%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.187	3665797	19.451 ug/ml
2) T	Naphthalene (C11.7)	5.704	3806037	19.461 ug/ml
3) T	2-Methylnaphthalene (...	6.751	3747892	19.612 ug/ml
5) T	Acenaphthylene (C15.06)	8.017	3882404	20.020 ug/ml
7) T	Acenaphthene (C15.5)	8.311	3740654	19.448 ug/ml
8) T	Flouorene (C16.55)	9.090	3756678	19.581 ug/ml
9) T	Phenanthrene (C19.36)	10.477	3562885	19.437 ug/ml
10) T	Anthracene (C19.43)	10.553	3563171	19.027 ug/ml
12) T	Fluoranthene (C21.85)	12.282	3573927	19.517 ug/ml
13) T	Pyrene (C20.8)	12.575	3507964	19.403 ug/ml
14) T	Benzo[a]anthracene (C...	14.445	3271243	19.886 ug/ml
15) T	Chrysene (C27.41)	14.486	3405535	19.459 ug/ml
16) T	benzo[b]fluoranthene ...	15.991	3111443	19.803 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.022	3204860	19.638 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.367	2937931	19.705 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.731	2442922	19.776 ug/ml
20) T	Dibenz[a,h]anthracene...	17.771	3068383	19.567 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.981	2827163	19.814 ug/ml

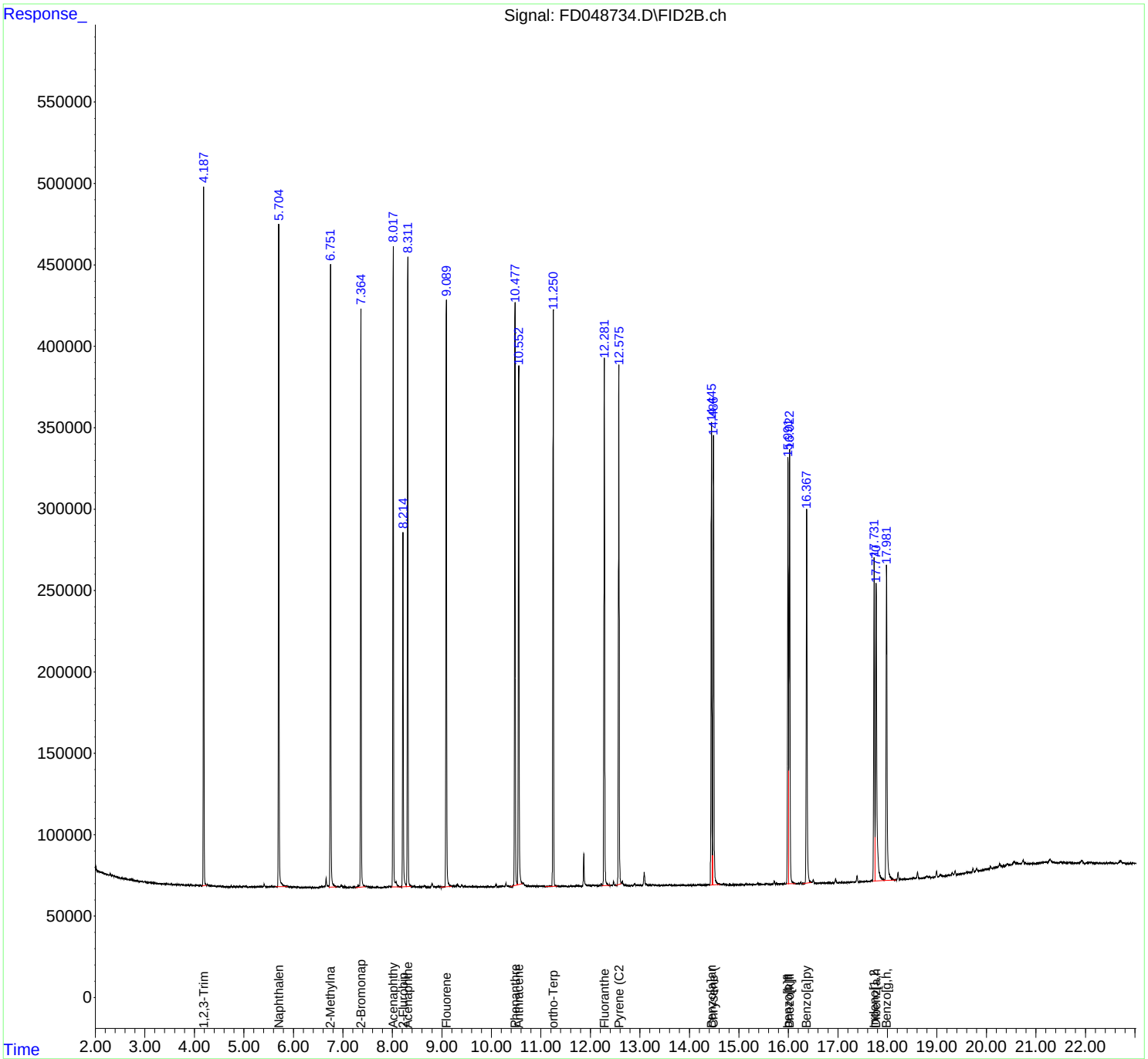
(f)=RT Delta > 1/2 Window (m)=manual int.

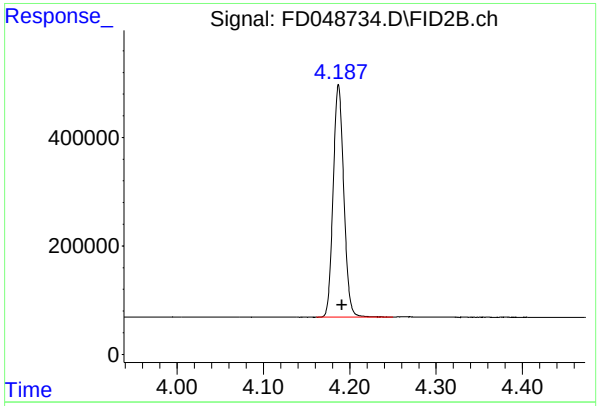
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048734.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 13:49
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Nov 14 16:39:35 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

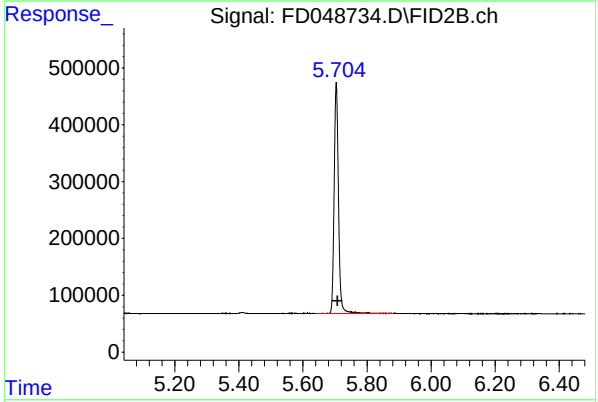




#1 1,2,3-Trimethylbenzene (C10.1)

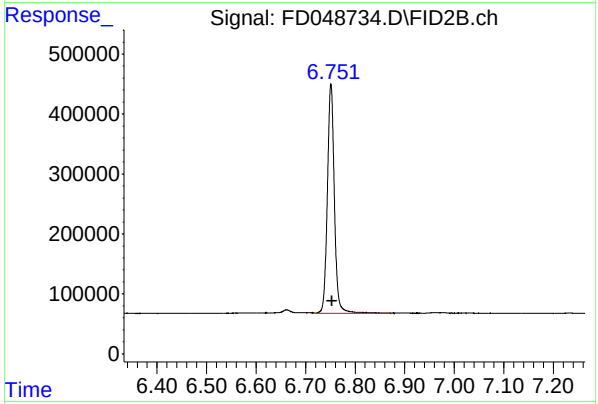
R.T.: 4.187 min
Delta R.T.: -0.004 min
Response: 3665797
Conc: 19.45 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



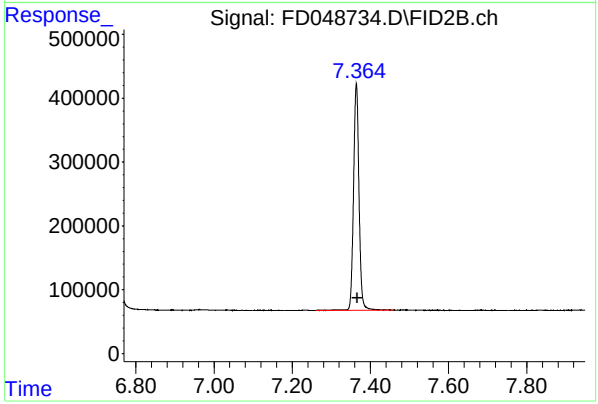
#2 Naphthalene (C11.7)

R.T.: 5.704 min
Delta R.T.: -0.003 min
Response: 3806037
Conc: 19.46 ug/ml



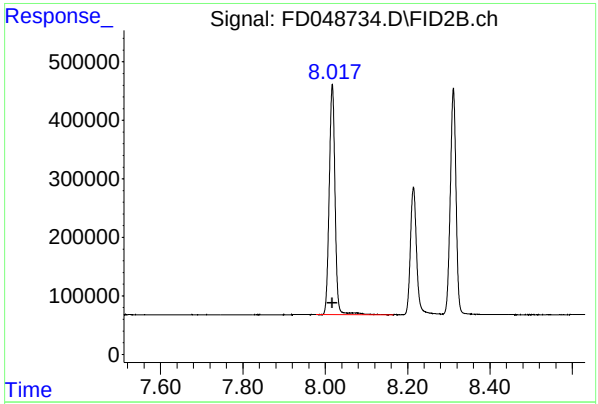
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.751 min
Delta R.T.: -0.002 min
Response: 3747892
Conc: 19.61 ug/ml



#4 2-Bromonaphthalene (SURR)

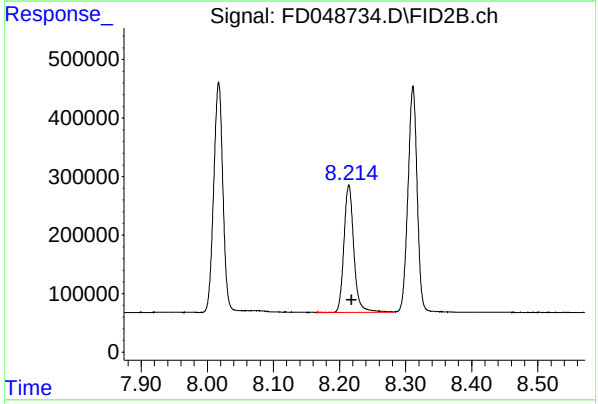
R.T.: 7.364 min
Delta R.T.: -0.002 min
Response: 3456068
Conc: 19.63 ug/ml



#5 Acenaphthylene (C15.06)

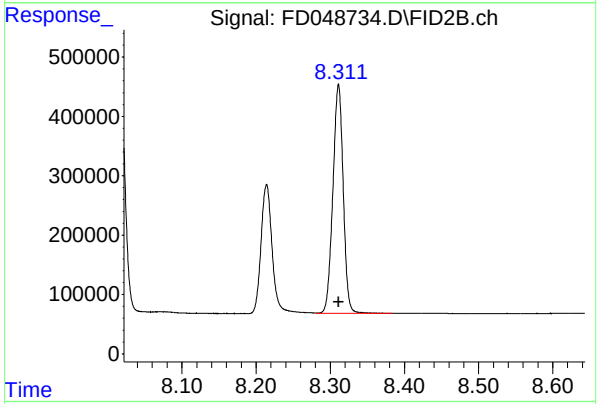
R.T.: 8.017 min
Delta R.T.: 0.000 min
Response: 3882404
Conc: 20.02 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



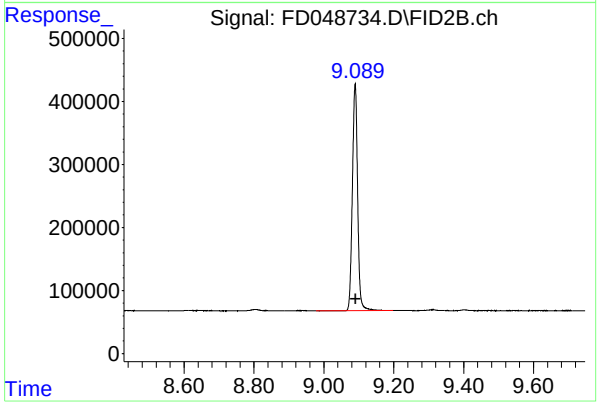
#6 2-Flurobiphenyl (SURR)

R.T.: 8.214 min
Delta R.T.: -0.004 min
Response: 2270429
Conc: 19.71 ug/ml



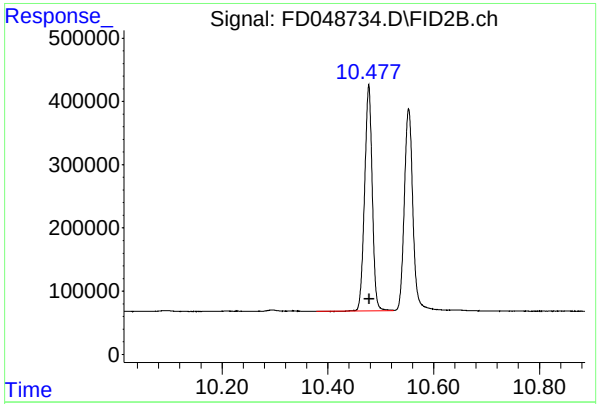
#7 Acenaphthene (C15.5)

R.T.: 8.311 min
Delta R.T.: 0.000 min
Response: 3740654
Conc: 19.45 ug/ml



#8 Flouorene (C16.55)

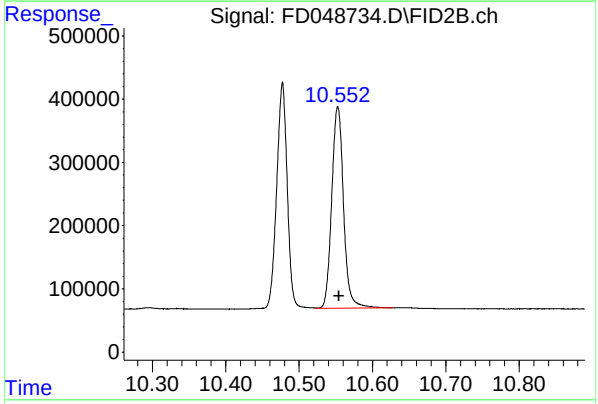
R.T.: 9.090 min
Delta R.T.: -0.002 min
Response: 3756678
Conc: 19.58 ug/ml



#9 Phenanthrene (C19.36)

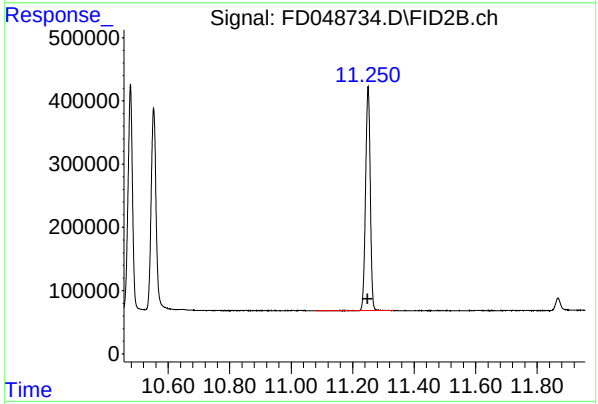
R.T.: 10.477 min
Delta R.T.: 0.000 min
Response: 3562885
Conc: 19.44 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



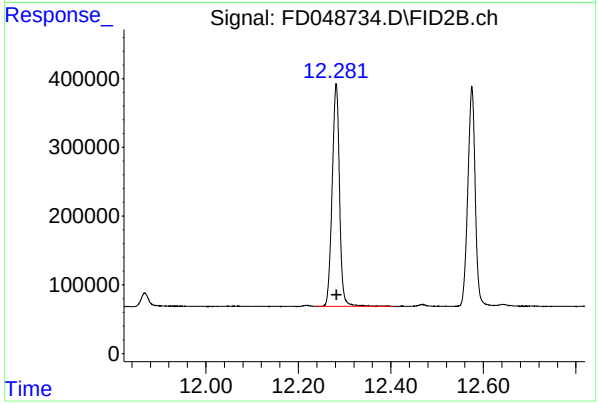
#10 Anthracene (C19.43)

R.T.: 10.553 min
Delta R.T.: -0.002 min
Response: 3563171
Conc: 19.03 ug/ml



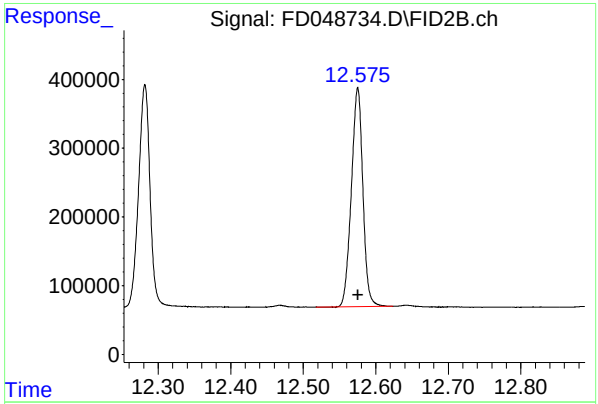
#11 ortho-Terphenyl (SURR)

R.T.: 11.250 min
Delta R.T.: 0.002 min
Response: 3749525
Conc: 19.49 ug/ml



#12 Fluoranthene (C21.85)

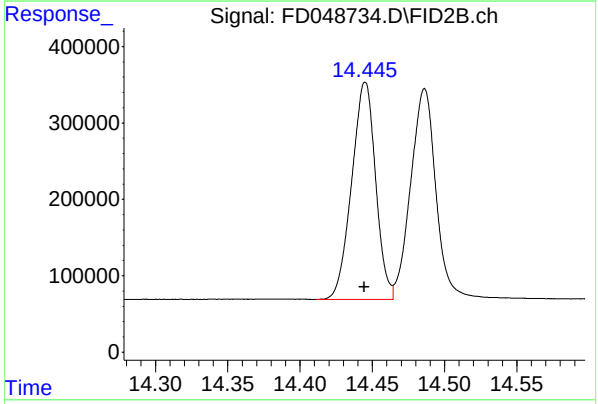
R.T.: 12.282 min
Delta R.T.: 0.000 min
Response: 3573927
Conc: 19.52 ug/ml



#13 Pyrene (C20.8)

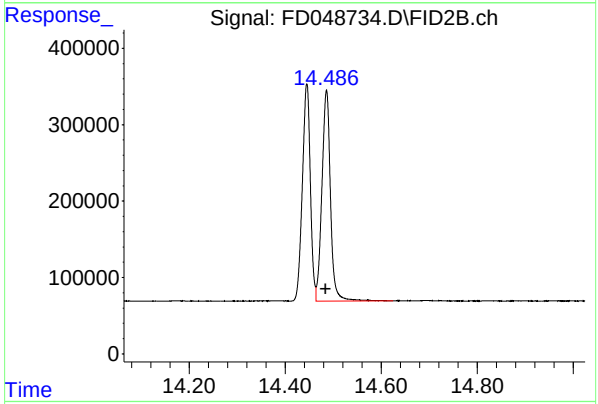
R.T.: 12.575 min
Delta R.T.: 0.000 min
Response: 3507964
Conc: 19.40 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



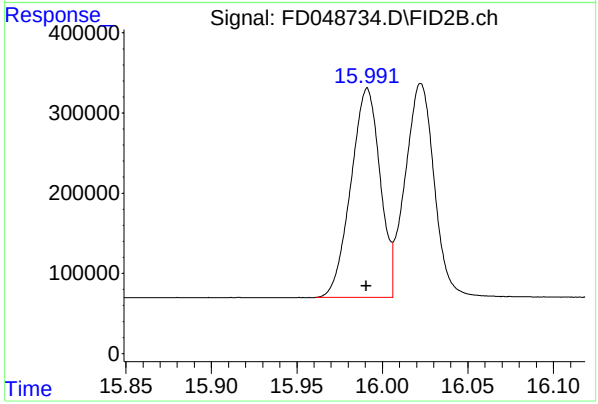
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.445 min
Delta R.T.: 0.000 min
Response: 3271243
Conc: 19.89 ug/ml



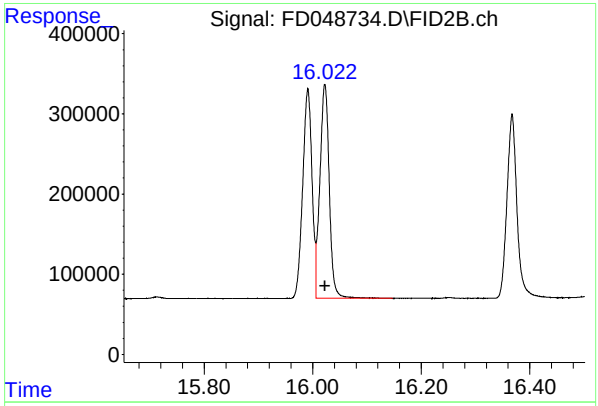
#15 Chrysene (C27.41)

R.T.: 14.486 min
Delta R.T.: 0.002 min
Response: 3405535
Conc: 19.46 ug/ml



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

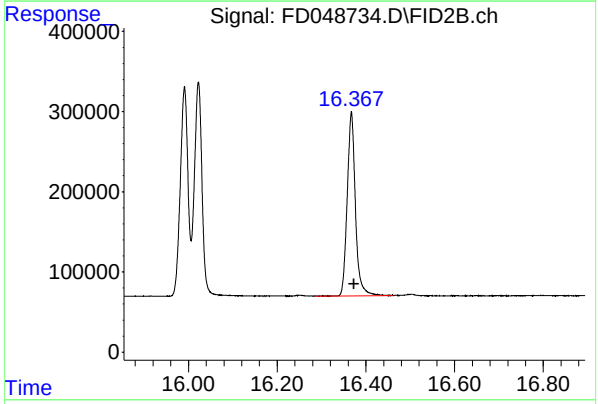
R.T.: 15.991 min
Delta R.T.: 0.000 min
Response: 3111443
Conc: 19.80 ug/ml



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

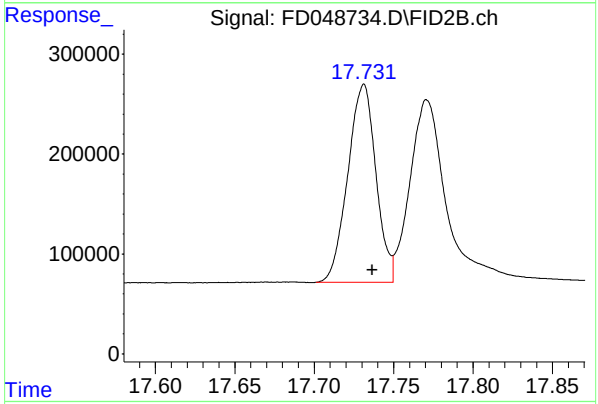
R.T.: 16.022 min
Delta R.T.: 0.000 mi
Response: 3204860
Conc: 19.64 ug/m

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



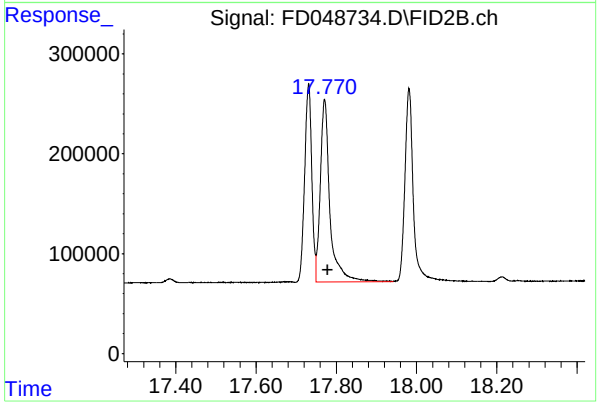
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.367 min
Delta R.T.: -0.005 min
Response: 2937931
Conc: 19.70 ug/ml



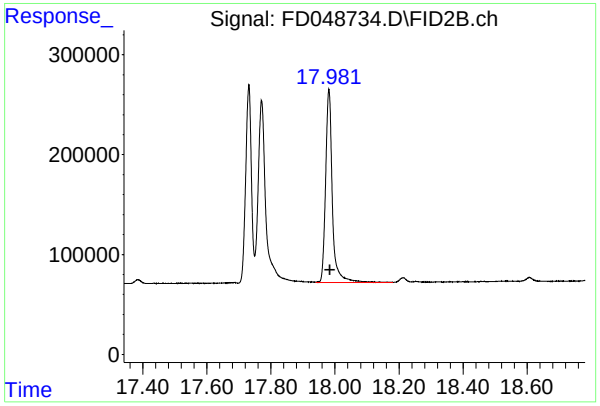
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.731 min
Delta R.T.: -0.006 min
Response: 2442922
Conc: 19.78 ug/ml



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

R.T.: 17.771 min
Delta R.T.: -0.008 min
Response: 3068383
Conc: 19.57 ug/ml



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

R.T.: 17.981 min
Delta R.T.: -0.003 mi
Response: 2827163
Conc: 19.81 ug/m

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048734.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 13:49
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.161	4.250	BV	425503	3665797	94.88%	5.186%
2	5.704	5.588	5.968	VV	405009	3863463	100.00%	5.466%
3	6.751	6.721	6.876	VV	381698	3750038	97.06%	5.305%
4	7.364	7.251	7.464	PV	354635	3457496	89.49%	4.891%
5	8.017	7.991	8.058	BV	394327	3815860	98.77%	5.398%
6	8.214	8.178	8.281	PV	217413	2274269	58.87%	3.217%
7	8.311	8.281	8.414	VV	385706	3749263	97.04%	5.304%
8	9.090	9.031	9.198	BV	361595	3781745	97.88%	5.350%
9	10.477	10.384	10.523	BV	357565	3565194	92.28%	5.044%
10	10.553	10.523	10.628	VV	318873	3563635	92.24%	5.042%
11	11.250	11.214	11.361	VV	354612	3772014	97.63%	5.336%
12	12.282	12.238	12.404	PV	323586	3579166	92.64%	5.064%
13	12.575	12.534	12.624	PV	317906	3544162	91.74%	5.014%
14	14.445	14.409	14.464	PV	285007	3271223	84.67%	4.628%
15	14.486	14.464	14.623	VV	274350	3405868	88.16%	4.818%
16	15.991	15.961	16.006	BV	260711	3111443	80.54%	4.402%
17	16.022	16.006	16.148	VB	266747	3204860	82.95%	4.534%
18	16.367	16.294	16.461	BV	229745	2970535	76.89%	4.203%
19	17.731	17.701	17.750	BV	198575	2442922	63.23%	3.456%
20	17.771	17.750	17.940	VV	182974	3068171	79.42%	4.341%
21	17.981	17.940	18.181	VV	193617	2827375	73.18%	4.000%
			Sum of corrected areas:			70684497		

Aromatic EPH 111424.M Fri Nov 15 02:40:45 2024

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

Continuing Calibration Report for SequenceID : FC120624AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FC067927.D**						
Aliphatic C9-C12	10092031.000	60.000	3.154	6.430	168200.517	165791.359	-1.453
Aliphatic C12-C16	6852156.000	40.000	6.431	9.821	171303.900	170384.422	-0.540
Aliphatic C16-C21	9642607.000	60.000	9.822	13.180	160710.117	169621.553	5.254
Aliphatic C21-C28	11401511.000	80.000	13.181	16.835	142518.888	157280.060	9.385
Aliphatic C28-C40	13493751.000	120.000	16.836	21.671	112447.925	121111.336	7.153
Aliphatic EPH	51482056.000	360.000	3.154	21.671	143005.711	150155.324	4.761

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

Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	06 Dec 2024 14:29
Client Sample ID:		Operator:	YP/AJ
Data file:	FC067927.D	Misc:	
Instrument:	FID_C	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.154	6.430	10092031.000	60.000	ug/ml
Aliphatic C12-C16	6.431	9.821	6852156.000	40.000	ug/ml
Aliphatic C16-C21	9.822	13.180	9642607.000	60.000	ug/ml
Aliphatic C21-C28	13.181	16.835	11401511.000	80.000	ug/ml
Aliphatic C28-C40	16.836	21.671	13493751.000	120.000	ug/ml
Aliphatic EPH	3.154	21.671	51482056.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067927.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 14:29
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:04:47 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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)	11.471	3625177	18.698 ug/ml
Spiked Amount	50.000		Recovery =	37.40%
12) S	1-chlorooctadecane (S...	12.911	2665503	18.362 ug/ml
Spiked Amount	50.000		Recovery =	36.72%
	Target Compounds			
1) T	n-Nonane (C9)	3.254	3284689	20.137 ug/ml
2) T	n-Decane (C10)	4.315	3369532	20.319 ug/ml
3) T	A~Naphthalene (C11.7)	5.890	3699705	20.200 ug/ml
4) T	n-Dodecane (C12)	6.330	3437810	20.411 ug/ml
5) T	A~2-methylnaphthalene...	6.946	3582280	20.199 ug/ml
6) T	n-Tetradecane (C14)	8.122	3400960	20.308 ug/ml
7) T	n-Hexadecane (C16)	9.721	3451196	19.915 ug/ml
8) T	n-Octadecane (C18)	11.161	3407747	19.369 ug/ml
10) T	n-Eicosane (C20)	12.469	3168568	18.817 ug/ml
11) T	n-Heneicosane (C21)	13.080	3066292	18.636 ug/ml
13) T	n-Docosane (C22)	13.665	2996719	18.401 ug/ml
14) T	n-Tetracosane (C24)	14.766	2893126	18.039 ug/ml
15) T	n-Hexacosane (C26)	15.787	2788193	18.004 ug/ml
16) T	n-Octacosane (C28)	16.735	2723473	18.033 ug/ml
17) T	n-Tricontane (C30)	17.621	2758357	18.016 ug/ml
18) T	n-Dotriacontane (C32)	18.451	2659363	18.006 ug/ml
19) T	n-Tetratriacontane (C34)	19.235	2331109	18.482 ug/ml
20) T	n-Hexatriacontane (C36)	19.972	2017005	19.285 ug/ml
21) T	n-Octatriacontane (C38)	20.693	1894838	19.398 ug/ml
22) T	n-Tetracontane (C40)	21.571	1833079	18.807 ug/ml

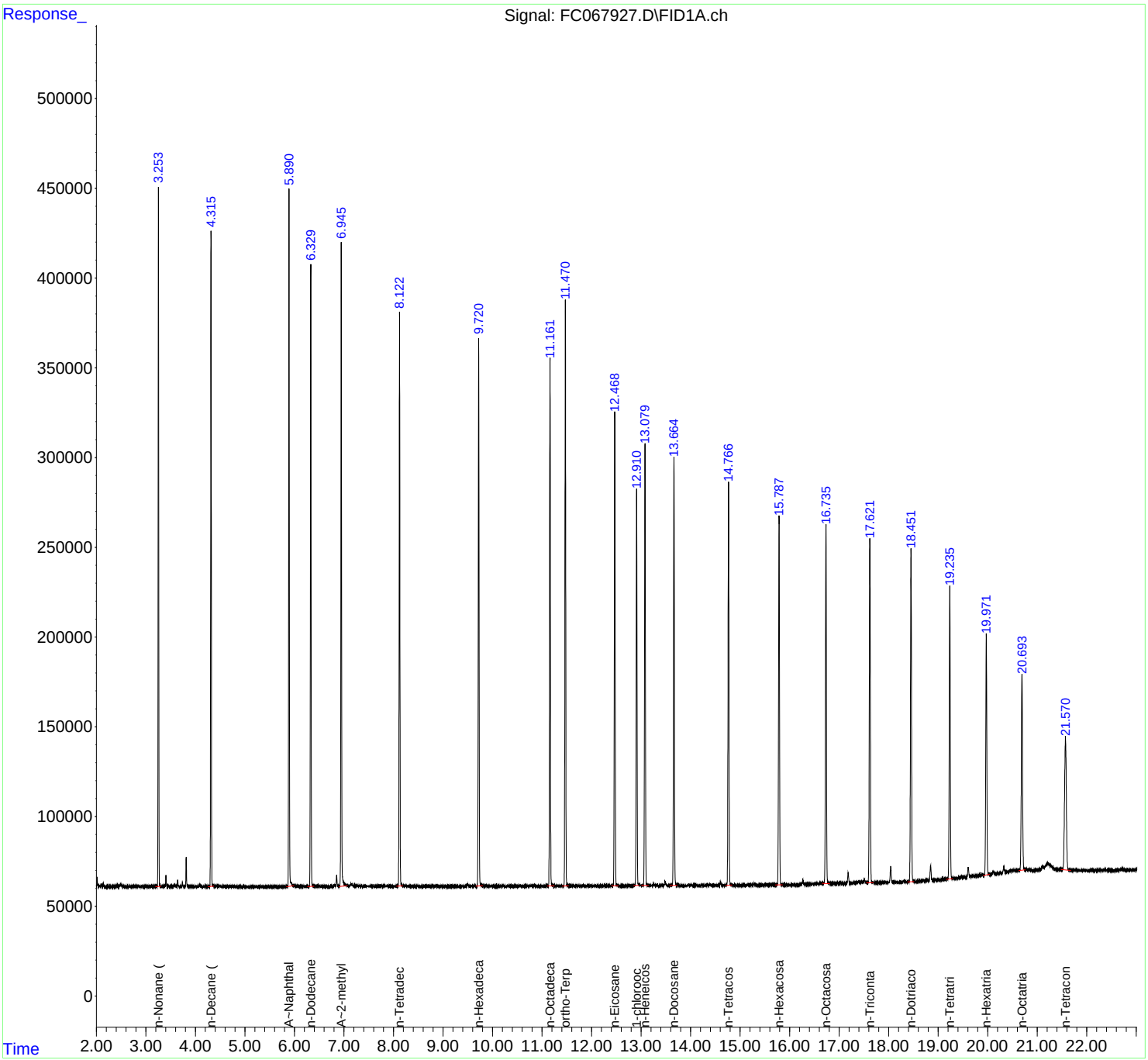
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067927.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 14:29
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:04:47 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067927.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 14:29
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 111424.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	3.254	3.197	3.307	BB	390095	3284689	88.78%	5.049%
2	4.315	4.262	4.377	BB	365365	3369532	91.08%	5.180%
3	5.890	5.840	5.988	BB	388553	3699705	100.00%	5.687%
4	6.330	6.268	6.393	BB	345279	3437810	92.92%	5.284%
5	6.946	6.898	7.068	BB	357865	3582280	96.83%	5.507%
6	8.122	8.060	8.192	BB	319473	3400960	91.93%	5.228%
7	9.721	9.663	9.802	BB	302378	3451196	93.28%	5.305%
8	11.161	11.110	11.245	BB	295245	3407747	92.11%	5.238%
9	11.471	11.405	11.538	BB	323341	3625177	97.99%	5.573%
10	12.469	12.405	12.537	BB	264473	3168568	85.64%	4.871%
11	12.911	12.845	12.962	BB	220595	2665503	72.05%	4.097%
12	13.080	13.013	13.153	BB	246842	3066292	82.88%	4.713%
13	13.665	13.582	13.732	BB	238559	2996719	81.00%	4.606%
14	14.766	14.707	14.835	BB	224829	2893126	78.20%	4.447%
15	15.787	15.717	15.855	BB	204775	2788193	75.36%	4.286%
16	16.735	16.652	16.812	BB	200371	2723473	73.61%	4.186%
17	17.621	17.553	17.690	BB	191291	2758357	74.56%	4.240%
18	18.451	18.382	18.517	BB	185999	2659363	71.88%	4.088%
19	19.235	19.167	19.300	BB	163276	2331109	63.01%	3.583%
20	19.972	19.913	20.040	BB	134574	2017005	54.52%	3.100%
21	20.693	20.625	20.762	BB	109265	1894838	51.22%	2.913%
22	21.571	21.485	21.673	BB	74290	1833079	49.55%	2.818%
			Sum of corrected areas:			65054722		

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

Continuing Calibration Report for SequenceID : FC120624AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FC067937.D**						
Aliphatic C9-C12	9643965.000	60.000	3.154	6.430	160732.750	165791.359	3.051
Aliphatic C12-C16	6626528.000	40.000	6.431	9.821	165663.200	170384.422	2.771
Aliphatic C16-C21	9593540.000	60.000	9.822	13.180	159892.333	169621.553	5.736
Aliphatic C21-C28	11578614.000	80.000	13.181	16.835	144732.675	157280.060	7.978
Aliphatic C28-C40	13826870.000	120.000	16.836	21.671	115223.917	121111.336	4.861
Aliphatic EPH	51269517.000	360.000	3.154	21.671	142415.325	150155.324	5.155

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

Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	06 Dec 2024 21:35
Client Sample ID:		Operator:	YP/AJ
Data file:	FC067937.D	Misc:	
Instrument:	FID_C	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.154	6.430	9643965.000	60.000	ug/ml
Aliphatic C12-C16	6.431	9.821	6626528.000	40.000	ug/ml
Aliphatic C16-C21	9.822	13.180	9593540.000	60.000	ug/ml
Aliphatic C21-C28	13.181	16.835	11578614.000	80.000	ug/ml
Aliphatic C28-C40	16.836	21.671	13826870.000	120.000	ug/ml
Aliphatic EPH	3.154	21.671	51269517.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067937.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 21:35
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:09:05 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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

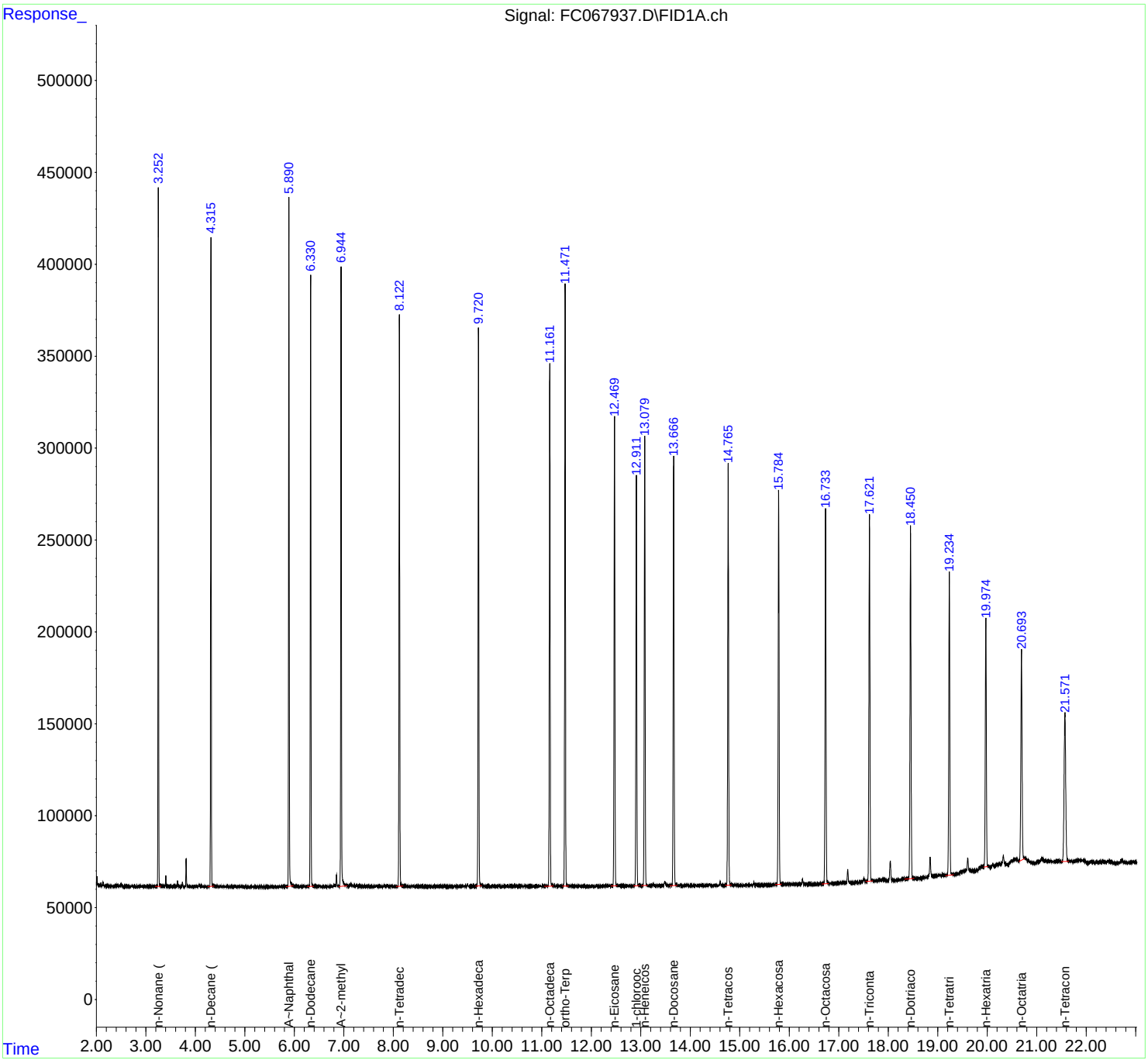
	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	ortho-Terphenyl (SURR)	11.471	3616397	18.653 ug/ml
Spiked Amount	50.000		Recovery =	37.31%
12) S	1-chlorooctadecane (S...	12.911	2688866	18.523 ug/ml
Spiked Amount	50.000		Recovery =	37.05%
	Target Compounds			
1) T	n-Nonane (C9)	3.252	3135797	19.225 ug/ml
2) T	n-Decane (C10)	4.315	3221913	19.429 ug/ml
3) T	A~Naphthalene (C11.7)	5.890	3563987	19.459 ug/ml
4) T	n-Dodecane (C12)	6.330	3286255	19.511 ug/ml
5) T	A~2-methylnaphthalene...	6.946	3465536	19.540 ug/ml
6) T	n-Tetradecane (C14)	8.122	3277055	19.568 ug/ml
7) T	n-Hexadecane (C16)	9.721	3349473	19.328 ug/ml
8) T	n-Octadecane (C18)	11.161	3362686	19.113 ug/ml
10) T	n-Eicosane (C20)	12.469	3159087	18.761 ug/ml
11) T	n-Heneicosane (C21)	13.080	3071767	18.669 ug/ml
13) T	n-Docosane (C22)	13.665	3025469	18.578 ug/ml
14) T	n-Tetracosane (C24)	14.766	2939427	18.328 ug/ml
15) T	n-Hexacosane (C26)	15.785	2839565	18.336 ug/ml
16) T	n-Octacosane (C28)	16.734	2774153	18.369 ug/ml
17) T	n-Tricontane (C30)	17.621	2829233	18.479 ug/ml
18) T	n-Dotriacontane (C32)	18.450	2737812	18.537 ug/ml
19) T	n-Tetratriacontane (C34)	19.234	2425032	19.226 ug/mlm
20) T	n-Hexatriacontane (C36)	19.974	2046024	19.563 ug/mlm
21) T	n-Octatriacontane (C38)	20.693	1942838	19.889 ug/ml
22) T	n-Tetracontane (C40)	21.570	1845931	18.939 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067937.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 21:35
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:09:05 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067937.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 21:35
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 111424.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	3.194	3.309	BB	379399	3135797	86.71%	4.843%
2	4.315	4.254	4.377	BB	353940	3221913	89.09%	4.976%
3	5.890	5.837	5.984	BB	375536	3563987	98.55%	5.504%
4	6.330	6.265	6.390	BB	332421	3286255	90.87%	5.075%
5	6.946	6.899	7.065	BB	336438	3465536	95.83%	5.352%
6	8.122	8.055	8.195	BB	310206	3277055	90.62%	5.061%
7	9.721	9.662	9.785	BB	302840	3349473	92.62%	5.173%
8	11.161	11.055	11.237	BB	283550	3362686	92.98%	5.193%
9	11.471	11.412	11.540	BB	327555	3616397	100.00%	5.585%
10	12.469	12.397	12.527	BB	254562	3159087	87.35%	4.879%
11	12.911	12.849	12.972	BB	221552	2688866	74.35%	4.153%
12	13.080	13.014	13.135	BB	244758	3071767	84.94%	4.744%
13	13.665	13.582	13.730	BB	232476	3025469	83.66%	4.673%
14	14.766	14.707	14.830	BB	228779	2939427	81.28%	4.540%
15	15.785	15.719	15.844	BB	213032	2839565	78.52%	4.386%
16	16.734	16.655	16.799	BB	203146	2774153	76.71%	4.285%
17	17.621	17.545	17.689	BB	198493	2829233	78.23%	4.370%
18	18.450	18.330	18.522	BB	190740	2737812	75.71%	4.228%
19	19.234	19.115	19.320	PB	164788	2425126	67.06%	3.745%
20	19.973	19.717	20.067	BB	135675	2190126	60.56%	3.383%
21	20.693	20.647	20.755	BB	113775	1942838	53.72%	3.001%
22	21.570	21.492	21.652	BB	79918	1845931	51.04%	2.851%
					Sum of corrected areas:	64748500		

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

Continuing Calibration Report for SequenceID : FC120924AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FC067940.D**						
Aliphatic C9-C12	10666239.000	60.000	3.152	6.430	177770.650	165791.359	-7.226
Aliphatic C12-C16	7362587.000	40.000	6.431	9.821	184064.675	170384.422	-8.029
Aliphatic C16-C21	10474922.000	60.000	9.822	13.180	174582.033	169621.553	-2.924
Aliphatic C21-C28	12638384.000	80.000	13.181	16.834	157979.800	157280.060	-0.445
Aliphatic C28-C40	15037322.000	120.000	16.835	21.670	125311.017	121111.336	-3.468
Aliphatic EPH	56179454.000	360.000	3.152	21.670	156054.039	150155.324	-3.928

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

Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	09 Dec 2024 09:03
Client Sample ID:		Operator:	YP/AJ
Data file:	FC067940.D	Misc:	
Instrument:	FID_C	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.152	6.430	10666239.000	60.000	ug/ml
Aliphatic C12-C16	6.431	9.821	7362587.000	40.000	ug/ml
Aliphatic C16-C21	9.822	13.180	10474922.000	60.000	ug/ml
Aliphatic C21-C28	13.181	16.834	12638384.000	80.000	ug/ml
Aliphatic C28-C40	16.835	21.670	15037322.000	120.000	ug/ml
Aliphatic EPH	3.152	21.670	56179454.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067940.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 09:03
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

Integration File: autoint1.e
Quant Time: Dec 09 12:20:29 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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)	11.471	3952225	20.385 ug/ml
	Spiked Amount 50.000		Recovery = 40.77%	
12)	S 1-chlorooctadecane (S...	12.910	2892506	19.926 ug/ml
	Spiked Amount 50.000		Recovery = 39.85%	
	Target Compounds			
1)	T n-Nonane (C9)	3.252	3433818	21.052 ug/ml
2)	T n-Decane (C10)	4.315	3570687	21.532 ug/ml
3)	T A~Naphthalene (C11.7)	5.890	3946193	21.545 ug/ml
4)	T n-Dodecane (C12)	6.330	3661734	21.741 ug/ml
5)	T A~2-methylnaphthalene...	6.945	3834084	21.618 ug/ml
6)	T n-Tetradecane (C14)	8.122	3646263	21.772 ug/ml
7)	T n-Hexadecane (C16)	9.721	3716324	21.445 ug/ml
8)	T n-Octadecane (C18)	11.161	3686856	20.955 ug/ml
10)	T n-Eicosane (C20)	12.468	3447632	20.475 ug/ml
11)	T n-Heneicosane (C21)	13.080	3340434	20.302 ug/ml
13)	T n-Docosane (C22)	13.664	3281942	20.153 ug/ml
14)	T n-Tetracosane (C24)	14.766	3188736	19.882 ug/ml
15)	T n-Hexacosane (C26)	15.785	3096934	19.998 ug/ml
16)	T n-Octacosane (C28)	16.734	3070772	20.333 ug/ml
17)	T n-Tricontane (C30)	17.621	3090170	20.183 ug/ml
18)	T n-Dotriacontane (C32)	18.452	3006789	20.359 ug/ml
19)	T n-Tetratriacontane (C34)	19.234	2619517	20.768 ug/ml
20)	T n-Hexatriacontane (C36)	19.973	2217690	21.204 ug/ml
21)	T n-Octatriacontane (C38)	20.693	2094445	21.441 ug/ml
22)	T n-Tetracontane (C40)	21.570	2008711	20.609 ug/ml

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

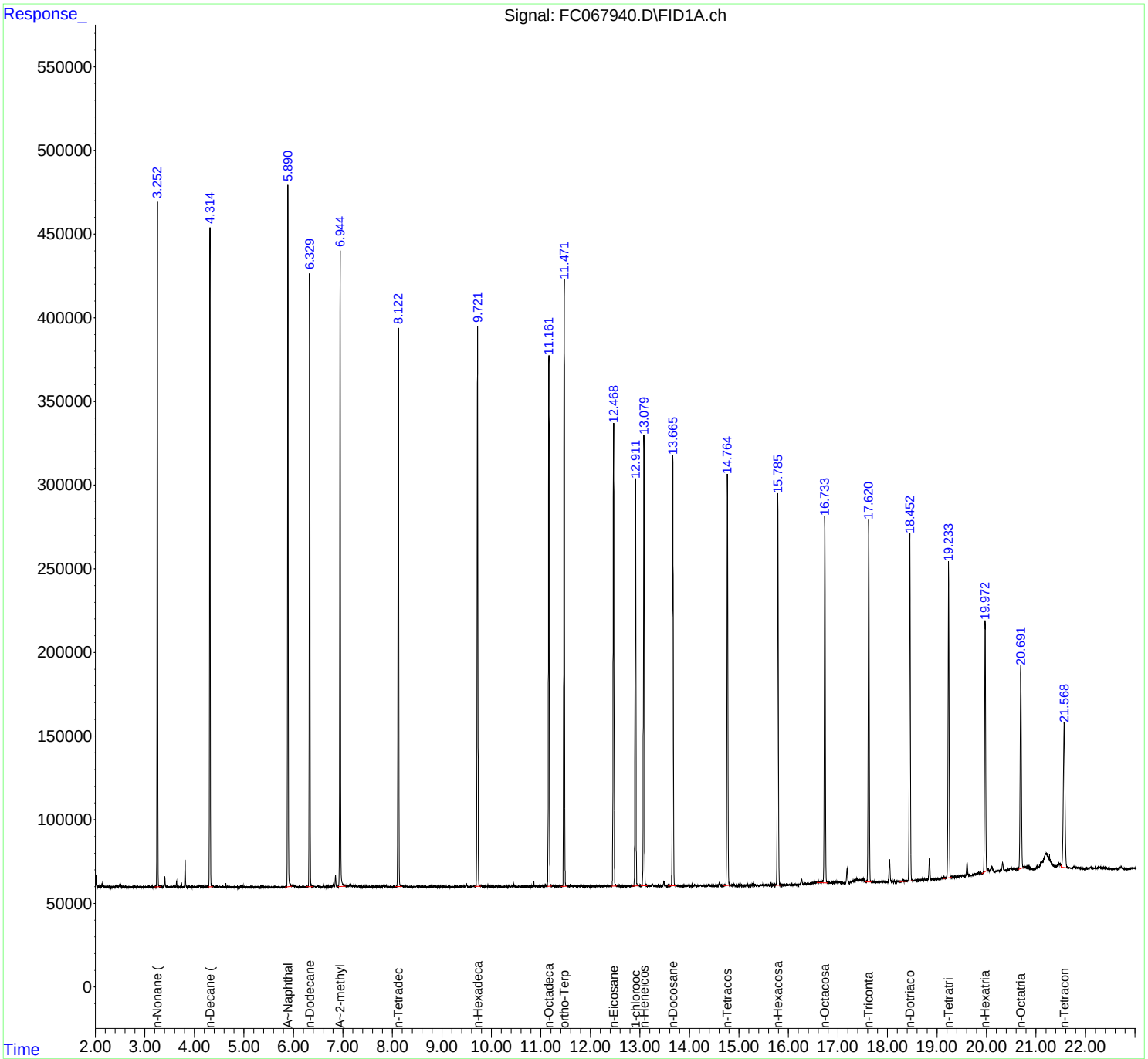
Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067940.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 09:03
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

