284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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Cover Page

Order ID : P5002

Project ID : North Point

Client : ENTACT

Lab Sample Number	Client Sample Number
P5002-01	EX-7-TPH-1

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: 12/3/2024

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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **P5002**

	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: **PRADIP PRAJAPATI** **Date:** **12/03/2024**

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LAB CHRONICLE

OrderID:	P5002	**OrderDate:**	11/25/2024 4:01:00 PM
Client:	ENTACT	**Project:**	North Point
Contact:	Wyatt Seel	**Location:**	L61

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5002-01	**EX-7-TPH-1**	**SOIL**			**11/25/24**			**11/25/24**
			Diesel Range Organics	8015D		11/26/24	11/27/24	
			Gasoline Range Organics	8015D			11/26/24	
			EPH	NJEPH		11/26/24	11/27/24	
P5002-01DL	**EX-7-TPH-1DL**	**Solid**			**11/25/24**			**11/25/24**
			EPH	NJEPH		11/26/24	11/27/24	
P5002-01DL2	**EX-7-TPH-1DL2**	**Solid**			**11/25/24**			**11/25/24**
			EPH	NJEPH		11/26/24	11/27/24	

QC SUMMARY

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SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: ENTA05

Lab Code: CHEM CASE No.: P5002 SAS No.: P5002 SDG No.: P5002

Run Number: FC112724AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)			TOT OUT
EX-7-TPH-1	106			0
EX-7-TPH-1DL	117			0
EX-7-TPH-1DL2	137			0
EX-7-TPH-1MS	88			0
EX-7-TPH-1MSD	88			0
PB165286BL	72			0
PB165286BS	63			0
PB165286BSD	67			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

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SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: ENTA05

Lab Code: CHEM CASE No.: P5002 SAS No.: P5002 SDG No.: P5002

Run Number: FD112724AR

Client SAMPLE NO.	2-Bromonaphthalene (SURR)	2-Flurobiphenyl (SURR)	ortho-Terphenyl (SURR)	TOT OUT
EX-7-TPH-1	141 *	124	92	1
EX-7-TPH-1DL	154 *	105	120	1
EX-7-TPH-1DL2	184 *	115	134	1
EX-7-TPH-1MS	140 *	117	86	1
EX-7-TPH-1MSD	146 *	119	104	1
PB165286BL	106	80	97	0
PB165286BS	88	71	79	0
PB165286BSD	89	72	79	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

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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

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SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5002 **SAS No :** P5002 **SDG No:** P5002

Sample No : P5002-01MS **Datafile:** FC067876.D

Client ID : EX-7-TPH-1MS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	11.8	66.3	82.2	135		(40-140)
Aliphatic C12-C16	7.9	367	470	1305	*	(40-140)
Aliphatic C16-C21	11.8	350	448	823	*	(40-140)
Aliphatic C21-C28	15.7	119	158	245	*	(40-140)
Aliphatic C28-C40	23.6	74.9	108	140	*	(40-140)

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SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5002 **SAS No :** P5002 **SDG No:** P5002

Sample No : P5002-01MSD **Datafile:** FC067877.D

Client ID : EX-7-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	11.8	66.3	79.1	108		22.2 |	(40-140)	25
Aliphatic C12-C16	7.9	367	456	1126	*	14.7 |	(40-140)	25
Aliphatic C16-C21	11.8	350	433	695	*	16.9 |	(40-140)	25
Aliphatic C21-C28	15.7	119	150	194	*	23.2 |	(40-140)	25
Aliphatic C28-C40	23.6	74.9	103	119		16.2 |	(40-140)	25

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SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5002 **SAS No :** P5002 **SDG No:** P5002

Sample No : P5002-01MS **Datafile:** FD048827.D

Client ID : EX-7-TPH-1MS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	7.9	15.1	19.7	59		(40-140)
Aromatic C12-C16	11.8	157	170	108		(40-140)
Aromatic C16-C21	19.6	405	450	227	*	(40-140)
Aromatic C21-C36	31.4	67.7	126	185	*	(40-140)

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SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5002 **SAS No :** P5002 **SDG No:** P5002

Sample No : P5002-01MSD **Datafile:** FD048828.D

Client ID : EX-7-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	7.9	15.1	20.5	69		15 |	(40-140)	25
Aromatic C12-C16	11.8	157	177	167	*	42 *|	(40-140)	25
Aromatic C16-C21	19.7	405	470	328	*	36 *|	(40-140)	25
Aromatic C21-C36	31.5	67.7	132	204	*	9.77 |	(40-140)	25

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SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5002 **SAS No :** P5002 **SDG No:** P5002

Sample No : PB165286BS **Datafile:** FC067872.D

Client ID : PB165286BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	10	4.54	45		(40-140)
Aliphatic C12-C16	6.7	4.73	71		(40-140)
Aliphatic C16-C21	10	8.31	83		(40-140)
Aliphatic C21-C28	13.3	11.0	83		(40-140)
Aliphatic C28-C40	20.0	18.2	91		(40-140)

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SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5002 **SAS No :** P5002 **SDG No:** P5002

Sample No : PB165286BSD **Datafile:** FC067873.D

Client ID : PB165286BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD | QC LIMITS	QC Limit Of RPD
Aliphatic C9-C12	10.0	4.55	46		0.25| (40-140)	50
Aliphatic C12-C16	6.7	4.73	71		0.0371 (40-140)	50
Aliphatic C16-C21	10.0	8.38	84		0.75| (40-140)	50
Aliphatic C21-C28	13.3	11.2	84		1.7| (40-140)	50
Aliphatic C28-C40	20.0	18.6	93		2.1| (40-140)	50

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SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5002 **SAS No :** P5002 **SDG No:** P5002

Sample No : PB165286BS **Datafile:** FD048823.D

Client ID : PB165286BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	6.7	4.02	60		(40-140)
Aromatic C12-C16	10	8.25	83		(40-140)
Aromatic C16-C21	16.7	17.4	104		(40-140)
Aromatic C21-C36	26.6	28.6	107		(40-140)

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SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** ENTACT

Lab Code: CHEM **Cas No:** P5002 **SAS No :** P5002 **SDG No:** P5002

Sample No : PB165286BSD **Datafile:** FD048824.D

Client ID : PB165286BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aromatic C10-C12	6.7	4.04	61		0.36|	(40-140)	50
Aromatic C12-C16	10.0	8.28	83		0.27|	(40-140)	50
Aromatic C16-C21	16.7	17.4	104		0.41|	(40-140)	50
Aromatic C21-C36	26.7	28.7	107		0.61|	(40-140)	50

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4B

METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165286BL

Lab Name: CHEMTECH Contract: ENTA05

Lab Code: CHEM Case No.: P5002 SAS No.: P5002 SDG NO.: P5002

Instrument ID: FID_C Lab Sample ID: PB165286BL

Matrix: (soil/water) Solid Date Extracted: 11/26/2024 10:25:00

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB165286BS	PB165286BS
PB165286BSD	PB165286BSD
EX-7-TPH-1	P5002-01
EX-7-TPH-1MS	P5002-01MS
EX-7-TPH-1MSD	P5002-01MSD

COMMENTS:

SAMPLE DATA

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Report of Analysis

Client:	ENTACT			Date Collected:	11/25/24
Project:	North Point			Date Received:	11/25/24
Client Sample ID:	EX-7-TPH-1			SDG No.:	P5002
Lab Sample ID:	P5002-01			Matrix:	Solid
Analytical Method:	NJEPH			% Solid:	84.6
Sample Wt/Vol:	30.04	Units:	g	Final Vol:	2000 uL
Soil Aliquot Vol:			uL	Test:	EPH
Prep Method :					

Prep Date :	Date Analyzed :	Prep Batch ID
11/26/24 10:25	11/27/24 12:27	PB165286

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	71.5		5	2.24	5.90	mg/kg	FC067878.D
Aliphatic C12-C16	Aliphatic C12-C16	458		50	14.2	39.3	mg/kg	FC067879.D
Aliphatic C16-C21	Aliphatic C16-C21	447		50	17.7	59.0	mg/kg	FC067879.D
Aliphatic C21-C28	Aliphatic C21-C28	131		5	4.72	7.87	mg/kg	FC067878.D
Aliphatic C28-C40	Aliphatic C28-C40	65.0		5	10.6	11.8	mg/kg	FC067878.D
Aromatic C10-C12	Aromatic C10-C12	15.1		1	0.35	0.79	mg/kg	FD048825.D
Aromatic C12-C16	Aromatic C12-C16	178		10	4.01	11.8	mg/kg	FD048829.D
Aromatic C16-C21	Aromatic C16-C21	440		20	22.7	39.3	mg/kg	FD048830.D
Aromatic C21-C36	Aromatic C21-C36	75.0		10	23.6	31.5	mg/kg	FD048829.D
Total AliphaticEPH	Total AliphaticEPH	1170			49.5	124	mg/kg	
Total AromaticEPH	Total AromaticEPH	708			50.7	83.4	mg/kg	
Total EPH	Total EPH	1880			100	207	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

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Report of Analysis

Client:	ENTACT			Date Collected:	11/25/24
Project:	North Point			Date Received:	11/25/24
Client Sample ID:	EX-7-TPH-1			SDG No.:	P5002
Lab Sample ID:	P5002-01			Matrix:	Solid
Analytical Method:	NJEPH			% Solid:	84.6
Sample Wt/Vol:	30.04	Units:	g	Final Vol:	2000 uL
Soil Aliquot Vol:			uL	Test:	EPH
Prep Method :					

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC067874.D	1	11/26/24	11/27/24	PB165286

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12		66.3	E	0.45	1.18	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16		367	E	0.28	0.79	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21		350	E	0.35	1.18	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28		119	E	0.94	1.57	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40		74.9	E	2.12	2.36	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)		52.8		40 - 140	106%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5002-01	Acq On:	27 Nov 2024 10:02
Client Sample ID:	EX-7-TPH-1	Operator:	YP/AJ
Data file:	FC067874.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	3.186	6.461	139586089	841.938	300	ug/ml
Aliphatic C12-C16	6.462	9.849	795449477	4670	200	ug/ml
Aliphatic C16-C21	9.850	13.205	756363113	4460	300	ug/ml
Aliphatic C21-C28	13.206	16.857	238722158	1520	400	ug/ml
Aliphatic C28-C40	16.858	21.700	115222652	951.378	600	ug/ml
Aliphatic EPH	3.186	21.700	2045343489	12400		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.949	12.949	7661000	52.78		ug/ml
Aliphatic C9-C28	3.186	16.857	1930120837	11500	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067874.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 10:02
Operator : YP/AJ
Sample : P5002-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 28 00:13:18 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 :
EX-7-TPH-1

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
12) S 1-chlorooctadecane (S...	12.949	7661000	52.776 ug/mlm
Spiked Amount 50.000		Recovery = 105.55%	
Target Compounds			

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067874.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 10:02
Operator : YP/AJ
Sample : P5002-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

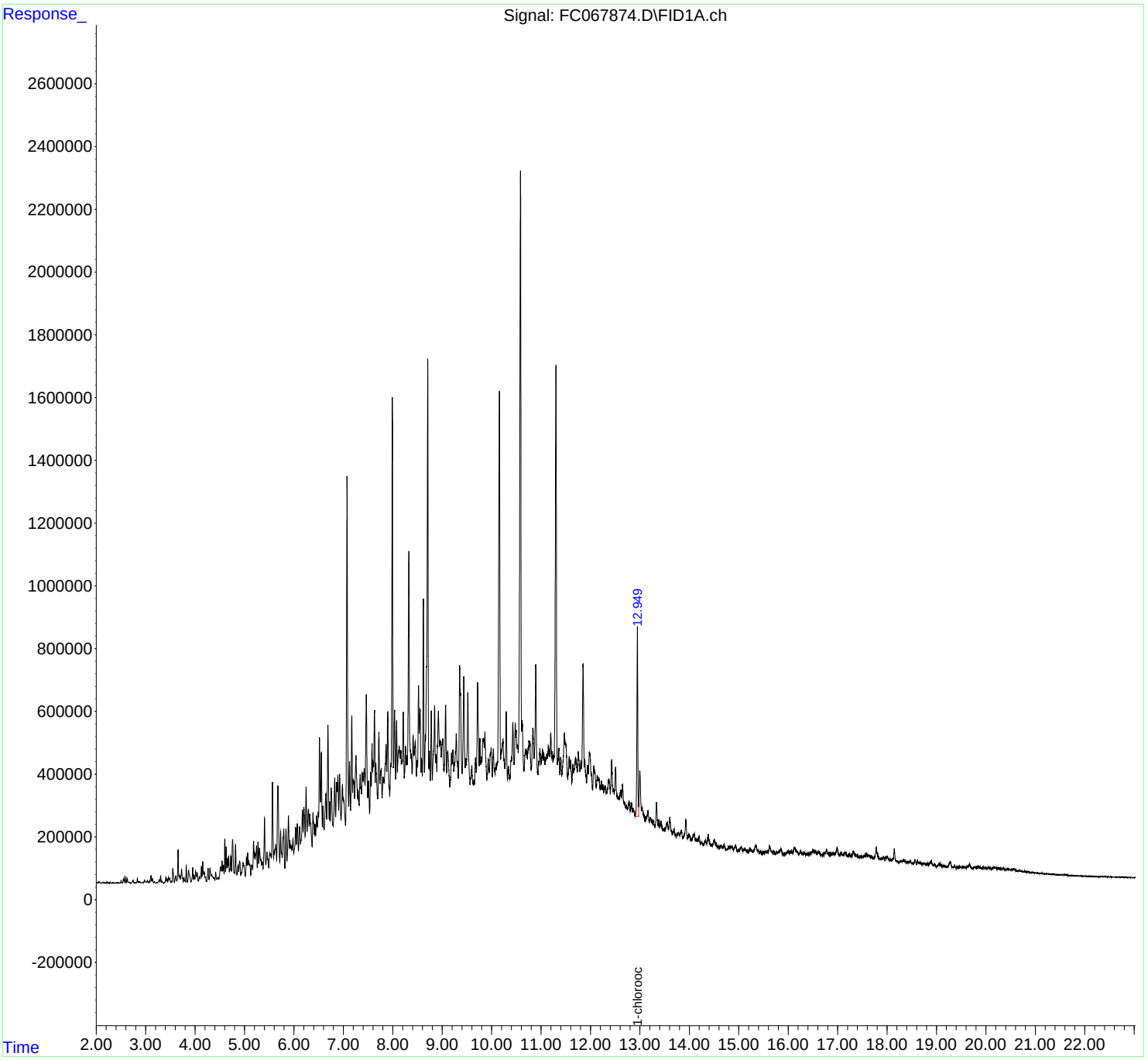
Integration File: autoint1.e
Quant Time: Nov 28 00:13:18 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

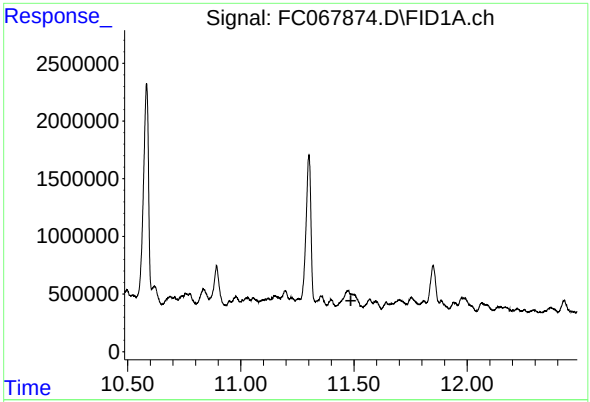
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024





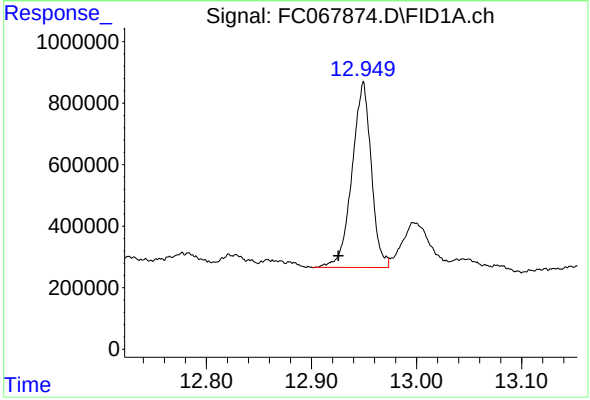
#9 ortho-Terphenyl (SURR)

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

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024



#12 1-chlorooctadecane (SURR)

R.T.: 12.949 min
Delta R.T.: 0.024 min
Response: 7661000
Conc: 52.78 ug/ml m

Instrument :
FID_C
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rteres

Area Percent

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Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Da
Data File : FC067874.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 10:02
Sample : P5002-01
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	3.275	3.224	3.289	BV	10534	145910	0.32%	0.007%
2	3.304	3.289	3.364	VV	22493	272549	0.60%	0.013%
3	3.409	3.364	3.422	PV	19310	225929	0.49%	0.011%
4	3.433	3.422	3.447	VV	14081	141275	0.31%	0.007%
5	3.463	3.447	3.474	VV	18419	187278	0.41%	0.009%
6	3.486	3.474	3.511	VV	17156	229108	0.50%	0.011%
7	3.550	3.511	3.582	VV	45306	723609	1.59%	0.035%
8	3.610	3.582	3.630	VV	23315	381873	0.84%	0.019%
9	3.656	3.630	3.678	VV	105648	1184430	2.59%	0.057%
10	3.687	3.678	3.700	VV	23444	260220	0.57%	0.013%
11	3.728	3.700	3.762	VV	44534	799425	1.75%	0.039%
12	3.776	3.762	3.803	VV	17703	251720	0.55%	0.012%
13	3.822	3.803	3.842	VV	55217	511828	1.12%	0.025%
14	3.870	3.842	3.917	VV	39566	864516	1.89%	0.042%
15	3.952	3.917	3.967	VV	49504	614338	1.35%	0.030%
16	3.978	3.967	3.998	VV	25686	344896	0.76%	0.017%
17	4.012	3.998	4.030	VV	36209	498747	1.09%	0.024%
18	4.044	4.030	4.066	VV	33014	418409	0.92%	0.020%
19	4.087	4.066	4.100	VV	20503	277525	0.61%	0.013%
20	4.128	4.100	4.140	VV	52619	702992	1.54%	0.034%
21	4.155	4.140	4.178	VV	68090	927177	2.03%	0.045%
22	4.190	4.178	4.230	VV	35443	622089	1.36%	0.030%
23	4.262	4.230	4.282	VV	46213	687146	1.51%	0.033%
24	4.302	4.282	4.327	VV	46317	786905	1.72%	0.038%
25	4.337	4.327	4.374	VV	25716	575955	1.26%	0.028%

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26	4.385	4.374	4.400	VV	16677	206422	0.45%	0.010%
27	4.417	4.400	4.441	VV	32477	[illegible]		
28	4.465	4.441	4.480	VV	18175	[illegible]		
29	4.516	4.480	4.530	VV	50809	1[illegible]		
30	4.546	4.530	4.560	VV	70320	[illegible]		
31	4.572	4.560	4.586	VV	54752	689391	1.51%	0.033%
32	4.602	4.586	4.617	VV	140098	1460173	3.20%	0.071%
33	4.630	4.617	4.644	VV	113797	1236902	2.71%	0.060%
34	4.656	4.644	4.667	VV	76720	910202	1.99%	0.044%
35	4.677	4.667	4.692	VV	85640	946667	2.07%	0.046%
36	4.721	4.692	4.736	VV	83855	1438568	3.15%	0.070%
37	4.759	4.736	4.797	VV	136957	2716699	5.95%	0.132%
38	4.818	4.797	4.846	VV	120394	1738663	3.81%	0.084%
39	4.868	4.846	4.882	VV	56705	880133	1.93%	0.043%
40	4.902	4.882	4.924	VV	68362	1301335	2.85%	0.063%
41	4.971	4.924	5.015	VV	63033	2281506	5.00%	0.111%
42	5.039	5.015	5.050	VV	79294	1092883	2.39%	0.053%
43	5.063	5.050	5.075	VV	94636	1106125	2.42%	0.054%
44	5.083	5.075	5.126	VV	69360	1654425	3.62%	0.080%
45	5.144	5.126	5.163	VV	54466	1018483	2.23%	0.049%
46	5.184	5.163	5.215	VV	131630	2742212	6.01%	0.133%
47	5.241	5.215	5.257	VV	116039	2222918	4.87%	0.108%
48	5.272	5.257	5.287	VV	129416	1647055	3.61%	0.080%
49	5.302	5.287	5.348	VV	109359	2903407	6.36%	0.141%
50	5.360	5.348	5.374	VV	65603	936512	2.05%	0.045%
51	5.405	5.374	5.432	VV	204950	3573439	7.83%	0.173%
52	5.454	5.432	5.488	VV	97178	2481353	5.44%	0.120%
53	5.509	5.488	5.521	VV	92230	1521288	3.33%	0.074%
54	5.529	5.521	5.542	VV	91796	1096494	2.40%	0.053%
55	5.565	5.542	5.589	VV	318350	4883473	10.70%	0.237%
56	5.599	5.589	5.605	VV	97957	886154	1.94%	0.043%
57	5.632	5.605	5.650	VV	119235	2694205	5.90%	0.131%
58	5.676	5.650	5.713	VV	306648	6809381	14.92%	0.330%
59	5.731	5.713	5.761	VV	162603	3105219	6.80%	0.151%
60	5.793	5.761	5.816	VV	170865	3768970	8.26%	0.183%
61	5.839	5.816	5.859	VV	169426	2677811	5.87%	0.130%
62	5.889	5.859	5.908	VV	211471	4045333	8.86%	0.196%
63	5.918	5.908	5.953	VV	134524	3179668	6.97%	0.154%
64	5.979	5.953	5.996	VV	138330	2950658	6.46%	0.143%
65	6.034	5.996	6.049	VV	174305	4110741	9.00%	0.199%
66	6.068	6.049	6.091	VV	186057	3685840	8.07%	0.179%
67	6.114	6.091	6.135	VV	175734	3887992	8.52%	0.189%
68	6.173	6.135	6.187	VV	230571	5249695	11.50%	0.255%
69	6.202	6.187	6.227	VV	238108	4785024	10.48%	0.232%

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70	6.246	6.227	6.267	VV	302359	5291328	11.59%	0.257%
71	6.293	6.267	6.309	VV	232025	5		
72	6.321	6.309	6.367	VV	216014	6		
73	6.386	6.367	6.414	VV	219740	4		
74	6.426	6.414	6.440	VV	183881	2		
75	6.457	6.440	6.474	VV	210110	3699269	8.10%	0.179%
76	6.518	6.474	6.538	VV	459378	10818192	23.70%	0.525%
77	6.555	6.538	6.575	VV	413701	6715189	14.71%	0.326%
78	6.587	6.575	6.612	VV	242528	4297036	9.41%	0.208%
79	6.644	6.612	6.662	VV	279406	6921592	15.16%	0.336%
80	6.689	6.662	6.713	VV	501018	9948437	21.79%	0.483%
81	6.724	6.713	6.736	VV	255590	3184334	6.98%	0.154%
82	6.754	6.736	6.789	VV	298189	7606055	16.66%	0.369%
83	6.825	6.789	6.844	VV	327552	8095294	17.73%	0.393%
84	6.865	6.844	6.878	VV	317770	5545821	12.15%	0.269%
85	6.889	6.878	6.906	VV	335256	4900201	10.73%	0.238%
86	6.925	6.906	6.953	VV	342801	7747114	16.97%	0.376%
87	6.981	6.953	7.043	VV	309837	13281230	29.09%	0.644%
88	7.075	7.043	7.108	VV	1291689	22159030	48.54%	1.075%
89	7.125	7.108	7.146	VV	381383	6870798	15.05%	0.333%
90	7.171	7.146	7.189	VV	526125	9550031	20.92%	0.463%
91	7.203	7.189	7.228	VV	321690	7169025	15.70%	0.348%
92	7.255	7.228	7.288	VV	399500	11804222	25.86%	0.573%
93	7.299	7.288	7.316	VV	286067	4633065	10.15%	0.225%
94	7.341	7.316	7.367	VV	341417	9130811	20.00%	0.443%
95	7.383	7.367	7.398	VV	348387	5848958	12.81%	0.284%
96	7.424	7.398	7.437	VV	360321	8006547	17.54%	0.388%
97	7.465	7.437	7.492	VV	596047	13815235	30.26%	0.670%
98	7.508	7.492	7.532	VV	317384	6591550	14.44%	0.320%
99	7.552	7.532	7.563	VV	346767	5504536	12.06%	0.267%
100	7.580	7.563	7.594	VV	437156	6979600	15.29%	0.339%
101	7.604	7.594	7.610	VV	377246	3705445	8.12%	0.180%
102	7.630	7.610	7.646	VV	545805	9455453	20.71%	0.459%
103	7.658	7.646	7.694	VV	374939	9260698	20.29%	0.449%
104	7.719	7.694	7.739	VV	472406	9967450	21.83%	0.483%
105	7.764	7.739	7.784	VV	356905	8873164	19.44%	0.430%
106	7.806	7.784	7.824	VV	329248	7444006	16.31%	0.361%
107	7.864	7.824	7.879	VV	437290	12226229	26.78%	0.593%
108	7.898	7.879	7.938	VV	540719	13726634	30.07%	0.666%
109	7.991	7.938	8.013	VV	1535104	29184572	63.93%	1.415%
110	8.035	8.013	8.057	VV	545040	11619324	25.45%	0.564%
111	8.076	8.057	8.095	VV	506896	9462321	20.73%	0.459%
112	8.129	8.095	8.150	VV	431886	13400666	29.35%	0.650%

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113	8.162	8.150	8.181	VV	414071	7255539	15.89%	0.352%
114	8.212	8.181	8.233	VV	537228	13		
115	8.257	8.233	8.273	VV	430622	9		
116	8.283	8.273	8.293	VV	398847	4		
117	8.324	8.293	8.368	VV	1045663	26		
118	8.373	8.368	8.391	VV	404393	5332693	11.68%	0.259%
119	8.411	8.391	8.431	VV	457516	9889093	21.66%	0.480%
120	8.454	8.431	8.478	VV	443936	11397348	24.97%	0.553%
121	8.492	8.478	8.500	VV	384415	4835902	10.59%	0.235%
122	8.521	8.500	8.534	VV	623367	10398300	22.78%	0.504%
123	8.550	8.534	8.572	VV	544843	10667697	23.37%	0.517%
124	8.584	8.572	8.596	VV	384720	5386784	11.80%	0.261%
125	8.618	8.596	8.640	VV	895726	15240066	33.38%	0.739%
126	8.707	8.640	8.729	VV	1684626	38613124	84.58%	1.873%
127	8.740	8.729	8.758	VV	415067	6685220	14.64%	0.324%
128	8.778	8.758	8.800	VV	539558	10692030	23.42%	0.519%
129	8.846	8.800	8.865	VV	559175	16624033	36.42%	0.806%
130	8.875	8.865	8.891	VV	401986	6006683	13.16%	0.291%
131	8.922	8.891	8.944	VV	540072	14829180	32.48%	0.719%
132	8.960	8.944	8.981	VV	447169	9569839	20.96%	0.464%
133	9.008	8.981	9.035	VV	451047	13292329	29.12%	0.645%
134	9.068	9.035	9.091	VV	557495	14501966	31.77%	0.703%
135	9.112	9.091	9.153	VV	411583	13633283	29.86%	0.661%
136	9.188	9.153	9.201	VV	405101	10045183	22.00%	0.487%
137	9.217	9.201	9.236	VV	413325	8192715	17.95%	0.397%
138	9.284	9.236	9.325	VV	466325	21099971	46.22%	1.023%
139	9.354	9.325	9.404	VV	680283	22983018	50.35%	1.115%
140	9.436	9.404	9.464	VV	650022	17062521	37.38%	0.828%
141	9.474	9.464	9.488	VV	386961	5364660	11.75%	0.260%
142	9.519	9.488	9.563	VV	597799	19171914	42.00%	0.930%
143	9.599	9.563	9.630	VV	364339	13302605	29.14%	0.645%
144	9.642	9.630	9.651	VV	321028	3999678	8.76%	0.194%
145	9.674	9.651	9.690	VV	390197	8167972	17.89%	0.396%
146	9.717	9.690	9.748	VV	628512	16501427	36.15%	0.800%
147	9.763	9.748	9.782	VV	455467	8350135	18.29%	0.405%
148	9.795	9.782	9.804	VV	394045	5103347	11.18%	0.248%
149	9.831	9.804	9.852	VV	451655	12549865	27.49%	0.609%
150	9.864	9.852	9.903	VV	475591	12326890	27.00%	0.598%
151	9.932	9.903	9.954	VV	384973	10926049	23.93%	0.530%
152	9.990	9.954	10.014	VV	419820	13833634	30.30%	0.671%
153	10.036	10.014	10.069	VV	419773	12150797	26.62%	0.589%
154	10.089	10.069	10.098	VV	366363	6258924	13.71%	0.304%
155	10.157	10.098	10.183	VV	1562953	37476061	82.09%	1.818%

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156	10.228	10.183	10.265	VV	448969	20264712	44.39%	0.983%
157	10.296	10.265	10.321	VV	535867	13		
158	10.339	10.321	10.364	VV	360972	8		
159	10.429	10.364	10.456	VV	506754	21		
160	10.478	10.456	10.538	VV	495716	21		
161	10.583	10.538	10.608	VV	2264097	45650918	100.00%	2.214%
162	10.618	10.608	10.654	VV	507946	12130113	26.57%	0.588%
163	10.688	10.654	10.698	VV	417074	10218709	22.38%	0.496%
164	10.707	10.698	10.724	VV	414325	6407602	14.04%	0.311%
165	10.756	10.724	10.803	VV	440255	19422052	42.54%	0.942%
166	10.835	10.803	10.860	VV	482290	14510001	31.78%	0.704%
167	10.893	10.860	10.938	VV	682925	21551490	47.21%	1.045%
168	10.978	10.938	10.998	VV	418857	13843116	30.32%	0.671%
169	11.031	10.998	11.044	VV	413704	10929163	23.94%	0.530%
170	11.055	11.044	11.078	VV	406513	7814684	17.12%	0.379%
171	11.121	11.078	11.130	VV	401195	12223593	26.78%	0.593%
172	11.151	11.130	11.173	VV	424318	10481531	22.96%	0.508%
173	11.196	11.173	11.215	VV	467107	10768053	23.59%	0.522%
174	11.224	11.215	11.240	VV	407904	5989276	13.12%	0.290%
175	11.255	11.240	11.261	VV	395809	4851593	10.63%	0.235%
176	11.301	11.261	11.331	VV	1640961	34540031	75.66%	1.675%
177	11.356	11.331	11.380	VV	419491	11244016	24.63%	0.545%
178	11.399	11.380	11.418	VV	385813	8303429	18.19%	0.403%
179	11.473	11.418	11.540	VV	468081	28965573	63.45%	1.405%
180	11.569	11.540	11.584	VV	391711	9572703	20.97%	0.464%
181	11.596	11.584	11.621	VV	378654	7844915	17.18%	0.380%
182	11.642	11.621	11.656	VV	368331	7196174	15.76%	0.349%
183	11.701	11.656	11.733	VV	388919	16893371	37.01%	0.819%
184	11.754	11.733	11.791	VV	408851	13076292	28.64%	0.634%
185	11.809	11.791	11.819	VV	376451	6138631	13.45%	0.298%
186	11.850	11.819	11.919	VV	685653	26157668	57.30%	1.269%
187	11.941	11.919	11.961	VV	363062	8610606	18.86%	0.418%
188	11.978	11.961	12.044	VV	403124	17760810	38.91%	0.861%
189	12.065	12.044	12.114	VV	361363	13916187	30.48%	0.675%
190	12.136	12.114	12.158	VV	329924	8219972	18.01%	0.399%
191	12.167	12.158	12.207	VV	323285	9052406	19.83%	0.439%
192	12.221	12.207	12.244	VV	314357	6745317	14.78%	0.327%
193	12.253	12.244	12.269	VV	302033	4251966	9.31%	0.206%
194	12.293	12.269	12.328	VV	299188	10153016	22.24%	0.492%
195	12.369	12.328	12.401	VV	320323	13163248	28.83%	0.638%
196	12.428	12.401	12.480	VV	380953	14804822	32.43%	0.718%
197	12.506	12.480	12.587	VV	356917	18311239	40.11%	0.888%
198	12.611	12.587	12.631	VV	282696	7091987	15.54%	0.344%
199	12.649	12.631	12.717	VV	301797	13362067	29.27%	0.648%

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200	12.727	12.717	12.747	VV	235840	4142098	9.07%	0.201%
201	12.780	12.747	12.808	VV	245784	8		
202	12.825	12.808	12.902	VV	239526	12		
203	12.949	12.902	12.975	VV	786519	16		
204	12.999	12.975	13.032	VV	347002	9		
205	13.046	13.032	13.101	VV	229185	8760176	19.19%	0.425%
206	13.165	13.101	13.194	VV	218175	11158351	24.44%	0.541%
207	13.208	13.194	13.261	VV	195343	7465286	16.35%	0.362%
208	13.277	13.261	13.308	VV	185530	5018229	10.99%	0.243%
209	13.337	13.308	13.368	VV	243998	7208265	15.79%	0.350%
210	13.384	13.368	13.405	VV	188640	3965520	8.69%	0.192%
211	13.424	13.405	13.507	VV	183543	10206506	22.36%	0.495%
212	13.551	13.507	13.581	VV	182685	7462094	16.35%	0.362%
213	13.606	13.581	13.666	VV	195912	8452385	18.52%	0.410%
214	13.690	13.666	13.727	VV	159986	5425484	11.88%	0.263%
215	13.783	13.727	13.803	VV	149281	6509831	14.26%	0.316%
216	13.835	13.803	13.870	VV	154482	5752588	12.60%	0.279%
217	13.929	13.870	13.973	VV	186988	9222725	20.20%	0.447%
218	13.991	13.973	14.038	VV	141114	5169209	11.32%	0.251%
219	14.083	14.038	14.121	VV	140193	6695762	14.67%	0.325%
220	14.141	14.121	14.155	VV	126439	2535765	5.55%	0.123%
221	14.164	14.155	14.177	VV	125908	1676811	3.67%	0.081%
222	14.200	14.177	14.224	VV	138276	3551908	7.78%	0.172%
223	14.238	14.224	14.283	VV	116591	3962019	8.68%	0.192%
224	14.325	14.283	14.347	VV	123589	4435888	9.72%	0.215%
225	14.381	14.347	14.470	VV	141136	8617502	18.88%	0.418%
226	14.501	14.470	14.531	VV	124066	4277144	9.37%	0.207%
227	14.540	14.531	14.568	VV	111043	2368710	5.19%	0.115%
228	14.575	14.568	14.596	VV	104779	1725789	3.78%	0.084%
229	14.641	14.596	14.681	VV	106884	5197010	11.38%	0.252%
230	14.699	14.681	14.742	VV	108597	3689071	8.08%	0.179%
231	14.752	14.742	14.759	VV	94477	944989	2.07%	0.046%
232	14.801	14.759	14.814	VV	100955	3238105	7.09%	0.157%
233	14.864	14.814	14.891	VV	103249	4574116	10.02%	0.222%
234	14.934	14.891	14.964	VV	107829	4345400	9.52%	0.211%
235	14.991	14.964	15.008	VV	93170	2347144	5.14%	0.114%
236	15.046	15.008	15.101	VV	99692	5278948	11.56%	0.256%
237	15.123	15.101	15.187	VV	95142	4675072	10.24%	0.227%
238	15.226	15.187	15.288	VV	95353	5439168	11.91%	0.264%
239	15.344	15.288	15.418	VV	106008	7242021	15.86%	0.351%
240	15.439	15.418	15.481	VV	86771	3165884	6.93%	0.154%
241	15.490	15.481	15.515	VV	84944	1664083	3.65%	0.081%
242	15.535	15.515	15.547	VV	86843	1639017	3.59%	0.079%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

rteres

243	15.571	15.547	15.594	VV	87656	2405387	5.27%	0.117%
244	15.622	15.594	15.683	VV	101954	4		
245	15.702	15.683	15.741	VV	84540	2		
246	15.766	15.741	15.798	VV	82833	2		
247	15.853	15.798	15.931	VV	95356	6		
248	15.998	15.931	16.034	VV	88747	5099978	11.17%	0.247%
249	16.066	16.034	16.088	VV	85683	2668229	5.84%	0.129%
250	16.133	16.088	16.224	VV	97028	7076063	15.50%	0.343%
251	16.245	16.224	16.318	VV	84928	4516637	9.89%	0.219%
252	16.331	16.318	16.358	VV	81964	1881641	4.12%	0.091%
253	16.383	16.358	16.401	VV	78258	1982918	4.34%	0.096%
254	16.408	16.401	16.424	VV	79393	1045248	2.29%	0.051%
255	16.439	16.424	16.446	VV	79293	1056567	2.31%	0.051%
256	16.517	16.446	16.582	VV	88138	6788292	14.87%	0.329%
257	16.633	16.582	16.689	VV	84252	5038354	11.04%	0.244%
258	16.702	16.689	16.714	VV	74937	1131736	2.48%	0.055%
259	16.777	16.714	16.801	VV	91900	4183254	9.16%	0.203%
260	16.810	16.801	16.834	VV	79572	1561810	3.42%	0.076%
261	16.890	16.834	16.907	VV	78301	3349910	7.34%	0.162%
262	16.991	16.907	17.034	VV	96676	6196813	13.57%	0.301%
263	17.080	17.034	17.107	VV	79337	3284587	7.20%	0.159%
264	17.163	17.107	17.201	VV	82700	4270324	9.35%	0.207%
265	17.233	17.201	17.284	VV	75611	3565273	7.81%	0.173%
266	17.319	17.284	17.386	VV	85110	4595261	10.07%	0.223%
267	17.397	17.386	17.461	VV	71282	3029163	6.64%	0.147%
268	17.490	17.461	17.514	VV	68314	2122333	4.65%	0.103%
269	17.543	17.514	17.549	VV	70030	1447635	3.17%	0.070%
270	17.576	17.549	17.623	VV	76593	3199723	7.01%	0.155%
271	17.637	17.623	17.665	VV	73122	1705926	3.74%	0.083%
272	17.683	17.665	17.734	VV	69907	2680574	5.87%	0.130%
273	17.781	17.734	17.864	VV	94992	5504024	12.06%	0.267%
274	17.882	17.864	17.908	VV	61699	1550980	3.40%	0.075%
275	17.929	17.908	17.961	VV	64688	1974866	4.33%	0.096%
276	17.984	17.961	17.998	VV	65165	1370379	3.00%	0.066%
277	18.010	17.998	18.049	VV	67785	1891600	4.14%	0.092%
278	18.147	18.049	18.244	VV	91523	6856813	15.02%	0.333%
279	18.303	18.244	18.317	VV	53230	2249205	4.93%	0.109%
280	18.352	18.317	18.418	VV	55499	3068378	6.72%	0.149%
281	18.427	18.418	18.454	VV	49819	1076433	2.36%	0.052%
282	18.477	18.454	18.541	VV	52454	2465143	5.40%	0.120%
283	18.567	18.541	18.595	VV	56763	1590122	3.48%	0.077%
284	18.617	18.595	18.645	VV	51556	1434980	3.14%	0.070%
285	18.667	18.645	18.711	VV	48545	1800616	3.94%	0.087%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1

rteres

Manual IntegrationsAPPROVED

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286	18.749	18.711	18.784	VV	45661	1912190	4.19%	0.093%
287	18.790	18.784	18.847	VV	43304	1		
288	18.895	18.847	18.942	VV	50956	2		
289	18.965	18.942	18.999	VV	44292	1		
290	19.072	18.999	19.129	VV	43052	2		
291	19.138	19.129	19.150	VV	36324	445890	0.98%	0.022%
292	19.174	19.150	19.201	VV	35613	1048773	2.30%	0.051%
293	19.205	19.201	19.226	VV	34721	492647	1.08%	0.024%
294	19.280	19.226	19.334	VV	48353	2513885	5.51%	0.122%
295	19.368	19.334	19.426	VV	34887	1756738	3.85%	0.085%
296	19.447	19.426	19.485	VV	33836	1128452	2.47%	0.055%
297	19.491	19.485	19.513	VV	32423	520321	1.14%	0.025%
298	19.525	19.513	19.604	VV	32796	1719237	3.77%	0.083%
299	19.668	19.604	19.731	VV	40161	2482086	5.44%	0.120%
300	19.778	19.731	19.801	VV	32142	1268593	2.78%	0.062%
301	19.845	19.801	19.914	VV	32847	2062308	4.52%	0.100%
302	19.950	19.914	19.974	VV	30260	1024106	2.24%	0.050%
303	19.981	19.974	20.022	VV	29435	800192	1.75%	0.039%
304	20.051	20.022	20.098	VV	30525	1290253	2.83%	0.063%
305	20.107	20.098	20.120	VV	27206	352057	0.77%	0.017%
306	20.181	20.120	20.218	VV	30649	1648913	3.61%	0.080%
307	20.239	20.218	20.284	VV	27955	1058421	2.32%	0.051%
308	20.298	20.284	20.323	VV	24802	560419	1.23%	0.027%
309	20.348	20.323	20.391	VV	25916	1003592	2.20%	0.049%
310	20.398	20.391	20.410	VV	23542	267837	0.59%	0.013%
311	20.454	20.410	20.500	VV	24974	1261250	2.76%	0.061%
312	20.535	20.500	20.544	VV	23974	595646	1.30%	0.029%
313	20.552	20.544	20.557	VV	23059	180356	0.40%	0.009%
314	20.566	20.557	20.644	VV	25335	1101834	2.41%	0.053%
315	20.668	20.644	20.754	VV	19471	1172594	2.57%	0.057%
316	20.772	20.754	20.780	VV	15739	238909	0.52%	0.012%
317	20.790	20.780	20.904	VV	16385	1055094	2.31%	0.051%
318	20.935	20.904	20.967	VV	13712	494220	1.08%	0.024%
319	20.984	20.967	21.022	VV	12722	381359	0.84%	0.018%
320	21.040	21.022	21.102	VV	11658	513046	1.12%	0.025%
321	21.114	21.102	21.183	VV	10049	449930	0.99%	0.022%
322	21.190	21.183	21.211	VV	8288	137354	0.30%	0.007%
323	21.242	21.211	21.298	VV	9495	422772	0.93%	0.021%
324	21.308	21.298	21.341	VV	7380	174314	0.38%	0.008%
325	21.347	21.341	21.483	VV	6625	473837	1.04%	0.023%
326	21.494	21.483	21.512	VV	5579	86338	0.19%	0.004%
327	21.525	21.512	21.534	VV	5132	64622	0.14%	0.003%
328	21.550	21.534	21.578	VV	5949	137971	0.30%	0.007%
329	21.603	21.578	21.644	VV	6157	193843	0.42%	0.009%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1

rteres

330 21.653 21.644 21.701 VBA 3353 121221 0.27% 0.006%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Sum of corrected are

Aliphatic EPH 111424.M Thu Nov 28 01:21:56 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	11/25/24	
Project:	North Point		Date Received:	11/25/24	
Client Sample ID:	EX-7-TPH-1		SDG No.:	P5002	
Lab Sample ID:	P5002-01		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	84.6	
Sample Wt/Vol:	30.04	Units: g	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :					

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048825.D	1	11/26/24	11/27/24	PB165286

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	15.1		0.35	0.79	mg/kg
Aromatic C12-C16	Aromatic C12-C16	157	E	0.40	1.18	mg/kg
Aromatic C16-C21	Aromatic C16-C21	405	E	1.13	1.97	mg/kg
Aromatic C21-C36	Aromatic C21-C36	67.7	E	2.36	3.15	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	70.5		40 - 140	141%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	62.2		40 - 140	124%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	45.8		40 - 140	92%	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:	P5002-01	Acq On:	27 Nov 2024 10:02
Client Sample ID:	EX-7-TPH-1	Operator:	YP/AJ
Data file:	FD048825.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	4.087	5.803	36793107	191.613	200	ug/ml
Aromatic C12-C16	5.804	8.410	384605387	2000	300	ug/ml
Aromatic C16-C21	8.411	12.673	957025255	5150	500	ug/ml
Aromatic C21-C36	12.674	18.080	135343588	860.794	800	ug/ml
Aromatic EPH	4.087	18.080	1513767337	8200		ug/ml
2-Bromonaphthalene (SURR)	7.369	7.369	12406185	70.47		ug/ml
2-Flurobiphenyl (SURR)	8.224	8.224	7161646	62.18		ug/ml
ortho-Terphenyl (SURR)	11.266	11.266	8806368	45.79		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048825.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 10:02
Operator : YP/AJ
Sample : P5002-01
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:39:13 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...	7.369	12406185	70.466 ug/ml
Spiked Amount 50.000		Recovery = 140.93%	
6) S 2-Flurobiphenyl (SURR)	8.224	7161646	62.183 ug/mlm
Spiked Amount 50.000	Range 0 - 131	Recovery = 124.37%	
11) S ortho-Terphenyl (SURR)	11.266	8806368	45.786 ug/mlm
Spiked Amount 50.000		Recovery = 91.57%	
Target Compounds			

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048825.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 10:02
Operator : YP/AJ
Sample : P5002-01
Misc :
ALS Vial : 64 Sample Multiplier: 1

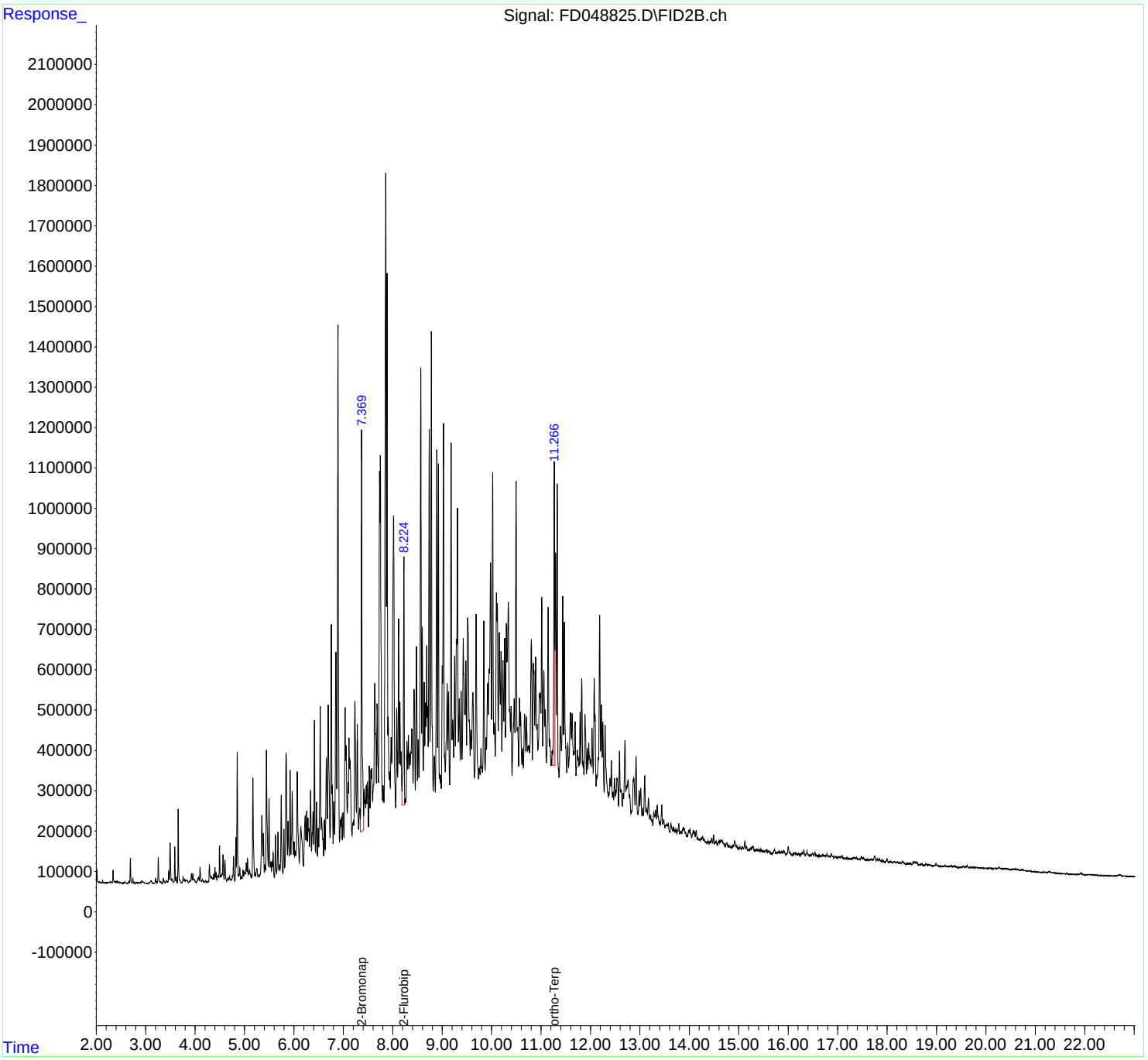
Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1

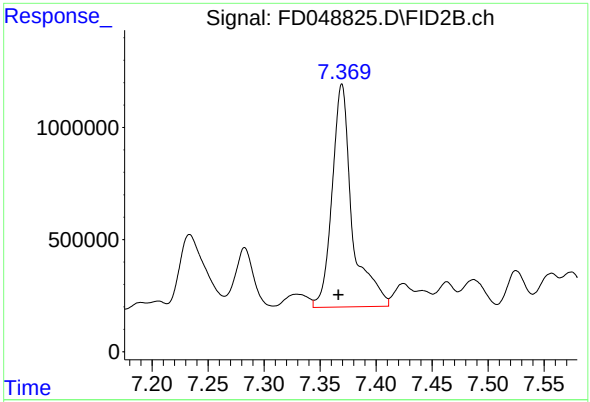
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:39:13 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





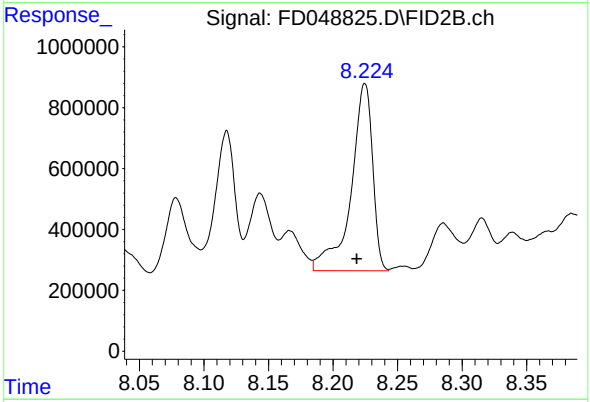
#4 2-Bromonaphthalene (SURR)

R.T.: 7.369 min
Delta R.T.: 0.003 min
Response: 12406185
Conc: 70.47 ug/ml

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1

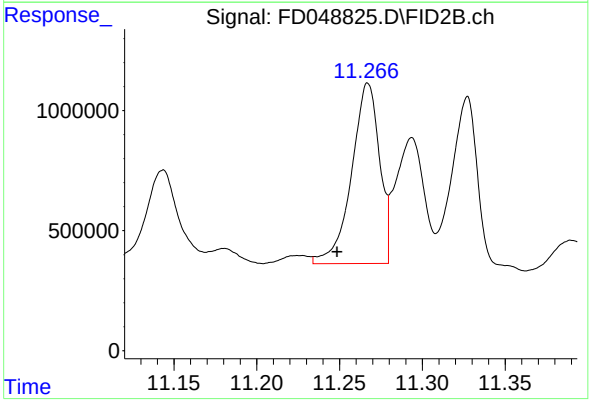
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024



#6 2-Flurobiphenyl (SURR)

R.T.: 8.224 min
Delta R.T.: 0.006 min
Response: 7161646
Conc: 62.18 ug/ml m



#11 ortho-Terphenyl (SURR)

R.T.: 11.266 min
Delta R.T.: 0.018 min
Response: 8806368
Conc: 45.79 ug/ml m

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Da
Data File : FD048825.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 10:02
Sample : P5002-01
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	4.101	4.086	4.125	PV	33286	303593	1.11%	0.020%
2	4.138	4.125	4.144	VV	1836	13859	0.05%	0.001%
3	4.153	4.144	4.173	VV	4348	44266	0.16%	0.003%
4	4.182	4.173	4.196	VV	1431	9695	0.04%	0.001%
5	4.214	4.196	4.235	PV	5234	55688	0.20%	0.004%
6	4.265	4.235	4.273	PV	2766	23473	0.09%	0.002%
7	4.290	4.273	4.310	VV	44113	470011	1.72%	0.031%
8	4.315	4.310	4.327	VV	14154	127224	0.46%	0.008%
9	4.337	4.327	4.360	VV	13896	198453	0.72%	0.013%
10	4.377	4.360	4.389	VV	19233	218294	0.80%	0.014%
11	4.402	4.389	4.414	VV	36009	330735	1.21%	0.022%
12	4.423	4.414	4.439	VV	23630	219556	0.80%	0.014%
13	4.455	4.439	4.461	VV	13740	148278	0.54%	0.010%
14	4.472	4.461	4.480	VV	17534	166708	0.61%	0.011%
15	4.495	4.480	4.514	VV	88876	855797	3.12%	0.056%
16	4.521	4.514	4.529	VV	15150	125969	0.46%	0.008%
17	4.540	4.529	4.548	VV	19717	188952	0.69%	0.012%
18	4.565	4.548	4.586	VV	66445	762288	2.78%	0.050%
19	4.604	4.586	4.637	VV	53485	586391	2.14%	0.038%
20	4.667	4.637	4.683	VV	8905	141228	0.52%	0.009%
21	4.698	4.683	4.717	VV	13321	153590	0.56%	0.010%
22	4.723	4.717	4.735	VV	4028	36574	0.13%	0.002%
23	4.756	4.735	4.763	VV	14803	144519	0.53%	0.009%
24	4.778	4.763	4.803	VV	60987	600257	2.19%	0.039%
25	4.826	4.803	4.837	VV	107840	947019	3.46%	0.062%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1

rteres

Manual IntegrationsAPPROVED

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26	4.852	4.837	4.876	VV	319775	3071054	11.21%	0.201%
27	4.886	4.876	4.890	VV	14702			
28	4.905	4.890	4.921	VV	31824			
29	4.939	4.921	4.952	VV	10198			
30	4.970	4.952	4.984	VV	26648			
31	4.997	4.984	5.016	VV	21522	342243	1.25%	0.022%
32	5.036	5.016	5.049	VV	44338	583265	2.13%	0.038%
33	5.061	5.049	5.076	VV	52870	559946	2.04%	0.037%
34	5.102	5.076	5.114	VV	27077	454480	1.66%	0.030%
35	5.119	5.114	5.132	VV	16167	135392	0.49%	0.009%
36	5.143	5.132	5.151	VV	12817	110946	0.40%	0.007%
37	5.169	5.151	5.205	VV	254136	3049418	11.13%	0.199%
38	5.216	5.205	5.226	VV	16724	169137	0.62%	0.011%
39	5.244	5.226	5.275	VV	28624	557019	2.03%	0.036%
40	5.294	5.275	5.306	VV	13178	191824	0.70%	0.013%
41	5.350	5.306	5.372	VV	160031	2718760	9.92%	0.178%
42	5.383	5.372	5.400	VV	114864	1161402	4.24%	0.076%
43	5.412	5.400	5.425	VV	36457	443233	1.62%	0.029%
44	5.443	5.425	5.480	VV	320656	4501104	16.42%	0.294%
45	5.496	5.480	5.518	VV	200198	2098594	7.66%	0.137%
46	5.534	5.518	5.547	VV	43968	581735	2.12%	0.038%
47	5.558	5.547	5.567	VV	42130	402922	1.47%	0.026%
48	5.579	5.567	5.603	VV	65513	733924	2.68%	0.048%
49	5.626	5.603	5.649	VV	109345	1203736	4.39%	0.079%
50	5.677	5.649	5.694	VV	116699	1502789	5.48%	0.098%
51	5.705	5.694	5.719	VV	34993	442587	1.62%	0.029%
52	5.743	5.719	5.776	VV	208355	2597768	9.48%	0.170%
53	5.797	5.776	5.814	VV	123397	1365061	4.98%	0.089%
54	5.841	5.814	5.868	VV	310223	5281164	19.27%	0.345%
55	5.881	5.868	5.906	VV	142603	2113956	7.71%	0.138%
56	5.923	5.906	5.939	VV	268614	2888914	10.54%	0.189%
57	5.965	5.939	5.991	VV	215728	3738237	13.64%	0.244%
58	6.004	5.991	6.016	VV	90804	1096006	4.00%	0.072%
59	6.026	6.016	6.037	VV	67182	758719	2.77%	0.050%
60	6.067	6.037	6.108	VV	263316	5121787	18.69%	0.335%
61	6.139	6.108	6.193	VV	126303	4017852	14.66%	0.262%
62	6.227	6.193	6.241	VV	152403	2979801	10.87%	0.195%
63	6.258	6.241	6.272	VV	165250	2393925	8.74%	0.156%
64	6.284	6.272	6.295	VV	148083	1750557	6.39%	0.114%
65	6.300	6.295	6.315	VV	122219	1249750	4.56%	0.082%
66	6.337	6.315	6.356	VV	214727	3419770	12.48%	0.223%
67	6.387	6.356	6.400	VV	163746	3029765	11.06%	0.198%
68	6.415	6.400	6.438	VV	389065	4369968	15.95%	0.285%
69	6.457	6.438	6.476	VV	186608	2604802	9.50%	0.170%

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70	6.492	6.476	6.503	VV	121711	1495621	5.46%	0.098%
71	6.533	6.503	6.548	VV	424459	5		
72	6.557	6.548	6.600	VV	147167	3		
73	6.616	6.600	6.632	VV	140035	1		
74	6.657	6.632	6.677	VV	295176	5		
75	6.694	6.677	6.731	VV	425222	8062463	29.42%	0.527%
76	6.757	6.731	6.772	VV	624198	8103130	29.57%	0.529%
77	6.778	6.772	6.794	VV	226241	2136954	7.80%	0.140%
78	6.808	6.794	6.823	VV	185616	2388733	8.72%	0.156%
79	6.850	6.823	6.868	VV	556266	9207115	33.60%	0.602%
80	6.892	6.868	6.923	VV	1365616	18254612	66.61%	1.193%
81	6.944	6.923	6.953	VV	139937	2155278	7.86%	0.141%
82	6.963	6.953	6.977	VV	146353	1819602	6.64%	0.119%
83	6.993	6.977	7.012	VV	157063	2586558	9.44%	0.169%
84	7.036	7.012	7.048	VV	416390	5628814	20.54%	0.368%
85	7.056	7.048	7.080	VV	322514	4781469	17.45%	0.312%
86	7.095	7.080	7.101	VV	232506	2489834	9.09%	0.163%
87	7.114	7.101	7.126	VV	341377	4191757	15.30%	0.274%
88	7.134	7.126	7.176	VV	286513	5999127	21.89%	0.392%
89	7.190	7.176	7.196	VV	130454	1428234	5.21%	0.093%
90	7.206	7.196	7.213	VV	136562	1387965	5.06%	0.091%
91	7.234	7.213	7.265	VV	433494	8449282	30.83%	0.552%
92	7.283	7.265	7.309	VV	374942	5905914	21.55%	0.386%
93	7.329	7.309	7.345	VV	166295	3187145	11.63%	0.208%
94	7.369	7.345	7.411	VV	1106299	16771739	61.20%	1.096%
95	7.424	7.411	7.436	VV	213573	2773615	10.12%	0.181%
96	7.441	7.436	7.451	VV	182398	1586162	5.79%	0.104%
97	7.463	7.451	7.473	VV	221518	2644458	9.65%	0.173%
98	7.487	7.473	7.508	VV	231050	3893119	14.21%	0.254%
99	7.525	7.508	7.540	VV	270260	3897338	14.22%	0.255%
100	7.557	7.540	7.564	VV	258898	3291128	12.01%	0.215%
101	7.574	7.564	7.591	VV	263717	3752983	13.69%	0.245%
102	7.635	7.591	7.668	VV	472265	14315229	52.24%	0.935%
103	7.683	7.668	7.710	VV	422296	7746975	28.27%	0.506%
104	7.733	7.710	7.741	VV	994358	12117413	44.22%	0.792%
105	7.749	7.741	7.792	VV	1038429	16552287	60.40%	1.081%
106	7.804	7.792	7.821	VV	220224	3486459	12.72%	0.228%
107	7.857	7.821	7.871	VV	1738261	27404631	100.00%	1.790%
108	7.885	7.871	7.900	VV	1488972	16238499	59.25%	1.061%
109	7.907	7.900	7.925	VV	388355	4967271	18.13%	0.325%
110	7.937	7.925	7.950	VV	250561	3573178	13.04%	0.233%
111	7.966	7.950	7.980	VV	337774	5293949	19.32%	0.346%
112	8.015	7.980	8.058	VV	886526	22700217	82.83%	1.483%

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113	8.078	8.058	8.098	VV	409940	6805121	24.83%	0.445%
114	8.118	8.098	8.131	VV	628962	8		
115	8.144	8.131	8.158	VV	424772	5		
116	8.166	8.158	8.184	VV	300997	4		
117	8.225	8.184	8.244	VV	784735	13		
118	8.255	8.244	8.263	VV	184030	2065115	7.54%	0.135%
119	8.285	8.263	8.301	VV	326040	6013114	21.94%	0.393%
120	8.315	8.301	8.328	VV	342267	4750395	17.33%	0.310%
121	8.339	8.328	8.350	VV	294981	3760014	13.72%	0.246%
122	8.385	8.350	8.410	VV	356831	10855108	39.61%	0.709%
123	8.430	8.410	8.456	VV	454340	9379596	34.23%	0.613%
124	8.478	8.456	8.500	VV	561219	10058291	36.70%	0.657%
125	8.514	8.500	8.528	VV	329462	4790355	17.48%	0.313%
126	8.567	8.528	8.583	VV	1252017	20369169	74.33%	1.331%
127	8.596	8.583	8.618	VV	608996	8676892	31.66%	0.567%
128	8.635	8.618	8.648	VV	470977	6572275	23.98%	0.429%
129	8.662	8.648	8.673	VV	420298	5717926	20.86%	0.374%
130	8.686	8.673	8.698	VV	560345	6906104	25.20%	0.451%
131	8.705	8.698	8.716	VV	407117	4003250	14.61%	0.262%
132	8.737	8.716	8.753	VV	1095296	14423551	52.63%	0.942%
133	8.781	8.753	8.818	VV	1333982	22418614	81.81%	1.465%
134	8.841	8.818	8.860	VV	285557	6254962	22.82%	0.409%
135	8.890	8.860	8.906	VV	1045897	15186476	55.42%	0.992%
136	8.923	8.906	8.940	VV	1011698	12211136	44.56%	0.798%
137	8.946	8.940	8.959	VV	241594	2660441	9.71%	0.174%
138	8.970	8.959	8.981	VV	239361	2891867	10.55%	0.189%
139	9.001	8.981	9.008	VV	510088	6124249	22.35%	0.400%
140	9.026	9.008	9.062	VV	1112521	18292211	66.75%	1.195%
141	9.100	9.062	9.113	VV	465919	10415433	38.01%	0.680%
142	9.127	9.113	9.152	VV	445721	7827402	28.56%	0.511%
143	9.181	9.152	9.199	VV	1060514	15883201	57.96%	1.038%
144	9.213	9.199	9.233	VV	373077	6895900	25.16%	0.451%
145	9.252	9.233	9.267	VV	533125	8447327	30.82%	0.552%
146	9.288	9.267	9.293	VV	572128	7344343	26.80%	0.480%
147	9.309	9.293	9.330	VV	899505	13124528	47.89%	0.857%
148	9.345	9.330	9.366	VV	426369	7666322	27.97%	0.501%
149	9.383	9.366	9.400	VV	445191	7145030	26.07%	0.467%
150	9.426	9.400	9.465	VV	574854	16573474	60.48%	1.083%
151	9.478	9.465	9.493	VV	520110	7261745	26.50%	0.474%
152	9.516	9.493	9.566	VV	625823	19905586	72.64%	1.300%
153	9.579	9.566	9.595	VV	347312	5533723	20.19%	0.362%
154	9.621	9.595	9.650	VV	440085	11812506	43.10%	0.772%
155	9.686	9.650	9.735	VV	634911	17651361	64.41%	1.153%

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156	9.751	9.735	9.769	VV	251040	4797017	17.50%	0.313%
157	9.784	9.769	9.797	VV	300372	4[illegible]		
158	9.802	9.797	9.814	VV	255101	2[illegible]		
159	9.843	9.814	9.869	VV	617188	12[illegible]		
160	9.888	9.869	9.897	VV	326913	5[illegible]		
161	9.918	9.897	9.933	VV	460219	8559245	31.23%	0.559%
162	9.951	9.933	9.957	VV	497294	6649082	24.26%	0.434%
163	9.979	9.957	10.000	VV	759886	14936302	54.50%	0.976%
164	10.022	10.000	10.044	VV	983250	15942056	58.17%	1.042%
165	10.054	10.044	10.074	VV	361820	5982153	21.83%	0.391%
166	10.098	10.074	10.108	VV	683542	10369067	37.84%	0.677%
167	10.116	10.108	10.135	VV	657282	8825048	32.20%	0.577%
168	10.155	10.135	10.179	VV	585587	12259715	44.74%	0.801%
169	10.191	10.179	10.207	VV	539917	7352741	26.83%	0.480%
170	10.229	10.207	10.247	VV	516127	10171968	37.12%	0.665%
171	10.265	10.247	10.280	VV	571047	9016977	32.90%	0.589%
172	10.299	10.280	10.311	VV	607438	9185031	33.52%	0.600%
173	10.338	10.311	10.362	VV	661373	16695063	60.92%	1.091%
174	10.367	10.362	10.382	VV	396738	4489268	16.38%	0.293%
175	10.395	10.382	10.413	VV	401263	6353030	23.18%	0.415%
176	10.458	10.413	10.472	VV	419160	11980162	43.72%	0.783%
177	10.495	10.472	10.517	VV	958904	15815818	57.71%	1.033%
178	10.528	10.517	10.546	VV	348905	5606751	20.46%	0.366%
179	10.566	10.546	10.577	VV	422016	6462149	23.58%	0.422%
180	10.586	10.577	10.612	VV	384848	6857919	25.02%	0.448%
181	10.628	10.612	10.642	VV	295172	4980065	18.17%	0.325%
182	10.668	10.642	10.691	VV	381697	9472436	34.57%	0.619%
183	10.707	10.691	10.723	VV	372809	6274838	22.90%	0.410%
184	10.731	10.723	10.740	VV	299384	3074853	11.22%	0.201%
185	10.752	10.740	10.770	VV	303403	5236614	19.11%	0.342%
186	10.804	10.770	10.825	VV	564312	13837746	50.49%	0.904%
187	10.844	10.825	10.874	VV	505458	12345879	45.05%	0.807%
188	10.891	10.874	10.913	VV	522171	10075660	36.77%	0.658%
189	10.919	10.913	10.934	VV	353264	4145621	15.13%	0.271%
190	10.975	10.934	10.997	VV	432270	14244765	51.98%	0.931%
191	11.014	10.997	11.034	VV	667829	10743010	39.20%	0.702%
192	11.057	11.034	11.073	VV	485853	9566390	34.91%	0.625%
193	11.084	11.073	11.106	VV	388824	6620882	24.16%	0.433%
194	11.143	11.106	11.169	VV	641568	15123501	55.19%	0.988%
195	11.180	11.169	11.204	VV	314408	5938505	21.67%	0.388%
196	11.226	11.204	11.237	VV	284145	5433796	19.83%	0.355%
197	11.267	11.237	11.280	VV	1003720	15344011	55.99%	1.002%
198	11.294	11.280	11.308	VV	775916	10402971	37.96%	0.680%
199	11.327	11.308	11.362	VV	945787	15235121	55.59%	0.995%

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200	11.390	11.362	11.411	VV	346780	8516940	31.08%	0.556%
201	11.439	11.411	11.455	VV	668798	11		
202	11.471	11.455	11.519	VV	605344	14		
203	11.541	11.519	11.558	VV	305098	6		
204	11.595	11.558	11.614	VV	379532	10		
205	11.629	11.614	11.657	VV	376421	8418102	30.72%	0.550%
206	11.663	11.657	11.671	VV	281260	2319598	8.46%	0.152%
207	11.689	11.671	11.706	VV	356053	6345382	23.15%	0.415%
208	11.733	11.706	11.771	VV	284797	10078530	36.78%	0.658%
209	11.789	11.771	11.804	VV	378847	5939307	21.67%	0.388%
210	11.822	11.804	11.867	VV	463091	11974083	43.69%	0.782%
211	11.888	11.867	11.919	VV	372197	9266362	33.81%	0.605%
212	11.934	11.919	11.947	VV	288778	4458791	16.27%	0.291%
213	11.965	11.947	11.975	VV	302821	4625210	16.88%	0.302%
214	11.980	11.975	11.993	VV	269968	2772748	10.12%	0.181%
215	12.002	11.993	12.013	VV	261222	2981319	10.88%	0.195%
216	12.031	12.013	12.056	VV	338344	7187753	26.23%	0.470%
217	12.075	12.056	12.087	VV	462116	6877776	25.10%	0.449%
218	12.093	12.087	12.114	VV	371459	4569838	16.68%	0.299%
219	12.128	12.114	12.134	VV	219431	2522729	9.21%	0.165%
220	12.156	12.134	12.162	VV	264215	4159376	15.18%	0.272%
221	12.186	12.162	12.204	VV	617884	10510970	38.35%	0.687%
222	12.220	12.204	12.236	VV	396074	6455567	23.56%	0.422%
223	12.249	12.236	12.276	VV	352974	6580038	24.01%	0.430%
224	12.296	12.276	12.366	VV	343723	11916107	43.48%	0.779%
225	12.397	12.366	12.408	VV	211075	4877014	17.80%	0.319%
226	12.423	12.408	12.445	VV	256408	4608148	16.82%	0.301%
227	12.455	12.445	12.468	VV	177046	2315261	8.45%	0.151%
228	12.486	12.468	12.502	VV	212142	3845035	14.03%	0.251%
229	12.535	12.502	12.567	VV	210794	7306858	26.66%	0.477%
230	12.587	12.567	12.607	VV	277663	5095574	18.59%	0.333%
231	12.621	12.607	12.645	VV	181833	3723655	13.59%	0.243%
232	12.660	12.645	12.671	VV	174476	2561706	9.35%	0.167%
233	12.698	12.671	12.716	VV	305192	6094511	22.24%	0.398%
234	12.730	12.716	12.735	VV	191751	2139829	7.81%	0.140%
235	12.760	12.735	12.790	VV	205395	6221876	22.70%	0.406%
236	12.795	12.790	12.820	VV	167475	2632672	9.61%	0.172%
237	12.831	12.820	12.838	VV	129546	1416476	5.17%	0.093%
238	12.876	12.838	12.901	VV	208964	6677819	24.37%	0.436%
239	12.922	12.901	12.954	VV	261756	5713937	20.85%	0.373%
240	12.984	12.954	12.998	VV	179019	3827932	13.97%	0.250%
241	13.017	12.998	13.040	VV	183376	3885479	14.18%	0.254%
242	13.057	13.040	13.072	VV	133472	2362271	8.62%	0.154%

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243	13.097	13.072	13.122	VV	214079	4802114	17.52%	0.314%
244	13.138	13.122	13.154	VV	133383	2		
245	13.172	13.154	13.195	VV	159261	3		
246	13.215	13.195	13.236	VV	114416	2		
247	13.245	13.236	13.260	VV	104442	1		
248	13.282	13.260	13.296	VV	122450	2401297	8.76%	0.157%
249	13.317	13.296	13.333	VV	128209	2568557	9.37%	0.168%
250	13.350	13.333	13.394	VV	139100	4278610	15.61%	0.280%
251	13.400	13.394	13.413	VV	98310	1092569	3.99%	0.071%
252	13.442	13.413	13.463	VV	140216	3297700	12.03%	0.215%
253	13.482	13.463	13.506	VV	103596	2457524	8.97%	0.161%
254	13.528	13.506	13.540	VV	90664	1828875	6.67%	0.119%
255	13.547	13.540	13.559	VV	91944	1029844	3.76%	0.067%
256	13.574	13.559	13.606	VV	93798	2313494	8.44%	0.151%
257	13.628	13.606	13.662	VV	91799	2759313	10.07%	0.180%
258	13.680	13.662	13.695	VV	84236	1572436	5.74%	0.103%
259	13.707	13.695	13.722	VV	78124	1224997	4.47%	0.080%
260	13.735	13.722	13.749	VV	79184	1193094	4.35%	0.078%
261	13.787	13.749	13.807	VV	93159	2725076	9.94%	0.178%
262	13.822	13.807	13.832	VV	72637	1060736	3.87%	0.069%
263	13.840	13.832	13.847	VV	70977	618571	2.26%	0.040%
264	13.884	13.847	13.915	VV	81692	3090928	11.28%	0.202%
265	13.920	13.915	13.955	VV	68773	1522918	5.56%	0.099%
266	13.961	13.955	13.963	VV	60952	296948	1.08%	0.019%
267	13.984	13.963	13.993	VV	73952	1222966	4.46%	0.080%
268	14.012	13.993	14.050	VV	76993	2306616	8.42%	0.151%
269	14.081	14.050	14.094	VV	73442	1764602	6.44%	0.115%
270	14.102	14.094	14.119	VV	69481	955652	3.49%	0.062%
271	14.140	14.119	14.162	VV	73877	1652817	6.03%	0.108%
272	14.168	14.162	14.194	VV	54256	994744	3.63%	0.065%
273	14.209	14.194	14.220	VV	51390	798636	2.91%	0.052%
274	14.234	14.220	14.243	VV	52903	698238	2.55%	0.046%
275	14.267	14.243	14.289	VV	56495	1449204	5.29%	0.095%
276	14.299	14.289	14.320	VV	51784	914792	3.34%	0.060%
277	14.328	14.320	14.359	VV	45478	981739	3.58%	0.064%
278	14.373	14.359	14.388	VV	44894	754619	2.75%	0.049%
279	14.399	14.388	14.411	VV	43824	588741	2.15%	0.038%
280	14.427	14.411	14.439	VV	44666	729959	2.66%	0.048%
281	14.452	14.439	14.472	VV	52326	949696	3.47%	0.062%
282	14.491	14.472	14.509	VV	60478	1085822	3.96%	0.071%
283	14.525	14.509	14.529	VV	42715	483551	1.76%	0.032%
284	14.539	14.529	14.562	VV	45022	812846	2.97%	0.053%
285	14.603	14.562	14.620	VV	45862	1397602	5.10%	0.091%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

286	14.632	14.620	14.636	VV	44623	426981	1.56%	0.028%
287	14.641	14.636	14.644	VV	45651			
288	14.655	14.644	14.688	VV	48227	1		
289	14.693	14.688	14.729	VV	38894			
290	14.761	14.729	14.791	VV	39447	1		
291	14.805	14.791	14.852	VV	30562	1072033	3.91%	0.070%
292	14.884	14.852	14.890	VV	30922	653496	2.38%	0.043%
293	14.916	14.890	14.951	VV	42942	1268955	4.63%	0.083%
294	14.964	14.951	14.984	VV	30913	541564	1.98%	0.035%
295	15.000	14.984	15.010	VV	25753	371230	1.35%	0.024%
296	15.022	15.010	15.052	VV	27051	624338	2.28%	0.041%
297	15.077	15.052	15.098	VV	26919	680123	2.48%	0.044%
298	15.123	15.098	15.145	VV	41525	850987	3.11%	0.056%
299	15.158	15.145	15.185	VV	28154	558343	2.04%	0.036%
300	15.192	15.185	15.199	VV	19271	152658	0.56%	0.010%
301	15.239	15.199	15.248	VV	23280	600720	2.19%	0.039%
302	15.255	15.248	15.260	VV	23144	161841	0.59%	0.011%
303	15.283	15.260	15.334	VV	28171	967000	3.53%	0.063%
304	15.355	15.334	15.367	VV	18924	345197	1.26%	0.023%
305	15.371	15.367	15.433	VV	18642	663534	2.42%	0.043%
306	15.443	15.433	15.468	VV	18228	342989	1.25%	0.022%
307	15.474	15.468	15.498	VV	14821	257404	0.94%	0.017%
308	15.504	15.498	15.525	VV	14621	222324	0.81%	0.015%
309	15.550	15.525	15.581	VV	16869	481831	1.76%	0.031%
310	15.594	15.581	15.603	VV	13555	176093	0.64%	0.012%
311	15.608	15.603	15.614	VV	12981	81686	0.30%	0.005%
312	15.618	15.614	15.644	VV	12269	191401	0.70%	0.013%
313	15.646	15.644	15.667	VV	9735	118579	0.43%	0.008%
314	15.674	15.667	15.681	VV	7535	54899	0.20%	0.004%
315	15.723	15.681	15.744	VV	17326	445081	1.62%	0.029%
316	15.760	15.744	15.772	VV	9993	153050	0.56%	0.010%
317	15.777	15.772	15.781	VV	9401	46180	0.17%	0.003%
318	15.798	15.781	15.806	VV	11376	159340	0.58%	0.010%
319	15.816	15.806	15.845	VV	11993	233452	0.85%	0.015%
320	15.865	15.845	15.890	VV	12478	276417	1.01%	0.018%
321	15.917	15.890	15.948	VV	12362	315321	1.15%	0.021%
322	15.970	15.948	15.976	VV	5840	81253	0.30%	0.005%
323	16.000	15.976	16.029	VV	22717	415103	1.51%	0.027%
324	16.035	16.029	16.062	VV	8838	125085	0.46%	0.008%
325	16.068	16.062	16.079	VV	3037	26595	0.10%	0.002%
326	16.103	16.079	16.115	VV	5310	86012	0.31%	0.006%
327	16.136	16.115	16.149	VV	6998	108061	0.39%	0.007%
328	16.166	16.149	16.188	VV	5537	89776	0.33%	0.006%
329	16.195	16.188	16.207	VV	3197	28433	0.10%	0.002%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

330	16.214	16.207	16.227	VV	3458	33910	0.12%	0.002%
331	16.288	16.227	16.304	VV	6918			
332	16.318	16.304	16.357	VV	11569			
333	16.380	16.357	16.400	PBA	8241			
334	16.498	16.463	16.515	PV	6538			
335	16.540	16.515	16.563	VV	9157	144642	0.53%	0.009%
336	16.569	16.563	16.575	VV	2543	13596	0.05%	0.001%
337	16.578	16.575	16.593	VV	2561	11596	0.04%	0.001%
338	16.600	16.593	16.612	VV	1983	14446	0.05%	0.001%
339	16.616	16.612	16.620	VV	1051	5438	0.02%	0.000%
340	16.629	16.620	16.645	VV	2619	26856	0.10%	0.002%
341	16.650	16.645	16.671	VV	1758	22571	0.08%	0.001%
342	16.698	16.671	16.733	VV	6163	141667	0.52%	0.009%
343	16.749	16.733	16.762	VV	4400	55876	0.20%	0.004%
344	16.786	16.762	16.809	VV	8720	134781	0.49%	0.009%
345	16.825	16.809	16.844	VV	4266	65230	0.24%	0.004%
346	16.871	16.844	16.891	VV	8918	158139	0.58%	0.010%
347	16.906	16.891	16.930	VV	4071	57166	0.21%	0.004%
348	16.951	16.930	16.975	PV	5228	88320	0.32%	0.006%
349	16.983	16.975	16.997	VV	3522	30758	0.11%	0.002%
350	17.030	16.997	17.037	VV	3695	66285	0.24%	0.004%
351	17.043	17.037	17.063	VV	3884	48131	0.18%	0.003%
352	17.087	17.063	17.130	VV	5661	127747	0.47%	0.008%
353	17.135	17.130	17.142	VV	1925	11857	0.04%	0.001%
354	17.151	17.142	17.160	VV	2483	21676	0.08%	0.001%
355	17.186	17.160	17.209	VV	4117	70226	0.26%	0.005%
356	17.212	17.209	17.223	VV	1556	11108	0.04%	0.001%
357	17.231	17.223	17.235	VV	2442	13518	0.05%	0.001%
358	17.239	17.235	17.244	VV	2545	9822	0.04%	0.001%
359	17.250	17.244	17.256	VV	2848	13945	0.05%	0.001%
360	17.261	17.256	17.273	VV	2111	16837	0.06%	0.001%
361	17.290	17.273	17.295	VV	2678	28063	0.10%	0.002%
362	17.346	17.295	17.367	VV	6581	183702	0.67%	0.012%
363	17.385	17.367	17.407	VV	6458	96977	0.35%	0.006%
364	17.421	17.407	17.423	VV	2502	20120	0.07%	0.001%
365	17.432	17.423	17.454	VV	3533	49883	0.18%	0.003%
366	17.482	17.454	17.502	VV	9576	163534	0.60%	0.011%
367	17.521	17.502	17.546	VV	6771	126663	0.46%	0.008%
368	17.551	17.546	17.580	VV	3305	32882	0.12%	0.002%
369	17.596	17.580	17.614	VV	4063	50699	0.19%	0.003%
370	17.627	17.614	17.645	VV	3528	49880	0.18%	0.003%
371	17.655	17.645	17.660	VV	3738	26844	0.10%	0.002%
372	17.668	17.660	17.679	VV	4061	42504	0.16%	0.003%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

rteres

373	17.698	17.679	17.714	VV	5489	86932	0.32%	0.006%
374	17.749	17.714	17.778	VV	13667			
375	17.801	17.778	17.825	VV	6753			
376	17.849	17.825	17.875	VV	9026			
377	17.882	17.875	17.902	VV	3641			
378	17.912	17.902	17.925	VV	3153	33306	0.12%	0.002%
379	17.930	17.925	17.953	VV	3394	29719	0.11%	0.002%
380	17.959	17.953	17.966	PV	1335	4889	0.02%	0.000%
381	17.999	17.966	18.030	VV	9004	149225	0.54%	0.010%
382	18.054	18.030	18.080	VV	2976	57679	0.21%	0.004%
383	18.086	18.080	18.122	VV	2688	30405	0.11%	0.002%
384	18.144	18.122	18.192	PV	3739	74459	0.27%	0.005%

Sum of corrected areas: 1530643941

Aromatic EPH 111424.M Thu Nov 28 05:15:32 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	11/25/24	
Project:	North Point		Date Received:	11/25/24	
Client Sample ID:	EX-7-TPH-1DL		SDG No.:	P5002	
Lab Sample ID:	P5002-01DL		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	84.6	
Sample Wt/Vol:	30.04	Units: g	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :					

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC067878.D	5	11/26/24	11/27/24	PB165286

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	71.5		2.24	5.90	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	401	E	1.42	3.93	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	409	E	1.77	5.90	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	131		4.72	7.87	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	65.0		10.6	11.8	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	11.7		40 - 140	117%	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:	P5002-01DL	Acq On:	27 Nov 2024 12:27
Client Sample ID:	EX-7-TPH-1DL	Operator:	YP/AJ
Data file:	FC067878.D	Misc:	
Instrument:	FID_C	ALS Vial:	18
Dilution Factor:	5	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.186	6.461	30142851	181.812	300	ug/ml
Aliphatic C12-C16	6.462	9.849	173770225	1020	200	ug/ml
Aliphatic C16-C21	9.850	13.205	176638979	1040	300	ug/ml
Aliphatic C21-C28	13.206	16.857	52526246	333.966	400	ug/ml
Aliphatic C28-C40	16.858	21.700	20009579	165.216	600	ug/ml
Aliphatic EPH	3.186	21.700	453087880	2740		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.937	12.937	1694282	11.67		ug/ml
Aliphatic C9-C28	3.186	16.857	433078301	2580	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067878.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 12:27
Operator : YP/AJ
Sample : P5002-01DL 5X
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 00:17:15 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...	12.937	1694282	11.672 ug/mlm
Spiked Amount 50.000		Recovery = 23.34%	
Target Compounds			

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067878.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 12:27
Operator : YP/AJ
Sample : P5002-01DL 5X
Misc :
ALS Vial : 18 Sample Multiplier: 1

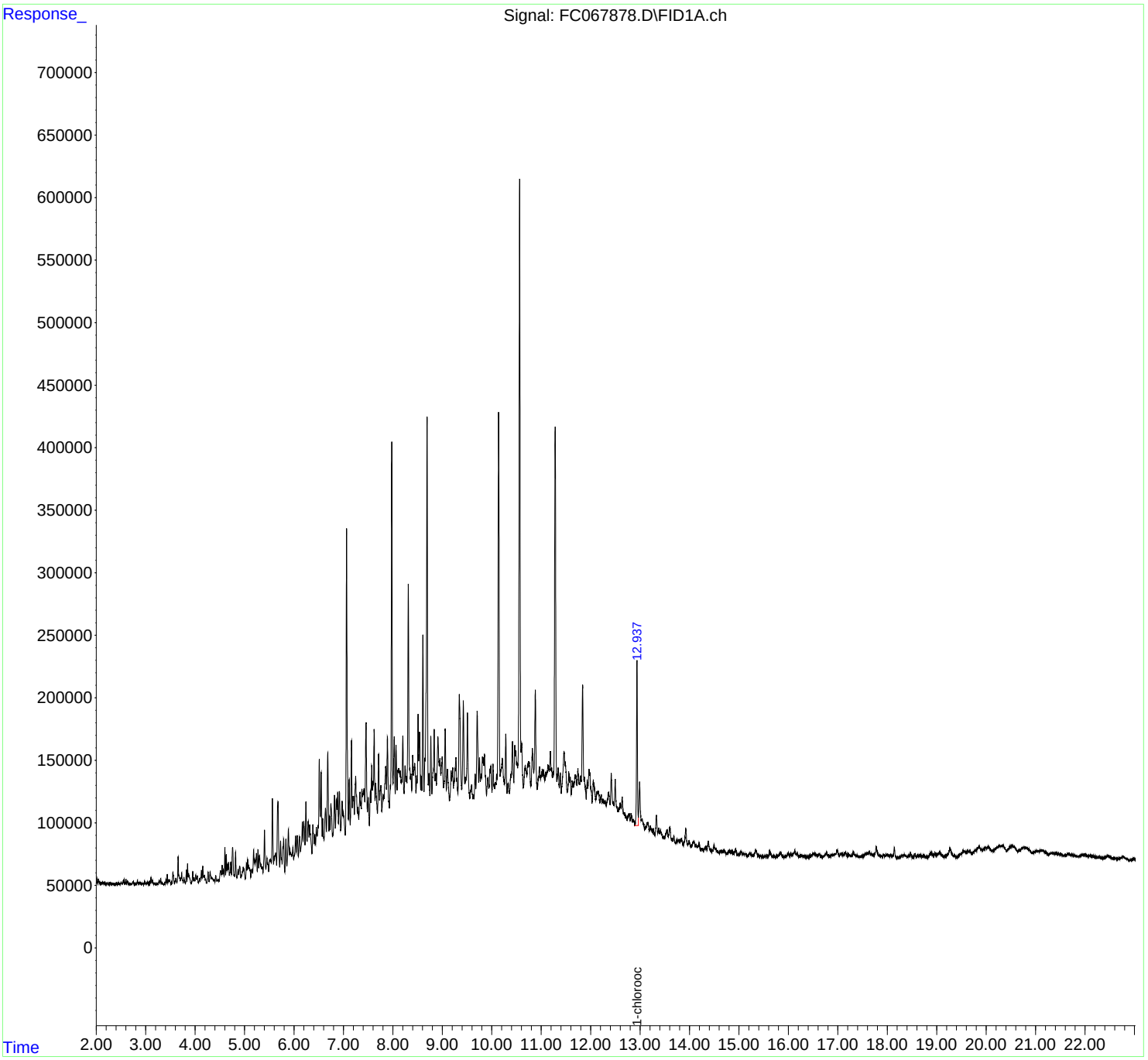
Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL

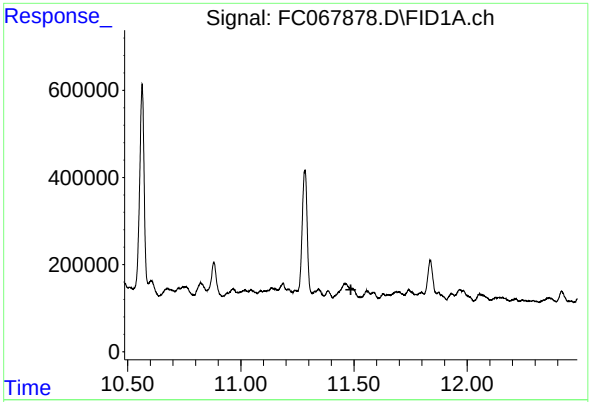
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 00:17:15 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





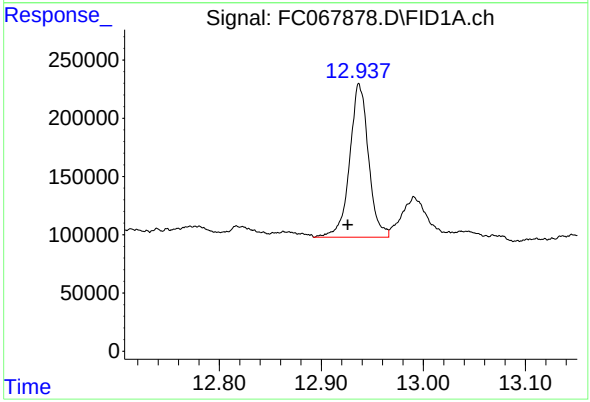
#9 ortho-Terphenyl (SURR)

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

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024



#12 1-chlorooctadecane (SURR)

R.T.: 12.937 min
Delta R.T.: 0.011 min
Response: 1694282
Conc: 11.67 ug/ml m

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL

rteres

Area Percent

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Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Da
Data File : FC067878.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 12:27
Sample : P5002-01DL 5X
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	3.233	3.204	3.244	BH	635	6939	0.07%	0.002%
2	3.275	3.244	3.290	HH	2610	37590	0.37%	0.008%
3	3.305	3.290	3.321	HH	4849	46197	0.45%	0.010%
4	3.331	3.321	3.361	HH	1131	13208	0.13%	0.003%
5	3.386	3.361	3.393	PH	837	6675	0.07%	0.001%
6	3.410	3.393	3.422	HH	3977	38495	0.38%	0.008%
7	3.437	3.422	3.452	HH	8142	75740	0.74%	0.017%
8	3.464	3.452	3.474	HH	3821	38051	0.37%	0.008%
9	3.486	3.474	3.512	HH	3594	47583	0.47%	0.011%
10	3.551	3.512	3.583	HH	9581	151019	1.48%	0.033%
11	3.611	3.583	3.631	HH	5027	83301	0.82%	0.018%
12	3.657	3.631	3.701	HH	22029	326086	3.19%	0.072%
13	3.728	3.701	3.760	HH	9459	169838	1.66%	0.037%
14	3.774	3.760	3.804	HH	5482	73853	0.72%	0.016%
15	3.823	3.804	3.835	HH	11659	105499	1.03%	0.023%
16	3.848	3.835	3.861	HH	16465	150704	1.48%	0.033%
17	3.869	3.861	3.917	HH	8763	167245	1.64%	0.037%
18	3.952	3.917	3.967	HH	10373	131313	1.29%	0.029%
19	3.979	3.967	3.998	HH	5445	73860	0.72%	0.016%
20	4.012	3.998	4.030	HH	7677	106670	1.05%	0.024%
21	4.044	4.030	4.066	HH	6989	90561	0.89%	0.020%
22	4.088	4.066	4.099	HH	4279	58802	0.58%	0.013%
23	4.128	4.099	4.140	HH	11257	160813	1.58%	0.035%
24	4.155	4.140	4.178	HH	14510	201982	1.98%	0.045%
25	4.190	4.178	4.232	HH	7515	136712	1.34%	0.030%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL

rteres

Manual IntegrationsAPPROVED

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26	4.263	4.232	4.282	HH	9928	147400	1.44%	0.033%
27	4.303	4.282	4.327	HH	9964			
28	4.338	4.327	4.378	HH	5448			
29	4.386	4.378	4.400	HH	3616			
30	4.417	4.400	4.440	HH	7049			
31	4.466	4.440	4.480	HH	4053	77387	0.76%	0.017%
32	4.516	4.480	4.530	HH	10703	224195	2.20%	0.049%
33	4.546	4.530	4.560	HH	15346	204160	2.00%	0.045%
34	4.572	4.560	4.585	HH	11946	144519	1.42%	0.032%
35	4.602	4.585	4.616	HH	29855	310792	3.05%	0.069%
36	4.630	4.616	4.644	HH	24050	267306	2.62%	0.059%
37	4.655	4.644	4.667	HH	16142	192119	1.88%	0.042%
38	4.677	4.667	4.692	HH	17722	200688	1.97%	0.044%
39	4.720	4.692	4.736	HH	17927	306445	3.00%	0.068%
40	4.758	4.736	4.797	HH	29864	579200	5.67%	0.128%
41	4.818	4.797	4.845	HH	25805	365054	3.58%	0.081%
42	4.868	4.845	4.881	HH	12040	193312	1.89%	0.043%
43	4.902	4.881	4.924	HH	14562	278334	2.73%	0.061%
44	4.972	4.924	5.014	HH	13783	490802	4.81%	0.108%
45	5.038	5.014	5.050	HH	17077	237682	2.33%	0.052%
46	5.063	5.050	5.125	HH	20037	591328	5.79%	0.131%
47	5.144	5.125	5.162	HH	11723	220416	2.16%	0.049%
48	5.183	5.162	5.196	HH	27670	385021	3.77%	0.085%
49	5.203	5.196	5.214	HH	20173	197613	1.94%	0.044%
50	5.240	5.214	5.256	HH	24949	479635	4.70%	0.106%
51	5.271	5.256	5.286	HH	27701	353421	3.46%	0.078%
52	5.301	5.286	5.345	HH	23053	615324	6.03%	0.136%
53	5.359	5.345	5.373	HH	14097	211854	2.08%	0.047%
54	5.403	5.373	5.431	HH	43559	764841	7.49%	0.169%
55	5.453	5.431	5.487	HH	21128	534299	5.23%	0.118%
56	5.508	5.487	5.517	HH	19420	296379	2.90%	0.065%
57	5.526	5.517	5.541	HH	19521	273414	2.68%	0.060%
58	5.563	5.541	5.587	HH	67972	1030594	10.10%	0.227%
59	5.630	5.587	5.647	HH	25172	766982	7.51%	0.169%
60	5.675	5.647	5.710	HH	66007	1452021	14.23%	0.320%
61	5.729	5.710	5.759	HH	34661	667172	6.54%	0.147%
62	5.790	5.759	5.813	HH	36714	807484	7.91%	0.178%
63	5.836	5.813	5.856	HH	36354	576841	5.65%	0.127%
64	5.887	5.856	5.905	HH	43727	870300	8.53%	0.192%
65	5.915	5.905	5.950	HH	28758	673932	6.60%	0.149%
66	5.977	5.950	5.993	HH	29681	643797	6.31%	0.142%
67	6.031	5.993	6.047	HH	38448	892475	8.74%	0.197%
68	6.065	6.047	6.088	HH	39138	796408	7.80%	0.176%
69	6.111	6.088	6.131	HH	38084	818418	8.02%	0.181%