Integration File: autoint1.e
Quant Time: Dec 09 12:20:29 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067940.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 09:03
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 111424.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	3.202	3.314	BB	408147	3433818	86.88%	4.850%
2	4.315	4.264	4.375	BB	393684	3570687	90.35%	5.043%
3	5.890	5.835	5.975	BB	420340	3946193	99.85%	5.573%
4	6.330	6.264	6.394	BB	366258	3661734	92.65%	5.172%
5	6.945	6.897	7.059	BB	378232	3834084	97.01%	5.415%
6	8.122	8.055	8.195	BB	333820	3646263	92.26%	5.150%
7	9.721	9.664	9.789	BB	334538	3716324	94.03%	5.249%
8	11.161	11.120	11.224	BB	314307	3686856	93.29%	5.207%
9	11.471	11.400	11.539	BB	361877	3952225	100.00%	5.582%
10	12.468	12.407	12.534	BB	275236	3447632	87.23%	4.869%
11	12.910	12.840	12.974	BB	243812	2892506	73.19%	4.085%
12	13.080	13.014	13.144	BB	268219	3340434	84.52%	4.718%
13	13.664	13.569	13.729	BB	256063	3281942	83.04%	4.635%
14	14.766	14.695	14.834	BB	244912	3188736	80.68%	4.504%
15	15.785	15.724	15.860	BB	232804	3096934	78.36%	4.374%
16	16.734	16.574	16.804	BB	216745	3070772	77.70%	4.337%
17	17.621	17.544	17.675	BB	215820	3090170	78.19%	4.364%
18	18.452	18.255	18.519	BB	207444	3006789	76.08%	4.247%
19	19.234	19.115	19.297	PB	187804	2619517	66.28%	3.700%
20	19.973	19.910	20.013	BV	150137	2217690	56.11%	3.132%
21	20.693	20.627	20.760	BB	120163	2094445	52.99%	2.958%
22	21.570	21.507	21.669	VB	85831	2008711	50.82%	2.837%
			Sum of corrected areas:			70804462		

Aliphatic EPH 111424.M Mon Dec 09 12:30:43 2024

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

Continuing Calibration Report for SequenceID : FC120924AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FC067945.D**						
Aliphatic C9-C12	11103446.000	60.000	3.152	6.430	185057.433	165791.359	-11.621
Aliphatic C12-C16	7622214.000	40.000	6.431	9.821	190555.350	170384.422	-11.838
Aliphatic C16-C21	10865704.000	60.000	9.822	13.180	181095.067	169621.553	-6.764
Aliphatic C21-C28	13029285.000	80.000	13.181	16.834	162866.063	157280.060	-3.552
Aliphatic C28-C40	15636843.000	120.000	16.835	21.670	130307.025	121111.336	-7.593
Aliphatic EPH	58257492.000	360.000	3.152	21.670	161826.367	150155.324	-7.773

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

Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	09 Dec 2024 13:14
Client Sample ID:		Operator:	YP/AJ
Data file:	FC067945.D	Misc:	
Instrument:	FID_C	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.152	6.430	11103446.000	60.000	ug/ml
Aliphatic C12-C16	6.431	9.821	7622214.000	40.000	ug/ml
Aliphatic C16-C21	9.822	13.180	10865704.000	60.000	ug/ml
Aliphatic C21-C28	13.181	16.834	13029285.000	80.000	ug/ml
Aliphatic C28-C40	16.835	21.670	15636843.000	120.000	ug/ml
Aliphatic EPH	3.152	21.670	58257492.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067945.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 13:14
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 12/10/2024
Supervised By :Ankita Jodhani 12/10/2024

Integration File: autoint1.e
Quant Time: Dec 10 04:37:52 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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)	11.472	4090049	21.096 ug/ml
Spiked Amount	50.000		Recovery =	42.19%
12) S	1-chlorooctadecane (S...	12.911	3025164	20.840 ug/ml
Spiked Amount	50.000		Recovery =	41.68%
	Target Compounds			
1) T	n-Nonane (C9)	3.253	3578175	21.937 ug/ml
2) T	n-Decane (C10)	4.315	3719839	22.431 ug/ml
3) T	A~Naphthalene (C11.7)	5.890	4099980	22.385 ug/ml
4) T	n-Dodecane (C12)	6.330	3805432	22.594 ug/ml
5) T	A~2-methylnaphthalene...	6.945	3980416	22.443 ug/ml
6) T	n-Tetradecane (C14)	8.122	3777911	22.558 ug/ml
7) T	n-Hexadecane (C16)	9.722	3844303	22.183 ug/ml
8) T	n-Octadecane (C18)	11.161	3821428	21.720 ug/mlm
10) T	n-Eicosane (C20)	12.469	3577841	21.248 ug/ml
11) T	n-Heneicosane (C21)	13.081	3466435	21.068 ug/ml
13) T	n-Docosane (C22)	13.665	3404283	20.904 ug/ml
14) T	n-Tetracosane (C24)	14.767	3298910	20.569 ug/ml
15) T	n-Hexacosane (C26)	15.787	3190239	20.601 ug/ml
16) T	n-Octacosane (C28)	16.735	3135853	20.764 ug/ml
17) T	n-Tricontane (C30)	17.622	3205653	20.937 ug/ml
18) T	n-Dotriacontane (C32)	18.453	3107106	21.038 ug/ml
19) T	n-Tetratriacontane (C34)	19.234	2716362	21.536 ug/ml
20) T	n-Hexatriacontane (C36)	19.972	2324668	22.227 ug/ml
21) T	n-Octatriacontane (C38)	20.695	2179175	22.308 ug/ml
22) T	n-Tetracontane (C40)	21.574	2103879	21.586 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120924AL\
Data File : FC067945.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 13:14
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

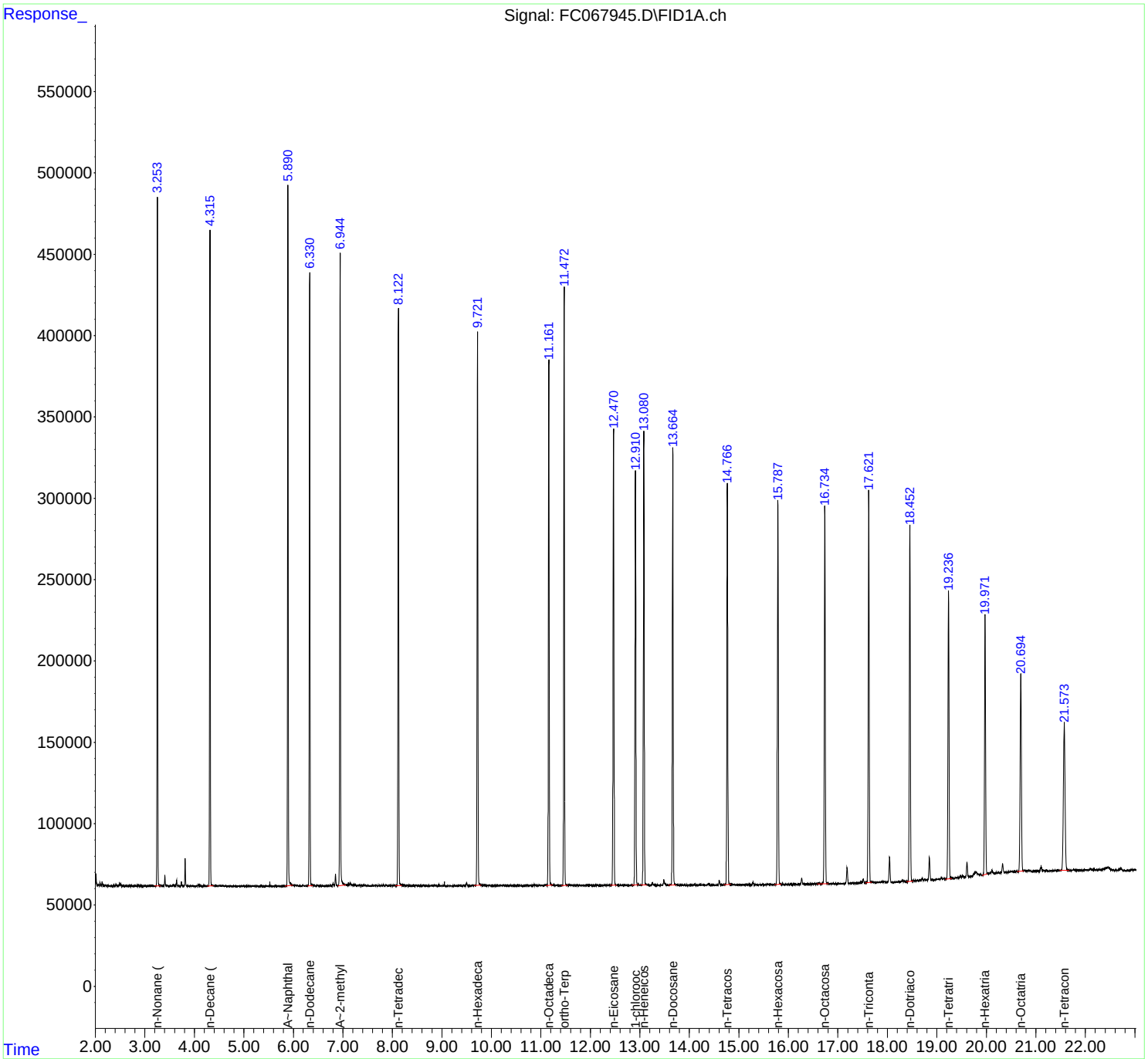
Integration File: autoint1.e
Quant Time: Dec 10 04:37:52 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations APPROVED

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



Instrument :
FID_C
LabSampleId :
20 PPM ALIPHATIC HC STD

rteres

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_C\Data\FC12092
Data File : FC067945.D
Signal(s) : FID1A.ch
Acq On : 09 Dec 2024 13:14
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 111424.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	3.204	3.314	BB	425005	3578175	87.27%	4.871%
2	4.315	4.260	4.385	BB	403580	3719839	90.73%	5.064%
3	5.890	5.827	5.994	BB	430525	4099980	100.00%	5.581%
4	6.330	6.287	6.392	BB	377223	3805432	92.82%	5.180%
5	6.945	6.899	7.055	BB	387133	3980416	97.08%	5.418%
6	8.122	8.059	8.192	BB	354489	3777911	92.14%	5.143%
7	9.722	9.654	9.795	BB	340712	3844303	93.76%	5.233%
8	11.161	11.050	11.239	BB	323247	3829684	93.41%	5.213%
9	11.472	11.414	11.535	BB	368080	4090049	99.76%	5.568%
10	12.469	12.402	12.532	BB	279466	3577841	87.26%	4.870%
11	12.911	12.842	12.970	BB	254527	3025164	73.78%	4.118%
12	13.081	13.015	13.140	BB	278070	3466435	84.55%	4.719%
13	13.665	13.582	13.727	BB	267768	3404283	83.03%	4.634%
14	14.767	14.702	14.830	BB	246168	3298910	80.46%	4.491%
15	15.787	15.714	15.852	BB	235897	3190239	77.81%	4.343%
16	16.735	16.580	16.814	BB	229598	3135853	76.48%	4.269%
17	17.622	17.550	17.685	BB	241107	3205653	78.19%	4.364%
18	18.453	18.387	18.522	BB	218663	3107106	75.78%	4.230%
19	19.234	19.167	19.299	BB	172637	2716362	66.25%	3.698%
20	19.972	19.910	20.015	BV	158680	2324668	56.70%	3.164%
21	20.695	20.619	20.759	BB	121296	2179175	53.15%	2.966%
22	21.574	21.482	21.674	BB	90861	2103879	51.31%	2.864%
			Sum of corrected areas:			73461355		

Aliphatic EPH 111424.M Tue Dec 10 05:40:42 2024

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

Continuing Calibration Report for SequenceID : FD120624AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FD048835.D**						
Aromatic C10-C12	7755997.000	40.000	4.086	5.803	193899.925	192017.544	-0.980
Aromatic C12-C16	11742896.000	60.000	5.804	8.408	195714.933	192458.977	-1.692
Aromatic C16-C21	14143269.000	80.000	8.409	12.672	176790.863	185804.816	4.851
Aromatic C21-C36	26842313.000	180.000	12.673	18.079	149123.961	157231.056	5.156
Aromatic EPH	60484475.000	360.000	4.086	18.079	168012.431	173317.266	3.061

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

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	06 Dec 2024 15:05
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048835.D	Misc:	
Instrument:	FID_D	ALS Vial:	52
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.086	5.803	7755997.000	40.000	ug/ml
Aromatic C12-C16	5.804	8.408	11742896.000	60.000	ug/ml
Aromatic C16-C21	8.409	12.672	14143269.000	80.000	ug/ml
Aromatic C21-C36	12.673	18.079	26842313.000	180.000	ug/ml
Aromatic EPH	4.086	18.079	60484475.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048835.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 15:05
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

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Integration File: autoint1.e
Quant Time: Dec 07 03:09:08 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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	3353100	19.045 ug/ml
Spiked Amount	50.000		Recovery =	38.09%
6) S	2-Flurobiphenyl (SURR)	8.213	2149230	18.661 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	37.32%
11) S	ortho-Terphenyl (SURR)	11.246	3739335	19.442 ug/ml
Spiked Amount	50.000		Recovery =	38.88%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.186	3833961	20.343 ug/ml
2) T	Naphthalene (C11.7)	5.703	3922036	20.054 ug/ml
3) T	2-Methylnaphthalene (...	6.750	3953779	20.689 ug/ml
5) T	Acenaphthylene (C15.06)	8.014	3857596	19.892 ug/ml
7) T	Acenaphthene (C15.5)	8.308	3931521	20.440 ug/ml
8) T	Flouorene (C16.55)	9.088	3707213	19.323 ug/ml
9) T	Phenanthrene (C19.36)	10.474	3595059	19.613 ug/ml
10) T	Anthracene (C19.43)	10.551	3410349	18.211 ug/ml
12) T	Fluoranthene (C21.85)	12.279	3517436	19.208 ug/ml
13) T	Pyrene (C20.8)	12.572	3430648	18.975 ug/ml
14) T	Benzo[a]anthracene (C...	14.441	2956721	17.974 ug/ml
15) T	Chrysene (C27.41)	14.483	3317394	18.955 ug/ml
16) T	benzo[b]fluoranthene ...	15.988	3044673	19.378 ug/mlm
17) T	Bnezo[k]fluoranthene ...	16.019	2926271	17.931 ug/mlm
18) T	Benzo[a]pyrene (C31.34)	16.366	2847012	19.095 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.730	2275134	18.418 ug/ml
20) T	Dibenz[a,h]anthracene...	17.770	3077789	19.627 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.979	2879883	20.183 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048835.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 15:05
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

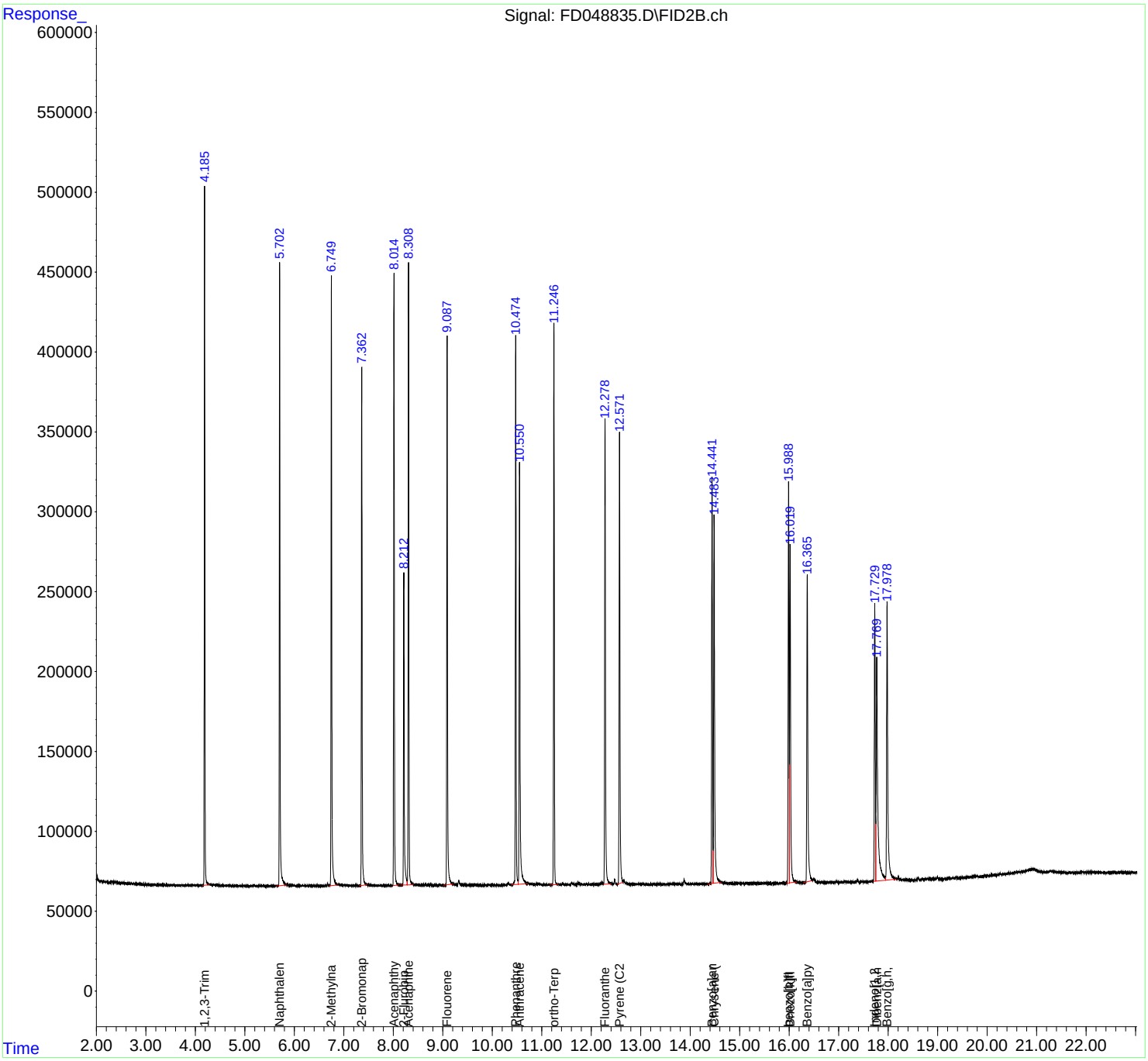
Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Integration File: autoint1.e
Quant Time: Dec 07 03:09:08 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD12062
Data File : FD048835.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 15:05
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 111424.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	4.288	BB	429388	3833961	96.97%	5.511%
2	5.703	5.638	5.851	BB	384410	3922036	99.20%	5.637%
3	6.750	6.711	6.881	BB	374323	3953779	100.00%	5.683%
4	7.363	7.304	7.474	BB	323060	3353100	84.81%	4.819%
5	8.014	7.991	8.118	BB	382938	3857596	97.57%	5.545%
6	8.213	8.141	8.280	BV	194402	2149230	54.36%	3.089%
7	8.308	8.280	8.411	VB	388578	3931521	99.44%	5.651%
8	9.088	9.008	9.214	BB	343706	3707213	93.76%	5.328%
9	10.474	10.378	10.523	BV	343283	3595059	90.93%	5.167%
10	10.551	10.523	10.721	VB	263652	3410349	86.26%	4.902%
11	11.246	11.164	11.341	BB	349108	3739335	94.58%	5.375%
12	12.279	12.248	12.408	VB	290753	3517436	88.96%	5.056%
13	12.572	12.521	12.644	BV	282826	3430648	86.77%	4.931%
14	14.441	14.351	14.462	BV	254388	2956721	74.78%	4.250%
15	14.483	14.462	14.631	VB	230023	3317394	83.90%	4.768%
16	15.988	15.952	16.000	M	250610	2839007	71.80%	4.081%
17	16.019	16.002	16.114	M	212347	2980249	75.38%	4.284%
18	16.366	16.284	16.470	BV	192850	2847012	72.01%	4.092%
19	17.730	17.701	17.750	BV	172561	2275134	57.54%	3.270%
20	17.770	17.750	17.948	VV	137684	3077789	77.84%	4.424%
21	17.979	17.948	18.171	VB	174678	2879883	72.84%	4.139%
			Sum of corrected areas:			69574452		

Aromatic EPH 111424.M Sat Dec 07 03:35:09 2024

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

Continuing Calibration Report for SequenceID : FD120624AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FD048845.D**						
Aromatic C10-C12	7966605.000	40.000	4.086	5.803	199165.125	192017.544	-3.722
Aromatic C12-C16	11930857.000	60.000	5.804	8.408	198847.617	192458.977	-3.319
Aromatic C16-C21	14429836.000	80.000	8.409	12.672	180372.950	185804.816	2.923
Aromatic C21-C36	27473861.000	180.000	12.673	18.079	152632.561	157231.056	2.925
Aromatic EPH	61801159.000	360.000	4.086	18.079	171669.886	173317.266	0.950

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

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	06 Dec 2024 21:35
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048845.D	Misc:	
Instrument:	FID_D	ALS Vial:	52
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.086	5.803	7966605.000	40.000	ug/ml
Aromatic C12-C16	5.804	8.408	11930857.000	60.000	ug/ml
Aromatic C16-C21	8.409	12.672	14429836.000	80.000	ug/ml
Aromatic C21-C36	12.673	18.079	27473861.000	180.000	ug/ml
Aromatic EPH	4.086	18.079	61801159.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048845.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 21:35
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 07 03:13:09 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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	3443281	19.558 ug/ml
Spiked Amount	50.000		Recovery =	39.12%
6) S	2-Flurobiphenyl (SURR)	8.211	2226791	19.335 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	38.67%
11) S	ortho-Terphenyl (SURR)	11.246	3792271	19.717 ug/ml
Spiked Amount	50.000		Recovery =	39.43%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.185	3934416	20.876 ug/ml
2) T	Naphthalene (C11.7)	5.702	4032189	20.617 ug/ml
3) T	2-Methylnaphthalene (...	6.748	4039194	21.136 ug/ml
5) T	Acenaphthylene (C15.06)	8.013	3909373	20.159 ug/ml
7) T	Acenaphthene (C15.5)	8.307	3982290	20.704 ug/ml
8) T	Flouorene (C16.55)	9.086	3799744	19.806 ug/ml
9) T	Phenanthrene (C19.36)	10.473	3684445	20.100 ug/ml
10) T	Anthracene (C19.43)	10.549	3465368	18.505 ug/ml
12) T	Fluoranthene (C21.85)	12.277	3560478	19.443 ug/ml
13) T	Pyrene (C20.8)	12.570	3480279	19.250 ug/ml
14) T	Benzo[a]anthracene (C...	14.440	3085392	18.756 ug/ml
15) T	Chrysene (C27.41)	14.482	3338877	19.078 ug/ml
16) T	benzo[b]fluoranthene ...	15.988	3024169	19.248 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.019	2953874	18.100 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.364	2968063	19.907 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.729	2473320	20.022 ug/ml
20) T	Dibenz[a,h]anthracene...	17.768	3124670	19.926 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.978	2945018	20.640 ug/ml

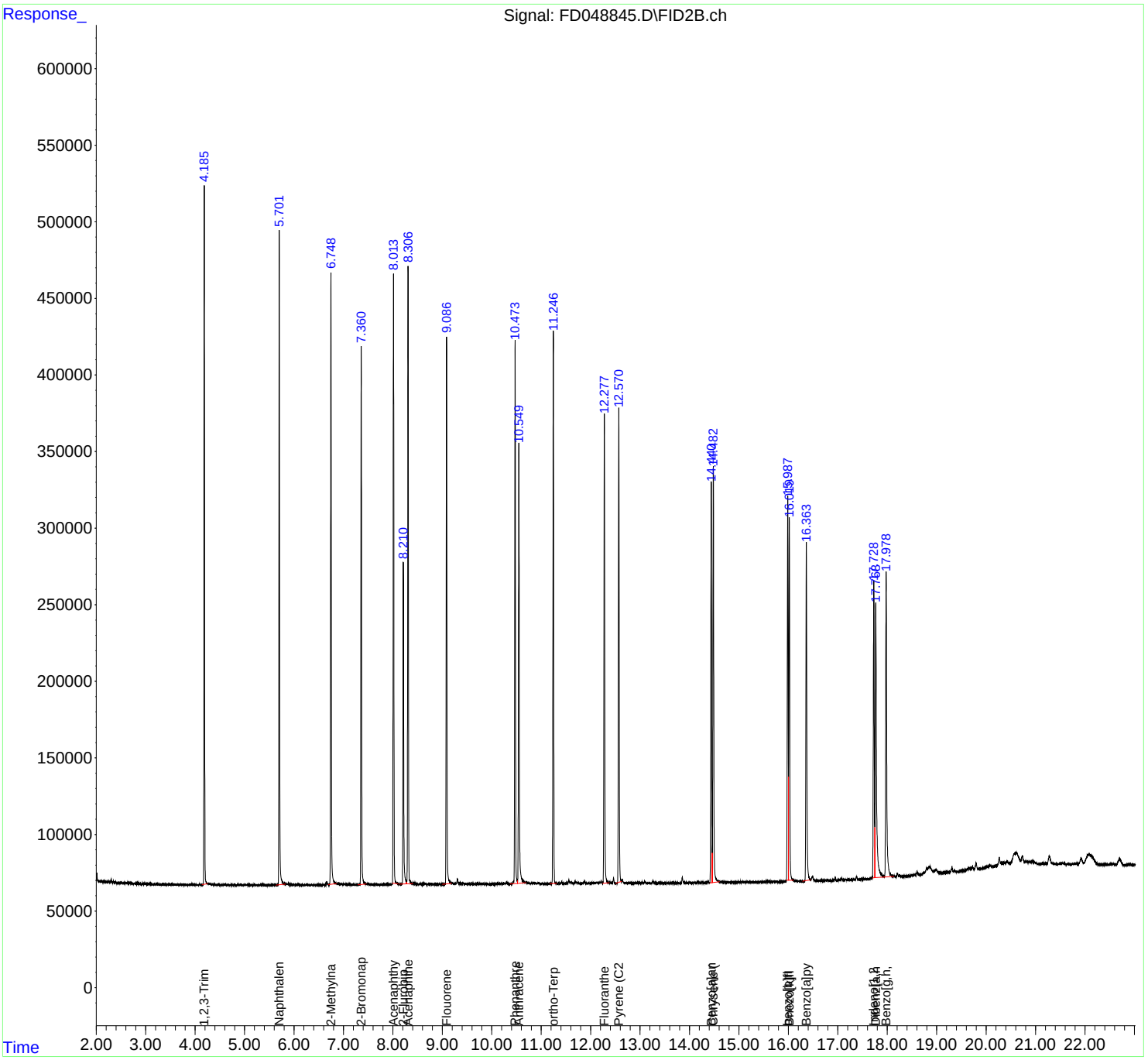
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048845.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 21:35
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 07 03:13:09 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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\FD120624AR\
Data File : FD048845.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 21:35
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 111424.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	4.185	4.141	4.251	BV	455599	3934416	97.41%	5.521%
2	5.702	5.641	5.825	BB	425975	4032189	99.83%	5.658%
3	6.748	6.695	6.861	BB	398714	4039194	100.00%	5.668%
4	7.361	7.295	7.461	BB	350764	3443281	85.25%	4.832%
5	8.013	7.991	8.115	BB	400402	3909373	96.79%	5.486%
6	8.211	8.135	8.277	BV	209294	2226791	55.13%	3.125%
7	8.307	8.277	8.405	VB	403104	3982290	98.59%	5.588%
8	9.086	9.008	9.191	BB	353183	3799744	94.07%	5.332%
9	10.473	10.368	10.520	BV	355592	3684445	91.22%	5.170%
10	10.549	10.520	10.691	VB	286451	3465368	85.79%	4.863%
11	11.246	11.171	11.315	BB	356811	3792271	93.89%	5.321%
12	12.277	12.241	12.375	PB	306930	3560478	88.15%	4.996%
13	12.570	12.505	12.622	BV	310443	3480279	86.16%	4.884%
14	14.440	14.405	14.461	PV	260900	3085392	76.39%	4.330%
15	14.482	14.461	14.605	VB	269729	3338877	82.66%	4.685%
16	15.988	15.961	16.003	BV	251319	3024169	74.87%	4.244%
17	16.019	16.003	16.105	VB	235919	2953874	73.13%	4.145%
18	16.364	16.285	16.448	BV	220436	2968063	73.48%	4.165%
19	17.729	17.701	17.748	BV	193066	2473320	61.23%	3.471%
20	17.768	17.748	17.945	VV	179089	3124670	77.36%	4.385%
21	17.978	17.945	18.135	VB	197752	2945018	72.91%	4.133%
			Sum of corrected areas:			71263501		

Aromatic EPH 111424.M Sat Dec 07 03:40:11 2024

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

Continuing Calibration Report for SequenceID : FD120924AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FD048848.D**						
Aromatic C10-C12	7506036.000	40.000	4.086	5.802	187650.900	192017.544	2.274
Aromatic C12-C16	11075044.000	60.000	5.803	8.408	184584.067	192458.977	4.092
Aromatic C16-C21	13685145.000	80.000	8.409	12.670	171064.313	185804.816	7.933
Aromatic C21-C36	25563417.000	180.000	12.671	18.079	142018.983	157231.056	9.675
Aromatic EPH	57829642.000	360.000	4.086	18.079	160637.894	173317.266	7.316

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

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	09 Dec 2024 09:38
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048848.D	Misc:	
Instrument:	FID_D	ALS Vial:	52
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.086	5.802	7506036.000	40.000	ug/ml
Aromatic C12-C16	5.803	8.408	11075044.000	60.000	ug/ml
Aromatic C16-C21	8.409	12.670	13685145.000	80.000	ug/ml
Aromatic C21-C36	12.671	18.079	25563417.000	180.000	ug/ml
Aromatic EPH	4.086	18.079	57829642.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120924AR\
Data File : FD048848.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 09:38
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 09 12:47:20 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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	3344687	18.998 ug/ml
Spiked Amount	50.000		Recovery =	38.00%
6) S	2-Flurobiphenyl (SURR)	8.212	2150566	18.673 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	37.35%
11) S	ortho-Terphenyl (SURR)	11.246	3595915	18.696 ug/ml
Spiked Amount	50.000		Recovery =	37.39%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.186	3735883	19.823 ug/ml
2) T	Naphthalene (C11.7)	5.702	3770153	19.277 ug/ml
3) T	2-Methylnaphthalene (...	6.749	3671659	19.213 ug/ml
5) T	Acenaphthylene (C15.06)	8.014	3724553	19.206 ug/ml
7) T	Acenaphthene (C15.5)	8.308	3678832	19.126 ug/ml
8) T	Flouorene (C16.55)	9.087	3594920	18.738 ug/ml
9) T	Phenanthrene (C19.36)	10.474	3403742	18.569 ug/ml
10) T	Anthracene (C19.43)	10.550	3416871	18.246 ug/ml
12) T	Fluoranthene (C21.85)	12.278	3330205	18.186 ug/ml
13) T	Pyrene (C20.8)	12.570	3269612	18.085 ug/ml
14) T	Benzo[a]anthracene (C...	14.441	2862225	17.399 ug/ml
15) T	Chrysene (C27.41)	14.482	3096271	17.692 ug/ml
16) T	benzo[b]fluoranthene ...	15.987	2795945	17.795 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.019	2893652	17.731 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.365	2680547	17.978 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.730	2219232	17.965 ug/ml
20) T	Dibenz[a,h]anthracene...	17.769	2926067	18.660 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.979	2759273	19.338 ug/ml

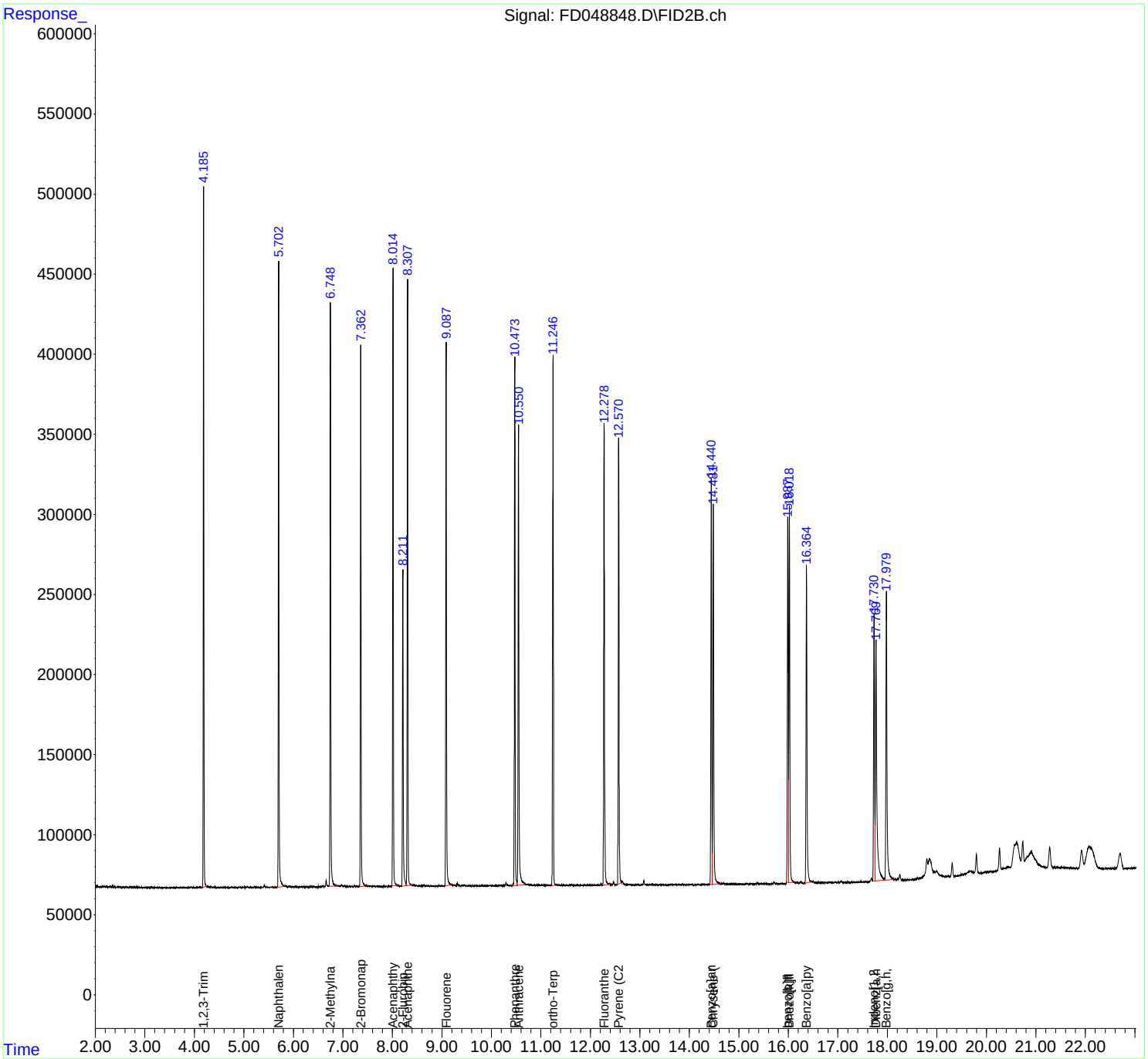
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120924AR\
Data File : FD048848.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 09:38
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 09 12:47:20 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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\FD120924AR\
Data File : FD048848.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 09:38
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 111424.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	4.161	4.251	BB	433485	3735883	99.09%	5.583%
2	5.702	5.668	5.838	BB	388468	3770153	100.00%	5.634%
3	6.749	6.718	6.881	BB	363818	3671659	97.39%	5.487%
4	7.362	7.328	7.484	BB	334820	3344687	88.71%	4.998%
5	8.014	7.991	8.111	BB	384842	3724553	98.79%	5.566%
6	8.212	8.184	8.279	BV	197208	2150566	57.04%	3.214%
7	8.308	8.279	8.404	VB	377672	3678832	97.58%	5.497%
8	9.087	9.058	9.194	BB	338339	3594920	95.35%	5.372%
9	10.474	10.408	10.520	BV	330918	3403742	90.28%	5.086%
10	10.550	10.520	10.689	VB	287064	3416871	90.63%	5.106%
11	11.246	11.208	11.321	BB	332449	3595915	95.38%	5.373%
12	12.278	12.241	12.404	BB	287791	3330205	88.33%	4.976%
13	12.570	12.538	12.631	BV	279074	3269612	86.72%	4.886%
14	14.441	14.398	14.460	BV	252527	2862225	75.92%	4.277%
15	14.482	14.460	14.631	VB	236915	3096271	82.13%	4.627%
16	15.987	15.961	16.003	BV	228785	2795945	74.16%	4.178%
17	16.019	16.003	16.131	VB	234060	2893652	76.75%	4.324%
18	16.365	16.321	16.461	BB	197836	2680547	71.10%	4.006%
19	17.730	17.701	17.749	BV	167202	2219232	58.86%	3.316%
20	17.769	17.749	17.944	VV	149815	2926067	77.61%	4.372%
21	17.979	17.944	18.144	VB	180152	2759273	73.19%	4.123%

Sum of corrected areas: 66920810

Aromatic EPH 111424.M Mon Dec 09 13:01:21 2024

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

Continuing Calibration Report for SequenceID : FD120924AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FD048852.D**						
Aromatic C10-C12	7675345.000	40.000	4.086	5.802	191883.625	192017.544	0.070
Aromatic C12-C16	11281054.000	60.000	5.803	8.408	188017.567	192458.977	2.308
Aromatic C16-C21	13808809.000	80.000	8.409	12.670	172610.113	185804.816	7.101
Aromatic C21-C36	25742397.000	180.000	12.671	18.079	143013.317	157231.056	9.043
Aromatic EPH	58507605.000	360.000	4.086	18.079	162521.125	173317.266	6.229

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

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	09 Dec 2024 12:38
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048852.D	Misc:	
Instrument:	FID_D	ALS Vial:	52
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.086	5.802	7675345.000	40.000	ug/ml
Aromatic C12-C16	5.803	8.408	11281054.000	60.000	ug/ml
Aromatic C16-C21	8.409	12.670	13808809.000	80.000	ug/ml
Aromatic C21-C36	12.671	18.079	25742397.000	180.000	ug/ml
Aromatic EPH	4.086	18.079	58507605.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120924AR\
Data File : FD048852.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 12:38
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 10 06:16:09 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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	3393364	19.274 ug/ml
	Spiked Amount 50.000		Recovery =	38.55%
6)	S 2-Flurobiphenyl (SURR)	8.213	2181554	18.942 ug/ml
	Spiked Amount 50.000 Range 0 - 131		Recovery =	37.88%
11)	S ortho-Terphenyl (SURR)	11.247	3588307	18.656 ug/ml
	Spiked Amount 50.000		Recovery =	37.31%
	Target Compounds			
1)	T 1,2,3-Trimethylbenzen...	4.186	3820563	20.272 ug/ml
2)	T Naphthalene (C11.7)	5.702	3854782	19.710 ug/ml
3)	T 2-Methylnaphthalene (...	6.749	3753989	19.644 ug/ml
5)	T Acenaphthylene (C15.06)	8.014	3788107	19.534 ug/ml
7)	T Acenaphthene (C15.5)	8.308	3738958	19.439 ug/ml
8)	T Flouorene (C16.55)	9.087	3633396	18.938 ug/ml
9)	T Phenanthrene (C19.36)	10.474	3404238	18.572 ug/ml
10)	T Anthracene (C19.43)	10.550	3496424	18.671 ug/ml
12)	T Fluoranthene (C21.85)	12.279	3341005	18.245 ug/ml
13)	T Pyrene (C20.8)	12.572	3274751	18.113 ug/ml
14)	T Benzo[a]anthracene (C...	14.441	2813307	17.102 ug/ml
15)	T Chrysene (C27.41)	14.482	3132508	17.899 ug/ml
16)	T benzo[b]fluoranthene ...	15.988	2794581	17.787 ug/ml
17)	T Bnezo[k]fluoranthene ...	16.019	2973537	18.221 ug/ml
18)	T Benzo[a]pyrene (C31.34)	16.365	2724001	18.270 ug/ml
19)	T Indeno[1,2,3-cd]pyren...	17.730	2201206	17.819 ug/ml
20)	T Dibenz[a,h]anthracene...	17.770	2994241	19.094 ug/ml
21)	T Benzo[g,h,i]perylene ...	17.980	2768011	19.399 ug/ml

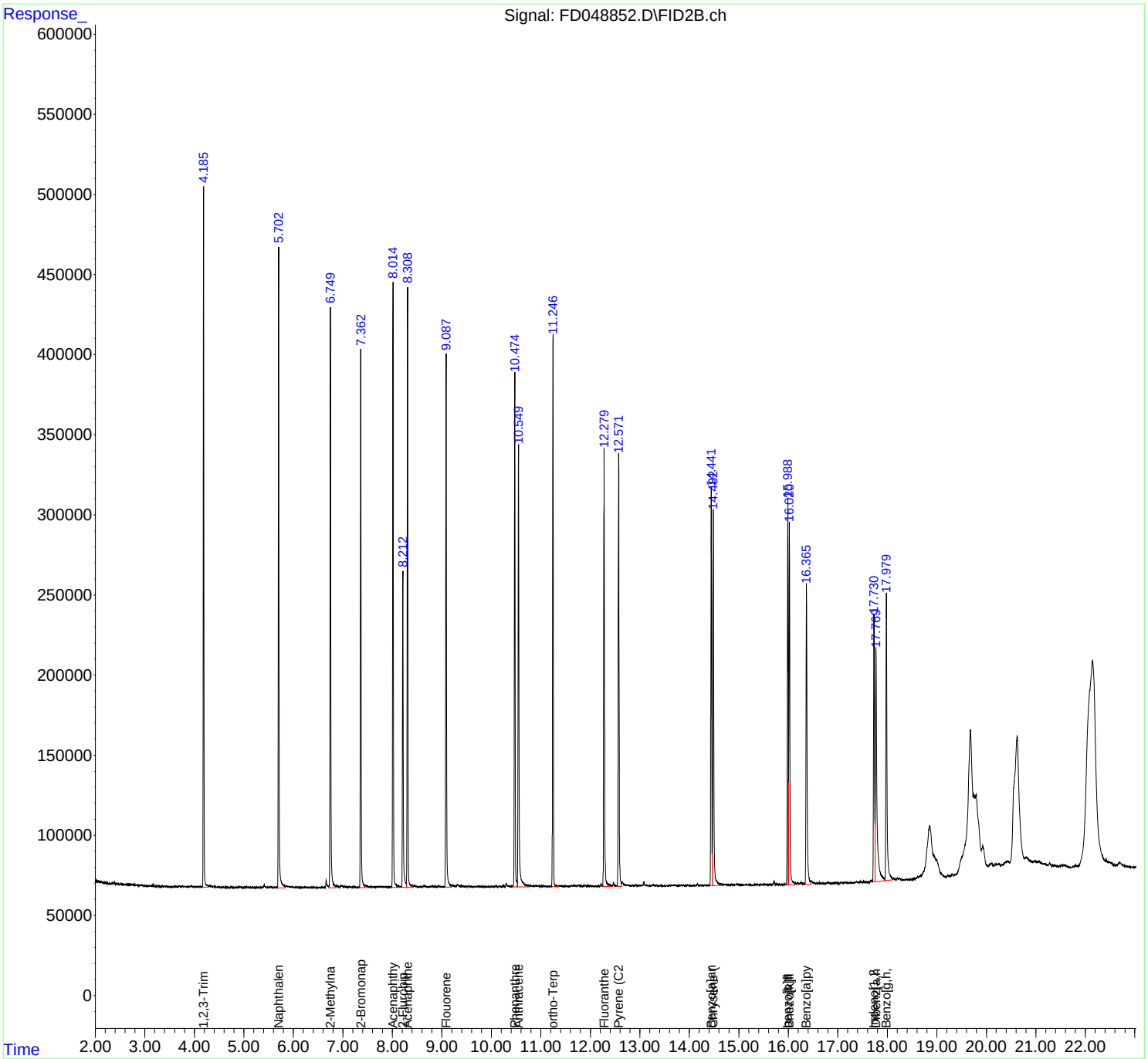
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120924AR\
Data File : FD048852.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 12:38
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 10 06:16:09 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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\FD120924AR\
Data File : FD048852.D
Signal(s) : FID2B.ch
Acq On : 09 Dec 2024 12:38
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 111424.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	4.284	BB	435891	3790734	100.00%	5.681%
2	5.702	5.625	5.828	BB	396311	3772264	99.51%	5.653%
3	6.749	6.715	6.878	VV	361335	3701220	97.64%	5.547%
4	7.362	7.308	7.465	BB	333641	3334685	87.97%	4.997%
5	8.014	7.991	8.111	BB	376836	3733380	98.49%	5.595%
6	8.213	8.145	8.280	BV	196344	2144174	56.56%	3.213%
7	8.308	8.280	8.405	VB	373091	3687011	97.26%	5.525%
8	9.087	9.028	9.198	BB	330998	3577746	94.38%	5.362%
9	10.474	10.395	10.525	BV	320996	3382606	89.23%	5.069%
10	10.550	10.525	10.711	VB	273316	3394755	89.55%	5.087%
11	11.247	11.178	11.318	BB	343707	3558336	93.87%	5.332%
12	12.279	12.245	12.371	PB	273108	3267201	86.19%	4.896%
13	12.572	12.538	12.632	BV	269358	3217051	84.87%	4.821%
14	14.441	14.405	14.461	BV	248653	2807561	74.06%	4.207%
15	14.482	14.461	14.631	VB	233552	3083115	81.33%	4.620%
16	15.988	15.961	16.003	BV	240547	2774223	73.18%	4.157%
17	16.019	16.003	16.141	VB	223705	2909229	76.75%	4.360%
18	16.365	16.318	16.457	BV	186097	2667039	70.36%	3.997%
19	17.730	17.701	17.750	BV	168433	2196999	57.96%	3.292%
20	17.770	17.750	17.945	VV	144454	2975817	78.50%	4.460%
21	17.980	17.945	18.158	VB	178120	2754434	72.66%	4.128%
			Sum of corrected areas:			66729580		

Aromatic EPH 111424.M Tue Dec 10 07:03:12 2024

QC SAMPLE DATA

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

Report of Analysis

Client:	ENTACT		Date Collected:		
Project:	North Point		Date Received:		
Client Sample ID:	PB165427BL		SDG No.:	P5147	
Lab Sample ID:	PB165427BL		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
FD048836.D	1	12/06/24	12/06/24	PB165427

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)	49.6		40 - 140	99%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	39.3		40 - 140	79%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	43.6		40 - 140	87%	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:	PB165427BL	Acq On:	06 Dec 2024 16:16
Client Sample ID:	PB165427BL	Operator:	YP/AJ
Data file:	FD048836.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	4.086	5.803	0	0	200	ug/ml
Aromatic C12-C16	5.804	8.408	0	0	300	ug/ml
Aromatic C16-C21	8.409	12.672	0	0	500	ug/ml
Aromatic C21-C36	12.673	18.079	0	0	800	ug/ml
Aromatic EPH	4.086	18.079	0	0		ug/ml
2-Bromonaphthalene (SURR)	7.364	7.364	8729393	49.58		ug/ml
2-Flurobiphenyl (SURR)	8.213	8.213	4523879	39.28		ug/ml
ortho-Terphenyl (SURR)	11.250	11.250	8392079	43.63		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048836.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 16:16
Operator : YP/AJ
Sample : PB165427BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB165427BL

Integration File: autoint1.e
Quant Time: Dec 07 03:09:39 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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	8729393	49.582 ug/ml
Spiked Amount 50.000		Recovery = 99.16%	
6) S 2-Flurobiphenyl (SURR)	8.213	4523879	39.280 ug/ml
Spiked Amount 50.000	Range 0 - 131	Recovery = 78.56%	
11) S ortho-Terphenyl (SURR)	11.250	8392079	43.632 ug/ml
Spiked Amount 50.000		Recovery = 87.26%	
Target Compounds			

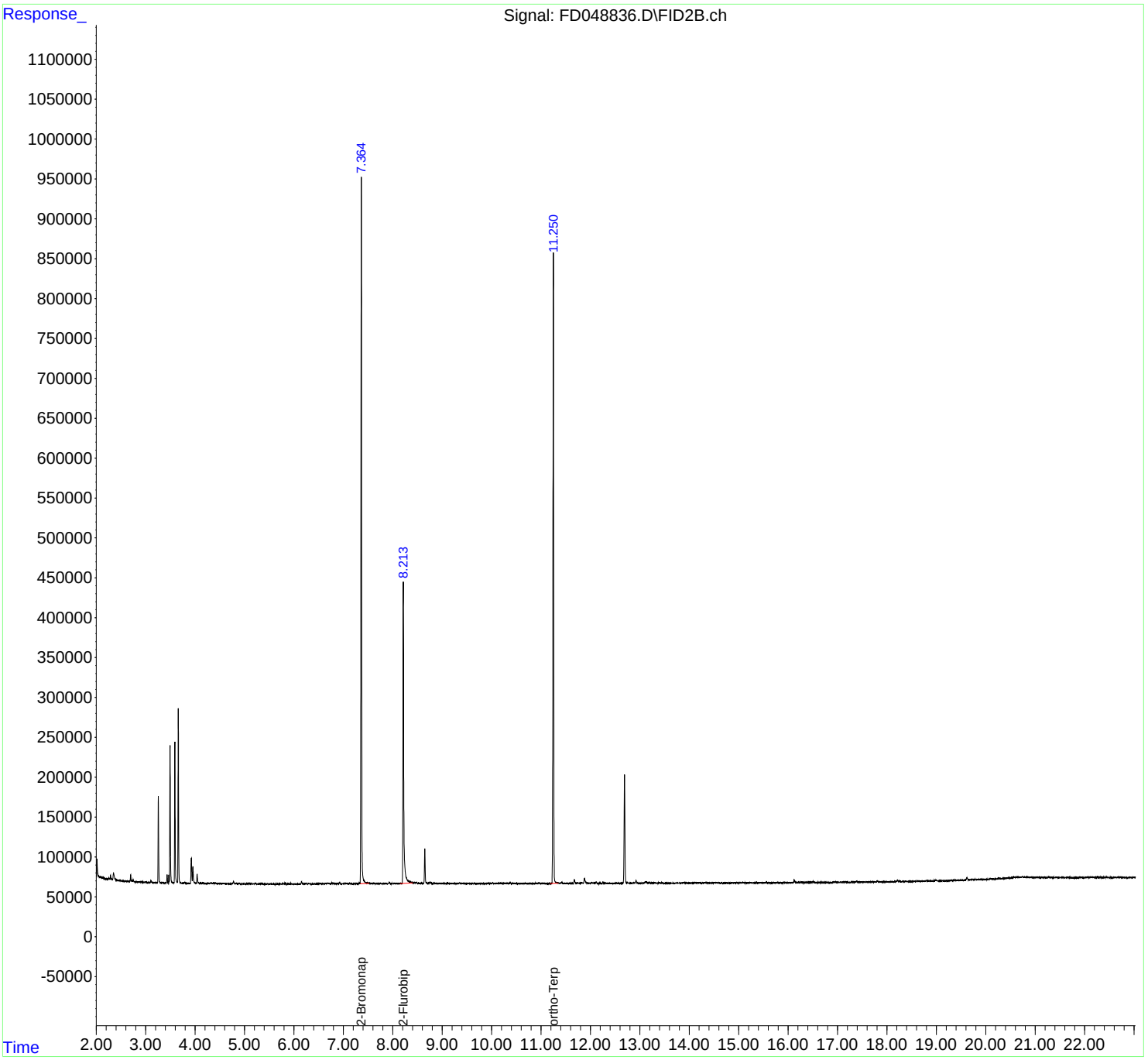
(f)=RT Delta > 1/2 Window (m)=manual int.

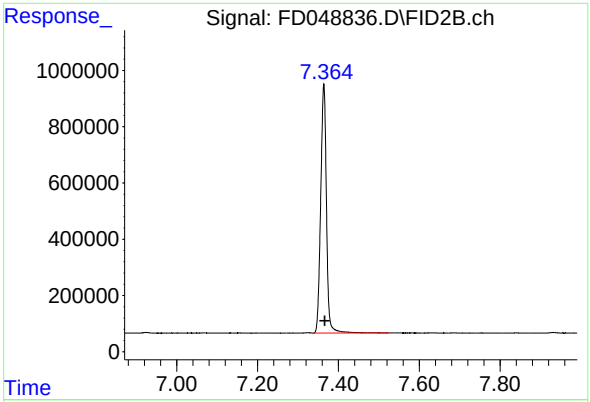
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048836.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 16:16
Operator : YP/AJ
Sample : PB165427BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB165427BL

Integration File: autoint1.e
Quant Time: Dec 07 03:09:39 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

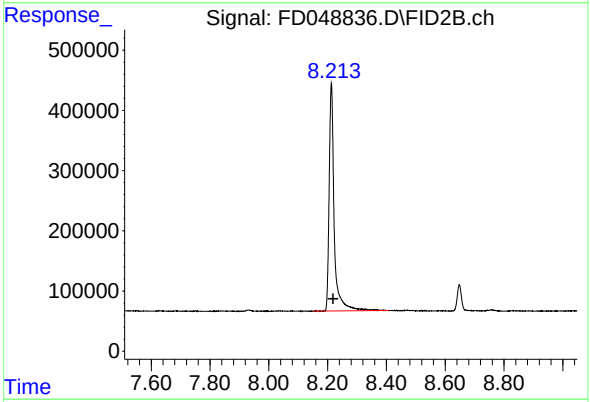




#4 2-Bromonaphthalene (SURR)

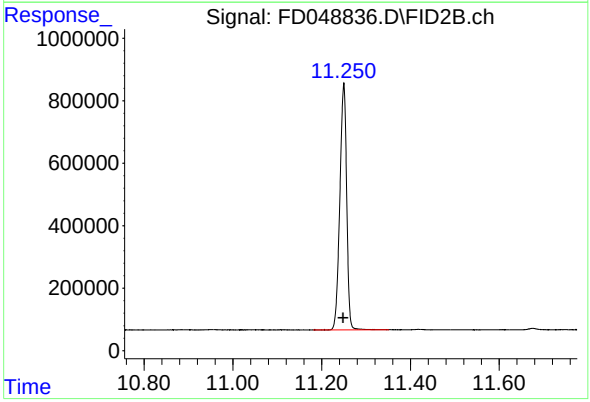
R.T.: 7.364 min
Delta R.T.: -0.003 min
Response: 8729393
Conc: 49.58 ug/ml

Instrument :
FID_D
ClientSampleId :
PB165427BL



#6 2-Flurobiphenyl (SURR)

R.T.: 8.213 min
Delta R.T.: -0.006 min
Response: 4523879
Conc: 39.28 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.250 min
Delta R.T.: 0.001 min
Response: 8392079
Conc: 43.63 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048836.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 16:16
Sample : PB165427BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	7.364	7.338	7.524	VB	887207	8729393	100.00%	40.329%
2	8.213	8.151	8.408	BB	377513	4523879	51.82%	20.900%
3	11.250	11.181	11.351	BB	795355	8392079	96.14%	38.771%

Sum of corrected areas: 21645351

Aromatic EPH 111424.M Sat Dec 07 03:35:38 2024

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

Report of Analysis

Client:	ENTACT			Date Collected:			
Project:	North Point			Date Received:			
Client Sample ID:	PB165427BL			SDG No.:	P5147		
Lab Sample ID:	PB165427BL			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
12/06/24 09:50	12/06/24 16:16	PB165427

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.38	U	1	0.38	1.00	mg/kg	FC067928.D
Aliphatic C12-C16	Aliphatic C12-C16	0.24	U	1	0.24	0.67	mg/kg	FC067928.D
Aliphatic C16-C21	Aliphatic C16-C21	0.30	U	1	0.30	1.00	mg/kg	FC067928.D
Aliphatic C21-C28	Aliphatic C21-C28	0.80	U	1	0.80	1.33	mg/kg	FC067928.D
Aliphatic C28-C40	Aliphatic C28-C40	1.80	U	1	1.80	2.00	mg/kg	FC067928.D
Aromatic C10-C12	Aromatic C10-C12	0.30	U	1	0.30	0.67	mg/kg	FD048836.D
Aromatic C12-C16	Aromatic C12-C16	0.34	U	1	0.34	1.00	mg/kg	FD048836.D
Aromatic C16-C21	Aromatic C16-C21	0.96	U	1	0.96	1.67	mg/kg	FD048836.D
Aromatic C21-C36	Aromatic C21-C36	2.00	U	1	2.00	2.66	mg/kg	FD048836.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

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

Report of Analysis

Client:	ENTACT		Date Collected:		
Project:	North Point		Date Received:		
Client Sample ID:	PB165427BL		SDG No.:	P5147	
Lab Sample ID:	PB165427BL		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
FC067928.D	1	12/06/24	12/06/24	PB165427

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)		48.8		40 - 140	98%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB165427BL	Acq On:	06 Dec 2024 16:16
Client Sample ID:	PB165427BL	Operator:	YP/AJ
Data file:	FC067928.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	3.154	6.430	0	0	300	ug/ml
Aliphatic C12-C16	6.431	9.821	0	0	200	ug/ml
Aliphatic C16-C21	9.822	13.180	0	0	300	ug/ml
Aliphatic C21-C28	13.181	16.835	0	0	400	ug/ml
Aliphatic C28-C40	16.836	21.671	0	0	600	ug/ml
Aliphatic EPH	3.154	21.671	0	0		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.913	12.913	7083073	48.79		ug/ml
Aliphatic C9-C28	3.154	16.835	0	0	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067928.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 16:16
Operator : YP/AJ
Sample : PB165427BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:05:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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

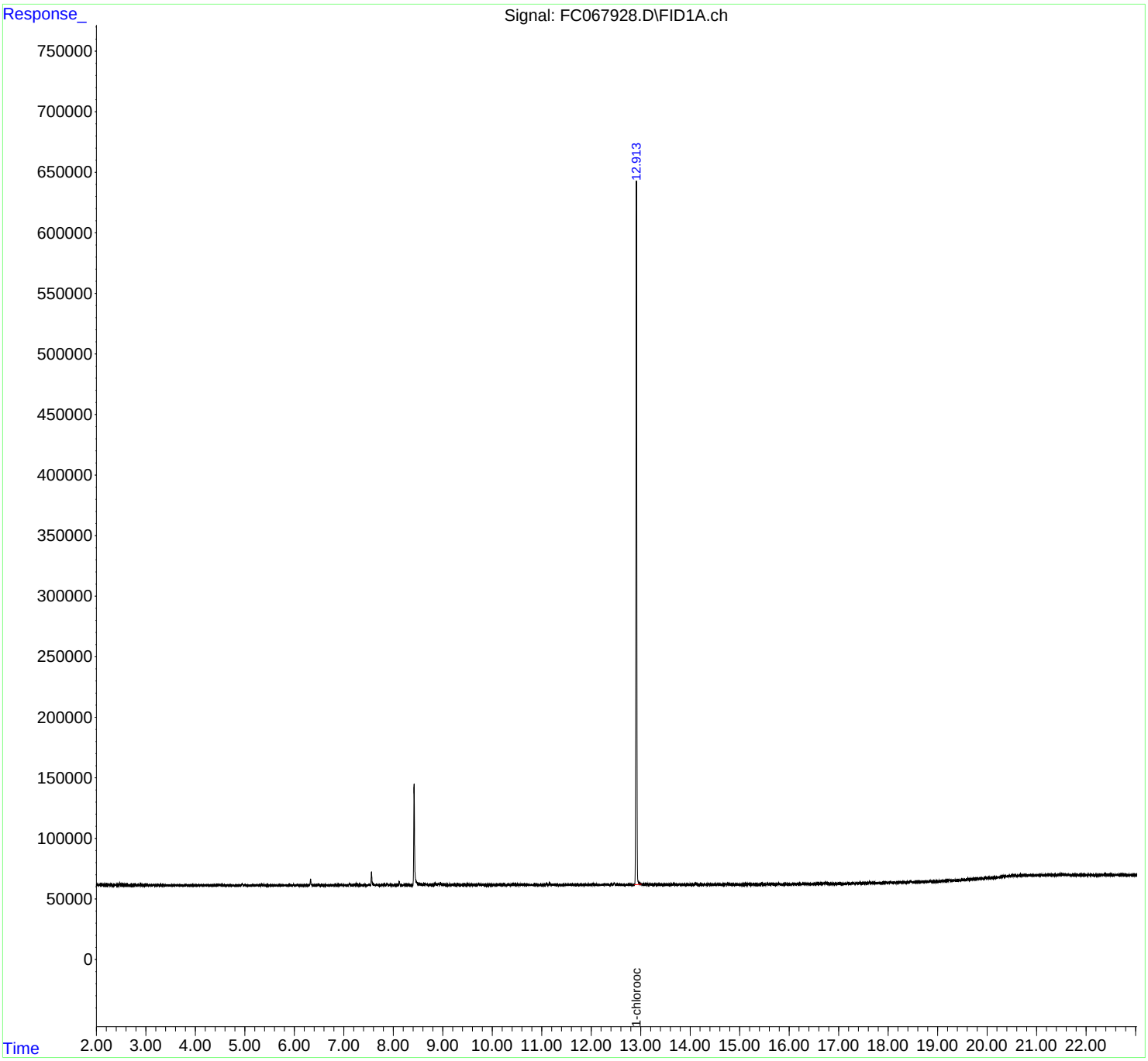
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
12) S 1-chlorooctadecane (S...	12.913	7083073	48.795 ug/ml
Spiked Amount 50.000		Recovery = 97.59%	
Target Compounds			

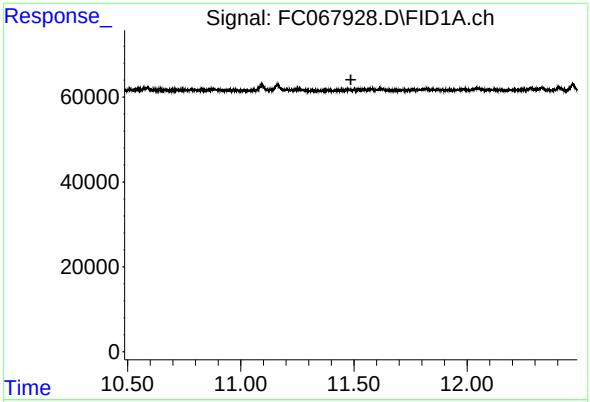
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067928.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 16:16
Operator : YP/AJ
Sample : PB165427BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:05:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

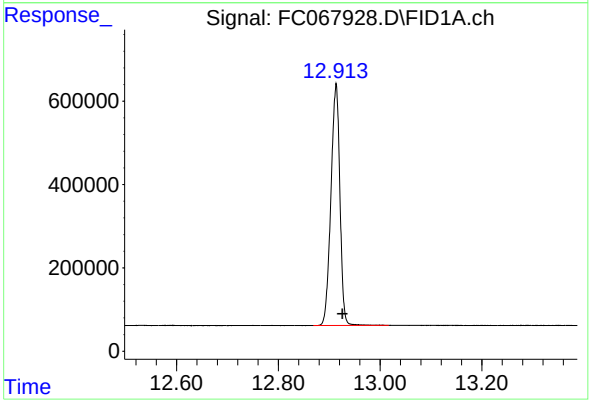
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um





#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.486 min
Response: 0
Conc: N.D.



#12 1-chlorooctadecane (SURR)

R.T.: 12.913 min
Delta R.T.: -0.013 min
Response: 7083073
Conc: 48.79 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067928.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 16:16
Sample : PB165427BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	12.913	12.868	13.017	BB	581995	7083073	100.00%	100.000%
			Sum of corrected areas:			7083073		

Aliphatic EPH 111424.M Sat Dec 07 02:41:33 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:		
Project:	North Point		Date Received:		
Client Sample ID:	PB165427BS		SDG No.:	P5147	
Lab Sample ID:	PB165427BS		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
FD048837.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	4.67		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	8.47		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	16.5		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	25.2		2.00	2.67	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	51.4		40 - 140	103%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	48.4		40 - 140	97%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	44.4		40 - 140	89%	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:	PB165427BS	Acq On:	06 Dec 2024 16:51
Client Sample ID:	PB165427BS	Operator:	YP/AJ
Data file:	FD048837.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	4.086	5.803	13453421	70.063	200	ug/ml
Aromatic C12-C16	5.804	8.408	24470255	127.145	300	ug/ml
Aromatic C16-C21	8.409	12.672	46063974	247.916	500	ug/ml
Aromatic C21-C36	12.673	18.079	59538099	378.666	800	ug/ml
Aromatic EPH	4.086	18.079	143525749	823.791		ug/ml
ortho-Terphenyl (SURR)	11.249	11.249	8537216	44.39		ug/ml
2-Bromonaphthalene (SURR)	7.363	7.363	9044043	51.37		ug/ml
2-Flurobiphenyl (SURR)	8.214	8.214	5577460	48.43		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048837.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 16:51
Operator : YP/AJ
Sample : PB165427BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB165427BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Integration File: autoint1.e
Quant Time: Dec 07 03:09:58 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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	9044043	51.369 ug/ml
Spiked Amount	50.000		Recovery =	102.74%
6) S	2-Flurobiphenyl (SURR)	8.214	5577460	48.428 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	96.86%
11) S	ortho-Terphenyl (SURR)	11.249	8537216	44.387 ug/ml
Spiked Amount	50.000		Recovery =	88.77%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.186	6036099	32.028 ug/ml
2) T	Naphthalene (C11.7)	5.704	7417322	37.926 ug/ml
3) T	2-Methylnaphthalene (...	6.750	7461791	39.045 ug/ml
5) T	Acenaphthylene (C15.06)	8.016	8183658	42.200 ug/ml
7) T	Acenaphthene (C15.5)	8.311	8824806	45.880 ug/ml
8) T	Flouorene (C16.55)	9.090	8902071	46.401 ug/ml
9) T	Phenanthrene (C19.36)	10.477	8879204	48.440 ug/ml
10) T	Anthracene (C19.43)	10.554	9014634	48.137 ug/ml
12) T	Fluoranthene (C21.85)	12.285	8884949	48.519 ug/mlm
13) T	Pyrene (C20.8)	12.576	9309929	51.495 ug/ml
14) T	Benzo[a]anthracene (C...	14.445	7931581	48.216 ug/ml
15) T	Chrysene (C27.41)	14.488	8001045	45.717 ug/ml
16) T	benzo[b]fluoranthene ...	15.994	7689710	48.942 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.028	7480083	45.835 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.370	7236414	48.535 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.738	7249560	58.687 ug/ml
20) T	Dibenz[a,h]anthracene...	17.774	7133151	45.488 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.988	6816555	47.773 ug/ml

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048837.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 16:51
Operator : YP/AJ
Sample : PB165427BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

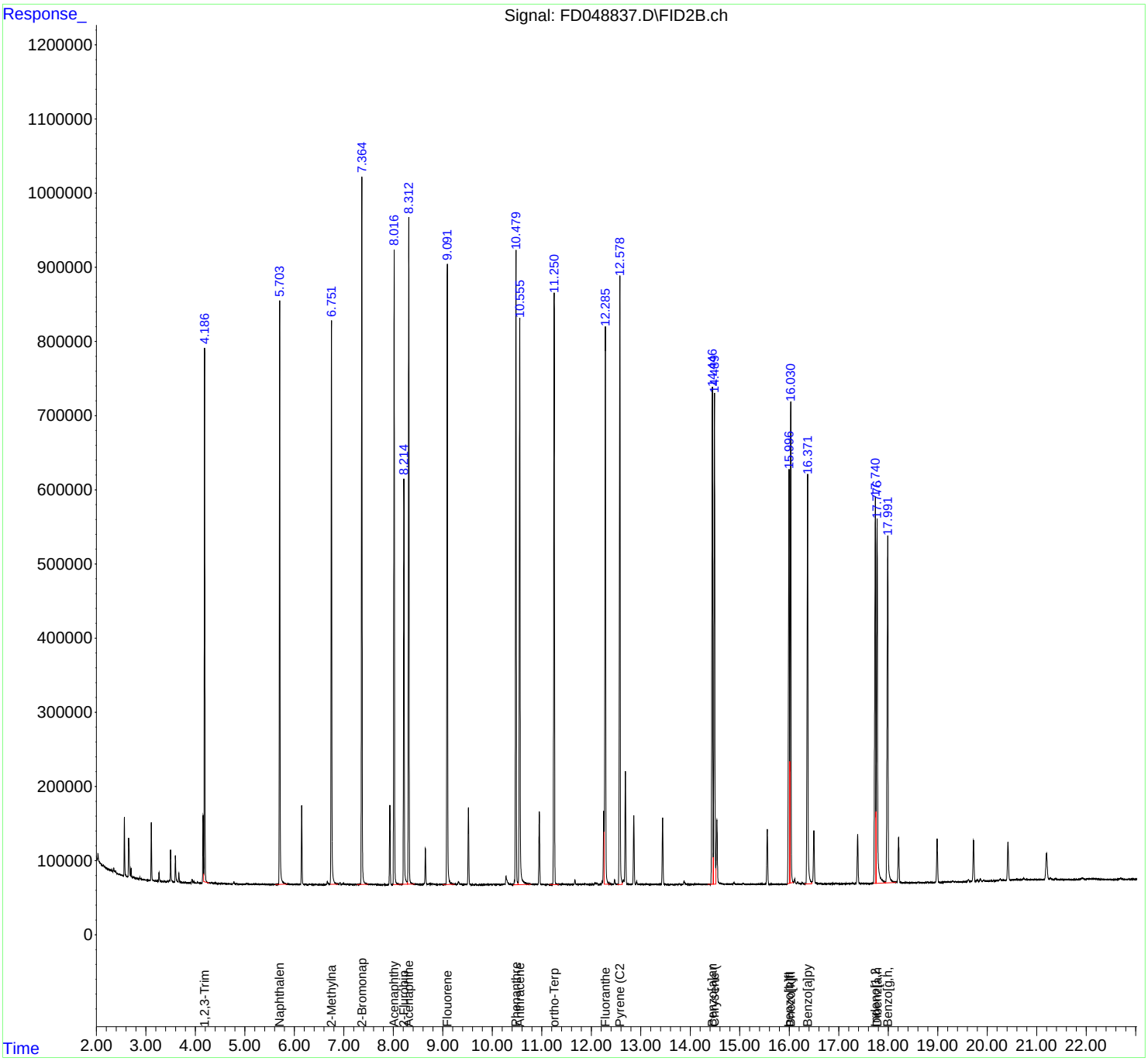
Integration File: autoint1.e
Quant Time: Dec 07 03:09:58 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_D
ClientSampleId :
PB165427BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024



rteres

Instrument :
FID_D
ClientSampleId :
PB165427BS

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD12062
Data File : FD048837.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 16:51
Sample : PB165427BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.168	4.281	VB	715221	6036099	60.61%	3.621%
2	5.704	5.611	5.861	BB	787929	7417322	74.49%	4.450%
3	6.750	6.721	6.884	BB	764491	7461791	74.93%	4.477%
4	7.363	7.268	7.494	BB	965136	9044043	90.82%	5.426%
5	8.016	7.991	8.134	BB	870785	8183658	82.18%	4.910%
6	8.214	8.134	8.284	BV	552142	5577460	56.01%	3.346%
7	8.311	8.284	8.428	VB	895080	8824806	88.62%	5.294%
8	9.090	8.994	9.234	BB	851435	8902071	89.39%	5.341%
9	10.477	10.414	10.521	BV	850857	8879204	89.17%	5.327%
10	10.554	10.521	10.788	VB	765633	9014634	90.53%	5.408%
11	11.249	11.158	11.348	BB	781546	8537216	85.73%	5.122%
12	12.283	12.161	12.421	BB	761516	9958136	100.00%	5.974%
13	12.576	12.518	12.627	PV	834001	9309929	93.49%	5.585%
14	14.445	14.351	14.464	BV	645740	7931581	79.65%	4.758%
15	14.488	14.464	14.517	VV	655064	8001045	80.35%	4.800%
16	15.994	15.961	16.011	BV	557905	7689710	77.22%	4.613%
17	16.028	16.011	16.087	VV	620834	7480083	75.12%	4.488%
18	16.370	16.308	16.454	BV	558229	7236414	72.67%	4.341%
19	17.738	17.701	17.754	BV	511415	7249560	72.80%	4.349%
20	17.774	17.754	17.941	VV	488787	7133151	71.63%	4.279%
21	17.988	17.941	18.164	VB	454536	6816555	68.45%	4.089%

Sum of corrected areas: 166684467

Aromatic EPH 111424.M Sat Dec 07 03:37:59 2024

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

Report of Analysis

Client:	ENTACT			Date Collected:	
Project:	North Point			Date Received:	
Client Sample ID:	PB165427BS			SDG No.:	P5147
Lab Sample ID:	PB165427BS			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
12/06/24 09:50	12/06/24 16:51	PB165427

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	4.99		1	0.38	1.00	mg/kg	FC067929.D
Aliphatic C12-C16	Aliphatic C12-C16	4.72		1	0.24	0.67	mg/kg	FC067929.D
Aliphatic C16-C21	Aliphatic C16-C21	7.45		1	0.30	1.00	mg/kg	FC067929.D
Aliphatic C21-C28	Aliphatic C21-C28	9.88		1	0.80	1.33	mg/kg	FC067929.D
Aliphatic C28-C40	Aliphatic C28-C40	17.2		1	1.80	2.00	mg/kg	FC067929.D
Aromatic C10-C12	Aromatic C10-C12	4.67		1	0.30	0.67	mg/kg	FD048837.D
Aromatic C12-C16	Aromatic C12-C16	8.47		1	0.34	1.00	mg/kg	FD048837.D
Aromatic C16-C21	Aromatic C16-C21	16.5		1	0.96	1.67	mg/kg	FD048837.D
Aromatic C21-C36	Aromatic C21-C36	25.2		1	2.00	2.67	mg/kg	FD048837.D
Total AliphaticEPH	Total AliphaticEPH	44.2			3.52	6.00	mg/kg	
Total AromaticEPH	Total AromaticEPH	54.8			3.60	6.01	mg/kg	
Total EPH	Total EPH	99.1			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

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

Report of Analysis

Client:	ENTACT		Date Collected:		
Project:	North Point		Date Received:		
Client Sample ID:	PB165427BS		SDG No.:	P5147	
Lab Sample ID:	PB165427BS		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
FC067929.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12		4.99		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16		4.72		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21		7.45		0.30	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28		9.88		0.80	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40		17.2		1.80	2.00	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)		29.9		40 - 140	60%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB165427BS	Acq On:	06 Dec 2024 16:51
Client Sample ID:	PB165427BS	Operator:	YP/AJ
Data file:	FC067929.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	3.154	6.430	12417455	74.898	300	ug/ml
Aliphatic C12-C16	6.431	9.821	12068869	70.833	200	ug/ml
Aliphatic C16-C21	9.822	13.180	18963254	111.797	300	ug/ml
Aliphatic C21-C28	13.181	16.835	23326070	148.309	400	ug/ml
Aliphatic C28-C40	16.836	21.671	31345334	258.814	600	ug/ml
Aliphatic EPH	3.154	21.671	98120982	664.652		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.912	12.912	4332711	29.85		ug/ml
Aliphatic C9-C28	3.154	16.835	66775648	405.837	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067929.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 16:51
Operator : YP/AJ
Sample : PB165427BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:05:36 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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...	12.912	4332711	29.848 ug/ml
Spiked Amount	50.000		Recovery =	59.70%
	Target Compounds			
1) T	n-Nonane (C9)	3.254	3105638	19.040 ug/ml
2) T	n-Decane (C10)	4.315	4054299	24.448 ug/ml
4) T	n-Dodecane (C12)	6.330	5257518	31.215 ug/ml
6) T	n-Tetradecane (C14)	8.124	5926284	35.387 ug/ml
7) T	n-Hexadecane (C16)	9.723	6142585	35.445 ug/ml
8) T	n-Octadecane (C18)	11.163	6262877	35.597 ug/ml
10) T	n-Eicosane (C20)	12.471	6480335	38.485 ug/ml
11) T	n-Heneicosane (C21)	13.082	6220042	37.803 ug/ml
13) T	n-Docosane (C22)	13.667	6136701	37.682 ug/ml
14) T	n-Tetracosane (C24)	14.769	5918041	36.900 ug/ml
15) T	n-Hexacosane (C26)	15.787	5722244	36.951 ug/ml
16) T	n-Octacosane (C28)	16.738	5539913	36.682 ug/mlm
17) T	n-Tricontane (C30)	17.623	5495698	35.894 ug/ml
18) T	n-Dotriacontane (C32)	18.453	5371604	36.370 ug/ml
19) T	n-Tetratriacontane (C34)	19.236	5281441	41.873 ug/ml
20) T	n-Hexatriacontane (C36)	19.975	5118535	48.940 ug/ml
21) T	n-Octatriacontane (C38)	20.696	5065755	51.859 ug/ml
22) T	n-Tetracontane (C40)	21.575	5012301	51.426 ug/ml

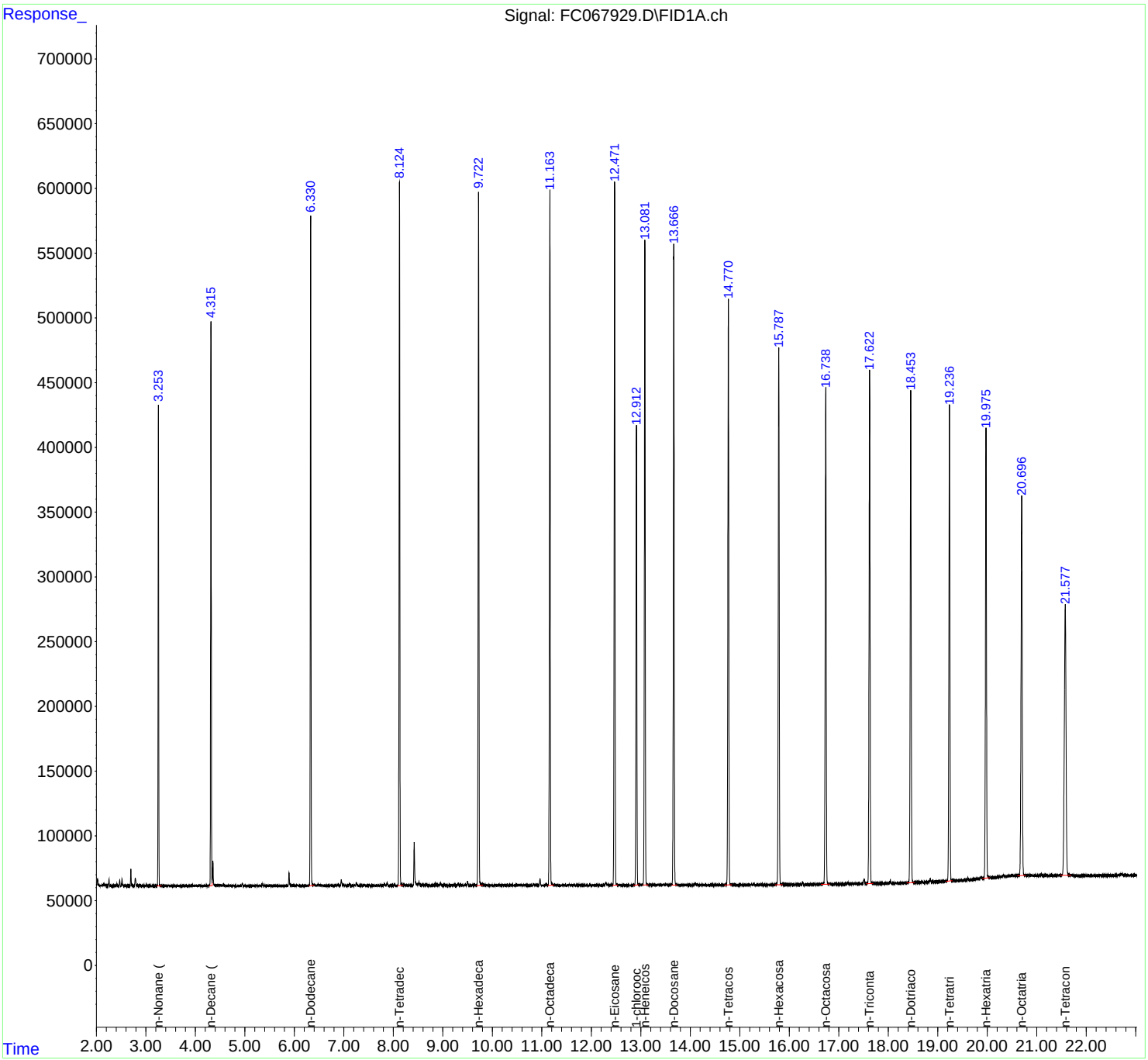
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067929.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 16:51
Operator : YP/AJ
Sample : PB165427BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:05:36 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067929.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 16:51
Sample : PB165427BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.254	3.225	3.312	BB	370992	3105638	47.92%	3.031%
2	4.315	4.279	4.340	BV	434989	4054299	62.56%	3.957%
3	6.330	6.293	6.400	BB	516883	5257518	81.13%	5.132%
4	8.124	8.085	8.195	BB	544048	5926284	91.45%	5.784%
5	9.723	9.678	9.810	BB	533460	6142585	94.79%	5.995%
6	11.163	11.127	11.242	BB	535970	6262877	96.64%	6.113%
7	12.471	12.429	12.534	PB	541270	6480335	100.00%	6.325%
8	12.912	12.847	12.967	BB	354605	4332711	66.86%	4.229%
9	13.082	13.040	13.154	BB	498485	6220042	95.98%	6.071%
10	13.667	13.627	13.735	VB	490276	6136701	94.70%	5.990%
11	14.769	14.690	14.840	BB	450751	5918041	91.32%	5.776%
12	15.787	15.709	15.864	BB	413427	5722244	88.30%	5.585%
13	16.737	16.595	16.805	BB	382235	5549084	85.63%	5.416%
14	17.623	17.557	17.692	BB	395339	5495698	84.81%	5.364%
15	18.453	18.375	18.529	BB	378503	5371604	82.89%	5.243%
16	19.236	19.167	19.292	BB	366771	5281441	81.50%	5.155%
17	19.975	19.904	20.049	BB	347422	5118535	78.99%	4.996%
18	20.696	20.615	20.774	BB	291551	5065755	78.17%	4.944%
19	21.575	21.480	21.695	BB	209092	5012301	77.35%	4.892%
			Sum of corrected areas:			102453690		

Aliphatic EPH 111424.M Sat Dec 07 02:42:21 2024

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

Report of Analysis

Client:	ENTACT			Date Collected:	
Project:	North Point			Date Received:	
Client Sample ID:	PB165427BSD			SDG No.:	P5147
Lab Sample ID:	PB165427BSD			Matrix:	Solid
Analytical Method:	NJEPH			% Solid:	100
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
12/06/24 09:50	12/06/24 17:27	PB165427

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	4.30		1	0.38	1.00	mg/kg	FC067930.D
Aliphatic C12-C16	Aliphatic C12-C16	4.24		1	0.24	0.67	mg/kg	FC067930.D
Aliphatic C16-C21	Aliphatic C16-C21	6.79		1	0.30	1.00	mg/kg	FC067930.D
Aliphatic C21-C28	Aliphatic C21-C28	8.85		1	0.80	1.33	mg/kg	FC067930.D
Aliphatic C28-C40	Aliphatic C28-C40	15.1		1	1.80	2.00	mg/kg	FC067930.D
Aromatic C10-C12	Aromatic C10-C12	3.78		1	0.30	0.67	mg/kg	FD048838.D
Aromatic C12-C16	Aromatic C12-C16	6.99		1	0.34	1.00	mg/kg	FD048838.D
Aromatic C16-C21	Aromatic C16-C21	14.0		1	0.96	1.67	mg/kg	FD048838.D
Aromatic C21-C36	Aromatic C21-C36	21.9		1	2.00	2.66	mg/kg	FD048838.D
Total AliphaticEPH	Total AliphaticEPH	39.3			3.52	5.99	mg/kg	
Total AromaticEPH	Total AromaticEPH	46.7			3.60	6.00	mg/kg	
Total EPH	Total EPH	86.0			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

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

Report of Analysis

Client:	ENTACT		Date Collected:		
Project:	North Point		Date Received:		
Client Sample ID:	PB165427BSD		SDG No.:	P5147	
Lab Sample ID:	PB165427BSD		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	100	
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
FC067930.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	4.30		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	4.24		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	6.79		0.30	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	8.85		0.80	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	15.1		1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	49.3		40 - 140	99%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB165427BSD	Acq On:	06 Dec 2024 17:27
Client Sample ID:	PB165427BSD	Operator:	YP/AJ
Data file:	FC067930.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	3.154	6.430	10705079	64.57	300	ug/ml
Aliphatic C12-C16	6.431	9.821	10841918	63.632	200	ug/ml
Aliphatic C16-C21	9.822	13.180	17294268	101.958	300	ug/ml
Aliphatic C21-C28	13.181	16.835	20889460	132.817	400	ug/ml
Aliphatic C28-C40	16.836	21.671	27483802	226.93	600	ug/ml
Aliphatic EPH	3.154	21.671	87214527	589.907		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.914	12.914	7155656	49.29		ug/ml
Aliphatic C9-C28	3.154	16.835	59730725	362.977	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067930.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 17:27
Operator : YP/AJ
Sample : PB165427BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:06:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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

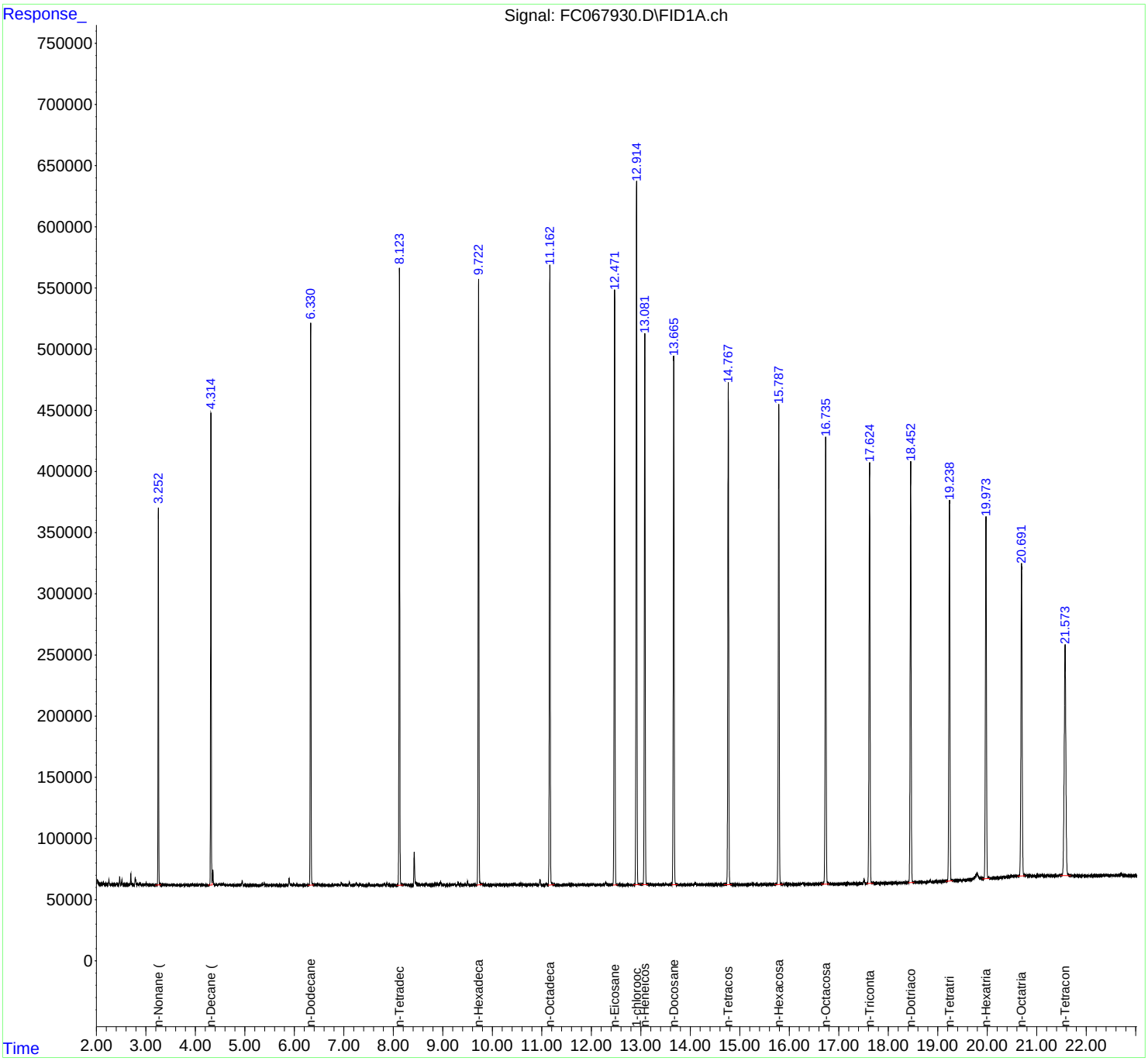
	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
12) S	1-chlorooctadecane (S...	12.914	7155656	49.295 ug/ml
Spiked Amount	50.000		Recovery =	98.59%
	Target Compounds			
1) T	n-Nonane (C9)	3.253	2587863	15.865 ug/ml
2) T	n-Decane (C10)	4.315	3518809	21.219 ug/ml
4) T	n-Dodecane (C12)	6.330	4598407	27.302 ug/ml
6) T	n-Tetradecane (C14)	8.123	5246760	31.329 ug/ml
7) T	n-Hexadecane (C16)	9.722	5595158	32.287 ug/ml
8) T	n-Octadecane (C18)	11.162	5850792	33.255 ug/ml
10) T	n-Eicosane (C20)	12.471	5856278	34.779 ug/ml
11) T	n-Heneicosane (C21)	13.081	5587198	33.957 ug/ml
13) T	n-Docosane (C22)	13.665	5504291	33.799 ug/mlm
14) T	n-Tetracosane (C24)	14.768	5304039	33.071 ug/ml
15) T	n-Hexacosane (C26)	15.788	5122880	33.080 ug/ml
16) T	n-Octacosane (C28)	16.735	4950422	32.779 ug/mlm
17) T	n-Tricontane (C30)	17.623	4890575	31.942 ug/ml
18) T	n-Dotriacontane (C32)	18.453	4779122	32.359 ug/ml
19) T	n-Tetratriacontane (C34)	19.236	4666748	36.999 ug/ml
20) T	n-Hexatriacontane (C36)	19.974	4482131	42.855 ug/ml
21) T	n-Octatriacontane (C38)	20.693	4373414	44.771 ug/ml
22) T	n-Tetracontane (C40)	21.572	4291812	44.034 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067930.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 17:27
Operator : YP/AJ
Sample : PB165427BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:06:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067930.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 17:27
Sample : PB165427BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.192	3.309	BB	308138	2587863	36.17%	2.742%
2	4.315	4.260	4.340	BV	385580	3518809	49.18%	3.729%
3	6.330	6.274	6.397	BV	459239	4598407	64.26%	4.873%
4	8.123	8.064	8.197	BV	503309	5246760	73.32%	5.560%
5	9.722	9.679	9.800	BB	495121	5595158	78.19%	5.929%
6	11.162	11.120	11.249	PB	507243	5850792	81.76%	6.200%
7	12.471	12.434	12.532	PB	483410	5856278	81.84%	6.206%
8	12.914	12.840	12.984	BB	571469	7155656	100.00%	7.583%
9	13.081	13.014	13.147	BB	446061	5587198	78.08%	5.921%
10	13.667	13.584	13.739	BB	430008	5508497	76.98%	5.837%
11	14.768	14.682	14.839	BB	407796	5304039	74.12%	5.620%
12	15.788	15.697	15.872	BB	391944	5122880	71.59%	5.428%
13	16.736	16.585	16.804	BB	366021	4954044	69.23%	5.250%
14	17.623	17.562	17.697	BB	344270	4890575	68.35%	5.182%
15	18.453	18.402	18.525	BB	336602	4779122	66.79%	5.064%
16	19.236	19.162	19.305	BB	309396	4666748	65.22%	4.945%
17	19.974	19.900	20.052	BB	296264	4482131	62.64%	4.750%
18	20.693	20.612	20.764	BB	251272	4373414	61.12%	4.634%
19	21.572	21.475	21.685	BB	187098	4291812	59.98%	4.548%
			Sum of corrected areas:			94370183		

Aliphatic EPH 111424.M Sat Dec 07 02:43:46 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:		
Project:	North Point		Date Received:		
Client Sample ID:	PB165427BSD		SDG No.:	P5147	
Lab Sample ID:	PB165427BSD		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	100	
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
FD048838.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	3.78		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	6.99		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	14.0		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	21.9		2.00	2.66	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	46.3		40 - 140	93%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	43.6		40 - 140	87%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	41.6		40 - 140	83%	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:	PB165427BSD	Acq On:	06 Dec 2024 17:27
Client Sample ID:	PB165427BSD	Operator:	YP/AJ
Data file:	FD048838.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	4.086	5.803	10895682	56.743	200	ug/ml
Aromatic C12-C16	5.804	8.408	20193428	104.923	300	ug/ml
Aromatic C16-C21	8.409	12.672	39065601	210.251	500	ug/ml
Aromatic C21-C36	12.673	18.079	51626220	328.346	800	ug/ml
Aromatic EPH	4.086	18.079	121780931	700.263		ug/ml
ortho-Terphenyl (SURR)	11.249	11.249	8004387	41.62		ug/ml
2-Bromonaphthalene (SURR)	7.364	7.364	8146022	46.27		ug/ml
2-Flurobiphenyl (SURR)	8.214	8.214	5019098	43.58		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048838.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 17:27
Operator : YP/AJ
Sample : PB165427BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 07 03:10:26 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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 :
PB165427BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel

12/09/2024
Supervised By :Ankita Jodhani

12/09/2024

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.364	8146022	46.269 ug/ml
Spiked Amount	50.000		Recovery =	92.54%
6) S	2-Flurobiphenyl (SURR)	8.214	5019098	43.580 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	87.16%
11) S	ortho-Terphenyl (SURR)	11.249	8004387	41.617 ug/ml
Spiked Amount	50.000		Recovery =	83.23%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.186	4842511	25.695 ug/ml
2) T	Naphthalene (C11.7)	5.703	6053171	30.951 ug/ml
3) T	2-Methylnaphthalene (...	6.750	6133436	32.094 ug/ml
5) T	Acenaphthylene (C15.06)	8.016	6754577	34.831 ug/ml
7) T	Acenaphthene (C15.5)	8.311	7305415	37.981 ug/ml
8) T	Flouorene (C16.55)	9.090	7389902	38.519 ug/ml
9) T	Phenanthrene (C19.36)	10.477	7490909	40.866 ug/ml
10) T	Anthracene (C19.43)	10.553	7695486	41.093 ug/ml
12) T	Fluoranthene (C21.85)	12.282	7607143	41.541 ug/mlm
13) T	Pyrene (C20.8)	12.575	8018172	44.350 ug/ml
14) T	Benzo[a]anthracene (C...	14.444	6901809	41.956 ug/ml
15) T	Chrysene (C27.41)	14.487	6959994	39.768 ug/ml
16) T	benzo[b]fluoranthene ...	15.994	6732668	42.851 ug/mlm
17) T	Bnezo[k]fluoranthene ...	16.027	6667120	40.853 ug/mlm
18) T	Benzo[a]pyrene (C31.34)	16.368	6309288	42.317 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.735	6270529	50.761 ug/ml
20) T	Dibenz[a,h]anthracene...	17.772	6254521	39.885 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.986	5906702	41.396 ug/ml

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048838.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 17:27
Operator : YP/AJ
Sample : PB165427BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 07 03:10:26 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 2024
Response via : Initial Calibration
Integrator: ChemStation

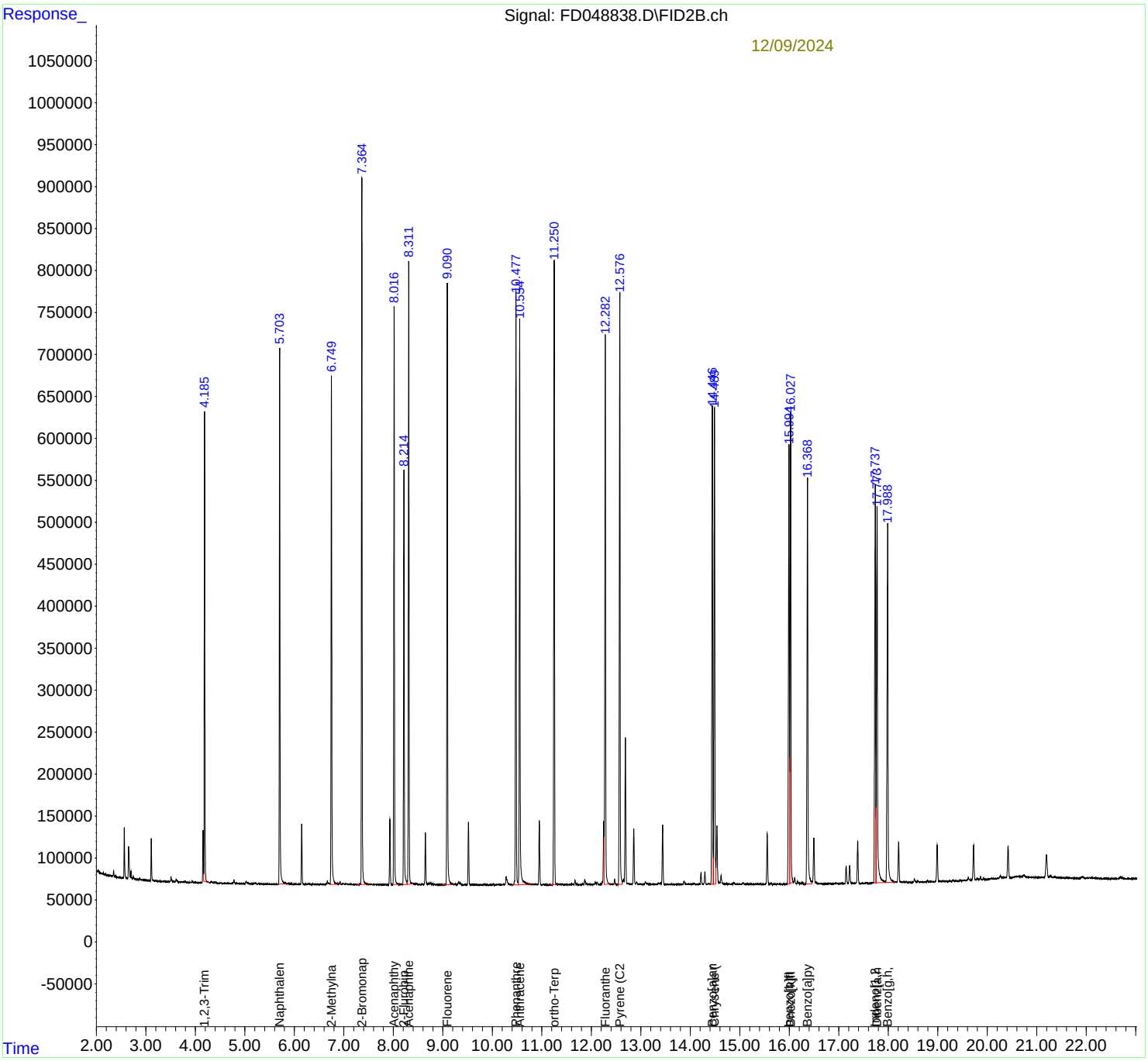
Volume Inj. : 1 µl
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18µm

Instrument :
FID_D
ClientSampleId :
PB165427BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel

12/09/2024
Supervised By :Ankita Jodhani



Instrument :
FID_D
ClientSampleId :
PB165427BSD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD12062
Data File : FD048838.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 17:27
Sample : PB165427BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.168	4.288	VB	558045	4842511	57.16%	3.388%
2	5.703	5.648	5.855	BB	630649	6053171	71.46%	4.234%
3	6.750	6.718	6.891	VB	604634	6133436	72.40%	4.291%
4	7.364	7.258	7.501	BB	845987	8146022	96.16%	5.698%
5	8.016	7.991	8.108	BB	677339	6754577	79.74%	4.725%
6	8.214	8.181	8.280	BV	496896	5019098	59.25%	3.511%
7	8.311	8.280	8.405	VB	740446	7305415	86.24%	5.110%
8	9.090	8.975	9.231	BB	725338	7389902	87.24%	5.170%
9	10.477	10.411	10.525	BV	713682	7490909	88.43%	5.240%
10	10.553	10.525	10.781	VB	687990	7695486	90.84%	5.383%
11	11.249	11.155	11.318	BB	725399	8004387	94.49%	5.599%
12	12.281	12.165	12.425	BB	652089	8471132	100.00%	5.926%
13	12.575	12.518	12.628	BV	696769	8018172	94.65%	5.609%
14	14.444	14.388	14.465	BV	568942	6901809	81.47%	4.828%
15	14.487	14.465	14.517	VV	571276	6959994	82.16%	4.869%
16	15.994	15.960	16.005	M	521866	6267806	73.99%	4.385%
17	16.027	16.006	16.073	M	559949	6755571	79.75%	4.726%
18	16.368	16.308	16.461	BV	483753	6309288	74.48%	4.414%
19	17.735	17.701	17.753	BV	461224	6270529	74.02%	4.387%
20	17.772	17.753	17.948	VV	435391	6254521	73.83%	4.375%
21	17.986	17.948	18.148	VB	409801	5906702	69.73%	4.132%
			Sum of corrected areas:			142950437		

Aromatic EPH 111424.M Sat Dec 07 03:39:25 2024

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

Report of Analysis

Client:	ENTACT			Date Collected:	
Project:	North Point			Date Received:	
Client Sample ID:	EX-8-TPH-1MS			SDG No.:	P5147
Lab Sample ID:	P5147-01MS			Matrix:	Solid
Analytical Method:	NJEPH			% Solid:	81
Sample Wt/Vol:	30.05	Units:	g	Final Vol:	2000 uL
Soil Aliquot Vol:			uL	Test:	EPH
Prep Method :					

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048841.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aromatic C10-C12	Aromatic C10-C12		23.6	E	0.37	0.82	mg/kg
Aromatic C12-C16	Aromatic C12-C16		104	E	0.42	1.23	mg/kg
Aromatic C16-C21	Aromatic C16-C21		139	E	1.18	2.05	mg/kg
Aromatic C21-C36	Aromatic C21-C36		51.8		2.47	3.29	mg/kg
SURROGATES							
580-13-2	2-Bromonaphthalene (SURR)		64.5		40 - 140	129%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)		51.1		40 - 140	102%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		42.6		40 - 140	85%	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:	P5147-01MS	Acq On:	06 Dec 2024 19:13
Client Sample ID:	EX-8-TPH-1MS	Operator:	YP/AJ
Data file:	FD048841.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	4.086	5.803	55191544	287.43	200	ug/ml
Aromatic C12-C16	5.804	8.408	244827024	1270	300	ug/ml
Aromatic C16-C21	8.409	12.672	315818293	1700	500	ug/ml
Aromatic C21-C36	12.673	18.079	99043204	629.921	800	ug/ml
Aromatic EPH	4.086	18.079	714880065	3890		ug/ml
2-Bromonaphthalene (SURR)	7.367	7.367	11360785	64.53		ug/ml
2-Flurobiphenyl (SURR)	8.219	8.219	5880351	51.06		ug/ml
ortho-Terphenyl (SURR)	11.252	11.252	8189608	42.58		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048841.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 19:13
Operator : YP/AJ
Sample : P5147-01MS
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Dec 07 03:11:41 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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 :
EX-8-TPH-1MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.367	11360785	64.528 ug/ml
Spiked Amount	50.000		Recovery =	129.06%
6) S	2-Flurobiphenyl (SURR)	8.219	5880351	51.058 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	102.12%
11) S	ortho-Terphenyl (SURR)	11.252	8189608	42.580 ug/ml
Spiked Amount	50.000		Recovery =	85.16%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.187	6894238	36.582 ug/ml
2) T	Naphthalene (C11.7)	5.705	8500773	43.466 ug/mlm
3) T	2-Methylnaphthalene (...	6.755	11910474	62.324 ug/ml
5) T	Acenaphthylene (C15.06)	8.023	13473668	69.478 ug/mlm
7) T	Acenaphthene (C15.5)	8.318	11476953	59.669 ug/ml
8) T	Flouorene (C16.55)	9.097	12068103	62.903 ug/ml
9) T	Phenanthrene (C19.36)	10.484	11969970	65.302 ug/ml
10) T	Anthracene (C19.43)	10.559	10659505	56.921 ug/ml
12) T	Fluoranthene (C21.85)	12.288	10343821	56.486 ug/ml
13) T	Pyrene (C20.8)	12.582	10496264	58.057 ug/ml
14) T	Benzo[a]anthracene (C...	14.450	8589709	52.216 ug/ml
15) T	Chrysene (C27.41)	14.493	8658534	49.474 ug/ml
16) T	benzo[b]fluoranthene ...	15.998	8116009	51.655 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.032	7938094	48.641 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.374	7676361	51.486 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.743	7897166	63.929 ug/ml
20) T	Dibenz[a,h]anthracene...	17.779	7435316	47.415 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.994	7152920	50.130 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048841.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 19:13
Operator : YP/AJ
Sample : P5147-01MS
Misc :
ALS Vial : 66 Sample Multiplier: 1