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70	6.170	6.131	6.184	HH	49906	1144902	11.22%	0.253%
71	6.199	6.184	6.223	HH	50278	1(		
72	6.241	6.223	6.262	HH	66274	1[illegible]		
73	6.289	6.262	6.305	HH	50418	1[illegible]		
74	6.317	6.305	6.363	HH	47391	1[illegible]		
75	6.382	6.363	6.409	HH	47876	1043650	10.23%	0.230%
76	6.422	6.409	6.437	HH	39768	589963	5.78%	0.130%
77	6.453	6.437	6.468	HH	45529	745685	7.31%	0.165%
78	6.512	6.468	6.533	HH	99873	2340704	22.93%	0.517%
79	6.549	6.533	6.570	HH	89705	1450674	14.21%	0.320%
80	6.582	6.570	6.607	HH	52687	940306	9.21%	0.208%
81	6.637	6.607	6.656	HH	60755	1464153	14.35%	0.323%
82	6.683	6.656	6.708	HH	105708	2145571	21.02%	0.474%
83	6.719	6.708	6.731	HH	54544	681949	6.68%	0.151%
84	6.748	6.731	6.779	HH	64350	1539563	15.08%	0.340%
85	6.819	6.779	6.838	HH	71434	1841194	18.04%	0.406%
86	6.858	6.838	6.870	HH	67813	1137560	11.15%	0.251%
87	6.883	6.870	6.900	HH	73893	1110213	10.88%	0.245%
88	6.919	6.900	6.946	HH	74505	1641018	16.08%	0.362%
89	6.974	6.946	7.037	HH	66386	2891746	28.33%	0.638%
90	7.064	7.037	7.101	HH	282937	4765303	46.69%	1.052%
91	7.118	7.101	7.138	HH	83796	1448450	14.19%	0.320%
92	7.163	7.138	7.182	HH	115510	2072149	20.30%	0.457%
93	7.203	7.182	7.221	HH	69965	1565086	15.33%	0.345%
94	7.247	7.221	7.282	HH	86723	2588406	25.36%	0.571%
95	7.292	7.282	7.310	HH	61747	979790	9.60%	0.216%
96	7.333	7.310	7.360	HH	73717	1940542	19.01%	0.428%
97	7.375	7.360	7.384	HH	75893	1022477	10.02%	0.226%
98	7.415	7.384	7.430	HH	76395	2003526	19.63%	0.442%
99	7.457	7.430	7.485	HH	129689	2973777	29.14%	0.656%
100	7.501	7.485	7.524	HH	69330	1428165	13.99%	0.315%
101	7.544	7.524	7.555	HH	74051	1169449	11.46%	0.258%
102	7.572	7.555	7.585	HH	95000	1497269	14.67%	0.330%
103	7.595	7.585	7.602	HH	82095	824504	8.08%	0.182%
104	7.621	7.602	7.638	HH	124056	2058040	20.16%	0.454%
105	7.651	7.638	7.687	HH	80099	2036983	19.96%	0.450%
106	7.711	7.687	7.731	HH	103820	2124572	20.82%	0.469%
107	7.757	7.731	7.776	HH	78941	1940205	19.01%	0.428%
108	7.801	7.776	7.813	HH	70873	1487542	14.57%	0.328%
109	7.856	7.813	7.871	HH	94327	2797300	27.41%	0.617%
110	7.890	7.871	7.928	HH	117605	2943042	28.84%	0.650%
111	7.977	7.928	8.003	HH	355052	6294921	61.68%	1.389%
112	8.027	8.003	8.047	HH	118301	2572458	25.20%	0.568%

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113	8.064	8.047	8.086	HH	111050	2081633	20.40%	0.459%
114	8.118	8.086	8.144	HH	92671	3		
115	8.151	8.144	8.181	HH	90466	1		
116	8.201	8.181	8.223	HH	118271	2		
117	8.247	8.223	8.263	HH	94100	2		
118	8.274	8.263	8.283	HH	86151	1052042	10.31%	0.232%
119	8.311	8.283	8.355	HH	240033	5554208	54.42%	1.226%
120	8.363	8.355	8.381	HH	87991	1300841	12.75%	0.287%
121	8.401	8.381	8.418	HH	102691	2003947	19.63%	0.442%
122	8.441	8.418	8.468	HH	96484	2660311	26.07%	0.587%
123	8.482	8.468	8.490	HH	86315	1061559	10.40%	0.234%
124	8.509	8.490	8.523	HH	136191	2155243	21.12%	0.476%
125	8.540	8.523	8.562	HH	121088	2444832	23.95%	0.540%
126	8.574	8.562	8.585	HH	86020	1155069	11.32%	0.255%
127	8.607	8.585	8.630	HH	198129	3316209	32.49%	0.732%
128	8.691	8.630	8.717	HH	371590	8418919	82.49%	1.858%
129	8.729	8.717	8.747	HH	88334	1512662	14.82%	0.334%
130	8.767	8.747	8.789	HH	118254	2319477	22.73%	0.512%
131	8.835	8.789	8.854	HH	123716	3693286	36.19%	0.815%
132	8.867	8.854	8.880	HH	88729	1323508	12.97%	0.292%
133	8.912	8.880	8.938	HH	117645	3460046	33.90%	0.764%
134	8.952	8.938	8.971	HH	99954	1900410	18.62%	0.419%
135	8.998	8.971	9.025	HH	101050	2975180	29.15%	0.657%
136	9.058	9.025	9.082	HH	123908	3217350	31.52%	0.710%
137	9.103	9.082	9.144	HH	91868	3018487	29.57%	0.666%
138	9.178	9.144	9.190	HH	90573	2165536	21.22%	0.478%
139	9.209	9.190	9.225	HH	92366	1780258	17.44%	0.393%
140	9.275	9.225	9.314	HH	101301	4675621	45.81%	1.032%
141	9.345	9.314	9.394	HH	150705	5130981	50.27%	1.132%
142	9.426	9.394	9.453	HH	145954	3744776	36.69%	0.827%
143	9.509	9.453	9.554	HH	136331	5520577	54.09%	1.218%
144	9.592	9.554	9.619	HH	79445	2869231	28.11%	0.633%
145	9.633	9.619	9.641	HH	70718	920690	9.02%	0.203%
146	9.665	9.641	9.679	HH	87936	1828692	17.92%	0.404%
147	9.706	9.679	9.737	HH	137678	3657892	35.84%	0.807%
148	9.753	9.737	9.771	HH	101608	1858349	18.21%	0.410%
149	9.812	9.771	9.840	HH	101899	3877275	37.99%	0.856%
150	9.853	9.840	9.894	HH	103309	2890508	28.32%	0.638%
151	9.923	9.894	9.941	HH	85320	2243325	21.98%	0.495%
152	9.981	9.941	10.005	HH	94491	3294673	32.28%	0.727%
153	10.025	10.005	10.059	HH	95307	2720873	26.66%	0.601%
154	10.099	10.059	10.111	HH	87760	2550218	24.99%	0.563%
155	10.139	10.111	10.171	HH	376054	7142457	69.98%	1.576%

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156	10.216	10.171	10.254	HH	100231	4554555	44.62%	1.005%	
157	10.285	10.254	10.310	HH	119975	3(			
158	10.328	10.310	10.357	HH	80064	2[illegible]			
159	10.418	10.357	10.446	HH	113918	4[illegible]			
160	10.466	10.446	10.523	HH	111368	4(			
161	10.564	10.523	10.593	HH	562466	10206407	100.00%	2.253%	
162	10.604	10.593	10.640	HH	111900	2753527	26.98%	0.608%	
163	10.676	10.640	10.711	HH	95172	3772819	36.97%	0.833%	
164	10.745	10.711	10.798	HH	98078	4728956	46.33%	1.044%	
165	10.823	10.798	10.849	HH	107891	2994051	29.34%	0.661%	
166	10.881	10.849	10.919	HH	154481	4462987	43.73%	0.985%	
167	10.966	10.919	10.988	HH	93015	3552012	34.80%	0.784%	
168	11.019	10.988	11.032	HH	91553	2328127	22.81%	0.514%	
169	11.045	11.032	11.073	HH	91556	2141669	20.98%	0.473%	
170	11.136	11.073	11.164	HH	95125	4944095	48.44%	1.091%	
171	11.186	11.164	11.227	HH	106330	3577250	35.05%	0.790%	
172	11.283	11.227	11.314	HH	367724	8696663	85.21%	1.919%	
173	11.343	11.314	11.367	HH	92723	2739650	26.84%	0.605%	
174	11.385	11.367	11.406	HH	89045	1916059	18.77%	0.423%	
175	11.462	11.406	11.528	HH	105332	6508315	63.77%	1.436%	
176	11.556	11.528	11.573	HH	87550	2249610	22.04%	0.497%	
177	11.586	11.573	11.609	HH	85953	1719722	16.85%	0.380%	
178	11.629	11.609	11.661	HH	82792	2450000	24.00%	0.541%	
179	11.698	11.661	11.724	HH	87115	3173954	31.10%	0.701%	
180	11.742	11.724	11.781	HH	91919	2877645	28.19%	0.635%	
181	11.799	11.781	11.809	HH	86014	1376471	13.49%	0.304%	
182	11.837	11.809	11.909	HH	158828	5906289	57.87%	1.304%	
183	11.931	11.909	11.944	HH	82728	1674666	16.41%	0.370%	
184	11.968	11.944	12.029	HH	92033	4114160	40.31%	0.908%	
185	12.055	12.029	12.108	HH	82413	3514853	34.44%	0.776%	
186	12.138	12.108	12.188	HH	73613	3425691	33.56%	0.756%	
187	12.213	12.188	12.230	HH	70774	1727919	16.93%	0.381%	
188	12.244	12.230	12.266	HH	67992	1423720	13.95%	0.314%	
189	12.274	12.266	12.284	HH	66479	737394	7.22%	0.163%	
190	12.291	12.284	12.317	HH	66864	1285379	12.59%	0.284%	
191	12.363	12.317	12.393	HH	73467	3106271	30.43%	0.686%	
192	12.418	12.393	12.469	HH	88141	3291711	32.25%	0.727%	
193	12.497	12.469	12.551	HH	83689	3284836	32.18%	0.725%	
194	12.569	12.551	12.576	HH	60664	896242	8.78%	0.198%	
195	12.596	12.576	12.616	HH	64855	1488594	14.58%	0.329%	
196	12.638	12.616	12.681	HH	69468	2413485	23.65%	0.533%	
197	12.686	12.681	12.704	HH	57209	772606	7.57%	0.171%	
198	12.714	12.704	12.744	HH	54202	1269928	12.44%	0.280%	
199	12.773	12.744	12.800	HH	56423	1831796	17.95%	0.404%	

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200	12.819	12.800	12.849	HH	56449	1563231	15.32%	0.345%
201	12.865	12.849	12.895	HH	51698	1		
202	12.938	12.895	12.965	HH	177312	3		
203	12.991	12.965	13.031	HH	81674	2		
204	13.040	13.031	13.094	HH	51965	1		
205	13.160	13.094	13.187	HH	49728	2568671	25.17%	0.567%
206	13.205	13.187	13.251	HH	46569	1713246	16.79%	0.378%
207	13.269	13.251	13.294	HH	44432	1093405	10.71%	0.241%
208	13.330	13.294	13.358	HH	55188	1759572	17.24%	0.388%
209	13.377	13.358	13.400	HH	45072	1081185	10.59%	0.239%
210	13.414	13.400	13.473	HH	43301	1746582	17.11%	0.385%
211	13.484	13.473	13.500	HH	38478	604379	5.92%	0.133%
212	13.542	13.500	13.566	HH	43463	1595514	15.63%	0.352%
213	13.602	13.566	13.664	HH	45535	2311523	22.65%	0.510%
214	13.683	13.664	13.717	HH	38804	1127578	11.05%	0.249%
215	13.740	13.717	13.761	HH	35505	902567	8.84%	0.199%
216	13.778	13.761	13.814	HH	35222	1117067	10.94%	0.247%
217	13.835	13.814	13.864	HH	36668	1039083	10.18%	0.229%
218	13.990	13.964	14.028	HH	34665	1237041	12.12%	0.273%
219	14.076	14.028	14.116	HH	34077	1705833	16.71%	0.376%
220	14.132	14.116	14.153	HH	32186	677795	6.64%	0.150%
221	14.192	14.153	14.227	HH	33268	1345863	13.19%	0.297%
222	14.245	14.227	14.281	HH	28592	906711	8.88%	0.200%
223	14.319	14.281	14.351	HH	29875	1200494	11.76%	0.265%
224	14.498	14.449	14.517	HH	31940	1159976	11.37%	0.256%
225	14.527	14.517	14.591	HH	28830	1203716	11.79%	0.266%
226	14.634	14.591	14.671	HH	27181	1253517	12.28%	0.277%
227	14.699	14.671	14.754	HH	27597	1283849	12.58%	0.283%
228	14.794	14.754	14.901	HH	26572	2258690	22.13%	0.499%
229	14.932	14.901	14.967	HH	27824	1019041	9.98%	0.225%
230	14.987	14.967	14.997	HH	24453	429972	4.21%	0.095%
231	15.042	14.997	15.088	HH	25936	1348598	13.21%	0.298%
232	15.219	15.172	15.269	HH	25222	1366073	13.38%	0.302%
233	15.337	15.269	15.416	HH	27034	2137155	20.94%	0.472%
234	15.440	15.416	15.464	HH	22969	644283	6.31%	0.142%
235	15.489	15.464	15.508	HH	22279	568572	5.57%	0.125%
236	15.526	15.508	15.544	HH	22818	493529	4.84%	0.109%
237	15.566	15.544	15.588	HH	23630	589440	5.78%	0.130%
238	15.696	15.674	15.731	HH	23160	771915	7.56%	0.170%
239	15.759	15.731	15.794	HH	23260	855596	8.38%	0.189%
240	15.847	15.794	15.914	HH	25228	1682550	16.49%	0.371%
241	15.993	15.914	16.026	HH	24655	1548019	15.17%	0.342%
242	16.044	16.026	16.081	HH	23899	765617	7.50%	0.169%

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243	16.169	16.158	16.216	HH	24415	810766	7.94%	0.179%
244	16.244	16.216	16.272	HH	23921			
245	16.290	16.272	16.316	HH	22915			
246	16.328	16.316	16.361	HH	22804			
247	16.384	16.361	16.414	HH	22430			
248	16.422	16.414	16.431	HH	22312	220300	2.16%	0.049%
249	16.448	16.431	16.464	HH	22887	452453	4.43%	0.100%
250	16.510	16.464	16.580	HH	25017	1648835	16.15%	0.364%
251	16.615	16.580	16.649	HH	24272	971649	9.52%	0.214%
252	16.661	16.649	16.697	HH	22797	635416	6.23%	0.140%
253	16.772	16.697	16.831	HH	25769	1887190	18.49%	0.417%
254	16.839	16.831	16.851	HH	23071	273319	2.68%	0.060%
255	16.855	16.851	16.860	HH	22883	128241	1.26%	0.028%
256	16.882	16.860	16.908	HH	23678	657465	6.44%	0.145%
257	16.986	16.908	17.034	HH	27705	1856733	18.19%	0.410%
258	17.075	17.034	17.106	HH	24668	1039430	10.18%	0.229%
259	17.159	17.106	17.191	HH	25331	1222089	11.97%	0.270%
260	17.210	17.191	17.252	HH	24064	857609	8.40%	0.189%
261	17.272	17.252	17.282	HH	23101	410976	4.03%	0.091%
262	17.318	17.282	17.381	HH	26499	1407073	13.79%	0.311%
263	17.396	17.381	17.444	HH	23114	853629	8.36%	0.188%
264	17.487	17.444	17.510	HH	22895	891114	8.73%	0.197%
265	17.569	17.510	17.601	HH	24914	1301108	12.75%	0.287%
266	17.611	17.601	17.624	HH	24843	352581	3.45%	0.078%
267	17.637	17.624	17.659	HH	26054	523035	5.12%	0.115%
268	17.679	17.659	17.727	HH	24432	963833	9.44%	0.213%
269	17.776	17.727	17.852	HH	30350	1887222	18.49%	0.417%
270	17.870	17.852	17.900	HH	23241	651712	6.39%	0.144%
271	17.929	17.900	17.958	HH	23603	797414	7.81%	0.176%
272	17.979	17.958	17.992	HH	23919	475885	4.66%	0.105%
273	18.008	17.992	18.050	HH	23869	801694	7.85%	0.177%
274	18.063	18.050	18.093	HH	23739	596631	5.85%	0.132%
275	18.142	18.093	18.197	HH	29836	1480283	14.50%	0.327%
276	18.212	18.197	18.231	HH	21827	436655	4.28%	0.096%
277	18.264	18.231	18.273	HH	22216	545408	5.34%	0.120%

Sum of corrected areas: 453087882

Aliphatic EPH 111424.M Thu Nov 28 02:24:47 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	11/25/24	
Project:	North Point		Date Received:	11/25/24	
Client Sample ID:	EX-7-TPH-1DL		SDG No.:	P5002	
Lab Sample ID:	P5002-01DL		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	84.6	
Sample Wt/Vol:	30.04	Units: g	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :					

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048829.D	10	11/26/24	11/27/24	PB165286

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	17.4		3.54	7.87	mg/kg
Aromatic C12-C16	Aromatic C12-C16	178		4.01	11.8	mg/kg
Aromatic C16-C21	Aromatic C16-C21	443	E	11.3	19.7	mg/kg
Aromatic C21-C36	Aromatic C21-C36	75.0		23.6	31.5	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	7.69		40 - 140	154%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	5.24		40 - 140	105%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	6.02		40 - 140	120%	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:	P5002-01DL	Acq On:	27 Nov 2024 12:27
Client Sample ID:	EX-7-TPH-1DL	Operator:	YP/AJ
Data file:	FD048829.D	Misc:	
Instrument:	FID_D	ALS Vial:	68
Dilution Factor:	10	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.087	5.803	4246148	22.113	200	ug/ml
Aromatic C12-C16	5.804	8.410	43679801	226.956	300	ug/ml
Aromatic C16-C21	8.411	12.673	104598798	562.95	500	ug/ml
Aromatic C21-C36	12.674	18.080	14993224	95.358	800	ug/ml
Aromatic EPH	4.087	18.080	167517971	907.378		ug/ml
2-Bromonaphthalene (SURR)	7.364	7.364	1353254	7.69		ug/ml
2-Flurobiphenyl (SURR)	8.215	8.215	603553	5.24		ug/ml
ortho-Terphenyl (SURR)	11.247	11.247	1158676	6.02		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048829.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 12:27
Operator : YP/AJ
Sample : P5002-01DL 10X
Misc :
ALS Vial : 68 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:43:08 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...	7.364	1353254	7.686 ug/ml
Spiked Amount 50.000		Recovery =	15.37%
6) S 2-Flurobiphenyl (SURR)	8.215	603553	5.241 ug/ml
Spiked Amount 50.000	Range 0 - 131	Recovery =	10.48%
11) S ortho-Terphenyl (SURR)	11.247	1158676	6.024 ug/mlm
Spiked Amount 50.000		Recovery =	12.05%
Target Compounds			

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048829.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 12:27
Operator : YP/AJ
Sample : P5002-01DL 10X
Misc :
ALS Vial : 68 Sample Multiplier: 1

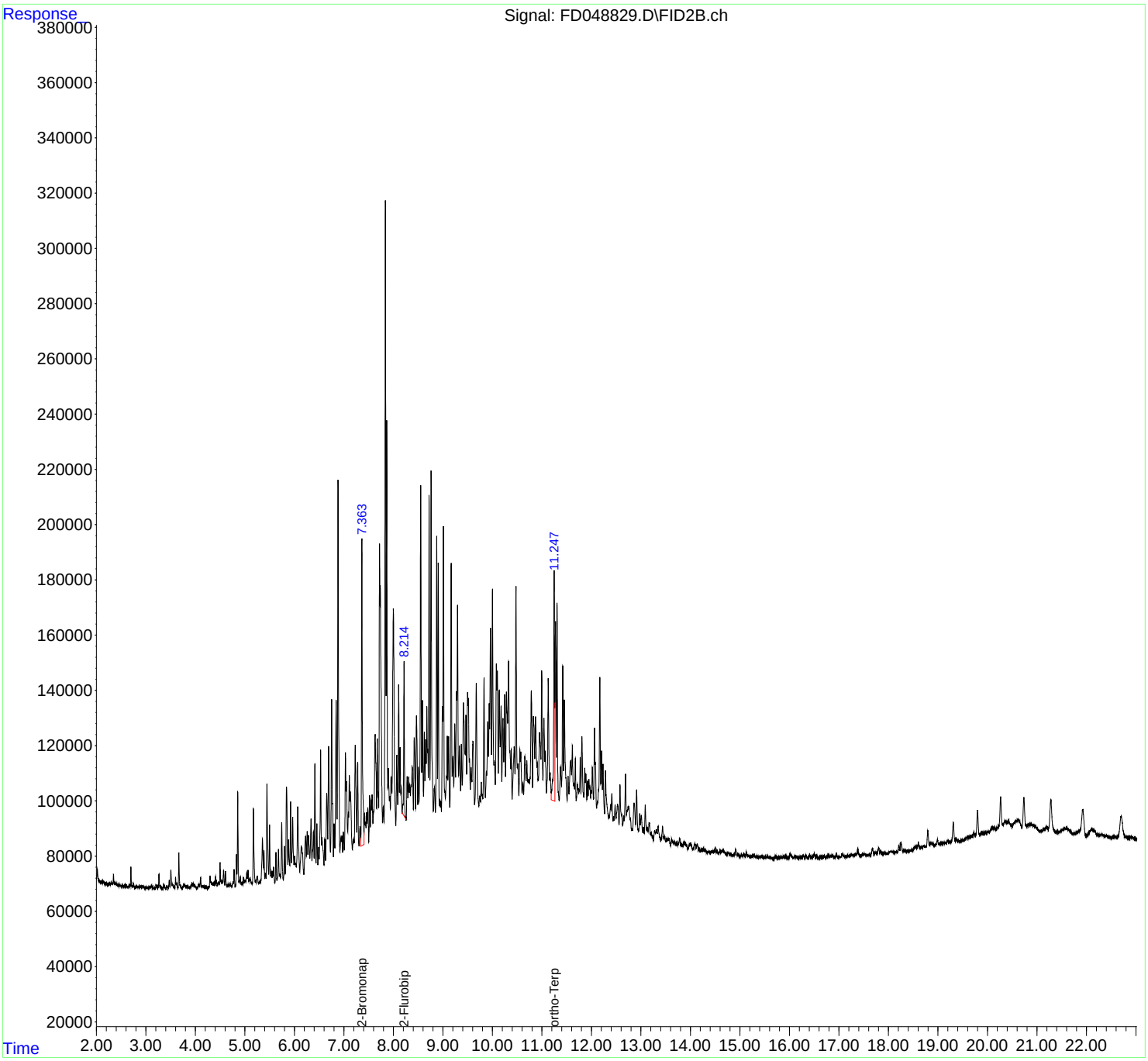
Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL

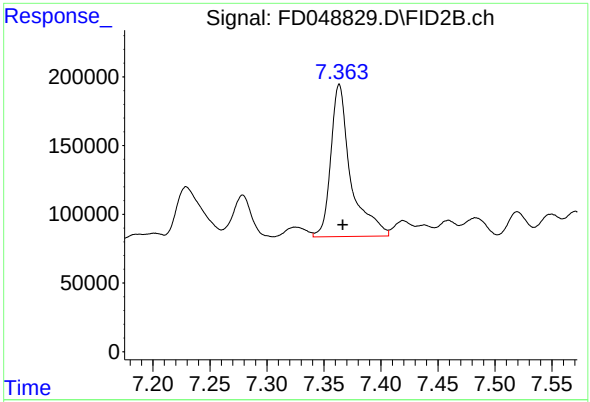
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:43:08 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





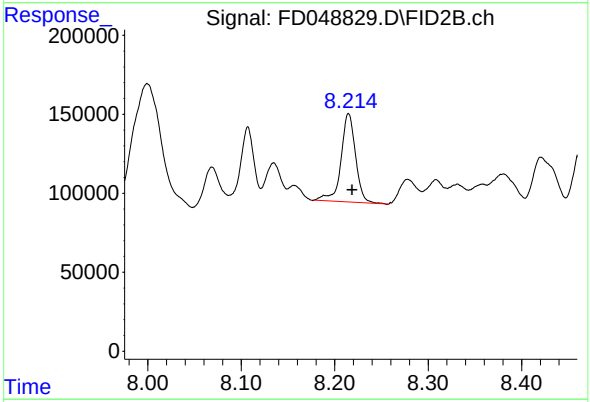
#4 2-Bromonaphthalene (SURR)

R.T.: 7.364 min
Delta R.T.: -0.003 min
Response: 1353254
Conc: 7.69 ug/ml

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL

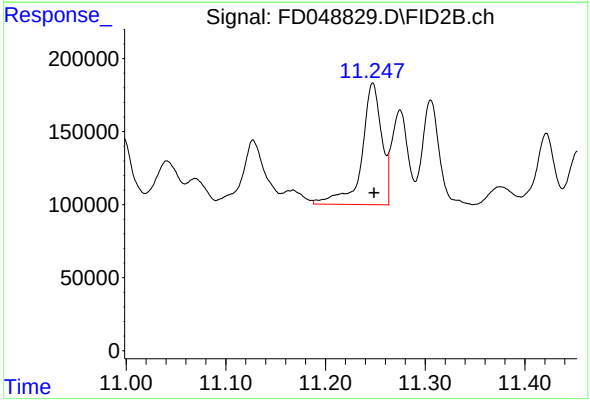
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024



#6 2-Flurobiphenyl (SURR)

R.T.: 8.215 min
Delta R.T.: -0.003 min
Response: 603553
Conc: 5.24 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.247 min
Delta R.T.: -0.001 min
Response: 1158676
Conc: 6.02 ug/ml m

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Da
Data File : FD048829.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 12:27
Sample : P5002-01DL 10X
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	4.063	4.042	4.072	PV	696	6189	0.21%	0.004%
2	4.079	4.072	4.089	PV	588	2904	0.10%	0.002%
3	4.106	4.089	4.130	PV	3425	32669	1.12%	0.019%
4	4.139	4.130	4.147	VV	311	1813	0.06%	0.001%
5	4.160	4.147	4.194	VV	543	7773	0.27%	0.005%
6	4.214	4.202	4.235	PV	753	7475	0.26%	0.004%
7	4.257	4.243	4.261	VV	400	3093	0.11%	0.002%
8	4.268	4.261	4.275	VV	480	3444	0.12%	0.002%
9	4.296	4.275	4.330	VV	4436	71480	2.44%	0.042%
10	4.339	4.330	4.365	VV	1745	29206	1.00%	0.017%
11	4.379	4.365	4.391	VV	2410	26641	0.91%	0.016%
12	4.405	4.391	4.416	VV	4155	39465	1.35%	0.023%
13	4.426	4.416	4.440	VV	2814	26905	0.92%	0.016%
14	4.460	4.440	4.465	VV	1805	21196	0.72%	0.012%
15	4.474	4.465	4.484	VV	2230	20262	0.69%	0.012%
16	4.499	4.484	4.532	VV	9181	114290	3.91%	0.067%
17	4.542	4.532	4.552	VV	2374	24963	0.85%	0.015%
18	4.569	4.552	4.592	VV	6114	83366	2.85%	0.049%
19	4.608	4.592	4.641	VV	5972	72489	2.48%	0.042%
20	4.668	4.641	4.686	VV	1079	21523	0.74%	0.013%
21	4.700	4.686	4.725	VV	1579	22018	0.75%	0.013%
22	4.729	4.725	4.736	VV	553	3322	0.11%	0.002%
23	4.759	4.736	4.765	VV	1654	18432	0.63%	0.011%
24	4.781	4.765	4.805	VV	6443	67572	2.31%	0.039%
25	4.829	4.805	4.840	VV	11760	107467	3.67%	0.063%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL

rteres

Manual IntegrationsAPPROVED

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26	4.855	4.840	4.881	VV	34368	344310	11.76%	0.201%
27	4.890	4.881	4.895	VV	2035			
28	4.908	4.895	4.923	VV	3745			
29	4.939	4.923	4.952	VV	1459			
30	4.972	4.952	4.985	VV	3263			
31	4.996	4.985	5.005	VV	2204	22091	0.75%	0.013%
32	5.038	5.005	5.051	VV	5203	86267	2.95%	0.050%
33	5.064	5.051	5.078	VV	5935	62675	2.14%	0.037%
34	5.103	5.078	5.134	VV	3079	71653	2.45%	0.042%
35	5.143	5.134	5.153	VV	1543	13703	0.47%	0.008%
36	5.172	5.153	5.207	VV	28042	345168	11.79%	0.201%
37	5.214	5.207	5.228	VV	2198	21655	0.74%	0.013%
38	5.252	5.228	5.279	VV	3259	65651	2.24%	0.038%
39	5.296	5.279	5.310	VV	1543	22503	0.77%	0.013%
40	5.354	5.310	5.374	VV	17124	300053	10.25%	0.175%
41	5.385	5.374	5.402	VV	12707	130699	4.47%	0.076%
42	5.414	5.402	5.427	VV	4435	55027	1.88%	0.032%
43	5.445	5.427	5.481	VV	36722	504578	17.24%	0.294%
44	5.498	5.481	5.525	VV	21998	252972	8.64%	0.147%
45	5.536	5.525	5.547	VV	5074	53900	1.84%	0.031%
46	5.560	5.547	5.569	VV	5124	51429	1.76%	0.030%
47	5.581	5.569	5.604	VV	6531	77794	2.66%	0.045%
48	5.627	5.604	5.652	VV	11873	139767	4.78%	0.081%
49	5.678	5.652	5.695	VV	12901	169624	5.80%	0.099%
50	5.703	5.695	5.717	VV	3924	43290	1.48%	0.025%
51	5.744	5.717	5.777	VV	22643	303875	10.38%	0.177%
52	5.798	5.777	5.815	VV	13797	160524	5.48%	0.094%
53	5.841	5.815	5.869	VV	35325	599712	20.49%	0.350%
54	5.882	5.869	5.907	VV	16194	241805	8.26%	0.141%
55	5.923	5.907	5.939	VV	29885	330434	11.29%	0.193%
56	5.966	5.939	5.992	VV	24256	426767	14.58%	0.249%
57	6.004	5.992	6.017	VV	10122	127015	4.34%	0.074%
58	6.024	6.017	6.037	VV	7705	84489	2.89%	0.049%
59	6.068	6.037	6.109	VV	28047	579596	19.80%	0.338%
60	6.139	6.109	6.192	VV	13791	453401	15.49%	0.264%
61	6.226	6.192	6.241	VV	16954	341338	11.66%	0.199%
62	6.259	6.241	6.272	VV	18903	270256	9.23%	0.158%
63	6.285	6.272	6.313	VV	17424	330165	11.28%	0.192%
64	6.337	6.313	6.355	VV	23384	391904	13.39%	0.228%
65	6.385	6.355	6.399	VV	18684	346324	11.83%	0.202%
66	6.414	6.399	6.436	VV	43216	495535	16.93%	0.289%
67	6.455	6.436	6.475	VV	21532	298891	10.21%	0.174%
68	6.491	6.475	6.502	VV	13022	164406	5.62%	0.096%
69	6.531	6.502	6.547	VV	47913	666502	22.77%	0.389%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

70	6.556	6.547	6.598	VV	16522	385505	13.17%	0.225%
71	6.615	6.598	6.630	VV	15725			
72	6.654	6.630	6.675	VV	32422			
73	6.692	6.675	6.729	VV	49232			
74	6.753	6.729	6.789	VV	66153			
75	6.803	6.789	6.818	VV	21292	268199	9.16%	0.156%
76	6.845	6.818	6.863	VV	65808	1042226	35.61%	0.608%
77	6.882	6.863	6.920	VV	145450	2055942	70.25%	1.199%
78	6.940	6.920	6.950	VV	15925	256005	8.75%	0.149%
79	6.960	6.950	6.974	VV	16734	207659	7.10%	0.121%
80	6.990	6.974	7.007	VV	18005	292129	9.98%	0.170%
81	7.032	7.007	7.044	VV	46730	633268	21.64%	0.369%
82	7.052	7.044	7.078	VV	36345	569676	19.46%	0.332%
83	7.091	7.078	7.097	VV	25068	251192	8.58%	0.146%
84	7.110	7.097	7.122	VV	38405	470991	16.09%	0.275%
85	7.130	7.122	7.172	VV	32377	701675	23.97%	0.409%
86	7.201	7.172	7.210	VV	15354	318087	10.87%	0.185%
87	7.229	7.210	7.260	VV	49249	947833	32.39%	0.553%
88	7.279	7.260	7.306	VV	43147	685872	23.43%	0.400%
89	7.325	7.306	7.341	VV	19657	360871	12.33%	0.210%
90	7.363	7.341	7.407	VV	123732	1855495	63.40%	1.082%
91	7.420	7.407	7.431	VV	24370	316641	10.82%	0.185%
92	7.438	7.431	7.447	VV	21305	193186	6.60%	0.113%
93	7.459	7.447	7.469	VV	24583	294153	10.05%	0.172%
94	7.483	7.469	7.502	VV	26334	436109	14.90%	0.254%
95	7.520	7.502	7.534	VV	30732	445497	15.22%	0.260%
96	7.549	7.534	7.559	VV	29078	384065	13.12%	0.224%
97	7.570	7.559	7.587	VV	31021	432775	14.79%	0.252%
98	7.632	7.587	7.661	VV	52820	1605631	54.86%	0.936%
99	7.675	7.661	7.689	VV	51253	646480	22.09%	0.377%
100	7.693	7.689	7.702	VV	31145	238306	8.14%	0.139%
101	7.721	7.702	7.729	VV	121565	1306414	44.64%	0.762%
102	7.735	7.729	7.781	VV	106647	1894093	64.72%	1.104%
103	7.796	7.781	7.810	VV	26558	423032	14.45%	0.247%
104	7.838	7.810	7.853	VV	245848	2926742	100.00%	1.706%
105	7.865	7.853	7.886	VV	166154	1894772	64.74%	1.105%
106	7.898	7.886	7.919	VV	40364	693670	23.70%	0.404%
107	7.928	7.919	7.939	VV	30090	332215	11.35%	0.194%
108	7.954	7.939	7.970	VV	37086	618217	21.12%	0.360%
109	8.000	7.970	8.048	VV	97765	2559661	87.46%	1.492%
110	8.069	8.048	8.087	VV	45016	759107	25.94%	0.443%
111	8.107	8.087	8.121	VV	70455	940316	32.13%	0.548%
112	8.135	8.121	8.149	VV	47694	666669	22.78%	0.389%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL

rteres

Manual IntegrationsAPPROVED

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Supervised By :Ankita Jodhani 12/02/2024

113	8.157	8.149	8.177	VV	33317	477517	16.32%	0.278%
114	8.215	8.177	8.256	VV	78686	1(		
115	8.278	8.256	8.294	VV	37065	(		
116	8.308	8.294	8.320	VV	36876			
117	8.331	8.320	8.343	VV	34038			
118	8.358	8.343	8.363	VV	33953	379292	12.96%	0.221%
119	8.380	8.363	8.404	VV	40346	850828	29.07%	0.496%
120	8.421	8.404	8.447	VV	50969	1028945	35.16%	0.600%
121	8.465	8.447	8.492	VV	58800	1160378	39.65%	0.677%
122	8.504	8.492	8.518	VV	40220	535926	18.31%	0.312%
123	8.552	8.518	8.572	VV	142067	2269306	77.54%	1.323%
124	8.586	8.572	8.608	VV	64242	1000866	34.20%	0.584%
125	8.624	8.608	8.638	VV	52643	751208	25.67%	0.438%
126	8.653	8.638	8.663	VV	50117	659788	22.54%	0.385%
127	8.675	8.663	8.689	VV	61886	795172	27.17%	0.464%
128	8.694	8.689	8.705	VV	46565	417768	14.27%	0.244%
129	8.721	8.705	8.738	VV	137859	1559375	53.28%	0.909%
130	8.761	8.738	8.807	VV	147493	2581694	88.21%	1.505%
131	8.831	8.807	8.848	VV	32891	705699	24.11%	0.411%
132	8.875	8.848	8.891	VV	123364	1679022	57.37%	0.979%
133	8.906	8.891	8.926	VV	113740	1350650	46.15%	0.787%
134	8.935	8.926	8.949	VV	28075	362979	12.40%	0.212%
135	8.957	8.949	8.969	VV	27579	324802	11.10%	0.189%
136	8.989	8.969	8.995	VV	61574	679325	23.21%	0.396%
137	9.010	8.995	9.033	VV	126900	1726971	59.01%	1.007%
138	9.038	9.033	9.050	VV	31124	309154	10.56%	0.180%
139	9.088	9.050	9.101	VV	50967	1163701	39.76%	0.678%
140	9.115	9.101	9.138	VV	50605	873597	29.85%	0.509%
141	9.167	9.138	9.188	VV	113375	1807692	61.76%	1.054%
142	9.203	9.188	9.219	VV	43551	750154	25.63%	0.437%
143	9.240	9.219	9.257	VV	55259	994164	33.97%	0.580%
144	9.276	9.257	9.282	VV	66815	832546	28.45%	0.485%
145	9.296	9.282	9.317	VV	98181	1423699	48.64%	0.830%
146	9.334	9.317	9.359	VV	47140	970600	33.16%	0.566%
147	9.373	9.359	9.390	VV	47736	752316	25.70%	0.439%
148	9.414	9.390	9.453	VV	62707	1835828	62.73%	1.070%
149	9.466	9.453	9.480	VV	58206	804810	27.50%	0.469%
150	9.499	9.480	9.509	VV	66358	988681	33.78%	0.576%
151	9.515	9.509	9.532	VV	64351	741529	25.34%	0.432%
152	9.538	9.532	9.554	VV	42447	507209	17.33%	0.296%
153	9.568	9.554	9.585	VV	39112	646819	22.10%	0.377%
154	9.609	9.585	9.639	VV	48543	1302736	44.51%	0.760%
155	9.674	9.639	9.725	VV	69473	1989427	67.97%	1.160%

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156	9.742	9.725	9.762	VV	28658	596326	20.38%	0.348%
157	9.776	9.762	9.806	VV	33758			
158	9.831	9.806	9.857	VV	71296	1		
159	9.879	9.857	9.885	VV	37571			
160	9.906	9.885	9.921	VV	55365	1		
161	9.936	9.921	9.945	VV	62065	762615	26.06%	0.445%
162	9.962	9.945	9.983	VV	89268	1532928	52.38%	0.894%
163	10.001	9.983	10.031	VV	103303	1867362	63.80%	1.089%
164	10.036	10.031	10.059	VV	41132	632356	21.61%	0.369%
165	10.080	10.059	10.092	VV	76273	1158526	39.58%	0.675%
166	10.101	10.092	10.119	VV	73472	980898	33.51%	0.572%
167	10.139	10.119	10.158	VV	66708	1233673	42.15%	0.719%
168	10.175	10.158	10.191	VV	60985	963204	32.91%	0.562%
169	10.213	10.191	10.230	VV	56421	1121726	38.33%	0.654%
170	10.249	10.230	10.265	VV	64802	1041408	35.58%	0.607%
171	10.284	10.265	10.308	VV	65885	1415947	48.38%	0.826%
172	10.326	10.308	10.349	VV	76941	1529068	52.24%	0.891%
173	10.354	10.349	10.369	VV	44652	508552	17.38%	0.297%
174	10.382	10.369	10.399	VV	45091	679995	23.23%	0.396%
175	10.441	10.399	10.457	VV	45879	1315752	44.96%	0.767%
176	10.477	10.457	10.506	VV	103909	1785447	61.00%	1.041%
177	10.516	10.506	10.535	VV	39610	629421	21.51%	0.367%
178	10.554	10.535	10.566	VV	44654	700542	23.94%	0.408%
179	10.575	10.566	10.600	VV	43929	765877	26.17%	0.447%
180	10.616	10.600	10.630	VV	32795	550660	18.81%	0.321%
181	10.654	10.630	10.680	VV	42271	1108286	37.87%	0.646%
182	10.696	10.680	10.724	VV	40689	929290	31.75%	0.542%
183	10.736	10.724	10.748	VV	33966	480504	16.42%	0.280%
184	10.786	10.748	10.810	VV	65841	1703973	58.22%	0.993%
185	10.828	10.810	10.856	VV	56500	1322593	45.19%	0.771%
186	10.871	10.856	10.898	VV	56214	1175714	40.17%	0.685%
187	10.905	10.898	10.920	VV	39694	500598	17.10%	0.292%
188	10.952	10.920	10.980	VV	50639	1529882	52.27%	0.892%
189	10.997	10.980	11.019	VV	72835	1211816	41.40%	0.707%
190	11.041	11.019	11.059	VV	55835	1099179	37.56%	0.641%
191	11.069	11.059	11.090	VV	43794	714802	24.42%	0.417%
192	11.127	11.090	11.155	VV	70057	1707019	58.32%	0.995%
193	11.167	11.155	11.187	VV	35762	625387	21.37%	0.365%
194	11.247	11.187	11.262	VV	109013	2290099	78.25%	1.335%
195	11.275	11.262	11.290	VV	90535	1174752	40.14%	0.685%
196	11.306	11.290	11.349	VV	97248	1736134	59.32%	1.012%
197	11.375	11.349	11.397	VV	37801	945277	32.30%	0.551%
198	11.422	11.397	11.438	VV	74425	1234858	42.19%	0.720%
199	11.453	11.438	11.509	VV	61813	1706414	58.30%	0.995%

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200	11.529	11.509	11.546	VV	34294	680759	23.26%	0.397%
201	11.580	11.546	11.599	VV	39915	1		
202	11.615	11.599	11.644	VV	45414	1		
203	11.650	11.644	11.658	VV	31528			
204	11.675	11.658	11.692	VV	40599			
205	11.718	11.692	11.743	VV	31232	866741	29.61%	0.505%
206	11.753	11.743	11.757	VV	29124	245540	8.39%	0.143%
207	11.774	11.757	11.788	VV	40952	642994	21.97%	0.375%
208	11.807	11.788	11.849	VV	48505	1270180	43.40%	0.741%
209	11.865	11.849	11.876	VV	36899	522930	17.87%	0.305%
210	11.888	11.876	11.907	VV	34816	589357	20.14%	0.344%
211	11.921	11.907	11.935	VV	32141	482735	16.49%	0.281%
212	11.949	11.935	11.982	VV	32870	836405	28.58%	0.488%
213	11.992	11.982	12.002	VV	28824	333484	11.39%	0.194%
214	12.018	12.002	12.042	VV	37118	746977	25.52%	0.436%
215	12.062	12.042	12.102	VV	51407	1298851	44.38%	0.757%
216	12.119	12.102	12.123	VV	24403	292790	10.00%	0.171%
217	12.170	12.123	12.189	VV	69762	1555926	53.16%	0.907%
218	12.205	12.189	12.221	VV	42877	710659	24.28%	0.414%
219	12.234	12.221	12.265	VV	37975	756598	25.85%	0.441%
220	12.284	12.265	12.353	VV	35733	1291653	44.13%	0.753%
221	12.387	12.353	12.398	VV	22847	552250	18.87%	0.322%
222	12.412	12.398	12.437	VV	27283	525498	17.96%	0.306%
223	12.449	12.437	12.460	VV	19052	253104	8.65%	0.148%
224	12.478	12.460	12.495	VV	23110	427151	14.59%	0.249%
225	12.528	12.495	12.558	VV	23304	773682	26.43%	0.451%
226	12.577	12.558	12.607	VV	30283	662475	22.64%	0.386%
227	12.612	12.607	12.635	VV	19563	286941	9.80%	0.167%
228	12.651	12.635	12.662	VV	19043	288416	9.85%	0.168%
229	12.689	12.662	12.708	VV	33985	682137	23.31%	0.398%
230	12.717	12.708	12.727	VV	20787	231795	7.92%	0.135%
231	12.752	12.727	12.782	VV	22336	685786	23.43%	0.400%
232	12.788	12.782	12.810	VV	17641	270916	9.26%	0.158%
233	12.818	12.810	12.828	VV	14195	153903	5.26%	0.090%
234	12.862	12.828	12.893	VV	23390	741879	25.35%	0.433%
235	12.913	12.893	12.954	VV	28163	686417	23.45%	0.400%
236	12.975	12.954	12.990	VV	19551	354786	12.12%	0.207%
237	13.006	12.990	13.035	VV	18895	440414	15.05%	0.257%
238	13.050	13.035	13.066	VV	14510	250884	8.57%	0.146%
239	13.087	13.066	13.116	VV	22512	502855	17.18%	0.293%
240	13.129	13.116	13.145	VV	14345	236392	8.08%	0.138%
241	13.171	13.145	13.195	VV	16071	424983	14.52%	0.248%
242	13.208	13.195	13.228	VV	12593	235810	8.06%	0.137%

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243	13.238	13.228	13.254	VV	10974	162872	5.56%	0.095%
244	13.280	13.254	13.290	VV	13069			
245	13.313	13.290	13.328	VV	13320			
246	13.346	13.328	13.408	VV	14697			
247	13.438	13.408	13.469	VV	14561			
248	13.481	13.469	13.501	VV	10894	193922	6.63%	0.113%
249	13.515	13.501	13.532	VV	9778	177836	6.08%	0.104%
250	13.544	13.532	13.557	VV	9744	144005	4.92%	0.084%
251	13.569	13.557	13.600	VV	10085	229082	7.83%	0.134%
252	13.619	13.600	13.657	VV	9981	301867	10.31%	0.176%
253	13.678	13.657	13.691	VV	8881	172333	5.89%	0.100%
254	13.705	13.691	13.717	VV	8198	123333	4.21%	0.072%
255	13.727	13.717	13.744	VV	8237	128575	4.39%	0.075%
256	13.781	13.744	13.799	VV	9853	280544	9.59%	0.164%
257	13.814	13.799	13.819	VV	7809	88596	3.03%	0.052%
258	13.824	13.819	13.829	VV	7868	46352	1.58%	0.027%
259	13.833	13.829	13.848	VV	7742	86860	2.97%	0.051%
260	13.874	13.848	13.920	VV	8400	337972	11.55%	0.197%
261	13.924	13.920	13.950	VV	7324	115460	3.94%	0.067%
262	13.981	13.950	13.990	VV	7388	161283	5.51%	0.094%
263	14.005	13.990	14.040	VV	8151	218733	7.47%	0.128%
264	14.045	14.040	14.050	VV	5966	35485	1.21%	0.021%
265	14.091	14.050	14.115	VV	7671	264885	9.05%	0.154%
266	14.138	14.115	14.160	VV	7597	178542	6.10%	0.104%
267	14.166	14.160	14.169	VV	5660	27526	0.94%	0.016%
268	14.174	14.169	14.197	VV	5805	93136	3.18%	0.054%
269	14.220	14.197	14.241	VV	5401	135064	4.61%	0.079%
270	14.263	14.241	14.284	VV	5711	139888	4.78%	0.082%
271	14.295	14.284	14.322	VV	5197	111731	3.82%	0.065%
272	14.339	14.322	14.345	VV	4412	59425	2.03%	0.035%
273	14.362	14.345	14.372	VV	4625	70926	2.42%	0.041%
274	14.382	14.372	14.402	VV	4629	79245	2.71%	0.046%
275	14.411	14.402	14.419	VV	4301	42130	1.44%	0.025%
276	14.423	14.419	14.448	VV	4590	76998	2.63%	0.045%
277	14.463	14.448	14.479	VV	4785	82416	2.82%	0.048%
278	14.500	14.479	14.524	VV	6188	132417	4.52%	0.077%
279	14.538	14.524	14.566	VV	5030	110645	3.78%	0.065%
280	14.597	14.566	14.623	VV	4677	144514	4.94%	0.084%
281	14.639	14.623	14.644	VV	4747	54708	1.87%	0.032%
282	14.659	14.644	14.663	VV	4906	55170	1.89%	0.032%
283	14.670	14.663	14.709	VV	4815	113533	3.88%	0.066%
284	14.715	14.709	14.720	VV	3502	21685	0.74%	0.013%
285	14.757	14.720	14.765	VV	3981	95642	3.27%	0.056%

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286	14.768	14.765	14.791	VV	3757	52338	1.79%	0.031%
287	14.803	14.791	14.830	VV	3455			
288	14.835	14.830	14.844	VV	3029			
289	14.848	14.844	14.855	VV	2998			
290	14.888	14.855	14.897	VV	3220			
291	14.915	14.897	14.950	VV	5068	118555	4.05%	0.069%
292	14.962	14.950	14.999	VV	3184	77633	2.65%	0.045%
293	15.022	14.999	15.027	VV	2780	43762	1.50%	0.026%
294	15.036	15.027	15.055	VV	2867	41682	1.42%	0.024%
295	15.071	15.055	15.079	VV	2852	37524	1.28%	0.022%
296	15.082	15.079	15.103	VV	2771	38149	1.30%	0.022%
297	15.129	15.103	15.159	VV	3886	95966	3.28%	0.056%
298	15.166	15.159	15.170	VV	2522	16591	0.57%	0.010%
299	15.173	15.170	15.181	VV	2408	15460	0.53%	0.009%
300	15.189	15.181	15.212	VV	2198	36228	1.24%	0.021%
301	15.235	15.212	15.263	VV	2424	64346	2.20%	0.038%
302	15.289	15.263	15.312	VV	2914	69056	2.36%	0.040%
303	15.318	15.312	15.334	VV	1996	24702	0.84%	0.014%
304	15.336	15.334	15.342	VV	1766	8392	0.29%	0.005%
305	15.357	15.342	15.375	VV	2021	38161	1.30%	0.022%
306	15.390	15.375	15.405	VV	1974	32666	1.12%	0.019%
307	15.425	15.405	15.446	VV	1898	42485	1.45%	0.025%
308	15.455	15.446	15.474	VV	1837	27036	0.92%	0.016%
309	15.480	15.474	15.486	VV	1676	10998	0.38%	0.006%
310	15.511	15.486	15.528	VV	1803	38626	1.32%	0.023%
311	15.560	15.528	15.577	VV	1951	49921	1.71%	0.029%
312	15.591	15.577	15.606	VV	1582	25291	0.86%	0.015%
313	15.615	15.606	15.644	VV	1446	29128	1.00%	0.017%
314	15.653	15.644	15.683	VV	1228	22560	0.77%	0.013%
315	15.727	15.683	15.756	VV	1924	58499	2.00%	0.034%
316	15.772	15.756	15.786	VV	1447	21729	0.74%	0.013%
317	15.824	15.786	15.837	VV	1376	36161	1.24%	0.021%
318	15.850	15.837	15.855	VV	1347	13097	0.45%	0.008%
319	15.871	15.855	15.892	VV	1594	28812	0.98%	0.017%
320	15.923	15.892	15.950	VV	1771	45312	1.55%	0.026%
321	15.960	15.950	15.980	VV	1007	15849	0.54%	0.009%
322	16.015	15.980	16.035	VV	2329	51811	1.77%	0.030%
323	16.042	16.035	16.083	VV	1672	35577	1.22%	0.021%
324	16.104	16.083	16.114	VV	1216	17892	0.61%	0.010%
325	16.118	16.114	16.129	VV	1093	9295	0.32%	0.005%
326	16.146	16.129	16.164	VV	1220	21542	0.74%	0.013%
327	16.169	16.164	16.194	VV	953	14295	0.49%	0.008%
328	16.206	16.194	16.211	VV	1064	9168	0.31%	0.005%
329	16.217	16.211	16.245	VV	1067	18573	0.63%	0.011%

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330	16.258	16.245	16.262	VV	1075	9011	0.31%	0.005%
331	16.288	16.262	16.314	VV	1309			
332	16.334	16.314	16.387	VV	1755			
333	16.407	16.387	16.432	VV	1665			
334	16.466	16.432	16.477	VV	840			
335	16.502	16.477	16.525	VV	1964	36581	1.25%	0.021%
336	16.541	16.525	16.589	VV	1540	33079	1.13%	0.019%
337	16.615	16.589	16.621	VV	568	9172	0.31%	0.005%
338	16.634	16.621	16.640	VV	688	6822	0.23%	0.004%
339	16.649	16.640	16.661	VV	925	8982	0.31%	0.005%
340	16.665	16.661	16.673	VV	664	4420	0.15%	0.003%
341	16.679	16.673	16.683	VV	705	3583	0.12%	0.002%
342	16.703	16.683	16.735	VV	1166	23278	0.80%	0.014%
343	16.747	16.735	16.764	VV	652	9198	0.31%	0.005%
344	16.788	16.764	16.812	VV	1457	27416	0.94%	0.016%
345	16.829	16.812	16.845	VV	971	14336	0.49%	0.008%
346	16.856	16.845	16.862	VV	1008	7880	0.27%	0.005%
347	16.868	16.862	16.879	VV	944	9065	0.31%	0.005%
348	16.883	16.879	16.900	VV	980	7202	0.25%	0.004%
349	16.904	16.900	16.910	VV	465	2224	0.08%	0.001%
350	16.914	16.910	16.924	VV	344	2060	0.07%	0.001%
351	16.950	16.924	16.982	PV	1891	27275	0.93%	0.016%
352	16.987	16.982	16.995	VV	336	1662	0.06%	0.001%
353	16.999	16.995	17.005	VV	416	1721	0.06%	0.001%
354	17.019	17.005	17.034	VV	549	5594	0.19%	0.003%
355	17.060	17.034	17.089	VV	1382	26951	0.92%	0.016%
356	17.092	17.089	17.111	VV	646	6337	0.22%	0.004%
357	17.115	17.111	17.135	VV	352	4279	0.15%	0.002%
358	17.139	17.135	17.149	VV	318	2322	0.08%	0.001%
359	17.156	17.149	17.160	VV	494	2710	0.09%	0.002%
360	17.176	17.160	17.197	VV	859	13549	0.46%	0.008%
361	17.198	17.197	17.220	VV	647	6091	0.21%	0.004%
362	17.247	17.220	17.254	VV	812	11522	0.39%	0.007%
363	17.258	17.254	17.271	VV	717	6883	0.24%	0.004%
364	17.277	17.271	17.291	VV	745	6843	0.23%	0.004%
365	17.296	17.291	17.301	VV	584	3469	0.12%	0.002%
366	17.317	17.301	17.331	VV	829	11618	0.40%	0.007%
367	17.348	17.331	17.353	VV	1022	11674	0.40%	0.007%
368	17.384	17.353	17.421	VV	2837	53397	1.82%	0.031%
369	17.431	17.421	17.449	VV	608	5937	0.20%	0.003%
370	17.453	17.449	17.458	VV	495	2207	0.08%	0.001%
371	17.480	17.458	17.499	VV	1122	18605	0.64%	0.011%
372	17.502	17.499	17.506	VV	642	2742	0.09%	0.002%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

rteres

373	17.526	17.506	17.573	VV	761	17601	0.60%	0.010%
374	17.591	17.573	17.612	PV	523			
375	17.623	17.612	17.642	VV	472			
376	17.677	17.642	17.714	VV	2680			
377	17.740	17.714	17.754	VV	1005			
378	17.761	17.754	17.770	VV	596	5306	0.18%	0.003%
379	17.804	17.770	17.835	VV	2693	56654	1.94%	0.033%
380	17.845	17.835	17.872	VV	1285	16825	0.57%	0.010%
381	17.875	17.872	17.883	VV	376	1782	0.06%	0.001%
382	17.893	17.883	17.912	VV	492	4928	0.17%	0.003%
383	17.924	17.912	17.929	VV	508	3940	0.13%	0.002%
384	17.933	17.929	17.953	VV	572	4460	0.15%	0.003%
385	17.963	17.953	17.975	VV	436	2958	0.10%	0.002%
386	18.025	17.975	18.049	PV	988	23161	0.79%	0.014%
387	18.058	18.049	18.067	VV	912	8711	0.30%	0.005%
388	18.071	18.067	18.106	VV	824	9602	0.33%	0.006%
389	18.113	18.106	18.130	VV	422	3355	0.11%	0.002%
390	18.165	18.130	18.170	VV	581	7811	0.27%	0.005%
391	18.176	18.170	18.184	VV	212	1414	0.05%	0.001%

Sum of corrected areas: 171516694

Aromatic EPH 111424.M Thu Nov 28 03:57:16 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	11/25/24	
Project:	North Point		Date Received:	11/25/24	
Client Sample ID:	EX-7-TPH-1DL2		SDG No.:	P5002	
Lab Sample ID:	P5002-01DL2		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	84.6	
Sample Wt/Vol:	30.04	Units: g	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :					

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC067879.D	50	11/26/24	11/27/24	PB165286

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	81.9		22.4	59.0	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	458		14.2	39.3	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	447		17.7	59.0	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	56.4	J	47.2	78.7	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	55.4	J	106	118	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	1.37		40 - 140	137%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P5002-01DL2	Acq On:	27 Nov 2024 13:02
Client Sample ID:	EX-7-TPH-1DL2	Operator:	YP/AJ
Data file:	FC067879.D	Misc:	
Instrument:	FID_C	ALS Vial:	19
Dilution Factor:	50	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.186	6.461	3450939	20.815	300	ug/ml
Aliphatic C12-C16	6.462	9.849	19833358	116.404	200	ug/ml
Aliphatic C16-C21	9.850	13.205	19303614	113.804	300	ug/ml
Aliphatic C21-C28	13.206	16.857	2255935	14.343	400	ug/ml
Aliphatic C28-C40	16.858	21.700	1706458	14.09	600	ug/ml
Aliphatic EPH	3.186	21.700	46550304	279.456		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.935	12.935	199397	1.37		ug/ml
Aliphatic C9-C28	3.186	16.857	44843846	265.366	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067879.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 13:02
Operator : YP/AJ
Sample : P5002-01DL2 50X
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL2

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 00:18:01 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...	12.935	199397	1.374 ug/mlm
Spiked Amount 50.000		Recovery =	2.75%
Target Compounds			

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067879.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 13:02
Operator : YP/AJ
Sample : P5002-01DL2 50X
Misc :
ALS Vial : 19 Sample Multiplier: 1

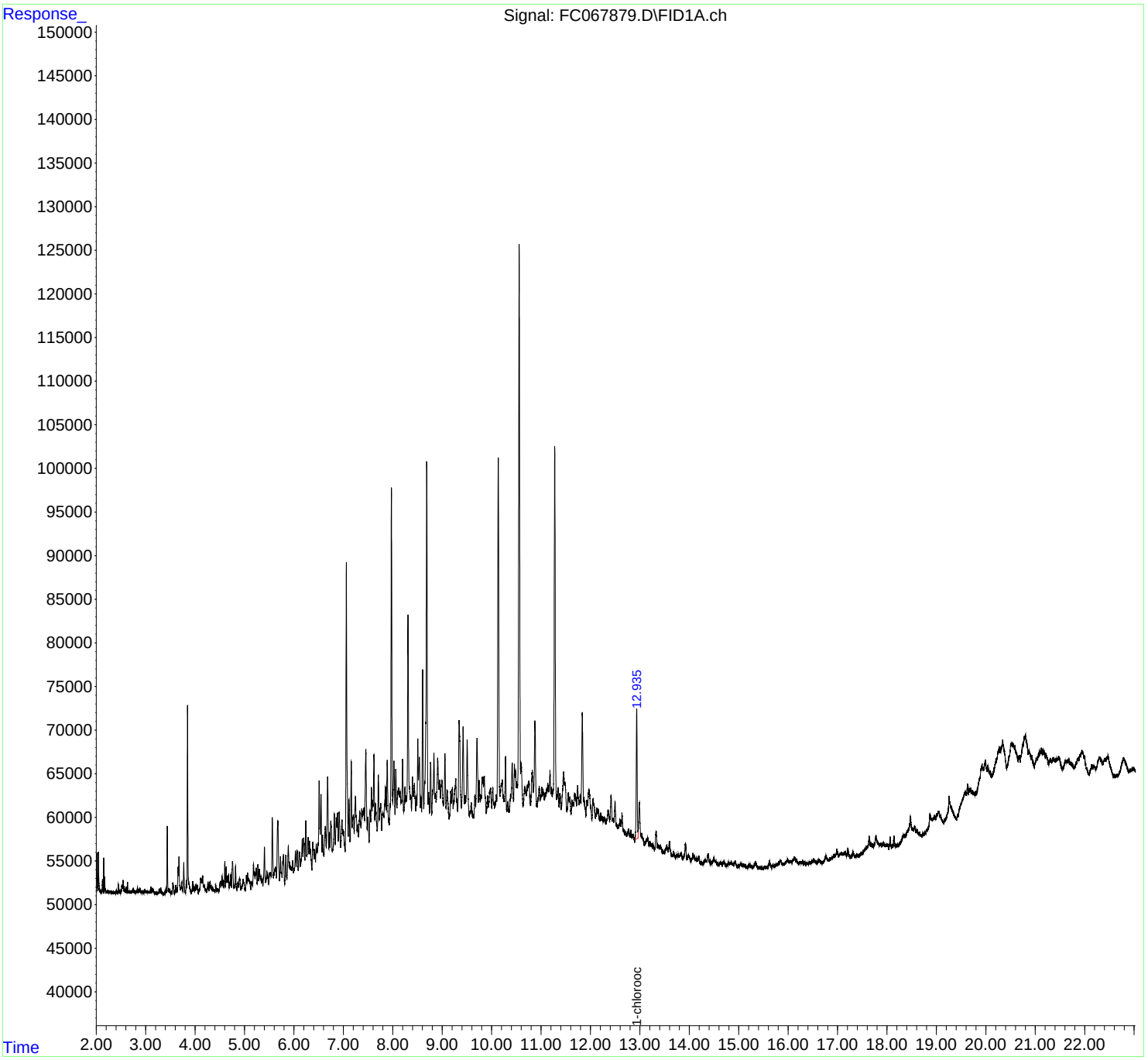
Integration File: autoint1.e
Quant Time: Nov 28 00:18:01 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

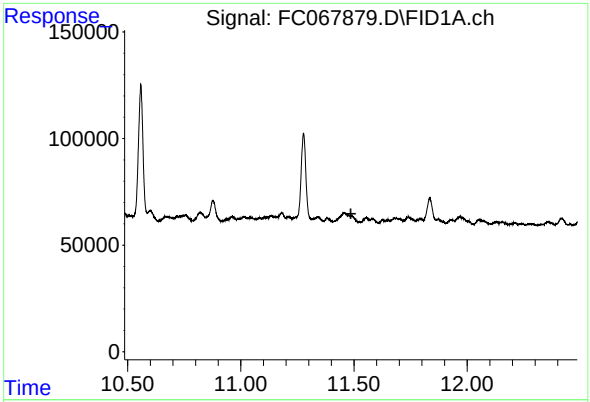
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL2

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024





#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-7-TPH-1DL2

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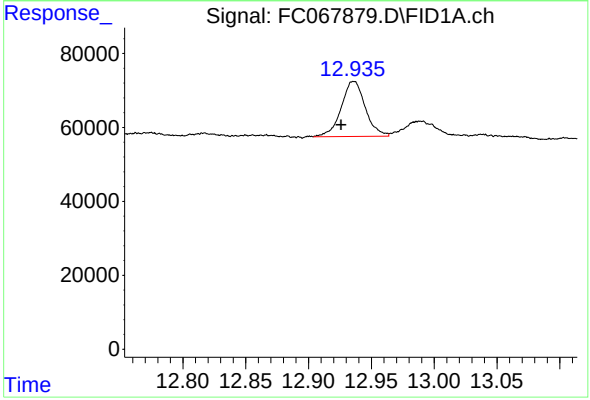
Supervised By :Ankita Jodhani 12/02/2024



#12 1-chlorooctadecane (SURR)

R.T.: 12.935 min
Delta R.T.: 0.009 min
Response: 199397
Conc: 1.37 ug/ml m

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL2

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Da
Data File : FC067879.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 13:02
Sample : P5002-01DL2 50X
Misc :
ALS Vial : 19 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	3.275	3.204	3.291	BV	552	7209	0.58%	0.015%
2	3.305	3.291	3.371	VV	664	10063	0.81%	0.022%
3	3.384	3.371	3.394	PV	212	2098	0.17%	0.005%
4	3.410	3.394	3.420	VV	642	5797	0.46%	0.012%
5	3.438	3.420	3.474	VV	7723	70704	5.67%	0.152%
6	3.487	3.474	3.511	VV	533	7754	0.62%	0.017%
7	3.522	3.511	3.533	VV	306	2987	0.24%	0.006%
8	3.551	3.533	3.583	VV	1271	17757	1.42%	0.038%
9	3.610	3.583	3.629	VV	1001	13967	1.12%	0.030%
10	3.674	3.629	3.701	VV	4241	75430	6.05%	0.162%
11	3.729	3.701	3.758	VV	1255	22679	1.82%	0.049%
12	3.772	3.758	3.808	VV	3506	34138	2.74%	0.073%
13	3.848	3.808	3.920	VV	21426	214747	17.21%	0.461%
14	3.953	3.920	3.968	VV	1324	16068	1.29%	0.035%
15	3.979	3.968	3.997	VV	702	8605	0.69%	0.018%
16	4.013	3.997	4.034	VV	936	13937	1.12%	0.030%
17	4.044	4.034	4.068	VV	893	8740	0.70%	0.019%
18	4.113	4.068	4.122	VV	1634	23377	1.87%	0.050%
19	4.128	4.122	4.136	VV	1514	12164	0.98%	0.026%
20	4.154	4.136	4.180	VV	1901	32374	2.60%	0.070%
21	4.189	4.180	4.238	VV	850	16575	1.33%	0.036%
22	4.263	4.238	4.284	VV	1203	16375	1.31%	0.035%
23	4.303	4.284	4.327	VV	1137	18262	1.46%	0.039%
24	4.340	4.327	4.401	VV	611	15942	1.28%	0.034%
25	4.418	4.401	4.439	VV	786	9969	0.80%	0.021%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL2

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Manual IntegrationsAPPROVED

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26	4.451	4.439	4.478	VV	361	6743	0.54%	0.014%
27	4.516	4.478	4.530	VV	1197			
28	4.546	4.530	4.561	VV	1786			
29	4.571	4.561	4.585	VV	1263			
30	4.602	4.585	4.616	VV	3475			
31	4.630	4.616	4.644	VV	2817	29156	2.34%	0.063%
32	4.655	4.644	4.667	VV	1779	20049	1.61%	0.043%
33	4.677	4.667	4.692	VV	1899	19639	1.57%	0.042%
34	4.721	4.692	4.736	VV	1896	29427	2.36%	0.063%
35	4.757	4.736	4.796	VV	3349	58344	4.68%	0.125%
36	4.818	4.796	4.844	VV	2904	34672	2.78%	0.074%
37	4.868	4.844	4.881	VV	1090	14609	1.17%	0.031%
38	4.902	4.881	4.938	VV	1406	27581	2.21%	0.059%
39	4.971	4.938	5.015	VV	1286	32321	2.59%	0.069%
40	5.038	5.015	5.050	VV	1737	19879	1.59%	0.043%
41	5.063	5.050	5.125	VV	2040	52509	4.21%	0.113%
42	5.143	5.125	5.162	VV	985	16338	1.31%	0.035%
43	5.183	5.162	5.196	VV	3036	39332	3.15%	0.084%
44	5.202	5.196	5.214	VV	2119	19974	1.60%	0.043%
45	5.240	5.214	5.255	VV	2552	46221	3.71%	0.099%
46	5.271	5.255	5.286	VV	2962	34556	2.77%	0.074%
47	5.301	5.286	5.323	VV	2370	40851	3.27%	0.088%
48	5.330	5.323	5.345	VV	1446	17389	1.39%	0.037%
49	5.358	5.345	5.373	VV	1272	17337	1.39%	0.037%
50	5.403	5.373	5.431	VV	4956	78218	6.27%	0.168%
51	5.452	5.431	5.486	VV	2137	46821	3.75%	0.101%
52	5.526	5.486	5.541	VV	1921	54116	4.34%	0.116%
53	5.563	5.541	5.587	VV	8326	115134	9.23%	0.247%
54	5.628	5.587	5.647	VV	2541	73500	5.89%	0.158%
55	5.675	5.647	5.710	VV	7814	162044	12.99%	0.348%
56	5.728	5.710	5.758	VV	3772	65755	5.27%	0.141%
57	5.789	5.758	5.813	VV	3904	82169	6.59%	0.177%
58	5.835	5.813	5.856	VV	3951	57515	4.61%	0.124%
59	5.886	5.856	5.905	VV	4929	91579	7.34%	0.197%
60	5.914	5.905	5.925	VV	3075	33655	2.70%	0.072%
61	5.933	5.925	5.953	VV	2516	40121	3.22%	0.086%
62	5.975	5.953	5.993	VV	3183	59834	4.80%	0.129%
63	6.031	5.993	6.046	VV	4318	92659	7.43%	0.199%
64	6.063	6.046	6.088	VV	4331	85946	6.89%	0.185%
65	6.110	6.088	6.132	VV	4211	89600	7.18%	0.192%
66	6.169	6.132	6.183	VV	5694	119632	9.59%	0.257%
67	6.198	6.183	6.222	VV	5749	111914	8.97%	0.240%
68	6.241	6.222	6.261	VV	7679	124494	9.98%	0.267%
69	6.288	6.261	6.304	VV	5761	122835	9.85%	0.264%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL2

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Manual IntegrationsAPPROVED

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70	6.316	6.304	6.363	VV	5373	140017	11.22%	0.301%
71	6.382	6.363	6.408	VV	5206			
72	6.421	6.408	6.436	VV	4318			
73	6.453	6.436	6.468	VV	4980			
74	6.511	6.468	6.532	VV	12173			
75	6.548	6.532	6.569	VV	10708	166877	13.38%	0.358%
76	6.581	6.569	6.607	VV	5997	105874	8.49%	0.227%
77	6.637	6.607	6.655	VV	6961	161335	12.93%	0.347%
78	6.682	6.655	6.706	VV	12690	249352	19.99%	0.536%
79	6.718	6.706	6.730	VV	6249	76155	6.10%	0.164%
80	6.747	6.730	6.778	VV	7467	171899	13.78%	0.369%
81	6.818	6.778	6.837	VV	8376	206630	16.56%	0.444%
82	6.858	6.837	6.869	VV	7934	129775	10.40%	0.279%
83	6.881	6.869	6.898	VV	8451	125996	10.10%	0.271%
84	6.917	6.898	6.944	VV	8533	184668	14.80%	0.397%
85	6.973	6.944	7.038	VV	7639	328639	26.34%	0.706%
86	7.061	7.038	7.099	VV	37112	579060	46.42%	1.244%
87	7.116	7.099	7.136	VV	9901	165454	13.26%	0.355%
88	7.161	7.136	7.179	VV	14371	239940	19.23%	0.515%
89	7.203	7.179	7.219	VV	8092	181924	14.58%	0.391%
90	7.245	7.219	7.279	VV	10289	294169	23.58%	0.632%
91	7.290	7.279	7.307	VV	6847	108520	8.70%	0.233%
92	7.332	7.307	7.357	VV	8622	216201	17.33%	0.464%
93	7.373	7.357	7.384	VV	8779	132234	10.60%	0.284%
94	7.413	7.384	7.428	VV	8854	216820	17.38%	0.466%
95	7.454	7.428	7.483	VV	15649	352978	28.29%	0.758%
96	7.497	7.483	7.521	VV	7849	157388	12.62%	0.338%
97	7.541	7.521	7.552	VV	8552	132777	10.64%	0.285%
98	7.569	7.552	7.582	VV	11263	171541	13.75%	0.369%
99	7.593	7.582	7.600	VV	9776	100621	8.07%	0.216%
100	7.619	7.600	7.636	VV	14987	241426	19.35%	0.519%
101	7.649	7.636	7.684	VV	9381	231835	18.58%	0.498%
102	7.709	7.684	7.729	VV	12653	248262	19.90%	0.533%
103	7.756	7.729	7.775	VV	9398	226041	18.12%	0.486%
104	7.798	7.775	7.821	VV	8299	213697	17.13%	0.459%
105	7.853	7.821	7.868	VV	11212	273210	21.90%	0.587%
106	7.887	7.868	7.927	VV	14255	346219	27.75%	0.744%
107	7.973	7.927	8.000	VV	45225	768873	61.63%	1.652%
108	8.024	8.000	8.045	VV	14129	305316	24.47%	0.656%
109	8.061	8.045	8.082	VV	13188	240996	19.32%	0.518%
110	8.115	8.082	8.137	VV	11011	336525	26.98%	0.723%
111	8.149	8.137	8.166	VV	10562	177983	14.27%	0.382%
112	8.198	8.166	8.221	VV	14377	354993	28.46%	0.763%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL2

rteres

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113	8.246	8.221	8.279	VV	11099	340054	27.26%	0.731%
114	8.308	8.279	8.353	VV	30778			
115	8.361	8.353	8.381	VV	10150			
116	8.398	8.381	8.417	VV	12237			
117	8.438	8.417	8.468	VV	11470			
118	8.479	8.468	8.487	VV	9902	108697	8.71%	0.234%
119	8.507	8.487	8.520	VV	16516	257529	20.64%	0.553%
120	8.537	8.520	8.564	VV	14426	315807	25.32%	0.678%
121	8.573	8.564	8.584	VV	9780	110489	8.86%	0.237%
122	8.604	8.584	8.627	VV	24300	393306	31.53%	0.845%
123	8.687	8.627	8.714	VV	48043	1036418	83.08%	2.226%
124	8.726	8.714	8.745	VV	10364	172102	13.80%	0.370%
125	8.765	8.745	8.787	VV	13848	272986	21.88%	0.586%
126	8.833	8.787	8.852	VV	14836	425770	34.13%	0.915%
127	8.863	8.852	8.877	VV	10173	151033	12.11%	0.324%
128	8.910	8.877	8.932	VV	13942	382610	30.67%	0.822%
129	8.947	8.932	8.967	VV	11534	234186	18.77%	0.503%
130	8.995	8.967	9.022	VV	11470	347315	27.84%	0.746%
131	9.056	9.022	9.080	VV	14652	376086	30.15%	0.808%
132	9.100	9.080	9.141	VV	10450	334282	26.80%	0.718%
133	9.174	9.141	9.187	VV	10351	243634	19.53%	0.523%
134	9.205	9.187	9.222	VV	10752	205033	16.44%	0.440%
135	9.273	9.222	9.311	VV	11815	528319	42.35%	1.135%
136	9.343	9.311	9.390	VV	18214	591921	47.45%	1.272%
137	9.423	9.390	9.451	VV	17528	448613	35.96%	0.964%
138	9.464	9.451	9.476	VV	9740	138630	11.11%	0.298%
139	9.506	9.476	9.554	VV	16037	499927	40.07%	1.074%
140	9.588	9.554	9.618	VV	8935	308092	24.70%	0.662%
141	9.630	9.618	9.640	VV	7652	102274	8.20%	0.220%
142	9.662	9.640	9.677	VV	9825	198096	15.88%	0.426%
143	9.704	9.677	9.734	VV	16376	418226	33.53%	0.898%
144	9.750	9.734	9.769	VV	11370	216146	17.33%	0.464%
145	9.779	9.769	9.787	VV	9782	103593	8.30%	0.223%
146	9.851	9.787	9.892	VV	12005	662409	53.10%	1.423%
147	9.919	9.892	9.938	VV	9513	242588	19.45%	0.521%
148	9.977	9.938	10.003	VV	10494	377604	30.27%	0.811%
149	10.024	10.003	10.058	VV	10548	301886	24.20%	0.649%
150	10.135	10.058	10.168	VV	47917	1154646	92.56%	2.480%
151	10.214	10.168	10.261	VV	11344	569578	45.66%	1.224%
152	10.282	10.261	10.307	VV	14091	295125	23.66%	0.634%
153	10.324	10.307	10.358	VV	8783	251714	20.18%	0.541%
154	10.416	10.358	10.443	VV	13448	521314	41.79%	1.120%
155	10.464	10.443	10.524	VV	13037	555224	44.51%	1.193%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL2

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

156	10.558	10.524	10.588	VV	72375	1247497	100.00%	2.680%
157	10.599	10.588	10.634	VV	13349			
158	10.671	10.634	10.703	VV	10442			
159	10.756	10.703	10.789	VV	11183			
160	10.821	10.789	10.845	VV	12434			
161	10.877	10.845	10.918	VV	17851	532471	42.68%	1.144%
162	10.963	10.918	10.982	VV	10478	358597	28.75%	0.770%
163	11.014	10.982	11.029	VV	10281	274075	21.97%	0.589%
164	11.041	11.029	11.069	VV	10097	232110	18.61%	0.499%
165	11.136	11.069	11.157	VV	10641	524634	42.05%	1.127%
166	11.181	11.157	11.199	VV	12176	271334	21.75%	0.583%
167	11.208	11.199	11.228	VV	10348	172477	13.83%	0.371%
168	11.277	11.228	11.314	VV	49387	1054171	84.50%	2.265%
169	11.340	11.314	11.368	VV	10199	297558	23.85%	0.639%
170	11.382	11.368	11.408	VV	9571	211233	16.93%	0.454%
171	11.458	11.408	11.521	VV	11936	672910	53.94%	1.446%
172	11.554	11.521	11.608	VV	9642	445637	35.72%	0.957%
173	11.626	11.608	11.641	VV	8784	163188	13.08%	0.351%
174	11.653	11.641	11.664	VV	8409	118340	9.49%	0.254%
175	11.679	11.664	11.718	VV	9587	289497	23.21%	0.622%
176	11.740	11.718	11.772	VV	10298	293922	23.56%	0.631%
177	11.793	11.772	11.808	VV	9237	189447	15.19%	0.407%
178	11.835	11.808	11.906	VV	18757	641007	51.38%	1.377%
179	11.927	11.906	11.943	VV	8548	178455	14.31%	0.383%
180	11.968	11.943	12.028	VV	9879	435849	34.94%	0.936%
181	12.053	12.028	12.104	VV	8883	351546	28.18%	0.755%
182	12.126	12.104	12.184	VV	7767	343427	27.53%	0.738%
183	12.210	12.184	12.231	VV	7144	189766	15.21%	0.408%
184	12.242	12.231	12.259	VV	6706	109048	8.74%	0.234%
185	12.278	12.259	12.313	VV	6679	205851	16.50%	0.442%
186	12.357	12.313	12.388	VV	7282	304356	24.40%	0.654%
187	12.417	12.388	12.467	VV	9218	342032	27.42%	0.735%
188	12.497	12.467	12.574	VV	8363	402983	32.30%	0.866%
189	12.596	12.574	12.618	VV	6187	156394	12.54%	0.336%
190	12.639	12.618	12.698	VV	6932	266809	21.39%	0.573%
191	12.711	12.698	12.735	VV	4819	103939	8.33%	0.223%
192	12.773	12.735	12.798	VV	5218	180426	14.46%	0.388%
193	12.817	12.798	12.844	VV	5051	127472	10.22%	0.274%
194	12.855	12.844	12.893	VV	4450	125131	10.03%	0.269%
195	12.936	12.893	12.964	VV	19117	371968	29.82%	0.799%
196	12.988	12.964	13.028	VV	8181	231497	18.56%	0.497%
197	13.038	13.028	13.088	VV	4641	145409	11.66%	0.312%
198	13.158	13.088	13.184	VV	4134	212783	17.06%	0.457%
199	13.208	13.184	13.228	VV	3639	90125	7.22%	0.194%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL2

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

200	13.238	13.228	13.258	VV	3348	57600	4.62%	0.124%
201	13.265	13.258	13.294	VV	3461			
202	13.328	13.294	13.356	VV	4824			
203	13.371	13.356	13.407	VV	3221			
204	13.418	13.407	13.464	VV	3236			
205	13.468	13.464	13.479	VV	2548	20620	1.65%	0.044%
206	13.489	13.479	13.499	VV	2450	29841	2.39%	0.064%
207	13.543	13.499	13.570	VV	3172	116353	9.33%	0.250%
208	13.601	13.570	13.661	VV	3576	140041	11.23%	0.301%
209	13.680	13.661	13.723	VV	2376	76505	6.13%	0.164%
210	13.773	13.723	13.803	VV	2091	92912	7.45%	0.200%
211	13.834	13.803	13.865	VV	2222	73658	5.90%	0.158%
212	13.923	13.865	13.958	VV	3328	118096	9.47%	0.254%
213	13.981	13.958	14.031	VV	1870	72055	5.78%	0.155%
214	14.073	14.031	14.114	VV	2046	82424	6.61%	0.177%
215	14.124	14.114	14.169	VV	1498	45775	3.67%	0.098%
216	14.190	14.169	14.231	VV	1770	48221	3.87%	0.104%
217	14.242	14.231	14.284	VV	1084	31565	2.53%	0.068%
218	14.321	14.284	14.352	VV	1319	47412	3.80%	0.102%
219	14.379	14.352	14.428	VV	1924	61905	4.96%	0.133%
220	14.495	14.428	14.594	VV	1535	99632	7.99%	0.214%
221	14.629	14.594	14.665	VV	960	34861	2.79%	0.075%
222	14.700	14.665	14.731	VV	954	32626	2.62%	0.070%
223	14.744	14.731	14.762	VV	673	11228	0.90%	0.024%
224	14.787	14.762	14.830	VV	879	31359	2.51%	0.067%
225	14.848	14.830	14.894	VV	1020	29007	2.33%	0.062%
226	14.928	14.894	14.971	VV	962	31774	2.55%	0.068%
227	14.990	14.971	15.002	VV	523	8782	0.70%	0.019%
228	15.045	15.002	15.074	VV	679	24901	2.00%	0.053%
229	15.100	15.074	15.177	VV	642	26669	2.14%	0.057%
230	15.226	15.177	15.281	VV	524	22992	1.84%	0.049%
231	15.342	15.281	15.464	VV	801	35639	2.86%	0.077%
232	15.477	15.464	15.498	VV	151	1368	0.11%	0.003%
233	15.528	15.498	15.539	PV	203	3691	0.30%	0.008%
234	15.558	15.539	15.594	VV	277	5286	0.42%	0.011%
235	15.620	15.594	15.678	VV	783	19447	1.56%	0.042%
236	15.692	15.678	15.708	VV	284	4182	0.34%	0.009%
237	15.775	15.708	15.790	VV	388	13253	1.06%	0.028%
238	15.848	15.790	15.894	VV	719	31745	2.54%	0.068%
239	15.989	15.894	16.027	VV	753	40018	3.21%	0.086%
240	16.124	16.027	16.213	VV	942	62517	5.01%	0.134%
241	16.241	16.213	16.258	VV	383	7719	0.62%	0.017%
242	16.264	16.258	16.277	VV	298	3167	0.25%	0.007%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL2

rteres

Manual IntegrationsAPPROVED

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Supervised By :Ankita Jodhani 12/02/2024

243	16.291	16.277	16.324	VV	484	7259	0.58%	0.016%
244	16.337	16.324	16.360	VV	224			
245	16.378	16.360	16.405	VV	170			
246	16.479	16.405	16.498	VV	353			
247	16.515	16.498	16.537	VV	535			
248	16.550	16.537	16.577	VV	339	4963	0.40%	0.011%
249	16.608	16.577	16.618	VV	334	5131	0.41%	0.011%
250	16.633	16.618	16.678	VV	376	7073	0.57%	0.015%
251	16.764	16.678	16.827	PV	736	23919	1.92%	0.051%
252	16.847	16.827	16.858	VV	315	4665	0.37%	0.010%
253	16.881	16.858	16.896	VV	457	7488	0.60%	0.016%
254	16.987	16.896	17.018	VV	1227	48844	3.92%	0.105%
255	17.079	17.018	17.101	VV	699	31034	2.49%	0.067%
256	17.111	17.101	17.121	VV	600	7148	0.57%	0.015%
257	17.156	17.121	17.184	VV	798	22210	1.78%	0.048%
258	17.207	17.184	17.251	VV	1056	21989	1.76%	0.047%
259	17.271	17.251	17.284	VV	263	3116	0.25%	0.007%
260	17.313	17.284	17.360	VV	627	13444	1.08%	0.029%
261	17.395	17.360	17.428	VV	221	4432	0.36%	0.010%
262	17.576	17.428	17.587	PV	821	35525	2.85%	0.076%
263	17.641	17.587	17.668	VV	1877	57170	4.58%	0.123%
264	17.683	17.668	17.723	VV	1108	30299	2.43%	0.065%
265	17.775	17.723	17.896	VV	1851	103115	8.27%	0.222%
266	17.920	17.896	17.957	VV	804	23225	1.86%	0.050%
267	17.978	17.957	17.988	VV	522	8572	0.69%	0.018%
268	18.006	17.988	18.039	VV	529	11373	0.91%	0.024%
269	18.062	18.039	18.088	PV	1238	17147	1.37%	0.037%
270	18.106	18.088	18.117	VV	334	3444	0.28%	0.007%
271	18.141	18.117	18.188	VV	1197	18715	1.50%	0.040%
272	18.212	18.188	18.229	VV	259	2011	0.16%	0.004%
273	18.262	18.229	18.270	PV	399	3524	0.28%	0.008%
274	18.331	18.270	18.350	VV	959	29274	2.35%	0.063%
275	18.367	18.350	18.377	VV	861	13417	1.08%	0.029%
276	18.476	18.377	18.533	VV	2752	138931	11.14%	0.298%
277	18.560	18.533	18.591	VV	1405	38954	3.12%	0.084%
278	18.612	18.591	18.711	VV	899	30624	2.45%	0.066%
279	18.871	18.711	18.917	PV	1987	89247	7.15%	0.192%
280	18.961	18.917	18.981	VV	1715	56605	4.54%	0.122%
281	19.053	18.981	19.145	VV	1904	128235	10.28%	0.275%
282	19.256	19.145	19.407	VV	3076	190344	15.26%	0.409%
283	19.587	19.407	19.598	VV	2952	188244	15.09%	0.404%
284	19.630	19.598	19.648	VV	3533	87279	7.00%	0.187%
285	19.664	19.648	19.676	VV	2943	47427	3.80%	0.102%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1DL2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

					rteres			
286	19.697	19.676	19.711	VV	2993	57839	4.64%	0.124%
287	19.725	19.711	19.739	VV	2488			
288	19.749	19.739	19.764	VV	2333			
289	19.795	19.764	19.813	VV	2266			
			Sum of corrected are					

Aliphatic EPH 111424.M Thu Nov 28 02:34:16 2024

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

Report of Analysis

Client:	ENTACT		Date Collected:	11/25/24	
Project:	North Point		Date Received:	11/25/24	
Client Sample ID:	EX-7-TPH-1DL2		SDG No.:	P5002	
Lab Sample ID:	P5002-01DL2		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	84.6	
Sample Wt/Vol:	30.04	Units: g	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :					

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048830.D	20	11/26/24	11/27/24	PB165286

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	20.5		7.08	15.7	mg/kg
Aromatic C12-C16	Aromatic C12-C16	200		8.03	23.6	mg/kg
Aromatic C16-C21	Aromatic C16-C21	440		22.7	39.3	mg/kg
Aromatic C21-C36	Aromatic C21-C36	84.8		47.2	63.0	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	4.59		40 - 140	184%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	2.88		40 - 140	115%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	3.35		40 - 140	134%	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:	P5002-01DL2	Acq On:	27 Nov 2024 13:02
Client Sample ID:	EX-7-TPH-1DL2	Operator:	YP/AJ
Data file:	FD048830.D	Misc:	
Instrument:	FID_D	ALS Vial:	69
Dilution Factor:	20	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.087	5.803	2502339	13.032	200	ug/ml
Aromatic C12-C16	5.804	8.410	24504278	127.322	300	ug/ml
Aromatic C16-C21	8.411	12.673	52003632	279.883	500	ug/ml
Aromatic C21-C36	12.674	18.080	8470205	53.871	800	ug/ml
Aromatic EPH	4.087	18.080	87480454	474.108		ug/ml
2-Bromonaphthalene (SURR)	7.364	7.364	807281	4.59		ug/ml
2-Flurobiphenyl (SURR)	8.217	8.217	331368	2.88		ug/ml
ortho-Terphenyl (SURR)	11.246	11.246	643801	3.35		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048830.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 13:02
Operator : YP/AJ
Sample : P5002-01DL2 20X
Misc :
ALS Vial : 69 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL2

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:43:50 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	807281	4.585 ug/ml
Spiked Amount 50.000		Recovery =	9.17%
6) S 2-Flurobiphenyl (SURR)	8.217	331368	2.877 ug/ml
Spiked Amount 50.000	Range 0 - 131	Recovery =	5.75%
11) S ortho-Terphenyl (SURR)	11.246	643801	3.347 ug/mlm
Spiked Amount 50.000		Recovery =	6.69%
Target Compounds			

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048830.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 13:02
Operator : YP/AJ
Sample : P5002-01DL2 20X
Misc :
ALS Vial : 69 Sample Multiplier: 1

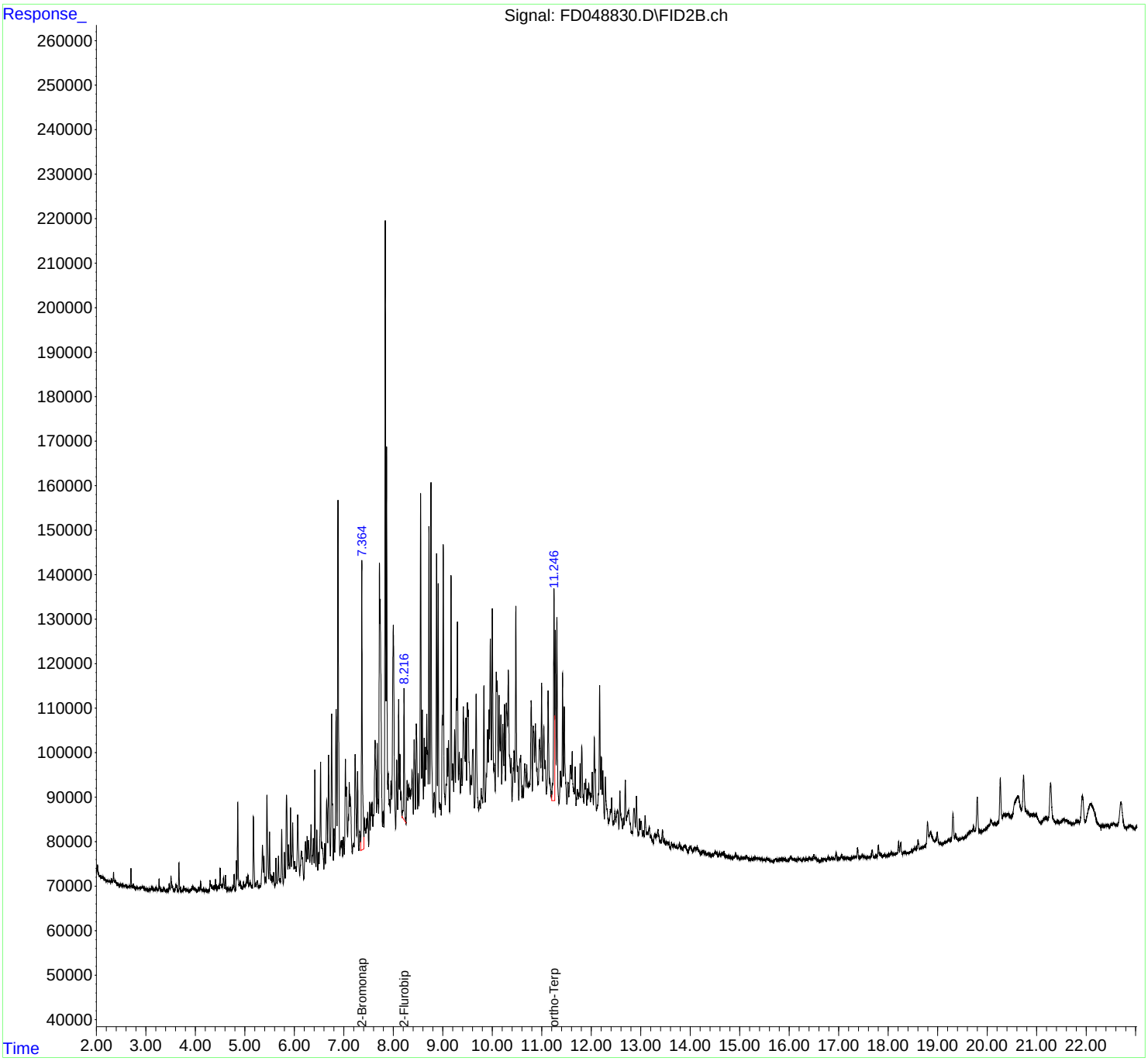
Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL2

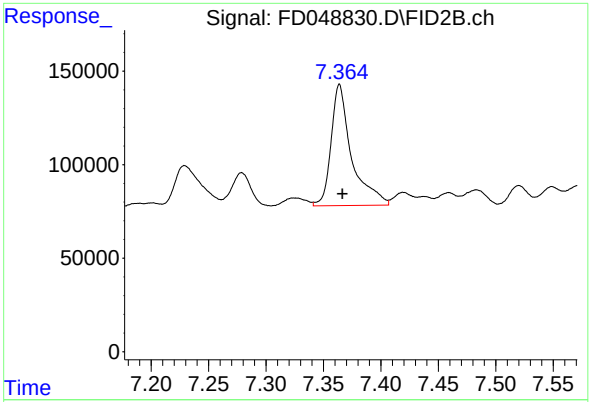
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:43:50 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





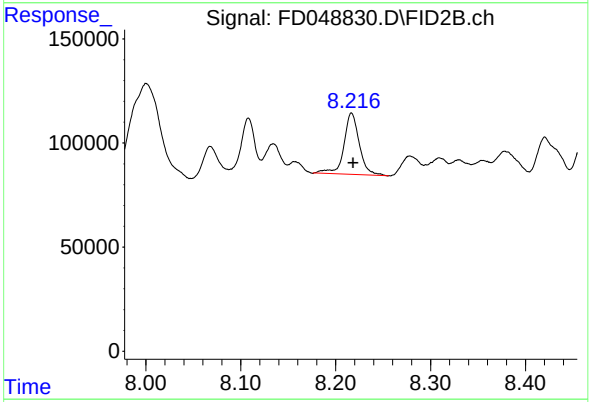
#4 2-Bromonaphthalene (SURR)

R.T.: 7.364 min
Delta R.T.: -0.002 min
Response: 807281
Conc: 4.59 ug/ml

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL2

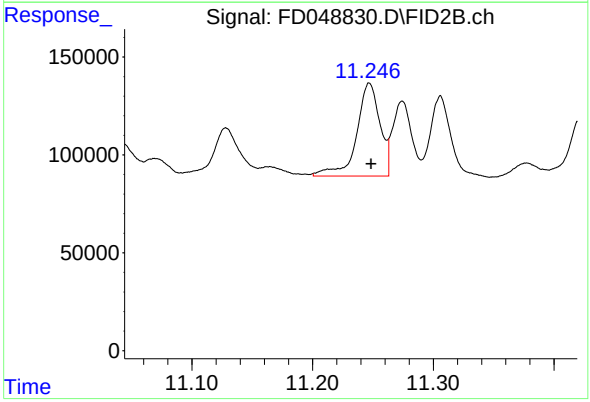
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024



#6 2-Flurobiphenyl (SURR)

R.T.: 8.217 min
Delta R.T.: -0.001 min
Response: 331368
Conc: 2.88 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.246 min
Delta R.T.: -0.003 min
Response: 643801
Conc: 3.35 ug/ml m

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL2

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Da
Data File : FD048830.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 13:02
Sample : P5002-01DL2 20X
Misc :
ALS Vial : 69 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	4.062	4.042	4.075	BV	745	8407	0.48%	0.009%
2	4.080	4.075	4.090	VV	616	4712	0.27%	0.005%
3	4.107	4.090	4.128	VV	2292	26661	1.51%	0.030%
4	4.136	4.128	4.147	VV	459	3830	0.22%	0.004%
5	4.158	4.147	4.198	VV	499	8520	0.48%	0.010%
6	4.220	4.198	4.239	VV	550	6442	0.37%	0.007%
7	4.266	4.239	4.279	PV	456	4004	0.23%	0.004%
8	4.298	4.279	4.332	VV	2568	42280	2.40%	0.047%
9	4.342	4.332	4.365	VV	1084	17949	1.02%	0.020%
10	4.380	4.365	4.392	VV	1337	16336	0.93%	0.018%
11	4.405	4.392	4.419	VV	2632	25856	1.47%	0.029%
12	4.427	4.419	4.443	VV	1467	14105	0.80%	0.016%
13	4.455	4.443	4.464	VV	1077	10306	0.58%	0.012%
14	4.476	4.464	4.485	VV	1344	13484	0.77%	0.015%
15	4.502	4.485	4.534	VV	5129	66653	3.78%	0.074%
16	4.545	4.534	4.555	VV	1414	14740	0.84%	0.016%
17	4.571	4.555	4.592	VV	3002	42621	2.42%	0.048%
18	4.608	4.592	4.642	VV	3542	42180	2.39%	0.047%
19	4.662	4.642	4.685	VV	701	9905	0.56%	0.011%
20	4.703	4.685	4.719	VV	897	9554	0.54%	0.011%
21	4.730	4.719	4.739	VV	350	2668	0.15%	0.003%
22	4.760	4.739	4.767	VV	1018	10712	0.61%	0.012%
23	4.783	4.767	4.810	VV	3609	39305	2.23%	0.044%
24	4.831	4.810	4.841	PV	6768	62900	3.57%	0.070%
25	4.857	4.841	4.897	VV	19812	214798	12.19%	0.240%