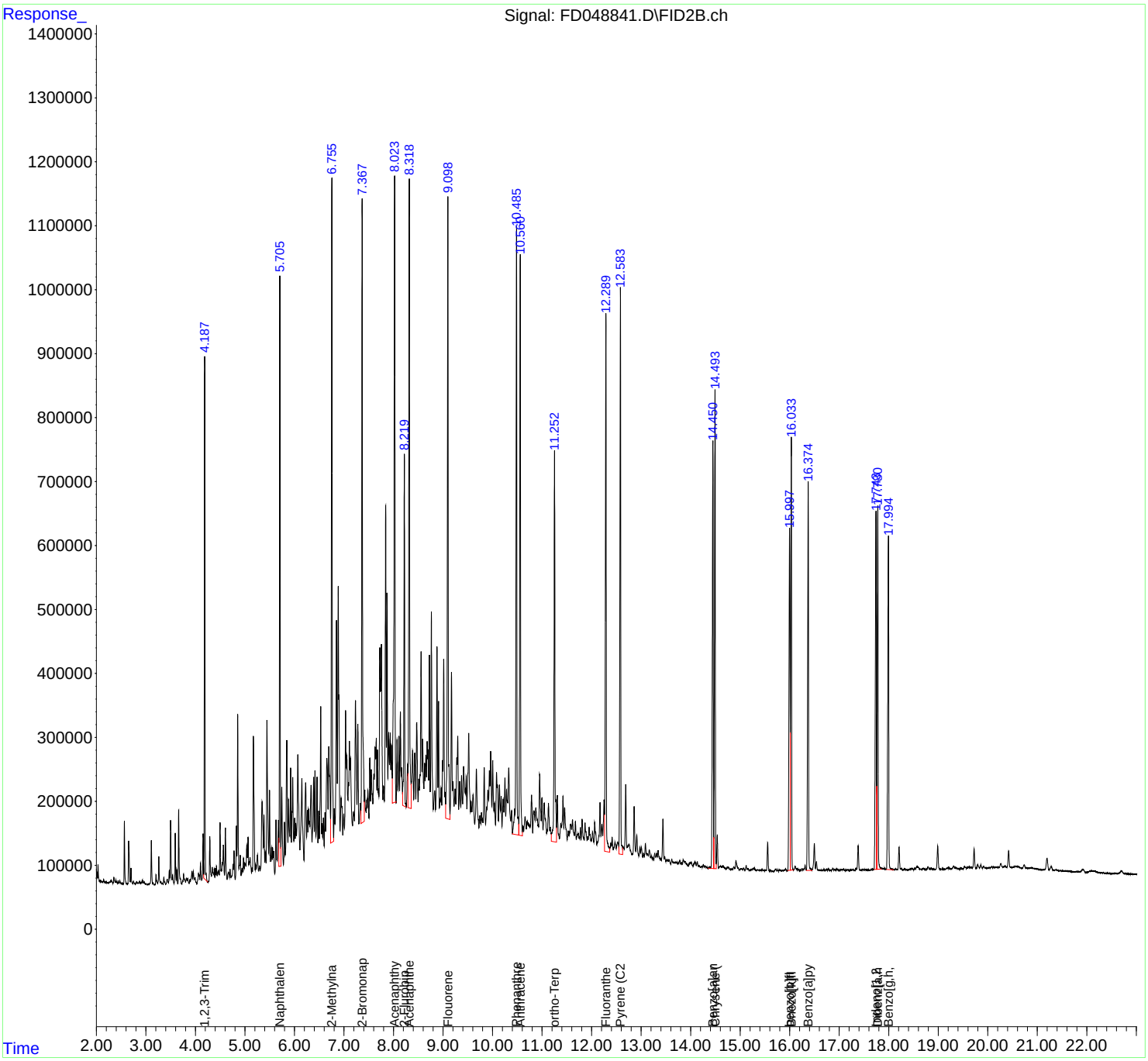
Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Integration File: autoint1.e
Quant Time: Dec 07 03:11:41 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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 :
EX-8-TPH-1MS

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD12062
Data File : FD048841.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 19:13
Sample : P5147-01MS
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.104	4.089	4.127	PV	26582	258300	1.36%	0.034%
2	4.156	4.127	4.169	VV	73731	654674	3.45%	0.087%
3	4.187	4.169	4.209	VV	819474	6859475	36.11%	0.912%
4	4.215	4.209	4.254	VV	13743	148654	0.78%	0.020%
5	4.291	4.254	4.325	PV	71919	826660	4.35%	0.110%
6	4.340	4.325	4.368	VV	23504	411591	2.17%	0.055%
7	4.380	4.368	4.392	VV	20748	213699	1.13%	0.028%
8	4.404	4.392	4.415	VV	21910	209897	1.11%	0.028%
9	4.426	4.415	4.440	VV	25487	265156	1.40%	0.035%
10	4.458	4.440	4.463	VV	16702	193425	1.02%	0.026%
11	4.472	4.463	4.482	VV	18607	178983	0.94%	0.024%
12	4.497	4.482	4.517	VV	93201	963562	5.07%	0.128%
13	4.523	4.517	4.529	VV	18789	132889	0.70%	0.018%
14	4.542	4.529	4.549	VV	31474	301875	1.59%	0.040%
15	4.565	4.549	4.587	VV	57673	815874	4.30%	0.108%
16	4.606	4.587	4.640	VV	84592	1008793	5.31%	0.134%
17	4.669	4.640	4.685	VV	15057	291880	1.54%	0.039%
18	4.700	4.685	4.718	VV	19966	246461	1.30%	0.033%
19	4.759	4.718	4.768	VV	27172	426065	2.24%	0.057%
20	4.780	4.768	4.804	VV	48535	534503	2.81%	0.071%
21	4.827	4.804	4.838	VV	87320	842417	4.44%	0.112%
22	4.854	4.838	4.878	VV	261585	2754888	14.50%	0.366%
23	4.905	4.878	4.921	VV	41542	686111	3.61%	0.091%
24	4.941	4.921	4.953	VV	20887	322490	1.70%	0.043%
25	4.971	4.953	4.986	VV	37035	535432	2.82%	0.071%
26	4.998	4.986	5.006	VV	29250	311705	1.64%	0.041%
27	5.010	5.006	5.020	VV	26691	211023	1.11%	0.028%
28	5.037	5.020	5.050	VV	57057	750586	3.95%	0.100%
29	5.063	5.050	5.077	VV	69435	792434	4.17%	0.105%
30	5.086	5.077	5.092	VV	30940	256685	1.35%	0.034%
31	5.103	5.092	5.133	VV	38082	657005	3.46%	0.087%
32	5.145	5.133	5.153	VV	20997	210993	1.11%	0.028%
33	5.171	5.153	5.205	VV	226818	3229969	17.01%	0.429%
34	5.216	5.205	5.228	VV	25907	294062	1.55%	0.039%
35	5.253	5.228	5.276	VV	41536	822013	4.33%	0.109%
36	5.295	5.276	5.308	VV	24061	384876	2.03%	0.051%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

37	5.346	5.308	5.373	VV	124574	2807439	14.78%	0.373%
38	5.384	5.373	5.401	VV	103590	1129600	5	
39	5.412	5.401	5.427	VV	45923	581955	3	
40	5.444	5.427	5.480	VV	251962	3844137	20	
41	5.497	5.480	5.514	VV	142117	1590675	8	
42	5.536	5.514	5.548	VV	52496	836253	4	
43	5.559	5.548	5.570	VV	52281	580307	3.06%	0.077%
44	5.579	5.570	5.602	VV	46930	577379	3.04%	0.077%
45	5.627	5.602	5.652	VV	95860	1320434	6.95%	0.175%
46	5.677	5.652	5.687	VV	95172	1375732	7.24%	0.183%
47	5.705	5.687	5.725	VV	947046	8951117	47.13%	1.190%
48	5.744	5.725	5.777	VV	146530	2367003	12.46%	0.315%
49	5.798	5.777	5.813	VV	91931	1224408	6.45%	0.163%
50	5.846	5.813	5.868	VV	219528	3858928	20.32%	0.513%
51	5.882	5.868	5.906	VV	127022	2097586	11.04%	0.279%
52	5.923	5.906	5.938	VV	176945	2107192	11.09%	0.280%
53	5.965	5.938	5.988	VV	161943	3085453	16.24%	0.410%
54	6.004	5.988	6.016	VV	98141	1327212	6.99%	0.176%
55	6.027	6.016	6.040	VV	89369	1154546	6.08%	0.153%
56	6.069	6.040	6.110	VV	197118	4646619	24.46%	0.617%
57	6.150	6.110	6.192	VV	159922	4224409	22.24%	0.561%
58	6.226	6.192	6.246	VV	153086	3224547	16.98%	0.429%
59	6.261	6.246	6.272	VV	110068	1375961	7.24%	0.183%
60	6.285	6.272	6.297	VV	112024	1460214	7.69%	0.194%
61	6.304	6.297	6.314	VV	92955	884974	4.66%	0.118%
62	6.336	6.314	6.355	VV	148958	2753961	14.50%	0.366%
63	6.388	6.355	6.402	VV	161135	2943354	15.50%	0.391%
64	6.415	6.402	6.434	VV	171426	2149347	11.32%	0.286%
65	6.456	6.434	6.474	VV	161539	2513774	13.23%	0.334%
66	6.490	6.474	6.503	VV	108561	1436237	7.56%	0.191%
67	6.531	6.503	6.548	VV	271835	3957106	20.83%	0.526%
68	6.558	6.548	6.570	VV	88996	1053534	5.55%	0.140%
69	6.584	6.570	6.600	VV	97749	1407635	7.41%	0.187%
70	6.617	6.600	6.630	VV	105462	1522433	8.02%	0.202%
71	6.656	6.630	6.679	VV	190267	4279330	22.53%	0.569%
72	6.694	6.679	6.730	VV	208840	4749283	25.00%	0.631%
73	6.756	6.730	6.792	VV	1096816	14091651	74.19%	1.873%
74	6.805	6.792	6.820	VV	111800	1578112	8.31%	0.210%
75	6.849	6.820	6.866	VV	405507	6293370	33.13%	0.836%
76	6.885	6.866	6.922	VV	456950	8571774	45.13%	1.139%
77	6.943	6.922	6.977	VV	128011	3438132	18.10%	0.457%
78	6.996	6.977	7.011	VV	103027	1802965	9.49%	0.240%
79	7.034	7.011	7.046	VV	264657	3739168	19.69%	0.497%
80	7.056	7.046	7.081	VV	194496	3344274	17.61%	0.444%
81	7.093	7.081	7.097	VV	151915	1393896	7.34%	0.185%
82	7.111	7.097	7.123	VV	217071	2886758	15.20%	0.384%
83	7.131	7.123	7.174	VV	189765	4056713	21.36%	0.539%
84	7.189	7.174	7.212	VV	105901	2199972	11.58%	0.292%
85	7.233	7.212	7.263	VV	279624	5701284	30.02%	0.758%
86	7.280	7.263	7.302	VV	243072	3788110	19.94%	0.503%
87	7.332	7.302	7.343	VV	119301	2551821	13.43%	0.339%
88	7.367	7.343	7.410	VV	1065153	14942290	78.67%	1.986%
89	7.421	7.410	7.448	VV	139570	2713912	14.29%	0.361%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MS

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

90	7.460	7.448	7.469	VV	123796	1475961	7.77%	0.196%
91	7.484	7.469	7.504	VV	139121	2528160	13	
92	7.522	7.504	7.537	VV	189493	2836020	14	
93	7.552	7.537	7.583	VV	171226	3945934	20	
94	7.604	7.583	7.612	VV	164450	2529725	13	
95	7.627	7.612	7.641	VV	206198	3321625	17	
96	7.652	7.641	7.665	VV	220458	2765466	14.56%	0.368%
97	7.677	7.665	7.692	VV	202471	2673972	14.08%	0.355%
98	7.697	7.692	7.705	VV	140844	1091987	5.75%	0.145%
99	7.724	7.705	7.734	VV	361531	4459836	23.48%	0.593%
100	7.739	7.734	7.745	VV	310093	2123117	11.18%	0.282%
101	7.756	7.745	7.786	VV	366559	6008862	31.64%	0.799%
102	7.798	7.786	7.815	VV	145337	2419252	12.74%	0.321%
103	7.843	7.815	7.857	VV	582595	8076094	42.52%	1.073%
104	7.870	7.857	7.887	VV	447023	5335327	28.09%	0.709%
105	7.903	7.887	7.920	VV	228950	3950162	20.80%	0.525%
106	7.934	7.920	7.946	VV	228340	3168375	16.68%	0.421%
107	7.958	7.946	7.975	VV	208994	3203949	16.87%	0.426%
108	8.023	7.975	8.052	VV	1098754	18993883	100.00%	2.524%
109	8.072	8.052	8.089	VV	217600	3655238	19.24%	0.486%
110	8.110	8.089	8.123	VV	222986	3505946	18.46%	0.466%
111	8.139	8.123	8.155	VV	261194	3915747	20.62%	0.520%
112	8.163	8.155	8.182	VV	173705	2609616	13.74%	0.347%
113	8.219	8.182	8.257	VV	663982	10989459	57.86%	1.460%
114	8.282	8.257	8.292	VV	178526	3066836	16.15%	0.408%
115	8.318	8.292	8.359	VV	1095504	15875018	83.58%	2.110%
116	8.385	8.359	8.408	VV	200042	4925369	25.93%	0.655%
117	8.429	8.408	8.450	VV	196481	4070899	21.43%	0.541%
118	8.469	8.450	8.496	VV	243512	5019298	26.43%	0.667%
119	8.511	8.496	8.521	VV	155638	2164790	11.40%	0.288%
120	8.557	8.521	8.575	VV	354587	7130390	37.54%	0.948%
121	8.588	8.575	8.613	VV	217710	4044211	21.29%	0.537%
122	8.627	8.613	8.639	VV	180119	2514133	13.24%	0.334%
123	8.654	8.639	8.667	VV	192513	2895313	15.24%	0.385%
124	8.679	8.667	8.690	VV	213736	2631100	13.85%	0.350%
125	8.697	8.690	8.709	VV	200554	2115594	11.14%	0.281%
126	8.724	8.709	8.741	VV	348910	4478957	23.58%	0.595%
127	8.765	8.741	8.803	VV	416244	7977934	42.00%	1.060%
128	8.832	8.803	8.849	VV	136326	3346412	17.62%	0.445%
129	8.878	8.849	8.895	VV	361786	5871971	30.92%	0.780%
130	8.910	8.895	8.927	VV	275736	3629922	19.11%	0.482%
131	8.940	8.927	8.947	VV	122229	1396546	7.35%	0.186%
132	8.961	8.947	8.974	VV	140714	2117542	11.15%	0.281%
133	8.991	8.974	8.998	VV	183931	2220712	11.69%	0.295%
134	9.014	8.998	9.033	VV	342008	4899042	25.79%	0.651%
135	9.041	9.033	9.053	VV	134392	1533389	8.07%	0.204%
136	9.098	9.053	9.141	VV	1060603	16894040	88.94%	2.245%
137	9.171	9.141	9.191	VV	321131	5708413	30.05%	0.759%
138	9.201	9.191	9.223	VV	150334	2598927	13.68%	0.345%
139	9.244	9.223	9.258	VV	138856	2664961	14.03%	0.354%
140	9.278	9.258	9.286	VV	186839	2623656	13.81%	0.349%
141	9.297	9.286	9.316	VV	221204	3108085	16.36%	0.413%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MS

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

142	9.335	9.316	9.359	VV	150507	3235394	17.03%	0.430%
143	9.374	9.359	9.397	VV	159425	3017013	15	
144	9.416	9.397	9.440	VV	173976	3881595	20	
145	9.447	9.440	9.455	VV	137483	1195060	6	
146	9.468	9.455	9.482	VV	158727	2236817	11	
147	9.519	9.482	9.555	VV	225527	6680259	35	
148	9.568	9.555	9.584	VV	118878	1967701	10.36%	0.261%
149	9.608	9.584	9.640	VV	128505	3678999	19.37%	0.489%
150	9.674	9.640	9.726	VV	169768	5660216	29.80%	0.752%
151	9.743	9.726	9.763	VV	95728	1944236	10.24%	0.258%
152	9.776	9.763	9.790	VV	101294	1535368	8.08%	0.204%
153	9.795	9.790	9.809	VV	90732	979165	5.16%	0.130%
154	9.832	9.809	9.860	VV	171109	3601490	18.96%	0.479%
155	9.880	9.860	9.888	VV	110182	1705964	8.98%	0.227%
156	9.906	9.888	9.922	VV	136170	2502380	13.17%	0.333%
157	9.937	9.922	9.947	VV	166599	2211594	11.64%	0.294%
158	9.962	9.947	9.987	VV	196754	3744269	19.71%	0.498%
159	10.004	9.987	10.028	VV	182457	3373585	17.76%	0.448%
160	10.040	10.028	10.060	VV	115913	1997510	10.52%	0.265%
161	10.082	10.060	10.093	VV	163019	2581183	13.59%	0.343%
162	10.099	10.093	10.119	VV	143415	1914765	10.08%	0.254%
163	10.140	10.119	10.159	VV	143046	2776068	14.62%	0.369%
164	10.175	10.159	10.192	VV	125911	2120167	11.16%	0.282%
165	10.214	10.192	10.230	VV	121605	2381272	12.54%	0.316%
166	10.251	10.230	10.267	VV	154718	2705284	14.24%	0.360%
167	10.284	10.267	10.308	VV	136250	2962368	15.60%	0.394%
168	10.328	10.308	10.367	VV	169913	4421170	23.28%	0.588%
169	10.385	10.367	10.403	VV	103356	1909844	10.06%	0.254%
170	10.447	10.403	10.455	VV	106010	2728464	14.36%	0.363%
171	10.485	10.455	10.513	VV	1017438	13345617	70.26%	1.774%
172	10.518	10.513	10.531	VV	92515	980990	5.16%	0.130%
173	10.560	10.531	10.602	VV	974188	13363487	70.36%	1.776%
174	10.616	10.602	10.630	VV	77994	1252090	6.59%	0.166%
175	10.657	10.630	10.683	VV	93259	2616323	13.77%	0.348%
176	10.699	10.683	10.708	VV	85159	1208553	6.36%	0.161%
177	10.712	10.708	10.727	VV	84072	939928	4.95%	0.125%
178	10.737	10.727	10.749	VV	81644	1078709	5.68%	0.143%
179	10.788	10.749	10.812	VV	126578	3537767	18.63%	0.470%
180	10.830	10.812	10.859	VV	101336	2588612	13.63%	0.344%
181	10.874	10.859	10.931	VV	106784	3955834	20.83%	0.526%
182	10.952	10.931	10.983	VV	159147	3563558	18.76%	0.474%
183	10.998	10.983	11.020	VV	122516	2172057	11.44%	0.289%
184	11.044	11.020	11.092	VV	114538	3861424	20.33%	0.513%
185	11.130	11.092	11.155	VV	113886	3217618	16.94%	0.428%
186	11.165	11.155	11.184	VV	76497	1240618	6.53%	0.165%
187	11.252	11.184	11.292	VV	665111	11655275	61.36%	1.549%
188	11.308	11.292	11.354	VV	126373	3002468	15.81%	0.399%
189	11.379	11.354	11.394	VV	81948	1770303	9.32%	0.235%
190	11.422	11.394	11.440	VV	124586	2611017	13.75%	0.347%
191	11.456	11.440	11.508	VV	106073	3225355	16.98%	0.429%
192	11.529	11.508	11.543	VV	69561	1350419	7.11%	0.179%
193	11.582	11.543	11.598	VV	80434	2426593	12.78%	0.322%
194	11.616	11.598	11.645	VV	87053	2098528	11.05%	0.279%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

					rteres			
195	11.651	11.645	11.657	VV	65601	469867	2.47%	0.062%
196	11.674	11.657	11.691	VV	84652	1428530	7	
197	11.717	11.691	11.723	VV	64681	1190378	6	
198	11.731	11.723	11.747	VV	65806	894892	4	
199	11.750	11.747	11.759	VV	59579	424944	2	
200	11.775	11.759	11.788	VV	75102	1159288	6	
201	11.809	11.788	11.849	VV	87424	2441236	12.85%	0.324%
202	11.867	11.849	11.909	VV	82268	2396911	12.62%	0.319%
203	11.921	11.909	11.931	VV	60773	760455	4.00%	0.101%
204	11.950	11.931	11.987	VV	75015	2120705	11.17%	0.282%
205	11.992	11.987	11.997	VV	55569	329327	1.73%	0.044%
206	12.019	11.997	12.044	VV	68264	1654482	8.71%	0.220%
207	12.062	12.044	12.105	VV	82919	2361449	12.43%	0.314%
208	12.170	12.105	12.190	VV	113554	3465952	18.25%	0.461%
209	12.209	12.190	12.225	VV	79557	1470256	7.74%	0.195%
210	12.251	12.225	12.261	VV	117411	2010248	10.58%	0.267%
211	12.289	12.261	12.354	VV	875825	12264846	64.57%	1.630%
212	12.360	12.354	12.367	VV	42447	337143	1.78%	0.045%
213	12.389	12.367	12.400	VV	49077	893990	4.71%	0.119%
214	12.415	12.400	12.437	VV	58520	1083365	5.70%	0.144%
215	12.472	12.437	12.496	VV	50847	1596044	8.40%	0.212%
216	12.527	12.496	12.550	VV	51730	1522094	8.01%	0.202%
217	12.583	12.550	12.610	VV	914839	11534822	60.73%	1.533%
218	12.615	12.610	12.625	VV	45707	419082	2.21%	0.056%
219	12.634	12.625	12.660	VV	44320	874682	4.61%	0.116%
220	12.690	12.660	12.721	VV	140979	2672853	14.07%	0.355%
221	12.735	12.721	12.741	VV	45491	533097	2.81%	0.071%
222	12.756	12.741	12.811	VV	47538	1678856	8.84%	0.223%
223	12.859	12.811	12.893	VV	106332	2564034	13.50%	0.341%
224	12.913	12.893	12.956	VV	61423	1563668	8.23%	0.208%
225	12.975	12.956	12.989	VV	42439	709490	3.74%	0.094%
226	13.004	12.989	13.037	VV	42056	1010164	5.32%	0.134%
227	13.051	13.037	13.067	VV	32550	541073	2.85%	0.072%
228	13.087	13.067	13.116	VV	47348	1079304	5.68%	0.143%
229	13.130	13.116	13.144	VV	32512	527595	2.78%	0.070%
230	13.167	13.144	13.190	VV	37673	886479	4.67%	0.118%
231	13.208	13.190	13.232	VV	28769	659913	3.47%	0.088%
232	13.239	13.232	13.255	VV	25146	321517	1.69%	0.043%
233	13.274	13.255	13.291	VV	32204	597128	3.14%	0.079%
234	13.310	13.291	13.326	VV	31445	608061	3.20%	0.081%
235	13.344	13.326	13.384	VV	37035	988991	5.21%	0.131%
236	13.392	13.384	13.410	VV	23262	355879	1.87%	0.047%
237	13.441	13.410	13.465	VV	85764	1500584	7.90%	0.199%
238	13.478	13.465	13.500	VV	26965	503770	2.65%	0.067%
239	13.520	13.500	13.555	VV	21637	680749	3.58%	0.090%
240	13.567	13.555	13.599	VV	20852	487445	2.57%	0.065%
241	13.621	13.599	13.661	VV	22348	691940	3.64%	0.092%
242	13.678	13.661	13.689	VV	17996	292692	1.54%	0.039%
243	13.703	13.689	13.717	VV	18535	285001	1.50%	0.038%
244	13.729	13.717	13.747	VV	17523	297309	1.57%	0.040%
245	13.780	13.747	13.799	VV	20327	546991	2.88%	0.073%
246	13.816	13.799	13.826	VV	16173	253190	1.33%	0.034%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

247	13.850	13.826	13.870	VV	21982	497176	2.62%	0.066%
248	13.879	13.870	13.885	VV	18963	168786		
249	13.890	13.885	13.907	VV	18810	225913		
250	13.918	13.907	13.955	VV	15560	397983		
251	13.980	13.955	13.987	VV	15926	281694		
252	14.003	13.987	14.045	VV	17518	528059		
253	14.082	14.045	14.115	VV	16380	594490	3.13%	0.079%
254	14.136	14.115	14.156	VV	18141	356187	1.88%	0.047%
255	14.166	14.156	14.205	VV	12173	312691	1.65%	0.042%
256	14.223	14.205	14.239	VV	10619	198543	1.05%	0.026%
257	14.256	14.239	14.281	VV	13343	284004	1.50%	0.038%
258	14.294	14.281	14.319	VV	11397	226341	1.19%	0.030%
259	14.327	14.319	14.353	VV	9750	172714	0.91%	0.023%
260	14.365	14.353	14.372	VV	8683	94953	0.50%	0.013%
261	14.377	14.372	14.395	VV	8515	116226	0.61%	0.015%
262	14.450	14.395	14.468	VV	676312	8861769	46.66%	1.178%
263	14.493	14.468	14.516	VV	757349	8867735	46.69%	1.178%
264	14.538	14.516	14.567	VV	58902	881954	4.64%	0.117%
265	14.606	14.567	14.629	VV	10452	350844	1.85%	0.047%
266	14.652	14.629	14.684	VV	10829	303267	1.60%	0.040%
267	14.692	14.684	14.710	VV	8412	119016	0.63%	0.016%
268	14.730	14.710	14.734	VV	7287	92780	0.49%	0.012%
269	14.754	14.734	14.788	VV	8836	240783	1.27%	0.032%
270	14.792	14.788	14.796	VV	5606	27653	0.15%	0.004%
271	14.799	14.796	14.817	VV	5514	64438	0.34%	0.009%
272	14.835	14.817	14.847	VV	5547	94558	0.50%	0.013%
273	14.874	14.847	14.893	VV	8788	188635	0.99%	0.025%
274	14.915	14.893	14.954	VV	18409	422220	2.22%	0.056%
275	14.959	14.954	14.985	VV	7588	105092	0.55%	0.014%
276	15.017	14.985	15.025	VV	5705	118723	0.63%	0.016%
277	15.032	15.025	15.052	VV	5919	84093	0.44%	0.011%
278	15.068	15.052	15.100	VV	7116	145239	0.76%	0.019%
279	15.121	15.100	15.145	VV	10234	181325	0.95%	0.024%
280	15.160	15.145	15.188	VV	5670	113887	0.60%	0.015%
281	15.197	15.188	15.201	VV	3470	25976	0.14%	0.003%
282	15.206	15.201	15.216	VV	3541	28905	0.15%	0.004%
283	15.230	15.216	15.237	VV	4539	49249	0.26%	0.007%
284	15.278	15.237	15.312	VV	6676	225899	1.19%	0.030%
285	15.316	15.312	15.332	VV	3832	38066	0.20%	0.005%
286	15.346	15.332	15.362	VV	4051	57773	0.30%	0.008%
287	15.367	15.362	15.390	VV	3442	51083	0.27%	0.007%
288	15.395	15.390	15.400	VV	2897	16143	0.08%	0.002%
289	15.407	15.400	15.413	VV	3481	23133	0.12%	0.003%
290	15.416	15.413	15.425	VV	3142	22586	0.12%	0.003%
291	15.444	15.425	15.464	VV	4195	71496	0.38%	0.010%
292	15.472	15.464	15.495	VV	2585	45530	0.24%	0.006%
293	15.513	15.495	15.528	VV	2954	52030	0.27%	0.007%
294	15.555	15.528	15.592	VV	46177	647326	3.41%	0.086%
295	15.599	15.592	15.608	VV	2158	17635	0.09%	0.002%
296	15.618	15.608	15.640	VV	2695	36102	0.19%	0.005%
297	15.646	15.640	15.662	VV	1435	12661	0.07%	0.002%
298	15.721	15.662	15.743	PV	3766	91868	0.48%	0.012%
299	15.758	15.743	15.780	VV	2459	34160	0.18%	0.005%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

300	15.809	15.780	15.837	VV	2421	58896	0.31%	0.008%
301	15.862	15.837	15.872	VV	1614	23083		
302	15.878	15.872	15.882	VV	1435	7716		
303	15.918	15.882	15.948	VV	3448	73792		
304	15.998	15.948	16.014	VV	531954	8132288	42	
305	16.033	16.014	16.082	VV	681367	8018918	42	
306	16.108	16.082	16.154	VV	7380	161623	0.85%	0.021%
307	16.166	16.154	16.176	VV	2306	25852	0.14%	0.003%
308	16.180	16.176	16.197	VV	1630	12084	0.06%	0.002%
309	16.200	16.197	16.207	VV	535	1986	0.01%	0.000%
310	16.219	16.207	16.230	PV	654	5304	0.03%	0.001%
311	16.249	16.230	16.269	VV	2564	29826	0.16%	0.004%
312	16.311	16.269	16.336	VV	7651	107594	0.57%	0.014%
313	16.374	16.336	16.400	PBA	602860	7504989	39.51%	0.997%
314	16.498	16.448	16.521	PV	41756	614090	3.23%	0.082%
315	16.540	16.521	16.595	VV	13314	182898	0.96%	0.024%
316	16.602	16.595	16.615	VV	502	2599	0.01%	0.000%
317	16.632	16.615	16.650	PV	1160	9004	0.05%	0.001%
318	16.661	16.650	16.671	VV	596	3757	0.02%	0.000%
319	16.693	16.671	16.714	PV	2075	26260	0.14%	0.003%
320	16.745	16.714	16.762	VV	1538	32275	0.17%	0.004%
321	16.781	16.762	16.803	VV	2007	33288	0.18%	0.004%
322	16.822	16.803	16.840	VV	1298	16677	0.09%	0.002%
323	16.870	16.840	16.895	VV	3108	62906	0.33%	0.008%
324	16.903	16.895	16.927	VV	1997	23479	0.12%	0.003%
325	16.946	16.927	16.962	PV	2712	36874	0.19%	0.005%
326	16.975	16.962	16.992	VV	1524	19118	0.10%	0.003%
327	17.007	16.992	17.012	VV	1066	8767	0.05%	0.001%
328	17.041	17.012	17.057	VV	1861	32795	0.17%	0.004%
329	17.087	17.057	17.120	VV	2413	55754	0.29%	0.007%
330	17.147	17.120	17.159	VV	1347	20840	0.11%	0.003%
331	17.175	17.159	17.200	VV	1614	23647	0.12%	0.003%
332	17.205	17.200	17.210	VV	322	1198	0.01%	0.000%
333	17.233	17.210	17.238	PV	993	11439	0.06%	0.002%
334	17.240	17.238	17.245	VV	876	3647	0.02%	0.000%
335	17.273	17.245	17.301	VV	1341	32558	0.17%	0.004%
336	17.307	17.301	17.315	VV	869	5545	0.03%	0.001%
337	17.340	17.315	17.356	VV	2564	43830	0.23%	0.006%
338	17.383	17.356	17.434	VV	39109	551366	2.90%	0.073%
339	17.448	17.434	17.454	VV	977	7687	0.04%	0.001%
340	17.477	17.454	17.497	VV	2385	33608	0.18%	0.004%
341	17.502	17.497	17.506	VV	636	2814	0.01%	0.000%
342	17.519	17.506	17.544	VV	1423	24574	0.13%	0.003%
343	17.549	17.544	17.568	VV	1182	7845	0.04%	0.001%
344	17.594	17.568	17.606	PV	842	11611	0.06%	0.002%
345	17.647	17.606	17.660	PV	1294	18976	0.10%	0.003%
346	17.675	17.660	17.693	VV	1981	27498	0.14%	0.004%
347	17.744	17.693	17.757	VV	561906	7880976	41.49%	1.047%
348	17.780	17.757	17.862	VV	571189	7605427	40.04%	1.011%
349	17.873	17.862	17.900	VV	2669	48453	0.26%	0.006%
350	17.915	17.900	17.940	VV	2560	45648	0.24%	0.006%
351	17.995	17.940	18.070	VV	522049	7191542	37.86%	0.956%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

352	18.074	18.070	18.104	VV	1264	12818	0.07%	0.002%
353	18.144	18.104	18.158	PV	1417	22243	0	
354	18.163	18.158	18.173	VV	375	2261	0	

Sum of corrected areas: 752

Aromatic EPH 111424.M Sat Dec 07 03:41:45 2024

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

Report of Analysis

Client:	ENTACT			Date Collected:			
Project:	North Point			Date Received:			
Client Sample ID:	EX-8-TPH-1MS			SDG No.:	P5147		
Lab Sample ID:	P5147-01MS			Matrix:	Solid		
Analytical Method:	NJEPH			% Solid:	81		
Sample Wt/Vol:	30.05	Units:	g	Final Vol:	2000	uL	
Soil Aliquot Vol:			uL	Test:	EPH		
Prep Method :							

Prep Date :	Date Analyzed :	Prep Batch ID
12/06/24 09:50	12/06/24 19:13	PB165427

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	174	E	1	0.47	1.23	mg/kg	FC067933.D
Aliphatic C12-C16	Aliphatic C12-C16	435	E	1	0.30	0.82	mg/kg	FC067933.D
Aliphatic C16-C21	Aliphatic C16-C21	168	E	1	0.37	1.23	mg/kg	FC067933.D
Aliphatic C21-C28	Aliphatic C21-C28	40.6	E	1	0.99	1.64	mg/kg	FC067933.D
Aliphatic C28-C40	Aliphatic C28-C40	37.4		1	2.22	2.47	mg/kg	FC067933.D
Aromatic C10-C12	Aromatic C10-C12	23.6	E	1	0.37	0.82	mg/kg	FD048841.D
Aromatic C12-C16	Aromatic C12-C16	104	E	1	0.42	1.23	mg/kg	FD048841.D
Aromatic C16-C21	Aromatic C16-C21	139	E	1	1.18	2.05	mg/kg	FD048841.D
Aromatic C21-C36	Aromatic C21-C36	51.8		1	2.47	3.29	mg/kg	FD048841.D
Total AliphaticEPH	Total AliphaticEPH	855			4.34	7.39	mg/kg	
Total AromaticEPH	Total AromaticEPH	318			4.44	7.39	mg/kg	
Total EPH	Total EPH	1170			8.78	14.8	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

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

Report of Analysis

Client:	ENTACT		Date Collected:		
Project:	North Point		Date Received:		
Client Sample ID:	EX-8-TPH-1MS		SDG No.:	P5147	
Lab Sample ID:	P5147-01MS		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	81	
Sample Wt/Vol:	30.05 Units:	g	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :					

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC067933.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12		174	E	0.47	1.23	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16		435	E	0.30	0.82	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21		168	E	0.37	1.23	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28		40.6	E	0.99	1.64	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40		37.4		2.22	2.47	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)		49.9		40 - 140	100%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5147-01MS	Acq On:	06 Dec 2024 19:13
Client Sample ID:	EX-8-TPH-1MS	Operator:	YP/AJ
Data file:	FC067933.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	3.154	6.430	351506169	2120	300	ug/ml
Aliphatic C12-C16	6.431	9.821	903786303	5300	200	ug/ml
Aliphatic C16-C21	9.822	13.180	347654604	2050	300	ug/ml
Aliphatic C21-C28	13.181	16.835	77689676	493.958	400	ug/ml
Aliphatic C28-C40	16.836	21.671	55156074	455.416	600	ug/ml
Aliphatic EPH	3.154	21.671	1735792826	10400		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.917	12.917	7242297	49.89		ug/ml
Aliphatic C9-C28	3.154	16.835	1680636752	9970	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067933.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 19:13
Operator : YP/AJ
Sample : P5147-01MS
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:07:22 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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

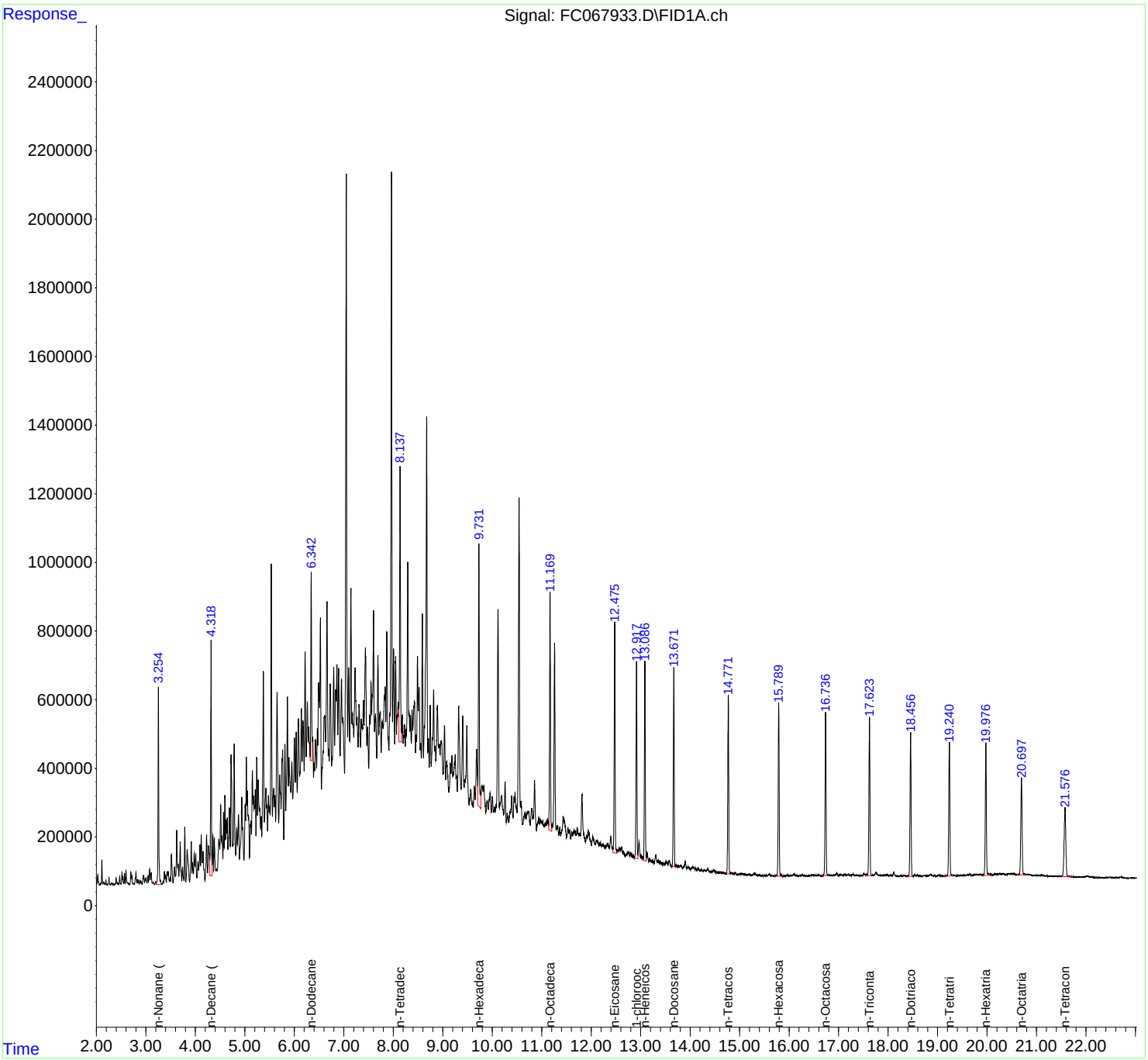
	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
12) S	1-chlorooctadecane (S...	12.917	7242297	49.892 ug/mlm
Spiked Amount	50.000		Recovery =	99.78%
	Target Compounds			
1) T	n-Nonane (C9)	3.254	6017262	36.890 ug/ml
2) T	n-Decane (C10)	4.318	7182490	43.312 ug/mlm
4) T	n-Dodecane (C12)	6.342	6038250	35.851 ug/mlm
6) T	n-Tetradecane (C14)	8.137	9973430	59.553 ug/mlm
7) T	n-Hexadecane (C16)	9.731	9517504	54.920 ug/mlm
8) T	n-Octadecane (C18)	11.169	8732101	49.631 ug/mlm
10) T	n-Eicosane (C20)	12.475	8520082	50.598 ug/mlm
11) T	n-Heneicosane (C21)	13.086	7392545	44.929 ug/mlm
13) T	n-Docosane (C22)	13.671	7243099	44.476 ug/mlm
14) T	n-Tetracosane (C24)	14.771	6922666	43.164 ug/mlm
15) T	n-Hexacosane (C26)	15.790	6831610	44.114 ug/ml
16) T	n-Octacosane (C28)	16.738	6584909	43.602 ug/ml
17) T	n-Tricontane (C30)	17.625	6586884	43.021 ug/ml
18) T	n-Dotriacontane (C32)	18.456	6321283	42.801 ug/ml
19) T	n-Tetratriacontane (C34)	19.239	6195435	49.119 ug/ml
20) T	n-Hexatriacontane (C36)	19.977	5815687	55.606 ug/ml
21) T	n-Octatriacontane (C38)	20.697	5212001	53.356 ug/ml
22) T	n-Tetracontane (C40)	21.577	4732798	48.558 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067933.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 19:13
Operator : YP/AJ
Sample : P5147-01MS
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:07:22 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067933.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 19:13
Sample : P5147-01MS
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.254	3.205	3.330	BV	573631	5842367	14.96%	0.335%
2	3.350	3.330	3.360	PV	9865	86514	0.22%	0.005%
3	3.375	3.360	3.388	VV	37984	368559	0.94%	0.021%
4	3.398	3.388	3.414	VV	28054	292689	0.75%	0.017%
5	3.431	3.414	3.442	VV	37152	405036	1.04%	0.023%
6	3.454	3.442	3.477	VV	37420	507678	1.30%	0.029%
7	3.517	3.477	3.550	VV	85371	1412382	3.62%	0.081%
8	3.579	3.550	3.600	VV	49676	830293	2.13%	0.048%
9	3.624	3.600	3.645	VV	156256	2044395	5.23%	0.117%
10	3.653	3.645	3.668	VV	59517	621141	1.59%	0.036%
11	3.695	3.668	3.727	VV	123379	1926872	4.93%	0.110%
12	3.743	3.727	3.769	VV	50802	693613	1.78%	0.040%
13	3.788	3.769	3.808	VV	166878	1558189	3.99%	0.089%
14	3.836	3.808	3.883	VV	99484	2220690	5.69%	0.127%
15	3.919	3.883	3.933	VV	122034	1629562	4.17%	0.093%
16	3.944	3.933	3.962	VV	63485	808195	2.07%	0.046%
17	3.978	3.962	3.994	VV	90144	1207252	3.09%	0.069%
18	4.010	3.994	4.032	VV	88347	1195890	3.06%	0.068%
19	4.054	4.032	4.067	VV	65595	887209	2.27%	0.051%
20	4.094	4.067	4.106	VV	115168	1682554	4.31%	0.096%
21	4.120	4.106	4.139	VV	141318	1885839	4.83%	0.108%
22	4.157	4.139	4.195	VV	95688	1768010	4.53%	0.101%
23	4.228	4.195	4.248	VV	143088	2103630	5.39%	0.120%
24	4.269	4.248	4.292	VV	111421	2079309	5.32%	0.119%
25	4.318	4.292	4.340	VV	707920	7879651	20.18%	0.451%

rteres

26	4.354	4.340	4.369	VV	141365	1563429	4.00%	0.090%
27	4.385	4.369	4.421	VV	134394	2241604	5.74%	0.128%
28	4.433	4.421	4.442	VV	43666	528099	1.35%	0.030%
29	4.475	4.442	4.494	VV	129547	2843806	7.28%	0.163%
30	4.513	4.494	4.556	VV	227958	5414180	13.86%	0.310%
31	4.571	4.556	4.583	VV	208406	2305891	5.90%	0.132%
32	4.597	4.583	4.612	VV	255587	3096264	7.93%	0.177%
33	4.624	4.612	4.635	VV	185114	2249352	5.76%	0.129%
34	4.644	4.635	4.659	VV	192925	2220018	5.68%	0.127%
35	4.689	4.659	4.704	VV	221315	4206089	10.77%	0.241%
36	4.723	4.704	4.753	VV	375006	6921434	17.72%	0.396%
37	4.785	4.753	4.815	VV	406905	6971623	17.85%	0.399%
38	4.837	4.815	4.851	VV	163193	2685277	6.88%	0.154%
39	4.872	4.851	4.893	VV	201450	3688686	9.44%	0.211%
40	4.939	4.893	4.982	VV	252512	7622610	19.52%	0.437%
41	5.031	4.982	5.043	VV	368068	7611612	19.49%	0.436%
42	5.050	5.043	5.095	VV	269062	6019638	15.41%	0.345%
43	5.122	5.095	5.133	VV	181096	3417558	8.75%	0.196%
44	5.210	5.197	5.225	VV	274801	3820743	9.78%	0.219%
45	5.241	5.225	5.256	VV	365888	5031691	12.88%	0.288%
46	5.270	5.256	5.318	VV	299356	8525471	21.83%	0.488%
47	5.331	5.318	5.343	VV	195034	2572627	6.59%	0.147%
48	5.374	5.343	5.396	VV	617239	10553105	27.02%	0.604%
49	5.425	5.396	5.460	VV	276731	8504490	21.78%	0.487%
50	5.477	5.460	5.492	VV	253500	4258073	10.90%	0.244%
51	5.502	5.492	5.511	VV	225923	2339384	5.99%	0.134%
52	5.583	5.558	5.598	VV	278822	5850802	14.98%	0.335%
53	5.609	5.598	5.623	VV	255951	3541187	9.07%	0.203%
54	5.652	5.623	5.685	VV	554998	12498707	32.00%	0.716%
55	5.705	5.685	5.733	VV	315217	7350213	18.82%	0.421%
56	5.763	5.733	5.787	VV	391626	9413032	24.10%	0.539%
57	5.811	5.787	5.829	VV	405838	6735564	17.25%	0.386%
58	5.861	5.829	5.879	VV	541673	10948974	28.03%	0.627%
59	5.893	5.879	5.929	VV	364597	9368487	23.99%	0.537%
60	5.950	5.929	5.969	VV	353024	7033102	18.01%	0.403%
61	6.003	5.969	6.021	VV	421583	10336812	26.47%	0.592%
62	6.038	6.021	6.059	VV	440055	8200366	21.00%	0.470%
63	6.083	6.059	6.108	VV	479274	11298276	28.93%	0.647%
64	6.143	6.108	6.159	VV	509405	12136328	31.08%	0.695%
65	6.176	6.159	6.199	VV	471367	9902522	25.36%	0.567%
66	6.219	6.199	6.241	VV	671972	12358203	31.64%	0.708%
67	6.265	6.241	6.281	VV	528338	10917518	27.95%	0.625%
68	6.291	6.281	6.320	VV	454004	9773202	25.02%	0.560%
69	6.342	6.320	6.390	VV	899564	21516002	55.09%	1.232%

rteres

70	6.402	6.390	6.411	VV	347709	4169352	10.68%	0.239%
71	6.428	6.411	6.451	VV	415458	9007247	23.06%	0.516%
72	6.492	6.451	6.510	VV	582000	16883557	43.23%	0.967%
73	6.527	6.510	6.550	VV	771862	12921226	33.08%	0.740%
74	6.610	6.550	6.632	VV	487256	19859631	50.85%	1.137%
75	6.662	6.632	6.689	VV	815987	19171422	49.09%	1.098%
76	6.696	6.689	6.706	VV	390081	3749897	9.60%	0.215%
77	6.727	6.706	6.756	VV	579082	13950210	35.72%	0.799%
78	6.797	6.756	6.816	VV	627481	16695086	42.75%	0.956%
79	6.837	6.816	6.847	VV	561161	9388524	24.04%	0.538%
80	6.862	6.847	6.879	VV	630331	10378725	26.57%	0.594%
81	6.897	6.879	6.926	VV	623374	14044893	35.96%	0.804%
82	6.954	6.926	7.016	VV	591528	24798821	63.50%	1.420%
83	7.051	7.016	7.080	VV	2073236	36541618	93.56%	2.093%
84	7.098	7.080	7.120	VV	624610	12356765	31.64%	0.708%
85	7.145	7.120	7.202	VV	855132	26726555	68.43%	1.531%
86	7.268	7.258	7.290	VV	478573	8658781	22.17%	0.496%
87	7.311	7.290	7.339	VV	519065	13525576	34.63%	0.775%
88	7.355	7.339	7.366	VV	477288	7043537	18.03%	0.403%
89	7.398	7.366	7.410	VV	528150	12813436	32.81%	0.734%
90	7.438	7.410	7.468	VV	679793	18967925	48.57%	1.086%
91	7.482	7.468	7.504	VV	450944	8916185	22.83%	0.511%
92	7.551	7.504	7.564	VV	582717	17164464	43.95%	0.983%
93	7.601	7.564	7.621	VV	788235	20070423	51.39%	1.150%
94	7.641	7.621	7.667	VV	488011	12104410	30.99%	0.693%
95	7.691	7.667	7.710	VV	657328	13089725	33.52%	0.750%
96	7.736	7.710	7.756	VV	493034	12784799	32.74%	0.732%
97	7.779	7.756	7.796	VV	465374	10621366	27.20%	0.608%
98	7.835	7.796	7.850	VV	569955	16707737	42.78%	0.957%
99	7.870	7.850	7.910	VV	730902	19021329	48.70%	1.089%
100	7.964	7.910	7.986	VV	2061399	39054887	100.00%	2.237%
101	8.006	7.986	8.028	VV	674983	14164441	36.27%	0.811%
102	8.048	8.028	8.068	VV	651941	12312647	31.53%	0.705%
103	8.101	8.068	8.111	VV	521929	12691960	32.50%	0.727%
104	8.138	8.111	8.166	VV	1212312	23806255	60.96%	1.363%
105	8.182	8.166	8.202	VV	484805	9687687	24.81%	0.555%
106	8.257	8.243	8.267	VV	443119	6090454	15.59%	0.349%
107	8.293	8.267	8.334	VV	931912	23914871	61.23%	1.370%
108	8.346	8.334	8.364	VV	488191	8282269	21.21%	0.474%
109	8.381	8.364	8.395	VV	500697	8421955	21.56%	0.482%
110	8.427	8.395	8.451	VV	526430	15930918	40.79%	0.912%
111	8.463	8.451	8.470	VV	425585	4770959	12.22%	0.273%
112	8.490	8.470	8.506	VV	657671	11605346	29.72%	0.665%

rteres

113	8.521	8.506	8.568	VV	562634	16841959	43.12%	0.965%
114	8.588	8.568	8.610	VV	782274	13742174	35.19%	0.787%
115	8.675	8.610	8.698	VV	1356226	34775713	89.04%	1.992%
116	8.710	8.698	8.727	VV	419641	6884970	17.63%	0.394%
117	8.747	8.727	8.768	VV	513807	10094753	25.85%	0.578%
118	8.815	8.768	8.861	VV	559053	23288104	59.63%	1.334%
119	8.930	8.918	8.946	VV	400467	6532532	16.73%	0.374%
120	8.964	8.946	9.008	VV	410408	14108217	36.12%	0.808%
121	9.036	9.008	9.059	VV	454941	11244642	28.79%	0.644%
122	9.080	9.059	9.123	VV	351210	12077448	30.92%	0.692%
123	9.155	9.123	9.167	VV	344521	8062145	20.64%	0.462%
124	9.186	9.167	9.204	VV	369412	7395576	18.94%	0.424%
125	9.252	9.204	9.294	VV	369193	17348449	44.42%	0.994%
126	9.322	9.294	9.371	VV	512328	16762567	42.92%	0.960%
127	9.404	9.371	9.431	VV	482933	12798956	32.77%	0.733%
128	9.442	9.431	9.449	VV	296430	3179056	8.14%	0.182%
129	9.487	9.449	9.531	VV	456213	15568420	39.86%	0.892%
130	9.567	9.531	9.617	VV	266460	12355183	31.64%	0.708%
131	9.639	9.617	9.657	VV	278613	6135932	15.71%	0.351%
132	9.684	9.657	9.707	VV	386405	9425946	24.14%	0.540%
133	9.731	9.707	9.770	VV	982826	17788973	45.55%	1.019%
134	9.788	9.770	9.818	VV	277257	7683316	19.67%	0.440%
135	9.830	9.818	9.871	VV	277567	7897109	20.22%	0.452%
136	9.897	9.871	9.920	VV	236527	6517891	16.69%	0.373%
137	9.957	9.920	9.982	VV	257465	8578570	21.97%	0.491%
138	10.003	9.982	10.027	VV	248025	6024458	15.43%	0.345%
139	10.049	10.027	10.061	VV	211970	4213101	10.79%	0.241%
140	10.118	10.061	10.146	VV	793688	19288204	49.39%	1.105%
141	10.191	10.146	10.228	VV	249124	11088437	28.39%	0.635%
142	10.261	10.228	10.286	VV	291181	7706856	19.73%	0.441%
143	10.303	10.286	10.331	VV	196572	5041416	12.91%	0.289%
144	10.394	10.331	10.421	VV	249403	11072372	28.35%	0.634%
145	10.442	10.421	10.450	VV	245410	3830860	9.81%	0.219%
146	10.462	10.450	10.502	VV	258772	7082324	18.13%	0.406%
147	10.543	10.502	10.570	VV	1107171	20846106	53.38%	1.194%
148	10.581	10.570	10.615	VV	233443	5415719	13.87%	0.310%
149	10.657	10.615	10.684	VV	195755	7713205	19.75%	0.442%
150	10.732	10.684	10.767	VV	203966	9536090	24.42%	0.546%
151	10.798	10.767	10.821	VV	209196	6264280	16.04%	0.359%
152	10.856	10.821	10.895	VV	288992	9250105	23.68%	0.530%
153	10.940	10.895	10.957	VV	185049	6268716	16.05%	0.359%
154	10.970	10.957	10.985	VV	177988	2888751	7.40%	0.165%
155	10.992	10.985	11.008	VV	174173	2445558	6.26%	0.140%

156	11.019	11.008	11.048	VV	175251	3958239	10.14%	0.227%
157	11.087	11.048	11.098	VV	168236	4966270	12.72%	0.284%
158	11.115	11.098	11.141	VV	179527	4478403	11.47%	0.256%
159	11.170	11.141	11.205	VV	839019	14323754	36.68%	0.820%
160	11.260	11.205	11.306	VV	694292	16871089	43.20%	0.966%
161	11.320	11.306	11.344	VV	162190	3396764	8.70%	0.195%
162	11.363	11.344	11.385	VV	152600	3502361	8.97%	0.201%
163	11.435	11.385	11.501	VV	186991	11071482	28.35%	0.634%
164	11.532	11.501	11.548	VV	150919	3979285	10.19%	0.228%
165	11.561	11.548	11.585	VV	148503	3032541	7.76%	0.174%
166	11.606	11.585	11.621	VV	142230	2905687	7.44%	0.166%
167	11.656	11.621	11.696	VV	146424	6308527	16.15%	0.361%
168	11.718	11.696	11.758	VV	149151	5200216	13.32%	0.298%
169	11.771	11.758	11.783	VV	137880	2019112	5.17%	0.116%
170	11.814	11.783	11.885	VV	251606	9843079	25.20%	0.564%
171	11.907	11.885	11.921	VV	129690	2666071	6.83%	0.153%
172	11.941	11.921	12.006	VV	145696	6514190	16.68%	0.373%
173	12.031	12.006	12.075	VV	128740	4789985	12.26%	0.274%
174	12.109	12.075	12.121	VV	116146	3138508	8.04%	0.180%
175	12.131	12.121	12.161	VV	116117	2662358	6.82%	0.152%
176	12.188	12.161	12.205	VV	111271	2788555	7.14%	0.160%
177	12.221	12.205	12.231	VV	104909	1596241	4.09%	0.091%
178	12.246	12.231	12.291	VV	105765	3623272	9.28%	0.208%
179	12.340	12.291	12.368	VV	106474	4692492	12.02%	0.269%
180	12.395	12.368	12.440	VV	129513	4575332	11.72%	0.262%
181	12.475	12.440	12.519	VV	747967	12362274	31.65%	0.708%
182	12.571	12.519	12.595	VV	93357	4035020	10.33%	0.231%
183	12.617	12.595	12.704	VV	98627	5372323	13.76%	0.308%
184	12.753	12.704	12.778	VV	82707	3438517	8.80%	0.197%
185	12.795	12.778	12.815	VV	76867	1648443	4.22%	0.094%
186	12.824	12.815	12.867	VV	74552	2237745	5.73%	0.128%
187	12.917	12.867	12.944	VV	638944	10185587	26.08%	0.583%
188	12.967	12.944	13.053	VV	113520	5174562	13.25%	0.296%
189	13.086	13.053	13.115	VV	637471	9486331	24.29%	0.543%
190	13.132	13.115	13.165	VV	77261	2025448	5.19%	0.116%
191	13.183	13.165	13.225	VV	60876	2085949	5.34%	0.119%
192	13.243	13.225	13.273	VV	58402	1586655	4.06%	0.091%
193	13.305	13.273	13.335	VV	73111	2302320	5.90%	0.132%
194	13.353	13.335	13.378	VV	57104	1389142	3.56%	0.080%
195	13.385	13.378	13.440	VV	54012	1886187	4.83%	0.108%
196	13.459	13.440	13.481	VV	47743	1159493	2.97%	0.066%
197	13.520	13.481	13.550	VV	53476	2060622	5.28%	0.118%
198	13.577	13.550	13.625	VV	56588	2193999	5.62%	0.126%
199	13.671	13.625	13.714	VV	619077	9358858	23.96%	0.536%

200	13.723	13.714	13.734	VV	41906	490235	1.26%	0.028%
201	13.753	13.734	13.783	VV	42090	1173007	3.00%	0.067%
202	13.808	13.783	13.855	VV	41990	1676904	4.29%	0.096%
203	13.901	13.855	13.943	VV	53844	2208837	5.66%	0.127%
204	13.959	13.943	14.009	VV	37481	1375851	3.52%	0.079%
205	14.060	14.009	14.096	VV	37707	1821721	4.66%	0.104%
206	14.106	14.096	14.131	VV	33756	660870	1.69%	0.038%
207	14.166	14.131	14.204	VV	34787	1318282	3.38%	0.076%
208	14.224	14.204	14.258	VV	30148	902660	2.31%	0.052%
209	14.295	14.258	14.326	VV	28266	1105292	2.83%	0.063%
210	14.355	14.326	14.420	VV	33724	1521169	3.89%	0.087%
211	14.472	14.420	14.564	VV	29763	2045952	5.24%	0.117%
212	14.605	14.564	14.628	VV	21319	783696	2.01%	0.045%
213	14.638	14.628	14.652	VV	20664	291048	0.75%	0.017%
214	14.671	14.652	14.732	VV	21401	918721	2.35%	0.053%
215	14.771	14.732	14.818	VV	535689	7812279	20.00%	0.447%
216	14.841	14.818	14.874	VV	19199	606669	1.55%	0.035%
217	14.911	14.874	14.943	VV	19970	719252	1.84%	0.041%
218	14.961	14.943	14.976	VV	15436	295979	0.76%	0.017%
219	15.022	14.976	15.048	VV	16488	672802	1.72%	0.039%
220	15.069	15.048	15.092	VV	15806	404225	1.04%	0.023%
221	15.102	15.092	15.149	VV	15054	475518	1.22%	0.027%
222	15.198	15.149	15.258	VV	14605	867563	2.22%	0.050%
223	15.283	15.258	15.296	VV	16685	330657	0.85%	0.019%
224	15.311	15.296	15.388	VV	16527	755649	1.93%	0.043%
225	15.406	15.388	15.451	VV	12063	423045	1.08%	0.024%
226	15.503	15.451	15.523	VV	11437	475978	1.22%	0.027%
227	15.542	15.523	15.561	VV	12161	246841	0.63%	0.014%
228	15.599	15.561	15.655	VV	14820	673155	1.72%	0.039%
229	15.664	15.655	15.708	VV	10792	321660	0.82%	0.018%
230	15.717	15.708	15.731	VV	10113	137156	0.35%	0.008%
231	15.790	15.731	15.868	VV	501785	7538968	19.30%	0.432%
232	15.876	15.868	15.888	VV	9282	106172	0.27%	0.006%
233	15.970	15.888	16.018	VV	12563	785941	2.01%	0.045%
234	16.037	16.018	16.057	VV	10503	235957	0.60%	0.014%
235	16.106	16.057	16.133	VV	13266	531168	1.36%	0.030%
236	16.143	16.133	16.187	VV	10972	324756	0.83%	0.019%
237	16.219	16.187	16.248	VV	10742	353933	0.91%	0.020%
238	16.268	16.248	16.298	VV	12936	327720	0.84%	0.019%
239	16.311	16.298	16.330	VV	9507	174832	0.45%	0.010%
240	16.356	16.330	16.373	VV	9791	230908	0.59%	0.013%
241	16.472	16.373	16.552	VV	11731	1097321	2.81%	0.063%
242	16.588	16.552	16.658	VV	11326	623290	1.60%	0.036%

rteres

243	16.663	16.658	16.676	VV	9188	99020	0.25%	0.006%
244	16.738	16.676	16.801	VV	481449	7276092	18.63%	0.417%
245	16.822	16.801	16.877	VV	11239	447700	1.15%	0.026%
246	16.962	16.877	17.004	VV	15176	878633	2.25%	0.050%
247	17.037	17.004	17.081	VV	11149	475830	1.22%	0.027%
248	17.096	17.081	17.103	VV	10364	134291	0.34%	0.008%
249	17.129	17.103	17.168	VV	13139	433258	1.11%	0.025%
250	17.186	17.168	17.231	VV	12572	416476	1.07%	0.024%
251	17.247	17.231	17.263	VV	10637	192865	0.49%	0.011%
252	17.293	17.263	17.336	VV	13283	471906	1.21%	0.027%
253	17.353	17.336	17.392	VV	10003	312792	0.80%	0.018%
254	17.463	17.420	17.485	VV	9583	342969	0.88%	0.020%
255	17.512	17.485	17.541	VV	14811	393032	1.01%	0.023%
256	17.564	17.541	17.574	VV	11072	216812	0.56%	0.012%
257	17.625	17.574	17.694	VV	467699	7141802	18.29%	0.409%
258	17.752	17.694	17.835	VV	18178	948067	2.43%	0.054%
259	17.852	17.835	17.879	VV	9234	225668	0.58%	0.013%
260	17.902	17.879	17.935	VV	10036	307274	0.79%	0.018%
261	17.955	17.935	17.977	VV	9976	240818	0.62%	0.014%
262	17.984	17.977	18.015	VV	9819	195698	0.50%	0.011%
263	18.044	18.015	18.061	VV	9979	231505	0.59%	0.013%
264	18.119	18.061	18.215	VV	18335	810890	2.08%	0.046%
265	18.238	18.215	18.248	VV	7141	131443	0.34%	0.008%
266	18.273	18.248	18.295	VV	7480	200200	0.51%	0.011%
267	18.319	18.295	18.378	VV	7694	341972	0.88%	0.020%
268	18.456	18.378	18.515	VV	420188	6755980	17.30%	0.387%
269	18.539	18.515	18.568	VV	9687	239825	0.61%	0.014%
270	18.591	18.568	18.625	VV	8893	245939	0.63%	0.014%
271	18.628	18.625	18.636	VV	6839	43555	0.11%	0.002%
272	18.660	18.636	18.696	VV	6652	220985	0.57%	0.013%
273	18.717	18.696	18.735	VV	7210	153499	0.39%	0.009%
274	18.749	18.735	18.785	VV	7171	190878	0.49%	0.011%
275	18.854	18.785	18.913	VV	9592	547137	1.40%	0.031%
276	18.943	18.913	18.985	VV	7638	262441	0.67%	0.015%
277	19.029	18.985	19.071	VV	7312	332975	0.85%	0.019%
278	19.088	19.071	19.120	VV	6202	163810	0.42%	0.009%
279	19.142	19.120	19.157	VV	5951	123798	0.32%	0.007%
280	19.239	19.157	19.320	VV	394324	6697173	17.15%	0.384%
281	19.347	19.320	19.376	VV	6741	205037	0.52%	0.012%
282	19.458	19.376	19.483	VV	6509	382949	0.98%	0.022%
283	19.569	19.483	19.588	VV	7397	427353	1.09%	0.024%
284	19.609	19.588	19.626	VV	9185	185658	0.48%	0.011%
285	19.639	19.626	19.695	VV	9929	334453	0.86%	0.019%

rteres

286	19.765	19.695	19.821	VV	8887	592840	1.52%	0.034%
287	19.874	19.821	19.909	VV	8854	423019	1.08%	0.024%
288	19.914	19.909	19.924	VV	8250	73728	0.19%	0.004%
289	19.977	19.924	20.108	VV	390071	6481461	16.60%	0.371%
290	20.167	20.108	20.185	VV	10241	410301	1.05%	0.023%
291	20.250	20.185	20.269	VV	10129	474763	1.22%	0.027%
292	20.324	20.269	20.391	VV	10494	663455	1.70%	0.038%
293	20.449	20.391	20.501	VV	10131	615964	1.58%	0.035%
294	20.524	20.501	20.602	VV	9602	524371	1.34%	0.030%
295	20.697	20.602	20.825	VV	287630	6128251	15.69%	0.351%
296	20.842	20.825	20.924	VV	7787	370698	0.95%	0.021%
297	20.931	20.924	20.948	VV	4801	65773	0.17%	0.004%
298	20.963	20.948	20.995	VV	5368	137485	0.35%	0.008%
299	21.002	20.995	21.028	VV	4879	94344	0.24%	0.005%
300	21.105	21.028	21.166	VV	5930	373428	0.96%	0.021%
301	21.198	21.166	21.275	VV	3395	180377	0.46%	0.010%
302	21.321	21.275	21.347	VV	2504	92453	0.24%	0.005%
303	21.356	21.347	21.401	VV	2120	57691	0.15%	0.003%
304	21.428	21.401	21.481	VV	1850	72045	0.18%	0.004%
305	21.498	21.481	21.508	VV	1541	19064	0.05%	0.001%
306	21.577	21.508	21.650	VV	199385	4746917	12.15%	0.272%
307	21.677	21.650	21.693	VV	907	14769	0.04%	0.001%

Sum of corrected areas: 1745993189

Aliphatic EPH 111424.M Mon Dec 09 01:54:24 2024

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

Report of Analysis

Client:	ENTACT			Date Collected:	
Project:	North Point			Date Received:	
Client Sample ID:	EX-8-TPH-1MSD			SDG No.:	P5147
Lab Sample ID:	P5147-01MSD			Matrix:	Solid
Analytical Method:	NJEPH			% Solid:	81
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
12/06/24 09:50	12/06/24 19:49	PB165427

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	175	E	1	0.47	1.23	mg/kg	FC067934.D
Aliphatic C12-C16	Aliphatic C12-C16	435	E	1	0.30	0.82	mg/kg	FC067934.D
Aliphatic C16-C21	Aliphatic C16-C21	167	E	1	0.37	1.23	mg/kg	FC067934.D
Aliphatic C21-C28	Aliphatic C21-C28	41.2	E	1	0.99	1.64	mg/kg	FC067934.D
Aliphatic C28-C40	Aliphatic C28-C40	43.1		1	2.22	2.47	mg/kg	FC067934.D
Aromatic C10-C12	Aromatic C10-C12	23.4	E	1	0.37	0.82	mg/kg	FD048842.D
Aromatic C12-C16	Aromatic C12-C16	110	E	1	0.42	1.23	mg/kg	FD048842.D
Aromatic C16-C21	Aromatic C16-C21	144	E	1	1.18	2.06	mg/kg	FD048842.D
Aromatic C21-C36	Aromatic C21-C36	51.3		1	2.47	3.29	mg/kg	FD048842.D
Total AliphaticEPH	Total AliphaticEPH	861			4.34	7.39	mg/kg	
Total AromaticEPH	Total AromaticEPH	329			4.44	7.40	mg/kg	
Total EPH	Total EPH	1190			8.78	14.8	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

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

Report of Analysis

Client:	ENTACT		Date Collected:		
Project:	North Point		Date Received:		
Client Sample ID:	EX-8-TPH-1MSD		SDG No.:	P5147	
Lab Sample ID:	P5147-01MSD		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	81	
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
FC067934.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	175	E	0.47	1.23	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	435	E	0.30	0.82	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	167	E	0.37	1.23	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	41.2	E	0.99	1.64	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	43.1		2.22	2.47	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	49.1		40 - 140	98%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5147-01MSD	Acq On:	06 Dec 2024 19:49
Client Sample ID:	EX-8-TPH-1MSD	Operator:	YP/AJ
Data file:	FC067934.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	3.154	6.430	353760137	2130	300	ug/ml
Aliphatic C12-C16	6.431	9.821	902881767	5300	200	ug/ml
Aliphatic C16-C21	9.822	13.180	345865707	2040	300	ug/ml
Aliphatic C21-C28	13.181	16.835	78736308	500.612	400	ug/ml
Aliphatic C28-C40	16.836	21.671	63437910	523.798	600	ug/ml
Aliphatic EPH	3.154	21.671	1744681829	10500		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.918	12.918	7126471	49.09		ug/ml
Aliphatic C9-C28	3.154	16.835	1681243919	9970	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067934.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 19:49
Operator : YP/AJ
Sample : P5147-01MSD
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:07:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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...	12.918	7126471	49.094 ug/mlm
Spiked Amount	50.000		Recovery =	98.19%
	Target Compounds			
1) T	n-Nonane (C9)	3.254	5508751	33.772 ug/ml
2) T	n-Decane (C10)	4.317	6392812	38.550 ug/mlm
4) T	n-Dodecane (C12)	6.340	5686927	33.765 ug/mlm
6) T	n-Tetradecane (C14)	8.136	9403399	56.149 ug/mlm
7) T	n-Hexadecane (C16)	9.731	9175406	52.946 ug/mlm
8) T	n-Octadecane (C18)	11.168	8393291	47.705 ug/mlm
10) T	n-Eicosane (C20)	12.477	7976825	47.372 ug/mlm
11) T	n-Heneicosane (C21)	13.085	7003877	42.567 ug/mlm
13) T	n-Docosane (C22)	13.670	6981052	42.867 ug/ml
14) T	n-Tetracosane (C24)	14.772	6703587	41.798 ug/ml
15) T	n-Hexacosane (C26)	15.789	6536517	42.209 ug/ml
16) T	n-Octacosane (C28)	16.738	6312212	41.796 ug/ml
17) T	n-Tricontane (C30)	17.625	6329269	41.338 ug/ml
18) T	n-Dotriacontane (C32)	18.456	6032462	40.845 ug/ml
19) T	n-Tetratriacontane (C34)	19.239	5928242	47.001 ug/ml
20) T	n-Hexatriacontane (C36)	19.977	5368698	51.332 ug/ml
21) T	n-Octatriacontane (C38)	20.697	4833010	49.476 ug/ml
22) T	n-Tetracontane (C40)	21.574	4464419	45.805 ug/ml

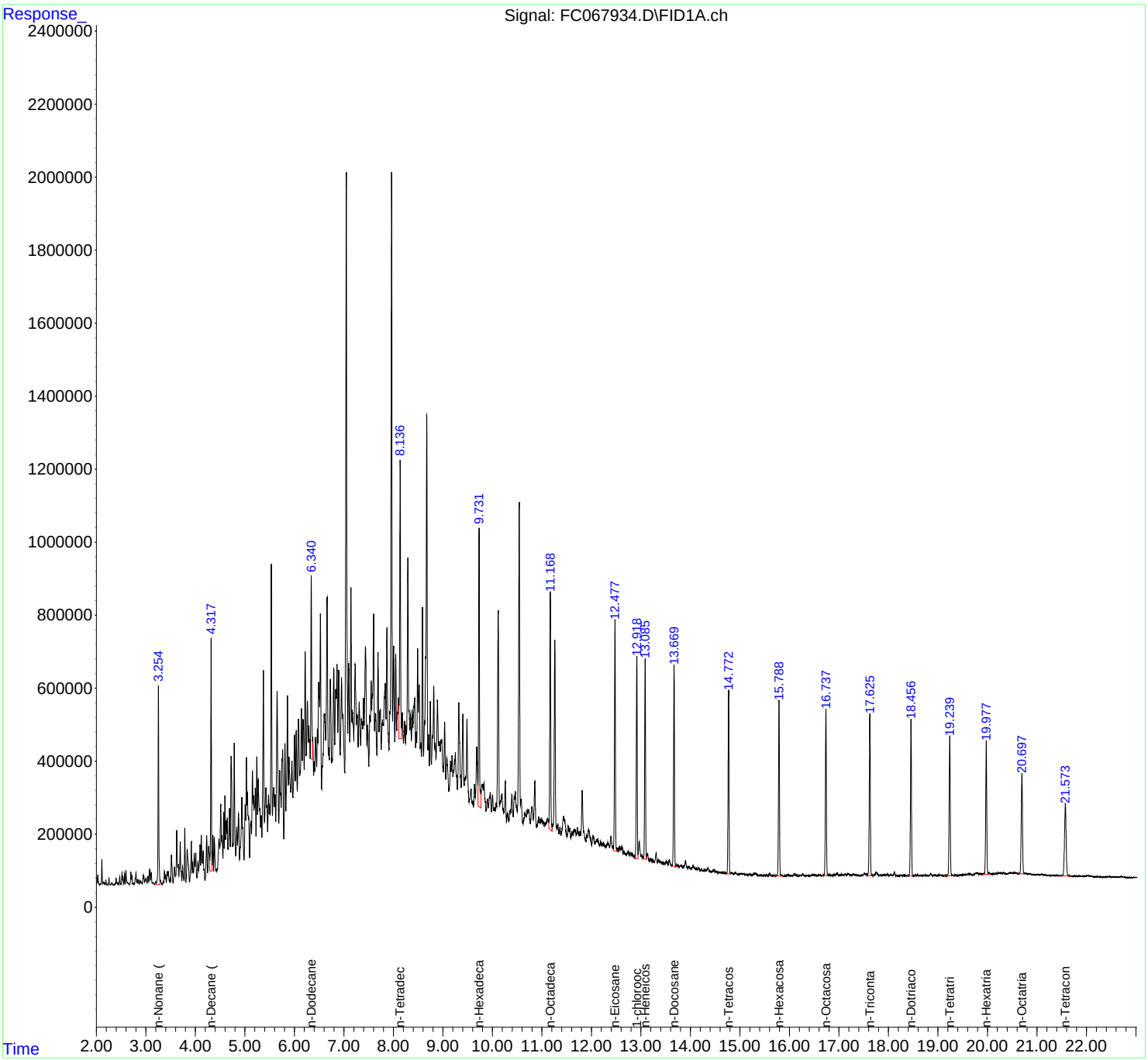
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067934.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 19:49
Operator : YP/AJ
Sample : P5147-01MSD
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: sample.E
Quant Time: Dec 07 01:07:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 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

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC120624AL\
Data File : FC067934.D
Signal(s) : FID1A.ch
Acq On : 06 Dec 2024 19:49
Sample : P5147-01MSD
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.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	3.254	3.204	3.330	BV	542029	5491494	14.85%	0.315%
2	3.350	3.330	3.360	PV	9133	81737	0.22%	0.005%
3	3.375	3.360	3.388	VV	35823	346321	0.94%	0.020%
4	3.398	3.388	3.414	VV	27083	277871	0.75%	0.016%
5	3.431	3.414	3.441	VV	34945	379646	1.03%	0.022%
6	3.453	3.441	3.477	VV	35435	478938	1.30%	0.027%
7	3.517	3.477	3.550	VV	80089	1331102	3.60%	0.076%
8	3.579	3.550	3.600	VV	47076	780941	2.11%	0.045%
9	3.624	3.600	3.645	VV	147555	1927599	5.21%	0.110%
10	3.653	3.645	3.668	VV	55921	584169	1.58%	0.033%
11	3.695	3.668	3.727	VV	116168	1811812	4.90%	0.104%
12	3.743	3.727	3.768	VV	48470	653570	1.77%	0.037%
13	3.787	3.768	3.808	VV	153195	1468821	3.97%	0.084%
14	3.836	3.808	3.883	VV	96274	2094382	5.66%	0.120%
15	3.919	3.883	3.933	VV	116081	1538675	4.16%	0.088%
16	3.944	3.933	3.962	VV	58699	763454	2.06%	0.044%
17	3.978	3.962	3.994	VV	84287	1132486	3.06%	0.065%
18	4.009	3.994	4.031	VV	83648	1130006	3.06%	0.065%
19	4.053	4.031	4.066	VV	62030	836597	2.26%	0.048%
20	4.094	4.066	4.106	VV	107840	1592507	4.31%	0.091%
21	4.120	4.106	4.140	VV	134472	1800020	4.87%	0.103%
22	4.157	4.140	4.194	VV	90622	1641063	4.44%	0.094%
23	4.228	4.194	4.248	VV	133782	1980492	5.36%	0.114%
24	4.269	4.248	4.292	VV	103465	1965069	5.31%	0.113%
25	4.318	4.292	4.339	VV	672709	7424117	20.08%	0.426%

rteres

26	4.354	4.339	4.369	VV	133257	1477568	4.00%	0.085%
27	4.384	4.369	4.420	VV	126483	2107426	5.70%	0.121%
28	4.433	4.420	4.442	VV	41636	511619	1.38%	0.029%
29	4.475	4.442	4.493	VV	121902	2678609	7.24%	0.154%
30	4.512	4.493	4.556	VV	217809	5106633	13.81%	0.293%
31	4.571	4.556	4.583	VV	196830	2174536	5.88%	0.125%
32	4.597	4.583	4.611	VV	240697	2926404	7.91%	0.168%
33	4.623	4.611	4.634	VV	173535	2101402	5.68%	0.120%
34	4.644	4.634	4.658	VV	180934	2130481	5.76%	0.122%
35	4.689	4.658	4.704	VV	205755	3967767	10.73%	0.227%
36	4.723	4.704	4.753	VV	345255	6532774	17.67%	0.374%
37	4.785	4.753	4.815	VV	385086	6562752	17.75%	0.376%
38	4.836	4.815	4.850	VV	156806	2511171	6.79%	0.144%
39	4.872	4.850	4.892	VV	192396	3519389	9.52%	0.202%
40	4.938	4.892	4.982	VV	237070	7195270	19.46%	0.412%
41	5.006	4.982	5.015	VV	214561	2949298	7.98%	0.169%
42	5.030	5.015	5.042	VV	344432	4231468	11.44%	0.243%
43	5.049	5.042	5.095	VV	252972	5698937	15.41%	0.327%
44	5.121	5.095	5.133	VV	169943	3247600	8.78%	0.186%
45	5.153	5.133	5.196	VV	307449	8649079	23.39%	0.496%
46	5.210	5.196	5.224	VV	263777	3605082	9.75%	0.207%
47	5.241	5.224	5.256	VV	348526	4742031	12.82%	0.272%
48	5.269	5.256	5.318	VV	286624	8083405	21.86%	0.463%
49	5.330	5.318	5.343	VV	187032	2433106	6.58%	0.139%
50	5.374	5.343	5.396	VV	588520	9970790	26.97%	0.571%
51	5.424	5.396	5.459	VV	263510	8033135	21.73%	0.460%
52	5.477	5.459	5.491	VV	242317	3967202	10.73%	0.227%
53	5.501	5.491	5.510	VV	213648	2301189	6.22%	0.132%
54	5.534	5.510	5.558	VV	871781	12732630	34.44%	0.730%
55	5.582	5.558	5.597	VV	261924	5502249	14.88%	0.315%
56	5.609	5.597	5.623	VV	243333	3401819	9.20%	0.195%
57	5.651	5.623	5.685	VV	527243	11822309	31.97%	0.678%
58	5.704	5.685	5.732	VV	308792	6872110	18.59%	0.394%
59	5.762	5.732	5.786	VV	365511	8967190	24.25%	0.514%
60	5.810	5.786	5.828	VV	380808	6351696	17.18%	0.364%
61	5.860	5.828	5.879	VV	513615	10404184	28.14%	0.596%
62	5.892	5.879	5.928	VV	345135	8690593	23.50%	0.498%
63	5.950	5.928	5.969	VV	337195	6913220	18.70%	0.396%
64	6.003	5.969	6.020	VV	406544	9704457	26.25%	0.556%
65	6.038	6.020	6.058	VV	420167	7791686	21.07%	0.447%
66	6.083	6.058	6.108	VV	449843	10764922	29.11%	0.617%
67	6.143	6.108	6.159	VV	477337	11320880	30.62%	0.649%
68	6.176	6.159	6.198	VV	447381	9415866	25.47%	0.540%
69	6.218	6.198	6.240	VV	634386	11790417	31.89%	0.676%

70	6.264	6.240	6.280	VV	500457	10336034	27.95%	0.592%
71	6.291	6.280	6.319	VV	430222	9105248	24.63%	0.522%
72	6.341	6.319	6.389	VV	843048	20418327	55.22%	1.170%
73	6.400	6.389	6.410	VV	332458	4038278	10.92%	0.231%
74	6.428	6.410	6.450	VV	397623	8487010	22.95%	0.486%
75	6.466	6.450	6.474	VV	422441	5380019	14.55%	0.308%
76	6.491	6.474	6.510	VV	549359	10719681	28.99%	0.614%
77	6.526	6.510	6.549	VV	735614	12240587	33.11%	0.702%
78	6.608	6.549	6.632	VV	462521	18952752	51.26%	1.086%
79	6.661	6.632	6.705	VV	783722	21617918	58.47%	1.239%
80	6.726	6.705	6.754	VV	557827	13161212	35.59%	0.754%
81	6.796	6.754	6.815	VV	590613	15957864	43.16%	0.915%
82	6.836	6.815	6.846	VV	528216	8961184	24.24%	0.514%
83	6.861	6.846	6.878	VV	597439	9809120	26.53%	0.562%
84	6.896	6.878	6.924	VV	579786	13246906	35.83%	0.759%
85	6.953	6.924	7.015	VV	557815	23639393	63.93%	1.355%
86	7.049	7.015	7.079	VV	1927641	34701097	93.85%	1.989%
87	7.097	7.079	7.119	VV	599123	11759340	31.80%	0.674%
88	7.143	7.119	7.162	VV	810102	15088656	40.81%	0.865%
89	7.172	7.162	7.200	VV	471033	10086996	27.28%	0.578%
90	7.228	7.200	7.256	VV	598644	16715920	45.21%	0.958%
91	7.267	7.256	7.288	VV	459005	8209318	22.20%	0.471%
92	7.310	7.288	7.338	VV	494239	12966442	35.07%	0.743%
93	7.355	7.338	7.380	VV	448494	10858641	29.37%	0.622%
94	7.397	7.380	7.410	VV	506870	8193264	22.16%	0.470%
95	7.437	7.410	7.466	VV	643418	17768605	48.06%	1.018%
96	7.481	7.466	7.502	VV	431136	8414964	22.76%	0.482%
97	7.550	7.502	7.563	VV	552241	16552874	44.77%	0.949%
98	7.601	7.563	7.619	VV	737639	18933668	51.21%	1.085%
99	7.638	7.619	7.666	VV	461353	11827605	31.99%	0.678%
100	7.690	7.666	7.710	VV	625274	12792346	34.60%	0.733%
101	7.735	7.710	7.755	VV	470115	11660208	31.54%	0.668%
102	7.779	7.755	7.797	VV	438812	10617953	28.72%	0.609%
103	7.834	7.797	7.849	VV	544106	15421016	41.71%	0.884%
104	7.869	7.849	7.910	VV	695215	18372400	49.69%	1.053%
105	7.963	7.910	7.984	VV	1949811	36975007	100.00%	2.119%
106	8.005	7.984	8.028	VV	644216	13698065	37.05%	0.785%
107	8.047	8.028	8.066	VV	625746	11523941	31.17%	0.661%
108	8.101	8.066	8.110	VV	505540	12499831	33.81%	0.716%
109	8.136	8.110	8.165	VV	1153606	22499584	60.85%	1.290%
110	8.181	8.165	8.202	VV	464300	9506276	25.71%	0.545%
111	8.226	8.202	8.242	VV	435829	9803128	26.51%	0.562%
112	8.256	8.242	8.266	VV	431350	5910936	15.99%	0.339%

rteres

113	8.292	8.266	8.334	VV	883985	23038316	62.31%	1.320%
114	8.346	8.334	8.364	VV	461065	7720981	20.88%	0.443%
115	8.380	8.364	8.394	VV	465037	8025350	21.70%	0.460%
116	8.427	8.394	8.449	VV	505849	14920514	40.35%	0.855%
117	8.461	8.449	8.470	VV	410546	5132429	13.88%	0.294%
118	8.490	8.470	8.504	VV	638165	10572641	28.59%	0.606%
119	8.521	8.504	8.565	VV	542087	15812073	42.76%	0.906%
120	8.587	8.565	8.609	VV	747998	13482509	36.46%	0.773%
121	8.673	8.609	8.697	VV	1285295	33408562	90.35%	1.915%
122	8.709	8.697	8.727	VV	400211	6550004	17.71%	0.375%
123	8.746	8.727	8.768	VV	492471	9831205	26.59%	0.563%
124	8.815	8.768	8.861	VV	537122	22295602	60.30%	1.278%
125	8.890	8.861	8.918	VV	495351	14112182	38.17%	0.809%
126	8.929	8.918	8.946	VV	385557	6321590	17.10%	0.362%
127	8.963	8.946	9.008	VV	389010	13600278	36.78%	0.780%
128	9.035	9.008	9.058	VV	439328	10507108	28.42%	0.602%
129	9.080	9.058	9.121	VV	338815	11446001	30.96%	0.656%
130	9.154	9.121	9.166	VV	332198	7746200	20.95%	0.444%
131	9.185	9.166	9.202	VV	346373	7067080	19.11%	0.405%
132	9.251	9.202	9.293	VV	354185	16735761	45.26%	0.959%
133	9.322	9.293	9.368	VV	489736	15716972	42.51%	0.901%
134	9.403	9.368	9.429	VV	461520	12429137	33.61%	0.712%
135	9.486	9.429	9.528	VV	445089	17875196	48.34%	1.025%
136	9.567	9.528	9.597	VV	253498	9666663	26.14%	0.554%
137	9.606	9.597	9.617	VV	220881	2583493	6.99%	0.148%
138	9.639	9.617	9.657	VV	267864	5870931	15.88%	0.337%
139	9.684	9.657	9.707	VV	368592	9065785	24.52%	0.520%
140	9.731	9.707	9.770	VV	967772	17046131	46.10%	0.977%
141	9.804	9.770	9.817	VV	267542	7256356	19.63%	0.416%
142	9.830	9.817	9.878	VV	272197	8499342	22.99%	0.487%
143	9.899	9.878	9.918	VV	226166	5192935	14.04%	0.298%
144	9.957	9.918	9.982	VV	244208	8478782	22.93%	0.486%
145	10.003	9.982	10.027	VV	239371	5798287	15.68%	0.332%
146	10.048	10.027	10.060	VV	202278	4061037	10.98%	0.233%
147	10.118	10.060	10.144	VV	743185	18318757	49.54%	1.050%
148	10.193	10.144	10.234	VV	242176	11638206	31.48%	0.667%
149	10.260	10.234	10.286	VV	273432	6726069	18.19%	0.386%
150	10.305	10.286	10.331	VV	188049	4774505	12.91%	0.274%
151	10.394	10.331	10.421	VV	239932	10635936	28.77%	0.610%
152	10.442	10.421	10.451	VV	236215	3794391	10.26%	0.217%
153	10.463	10.451	10.501	VV	246829	6637627	17.95%	0.380%
154	10.542	10.501	10.568	VV	1034825	19787591	53.52%	1.134%
155	10.581	10.568	10.618	VV	226868	5904187	15.97%	0.338%

156	10.654	10.618	10.684	VV	187443	7051385	19.07%	0.404%
157	10.700	10.684	10.767	VV	195274	9210829	24.91%	0.528%
158	10.797	10.767	10.824	VV	202881	6383439	17.26%	0.366%
159	10.857	10.824	10.897	VV	272987	8765448	23.71%	0.502%
160	10.940	10.897	10.958	VV	176394	5962079	16.12%	0.342%
161	10.992	10.958	11.009	VV	172576	5116016	13.84%	0.293%
162	11.020	11.009	11.048	VV	166353	3772875	10.20%	0.216%
163	11.113	11.048	11.138	VV	171715	8782645	23.75%	0.503%
164	11.169	11.138	11.204	VV	794072	14105678	38.15%	0.808%
165	11.261	11.204	11.308	VV	655448	16401540	44.36%	0.940%
166	11.319	11.308	11.343	VV	156330	3130726	8.47%	0.179%
167	11.364	11.343	11.384	VV	148090	3332643	9.01%	0.191%
168	11.439	11.384	11.504	VV	177176	10955099	29.63%	0.628%
169	11.532	11.504	11.551	VV	151676	3923616	10.61%	0.225%
170	11.561	11.551	11.588	VV	146282	2925155	7.91%	0.168%
171	11.605	11.588	11.634	VV	136023	3657160	9.89%	0.210%
172	11.654	11.634	11.697	VV	141396	5104503	13.81%	0.293%
173	11.718	11.697	11.751	VV	146127	4416605	11.94%	0.253%
174	11.770	11.751	11.784	VV	135745	2612982	7.07%	0.150%
175	11.813	11.784	11.885	VV	248036	9452836	25.57%	0.542%
176	11.906	11.885	11.921	VV	125294	2593888	7.02%	0.149%
177	11.943	11.921	12.005	VV	141483	6178061	16.71%	0.354%
178	12.032	12.005	12.071	VV	123542	4534546	12.26%	0.260%
179	12.107	12.071	12.121	VV	114939	3281357	8.87%	0.188%
180	12.135	12.121	12.161	VV	112591	2559611	6.92%	0.147%
181	12.186	12.161	12.205	VV	106562	2723783	7.37%	0.156%
182	12.221	12.205	12.237	VV	104322	1902349	5.14%	0.109%
183	12.249	12.237	12.281	VV	101143	2612788	7.07%	0.150%
184	12.334	12.281	12.371	VV	105998	5309443	14.36%	0.304%
185	12.395	12.371	12.441	VV	123392	4346109	11.75%	0.249%
186	12.476	12.441	12.521	VV	721095	11951446	32.32%	0.685%
187	12.566	12.521	12.603	VV	91343	4271630	11.55%	0.245%
188	12.618	12.603	12.682	VV	94596	3905543	10.56%	0.224%
189	12.689	12.682	12.701	VV	74603	827851	2.24%	0.047%
190	12.750	12.701	12.777	VV	80452	3430919	9.28%	0.197%
191	12.793	12.777	12.815	VV	75351	1691163	4.57%	0.097%
192	12.823	12.815	12.876	VV	73143	2546469	6.89%	0.146%
193	12.917	12.876	12.943	VV	614301	9547593	25.82%	0.547%
194	12.966	12.943	13.002	VV	107572	3100579	8.39%	0.178%
195	13.017	13.002	13.048	VV	69625	1805403	4.88%	0.103%
196	13.086	13.048	13.115	VV	604061	9412817	25.46%	0.540%
197	13.133	13.115	13.166	VV	73817	2021448	5.47%	0.116%
198	13.182	13.166	13.226	VV	58833	2074302	5.61%	0.119%
199	13.241	13.226	13.271	VV	58097	1451003	3.92%	0.083%

rteres

200	13.306	13.271	13.334	VV	73113	2286176	6.18%	0.131%
201	13.351	13.334	13.379	VV	57626	1480524	4.00%	0.085%
202	13.391	13.379	13.438	VV	54067	1763039	4.77%	0.101%
203	13.451	13.438	13.474	VV	47141	1030114	2.79%	0.059%
204	13.519	13.474	13.551	VV	52864	2255083	6.10%	0.129%
205	13.577	13.551	13.625	VV	57733	2139473	5.79%	0.123%
206	13.670	13.625	13.704	VV	587980	8872368	24.00%	0.509%
207	13.713	13.704	13.734	VV	42113	725012	1.96%	0.042%
208	13.750	13.734	13.772	VV	42628	929553	2.51%	0.053%
209	13.812	13.772	13.858	VV	42034	1993126	5.39%	0.114%
210	13.901	13.858	13.941	VV	53623	2098566	5.68%	0.120%
211	13.966	13.941	14.004	VV	37770	1338319	3.62%	0.077%
212	14.054	14.004	14.147	VV	38586	2897632	7.84%	0.166%
213	14.167	14.147	14.198	VV	35378	949176	2.57%	0.054%
214	14.226	14.198	14.261	VV	32074	1079015	2.92%	0.062%
215	14.290	14.261	14.318	VV	29205	931736	2.52%	0.053%
216	14.355	14.318	14.416	VV	34352	1637728	4.43%	0.094%
217	14.472	14.416	14.574	VV	29047	2316277	6.26%	0.133%
218	14.614	14.574	14.654	VV	22155	1015926	2.75%	0.058%
219	14.672	14.654	14.730	VV	22265	928481	2.51%	0.053%
220	14.771	14.730	14.814	VV	514943	7585701	20.52%	0.435%
221	14.825	14.814	14.881	VV	20200	754657	2.04%	0.043%
222	14.908	14.881	14.948	VV	21154	741669	2.01%	0.043%
223	14.965	14.948	14.984	VV	16694	355327	0.96%	0.020%
224	15.017	14.984	15.054	VV	17907	712722	1.93%	0.041%
225	15.071	15.054	15.167	VV	16990	1038040	2.81%	0.059%
226	15.195	15.167	15.250	VV	16277	741753	2.01%	0.043%
227	15.288	15.250	15.300	VV	17801	467416	1.26%	0.027%
228	15.316	15.300	15.361	VV	17891	572394	1.55%	0.033%
229	15.371	15.361	15.395	VV	14142	269833	0.73%	0.015%
230	15.408	15.395	15.448	VV	13410	398316	1.08%	0.023%
231	15.458	15.448	15.464	VV	12140	118495	0.32%	0.007%
232	15.495	15.464	15.518	VV	13071	406374	1.10%	0.023%
233	15.547	15.518	15.569	VV	13237	374139	1.01%	0.021%
234	15.596	15.569	15.651	VV	16875	676412	1.83%	0.039%
235	15.669	15.651	15.702	VV	11988	351330	0.95%	0.020%
236	15.789	15.702	15.898	VV	493857	7790800	21.07%	0.447%
237	15.970	15.898	15.998	VV	14200	711265	1.92%	0.041%
238	16.033	15.998	16.054	VV	12164	390958	1.06%	0.022%
239	16.104	16.054	16.191	VV	14960	1026248	2.78%	0.059%
240	16.225	16.191	16.242	VV	12308	358196	0.97%	0.021%
241	16.267	16.242	16.348	VV	15051	738976	2.00%	0.042%
242	16.363	16.348	16.394	VV	10862	299239	0.81%	0.017%

rteres

243	16.492	16.394	16.515	VV	13453	881036	2.38%	0.050%
244	16.525	16.515	16.558	VV	12691	303388	0.82%	0.017%
245	16.599	16.558	16.670	VV	12610	776551	2.10%	0.045%
246	16.738	16.670	16.797	VV	465566	7157014	19.36%	0.410%
247	16.815	16.797	16.874	VV	12798	545430	1.48%	0.031%
248	16.892	16.874	16.904	VV	12639	218309	0.59%	0.013%
249	16.963	16.904	16.993	VV	17374	734706	1.99%	0.042%
250	17.051	16.993	17.094	VV	12976	732595	1.98%	0.042%
251	17.133	17.094	17.161	VV	14378	520399	1.41%	0.030%
252	17.184	17.161	17.234	VV	14858	571874	1.55%	0.033%
253	17.250	17.234	17.262	VV	12200	197793	0.53%	0.011%
254	17.291	17.262	17.327	VV	14642	498618	1.35%	0.029%
255	17.342	17.327	17.368	VV	12366	278950	0.75%	0.016%
256	17.376	17.368	17.423	VV	11894	365566	0.99%	0.021%
257	17.462	17.423	17.484	VV	12078	397551	1.08%	0.023%
258	17.512	17.484	17.537	VV	16560	439188	1.19%	0.025%
259	17.625	17.537	17.704	VV	453832	7386596	19.98%	0.423%
260	17.752	17.704	17.832	VV	20255	1065593	2.88%	0.061%
261	17.843	17.832	17.881	VV	11665	319626	0.86%	0.018%
262	17.907	17.881	17.933	VV	12137	347287	0.94%	0.020%
263	17.956	17.933	17.968	VV	12322	243402	0.66%	0.014%
264	17.984	17.968	18.021	VV	12432	346856	0.94%	0.020%
265	18.041	18.021	18.074	VV	13801	365150	0.99%	0.021%
266	18.119	18.074	18.171	VV	20223	710848	1.92%	0.041%
267	18.186	18.171	18.206	VV	9280	183819	0.50%	0.011%
268	18.269	18.206	18.289	VV	9914	454992	1.23%	0.026%
269	18.314	18.289	18.391	VV	10118	571033	1.54%	0.033%
270	18.456	18.391	18.498	VV	434732	6554661	17.73%	0.376%
271	18.509	18.498	18.521	VV	8857	121649	0.33%	0.007%
272	18.541	18.521	18.565	VV	12363	270087	0.73%	0.015%
273	18.587	18.565	18.660	VV	11138	541283	1.46%	0.031%
274	18.670	18.660	18.694	VV	8880	175731	0.48%	0.010%
275	18.715	18.694	18.732	VV	9834	210522	0.57%	0.012%
276	18.752	18.732	18.778	VV	9905	255127	0.69%	0.015%
277	18.795	18.778	18.816	VV	8847	198625	0.54%	0.011%
278	18.851	18.816	18.904	VV	13962	570359	1.54%	0.033%
279	18.939	18.904	18.972	VV	10524	371444	1.00%	0.021%
280	19.029	18.972	19.074	VV	10436	574520	1.55%	0.033%
281	19.239	19.074	19.321	VV	389521	7129179	19.28%	0.409%
282	19.350	19.321	19.383	VV	10346	333655	0.90%	0.019%
283	19.396	19.383	19.412	VV	8968	152724	0.41%	0.009%
284	19.418	19.412	19.424	VV	9015	61917	0.17%	0.004%
285	19.475	19.424	19.490	VV	10132	381175	1.03%	0.022%

rteres

286	19.549	19.490	19.570	VV	10883	504080	1.36%	0.029%
287	19.609	19.570	19.628	VV	13488	408238	1.10%	0.023%
288	19.647	19.628	19.694	VV	13053	454542	1.23%	0.026%
289	19.777	19.694	19.845	VV	15486	1178523	3.19%	0.068%
290	19.864	19.845	19.898	VV	12595	381850	1.03%	0.022%
291	19.977	19.898	20.055	VV	378162	6436203	17.41%	0.369%
292	20.080	20.055	20.106	VV	12236	357023	0.97%	0.020%
293	20.171	20.106	20.197	VV	13657	684777	1.85%	0.039%
294	20.244	20.197	20.294	VV	14529	802739	2.17%	0.046%
295	20.325	20.294	20.381	VV	15219	698439	1.89%	0.040%
296	20.388	20.381	20.403	VV	11991	154373	0.42%	0.009%
297	20.445	20.403	20.473	VV	14731	571570	1.55%	0.033%
298	20.486	20.473	20.522	VV	15093	426854	1.15%	0.024%
299	20.555	20.522	20.609	VV	15135	730831	1.98%	0.042%
300	20.627	20.609	20.642	VV	12629	240449	0.65%	0.014%
301	20.697	20.642	20.754	VV	286774	5649609	15.28%	0.324%
302	20.761	20.754	20.834	VV	13054	579129	1.57%	0.033%
303	20.844	20.834	20.858	VV	11370	157190	0.43%	0.009%
304	20.865	20.858	20.925	VV	11248	405056	1.10%	0.023%
305	20.935	20.925	20.944	VV	9451	109659	0.30%	0.006%
306	20.967	20.944	20.998	VV	9707	300541	0.81%	0.017%
307	21.025	20.998	21.064	VV	9849	373047	1.01%	0.021%
308	21.110	21.064	21.148	VV	10872	475163	1.29%	0.027%
309	21.161	21.148	21.195	VV	8527	224362	0.61%	0.013%
310	21.208	21.195	21.260	VV	7440	270395	0.73%	0.015%
311	21.274	21.260	21.285	VV	6760	99313	0.27%	0.006%
312	21.324	21.285	21.373	VV	7199	352471	0.95%	0.020%
313	21.415	21.373	21.425	VV	6769	204544	0.55%	0.012%
314	21.432	21.425	21.444	VV	6454	72123	0.20%	0.004%
315	21.450	21.444	21.508	VV	6636	225945	0.61%	0.013%
316	21.574	21.508	21.701	VBA	199432	5055463	13.67%	0.290%

Sum of corrected areas: 1744681832

Aliphatic EPH 111424.M Mon Dec 09 01:27:37 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:		
Project:	North Point		Date Received:		
Client Sample ID:	EX-8-TPH-1MSD		SDG No.:	P5147	
Lab Sample ID:	P5147-01MSD		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	81	
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
FD048842.D	1	12/06/24	12/06/24	PB165427

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	23.4	E	0.37	0.82	mg/kg
Aromatic C12-C16	Aromatic C12-C16	110	E	0.42	1.23	mg/kg
Aromatic C16-C21	Aromatic C16-C21	144	E	1.18	2.06	mg/kg
Aromatic C21-C36	Aromatic C21-C36	51.3		2.47	3.29	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	67.9		40 - 140	136%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	50.9		40 - 140	102%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	42.7		40 - 140	85%	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:	P5147-01MSD	Acq On:	06 Dec 2024 19:49
Client Sample ID:	EX-8-TPH-1MSD	Operator:	YP/AJ
Data file:	FD048842.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	4.086	5.803	54689830	284.817	200	ug/ml
Aromatic C12-C16	5.804	8.408	259263236	1350	300	ug/ml
Aromatic C16-C21	8.409	12.672	326468867	1760	500	ug/ml
Aromatic C21-C36	12.673	18.079	98161386	624.313	800	ug/ml
Aromatic EPH	4.086	18.079	738583319	4010		ug/ml
ortho-Terphenyl (SURR)	11.252	11.252	8210654	42.69		ug/ml
2-Bromonaphthalene (SURR)	7.367	7.367	11949343	67.87		ug/ml
2-Flurobiphenyl (SURR)	8.219	8.219	5864934	50.92		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048842.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 19:49
Operator : YP/AJ
Sample : P5147-01MSD
Misc :
ALS Vial : 67 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Integration File: autoint1.e
Quant Time: Dec 07 03:12:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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...	7.367	11949343	67.871 ug/ml
Spiked Amount	50.000		Recovery =	135.74%
6) S	2-Flurobiphenyl (SURR)	8.219	5864934	50.924 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	101.85%
11) S	ortho-Terphenyl (SURR)	11.252	8210654	42.689 ug/ml
Spiked Amount	50.000		Recovery =	85.38%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.187	6908732	36.659 ug/ml
2) T	Naphthalene (C11.7)	5.705	8474583	43.332 ug/mlm
3) T	2-Methylnaphthalene (...	6.755	11970469	62.638 ug/ml
5) T	Acenaphthylene (C15.06)	8.023	13758585	70.948 ug/mlm
7) T	Acenaphthene (C15.5)	8.317	11350567	59.011 ug/ml
8) T	Flouorene (C16.55)	9.097	12066600	62.895 ug/ml
9) T	Phenanthrene (C19.36)	10.485	12002572	65.479 ug/ml
10) T	Anthracene (C19.43)	10.561	10692958	57.099 ug/ml
12) T	Fluoranthene (C21.85)	12.289	10366874	56.612 ug/ml
13) T	Pyrene (C20.8)	12.582	10531778	58.253 ug/ml
14) T	Benzo[a]anthracene (C...	14.450	8563815	52.059 ug/ml
15) T	Chrysene (C27.41)	14.494	8634369	49.335 ug/ml
16) T	benzo[b]fluoranthene ...	15.999	8130005	51.745 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.033	7903485	48.429 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.375	7662454	51.392 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.743	7906909	64.008 ug/ml
20) T	Dibenz[a,h]anthracene...	17.779	7510055	47.892 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.994	7185662	50.360 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD120624AR\
Data File : FD048842.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 19:49
Operator : YP/AJ
Sample : P5147-01MSD
Misc :
ALS Vial : 67 Sample Multiplier: 1