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26	4.908	4.897	4.925	VV	2045	23437	1.33%	0.026%
27	4.940	4.925	4.954	VV	778			
28	4.973	4.954	4.986	VV	1913			
29	4.996	4.986	5.007	VV	1273			
30	5.039	5.007	5.051	VV	3034			
31	5.064	5.051	5.079	VV	3414	37722	2.14%	0.042%
32	5.105	5.079	5.134	VV	1806	40104	2.28%	0.045%
33	5.144	5.134	5.155	VV	968	8653	0.49%	0.010%
34	5.173	5.155	5.210	VV	16526	206175	11.70%	0.230%
35	5.218	5.210	5.230	VV	1214	12356	0.70%	0.014%
36	5.246	5.230	5.285	VV	1972	38865	2.21%	0.043%
37	5.300	5.285	5.309	VV	887	10194	0.58%	0.011%
38	5.356	5.309	5.375	VV	9935	177027	10.05%	0.198%
39	5.386	5.375	5.403	VV	7452	76585	4.35%	0.085%
40	5.415	5.403	5.428	VV	2676	32615	1.85%	0.036%
41	5.446	5.428	5.484	VV	21122	304499	17.28%	0.340%
42	5.499	5.484	5.527	VV	12848	150081	8.52%	0.168%
43	5.537	5.527	5.548	VV	2756	29375	1.67%	0.033%
44	5.559	5.548	5.570	VV	2802	29045	1.65%	0.032%
45	5.582	5.570	5.604	VV	3704	44438	2.52%	0.050%
46	5.628	5.604	5.652	VV	6914	82295	4.67%	0.092%
47	5.680	5.652	5.696	VV	7300	101371	5.75%	0.113%
48	5.704	5.696	5.717	VV	2209	23114	1.31%	0.026%
49	5.745	5.717	5.779	VV	13272	179425	10.18%	0.200%
50	5.799	5.779	5.817	VV	8055	94703	5.37%	0.106%
51	5.843	5.817	5.870	VV	20837	358999	20.37%	0.401%
52	5.883	5.870	5.907	VV	9760	144139	8.18%	0.161%
53	5.924	5.907	5.940	VV	18041	199770	11.34%	0.223%
54	5.967	5.940	5.992	VV	14568	255760	14.51%	0.285%
55	6.005	5.992	6.019	VV	5972	80851	4.59%	0.090%
56	6.026	6.019	6.039	VV	4640	51365	2.91%	0.057%
57	6.069	6.039	6.110	VV	16373	347285	19.71%	0.388%
58	6.141	6.110	6.193	VV	8144	268775	15.25%	0.300%
59	6.226	6.193	6.242	VV	10257	203618	11.56%	0.227%
60	6.259	6.242	6.273	VV	11419	160423	9.10%	0.179%
61	6.285	6.273	6.313	VV	10478	199662	11.33%	0.223%
62	6.338	6.313	6.356	VV	13961	235770	13.38%	0.263%
63	6.385	6.356	6.400	VV	10844	201793	11.45%	0.225%
64	6.415	6.400	6.438	VV	26287	300122	17.03%	0.335%
65	6.456	6.438	6.475	VV	12746	175890	9.98%	0.196%
66	6.491	6.475	6.502	VV	7734	95567	5.42%	0.107%
67	6.531	6.502	6.548	VV	28100	398157	22.60%	0.444%
68	6.556	6.548	6.598	VV	9821	232285	13.18%	0.259%
69	6.615	6.598	6.630	VV	9633	132827	7.54%	0.148%

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70	6.654	6.630	6.675	VV	19292	358693	20.36%	0.400%
71	6.692	6.675	6.729	VV	29449			
72	6.755	6.729	6.789	VV	38759			
73	6.802	6.789	6.817	VV	12822			
74	6.845	6.817	6.863	VV	39696			
75	6.882	6.863	6.920	VV	86605	1238202	70.27%	1.382%
76	6.940	6.920	6.949	VV	9831	150265	8.53%	0.168%
77	6.960	6.949	6.975	VV	10087	134332	7.62%	0.150%
78	6.991	6.975	7.008	VV	10818	178559	10.13%	0.199%
79	7.033	7.008	7.044	VV	28205	375261	21.30%	0.419%
80	7.053	7.044	7.078	VV	22090	344481	19.55%	0.384%
81	7.092	7.078	7.097	VV	15315	152500	8.65%	0.170%
82	7.111	7.097	7.121	VV	23157	284342	16.14%	0.317%
83	7.131	7.121	7.173	VV	19896	432166	24.53%	0.482%
84	7.201	7.173	7.210	VV	9308	194618	11.04%	0.217%
85	7.229	7.210	7.261	VV	29221	573996	32.57%	0.641%
86	7.279	7.261	7.305	VV	25372	407668	23.14%	0.455%
87	7.324	7.305	7.344	VV	11808	234928	13.33%	0.262%
88	7.364	7.344	7.407	VV	72656	1098727	62.35%	1.226%
89	7.420	7.407	7.432	VV	14748	198419	11.26%	0.221%
90	7.438	7.432	7.446	VV	12585	104698	5.94%	0.117%
91	7.459	7.446	7.468	VV	14668	178104	10.11%	0.199%
92	7.483	7.468	7.502	VV	16119	268552	15.24%	0.300%
93	7.520	7.502	7.534	VV	18388	267616	15.19%	0.299%
94	7.549	7.534	7.560	VV	17828	237100	13.46%	0.265%
95	7.572	7.560	7.586	VV	18316	259302	14.72%	0.289%
96	7.633	7.586	7.661	VV	32248	978367	55.52%	1.092%
97	7.675	7.661	7.688	VV	31617	385435	21.87%	0.430%
98	7.693	7.688	7.703	VV	18879	151967	8.62%	0.170%
99	7.721	7.703	7.730	VV	71762	782442	44.40%	0.873%
100	7.736	7.730	7.781	VV	63977	1150233	65.28%	1.284%
101	7.794	7.781	7.810	VV	16112	256904	14.58%	0.287%
102	7.837	7.810	7.853	VV	148879	1762085	100.00%	1.967%
103	7.865	7.853	7.887	VV	97889	1157915	65.71%	1.292%
104	7.898	7.887	7.919	VV	24538	408459	23.18%	0.456%
105	7.928	7.919	7.939	VV	18777	212243	12.04%	0.237%
106	7.953	7.939	7.969	VV	22988	368558	20.92%	0.411%
107	8.000	7.969	8.049	VV	57892	1565912	88.87%	1.748%
108	8.068	8.049	8.088	VV	27600	466307	26.46%	0.520%
109	8.108	8.088	8.122	VV	41145	564391	32.03%	0.630%
110	8.134	8.122	8.150	VV	28745	404645	22.96%	0.452%
111	8.157	8.150	8.176	VV	20150	285428	16.20%	0.319%
112	8.217	8.176	8.255	VV	43571	1000667	56.79%	1.117%

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113	8.278	8.255	8.294	VV	22866	429938	24.40%	0.480%
114	8.330	8.320	8.343	VV	20987			
115	8.355	8.343	8.364	VV	20671			
116	8.421	8.404	8.447	VV	31896			
117	8.465	8.447	8.491	VV	35419			
118	8.504	8.491	8.518	VV	24321	323129	18.34%	0.361%
119	8.586	8.572	8.609	VV	38517	614188	34.86%	0.685%
120	8.624	8.609	8.637	VV	32204	440931	25.02%	0.492%
121	8.653	8.637	8.663	VV	30088	405456	23.01%	0.453%
122	8.676	8.663	8.704	VV	37488	741269	42.07%	0.827%
123	8.721	8.704	8.738	VV	79653	951785	54.01%	1.062%
124	8.761	8.738	8.805	VV	89386	1552276	88.09%	1.732%
125	8.829	8.805	8.848	VV	19735	445862	25.30%	0.498%
126	8.874	8.848	8.891	VV	73426	1016530	57.69%	1.135%
127	8.934	8.927	8.946	VV	17488	192667	10.93%	0.215%
128	8.956	8.946	8.968	VV	17205	216222	12.27%	0.241%
129	8.989	8.968	8.994	VV	36969	415945	23.61%	0.464%
130	9.009	8.994	9.049	VV	75300	1238776	70.30%	1.383%
131	9.069	9.049	9.073	VV	21523	285500	16.20%	0.319%
132	9.089	9.073	9.101	VV	29697	427732	24.27%	0.477%
133	9.115	9.101	9.138	VV	31337	525846	29.84%	0.587%
134	9.167	9.138	9.187	VV	68485	1091288	61.93%	1.218%
135	9.240	9.220	9.257	VV	33710	597631	33.92%	0.667%
136	9.274	9.257	9.282	VV	40611	493637	28.01%	0.551%
137	9.296	9.282	9.317	VV	57948	854666	48.50%	0.954%
138	9.333	9.317	9.357	VV	28590	582640	33.07%	0.650%
139	9.374	9.357	9.393	VV	27123	504754	28.65%	0.563%
140	9.466	9.454	9.480	VV	36168	475044	26.96%	0.530%
141	9.498	9.480	9.508	VV	39682	570433	32.37%	0.637%
142	9.514	9.508	9.554	VV	37937	779218	44.22%	0.870%
143	9.569	9.554	9.582	VV	23136	368307	20.90%	0.411%
144	9.612	9.582	9.642	VV	29027	858999	48.75%	0.959%
145	9.674	9.642	9.726	VV	41389	1193176	67.71%	1.332%
146	9.777	9.761	9.807	VV	20208	499128	28.33%	0.557%
147	9.879	9.857	9.885	VV	23070	340586	19.33%	0.380%
148	9.904	9.885	9.920	VV	33377	605390	34.36%	0.676%
149	9.935	9.920	9.945	VV	37783	481760	27.34%	0.538%
150	10.001	9.983	10.029	VV	60478	1095060	62.15%	1.222%
151	10.040	10.029	10.059	VV	25630	428212	24.30%	0.478%
152	10.081	10.059	10.091	VV	46107	678413	38.50%	0.757%
153	10.100	10.091	10.119	VV	44236	615920	34.95%	0.687%
154	10.174	10.158	10.191	VV	36412	580556	32.95%	0.648%
155	10.213	10.191	10.230	VV	34401	681606	38.68%	0.761%

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156	10.250	10.230	10.266	VV	38786	642454	36.46%	0.717%
157	10.286	10.266	10.308	VV	39071	[illegible]		
158	10.324	10.308	10.368	VV	46520	1[illegible]		
159	10.382	10.368	10.399	VV	26676	[illegible]		
160	10.441	10.399	10.457	VV	28296	[illegible]		
161	10.516	10.508	10.536	VV	24683	372053	21.11%	0.415%
162	10.574	10.563	10.602	VV	27187	534317	30.32%	0.596%
163	10.615	10.602	10.631	VV	20222	327602	18.59%	0.366%
164	10.697	10.683	10.727	VV	24980	581278	32.99%	0.649%
165	10.734	10.727	10.746	VV	20884	232685	13.21%	0.260%
166	10.787	10.746	10.810	VV	39266	1050879	59.64%	1.173%
167	10.827	10.810	10.856	VV	33531	802623	45.55%	0.896%
168	10.872	10.856	10.897	VV	33976	703619	39.93%	0.785%
169	10.953	10.932	10.981	VV	30455	788448	44.75%	0.880%
170	10.997	10.981	11.020	VV	43220	732311	41.56%	0.817%
171	11.042	11.020	11.060	VV	33299	679850	38.58%	0.759%
172	11.128	11.091	11.156	VV	41303	1027263	58.30%	1.147%
173	11.164	11.156	11.197	VV	21391	482381	27.38%	0.538%
174	11.274	11.262	11.290	VV	54886	710689	40.33%	0.793%
175	11.306	11.290	11.347	VV	57535	1039535	58.99%	1.160%
176	11.377	11.347	11.395	VV	23209	568948	32.29%	0.635%
177	11.421	11.395	11.438	VV	45193	769351	43.66%	0.859%
178	11.454	11.438	11.509	VV	37647	1032935	58.62%	1.153%
179	11.581	11.546	11.598	VV	24459	685352	38.89%	0.765%
180	11.615	11.598	11.644	VV	27443	606354	34.41%	0.677%
181	11.648	11.644	11.658	VV	18852	161055	9.14%	0.180%
182	11.674	11.658	11.692	VV	23945	404201	22.94%	0.451%
183	11.718	11.692	11.743	VV	18915	533184	30.26%	0.595%
184	11.753	11.743	11.760	VV	18015	183286	10.40%	0.205%
185	11.774	11.760	11.788	VV	24693	351925	19.97%	0.393%
186	11.865	11.851	11.875	VV	20191	264384	15.00%	0.295%
187	11.888	11.875	11.908	VV	21116	370306	21.02%	0.413%
188	11.922	11.908	11.934	VV	18881	279399	15.86%	0.312%
189	11.949	11.934	11.982	VV	20066	517467	29.37%	0.578%
190	11.995	11.982	12.002	VV	17823	202975	11.52%	0.227%
191	12.018	12.002	12.043	VV	22589	461467	26.19%	0.515%
192	12.062	12.043	12.076	VV	30347	469982	26.67%	0.525%
193	12.081	12.076	12.105	VV	23284	325558	18.48%	0.363%
194	12.170	12.105	12.189	VV	42062	1100194	62.44%	1.228%
195	12.205	12.189	12.222	VV	25812	428203	24.30%	0.478%
196	12.235	12.222	12.266	VV	22852	465036	26.39%	0.519%
197	12.386	12.352	12.394	VV	13996	315054	17.88%	0.352%
198	12.412	12.394	12.441	VV	16608	379171	21.52%	0.423%
199	12.449	12.441	12.461	VV	11414	128711	7.30%	0.144%

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200	12.477	12.461	12.497	VV	13618	265620	15.07%	0.296%
201	12.527	12.497	12.558	VV	13796			
202	12.579	12.558	12.634	VV	18097			
203	12.653	12.634	12.662	VV	11893			
204	12.688	12.662	12.709	VV	20300			
205	12.788	12.783	12.817	VV	10758	196206	11.13%	0.219%
206	12.820	12.817	12.832	VV	8742	76895	4.36%	0.086%
207	12.866	12.832	12.893	VV	13947	424565	24.09%	0.474%
208	12.914	12.893	12.955	VV	16621	425628	24.15%	0.475%
209	12.976	12.955	12.990	VV	11565	207087	11.75%	0.231%
210	13.005	12.990	13.035	VV	11010	263940	14.98%	0.295%
211	13.051	13.035	13.069	VV	8919	162664	9.23%	0.182%
212	13.088	13.069	13.121	VV	12245	306872	17.42%	0.342%
213	13.132	13.121	13.150	VV	8520	145633	8.26%	0.163%
214	13.172	13.150	13.197	VV	9625	241326	13.70%	0.269%
215	13.205	13.197	13.234	VV	7639	158819	9.01%	0.177%
216	13.240	13.234	13.255	VV	6702	77797	4.42%	0.087%
217	13.282	13.255	13.302	VV	7975	206778	11.73%	0.231%
218	13.320	13.302	13.327	VV	7825	114363	6.49%	0.128%
219	13.346	13.327	13.413	VV	9021	372811	21.16%	0.416%
220	13.439	13.413	13.475	VV	8857	261403	14.83%	0.292%
221	13.482	13.475	13.506	VV	6656	111305	6.32%	0.124%
222	13.520	13.506	13.536	VV	6022	105623	5.99%	0.118%
223	13.550	13.536	13.556	VV	5913	68592	3.89%	0.077%
224	13.570	13.556	13.600	VV	5890	141506	8.03%	0.158%
225	13.622	13.600	13.659	VV	5917	181989	10.33%	0.203%
226	13.679	13.659	13.698	VV	5330	118676	6.73%	0.132%
227	13.712	13.698	13.727	VV	5047	84420	4.79%	0.094%
228	13.732	13.727	13.749	VV	5054	62010	3.52%	0.069%
229	13.754	13.749	13.762	VV	4706	37040	2.10%	0.041%
230	13.785	13.762	13.804	VV	5651	129794	7.37%	0.145%
231	13.817	13.804	13.847	VV	4855	115111	6.53%	0.128%
232	13.877	13.847	13.942	VV	5114	260297	14.77%	0.291%
233	13.946	13.942	13.958	VV	3868	34659	1.97%	0.039%
234	13.985	13.958	13.990	VV	4556	80262	4.55%	0.090%
235	14.004	13.990	14.008	VV	4862	51089	2.90%	0.057%
236	14.014	14.008	14.049	VV	4985	101129	5.74%	0.113%
237	14.066	14.049	14.075	VV	4042	60151	3.41%	0.067%
238	14.100	14.075	14.115	VV	4569	104416	5.93%	0.117%
239	14.138	14.115	14.167	VV	4458	126578	7.18%	0.141%
240	14.175	14.167	14.204	VV	3800	75399	4.28%	0.084%
241	14.216	14.204	14.237	VV	3331	64059	3.64%	0.071%
242	14.241	14.237	14.250	VV	3357	26248	1.49%	0.029%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

rteres

243	14.270	14.250	14.292	VV	3782	85250	4.84%	0.095%
244	14.300	14.292	14.321	VV	3313			
245	14.325	14.321	14.329	VV	2828			
246	14.338	14.329	14.345	VV	2831			
247	14.359	14.345	14.362	VV	2915			
248	14.373	14.362	14.384	VV	2997	37558	2.13%	0.042%
249	14.394	14.384	14.421	VV	2913	59203	3.36%	0.066%
250	14.437	14.421	14.453	VV	2731	48462	2.75%	0.054%
251	14.468	14.453	14.475	VV	2686	35079	1.99%	0.039%
252	14.511	14.475	14.527	VV	3341	93416	5.30%	0.104%
253	14.542	14.527	14.566	VV	3075	64582	3.67%	0.072%
254	14.594	14.566	14.614	VV	2957	75039	4.26%	0.084%
255	14.619	14.614	14.625	VV	2579	16916	0.96%	0.019%
256	14.634	14.625	14.647	VV	2763	35186	2.00%	0.039%
257	14.661	14.647	14.669	VV	3027	37668	2.14%	0.042%
258	14.684	14.669	14.719	VV	3273	70939	4.03%	0.079%
259	14.730	14.719	14.735	VV	2242	20795	1.18%	0.023%
260	14.743	14.735	14.749	VV	2132	16785	0.95%	0.019%
261	14.765	14.749	14.790	VV	2333	51983	2.95%	0.058%
262	14.795	14.790	14.803	VV	1938	14268	0.81%	0.016%
263	14.814	14.803	14.827	VV	2050	26896	1.53%	0.030%
264	14.832	14.827	14.836	VV	1815	9314	0.53%	0.010%
265	14.839	14.836	14.855	VV	1738	19609	1.11%	0.022%
266	14.872	14.855	14.881	VV	1854	27122	1.54%	0.030%
267	14.917	14.881	14.949	VV	2811	85950	4.88%	0.096%
268	14.965	14.949	14.991	VV	1901	43387	2.46%	0.048%
269	14.996	14.991	15.005	VV	1539	12431	0.71%	0.014%
270	15.015	15.005	15.029	VV	1597	21706	1.23%	0.024%
271	15.034	15.029	15.038	VV	1592	8884	0.50%	0.010%
272	15.046	15.038	15.053	VV	1639	13613	0.77%	0.015%
273	15.072	15.053	15.106	VV	1850	50974	2.89%	0.057%
274	15.110	15.106	15.117	VV	1560	10299	0.58%	0.011%
275	15.137	15.117	15.158	VV	2161	43036	2.44%	0.048%
276	15.176	15.158	15.219	VV	1559	49522	2.81%	0.055%
277	15.239	15.219	15.258	VV	1561	29320	1.66%	0.033%
278	15.265	15.258	15.277	VV	1394	14860	0.84%	0.017%
279	15.289	15.277	15.309	VV	1618	27920	1.58%	0.031%
280	15.314	15.309	15.342	VV	1545	26636	1.51%	0.030%
281	15.352	15.342	15.364	VV	1385	17081	0.97%	0.019%
282	15.368	15.364	15.378	VV	1452	11295	0.64%	0.013%
283	15.384	15.378	15.393	VV	1318	10872	0.62%	0.012%
284	15.398	15.393	15.406	VV	1252	8689	0.49%	0.010%
285	15.416	15.406	15.432	VV	1294	18861	1.07%	0.021%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL2

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

286	15.435	15.432	15.448	VV	1291	11261	0.64%	0.013%
287	15.452	15.448	15.466	VV	1241			
288	15.478	15.466	15.498	VV	1077			
289	15.503	15.498	15.508	VV	979			
290	15.514	15.508	15.529	VV	1030			
291	15.550	15.529	15.580	VV	1355	30584	1.74%	0.034%
292	15.591	15.580	15.615	VV	996	16003	0.91%	0.018%
293	15.622	15.615	15.652	VV	708	12255	0.70%	0.014%
294	15.659	15.652	15.684	VV	577	8617	0.49%	0.010%
295	15.731	15.684	15.755	VV	1186	33800	1.92%	0.038%
296	15.770	15.755	15.800	VV	948	20496	1.16%	0.023%
297	15.824	15.800	15.831	VV	1028	14624	0.83%	0.016%
298	15.836	15.831	15.845	VV	929	7613	0.43%	0.008%
299	15.849	15.845	15.862	VV	898	8411	0.48%	0.009%
300	15.882	15.862	15.887	VV	928	12643	0.72%	0.014%
301	15.891	15.887	15.907	VV	977	9443	0.54%	0.011%
302	15.919	15.907	15.965	VV	969	24200	1.37%	0.027%
303	15.977	15.965	15.984	VV	655	5731	0.33%	0.006%
304	15.990	15.984	15.997	VV	642	4565	0.26%	0.005%
305	16.030	15.997	16.067	VV	1506	40802	2.32%	0.046%
306	16.072	16.067	16.082	VV	863	6880	0.39%	0.008%
307	16.099	16.082	16.128	VV	879	19271	1.09%	0.022%
308	16.143	16.128	16.153	VV	672	8734	0.50%	0.010%
309	16.180	16.153	16.187	VV	758	13134	0.75%	0.015%
310	16.201	16.187	16.255	VV	882	23390	1.33%	0.026%
311	16.287	16.255	16.299	VV	799	14898	0.85%	0.017%
312	16.305	16.299	16.325	VV	617	7841	0.44%	0.009%
313	16.337	16.325	16.367	VV	822	15647	0.89%	0.017%
314	16.432	16.426	16.441	VV	639	4959	0.28%	0.006%
315	16.459	16.441	16.473	VV	622	10285	0.58%	0.011%
316	16.496	16.473	16.522	VV	1552	29310	1.66%	0.033%
317	16.572	16.561	16.598	VV	384	5577	0.32%	0.006%
318	16.604	16.598	16.622	PV	161	2018	0.11%	0.002%
319	16.625	16.622	16.639	VV	268	1524	0.09%	0.002%
320	16.642	16.639	16.659	VV	218	2529	0.14%	0.003%
321	16.664	16.659	16.678	VV	434	3182	0.18%	0.004%
322	16.694	16.678	16.717	VV	477	8034	0.46%	0.009%
323	16.725	16.717	16.755	VV	421	4991	0.28%	0.006%
324	16.796	16.792	16.802	VV	699	3339	0.19%	0.004%
325	16.820	16.802	16.835	VV	645	8941	0.51%	0.010%
326	16.857	16.835	16.897	VV	642	14609	0.83%	0.016%
327	16.903	16.897	16.910	VV	371	2572	0.15%	0.003%
328	16.949	16.910	16.980	VV	1764	30499	1.73%	0.034%
329	17.000	16.989	17.007	VV	347	2737	0.16%	0.003%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1DL2

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

rteres

330	17.026	17.014	17.031	VV	397	3160	0.18%	0.004%
331	17.034	17.031	17.040	VV	368			
332	17.065	17.040	17.115	VV	1075			
333	17.120	17.115	17.125	VV	231			
334	17.131	17.125	17.140	VV	356			
335	17.172	17.150	17.176	VV	304	3539	0.20%	0.004%
336	17.235	17.230	17.250	VV	263	2124	0.12%	0.002%
337	17.260	17.250	17.269	VV	359	2487	0.14%	0.003%
338	17.276	17.269	17.295	VV	354	3605	0.20%	0.004%
339	17.302	17.295	17.313	VV	445	3802	0.22%	0.004%
340	17.319	17.313	17.328	VV	476	3451	0.20%	0.004%
341	17.382	17.356	17.414	VV	2521	38392	2.18%	0.043%
342	17.419	17.414	17.425	VV	251	1108	0.06%	0.001%
343	17.441	17.425	17.454	VV	354	4331	0.25%	0.005%
344	17.457	17.454	17.462	VV	421	1687	0.10%	0.002%
345	17.475	17.462	17.500	VV	738	10558	0.60%	0.012%
346	17.513	17.500	17.519	VV	394	3757	0.21%	0.004%
347	17.523	17.519	17.540	VV	355	2972	0.17%	0.003%
348	17.548	17.540	17.565	VV	313	2196	0.12%	0.002%
349	17.591	17.574	17.595	VV	293	2071	0.12%	0.002%
350	17.628	17.595	17.644	VV	357	5504	0.31%	0.006%
351	17.675	17.644	17.715	VV	1758	30748	1.74%	0.034%
352	17.746	17.715	17.759	PV	380	6231	0.35%	0.007%
353	17.802	17.771	17.833	VV	2713	42296	2.40%	0.047%
354	17.844	17.833	17.879	VV	720	12437	0.71%	0.014%
355	17.885	17.879	17.892	VV	268	1343	0.08%	0.001%
356	17.898	17.892	17.922	VV	239	2054	0.12%	0.002%
357	17.932	17.922	17.984	VV	255	4020	0.23%	0.004%
358	18.004	17.984	18.020	VV	405	4345	0.25%	0.005%
359	18.029	18.020	18.040	VV	408	2876	0.16%	0.003%
360	18.060	18.040	18.069	VV	813	7764	0.44%	0.009%
361	18.076	18.069	18.085	VV	462	3512	0.20%	0.004%
362	18.092	18.085	18.105	VV	366	3535	0.20%	0.004%
363	18.108	18.105	18.118	VV	339	1325	0.08%	0.001%
			Sum of corrected areas:			89597828		

Aromatic EPH 111424.M Thu Nov 28 05:09:49 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

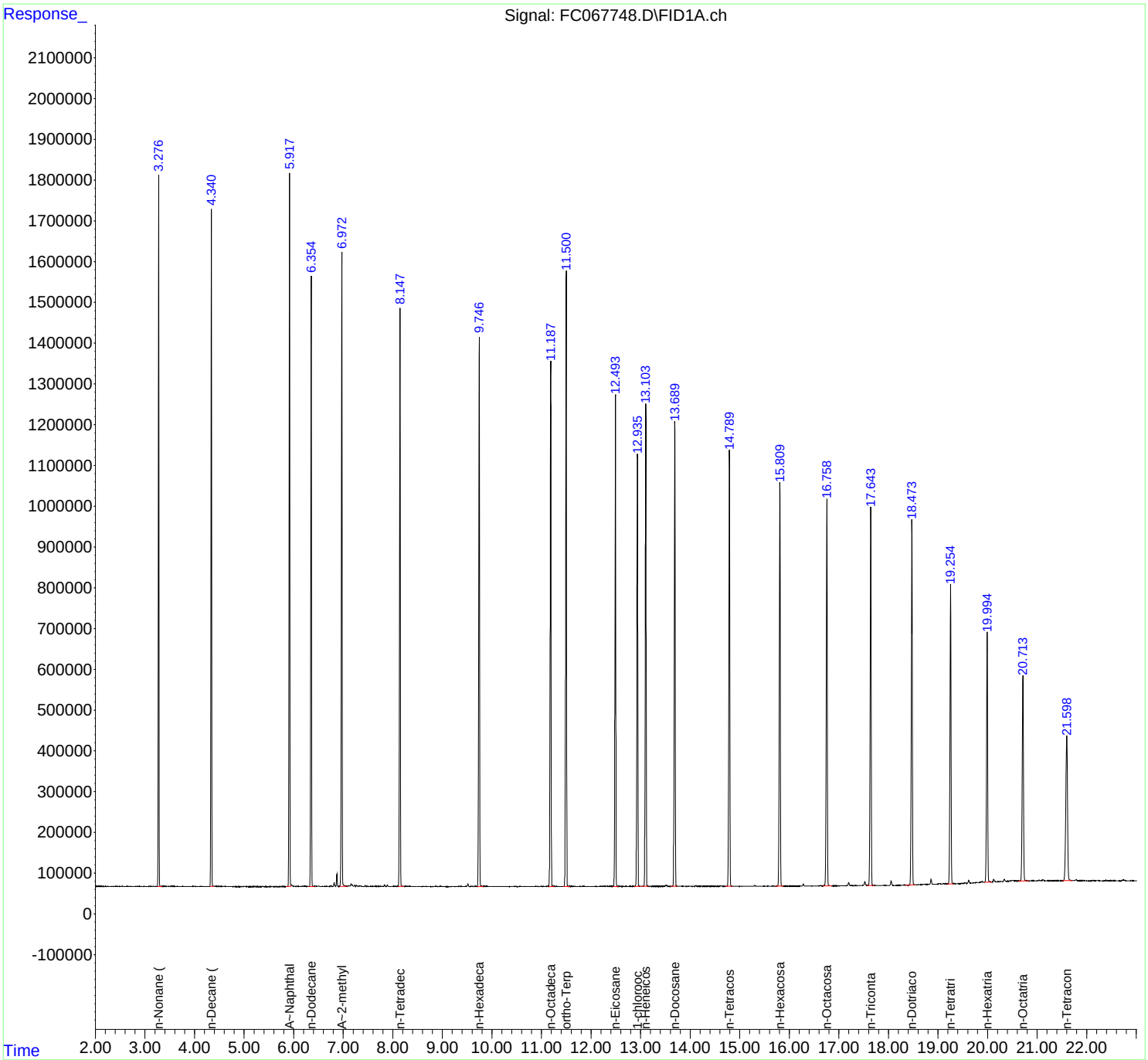
(f)=RT Delta > 1/2 Window (m)=manual int.

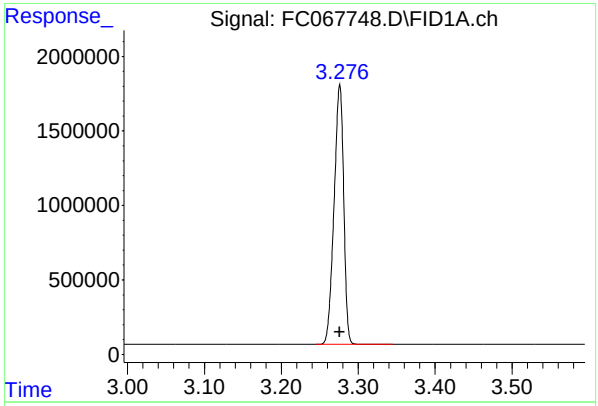
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067748.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 10:39
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

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

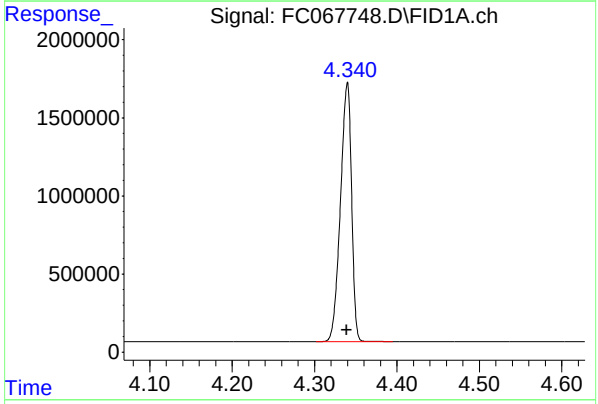




#1 n-Nonane (C9)

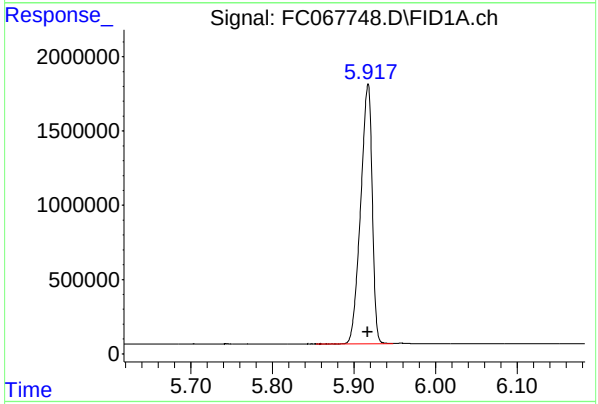
R.T.: 3.276 min
Delta R.T.: 0.000 min
Response: 15187907
Conc: 96.26 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



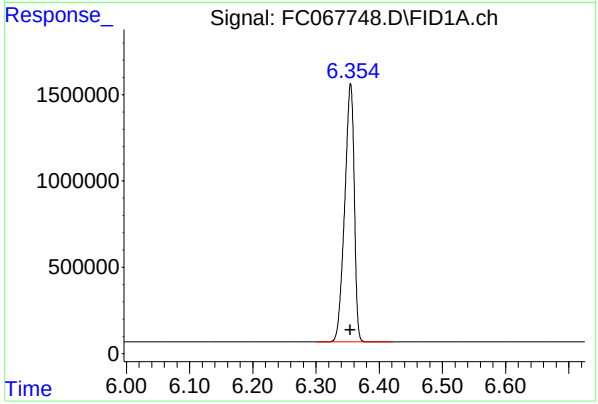
#2 n-Decane (C10)

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



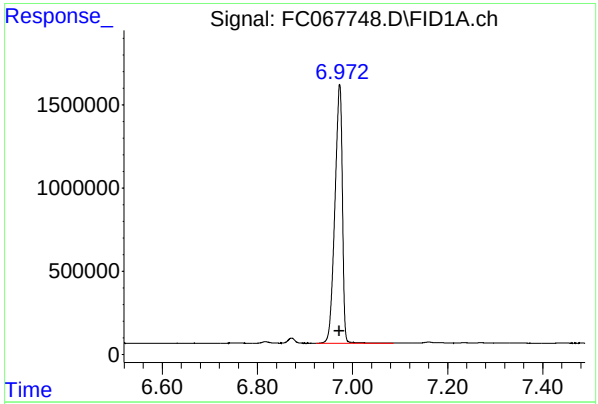
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

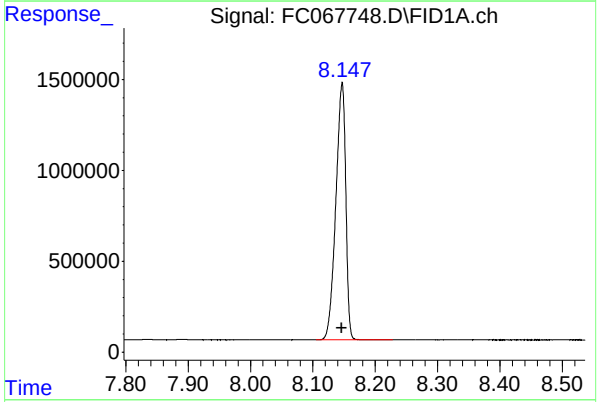
R.T.: 6.354 min
Delta R.T.: 0.000 min
Response: 15746654
Conc: 96.40 ug/ml



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

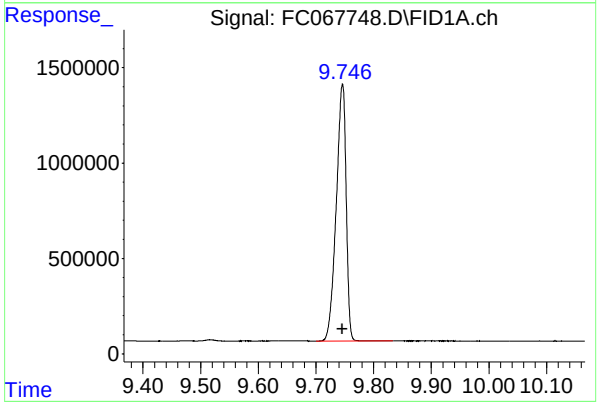
R.T.: 6.973 min
Delta R.T.: 0.000 min
Response: 16843025
Conc: 97.05 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



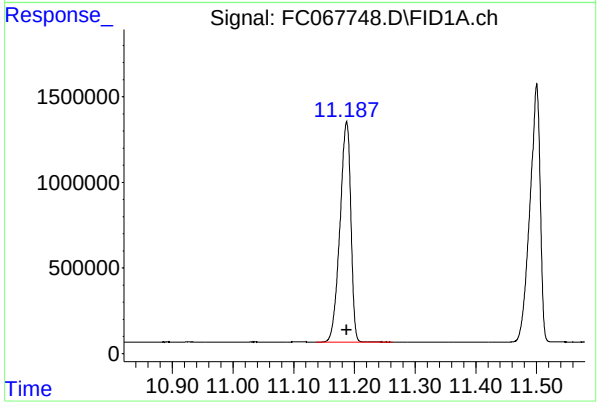
#6 n-Tetradecane (C14)

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



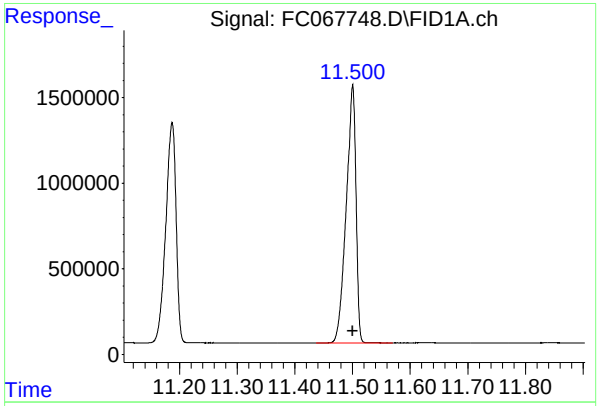
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

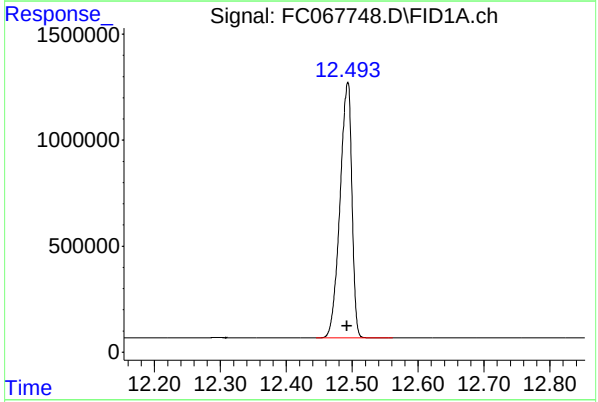
R.T.: 11.187 min
Delta R.T.: 0.000 min
Response: 16039699
Conc: 95.05 ug/ml



#9 ortho-Terphenyl (SURR)

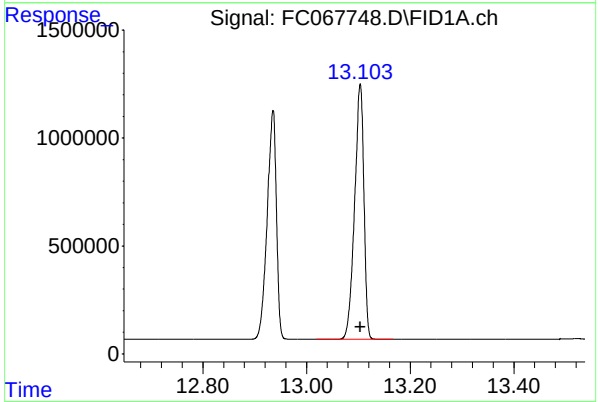
R.T.: 11.500 min
Delta R.T.: 0.000 min
Response: 17738644
Conc: 95.32 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



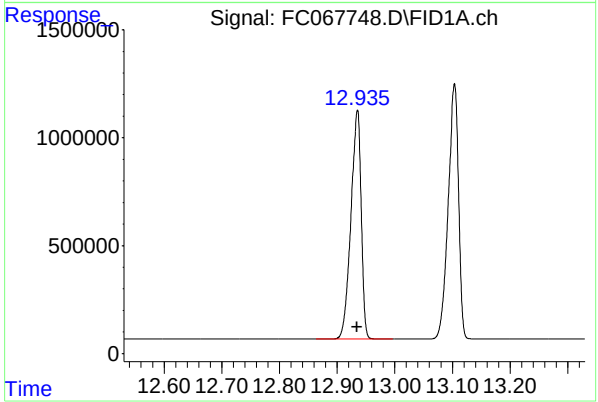
#10 n-Eicosane (C20)

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



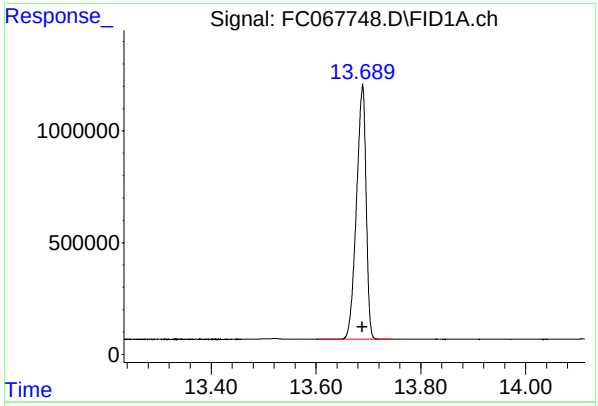
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

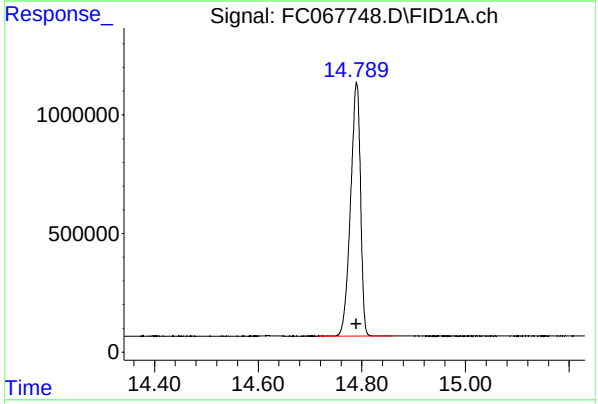
R.T.: 12.935 min
Delta R.T.: 0.000 min
Response: 13130093
Conc: 94.68 ug/ml



#13 n-Docosane (C22)

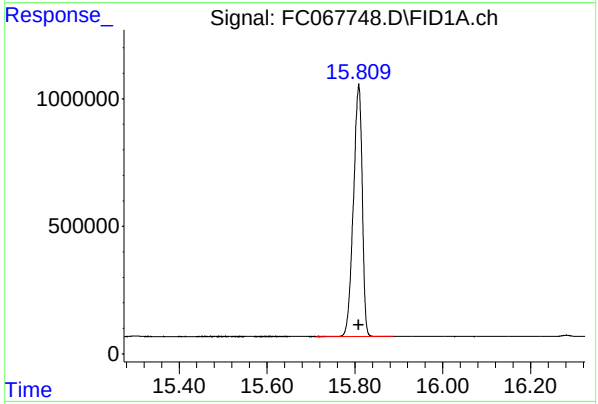
R.T.: 13.688 min
Delta R.T.: 0.000 min
Response: 14509212
Conc: 94.21 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



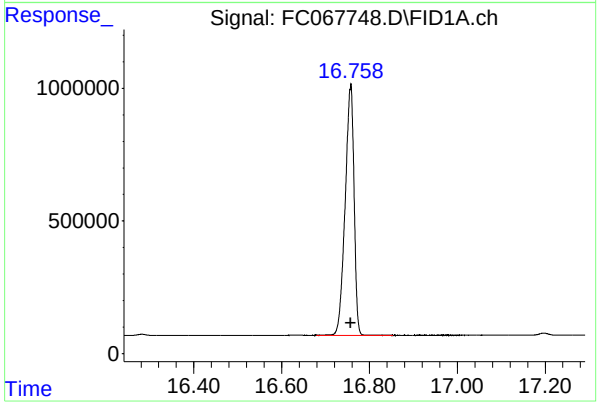
#14 n-Tetracosane (C24)

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



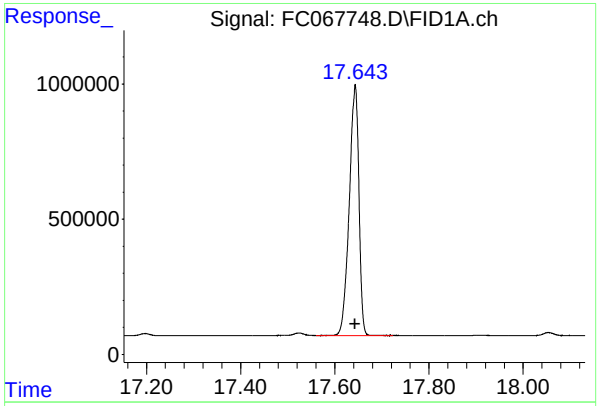
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

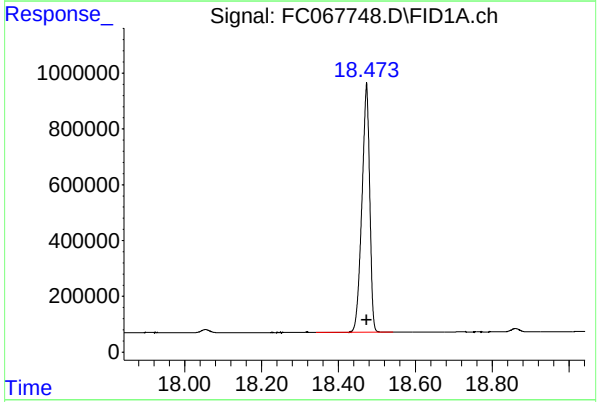
R.T.: 16.757 min
Delta R.T.: 0.000 min
Response: 13296660
Conc: 94.17 ug/ml



#17 n-Tricontane (C30)

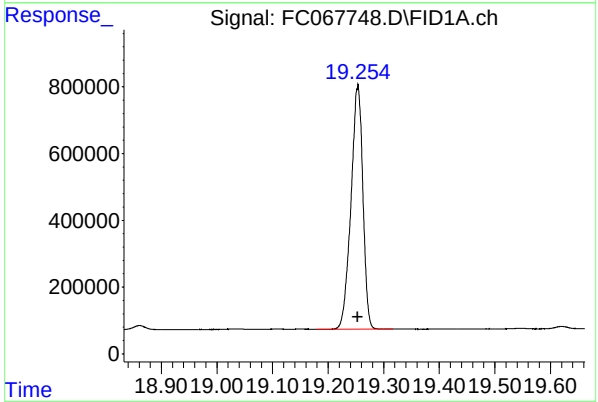
R.T.: 17.643 min
Delta R.T.: 0.000 min
Response: 13215277
Conc: 93.04 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



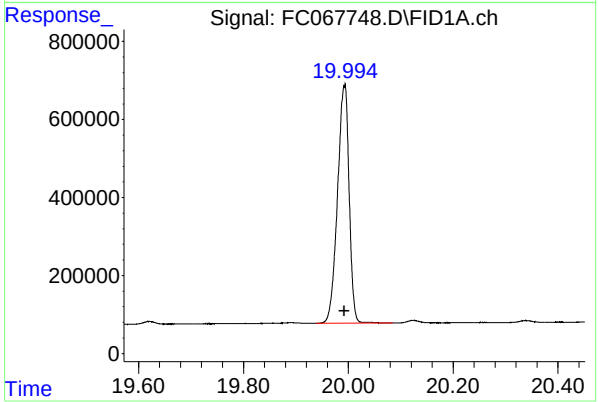
#18 n-Dotriacontane (C32)

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



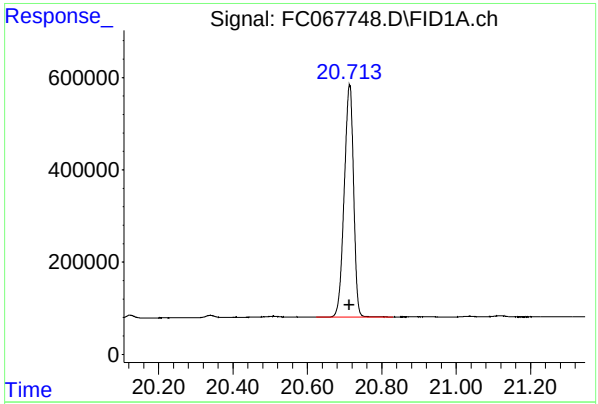
#19 n-Tetratriacontane (C34)

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



#20 n-Hexatriacontane (C36)

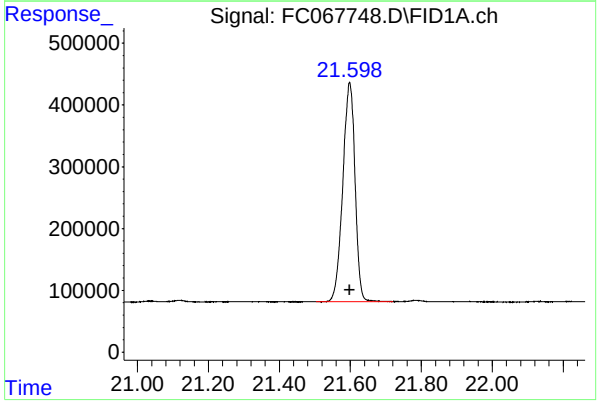
R.T.: 19.992 min
Delta R.T.: 0.000 min
Response: 9396830
Conc: 94.93 ug/ml



#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

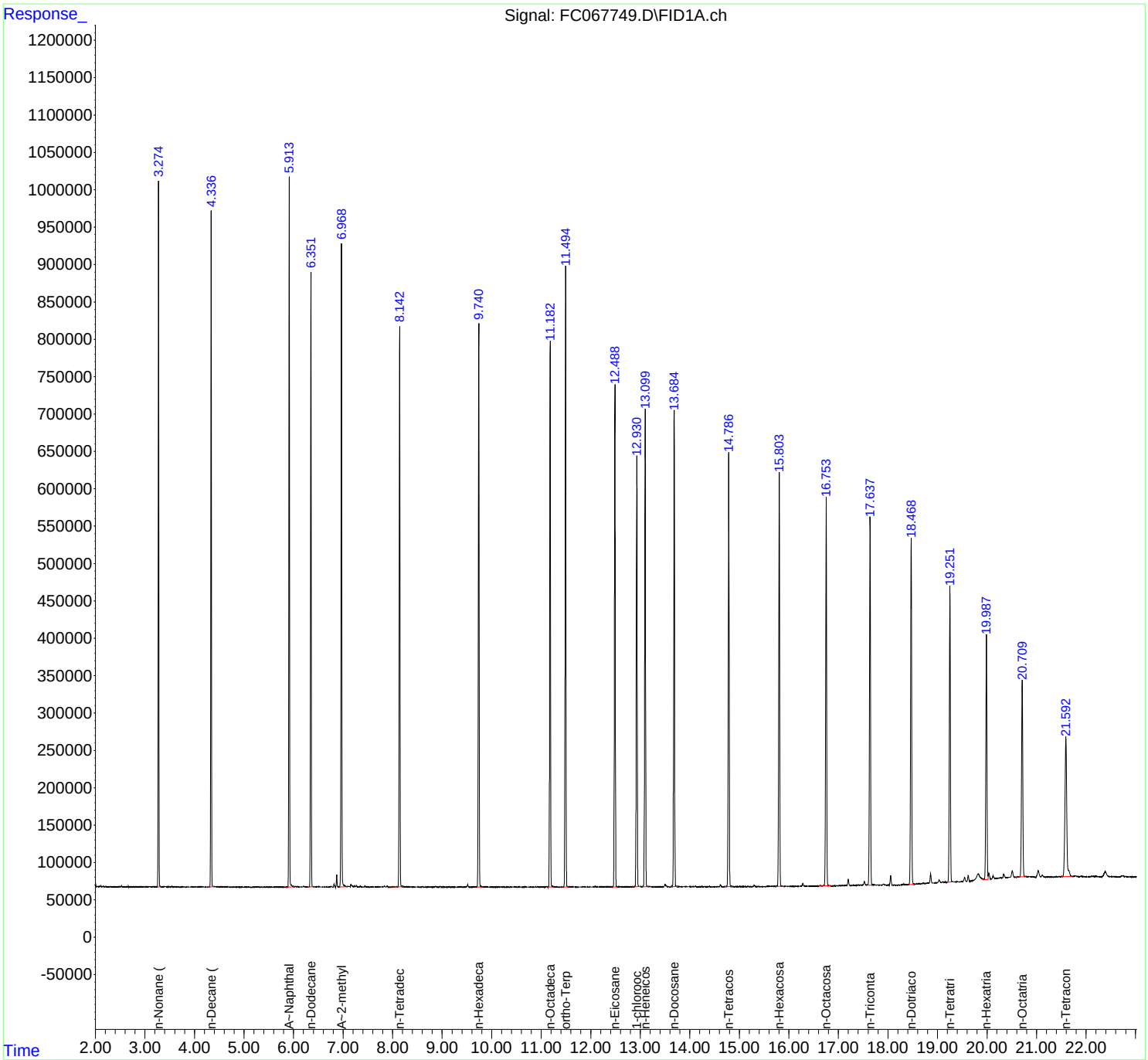
(f)=RT Delta > 1/2 Window (m)=manual int.

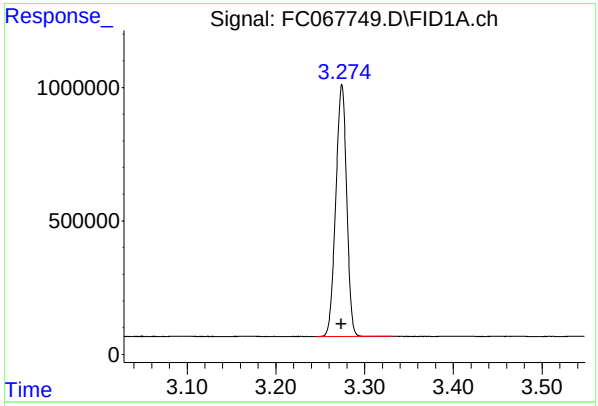
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067749.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 11:15
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

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

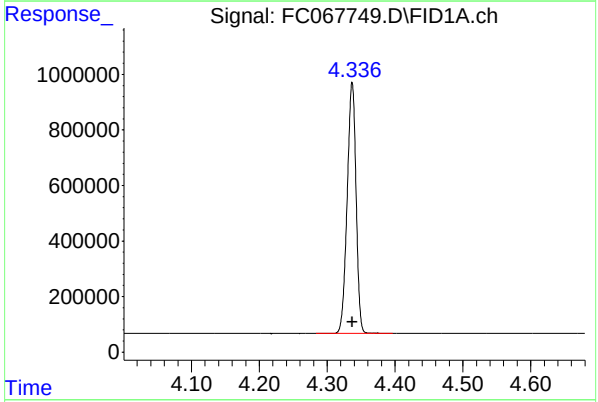




#1 n-Nonane (C9)

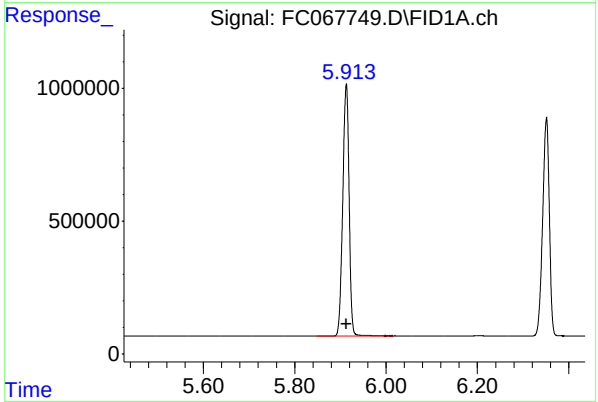
R.T.: 3.274 min
Delta R.T.: 0.000 min
Response: 8066160
Conc: 50.74 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



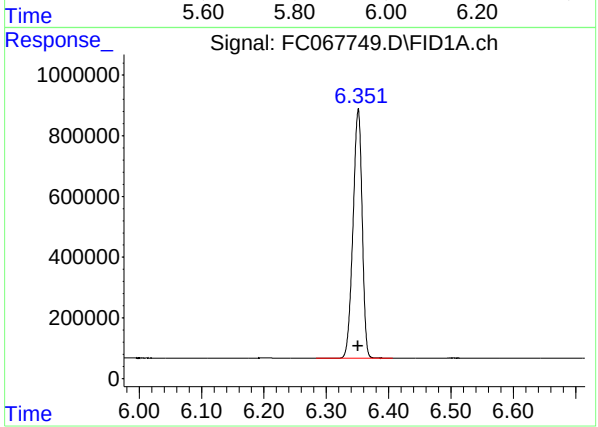
#2 n-Decane (C10)

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



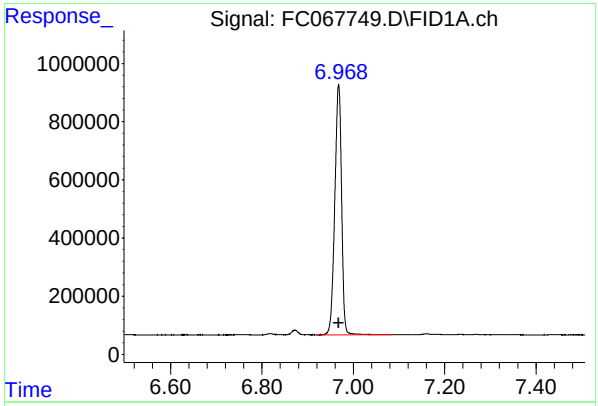
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

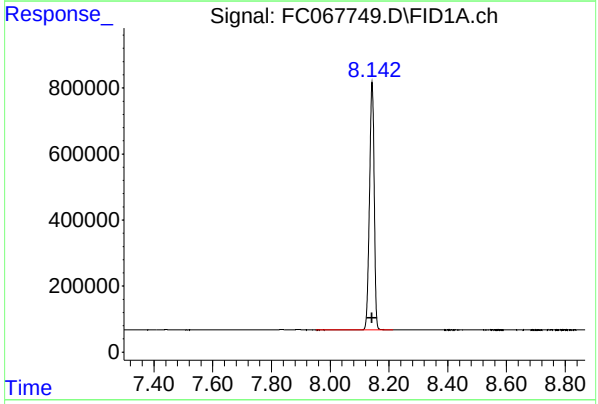
R.T.: 6.351 min
Delta R.T.: 0.000 min
Response: 8359779
Conc: 50.78 ug/ml



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

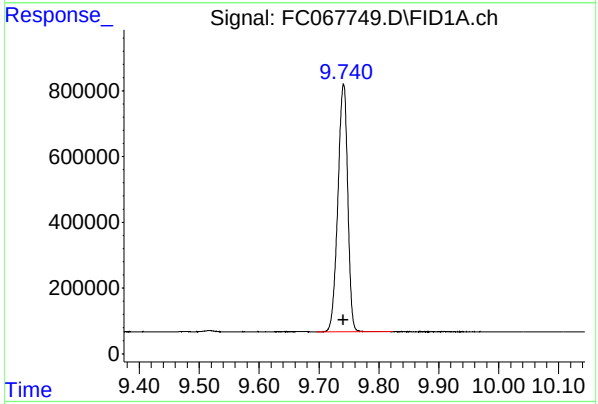
R.T.: 6.968 min
Delta R.T.: 0.000 min
Response: 8894913
Conc: 50.83 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



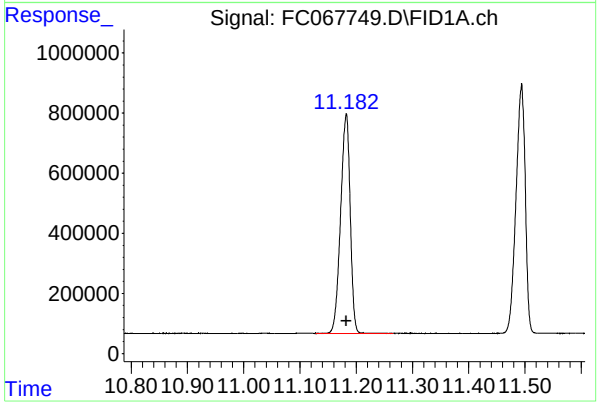
#6 n-Tetradecane (C14)

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



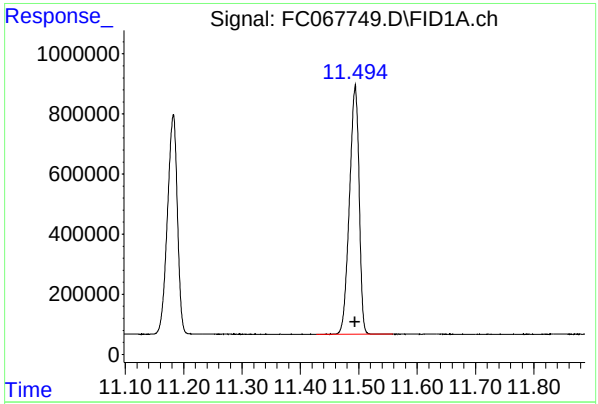
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

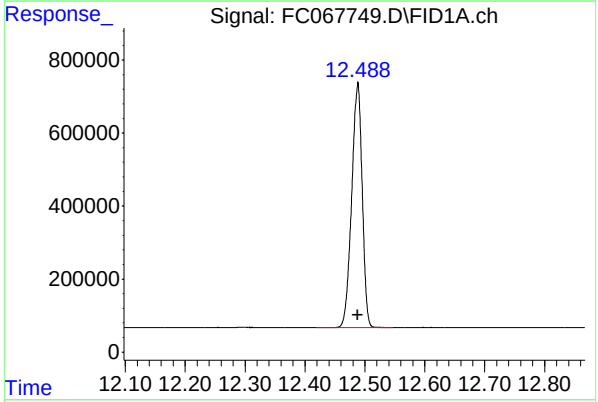
R.T.: 11.182 min
Delta R.T.: 0.000 min
Response: 8636330
Conc: 50.78 ug/ml



#9 ortho-Terphenyl (SURR)

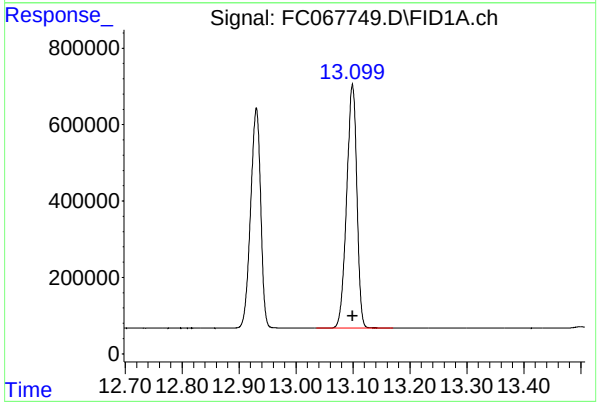
R.T.: 11.494 min
Delta R.T.: 0.000 min
Response: 9494610
Conc: 50.68 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



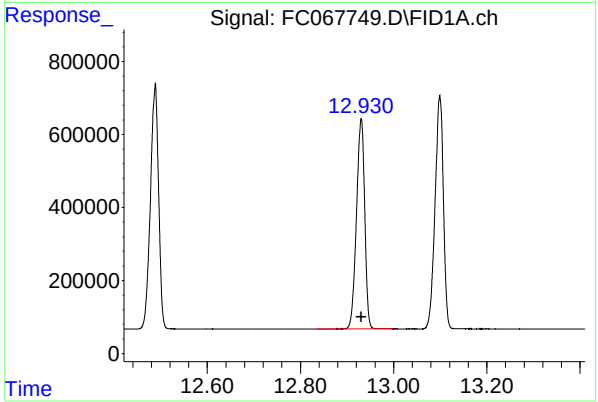
#10 n-Eicosane (C20)

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



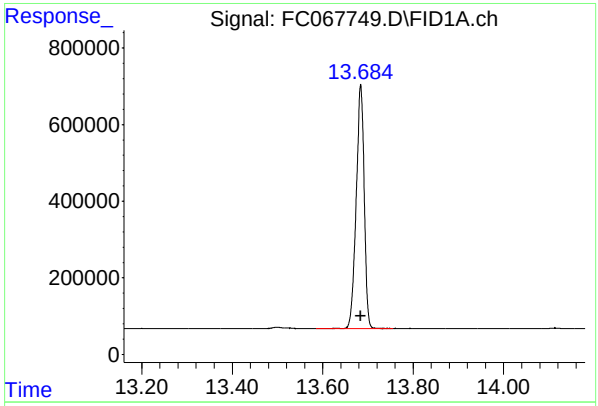
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

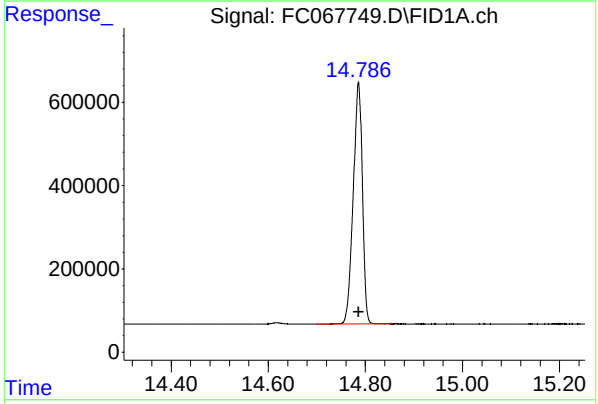
R.T.: 12.930 min
Delta R.T.: 0.000 min
Response: 7061712
Conc: 50.61 ug/ml



#13 n-Docosane (C22)

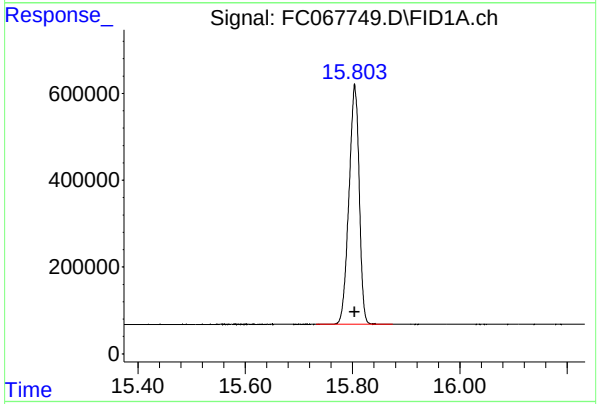
R.T.: 13.684 min
Delta R.T.: 0.000 min
Response: 7804830
Conc: 50.45 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



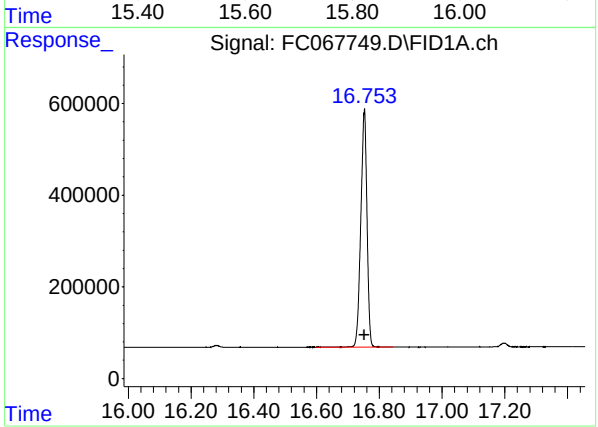
#14 n-Tetracosane (C24)

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



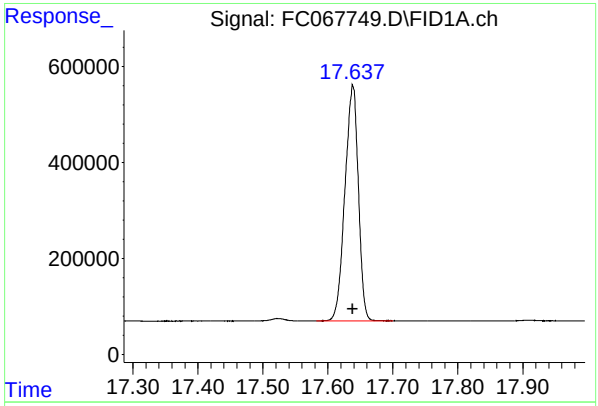
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

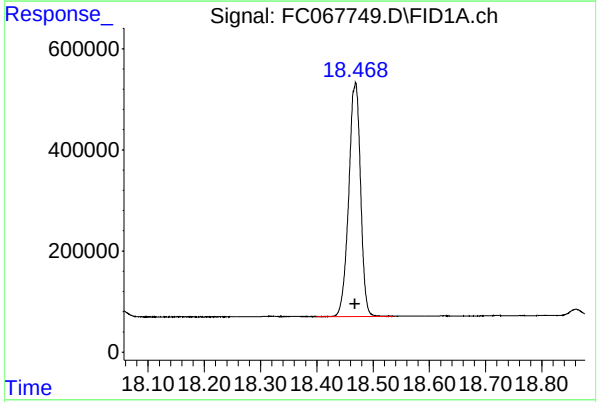
R.T.: 16.752 min
Delta R.T.: 0.000 min
Response: 7090853
Conc: 50.15 ug/ml



#17 n-Tricontane (C30)

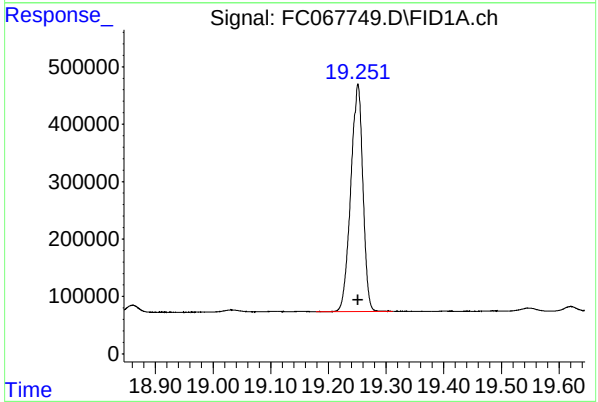
R.T.: 17.638 min
Delta R.T.: 0.000 min
Response: 7057449
Conc: 49.79 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



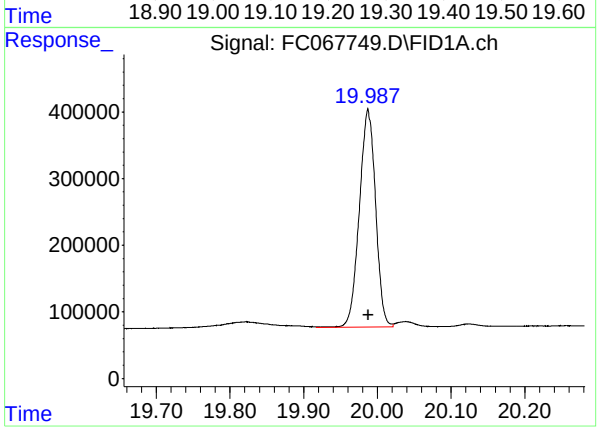
#18 n-Dotriacontane (C32)

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



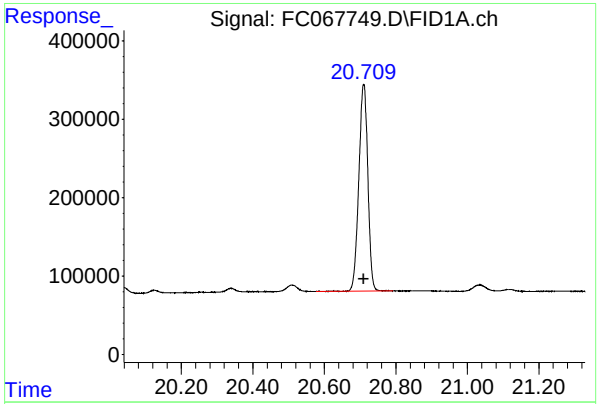
#19 n-Tetratriacontane (C34)

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



#20 n-Hexatriacontane (C36)

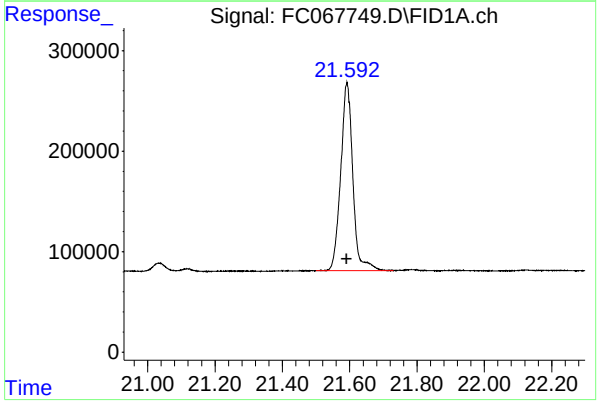
R.T.: 19.987 min
Delta R.T.: 0.000 min
Response: 5004110
Conc: 50.37 ug/ml



#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

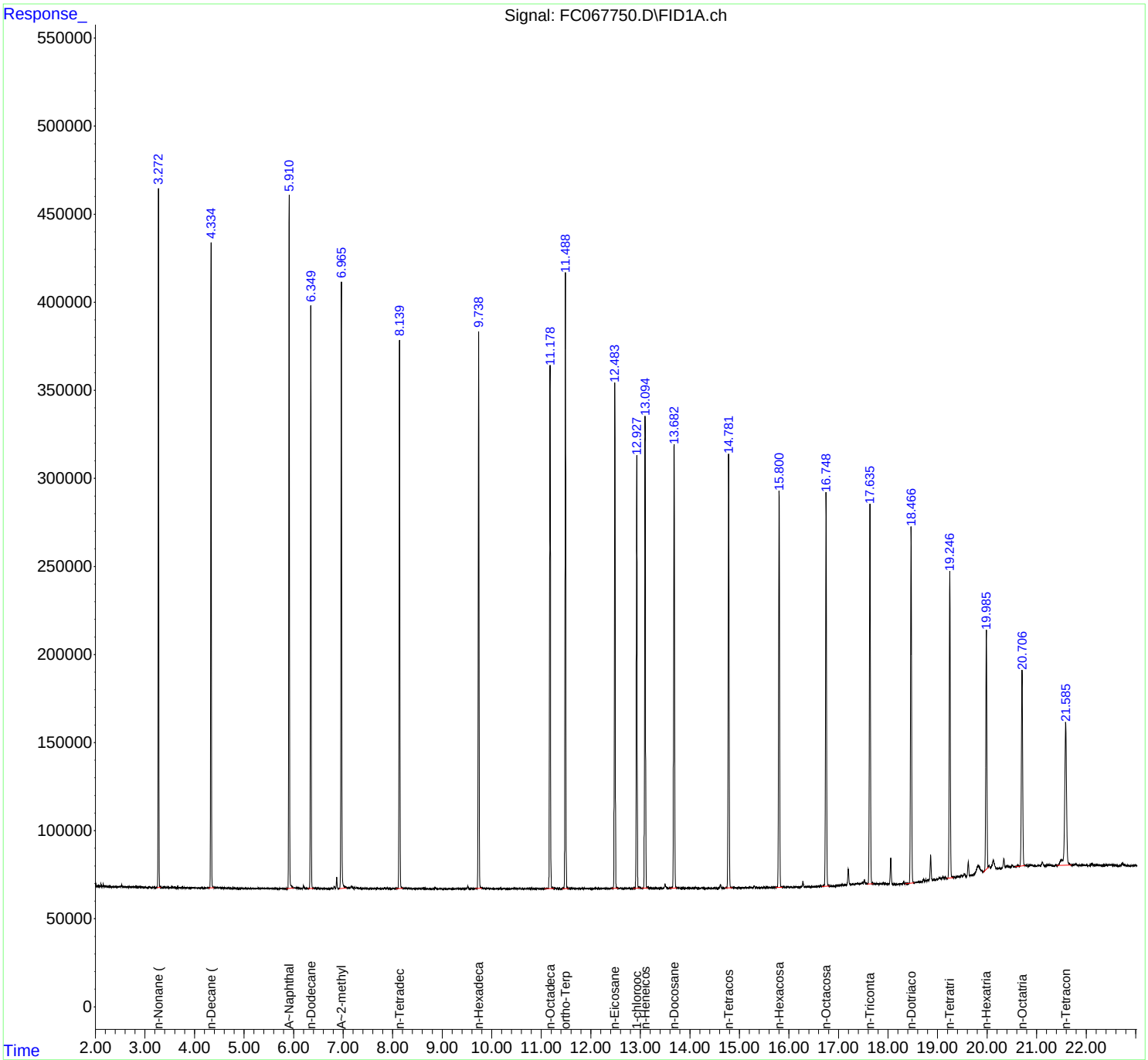
(f)=RT Delta > 1/2 Window (m)=manual int.

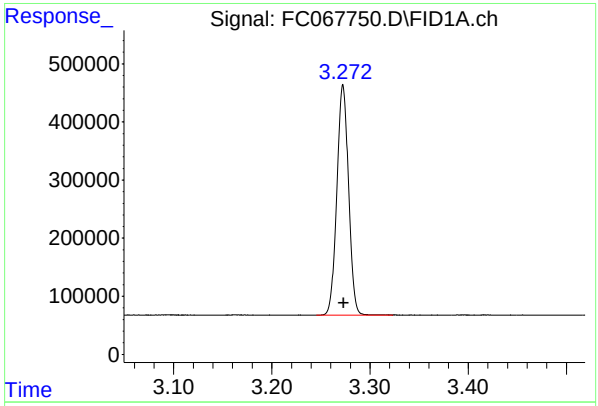
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067750.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 11:51
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

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

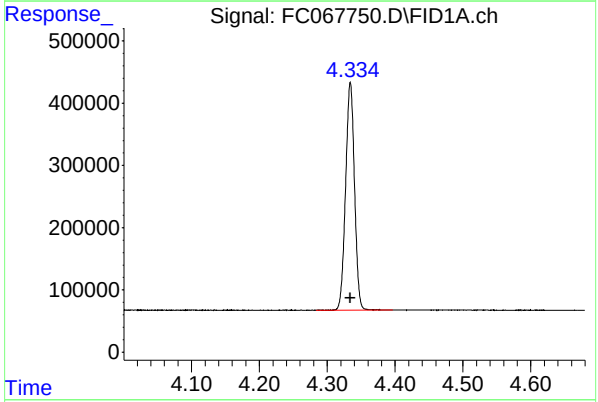




#1 n-Nonane (C9)

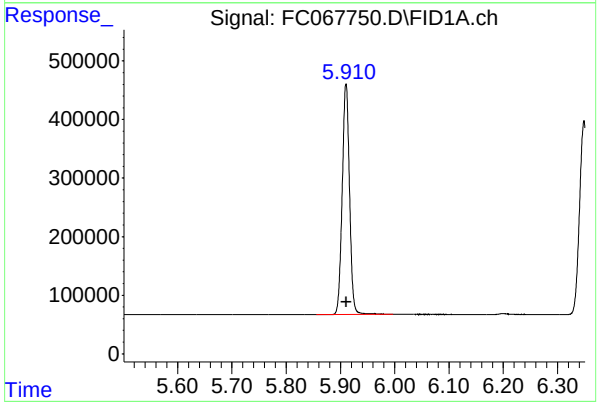
R.T.: 3.273 min
Delta R.T.: 0.000 min
Response: 3273618
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



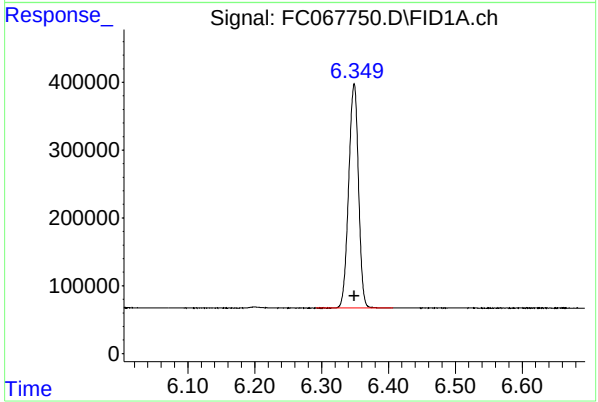
#2 n-Decane (C10)

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



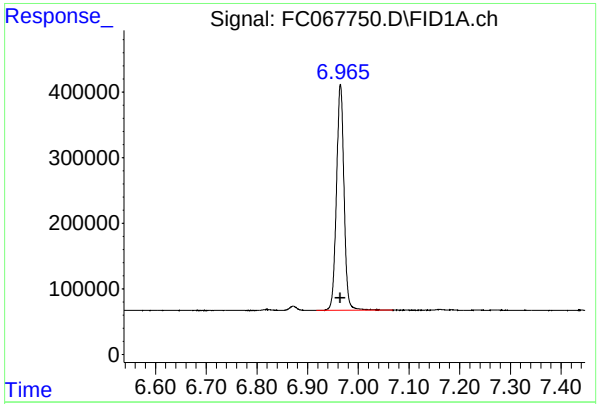
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

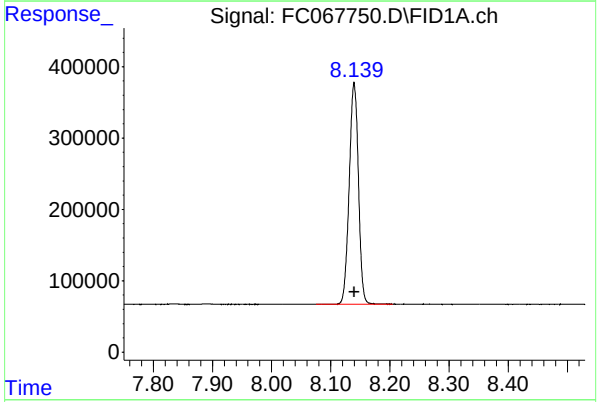
R.T.: 6.349 min
Delta R.T.: 0.000 min
Response: 3384863
Conc: 20.00 ug/ml



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

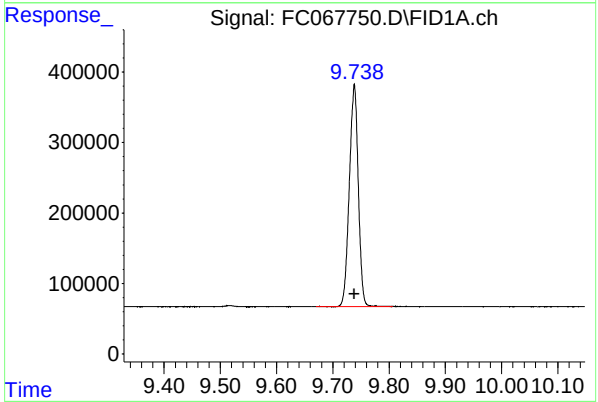
R.T.: 6.965 min
Delta R.T.: 0.000 min
Response: 3573153
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



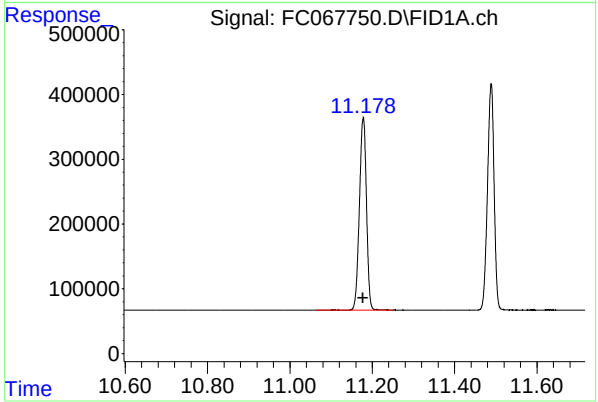
#6 n-Tetradecane (C14)

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



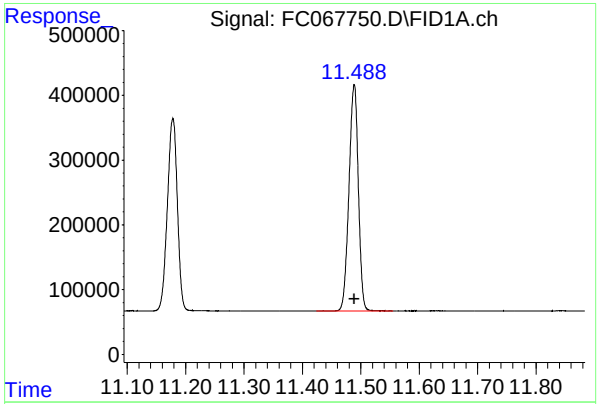
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

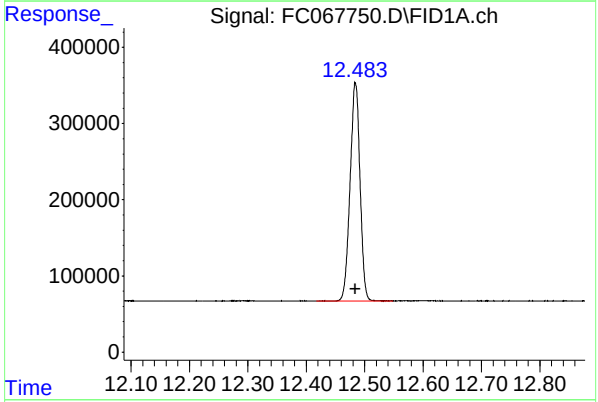
R.T.: 11.178 min
Delta R.T.: 0.000 min
Response: 3542342
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

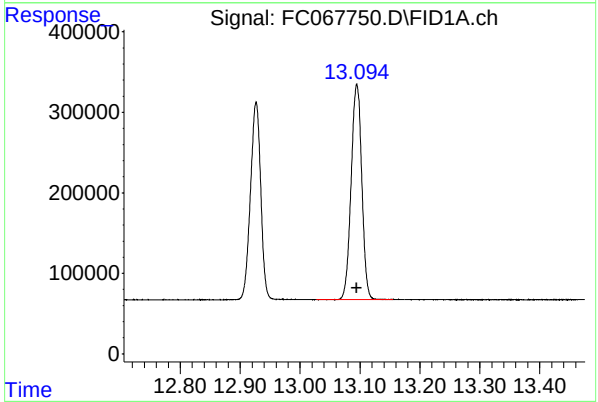
R.T.: 11.489 min
Delta R.T.: 0.000 min
Response: 3895981
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



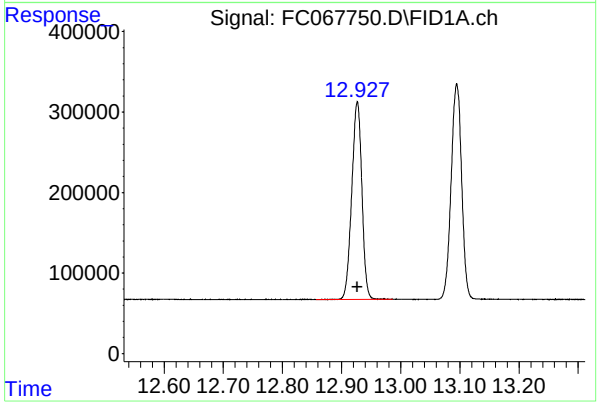
#10 n-Eicosane (C20)

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



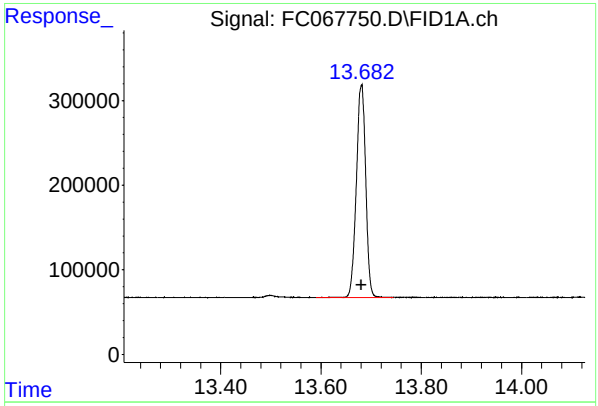
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

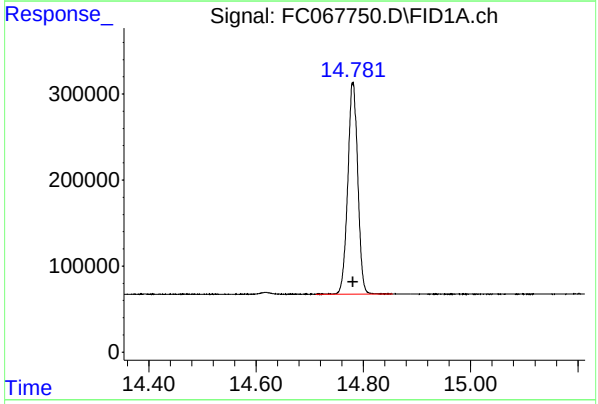
R.T.: 12.927 min
Delta R.T.: 0.000 min
Response: 2921225
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

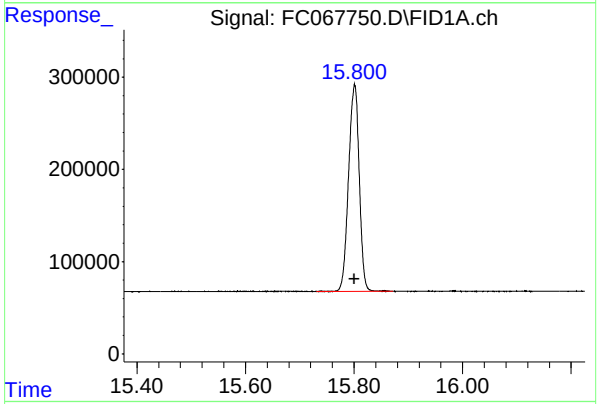
R.T.: 13.681 min
Delta R.T.: 0.000 min
Response: 3258558
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



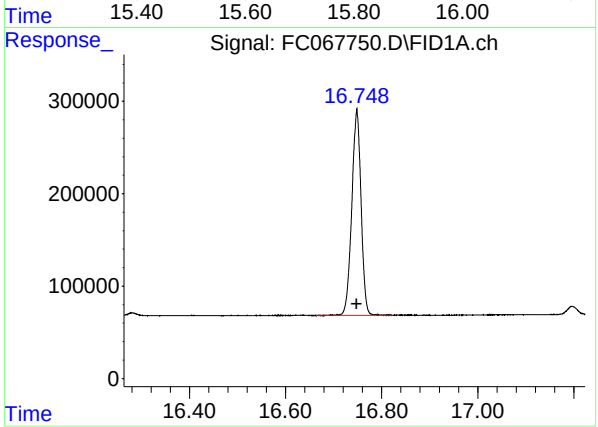
#14 n-Tetracosane (C24)

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



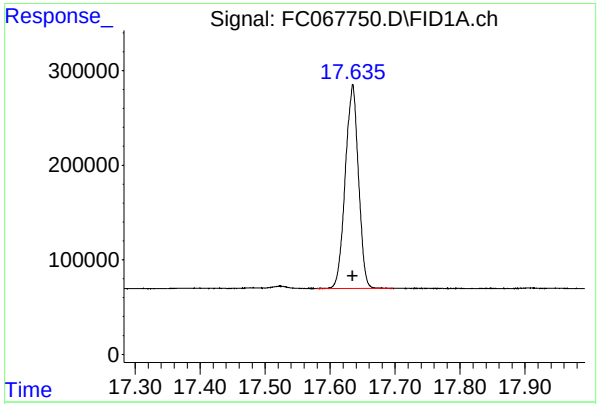
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

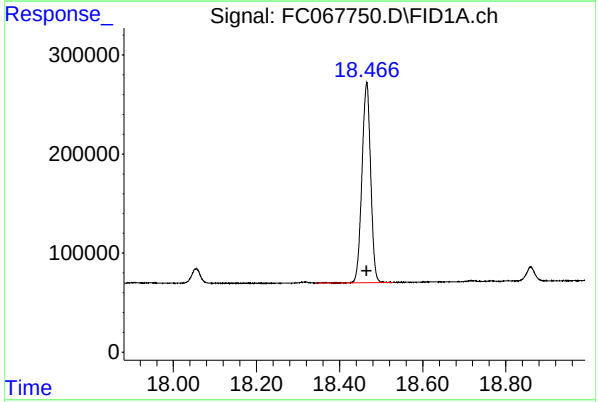
R.T.: 16.748 min
Delta R.T.: 0.000 min
Response: 2988500
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

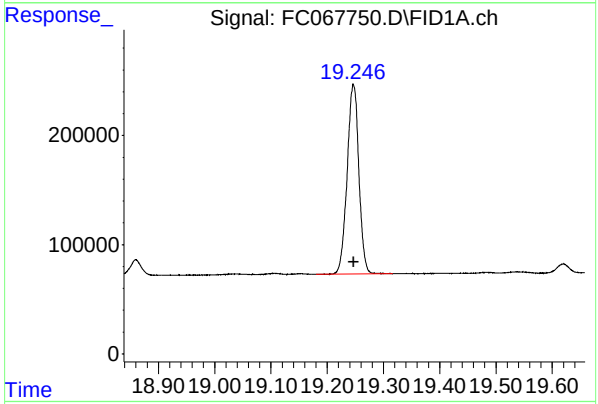
R.T.: 17.635 min
Delta R.T.: 0.000 min
Response: 3038323
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



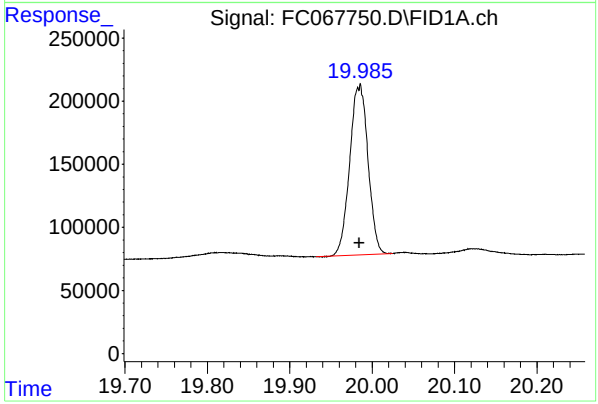
#18 n-Dotriacontane (C32)

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



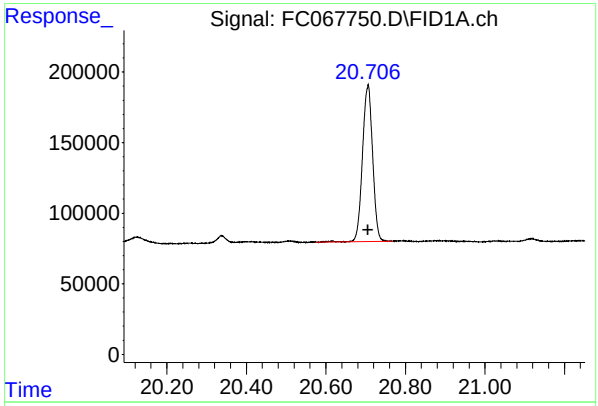
#19 n-Tetratriacontane (C34)

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



#20 n-Hexatriacontane (C36)

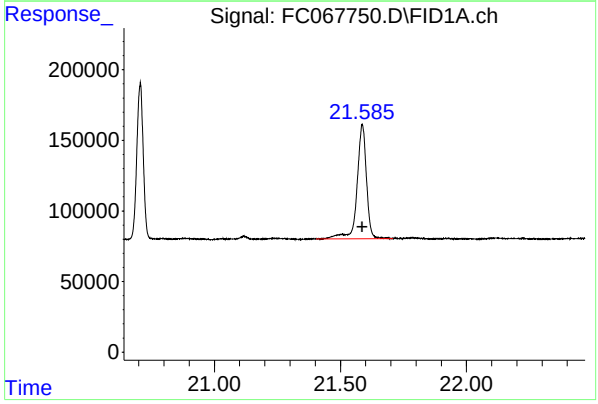
R.T.: 19.984 min
Delta R.T.: 0.000 min
Response: 2080234
Conc: 20.00 ug/ml



#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

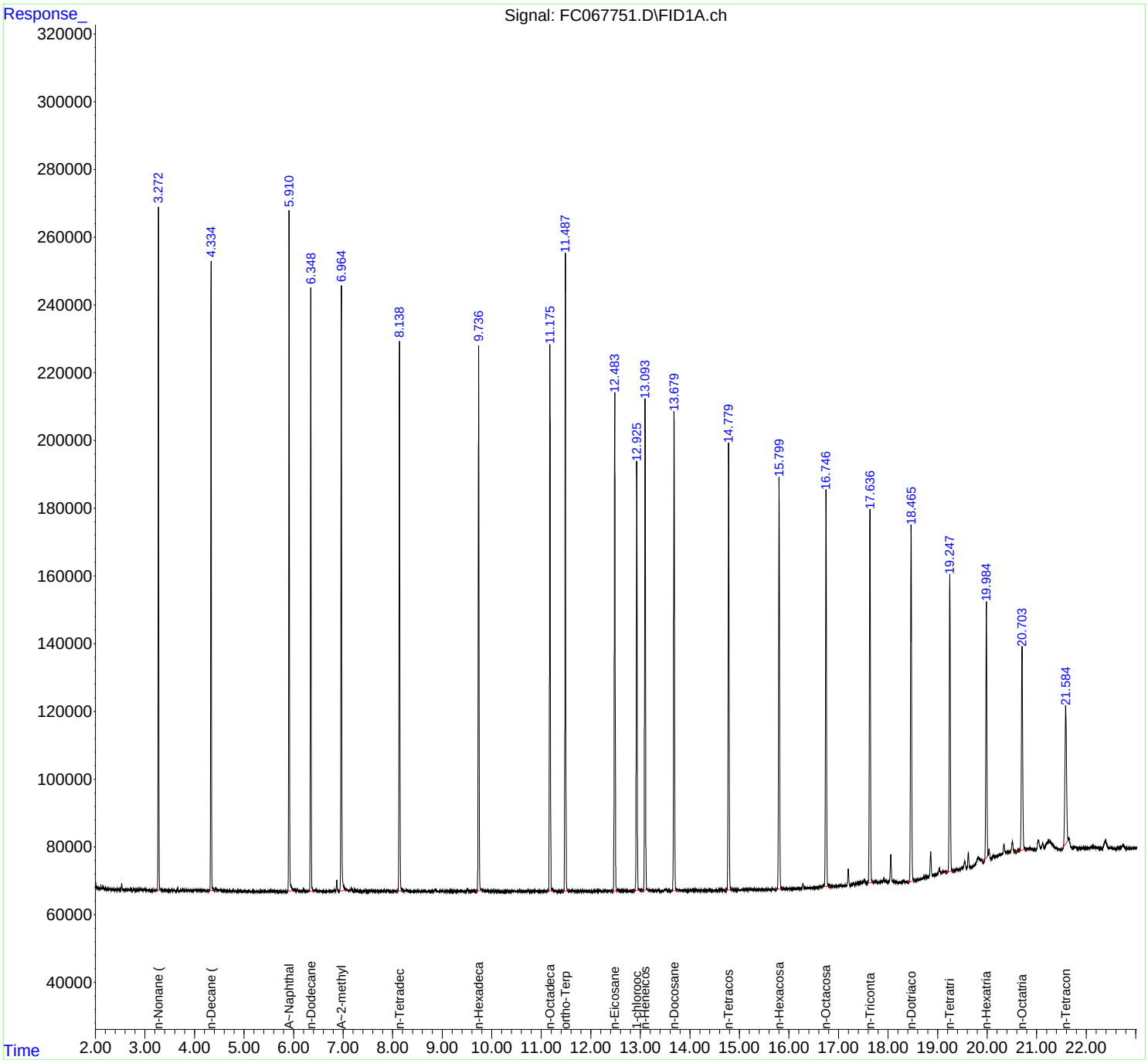
(f)=RT Delta > 1/2 Window (m)=manual int.