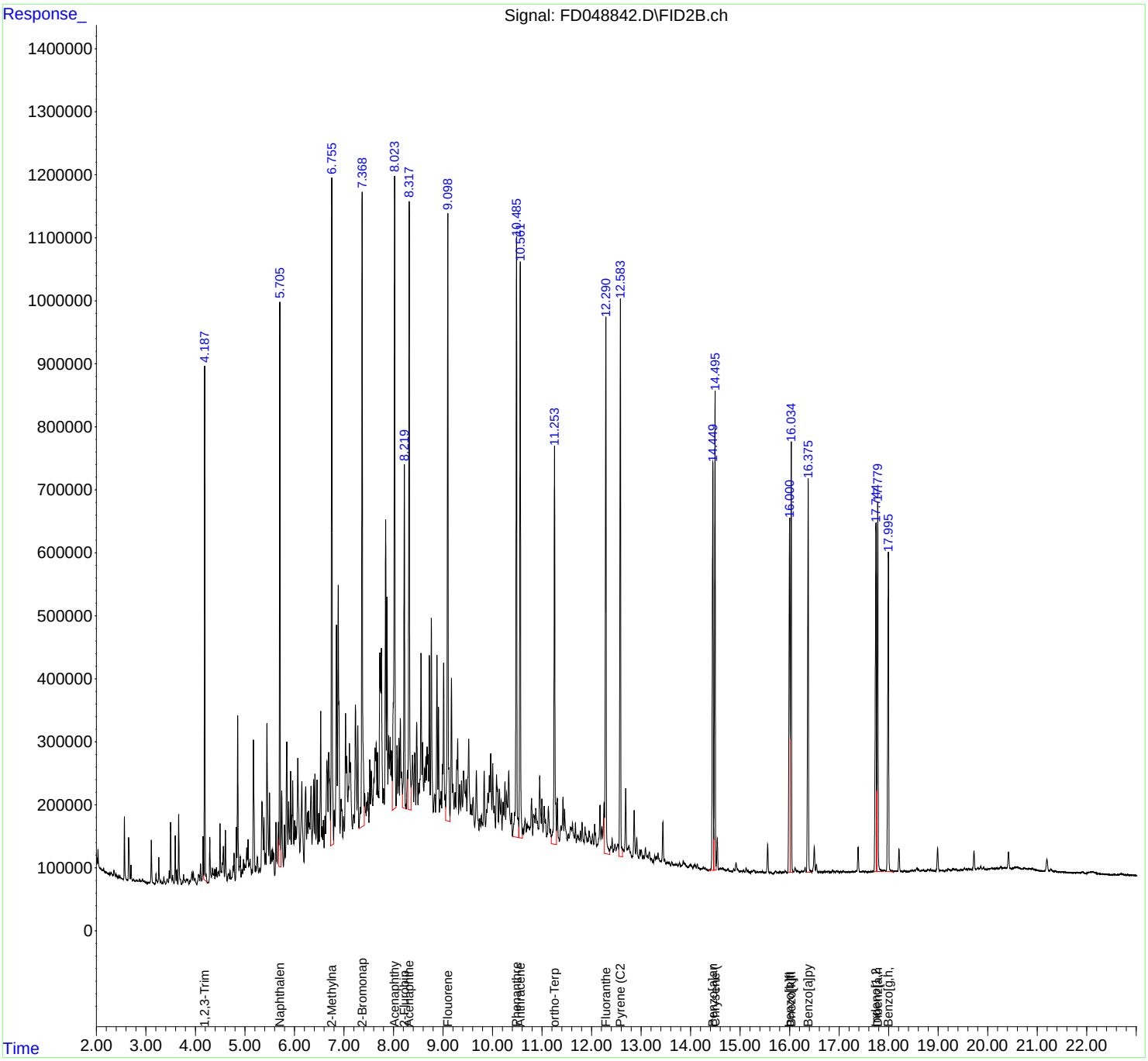
Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Integration File: autoint1.e
Quant Time: Dec 07 03:12:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 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 :
EX-8-TPH-1MSD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD12062
Data File : FD048842.D
Signal(s) : FID2B.ch
Acq On : 06 Dec 2024 19:49
Sample : P5147-01MSD
Misc :
ALS Vial : 67 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.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	4.104	4.089	4.127	PV	27211	262224	1.39%	0.035%
2	4.156	4.127	4.169	VV	72201	659315	3.49%	0.088%
3	4.187	4.169	4.209	VV	818902	6872859	36.38%	0.917%
4	4.216	4.209	4.256	VV	13739	147432	0.78%	0.020%
5	4.291	4.256	4.324	PV	73347	825330	4.37%	0.110%
6	4.341	4.324	4.368	VV	23460	406552	2.15%	0.054%
7	4.380	4.368	4.392	VV	20516	211029	1.12%	0.028%
8	4.404	4.392	4.415	VV	21942	207469	1.10%	0.028%
9	4.426	4.415	4.440	VV	25022	256551	1.36%	0.034%
10	4.458	4.440	4.463	VV	16404	189726	1.00%	0.025%
11	4.473	4.463	4.482	VV	18680	179008	0.95%	0.024%
12	4.497	4.482	4.517	VV	94314	968349	5.13%	0.129%
13	4.523	4.517	4.530	VV	18541	130304	0.69%	0.017%
14	4.543	4.530	4.549	VV	32159	293986	1.56%	0.039%
15	4.565	4.549	4.587	VV	58143	810080	4.29%	0.108%
16	4.606	4.587	4.640	VV	84022	992063	5.25%	0.132%
17	4.669	4.640	4.685	VV	14524	281880	1.49%	0.038%
18	4.700	4.685	4.717	VV	19649	234418	1.24%	0.031%
19	4.759	4.717	4.768	VV	26375	404922	2.14%	0.054%
20	4.780	4.768	4.804	VV	47105	527822	2.79%	0.070%
21	4.828	4.804	4.838	VV	88398	829423	4.39%	0.111%
22	4.854	4.838	4.879	VV	265174	2754670	14.58%	0.368%
23	4.905	4.879	4.921	VV	41902	670618	3.55%	0.090%
24	4.941	4.921	4.953	VV	20484	310634	1.64%	0.041%
25	4.971	4.953	4.986	VV	36999	524053	2.77%	0.070%
26	4.998	4.986	5.019	VV	28807	503414	2.66%	0.067%
27	5.037	5.019	5.049	VV	55300	731613	3.87%	0.098%
28	5.063	5.049	5.077	VV	68550	789706	4.18%	0.105%
29	5.085	5.077	5.092	VV	30148	249579	1.32%	0.033%
30	5.104	5.092	5.133	VV	37590	639804	3.39%	0.085%
31	5.145	5.133	5.153	VV	20153	200564	1.06%	0.027%
32	5.171	5.153	5.206	VV	226009	3213400	17.01%	0.429%
33	5.217	5.206	5.227	VV	25267	277136	1.47%	0.037%
34	5.252	5.227	5.275	VV	40477	802518	4.25%	0.107%
35	5.295	5.275	5.308	VV	22986	370698	1.96%	0.049%
36	5.345	5.308	5.373	VV	127784	2771117	14.67%	0.370%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

37	5.384	5.373	5.401	VV	102928	1121574	5.94%	0.150%
38	5.413	5.401	5.427	VV	44941	566393		
39	5.444	5.427	5.480	VV	251499	3820995	20	
40	5.497	5.480	5.514	VV	141940	1582514	8	
41	5.537	5.514	5.548	VV	50397	814123	4	
42	5.559	5.548	5.570	VV	51933	561012	2	
43	5.579	5.570	5.602	VV	46330	562431	2.98%	0.075%
44	5.627	5.602	5.652	VV	95043	1301725	6.89%	0.174%
45	5.677	5.652	5.686	VV	95142	1361951	7.21%	0.182%
46	5.705	5.686	5.725	VV	920356	8948073	47.36%	1.194%
47	5.744	5.725	5.778	VV	144442	2349773	12.44%	0.314%
48	5.798	5.778	5.813	VV	90714	1199000	6.35%	0.160%
49	5.846	5.813	5.868	VV	222689	3836330	20.31%	0.512%
50	5.882	5.868	5.907	VV	127267	2102954	11.13%	0.281%
51	5.923	5.907	5.938	VV	175157	2074633	10.98%	0.277%
52	5.965	5.938	5.988	VV	160328	3072211	16.26%	0.410%
53	6.004	5.988	6.016	VV	97279	1303575	6.90%	0.174%
54	6.027	6.016	6.040	VV	88126	1142139	6.05%	0.152%
55	6.068	6.040	6.110	VV	195782	4617485	24.44%	0.616%
56	6.150	6.110	6.193	VV	159374	4193594	22.20%	0.560%
57	6.228	6.193	6.246	VV	150762	3176693	16.82%	0.424%
58	6.261	6.246	6.272	VV	109359	1391429	7.37%	0.186%
59	6.284	6.272	6.296	VV	112140	1354850	7.17%	0.181%
60	6.304	6.296	6.313	VV	92050	930767	4.93%	0.124%
61	6.336	6.313	6.355	VV	151146	2773626	14.68%	0.370%
62	6.388	6.355	6.402	VV	161855	2909215	15.40%	0.388%
63	6.415	6.402	6.435	VV	170349	2173661	11.51%	0.290%
64	6.456	6.435	6.474	VV	161248	2459905	13.02%	0.328%
65	6.490	6.474	6.503	VV	108088	1410398	7.47%	0.188%
66	6.531	6.503	6.548	VV	269537	3945786	20.89%	0.527%
67	6.558	6.548	6.570	VV	87385	1045537	5.53%	0.140%
68	6.584	6.570	6.600	VV	96798	1375215	7.28%	0.184%
69	6.617	6.600	6.630	VV	103498	1491862	7.90%	0.199%
70	6.657	6.630	6.678	VV	190437	4259162	22.55%	0.568%
71	6.693	6.678	6.729	VV	204640	4717997	24.97%	0.630%
72	6.755	6.729	6.792	VV	1117153	14115895	74.72%	1.884%
73	6.805	6.792	6.820	VV	112003	1591491	8.42%	0.212%
74	6.849	6.820	6.865	VV	406057	6248643	33.08%	0.834%
75	6.885	6.865	6.921	VV	468658	8547323	45.24%	1.141%
76	6.943	6.921	6.977	VV	130048	3417982	18.09%	0.456%
77	6.995	6.977	7.010	VV	102554	1770316	9.37%	0.236%
78	7.033	7.010	7.046	VV	265403	3705961	19.62%	0.495%
79	7.057	7.046	7.079	VV	197128	3248158	17.19%	0.434%
80	7.093	7.079	7.097	VV	149648	1502106	7.95%	0.200%
81	7.111	7.097	7.122	VV	218463	2844127	15.05%	0.380%
82	7.131	7.122	7.174	VV	187765	4035220	21.36%	0.539%
83	7.190	7.174	7.212	VV	104449	2225655	11.78%	0.297%
84	7.233	7.212	7.263	VV	278713	5698930	30.17%	0.761%
85	7.280	7.263	7.302	VV	246164	3743898	19.82%	0.500%
86	7.334	7.302	7.343	VV	116920	2554279	13.52%	0.341%
87	7.368	7.343	7.410	VV	1096683	14909930	78.92%	1.990%
88	7.420	7.410	7.436	VV	138980	1925896	10.19%	0.257%
89	7.440	7.436	7.448	VV	109391	791069	4.19%	0.106%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MSD

rteres

90	7.460	7.448	7.470	VV	124011	1483874	7.85%	0.198%
91	7.485	7.470	7.504	VV	139563	2483924	13	
92	7.522	7.504	7.537	VV	191626	2816023	14	
93	7.552	7.537	7.582	VV	173075	3924089	20	
94	7.604	7.582	7.611	VV	162020	2467139	13	
95	7.627	7.611	7.641	VV	210278	3411213	18	
96	7.652	7.641	7.665	VV	218833	2699582	14.29%	0.360%
97	7.677	7.665	7.691	VV	203019	2664306	14.10%	0.356%
98	7.697	7.691	7.705	VV	139823	1115391	5.90%	0.149%
99	7.724	7.705	7.734	VV	361113	4467281	23.65%	0.596%
100	7.739	7.734	7.745	VV	309699	2108340	11.16%	0.281%
101	7.756	7.745	7.785	VV	368355	5997533	31.75%	0.801%
102	7.799	7.785	7.815	VV	145811	2392605	12.66%	0.319%
103	7.842	7.815	7.857	VV	572760	8093986	42.84%	1.080%
104	7.869	7.857	7.886	VV	450272	5303355	28.07%	0.708%
105	7.903	7.886	7.918	VV	228767	3765562	19.93%	0.503%
106	7.934	7.918	7.947	VV	227117	3397449	17.98%	0.453%
107	7.959	7.947	7.976	VV	205277	3252774	17.22%	0.434%
108	8.023	7.976	8.052	VV	1117935	18891782	100.00%	2.522%
109	8.072	8.052	8.089	VV	213417	3638076	19.26%	0.486%
110	8.109	8.089	8.122	VV	225347	3490667	18.48%	0.466%
111	8.139	8.122	8.155	VV	255743	3967926	21.00%	0.530%
112	8.165	8.155	8.183	VV	171756	2613270	13.83%	0.349%
113	8.219	8.183	8.252	VV	658883	10584041	56.02%	1.413%
114	8.282	8.252	8.291	VV	173838	3400576	18.00%	0.454%
115	8.318	8.291	8.354	VV	1075758	15507715	82.09%	2.070%
116	8.384	8.354	8.408	VV	197622	5272895	27.91%	0.704%
117	8.429	8.408	8.450	VV	201192	4087465	21.64%	0.546%
118	8.469	8.450	8.495	VV	249807	4944650	26.17%	0.660%
119	8.510	8.495	8.522	VV	153671	2265791	11.99%	0.302%
120	8.556	8.522	8.575	VV	359281	7072273	37.44%	0.944%
121	8.587	8.575	8.612	VV	217786	3916581	20.73%	0.523%
122	8.627	8.612	8.638	VV	176241	2523048	13.36%	0.337%
123	8.654	8.638	8.666	VV	195302	2912657	15.42%	0.389%
124	8.679	8.666	8.690	VV	210706	2683565	14.20%	0.358%
125	8.697	8.690	8.709	VV	198397	2100926	11.12%	0.280%
126	8.724	8.709	8.741	VV	353901	4484585	23.74%	0.599%
127	8.765	8.741	8.804	VV	413983	8032192	42.52%	1.072%
128	8.834	8.804	8.849	VV	134703	3279455	17.36%	0.438%
129	8.878	8.849	8.895	VV	355924	5830382	30.86%	0.778%
130	8.909	8.895	8.927	VV	273498	3632645	19.23%	0.485%
131	8.939	8.927	8.947	VV	125226	1435261	7.60%	0.192%
132	8.961	8.947	8.974	VV	139994	2073650	10.98%	0.277%
133	8.990	8.974	8.998	VV	182696	2207070	11.68%	0.295%
134	9.013	8.998	9.034	VV	343065	4938299	26.14%	0.659%
135	9.041	9.034	9.053	VV	133470	1474759	7.81%	0.197%
136	9.098	9.053	9.141	VV	1062758	16930130	89.62%	2.260%
137	9.171	9.141	9.190	VV	319529	5671897	30.02%	0.757%
138	9.200	9.190	9.224	VV	150477	2674828	14.16%	0.357%
139	9.244	9.224	9.258	VV	137495	2564625	13.58%	0.342%
140	9.279	9.258	9.286	VV	189046	2650338	14.03%	0.354%
141	9.297	9.286	9.316	VV	222609	3063275	16.21%	0.409%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

142	9.335	9.316	9.358	VV	149982	3220452	17.05%	0.430%
143	9.374	9.358	9.395	VV	156122	2899394	15	
144	9.415	9.395	9.441	VV	171446	4024218	21	
145	9.449	9.441	9.456	VV	138275	1236493	6	
146	9.467	9.456	9.483	VV	157697	2198161	11	
147	9.520	9.483	9.555	VV	221990	6679980	35	
148	9.568	9.555	9.587	VV	118157	2054604	10.88%	0.274%
149	9.608	9.587	9.641	VV	128948	3519152	18.63%	0.470%
150	9.675	9.641	9.727	VV	171563	5674501	30.04%	0.757%
151	9.744	9.727	9.763	VV	95354	1914962	10.14%	0.256%
152	9.777	9.763	9.805	VV	100331	2298337	12.17%	0.307%
153	9.832	9.805	9.860	VV	170195	3775340	19.98%	0.504%
154	9.880	9.860	9.888	VV	109980	1645136	8.71%	0.220%
155	9.906	9.888	9.922	VV	135843	2483290	13.14%	0.331%
156	9.936	9.922	9.947	VV	163297	2190065	11.59%	0.292%
157	9.964	9.947	9.988	VV	197859	3868262	20.48%	0.516%
158	10.005	9.988	10.029	VV	182809	3365066	17.81%	0.449%
159	10.039	10.029	10.061	VV	115074	1920681	10.17%	0.256%
160	10.082	10.061	10.097	VV	163981	2826008	14.96%	0.377%
161	10.102	10.097	10.120	VV	141311	1704719	9.02%	0.228%
162	10.140	10.120	10.160	VV	141310	2799720	14.82%	0.374%
163	10.176	10.160	10.193	VV	124196	2038099	10.79%	0.272%
164	10.214	10.193	10.231	VV	120588	2401752	12.71%	0.321%
165	10.252	10.231	10.267	VV	152917	2669776	14.13%	0.356%
166	10.285	10.267	10.309	VV	135738	2915623	15.43%	0.389%
167	10.329	10.309	10.367	VV	169498	4352974	23.04%	0.581%
168	10.386	10.367	10.404	VV	103188	1974412	10.45%	0.264%
169	10.448	10.404	10.456	VV	103975	2707315	14.33%	0.361%
170	10.485	10.456	10.532	VV	1017311	14320145	75.80%	1.911%
171	10.561	10.532	10.604	VV	983404	13408061	70.97%	1.790%
172	10.619	10.604	10.631	VV	78665	1211088	6.41%	0.162%
173	10.659	10.631	10.683	VV	93815	2576172	13.64%	0.344%
174	10.699	10.683	10.711	VV	85681	1373045	7.27%	0.183%
175	10.729	10.711	10.749	VV	82083	1818276	9.62%	0.243%
176	10.790	10.749	10.812	VV	125478	3561614	18.85%	0.475%
177	10.829	10.812	10.858	VV	101022	2523011	13.36%	0.337%
178	10.874	10.858	10.896	VV	110092	2212362	11.71%	0.295%
179	10.905	10.896	10.931	VV	89261	1712562	9.07%	0.229%
180	10.953	10.931	10.984	VV	160934	3651549	19.33%	0.487%
181	10.998	10.984	11.020	VV	124705	2096155	11.10%	0.280%
182	11.044	11.020	11.061	VV	113501	2348005	12.43%	0.313%
183	11.070	11.061	11.093	VV	91529	1552123	8.22%	0.207%
184	11.129	11.093	11.157	VV	113244	3226085	17.08%	0.431%
185	11.168	11.157	11.187	VV	76986	1255302	6.64%	0.168%
186	11.253	11.187	11.292	VV	684832	11563868	61.21%	1.543%
187	11.308	11.292	11.349	VV	125300	2798695	14.81%	0.374%
188	11.381	11.349	11.395	VV	81379	1982112	10.49%	0.265%
189	11.424	11.395	11.441	VV	127148	2573819	13.62%	0.344%
190	11.456	11.441	11.509	VV	107965	3231973	17.11%	0.431%
191	11.532	11.509	11.548	VV	68588	1528375	8.09%	0.204%
192	11.580	11.548	11.600	VV	78902	2273959	12.04%	0.304%
193	11.615	11.600	11.659	VV	85825	2523775	13.36%	0.337%
194	11.674	11.659	11.692	VV	85801	1410001	7.46%	0.188%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

195	11.718	11.692	11.749	VV	64777	2087469	11.05%	0.279%
196	11.775	11.749	11.790	VV	73471	1561291	8	
197	11.809	11.790	11.852	VV	86521	2484095	13	
198	11.869	11.852	11.910	VV	79124	2290362	12	
199	11.922	11.910	11.933	VV	60945	785951	4	
200	11.950	11.933	11.984	VV	72692	1953737	10	
201	11.992	11.984	11.998	VV	54830	451779	2.39%	0.060%
202	12.019	11.998	12.045	VV	67056	1652697	8.75%	0.221%
203	12.062	12.045	12.105	VV	83378	2289706	12.12%	0.306%
204	12.118	12.105	12.124	VV	51439	570861	3.02%	0.076%
205	12.171	12.124	12.191	VV	113282	2924019	15.48%	0.390%
206	12.209	12.191	12.225	VV	79557	1446675	7.66%	0.193%
207	12.252	12.225	12.262	VV	116486	1999753	10.59%	0.267%
208	12.290	12.262	12.365	VV	891945	12531211	66.33%	1.673%
209	12.387	12.365	12.400	VV	46763	921172	4.88%	0.123%
210	12.416	12.400	12.437	VV	59939	1079189	5.71%	0.144%
211	12.470	12.437	12.495	VV	50901	1569383	8.31%	0.209%
212	12.530	12.495	12.550	VV	50404	1544404	8.18%	0.206%
213	12.583	12.550	12.625	VV	918856	11930999	63.15%	1.592%
214	12.636	12.625	12.659	VV	43707	853143	4.52%	0.114%
215	12.690	12.659	12.719	VV	139325	2602071	13.77%	0.347%
216	12.737	12.719	12.742	VV	44867	602456	3.19%	0.080%
217	12.756	12.742	12.780	VV	47982	1004545	5.32%	0.134%
218	12.786	12.780	12.808	VV	38418	605093	3.20%	0.081%
219	12.816	12.808	12.823	VV	31081	262118	1.39%	0.035%
220	12.861	12.823	12.894	VV	104544	2346828	12.42%	0.313%
221	12.913	12.894	12.955	VV	60342	1517157	8.03%	0.203%
222	12.975	12.955	12.988	VV	41571	689908	3.65%	0.092%
223	13.004	12.988	13.034	VV	41231	966516	5.12%	0.129%
224	13.050	13.034	13.065	VV	32014	555008	2.94%	0.074%
225	13.088	13.065	13.117	VV	44279	1086912	5.75%	0.145%
226	13.130	13.117	13.145	VV	32123	518798	2.75%	0.069%
227	13.168	13.145	13.191	VV	37853	887968	4.70%	0.119%
228	13.209	13.191	13.231	VV	27691	612834	3.24%	0.082%
229	13.243	13.231	13.253	VV	24748	299510	1.59%	0.040%
230	13.275	13.253	13.293	VV	32155	651312	3.45%	0.087%
231	13.311	13.293	13.326	VV	30820	561927	2.97%	0.075%
232	13.343	13.326	13.387	VV	35907	1017501	5.39%	0.136%
233	13.394	13.387	13.412	VV	23511	338722	1.79%	0.045%
234	13.442	13.412	13.466	VV	84863	1479836	7.83%	0.198%
235	13.478	13.466	13.500	VV	26142	455644	2.41%	0.061%
236	13.518	13.500	13.534	VV	20727	407468	2.16%	0.054%
237	13.538	13.534	13.560	VV	20590	313824	1.66%	0.042%
238	13.571	13.560	13.600	VV	20781	436200	2.31%	0.058%
239	13.621	13.600	13.653	VV	21569	578217	3.06%	0.077%
240	13.672	13.653	13.691	VV	17154	383561	2.03%	0.051%
241	13.702	13.691	13.719	VV	17711	291053	1.54%	0.039%
242	13.728	13.719	13.744	VV	17107	233732	1.24%	0.031%
243	13.778	13.744	13.801	VV	19993	580527	3.07%	0.077%
244	13.817	13.801	13.828	VV	15468	241433	1.28%	0.032%
245	13.851	13.828	13.867	VV	21553	430459	2.28%	0.057%
246	13.877	13.867	13.910	VV	18881	450580	2.39%	0.060%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

rteres

247	13.920	13.910	13.938	VV	14510	227557	1.20%	0.030%
248	13.944	13.938	13.955	VV	12809	126061	[illegible]	
249	13.981	13.955	13.989	VV	15613	292055	[illegible]	
250	13.999	13.989	14.047	VV	17097	500477	[illegible]	
251	14.079	14.047	14.089	VV	16385	353284	[illegible]	
252	14.097	14.089	14.116	VV	15754	219626	[illegible]	
253	14.136	14.116	14.157	VV	17481	339178	1.80%	0.045%
254	14.172	14.157	14.197	VV	11421	245183	1.30%	0.033%
255	14.218	14.197	14.237	VV	9703	228926	1.21%	0.031%
256	14.254	14.237	14.280	VV	12313	274595	1.45%	0.037%
257	14.295	14.280	14.317	VV	11351	216895	1.15%	0.029%
258	14.326	14.317	14.352	VV	8594	164087	0.87%	0.022%
259	14.376	14.352	14.395	VV	8090	194336	1.03%	0.026%
260	14.450	14.395	14.468	VV	655227	8850153	46.85%	1.181%
261	14.495	14.468	14.517	VV	769788	8849941	46.85%	1.181%
262	14.539	14.517	14.567	VV	57936	870229	4.61%	0.116%
263	14.597	14.567	14.627	VV	10313	320386	1.70%	0.043%
264	14.651	14.627	14.685	VV	10310	313543	1.66%	0.042%
265	14.691	14.685	14.711	VV	7642	109152	0.58%	0.015%
266	14.729	14.711	14.733	VV	6844	85425	0.45%	0.011%
267	14.756	14.733	14.792	VV	9010	245868	1.30%	0.033%
268	14.801	14.792	14.808	VV	5407	48857	0.26%	0.007%
269	14.813	14.808	14.823	VV	5033	43789	0.23%	0.006%
270	14.828	14.823	14.848	VV	5153	69820	0.37%	0.009%
271	14.871	14.848	14.893	VV	8638	173367	0.92%	0.023%
272	14.917	14.893	14.949	VV	18502	386359	2.05%	0.052%
273	14.953	14.949	14.985	VV	7485	125344	0.66%	0.017%
274	15.030	14.985	15.050	VV	5732	179739	0.95%	0.024%
275	15.068	15.050	15.094	VV	6497	127548	0.68%	0.017%
276	15.122	15.094	15.143	VV	10030	182954	0.97%	0.024%
277	15.159	15.143	15.186	VV	5647	108662	0.58%	0.015%
278	15.203	15.186	15.215	VV	3175	46691	0.25%	0.006%
279	15.230	15.215	15.245	VV	4287	65580	0.35%	0.009%
280	15.281	15.245	15.330	VV	6420	222356	1.18%	0.030%
281	15.347	15.330	15.380	VV	3392	85072	0.45%	0.011%
282	15.387	15.380	15.398	VV	3034	27986	0.15%	0.004%
283	15.409	15.398	15.428	VV	3184	50632	0.27%	0.007%
284	15.447	15.428	15.464	VV	3935	65725	0.35%	0.009%
285	15.472	15.464	15.478	VV	2705	22249	0.12%	0.003%
286	15.483	15.478	15.491	VV	2489	17556	0.09%	0.002%
287	15.503	15.491	15.519	VV	2658	36184	0.19%	0.005%
288	15.557	15.519	15.597	VV	46541	661284	3.50%	0.088%
289	15.619	15.597	15.674	VV	2508	54806	0.29%	0.007%
290	15.718	15.674	15.743	PV	3895	83387	0.44%	0.011%
291	15.759	15.743	15.777	VV	1964	26444	0.14%	0.004%
292	15.819	15.777	15.844	VV	2434	62716	0.33%	0.008%
293	15.874	15.844	15.891	VV	1568	32835	0.17%	0.004%
294	15.918	15.891	15.950	VV	3152	70904	0.38%	0.009%
295	16.000	15.950	16.014	VV	563999	8134988	43.06%	1.086%
296	16.033	16.014	16.081	VV	684398	7982495	42.25%	1.065%
297	16.109	16.081	16.150	VV	8288	164451	0.87%	0.022%
298	16.162	16.150	16.179	VV	3005	34493	0.18%	0.005%
299	16.185	16.179	16.204	VV	1327	12353	0.07%	0.002%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MSD

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

300	16.211	16.204	16.217	VV	734	3969	0.02%	0.001%
301	16.223	16.217	16.232	VV	676	4859		
302	16.248	16.232	16.270	VV	2809	35393		
303	16.313	16.270	16.334	VV	7917	114739		
304	16.376	16.334	16.400	PBA	620345	7500261	39	
305	16.499	16.449	16.523	PV	40461	616197		
306	16.541	16.523	16.578	VV	12653	174098	0.92%	0.023%
307	16.593	16.578	16.609	VV	345	2505	0.01%	0.000%
308	16.619	16.609	16.645	VV	451	4186	0.02%	0.001%
309	16.648	16.645	16.661	VV	563	2098	0.01%	0.000%
310	16.667	16.661	16.677	VV	403	1311	0.01%	0.000%
311	16.693	16.677	16.699	PV	1381	10278	0.05%	0.001%
312	16.703	16.699	16.730	VV	1142	15286	0.08%	0.002%
313	16.737	16.730	16.755	VV	1459	17559	0.09%	0.002%
314	16.779	16.755	16.802	VV	1982	36000	0.19%	0.005%
315	16.817	16.802	16.837	VV	1087	12331	0.07%	0.002%
316	16.872	16.837	16.890	VV	3350	56958	0.30%	0.008%
317	16.904	16.890	16.921	VV	1952	22484	0.12%	0.003%
318	16.943	16.921	16.970	PV	2136	37846	0.20%	0.005%
319	16.978	16.970	17.009	VV	1540	18441	0.10%	0.002%
320	17.031	17.009	17.041	VV	1363	18067	0.10%	0.002%
321	17.048	17.041	17.069	VV	1362	15100	0.08%	0.002%
322	17.087	17.069	17.120	VV	2271	36398	0.19%	0.005%
323	17.129	17.120	17.133	VV	539	2721	0.01%	0.000%
324	17.157	17.133	17.164	VV	1374	15201	0.08%	0.002%
325	17.169	17.164	17.179	VV	902	6390	0.03%	0.001%
326	17.188	17.179	17.214	VV	1213	9883	0.05%	0.001%
327	17.231	17.214	17.236	PV	774	6820	0.04%	0.001%
328	17.242	17.236	17.250	VV	895	6434	0.03%	0.001%
329	17.260	17.250	17.265	VV	1536	10824	0.06%	0.001%
330	17.271	17.265	17.295	VV	1590	15622	0.08%	0.002%
331	17.345	17.295	17.352	VV	2299	43702	0.23%	0.006%
332	17.384	17.352	17.427	VV	39806	542554	2.87%	0.072%
333	17.438	17.427	17.450	VV	832	6459	0.03%	0.001%
334	17.476	17.450	17.511	VV	2406	40798	0.22%	0.005%
335	17.524	17.511	17.546	VV	1263	18732	0.10%	0.003%
336	17.551	17.546	17.564	VV	638	3810	0.02%	0.001%
337	17.568	17.564	17.575	VV	476	1621	0.01%	0.000%
338	17.591	17.575	17.609	VV	866	8548	0.05%	0.001%
339	17.640	17.609	17.660	PV	1494	19095	0.10%	0.003%
340	17.678	17.660	17.697	VV	1541	21797	0.12%	0.003%
341	17.744	17.697	17.757	VV	552158	7908362	41.86%	1.056%
342	17.780	17.757	17.848	VV	589330	7552256	39.98%	1.008%
343	17.855	17.848	17.864	VV	2775	22972	0.12%	0.003%
344	17.868	17.864	17.874	VV	2330	12858	0.07%	0.002%
345	17.879	17.874	17.890	VV	2188	19040	0.10%	0.003%
346	17.909	17.890	17.947	VV	2462	65091	0.34%	0.009%
347	17.995	17.947	18.050	VV	508147	7177249	37.99%	0.958%
348	18.056	18.050	18.077	VV	1904	21882	0.12%	0.003%
349	18.084	18.077	18.104	VV	1140	11646	0.06%	0.002%
350	18.133	18.104	18.151	PV	1365	23205	0.12%	0.003%
351	18.156	18.151	18.169	VV	614	4050	0.02%	0.001%

Instrument :
FID_D
ClientSampleId :
EX-8-TPH-1MSD

rteres
Sum of corrected areas: 749206259

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/09/2024
Supervised By :Ankita Jodhani 12/09/2024

Aromatic EPH 111424.M Sat Dec 07 03:42:13 2024

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

Manual Integration Report

Sequence:	FC111424AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
5 PPM ALIPHATIC HC	FC067752.D	n-Hexatriacontane (C36)	yogesh	11/15/2024 9:29:46 AM	Ankita	11/15/2024 10:13:22	Peak Integrated by Software

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

Manual Integration Report

Sequence:	FC120624AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB165427BS	FC067929.D	n-Octacosane (C28)	yogesh	12/9/2024 8:32:01 AM	Ankita	12/9/2024 10:16:30	Peak Integrated by Software
PB165427BSD	FC067930.D	n-Docosane (C22)	yogesh	12/9/2024 8:32:02 AM	Ankita	12/9/2024 10:16:32	Peak Integrated by Software
PB165427BSD	FC067930.D	n-Octacosane (C28)	yogesh	12/9/2024 8:32:02 AM	Ankita	12/9/2024 10:16:32	Peak Integrated by Software
P5147-01	FC067931.D	1-chlorooctadecane (SURR)	yogesh	12/9/2024 8:32:04 AM	Ankita	12/9/2024 10:16:34	Peak Integrated by Software
P5147-01D	FC067932.D	1-chlorooctadecane (SURR)	yogesh	12/9/2024 8:32:05 AM	Ankita	12/9/2024 10:16:35	Peak Integrated by Software
P5147-01MS	FC067933.D	1-chlorooctadecane (SURR)	yogesh	12/10/2024 8:14:17 AM	Ankita	12/10/2024 10:28:06	Peak Integrated by Software
P5147-01MS	FC067933.D	n-Decane (C10)	yogesh	12/10/2024 8:14:17 AM	Ankita	12/10/2024 10:28:06	Peak Integrated by Software
P5147-01MS	FC067933.D	n-Docosane (C22)	yogesh	12/10/2024 8:14:17 AM	Ankita	12/10/2024 10:28:06	Peak Integrated by Software
P5147-01MS	FC067933.D	n-Dodecane (C12)	yogesh	12/10/2024 8:14:17 AM	Ankita	12/10/2024 10:28:06	Peak Integrated by Software
P5147-01MS	FC067933.D	n-Eicosane (C20)	yogesh	12/10/2024 8:14:17 AM	Ankita	12/10/2024 10:28:06	Peak Integrated by Software
P5147-01MS	FC067933.D	n-Heneicosane (C21)	yogesh	12/10/2024 8:14:17 AM	Ankita	12/10/2024 10:28:06	Peak Integrated by Software
P5147-01MS	FC067933.D	n-Hexadecane (C16)	yogesh	12/10/2024 8:14:17 AM	Ankita	12/10/2024 10:28:06	Peak Integrated by Software
P5147-01MS	FC067933.D	n-Octadecane (C18)	yogesh	12/10/2024 8:14:17 AM	Ankita	12/10/2024 10:28:06	Peak Integrated by Software

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

Manual Integration Report

Sequence:	FC120624AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
P5147-01MS	FC067933.D	n-Tetracosane (C24)	yogesh	12/10/2024 8:14:17 AM	Ankita	12/10/2024 10:28:06	Peak Integrated by Software
P5147-01MS	FC067933.D	n-Tetradecane (C14)	yogesh	12/10/2024 8:14:17 AM	Ankita	12/10/2024 10:28:06	Peak Integrated by Software
P5147-01MSD	FC067934.D	1-chlorooctadecane (SURR)	yogesh	12/10/2024 8:14:19 AM	Ankita	12/10/2024 10:28:08	Peak Integrated by Software
P5147-01MSD	FC067934.D	n-Decane (C10)	yogesh	12/10/2024 8:14:19 AM	Ankita	12/10/2024 10:28:08	Peak Integrated by Software
P5147-01MSD	FC067934.D	n-Dodecane (C12)	yogesh	12/10/2024 8:14:19 AM	Ankita	12/10/2024 10:28:08	Peak Integrated by Software
P5147-01MSD	FC067934.D	n-Eicosane (C20)	yogesh	12/10/2024 8:14:19 AM	Ankita	12/10/2024 10:28:08	Peak Integrated by Software
P5147-01MSD	FC067934.D	n-Heneicosane (C21)	yogesh	12/10/2024 8:14:19 AM	Ankita	12/10/2024 10:28:08	Peak Integrated by Software
P5147-01MSD	FC067934.D	n-Hexadecane (C16)	yogesh	12/10/2024 8:14:19 AM	Ankita	12/10/2024 10:28:08	Peak Integrated by Software
P5147-01MSD	FC067934.D	n-Octadecane (C18)	yogesh	12/10/2024 8:14:19 AM	Ankita	12/10/2024 10:28:08	Peak Integrated by Software
P5147-01MSD	FC067934.D	n-Tetradecane (C14)	yogesh	12/10/2024 8:14:19 AM	Ankita	12/10/2024 10:28:08	Peak Integrated by Software
P5147-02	FC067935.D	1-chlorooctadecane (SURR)	yogesh	12/9/2024 8:32:10 AM	Ankita	12/9/2024 10:16:40	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC067937.D	n-Hexatriacontane (C36)	yogesh	12/9/2024 8:32:12 AM	Ankita	12/9/2024 10:16:42	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC067937.D	n-Tetratriacontane (C34)	yogesh	12/9/2024 8:32:12 AM	Ankita	12/9/2024 10:16:42	Peak Integrated by Software

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

Manual Integration Report

Sequence:	FC120624AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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

Manual Integration Report

Sequence:	FC120924AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
P5147-01DL	FC067941.D	1-chlorooctadecane (SURR)	yogesh	12/10/2024 8:11:14 AM	Ankita	12/10/2024 10:27:27	Peak Integrated by Software
P5147-02DL	FC067942.D	1-chlorooctadecane (SURR)	yogesh	12/10/2024 8:11:16 AM	Ankita	12/10/2024 10:27:30	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC067945.D	n-Octadecane (C18)	yogesh	12/10/2024 8:11:18 AM	Ankita	12/10/2024 10:27:31	Peak Integrated by Software
PB165478BS	FC067947.D	n-Tetracosane (C24)	yogesh	12/10/2024 8:11:19 AM	Ankita	12/10/2024 10:27:34	Peak Integrated by Software
PB165478BSD	FC067948.D	n-Tetracosane (C24)	yogesh	12/10/2024 8:11:22 AM	Ankita	12/10/2024 10:27:35	Peak Integrated by Software
P5174-01MS	FC067951.D	n-Hexadecane (C16)	yogesh	12/10/2024 8:11:24 AM	Ankita	12/10/2024 10:27:37	Peak Integrated by Software
P5174-01MS	FC067951.D	n-Hexatriacontane (C36)	yogesh	12/10/2024 8:11:24 AM	Ankita	12/10/2024 10:27:37	Peak Integrated by Software
P5174-01MS	FC067951.D	n-Octatriacontane (C38)	yogesh	12/10/2024 8:11:24 AM	Ankita	12/10/2024 10:27:37	Peak Integrated by Software
P5174-01MS	FC067951.D	n-Tetracosane (C24)	yogesh	12/10/2024 8:11:24 AM	Ankita	12/10/2024 10:27:37	Peak Integrated by Software
P5174-01MS	FC067951.D	n-Tetradecane (C14)	yogesh	12/10/2024 8:11:24 AM	Ankita	12/10/2024 10:27:37	Peak Integrated by Software
P5174-01MSD	FC067952.D	n-Hexadecane (C16)	yogesh	12/10/2024 8:11:26 AM	Ankita	12/10/2024 10:27:38	Peak Integrated by Software
P5174-01MSD	FC067952.D	n-Octadecane (C18)	yogesh	12/10/2024 8:11:26 AM	Ankita	12/10/2024 10:27:38	Peak Integrated by Software
P5174-01MSD	FC067952.D	n-Tetracosane (C24)	yogesh	12/10/2024 8:11:26 AM	Ankita	12/10/2024 10:27:38	Peak Integrated by Software

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

Manual Integration Report

Sequence:	FC120924AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
P5174-01MSD	FC067952.D	n-Tetradecane (C14)	yogesh	12/10/2024 8:11:26 AM	Ankita	12/10/2024 10:27:38	Peak Integrated by Software
PB165500BS	FC067954.D	n-Hexatriacontane (C36)	yogesh	12/10/2024 8:11:27 AM	Ankita	12/10/2024 10:27:40	Peak Integrated by Software
PB165500BSD	FC067955.D	n-Decane (C10)	yogesh	12/10/2024 8:11:29 AM	Ankita	12/10/2024 10:27:41	Peak Integrated by Software
P5145-01	FC067956.D	ortho-Terphenyl (SURR)	yogesh	12/10/2024 8:11:31 AM	Ankita	12/10/2024 10:27:43	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC067958.D	n-Octatriacontane (C38)	yogesh	12/10/2024 8:11:33 AM	Ankita	12/10/2024 10:27:45	Peak Integrated by Software

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

Manual Integration Report

Sequence:	FD111424AR	Instrument	FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
10 PPM AROMATIC HC	FD048732.D	Acenaphthylene (C15.06)	yogesh	11/15/2024 9:30:06 AM	Ankita	11/15/2024 10:08:28	Peak Integrated by Software
5 PPM AROMATIC HC	FD048733.D	Acenaphthylene (C15.06)	yogesh	11/15/2024 9:30:08 AM	Ankita	11/15/2024 10:08:30	Peak Integrated by Software

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

Manual Integration Report

Sequence:	FD120624AR	Instrument	FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM AROMATIC HC	FD048835.D	benzo[b]fluoranthene (C30.41)	yogesh	12/9/2024 8:46:26 AM	Ankita	12/9/2024 10:20:37	Peak Integrated by Software
20 PPM AROMATIC HC	FD048835.D	Bnezo[k]fluoranthene (C30.14)	yogesh	12/9/2024 8:46:26 AM	Ankita	12/9/2024 10:20:37	Peak Integrated by Software
PB165427BS	FD048837.D	Fluoranthene (C21.85)	yogesh	12/9/2024 8:46:28 AM	Ankita	12/9/2024 10:20:38	Peak Integrated by Software
PB165427BSD	FD048838.D	benzo[b]fluoranthene (C30.41)	yogesh	12/9/2024 8:46:29 AM	Ankita	12/9/2024 10:20:40	Peak Integrated by Software
PB165427BSD	FD048838.D	Bnezo[k]fluoranthene (C30.14)	yogesh	12/9/2024 8:46:29 AM	Ankita	12/9/2024 10:20:40	Peak Integrated by Software
PB165427BSD	FD048838.D	Fluoranthene (C21.85)	yogesh	12/9/2024 8:46:29 AM	Ankita	12/9/2024 10:20:40	Peak Integrated by Software
P5147-01MS	FD048841.D	Acenaphthylene (C15.06)	yogesh	12/9/2024 8:46:31 AM	Ankita	12/9/2024 10:20:41	Peak Integrated by Software
P5147-01MS	FD048841.D	Naphthalene (C11.7)	yogesh	12/9/2024 8:46:31 AM	Ankita	12/9/2024 10:20:41	Peak Integrated by Software
P5147-01MSD	FD048842.D	Acenaphthylene (C15.06)	yogesh	12/9/2024 8:46:32 AM	Ankita	12/9/2024 10:20:43	Peak Integrated by Software
P5147-01MSD	FD048842.D	Naphthalene (C11.7)	yogesh	12/9/2024 8:46:32 AM	Ankita	12/9/2024 10:20:43	Peak Integrated by Software
P5147-02	FD048843.D	ortho-Terphenyl (SURR)	yogesh	12/9/2024 8:46:34 AM	Ankita	12/9/2024 10:20:44	Peak Integrated by Software

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

Manual Integration Report

Sequence:	FD120924AR	Instrument	FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
P5147-02DL	FD048850.D	ortho-Terphenyl (SURR)	yogesh	12/10/2024 8:15:11 AM	Ankita	12/10/2024 10:27:08	Peak Integrated by Software
P5145-01	FD048857.D	2-Flurobiphenyl (SURR)	yogesh	12/10/2024 8:15:13 AM	Ankita	12/10/2024 10:27:10	Peak Integrated by Software
P5145-01	FD048857.D	ortho-Terphenyl (SURR)	yogesh	12/10/2024 8:15:13 AM	Ankita	12/10/2024 10:27:10	Peak Integrated by Software

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

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC111424AL

Review By	yogesh	Review On	11/14/2024 11:18:40 AM		
Supervise By	Ankita	Supervise On	11/15/2024 10:13:25 AM		
SubDirectory	FC111424AL	HP Acquire Method		HP Processing Method	FC111424AL

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	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC067746.D	14 Nov 2024 08:52	YP/AJ	Ok
2	I.BLK	FC067747.D	14 Nov 2024 09:27	YP/AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FC067748.D	14 Nov 2024 10:39	YP/AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FC067749.D	14 Nov 2024 11:15	YP/AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FC067750.D	14 Nov 2024 11:51	YP/AJ	Ok
6	10 PPM ALIHPHATIC HC STD4	FC067751.D	14 Nov 2024 12:27	YP/AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FC067752.D	14 Nov 2024 13:03	YP/AJ	Ok,M
8	20 PPM ALIPHATIC HC STD ICV	FC067753.D	14 Nov 2024 13:49	YP/AJ	Ok
9	I.BLK	FC067754.D	14 Nov 2024 14:24	YP/AJ	Ok
10	20 PPM ALIPHATIC HC STD	FC067755.D	14 Nov 2024 15:00	YP/AJ	Ok
11	PB164966BL	FC067756.D	14 Nov 2024 15:36	YP/AJ	Ok
12	PB164966BS	FC067757.D	14 Nov 2024 16:13	YP/AJ	Ok
13	PB164966BSD	FC067758.D	14 Nov 2024 16:49	YP/AJ	Ok
14	P4833-01	FC067759.D	14 Nov 2024 17:25	YP/AJ	Ok
15	P4833-01D	FC067760.D	14 Nov 2024 18:02	YP/AJ	Ok
16	P4833-01MS	FC067761.D	14 Nov 2024 18:38	YP/AJ	Ok
17	P4833-01MSD	FC067762.D	14 Nov 2024 19:14	YP/AJ	Ok
18	P4833-02	FC067763.D	15 Nov 2024 02:06	YP/AJ	Ok
19	P4833-05	FC067764.D	15 Nov 2024 02:41	YP/AJ	Ok
20	P4833-06	FC067765.D	15 Nov 2024 03:17	YP/AJ	Ok
21	I.BLK	FC067766.D	15 Nov 2024 04:58	YP/AJ	Ok

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

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC111424AL

Review By	yogesh	Review On	11/14/2024 11:18:40 AM		
Supervise By	Ankita	Supervise On	11/15/2024 10:13:25 AM		
SubDirectory	FC111424AL	HP Acquire Method		HP Processing Method	FC111424AL

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	

22	20 PPM ALIPHATIC HC STD	FC067767.D	15 Nov 2024 05:34	YP/AJ	Ok

M : Manual Integration

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

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC120624AL

Review By	yogesh	Review On	12/9/2024 10:59:11 AM		
Supervise By	Ankita	Supervise On	12/9/2024 11:02:21 AM		
SubDirectory	FC120624AL	HP Acquire Method		HP Processing Method	FC111424AL

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	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC067925.D	06 Dec 2024 13:18	YP/AJ	Ok
2	I.BLK	FC067926.D	06 Dec 2024 13:54	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC067927.D	06 Dec 2024 14:29	YP/AJ	Ok
4	PB165427BL	FC067928.D	06 Dec 2024 16:16	YP/AJ	Ok
5	PB165427BS	FC067929.D	06 Dec 2024 16:51	YP/AJ	Ok,M
6	PB165427BSD	FC067930.D	06 Dec 2024 17:27	YP/AJ	Ok,M
7	P5147-01	FC067931.D	06 Dec 2024 18:02	YP/AJ	Dilution
8	P5147-01D	FC067932.D	06 Dec 2024 18:38	YP/AJ	Ok,M
9	P5147-01MS	FC067933.D	06 Dec 2024 19:13	YP/AJ	Ok,M
10	P5147-01MSD	FC067934.D	06 Dec 2024 19:49	YP/AJ	Ok,M
11	P5147-02	FC067935.D	06 Dec 2024 20:24	YP/AJ	Dilution
12	I.BLK	FC067936.D	06 Dec 2024 20:59	YP/AJ	Ok
13	20 PPM ALIPHATIC HC STD	FC067937.D	06 Dec 2024 21:35	YP/AJ	Ok,M

M : Manual Integration

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

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC120924AL

Review By	yogesh	Review On	12/9/2024 11:36:46 AM		
Supervise By	Ankita	Supervise On	12/10/2024 10:27:55 AM		
SubDirectory	FC120924AL	HP Acquire Method		HP Processing Method	FC111424AL

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	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC067938.D	09 Dec 2024 07:54	YP/AJ	Ok
2	I.BLK	FC067939.D	09 Dec 2024 08:28	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC067940.D	09 Dec 2024 09:03	YP/AJ	Ok
4	P5147-01DL	FC067941.D	09 Dec 2024 09:38	YP/AJ	Ok,M
5	P5147-02DL	FC067942.D	09 Dec 2024 10:14	YP/AJ	Dilution
6	P5147-02DL2	FC067943.D	09 Dec 2024 10:50	YP/AJ	Ok
7	I.BLK	FC067944.D	09 Dec 2024 12:02	YP/AJ	Ok
8	20 PPM ALIPHATIC HC STD	FC067945.D	09 Dec 2024 13:14	YP/AJ	Ok,M
9	PB165478BL	FC067946.D	09 Dec 2024 13:51	YP/AJ	Ok
10	PB165478BS	FC067947.D	09 Dec 2024 14:28	YP/AJ	Ok,M
11	PB165478BSD	FC067948.D	09 Dec 2024 15:05	YP/AJ	Ok,M
12	P5174-01	FC067949.D	09 Dec 2024 15:41	YP/AJ	Ok
13	P5174-01D	FC067950.D	09 Dec 2024 16:18	YP/AJ	Ok
14	P5174-01MS	FC067951.D	09 Dec 2024 16:54	YP/AJ	Ok,M
15	P5174-01MSD	FC067952.D	09 Dec 2024 17:31	YP/AJ	Ok,M
16	PB165500BL	FC067953.D	09 Dec 2024 18:07	YP/AJ	Ok
17	PB165500BS	FC067954.D	09 Dec 2024 18:44	YP/AJ	Ok,M
18	PB165500BSD	FC067955.D	10 Dec 2024 00:34	YP/AJ	Ok,M
19	P5145-01	FC067956.D	10 Dec 2024 01:09	YP/AJ	Dilution
20	I.BLK	FC067957.D	10 Dec 2024 01:46	YP/AJ	Ok
21	20 PPM ALIPHATIC HC STD	FC067958.D	10 Dec 2024 02:22	YP/AJ	Ok,M

M : Manual Integration

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

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD111424AR

Review By	yogesh	Review On	11/14/2024 11:28:45 AM		
Supervise By	Ankita	Supervise On	11/15/2024 10:08:51 AM		
SubDirectory	FD111424AR	HP Acquire Method		HP Processing Method	FD111424AR

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	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FD048727.D	14 Nov 2024 08:52	YP/AJ	Ok
2	I.BLK	FD048728.D	14 Nov 2024 09:27	YP/AJ	Ok
3	100 PPM AROMATIC HC STD1	FD048729.D	14 Nov 2024 10:39	YP/AJ	Ok
4	50 PPM AROMATIC HC STD2	FD048730.D	14 Nov 2024 11:15	YP/AJ	Ok
5	20 PPM AROMATIC HC STD3	FD048731.D	14 Nov 2024 11:51	YP/AJ	Ok
6	10 PPM AROMATIC HC STD4	FD048732.D	14 Nov 2024 12:27	YP/AJ	Ok,M
7	5 PPM AROMATIC HC STD5	FD048733.D	14 Nov 2024 13:03	YP/AJ	Ok,M
8	20 PPM AROMATIC HC STD ICV	FD048734.D	14 Nov 2024 13:49	YP/AJ	Ok
9	I.BLK	FD048735.D	14 Nov 2024 14:24	YP/AJ	Ok
10	20 PPM AROMATIC HC STD	FD048736.D	14 Nov 2024 15:00	YP/AJ	Ok

M : Manual Integration

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

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD120624AR

Review By	yogesh	Review On	12/9/2024 11:01:27 AM		
Supervise By	Ankita	Supervise On	12/9/2024 11:04:22 AM		
SubDirectory	FD120624AR	HP Acquire Method		HP Processing Method	FD120624AR

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	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FD048833.D	06 Dec 2024 13:18	YP/AJ	Ok
2	I.BLK	FD048834.D	06 Dec 2024 13:54	YP/AJ	Ok
3	20 PPM AROMATIC HC STD	FD048835.D	06 Dec 2024 15:05	YP/AJ	Ok,M
4	PB165427BL	FD048836.D	06 Dec 2024 16:16	YP/AJ	Ok
5	PB165427BS	FD048837.D	06 Dec 2024 16:51	YP/AJ	Ok,M
6	PB165427BSD	FD048838.D	06 Dec 2024 17:27	YP/AJ	Ok,M
7	P5147-01	FD048839.D	06 Dec 2024 18:02	YP/AJ	Dilution
8	P5147-01D	FD048840.D	06 Dec 2024 18:38	YP/AJ	Ok
9	P5147-01MS	FD048841.D	06 Dec 2024 19:13	YP/AJ	Ok,M
10	P5147-01MSD	FD048842.D	06 Dec 2024 19:49	YP/AJ	Ok,M
11	P5147-02	FD048843.D	06 Dec 2024 20:24	YP/AJ	Dilution
12	I.BLK	FD048844.D	06 Dec 2024 20:59	YP/AJ	Ok
13	20 PPM AROMATIC HC STD	FD048845.D	06 Dec 2024 21:35	YP/AJ	Ok

M : Manual Integration

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

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD120924AR

Review By	yogesh	Review On	12/9/2024 11:38:10 AM		
Supervise By	Ankita	Supervise On	12/10/2024 10:27:13 AM		
SubDirectory	FD120924AR	HP Acquire Method		HP Processing Method	FD120624AR

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	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FD048846.D	09 Dec 2024 07:54	YP/AJ	Ok
2	I.BLK	FD048847.D	09 Dec 2024 08:28	YP/AJ	Ok
3	20 PPM AROMATIC HC STD	FD048848.D	09 Dec 2024 09:38	YP/AJ	Ok
4	P5147-01DL	FD048849.D	09 Dec 2024 10:14	YP/AJ	Ok
5	P5147-02DL	FD048850.D	09 Dec 2024 10:50	YP/AJ	Ok,M
6	I.BLK	FD048851.D	09 Dec 2024 12:02	YP/AJ	Ok
7	20 PPM AROMATIC HC STD	FD048852.D	09 Dec 2024 12:38	YP/AJ	Ok
8	PP24077	FD048853.D	09 Dec 2024 15:41	YP/AJ	Ok
9	PB165500BL	FD048854.D	09 Dec 2024 16:18	YP/AJ	Ok
10	PB165500BS	FD048855.D	09 Dec 2024 16:54	YP/AJ	Ok
11	PB165500BSD	FD048856.D	09 Dec 2024 17:31	YP/AJ	Ok
12	P5145-01	FD048857.D	09 Dec 2024 18:07	YP/AJ	Ok,M
13	I.BLK	FD048858.D	09 Dec 2024 18:44	YP/AJ	Ok
14	20 PPM AROMATIC HC STD	FD048859.D	10 Dec 2024 00:34	YP/AJ	Ok

M : Manual Integration

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

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC111424AL

Review By	yogesh	Review On	11/14/2024 11:18:40 AM		
Supervise By	Ankita	Supervise On	11/15/2024 10:13:25 AM		
SubDirectory	FC111424AL	HP Acquire Method		HP Processing Method	FC111424AL

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	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FC067746.D	14 Nov 2024 08:52		YP/AJ	Ok
2	I.BLK	I.BLK	FC067747.D	14 Nov 2024 09:27		YP/AJ	Ok
3	100 PPM ALIPHATIC H	100 PPM ALIPHATIC H	FC067748.D	14 Nov 2024 10:39		YP/AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FC067749.D	14 Nov 2024 11:15		YP/AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067750.D	14 Nov 2024 11:51		YP/AJ	Ok
6	10 PPM ALIHPHATIC H	10 PPM ALIHPHATIC H	FC067751.D	14 Nov 2024 12:27		YP/AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FC067752.D	14 Nov 2024 13:03		YP/AJ	Ok,M
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067753.D	14 Nov 2024 13:49		YP/AJ	Ok
9	I.BLK	I.BLK	FC067754.D	14 Nov 2024 14:24		YP/AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067755.D	14 Nov 2024 15:00		YP/AJ	Ok
11	PB164966BL	PB164966BL	FC067756.D	14 Nov 2024 15:36		YP/AJ	Ok
12	PB164966BS	PB164966BS	FC067757.D	14 Nov 2024 16:13		YP/AJ	Ok
13	PB164966BSD	PB164966BSD	FC067758.D	14 Nov 2024 16:49		YP/AJ	Ok
14	P4833-01	MH-731	FC067759.D	14 Nov 2024 17:25		YP/AJ	Ok
15	P4833-01D	P4833-01D	FC067760.D	14 Nov 2024 18:02		YP/AJ	Ok
16	P4833-01MS	MH-731MS	FC067761.D	14 Nov 2024 18:38	FC067759.D	YP/AJ	Ok
17	P4833-01MSD	P4833-01MSD	FC067762.D	14 Nov 2024 19:14	FC067759.D!FC067762.D	YP/AJ	Ok
18	P4833-02	MH-731-EPH	FC067763.D	15 Nov 2024 02:06		YP/AJ	Ok

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

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC111424AL

Review By	yogesh	Review On	11/14/2024 11:18:40 AM		
Supervise By	Ankita	Supervise On	11/15/2024 10:13:25 AM		
SubDirectory	FC111424AL	HP Acquire Method		HP Processing Method	FC111424AL

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	P4833-05	TP-2	FC067764.D	15 Nov 2024 02:41		YP/AJ	Ok
20	P4833-06	TP-2-EPH	FC067765.D	15 Nov 2024 03:17		YP/AJ	Ok
21	I.BLK	I.BLK	FC067766.D	15 Nov 2024 04:58		YP/AJ	Ok
22	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067767.D	15 Nov 2024 05:34		YP/AJ	Ok

M : Manual Integration

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

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC120624AL

Review By	yogesh	Review On	12/9/2024 10:59:11 AM		
Supervise By	Ankita	Supervise On	12/9/2024 11:02:21 AM		
SubDirectory	FC120624AL	HP Acquire Method		HP Processing Method	FC111424AL

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	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FC067925.D	06 Dec 2024 13:18		YP/AJ	Ok
2	I.BLK	I.BLK	FC067926.D	06 Dec 2024 13:54		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067927.D	06 Dec 2024 14:29		YP/AJ	Ok
4	PB165427BL	PB165427BL	FC067928.D	06 Dec 2024 16:16		YP/AJ	Ok
5	PB165427BS	PB165427BS	FC067929.D	06 Dec 2024 16:51		YP/AJ	Ok,M
6	PB165427BSD	PB165427BSD	FC067930.D	06 Dec 2024 17:27		YP/AJ	Ok,M
7	P5147-01	EX-8-TPH-1	FC067931.D	06 Dec 2024 18:02	need 50x dilution	YP/AJ	Dilution
8	P5147-01D	P5147-01D	FC067932.D	06 Dec 2024 18:38		YP/AJ	Ok,M
9	P5147-01MS	EX-8-TPH-1MS	FC067933.D	06 Dec 2024 19:13	FC067931.D	YP/AJ	Ok,M
10	P5147-01MSD	EX-8-TPH-1MSD	FC067934.D	06 Dec 2024 19:49	FC067931.D!FC067933.D	YP/AJ	Ok,M
11	P5147-02	EX-8-TPH-2	FC067935.D	06 Dec 2024 20:24	need 10x & 50x dilution	YP/AJ	Dilution
12	I.BLK	I.BLK	FC067936.D	06 Dec 2024 20:59		YP/AJ	Ok
13	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067937.D	06 Dec 2024 21:35		YP/AJ	Ok,M

M : Manual Integration

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

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC120924AL

Review By	yogesh	Review On	12/9/2024 11:36:46 AM		
Supervise By	Ankita	Supervise On	12/10/2024 10:27:55 AM		
SubDirectory	FC120924AL	HP Acquire Method		HP Processing Method	FC111424AL

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	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FC067938.D	09 Dec 2024 07:54		YP/AJ	Ok
2	I.BLK	I.BLK	FC067939.D	09 Dec 2024 08:28		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067940.D	09 Dec 2024 09:03		YP/AJ	Ok
4	P5147-01DL	EX-8-TPH-1DL	FC067941.D	09 Dec 2024 09:38		YP/AJ	Ok,M
5	P5147-02DL	EX-8-TPH-2DL	FC067942.D	09 Dec 2024 10:14	need further dilution	YP/AJ	Dilution
6	P5147-02DL2	EX-8-TPH-2DL2	FC067943.D	09 Dec 2024 10:50		YP/AJ	Ok
7	I.BLK	I.BLK	FC067944.D	09 Dec 2024 12:02		YP/AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067945.D	09 Dec 2024 13:14		YP/AJ	Ok,M
9	PB165478BL	PB165478BL	FC067946.D	09 Dec 2024 13:51		YP/AJ	Ok
10	PB165478BS	PB165478BS	FC067947.D	09 Dec 2024 14:28		YP/AJ	Ok,M
11	PB165478BSD	PB165478BSD	FC067948.D	09 Dec 2024 15:05		YP/AJ	Ok,M
12	P5174-01	ROLL-OFF-COMP	FC067949.D	09 Dec 2024 15:41		YP/AJ	Ok
13	P5174-01D	P5174-01D	FC067950.D	09 Dec 2024 16:18		YP/AJ	Ok
14	P5174-01MS	ROLL-OFF-COMPMS	FC067951.D	09 Dec 2024 16:54	FC067949.D	YP/AJ	Ok,M
15	P5174-01MSD	ROLL-OFF-COMPMSD	FC067952.D	09 Dec 2024 17:31	FC067949.D!FC067951.D	YP/AJ	Ok,M
16	PB165500BL	PB165500BL	FC067953.D	09 Dec 2024 18:07		YP/AJ	Ok
17	PB165500BS	PB165500BS	FC067954.D	09 Dec 2024 18:44		YP/AJ	Ok,M
18	PB165500BSD	PB165500BSD	FC067955.D	10 Dec 2024 00:34		YP/AJ	Ok,M

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

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC120924AL

Review By	yogesh	Review On	12/9/2024 11:36:46 AM		
Supervise By	Ankita	Supervise On	12/10/2024 10:27:55 AM		
SubDirectory	FC120924AL	HP Acquire Method		HP Processing Method	FC111424AL

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	P5145-01	286085	FC067956.D	10 Dec 2024 01:09	need 5x dilution	YP/AJ	Dilution
20	I.BLK	I.BLK	FC067957.D	10 Dec 2024 01:46		YP/AJ	Ok
21	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067958.D	10 Dec 2024 02:22		YP/AJ	Ok,M

M : Manual Integration

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

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD111424AR

Review By	yogesh	Review On	11/14/2024 11:28:45 AM		
Supervise By	Ankita	Supervise On	11/15/2024 10:08:51 AM		
SubDirectory	FD111424AR	HP Acquire Method		HP Processing Method	FD111424AR

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	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FD048727.D	14 Nov 2024 08:52		YP/AJ	Ok
2	I.BLK	I.BLK	FD048728.D	14 Nov 2024 09:27		YP/AJ	Ok
3	100 PPM AROMATIC H	100 PPM AROMATIC H	FD048729.D	14 Nov 2024 10:39		YP/AJ	Ok
4	50 PPM AROMATIC HC	50 PPM AROMATIC HC	FD048730.D	14 Nov 2024 11:15		YP/AJ	Ok
5	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048731.D	14 Nov 2024 11:51		YP/AJ	Ok
6	10 PPM AROMATIC HC	10 PPM AROMATIC HC	FD048732.D	14 Nov 2024 12:27		YP/AJ	Ok,M
7	5 PPM AROMATIC HC	5 PPM AROMATIC HC	FD048733.D	14 Nov 2024 13:03		YP/AJ	Ok,M
8	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048734.D	14 Nov 2024 13:49		YP/AJ	Ok
9	I.BLK	I.BLK	FD048735.D	14 Nov 2024 14:24		YP/AJ	Ok
10	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048736.D	14 Nov 2024 15:00		YP/AJ	Ok

M : Manual Integration

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

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD120624AR

Review By	yogesh	Review On	12/9/2024 11:01:27 AM		
Supervise By	Ankita	Supervise On	12/9/2024 11:04:22 AM		
SubDirectory	FD120624AR	HP Acquire Method		HP Processing Method	FD120624AR

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	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FD048833.D	06 Dec 2024 13:18		YP/AJ	Ok
2	I.BLK	I.BLK	FD048834.D	06 Dec 2024 13:54		YP/AJ	Ok
3	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048835.D	06 Dec 2024 15:05		YP/AJ	Ok,M
4	PB165427BL	PB165427BL	FD048836.D	06 Dec 2024 16:16		YP/AJ	Ok
5	PB165427BS	PB165427BS	FD048837.D	06 Dec 2024 16:51		YP/AJ	Ok,M
6	PB165427BSD	PB165427BSD	FD048838.D	06 Dec 2024 17:27		YP/AJ	Ok,M
7	P5147-01	EX-8-TPH-1	FD048839.D	06 Dec 2024 18:02	need 10x dilution	YP/AJ	Dilution
8	P5147-01D	P5147-01D	FD048840.D	06 Dec 2024 18:38		YP/AJ	Ok
9	P5147-01MS	EX-8-TPH-1MS	FD048841.D	06 Dec 2024 19:13	FD048839.D	YP/AJ	Ok,M
10	P5147-01MSD	EX-8-TPH-1MSD	FD048842.D	06 Dec 2024 19:49	FD048839.D!FD048841.D	YP/AJ	Ok,M
11	P5147-02	EX-8-TPH-2	FD048843.D	06 Dec 2024 20:24	need 10x dilution	YP/AJ	Dilution
12	I.BLK	I.BLK	FD048844.D	06 Dec 2024 20:59		YP/AJ	Ok
13	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048845.D	06 Dec 2024 21:35		YP/AJ	Ok

M : Manual Integration

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

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD120924AR

Review By	yogesh	Review On	12/9/2024 11:38:10 AM		
Supervise By	Ankita	Supervise On	12/10/2024 10:27:13 AM		
SubDirectory	FD120924AR	HP Acquire Method		HP Processing Method	FD120624AR

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	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FD048846.D	09 Dec 2024 07:54		YP/AJ	Ok
2	I.BLK	I.BLK	FD048847.D	09 Dec 2024 08:28		YP/AJ	Ok
3	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048848.D	09 Dec 2024 09:38		YP/AJ	Ok
4	P5147-01DL	EX-8-TPH-1DL	FD048849.D	09 Dec 2024 10:14		YP/AJ	Ok
5	P5147-02DL	EX-8-TPH-2DL	FD048850.D	09 Dec 2024 10:50		YP/AJ	Ok,M
6	I.BLK	I.BLK	FD048851.D	09 Dec 2024 12:02		YP/AJ	Ok
7	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048852.D	09 Dec 2024 12:38		YP/AJ	Ok
8	PP24077	PP24077	FD048853.D	09 Dec 2024 15:41		YP/AJ	Ok
9	PB165500BL	PB165500BL	FD048854.D	09 Dec 2024 16:18		YP/AJ	Ok
10	PB165500BS	PB165500BS	FD048855.D	09 Dec 2024 16:54		YP/AJ	Ok
11	PB165500BSD	PB165500BSD	FD048856.D	09 Dec 2024 17:31		YP/AJ	Ok
12	P5145-01	286085	FD048857.D	09 Dec 2024 18:07		YP/AJ	Ok,M
13	I.BLK	I.BLK	FD048858.D	09 Dec 2024 18:44		YP/AJ	Ok
14	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048859.D	10 Dec 2024 00:34		YP/AJ	Ok

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 12/6/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 12/05/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:15
Out Date: 12/06/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133767

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
P5112-01	10TH-ST-SOIL	1	1.15	8.38	9.53	8.81	91.4	
P5113-01	FES-SB406-4345	2	1.15	8.81	9.96	8.94	88.4	
P5113-02	FES-SB406-7375	3	1.15	8.61	9.76	7.93	78.7	
P5117-01	TAPIAL3-SB04I-10-120324-00-T1	4	1.15	8.59	9.74	9.37	95.7	
P5117-02	TAPIAL2-IDW-SOIL-120424-00-T2	5	1.15	8.38	9.53	7.84	79.8	
P5120-01	TAPIAL2-IDW-SOIL-120424-00-T2	6	1.15	8.38	9.53	7.84	79.8	
P5133-01	MOO-24-00374	9	1.15	8.35	9.5	9.14	95.7	
P5134-01	MOO-24-00373	10	1.00	1.00	2.00	2.00	100.0	debris
P5135-01	LAW-23-00193	11	1.16	8.44	9.6	9.05	93.5	
P5136-01	COMP-1	12	1.16	8.49	9.65	7.26	71.8	
P5137-01	LAW-OILY-STONES	13	1.00	1.00	2.00	2.00	100.0	oily stone
P5137-02	LAW-OILY-STONES-E2	14	1.00	1.00	2.00	2.00	100.0	oily stone
P5144-01	60400	15	1.00	1.00	2.00	2.00	100.0	wipe sample
P5147-01	EX-8-TPH-1	7	1.15	8.82	9.97	8.29	81.0	
P5147-02	EX-8-TPH-2	8	1.15	8.76	9.91	8.1	79.3	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

VB 133767

WorkList Name : %1-120524 **WorkList ID :** 185988 **Department :** Wet-Chemistry **Date :** 12-05-2024 08:21:57

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5112-01	10TH-ST-SOIL	Solid	Percent Solids	Cool 4 deg C	TULL02	L51	12/05/2024	Chemtech -SO
P5113-01	FES-SB406-4345	Solid	Percent Solids	Cool 4 deg C	TETR06	L31	12/04/2024	Chemtech -SO
P5113-02	FES-SB406-7375	Solid	Percent Solids	Cool 4 deg C	TETR06	L31	12/04/2024	Chemtech -SO
P5117-01	TAPIAL3-SB04I-10-120324-00-	Solid	Percent Solids	Cool 4 deg C	WEST04	L41	12/05/2024	Chemtech -SO
P5117-02	TAPIAL2-IDW-SOIL-120424-00·	Solid	Percent Solids	Cool 4 deg C	WEST04	L41	12/05/2024	Chemtech -SO
P5120-01	TAPIAL2-IDW-SOIL-120424-00·	Solid	Percent Solids	Cool 4 deg C	WEST04	L51	11/27/2024	Chemtech -SO
P5133-01	MOO-24-00374	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	12/05/2024	Chemtech -SO
P5134-01	MOO-24-00373	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	12/05/2024	Chemtech -SO
P5135-01	LAW-23-00193	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	12/05/2024	Chemtech -SO
P5136-01	COMP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	12/05/2024	Chemtech -SO
P5137-01	LAW-OILY-STONES	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	12/05/2024	Chemtech -SO
P5137-02	LAW-OILY-STONES-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	12/05/2024	Chemtech -SO
P5147-01	EX-8-TPH-1	Solid	Percent Solids	Cool 4 deg C	ENTA05	L41	12/05/2024	Chemtech -SO
P5147-02	EX-8-TPH-2	Solid	Percent Solids	Cool 4 deg C	ENTA05	L41	12/05/2024	Chemtech -SO

Date/Time 12/05/24 15:40

Raw Sample Received by: TD WPC

Raw Sample Relinquished by: RJ CENT-(ab)

Date/Time 12/05/24 17:10

Raw Sample Received by: RJ CENT-(ab)

Raw Sample Relinquished by: TD WPC

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB165427

SOP ID:	MNJDEP-EPH-7				
Clean Up SOP #:	N/A			**Extraction Start Date :**	12/06/2024
Matrix :	Solid			**Extraction Start Time :**	09:50
Weigh By:	RJ	**Extraction By:**	RJ	**Extraction End Date :**	12/06/2024
Balance check:	RJ	**Filter By:**	RJ	**Extraction End Time :**	15:45
Balance ID:	EX-SC-2	**pH Meter ID:**	N/A	**Concentration By:**	EH
pH Strip Lot#:	N/A	**Hood ID:**	3,7	**Supervisor By :**	rajesh

Extraction Method: ☐ Seperatory Funnel ☐ Continious Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☑ Soxhlet

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	100 PPM	PP23988
Surrogate	1.0ML	100 PPM	PP23989
Fractionation Surrogate	1.0ML	100 PPM	PP24006
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	EP2570
Sand	N/A	E2865
Hexane	N/A	E3826
Sand	N/A	E2865
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:

1.5 ML Vial lot# 2210673.

KD Bath ID:	N/A	**Envap ID:**	NEVAP-02
KD Bath Temperature:	N/A	**Envap Temperature:**	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/6/24	RP (Ext Lab)	AJ / TEST PCA Lab
15:50	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB165427

Analytical Method: MNJDEP-EPH-7 **Concentration Date:** 12/06/2024

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB165427BL	PB165427BL	EPH	30.03	N/A	ritesh	Evelyn	2			U5-1
PB165427BS	PB165427BS	EPH	30.01	N/A	ritesh	Evelyn	2			2
PB165427BSD	PB165427BSD	EPH	30.02	N/A	ritesh	Evelyn	2			3
P5147-01	EX-8-TPH-1	EPH	30.06	N/A	ritesh	Evelyn	2	E		4
P5147-01DUP	EX-8-TPH-1DUP	EPH	30.07	N/A	ritesh	Evelyn	2	E		5
P5147-01MS	EX-8-TPH-1MS	EPH	30.05	N/A	ritesh	Evelyn	2	E		6
P5147-01MSD	EX-8-TPH-1MSD	EPH	30.03	N/A	ritesh	Evelyn	2	E		U4-1
P5147-02	EX-8-TPH-2	EPH	30.01	N/A	ritesh	Evelyn	2	E		2

* **Extracts relinguished on the same date as received.**

12/6/24

186042 EGM 9:20

WORKLIST(Hardcopy Internal Chain)

WorkList Name : P5137 **WorkList ID :** 186042 **Department :** Extraction **Date :** 12-06-2024 08:22:37

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5133-01	MOO-24-00374	Solid	EPH_NF	Cool 4 deg C	PSEG03	L61	12/05/2024	NJEPH
P5136-01	COMP-1	Solid	EPH_NF	Cool 4 deg C	PSEG03	L61	12/05/2024	NJEPH
P5137-01	LAW-OILY-STONES	Solid	EPH_NF	Cool 4 deg C	PSEG03	L61	12/05/2024	NJEPH
P5137-02	LAW-OILY-STONES-E2	Solid	EPH_NF	Cool 4 deg C	PSEG03	L61	12/05/2024	NJEPH
P5147-01	EX-8-TPH-1	Solid	EPH	Cool 4 deg C	ENTA05	L41	12/05/2024	NJEPH
P5147-02	EX-8-TPH-2	Solid	EPH	Cool 4 deg C	ENTA05	L41	12/05/2024	NJEPH

Date/Time 12/6/24 9:45
Raw Sample Received by: RJ (Ext lab)
Raw Sample Relinquished by: JD (SM)

Date/Time 12/6/24 10:10
Raw Sample Received by: JD(SM)
Raw Sample Relinquished by: RJ (Ext lab)

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

Prep Standard - Chemical Standard Summary

Order ID : P5147

Test : EPH

Prepbatch ID : PB165427,

Sequence ID/Qc Batch ID: FC120624AL,FC120924AL,FD120624AR,FD120924AR,

Standard ID :
EP2560,EP2570,PP23644,PP23645,PP23646,PP23647,PP23648,PP23649,PP23650,PP23968,PP23969,PP23970,PP23971,PP23972,PP23973,PP23974,PP23988,PP23989,PP24006,

Chemical ID :
E2865,E3551,E3789,E3826,E3827,E3828,P10260,P11139,P12362,P12972,P13017,P13278,P13465,P13472,P13599,P13600,P13604,P13622,P13628,P13629,P13630,P13631,P13632,P13633,P13634,P13635,P13637,P13643,P13646,P13647,P13648,P13649,P13656,P13689,P13718,P13719,P13720,P13721,P13722,P13723,P13724,P13725,P13726,P13727,P13761,P13763,P13771,P13772,W3110,

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

Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2570	12/02/2024	01/03/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 12/02/2024

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2901	20 PPM Aliphaitic 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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2901	20 PPM Aliphaitic 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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1330	100 PPM NJEPH Spike Solution	PP23988	11/18/2024	04/25/2025	Yogesh Patel	None	None	Ankita Jodhani 11/21/2024

FROM 5.00000ml of P13628 + 5.00000ml of P13629 + 5.00000ml of P13630 + 5.00000ml of P13631 + 5.00000ml of P13632 + 5.00000ml of P13633 + 5.00000ml of P13634 + 5.00000ml of P13635 + 5.00000ml of P13637 + 5.00000ml of P13643 + 5.00000ml of P13718 + 5.00000ml of P13719 + 5.00000ml of P13720 + 5.00000ml of P13721 + 5.00000ml of P13722 + 5.00000ml of P13723 + 5.00000ml of P13724 + 5.00000ml of P13725 + 5.00000ml of P13726 + 5.00000ml of P13727 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1339	100 PPM NJEPH Surrogate Spike	PP23989	11/18/2024	05/08/2025	Yogesh Patel	None	None	Ankita Jodhani 11/21/2024

FROM 1.25000ml of P13599 + 1.25000ml of P13600 + 1.25000ml of P13604 + 1.25000ml of P13622 + 1.25000ml of P13648 + 1.25000ml of P13649 + 1.25000ml of P13656 + 1.25000ml of P13689 + 490.00000ml of E3827 = Final Quantity: 500.000 ml

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1331	100 PPM NJEPH Fractionating Surrogate	PP24006	11/20/2024	05/09/2025	Yogesh Patel	None	None	Ankita Jodhani 11/21/2024

FROM 1.25000ml of P13761 + 1.25000ml of P13763 + 1.25000ml of P13771 + 1.25000ml of P13772 + 195.00000ml of E3826 = Final Quantity: 200.000 ml

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	01/03/2025	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-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	24G1962003	05/09/2025	11/09/2024 / Rajesh	11/07/2024 / Rajesh	E3826

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

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 #
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

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 #
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

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 #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0211112	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13628

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	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13629

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	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13630

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	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13631

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	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13632

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	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13633

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 #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0211112	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13634

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	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13635

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	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13637

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	05/18/2025	11/18/2024 / yogesh	10/16/2024 / yogesh	P13643

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

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 #
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

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	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13718

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	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13719

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 #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13720

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	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13721

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	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13722

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	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13723

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	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13724

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	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13725

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 #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13726

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	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13727

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	05/20/2025	11/20/2024 / yogesh	11/01/2024 / yogesh	P13761

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	05/20/2025	11/20/2024 / yogesh	11/01/2024 / yogesh	P13763

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	05/20/2025	11/20/2024 / yogesh	11/01/2024 / yogesh	P13771

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0214879	05/20/2025	11/20/2024 / yogesh	11/01/2024 / yogesh	P13772

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-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	235898	02/28/2029	06/27/2024 / jignesh	06/26/2024 / jignesh	W3110

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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

P10758 to P10762 -(5)

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

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 +/- 90.5449 µg/mL +/- 100.4678 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene **CAS #** 91-20-3 (Lot MKBZ8680V) **Purity** 99%	2,006.0 µg/mL	+/- 11.7723 µg/mL +/- 90.3656 µg/mL +/- 100.2689 µg/mL	Gravimetric Unstressed Stressed
3	2-Methylnaphthalene **CAS #** 91-57-6 (Lot STBG8884) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 90.4557 µg/mL +/- 100.3688 µg/mL	Gravimetric Unstressed Stressed
4	Acenaphthylene **CAS #** 208-96-8 (Lot N19U) **Purity** 95%	2,002.6 µg/mL	+/- 11.7524 µg/mL +/- 90.2125 µg/mL +/- 100.0989 µg/mL	Gravimetric Unstressed Stressed
5	Acenaphthene **CAS #** 83-32-9 (Lot MKCN0610) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 90.0953 µg/mL +/- 99.9689 µg/mL	Gravimetric Unstressed Stressed
6	Fluorene **CAS #** 86-73-7 (Lot 10217947) **Purity** 99%	2,016.0 µg/mL	+/- 11.8310 µg/mL +/- 90.8161 µg/mL +/- 100.7687 µg/mL	Gravimetric Unstressed Stressed
7	Phenanthrene **CAS #** 85-01-8 (Lot MKCL7390) **Purity** 99%	2,012.0 µg/mL	+/- 11.8075 µg/mL +/- 90.6359 µg/mL +/- 100.5688 µg/mL	Gravimetric Unstressed 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)

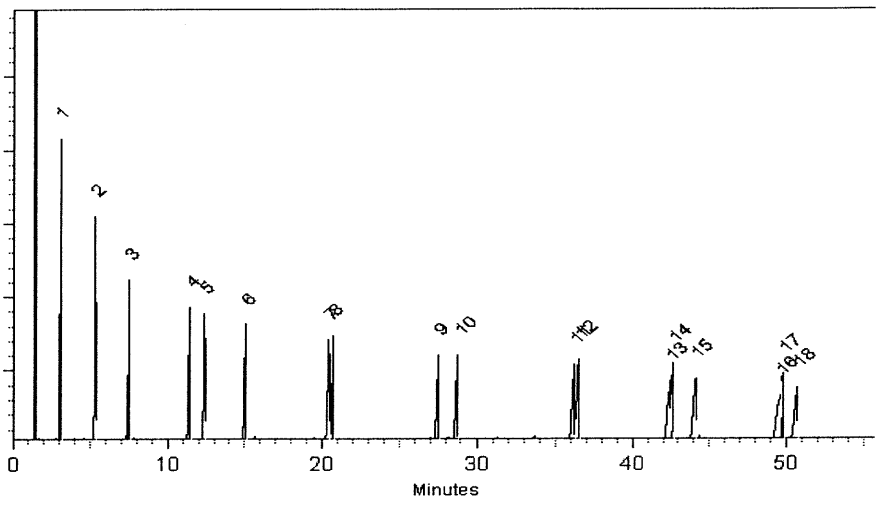
Carrier Gas:
hydrogen-constant pressure 10 psi.

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Sand
Purified
Washed and Ignited

avantor™ | J.T.Baker®

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	<= 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

James T Ethier

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 QUIMICOS 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_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_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 foreing 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.

RG-02-01, Ed. 3

Recd. by RB on 7/24/23 E3551

Hexanes (95% n-hexane)
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor | J.T.B

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_2SO_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

E3789

JCroak

Jamie Croak
Director Quality Operations, Bioscience Product

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

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

avantor™ | J.T.Baker®

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_2SO_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

E3826

Rec'd by RP on 11/7/24

Jamie Croak
Director Quality Operations, Bioscience Production

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker

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 ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) 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

E3827

Recd by RP on ~~11/6~~ 11/7/24
RP 11/7

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker

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)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 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

JCroak

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

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

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

Solvent(s):	Lot#
Methylene chloride	104929

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 500.0 0.058 Flask Uncertainty

Formulated By: Benson Chan	060420 DATE
Reviewed By: Pedro L. Rentas	060420 DATE

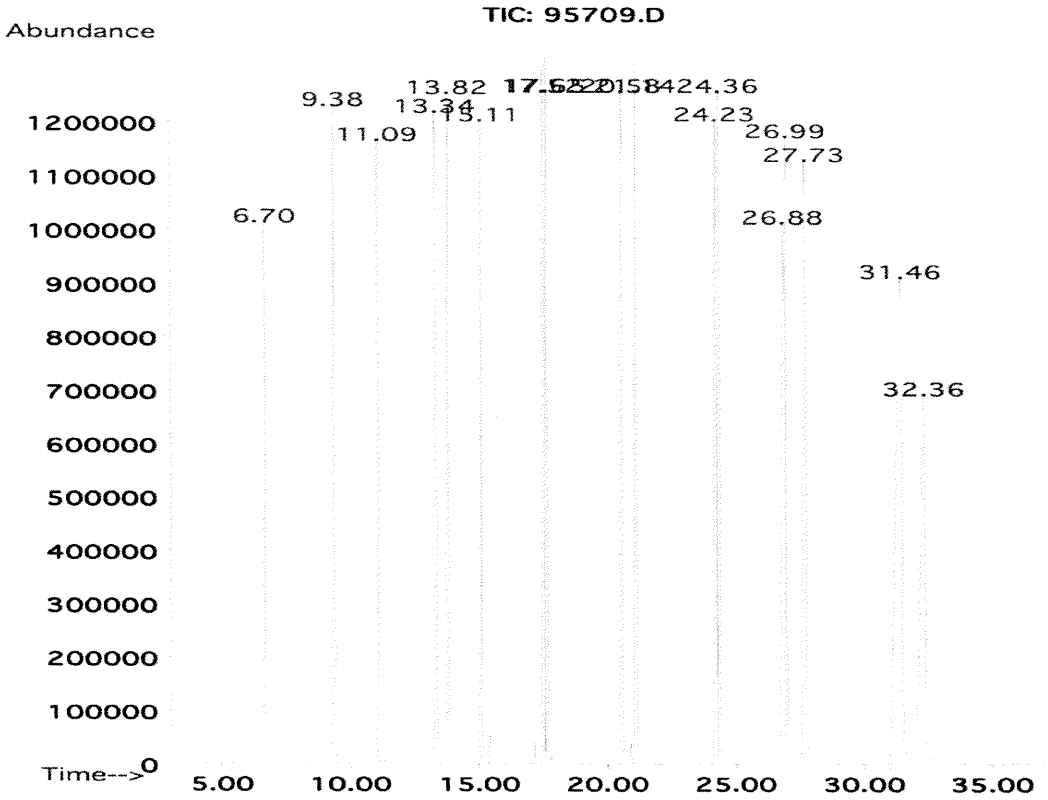
	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Acenaphthene	1	MKBJ4871V	2000	99	0.2	1.01003	1.01010	2000.1	8.1	83-32-9	N/A	ipr-rat 600mg/kg
2.	Acenaphthylene	3	012014	2000	98	0.2	1.02033	1.02053	2000.4	8.2	208-96-8	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)	ipr-mus 430mg/kg
4.	Benzo(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.	Benzo(a)pyrene	30	012012	2000	99.5	0.2	1.00495	1.00511	2000.3	8.1	50-32-8	0.2mg/m3 (8H)	scu-rat 50mg/kg
6.	Benzo(b)fluoranthene	31	012012b	2000	99	0.2	1.01003	1.01012	2000.2	8.1	205-99-2	N/A	N/A
7.	Benzo(k)fluoranthene	33	012012k	2000	99	0.2	1.01003	1.01018	2000.3	8.1	207-08-9	N/A	N/A
8.	Benzo(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	orl-rat 2000mg/kg
12.	Fluorene	184	07211MV	2000	98	0.2	1.02033	1.02047	2000.3	8.2	86-73-7	N/A	ipr-mus 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	MKBF3783V	2000	97	0.2	1.03085	1.03090	2000.1	8.3	91-57-6	N/A	orl-rat 1630mg/kg
15.	Naphthalene	222	MKBZ8680V	2000	100	0.2	0.99993	0.99999	2000.1	8.0	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 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	orl-mus 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	orl-rat 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

P11137
&
P11141

AR 11/02/21

- 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 certifed (+/-) 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).

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

P12361 ↓ P12370 } Y.P. 03/16/23

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Nonane (C9) **CAS #** 111-84-2 (Lot SHBN5361) **Purity** 99%	2,014.0 µg/mL	+/- 11.8193 µg/mL +/- 50.0027 µg/mL +/- 59.9491 µg/mL	Gravimetric Unstressed Stressed
2	n-Decane (C10) **CAS #** 124-18-5 (Lot SHBN8619) **Purity** 99%	2,014.7 µg/mL	+/- 11.8232 µg/mL +/- 50.0193 µg/mL +/- 59.9689 µg/mL	Gravimetric Unstressed Stressed
3	Naphthalene **CAS #** 91-20-3 (Lot MKCH0219) **Purity** 99%	2,015.3 µg/mL	+/- 11.8271 µg/mL +/- 50.0358 µg/mL +/- 59.9888 µg/mL	Gravimetric Unstressed Stressed
4	n-Dodecane (C12) **CAS #** 112-40-3 (Lot SHBN7174) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 49.8538 µg/mL +/- 59.7705 µg/mL	Gravimetric Unstressed Stressed
5	2-Methylnaphthalene **CAS #** 91-57-6 (Lot STBK0259) **Purity** 96%	2,007.0 µg/mL	+/- 11.7784 µg/mL +/- 49.8299 µg/mL +/- 59.7419 µg/mL	Gravimetric Unstressed Stressed
6	n-Tetradecane (C14) **CAS #** 629-59-4 (Lot STBK2282) **Purity** 99%	2,016.7 µg/mL	+/- 11.8349 µg/mL +/- 50.0689 µg/mL +/- 60.0284 µg/mL	Gravimetric Unstressed Stressed
7	n-Hexadecane (C16) **CAS #** 544-76-3 (Lot SHBM4146) **Purity** 98%	2,014.9 µg/mL	+/- 11.8244 µg/mL +/- 50.0246 µg/mL +/- 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 +/- 49.7710 +/- 59.6712	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Eicosane (C20) **CAS #** 112-95-8 **Purity** 99%	(Lot MKCF7888)	2,018.0	µg/mL	+/- 11.8428 +/- 50.1020 +/- 60.0681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Heneicosane (C21) **CAS #** 629-94-7 **Purity** 99%	(Lot MKCL3226)	2,000.7	µg/mL	+/- 11.7410 +/- 49.6717 +/- 59.5522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Docosane (C22) **CAS #** 629-97-0 **Purity** 99%	(Lot MKCL8918)	2,005.3	µg/mL	+/- 11.7684 +/- 49.7876 +/- 59.6911	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Tetracosane (C24) **CAS #** 646-31-1 **Purity** 99%	(Lot MKCN2863)	2,018.0	µg/mL	+/- 11.8428 +/- 50.1020 +/- 60.0681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexacosane (C26) **CAS #** 630-01-3 **Purity** 99%	(Lot MKCD4540)	2,014.0	µg/mL	+/- 11.8193 +/- 50.0027 +/- 59.9491	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Octacosane (C28) **CAS #** 630-02-4 **Purity** 99%	(Lot BCCG0084)	2,002.0	µg/mL	+/- 11.7489 +/- 49.7048 +/- 59.5919	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	n-Triacontane (C30) **CAS #** 638-68-6 **Purity** 97%	(Lot MKCQ9436)	2,011.1	µg/mL	+/- 11.8025 +/- 49.9316 +/- 59.8637	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Dotriacontane (C32) **CAS #** 544-85-4 **Purity** 99%	(Lot BCBW0661)	2,012.0	µg/mL	+/- 11.8075 +/- 49.9531 +/- 59.8895	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetratriacontane (C34) **CAS #** 14167-59-0 **Purity** 99%	(Lot OML4N)	2,006.7	µg/mL	+/- 11.7762 +/- 49.8207 +/- 59.7308	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	n-Hexatriacontane (C36) **CAS #** 630-06-8 **Purity** 99%	(Lot Z27H018)	2,017.3	µg/mL	+/- 11.8388 +/- 50.0855 +/- 60.0483	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	n-Octatriacontane (C38) **CAS #** 7194-85-6 **Purity** 96%	(Lot 0000145137)	2,017.3	µg/mL	+/- 11.8385 +/- 50.0842 +/- 60.0467	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	n-Tetracontane (C40) **CAS #** 4181-95-7 **Purity** 99%	(Lot BSBME)	2,008.7	µg/mL	+/- 11.7880 +/- 49.8703 +/- 59.7903	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane/Carbon disulfide (80:20)
CAS # 110-54-3/75-15-0
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

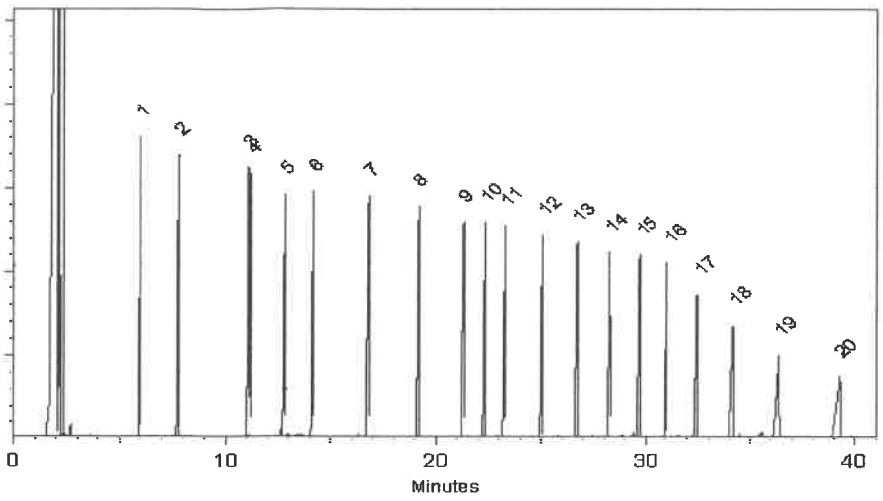
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

RESTEK
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

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

P12960 & P12991 Y.P. 12/21/2023

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

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.)

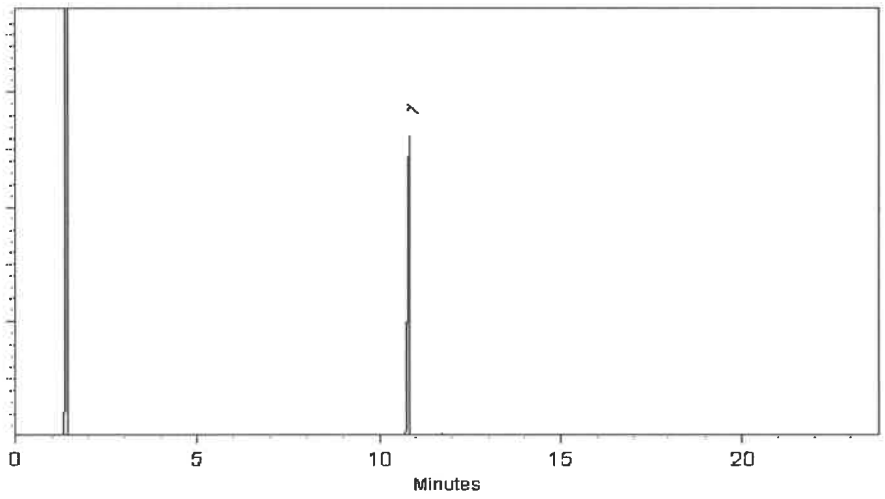
Inj. Temp:
250°C

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

P12992 ↓ P13031 } Y.P. 12/21/2023

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

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

* 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.)

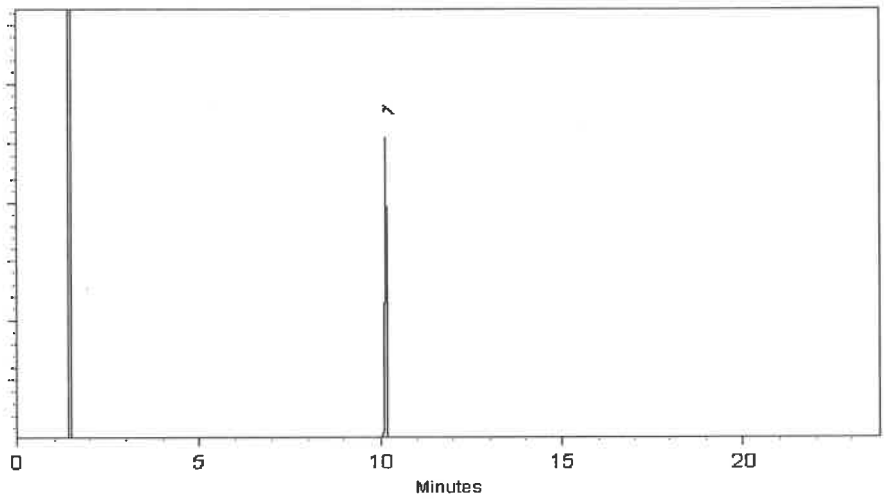
Inj. Temp:
250°C

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.

Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905

Dillan 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/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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95899
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

Solvent(s):	Lot#
Cyclohexane	28930

P13278 & P13287 } Y.P. 04111124

Formulated By:	Anthony Mahoney	040524 DATE
Reviewed By:	Pedro L. Rentas	040524 DATE

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty
CAUTION: Sonicate Before Use

	Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	2-Methylnaphthalene	(0214)	MKBF3783V	NA	NA	NA	1000	97	0.2	NA	0.02579	0.02594	1005.7	5.7	91-57-6	N/A	orl-rat 1630mg/kg
2.	Naphthalene	(0222)	MKBZ8680V	NA	NA	NA	1000	100	0.2	NA	0.02502	0.02511	1003.7	5.7	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
3.	n-Nonane	95708	120222	1.00	25.00	1000.7	1000	NA	NA	0.013	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m3/8H)	ivn-mus 218mg/kg
4.	n-Decane	95708	**120222**	1.00	25.00	1000.9	1000	NA	NA	0.013	NA	NA	1000.2	4.2	124-18-5	N/A	N/A
5.	n-Dodecane	95708	120222	1.00	25.00	1000.7	1000	NA	NA	0.013	NA	NA	1000.0	4.2	112-40-3	N/A	ivn-mus 3494mg/kg
6.	n-Tetradecane	95708	120222	1.00	25.00	1002.1	1000	NA	NA	0.013	NA	NA	1001.3	4.2	629-59-4	N/A	N/A
7.	n-Hexadecane	95708	120222	1.00	25.00	1000.5	1000	NA	NA	0.013	NA	NA	999.7	4.2	544-76-3	N/A	N/A
8.	n-Octadecane	95708	120222	1.00	25.00	1001.0	1000	NA	NA	0.013	NA	NA	1000.3	4.1	593-45-3	N/A	N/A
9.	n-Eicosane	95708	120222	1.00	25.00	1001.0	1000	NA	NA	0.013	NA	NA	1000.3	4.2	112-95-8	N/A	N/A
10.	n-Heneicosane	95708	120222	1.00	25.00	1002.4	1000	NA	NA	0.013	NA	NA	1001.6	4.2	629-94-7	N/A	N/A
11.	n-Docosane	95708	120222	1.00	25.00	1001.9	1000	NA	NA	0.013	NA	NA	1001.2	4.2	629-97-0	N/A	N/A
12.	n-Tetracosane	95708	120222	1.00	25.00	1000.8	1000	NA	NA	0.013	NA	NA	1000.1	4.2	646-31-1	N/A	N/A
13.	n-Hexacosane	95708	120222	1.00	25.00	1001.2	1000	NA	NA	0.013	NA	NA	1000.4	4.2	630-01-3	N/A	N/A
14.	n-Octacosane	95708	120222	1.00	25.00	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.2	630-02-4	N/A	N/A
15.	n-Triacontane	95708	120222	1.00	25.00	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.2	638-68-6	N/A	N/A
16.	n-Dotriacontane	95708	120222	1.00	25.00	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.3	544-85-4	N/A	ivn-mus 100mg/kg
17.	n-Tetratriacontane	95708	120222	1.00	25.00	1000.4	1000	NA	NA	0.013	NA	NA	999.7	4.2	14167-59-0	N/A	N/A
18.	n-Hexatriacontane	95708	120222	1.00	25.00	1001.5	1000	NA	NA	0.013	NA	NA	1000.8	4.2	630-06-8	N/A	N/A
19.	n-Octatriacontane	95708	120222	1.00	25.00	1000.3	1000	NA	NA	0.013	NA	NA	999.6	4.3	7194-85-6	N/A	N/A
20.	n-Tetracontane	95708	120222	1.00	25.00	1000.6	1000	NA	NA	0.013	NA	NA	999.9	4.3	4181-95-7	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.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13457 ↓ P13476 Y.P. 07/23/24

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.)

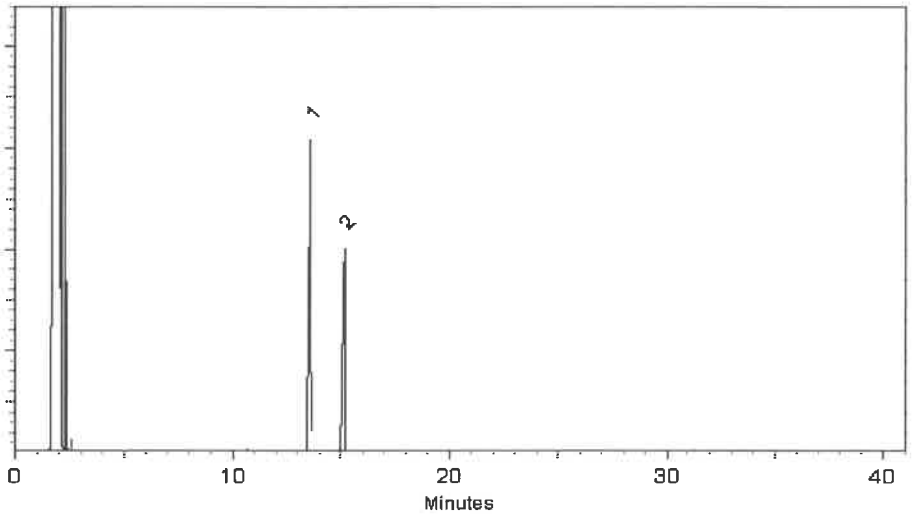
Inj. Temp:
250°C

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13457 ↓ P13476 Y.P. 07/23/24

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.)

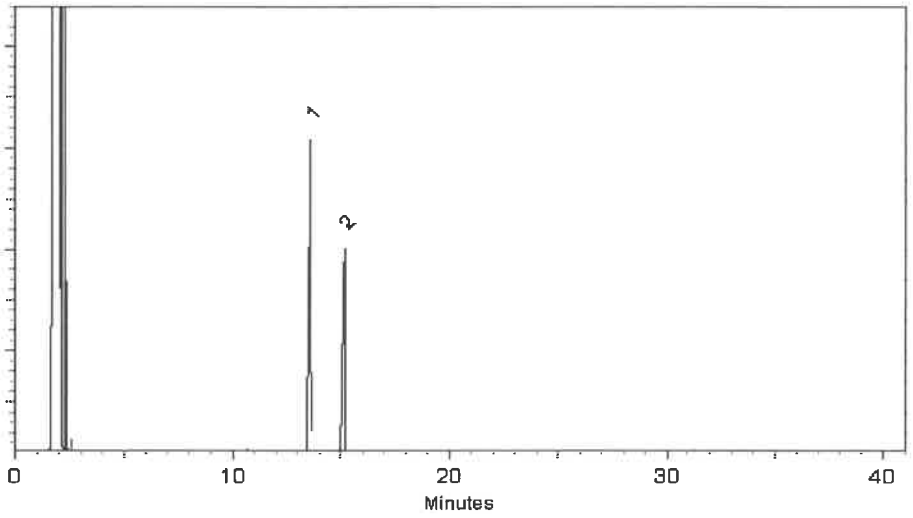
Inj. Temp:
250°C

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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-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.)

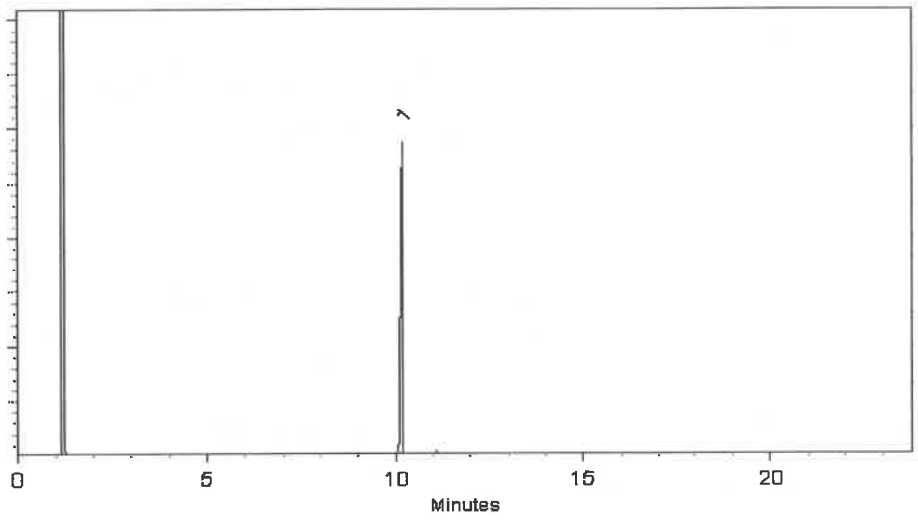
Inj. Temp:
250°C

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.

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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-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.)

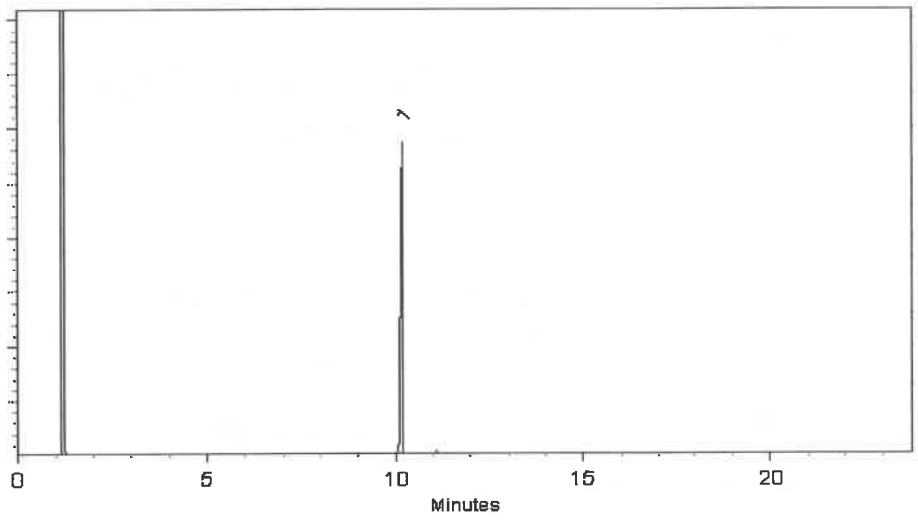
Inj. Temp:
250°C

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.

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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-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.)

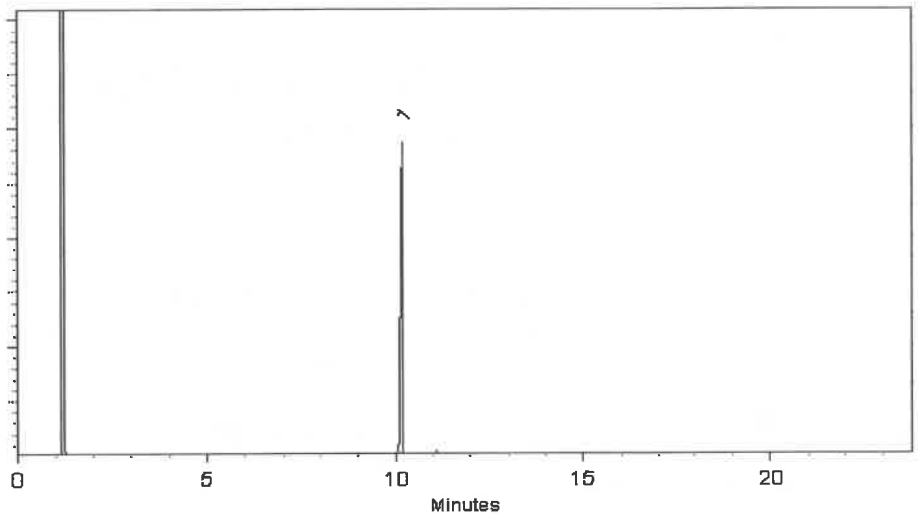
Inj. Temp:
250°C

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.