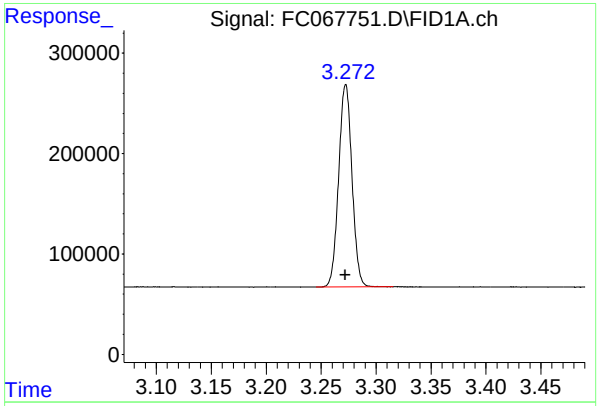
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067751.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 12:27
Operator : YP/AJ
Sample : 10 PPM ALIHPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

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

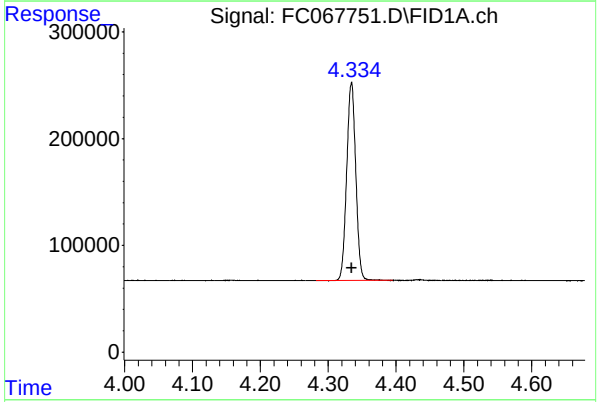




#1 n-Nonane (C9)

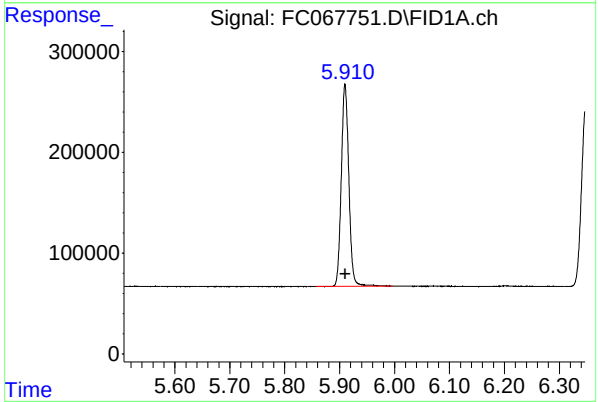
R.T.: 3.272 min
Delta R.T.: 0.000 min
Response: 1699554
Conc: 10.51 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4



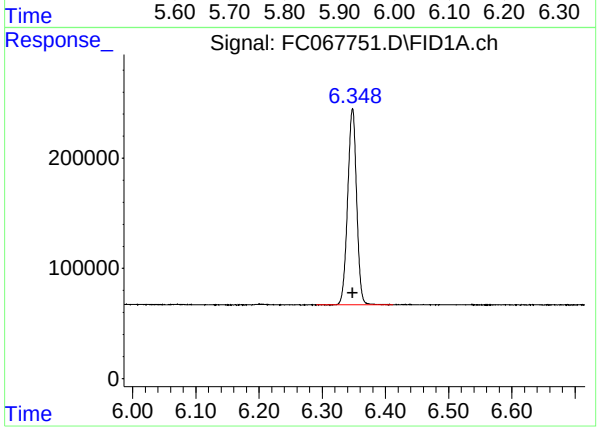
#2 n-Decane (C10)

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



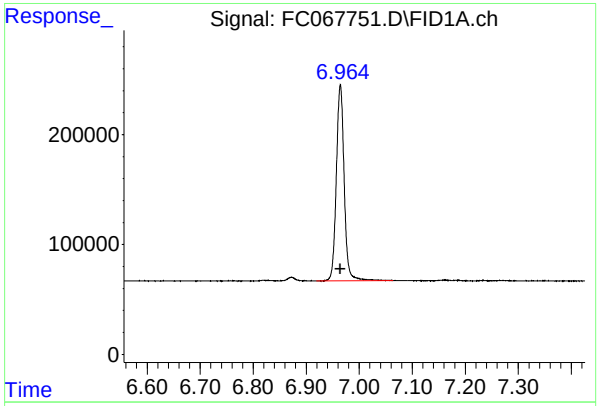
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

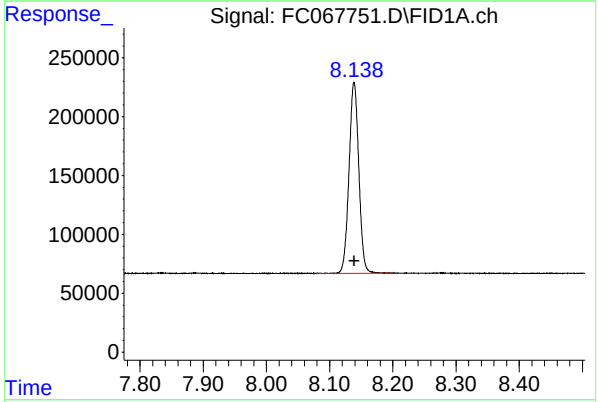
R.T.: 6.348 min
Delta R.T.: 0.000 min
Response: 1755770
Conc: 10.49 ug/ml



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

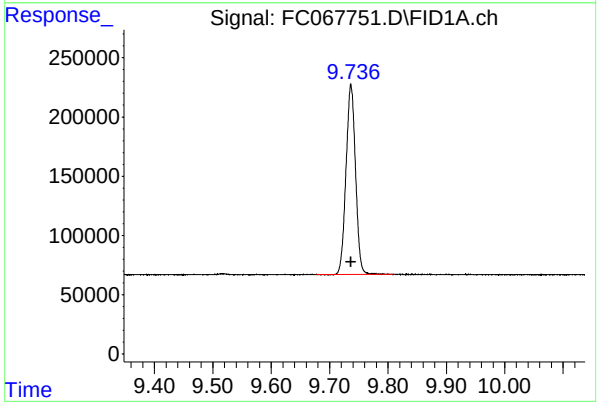
R.T.: 6.964 min
Delta R.T.: 0.000 min
Response: 1839874
Conc: 10.38 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4



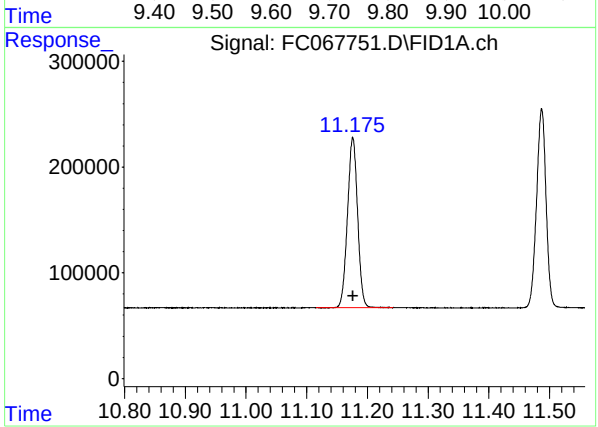
#6 n-Tetradecane (C14)

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



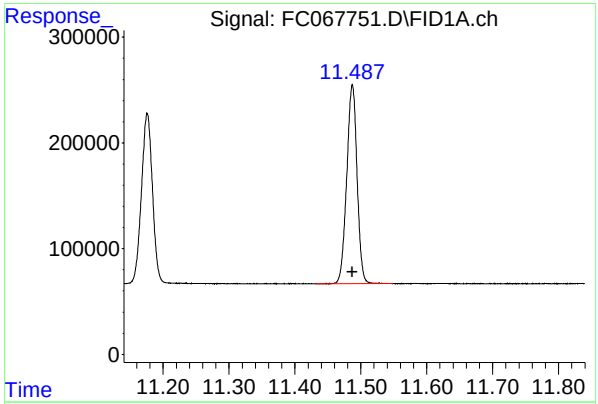
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

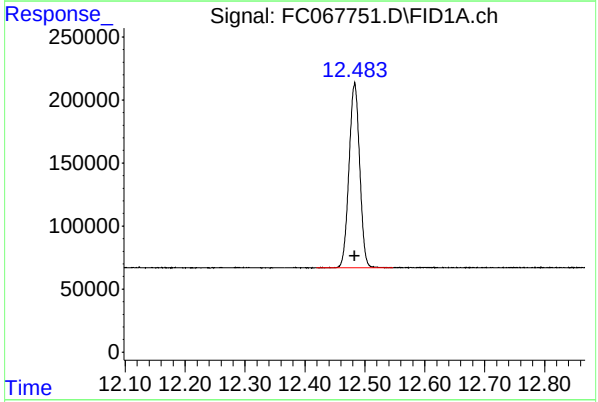
R.T.: 11.176 min
Delta R.T.: 0.000 min
Response: 1866614
Conc: 10.71 ug/ml



#9 ortho-Terphenyl (SURR)

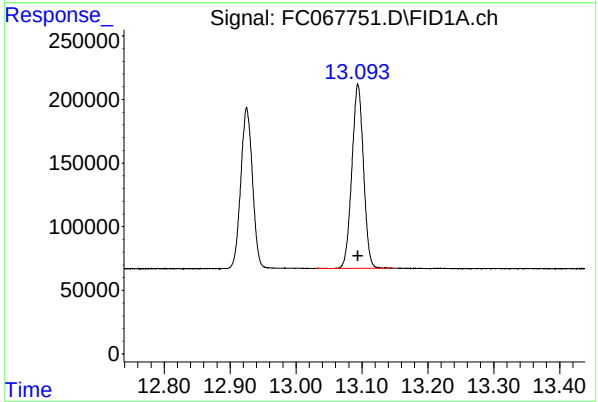
R.T.: 11.487 min
Delta R.T.: 0.000 min
Response: 2050947
Conc: 10.69 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4



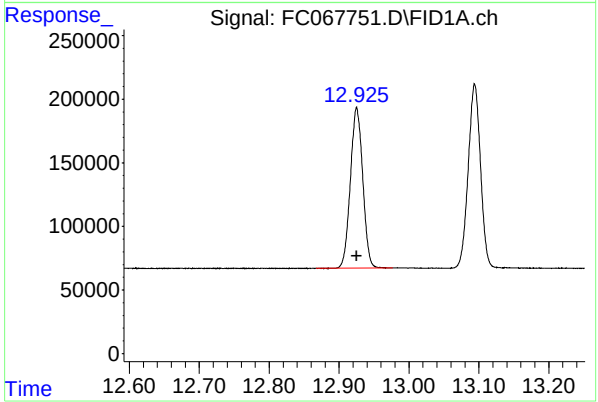
#10 n-Eicosane (C20)

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



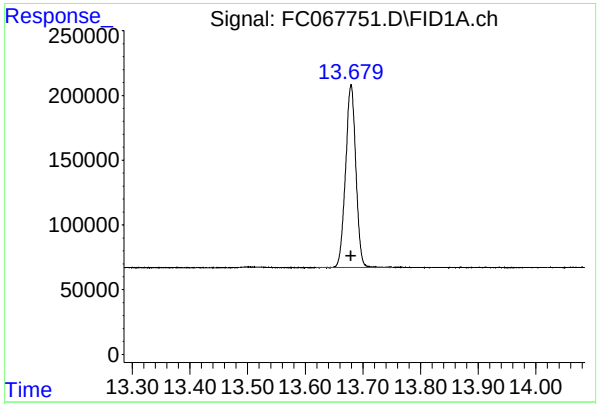
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

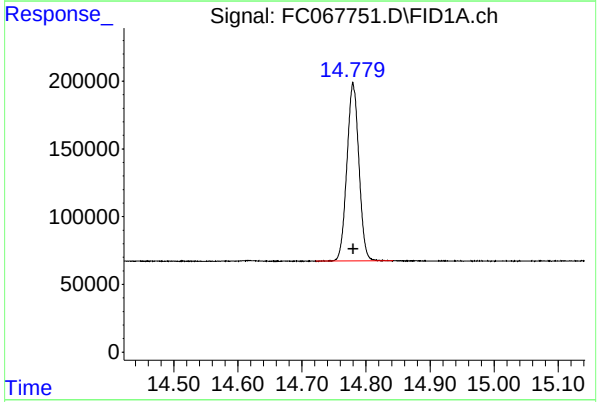
R.T.: 12.925 min
Delta R.T.: 0.000 min
Response: 1552495
Conc: 10.82 ug/ml



#13 n-Docosane (C22)

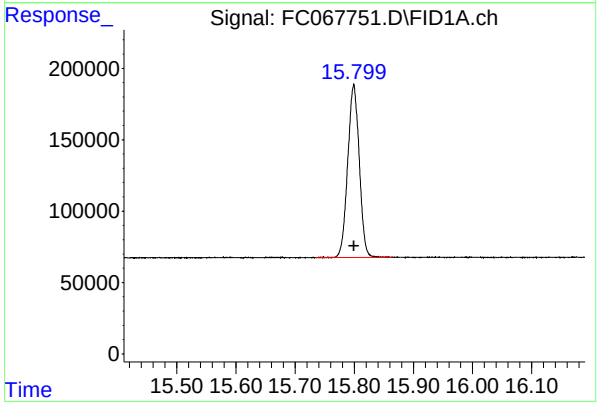
R.T.: 13.679 min
Delta R.T.: 0.000 min
Response: 1749101
Conc: 10.95 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4



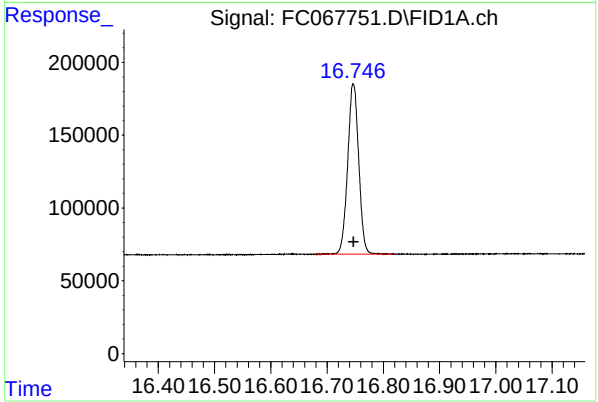
#14 n-Tetracosane (C24)

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



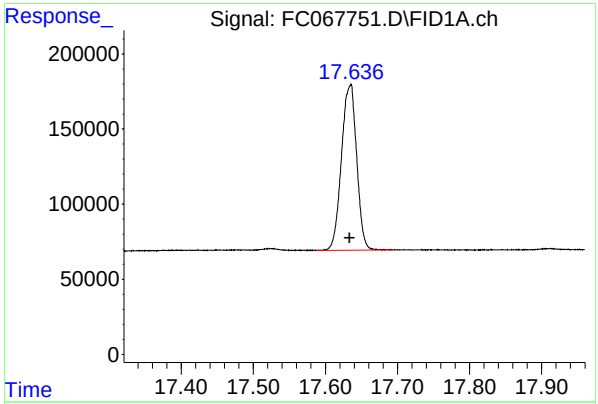
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

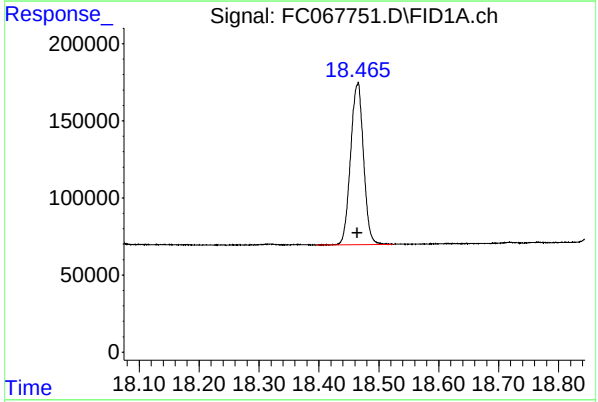
R.T.: 16.747 min
Delta R.T.: 0.000 min
Response: 1593212
Conc: 10.92 ug/ml



#17 n-Tricontane (C30)

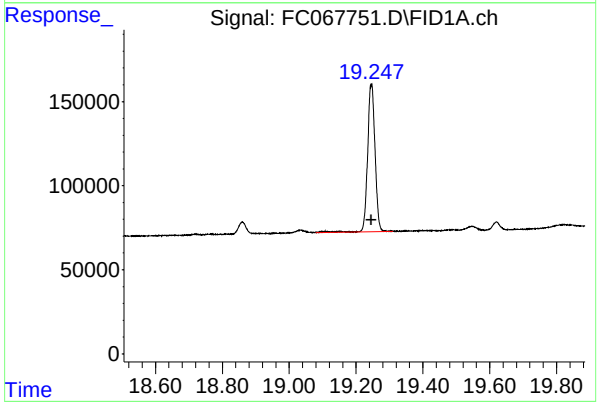
R.T.: 17.634 min
Delta R.T.: 0.000 min
Response: 1615415
Conc: 11.01 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIHPHATIC HC STD4



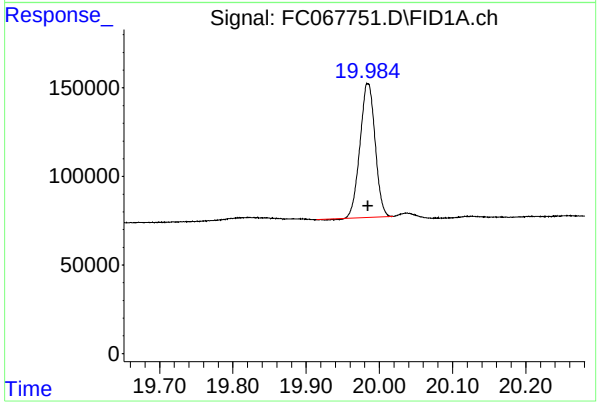
#18 n-Dotriacontane (C32)

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



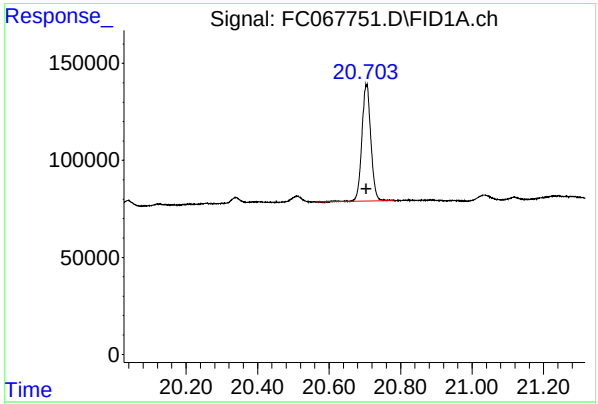
#19 n-Tetratriacontane (C34)

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



#20 n-Hexatriacontane (C36)

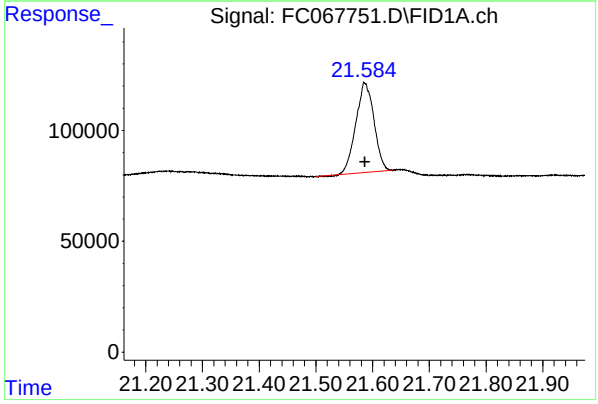
R.T.: 19.985 min
Delta R.T.: 0.000 min
Response: 1081784
Conc: 10.65 ug/ml



#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

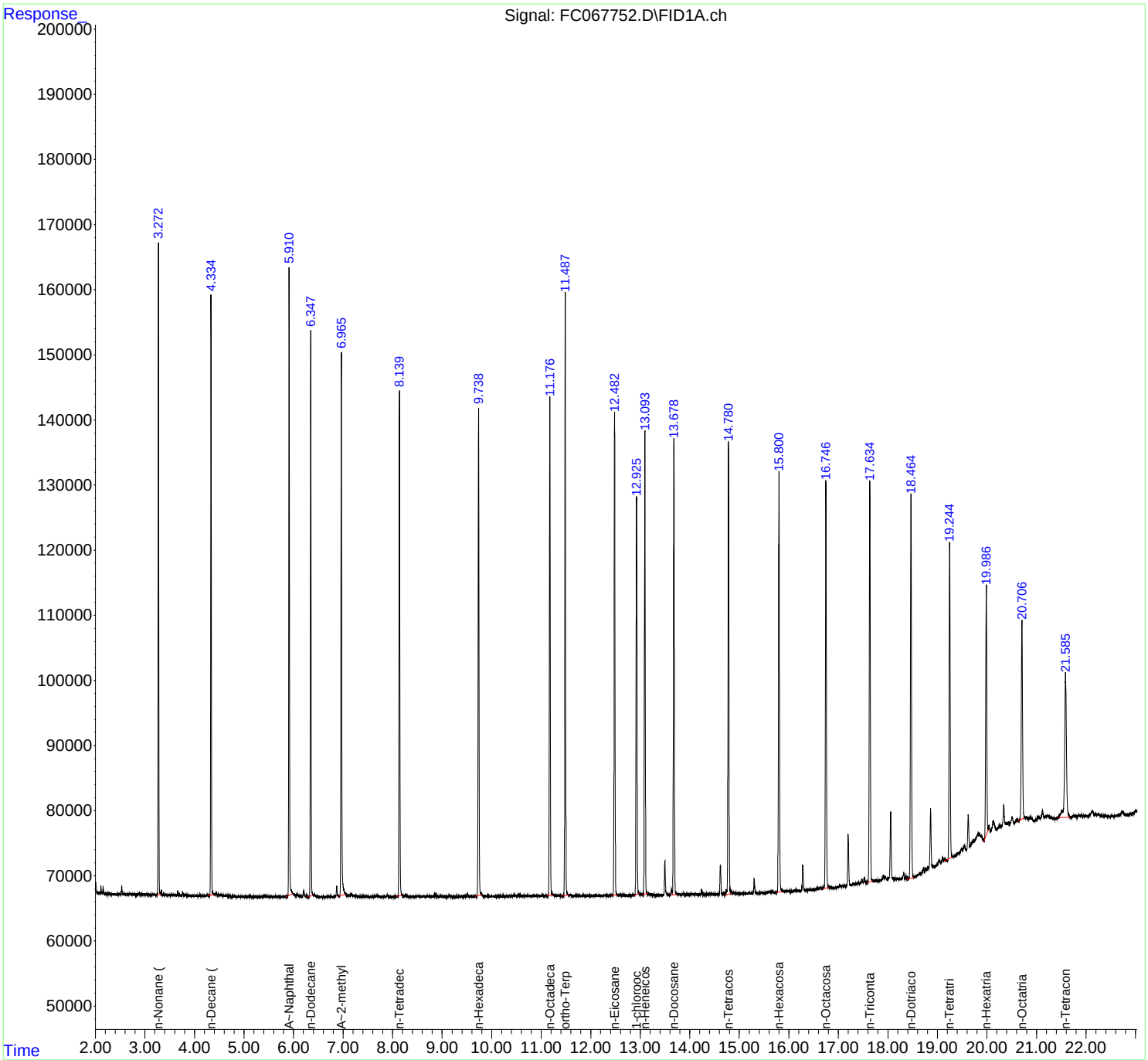
Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

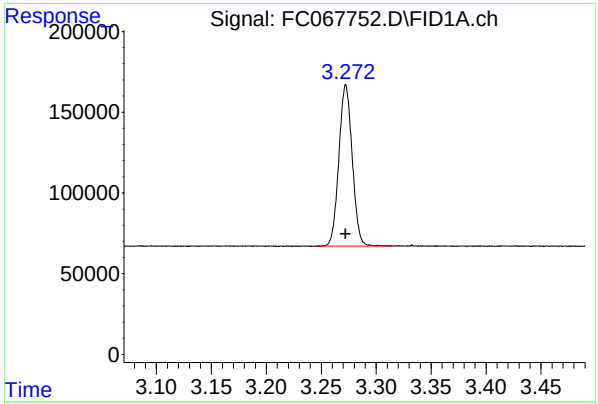
Manual Integrations APPROVED

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





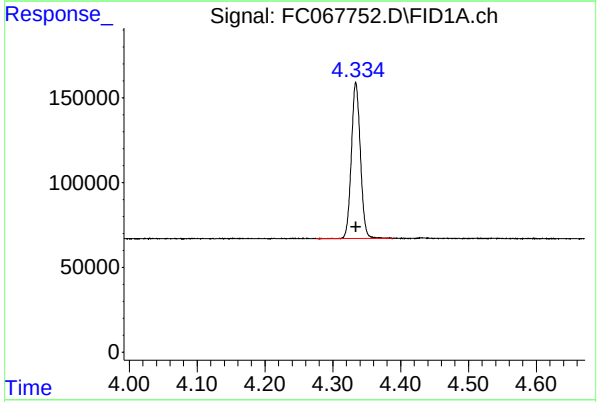
#1 n-Nonane (C9)

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

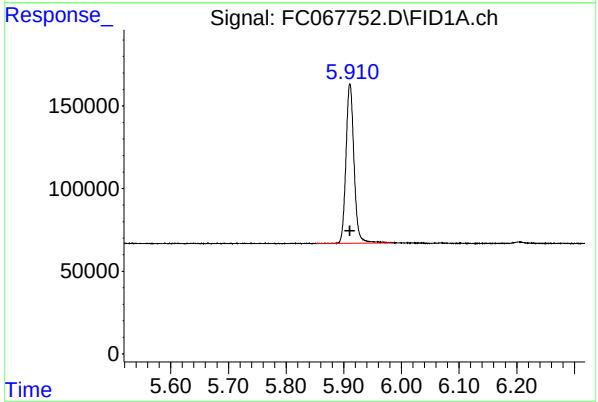
Manual Integrations
APPROVED

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



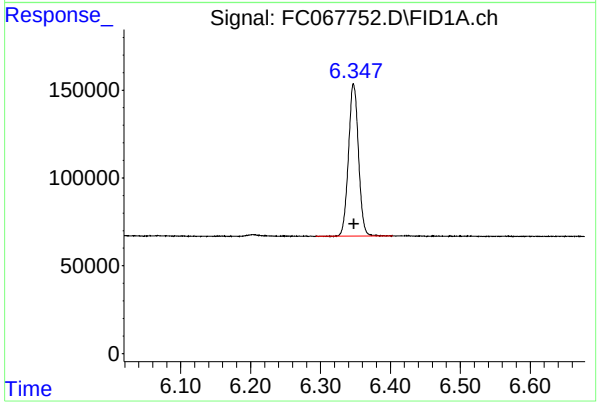
#2 n-Decane (C10)

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



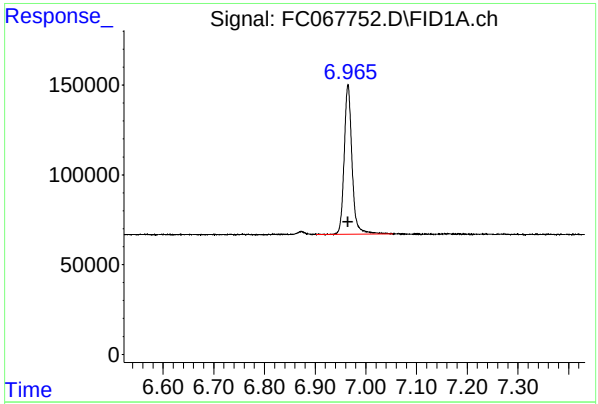
#3 A~Naphthalene (C11.7)

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



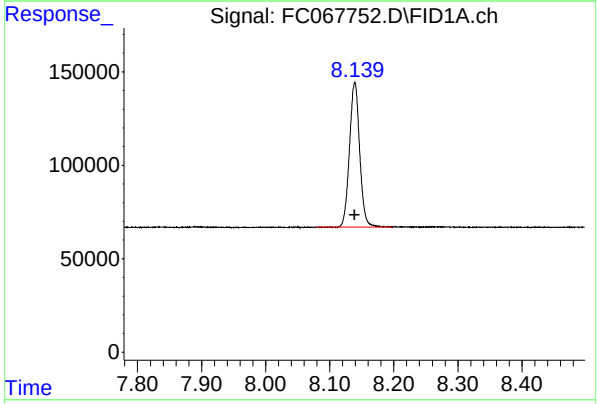
#5 A~2-methylnaphthalene (C12.89)

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

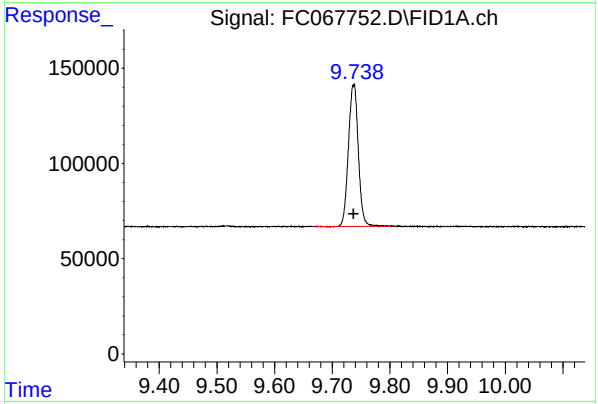
Manual Integrations
APPROVED

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



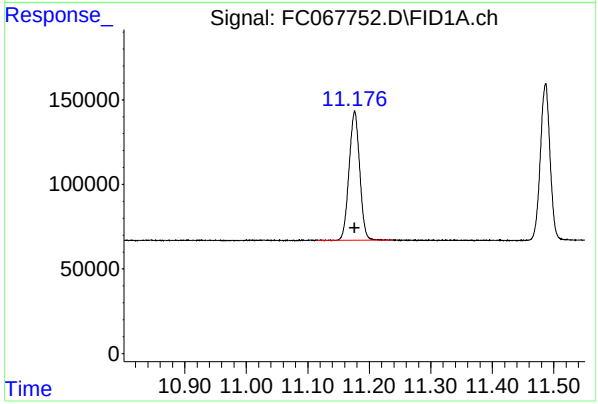
#6 n-Tetradecane (C14)

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



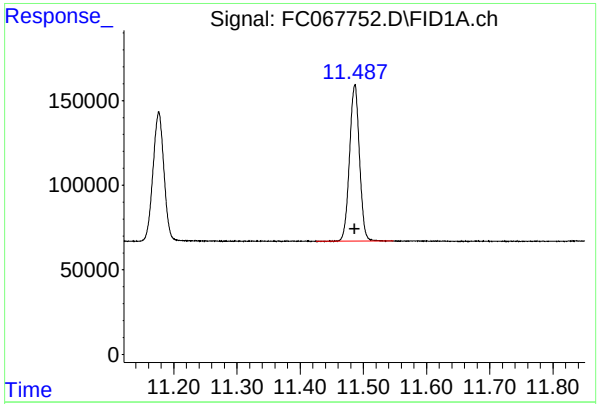
#7 n-Hexadecane (C16)

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



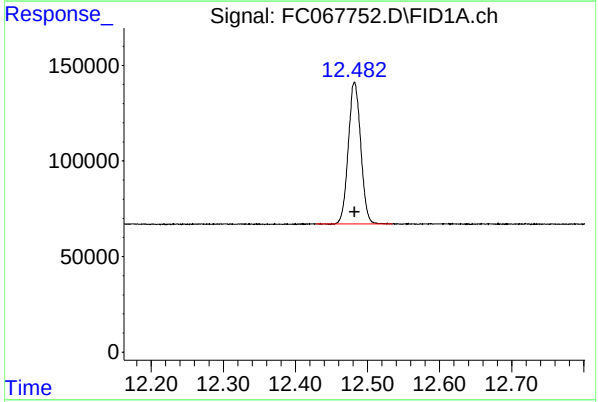
#9 ortho-Terphenyl (SURR)

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

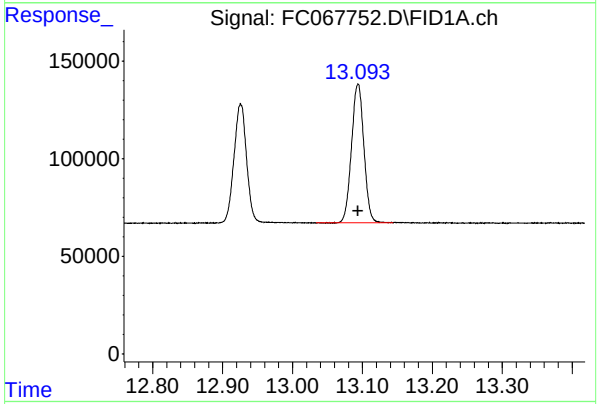
Manual Integrations
APPROVED

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



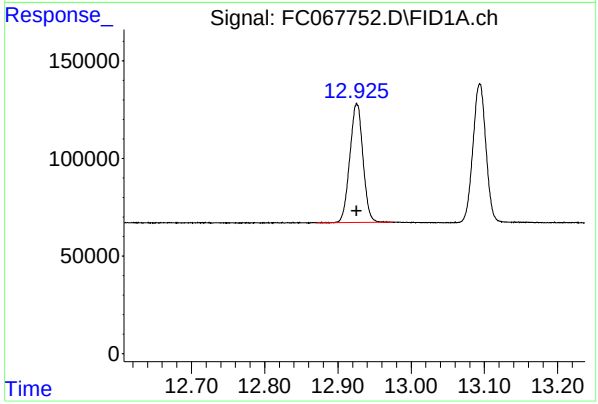
#10 n-Eicosane (C20)

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



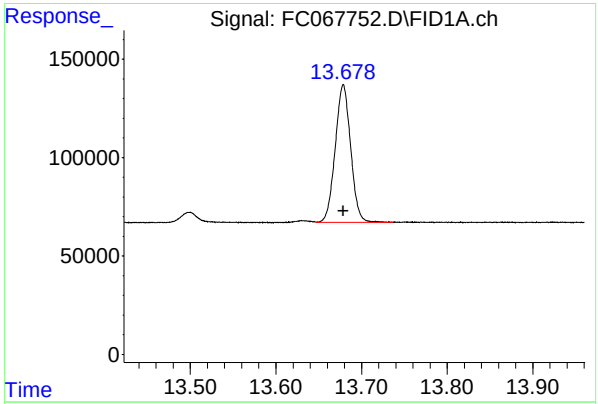
#11 n-Heneicosane (C21)

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



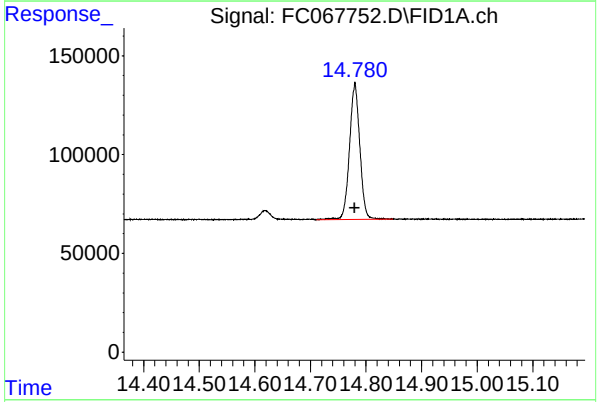
#13 n-Docosane (C22)

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

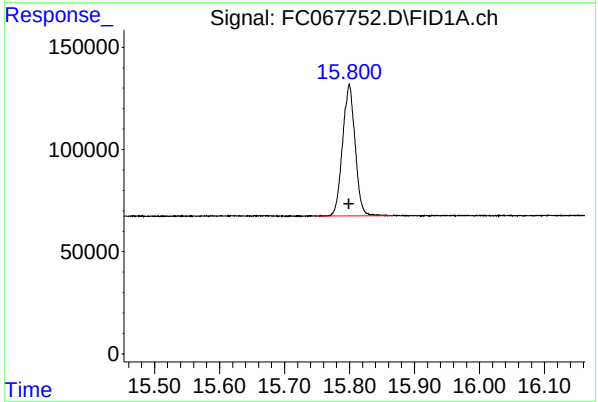
Manual Integrations
APPROVED

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



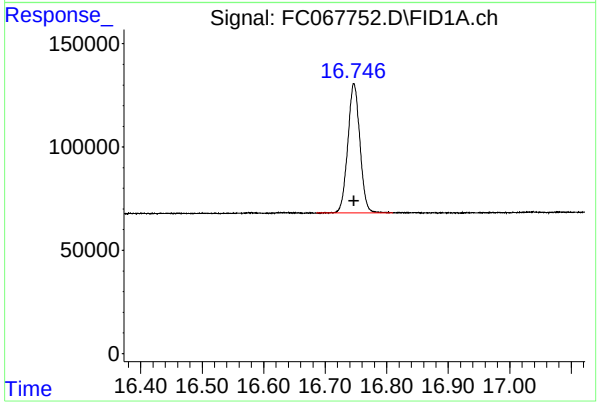
#14 n-Tetracosane (C24)

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



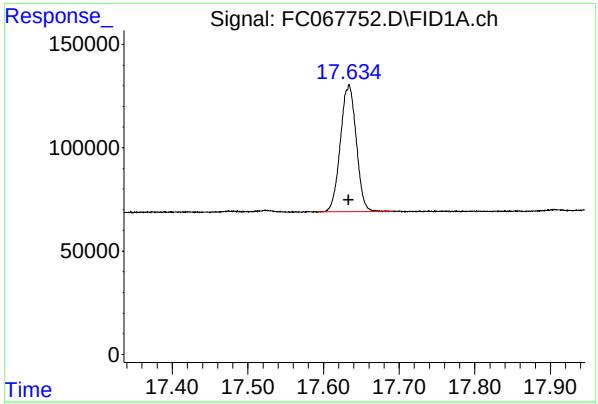
#15 n-Hexacosane (C26)

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



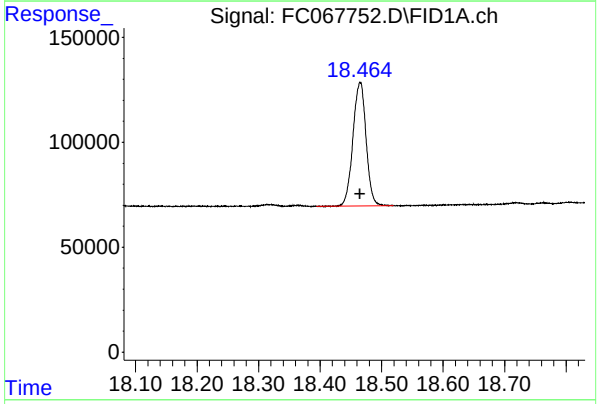
#17 n-Tricontane (C30)

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

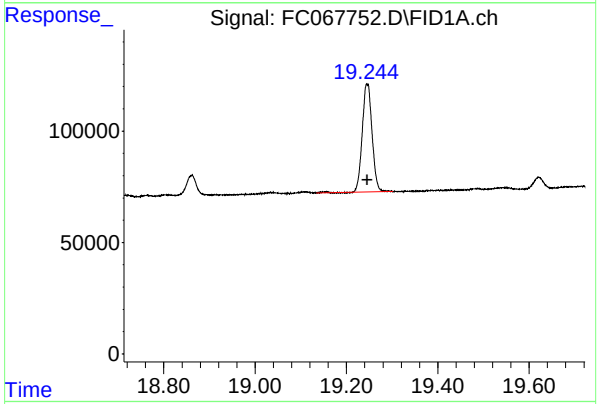
Manual Integrations APPROVED

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



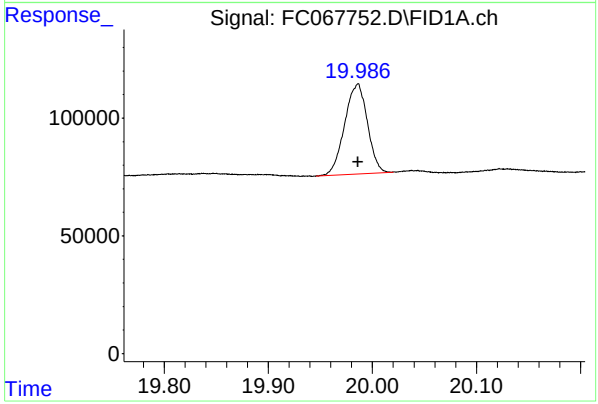
#18 n-Dotriacontane (C32)

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



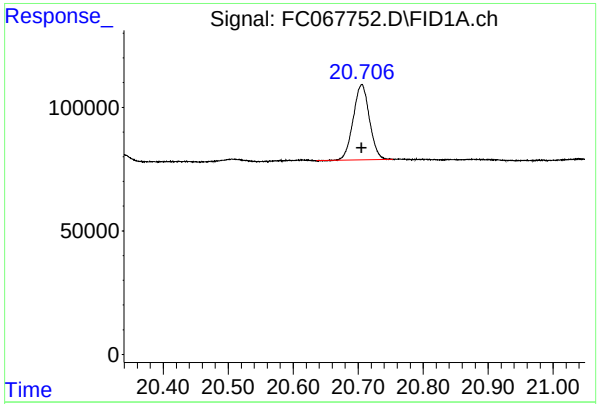
#19 n-Tetratriacontane (C34)

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



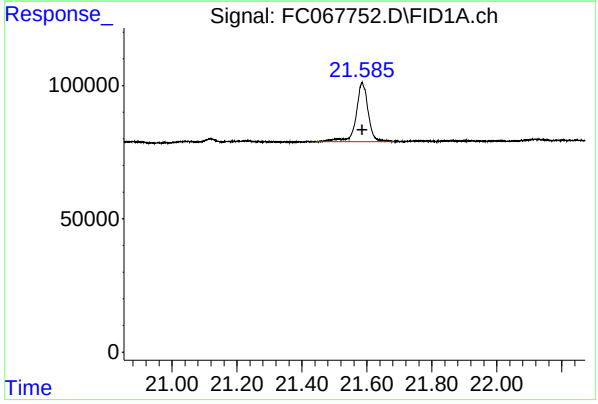
#21 n-Octatriacontane (C38)

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

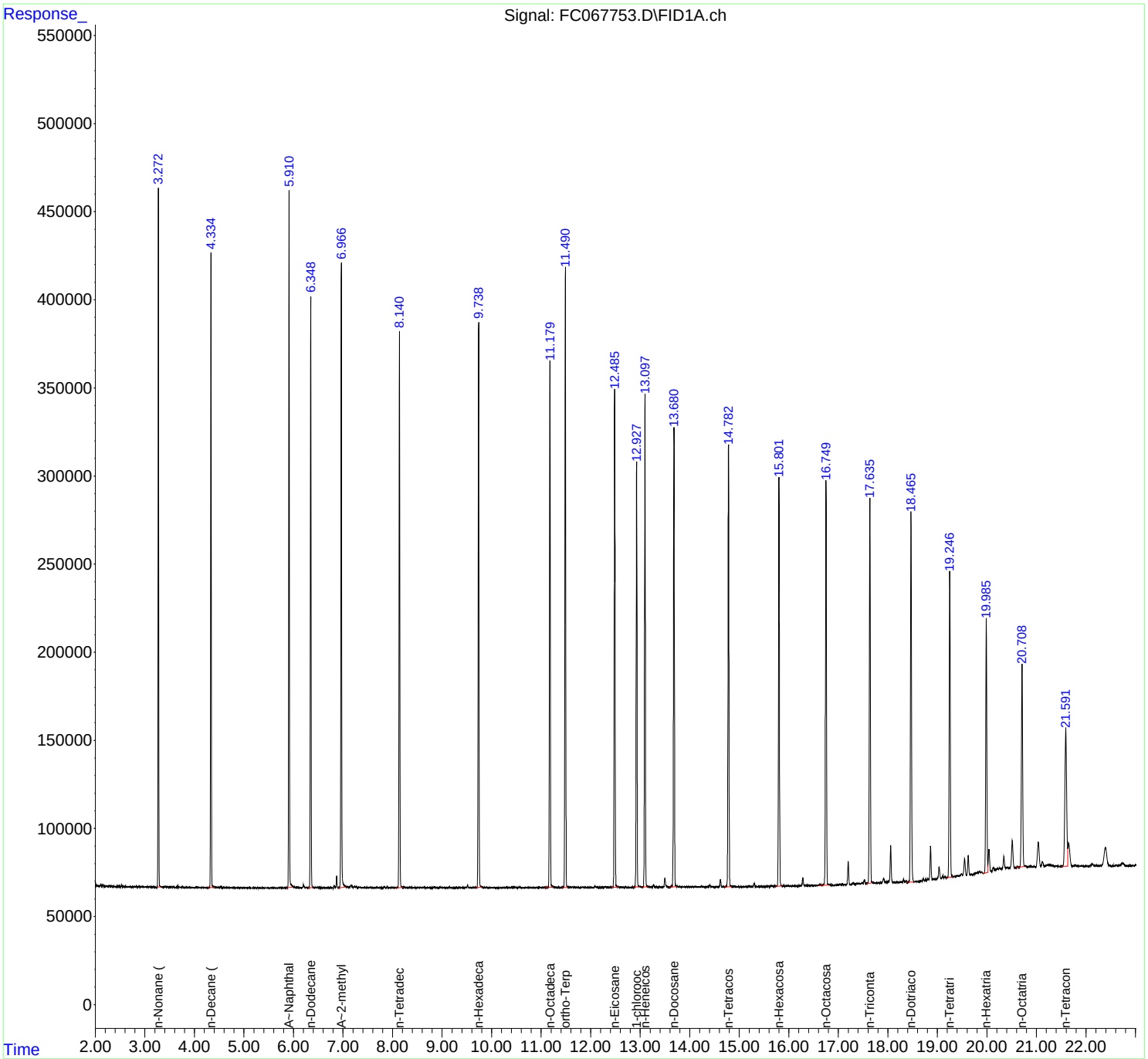
(f)=RT Delta > 1/2 Window (m)=manual int.

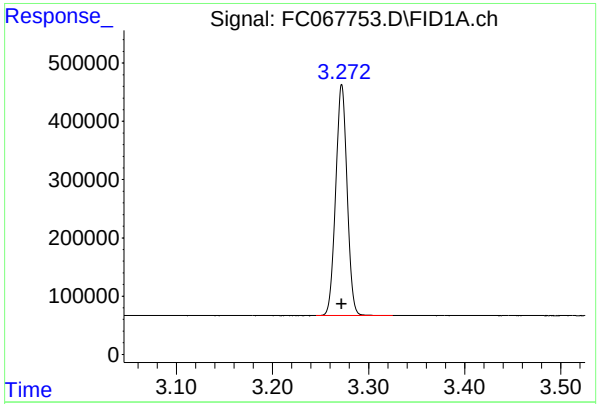
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC111424AL\
Data File : FC067753.D
Signal(s) : FID1A.ch
Acq On : 14 Nov 2024 13:49
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

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

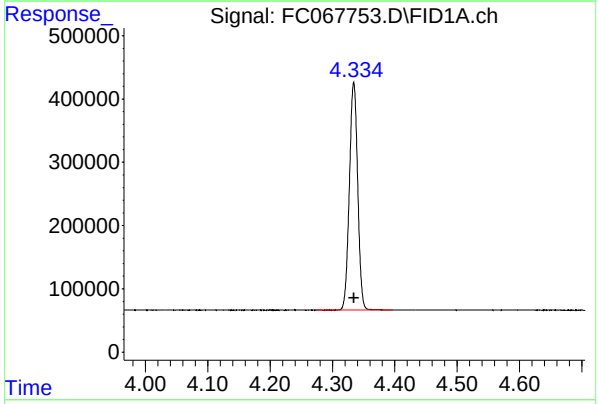




#1 n-Nonane (C9)

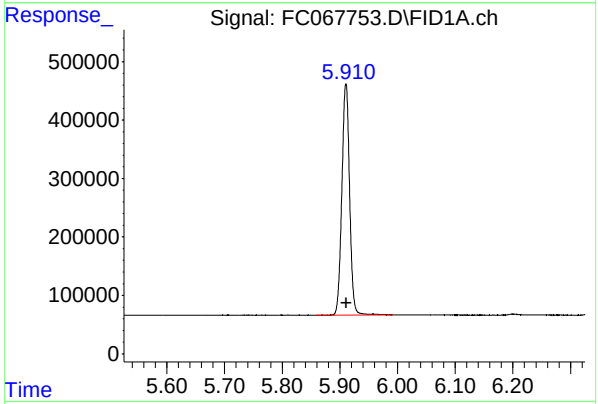
R.T.: 3.272 min
Delta R.T.: 0.000 min
Response: 3273252
Conc: 20.07 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



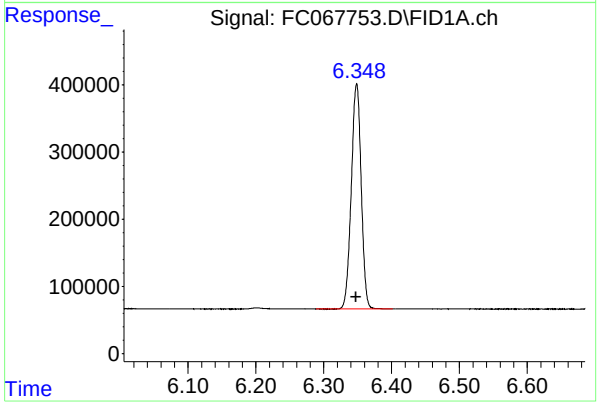
#2 n-Decane (C10)

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



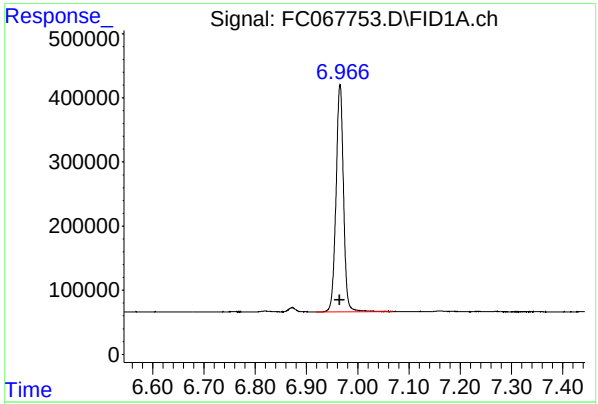
#3 A~Naphthalene (C11.7)

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



#4 n-Dodecane (C12)

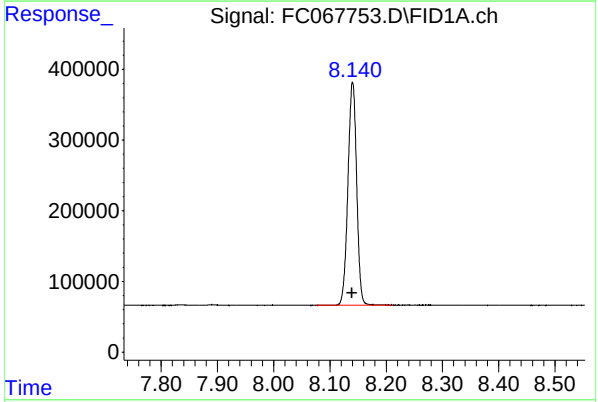
R.T.: 6.348 min
Delta R.T.: 0.000 min
Response: 3400656
Conc: 20.19 ug/ml



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

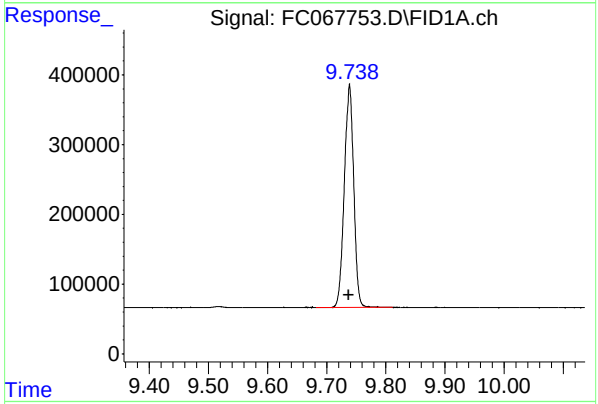
R.T.: 6.965 min
Delta R.T.: 0.000 min
Response: 3590183
Conc: 20.24 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



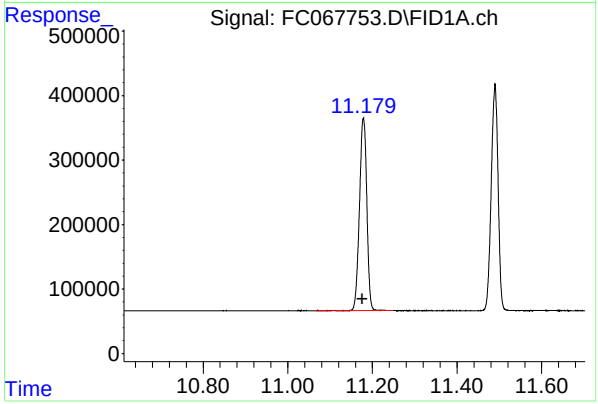
#6 n-Tetradecane (C14)

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



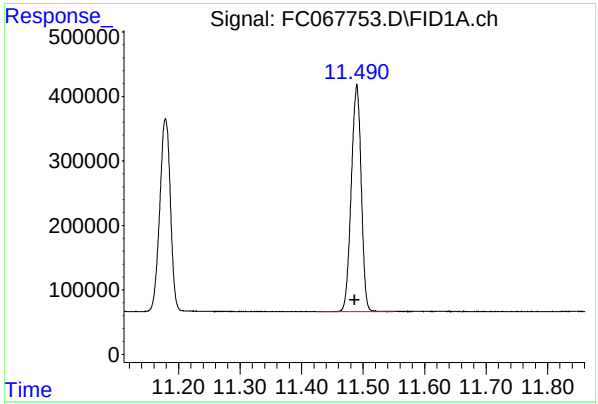
#7 n-Hexadecane (C16)

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



#8 n-Octadecane (C18)

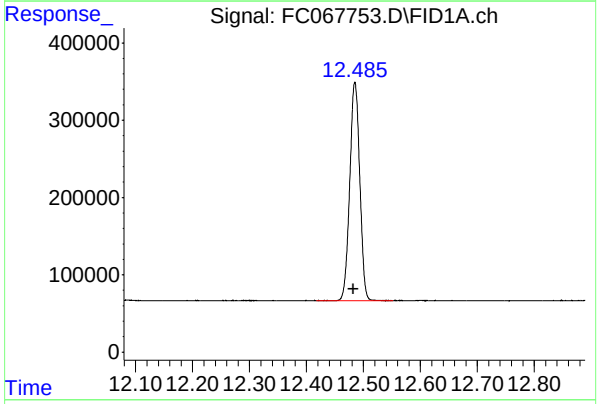
R.T.: 11.179 min
Delta R.T.: 0.003 min
Response: 3598310
Conc: 20.45 ug/ml



#9 ortho-Terphenyl (SURR)

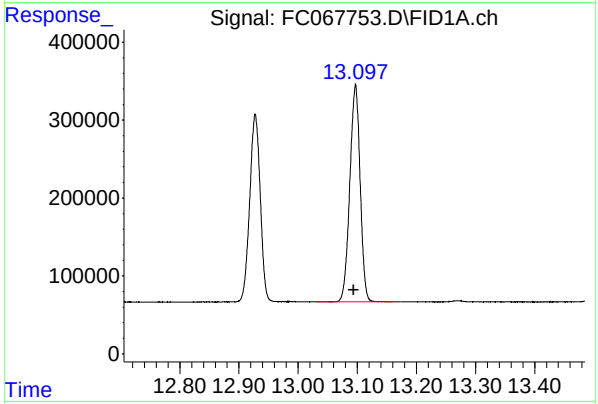
R.T.: 11.490 min
Delta R.T.: 0.003 min
Response: 3947572
Conc: 20.36 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



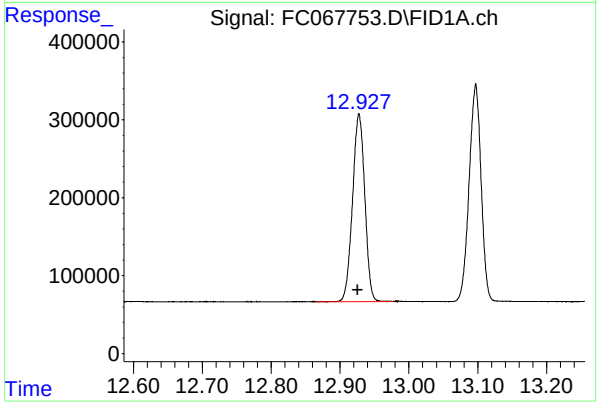
#10 n-Eicosane (C20)

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



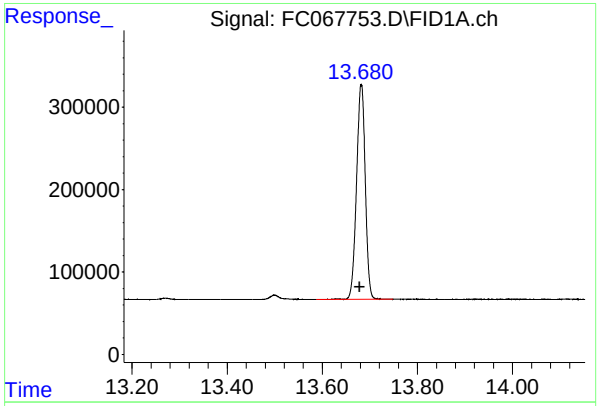
#11 n-Heneicosane (C21)

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



#12 1-chlorooctadecane (SURR)

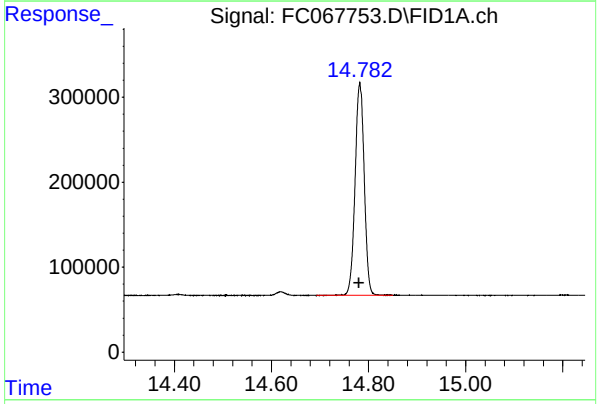
R.T.: 12.928 min
Delta R.T.: 0.002 min
Response: 2977474
Conc: 20.51 ug/ml



#13 n-Docosane (C22)

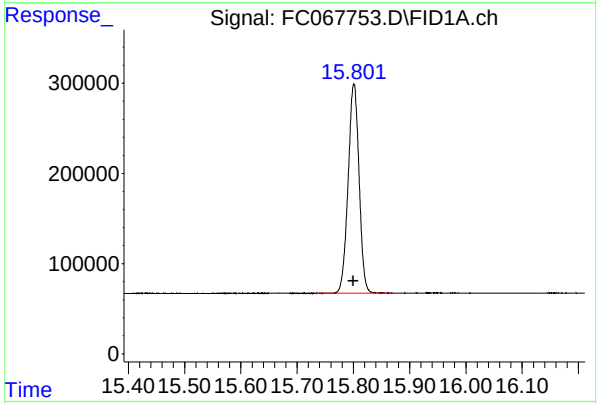
R.T.: 13.682 min
Delta R.T.: 0.003 min
Response: 3336664
Conc: 20.49 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



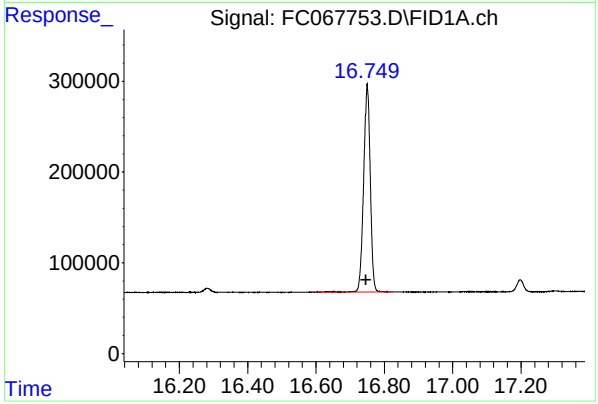
#14 n-Tetracosane (C24)

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



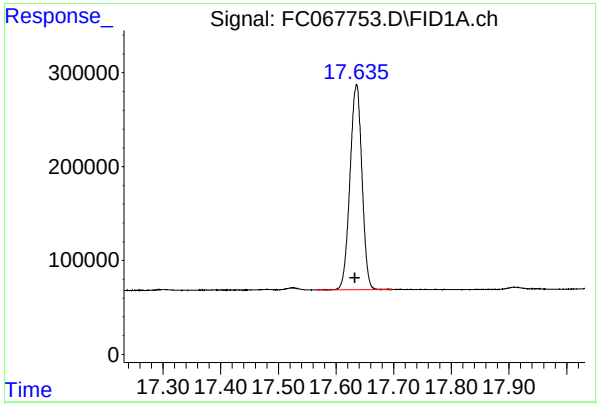
#15 n-Hexacosane (C26)

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



#16 n-Octacosane (C28)

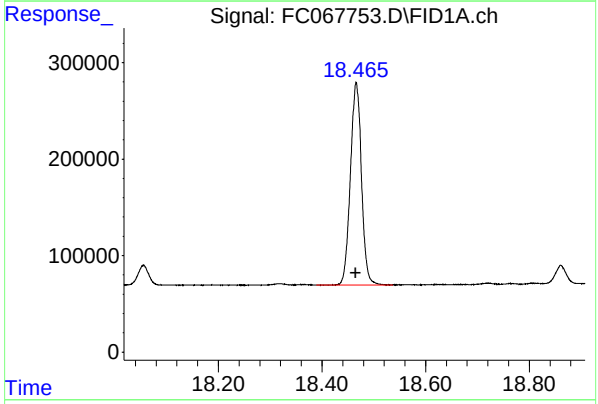
R.T.: 16.750 min
Delta R.T.: 0.003 min
Response: 3091639
Conc: 20.47 ug/ml



#17 n-Tricontane (C30)

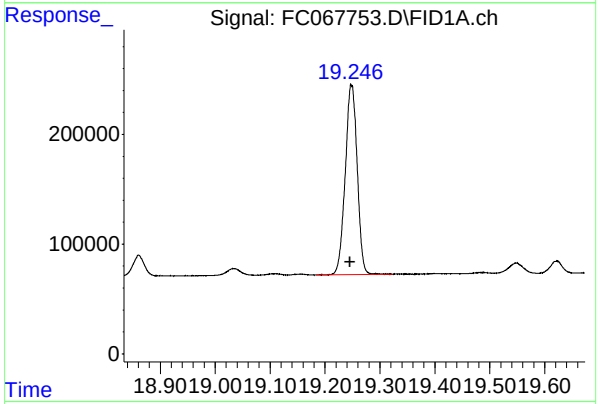
R.T.: 17.635 min
Delta R.T.: 0.002 min
Response: 3156621
Conc: 20.62 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



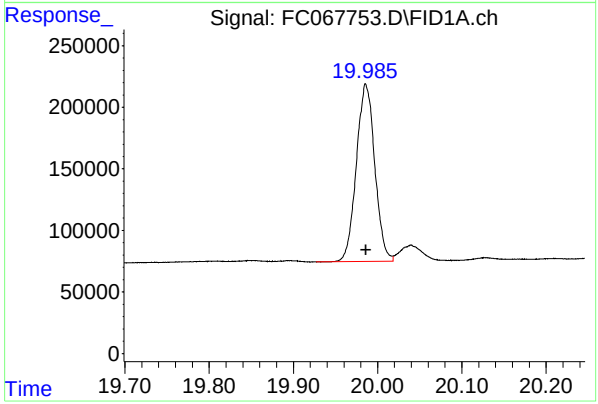
#18 n-Dotriacontane (C32)

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



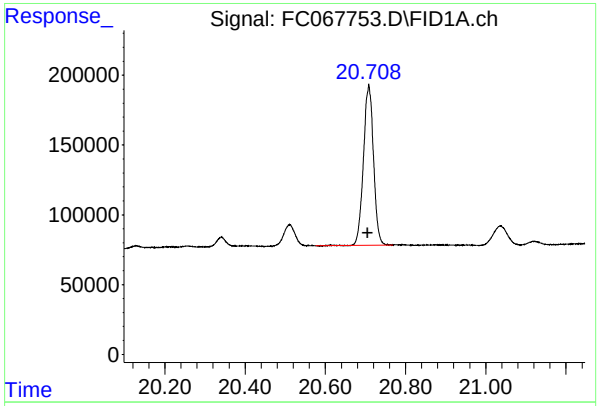
#19 n-Tetratriacontane (C34)

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



#20 n-Hexatriacontane (C36)

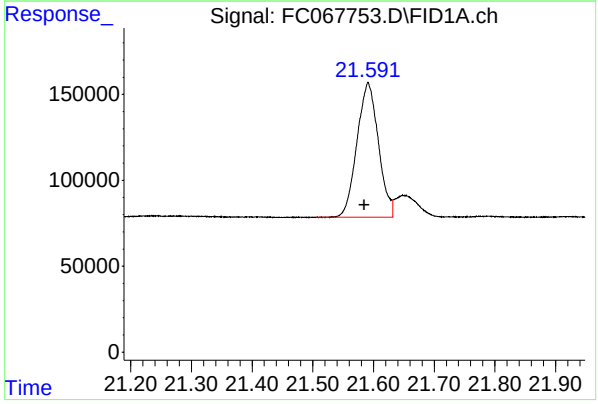
R.T.: 19.986 min
Delta R.T.: 0.000 min
Response: 2189342
Conc: 20.93 ug/ml



#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

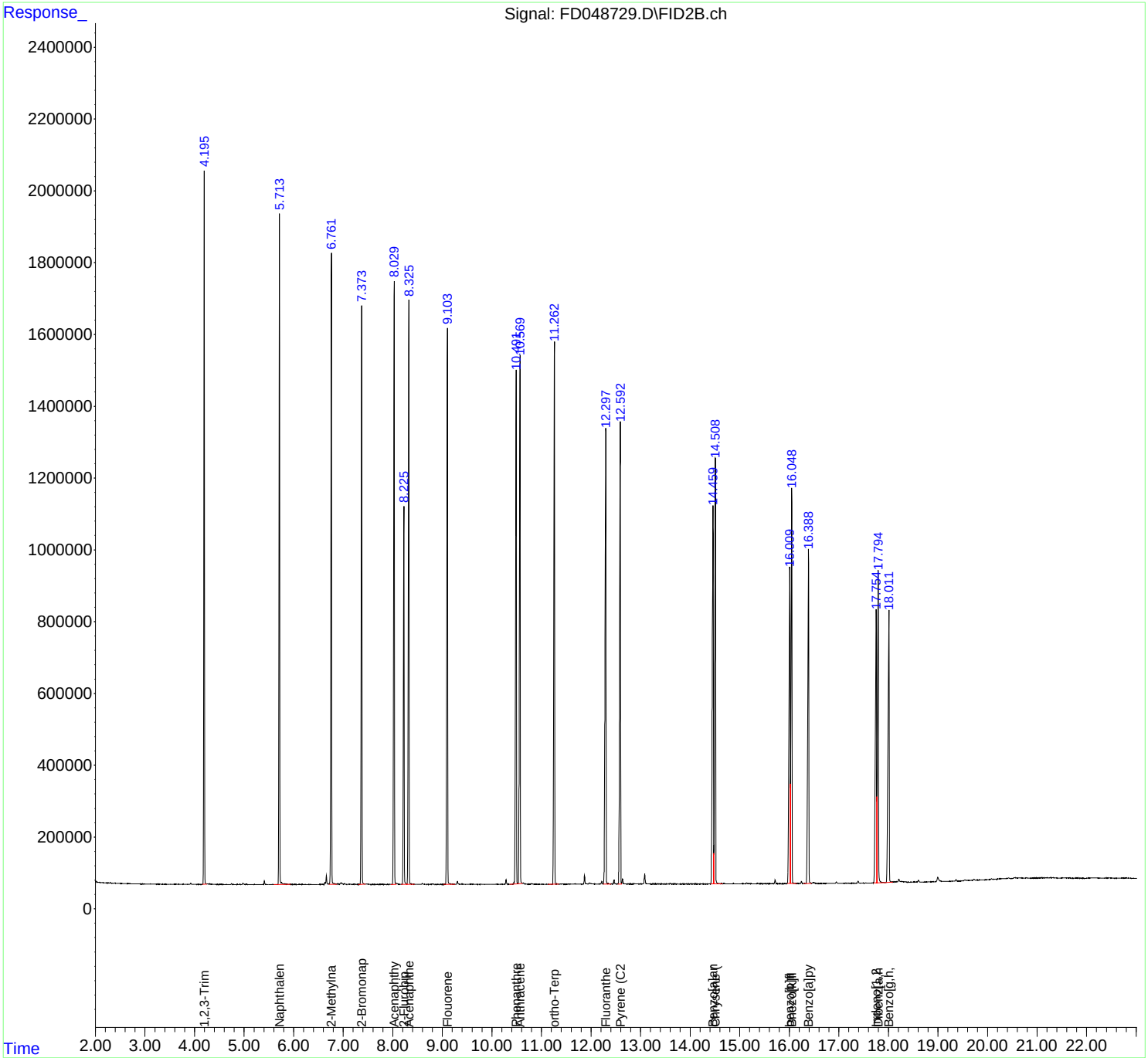
(f)=RT Delta > 1/2 Window (m)=manual int.

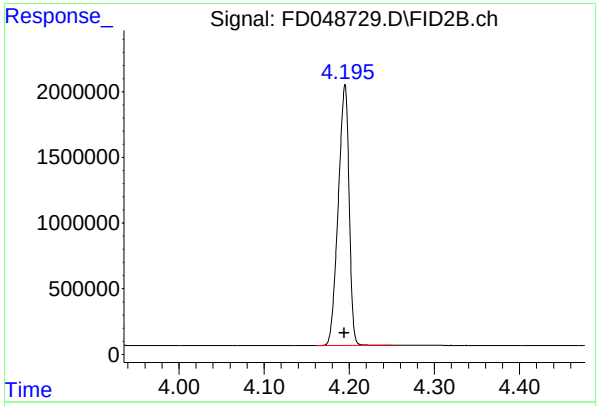
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048729.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 10:39
Operator : YP/AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 61 Sample Multiplier: 1

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

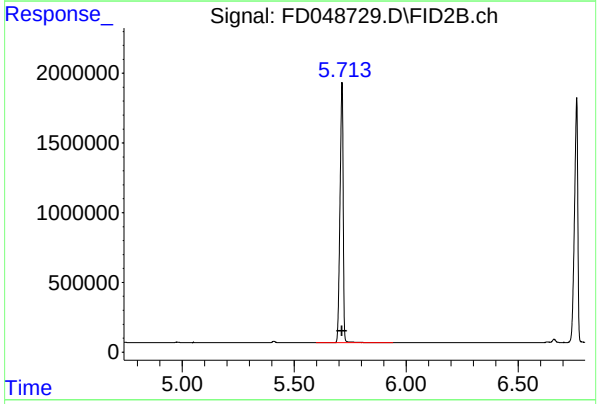




#1 1,2,3-Trimethylbenzene (C10.1)

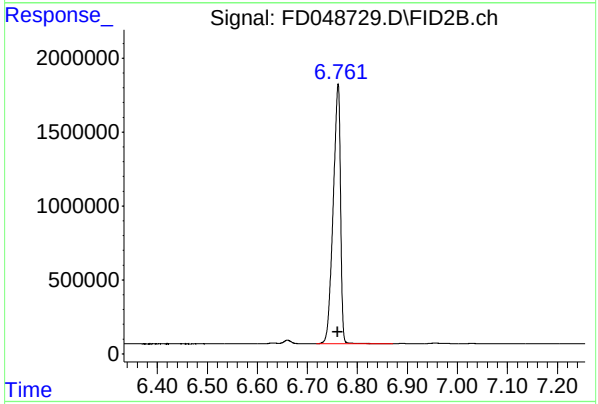
R.T.: 4.194 min
Delta R.T.: 0.000 min
Response: 17620031
Conc: 97.22 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



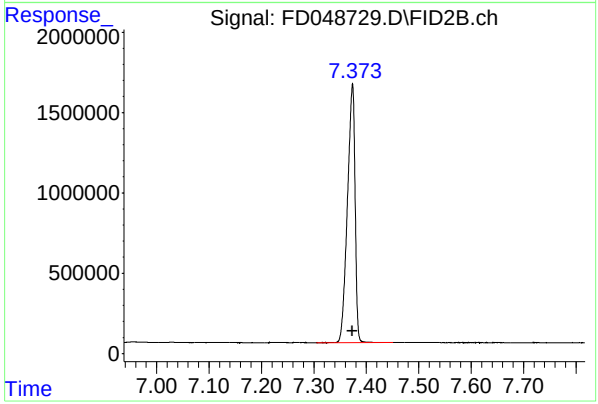
#2 Naphthalene (C11.7)

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



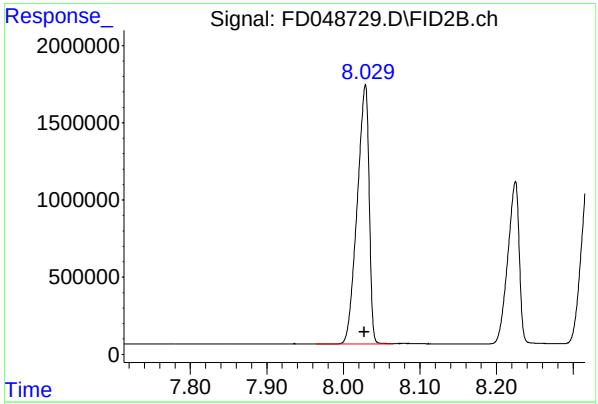
#3 2-Methylnaphthalene (C12.89)

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



#4 2-Bromonaphthalene (SURR)

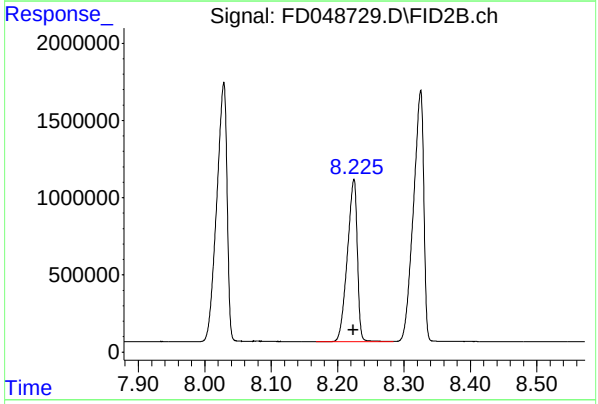
R.T.: 7.373 min
Delta R.T.: 0.000 min
Response: 16279710
Conc: 96.64 ug/ml



#5 Acenaphthylene (C15.06)

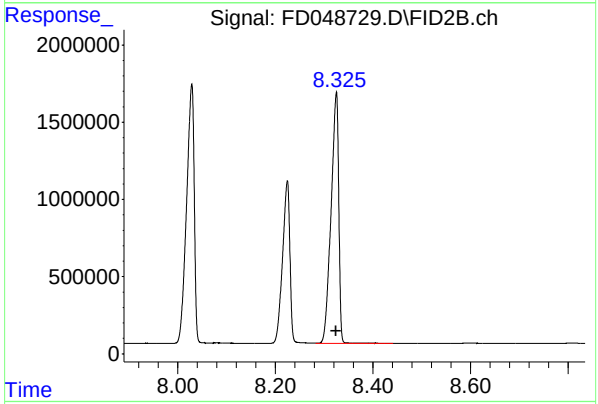
R.T.: 8.028 min
Delta R.T.: 0.000 min
Response: 18165782
Conc: 97.72 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



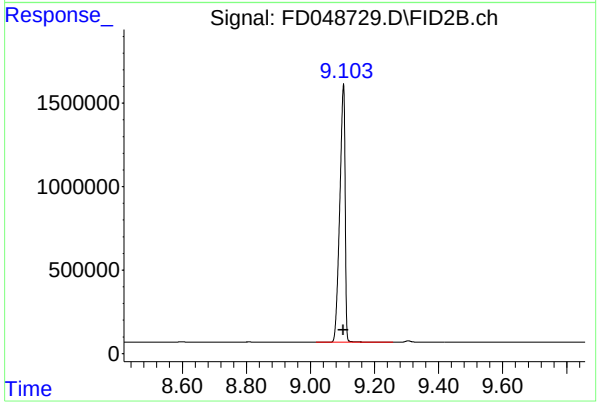
#6 2-Flurobiphenyl (SURR)

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



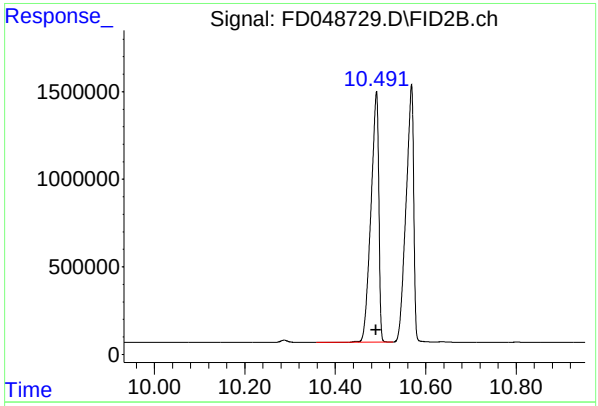
#7 Acenaphthene (C15.5)

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



#8 Flouorene (C16.55)

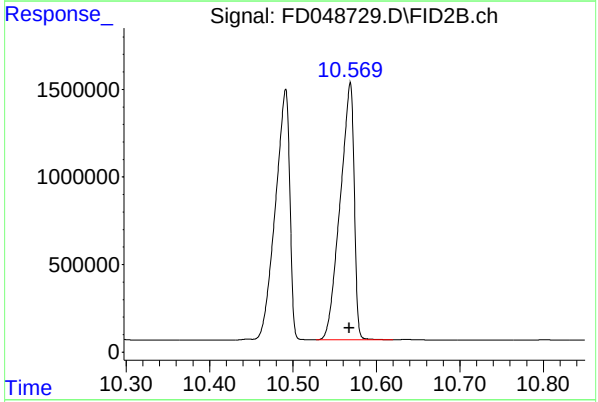
R.T.: 9.102 min
Delta R.T.: 0.000 min
Response: 17936029
Conc: 97.27 ug/ml



#9 Phenanthrene (C19.36)

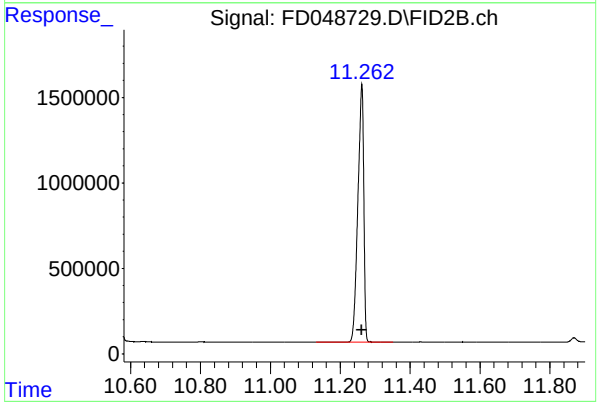
R.T.: 10.490 min
Delta R.T.: 0.000 min
Response: 17155776
Conc: 97.33 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



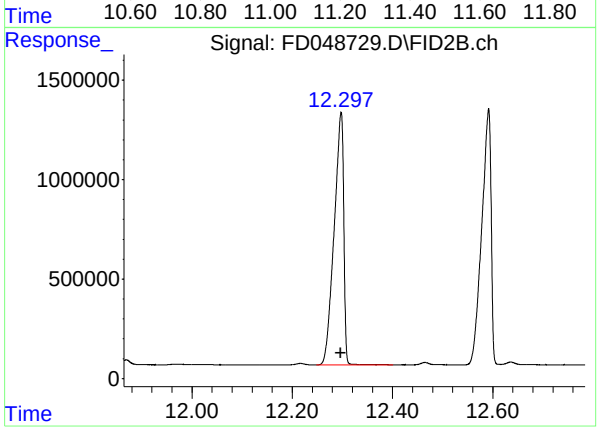
#10 Anthracene (C19.43)

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



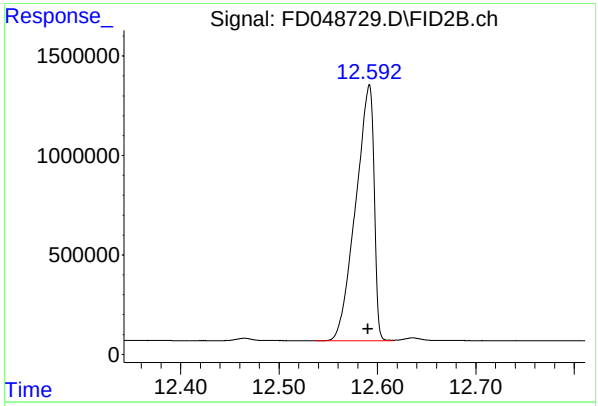
#11 ortho-Terphenyl (SURR)

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



#12 Fluoranthene (C21.85)

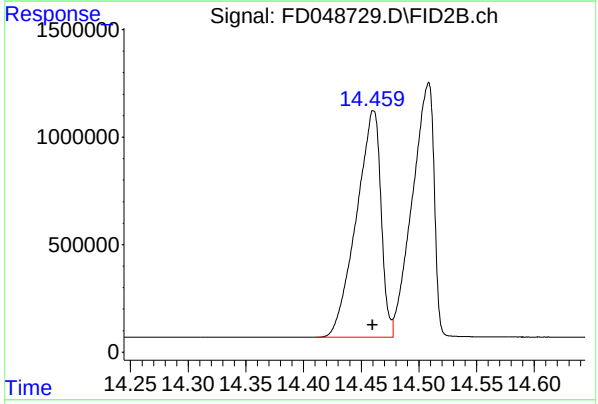
R.T.: 12.296 min
Delta R.T.: 0.000 min
Response: 16826726
Conc: 96.77 ug/ml



#13 Pyrene (C20.8)

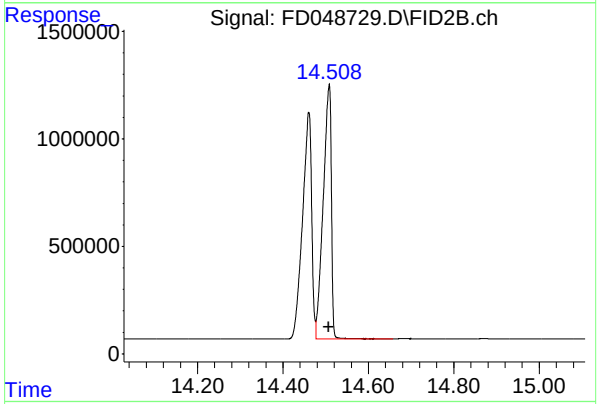
R.T.: 12.590 min
Delta R.T.: 0.000 min
Response: 16685708
Conc: 97.18 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



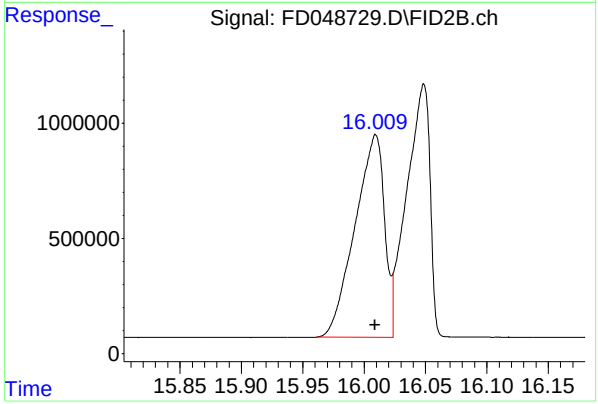
#14 Benzo[a]anthracene (C26.37)

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



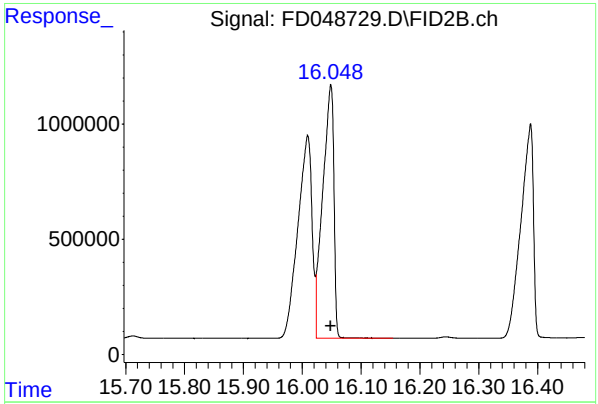
#15 Chrysene (C27.41)

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



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

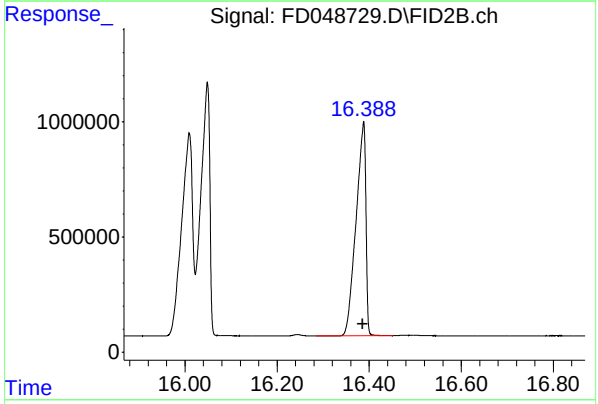
R.T.: 16.009 min
Delta R.T.: 0.000 min
Response: 14749238
Conc: 96.63 ug/ml



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

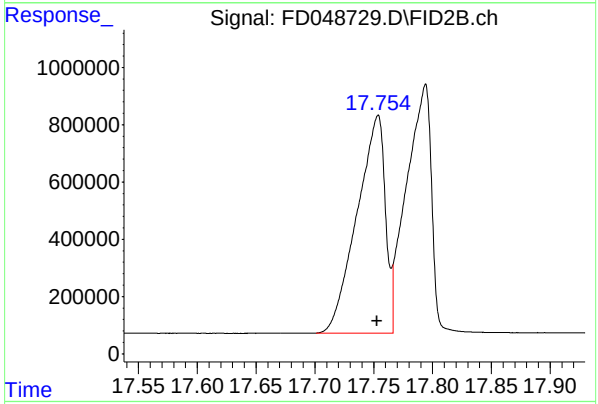
R.T.: 16.047 min
Delta R.T.: 0.000 mi
Response: 14449844
Conc: 95.20 ug/m

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



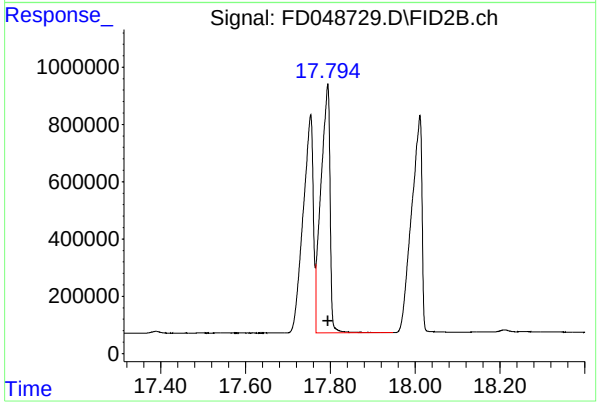
#18 Benzo[a]pyrene (C31.34)

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



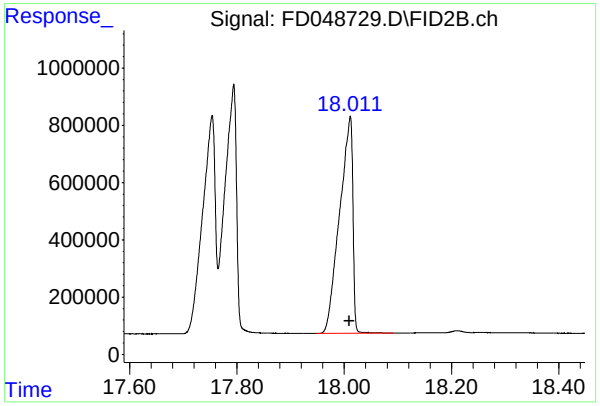
#19 Indeno[1,2,3-cd]pyrene (C35.01)

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

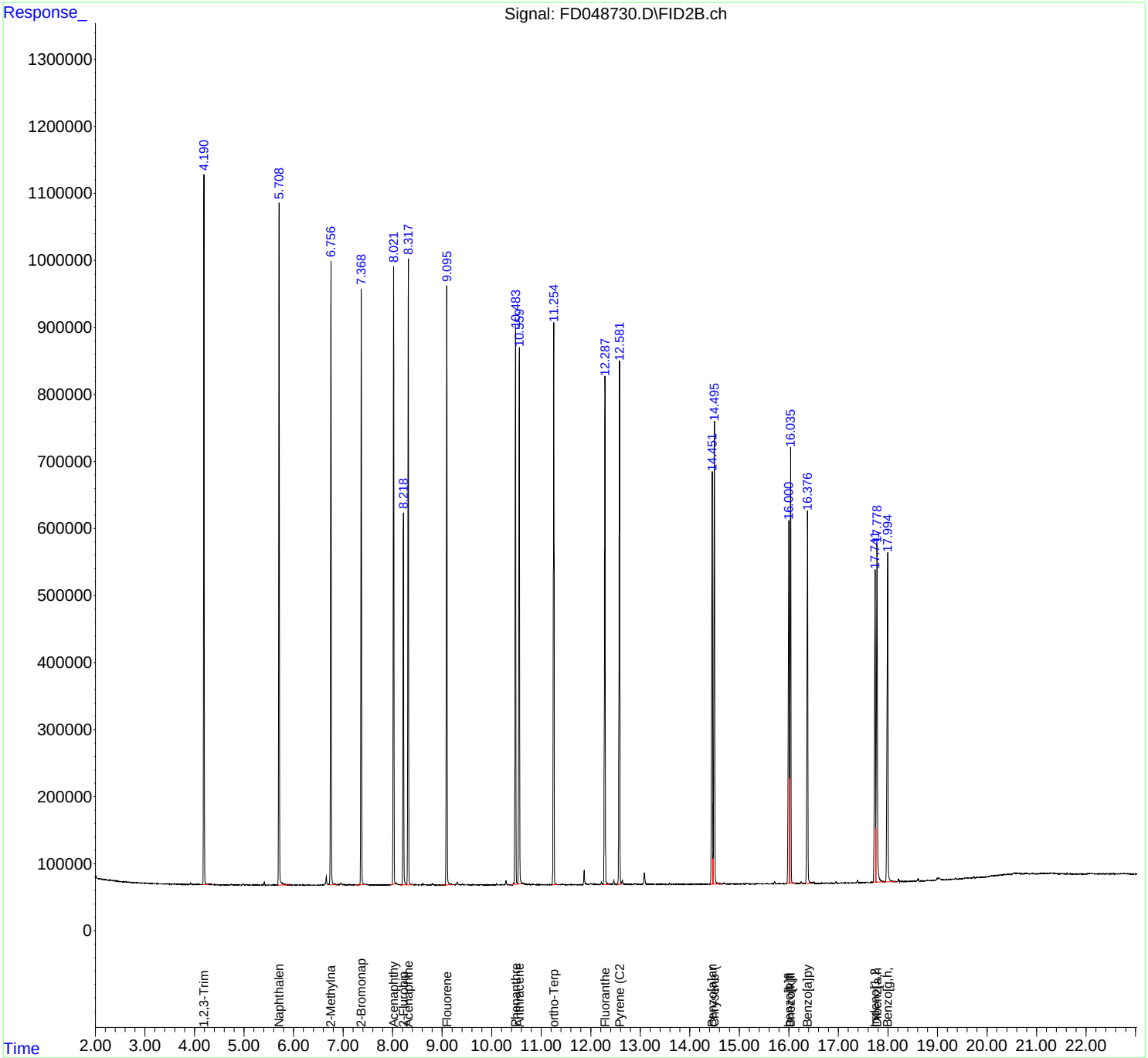
(f)=RT Delta > 1/2 Window (m)=manual int.