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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-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.)

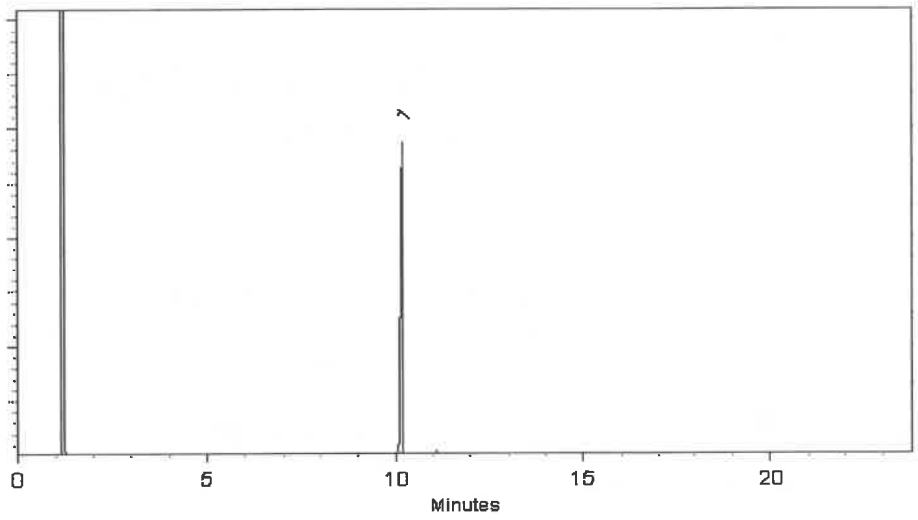
Inj. Temp:
250°C

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.

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.:** 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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

* 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.)

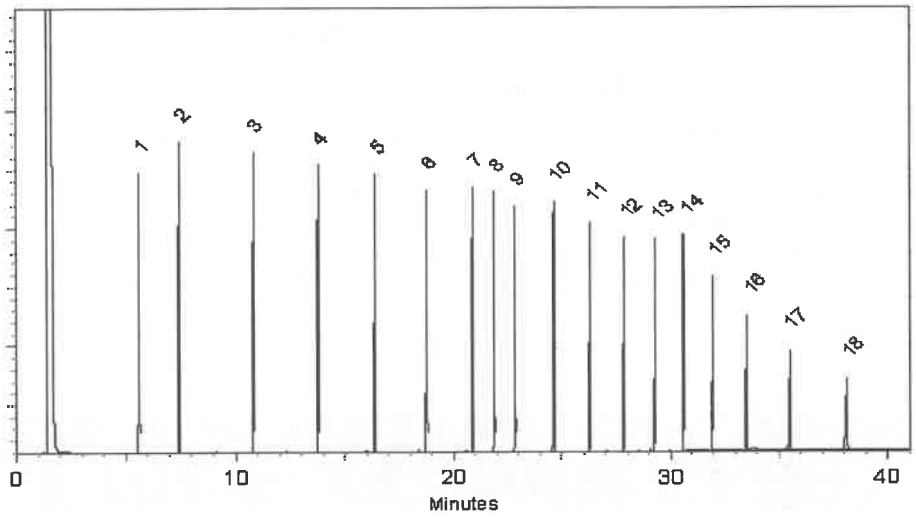
Inj. Temp:
250°C

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.

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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.:** 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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

* 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.)

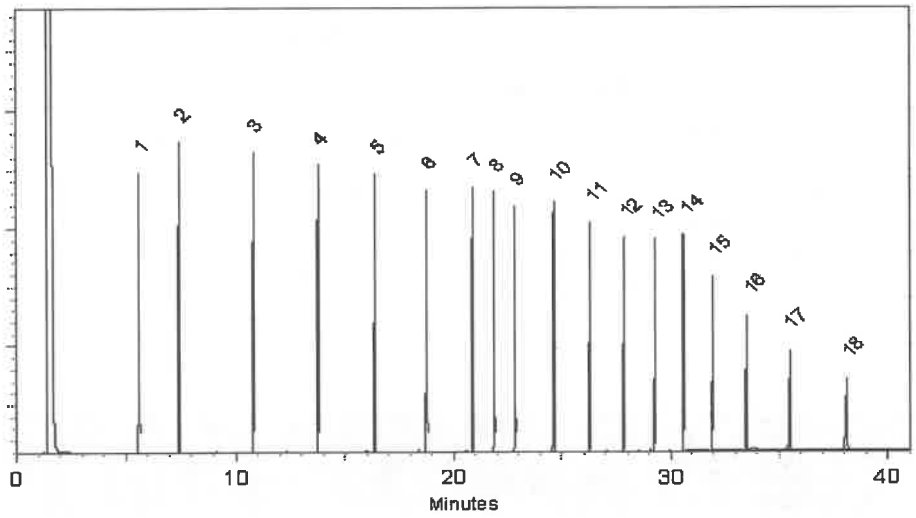
Inj. Temp:
250°C

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.

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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.:** 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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

* 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.)

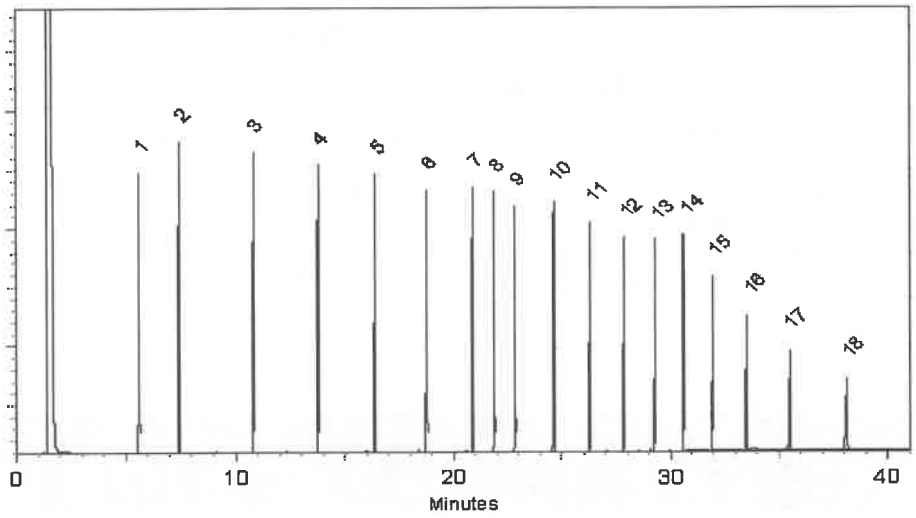
Inj. Temp:
250°C

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.

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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.:** 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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

* 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.)

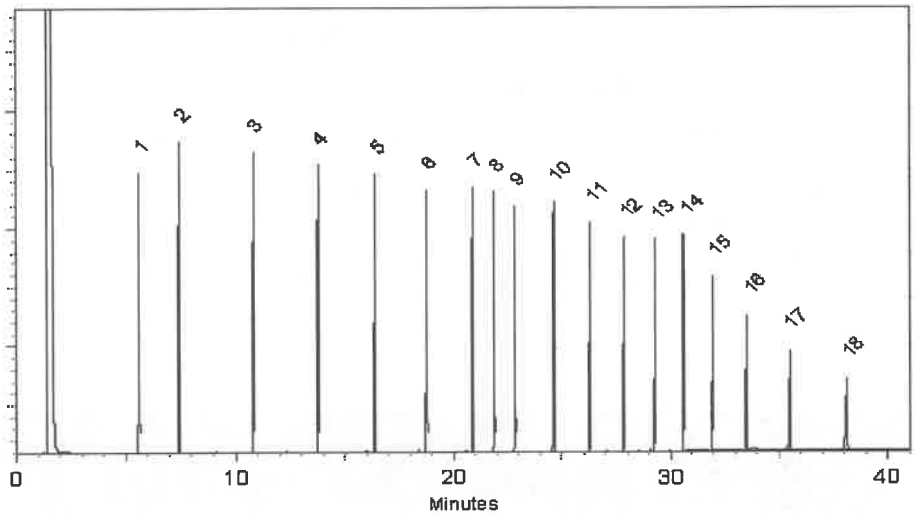
Inj. Temp:
250°C

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.

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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.:** 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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

* 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.)

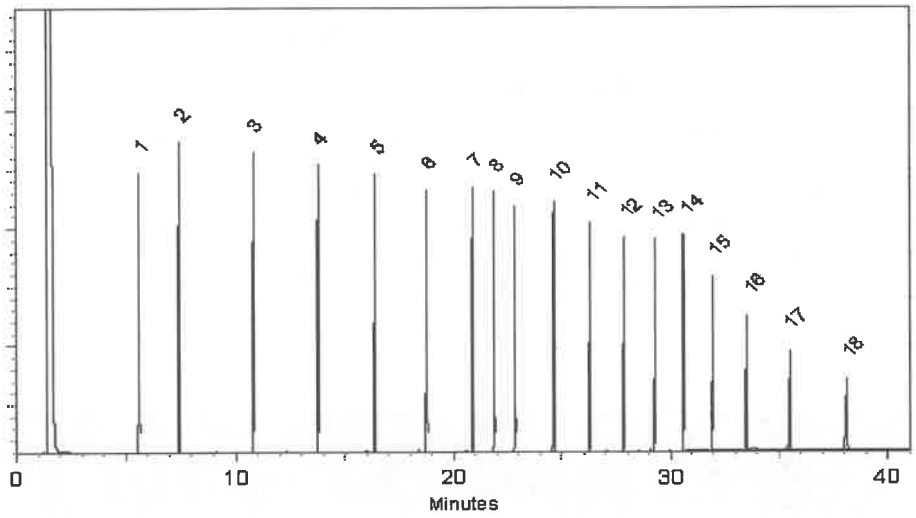
Inj. Temp:
250°C

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.

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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.:** 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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

* 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.)

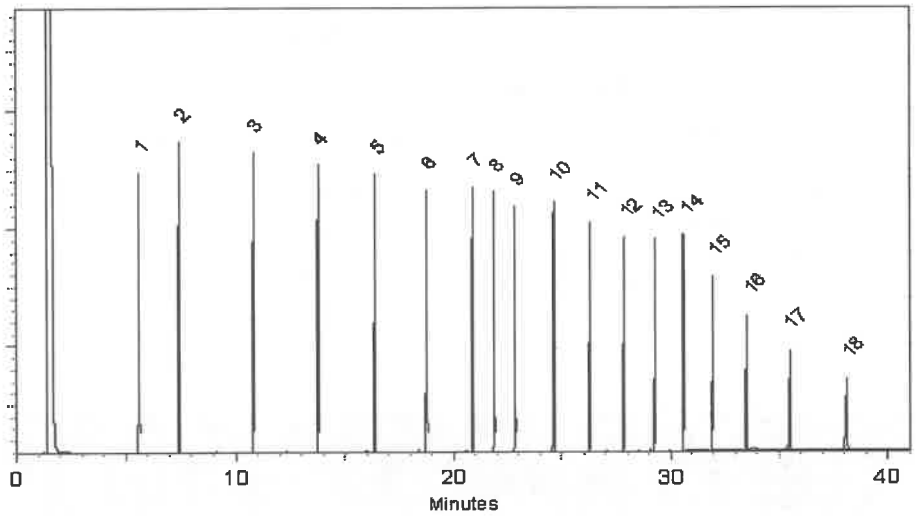
Inj. Temp:
250°C

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.

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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.:** 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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

* 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.)

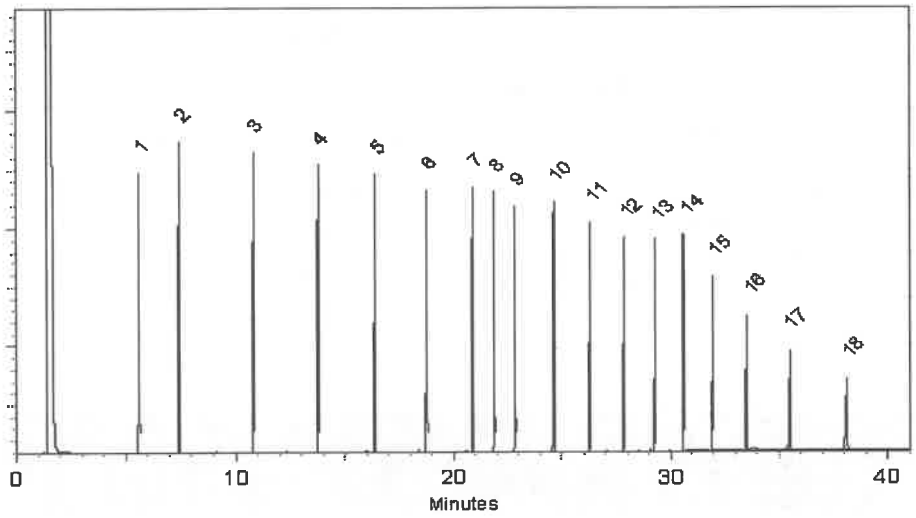
Inj. Temp:
250°C

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.

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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.:** 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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

* 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.)

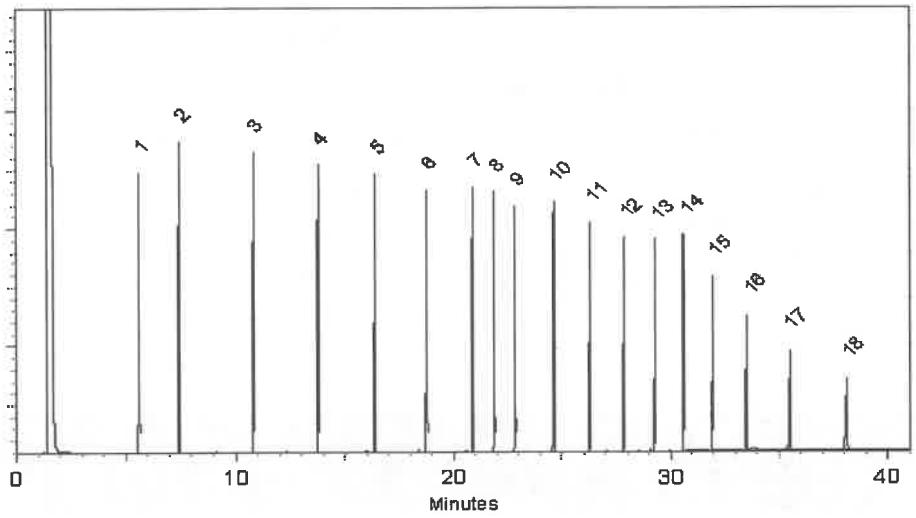
Inj. Temp:
250°C

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.

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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.:** 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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

* 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.)

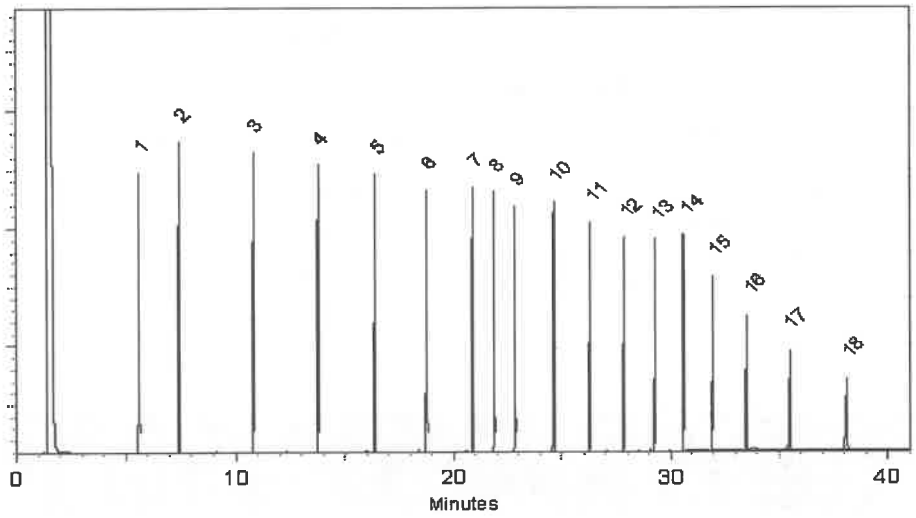
Inj. Temp:
250°C

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.

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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.:** 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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

* 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.)

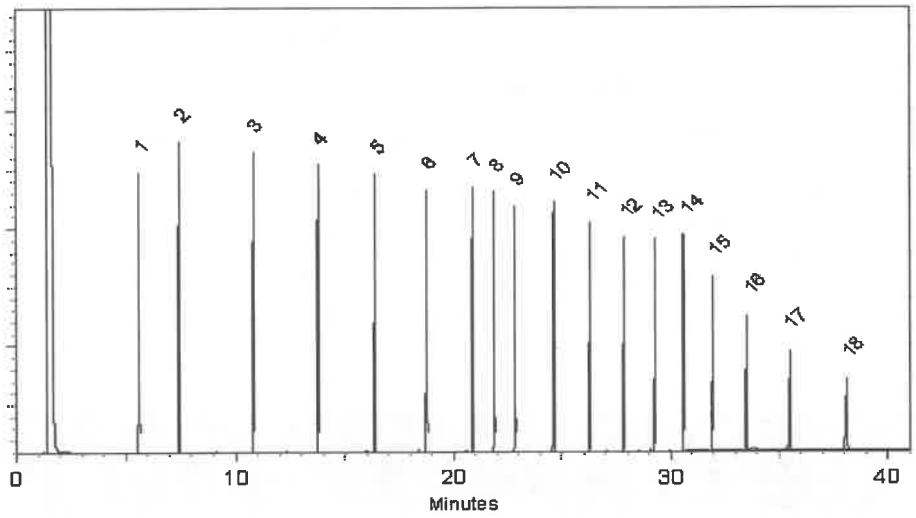
Inj. Temp:
250°C

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.

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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

P13645 ↓ P13694 } Y.P. 10/16/24

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

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.)

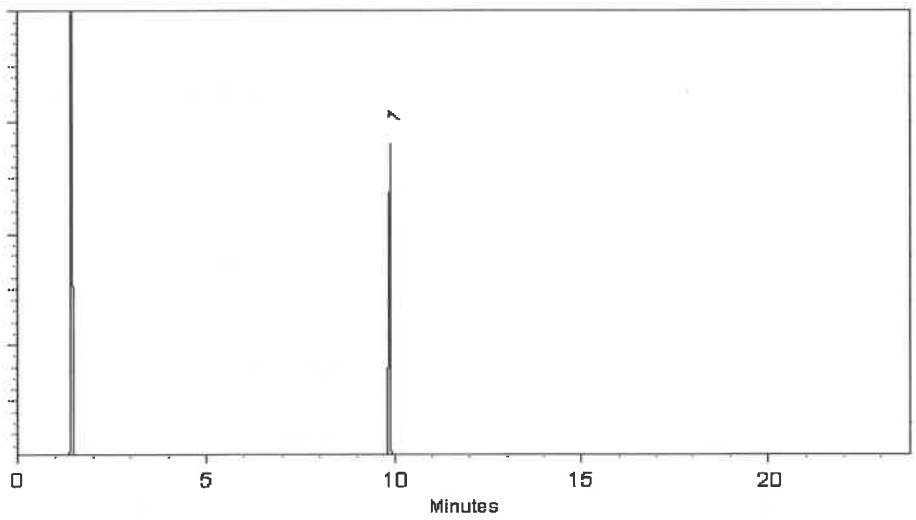
Inj. Temp:
250°C

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

P13645 ↓ P13694 } Y.P. 10/16/24

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

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.)

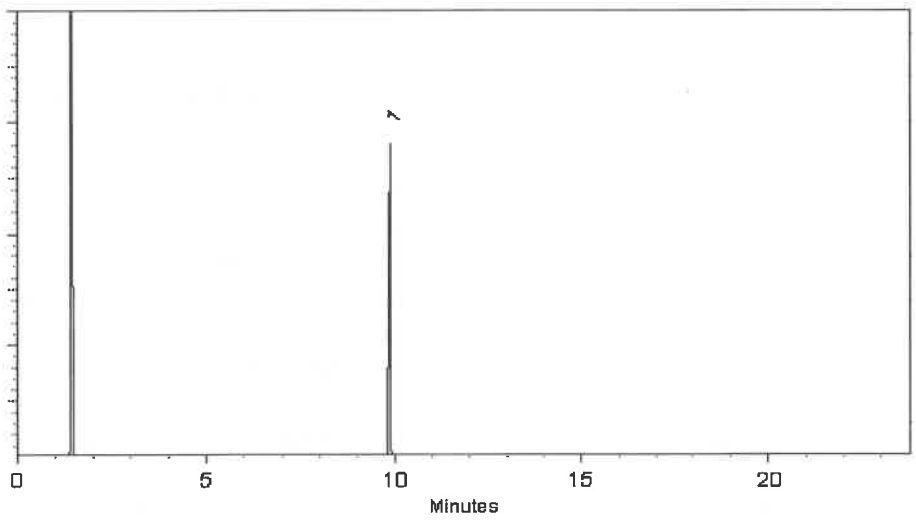
Inj. Temp:
250°C

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

P13645 ↓ P13694 } Y.P. 10/16/24

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

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.)

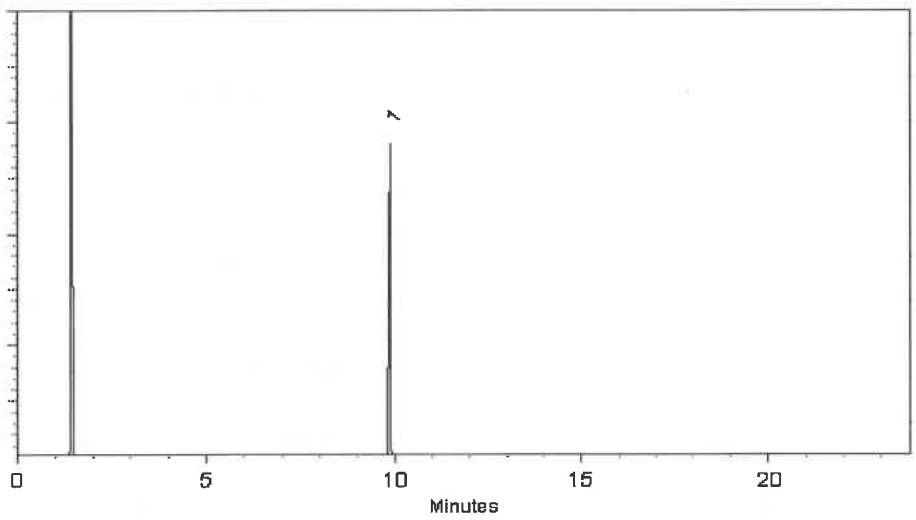
Inj. Temp:
250°C

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

P13645 ↓ P13694 } Y.P. 10/16/24

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

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.)

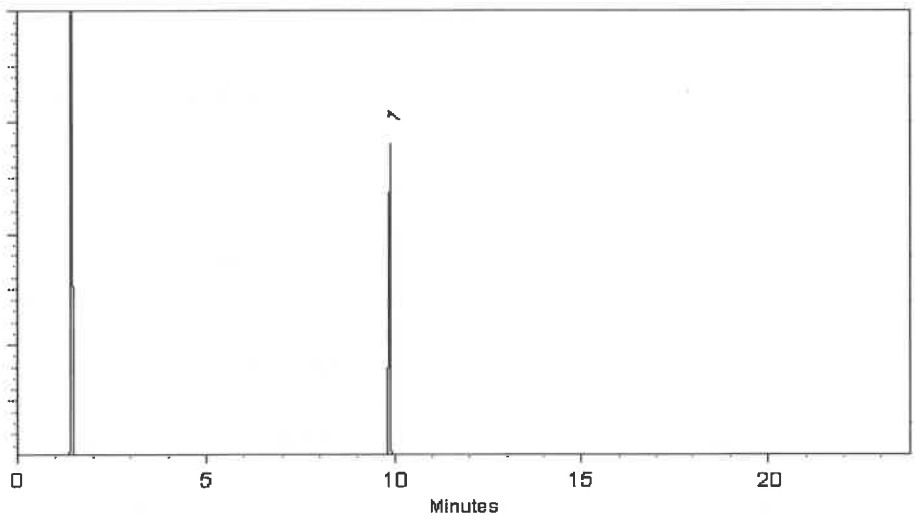
Inj. Temp:
250°C

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

P13645 ↓ P13694 } Y.P. 10/16/24

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

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.)

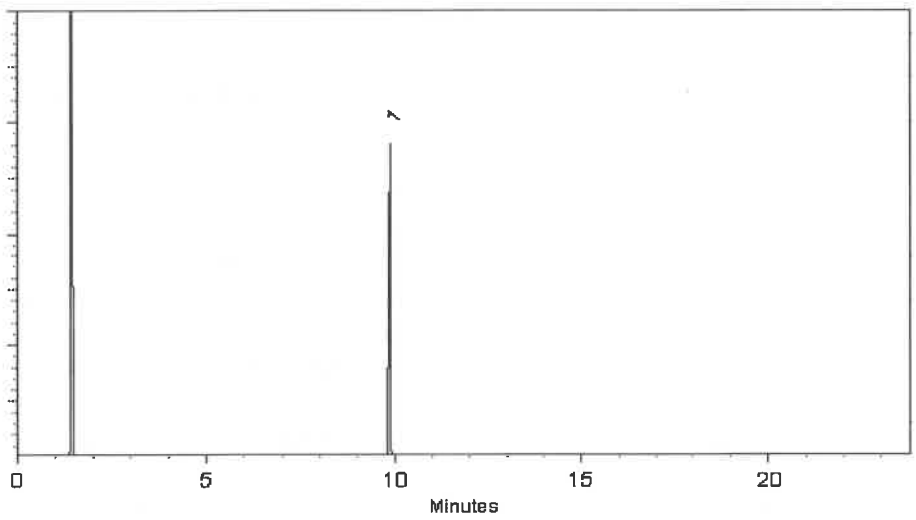
Inj. Temp:
250°C

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

P13645 ↓ P13694 } Y.P. 10/16/24

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

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.)

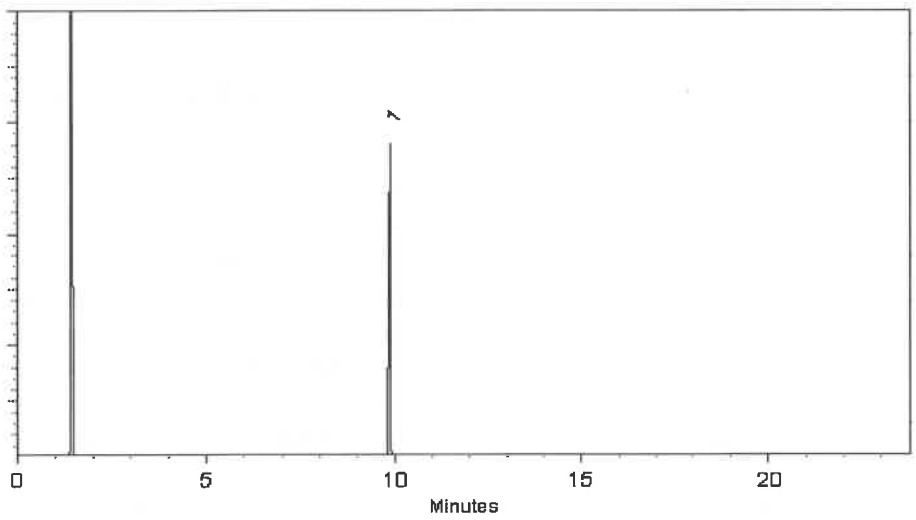
Inj. Temp:
250°C

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13717 ↓ P13727 Y.P 10/24/24

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.)

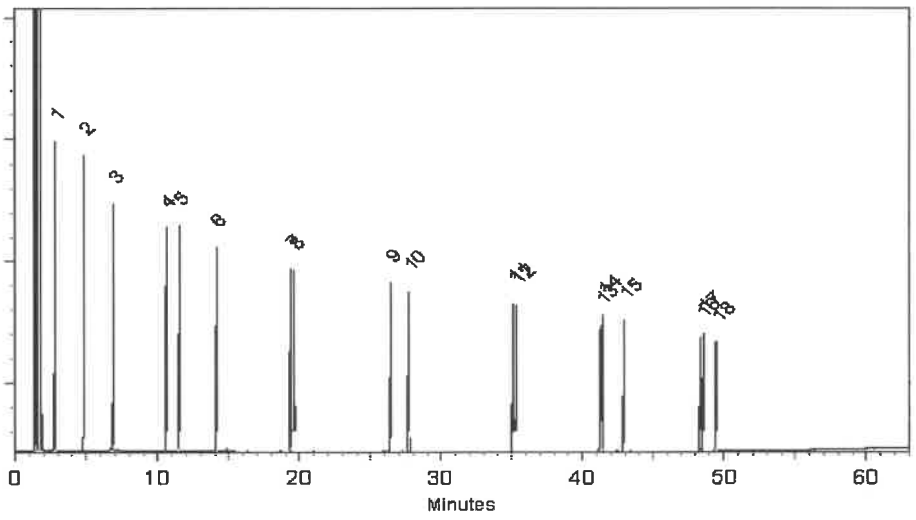
Inj. Temp:
250°C

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 - 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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13717 ↓ P13727 Y.P 10/24/24

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.)

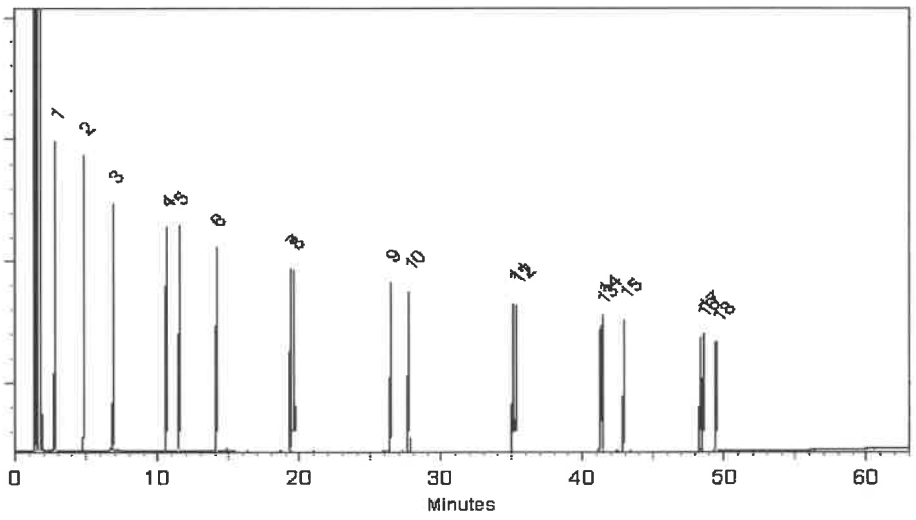
Inj. Temp:
250°C

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 - 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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13717 ↓ P13727 Y.P 10/24/24

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.)

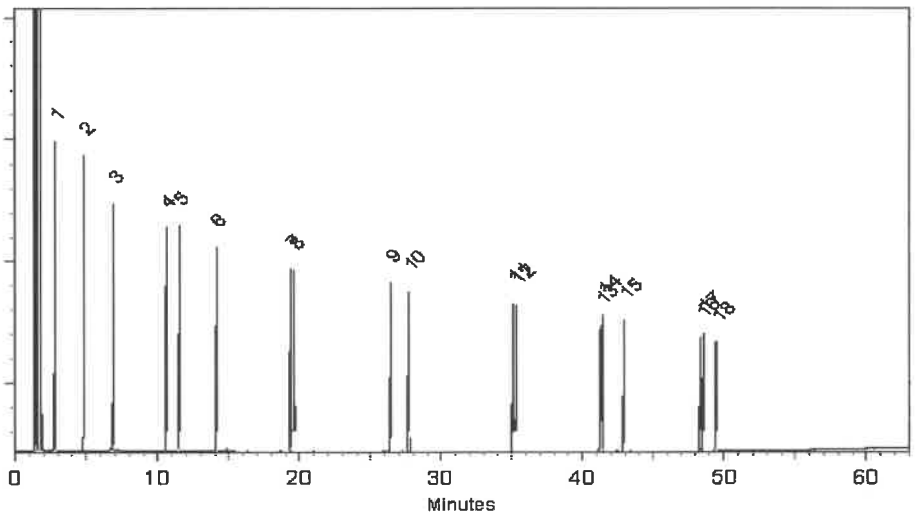
Inj. Temp:
250°C

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 - 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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13717 ↓ P13727 Y.P 10/24/24

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.)

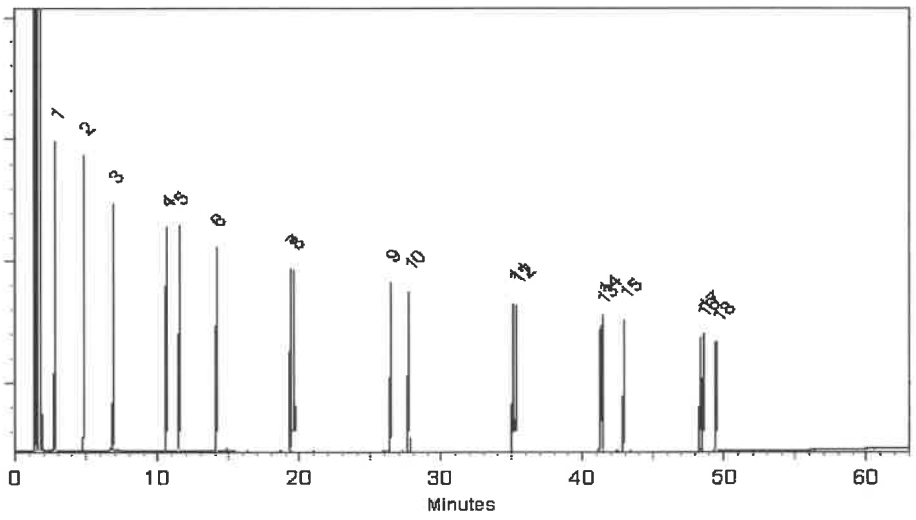
Inj. Temp:
250°C

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 - 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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13717 ↓ P13727 Y.P 10/24/24

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.)

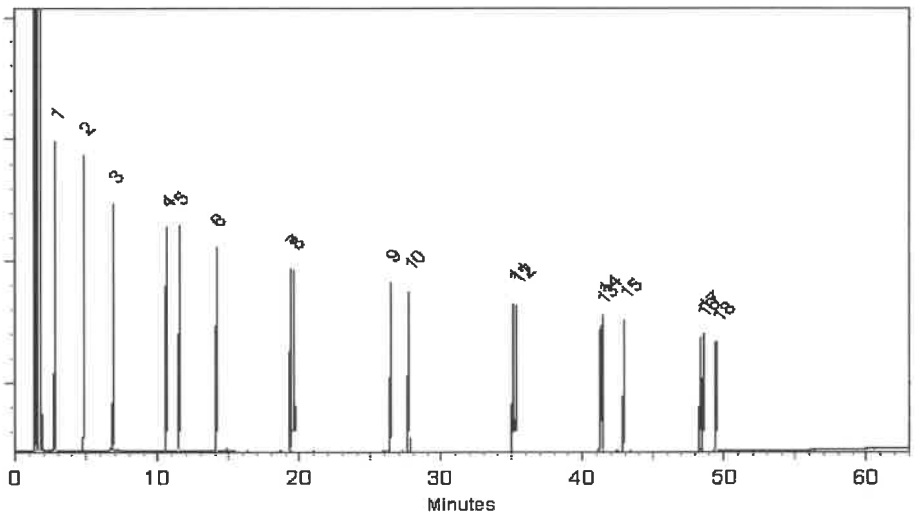
Inj. Temp:
250°C

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 - 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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13717 ↓ P13727 Y.P 10/24/24

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.)

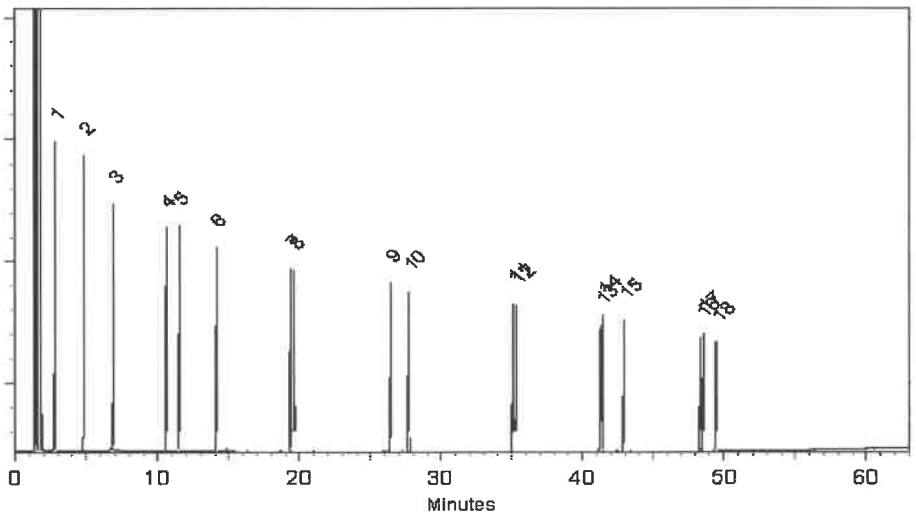
Inj. Temp:
250°C

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 - 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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13717 ↓ P13727 Y.P 10/24/24

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.)

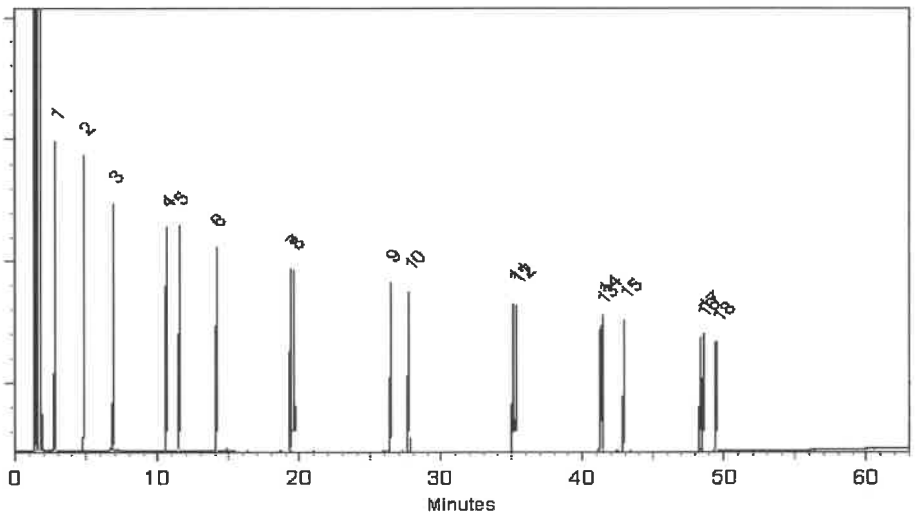
Inj. Temp:
250°C

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 - 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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13717 ↓ P13727 Y.P 10/24/24

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.)

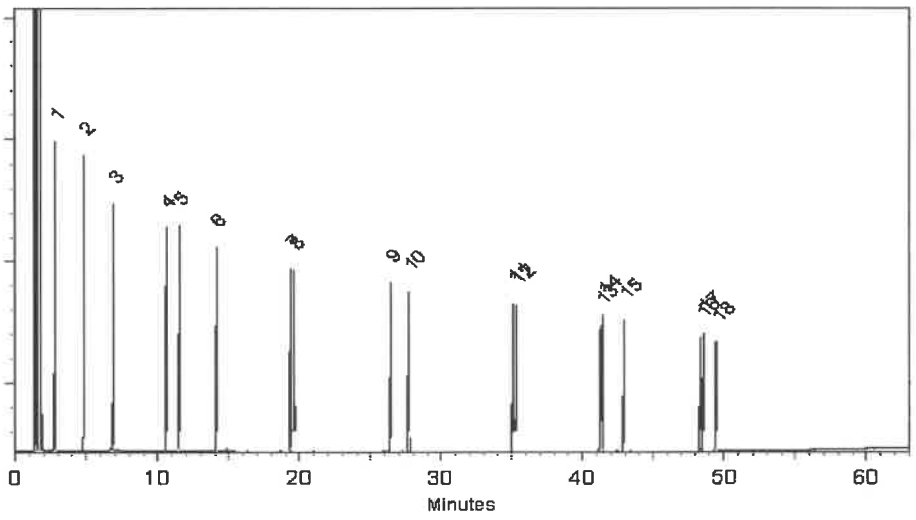
Inj. Temp:
250°C

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 - 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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13717 ↓ P13727 Y.P 10/24/24

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.)

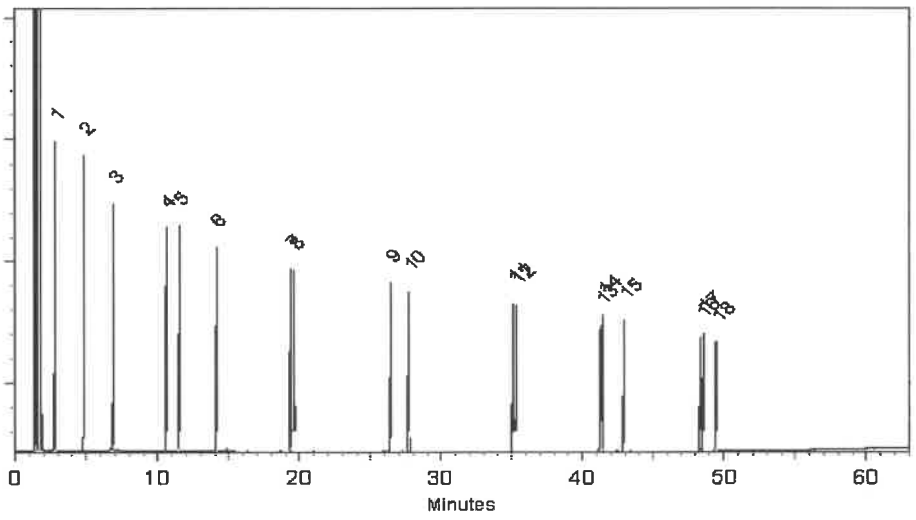
Inj. Temp:
250°C

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 - 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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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

P13717 ↓ P13727 Y.P 10/24/24

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.)

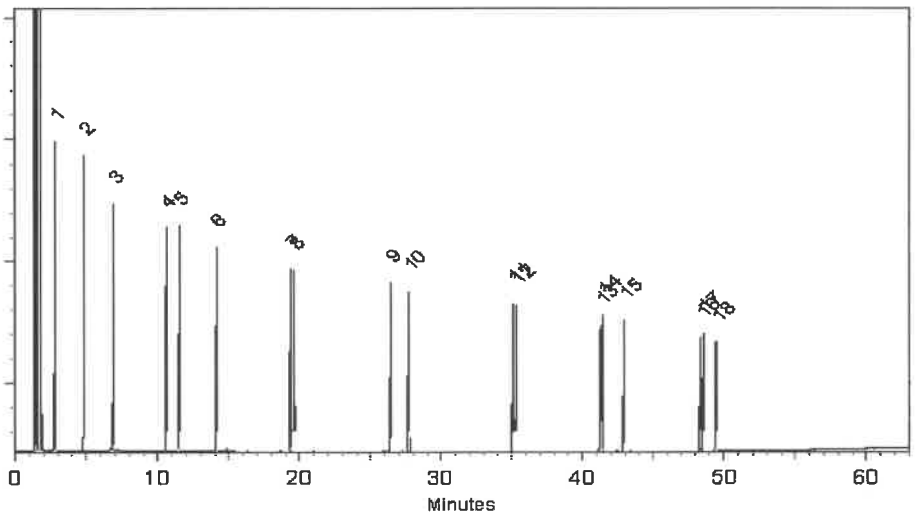
Inj. Temp:
250°C

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 - 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.
- 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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31480 **Lot No.:** A0214879

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 : July 31, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743 ↓ P13772 } Y.P. 11/01/24

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%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

* 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.)

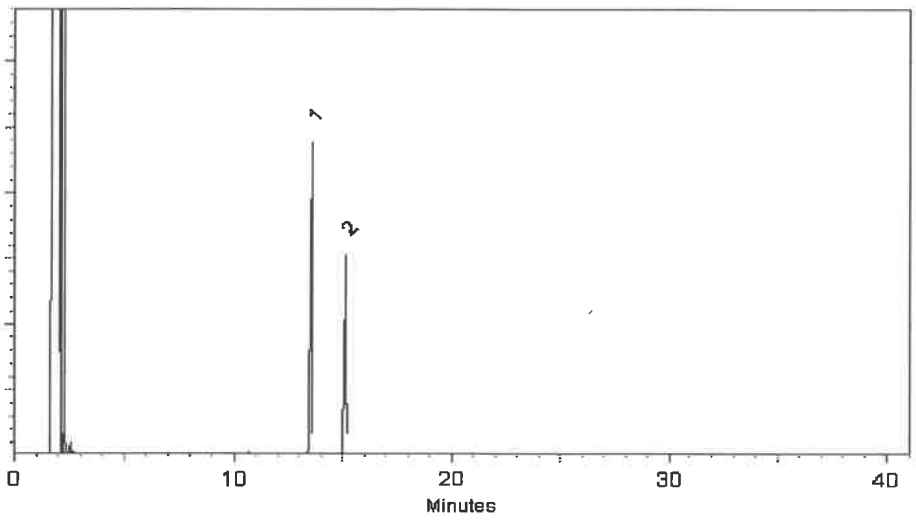
Inj. Temp:
250°C

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.

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31480 **Lot No.:** A0214879

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 : July 31, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743 ↓ P13772 } Y.P. 11/01/24

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%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

* 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.)

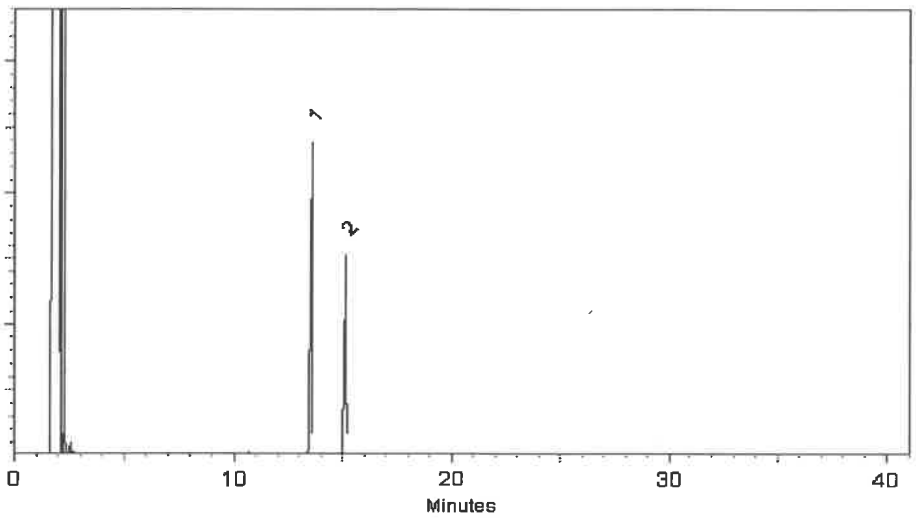
Inj. Temp:
250°C

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.

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31480 **Lot No.:** A0214879

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 : July 31, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743 ↓ P13772 } Y.P. 11/01/24

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%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

* 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.)

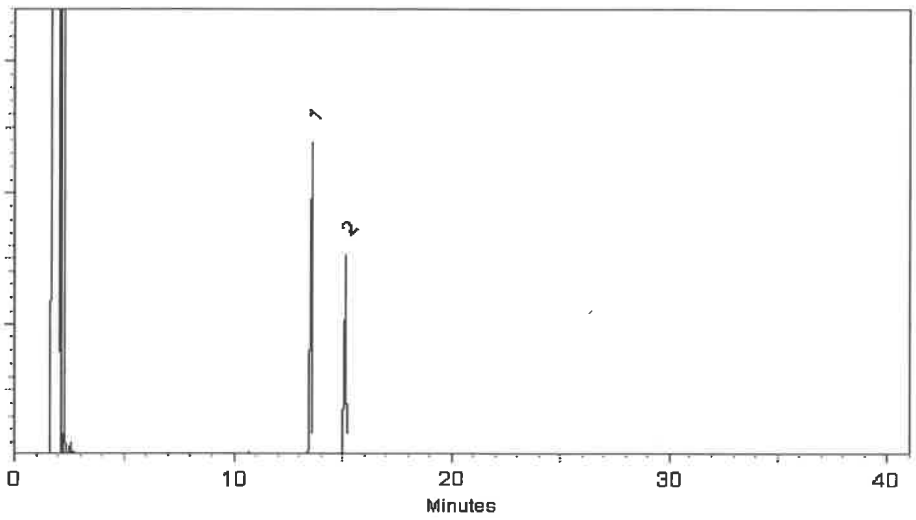
Inj. Temp:
250°C

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.

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

RESTEK
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

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31480 **Lot No.:** A0214879

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 : July 31, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

P13743 ↓ P13772 } Y.P. 11/01/24

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%	4,009.0 µg/mL	+/- 180.5961
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,008.5 µg/mL	+/- 180.5736

* 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.)

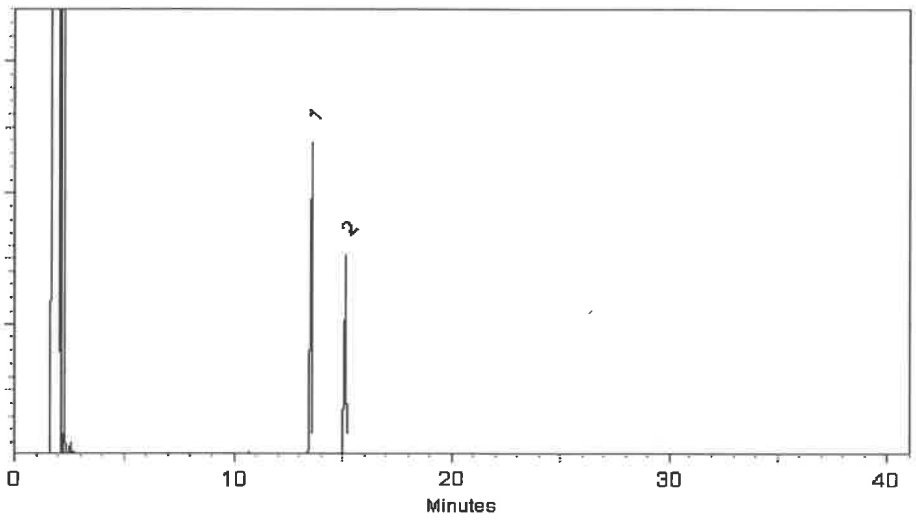
Inj. Temp:
250°C

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.

Scott McNeil - Operations Tech I

Date Mixed: 06-Aug-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 14-Aug-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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- 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.

Certificate of Analysis

ThermoFisher SCIENTIFIC

W3110 SP update: 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 - 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

ENTACT

CHAIN OF CUSTODY RECORD

P5147

NO. 1 OF 1

COMPANY INFORMATION		PROJECT INFORMATION		
LOCATION	ENTACT LLC	PROJECT	North Point	
ATTN	Wyatt Seel	BILLING INFORMATION		
ADDRESS	150 Bay Street, Suite 801	BILL TO	ENTACT LLC	
	Jersey City, NJ	ADDRESS	999 Oakmont Plaza Drive Suite 300	
			Westmont, IL 60559	
PHONE	419-266-4671	PHONE	630-986-2900	
FAX		FAX	PO# E9306	

SAMPLE ID	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	SAMPLE TYPE	CONTAINER TYPE	NUMBER OF CONTAINERS	TPH analysis(EPH Cat2, DRO & GRO) (8015)	COMMENTS
EX-8-TPH-1	TPH	12/5	11:00	Soil	G	Teracore / 8oz	2	X	
EX-8-TPH-2	TPH	12/5	11:00	Soil	G	Teracore / 8oz	2	X	

SAMPLER	A. Farmerie	SHIPMENT	courier	AIRBILL	

REQUIRED TURNAROUND ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS ☐ 10 DAYS ☐ ROUTINE ☐ OTHER: _____

1. RELINQUISHED BY	DATE	2. RELINQUISHED BY	DATE	3. RELINQUISHED BY	DATE
SIGNATURE:	12-5-24	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: ENTACT LLC		PRINTED NAME/COMPANY:		PRINTED NAME/COMPANY:	
1. RECEIVED BY	DATE	2. RECEIVED BY	DATE	3. RECEIVED BY	DATE
SIGNATURE: 3.0	12-5-24	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: GOLDE NEXUS/ ALLIANCE	1455	PRINTED NAME/COMPANY:		PRINTED NAME/COMPANY:	

CHEMTECH 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