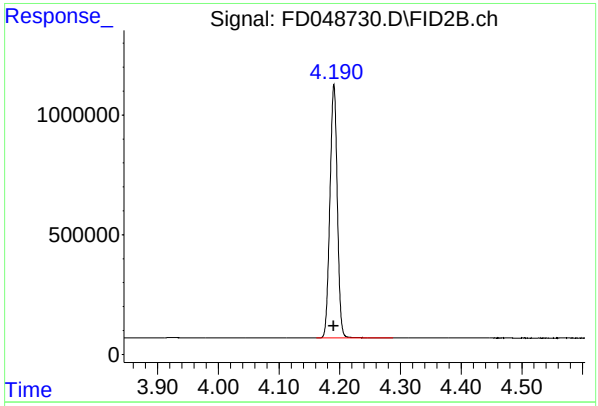
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048730.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 11:15
Operator : YP/AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 62 Sample Multiplier: 1

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

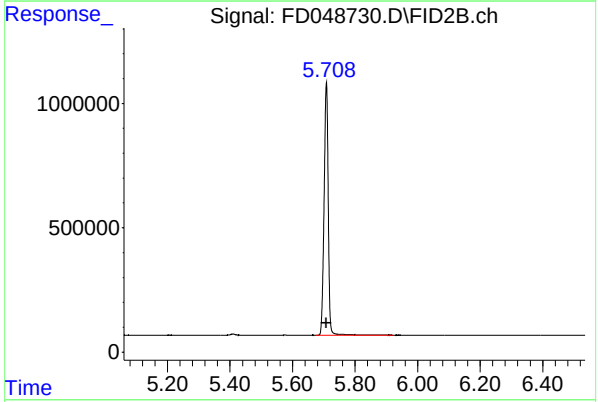




#1 1,2,3-Trimethylbenzene (C10.1)

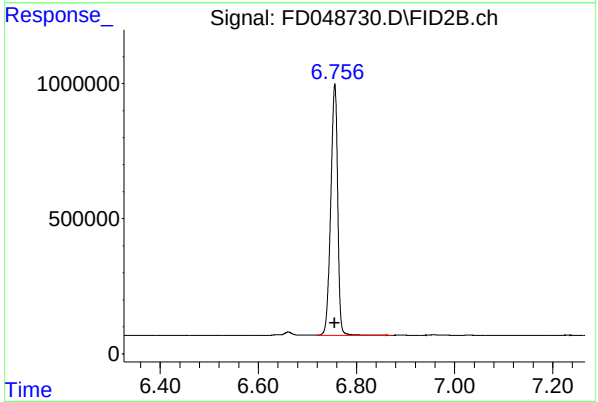
R.T.: 4.190 min
Delta R.T.: 0.000 min
Response: 8939308
Conc: 49.55 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



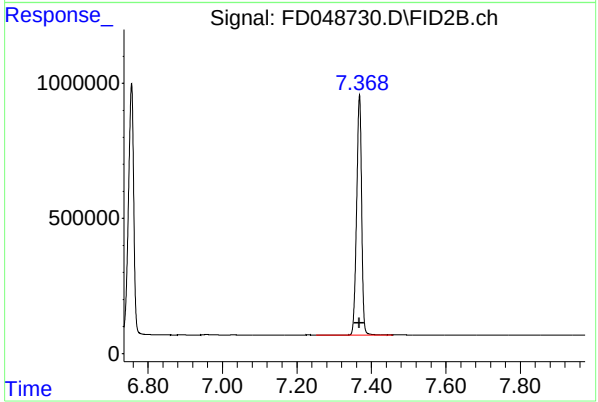
#2 Naphthalene (C11.7)

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



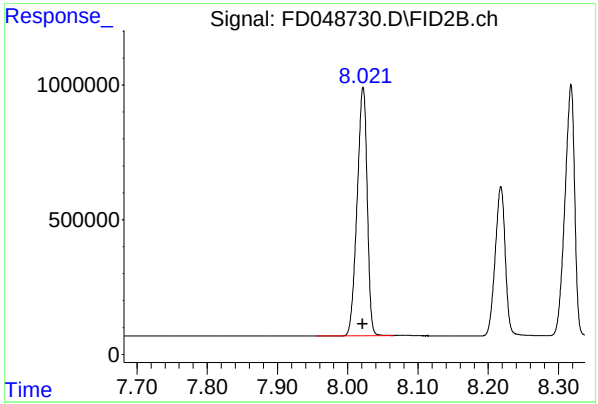
#3 2-Methylnaphthalene (C12.89)

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



#4 2-Bromonaphthalene (SURR)

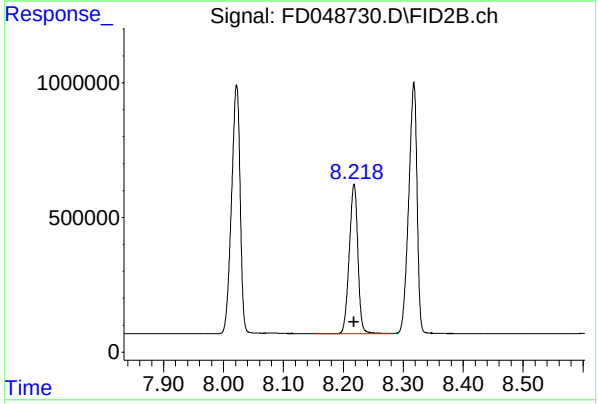
R.T.: 7.368 min
Delta R.T.: 0.000 min
Response: 8283088
Conc: 49.44 ug/ml



#5 Acenaphthylene (C15.06)

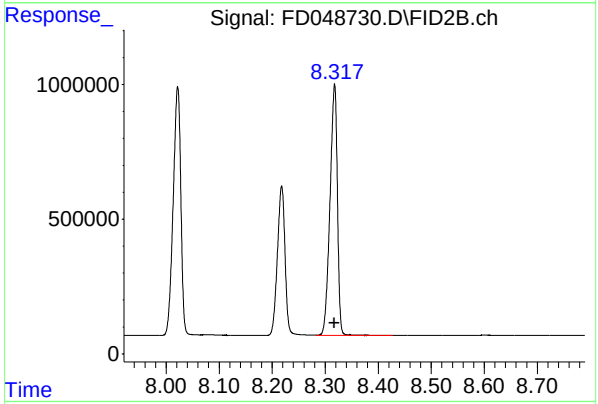
R.T.: 8.022 min
Delta R.T.: 0.000 min
Response: 9189135
Conc: 49.62 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



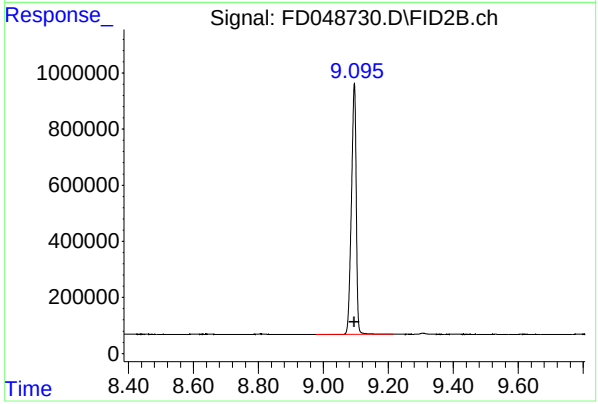
#6 2-Flurobiphenyl (SURR)

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



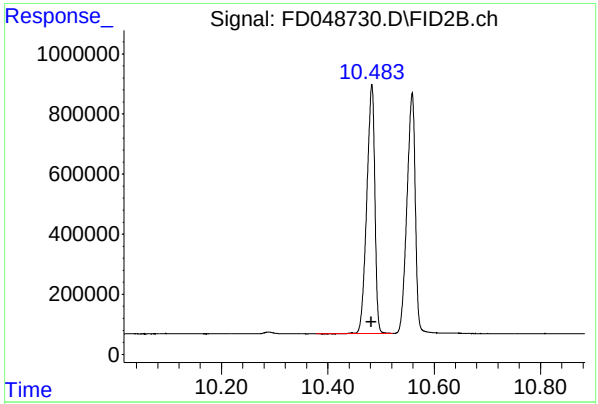
#7 Acenaphthene (C15.5)

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



#8 Flouorene (C16.55)

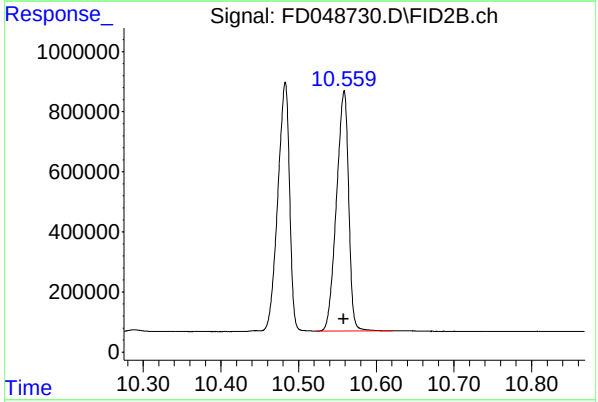
R.T.: 9.095 min
Delta R.T.: 0.000 min
Response: 9136727
Conc: 49.70 ug/ml



#9 Phenanthrene (C19.36)

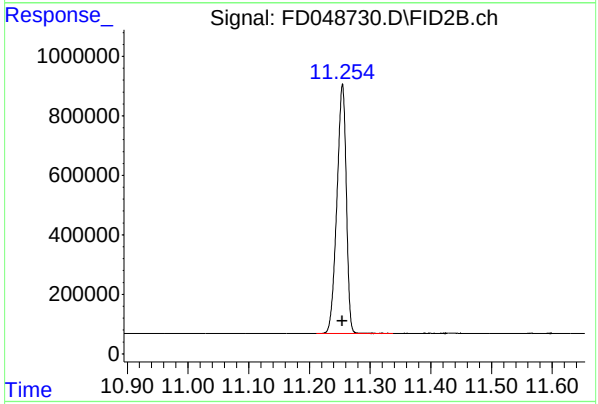
R.T.: 10.482 min
Delta R.T.: 0.000 min
Response: 8716439
Conc: 49.63 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



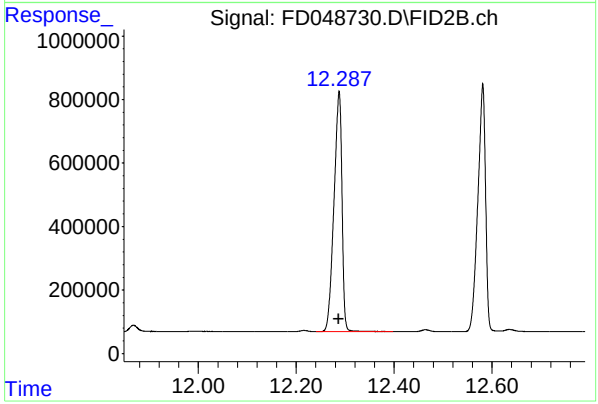
#10 Anthracene (C19.43)

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



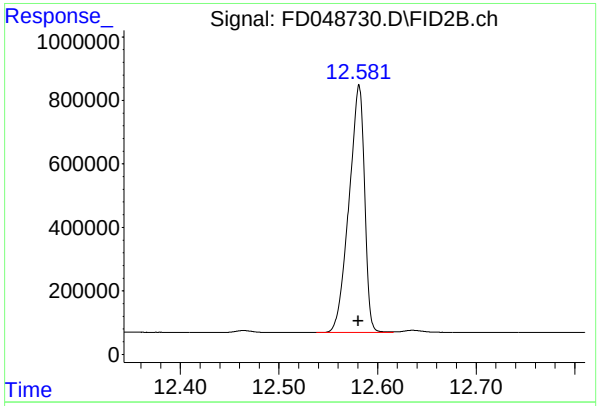
#11 ortho-Terphenyl (SURR)

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



#12 Fluoranthene (C21.85)

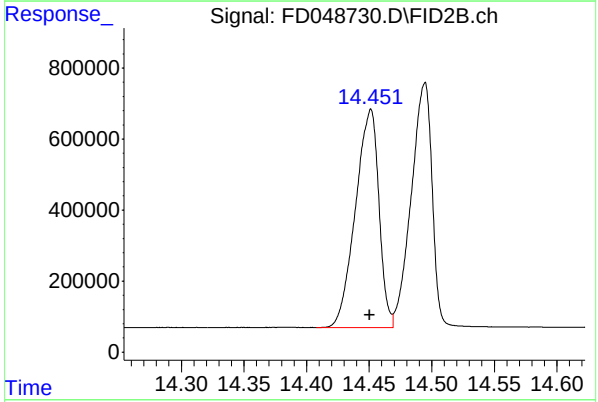
R.T.: 12.287 min
Delta R.T.: 0.000 min
Response: 8602468
Conc: 49.65 ug/ml



#13 Pyrene (C20.8)

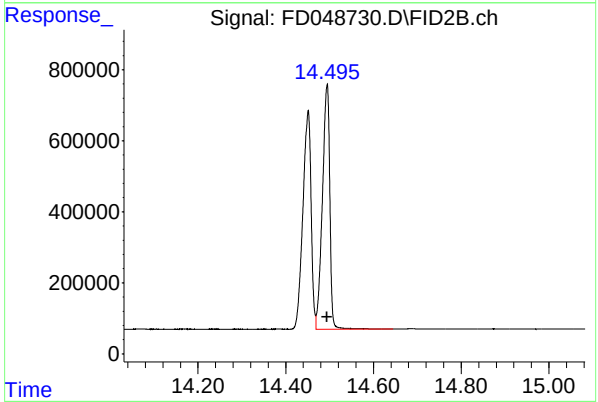
R.T.: 12.581 min
Delta R.T.: 0.000 min
Response: 8542740
Conc: 49.84 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



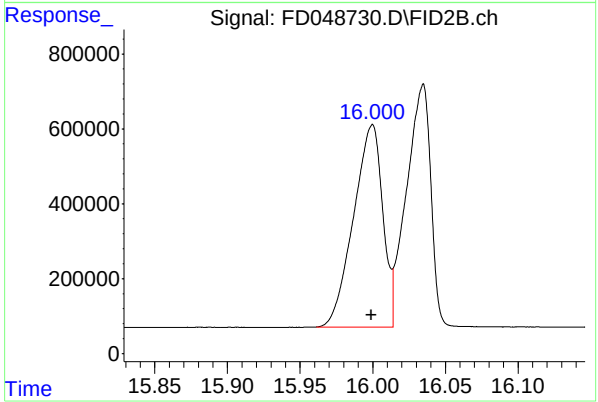
#14 Benzo[a]anthracene (C26.37)

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



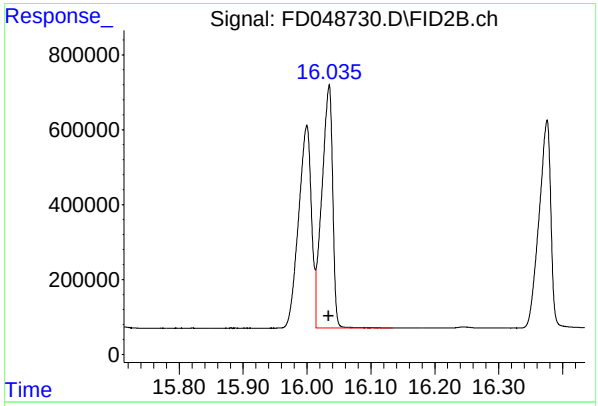
#15 Chrysene (C27.41)

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



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

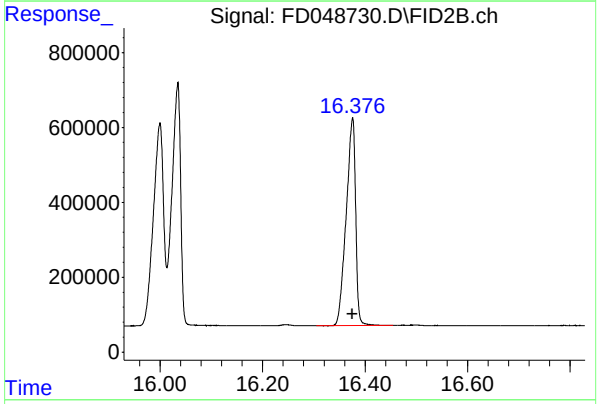
R.T.: 15.999 min
Delta R.T.: 0.000 min
Response: 7563737
Conc: 49.70 ug/ml



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

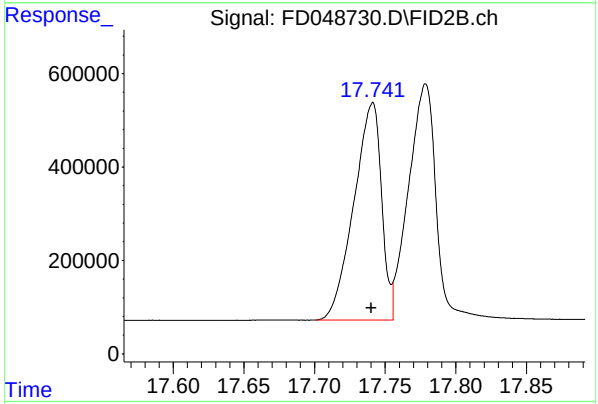
R.T.: 16.034 min
Delta R.T.: 0.000 min
Response: 7564689
Conc: 49.68 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



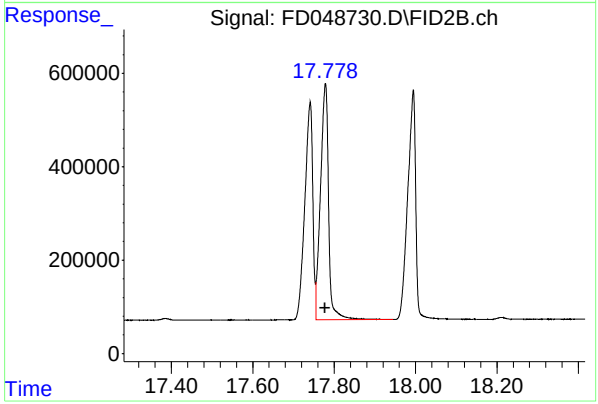
#18 Benzo[a]pyrene (C31.34)

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



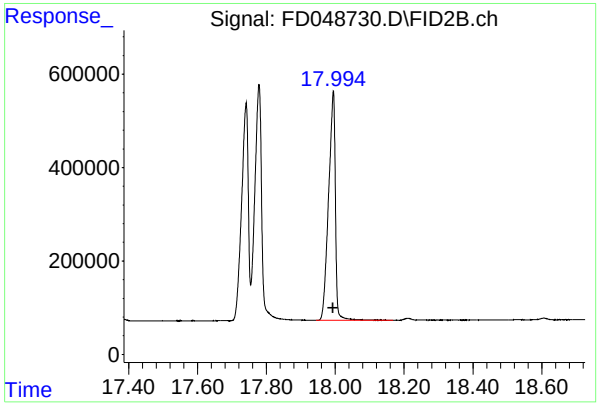
#19 Indeno[1,2,3-cd]pyrene (C35.01)

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

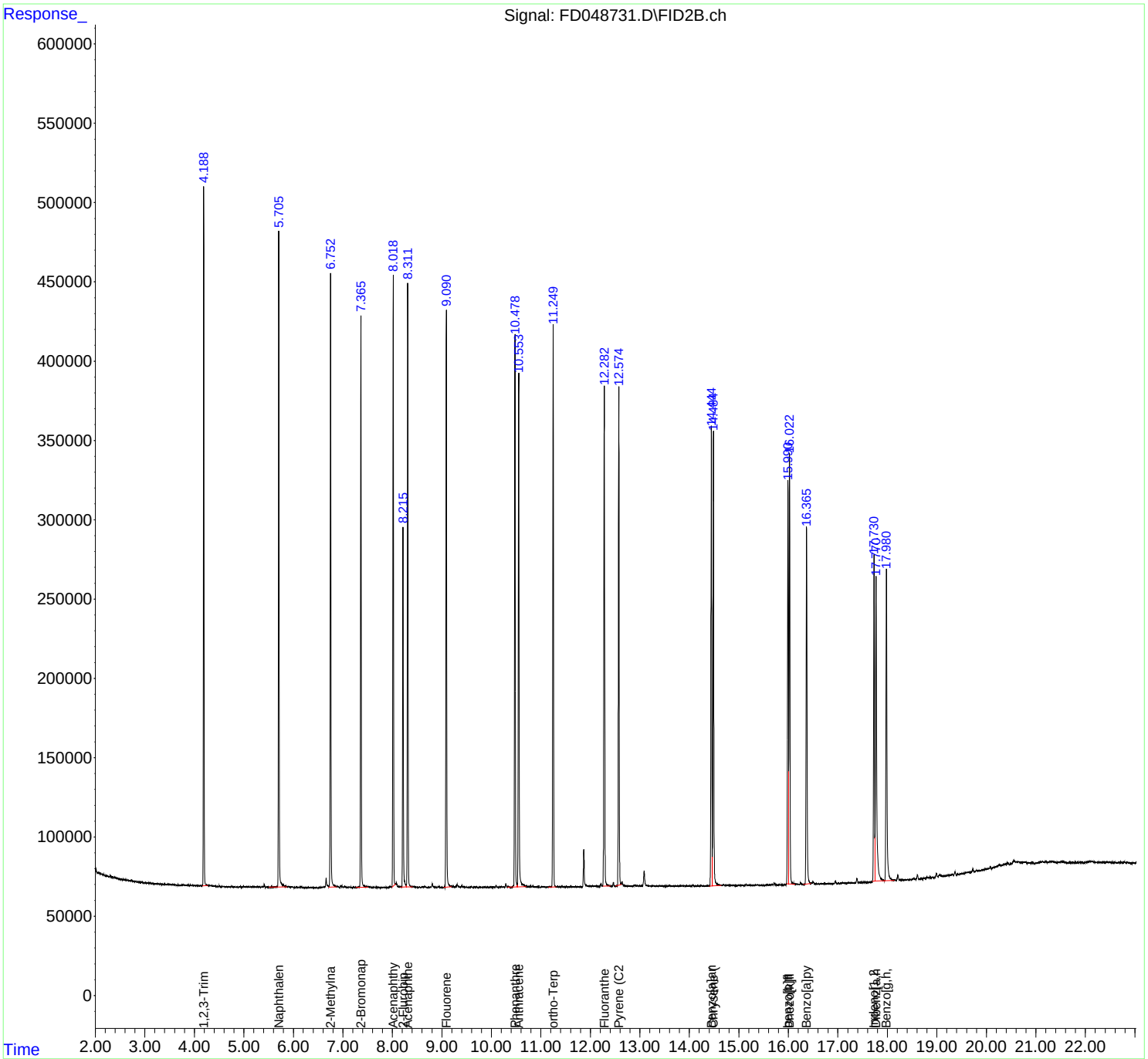
(f)=RT Delta > 1/2 Window (m)=manual int.

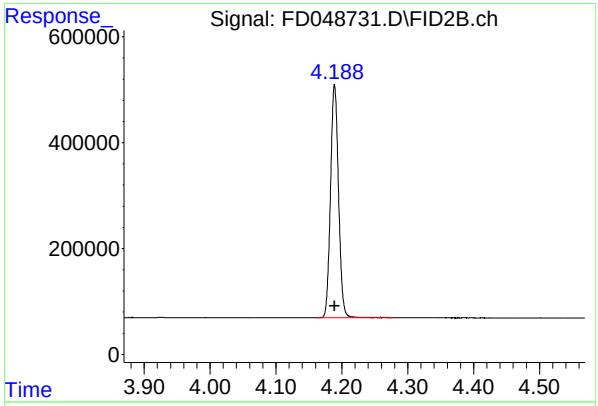
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048731.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 11:51
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 63 Sample Multiplier: 1

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

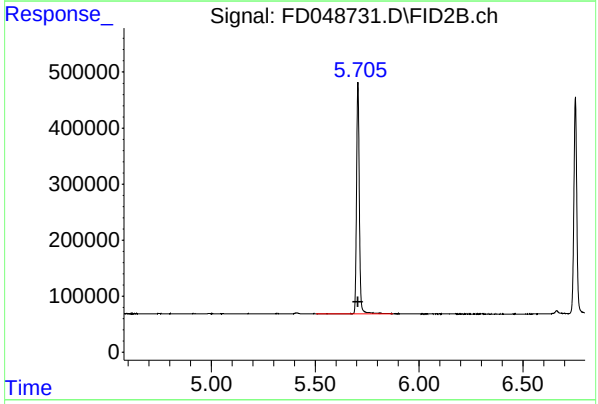




#1 1,2,3-Trimethylbenzene (C10.1)

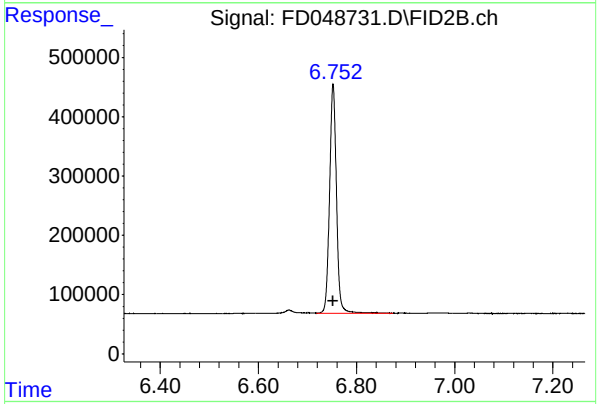
R.T.: 4.189 min
Delta R.T.: 0.000 min
Response: 3725913
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



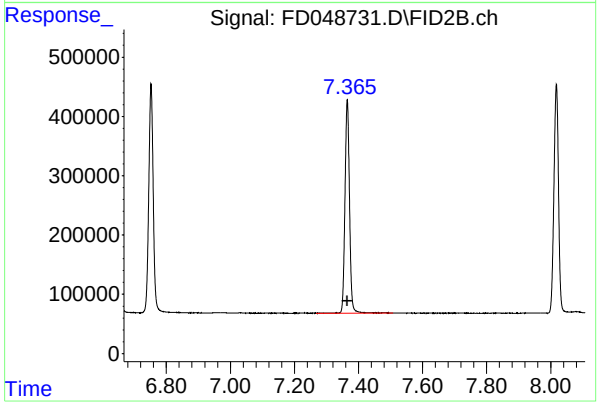
#2 Naphthalene (C11.7)

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



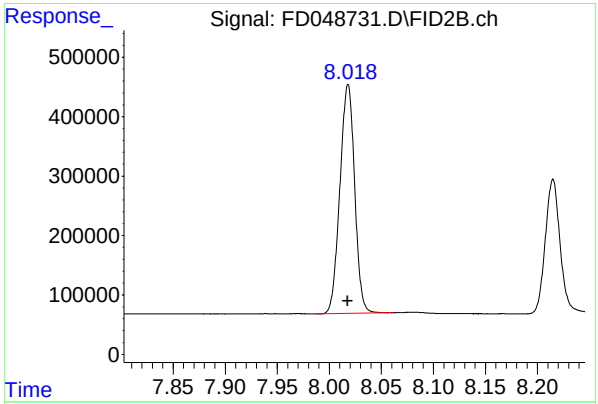
#3 2-Methylnaphthalene (C12.89)

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



#4 2-Bromonaphthalene (SURR)

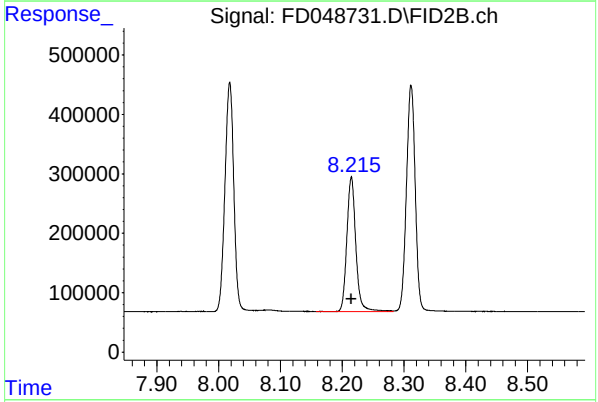
R.T.: 7.365 min
Delta R.T.: 0.000 min
Response: 3482492
Conc: 20.00 ug/ml



#5 Acenaphthylene (C15.06)

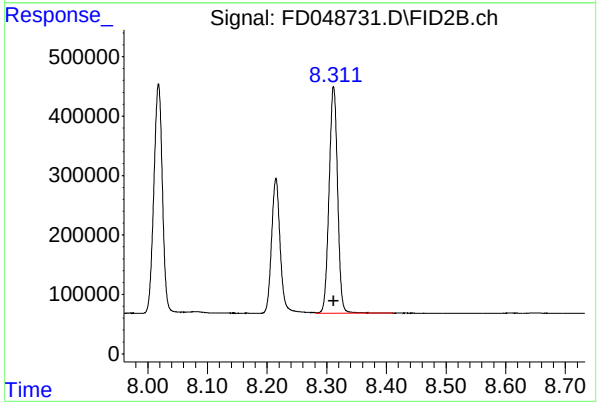
R.T.: 8.018 min
Delta R.T.: 0.000 min
Response: 3802878
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



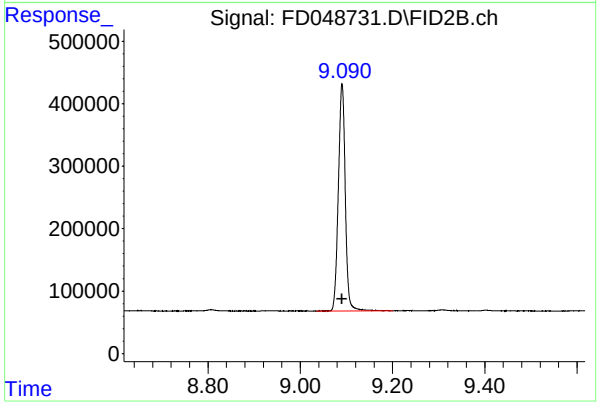
#6 2-Flurobiphenyl (SURR)

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



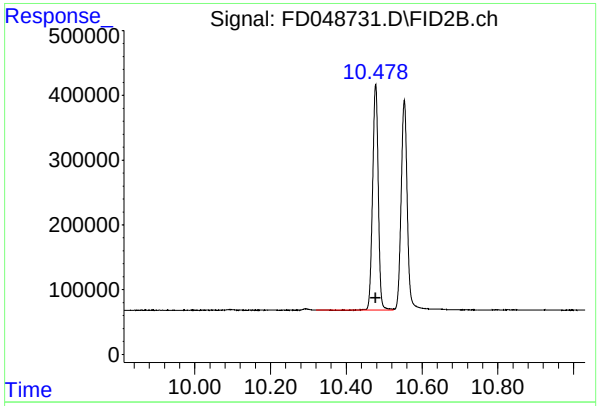
#7 Acenaphthene (C15.5)

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



#8 Flouorene (C16.55)

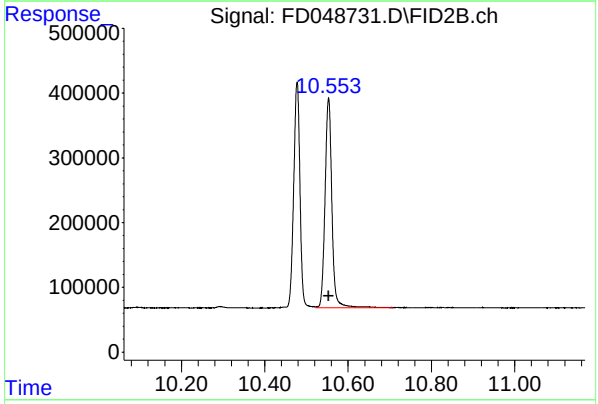
R.T.: 9.091 min
Delta R.T.: 0.000 min
Response: 3788895
Conc: 20.00 ug/ml



#9 Phenanthrene (C19.36)

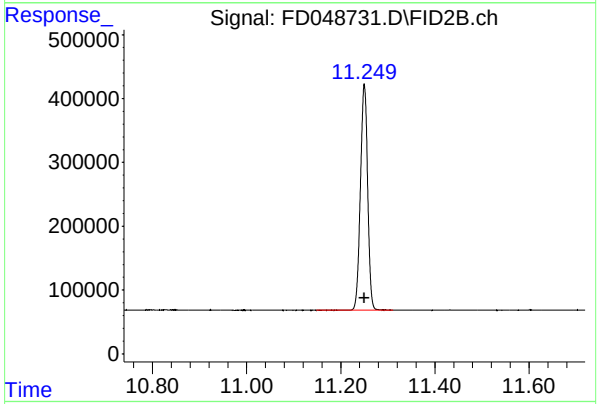
R.T.: 10.478 min
Delta R.T.: 0.000 min
Response: 3619123
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



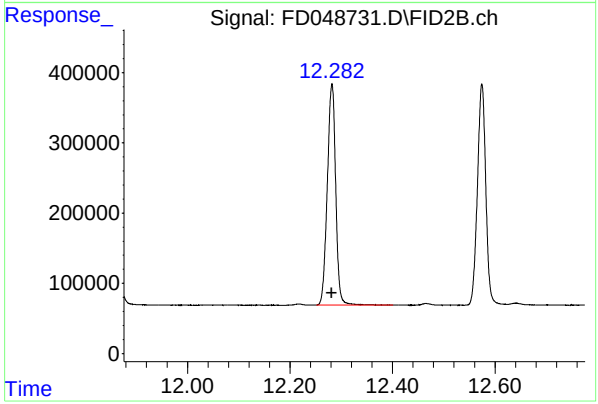
#10 Anthracene (C19.43)

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



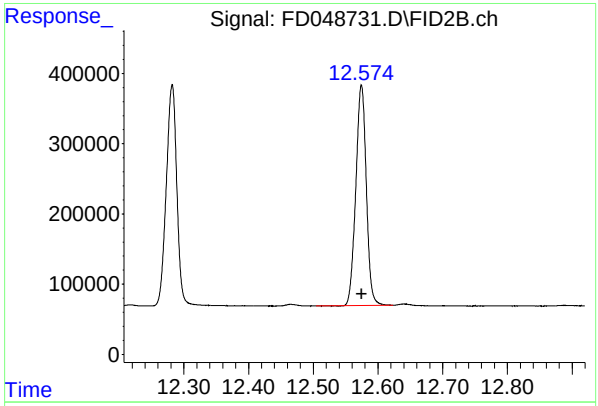
#11 ortho-Terphenyl (SURR)

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



#12 Fluoranthene (C21.85)

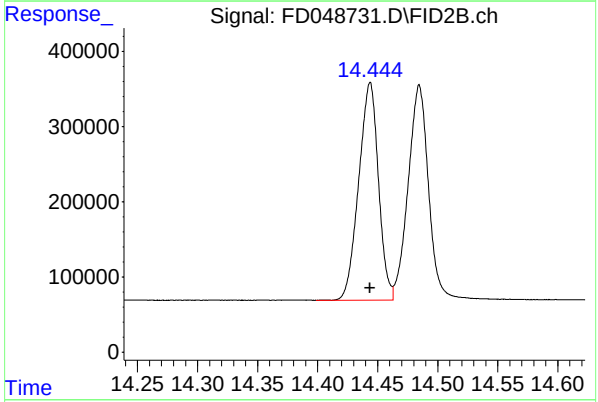
R.T.: 12.282 min
Delta R.T.: 0.000 min
Response: 3589859
Conc: 20.00 ug/ml



#13 Pyrene (C20.8)

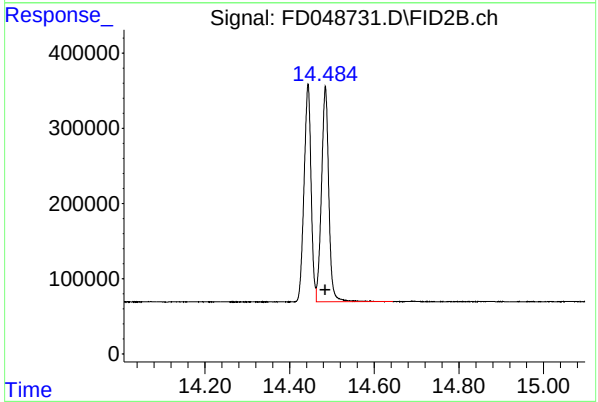
R.T.: 12.574 min
Delta R.T.: 0.000 min
Response: 3530762
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



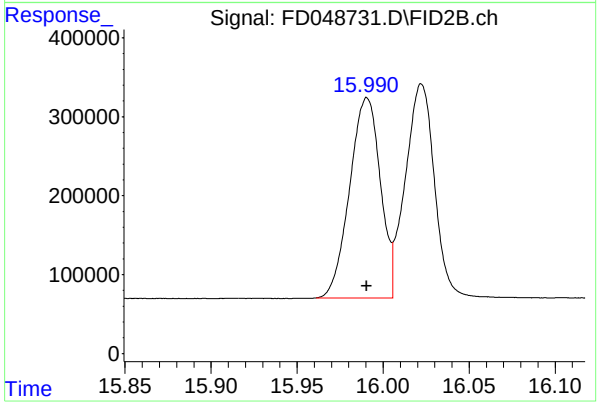
#14 Benzo[a]anthracene (C26.37)

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



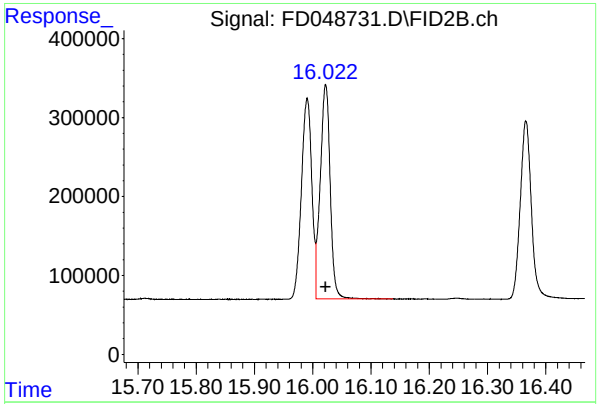
#15 Chrysene (C27.41)

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



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

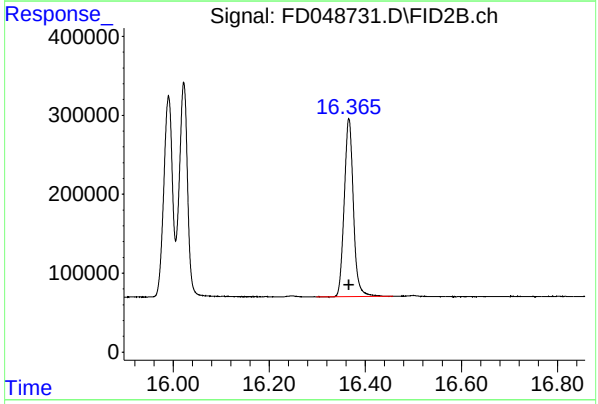
R.T.: 15.990 min
Delta R.T.: 0.000 min
Response: 3155598
Conc: 20.00 ug/ml



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

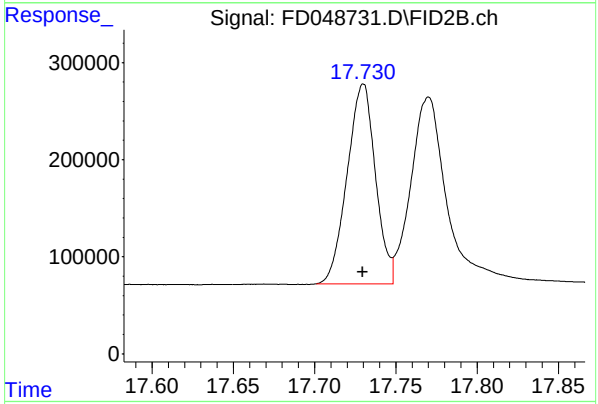
R.T.: 16.022 min
Delta R.T.: 0.000 mi
Response: 3220964
Conc: 20.00 ug/m

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



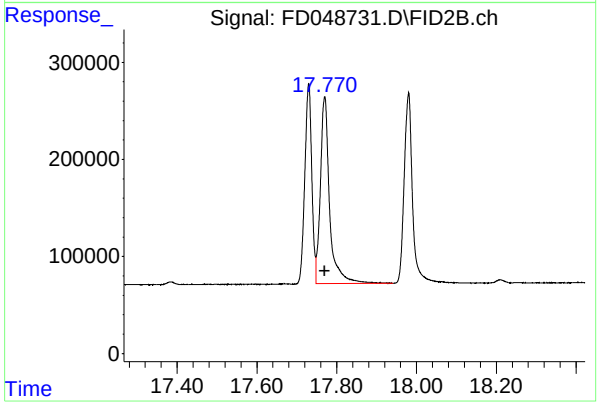
#18 Benzo[a]pyrene (C31.34)

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



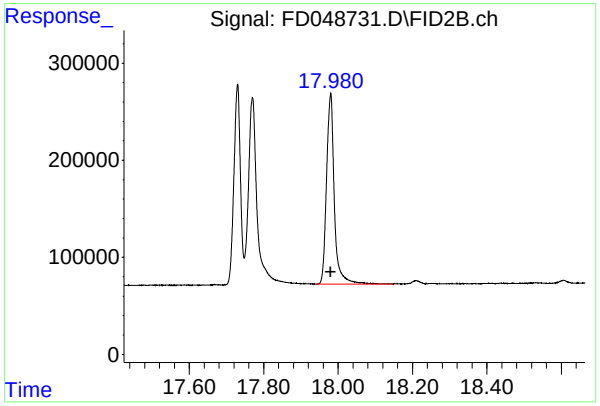
#19 Indeno[1,2,3-cd]pyrene (C35.01)

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

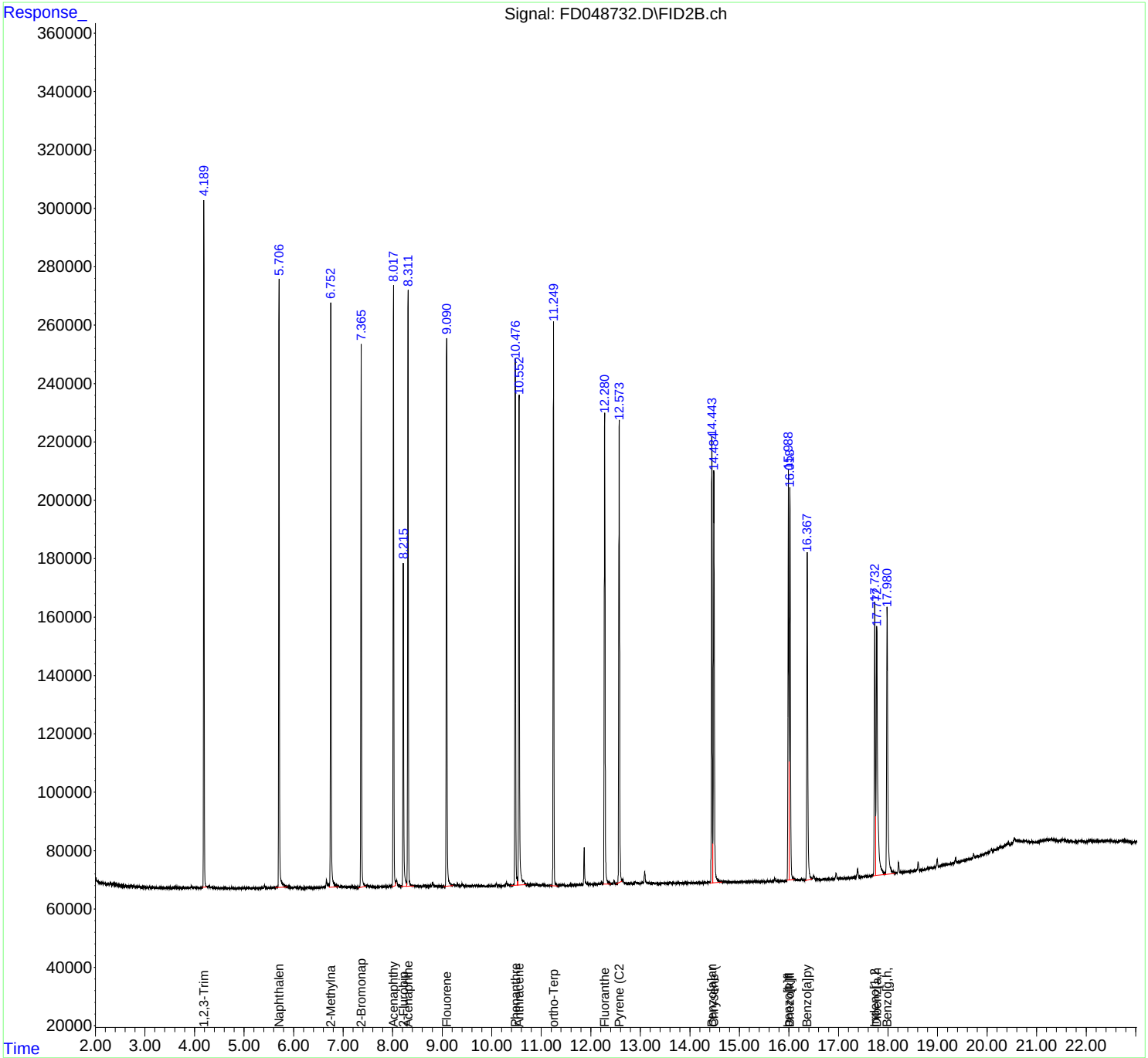
Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

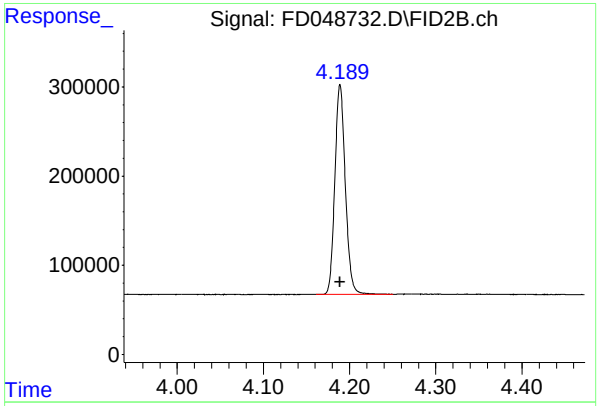
Manual Integrations APPROVED

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





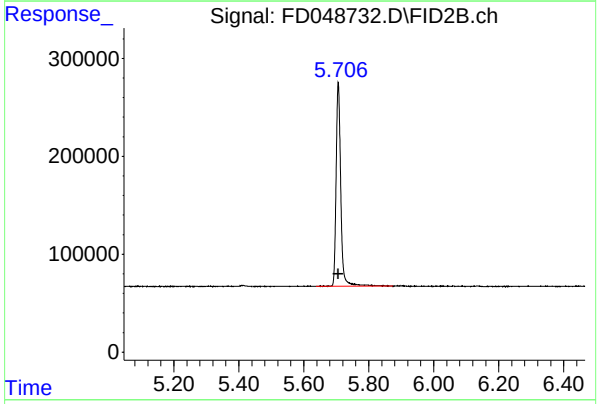
#1 1,2,3-Trimethylbenzene (C10.1)

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

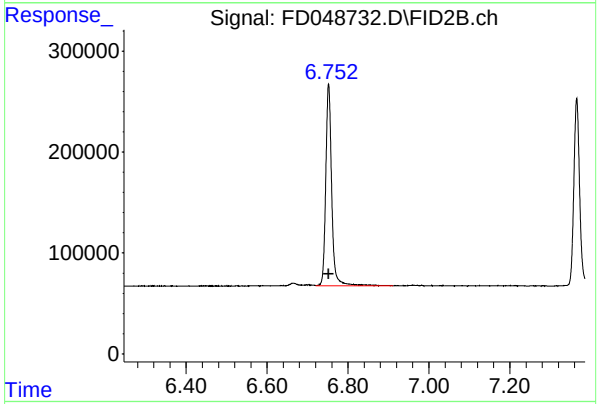
Manual Integrations
APPROVED

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



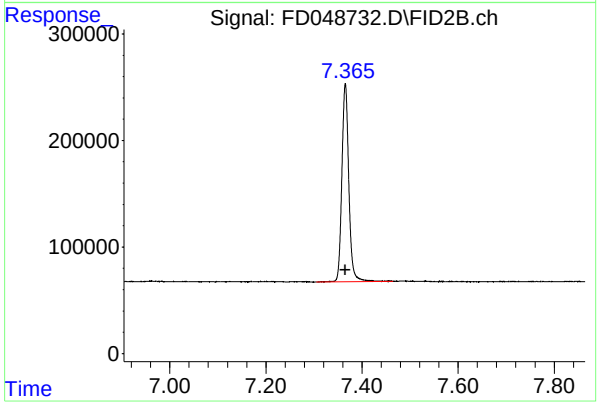
#2 Naphthalene (C11.7)

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



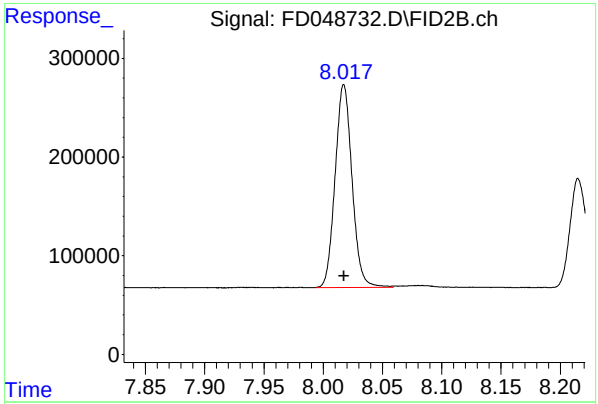
#3 2-Methylnaphthalene (C12.89)

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



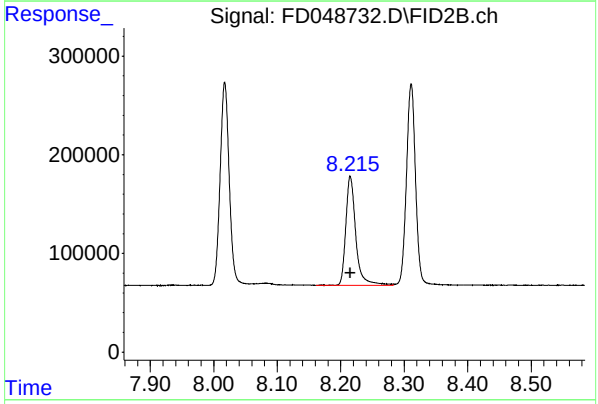
#5 Acenaphthylene (C15.06)

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

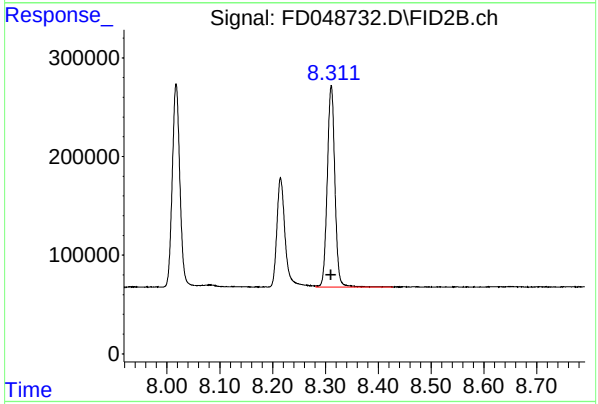
Manual Integrations
APPROVED

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



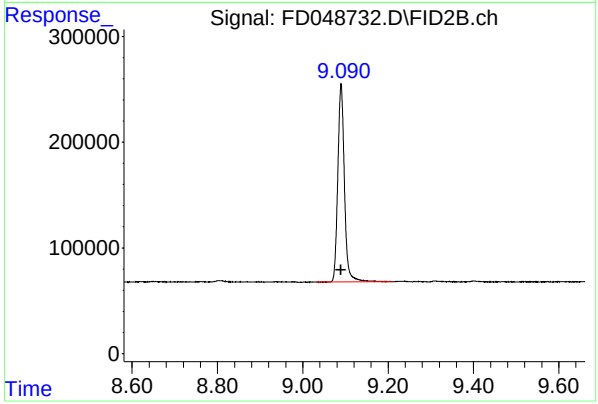
#6 2-Flurobiphenyl (SURR)

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



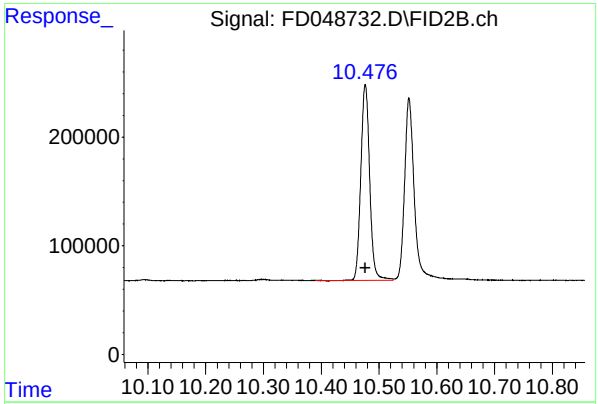
#7 Acenaphthene (C15.5)

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



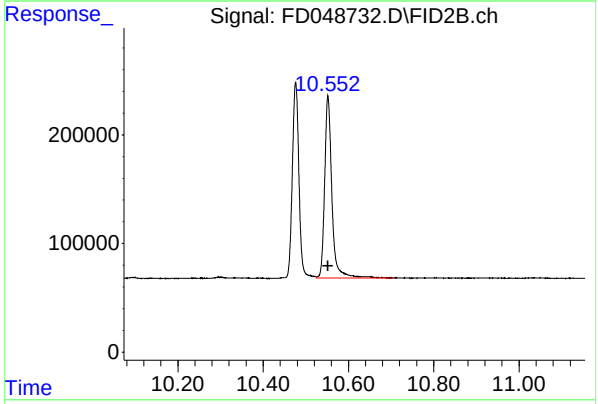
#9 Phenanthrene (C19.36)

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

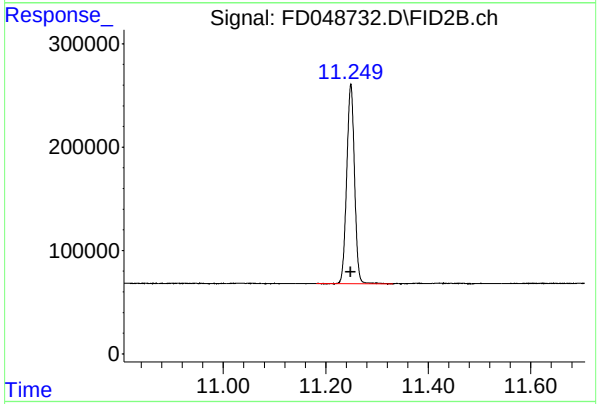
Manual Integrations APPROVED

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



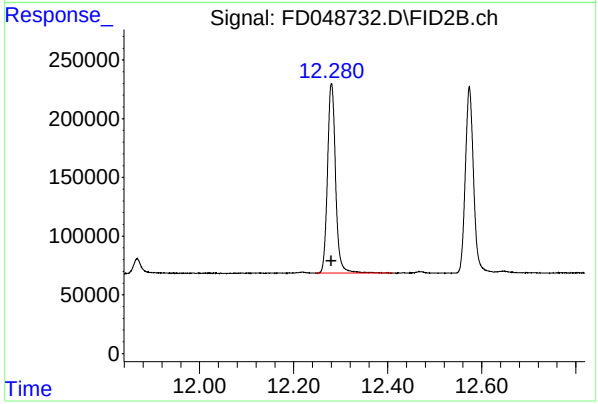
#10 Anthracene (C19.43)

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



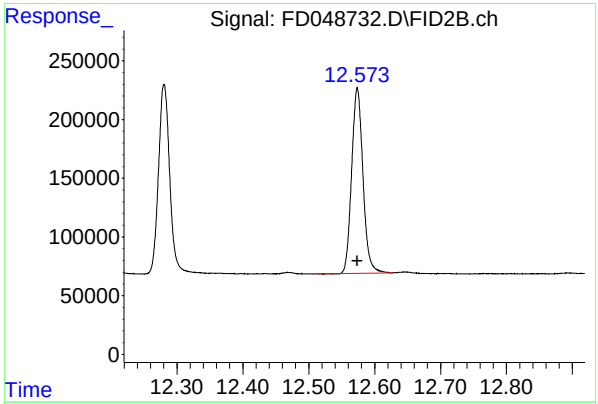
#11 ortho-Terphenyl (SURR)

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



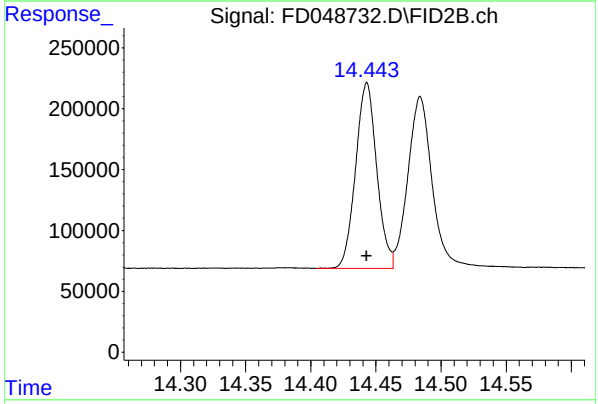
#13 Pyrene (C20.8)

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

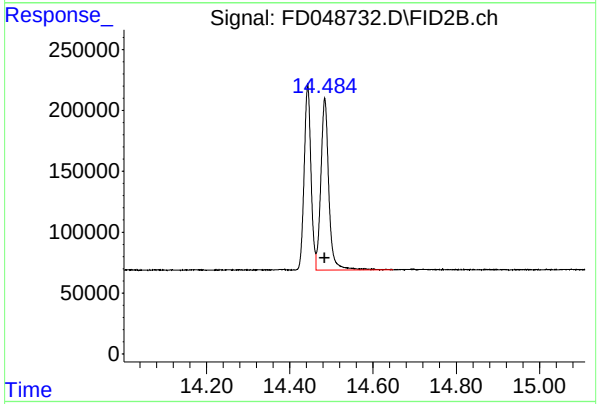
Manual Integrations
APPROVED

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



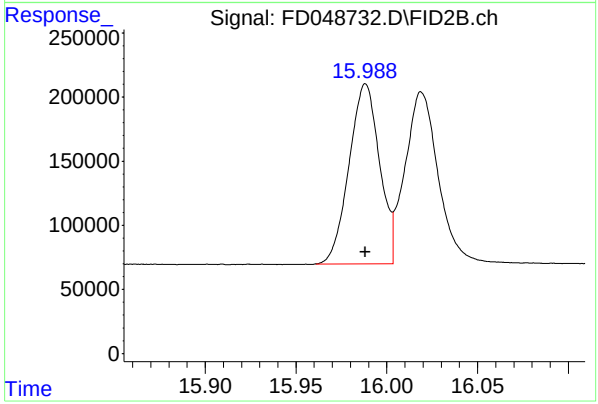
#14 Benzo[a]anthracene (C26.37)

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



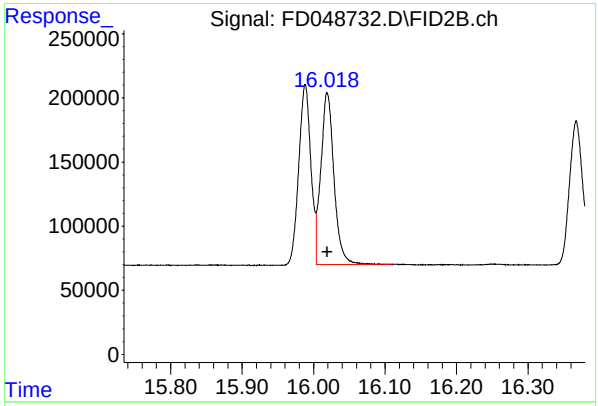
#15 Chrysene (C27.41)

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



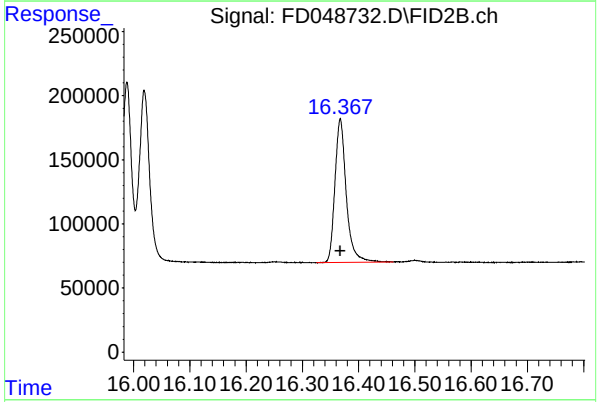
#17 Bnezo[k]fluoranthene (C30.14)

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

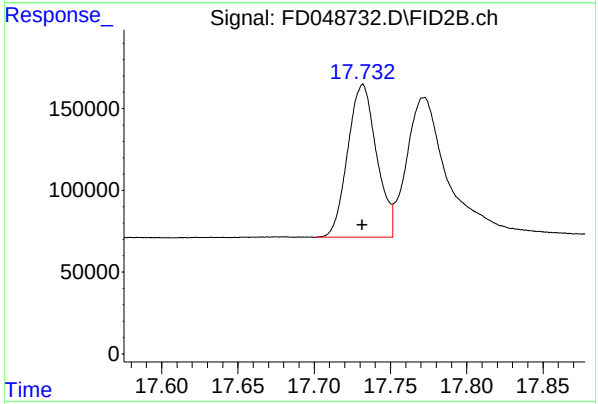
Manual Integrations APPROVED

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



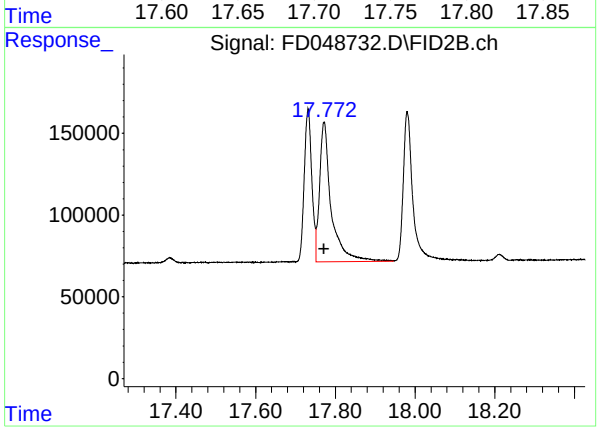
#18 Benzo[a]pyrene (C31.34)

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



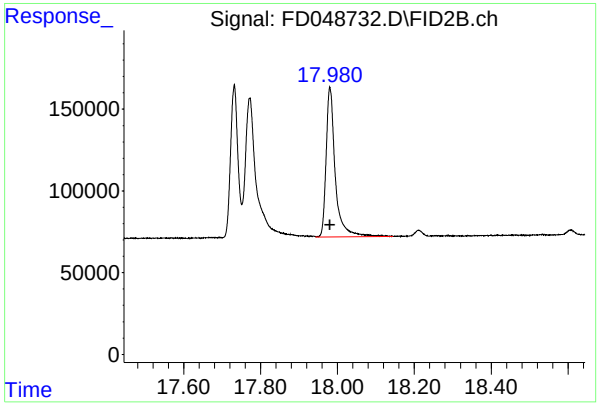
#19 Indeno[1,2,3-cd]pyrene (C35.01)

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

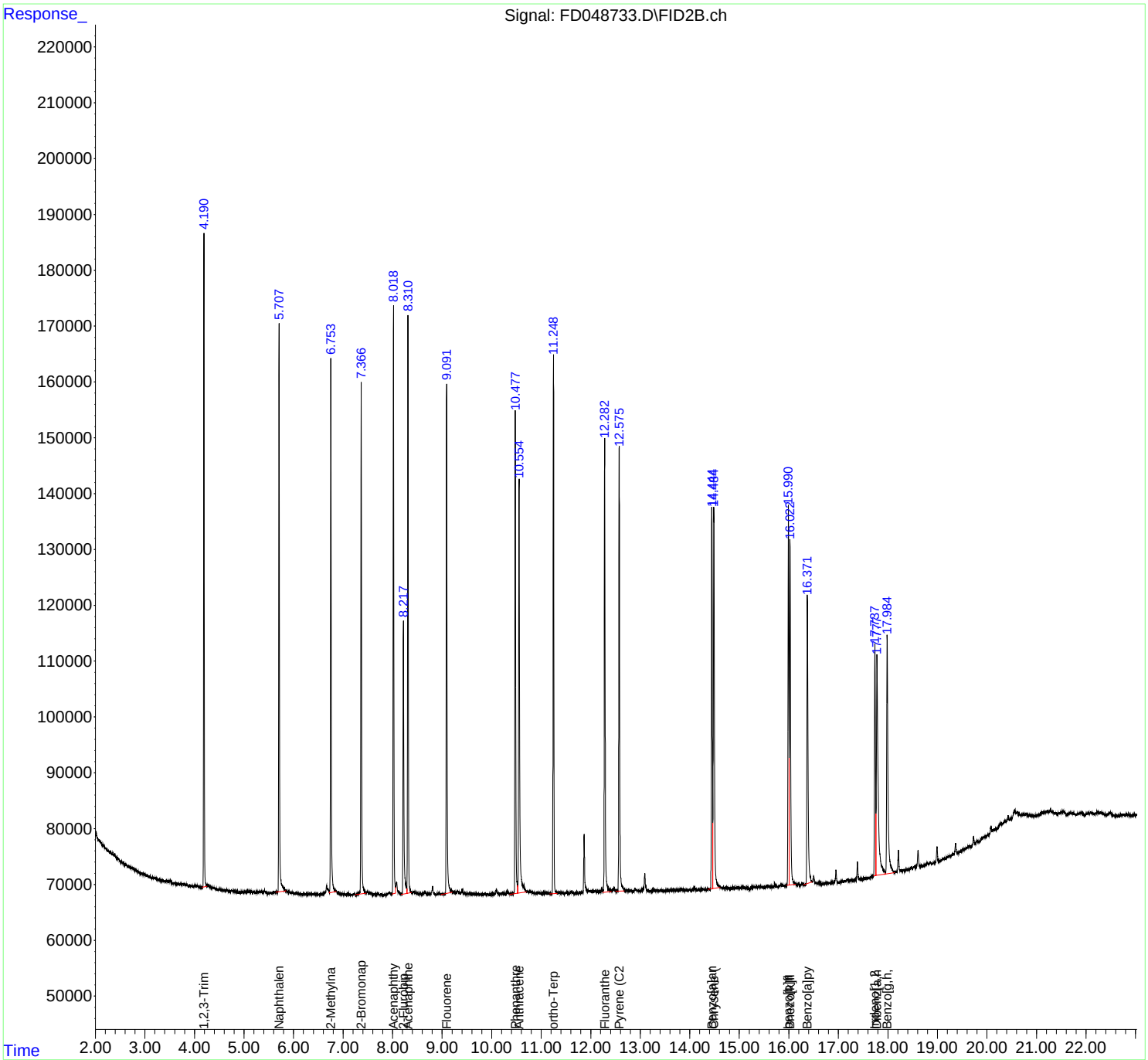
Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

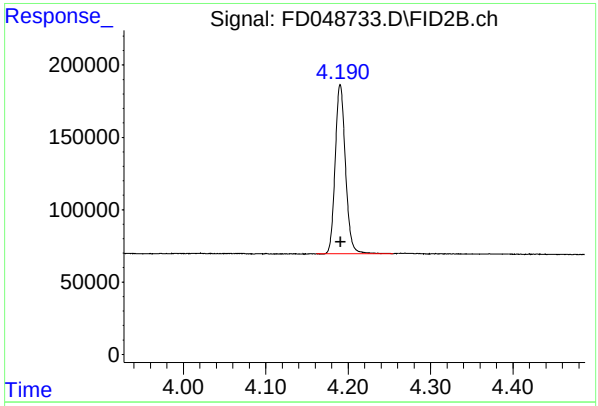
Manual Integrations APPROVED

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





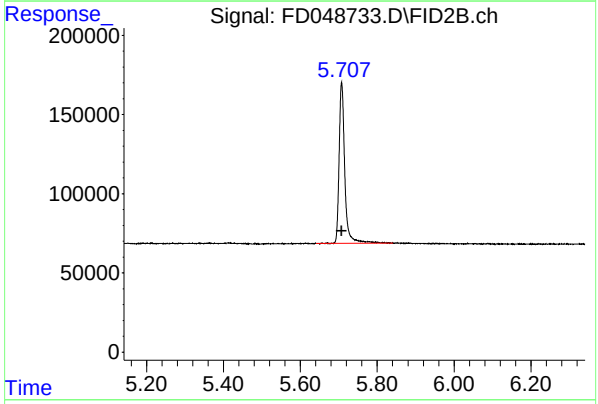
#1 1,2,3-Trimethylbenzene (C10.1)

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

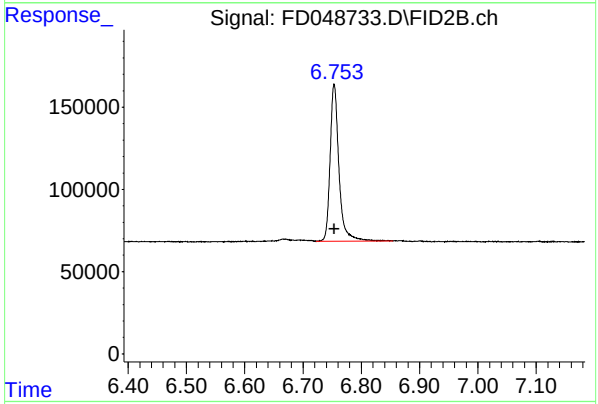
Manual Integrations APPROVED

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



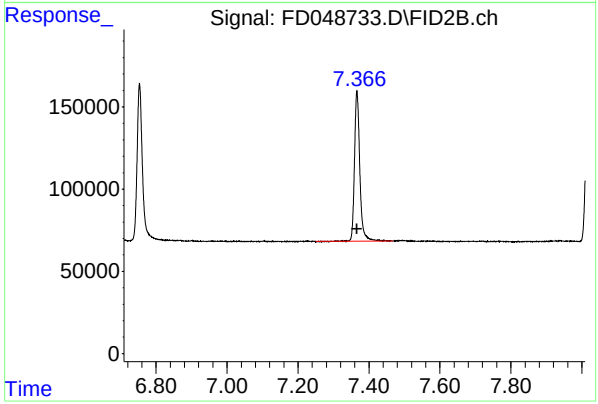
#2 Naphthalene (C11.7)

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



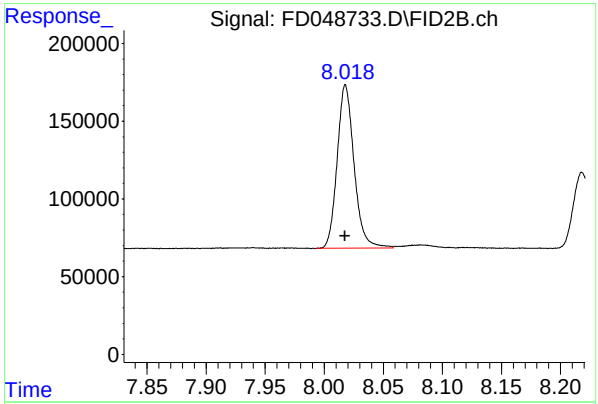
#3 2-Methylnaphthalene (C12.89)

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



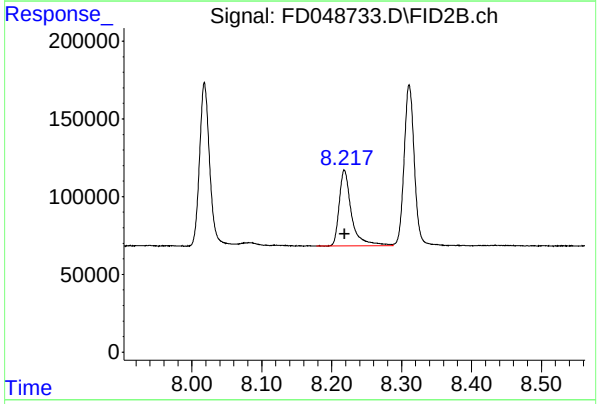
#5 Acenaphthylene (C15.06)

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

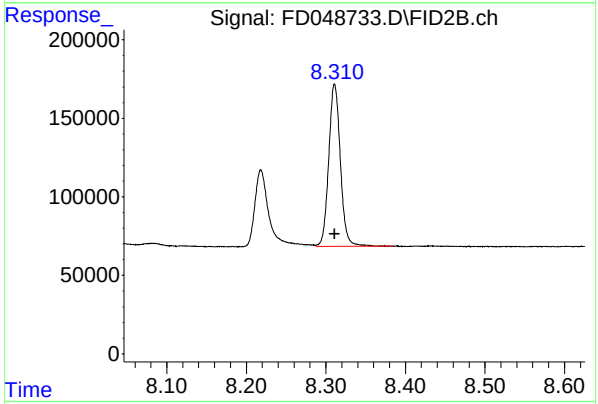
Manual Integrations
APPROVED

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



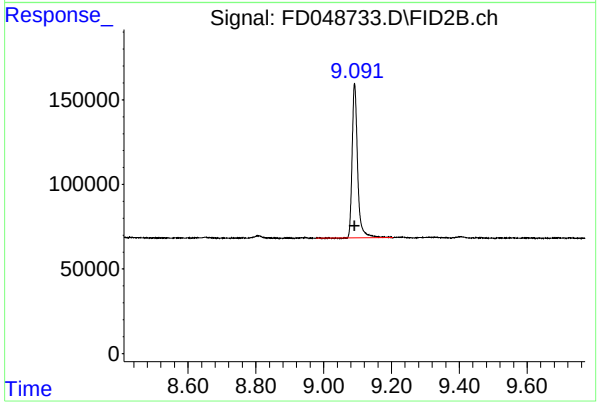
#6 2-Flurobiphenyl (SURR)

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



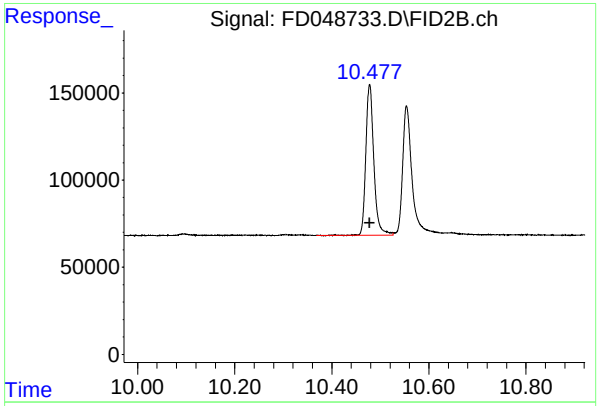
#7 Acenaphthene (C15.5)

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



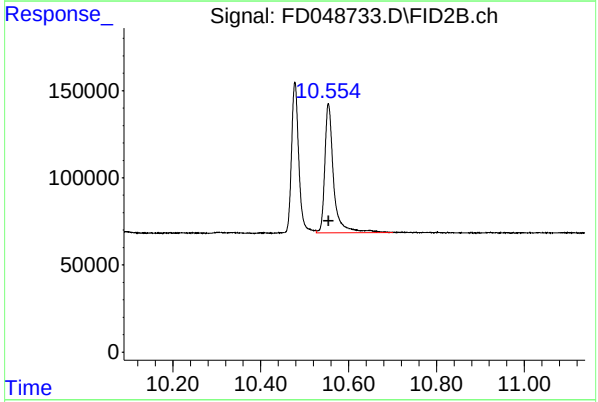
#9 Phenanthrene (C19.36)

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

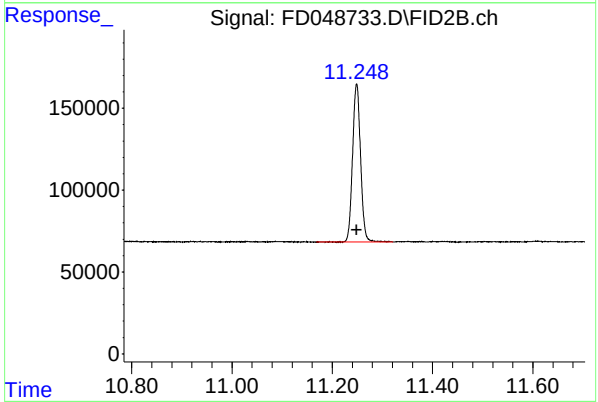
Manual Integrations
APPROVED

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



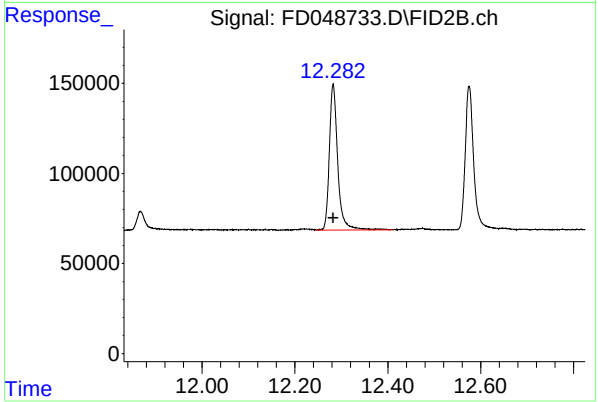
#10 Anthracene (C19.43)

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



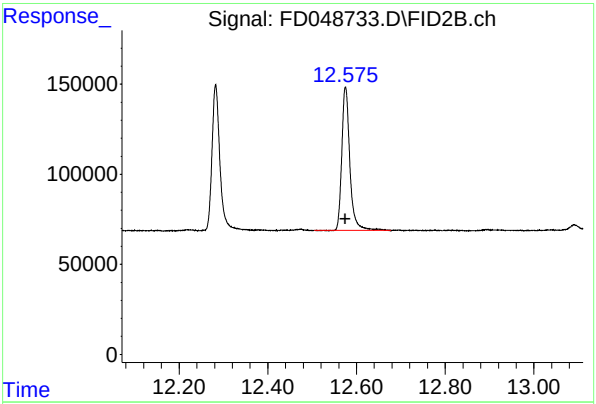
#11 ortho-Terphenyl (SURR)

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



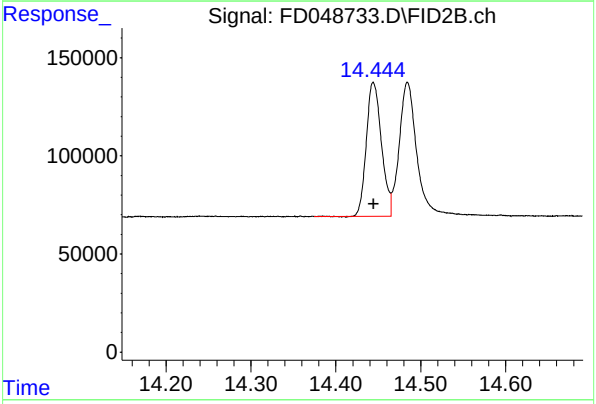
#13 Pyrene (C20.8)

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

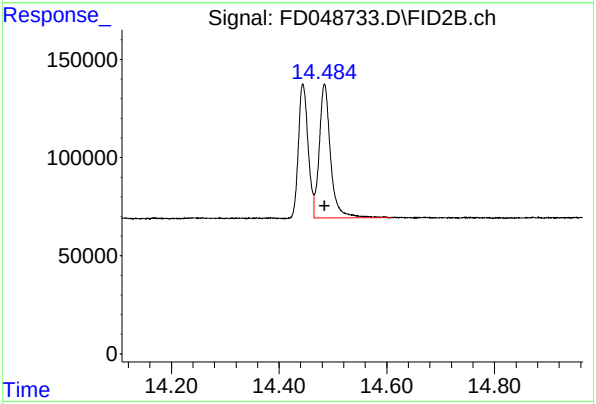
Manual Integrations
APPROVED

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



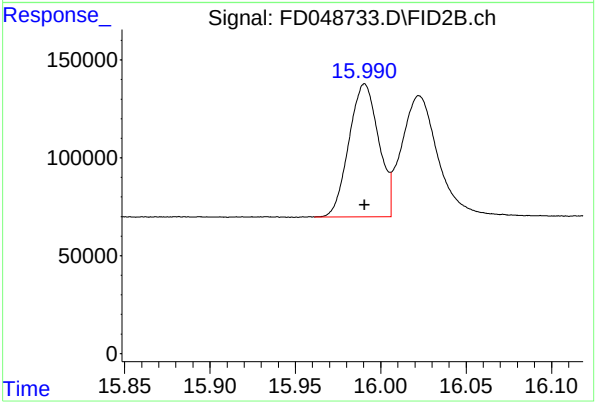
#14 Benzo[a]anthracene (C26.37)

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



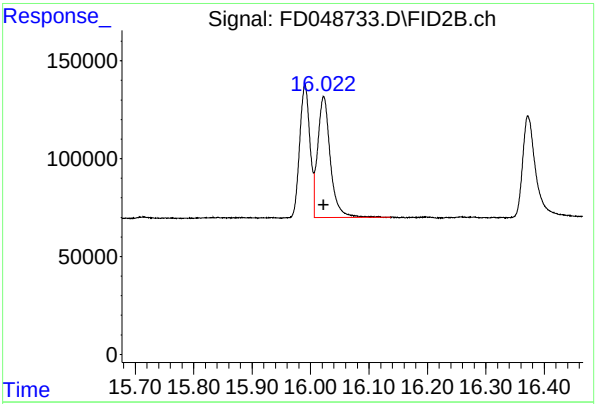
#15 Chrysene (C27.41)

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



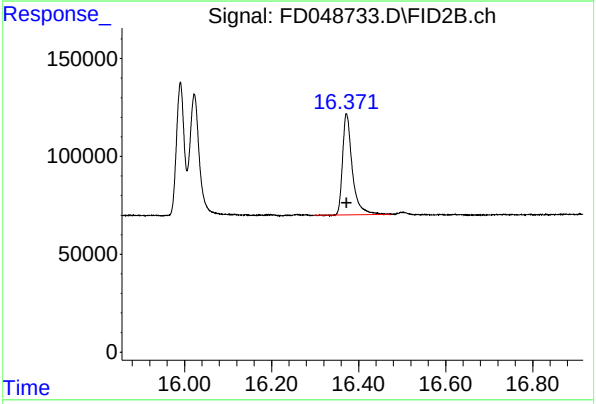
#17 Bnezo[k]fluoranthene (C30.14)

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

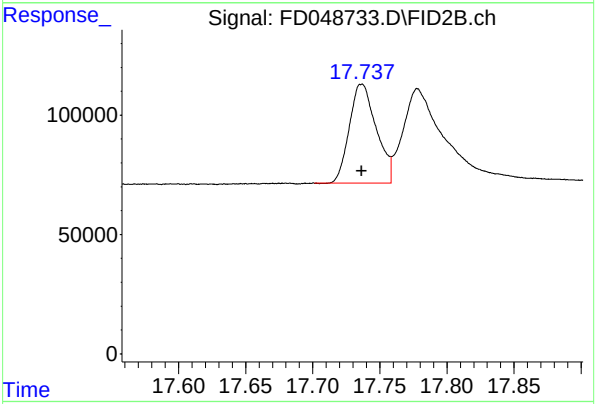
Manual Integrations APPROVED

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



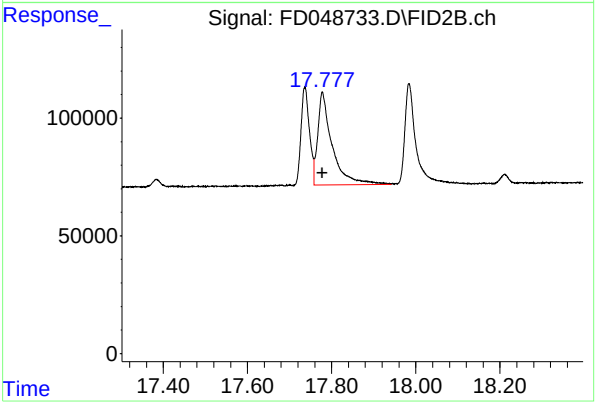
#18 Benzo[a]pyrene (C31.34)

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



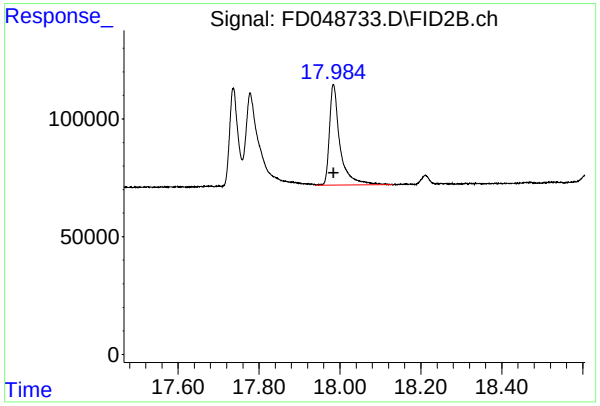
#19 Indeno[1,2,3-cd]pyrene (C35.01)

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

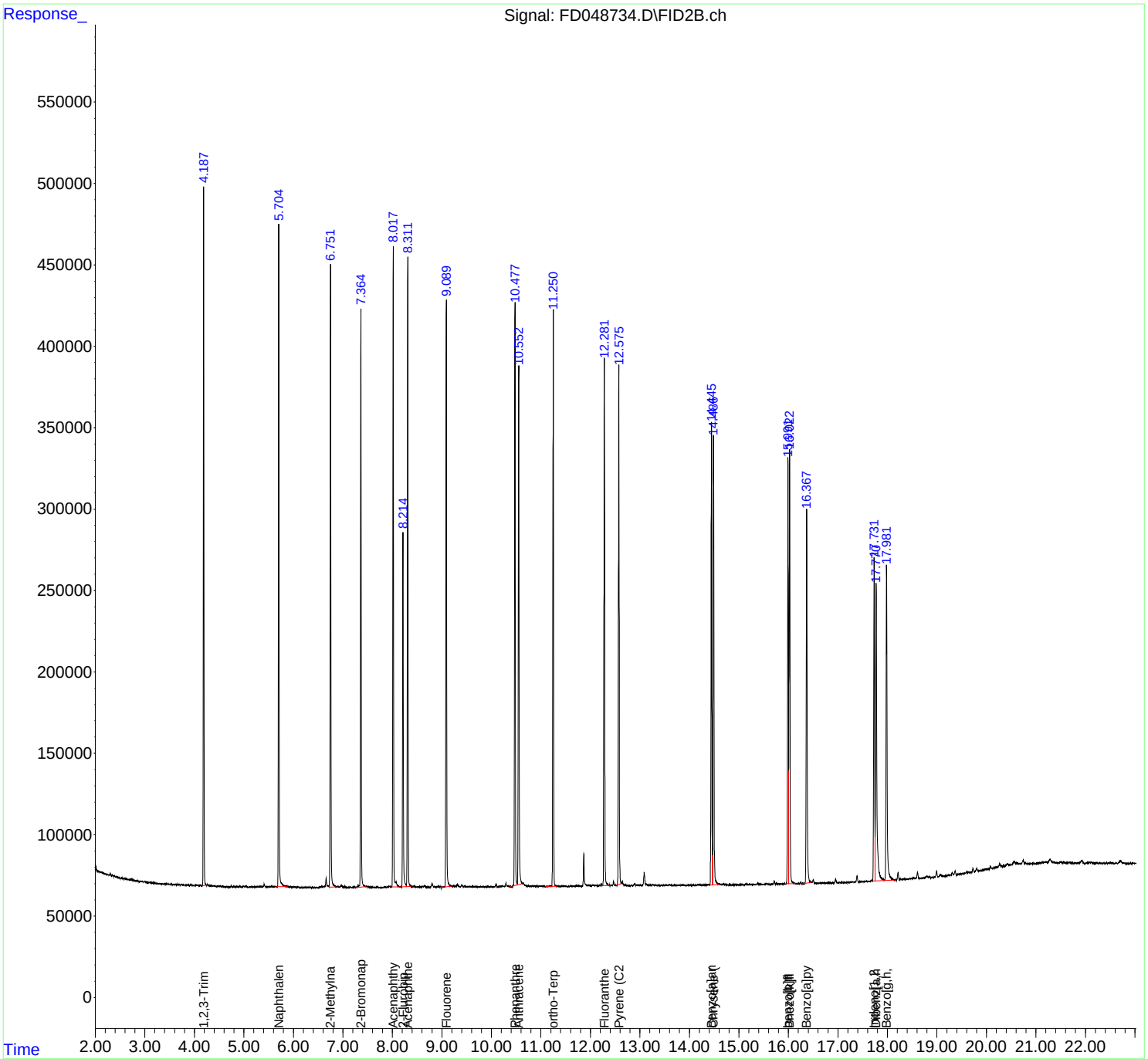
(f)=RT Delta > 1/2 Window (m)=manual int.

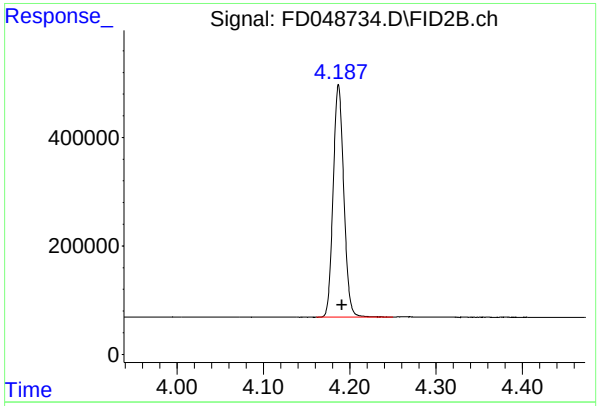
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD111424AR\
Data File : FD048734.D
Signal(s) : FID2B.ch
Acq On : 14 Nov 2024 13:49
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 66 Sample Multiplier: 1

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

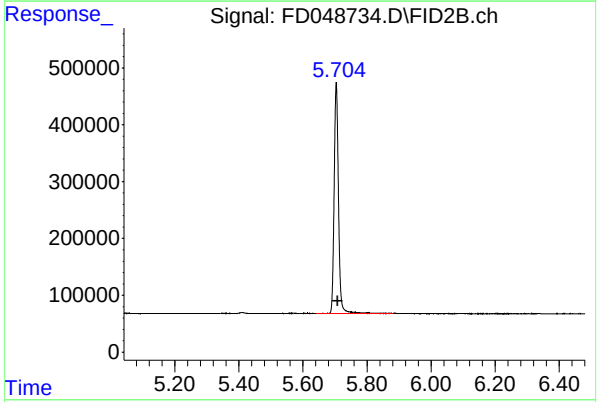




#1 1,2,3-Trimethylbenzene (C10.1)

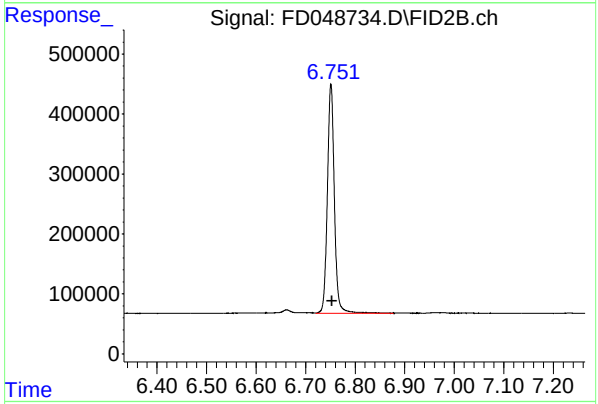
R.T.: 4.187 min
Delta R.T.: -0.004 min
Response: 3665797
Conc: 19.45 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



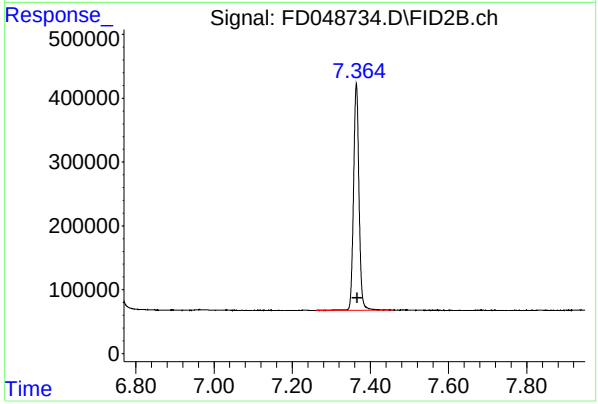
#2 Naphthalene (C11.7)

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



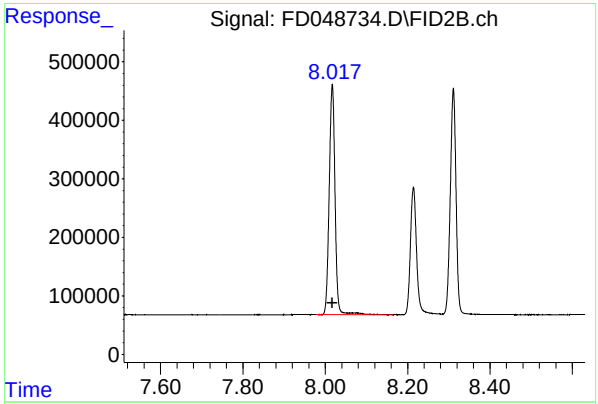
#3 2-Methylnaphthalene (C12.89)

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



#4 2-Bromonaphthalene (SURR)

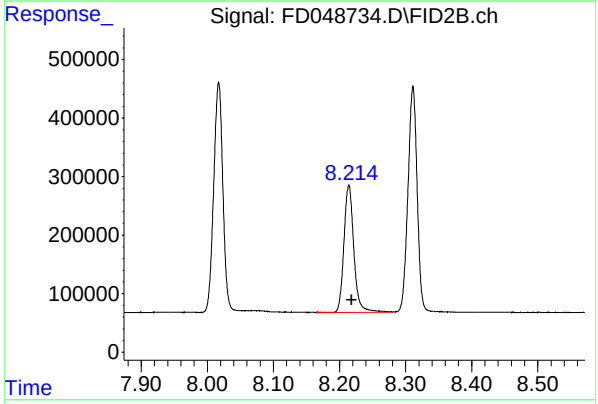
R.T.: 7.364 min
Delta R.T.: -0.002 min
Response: 3456068
Conc: 19.63 ug/ml



#5 Acenaphthylene (C15.06)

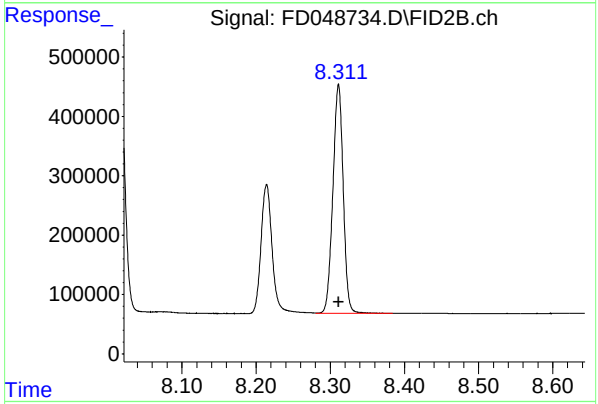
R.T.: 8.017 min
Delta R.T.: 0.000 min
Response: 3882404
Conc: 20.02 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



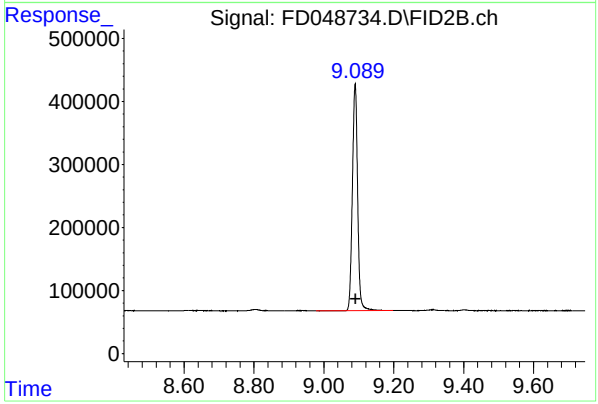
#6 2-Flurobiphenyl (SURR)

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



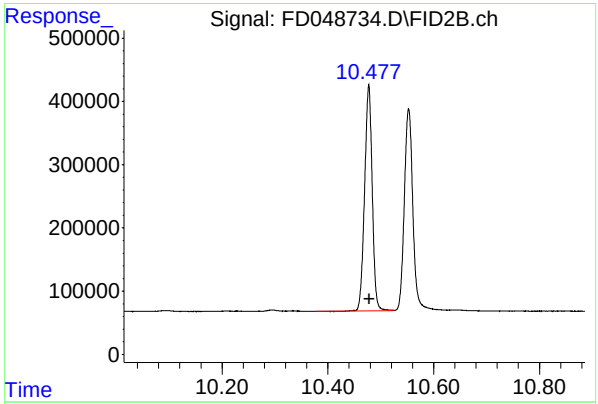
#7 Acenaphthene (C15.5)

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



#8 Flouorene (C16.55)

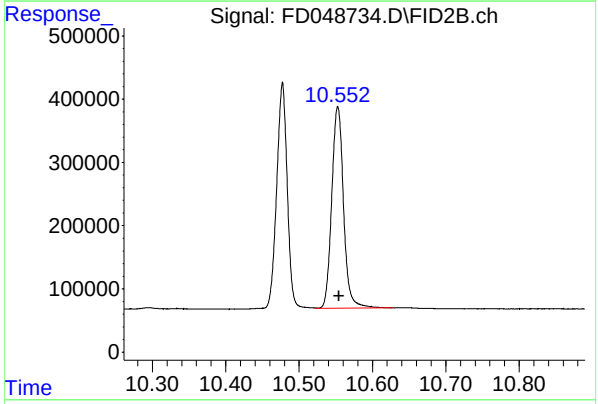
R.T.: 9.090 min
Delta R.T.: -0.002 min
Response: 3756678
Conc: 19.58 ug/ml



#9 Phenanthrene (C19.36)

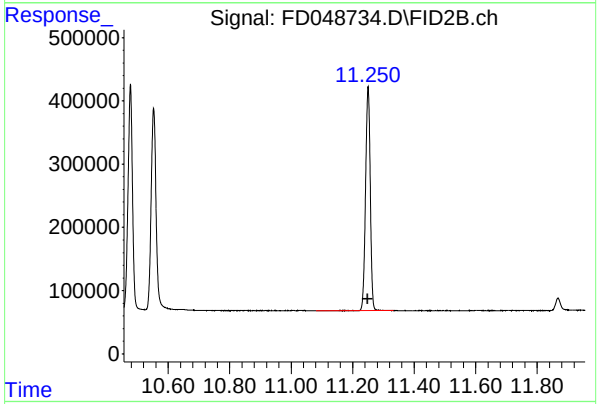
R.T.: 10.477 min
Delta R.T.: 0.000 min
Response: 3562885
Conc: 19.44 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



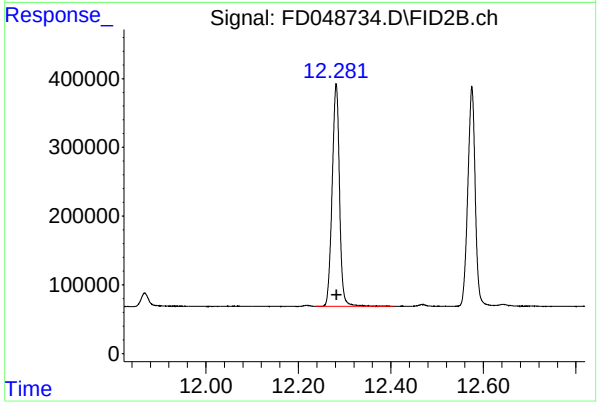
#10 Anthracene (C19.43)

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



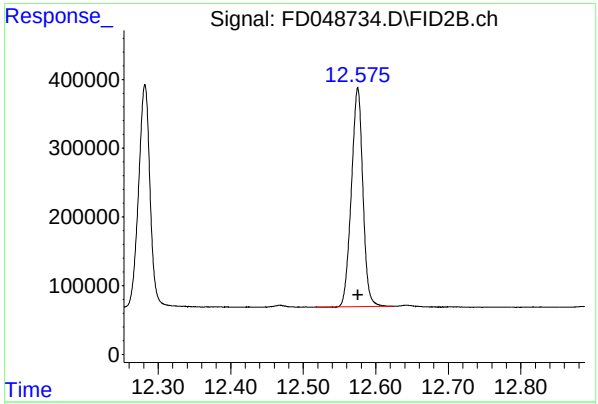
#11 ortho-Terphenyl (SURR)

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



#12 Fluoranthene (C21.85)

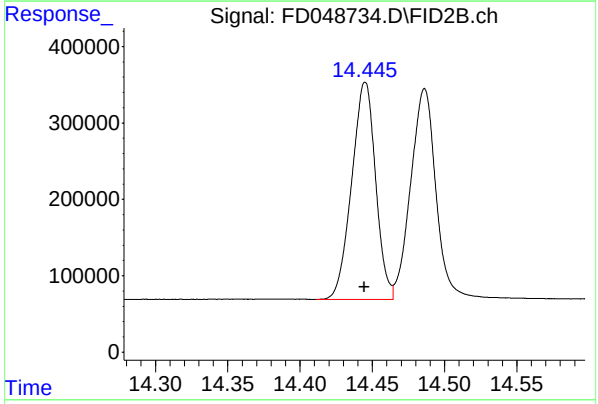
R.T.: 12.282 min
Delta R.T.: 0.000 min
Response: 3573927
Conc: 19.52 ug/ml



#13 Pyrene (C20.8)

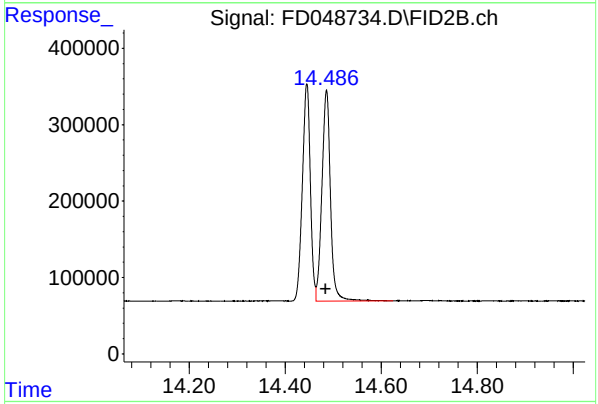
R.T.: 12.575 min
Delta R.T.: 0.000 min
Response: 3507964
Conc: 19.40 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



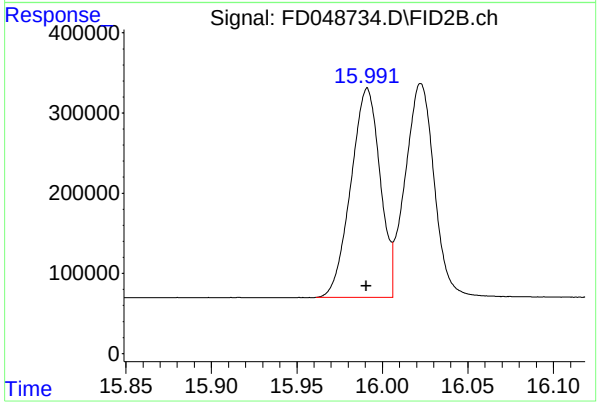
#14 Benzo[a]anthracene (C26.37)

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



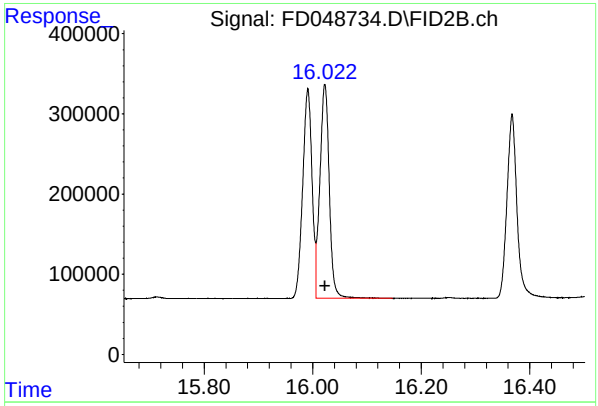
#15 Chrysene (C27.41)

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



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

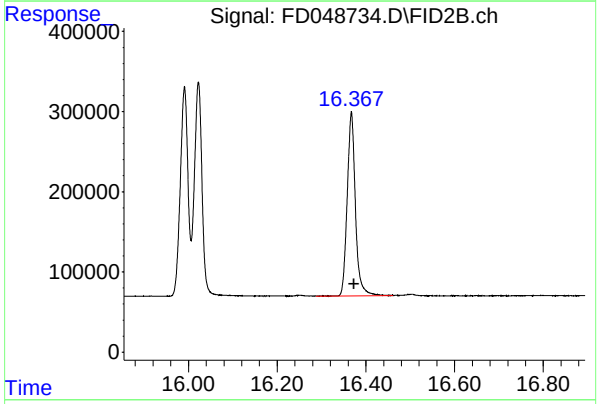
R.T.: 15.991 min
Delta R.T.: 0.000 min
Response: 3111443
Conc: 19.80 ug/ml



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

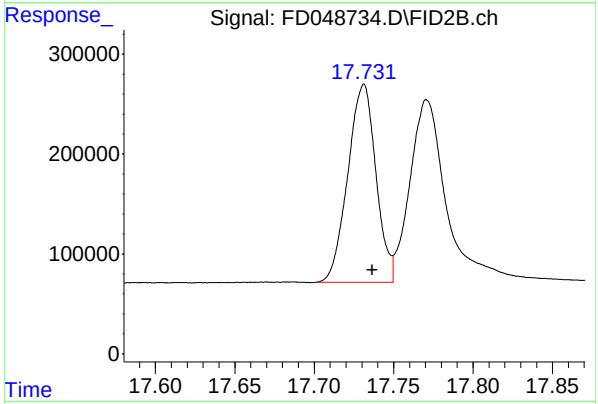
R.T.: 16.022 min
Delta R.T.: 0.000 mi
Response: 3204860
Conc: 19.64 ug/m

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



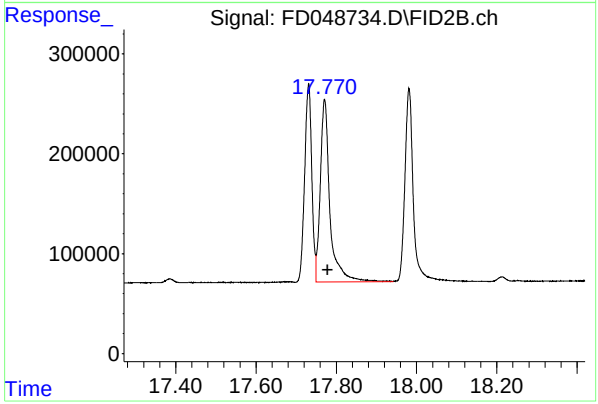
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.367 min
Delta R.T.: -0.005 min
Response: 2937931
Conc: 19.70 ug/ml



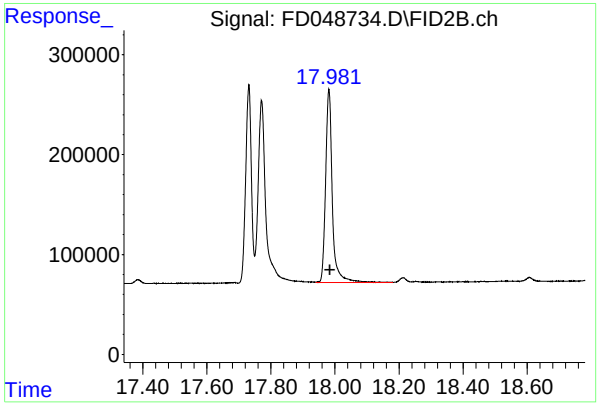
#19 Indeno[1,2,3-cd]pyrene (C35.01)

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 : FC112724AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FC067870.D**						
Aliphatic C9-C12	9816162.000	60.000	3.186	6.461	163602.700	165791.359	1.320
Aliphatic C12-C16	6888015.000	40.000	6.462	9.849	172200.375	170384.422	-1.066
Aliphatic C16-C21	10183410.000	60.000	9.850	13.205	169723.500	169621.553	-0.060
Aliphatic C21-C28	12700436.000	80.000	13.206	16.857	158755.450	157280.060	-0.938
Aliphatic C28-C40	16216453.000	120.000	16.858	21.700	135137.108	121111.336	-11.581
Aliphatic EPH	55804476.000	360.000	3.186	21.700	155012.433	150155.324	-3.235

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Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	27 Nov 2024 07:22
Client Sample ID:		Operator:	YP/AJ
Data file:	FC067870.D	Misc:	
Instrument:	FID_C	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.186	6.461	9816162.000	60.000	ug/ml
Aliphatic C12-C16	6.462	9.849	6888015.000	40.000	ug/ml
Aliphatic C16-C21	9.850	13.205	10183410.000	60.000	ug/ml
Aliphatic C21-C28	13.206	16.857	12700436.000	80.000	ug/ml
Aliphatic C28-C40	16.858	21.700	16216453.000	120.000	ug/ml
Aliphatic EPH	3.186	21.700	55804476.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067870.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 07:22
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: Nov 28 00:09:55 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)	11.500	3859318	19.906 ug/ml
Spiked Amount	50.000		Recovery =	39.81%
12) S	1-chlorooctadecane (S...	12.936	2834252	19.525 ug/ml
Spiked Amount	50.000		Recovery =	39.05%
	Target Compounds			
1) T	n-Nonane (C9)	3.286	3138996	19.244 ug/ml
2) T	n-Decane (C10)	4.349	3290574	19.843 ug/ml
3) T	A~Naphthalene (C11.7)	5.925	3548475	19.374 ug/ml
4) T	n-Dodecane (C12)	6.361	3386592	20.107 ug/ml
5) T	A~2-methylnaphthalene...	6.979	3580653	20.189 ug/ml
6) T	n-Tetradecane (C14)	8.152	3381418	20.191 ug/ml
7) T	n-Hexadecane (C16)	9.749	3506597	20.235 ug/ml
8) T	n-Octadecane (C18)	11.188	3547195	20.161 ug/ml
10) T	n-Eicosane (C20)	12.494	3360041	19.954 ug/ml
11) T	n-Heneicosane (C21)	13.105	3276174	19.911 ug/ml
13) T	n-Docosane (C22)	13.690	3234903	19.864 ug/ml
14) T	n-Tetracosane (C24)	14.791	3190405	19.893 ug/ml
15) T	n-Hexacosane (C26)	15.809	3110801	20.088 ug/ml
16) T	n-Octacosane (C28)	16.757	3164327	20.953 ug/ml
17) T	n-Tricontane (C30)	17.644	3418991	22.331 ug/ml
18) T	n-Dotriacontane (C32)	18.475	3385758	22.925 ug/ml
19) T	n-Tetratriacontane (C34)	19.255	2874689	22.791 ug/ml
20) T	n-Hexatriacontane (C36)	19.993	2340196	22.376 ug/ml
21) T	n-Octatriacontane (C38)	20.716	2039797	20.882 ug/ml
22) T	n-Tetracontane (C40)	21.600	2157022	22.131 ug/ml

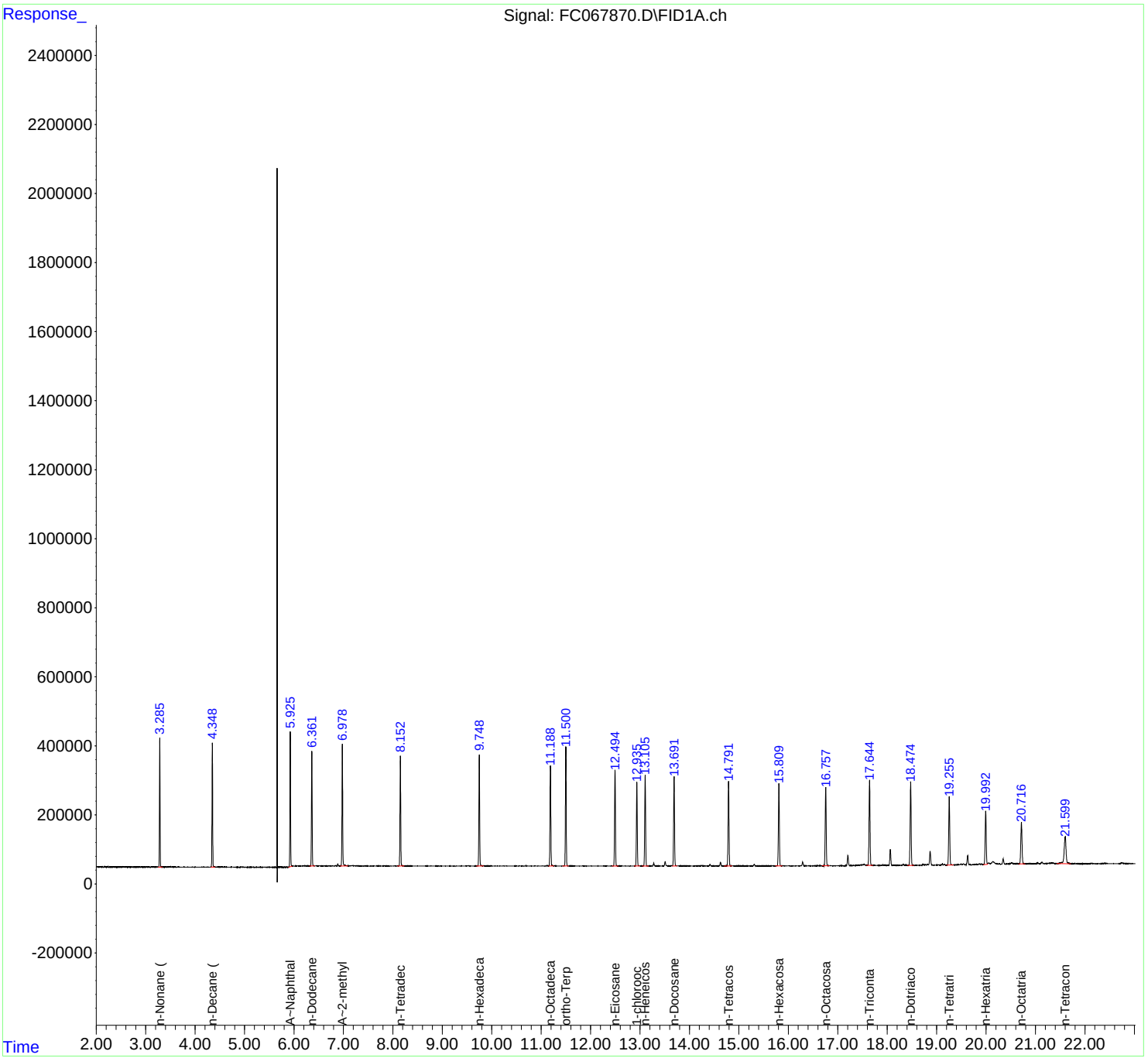
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067870.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 07:22
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: Nov 28 00:09:55 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\FC112724AL\
Data File : FC067870.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 07:22
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	3.286	3.252	3.342	BB	374811	3138996	81.34%	4.508%
2	4.349	4.315	4.405	BB	359410	3290574	85.26%	4.726%
3	5.925	5.885	5.964	BV	392417	3548475	91.95%	5.096%
4	6.361	6.309	6.422	BB	332933	3386592	87.75%	4.864%
5	6.979	6.932	7.094	BB	352751	3580653	92.78%	5.143%
6	8.152	8.092	8.232	BB	318479	3381418	87.62%	4.856%
7	9.749	9.692	9.839	BB	321308	3506597	90.86%	5.036%
8	11.188	11.149	11.259	BV	290531	3547195	91.91%	5.095%
9	11.500	11.430	11.554	BB	347898	3859318	100.00%	5.543%
10	12.494	12.432	12.559	BB	276554	3360041	87.06%	4.826%
11	12.936	12.879	12.997	BB	242820	2834252	73.44%	4.071%
12	13.105	13.039	13.175	BB	263495	3276174	84.89%	4.705%
13	13.690	13.657	13.752	VB	258472	3234903	83.82%	4.646%
14	14.791	14.704	14.862	BB	245082	3190405	82.67%	4.582%
15	15.809	15.735	15.879	BB	236010	3110801	80.60%	4.468%
16	16.757	16.679	16.834	BB	226843	3164327	81.99%	4.545%
17	17.644	17.579	17.712	BB	245420	3418991	88.59%	4.910%
18	18.475	18.412	18.540	BB	240723	3385758	87.73%	4.863%
19	19.255	19.202	19.340	BB	198571	2874689	74.49%	4.129%
20	19.993	19.942	20.030	BV	151807	2340196	60.64%	3.361%
21	20.716	20.655	20.789	BB	121088	2039797	52.85%	2.930%
22	21.600	21.427	21.715	BB	77732	2157022	55.89%	3.098%

Sum of corrected areas: 69627172

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Continuing Calibration Report for SequenceID : FC112724AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FC067881.D**						
Aliphatic C9-C12	9987946.000	60.000	3.186	6.461	166465.767	165791.359	-0.407
Aliphatic C12-C16	6942773.000	40.000	6.462	9.849	173569.325	170384.422	-1.869
Aliphatic C16-C21	10227182.000	60.000	9.850	13.205	170453.033	169621.553	-0.490
Aliphatic C21-C28	12690817.000	80.000	13.206	16.857	158635.213	157280.060	-0.862
Aliphatic C28-C40	16576371.000	120.000	16.858	21.700	138136.425	121111.336	-14.057
Aliphatic EPH	56425089.000	360.000	3.186	21.700	156736.358	150155.324	-4.383

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Fax : 908 789 8922

Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	27 Nov 2024 14:14
Client Sample ID:		Operator:	YP/AJ
Data file:	FC067881.D	Misc:	
Instrument:	FID_C	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.186	6.461	9987946.000	60.000	ug/ml
Aliphatic C12-C16	6.462	9.849	6942773.000	40.000	ug/ml
Aliphatic C16-C21	9.850	13.205	10227182.000	60.000	ug/ml
Aliphatic C21-C28	13.206	16.857	12690817.000	80.000	ug/ml
Aliphatic C28-C40	16.858	21.700	16576371.000	120.000	ug/ml
Aliphatic EPH	3.186	21.700	56425089.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067881.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 14:14
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

Integration File: autoint1.e
Quant Time: Nov 28 00:19:21 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)	11.499	3867330	19.947 ug/ml
Spiked Amount	50.000		Recovery =	39.89%
12) S	1-chlorooctadecane (S...	12.936	2873095	19.792 ug/ml
Spiked Amount	50.000		Recovery =	39.58%
	Target Compounds			
1) T	n-Nonane (C9)	3.286	3205513	19.652 ug/ml
2) T	n-Decane (C10)	4.349	3370019	20.322 ug/ml
3) T	A~Naphthalene (C11.7)	5.925	3706617	20.237 ug/ml
4) T	n-Dodecane (C12)	6.362	3412414	20.260 ug/ml
5) T	A~2-methylnaphthalene...	6.979	3608634	20.347 ug/ml
6) T	n-Tetradecane (C14)	8.152	3402205	20.315 ug/ml
7) T	n-Hexadecane (C16)	9.750	3540568	20.431 ug/ml
8) T	n-Octadecane (C18)	11.188	3570607	20.294 ug/ml
10) T	n-Eicosane (C20)	12.495	3378755	20.065 ug/ml
11) T	n-Heneicosane (C21)	13.105	3277820	19.921 ug/ml
13) T	n-Docosane (C22)	13.690	3236483	19.874 ug/ml
14) T	n-Tetracosane (C24)	14.791	3187148	19.872 ug/ml
15) T	n-Hexacosane (C26)	15.809	3099650	20.016 ug/ml
16) T	n-Octacosane (C28)	16.757	3167536	20.974 ug/ml
17) T	n-Tricontane (C30)	17.642	3455870	22.571 ug/ml
18) T	n-Dotriacontane (C32)	18.474	3532240	23.916 ug/ml
19) T	n-Tetratriacontane (C34)	19.257	2950289	23.391 ug/ml
20) T	n-Hexatriacontane (C36)	19.994	2447167	23.398 ug/ml
21) T	n-Octatriacontane (C38)	20.717	2161429	22.127 ug/ml
22) T	n-Tetracontane (C40)	21.602	2029376	20.821 ug/ml

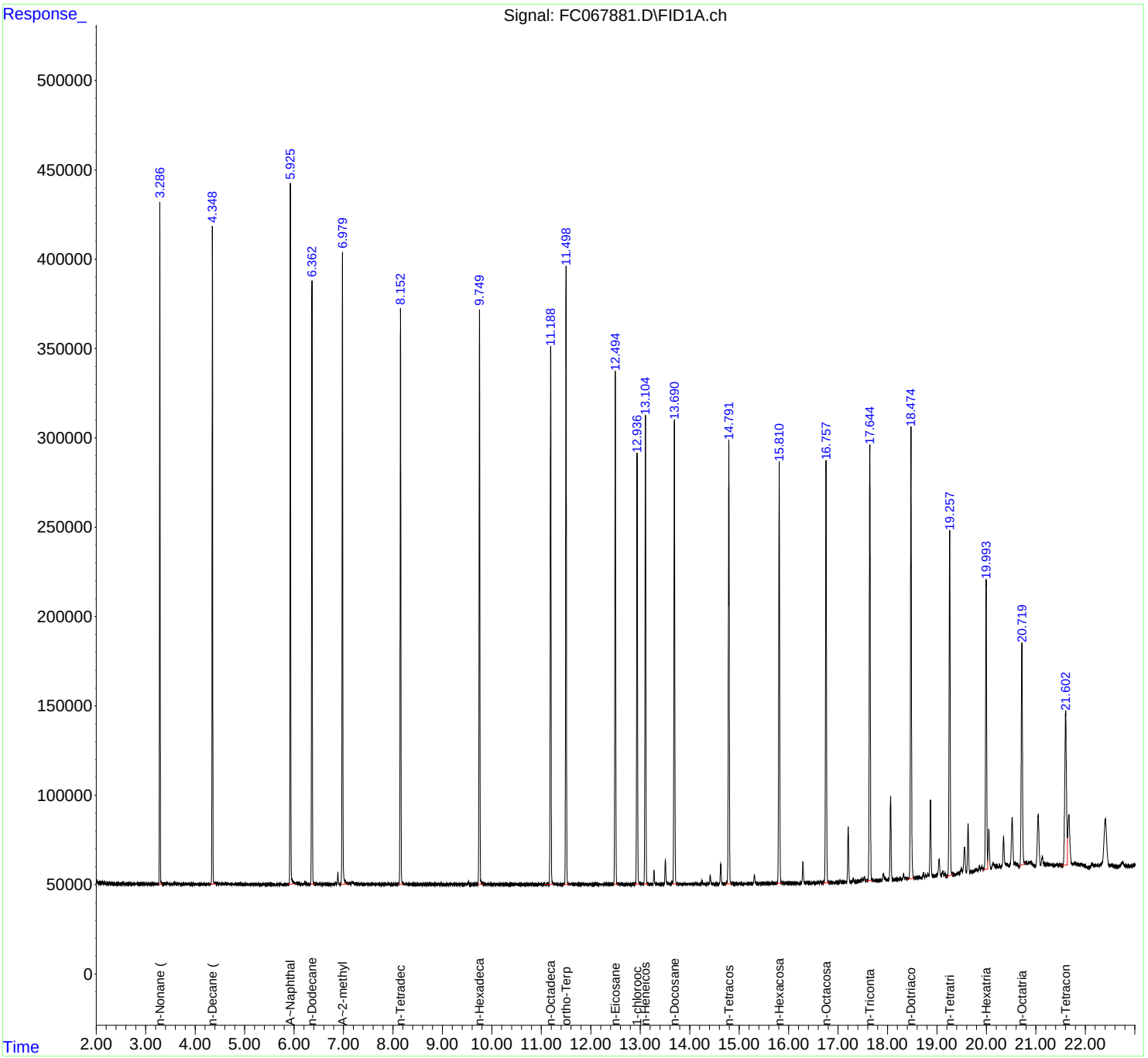
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067881.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 14:14
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

Integration File: autoint1.e
Quant Time: Nov 28 00:19:21 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\FC112724AL\
Data File : FC067881.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 14:14
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	3.286	3.257	3.342	BB	381472	3205513	82.89%	4.548%
2	4.349	4.307	4.422	BB	367489	3370019	87.14%	4.781%
3	5.925	5.872	6.025	BB	391435	3706617	95.84%	5.259%
4	6.362	6.323	6.423	BB	337052	3412414	88.24%	4.842%
5	6.979	6.935	7.097	BB	353135	3608634	93.31%	5.120%
6	8.152	8.097	8.220	BB	321859	3402205	87.97%	4.827%
7	9.750	9.712	9.828	BB	320815	3540568	91.55%	5.023%
8	11.188	11.075	11.260	BB	301123	3570607	92.33%	5.066%
9	11.499	11.438	11.568	BB	347462	3867330	100.00%	5.487%
10	12.495	12.457	12.562	BB	286402	3378755	87.37%	4.794%
11	12.936	12.868	12.987	BB	240007	2873095	74.29%	4.076%
12	13.105	13.065	13.167	BB	261527	3277820	84.76%	4.651%
13	13.690	13.658	13.757	VB	259750	3236483	83.69%	4.592%
14	14.791	14.720	14.860	BB	248508	3187148	82.41%	4.522%
15	15.809	15.752	15.875	BB	237257	3099650	80.15%	4.398%
16	16.757	16.685	16.833	BB	236365	3167536	81.90%	4.494%
17	17.642	17.568	17.703	BB	244268	3455870	89.36%	4.903%
18	18.474	18.402	18.543	BB	251260	3532240	91.34%	5.012%
19	19.257	19.193	19.327	BB	193993	2950289	76.29%	4.186%
20	19.994	19.933	20.023	VV	162101	2447167	63.28%	3.472%
21	20.717	20.658	20.785	BB	123266	2161429	55.89%	3.067%
22	21.602	21.508	21.638	BV	85602	2029376	52.47%	2.879%
					Sum of corrected areas:	70480762		

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Fax : 908 789 8922

Continuing Calibration Report for SequenceID : FD112724AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FD048821.D**						
Aromatic C10-C12	8466989.000	40.000	4.087	5.803	211674.725	192017.544	-10.237
Aromatic C12-C16	12905784.000	60.000	5.804	8.410	215096.400	192458.977	-11.762
Aromatic C16-C21	15378400.000	80.000	8.411	12.673	192230.000	185804.816	-3.458
Aromatic C21-C36	30610203.000	180.000	12.674	18.080	170056.683	157231.056	-8.157
Aromatic EPH	67361376.000	360.000	4.087	18.080	187114.933	173317.266	-7.961

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Fax : 908 789 8922

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	27 Nov 2024 07:22
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048821.D	Misc:	
Instrument:	FID_D	ALS Vial:	53
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.087	5.803	8466989.000	40.000	ug/ml
Aromatic C12-C16	5.804	8.410	12905784.000	60.000	ug/ml
Aromatic C16-C21	8.411	12.673	15378400.000	80.000	ug/ml
Aromatic C21-C36	12.674	18.080	30610203.000	180.000	ug/ml
Aromatic EPH	4.087	18.080	67361376.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048821.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 07:22
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:33:52 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	3714215	21.096 ug/ml
Spiked Amount	50.000		Recovery =	42.19%
6) S	2-Flurobiphenyl (SURR)	8.214	2434847	21.141 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	42.28%
11) S	ortho-Terphenyl (SURR)	11.248	4182536	21.746 ug/ml
Spiked Amount	50.000		Recovery =	43.49%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.187	4134484	21.938 ug/ml
2) T	Naphthalene (C11.7)	5.703	4332505	22.153 ug/mlm
3) T	2-Methylnaphthalene (...	6.751	4362975	22.830 ug/ml
5) T	Acenaphthylene (C15.06)	8.016	4227947	21.802 ug/ml
7) T	Acenaphthene (C15.5)	8.310	4314862	22.433 ug/ml
8) T	Flouorene (C16.55)	9.088	4163808	21.703 ug/ml
9) T	Phenanthrene (C19.36)	10.476	4034678	22.011 ug/ml
10) T	Anthracene (C19.43)	10.552	3294091	17.590 ug/ml
12) T	Fluoranthene (C21.85)	12.280	4053302	22.134 ug/ml
13) T	Pyrene (C20.8)	12.573	3885823	21.493 ug/ml
14) T	Benzo[a]anthracene (C...	14.442	3439605	20.909 ug/ml
15) T	Chrysene (C27.41)	14.484	3773684	21.562 ug/ml
16) T	benzo[b]fluoranthene ...	15.989	3337718	21.243 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.020	3554290	21.779 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.365	3163902	21.220 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.730	2599342	21.042 ug/ml
20) T	Dibenz[a,h]anthracene...	17.769	3559053	22.696 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.980	3129307	21.931 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048821.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 07:22
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

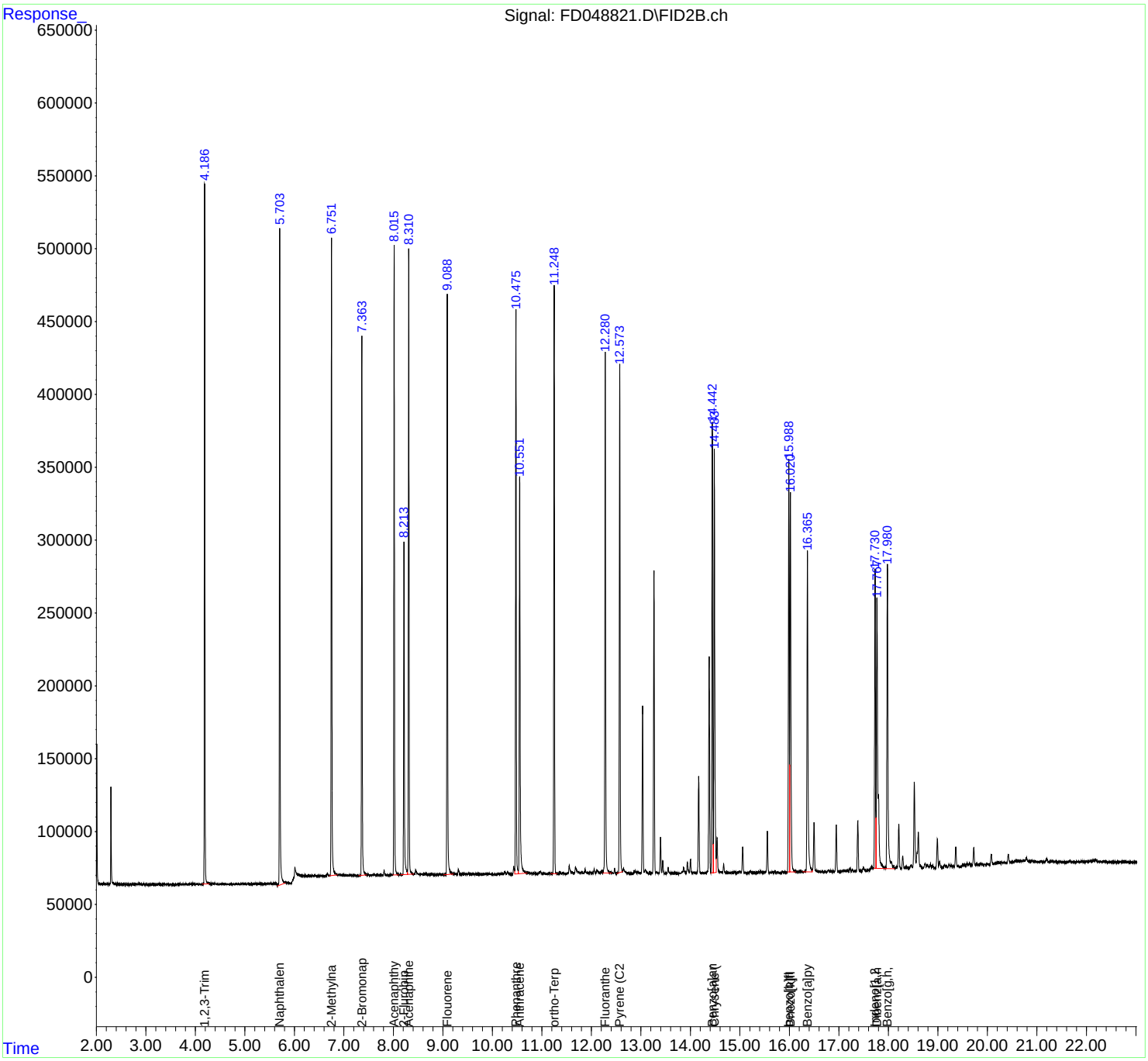
Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:33:52 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
LabSampleId :
20 PPM AROMATIC HC STD

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Da
Data File : FD048821.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 07:22
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 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	4.141	4.284	BB	476935	4134484	94.76%	5.328%
2	5.704	5.624	5.824	BB	447380	4241594	97.22%	5.466%
3	6.751	6.704	6.868	BB	437146	4362975	100.00%	5.622%
4	7.364	7.301	7.468	BB	369915	3714215	85.13%	4.786%
5	8.016	7.991	8.114	BB	430302	4227947	96.91%	5.448%
6	8.214	8.144	8.284	BV	226101	2434847	55.81%	3.138%
7	8.310	8.284	8.414	VB	428901	4314862	98.90%	5.560%
8	9.088	9.018	9.218	BB	396437	4163808	95.44%	5.366%
9	10.476	10.451	10.523	VV	384442	4034678	92.48%	5.199%
10	10.552	10.523	10.708	VB	273065	3294091	75.50%	4.245%
11	11.248	11.174	11.311	BB	402562	4182536	95.86%	5.390%
12	12.280	12.233	12.414	VB	359768	4053302	92.90%	5.223%
13	12.573	12.508	12.631	BV	346278	3885823	89.06%	5.007%
14	14.442	14.410	14.462	PV	307768	3439605	78.84%	4.432%
15	14.484	14.462	14.522	VV	289444	3773684	86.49%	4.863%
16	15.989	15.961	16.005	BV	283238	3337718	76.50%	4.301%
17	16.020	16.005	16.134	VB	261964	3554290	81.46%	4.580%
18	16.365	16.268	16.464	BV	217859	3163902	72.52%	4.077%
19	17.730	17.701	17.749	BV	206772	2599342	59.58%	3.350%
20	17.769	17.749	17.948	VV	186407	3559053	81.57%	4.586%
21	17.980	17.948	18.131	VV	211011	3129307	71.72%	4.033%
			Sum of corrected areas:			77602063		

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Fax : 908 789 8922

Continuing Calibration Report for SequenceID : FD112724AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FD048832.D**						
Aromatic C10-C12	8587340.000	40.000	4.087	5.803	214683.500	192017.544	-11.804
Aromatic C12-C16	12964029.000	60.000	5.804	8.410	216067.150	192458.977	-12.267
Aromatic C16-C21	15541052.000	80.000	8.411	12.673	194263.150	185804.816	-4.552
Aromatic C21-C36	31132422.000	180.000	12.674	18.080	172957.900	157231.056	-10.002
Aromatic EPH	68224843.000	360.000	4.087	18.080	189513.453	173317.266	-9.345

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Fax : 908 789 8922

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	27 Nov 2024 14:14
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048832.D	Misc:	
Instrument:	FID_D	ALS Vial:	53
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.087	5.803	8587340.000	40.000	ug/ml
Aromatic C12-C16	5.804	8.410	12964029.000	60.000	ug/ml
Aromatic C16-C21	8.411	12.673	15541052.000	80.000	ug/ml
Aromatic C21-C36	12.674	18.080	31132422.000	180.000	ug/ml
Aromatic EPH	4.087	18.080	68224843.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048832.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 14:14
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:45:06 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...	7.362	3738753	21.236 ug/ml
Spiked Amount	50.000		Recovery =	42.47%
6) S	2-Flurobiphenyl (SURR)	8.213	2476601	21.504 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	43.01%
11) S	ortho-Terphenyl (SURR)	11.248	4217243	21.926 ug/ml
Spiked Amount	50.000		Recovery =	43.85%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.186	4208498	22.331 ug/ml
2) T	Naphthalene (C11.7)	5.703	4378842	22.390 ug/ml
3) T	2-Methylnaphthalene (...	6.750	4386967	22.956 ug/ml
5) T	Acenaphthylene (C15.06)	8.015	4246212	21.896 ug/ml
7) T	Acenaphthene (C15.5)	8.310	4330850	22.516 ug/ml
8) T	Flouorene (C16.55)	9.088	4212228	21.956 ug/ml
9) T	Phenanthrene (C19.36)	10.475	4084375	22.282 ug/ml
10) T	Anthracene (C19.43)	10.551	3324203	17.751 ug/ml
12) T	Fluoranthene (C21.85)	12.279	4119144	22.494 ug/ml
13) T	Pyrene (C20.8)	12.572	3920246	21.684 ug/ml
14) T	Benzo[a]anthracene (C...	14.441	3519461	21.395 ug/ml
15) T	Chrysene (C27.41)	14.483	3851253	22.005 ug/ml
16) T	benzo[b]fluoranthene ...	15.989	3375031	21.481 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.020	3606585	22.100 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.365	3242503	21.748 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.730	2714706	21.976 ug/ml
20) T	Dibenz[a,h]anthracene...	17.768	3624462	23.113 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.980	3079277	21.581 ug/mlm

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048832.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 14:14
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 Sample Multiplier: 1

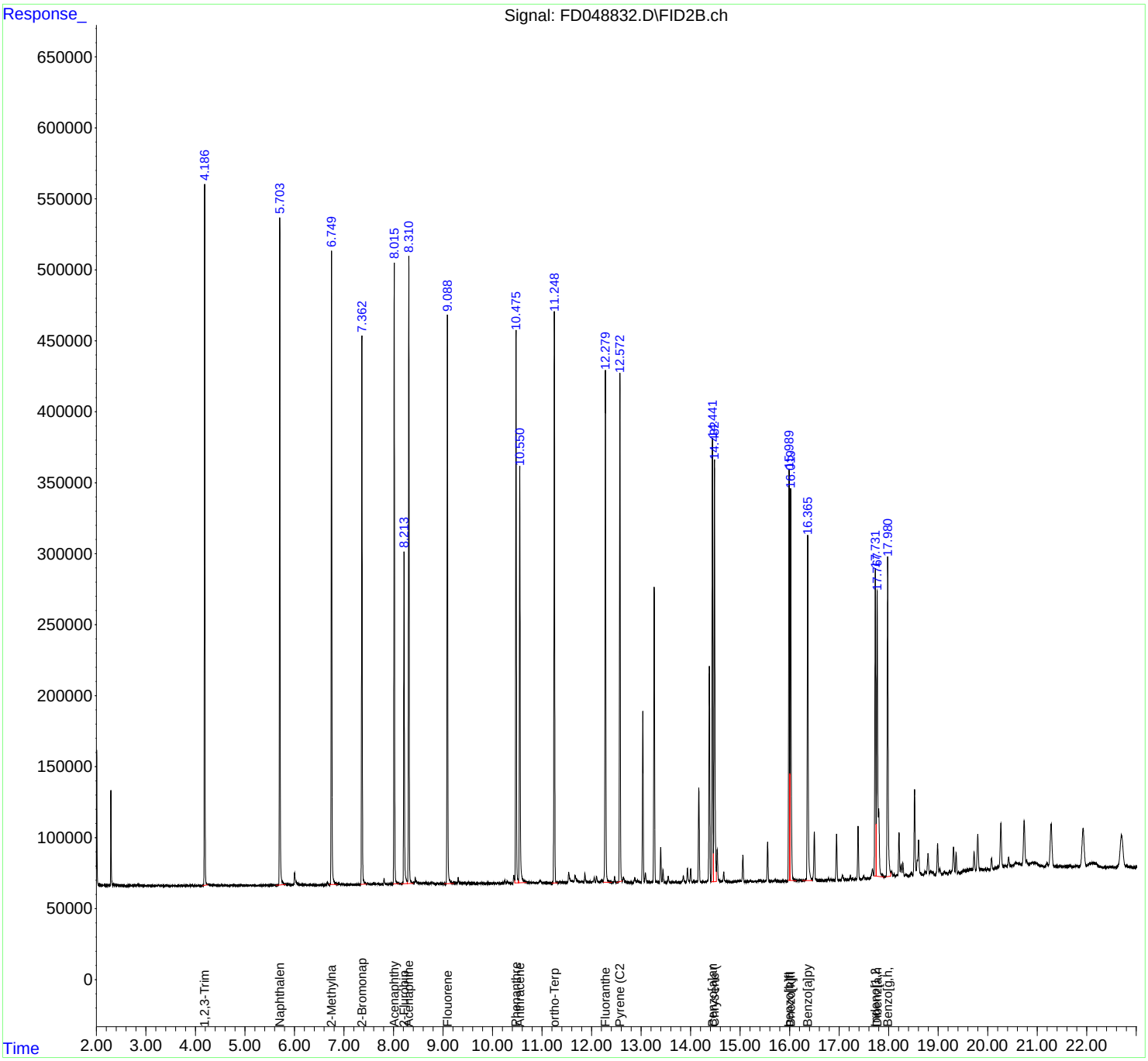
Integration File: autoint1.e
Quant Time: Nov 28 02:45:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:16:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024



Instrument :
FID_D
LabSampleId :
20 PPM AROMATIC HC STD

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Da
Data File : FD048832.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 14:14
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 53 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	4.248	BV	488018	4208498	95.93%	5.413%
2	5.703	5.628	5.828	BB	468851	4378842	99.81%	5.632%
3	6.750	6.698	6.874	BB	447415	4386967	100.00%	5.642%
4	7.362	7.328	7.464	BB	386617	3738753	85.22%	4.808%
5	8.015	7.991	8.108	BB	436796	4246212	96.79%	5.461%
6	8.213	8.151	8.280	BV	234307	2476601	56.45%	3.185%
7	8.310	8.280	8.408	VB	444879	4330850	98.72%	5.570%
8	9.088	9.024	9.221	BB	399399	4212228	96.02%	5.417%
9	10.475	10.447	10.524	VV	389274	4084375	93.10%	5.253%
10	10.551	10.524	10.691	VB	294028	3324203	75.77%	4.275%
11	11.248	11.194	11.321	BB	399773	4217243	96.13%	5.424%
12	12.279	12.231	12.408	PB	361529	4119144	93.90%	5.298%
13	12.572	12.508	12.621	BV	352715	3920246	89.36%	5.042%
14	13.265	13.168	13.299	BV	207597	2431648	55.43%	3.127%
15	14.441	14.410	14.461	PV	312373	3519461	80.23%	4.526%
16	14.483	14.461	14.520	VV	297394	3851253	87.79%	4.953%
17	15.989	15.961	16.004	BV	287187	3375031	76.93%	4.341%
18	16.020	16.004	16.138	VB	276819	3606585	82.21%	4.638%
19	17.730	17.701	17.748	BV	217884	2714706	61.88%	3.491%
20	17.768	17.748	17.911	VV	201386	3624462	82.62%	4.661%
21	17.980	17.911	18.048	PV	225113	2986444	68.08%	3.841%
			Sum of corrected areas:			77753751		

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:	PB165286BL			SDG No.:	P5002		
Lab Sample ID:	PB165286BL			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
11/26/24 10:25	11/27/24 8:07	PB165286

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	FC067871.D
Aliphatic C12-C16	Aliphatic C12-C16	0.24	U	1	0.24	0.67	mg/kg	FC067871.D
Aliphatic C16-C21	Aliphatic C16-C21	0.30	U	1	0.30	1.00	mg/kg	FC067871.D
Aliphatic C21-C28	Aliphatic C21-C28	0.80	U	1	0.80	1.33	mg/kg	FC067871.D
Aliphatic C28-C40	Aliphatic C28-C40	1.80	U	1	1.80	2.00	mg/kg	FC067871.D
Aromatic C10-C12	Aromatic C10-C12	0.30	U	1	0.30	0.67	mg/kg	FD048822.D
Aromatic C12-C16	Aromatic C12-C16	0.34	U	1	0.34	1.00	mg/kg	FD048822.D
Aromatic C16-C21	Aromatic C16-C21	0.96	U	1	0.96	1.67	mg/kg	FD048822.D
Aromatic C21-C36	Aromatic C21-C36	2.00	U	1	2.00	2.67	mg/kg	FD048822.D
Total AliphaticEPH	Total AliphaticEPH	3.52	U		3.52	6.00	mg/kg	
Total AromaticEPH	Total AromaticEPH	3.60	U		3.60	6.01	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:	PB165286BL		SDG No.:	P5002	
Lab Sample ID:	PB165286BL		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
FC067871.D	1	11/26/24	11/27/24	PB165286

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)		36.2		40 - 140	72%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB165286BL	Acq On:	27 Nov 2024 08:07
Client Sample ID:	PB165286BL	Operator:	YP/AJ
Data file:	FC067871.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	3.186	6.461	0	0	300	ug/ml
Aliphatic C12-C16	6.462	9.849	0	0	200	ug/ml
Aliphatic C16-C21	9.850	13.205	0	0	300	ug/ml
Aliphatic C21-C28	13.206	16.857	0	0	400	ug/ml
Aliphatic C28-C40	16.858	21.700	0	0	600	ug/ml
Aliphatic EPH	3.186	21.700	0	0		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.940	12.940	5252389	36.18		ug/ml
Aliphatic C9-C28	3.186	16.857	0	0	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067871.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 08:07
Operator : YP/AJ
Sample : PB165286BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB165286BL

Integration File: autoint1.e
Quant Time: Nov 28 00:10:54 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...	12.940	5252389	36.183 ug/ml
Spiked Amount 50.000		Recovery = 72.37%	
Target Compounds			

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

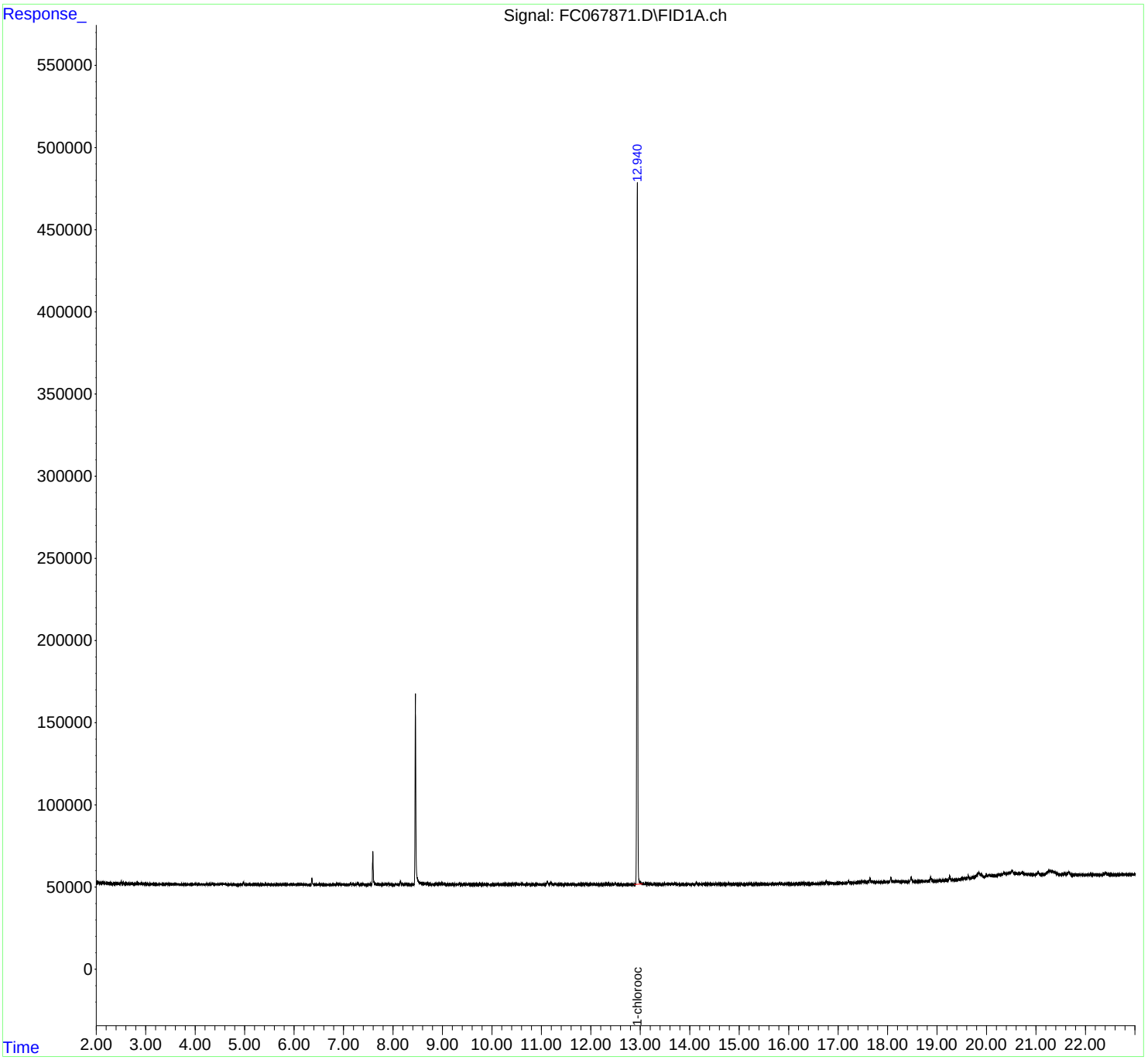
Quantitation Report (QT Reviewed)

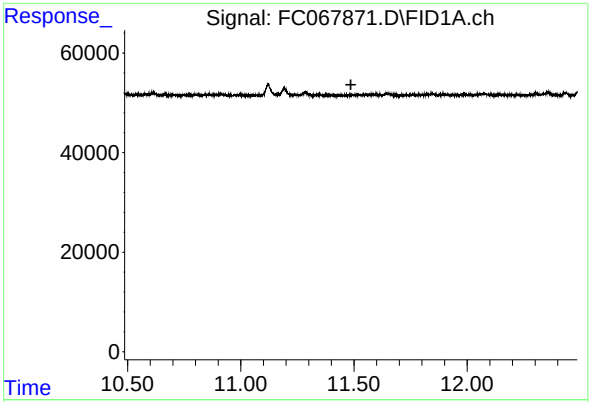
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067871.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 08:07
Operator : YP/AJ
Sample : PB165286BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB165286BL

Integration File: autoint1.e
Quant Time: Nov 28 00:10:54 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

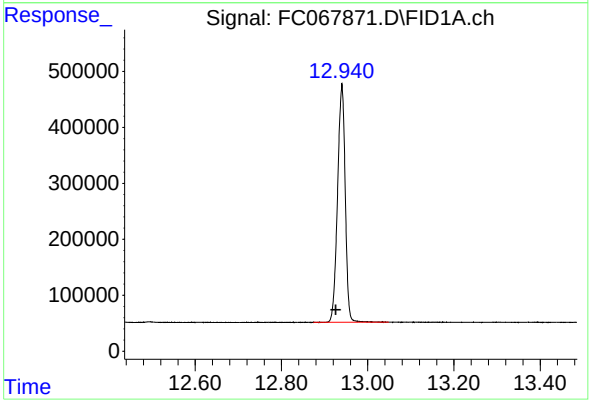




#9 ortho-Terphenyl (SURR)

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

Instrument :
FID_C
ClientSampleId :
PB165286BL



#12 1-chlorooctadecane (SURR)

R.T.: 12.940 min
Delta R.T.: 0.014 min
Response: 5252389
Conc: 36.18 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067871.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 08:07
Sample : PB165286BL
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	12.940	12.874	13.049	BB	426269	5252389	100.00%	100.000%
			Sum of corrected areas:			5252389		

Aliphatic EPH 111424.M Thu Nov 28 01:17:23 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:	PB165286BL			SDG No.:	P5002		
Lab Sample ID:	PB165286BL			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
FD048822.D	1	11/26/24	11/27/24	PB165286

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	2.67	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	53.0		40 - 140	106%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	40.0		40 - 140	80%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	48.7		40 - 140	97%	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:	PB165286BL	Acq On:	27 Nov 2024 08:07
Client Sample ID:	PB165286BL	Operator:	YP/AJ
Data file:	FD048822.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	4.087	5.803	0	0	200	ug/ml
Aromatic C12-C16	5.804	8.410	0	0	300	ug/ml
Aromatic C16-C21	8.411	12.673	0	0	500	ug/ml
Aromatic C21-C36	12.674	18.080	0	0	800	ug/ml
Aromatic EPH	4.087	18.080	0	0		ug/ml
ortho-Terphenyl (SURR)	11.251	11.251	9363581	48.68		ug/ml
2-Bromonaphthalene (SURR)	7.364	7.364	9337376	53.04		ug/ml
2-Flurobiphenyl (SURR)	8.213	8.213	4608306	40.01		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048822.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 08:07
Operator : YP/AJ
Sample : PB165286BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB165286BL

Integration File: autoint1.e
Quant Time: Nov 28 02:35:24 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	9337376	53.036 ug/ml
Spiked Amount 50.000		Recovery = 106.07%	
6) S 2-Flurobiphenyl (SURR)	8.213	4608306	40.013 ug/ml
Spiked Amount 50.000	Range 0 - 131	Recovery = 80.03%	
11) S ortho-Terphenyl (SURR)	11.251	9363581	48.684 ug/ml
Spiked Amount 50.000		Recovery = 97.37%	
Target Compounds			

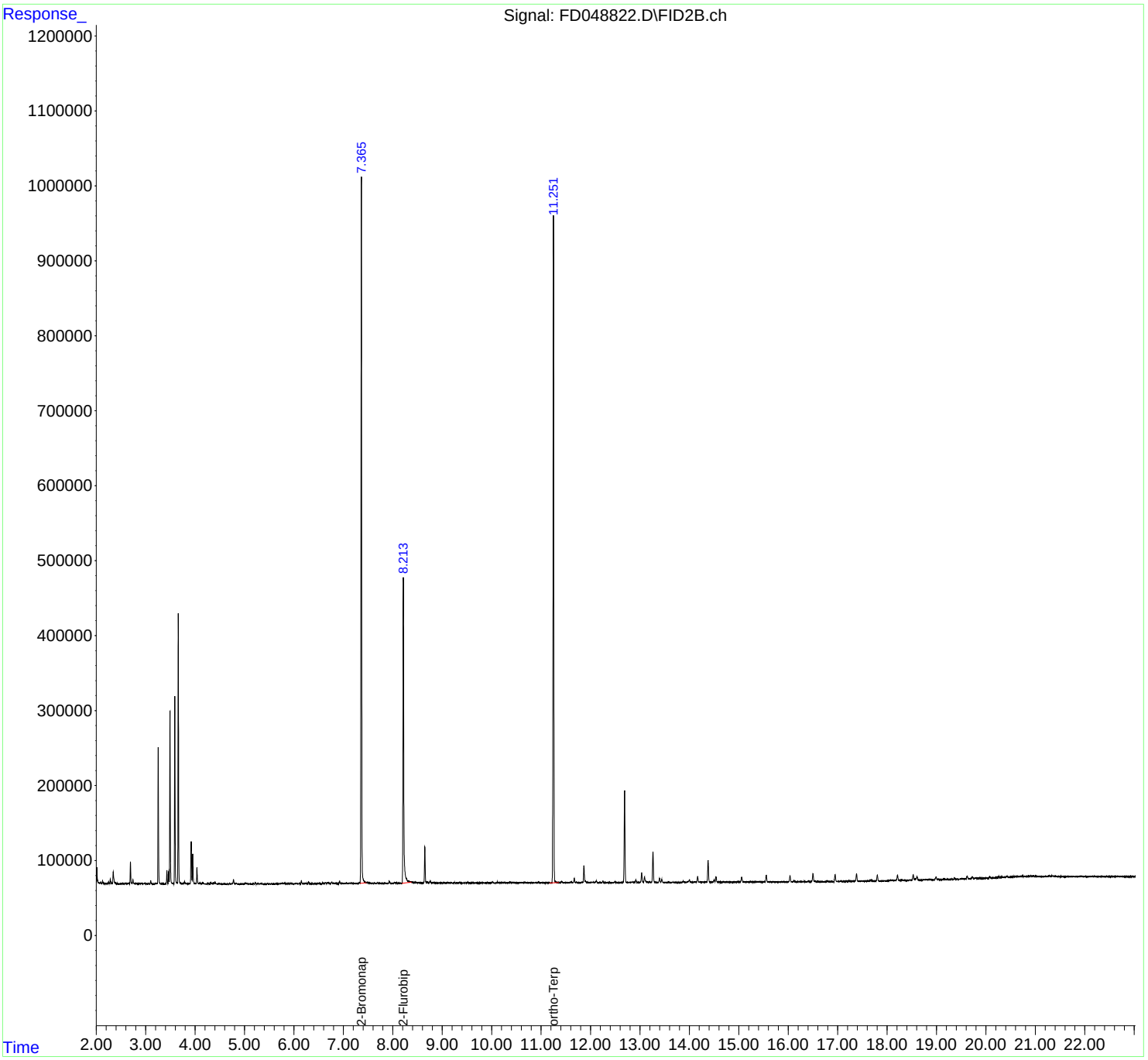
(f)=RT Delta > 1/2 Window (m)=manual int.

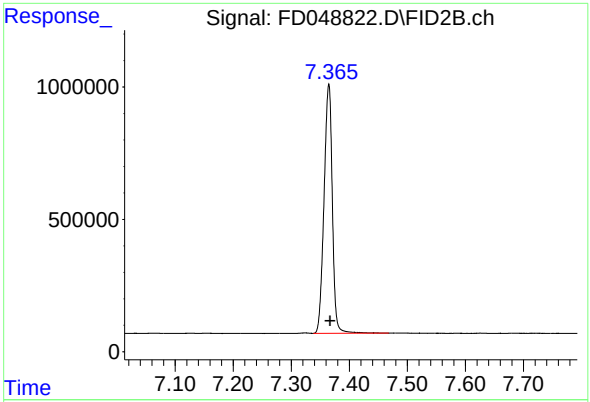
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048822.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 08:07
Operator : YP/AJ
Sample : PB165286BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB165286BL

Integration File: autoint1.e
Quant Time: Nov 28 02:35:24 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

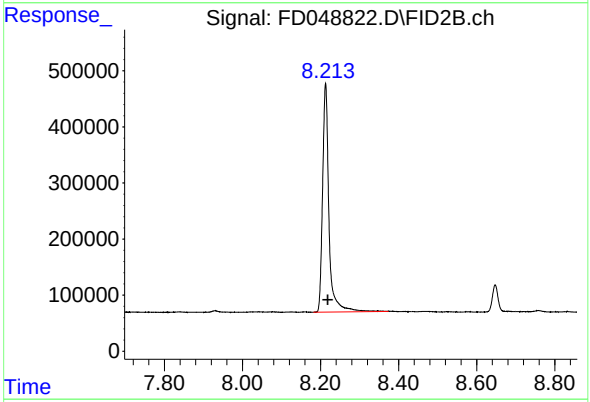




#4 2-Bromonaphthalene (SURR)

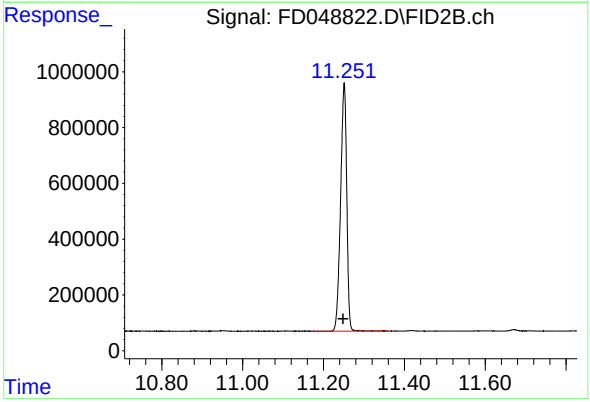
R.T.: 7.364 min
Delta R.T.: -0.002 min
Response: 9337376
Conc: 53.04 ug/ml

Instrument :
FID_D
ClientSampleId :
PB165286BL



#6 2-Flurobiphenyl (SURR)

R.T.: 8.213 min
Delta R.T.: -0.005 min
Response: 4608306
Conc: 40.01 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.251 min
Delta R.T.: 0.002 min
Response: 9363581
Conc: 48.68 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048822.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 08:07
Sample : PB165286BL
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	7.468	PV	942402	9337376	99.72%	40.059%
2	8.213	8.181	8.374	BB	407083	4608306	49.22%	19.770%
3	11.251	11.174	11.361	BB	890412	9363581	100.00%	40.171%
			Sum of corrected areas:			23309263		

Aromatic EPH 111424.M Thu Nov 28 03:47:27 2024

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Fax : 908 789 8922

Report of Analysis

Client:	ENTACT			Date Collected:	
Project:	North Point			Date Received:	
Client Sample ID:	PB165286BS			SDG No.:	P5002
Lab Sample ID:	PB165286BS			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
11/26/24 10:25	11/27/24 8:42	PB165286

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	4.54		1	0.38	1.00	mg/kg	FC067872.D
Aliphatic C12-C16	Aliphatic C12-C16	4.73		1	0.24	0.67	mg/kg	FC067872.D
Aliphatic C16-C21	Aliphatic C16-C21	8.31		1	0.30	1.00	mg/kg	FC067872.D
Aliphatic C21-C28	Aliphatic C21-C28	11.0		1	0.80	1.33	mg/kg	FC067872.D
Aliphatic C28-C40	Aliphatic C28-C40	18.2		1	1.80	2.00	mg/kg	FC067872.D
Aromatic C10-C12	Aromatic C10-C12	4.02		1	0.30	0.67	mg/kg	FD048823.D
Aromatic C12-C16	Aromatic C12-C16	8.25		1	0.34	1.00	mg/kg	FD048823.D
Aromatic C16-C21	Aromatic C16-C21	17.4		1	0.96	1.67	mg/kg	FD048823.D
Aromatic C21-C36	Aromatic C21-C36	28.6		1	2.00	2.66	mg/kg	FD048823.D
Total AliphaticEPH	Total AliphaticEPH	46.8			3.52	5.99	mg/kg	
Total AromaticEPH	Total AromaticEPH	58.3			3.60	6.00	mg/kg	
Total EPH	Total EPH	105			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

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Fax : 908 789 8922

Report of Analysis

Client:	ENTACT		Date Collected:		
Project:	North Point		Date Received:		
Client Sample ID:	PB165286BS		SDG No.:	P5002	
Lab Sample ID:	PB165286BS		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
FC067872.D	1	11/26/24	11/27/24	PB165286

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	4.54		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	4.73		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	8.31		0.30	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	11.0		0.80	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	18.2		1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	31.3		40 - 140	63%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB165286BS	Acq On:	27 Nov 2024 08:42
Client Sample ID:	PB165286BS	Operator:	YP/AJ
Data file:	FC067872.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	3.186	6.461	11305248	68.19	300	ug/ml
Aliphatic C12-C16	6.462	9.849	12105528	71.048	200	ug/ml
Aliphatic C16-C21	9.850	13.205	21160238	124.75	300	ug/ml
Aliphatic C21-C28	13.206	16.857	26044779	165.595	400	ug/ml
Aliphatic C28-C40	16.858	21.700	33102959	273.327	600	ug/ml
Aliphatic EPH	3.186	21.700	103718752	702.909		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.938	12.938	4541258	31.28		ug/ml
Aliphatic C9-C28	3.186	16.857	70615793	429.583	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067872.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 08:42
Operator : YP/AJ
Sample : PB165286BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB165286BS

Integration File: autoint1.e
Quant Time: Nov 28 00:11:27 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...	12.938	4541258	31.284 ug/ml
Spiked Amount	50.000		Recovery =	62.57%
	Target Compounds			
1) T	n-Nonane (C9)	3.287	2727270	16.720 ug/ml
2) T	n-Decane (C10)	4.350	3714748	22.401 ug/ml
4) T	n-Dodecane (C12)	6.362	4863230	28.874 ug/ml
6) T	n-Tetradecane (C14)	8.154	5695435	34.008 ug/ml
7) T	n-Hexadecane (C16)	9.751	6410093	36.989 ug/ml
8) T	n-Octadecane (C18)	11.190	6970399	39.618 ug/ml
10) T	n-Eicosane (C20)	12.497	7240964	43.002 ug/ml
11) T	n-Heneicosane (C21)	13.107	6948875	42.232 ug/ml
13) T	n-Docosane (C22)	13.692	6862818	42.141 ug/ml
14) T	n-Tetracosane (C24)	14.793	6628011	41.326 ug/ml
15) T	n-Hexacosane (C26)	15.812	6372773	41.151 ug/ml
16) T	n-Octacosane (C28)	16.759	6181177	40.929 ug/ml
17) T	n-Tricontane (C30)	17.645	6068763	39.637 ug/ml
18) T	n-Dotriacontane (C32)	18.475	5865010	39.711 ug/ml
19) T	n-Tetratriacontane (C34)	19.258	5649106	44.788 ug/ml
20) T	n-Hexatriacontane (C36)	19.995	5339540	51.053 ug/ml
21) T	n-Octatriacontane (C38)	20.719	5167356	52.899 ug/ml
22) T	n-Tetracontane (C40)	21.603	5013184	51.435 ug/ml

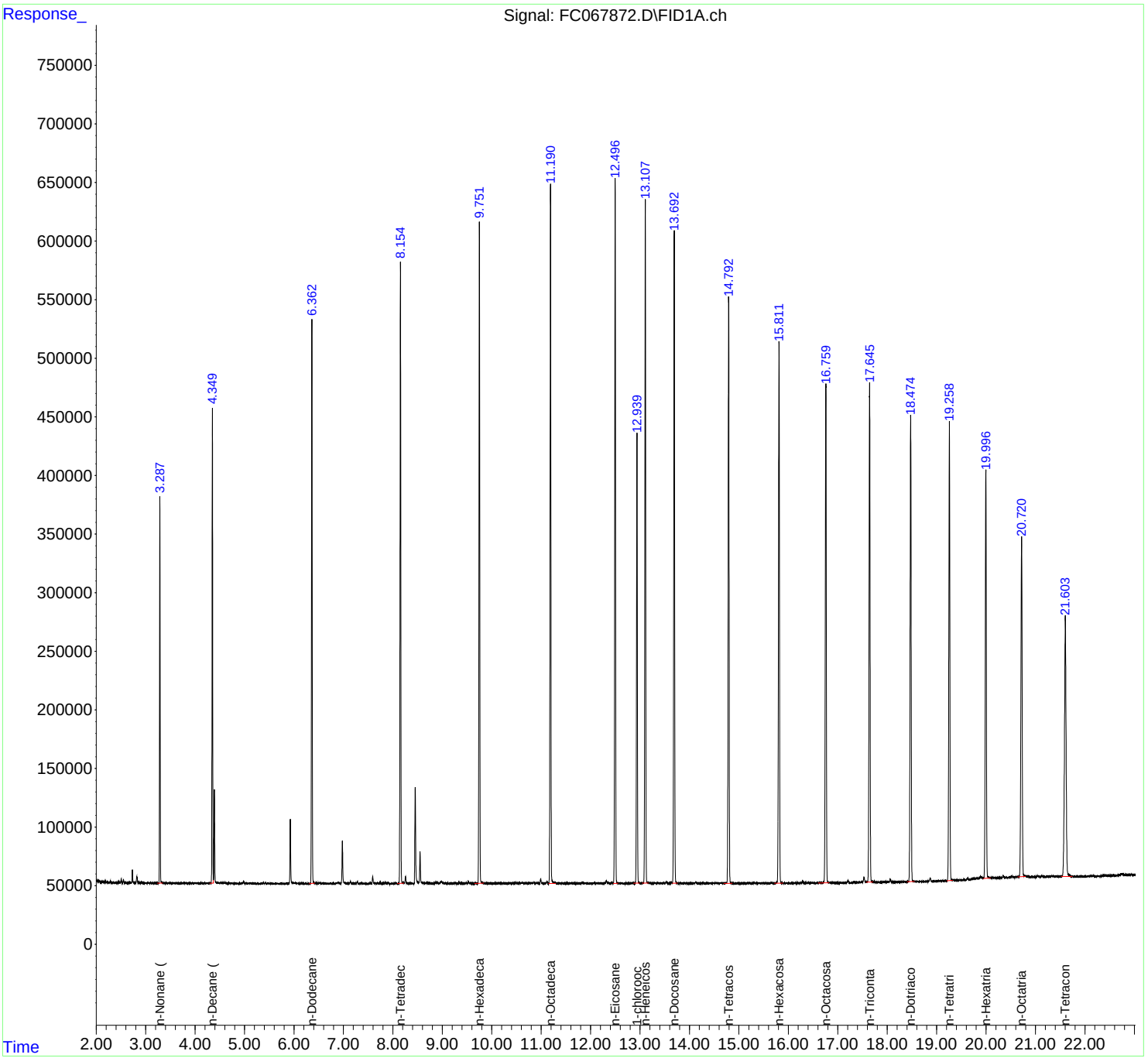
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067872.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 08:42
Operator : YP/AJ
Sample : PB165286BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB165286BS

Integration File: autoint1.e
Quant Time: Nov 28 00:11:27 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\FC112724AL\
Data File : FC067872.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 08:42
Sample : PB165286BS
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	3.287	3.237	3.349	BB	328078	2727270	37.66%	2.519%
2	4.350	4.294	4.372	BV	405958	3714748	51.30%	3.431%
3	6.362	6.305	6.424	BB	480694	4863230	67.16%	4.492%
4	8.154	8.094	8.227	BB	528296	5695435	78.66%	5.261%
5	9.751	9.652	9.837	BB	563002	6410093	88.53%	5.921%
6	11.190	11.154	11.300	BB	597510	6970399	96.26%	6.439%
7	12.497	12.455	12.559	PB	598241	7240964	100.00%	6.688%
8	12.938	12.870	12.997	BB	382267	4541258	62.72%	4.195%
9	13.107	13.040	13.174	BB	581724	6948875	95.97%	6.419%
10	13.692	13.652	13.762	VB	555758	6862818	94.78%	6.339%
11	14.793	14.695	14.872	BB	497641	6628011	91.53%	6.122%
12	15.812	15.715	15.890	BB	462191	6372773	88.01%	5.887%
13	16.759	16.602	16.827	BB	423672	6181177	85.36%	5.710%
14	17.645	17.577	17.715	BB	424941	6068763	83.81%	5.606%
15	18.475	18.407	18.557	BB	397308	5865010	81.00%	5.418%
16	19.258	19.204	19.322	BB	385683	5649106	78.02%	5.218%
17	19.995	19.940	20.090	VB	346609	5339540	73.74%	4.932%
18	20.719	20.637	20.800	BB	287357	5167356	71.36%	4.773%
19	21.603	21.512	21.749	BB	222062	5013184	69.23%	4.631%

Sum of corrected areas: 108260009

Aliphatic EPH 111424.M Thu Nov 28 01:18:12 2024

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Fax : 908 789 8922

Report of Analysis

Client:	ENTACT		Date Collected:		
Project:	North Point		Date Received:		
Client Sample ID:	PB165286BS		SDG No.:	P5002	
Lab Sample ID:	PB165286BS		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
FD048823.D	1	11/26/24	11/27/24	PB165286

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	4.02		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	8.25		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	17.4		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	28.6		2.00	2.66	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	44.1		40 - 140	88%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	35.6		40 - 140	71%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	39.6		40 - 140	79%	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:	PB165286BS	Acq On:	27 Nov 2024 08:42
Client Sample ID:	PB165286BS	Operator:	YP/AJ
Data file:	FD048823.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	4.087	5.803	11591756	60.368	200	ug/ml
Aromatic C12-C16	5.804	8.410	23853983	123.943	300	ug/ml
Aromatic C16-C21	8.411	12.673	48495461	261.002	500	ug/ml
Aromatic C21-C36	12.674	18.080	67530733	429.5	800	ug/ml
Aromatic EPH	4.087	18.080	151471933	874.814		ug/ml
2-Flurobiphenyl (SURR)	8.215	8.215	4101532	35.61		ug/ml
ortho-Terphenyl (SURR)	11.251	11.251	7614913	39.59		ug/ml
2-Bromonaphthalene (SURR)	7.365	7.365	7772671	44.15		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048823.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 08:42
Operator : YP/AJ
Sample : PB165286BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB165286BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:36:19 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...	7.365	7772671	44.148 ug/ml
Spiked Amount	50.000		Recovery =	88.30%
6) S	2-Flurobiphenyl (SURR)	8.215	4101532	35.613 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	71.23%
11) S	ortho-Terphenyl (SURR)	11.251	7614913	39.592 ug/ml
Spiked Amount	50.000		Recovery =	79.18%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.188	5063997	26.870 ug/ml
2) T	Naphthalene (C11.7)	5.705	6527759	33.378 ug/ml
3) T	2-Methylnaphthalene (...	6.751	6779759	35.476 ug/ml
5) T	Acenaphthylene (C15.06)	8.018	8401690	43.324 ug/ml
7) T	Acenaphthene (C15.5)	8.314	8672534	45.088 ug/ml
8) T	Flouorene (C16.55)	9.093	9058059	47.214 ug/ml
9) T	Phenanthrene (C19.36)	10.480	9424080	51.413 ug/ml
10) T	Anthracene (C19.43)	10.556	9526466	50.870 ug/ml
12) T	Fluoranthene (C21.85)	12.287	9816572	53.607 ug/mlm
13) T	Pyrene (C20.8)	12.579	9597538	53.086 ug/ml
14) T	Benzo[a]anthracene (C...	14.449	9112723	55.396 ug/ml
15) T	Chrysene (C27.41)	14.492	9076201	51.860 ug/ml
16) T	benzo[b]fluoranthene ...	15.997	8687712	55.294 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.032	8709709	53.370 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.373	8241898	55.279 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.741	8038301	65.072 ug/ml
20) T	Dibenz[a,h]anthracene...	17.777	7969188	50.819 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.993	7695001	53.929 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048823.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 08:42
Operator : YP/AJ
Sample : PB165286BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

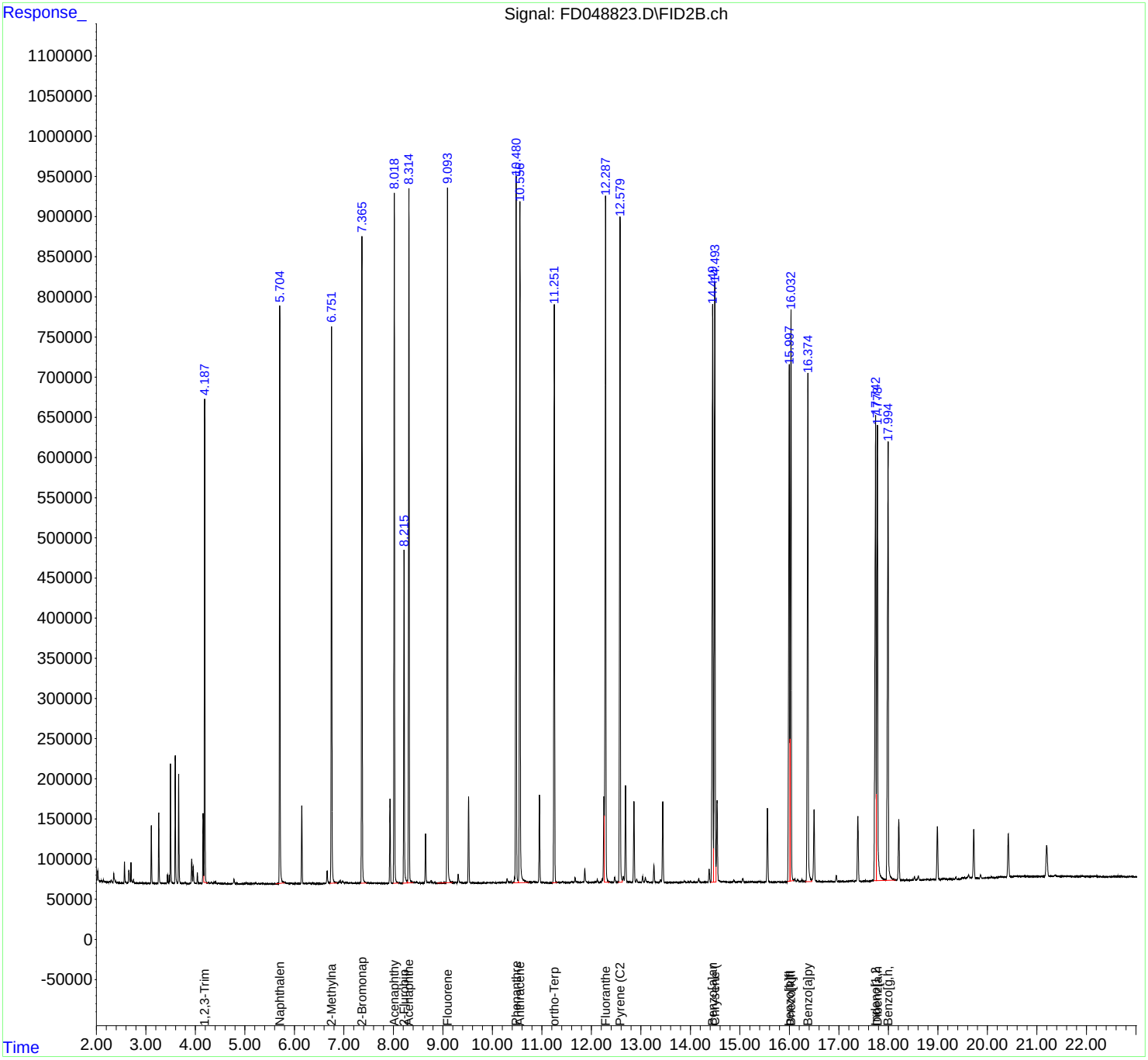
Instrument :
FID_D
ClientSampleId :
PB165286BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:36:19 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 :
PB165286BS

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Da
Data File : FD048823.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 08:42
Sample : PB165286BS
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	4.188	4.170	4.248	VV	599334	5063997	46.50%	2.962%
2	5.705	5.621	5.801	BV	717912	6527759	59.95%	3.818%
3	6.751	6.717	6.864	VB	692494	6779759	62.26%	3.966%
4	7.365	7.336	7.458	PB	804717	7772671	71.38%	4.546%
5	8.018	7.991	8.103	BV	856003	8401690	77.16%	4.914%
6	8.215	8.181	8.284	BV	410583	4101532	37.67%	2.399%
7	8.314	8.284	8.408	VB	871358	8672534	79.64%	5.073%
8	9.093	8.888	9.194	BB	881467	9058059	83.18%	5.298%
9	10.480	10.408	10.524	BV	888966	9424080	86.54%	5.512%
10	10.556	10.524	10.734	VB	856034	9526466	87.48%	5.572%
11	11.251	11.201	11.314	BB	718617	7614913	69.93%	4.454%
12	12.286	12.227	12.414	VB	869462	10889318	100.00%	6.369%
13	12.579	12.534	12.624	PV	822302	9597538	88.14%	5.614%
14	14.449	14.407	14.467	PV	712411	9112723	83.68%	5.330%
15	14.492	14.467	14.518	VV	739099	9076201	83.35%	5.309%
16	15.997	15.961	16.012	BV	649375	8687712	79.78%	5.082%
17	16.032	16.012	16.091	VV	704335	8709709	79.98%	5.095%
18	16.373	16.314	16.451	BV	640084	8241898	75.69%	4.821%
19	17.741	17.701	17.756	BV	581289	8038301	73.82%	4.702%
20	17.777	17.756	17.951	VV	568583	7969188	73.18%	4.661%
21	17.993	17.951	18.148	VB	553178	7695001	70.67%	4.501%

Sum of corrected areas: 170961051

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:	PB165286BSD			SDG No.:	P5002
Lab Sample ID:	PB165286BSD			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
11/26/24 10:25	11/27/24 9:18	PB165286

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	4.55		1	0.38	1.00	mg/kg	FC067873.D
Aliphatic C12-C16	Aliphatic C12-C16	4.73		1	0.24	0.67	mg/kg	FC067873.D
Aliphatic C16-C21	Aliphatic C16-C21	8.38		1	0.30	1.00	mg/kg	FC067873.D
Aliphatic C21-C28	Aliphatic C21-C28	11.2		1	0.80	1.33	mg/kg	FC067873.D
Aliphatic C28-C40	Aliphatic C28-C40	18.6		1	1.80	2.00	mg/kg	FC067873.D
Aromatic C10-C12	Aromatic C10-C12	4.04		1	0.30	0.67	mg/kg	FD048824.D
Aromatic C12-C16	Aromatic C12-C16	8.28		1	0.34	1.00	mg/kg	FD048824.D
Aromatic C16-C21	Aromatic C16-C21	17.4		1	0.96	1.67	mg/kg	FD048824.D
Aromatic C21-C36	Aromatic C21-C36	28.7		1	2.00	2.67	mg/kg	FD048824.D
Total AliphaticEPH	Total AliphaticEPH	47.5			3.52	6.00	mg/kg	
Total AromaticEPH	Total AromaticEPH	58.4			3.60	6.01	mg/kg	
Total EPH	Total EPH	106			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:	PB165286BSD		SDG No.:	P5002	
Lab Sample ID:	PB165286BSD		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
FC067873.D	1	11/26/24	11/27/24	PB165286

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	4.55		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	4.73		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	8.38		0.30	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	11.2		0.80	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	18.6		1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	33.5		40 - 140	67%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB165286BSD	Acq On:	27 Nov 2024 09:18
Client Sample ID:	PB165286BSD	Operator:	YP/AJ
Data file:	FC067873.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	3.186	6.461	11314639	68.246	300	ug/ml
Aliphatic C12-C16	6.462	9.849	12096489	70.995	200	ug/ml
Aliphatic C16-C21	9.850	13.205	21317377	125.676	300	ug/ml
Aliphatic C21-C28	13.206	16.857	26452082	168.185	400	ug/ml
Aliphatic C28-C40	16.858	21.700	33711701	278.353	600	ug/ml
Aliphatic EPH	3.186	21.700	104892288	711.455		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.938	12.938	4856284	33.45		ug/ml
Aliphatic C9-C28	3.186	16.857	71180587	433.102	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067873.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 09:18
Operator : YP/AJ
Sample : PB165286BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Nov 28 00:12:19 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 :
PB165286BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
12) S	1-chlorooctadecane (S...	12.938	4856284	33.454 ug/ml
Spiked Amount	50.000		Recovery =	66.91%
	Target Compounds			
1) T	n-Nonane (C9)	3.288	2733876	16.761 ug/ml
2) T	n-Decane (C10)	4.350	3722419	22.447 ug/ml
4) T	n-Dodecane (C12)	6.363	4858344	28.845 ug/ml
6) T	n-Tetradecane (C14)	8.153	5691424	33.984 ug/ml
7) T	n-Hexadecane (C16)	9.751	6405065	36.960 ug/ml
8) T	n-Octadecane (C18)	11.190	7005985	39.820 ug/ml
10) T	n-Eicosane (C20)	12.497	7304384	43.379 ug/ml
11) T	n-Heneicosane (C21)	13.108	7007008	42.586 ug/ml
13) T	n-Docosane (C22)	13.692	6938589	42.606 ug/ml
14) T	n-Tetracosane (C24)	14.793	6734059	41.988 ug/ml
15) T	n-Hexacosane (C26)	15.812	6483107	41.864 ug/ml
16) T	n-Octacosane (C28)	16.758	6291029	41.656 ug/mlm
17) T	n-Tricontane (C30)	17.644	6182684	40.381 ug/ml
18) T	n-Dotriacontane (C32)	18.475	5981052	40.497 ug/ml
19) T	n-Tetratriacontane (C34)	19.258	5756909	45.643 ug/ml
20) T	n-Hexatriacontane (C36)	19.995	5429361	51.912 ug/ml
21) T	n-Octatriacontane (C38)	20.719	5237894	53.621 ug/ml
22) T	n-Tetracontane (C40)	21.603	5123801	52.570 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067873.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 09:18
Operator : YP/AJ
Sample : PB165286BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

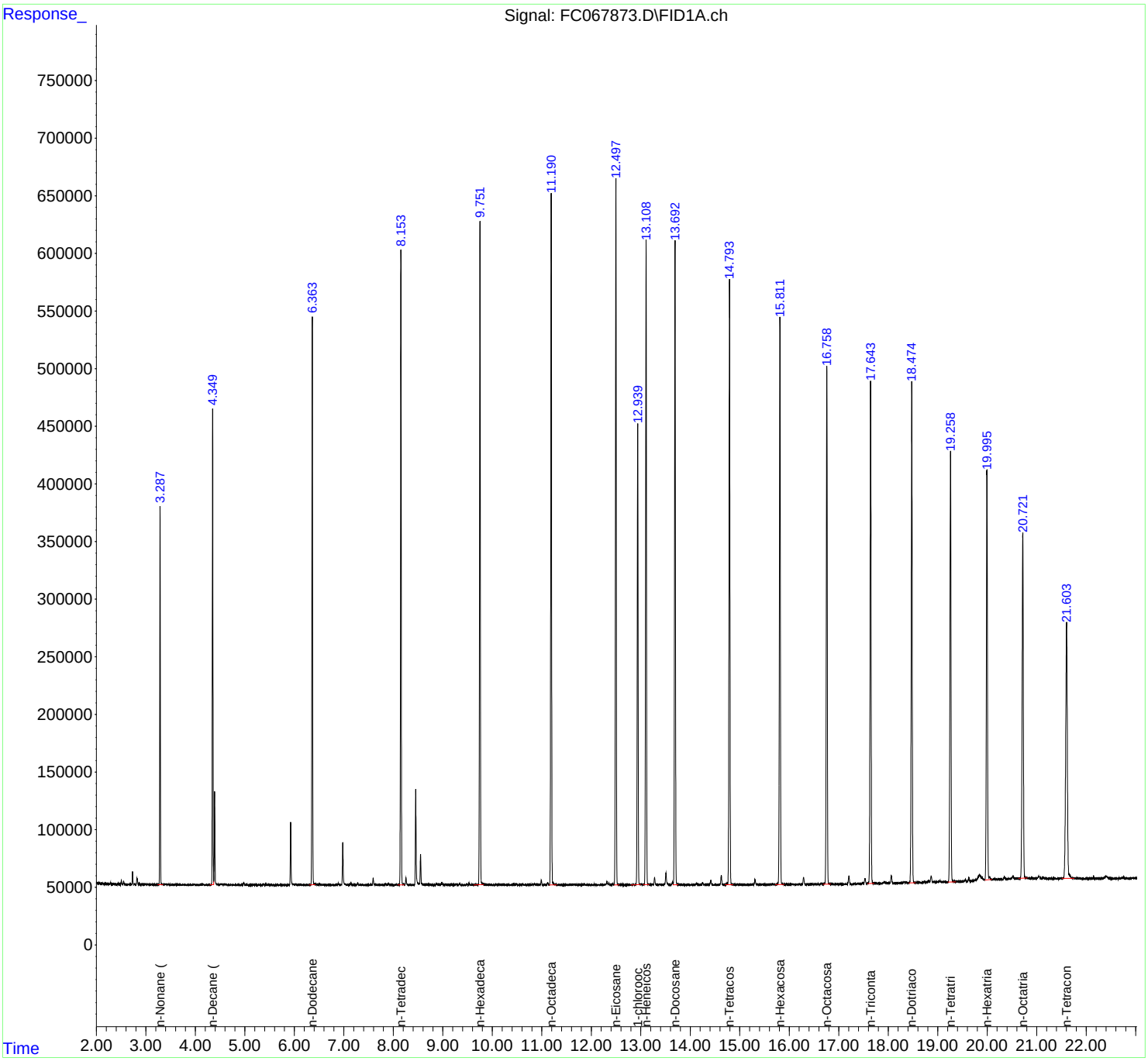
Instrument :
FID_C
ClientSampleId :
PB165286BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 00:12:19 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 :
PB165286BSD

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Da
Data File : FC067873.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 09:18
Sample : PB165286BSD
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	3.288	3.237	3.350	BB	327719	2733876	37.43%	2.491%
2	4.350	4.294	4.372	BV	414337	3722419	50.96%	3.392%
3	6.363	6.302	6.427	BB	492578	4858344	66.51%	4.427%
4	8.153	8.094	8.225	BV	550978	5691424	77.92%	5.186%
5	9.751	9.625	9.830	BB	574895	6405065	87.69%	5.836%
6	11.190	11.147	11.309	PB	598982	7005985	95.91%	6.384%
7	12.497	12.457	12.567	PB	613414	7304384	100.00%	6.656%
8	12.938	12.807	12.995	BB	401047	4856284	66.48%	4.425%
9	13.108	13.040	13.175	BB	554918	7007008	95.93%	6.385%
10	13.692	13.655	13.759	VB	557706	6938589	94.99%	6.322%
11	14.793	14.702	14.869	BB	524252	6734059	92.19%	6.136%
12	15.812	15.715	15.900	BB	491993	6483107	88.76%	5.907%
13	16.760	16.590	16.849	BB	445834	6296327	86.20%	5.737%
14	17.644	17.577	17.719	BB	433765	6182684	84.64%	5.633%
15	18.475	18.415	18.555	BB	432272	5981052	81.88%	5.450%
16	19.258	19.204	19.370	BB	373249	5756909	78.81%	5.246%
17	19.995	19.950	20.092	VB	355816	5429361	74.33%	4.947%
18	20.719	20.632	20.810	BB	297001	5237894	71.71%	4.773%
19	21.603	21.504	21.755	BB	222508	5123801	70.15%	4.669%

Sum of corrected areas: 109748571

Aliphatic EPH 111424.M Thu Nov 28 01:19:15 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:	PB165286BSD			SDG No.:	P5002
Lab Sample ID:	PB165286BSD			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
FD048824.D	1	11/26/24	11/27/24	PB165286

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	4.04		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	8.28		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	17.4		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	28.7		2.00	2.67	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	44.3		40 - 140	89%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	35.8		40 - 140	72%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	39.7		40 - 140	79%	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:	PB165286BSD	Acq On:	27 Nov 2024 09:18
Client Sample ID:	PB165286BSD	Operator:	YP/AJ
Data file:	FD048824.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	4.087	5.803	11645013	60.646	200	ug/ml
Aromatic C12-C16	5.804	8.410	23924027	124.307	300	ug/ml
Aromatic C16-C21	8.411	12.673	48630918	261.731	500	ug/ml
Aromatic C21-C36	12.674	18.080	67739328	430.827	800	ug/ml
Aromatic EPH	4.087	18.080	151939286	877.511		ug/ml
ortho-Terphenyl (SURR)	11.251	11.251	7633251	39.69		ug/ml
2-Bromonaphthalene (SURR)	7.365	7.365	7798373	44.29		ug/ml
2-Flurobiphenyl (SURR)	8.215	8.215	4119206	35.77		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048824.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 09:18
Operator : YP/AJ
Sample : PB165286BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB165286BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:37:27 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...	7.365	7798373	44.294 ug/ml
Spiked Amount	50.000		Recovery =	88.59%
6) S	2-Flurobiphenyl (SURR)	8.215	4119206	35.766 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	71.53%
11) S	ortho-Terphenyl (SURR)	11.251	7633251	39.687 ug/ml
Spiked Amount	50.000		Recovery =	79.37%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.188	5090019	27.008 ug/ml
2) T	Naphthalene (C11.7)	5.705	6554994	33.517 ug/ml
3) T	2-Methylnaphthalene (...	6.752	6807954	35.624 ug/ml
5) T	Acenaphthylene (C15.06)	8.018	8420422	43.421 ug/ml
7) T	Acenaphthene (C15.5)	8.314	8695651	45.209 ug/ml
8) T	Flouorene (C16.55)	9.092	9140315	47.642 ug/ml
9) T	Phenanthrene (C19.36)	10.480	9445420	51.529 ug/ml
10) T	Anthracene (C19.43)	10.557	9536310	50.923 ug/ml
12) T	Fluoranthene (C21.85)	12.286	9735315	53.163 ug/mlm
13) T	Pyrene (C20.8)	12.580	9616115	53.188 ug/ml
14) T	Benzo[a]anthracene (C...	14.450	9129078	55.495 ug/ml
15) T	Chrysene (C27.41)	14.493	9123392	52.130 ug/ml
16) T	benzo[b]fluoranthene ...	15.998	8673418	55.203 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.033	8875959	54.388 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.374	8240093	55.266 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.741	8020233	64.925 ug/ml
20) T	Dibenz[a,h]anthracene...	17.778	8055015	51.367 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.993	7622140	53.419 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048824.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 09:18
Operator : YP/AJ
Sample : PB165286BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

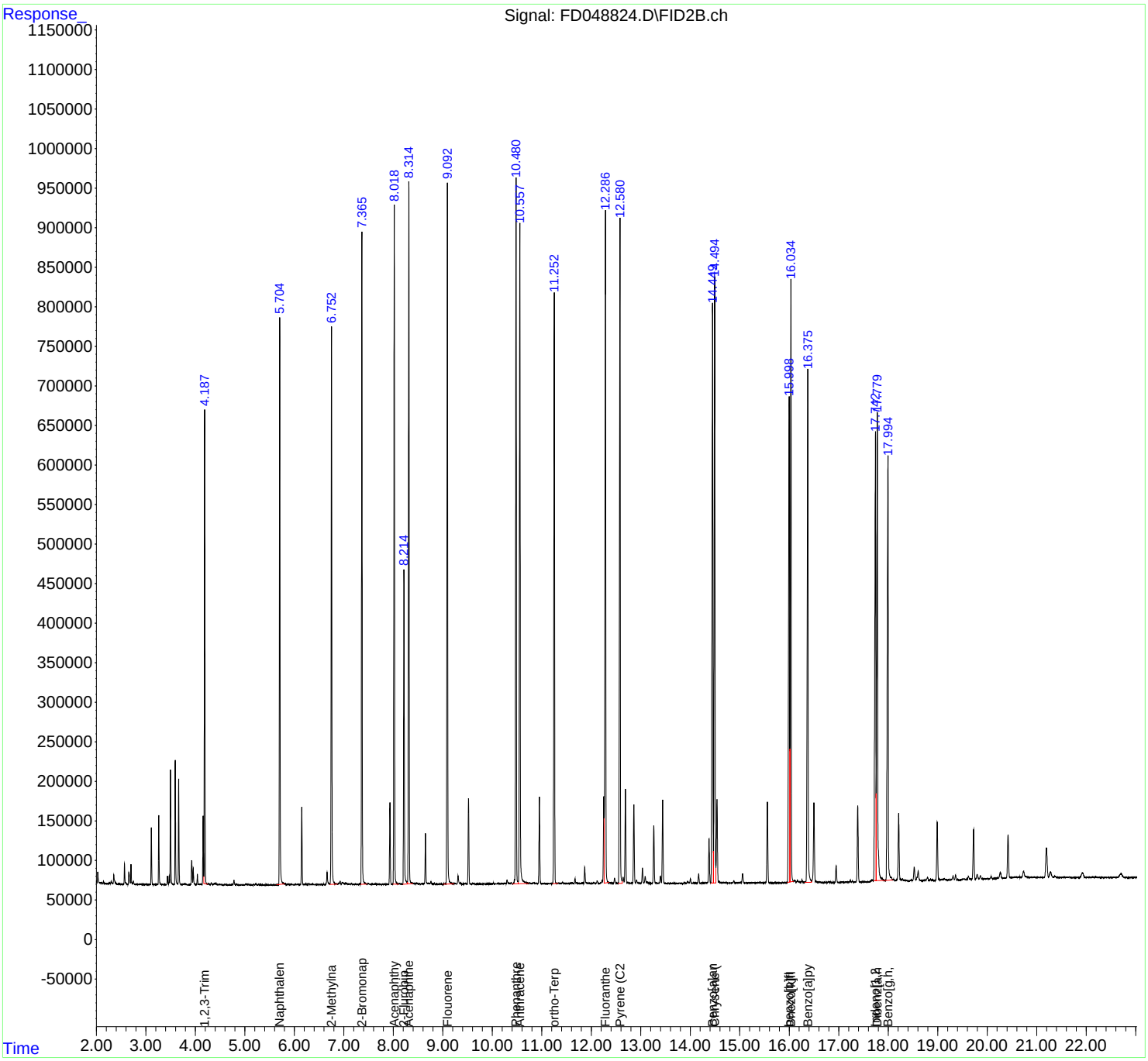
Instrument :
FID_D
ClientSampleId :
PB165286BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:37:27 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 :
PB165286BSD

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Da
Data File : FD048824.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 09:18
Sample : PB165286BSD
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	4.188	4.170	4.251	VV	596907	5090019	46.73%	2.968%
2	5.705	5.641	5.801	BV	716892	6554994	60.18%	3.822%
3	6.752	6.717	6.874	VB	701125	6807954	62.50%	3.970%
4	7.365	7.337	7.468	PB	824342	7798373	71.59%	4.547%
5	8.018	7.991	8.104	BV	854337	8420422	77.30%	4.910%
6	8.215	8.188	8.284	PV	398289	4119206	37.82%	2.402%
7	8.314	8.284	8.401	VB	898186	8695651	79.83%	5.071%
8	9.092	9.008	9.228	BB	879314	9140315	83.91%	5.330%
9	10.480	10.408	10.523	BV	898086	9445420	86.71%	5.508%
10	10.557	10.523	10.728	VV	842696	9536310	87.55%	5.561%
11	11.251	11.214	11.324	BB	741561	7633251	70.08%	4.451%
12	12.286	12.227	12.394	VB	833361	10892758	100.00%	6.352%
13	12.580	12.541	12.624	PV	861289	9616115	88.28%	5.607%
14	14.450	14.410	14.468	VV	738789	9129078	83.81%	5.323%
15	14.493	14.468	14.518	VV	774744	9123392	83.76%	5.320%
16	15.998	15.961	16.013	BV	614037	8673418	79.63%	5.058%
17	16.033	16.013	16.091	VV	776721	8875959	81.48%	5.176%
18	16.374	16.314	16.449	BV	647474	8240093	75.65%	4.805%
19	17.741	17.701	17.756	BV	561845	8020233	73.63%	4.677%
20	17.778	17.756	17.944	VV	583134	8055015	73.95%	4.697%
21	17.993	17.944	18.091	PV	541295	7622140	69.97%	4.445%

Sum of corrected areas: 171490119

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-7-TPH-1MS			SDG No.:	P5002		
Lab Sample ID:	P5002-01MS			Matrix:	Solid		
Analytical Method:	NJEPH			% Solid:	84.6		
Sample Wt/Vol:	30.08	Units:	g	Final Vol:	2000	uL	
Soil Aliquot Vol:			uL	Test:	EPH		
Prep Method :							

Prep Date :	Date Analyzed :	Prep Batch ID
11/26/24 10:25	11/27/24 11:12	PB165286

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	82.2	E	1	0.45	1.18	mg/kg	FC067876.D
Aliphatic C12-C16	Aliphatic C12-C16	470	E	1	0.28	0.79	mg/kg	FC067876.D
Aliphatic C16-C21	Aliphatic C16-C21	448	E	1	0.35	1.18	mg/kg	FC067876.D
Aliphatic C21-C28	Aliphatic C21-C28	158	E	1	0.94	1.57	mg/kg	FC067876.D
Aliphatic C28-C40	Aliphatic C28-C40	108	E	1	2.12	2.36	mg/kg	FC067876.D
Aromatic C10-C12	Aromatic C10-C12	19.7	E	1	0.35	0.79	mg/kg	FD048827.D
Aromatic C12-C16	Aromatic C12-C16	170	E	1	0.40	1.18	mg/kg	FD048827.D
Aromatic C16-C21	Aromatic C16-C21	450	E	1	1.13	1.96	mg/kg	FD048827.D
Aromatic C21-C36	Aromatic C21-C36	126	E	1	2.36	3.14	mg/kg	FD048827.D
Total AliphaticEPH	Total AliphaticEPH	1270			4.15	7.08	mg/kg	
Total AromaticEPH	Total AromaticEPH	766			4.25	7.07	mg/kg	
Total EPH	Total EPH	2030			8.39	14.1	mg/kg	

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution

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-7-TPH-1MS		SDG No.:	P5002	
Lab Sample ID:	P5002-01MS		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	84.6	
Sample Wt/Vol:	30.08 Units:	g	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :					

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC067876.D	1	11/26/24	11/27/24	PB165286

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12		82.2	E	0.45	1.18	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16		470	E	0.28	0.79	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21		448	E	0.35	1.18	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28		158	E	0.94	1.57	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40		108	E	2.12	2.36	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)		44.0		40 - 140	88%	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:	P5002-01MS	Acq On:	27 Nov 2024 11:12
Client Sample ID:	EX-7-TPH-1MS	Operator:	YP/AJ
Data file:	FC067876.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	3.186	6.461	173331318	1050	300	ug/ml
Aliphatic C12-C16	6.462	9.849	1019664802	5980	200	ug/ml
Aliphatic C16-C21	9.850	13.205	966931561	5700	300	ug/ml
Aliphatic C21-C28	13.206	16.857	316982891	2020	400	ug/ml
Aliphatic C28-C40	16.858	21.700	167223893	1380	600	ug/ml
Aliphatic EPH	3.186	21.700	2644134465	16100		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.949	12.949	6393016	44.04		ug/ml
Aliphatic C9-C28	3.186	16.857	2476910572	14700	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067876.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 11:12
Operator : YP/AJ
Sample : P5002-01MS
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 00:15:04 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...	12.949	6393016	44.041 ug/mlm
Spiked Amount	50.000		Recovery =	88.08%
	Target Compounds			
1) T	n-Nonane (C9)	3.286	3013106	18.472 ug/ml
2) T	n-Decane (C10)	4.350	4170816	25.151 ug/ml
4) T	n-Dodecane (C12)	6.369	6431282	38.184 ug/mlm
6) T	n-Tetradecane (C14)	8.168	6370966	38.042 ug/mlm
7) T	n-Hexadecane (C16)	9.722	6830899	39.417 ug/mlm
8) T	n-Octadecane (C18)	11.206	7042406	40.027 ug/mlm
10) T	n-Eicosane (C20)	12.510	7916470	47.014 ug/mlm
11) T	n-Heneicosane (C21)	13.115	5446451	33.101 ug/mlm
13) T	n-Docosane (C22)	13.699	5808047	35.664 ug/mlm
14) T	n-Tetracosane (C24)	14.799	5821883	36.300 ug/mlm
15) T	n-Hexacosane (C26)	15.818	5224317	33.735 ug/mlm
16) T	n-Octacosane (C28)	16.764	5789351	38.334 ug/mlm
17) T	n-Tricontane (C30)	17.650	5341413	34.886 ug/mlm
18) T	n-Dotriacontane (C32)	18.481	5123060	34.688 ug/mlm
19) T	n-Tetratriacontane (C34)	19.260	5338292	42.324 ug/ml
20) T	n-Hexatriacontane (C36)	19.998	5162157	49.357 ug/ml
21) T	n-Octatriacontane (C38)	20.722	4461491	45.673 ug/ml
22) T	n-Tetracontane (C40)	21.607	4445757	45.613 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067876.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 11:12
Operator : YP/AJ
Sample : P5002-01MS
Misc :
ALS Vial : 16 Sample Multiplier: 1

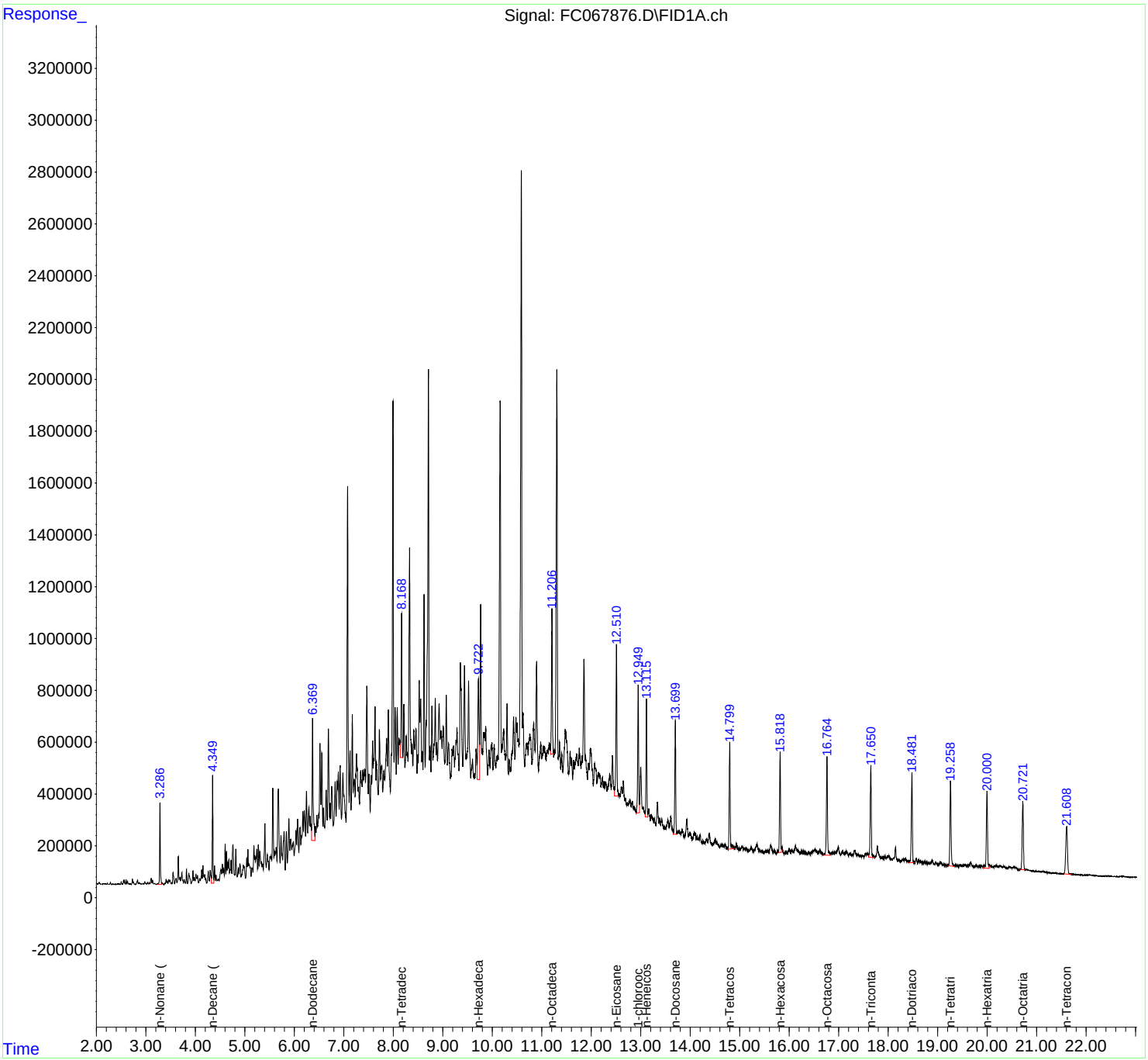
Integration File: autoint1.e
Quant Time: Nov 28 00:15:04 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024



Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1MS

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Da
Data File : FC067876.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 11:12
Sample : P5002-01MS
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	3.286	3.225	3.321	BV	312829	2976757	5.27%	0.112%
2	3.331	3.321	3.364	VV	5247	62589	0.11%	0.002%
3	3.385	3.364	3.394	PV	4969	43236	0.08%	0.002%
4	3.410	3.394	3.423	VV	18514	186308	0.33%	0.007%
5	3.433	3.423	3.447	VV	13680	135278	0.24%	0.005%
6	3.463	3.447	3.474	VV	18039	184229	0.33%	0.007%
7	3.486	3.474	3.512	VV	17085	224322	0.40%	0.008%
8	3.550	3.512	3.582	VV	44501	713362	1.26%	0.027%
9	3.610	3.582	3.630	VV	22956	379929	0.67%	0.014%
10	3.657	3.630	3.678	VV	106541	1185369	2.10%	0.045%
11	3.689	3.678	3.701	VV	25782	297955	0.53%	0.011%
12	3.728	3.701	3.762	VV	44965	794962	1.41%	0.030%
13	3.777	3.762	3.804	VV	17626	244834	0.43%	0.009%
14	3.822	3.804	3.842	VV	57199	511336	0.91%	0.019%
15	3.870	3.842	3.917	VV	40380	870032	1.54%	0.033%
16	3.952	3.917	3.967	VV	51262	625904	1.11%	0.024%
17	3.978	3.967	3.998	VV	26091	348053	0.62%	0.013%
18	4.012	3.998	4.031	VV	37162	510301	0.90%	0.019%
19	4.044	4.031	4.066	VV	33980	419264	0.74%	0.016%
20	4.087	4.066	4.100	VV	20697	278629	0.49%	0.010%
21	4.128	4.100	4.140	VV	54667	725756	1.29%	0.027%
22	4.155	4.140	4.178	VV	70824	962891	1.71%	0.036%
23	4.190	4.178	4.230	VV	36541	631274	1.12%	0.024%
24	4.262	4.230	4.282	VV	47955	718449	1.27%	0.027%
25	4.302	4.282	4.325	VV	52719	824088	1.46%	0.031%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1MS

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

26	4.350	4.325	4.372	VV	417885	4246231	7.52%	0.160%
27	4.389	4.372	4.404	VV	69518			
28	4.418	4.404	4.441	VV	35093			
29	4.465	4.441	4.480	VV	18729			
30	4.517	4.480	4.530	VV	54395	1		
31	4.546	4.530	4.560	VV	75353	1016475	1.80%	0.038%
32	4.572	4.560	4.586	VV	59117	744256	1.32%	0.028%
33	4.603	4.586	4.617	VV	152542	1585498	2.81%	0.060%
34	4.630	4.617	4.644	VV	124387	1341480	2.38%	0.050%
35	4.656	4.644	4.667	VV	82834	970784	1.72%	0.036%
36	4.677	4.667	4.691	VV	92321	996036	1.76%	0.037%
37	4.721	4.691	4.736	VV	90367	1662844	2.95%	0.062%
38	4.759	4.736	4.797	VV	151592	3024234	5.36%	0.114%
39	4.818	4.797	4.846	VV	133877	1890502	3.35%	0.071%
40	4.868	4.846	4.882	VV	61399	958113	1.70%	0.036%
41	4.902	4.882	4.924	VV	74061	1420737	2.52%	0.053%
42	4.972	4.924	5.015	VV	70094	2516517	4.46%	0.095%
43	5.039	5.015	5.049	VV	97502	1257044	2.23%	0.047%
44	5.062	5.049	5.126	VV	131665	3337172	5.91%	0.125%
45	5.145	5.126	5.163	VV	60502	1124839	1.99%	0.042%
46	5.184	5.163	5.215	VV	146060	3045016	5.39%	0.114%
47	5.241	5.215	5.257	VV	131668	2507941	4.44%	0.094%
48	5.272	5.257	5.287	VV	149263	1885449	3.34%	0.071%
49	5.303	5.287	5.347	VV	123366	3227564	5.72%	0.121%
50	5.360	5.347	5.373	VV	73873	1039902	1.84%	0.039%
51	5.405	5.373	5.432	VV	230397	4229362	7.49%	0.159%
52	5.454	5.432	5.489	VV	111456	2822039	5.00%	0.106%
53	5.509	5.489	5.520	VV	103151	1617699	2.87%	0.061%
54	5.530	5.520	5.543	VV	103316	1371650	2.43%	0.052%
55	5.565	5.543	5.589	VV	368518	5646307	10.00%	0.212%
56	5.598	5.589	5.608	VV	124187	1299153	2.30%	0.049%
57	5.633	5.608	5.649	VV	137982	2876746	5.10%	0.108%
58	5.677	5.649	5.713	VV	364378	8113271	14.37%	0.305%
59	5.732	5.713	5.762	VV	184224	3667748	6.50%	0.138%
60	5.793	5.762	5.816	VV	199404	4343086	7.69%	0.163%
61	5.840	5.816	5.860	VV	197999	3149353	5.58%	0.118%
62	5.891	5.860	5.909	VV	249257	4744189	8.40%	0.178%
63	5.924	5.909	5.949	VV	167658	3565090	6.31%	0.134%
64	5.979	5.949	5.997	VV	159142	4069518	7.21%	0.153%
65	6.034	5.997	6.048	VV	201612	4701488	8.33%	0.177%
66	6.067	6.048	6.091	VV	244847	4865354	8.62%	0.183%
67	6.114	6.091	6.133	VV	212091	4441371	7.87%	0.167%
68	6.173	6.133	6.187	VV	275666	6660180	11.80%	0.250%
69	6.203	6.187	6.228	VV	276983	5741875	10.17%	0.216%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1MS

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

70	6.246	6.228	6.268	VV	355701	6310184	11.18%	0.237%
71	6.294	6.268	6.309	VV	291168	6[illegible]		
72	6.321	6.309	6.348	VV	256511	5[illegible]		
73	6.369	6.348	6.416	VV	629724	13[illegible]		
74	6.429	6.416	6.440	VV	218255	2[illegible]		
75	6.457	6.440	6.472	VV	256300	4385691	7.77%	0.165%
76	6.519	6.472	6.540	VV	538366	13388015	23.71%	0.503%
77	6.557	6.540	6.577	VV	501326	8297053	14.70%	0.312%
78	6.589	6.577	6.613	VV	288992	5193662	9.20%	0.195%
79	6.644	6.613	6.664	VV	357152	8582871	15.20%	0.323%
80	6.690	6.664	6.714	VV	593926	11883004	21.05%	0.447%
81	6.725	6.714	6.737	VV	306207	3771745	6.68%	0.142%
82	6.756	6.737	6.791	VV	370542	9764210	17.30%	0.367%
83	6.826	6.791	6.846	VV	386899	9638314	17.07%	0.362%
84	6.867	6.846	6.876	VV	386258	6202910	10.99%	0.233%
85	6.890	6.876	6.907	VV	427025	6699479	11.87%	0.252%
86	6.926	6.907	6.954	VV	449801	9794183	17.35%	0.368%
87	6.983	6.954	7.045	VV	421293	17090949	30.27%	0.642%
88	7.077	7.045	7.108	VV	1540728	26902564	47.65%	1.011%
89	7.126	7.108	7.148	VV	505563	9335976	16.54%	0.351%
90	7.172	7.148	7.191	VV	644678	11653956	20.64%	0.438%
91	7.213	7.191	7.230	VV	394457	8744176	15.49%	0.329%
92	7.258	7.230	7.317	VV	495845	20484937	36.28%	0.770%
93	7.341	7.317	7.368	VV	430550	11833713	20.96%	0.445%
94	7.384	7.368	7.398	VV	429679	7201846	12.76%	0.271%
95	7.425	7.398	7.440	VV	436069	10356418	18.34%	0.389%
96	7.466	7.440	7.494	VV	755429	17218668	30.50%	0.647%
97	7.511	7.494	7.534	VV	413372	8487471	15.03%	0.319%
98	7.555	7.534	7.564	VV	409951	6709578	11.88%	0.252%
99	7.582	7.564	7.595	VV	542478	8418011	14.91%	0.316%
100	7.631	7.595	7.648	VV	677222	16816301	29.79%	0.632%
101	7.660	7.648	7.695	VV	461469	11361363	20.12%	0.427%
102	7.721	7.695	7.741	VV	581155	12562404	22.25%	0.472%
103	7.767	7.741	7.787	VV	448353	11524711	20.41%	0.433%
104	7.809	7.787	7.831	VV	427102	10584311	18.75%	0.398%
105	7.865	7.831	7.881	VV	554032	14391279	25.49%	0.541%
106	7.900	7.881	7.941	VV	665507	17561676	31.11%	0.660%
107	7.994	7.941	8.016	VV	1878549	36601178	64.83%	1.375%
108	8.038	8.016	8.059	VV	670799	14330025	25.38%	0.539%
109	8.079	8.059	8.098	VV	667377	12735391	22.56%	0.479%
110	8.168	8.098	8.192	VV	1033560	34390400	60.92%	1.292%
111	8.214	8.192	8.236	VV	687567	14694912	26.03%	0.552%
112	8.261	8.236	8.296	VV	563296	17825682	31.57%	0.670%

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Manual IntegrationsAPPROVED

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113	8.328	8.296	8.369	VV	1275083	32279187	57.18%	1.213%
114	8.379	8.369	8.398	VV	530475	8		
115	8.414	8.398	8.437	VV	581031	12		
116	8.457	8.437	8.480	VV	585242	13		
117	8.524	8.480	8.538	VV	774306	19		
118	8.553	8.538	8.575	VV	704858	13606315	24.10%	0.511%
119	8.585	8.575	8.598	VV	500536	6609410	11.71%	0.248%
120	8.622	8.598	8.644	VV	1107631	19780430	35.04%	0.743%
121	8.710	8.644	8.731	VV	1991762	47922104	84.88%	1.801%
122	8.744	8.731	8.761	VV	517630	8451343	14.97%	0.318%
123	8.781	8.761	8.802	VV	674863	13736207	24.33%	0.516%
124	8.848	8.802	8.866	VV	707371	21312910	37.75%	0.801%
125	8.877	8.866	8.893	VV	528974	8221128	14.56%	0.309%
126	8.925	8.893	8.948	VV	685166	19250543	34.10%	0.723%
127	8.967	8.948	8.988	VV	579477	13258925	23.49%	0.498%
128	9.010	8.988	9.038	VV	597724	16274046	28.83%	0.612%
129	9.071	9.038	9.095	VV	715246	18506835	32.78%	0.695%
130	9.117	9.095	9.158	VV	528715	17859072	31.63%	0.671%
131	9.189	9.158	9.201	VV	509597	11776899	20.86%	0.443%
132	9.219	9.201	9.238	VV	522987	10921969	19.35%	0.410%
133	9.288	9.238	9.328	VV	586160	27183753	48.15%	1.022%
134	9.357	9.328	9.405	VV	835447	28485860	50.46%	1.070%
135	9.439	9.405	9.485	VV	824701	27747960	49.15%	1.043%
136	9.522	9.485	9.566	VV	770575	26431856	46.82%	0.993%
137	9.601	9.566	9.651	VV	469155	21706659	38.45%	0.816%
138	9.675	9.651	9.693	VV	503791	11691942	20.71%	0.439%
139	9.720	9.693	9.745	VV	782887	19003340	33.66%	0.714%
140	9.766	9.745	9.788	VV	1072452	19197454	34.00%	0.721%
141	9.797	9.788	9.806	VV	509652	5569856	9.87%	0.209%
142	9.826	9.806	9.854	VV	572714	15483692	27.43%	0.582%
143	9.867	9.854	9.906	VV	593636	16005093	28.35%	0.601%
144	9.935	9.906	9.958	VV	503564	14327038	25.38%	0.538%
145	9.992	9.958	10.016	VV	533338	17268548	30.59%	0.649%
146	10.039	10.016	10.075	VV	518677	16419837	29.08%	0.617%
147	10.090	10.075	10.100	VV	478221	7210900	12.77%	0.271%
148	10.160	10.100	10.185	VV	1856737	46239292	81.90%	1.738%
149	10.230	10.185	10.269	VV	587077	26541673	47.01%	0.997%
150	10.299	10.269	10.324	VV	677039	17456817	30.92%	0.656%
151	10.341	10.324	10.375	VV	461636	13356129	23.66%	0.502%
152	10.432	10.375	10.458	VV	627790	25835565	45.76%	0.971%
153	10.480	10.458	10.493	VV	623030	11739219	20.79%	0.441%
154	10.501	10.493	10.521	VV	606738	9620162	17.04%	0.362%
155	10.527	10.521	10.539	VV	544021	5758243	10.20%	0.216%

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156	10.588	10.539	10.611	VV	2750220	56455771	100.00%	2.122%
157	10.622	10.611	10.654	VV	646351	14		
158	10.700	10.654	10.724	VV	528838	20		
159	10.759	10.724	10.801	VV	564518	24		
160	10.838	10.801	10.865	VV	604480	20		
161	10.895	10.865	10.935	VV	839007	25119378	44.49%	0.944%
162	10.979	10.935	11.001	VV	531932	19085194	33.81%	0.717%
163	11.031	11.001	11.048	VV	517874	13842921	24.52%	0.520%
164	11.057	11.048	11.091	VV	513227	12750237	22.58%	0.479%
165	11.117	11.091	11.131	VV	500241	11830033	20.95%	0.445%
166	11.152	11.131	11.177	VV	527518	13985307	24.77%	0.526%
167	11.206	11.177	11.242	VV	1039859	26169453	46.35%	0.983%
168	11.305	11.242	11.338	VV	1976403	49804123	88.22%	1.872%
169	11.360	11.338	11.384	VV	531400	13331994	23.61%	0.501%
170	11.403	11.384	11.426	VV	489810	11569608	20.49%	0.435%
171	11.478	11.426	11.547	VV	578595	36031188	63.82%	1.354%
172	11.573	11.547	11.590	VV	491871	11731990	20.78%	0.441%
173	11.604	11.590	11.624	VV	470597	9016294	15.97%	0.339%
174	11.645	11.624	11.660	VV	460682	9312486	16.50%	0.350%
175	11.705	11.660	11.738	VV	482916	21477735	38.04%	0.807%
176	11.758	11.738	11.794	VV	507062	15643905	27.71%	0.588%
177	11.815	11.794	11.823	VV	471984	8211384	14.54%	0.309%
178	11.853	11.823	11.924	VV	850866	32581620	57.71%	1.224%
179	11.944	11.924	11.960	VV	446996	9283916	16.44%	0.349%
180	11.982	11.960	12.042	VV	502809	22274845	39.46%	0.837%
181	12.069	12.042	12.118	VV	448123	18690782	33.11%	0.702%
182	12.144	12.118	12.197	VV	406228	18705327	33.13%	0.703%
183	12.224	12.197	12.243	VV	390950	10385355	18.40%	0.390%
184	12.257	12.243	12.274	VV	379647	6841129	12.12%	0.257%
185	12.289	12.274	12.323	VV	376603	10649612	18.86%	0.400%
186	12.372	12.323	12.403	VV	408347	17892264	31.69%	0.672%
187	12.430	12.403	12.477	VV	477023	17257435	30.57%	0.649%
188	12.510	12.477	12.581	VV	904349	28080528	49.74%	1.055%
189	12.609	12.581	12.629	VV	355165	9791294	17.34%	0.368%
190	12.649	12.629	12.676	VV	378916	9665989	17.12%	0.363%
191	12.683	12.676	12.717	VV	309943	7445640	13.19%	0.280%
192	12.727	12.717	12.746	VV	295657	5028210	8.91%	0.189%
193	12.783	12.746	12.811	VV	306441	11338554	20.08%	0.426%
194	12.832	12.811	12.906	VV	302140	16014116	28.37%	0.602%
195	12.949	12.906	12.975	VV	752753	16947592	30.02%	0.637%
196	13.001	12.975	13.037	VV	426576	12719034	22.53%	0.478%
197	13.048	13.037	13.090	VV	279853	8482043	15.02%	0.319%
198	13.117	13.090	13.145	VV	696969	13327880	23.61%	0.501%
199	13.162	13.145	13.195	VV	268421	7686744	13.62%	0.289%

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200	13.216	13.195	13.263	VV	249146	9541564	16.90%	0.359%
201	13.275	13.263	13.308	VV	232868	6[illegible]		
202	13.339	13.308	13.371	VV	295729	9[illegible]		
203	13.384	13.371	13.404	VV	234126	4[illegible]		
204	13.422	13.404	13.515	VV	232276	13[illegible]	[illegible]	[illegible]
205	13.549	13.515	13.578	VV	229280	8052620	14.26%	0.303%
206	13.608	13.578	13.659	VV	238547	10121735	17.93%	0.380%
207	13.700	13.659	13.734	VV	618048	13616245	24.12%	0.512%
208	13.780	13.734	13.808	VV	183234	7975765	14.13%	0.300%
209	13.841	13.808	13.880	VV	190893	7655192	13.56%	0.288%
210	13.931	13.880	13.968	VV	228864	9896455	17.53%	0.372%
211	14.000	13.968	14.045	VV	177584	7593541	13.45%	0.285%
212	14.084	14.045	14.095	VV	177705	5103023	9.04%	0.192%
213	14.101	14.095	14.118	VV	174874	2230563	3.95%	0.084%
214	14.133	14.118	14.164	VV	161595	4306502	7.63%	0.162%
215	14.171	14.164	14.179	VV	156942	1409684	2.50%	0.053%
216	14.199	14.179	14.239	VV	168814	5451817	9.66%	0.205%
217	14.255	14.239	14.294	VV	144876	4610754	8.17%	0.173%
218	14.329	14.294	14.355	VV	151080	5291204	9.37%	0.199%
219	14.386	14.355	14.460	VV	171139	9182967	16.27%	0.345%
220	14.505	14.460	14.525	VV	153672	5525817	9.79%	0.208%
221	14.534	14.525	14.595	VV	137354	5465165	9.68%	0.205%
222	14.633	14.595	14.684	VV	130352	6732416	11.93%	0.253%
223	14.704	14.684	14.762	VV	132967	5734481	10.16%	0.215%
224	14.798	14.762	14.841	VV	516530	10999090	19.48%	0.413%
225	14.850	14.841	14.903	VV	125517	4503407	7.98%	0.169%
226	14.936	14.903	14.978	VV	133322	5456932	9.67%	0.205%
227	14.993	14.978	15.014	VV	113778	2362034	4.18%	0.089%
228	15.047	15.014	15.091	VV	125798	5425503	9.61%	0.204%
229	15.102	15.091	15.115	VV	114513	1587537	2.81%	0.060%
230	15.135	15.115	15.175	VV	116988	3988016	7.06%	0.150%
231	15.228	15.175	15.273	VV	117444	6491875	11.50%	0.244%
232	15.283	15.273	15.287	VV	106489	893757	1.58%	0.034%
233	15.348	15.287	15.431	VV	130818	9753413	17.28%	0.367%
234	15.443	15.431	15.477	VV	105476	2813392	4.98%	0.106%
235	15.529	15.477	15.545	VV	104234	4131082	7.32%	0.155%
236	15.556	15.545	15.565	VV	105790	1199727	2.13%	0.045%
237	15.574	15.565	15.588	VV	106862	1459157	2.58%	0.055%
238	15.625	15.588	15.678	VV	125769	5961969	10.56%	0.224%
239	15.697	15.678	15.743	VV	104739	3896197	6.90%	0.146%
240	15.761	15.743	15.781	VV	103050	2241720	3.97%	0.084%
241	15.817	15.781	15.843	VV	489116	8931509	15.82%	0.336%
242	15.858	15.843	15.895	VV	117943	3277506	5.81%	0.123%

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243	15.998	15.895	16.038	VV	109186	8509907	15.07%	0.320%
244	16.058	16.038	16.091	VV	107174	3		
245	16.130	16.091	16.216	VV	122497	7		
246	16.245	16.216	16.281	VV	102239	3		
247	16.292	16.281	16.322	VV	98864	2		
248	16.344	16.322	16.363	VV	97612	2350241	4.16%	0.088%
249	16.410	16.363	16.430	VV	95854	3748668	6.64%	0.141%
250	16.513	16.430	16.527	VV	109444	5867373	10.39%	0.220%
251	16.535	16.527	16.585	VV	106516	3413060	6.05%	0.128%
252	16.620	16.585	16.708	VV	104830	6992431	12.39%	0.263%
253	16.764	16.708	16.838	VV	464025	12443349	22.04%	0.468%
254	16.851	16.838	16.872	VV	95819	1863120	3.30%	0.070%
255	16.887	16.872	16.903	VV	96147	1749785	3.10%	0.066%
256	16.992	16.903	17.039	VV	119498	8081073	14.31%	0.304%
257	17.078	17.039	17.130	VV	98114	5034831	8.92%	0.189%
258	17.165	17.130	17.195	VV	99896	3688325	6.53%	0.139%
259	17.237	17.195	17.257	VV	91680	3218343	5.70%	0.121%
260	17.273	17.257	17.288	VV	85859	1583837	2.81%	0.060%
261	17.319	17.288	17.395	VV	101087	5790289	10.26%	0.218%
262	17.402	17.395	17.428	VV	86645	1658604	2.94%	0.062%
263	17.440	17.428	17.465	VV	82064	1757141	3.11%	0.066%
264	17.488	17.465	17.508	VV	83512	2092435	3.71%	0.079%
265	17.538	17.508	17.549	VV	89972	2094089	3.71%	0.079%
266	17.556	17.549	17.562	VV	88913	657690	1.16%	0.025%
267	17.582	17.562	17.605	VV	90493	2275499	4.03%	0.086%
268	17.650	17.605	17.736	VV	435486	11289944	20.00%	0.424%
269	17.783	17.736	17.871	VV	118946	6973462	12.35%	0.262%
270	17.878	17.871	17.901	VV	75166	1317353	2.33%	0.050%
271	17.934	17.901	17.962	VV	78898	2720598	4.82%	0.102%
272	17.985	17.962	17.995	VV	80932	1510700	2.68%	0.057%
273	18.006	17.995	18.055	VV	79731	2650230	4.69%	0.100%
274	18.065	18.055	18.081	VV	67787	1011154	1.79%	0.038%
275	18.149	18.081	18.201	VV	113438	5428517	9.62%	0.204%
276	18.213	18.201	18.248	VV	63451	1707897	3.03%	0.064%
277	18.302	18.248	18.320	VV	66088	2706501	4.79%	0.102%
278	18.342	18.320	18.414	VV	68196	3500357	6.20%	0.132%
279	18.431	18.414	18.440	VV	60608	938952	1.66%	0.035%
280	18.480	18.440	18.515	VV	402513	7425801	13.15%	0.279%
281	18.524	18.515	18.545	VV	56535	951442	1.69%	0.036%
282	18.570	18.545	18.594	VV	69736	1812395	3.21%	0.068%
283	18.617	18.594	18.641	VV	65861	1656701	2.93%	0.062%
284	18.652	18.641	18.718	VV	58044	2534671	4.49%	0.095%
285	18.751	18.718	18.851	VV	57563	4138002	7.33%	0.156%

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286	18.872	18.851	18.880	VV	55928	933126	1.65%	0.035%
287	18.899	18.880	18.937	VV	60736	1[illegible]		
288	18.968	18.937	19.008	VV	53221	2[illegible]		
289	19.060	19.008	19.141	VV	52629	3[illegible]		
290	19.151	19.141	19.216	VV	44150	1[illegible]		
291	19.260	19.216	19.331	VV	360122	8016369	14.20%	0.301%
292	19.369	19.331	19.389	VV	43085	1429355	2.53%	0.054%
293	19.393	19.389	19.428	VV	38966	863817	1.53%	0.032%
294	19.456	19.428	19.504	VV	41769	1812372	3.21%	0.068%
295	19.518	19.504	19.549	VV	41675	1079178	1.91%	0.041%
296	19.558	19.549	19.614	VV	43010	1570799	2.78%	0.059%
297	19.674	19.614	19.728	VV	50033	2787992	4.94%	0.105%
298	19.780	19.728	19.813	VV	40757	1909091	3.38%	0.072%
299	19.844	19.813	19.865	VV	38404	1132284	2.01%	0.043%
300	19.889	19.865	19.911	VV	38783	1020206	1.81%	0.038%
301	19.932	19.911	19.960	VV	38665	1077663	1.91%	0.040%
302	19.998	19.960	20.044	VV	326243	6368894	11.28%	0.239%
303	20.052	20.044	20.133	VV	40613	1917373	3.40%	0.072%
304	20.192	20.133	20.228	VV	38036	2022474	3.58%	0.076%
305	20.253	20.228	20.314	VV	37491	1804291	3.20%	0.068%
306	20.337	20.314	20.399	VV	34036	1616082	2.86%	0.061%
307	20.412	20.399	20.421	VV	29016	370435	0.66%	0.014%
308	20.470	20.421	20.500	VV	32473	1440365	2.55%	0.054%
309	20.551	20.500	20.655	VV	31647	2527718	4.48%	0.095%
310	20.722	20.655	20.778	VV	284000	6070482	10.75%	0.228%
311	20.790	20.778	20.914	VV	22925	1563766	2.77%	0.059%
312	20.928	20.914	20.964	VV	16937	463640	0.82%	0.017%
313	20.986	20.964	21.023	VV	15749	516752	0.92%	0.019%
314	21.046	21.023	21.083	VV	15277	500640	0.89%	0.019%
315	21.128	21.083	21.228	VV	13893	1010119	1.79%	0.038%
316	21.237	21.228	21.300	VV	10142	380360	0.67%	0.014%
317	21.311	21.300	21.319	VV	8104	81252	0.14%	0.003%
318	21.331	21.319	21.354	VV	8700	167982	0.30%	0.006%
319	21.364	21.354	21.373	VV	7630	76556	0.14%	0.003%
320	21.383	21.373	21.494	VV	7008	392229	0.69%	0.015%
321	21.504	21.494	21.547	VV	4772	136911	0.24%	0.005%
322	21.607	21.547	21.701	VBA	186903	4730307	8.38%	0.178%

Sum of corrected areas: 2661082055

Aliphatic EPH 111424.M Thu Nov 28 01:23:56 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-7-TPH-1MS			SDG No.:	P5002
Lab Sample ID:	P5002-01MS			Matrix:	Solid
Analytical Method:	NJEPH			% Solid:	84.6
Sample Wt/Vol:	30.08	Units:	g	Final Vol:	2000 uL
Soil Aliquot Vol:			uL	Test:	EPH
Prep Method :					

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048827.D	1	11/26/24	11/27/24	PB165286

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aromatic C10-C12	Aromatic C10-C12		19.7	E	0.35	0.79	mg/kg
Aromatic C12-C16	Aromatic C12-C16		170	E	0.40	1.18	mg/kg
Aromatic C16-C21	Aromatic C16-C21		450	E	1.13	1.96	mg/kg
Aromatic C21-C36	Aromatic C21-C36		126	E	2.36	3.14	mg/kg
SURROGATES							
580-13-2	2-Bromonaphthalene (SURR)		70.1		40 - 140	140%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)		58.6		40 - 140	117%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		43.1		40 - 140	86%	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:	P5002-01MS	Acq On:	27 Nov 2024 11:12
Client Sample ID:	P5002-01MS	Operator:	YP/AJ
Data file:	FD048827.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	4.087	5.803	48024237	250.103	200	ug/ml
Aromatic C12-C16	5.804	8.410	417926321	2170	300	ug/ml
Aromatic C16-C21	8.411	12.673	1066069346	5740	500	ug/ml
Aromatic C21-C36	12.674	18.080	253808634	1610	800	ug/ml
Aromatic EPH	4.087	18.080	1785828538	9770		ug/ml
ortho-Terphenyl (SURR)	11.267	11.267	8281470	43.06		ug/ml
2-Bromonaphthalene (SURR)	7.370	7.370	12339244	70.09		ug/ml
2-Flurobiphenyl (SURR)	8.225	8.225	6749147	58.6		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048827.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 11:12
Operator : YP/AJ
Sample : P5002-01MS
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:41:36 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...	7.370	12339244	70.086 ug/ml
Spiked Amount	50.000		Recovery =	140.17%
6) S	2-Flurobiphenyl (SURR)	8.225	6749147	58.602 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	117.20%
11) S	ortho-Terphenyl (SURR)	11.267	8281470	43.057 ug/mlm
Spiked Amount	50.000		Recovery =	86.11%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.187	5380354	28.549 ug/ml
2) T	Naphthalene (C11.7)	5.705	7419466	37.937 ug/ml
3) T	2-Methylnaphthalene (...	6.758	14964132	78.303 ug/ml
5) T	Acenaphthylene (C15.06)	8.028	23076682	118.997 ug/mlm
7) T	Acenaphthene (C15.5)	8.324	12508010	65.029 ug/ml
8) T	Flouorene (C16.55)	9.109	15891193	82.830 ug/mlm
9) T	Phenanthrene (C19.36)	10.504	24719042	134.854 ug/mlm
10) T	Anthracene (C19.43)	10.576	12104711	64.638 ug/mlm
12) T	Fluoranthene (C21.85)	12.304	11873039	64.837 ug/mlm
13) T	Pyrene (C20.8)	12.596	11251705	62.235 ug/mlm
14) T	Benzo[a]anthracene (C...	14.456	8460596	51.432 ug/ml
15) T	Chrysene (C27.41)	14.498	8399914	47.996 ug/ml
16) T	benzo[b]fluoranthene ...	16.003	7681734	48.891 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.036	7340747	44.981 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.378	7155791	47.994 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.745	7338313	59.405 ug/ml
20) T	Dibenz[a,h]anthracene...	17.781	6790729	43.304 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.996	6582433	46.132 ug/ml

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048827.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 11:12
Operator : YP/AJ
Sample : P5002-01MS
Misc :
ALS Vial : 66 Sample Multiplier: 1

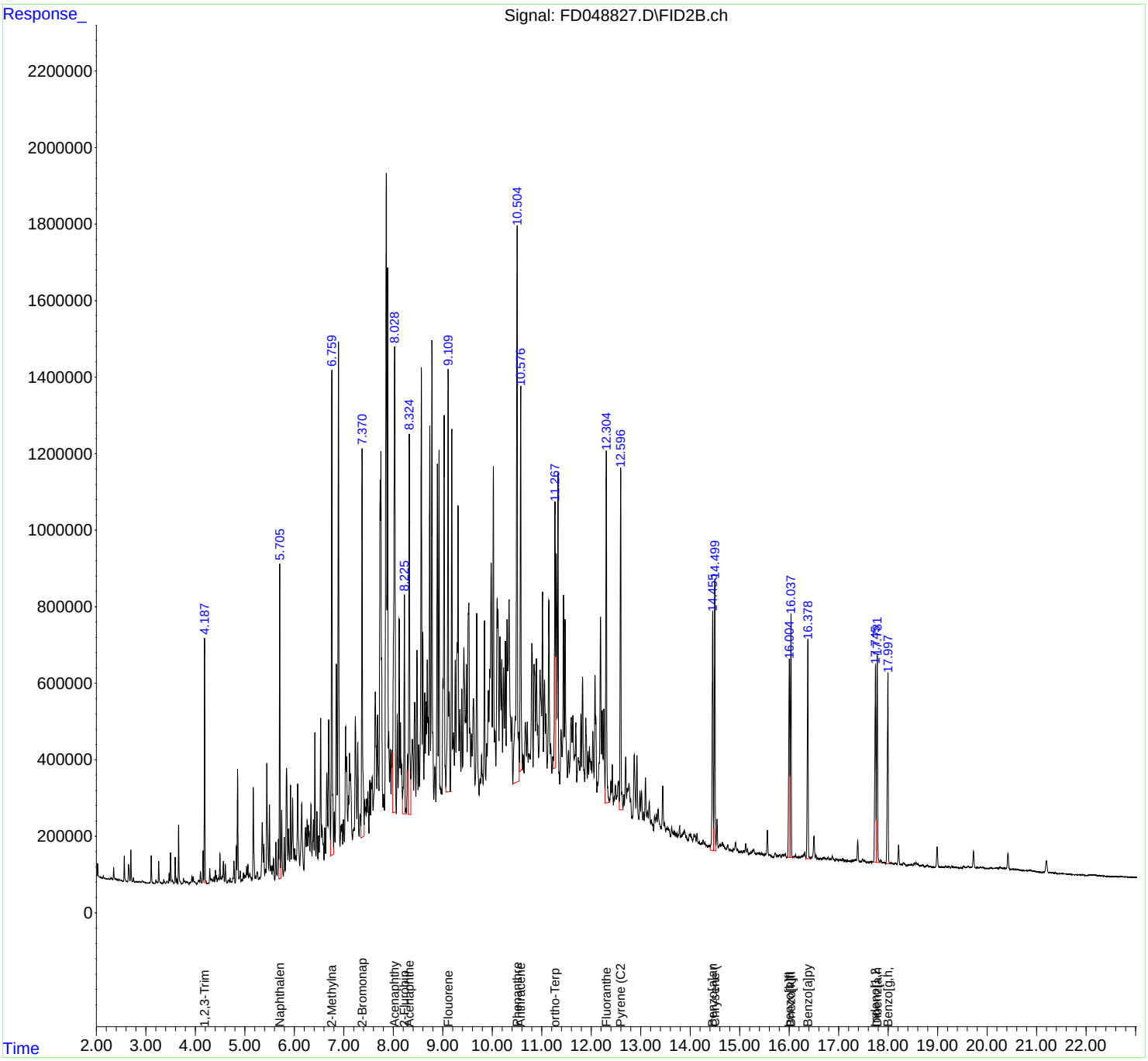
Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:41:36 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-7-TPH-1MS

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Da
Data File : FD048827.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 11:12
Sample : P5002-01MS
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	4.063	4.042	4.070	PV	3043	19416	0.06%	0.001%
2	4.078	4.070	4.088	PV	3536	18964	0.06%	0.001%
3	4.104	4.088	4.127	PV	28937	264847	0.84%	0.015%
4	4.156	4.127	4.170	PV	85344	740209	2.35%	0.041%
5	4.187	4.170	4.210	VV	641203	5386038	17.08%	0.299%
6	4.215	4.210	4.239	VV	6001	56159	0.18%	0.003%
7	4.247	4.239	4.253	PV	444	1675	0.01%	0.000%
8	4.268	4.253	4.277	VV	2575	19446	0.06%	0.001%
9	4.292	4.277	4.309	VV	39431	388492	1.23%	0.022%
10	4.319	4.309	4.331	VV	12906	145224	0.46%	0.008%
11	4.341	4.331	4.362	VV	12486	175001	0.56%	0.010%
12	4.379	4.362	4.391	VV	17951	202337	0.64%	0.011%
13	4.405	4.391	4.417	VV	34943	317690	1.01%	0.018%
14	4.426	4.417	4.441	VV	21802	207640	0.66%	0.012%
15	4.457	4.441	4.464	VV	13141	139137	0.44%	0.008%
16	4.474	4.464	4.483	VV	17187	162844	0.52%	0.009%
17	4.498	4.483	4.516	VV	77311	741079	2.35%	0.041%
18	4.524	4.516	4.532	VV	14532	124253	0.39%	0.007%
19	4.543	4.532	4.550	VV	19031	177592	0.56%	0.010%
20	4.567	4.550	4.588	VV	58423	671568	2.13%	0.037%
21	4.607	4.588	4.640	VV	50184	540241	1.71%	0.030%
22	4.669	4.640	4.685	VV	8541	136312	0.43%	0.008%
23	4.700	4.685	4.719	VV	13658	153495	0.49%	0.009%
24	4.727	4.719	4.737	VV	3846	34063	0.11%	0.002%
25	4.759	4.737	4.765	VV	14456	143777	0.46%	0.008%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1MS

rteres

Manual IntegrationsAPPROVED

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26	4.780	4.765	4.805	VV	58144	582698	1.85%	0.032%
27	4.828	4.805	4.839	PV	95390			
28	4.854	4.839	4.878	VV	297669	2		
29	4.907	4.878	4.923	VV	31137			
30	4.940	4.923	4.954	VV	9750			
31	4.973	4.954	4.987	VV	26347	339458	1.08%	0.019%
32	4.998	4.987	5.018	VV	20682	319079	1.01%	0.018%
33	5.037	5.018	5.050	VV	41893	542753	1.72%	0.030%
34	5.063	5.050	5.078	VV	48587	519383	1.65%	0.029%
35	5.102	5.078	5.116	VV	25015	440954	1.40%	0.025%
36	5.121	5.116	5.134	VV	15318	128387	0.41%	0.007%
37	5.145	5.134	5.152	VV	12901	112322	0.36%	0.006%
38	5.171	5.152	5.207	VV	248257	2942556	9.33%	0.164%
39	5.217	5.207	5.228	VV	16946	177031	0.56%	0.010%
40	5.253	5.228	5.275	VV	26276	527446	1.67%	0.029%
41	5.297	5.275	5.308	VV	13919	207132	0.66%	0.012%
42	5.352	5.308	5.374	VV	156887	2623298	8.32%	0.146%
43	5.385	5.374	5.402	VV	99984	1026480	3.26%	0.057%
44	5.415	5.402	5.427	VV	34420	431448	1.37%	0.024%
45	5.444	5.427	5.481	VV	311518	4312001	13.68%	0.240%
46	5.498	5.481	5.517	VV	202238	2079774	6.60%	0.116%
47	5.535	5.517	5.548	VV	41912	625578	1.98%	0.035%
48	5.560	5.548	5.568	VV	40483	388916	1.23%	0.022%
49	5.580	5.568	5.605	VV	60769	695630	2.21%	0.039%
50	5.628	5.605	5.652	VV	104300	1166050	3.70%	0.065%
51	5.679	5.652	5.688	VV	111662	1325837	4.20%	0.074%
52	5.705	5.688	5.726	VV	831430	7564283	23.99%	0.421%
53	5.744	5.726	5.778	VV	187409	2426173	7.69%	0.135%
54	5.798	5.778	5.815	VV	117244	1331079	4.22%	0.074%
55	5.843	5.815	5.869	VV	295809	4999515	15.86%	0.278%
56	5.882	5.869	5.907	VV	138519	2032826	6.45%	0.113%
57	5.924	5.907	5.940	VV	252658	2767302	8.78%	0.154%
58	5.966	5.940	5.992	VV	218372	3677692	11.66%	0.204%
59	6.005	5.992	6.017	VV	86208	1059393	3.36%	0.059%
60	6.026	6.017	6.038	VV	67518	794609	2.52%	0.044%
61	6.068	6.038	6.110	VV	254354	5002766	15.87%	0.278%
62	6.150	6.110	6.194	VV	202951	4800343	15.22%	0.267%
63	6.227	6.194	6.242	VV	140522	2794630	8.86%	0.155%
64	6.260	6.242	6.273	VV	160442	2370241	7.52%	0.132%
65	6.285	6.273	6.295	VV	146155	1679035	5.33%	0.093%
66	6.301	6.295	6.316	VV	126451	1347507	4.27%	0.075%
67	6.338	6.316	6.357	VV	200765	3277650	10.40%	0.182%
68	6.388	6.357	6.401	VV	160129	2928464	9.29%	0.163%
69	6.416	6.401	6.438	VV	387588	4282085	13.58%	0.238%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1MS

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

70	6.458	6.438	6.477	VV	181140	2635103	8.36%	0.147%
71	6.493	6.477	6.504	VV	118416	1		
72	6.534	6.504	6.549	VV	425062	5		
73	6.558	6.549	6.601	VV	142401	3		
74	6.617	6.601	6.633	VV	138649	1		
75	6.658	6.633	6.679	VV	282448	5122624	16.25%	0.285%
76	6.696	6.679	6.732	VV	420584	7939741	25.18%	0.441%
77	6.759	6.732	6.795	VV	1333456	17446312	55.33%	0.970%
78	6.809	6.795	6.824	VV	177935	2306256	7.31%	0.128%
79	6.850	6.824	6.869	VV	565136	9286180	29.45%	0.516%
80	6.894	6.869	6.924	VV	1406961	18770389	59.53%	1.044%
81	6.946	6.924	6.954	VV	142970	2226121	7.06%	0.124%
82	6.964	6.954	6.979	VV	146939	1849075	5.86%	0.103%
83	6.994	6.979	7.012	VV	157884	2570522	8.15%	0.143%
84	7.037	7.012	7.048	VV	400496	5393855	17.11%	0.300%
85	7.057	7.048	7.081	VV	323032	4867857	15.44%	0.271%
86	7.095	7.081	7.102	VV	220631	2370252	7.52%	0.132%
87	7.116	7.102	7.127	VV	331425	4109054	13.03%	0.228%
88	7.134	7.127	7.176	VV	278091	5785212	18.35%	0.322%
89	7.190	7.176	7.196	VV	130282	1414574	4.49%	0.079%
90	7.206	7.196	7.212	VV	133351	1319293	4.18%	0.073%
91	7.234	7.212	7.265	VV	426493	8486766	26.92%	0.472%
92	7.283	7.265	7.309	VV	359196	5757940	18.26%	0.320%
93	7.329	7.309	7.347	VV	170575	3432216	10.89%	0.191%
94	7.371	7.347	7.412	VV	1126377	16652962	52.82%	0.926%
95	7.425	7.412	7.436	VV	208276	2644330	8.39%	0.147%
96	7.443	7.436	7.452	VV	188542	1696821	5.38%	0.094%
97	7.464	7.452	7.474	VV	211004	2549808	8.09%	0.142%
98	7.488	7.474	7.508	VV	228583	3842291	12.19%	0.214%
99	7.526	7.508	7.541	VV	258975	3841951	12.18%	0.214%
100	7.557	7.541	7.565	VV	252001	3156689	10.01%	0.176%
101	7.575	7.565	7.592	VV	267943	3850564	12.21%	0.214%
102	7.637	7.592	7.669	VV	489517	14503419	46.00%	0.806%
103	7.684	7.669	7.711	VV	429402	7961863	25.25%	0.443%
104	7.735	7.711	7.742	VV	1040883	12537118	39.76%	0.697%
105	7.750	7.742	7.793	VV	1120447	17434333	55.29%	0.969%
106	7.805	7.793	7.822	VV	220811	3522567	11.17%	0.196%
107	7.860	7.822	7.873	VV	1848671	29074557	92.21%	1.617%
108	7.887	7.873	7.901	VV	1599306	17124924	54.31%	0.952%
109	7.908	7.901	7.925	VV	384687	4710431	14.94%	0.262%
110	7.939	7.925	7.954	VV	337926	4927614	15.63%	0.274%
111	7.971	7.954	7.983	VV	334933	5241229	16.62%	0.291%
112	8.028	7.983	8.061	VV	1390607	31530615	100.00%	1.753%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1MS

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
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113	8.081	8.061	8.099	VV	426364	6750458	21.41%	0.375%
114	8.120	8.099	8.133	VV	678365	9(		
115	8.145	8.133	8.159	VV	406196	5		
116	8.167	8.159	8.187	VV	299088	4		
117	8.225	8.187	8.245	VV	740568	12		
118	8.254	8.245	8.266	VV	182627	2218961	7.04%	0.123%
119	8.288	8.266	8.300	VV	322643	5383370	17.07%	0.299%
120	8.324	8.300	8.354	VV	1158472	18049436	57.24%	1.004%
121	8.386	8.354	8.411	VV	362856	10509220	33.33%	0.584%
122	8.434	8.411	8.456	VV	458676	9625665	30.53%	0.535%
123	8.479	8.456	8.500	VV	595177	10455489	33.16%	0.581%
124	8.514	8.500	8.528	VV	348329	4907353	15.56%	0.273%
125	8.568	8.528	8.584	VV	1333295	21292628	67.53%	1.184%
126	8.597	8.584	8.618	VV	641949	9027100	28.63%	0.502%
127	8.635	8.618	8.648	VV	484071	6774769	21.49%	0.377%
128	8.663	8.648	8.674	VV	460432	6171154	19.57%	0.343%
129	8.687	8.674	8.699	VV	568419	7116272	22.57%	0.396%
130	8.705	8.699	8.717	VV	419444	4188713	13.28%	0.233%
131	8.738	8.717	8.753	VV	1177312	15362436	48.72%	0.854%
132	8.782	8.753	8.819	VV	1402762	23764420	75.37%	1.321%
133	8.841	8.819	8.860	VV	288427	6175950	19.59%	0.343%
134	8.892	8.860	8.907	VV	1079044	16168845	51.28%	0.899%
135	8.925	8.907	8.962	VV	1117944	15887912	50.39%	0.883%
136	8.971	8.962	8.982	VV	230584	2666185	8.46%	0.148%
137	9.003	8.982	9.009	VV	518865	6410859	20.33%	0.356%
138	9.028	9.009	9.062	VV	1208732	19201158	60.90%	1.068%
139	9.109	9.062	9.122	VV	1323096	21257026	67.42%	1.182%
140	9.130	9.122	9.152	VV	483079	6623072	21.01%	0.368%
141	9.182	9.152	9.200	VV	1169878	16937562	53.72%	0.942%
142	9.214	9.200	9.235	VV	377167	7184834	22.79%	0.399%
143	9.253	9.235	9.268	VV	566173	8676258	27.52%	0.482%
144	9.290	9.268	9.296	VV	612308	8139638	25.82%	0.453%
145	9.310	9.296	9.329	VV	968165	12942002	41.05%	0.720%
146	9.346	9.329	9.367	VV	436453	8315312	26.37%	0.462%
147	9.385	9.367	9.402	VV	491276	7765223	24.63%	0.432%
148	9.427	9.402	9.454	VV	598009	14283651	45.30%	0.794%
149	9.459	9.454	9.465	VV	410997	2679664	8.50%	0.149%
150	9.479	9.465	9.494	VV	554595	7753652	24.59%	0.431%
151	9.526	9.494	9.546	VV	715259	17503377	55.51%	0.973%
152	9.551	9.546	9.567	VV	387363	4338719	13.76%	0.241%
153	9.581	9.567	9.596	VV	371854	5867840	18.61%	0.326%
154	9.621	9.596	9.651	VV	464532	12476852	39.57%	0.694%
155	9.687	9.651	9.734	VV	686498	18078546	57.34%	1.005%

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156	9.754	9.734	9.764	VV	254039	4297909	13.63%	0.239%
157	9.784	9.764	9.815	VV	316886	8		
158	9.844	9.815	9.868	VV	667225	12		
159	9.888	9.868	9.898	VV	345925	5		
160	9.920	9.898	9.934	VV	484356	8		
161	9.953	9.934	9.959	VV	540092	7371159	23.38%	0.410%
162	9.979	9.959	10.000	VV	816096	15529511	49.25%	0.863%
163	10.023	10.000	10.046	VV	1070472	17481163	55.44%	0.972%
164	10.058	10.046	10.074	VV	377614	5772864	18.31%	0.321%
165	10.099	10.074	10.109	VV	723525	11313745	35.88%	0.629%
166	10.117	10.109	10.136	VV	696727	9304984	29.51%	0.517%
167	10.156	10.136	10.179	VV	623184	12876076	40.84%	0.716%
168	10.193	10.179	10.208	VV	564032	8025352	25.45%	0.446%
169	10.230	10.208	10.248	VV	540212	10482742	33.25%	0.583%
170	10.266	10.248	10.281	VV	613593	9640413	30.57%	0.536%
171	10.300	10.281	10.314	VV	668164	10698359	33.93%	0.595%
172	10.340	10.314	10.382	VV	720511	21667464	68.72%	1.205%
173	10.398	10.382	10.417	VV	414262	7250146	22.99%	0.403%
174	10.465	10.417	10.472	VV	415536	11596587	36.78%	0.645%
175	10.504	10.472	10.524	VV	1697848	27139779	86.07%	1.509%
176	10.533	10.524	10.548	VV	372351	5172348	16.40%	0.288%
177	10.576	10.548	10.613	VV	1284427	22711425	72.03%	1.263%
178	10.628	10.613	10.643	VV	313037	5269456	16.71%	0.293%
179	10.670	10.643	10.694	VV	397167	10480233	33.24%	0.583%
180	10.709	10.694	10.727	VV	399547	6880782	21.82%	0.383%
181	10.747	10.727	10.770	VV	316735	8061046	25.57%	0.448%
182	10.802	10.770	10.827	VV	604077	15079570	47.83%	0.838%
183	10.846	10.827	10.875	VV	549771	13209305	41.89%	0.734%
184	10.893	10.875	10.914	VV	563310	10906769	34.59%	0.606%
185	10.921	10.914	10.938	VV	389711	4951076	15.70%	0.275%
186	10.967	10.938	10.998	VV	532706	15745088	49.94%	0.875%
187	11.017	10.998	11.035	VV	739331	11652343	36.96%	0.648%
188	11.056	11.035	11.074	VV	508037	10133195	32.14%	0.563%
189	11.086	11.074	11.109	VV	419167	7600774	24.11%	0.423%
190	11.145	11.109	11.171	VV	714652	16259756	51.57%	0.904%
191	11.182	11.171	11.204	VV	340705	6091783	19.32%	0.339%
192	11.224	11.204	11.235	VV	305697	5346914	16.96%	0.297%
193	11.268	11.235	11.281	VV	970904	15843759	50.25%	0.881%
194	11.295	11.281	11.310	VV	835231	11604047	36.80%	0.645%
195	11.329	11.310	11.365	VV	1045520	16784434	53.23%	0.933%
196	11.390	11.365	11.410	VV	375767	8745938	27.74%	0.486%
197	11.441	11.410	11.456	VV	728609	12999400	41.23%	0.723%
198	11.473	11.456	11.520	VV	663665	15730067	49.89%	0.875%
199	11.541	11.520	11.558	VV	321147	6488491	20.58%	0.361%

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200	11.597	11.558	11.613	VV	408242	11331859	35.94%	0.630%
201	11.630	11.613	11.656	VV	413006	9[illegible]		
202	11.690	11.656	11.707	VV	394216	9[illegible]		
203	11.735	11.707	11.770	VV	303567	10[illegible]		
204	11.791	11.770	11.804	VV	414771	6[illegible]		
205	11.825	11.804	11.868	VV	512486	13108107	41.57%	0.729%
206	11.891	11.868	11.920	VV	405434	10067274	31.93%	0.560%
207	11.935	11.920	11.948	VV	316829	4846209	15.37%	0.269%
208	11.964	11.948	11.976	VV	328129	4952518	15.71%	0.275%
209	11.981	11.976	11.994	VV	296999	3077666	9.76%	0.171%
210	12.003	11.994	12.014	VV	291296	3386450	10.74%	0.188%
211	12.032	12.014	12.057	VV	369305	7768320	24.64%	0.432%
212	12.077	12.057	12.089	VV	516638	7601670	24.11%	0.423%
213	12.094	12.089	12.114	VV	407633	4936186	15.66%	0.274%
214	12.129	12.114	12.135	VV	234683	2772745	8.79%	0.154%
215	12.188	12.135	12.206	VV	668776	16277006	51.62%	0.905%
216	12.223	12.206	12.240	VV	423527	7400826	23.47%	0.411%
217	12.257	12.240	12.278	VV	427176	7873360	24.97%	0.438%
218	12.305	12.278	12.370	VV	1102225	21940298	69.58%	1.220%
219	12.397	12.370	12.410	VV	237727	5146956	16.32%	0.286%
220	12.426	12.410	12.449	VV	281318	5280193	16.75%	0.294%
221	12.462	12.449	12.470	VV	196015	2444374	7.75%	0.136%
222	12.487	12.470	12.507	VV	225347	4614489	14.63%	0.257%
223	12.552	12.507	12.567	VV	237966	7688458	24.38%	0.427%
224	12.596	12.567	12.641	VV	1051723	18535323	58.79%	1.031%
225	12.661	12.641	12.671	VV	202549	3286449	10.42%	0.183%
226	12.698	12.671	12.716	VV	300316	6376600	20.22%	0.355%
227	12.729	12.716	12.738	VV	218496	2794056	8.86%	0.155%
228	12.743	12.738	12.747	VV	217170	1229738	3.90%	0.068%
229	12.763	12.747	12.789	VV	231052	5277596	16.74%	0.293%
230	12.798	12.789	12.822	VV	189108	3342936	10.60%	0.186%
231	12.869	12.822	12.903	VV	305444	9941806	31.53%	0.553%
232	12.924	12.903	12.963	VV	303629	7131754	22.62%	0.397%
233	12.985	12.963	12.999	VV	208991	3800074	12.05%	0.211%
234	13.018	12.999	13.041	VV	209614	4418760	14.01%	0.246%
235	13.059	13.041	13.073	VV	154965	2746501	8.71%	0.153%
236	13.097	13.073	13.122	VV	244527	5336539	16.92%	0.297%
237	13.138	13.122	13.153	VV	154902	2759637	8.75%	0.153%
238	13.174	13.153	13.203	VV	181887	4618782	14.65%	0.257%
239	13.217	13.203	13.235	VV	135688	2448590	7.77%	0.136%
240	13.247	13.235	13.261	VV	123275	1842918	5.84%	0.102%
241	13.280	13.261	13.295	VV	144846	2684372	8.51%	0.149%
242	13.317	13.295	13.334	VV	148717	3244041	10.29%	0.180%

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243	13.352	13.334	13.412	VV	161903	6138439	19.47%	0.341%
244	13.445	13.412	13.470	VV	222585	5		
245	13.483	13.470	13.504	VV	125279	2		
246	13.523	13.504	13.532	VV	111149	1		
247	13.551	13.532	13.567	VV	113510	2		
248	13.576	13.567	13.604	VV	107980	2214630	7.02%	0.123%
249	13.625	13.604	13.664	VV	111564	3629420	11.51%	0.202%
250	13.681	13.664	13.697	VV	103170	1913509	6.07%	0.106%
251	13.708	13.697	13.721	VV	97104	1377642	4.37%	0.077%
252	13.733	13.721	13.749	VV	97908	1542104	4.89%	0.086%
253	13.759	13.749	13.767	VV	93577	965712	3.06%	0.054%
254	13.786	13.767	13.807	VV	114181	2415071	7.66%	0.134%
255	13.817	13.807	13.826	VV	90314	1024272	3.25%	0.057%
256	13.836	13.826	13.840	VV	90890	730931	2.32%	0.041%
257	13.858	13.840	13.870	VV	99270	1733606	5.50%	0.096%
258	13.882	13.870	13.913	VV	103036	2501035	7.93%	0.139%
259	13.919	13.913	13.945	VV	87795	1616693	5.13%	0.090%
260	13.950	13.945	13.963	VV	79230	828296	2.63%	0.046%
261	13.985	13.963	13.995	VV	93235	1703475	5.40%	0.095%
262	14.010	13.995	14.051	VV	94549	2875712	9.12%	0.160%
263	14.080	14.051	14.093	VV	93343	2169018	6.88%	0.121%
264	14.103	14.093	14.119	VV	89112	1333686	4.23%	0.074%
265	14.139	14.119	14.160	VV	95193	2052300	6.51%	0.114%
266	14.166	14.160	14.169	VV	71823	355333	1.13%	0.020%
267	14.174	14.169	14.179	VV	71500	442368	1.40%	0.025%
268	14.182	14.179	14.186	VV	71086	286797	0.91%	0.016%
269	14.189	14.186	14.199	VV	71428	528896	1.68%	0.029%
270	14.204	14.199	14.211	VV	67378	480646	1.52%	0.027%
271	14.233	14.211	14.243	VV	70049	1341972	4.26%	0.075%
272	14.262	14.243	14.283	VV	77612	1729634	5.49%	0.096%
273	14.300	14.283	14.319	VV	69959	1451751	4.60%	0.081%
274	14.333	14.319	14.355	VV	63205	1318182	4.18%	0.073%
275	14.378	14.355	14.405	VV	63027	1809857	5.74%	0.101%
276	14.456	14.405	14.474	VV	673657	10504806	33.32%	0.584%
277	14.499	14.474	14.521	VV	757225	9769815	30.99%	0.543%
278	14.543	14.521	14.568	VV	131195	2551137	8.09%	0.142%
279	14.605	14.568	14.618	VV	65802	1835769	5.82%	0.102%
280	14.654	14.618	14.712	VV	69166	3443810	10.92%	0.191%
281	14.759	14.712	14.788	VV	63562	2493603	7.91%	0.139%
282	14.796	14.788	14.800	VV	50726	363001	1.15%	0.020%
283	14.806	14.800	14.818	VV	51616	546172	1.73%	0.030%
284	14.832	14.818	14.857	VV	49486	1118579	3.55%	0.062%
285	14.875	14.857	14.890	VV	52061	1011629	3.21%	0.056%

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286	14.914	14.890	14.952	VV	68500	2067302	6.56%	0.115%
287	14.961	14.952	14.985	VV	49456			
288	15.006	14.985	15.019	VV	44832			
289	15.039	15.019	15.056	VV	45570			
290	15.078	15.056	15.100	VV	47392	1		
291	15.121	15.100	15.143	VV	65089	1329754	4.22%	0.074%
292	15.158	15.143	15.182	VV	50700	1048740	3.33%	0.058%
293	15.198	15.182	15.203	VV	40084	480184	1.52%	0.027%
294	15.205	15.203	15.211	VV	39032	197691	0.63%	0.011%
295	15.235	15.211	15.245	VV	42490	828529	2.63%	0.046%
296	15.259	15.245	15.267	VV	45921	583332	1.85%	0.032%
297	15.283	15.267	15.306	VV	50016	1060154	3.36%	0.059%
298	15.313	15.306	15.334	VV	39717	636177	2.02%	0.035%
299	15.355	15.334	15.360	VV	39093	595924	1.89%	0.033%
300	15.371	15.360	15.392	VV	40126	751842	2.38%	0.042%
301	15.409	15.392	15.426	VV	39698	774042	2.45%	0.043%
302	15.446	15.426	15.462	VV	38556	786311	2.49%	0.044%
303	15.474	15.462	15.490	VV	35933	584568	1.85%	0.033%
304	15.513	15.490	15.521	VV	35544	633279	2.01%	0.035%
305	15.560	15.521	15.586	VV	98978	2142278	6.79%	0.119%
306	15.592	15.586	15.607	VV	34361	427862	1.36%	0.024%
307	15.618	15.607	15.636	VV	33918	562471	1.78%	0.031%
308	15.640	15.636	15.644	VV	29400	145985	0.46%	0.008%
309	15.655	15.644	15.671	VV	29248	449698	1.43%	0.025%
310	15.675	15.671	15.681	VV	27141	168234	0.53%	0.009%
311	15.719	15.681	15.744	VV	38345	1223309	3.88%	0.068%
312	15.756	15.744	15.780	VV	31705	643164	2.04%	0.036%
313	15.797	15.780	15.807	VV	32435	508976	1.61%	0.028%
314	15.821	15.807	15.837	VV	33146	565750	1.79%	0.031%
315	15.865	15.837	15.896	VV	33412	1087002	3.45%	0.060%
316	15.901	15.896	15.903	VV	31775	146147	0.46%	0.008%
317	15.920	15.903	15.955	VV	34906	922032	2.92%	0.051%
318	16.004	15.955	16.018	VV	543351	8619601	27.34%	0.479%
319	16.037	16.018	16.084	VV	661444	8391894	26.62%	0.467%
320	16.099	16.084	16.104	VV	28428	322393	1.02%	0.018%
321	16.108	16.104	16.117	VV	28570	216725	0.69%	0.012%
322	16.133	16.117	16.153	VV	30524	603213	1.91%	0.034%
323	16.157	16.153	16.160	VV	25815	116382	0.37%	0.006%
324	16.167	16.160	16.172	VV	26357	179410	0.57%	0.010%
325	16.177	16.172	16.199	VV	26353	409071	1.30%	0.023%
326	16.207	16.199	16.212	VV	25879	203710	0.65%	0.011%
327	16.219	16.212	16.229	VV	26158	247190	0.78%	0.014%
328	16.251	16.229	16.264	VV	28000	560305	1.78%	0.031%
329	16.314	16.264	16.339	VV	38388	1338553	4.25%	0.074%

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330	16.378	16.339	16.425	VV	594841	8249626	26.16%	0.459%
331	16.433	16.425	16.449	VV	23804			
332	16.501	16.449	16.530	VV	79073	1		
333	16.544	16.530	16.562	VV	28878			
334	16.575	16.562	16.595	VV	21677			
335	16.602	16.595	16.606	VV	19768	131177	0.42%	0.007%
336	16.612	16.606	16.618	VV	19616	140244	0.44%	0.008%
337	16.630	16.618	16.655	VV	20868	437408	1.39%	0.024%
338	16.661	16.655	16.669	VV	18721	153116	0.49%	0.009%
339	16.704	16.669	16.728	VV	22560	743373	2.36%	0.041%
340	16.736	16.728	16.760	VV	20273	383057	1.21%	0.021%
341	16.785	16.760	16.810	VV	22954	590994	1.87%	0.033%
342	16.825	16.810	16.847	VV	19117	387345	1.23%	0.022%
343	16.871	16.847	16.898	VV	24280	623947	1.98%	0.035%
344	16.904	16.898	16.929	VV	17915	290210	0.92%	0.016%
345	16.945	16.929	16.965	VV	17504	346766	1.10%	0.019%
346	16.973	16.965	17.000	VV	16836	325720	1.03%	0.018%
347	17.020	17.000	17.029	VV	16478	260924	0.83%	0.015%
348	17.039	17.029	17.055	VV	16427	245683	0.78%	0.014%
349	17.090	17.055	17.114	VV	16728	527599	1.67%	0.029%
350	17.121	17.114	17.125	VV	13167	88764	0.28%	0.005%
351	17.131	17.125	17.147	VV	13348	164199	0.52%	0.009%
352	17.149	17.147	17.156	VV	12521	62493	0.20%	0.003%
353	17.168	17.156	17.174	VV	13021	135863	0.43%	0.008%
354	17.184	17.174	17.224	VV	13455	363666	1.15%	0.020%
355	17.244	17.224	17.267	VV	13170	299139	0.95%	0.017%
356	17.274	17.267	17.278	VV	11758	74580	0.24%	0.004%
357	17.285	17.278	17.297	VV	12152	131678	0.42%	0.007%
358	17.321	17.297	17.326	VV	14234	218373	0.69%	0.012%
359	17.347	17.326	17.361	VV	15059	291595	0.92%	0.016%
360	17.386	17.361	17.431	VV	64901	1140142	3.62%	0.063%
361	17.437	17.431	17.446	VV	9828	79905	0.25%	0.004%
362	17.450	17.446	17.457	VV	9494	63643	0.20%	0.004%
363	17.485	17.457	17.500	VV	16632	320213	1.02%	0.018%
364	17.515	17.500	17.520	VV	12088	139021	0.44%	0.008%
365	17.524	17.520	17.527	VV	11344	47324	0.15%	0.003%
366	17.530	17.527	17.544	VV	11504	103065	0.33%	0.006%
367	17.549	17.544	17.577	VV	8609	139359	0.44%	0.008%
368	17.592	17.577	17.615	VV	8790	163384	0.52%	0.009%
369	17.634	17.615	17.639	VV	8102	102477	0.33%	0.006%
370	17.647	17.639	17.665	VV	8705	124057	0.39%	0.007%
371	17.678	17.665	17.688	VV	8592	103964	0.33%	0.006%
372	17.746	17.688	17.759	VV	524536	7601395	24.11%	0.423%

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373	17.781	17.759	17.827	VV	548836	7077165	22.45%	0.393%	
374	17.851	17.827	17.893	VV	12273				
375	17.912	17.893	17.935	VV	6007				
376	17.940	17.935	17.949	VV	4180				
377	17.997	17.949	18.039	VV	500694	6			
378	18.049	18.039	18.054	VV	3101	21926	0.07%	0.001%	
379	18.065	18.054	18.105	VV	3977	70349	0.22%	0.004%	
380	18.111	18.105	18.121	VV	1374	10680	0.03%	0.001%	
381	18.145	18.121	18.173	VV	3042	50605	0.16%	0.003%	

Sum of corrected areas: 1798563533

Aromatic EPH 111424.M Thu Nov 28 03:55:55 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-7-TPH-1MSD			SDG No.:	P5002		
Lab Sample ID:	P5002-01MSD			Matrix:	Solid		
Analytical Method:	NJEPH			% Solid:	84.6		
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
11/26/24 10:25	11/27/24 11:51	PB165286

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	79.1	E	1	0.45	1.18	mg/kg	FC067877.D
Aliphatic C12-C16	Aliphatic C12-C16	456	E	1	0.28	0.79	mg/kg	FC067877.D
Aliphatic C16-C21	Aliphatic C16-C21	433	E	1	0.35	1.18	mg/kg	FC067877.D
Aliphatic C21-C28	Aliphatic C21-C28	150	E	1	0.94	1.57	mg/kg	FC067877.D
Aliphatic C28-C40	Aliphatic C28-C40	103	E	1	2.12	2.36	mg/kg	FC067877.D
Aromatic C10-C12	Aromatic C10-C12	20.5	E	1	0.35	0.79	mg/kg	FD048828.D
Aromatic C12-C16	Aromatic C12-C16	177	E	1	0.40	1.18	mg/kg	FD048828.D
Aromatic C16-C21	Aromatic C16-C21	470	E	1	1.13	1.97	mg/kg	FD048828.D
Aromatic C21-C36	Aromatic C21-C36	132	E	1	2.36	3.15	mg/kg	FD048828.D
Total AliphaticEPH	Total AliphaticEPH	1220			4.15	7.08	mg/kg	
Total AromaticEPH	Total AromaticEPH	800			4.25	7.09	mg/kg	
Total EPH	Total EPH	2020			8.39	14.2	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-7-TPH-1MSD		SDG No.:	P5002	
Lab Sample ID:	P5002-01MSD		Matrix:	Solid	
Analytical Method:	NJEPH		% Solid:	84.6	
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
FC067877.D	1	11/26/24	11/27/24	PB165286

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12		79.1	E	0.45	1.18	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16		456	E	0.28	0.79	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21		433	E	0.35	1.18	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28		150	E	0.94	1.57	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40		103	E	2.12	2.36	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)		44.0		40 - 140	88%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		30.2		40 - 140	60%	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:	P5002-01MSD	Acq On:	27 Nov 2024 11:51
Client Sample ID:	EX-7-TPH-1MSD	Operator:	YP/AJ
Data file:	FC067877.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	3.186	6.461	166849116	1010	300	ug/ml
Aliphatic C12-C16	6.462	9.849	989689154	5810	200	ug/ml
Aliphatic C16-C21	9.850	13.205	934488030	5510	300	ug/ml
Aliphatic C21-C28	13.206	16.857	301414014	1920	400	ug/ml
Aliphatic C28-C40	16.858	21.700	159453519	1320	600	ug/ml
Aliphatic EPH	3.186	21.700	2551893833	15600		ug/ml
ortho-Terphenyl (SURR)	11.473	11.473	5858828	30.22		ug/ml
1-chlorooctadecane (SURR)	12.950	12.950	6379282	43.95		ug/ml
Aliphatic C9-C28	3.186	16.857	2392440314	14200	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067877.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 11:51
Operator : YP/AJ
Sample : P5002-01MSD
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 00:16:00 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)	11.473	5858828	30.219 ug/mlm
Spiked Amount	50.000		Recovery =	60.44%
12) S	1-chlorooctadecane (S...	12.950	6379282	43.946 ug/mlm
Spiked Amount	50.000		Recovery =	87.89%
	Target Compounds			
1) T	n-Nonane (C9)	3.287	2897405	17.763 ug/ml
2) T	n-Decane (C10)	4.350	4042443	24.377 ug/ml
4) T	n-Dodecane (C12)	6.369	6033405	35.822 ug/mlm
6) T	n-Tetradecane (C14)	8.168	6528498	38.983 ug/mlm
7) T	n-Hexadecane (C16)	9.720	5569130	32.136 ug/mlm
10) T	n-Eicosane (C20)	12.510	8092953	48.062 ug/mlm
11) T	n-Heneicosane (C21)	13.117	5684507	34.548 ug/mlm
13) T	n-Docosane (C22)	13.700	5877311	36.090 ug/mlm
14) T	n-Tetracosane (C24)	14.797	5479084	34.163 ug/mlm
15) T	n-Hexacosane (C26)	15.817	5087823	32.854 ug/mlm
16) T	n-Octacosane (C28)	16.765	5649701	37.409 ug/mlm
17) T	n-Tricontane (C30)	17.649	5352244	34.957 ug/mlm
18) T	n-Dotriacontane (C32)	18.479	4964353	33.613 ug/mlm
19) T	n-Tetratriacontane (C34)	19.264	5250708	41.629 ug/mlm
20) T	n-Hexatriacontane (C36)	20.000	4559054	43.591 ug/mlm
21) T	n-Octatriacontane (C38)	20.721	4365806	44.693 ug/ml
22) T	n-Tetracontane (C40)	21.610	4355431	44.686 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC112724AL\
Data File : FC067877.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 11:51
Operator : YP/AJ
Sample : P5002-01MSD
Misc :
ALS Vial : 17 Sample Multiplier: 1

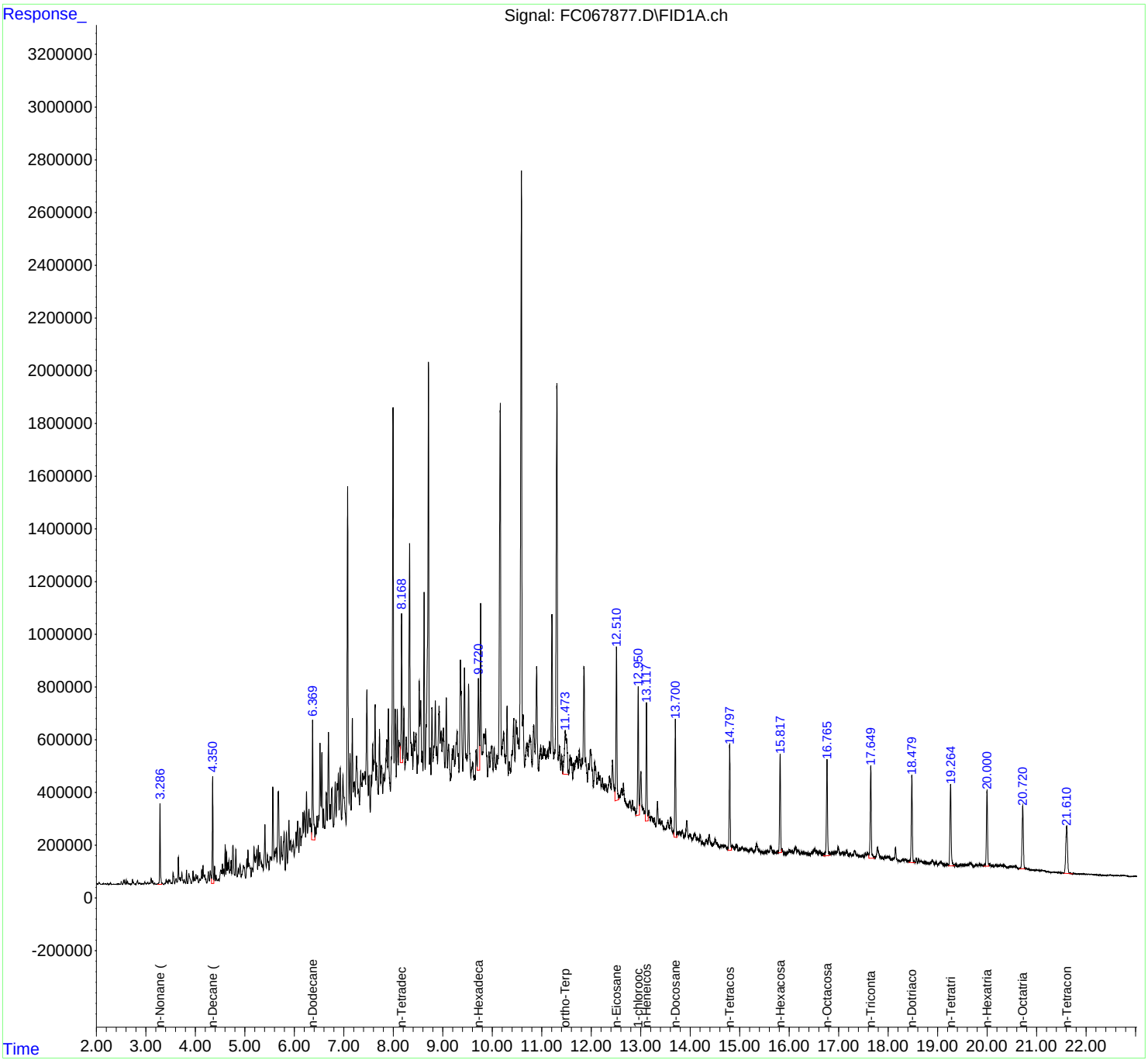
Integration File: autoint1.e
Quant Time: Nov 28 00:16:00 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 111424.M
Quant Title : GC Extractables
QLast Update : Thu Nov 14 14:13:15 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024



Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1MSD

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Da
Data File : FC067877.D
Signal(s) : FID1A.ch
Acq On : 27 Nov 2024 11:51
Sample : P5002-01MSD
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	3.287	3.224	3.321	BV	306319	2868497	5.35%	0.112%
2	3.331	3.321	3.364	VV	5058	61566	0.11%	0.002%
3	3.385	3.364	3.394	PV	4772	40363	0.08%	0.002%
4	3.410	3.394	3.423	VV	17988	177103	0.33%	0.007%
5	3.434	3.423	3.448	VV	13260	130074	0.24%	0.005%
6	3.464	3.448	3.474	VV	17389	175485	0.33%	0.007%
7	3.487	3.474	3.514	VV	16583	217646	0.41%	0.008%
8	3.551	3.514	3.583	VV	43529	681091	1.27%	0.027%
9	3.611	3.583	3.630	VV	22011	362052	0.68%	0.014%
10	3.657	3.630	3.678	VV	101968	1135459	2.12%	0.044%
11	3.689	3.678	3.702	VV	25844	290356	0.54%	0.011%
12	3.728	3.702	3.762	VV	43199	761615	1.42%	0.030%
13	3.777	3.762	3.804	VV	16951	233607	0.44%	0.009%
14	3.823	3.804	3.843	VV	53085	490269	0.91%	0.019%
15	3.870	3.843	3.918	VV	38931	831376	1.55%	0.032%
16	3.953	3.918	3.967	VV	49513	597694	1.11%	0.023%
17	3.979	3.967	3.996	VV	25101	314241	0.59%	0.012%
18	4.013	3.996	4.031	VV	35308	503363	0.94%	0.020%
19	4.044	4.031	4.066	VV	32484	400701	0.75%	0.016%
20	4.088	4.066	4.100	VV	19769	263409	0.49%	0.010%
21	4.129	4.100	4.141	VV	52969	693737	1.29%	0.027%
22	4.155	4.141	4.178	VV	69086	921453	1.72%	0.036%
23	4.190	4.178	4.231	VV	34878	604758	1.13%	0.024%
24	4.263	4.231	4.283	VV	46329	684525	1.28%	0.027%
25	4.303	4.283	4.326	VV	49538	791484	1.48%	0.031%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1MSD

rteres

Manual IntegrationsAPPROVED

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26	4.350	4.326	4.373	VV	408641	4076369	7.60%	0.159%
27	4.390	4.373	4.405	VV	67145			
28	4.418	4.405	4.442	VV	33466			
29	4.466	4.442	4.480	VV	18200			
30	4.517	4.480	4.531	VV	51263	1		
31	4.547	4.531	4.561	VV	74416	981029	1.83%	0.038%
32	4.573	4.561	4.587	VV	56064	706292	1.32%	0.027%
33	4.603	4.587	4.617	VV	148994	1516242	2.83%	0.059%
34	4.631	4.617	4.644	VV	119775	1291296	2.41%	0.050%
35	4.657	4.644	4.668	VV	79606	940353	1.75%	0.037%
36	4.678	4.668	4.692	VV	88550	950844	1.77%	0.037%
37	4.722	4.692	4.737	VV	88447	1594031	2.97%	0.062%
38	4.759	4.737	4.797	VV	146761	2895818	5.40%	0.113%
39	4.819	4.797	4.846	VV	128796	1818548	3.39%	0.071%
40	4.869	4.846	4.882	VV	58533	919719	1.72%	0.036%
41	4.903	4.882	4.925	VV	71006	1356554	2.53%	0.053%
42	4.936	4.925	4.940	VV	33550	279205	0.52%	0.011%
43	4.973	4.940	5.016	VV	68241	2129210	3.97%	0.083%
44	5.040	5.016	5.051	VV	93594	1209571	2.26%	0.047%
45	5.064	5.051	5.127	VV	126203	3199445	5.97%	0.125%
46	5.145	5.127	5.164	VV	58548	1061817	1.98%	0.041%
47	5.185	5.164	5.216	VV	138504	2918431	5.44%	0.114%
48	5.242	5.216	5.258	VV	126148	2438224	4.55%	0.095%
49	5.273	5.258	5.288	VV	144278	1796949	3.35%	0.070%
50	5.304	5.288	5.326	VV	117313	2150797	4.01%	0.084%
51	5.333	5.326	5.348	VV	80612	980228	1.83%	0.038%
52	5.361	5.348	5.374	VV	70256	975389	1.82%	0.038%
53	5.406	5.374	5.433	VV	222480	4072847	7.60%	0.159%
54	5.454	5.433	5.490	VV	108961	2719269	5.07%	0.106%
55	5.511	5.490	5.543	VV	99960	2802107	5.23%	0.109%
56	5.566	5.543	5.608	VV	361898	6701403	12.50%	0.261%
57	5.633	5.608	5.650	VV	132376	2828925	5.28%	0.110%
58	5.676	5.650	5.713	VV	346953	7804504	14.56%	0.304%
59	5.732	5.713	5.763	VV	178126	3530846	6.59%	0.137%
60	5.794	5.763	5.817	VV	193047	4204946	7.84%	0.164%
61	5.841	5.817	5.861	VV	190736	3030964	5.65%	0.118%
62	5.891	5.861	5.909	VV	237308	4538589	8.46%	0.177%
63	5.925	5.909	5.949	VV	159376	3458544	6.45%	0.135%
64	5.980	5.949	5.998	VV	157946	3917346	7.31%	0.152%
65	6.035	5.998	6.049	VV	191896	4542150	8.47%	0.177%
66	6.068	6.049	6.093	VV	233741	4691289	8.75%	0.183%
67	6.115	6.093	6.134	VV	206871	4304541	8.03%	0.168%
68	6.174	6.134	6.188	VV	267331	6395571	11.93%	0.249%
69	6.204	6.188	6.228	VV	266673	5516589	10.29%	0.215%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1MSD

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

70	6.247	6.228	6.268	VV	346036	6004373	11.20%	0.234%
71	6.295	6.268	6.311	VV	277403	6[illegible]		
72	6.322	6.311	6.348	VV	244252	4[illegible]		
73	6.370	6.348	6.416	VV	616962	12[illegible]		
74	6.430	6.416	6.441	VV	209673	2[illegible]		
75	6.458	6.441	6.473	VV	251558	4207061	7.85%	0.164%
76	6.520	6.473	6.540	VV	526308	12838069	23.94%	0.500%
77	6.558	6.540	6.578	VV	494300	8025951	14.97%	0.312%
78	6.590	6.578	6.614	VV	279714	5079315	9.47%	0.198%
79	6.645	6.614	6.664	VV	342000	8139151	15.18%	0.317%
80	6.691	6.664	6.715	VV	568874	11588038	21.61%	0.451%
81	6.726	6.715	6.738	VV	292364	3645605	6.80%	0.142%
82	6.758	6.738	6.792	VV	351367	9435364	17.60%	0.367%
83	6.827	6.792	6.846	VV	380962	9311852	17.37%	0.362%
84	6.869	6.846	6.877	VV	372792	6013375	11.22%	0.234%
85	6.890	6.877	6.907	VV	413452	6424930	11.98%	0.250%
86	6.927	6.907	6.954	VV	432447	9449501	17.62%	0.368%
87	6.984	6.954	7.046	VV	406661	16622914	31.00%	0.647%
88	7.077	7.046	7.109	VV	1497420	26026190	48.54%	1.013%
89	7.127	7.109	7.149	VV	487278	9037576	16.86%	0.352%
90	7.173	7.149	7.192	VV	623219	11229262	20.94%	0.437%
91	7.214	7.192	7.230	VV	376270	8350016	15.57%	0.325%
92	7.258	7.230	7.318	VV	477054	19969510	37.24%	0.777%
93	7.342	7.318	7.369	VV	422152	11529295	21.50%	0.449%
94	7.384	7.369	7.408	VV	412687	9032049	16.85%	0.352%
95	7.427	7.408	7.440	VV	420384	7792544	14.53%	0.303%
96	7.467	7.440	7.495	VV	729940	16818688	31.37%	0.655%
97	7.511	7.495	7.535	VV	402569	8242257	15.37%	0.321%
98	7.555	7.535	7.565	VV	406217	6399875	11.94%	0.249%
99	7.583	7.565	7.596	VV	525237	8337589	15.55%	0.325%
100	7.632	7.596	7.649	VV	668543	16084497	30.00%	0.626%
101	7.661	7.649	7.696	VV	444100	11073456	20.65%	0.431%
102	7.722	7.696	7.742	VV	574874	12205005	22.76%	0.475%
103	7.762	7.742	7.787	VV	438356	10929730	20.38%	0.425%
104	7.810	7.787	7.824	VV	407146	8668420	16.17%	0.337%
105	7.866	7.824	7.882	VV	536838	15762271	29.40%	0.614%
106	7.901	7.882	7.941	VV	656215	16901648	31.52%	0.658%
107	7.994	7.941	8.017	VV	1796449	35785289	66.74%	1.393%
108	8.039	8.017	8.060	VV	650821	13817790	25.77%	0.538%
109	8.081	8.060	8.100	VV	651266	12476355	23.27%	0.486%
110	8.116	8.100	8.143	VV	531074	13340245	24.88%	0.519%
111	8.168	8.143	8.191	VV	1015325	19335483	36.06%	0.753%
112	8.215	8.191	8.237	VV	657149	14801904	27.61%	0.576%

Instrument :
FID_C
ClientSampleId :
EX-7-TPH-1MSD

rteres

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

113	8.262	8.237	8.296	VV	548581	17080203	31.86%	0.665%
114	8.329	8.296	8.368	VV	1267854	31		
115	8.379	8.368	8.395	VV	516124	7		
116	8.414	8.395	8.429	VV	566713	10		
117	8.457	8.429	8.481	VV	559221	16		
118	8.495	8.481	8.504	VV	476030	5990186	11.17%	0.233%
119	8.524	8.504	8.538	VV	755836	12451058	23.22%	0.485%
120	8.554	8.538	8.575	VV	685202	13439961	25.07%	0.523%
121	8.585	8.575	8.599	VV	489535	6521744	12.16%	0.254%
122	8.623	8.599	8.645	VV	1099360	19142250	35.70%	0.745%
123	8.711	8.645	8.732	VV	1968347	46706593	87.11%	1.818%
124	8.744	8.732	8.761	VV	505438	8093144	15.09%	0.315%
125	8.782	8.761	8.802	VV	658910	12935218	24.13%	0.504%
126	8.849	8.802	8.868	VV	684764	21455073	40.02%	0.835%
127	8.878	8.868	8.894	VV	510553	7468558	13.93%	0.291%
128	8.925	8.894	8.948	VV	662826	18387945	34.29%	0.716%
129	8.968	8.948	8.985	VV	568907	12164753	22.69%	0.474%
130	9.013	8.985	9.042	VV	573049	17751197	33.11%	0.691%
131	9.071	9.042	9.096	VV	693228	17092149	31.88%	0.665%
132	9.118	9.096	9.161	VV	516525	17882712	33.35%	0.696%
133	9.191	9.161	9.201	VV	500740	10712265	19.98%	0.417%
134	9.220	9.201	9.239	VV	512443	10907804	20.34%	0.425%
135	9.289	9.239	9.330	VV	564776	26657797	49.72%	1.038%
136	9.358	9.330	9.405	VV	831843	27297119	50.91%	1.063%
137	9.439	9.405	9.489	VV	808243	27920542	52.07%	1.087%
138	9.523	9.489	9.568	VV	748854	24928355	46.49%	0.970%
139	9.601	9.568	9.633	VV	447630	16417982	30.62%	0.639%
140	9.676	9.633	9.694	VV	492719	15644669	29.18%	0.609%
141	9.720	9.694	9.745	VV	769474	18447928	34.41%	0.718%
142	9.766	9.745	9.803	VV	1048242	23047921	42.99%	0.897%
143	9.826	9.803	9.858	VV	554260	17156150	32.00%	0.668%
144	9.867	9.858	9.907	VV	571546	14504146	27.05%	0.565%
145	9.935	9.907	9.954	VV	487371	12749115	23.78%	0.496%
146	9.993	9.954	10.018	VV	507485	18004993	33.58%	0.701%
147	10.039	10.018	10.071	VV	501891	14739862	27.49%	0.574%
148	10.089	10.071	10.104	VV	476512	8923519	16.64%	0.347%
149	10.161	10.104	10.191	VV	1788632	45708423	85.25%	1.779%
150	10.230	10.191	10.270	VV	562045	24167210	45.07%	0.941%
151	10.300	10.270	10.324	VV	659205	16724489	31.19%	0.651%
152	10.342	10.324	10.371	VV	447634	12059366	22.49%	0.469%
153	10.434	10.371	10.459	VV	612697	26252395	48.96%	1.022%
154	10.481	10.459	10.494	VV	603575	11182900	20.86%	0.435%
155	10.503	10.494	10.519	VV	576760	8378844	15.63%	0.326%

Instrument :
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Manual IntegrationsAPPROVED

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156	10.527	10.519	10.544	VV	532216	7958733	14.84%	0.310%
157	10.590	10.544	10.612	VV	2702852	53(		
158	10.624	10.612	10.658	VV	623656	14		
159	10.707	10.658	10.727	VV	516728	20		
160	10.760	10.727	10.808	VV	546134	24		
161	10.839	10.808	10.868	VV	586906	18709132	34.89%	0.728%
162	10.897	10.868	10.935	VV	810220	23400240	43.64%	0.911%
163	10.979	10.935	11.018	VV	506400	23096040	43.08%	0.899%
164	11.031	11.018	11.047	VV	505616	8437213	15.74%	0.328%
165	11.061	11.047	11.086	VV	493010	11376339	21.22%	0.443%
166	11.121	11.086	11.134	VV	490260	13569443	25.31%	0.528%
167	11.156	11.134	11.179	VV	514837	13662992	25.48%	0.532%
168	11.207	11.179	11.243	VV	1006993	24665386	46.00%	0.960%
169	11.306	11.243	11.334	VV	1896583	47261934	88.15%	1.840%
170	11.360	11.334	11.385	VV	506226	14175774	26.44%	0.552%
171	11.403	11.385	11.424	VV	467670	10453112	19.50%	0.407%
172	11.476	11.424	11.549	VV	563452	35902274	66.96%	1.398%
173	11.573	11.549	11.588	VV	464676	10137639	18.91%	0.395%
174	11.600	11.588	11.626	VV	453724	9768870	18.22%	0.380%
175	11.645	11.626	11.659	VV	440996	8344308	15.56%	0.325%
176	11.714	11.659	11.738	VV	464920	21002484	39.17%	0.818%
177	11.760	11.738	11.793	VV	492695	15154647	28.26%	0.590%
178	11.813	11.793	11.828	VV	459483	9141220	17.05%	0.356%
179	11.854	11.828	11.924	VV	806366	30340006	56.59%	1.181%
180	11.946	11.924	11.960	VV	438011	9104018	16.98%	0.354%
181	11.987	11.960	12.048	VV	491344	22573055	42.10%	0.879%
182	12.070	12.048	12.114	VV	442552	16200383	30.21%	0.631%
183	12.145	12.114	12.164	VV	404851	11353606	21.18%	0.442%
184	12.177	12.164	12.201	VV	392125	8340432	15.56%	0.325%
185	12.226	12.201	12.244	VV	384023	9320182	17.38%	0.363%
186	12.260	12.244	12.275	VV	361887	6657086	12.42%	0.259%
187	12.294	12.275	12.329	VV	359623	11337575	21.15%	0.441%
188	12.369	12.329	12.405	VV	387945	16309976	30.42%	0.635%
189	12.431	12.405	12.478	VV	447316	16572978	30.91%	0.645%
190	12.511	12.478	12.557	VV	876021	22319060	41.63%	0.869%
191	12.568	12.557	12.588	VV	317070	5803410	10.82%	0.226%
192	12.612	12.588	12.634	VV	342802	9102428	16.98%	0.354%
193	12.651	12.634	12.758	VV	358624	22396366	41.77%	0.872%
194	12.782	12.758	12.812	VV	297101	9192633	17.14%	0.358%
195	12.832	12.812	12.851	VV	295031	6536899	12.19%	0.254%
196	12.871	12.851	12.905	VV	272724	8429734	15.72%	0.328%
197	12.950	12.905	12.978	VV	734940	16960378	31.63%	0.660%
198	13.003	12.978	13.038	VV	406207	11832646	22.07%	0.461%
199	13.045	13.038	13.094	VV	272008	8754821	16.33%	0.341%

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200	13.118	13.094	13.149	VV	666146	12908992	24.08%	0.503%
201	13.162	13.149	13.196	VV	257742	6[illegible]		
202	13.212	13.196	13.258	VV	237300	8[illegible]		
203	13.278	13.258	13.308	VV	230407	6[illegible]		
204	13.339	13.308	13.366	VV	288400	8[illegible]		
205	13.382	13.366	13.408	VV	225168	5433828	10.13%	0.212%
206	13.428	13.408	13.464	VV	218288	6987938	13.03%	0.272%
207	13.472	13.464	13.500	VV	194581	4094179	7.64%	0.159%
208	13.550	13.500	13.584	VV	220612	10073114	18.79%	0.392%
209	13.608	13.584	13.670	VV	231261	10076179	18.79%	0.392%
210	13.701	13.670	13.734	VV	604884	11968127	22.32%	0.466%
211	13.750	13.734	13.763	VV	175594	2908546	5.42%	0.113%
212	13.783	13.763	13.810	VV	177543	4920647	9.18%	0.192%
213	13.842	13.810	13.880	VV	181899	7085573	13.22%	0.276%
214	13.931	13.880	13.967	VV	215926	9359376	17.46%	0.364%
215	14.001	13.967	14.041	VV	168514	6985485	13.03%	0.272%
216	14.087	14.041	14.123	VV	167411	7735060	14.43%	0.301%
217	14.139	14.123	14.182	VV	149322	5248659	9.79%	0.204%
218	14.202	14.182	14.234	VV	164131	4622767	8.62%	0.180%
219	14.249	14.234	14.294	VV	136973	4738167	8.84%	0.184%
220	14.327	14.294	14.357	VV	143172	5171760	9.65%	0.201%
221	14.386	14.357	14.448	VV	163988	7653710	14.27%	0.298%
222	14.505	14.448	14.528	VV	148470	6378177	11.90%	0.248%
223	14.539	14.528	14.592	VV	132141	4823702	9.00%	0.188%
224	14.640	14.592	14.684	VV	123794	6580140	12.27%	0.256%
225	14.707	14.684	14.751	VV	125958	4705328	8.78%	0.183%
226	14.756	14.751	14.768	VV	109191	1097293	2.05%	0.043%
227	14.799	14.768	14.834	VV	506687	9591306	17.89%	0.373%
228	14.848	14.834	14.858	VV	120484	1714727	3.20%	0.067%
229	14.865	14.858	14.903	VV	119577	3048726	5.69%	0.119%
230	14.937	14.903	14.977	VV	127571	5101101	9.51%	0.199%
231	14.995	14.977	15.012	VV	110880	2224969	4.15%	0.087%
232	15.048	15.012	15.114	VV	116935	6756819	12.60%	0.263%
233	15.133	15.114	15.193	VV	110293	4952628	9.24%	0.193%
234	15.227	15.193	15.280	VV	109752	5408956	10.09%	0.211%
235	15.339	15.280	15.431	VV	127138	9608267	17.92%	0.374%
236	15.441	15.431	15.469	VV	99949	2182460	4.07%	0.085%
237	15.491	15.469	15.497	VV	96352	1590528	2.97%	0.062%
238	15.527	15.497	15.551	VV	99113	3118193	5.82%	0.121%
239	15.562	15.551	15.592	VV	99035	2405186	4.49%	0.094%
240	15.627	15.592	15.683	VV	118429	5670151	10.58%	0.221%
241	15.704	15.683	15.750	VV	98080	3771162	7.03%	0.147%
242	15.768	15.750	15.777	VV	96696	1528300	2.85%	0.059%

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243	15.817	15.777	15.898	VV	464828	11969701	22.32%	0.466%
244	15.911	15.898	15.953	VV	91218	2		
245	16.001	15.953	16.037	VV	102956	4		
246	16.055	16.037	16.090	VV	98611	3		
247	16.137	16.090	16.160	VV	114191	4		
248	16.185	16.160	16.218	VV	99984	3293204	6.14%	0.128%
249	16.247	16.218	16.287	VV	95535	3812120	7.11%	0.148%
250	16.297	16.287	16.320	VV	93472	1772933	3.31%	0.069%
251	16.336	16.320	16.373	VV	92764	2841282	5.30%	0.111%
252	16.386	16.373	16.426	VV	89735	2784215	5.19%	0.108%
253	16.458	16.426	16.467	VV	93173	2210245	4.12%	0.086%
254	16.519	16.467	16.545	VV	103070	4572153	8.53%	0.178%
255	16.560	16.545	16.598	VV	97771	2863345	5.34%	0.111%
256	16.623	16.598	16.668	VV	96460	3840606	7.16%	0.150%
257	16.683	16.668	16.699	VV	86000	1596094	2.98%	0.062%
258	16.766	16.699	16.804	VV	438992	10515567	19.61%	0.409%
259	16.811	16.804	16.840	VV	91462	1890550	3.53%	0.074%
260	16.850	16.840	16.873	VV	87677	1720230	3.21%	0.067%
261	16.888	16.873	16.908	VV	90453	1834990	3.42%	0.071%
262	16.919	16.908	16.951	VV	91001	2292626	4.28%	0.089%
263	16.993	16.951	17.039	VV	109822	5063307	9.44%	0.197%
264	17.049	17.039	17.054	VV	87007	760794	1.42%	0.030%
265	17.078	17.054	17.102	VV	94849	2544600	4.75%	0.099%
266	17.164	17.102	17.207	VV	94084	5440324	10.15%	0.212%
267	17.239	17.207	17.262	VV	88835	2722404	5.08%	0.106%
268	17.280	17.262	17.294	VV	82884	1548871	2.89%	0.060%
269	17.322	17.294	17.464	VV	96234	8317317	15.51%	0.324%
270	17.487	17.464	17.508	VV	79244	2008870	3.75%	0.078%
271	17.541	17.508	17.560	VV	87672	2515714	4.69%	0.098%
272	17.581	17.560	17.611	VV	87201	2526915	4.71%	0.098%
273	17.649	17.611	17.728	VV	411137	10120109	18.87%	0.394%
274	17.784	17.728	17.866	VV	109199	6762010	12.61%	0.263%
275	17.877	17.866	17.907	VV	70200	1667788	3.11%	0.065%
276	17.929	17.907	17.967	VV	73456	2516499	4.69%	0.098%
277	17.985	17.967	17.998	VV	75459	1322470	2.47%	0.051%
278	18.012	17.998	18.064	VV	73917	2718996	5.07%	0.106%
279	18.070	18.064	18.081	VV	63985	618412	1.15%	0.024%
280	18.150	18.081	18.201	VV	107955	5113211	9.54%	0.199%
281	18.219	18.201	18.257	VV	59740	1892941	3.53%	0.074%
282	18.302	18.257	18.318	VV	63427	2164320	4.04%	0.084%
283	18.351	18.318	18.388	VV	64059	2509548	4.68%	0.098%
284	18.396	18.388	18.418	VV	55908	994315	1.85%	0.039%
285	18.480	18.418	18.514	VV	378054	7817069	14.58%	0.304%

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286	18.524	18.514	18.548	VV	52475	1031237	1.92%	0.040%
287	18.568	18.548	18.601	VV	66797	1[illegible]		
288	18.620	18.601	18.644	VV	60183	1[illegible]		
289	18.652	18.644	18.658	VV	55260	[illegible]		
290	18.664	18.658	18.722	VV	54714	1[illegible]		
291	18.745	18.722	18.831	VV	54190	3166131	5.91%	0.123%
292	18.898	18.831	18.928	VV	58300	2926817	5.46%	0.114%
293	18.968	18.928	19.005	VV	49910	2083826	3.89%	0.081%
294	19.062	19.005	19.169	VV	51739	4285698	7.99%	0.167%
295	19.180	19.169	19.221	VV	42097	1236056	2.31%	0.048%
296	19.262	19.221	19.347	VV	345070	7944149	14.82%	0.309%
297	19.368	19.347	19.414	VV	41636	1508025	2.81%	0.059%
298	19.445	19.414	19.453	VV	38866	848103	1.58%	0.033%
299	19.463	19.453	19.491	VV	41050	864213	1.61%	0.034%
300	19.497	19.491	19.508	VV	39269	370429	0.69%	0.014%
301	19.537	19.508	19.598	VV	39119	2049554	3.82%	0.080%
302	19.604	19.598	19.617	VV	38075	444334	0.83%	0.017%
303	19.665	19.617	19.726	VV	46250	2591750	4.83%	0.101%
304	19.771	19.726	19.804	VV	38748	1712065	3.19%	0.067%
305	19.856	19.804	19.924	VV	39157	2664789	4.97%	0.104%
306	19.999	19.924	20.034	VV	326025	6724923	12.54%	0.262%
307	20.055	20.034	20.084	VV	40391	1124507	2.10%	0.044%
308	20.094	20.084	20.136	VV	34538	1034604	1.93%	0.040%
309	20.164	20.136	20.204	VV	37372	1408862	2.63%	0.055%
310	20.220	20.204	20.234	VV	34972	634798	1.18%	0.025%
311	20.248	20.234	20.330	VV	37147	1994594	3.72%	0.078%
312	20.342	20.330	20.420	VV	34566	1643679	3.07%	0.064%
313	20.433	20.420	20.439	VV	29530	331503	0.62%	0.013%
314	20.452	20.439	20.510	VV	31245	1273318	2.37%	0.050%
315	20.573	20.510	20.645	VV	32496	2258286	4.21%	0.088%
316	20.721	20.645	20.764	VV	259574	5888825	10.98%	0.229%
317	20.775	20.764	20.891	VV	22603	1506580	2.81%	0.059%
318	20.902	20.891	20.914	VV	16450	220798	0.41%	0.009%
319	20.925	20.914	20.977	VV	16542	580512	1.08%	0.023%
320	20.995	20.977	21.064	VV	16497	772832	1.44%	0.030%
321	21.111	21.064	21.216	VV	14586	1099678	2.05%	0.043%
322	21.229	21.216	21.298	VV	10750	396225	0.74%	0.015%
323	21.334	21.298	21.348	VV	7967	213394	0.40%	0.008%
324	21.367	21.348	21.438	VV	8003	339742	0.63%	0.013%
325	21.451	21.438	21.480	VV	5443	116088	0.22%	0.005%
326	21.488	21.480	21.499	VV	4568	49005	0.09%	0.002%
327	21.530	21.499	21.544	VV	5166	109294	0.20%	0.004%
328	21.610	21.544	21.701	VBA	183517	4530493	8.45%	0.176%

Sum of corrected areas: 2568854208

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Supervised By :Ankita Jodhani 12/02/2024

Aliphatic EPH 111424.M Thu Nov 28 01:25:20 2

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-7-TPH-1MSD			SDG No.:	P5002
Lab Sample ID:	P5002-01MSD			Matrix:	Solid
Analytical Method:	NJEPH			% Solid:	84.6
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
FD048828.D	1	11/26/24	11/27/24	PB165286

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	20.5	E	0.35	0.79	mg/kg
Aromatic C12-C16	Aromatic C12-C16	177	E	0.40	1.18	mg/kg
Aromatic C16-C21	Aromatic C16-C21	470	E	1.13	1.97	mg/kg
Aromatic C21-C36	Aromatic C21-C36	132	E	2.36	3.15	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	73.2		40 - 140	146%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	59.3		40 - 140	119%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	52.0		40 - 140	104%	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:	P5002-01MSD	Acq On:	27 Nov 2024 11:51
Client Sample ID:	EX-7-TPH-1MSD	Operator:	YP/AJ
Data file:	FD048828.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	4.087	5.803	50006917	260.429	200	ug/ml
Aromatic C12-C16	5.804	8.410	435236379	2260	300	ug/ml
Aromatic C16-C21	8.411	12.673	1112690508	5990	500	ug/ml
Aromatic C21-C36	12.674	18.080	264994577	1690	800	ug/ml
Aromatic EPH	4.087	18.080	1862928381	10200		ug/ml
2-Bromonaphthalene (SURR)	7.370	7.370	12894631	73.24		ug/ml
2-Flurobiphenyl (SURR)	8.226	8.226	6829230	59.3		ug/ml
ortho-Terphenyl (SURR)	11.269	11.269	9997491	51.98		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048828.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 11:51
Operator : YP/AJ
Sample : P5002-01MSD
Misc :
ALS Vial : 67 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:42:19 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...	7.370	12894631	73.241 ug/ml
Spiked Amount	50.000		Recovery =	146.48%
6) S	2-Flurobiphenyl (SURR)	8.226	6829230	59.297 ug/mlm
Spiked Amount	50.000 Range	0 - 131	Recovery =	118.59%
11) S	ortho-Terphenyl (SURR)	11.269	9997491	51.979 ug/mlm
Spiked Amount	50.000		Recovery =	103.96%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.186	5573744	29.575 ug/ml
2) T	Naphthalene (C11.7)	5.705	7726356	39.506 ug/ml
3) T	2-Methylnaphthalene (...	6.759	15602628	81.644 ug/ml
5) T	Acenaphthylene (C15.06)	8.029	24568688	126.691 ug/mlm
7) T	Acenaphthene (C15.5)	8.324	13175008	68.497 ug/ml
8) T	Flouorene (C16.55)	9.111	16354264	85.244 ug/mlm
9) T	Phenanthrene (C19.36)	10.506	26669910	145.496 ug/mlm
10) T	Anthracene (C19.43)	10.576	12982325	69.324 ug/mlm
12) T	Fluoranthene (C21.85)	12.307	11884868	64.901 ug/mlm
13) T	Pyrene (C20.8)	12.598	11884219	65.734 ug/mlm
14) T	Benzo[a]anthracene (C...	14.457	8766446	53.291 ug/ml
15) T	Chrysene (C27.41)	14.501	8749217	49.992 ug/ml
16) T	benzo[b]fluoranthene ...	16.005	8089507	51.487 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.038	7682960	47.078 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.380	7504314	50.332 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.747	7721880	62.510 ug/ml
20) T	Dibenz[a,h]anthracene...	17.784	7102312	45.291 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.998	6886032	48.260 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD112724AR\
Data File : FD048828.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 11:51
Operator : YP/AJ
Sample : P5002-01MSD
Misc :
ALS Vial : 67 Sample Multiplier: 1

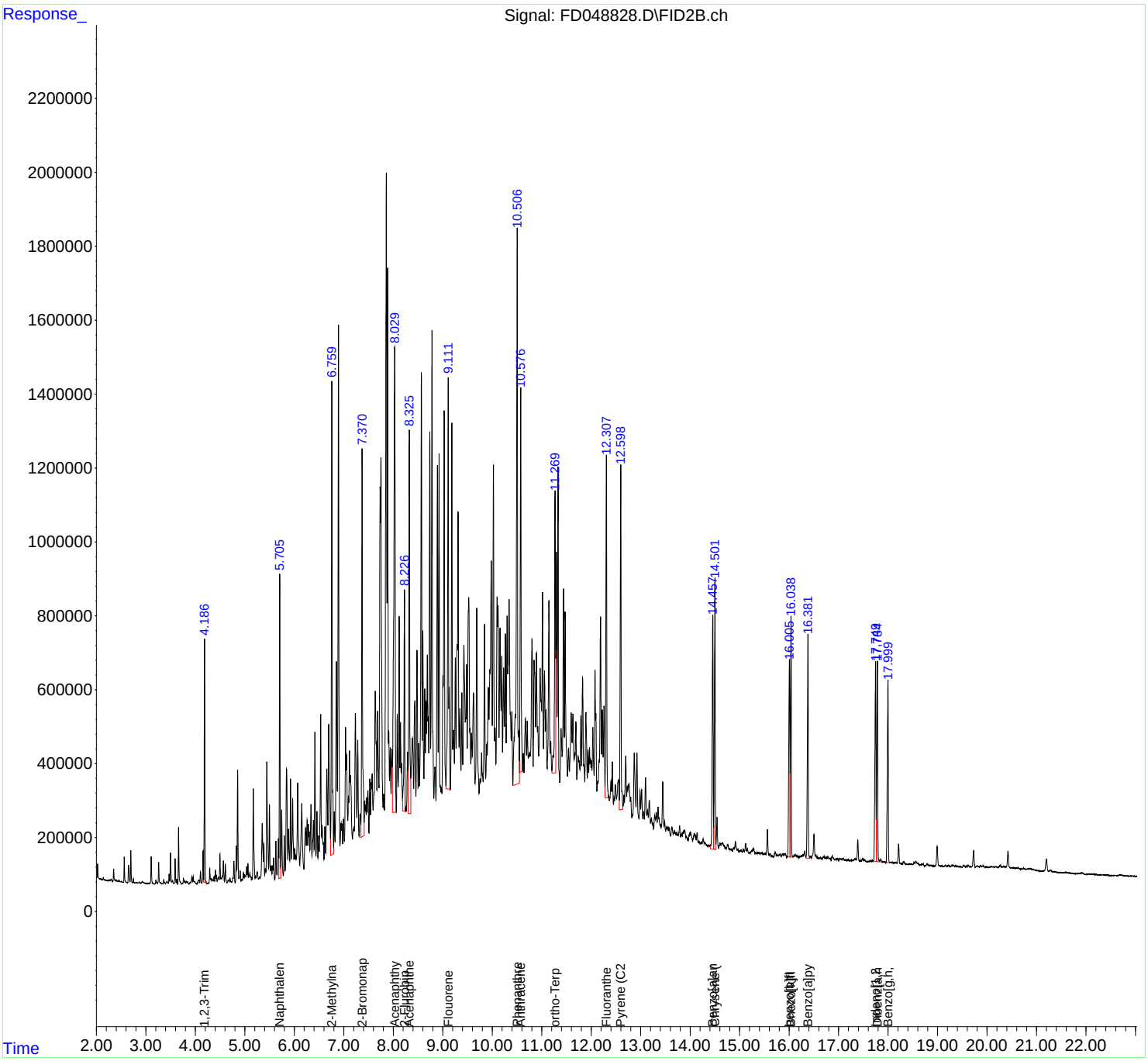
Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Integration File: autoint1.e
Quant Time: Nov 28 02:42:19 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-7-TPH-1MSD

rteres

Area Percent

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 12/02/2024
Supervised By :Ankita Jodhani 12/02/2024

Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Da
Data File : FD048828.D
Signal(s) : FID2B.ch
Acq On : 27 Nov 2024 11:51
Sample : P5002-01MSD
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	4.063	4.042	4.070	PV	2977	17254	0.04%	0.001%
2	4.076	4.070	4.088	PV	3103	17252	0.04%	0.001%
3	4.103	4.088	4.128	PV	29555	271353	0.66%	0.014%
4	4.155	4.128	4.169	PV	87753	764837	1.87%	0.041%
5	4.186	4.169	4.210	VV	661986	5589953	13.68%	0.298%
6	4.215	4.210	4.239	VV	6290	57057	0.14%	0.003%
7	4.246	4.239	4.252	PV	323	1507	0.00%	0.000%
8	4.268	4.252	4.275	VV	2719	21068	0.05%	0.001%
9	4.291	4.275	4.308	VV	41766	405124	0.99%	0.022%
10	4.319	4.308	4.330	VV	13784	151081	0.37%	0.008%
11	4.340	4.330	4.362	VV	13096	188344	0.46%	0.010%
12	4.378	4.362	4.391	VV	18954	208626	0.51%	0.011%
13	4.405	4.391	4.416	VV	36187	331491	0.81%	0.018%
14	4.425	4.416	4.441	VV	22938	214690	0.53%	0.011%
15	4.457	4.441	4.464	VV	13973	146408	0.36%	0.008%
16	4.474	4.464	4.483	VV	17494	165143	0.40%	0.009%
17	4.497	4.483	4.515	VV	79630	769381	1.88%	0.041%
18	4.523	4.515	4.531	VV	14636	127094	0.31%	0.007%
19	4.543	4.531	4.550	VV	19641	185430	0.45%	0.010%
20	4.567	4.550	4.588	VV	61203	696804	1.70%	0.037%
21	4.606	4.588	4.640	VV	50841	563463	1.38%	0.030%
22	4.669	4.640	4.684	VV	8877	141861	0.35%	0.008%
23	4.700	4.684	4.719	VV	14161	162698	0.40%	0.009%
24	4.726	4.719	4.737	VV	3986	37096	0.09%	0.002%
25	4.758	4.737	4.765	VV	14926	146492	0.36%	0.008%

Instrument :
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EX-7-TPH-1MSD

rteres

Manual IntegrationsAPPROVED

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26	4.780	4.765	4.805	VV	59107	602905	1.47%	0.032%
27	4.828	4.805	4.839	VV	100348	[illegible]		
28	4.854	4.839	4.878	VV	307039	2[illegible]		
29	4.906	4.878	4.923	VV	32682	[illegible]		
30	4.941	4.923	4.953	VV	9891	[illegible]		
31	4.972	4.953	4.986	VV	27808	359242	0.88%	0.019%
32	4.998	4.986	5.018	VV	21765	340783	0.83%	0.018%
33	5.037	5.018	5.050	VV	43386	556637	1.36%	0.030%
34	5.063	5.050	5.078	VV	51183	542888	1.33%	0.029%
35	5.103	5.078	5.115	VV	26492	450941	1.10%	0.024%
36	5.121	5.115	5.134	VV	16549	142502	0.35%	0.008%
37	5.145	5.134	5.152	VV	13548	119708	0.29%	0.006%
38	5.171	5.152	5.206	VV	253981	3060383	7.49%	0.163%
39	5.218	5.206	5.228	VV	17816	186956	0.46%	0.010%
40	5.251	5.228	5.275	VV	28235	556877	1.36%	0.030%
41	5.297	5.275	5.307	VV	14770	217745	0.53%	0.012%
42	5.351	5.307	5.374	VV	159385	2728549	6.68%	0.145%
43	5.385	5.374	5.401	VV	104651	1073121	2.63%	0.057%
44	5.414	5.401	5.426	VV	35694	448965	1.10%	0.024%
45	5.445	5.426	5.480	VV	325029	4479911	10.96%	0.239%
46	5.498	5.480	5.517	VV	210341	2169034	5.31%	0.116%
47	5.535	5.517	5.548	VV	43827	654481	1.60%	0.035%
48	5.560	5.548	5.568	VV	42236	410094	1.00%	0.022%
49	5.580	5.568	5.604	VV	64914	727015	1.78%	0.039%
50	5.627	5.604	5.650	VV	110152	1202117	2.94%	0.064%
51	5.679	5.650	5.688	VV	116918	1402325	3.43%	0.075%
52	5.705	5.688	5.726	VV	832823	7889002	19.30%	0.420%
53	5.744	5.726	5.778	VV	194723	2519894	6.16%	0.134%
54	5.798	5.778	5.815	VV	123596	1387924	3.40%	0.074%
55	5.843	5.815	5.869	VV	304885	5203998	12.73%	0.277%
56	5.883	5.869	5.907	VV	141851	2130263	5.21%	0.114%
57	5.924	5.907	5.939	VV	277313	2859816	7.00%	0.152%
58	5.966	5.939	5.992	VV	225256	3834586	9.38%	0.204%
59	6.006	5.992	6.017	VV	87950	1112730	2.72%	0.059%
60	6.026	6.017	6.039	VV	71129	827874	2.03%	0.044%
61	6.068	6.039	6.110	VV	265567	5204251	12.73%	0.277%
62	6.151	6.110	6.194	VV	210429	5009441	12.26%	0.267%
63	6.227	6.194	6.242	VV	142790	2915174	7.13%	0.155%
64	6.260	6.242	6.273	VV	164683	2452258	6.00%	0.131%
65	6.285	6.273	6.295	VV	153515	1704416	4.17%	0.091%
66	6.302	6.295	6.316	VV	133129	1455605	3.56%	0.078%
67	6.338	6.316	6.357	VV	205769	3393745	8.30%	0.181%
68	6.387	6.357	6.401	VV	164217	3062062	7.49%	0.163%
69	6.416	6.401	6.438	VV	401595	4471142	10.94%	0.238%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1MSD

rteres

Manual IntegrationsAPPROVED

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Supervised By :Ankita Jodhani 12/02/2024

70	6.458	6.438	6.477	VV	187329	2741802	6.71%	0.146%
71	6.493	6.477	6.504	VV	121353	1		
72	6.534	6.504	6.549	VV	448819	6		
73	6.560	6.549	6.581	VV	149092	2		
74	6.586	6.581	6.601	VV	102173	1		
75	6.618	6.601	6.634	VV	144943	2039012	4.99%	0.109%
76	6.658	6.634	6.679	VV	302277	5280794	12.92%	0.281%
77	6.696	6.679	6.733	VV	422200	8274591	20.24%	0.441%
78	6.759	6.733	6.795	VV	1348413	18182617	44.48%	0.969%
79	6.809	6.795	6.824	VV	184897	2399989	5.87%	0.128%
80	6.851	6.824	6.870	VV	590923	9688920	23.70%	0.516%
81	6.894	6.870	6.924	VV	1501364	19497717	47.70%	1.039%
82	6.945	6.924	6.954	VV	153502	2321509	5.68%	0.124%
83	6.964	6.954	6.978	VV	152073	1930454	4.72%	0.103%
84	6.994	6.978	7.012	VV	163270	2670535	6.53%	0.142%
85	7.037	7.012	7.048	VV	412412	5571357	13.63%	0.297%
86	7.057	7.048	7.082	VV	336633	5180631	12.67%	0.276%
87	7.095	7.082	7.102	VV	226460	2367696	5.79%	0.126%
88	7.115	7.102	7.127	VV	347971	4321684	10.57%	0.230%
89	7.134	7.127	7.176	VV	282444	5984659	14.64%	0.319%
90	7.192	7.176	7.197	VV	135354	1577553	3.86%	0.084%
91	7.205	7.197	7.213	VV	141671	1343288	3.29%	0.072%
92	7.235	7.213	7.265	VV	448362	8788090	21.50%	0.468%
93	7.283	7.265	7.309	VV	376928	5964381	14.59%	0.318%
94	7.330	7.309	7.346	VV	174947	3496026	8.55%	0.186%
95	7.371	7.346	7.412	VV	1166242	17469607	42.74%	0.931%
96	7.425	7.412	7.436	VV	212180	2709107	6.63%	0.144%
97	7.443	7.436	7.453	VV	194968	1862664	4.56%	0.099%
98	7.463	7.453	7.474	VV	220395	2574230	6.30%	0.137%
99	7.488	7.474	7.508	VV	239338	3995028	9.77%	0.213%
100	7.526	7.508	7.541	VV	270613	3992755	9.77%	0.213%
101	7.557	7.541	7.565	VV	261647	3281998	8.03%	0.175%
102	7.574	7.565	7.592	VV	284411	3909116	9.56%	0.208%
103	7.636	7.592	7.669	VV	507753	15215806	37.23%	0.811%
104	7.685	7.669	7.711	VV	453646	8252046	20.19%	0.440%
105	7.735	7.711	7.743	VV	1059764	13539253	33.12%	0.722%
106	7.751	7.743	7.793	VV	1139848	17676587	43.25%	0.942%
107	7.805	7.793	7.823	VV	229102	3795840	9.29%	0.202%
108	7.860	7.823	7.873	VV	1910554	30330944	74.20%	1.617%
109	7.887	7.873	7.902	VV	1647778	17781995	43.50%	0.948%
110	7.908	7.902	7.926	VV	400251	4902358	11.99%	0.261%
111	7.940	7.926	7.954	VV	353727	5103370	12.49%	0.272%
112	7.970	7.954	7.983	VV	349916	5401216	13.21%	0.288%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1MSD

rteres

Manual IntegrationsAPPROVED

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Supervised By :Ankita Jodhani 12/02/2024

113	8.028	7.983	8.061	VV	1436881	32861904	80.40%	1.751%
114	8.081	8.061	8.098	VV	444012	6[illegible]		
115	8.120	8.098	8.133	VV	709205	9[illegible]		
116	8.146	8.133	8.160	VV	420934	5[illegible]		
117	8.168	8.160	8.188	VV	310591	[illegible]		
118	8.226	8.188	8.246	VV	781027	13169625	32.22%	0.702%
119	8.256	8.246	8.265	VV	191749	2135175	5.22%	0.114%
120	8.289	8.265	8.300	VV	340728	5749027	14.06%	0.306%
121	8.325	8.300	8.354	VV	1215141	18715214	45.79%	0.997%
122	8.385	8.354	8.411	VV	374829	11028587	26.98%	0.588%
123	8.436	8.411	8.457	VV	478375	10090672	24.69%	0.538%
124	8.480	8.457	8.501	VV	616207	10894924	26.65%	0.581%
125	8.515	8.501	8.529	VV	363354	5021750	12.29%	0.268%
126	8.568	8.529	8.584	VV	1368737	22223670	54.37%	1.184%
127	8.597	8.584	8.619	VV	667366	9488271	23.21%	0.506%
128	8.636	8.619	8.649	VV	509422	7031086	17.20%	0.375%
129	8.663	8.649	8.674	VV	476179	6441960	15.76%	0.343%
130	8.688	8.674	8.700	VV	603269	7627065	18.66%	0.407%
131	8.705	8.700	8.717	VV	432924	4048912	9.91%	0.216%
132	8.739	8.717	8.754	VV	1203074	16174588	39.57%	0.862%
133	8.783	8.754	8.820	VV	1482901	24676923	60.37%	1.315%
134	8.843	8.820	8.862	VV	296745	6525859	15.97%	0.348%
135	8.892	8.862	8.908	VV	1108169	16758361	41.00%	0.893%
136	8.925	8.908	8.943	VV	1144315	13673773	33.45%	0.729%
137	8.946	8.943	8.961	VV	249070	2647019	6.48%	0.141%
138	8.970	8.961	8.983	VV	239897	3179935	7.78%	0.169%
139	9.003	8.983	9.009	VV	543209	6473439	15.84%	0.345%
140	9.029	9.009	9.063	VV	1261257	20073194	49.11%	1.070%
141	9.110	9.063	9.123	VV	1347746	22386822	54.77%	1.193%
142	9.130	9.123	9.153	VV	512809	6772080	16.57%	0.361%
143	9.184	9.153	9.201	VV	1227356	17658622	43.20%	0.941%
144	9.216	9.201	9.235	VV	396781	7471951	18.28%	0.398%
145	9.255	9.235	9.269	VV	590143	9083104	22.22%	0.484%
146	9.290	9.269	9.295	VV	625046	8005841	19.59%	0.427%
147	9.310	9.295	9.330	VV	986355	14031944	34.33%	0.748%
148	9.347	9.330	9.368	VV	454292	8712702	21.32%	0.464%
149	9.386	9.368	9.404	VV	497593	8197591	20.06%	0.437%
150	9.427	9.404	9.456	VV	624863	14926871	36.52%	0.796%
151	9.463	9.456	9.466	VV	430228	2559836	6.26%	0.136%
152	9.480	9.466	9.495	VV	572945	8088230	19.79%	0.431%
153	9.525	9.495	9.568	VV	753967	22806139	55.79%	1.216%
154	9.581	9.568	9.597	VV	387110	6262624	15.32%	0.334%
155	9.621	9.597	9.652	VV	493199	12775593	31.26%	0.681%

Instrument :
FID_D
ClientSampleId :
EX-7-TPH-1MSD

rteres

Manual IntegrationsAPPROVED

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Supervised By :Ankita Jodhani 12/02/2024

156	9.688	9.652	9.734	VV	724860	18746917	45.86%	0.999%
157	9.753	9.734	9.767	VV	261126	5(		
158	9.786	9.767	9.816	VV	333134	8[illegible]		
159	9.845	9.816	9.869	VV	681516	13(		
160	9.890	9.869	9.899	VV	355851	5[illegible]		
161	9.921	9.899	9.935	VV	508127	9271071	22.68%	0.494%
162	9.954	9.935	9.959	VV	557547	7229171	17.69%	0.385%
163	9.982	9.959	10.002	VV	849405	16793224	41.08%	0.895%
164	10.025	10.002	10.048	VV	1112197	18190308	44.50%	0.970%
165	10.058	10.048	10.075	VV	397683	6059278	14.82%	0.323%
166	10.099	10.075	10.110	VV	753661	11968455	29.28%	0.638%
167	10.118	10.110	10.137	VV	729157	9583564	23.45%	0.511%
168	10.158	10.137	10.179	VV	669589	13158863	32.19%	0.701%
169	10.194	10.179	10.209	VV	591899	8586180	21.01%	0.458%
170	10.232	10.209	10.248	VV	560553	10871086	26.60%	0.579%
171	10.267	10.248	10.282	VV	651788	10183290	24.91%	0.543%
172	10.301	10.282	10.315	VV	700711	11252183	27.53%	0.600%
173	10.342	10.315	10.384	VV	745387	22693164	55.52%	1.210%
174	10.398	10.384	10.418	VV	442301	7284750	17.82%	0.388%
175	10.506	10.418	10.526	VV	1757993	40874954	100.00%	2.179%
176	10.534	10.526	10.549	VV	388956	5058969	12.38%	0.270%
177	10.577	10.549	10.614	VV	1317508	23804254	58.24%	1.269%
178	10.629	10.614	10.643	VV	327593	5363299	13.12%	0.286%
179	10.669	10.643	10.693	VV	421191	10844351	26.53%	0.578%
180	10.709	10.693	10.728	VV	414961	7543590	18.46%	0.402%
181	10.750	10.728	10.769	VV	326798	7947901	19.44%	0.424%
182	10.804	10.769	10.828	VV	635555	16069174	39.31%	0.856%
183	10.846	10.828	10.875	VV	579711	13723796	33.58%	0.731%
184	10.893	10.875	10.914	VV	598242	11364519	27.80%	0.606%
185	10.922	10.914	10.938	VV	399364	5157447	12.62%	0.275%
186	10.969	10.938	10.999	VV	556427	16416766	40.16%	0.875%
187	11.017	10.999	11.036	VV	761327	12329719	30.16%	0.657%
188	11.057	11.036	11.075	VV	549630	10669588	26.10%	0.569%
189	11.087	11.075	11.109	VV	444742	7669784	18.76%	0.409%
190	11.146	11.109	11.171	VV	737855	16822399	41.16%	0.897%
191	11.183	11.171	11.204	VV	357896	6395303	15.65%	0.341%
192	11.270	11.204	11.282	VV	1036805	22444516	54.91%	1.196%
193	11.296	11.282	11.312	VV	868818	12095397	29.59%	0.645%
194	11.331	11.312	11.365	VV	1097773	17387644	42.54%	0.927%
195	11.390	11.365	11.412	VV	391258	9246540	22.62%	0.493%
196	11.442	11.412	11.457	VV	769472	13468514	32.95%	0.718%
197	11.474	11.457	11.522	VV	707074	16504895	40.38%	0.880%
198	11.542	11.522	11.559	VV	338958	6832798	16.72%	0.364%
199	11.595	11.559	11.615	VV	433649	11946855	29.23%	0.637%

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200	11.631	11.615	11.655	VV	429819	8980734	21.97%	0.479%
201	11.671	11.655	11.675	VV	324156	3[illegible]		
202	11.691	11.675	11.710	VV	408087	7[illegible]		
203	11.734	11.710	11.772	VV	314523	10[illegible]		
204	11.792	11.772	11.806	VV	424849	6[illegible]		
205	11.826	11.806	11.850	VV	527805	10620067	25.98%	0.566%
206	11.853	11.850	11.870	VV	291802	3205817	7.84%	0.171%
207	11.893	11.870	11.920	VV	432680	10349599	25.32%	0.552%
208	11.936	11.920	11.949	VV	331951	5031575	12.31%	0.268%
209	11.965	11.949	11.976	VV	338140	5013003	12.26%	0.267%
210	11.984	11.976	11.996	VV	306151	3543575	8.67%	0.189%
211	12.005	11.996	12.015	VV	301487	3321562	8.13%	0.177%
212	12.034	12.015	12.058	VV	392775	8198772	20.06%	0.437%
213	12.078	12.058	12.090	VV	546993	8034505	19.66%	0.428%
214	12.095	12.090	12.115	VV	429146	5067603	12.40%	0.270%
215	12.131	12.115	12.138	VV	247006	3325937	8.14%	0.177%
216	12.189	12.138	12.207	VV	690227	16611530	40.64%	0.885%
217	12.224	12.207	12.241	VV	438939	7713326	18.87%	0.411%
218	12.259	12.241	12.279	VV	449126	8245725	20.17%	0.439%
219	12.307	12.279	12.363	VV	1128740	21962777	53.73%	1.171%
220	12.368	12.363	12.373	VV	197217	1171027	2.86%	0.062%
221	12.400	12.373	12.412	VV	245880	5238732	12.82%	0.279%
222	12.428	12.412	12.452	VV	298484	5633419	13.78%	0.300%
223	12.463	12.452	12.472	VV	201405	2342753	5.73%	0.125%
224	12.487	12.472	12.513	VV	235241	5415111	13.25%	0.289%
225	12.555	12.513	12.568	VV	248657	7403541	18.11%	0.395%
226	12.598	12.568	12.638	VV	1102458	18956820	46.38%	1.010%
227	12.662	12.638	12.673	VV	207572	3887645	9.51%	0.207%
228	12.698	12.673	12.716	VV	312790	6483102	15.86%	0.346%
229	12.729	12.716	12.740	VV	229974	3199782	7.83%	0.171%
230	12.764	12.740	12.790	VV	238521	6637785	16.24%	0.354%
231	12.799	12.790	12.821	VV	200619	3310225	8.10%	0.176%
232	12.870	12.821	12.904	VV	319339	10585974	25.90%	0.564%
233	12.925	12.904	12.966	VV	319757	7650822	18.72%	0.408%
234	12.986	12.966	13.001	VV	216868	3764355	9.21%	0.201%
235	13.019	13.001	13.044	VV	218277	4716756	11.54%	0.251%
236	13.059	13.044	13.074	VV	161176	2791228	6.83%	0.149%
237	13.098	13.074	13.125	VV	252010	5764544	14.10%	0.307%
238	13.138	13.125	13.155	VV	163838	2748380	6.72%	0.146%
239	13.175	13.155	13.201	VV	190530	4537662	11.10%	0.242%
240	13.219	13.201	13.239	VV	140573	3000722	7.34%	0.160%
241	13.244	13.239	13.261	VV	128716	1634460	4.00%	0.087%
242	13.285	13.261	13.300	VV	150082	3212674	7.86%	0.171%

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243	13.317	13.300	13.333	VV	157320	2911921	7.12%	0.155%
244	13.352	13.333	13.415	VV	171855	6[illegible]		
245	13.447	13.415	13.471	VV	239185	5[illegible]		
246	13.484	13.471	13.507	VV	132113	2[illegible]		
247	13.523	13.507	13.537	VV	115759	2[illegible]		
248	13.543	13.537	13.565	VV	114089	1906174	4.66%	0.102%
249	13.573	13.565	13.603	VV	115382	2410173	5.90%	0.128%
250	13.630	13.603	13.662	VV	116514	3676090	8.99%	0.196%
251	13.682	13.662	13.697	VV	105129	2191813	5.36%	0.117%
252	13.708	13.697	13.720	VV	100365	1353715	3.31%	0.072%
253	13.734	13.720	13.748	VV	101134	1622846	3.97%	0.086%
254	13.787	13.748	13.808	VV	118858	3644394	8.92%	0.194%
255	13.821	13.808	13.825	VV	95133	925883	2.27%	0.049%
256	13.834	13.825	13.842	VV	95579	946712	2.32%	0.050%
257	13.859	13.842	13.872	VV	102630	1805575	4.42%	0.096%
258	13.888	13.872	13.913	VV	107296	2500925	6.12%	0.133%
259	13.922	13.913	13.942	VV	91745	1530603	3.74%	0.082%
260	13.948	13.942	13.960	VV	83792	889086	2.18%	0.047%
261	13.987	13.960	13.995	VV	96238	1870246	4.58%	0.100%
262	14.003	13.995	14.050	VV	98252	2977131	7.28%	0.159%
263	14.080	14.050	14.094	VV	97071	2361814	5.78%	0.126%
264	14.102	14.094	14.123	VV	93119	1526368	3.73%	0.081%
265	14.140	14.123	14.162	VV	98834	2030501	4.97%	0.108%
266	14.171	14.162	14.210	VV	75886	2054879	5.03%	0.110%
267	14.226	14.210	14.241	VV	74187	1343813	3.29%	0.072%
268	14.259	14.241	14.284	VV	80815	1921099	4.70%	0.102%
269	14.300	14.284	14.358	VV	71730	2958727	7.24%	0.158%
270	14.371	14.358	14.385	VV	64812	1038384	2.54%	0.055%
271	14.388	14.385	14.407	VV	64133	816531	2.00%	0.044%
272	14.458	14.407	14.476	VV	687450	10976379	26.85%	0.585%
273	14.501	14.476	14.521	VV	788541	10182357	24.91%	0.543%
274	14.544	14.521	14.568	VV	138994	2660476	6.51%	0.142%
275	14.603	14.568	14.623	VV	69701	2079931	5.09%	0.111%
276	14.656	14.623	14.677	VV	70507	2157488	5.28%	0.115%
277	14.683	14.677	14.704	VV	63584	1002119	2.45%	0.053%
278	14.713	14.704	14.730	VV	56323	850984	2.08%	0.045%
279	14.760	14.730	14.788	VV	64844	2035690	4.98%	0.108%
280	14.801	14.788	14.812	VV	53017	734602	1.80%	0.039%
281	14.831	14.812	14.853	VV	51755	1256074	3.07%	0.067%
282	14.874	14.853	14.891	VV	54846	1179391	2.89%	0.063%
283	14.915	14.891	14.950	VV	72250	2088033	5.11%	0.111%
284	14.961	14.950	14.985	VV	50793	996137	2.44%	0.053%
285	15.005	14.985	15.018	VV	47333	933860	2.28%	0.050%

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286	15.036	15.018	15.055	VV	48533	1005993	2.46%	0.054%
287	15.075	15.055	15.097	VV	50691	1		
288	15.121	15.097	15.145	VV	65880	1		
289	15.159	15.145	15.182	VV	52934	1		
290	15.197	15.182	15.212	VV	41256			
291	15.236	15.212	15.245	VV	44774	857166	2.10%	0.046%
292	15.256	15.245	15.262	VV	46548	463114	1.13%	0.025%
293	15.285	15.262	15.331	VV	52399	1846936	4.52%	0.098%
294	15.352	15.331	15.357	VV	41326	609930	1.49%	0.033%
295	15.361	15.357	15.385	VV	40654	677227	1.66%	0.036%
296	15.402	15.385	15.418	VV	40128	791463	1.94%	0.042%
297	15.421	15.418	15.426	VV	38869	164334	0.40%	0.009%
298	15.430	15.426	15.436	VV	38355	248771	0.61%	0.013%
299	15.449	15.436	15.466	VV	40813	677076	1.66%	0.036%
300	15.481	15.466	15.498	VV	37620	702050	1.72%	0.037%
301	15.511	15.498	15.520	VV	36666	468082	1.15%	0.025%
302	15.560	15.520	15.599	VV	102237	2499572	6.12%	0.133%
303	15.605	15.599	15.640	VV	35449	812447	1.99%	0.043%
304	15.644	15.640	15.650	VV	30855	184340	0.45%	0.010%
305	15.657	15.650	15.676	VV	30127	452562	1.11%	0.024%
306	15.721	15.676	15.741	VV	40836	1322837	3.24%	0.071%
307	15.754	15.741	15.775	VV	33813	636079	1.56%	0.034%
308	15.800	15.775	15.805	VV	33563	567350	1.39%	0.030%
309	15.816	15.805	15.840	VV	33762	668392	1.64%	0.036%
310	15.874	15.840	15.886	VV	34858	890419	2.18%	0.047%
311	15.894	15.886	15.899	VV	32648	242998	0.59%	0.013%
312	15.923	15.899	15.948	VV	35464	948104	2.32%	0.051%
313	16.006	15.948	16.019	VV	559628	9181213	22.46%	0.489%
314	16.038	16.019	16.082	VV	678459	8671722	21.22%	0.462%
315	16.104	16.082	16.116	VV	30164	583285	1.43%	0.031%
316	16.134	16.116	16.150	VV	31038	597075	1.46%	0.032%
317	16.159	16.150	16.180	VV	28112	486259	1.19%	0.026%
318	16.184	16.180	16.200	VV	27109	319561	0.78%	0.017%
319	16.220	16.200	16.225	VV	26559	385375	0.94%	0.021%
320	16.230	16.225	16.236	VV	26193	168605	0.41%	0.009%
321	16.250	16.236	16.264	VV	29933	460621	1.13%	0.025%
322	16.285	16.264	16.294	VV	30830	539523	1.32%	0.029%
323	16.315	16.294	16.338	VV	40621	855917	2.09%	0.046%
324	16.381	16.338	16.419	VV	626293	8526124	20.86%	0.454%
325	16.430	16.419	16.458	VV	25055	567943	1.39%	0.030%
326	16.502	16.458	16.528	VV	85085	1868282	4.57%	0.100%
327	16.543	16.528	16.562	VV	28419	528616	1.29%	0.028%
328	16.567	16.562	16.591	VV	23185	378723	0.93%	0.020%
329	16.598	16.591	16.614	VV	21724	282045	0.69%	0.015%

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330	16.619	16.614	16.623	VV	20324	111124	0.27%	0.006%
331	16.633	16.623	16.649	VV	21459			
332	16.657	16.649	16.673	VV	20030			
333	16.701	16.673	16.727	VV	23991			
334	16.740	16.727	16.761	VV	21652			
335	16.786	16.761	16.819	VV	23805	717239	1.75%	0.038%
336	16.828	16.819	16.846	VV	20212	301086	0.74%	0.016%
337	16.873	16.846	16.926	VV	26212	932799	2.28%	0.050%
338	16.947	16.926	16.967	VV	18449	411111	1.01%	0.022%
339	16.983	16.967	17.007	VV	16938	383685	0.94%	0.020%
340	17.024	17.007	17.038	VV	18872	309716	0.76%	0.017%
341	17.051	17.038	17.068	VV	17688	281093	0.69%	0.015%
342	17.081	17.068	17.118	VV	18043	470270	1.15%	0.025%
343	17.122	17.118	17.127	VV	13168	64679	0.16%	0.003%
344	17.152	17.127	17.169	VV	13916	329860	0.81%	0.018%
345	17.183	17.169	17.187	VV	14071	143226	0.35%	0.008%
346	17.193	17.187	17.218	VV	14133	228815	0.56%	0.012%
347	17.235	17.218	17.242	VV	12242	165914	0.41%	0.009%
348	17.257	17.242	17.272	VV	13748	218290	0.53%	0.012%
349	17.279	17.272	17.285	VV	11631	89191	0.22%	0.005%
350	17.292	17.285	17.297	VV	11989	85866	0.21%	0.005%
351	17.328	17.297	17.337	VV	15318	320154	0.78%	0.017%
352	17.345	17.337	17.362	VV	15006	215673	0.53%	0.011%
353	17.389	17.362	17.422	VV	67790	1136869	2.78%	0.061%
354	17.427	17.422	17.443	VV	10480	128935	0.32%	0.007%
355	17.457	17.443	17.462	VV	10157	110673	0.27%	0.006%
356	17.485	17.462	17.500	VV	17175	295704	0.72%	0.016%
357	17.506	17.500	17.508	VV	12340	59545	0.15%	0.003%
358	17.514	17.508	17.528	VV	12892	145218	0.36%	0.008%
359	17.533	17.528	17.566	VV	11440	204565	0.50%	0.011%
360	17.572	17.566	17.578	VV	7201	48948	0.12%	0.003%
361	17.594	17.578	17.612	VV	8906	150848	0.37%	0.008%
362	17.644	17.612	17.665	VV	8929	256405	0.63%	0.014%
363	17.679	17.665	17.693	VV	9713	139541	0.34%	0.007%
364	17.748	17.693	17.762	VV	550008	7995386	19.56%	0.426%
365	17.785	17.762	17.833	VV	549027	7406969	18.12%	0.395%
366	17.854	17.833	17.889	VV	13780	287122	0.70%	0.015%
367	17.899	17.889	17.907	VV	5970	57864	0.14%	0.003%
368	17.911	17.907	17.925	VV	5407	55392	0.14%	0.003%
369	17.930	17.925	17.952	VV	5205	73025	0.18%	0.004%
370	17.999	17.952	18.040	VV	497632	7029220	17.20%	0.375%
371	18.065	18.040	18.099	VV	4240	109988	0.27%	0.006%
372	18.104	18.099	18.111	VV	1908	11379	0.03%	0.001%

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 373 18.117  18.111  18.122  VV      1706      10247    0.03%  0.001%
 374 18.139  18.122  18.178  VV      3736
                        Sum of corrected are

Aromatic EPH 111424.M Thu Nov 28 03:56:38 202
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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:	FC112724AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB165286BSD	FC067873.D	n-Octacosane (C28)	yogesh	12/2/2024 8:41:38 AM	Ankita	12/2/2024 9:11:52	Peak Integrated by Software
P5002-01	FC067874.D	1-chlorooctadecane (SURR)	yogesh	12/2/2024 8:41:39 AM	Ankita	12/2/2024 9:11:54	Peak Integrated by Software
P5002-01D	FC067875.D	1-chlorooctadecane (SURR)	yogesh	12/2/2024 8:41:41 AM	Ankita	12/2/2024 9:11:55	Peak Integrated by Software
P5002-01MS	FC067876.D	1-chlorooctadecane (SURR)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MS	FC067876.D	n-Docosane (C22)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MS	FC067876.D	n-Dodecane (C12)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MS	FC067876.D	n-Dotriacontane (C32)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MS	FC067876.D	n-Eicosane (C20)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MS	FC067876.D	n-Heneicosane (C21)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MS	FC067876.D	n-Hexacosane (C26)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MS	FC067876.D	n-Hexadecane (C16)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MS	FC067876.D	n-Octacosane (C28)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MS	FC067876.D	n-Octadecane (C18)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software

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Manual Integration Report

Sequence:	FC112724AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
P5002-01MS	FC067876.D	n-Tetracosane (C24)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MS	FC067876.D	n-Tetradecane (C14)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MS	FC067876.D	n-Tricontane (C30)	yogesh	12/2/2024 8:41:43 AM	Ankita	12/2/2024 9:11:57	Peak Integrated by Software
P5002-01MSD	FC067877.D	1-chlorooctadecane (SURR)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Docosane (C22)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Dodecane (C12)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Dotriacontane (C32)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Eicosane (C20)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Heneicosane (C21)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Hexacosane (C26)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Hexadecane (C16)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Hexatriacontane (C36)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Octacosane (C28)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software

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Manual Integration Report

Sequence:	FC112724AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
P5002-01MSD	FC067877.D	n-Tetracosane (C24)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Tetradecane (C14)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Tetratriacontane (C34)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	n-Tricontane (C30)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01MSD	FC067877.D	ortho-Terphenyl (SURR)	yogesh	12/2/2024 8:41:44 AM	Ankita	12/2/2024 9:11:59	Peak Integrated by Software
P5002-01DL	FC067878.D	1-chlorooctadecane (SURR)	yogesh	12/2/2024 8:41:46 AM	Ankita	12/2/2024 9:12:00	Peak Integrated by Software
P5002-01DL2	FC067879.D	1-chlorooctadecane (SURR)	yogesh	12/2/2024 8:41:47 AM	Ankita	12/2/2024 9:12:02	Peak Integrated by Software

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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

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Manual Integration Report

Sequence:	FD112724AR	Instrument	FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM AROMATIC HC	FD048821.D	Naphthalene (C11.7)	yogesh	12/2/2024 8:42:11 AM	Ankita	12/2/2024 9:12:23	Peak Integrated by Software
PB165286BS	FD048823.D	Fluoranthene (C21.85)	yogesh	12/2/2024 8:42:13 AM	Ankita	12/2/2024 9:12:24	Peak Integrated by Software
PB165286BSD	FD048824.D	Fluoranthene (C21.85)	yogesh	12/2/2024 8:42:14 AM	Ankita	12/2/2024 9:12:25	Peak Integrated by Software
P5002-01	FD048825.D	2-Flurobiphenyl (SURR)	yogesh	12/2/2024 8:42:16 AM	Ankita	12/2/2024 9:12:27	Peak Integrated by Software
P5002-01	FD048825.D	ortho-Terphenyl (SURR)	yogesh	12/2/2024 8:42:16 AM	Ankita	12/2/2024 9:12:27	Peak Integrated by Software
P5002-01D	FD048826.D	2-Flurobiphenyl (SURR)	yogesh	12/2/2024 8:42:18 AM	Ankita	12/2/2024 9:12:29	Peak Integrated by Software
P5002-01D	FD048826.D	ortho-Terphenyl (SURR)	yogesh	12/2/2024 8:42:18 AM	Ankita	12/2/2024 9:12:29	Peak Integrated by Software
P5002-01MS	FD048827.D	Acenaphthylene (C15.06)	yogesh	12/2/2024 8:42:19 AM	Ankita	12/2/2024 9:12:30	Peak Integrated by Software
P5002-01MS	FD048827.D	Anthracene (C19.43)	yogesh	12/2/2024 8:42:19 AM	Ankita	12/2/2024 9:12:30	Peak Integrated by Software
P5002-01MS	FD048827.D	Flouorene (C16.55)	yogesh	12/2/2024 8:42:19 AM	Ankita	12/2/2024 9:12:30	Peak Integrated by Software
P5002-01MS	FD048827.D	Fluoranthene (C21.85)	yogesh	12/2/2024 8:42:19 AM	Ankita	12/2/2024 9:12:30	Peak Integrated by Software
P5002-01MS	FD048827.D	ortho-Terphenyl (SURR)	yogesh	12/2/2024 8:42:19 AM	Ankita	12/2/2024 9:12:30	Peak Integrated by Software
P5002-01MS	FD048827.D	Phenanthrene (C19.36)	yogesh	12/2/2024 8:42:19 AM	Ankita	12/2/2024 9:12:30	Peak Integrated by Software

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Manual Integration Report

Sequence:	FD112724AR	Instrument	FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
P5002-01MS	FD048827.D	Pyrene (C20.8)	yogesh	12/2/2024 8:42:19 AM	Ankita	12/2/2024 9:12:30	Peak Integrated by Software
P5002-01MSD	FD048828.D	2-Flurobiphenyl (SURR)	yogesh	12/2/2024 8:42:21 AM	Ankita	12/2/2024 9:12:32	Peak Integrated by Software
P5002-01MSD	FD048828.D	Acenaphthylene (C15.06)	yogesh	12/2/2024 8:42:21 AM	Ankita	12/2/2024 9:12:32	Peak Integrated by Software
P5002-01MSD	FD048828.D	Anthracene (C19.43)	yogesh	12/2/2024 8:42:21 AM	Ankita	12/2/2024 9:12:32	Peak Integrated by Software
P5002-01MSD	FD048828.D	Flouorene (C16.55)	yogesh	12/2/2024 8:42:21 AM	Ankita	12/2/2024 9:12:32	Peak Integrated by Software
P5002-01MSD	FD048828.D	Fluoranthene (C21.85)	yogesh	12/2/2024 8:42:21 AM	Ankita	12/2/2024 9:12:32	Peak Integrated by Software
P5002-01MSD	FD048828.D	ortho-Terphenyl (SURR)	yogesh	12/2/2024 8:42:21 AM	Ankita	12/2/2024 9:12:32	Peak Integrated by Software
P5002-01MSD	FD048828.D	Phenanthrene (C19.36)	yogesh	12/2/2024 8:42:21 AM	Ankita	12/2/2024 9:12:32	Peak Integrated by Software
P5002-01MSD	FD048828.D	Pyrene (C20.8)	yogesh	12/2/2024 8:42:21 AM	Ankita	12/2/2024 9:12:32	Peak Integrated by Software
P5002-01DL	FD048829.D	ortho-Terphenyl (SURR)	yogesh	12/2/2024 8:42:23 AM	Ankita	12/2/2024 9:12:34	Peak Integrated by Software
P5002-01DL2	FD048830.D	ortho-Terphenyl (SURR)	yogesh	12/2/2024 8:42:25 AM	Ankita	12/2/2024 9:12:35	Peak Integrated by Software
20 PPM AROMATIC HC	FD048832.D	Benzo[g,h,i]perylene (C34.01)	yogesh	12/2/2024 8:42:26 AM	Ankita	12/2/2024 9:12:37	Peak Integrated by Software

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Manual Integration Report

Sequence:	FD112724AR	Instrument	FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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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

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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

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Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC112724AL

Review By	yogesh	Review On	11/27/2024 9:51:31 AM		
Supervise By	Ankita	Supervise On	12/2/2024 9:12:06 AM		
SubDirectory	FC112724AL	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	FC067868.D	27 Nov 2024 06:12	YP/AJ	Ok
2	I.BLK	FC067869.D	27 Nov 2024 06:47	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC067870.D	27 Nov 2024 07:22	YP/AJ	Ok
4	PB165286BL	FC067871.D	27 Nov 2024 08:07	YP/AJ	Ok
5	PB165286BS	FC067872.D	27 Nov 2024 08:42	YP/AJ	Ok
6	PB165286BSD	FC067873.D	27 Nov 2024 09:18	YP/AJ	Ok,M
7	P5002-01	FC067874.D	27 Nov 2024 10:02	YP/AJ	Dilution
8	P5002-01D	FC067875.D	27 Nov 2024 10:37	YP/AJ	Ok,M
9	P5002-01MS	FC067876.D	27 Nov 2024 11:12	YP/AJ	Ok,M
10	P5002-01MSD	FC067877.D	27 Nov 2024 11:51	YP/AJ	Ok,M
11	P5002-01DL	FC067878.D	27 Nov 2024 12:27	YP/AJ	Dilution
12	P5002-01DL2	FC067879.D	27 Nov 2024 13:02	YP/AJ	Ok,M
13	I.BLK	FC067880.D	27 Nov 2024 13:38	YP/AJ	Ok
14	20 PPM ALIPHATIC HC STD	FC067881.D	27 Nov 2024 14:14	YP/AJ	Ok

M : Manual Integration

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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

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Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD112724AR

Review By	yogesh	Review On	11/27/2024 9:52:33 AM		
Supervise By	Ankita	Supervise On	12/2/2024 9:12:47 AM		
SubDirectory	FD112724AR	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	FD048819.D	27 Nov 2024 06:12	YP/AJ	Ok
2	I.BLK	FD048820.D	27 Nov 2024 06:47	YP/AJ	Ok
3	20 PPM AROMATIC HC STD	FD048821.D	27 Nov 2024 07:22	YP/AJ	Ok,M
4	PB165286BL	FD048822.D	27 Nov 2024 08:07	YP/AJ	Ok
5	PB165286BS	FD048823.D	27 Nov 2024 08:42	YP/AJ	Ok,M
6	PB165286BSD	FD048824.D	27 Nov 2024 09:18	YP/AJ	Ok,M
7	P5002-01	FD048825.D	27 Nov 2024 10:02	YP/AJ	Dilution
8	P5002-01D	FD048826.D	27 Nov 2024 10:37	YP/AJ	Ok,M
9	P5002-01MS	FD048827.D	27 Nov 2024 11:12	YP/AJ	Ok,M
10	P5002-01MSD	FD048828.D	27 Nov 2024 11:51	YP/AJ	Ok,M
11	P5002-01DL	FD048829.D	27 Nov 2024 12:27	YP/AJ	Dilution
12	P5002-01DL2	FD048830.D	27 Nov 2024 13:02	YP/AJ	Ok,M
13	I.BLK	FD048831.D	27 Nov 2024 13:38	YP/AJ	Ok
14	20 PPM AROMATIC HC STD	FD048832.D	27 Nov 2024 14:14	YP/AJ	Ok,M

M : Manual Integration

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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 # FC112724AL

Review By	yogesh	Review On	11/27/2024 9:51:31 AM		
Supervise By	Ankita	Supervise On	12/2/2024 9:12:06 AM		
SubDirectory	FC112724AL	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	FC067868.D	27 Nov 2024 06:12		YP/AJ	Ok
2	I.BLK	I.BLK	FC067869.D	27 Nov 2024 06:47		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067870.D	27 Nov 2024 07:22		YP/AJ	Ok
4	PB165286BL	PB165286BL	FC067871.D	27 Nov 2024 08:07		YP/AJ	Ok
5	PB165286BS	PB165286BS	FC067872.D	27 Nov 2024 08:42		YP/AJ	Ok
6	PB165286BSD	PB165286BSD	FC067873.D	27 Nov 2024 09:18		YP/AJ	Ok,M
7	P5002-01	EX-7-TPH-1	FC067874.D	27 Nov 2024 10:02	Need 5X,50X	YP/AJ	Dilution
8	P5002-01D	P5002-01D	FC067875.D	27 Nov 2024 10:37		YP/AJ	Ok,M
9	P5002-01MS	EX-7-TPH-1MS	FC067876.D	27 Nov 2024 11:12	FC067874.D	YP/AJ	Ok,M
10	P5002-01MSD	EX-7-TPH-1MSD	FC067877.D	27 Nov 2024 11:51	FC067874.D!FC067876.D	YP/AJ	Ok,M
11	P5002-01DL	EX-7-TPH-1DL	FC067878.D	27 Nov 2024 12:27	need further dilution	YP/AJ	Dilution
12	P5002-01DL2	EX-7-TPH-1DL2	FC067879.D	27 Nov 2024 13:02		YP/AJ	Ok,M
13	I.BLK	I.BLK	FC067880.D	27 Nov 2024 13:38		YP/AJ	Ok
14	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067881.D	27 Nov 2024 14:14		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 # 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 # FD112724AR

Review By	yogesh	Review On	11/27/2024 9:52:33 AM		
Supervise By	Ankita	Supervise On	12/2/2024 9:12:47 AM		
SubDirectory	FD112724AR	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	FD048819.D	27 Nov 2024 06:12		YP/AJ	Ok
2	I.BLK	I.BLK	FD048820.D	27 Nov 2024 06:47		YP/AJ	Ok
3	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048821.D	27 Nov 2024 07:22		YP/AJ	Ok,M
4	PB165286BL	PB165286BL	FD048822.D	27 Nov 2024 08:07		YP/AJ	Ok
5	PB165286BS	PB165286BS	FD048823.D	27 Nov 2024 08:42		YP/AJ	Ok,M
6	PB165286BSD	PB165286BSD	FD048824.D	27 Nov 2024 09:18		YP/AJ	Ok,M
7	P5002-01	EX-7-TPH-1	FD048825.D	27 Nov 2024 10:02	Need 10X,20X	YP/AJ	Dilution
8	P5002-01D	P5002-01D	FD048826.D	27 Nov 2024 10:37		YP/AJ	Ok,M
9	P5002-01MS	EX-7-TPH-1MS	FD048827.D	27 Nov 2024 11:12	FD048825.D	YP/AJ	Ok,M
10	P5002-01MSD	EX-7-TPH-1MSD	FD048828.D	27 Nov 2024 11:51	FD048825.D!FD048827.D	YP/AJ	Ok,M
11	P5002-01DL	EX-7-TPH-1DL	FD048829.D	27 Nov 2024 12:27	need further dilution	YP/AJ	Dilution
12	P5002-01DL2	EX-7-TPH-1DL2	FD048830.D	27 Nov 2024 13:02		YP/AJ	Ok,M
13	I.BLK	I.BLK	FD048831.D	27 Nov 2024 13:38		YP/AJ	Ok
14	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048832.D	27 Nov 2024 14:14		YP/AJ	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 11/26/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 16:45
In Date: 11/25/2024
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: 11/26/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133600

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
P4985-01	MH-756-WC	1	1.16	8.80	9.96	8.91	88.1	
P4985-02	MH-756-EPH	2	1.18	8.50	9.68	8.66	88.0	
P4985-03	MH-756-VOC	3	1.15	8.82	9.97	9.15	90.7	
P4985-05	MH-740-WC	4	1.12	8.74	9.86	8.93	89.4	
P4985-06	MH-740-EPH	5	1.16	8.74	9.9	8.99	89.6	
P4985-07	MH-740-VOC	6	1.15	8.84	9.99	9.02	89.0	
P4986-01	TAPIAL1-SB04D-9-112224-00-T1	7	1.19	8.62	9.81	9.28	93.9	
P4986-02	TAPIAL1-SB04D-4-112224-00-T1	8	1.17	8.70	9.87	9.24	92.8	
P4994-01	33218	9	1.00	1.00	2.00	2.00	100.0	debris
P4998-01	FCA546C-1-1	10	1.00	1.00	2.00	2.00	100.0	oilc
P4998-02	FCA546C-1-2	11	1.00	1.00	2.00	2.00	100.0	oilc
P4998-03	CABLE-1-1	12	1.00	1.00	2.00	2.00	100.0	oilc
P4998-04	CABLE-1-2	13	1.00	1.00	2.00	2.00	100.0	oilc
P4999-01	Y2309-0009-1-1	14	1.00	1.00	2.00	2.00	100.0	oilc
P4999-02	Y2309-0009-1-2	15	1.00	1.00	2.00	2.00	100.0	oilc
P4999-03	Y2308-0012-1-1	16	1.00	1.00	2.00	2.00	100.0	oilc
P4999-04	Y2308-0012-1-2	17	1.00	1.00	2.00	2.00	100.0	oilc
P4999-05	HIH407T-1-1	18	1.00	1.00	2.00	2.00	100.0	oilc
P4999-06	HIH407T-1-2	19	1.00	1.00	2.00	2.00	100.0	oilc
P4999-07	EDA834Y-1-1	20	1.00	1.00	2.00	2.00	100.0	oilc
P4999-08	EDA834Y-1-2	21	1.00	1.00	2.00	2.00	100.0	oilc
P4999-09	HEC991Z-1-1	22	1.00	1.00	2.00	2.00	100.0	oilc
P4999-10	HEC991Z-1-1	23	1.00	1.00	2.00	2.00	100.0	oilc
P5000-01	MH-745	24	1.15	8.63	9.78	8.29	82.7	
P5000-02	MH-745-EPH	25	1.11	8.68	9.79	8.43	84.3	
P5000-03	MH-745-VOC	26	1.16	8.48	9.64	8.15	82.4	
P5000-05	MH-733	27	1.18	8.58	9.76	8.68	87.4	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 11/26/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 16:45
In Date: 11/25/2024
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: 11/26/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133600

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
P5000-06	MH-733-EPH	28	1.18	8.52	9.7	8.54	86.4	
P5000-07	MH-733-VOC	29	1.15	8.84	9.99	9.1	89.9	
P5002-01	EX-7-TPH-1	30	1.18	8.81	9.99	8.63	84.6	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

WB 133600

WorkList Name : %1-112524 **WorkList ID :** 185724 **Department :** Wet-Chemistry **Date :** 11-25-2024 08:13:31

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4985-01	MH-756-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/23/2024	Chemtech -SO
P4985-02	MH-756-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/23/2024	Chemtech -SO
P4985-03	MH-756-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/23/2024	Chemtech -SO
P4985-05	MH-740-WC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/23/2024	Chemtech -SO
P4985-06	MH-740-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/23/2024	Chemtech -SO
P4985-07	MH-740-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/23/2024	Chemtech -SO
P4986-01	TAPIAL1-SB04D-9-112224-00-T	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/23/2024	Chemtech -SO
P4986-02	TAPIAL1-SB04D-4-112224-00-T	Solid	Percent Solids	Cool 4 deg C	WEST04	L51	11/22/2024	Chemtech -SO
P4994-01	33218	Solid	Percent Solids	Cool 4 deg C	WEST04	L51	11/22/2024	Chemtech -SO
P4998-01	FCA546C-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L51	11/25/2024	Chemtech -SO
P4998-02	FCA546C-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	11/25/2024	Chemtech -SO
P4998-03	CABLE-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	11/25/2024	Chemtech -SO
P4998-04	CABLE-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	11/25/2024	Chemtech -SO
P4999-01	Y2309-0009-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L41	11/25/2024	Chemtech -SO
P4999-02	Y2309-0009-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L11	11/25/2024	Chemtech -SO
P4999-03	Y2308-0012-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L11	11/25/2024	Chemtech -SO
P4999-04	Y2308-0012-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L11	11/25/2024	Chemtech -SO
P4999-05	HIH407T-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L11	11/25/2024	Chemtech -SO
P4999-06	HIH407T-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L11	11/25/2024	Chemtech -SO
P4999-07	EDA834Y-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L11	11/25/2024	Chemtech -SO
P4999-08	EDA834Y-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L11	11/25/2024	Chemtech -SO

Date/Time 11-25-24 15:30

Raw Sample Received by: JP WC

Raw Sample Relinquished by: CBS

Date/Time 11-25-24 17:00

Raw Sample Received by: CBS

Raw Sample Relinquished by: JP WC

WORKLIST(Hardcopy Internal Chain)

133600

WorkList Name : %1-112524 **WorkList ID :** 185724 **Department :** Wet-Chemistry **Date :** 11-25-2024 08:13:31

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4999-09	HEC991Z-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L11	11/25/2024	Chemtech -SO
P4999-10	HEC991Z-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L11	11/25/2024	Chemtech -SO
P5000-01	MH-745	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/25/2024	Chemtech -SO
P5000-02	MH-745-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/25/2024	Chemtech -SO
P5000-03	MH-745-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/25/2024	Chemtech -SO
P5000-05	MH-733	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/25/2024	Chemtech -SO
P5000-06	MH-733-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/25/2024	Chemtech -SO
P5000-07	MH-733-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L61	11/25/2024	Chemtech -SO
P5002-01	EX-7-TPH-1	Solid	Percent Solids	Cool 4 deg C	ENTA05	L61	11/25/2024	Chemtech -SO

Date/Time 11.25.24 1531.30

Raw Sample Received by: JR WC

Raw Sample Relinquished by: CB Son

Date/Time 11.25.24 1730

Raw Sample Received by: CB Son

Raw Sample Relinquished by: JR WC

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB165286

SOP ID: MNJDEP-EPH-7

Clean Up SOP #: N/A

Matrix : Solid

Weigh By: RJ

Balance check: RJ

Balance ID: EX-SC-2

pH Strip Lot#: N/A

Extraction By: RJ

Filter By: RJ

pH Meter ID: N/A

Hood ID: 3,7

Extraction Start Date : 11/26/2024

Extraction Start Time : 10:25

Extraction End Date : 11/26/2024

Extraction End Time : 18:25

Concentration By: EH

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	EP2566
Sand	N/A	E2865
Hexane	N/A	E3826
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210673.

KD Bath ID: N/A

KD Bath Temperature: N/A

Envap ID: NEVAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/26/24	RP (Ext. Lab)	AJ TEST PCB Lab
18:30	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB165286

Analytical Method: MNJDEP-EPH-7

Concentration Date: 11/26/2024

Sample ID	Client Sample ID	Test	g/mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB165286BL	PB165286BL	EPH	30.01	N/A	ritesh	Evelyn	2			U6-1
PB165286BS	PB165286BS	EPH	30.03	N/A	ritesh	Evelyn	2			2
PB165286BSD	PB165286BSD	EPH	30.01	N/A	ritesh	Evelyn	2			3
P5002-01	EX-7-TPH-1	EPH	30.04	N/A	ritesh	Evelyn	2	E	Strong Gasoline Smell	4
P5002-01DUP	EX-7-TPH-1DUP	EPH	30.02	N/A	ritesh	Evelyn	2	E	Strong Gasoline Smell	5
P5002-01MS	EX-7-TPH-1MS	EPH	30.08	N/A	ritesh	Evelyn	2	E	Strong Gasoline Smell	6
P5002-01MSD	EX-7-TPH-1MSD	EPH	30.06	N/A	ritesh	Evelyn	2	E	Strong Gasoline Smell	U7-1

* **Extracts relinquished on the same date as received.**

11/26/24

10:25
EPH
167286

WORKLIST(Hardcopy Internal Chain)

WorkList Name : p5002 **WorkList ID :** 185817 **Department :** Extraction **Date :** 11-26-2024 10:18:52

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5002-01	EX-7-TPH-1	Solid	Diesel Range Organics	Cool 4 deg C	ENTA05	L61	11/25/2024	8015D
P5002-01	EX-7-TPH-1	Solid	EPH	Cool 4 deg C	ENTA05	L61	11/25/2024	NJEPH

Date/Time 11/26/24 10:20
Raw Sample Received by: RJ (Ext Lab)
Raw Sample Relinquished by: [signature]

Date/Time 11/26/24 10:35
Raw Sample Received by: [signature]
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 : P5002

Test : EPH

Prepbatch ID : PB165286,

Sequence ID/Qc Batch ID: FC112724AL,FD112724AR,

Standard ID :

EP2560,EP2566,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,

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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	EP2566	11/22/2024	01/03/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	Evelyn Huang 11/22/2024

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

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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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	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)

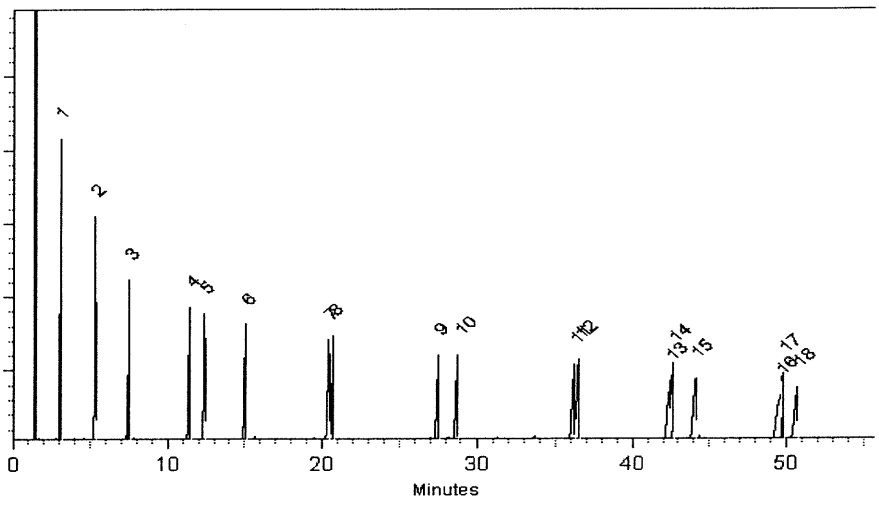
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

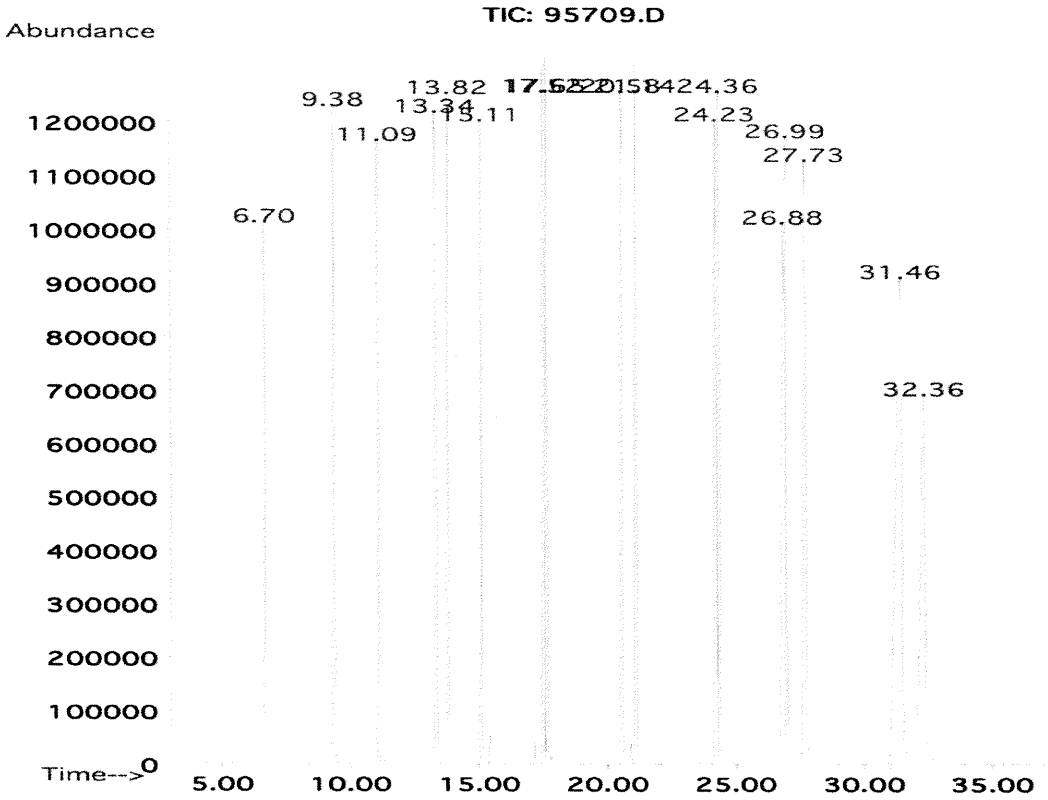
	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Acenaphthene	1	MKBJ4871V	2000	99	0.2	1.01003	1.01010	2000.1	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
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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)

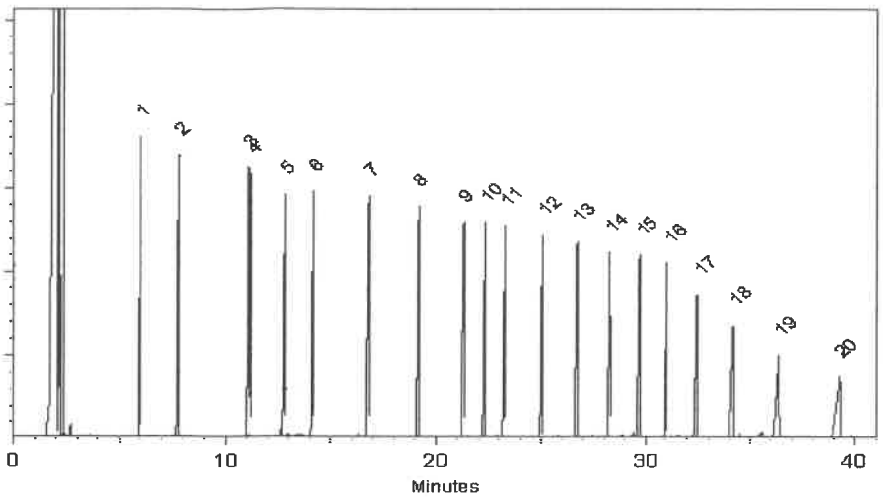
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.

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chromatographic plus

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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.)

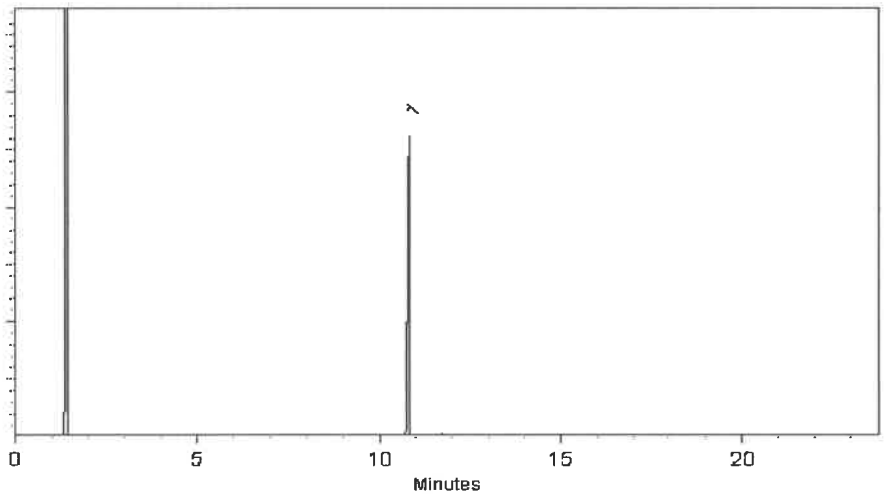
Inj. Temp:
250°C

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.

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chromatographic plus

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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.)

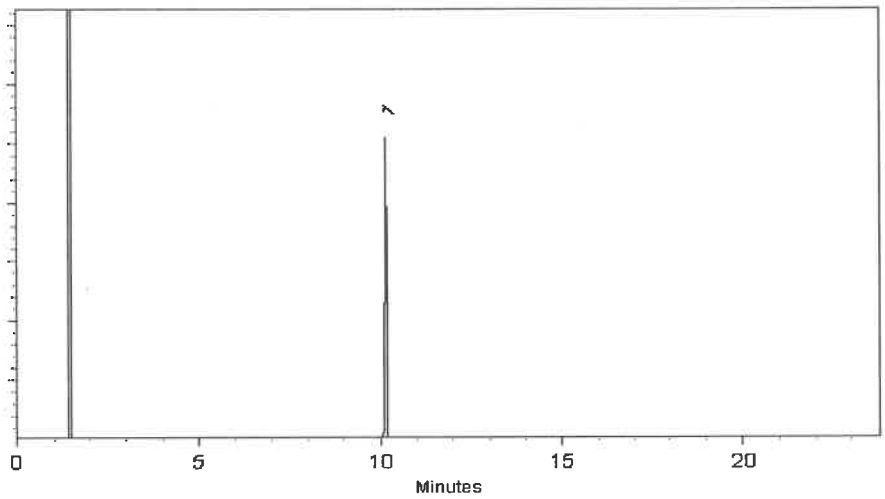
Inj. Temp:
250°C

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
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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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Catalog No. : 31480 **Lot No.:** A0210831

Description : MA Fractionation Surrogate Spike Mix

MA Fractionation Surrogate Spike Mix 4000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

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.)

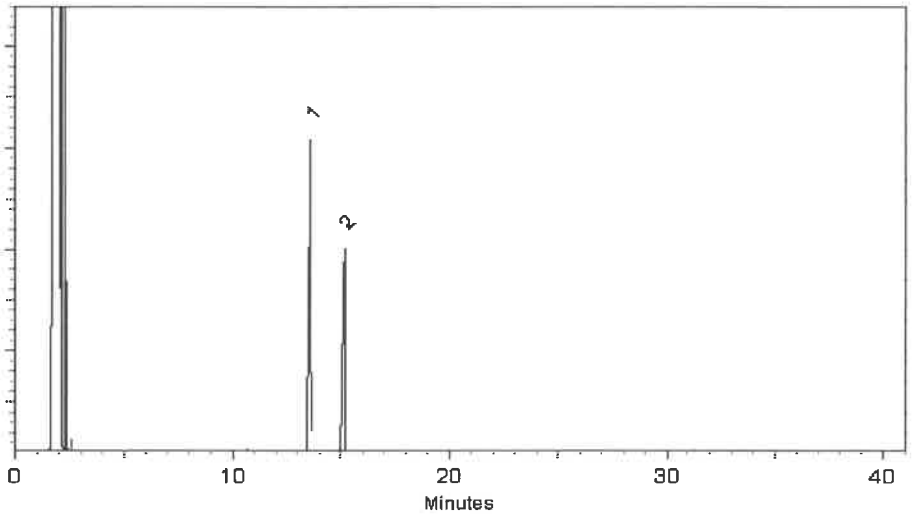
Inj. Temp:
250°C

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.
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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.)

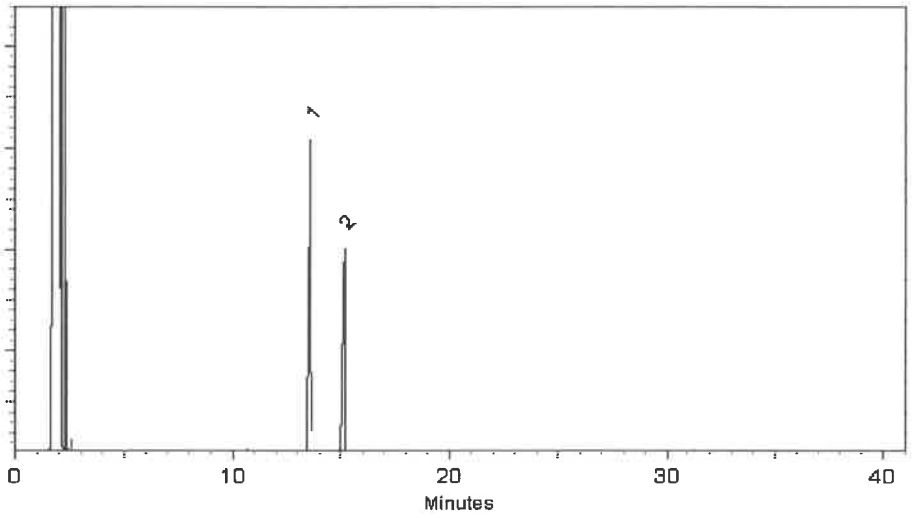
Inj. Temp:
250°C

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.
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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.)

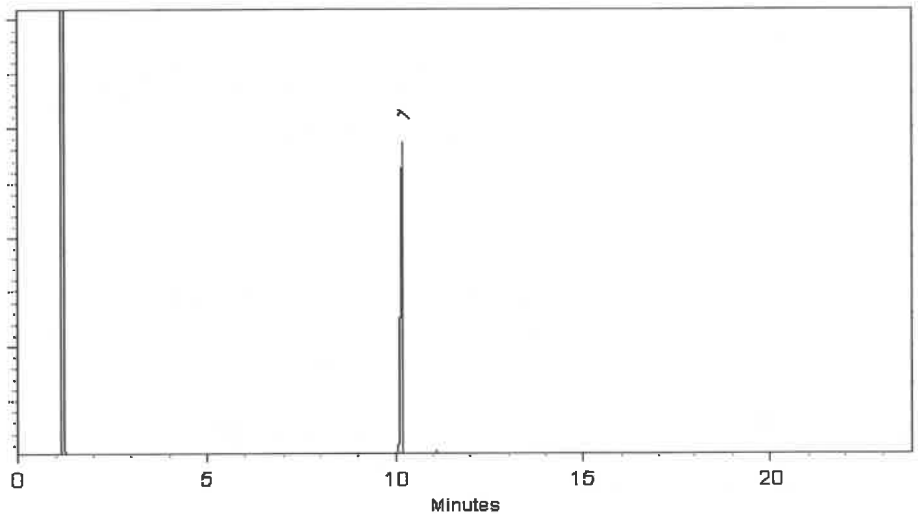
Inj. Temp:
250°C

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.
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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.)

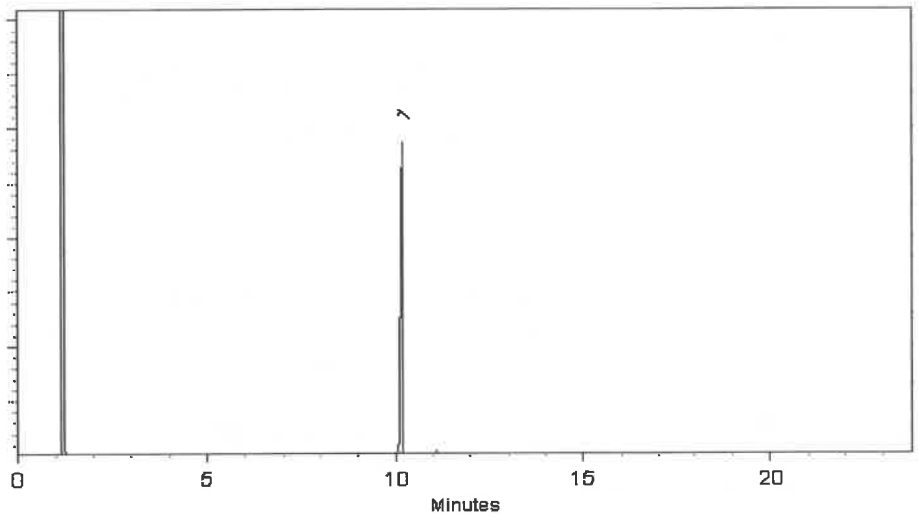
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Stacey Wanner - Operations Technician I

Date Mixed: 28-Jun-2024 **Balance Serial #** B345965662

Dillan Murphy - Operations Technician I

Date Passed: 01-Jul-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31098 **Lot No.:** A0213283

Description : 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2031 **Storage:** 10°C or colder

Ship: Ambient

P13595
↓
P13624
Y.P.
10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	15018900	99%	10,058.0 µg/mL	+/- 565.0578

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

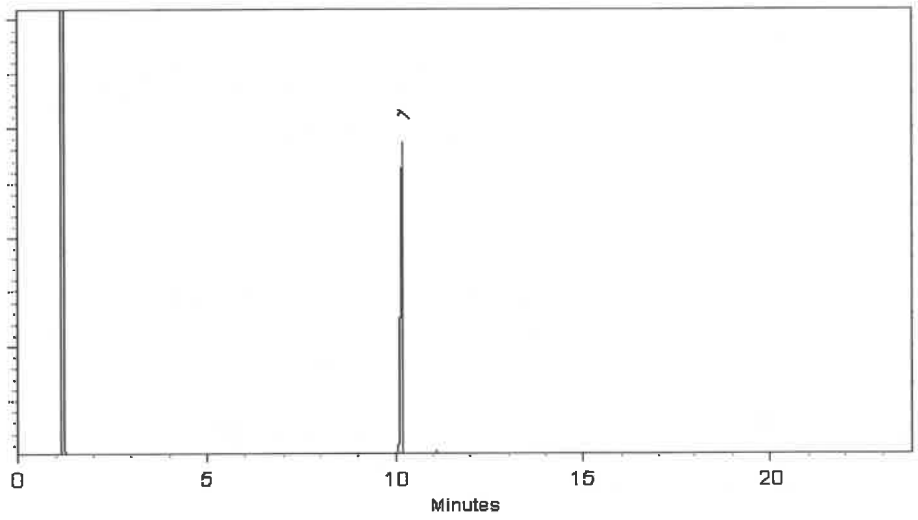
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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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:

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Purity Notes:

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Certified Uncertainty Value Notes:

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Catalog No. : 31098 **Lot No.:** A0213283

Description : 1-Chlorooctadecane Standard

1-Chlorooctadecane Standard 10,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2031 **Storage:** 10°C or colder

Ship: Ambient

P13595
↓
P13624
Y.P.
10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	15018900	99%	10,058.0 µg/mL	+/- 565.0578

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

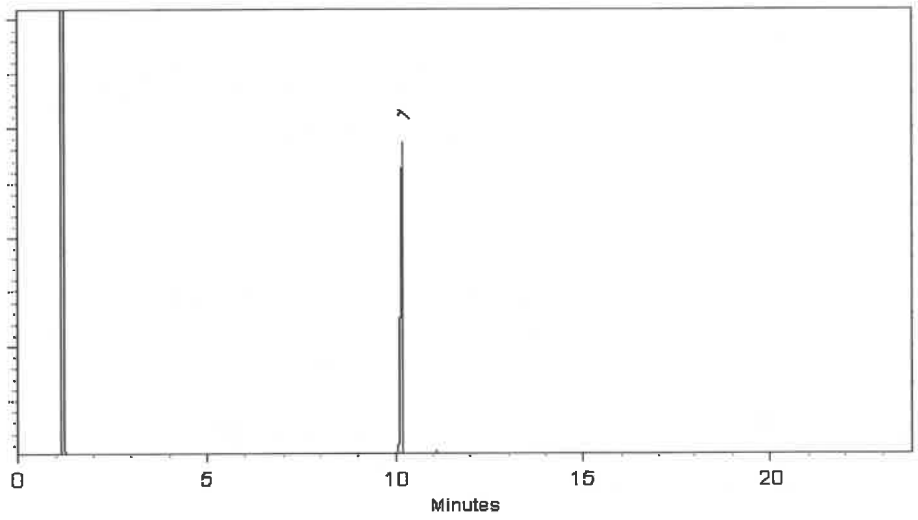
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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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

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- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

  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.

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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
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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.)

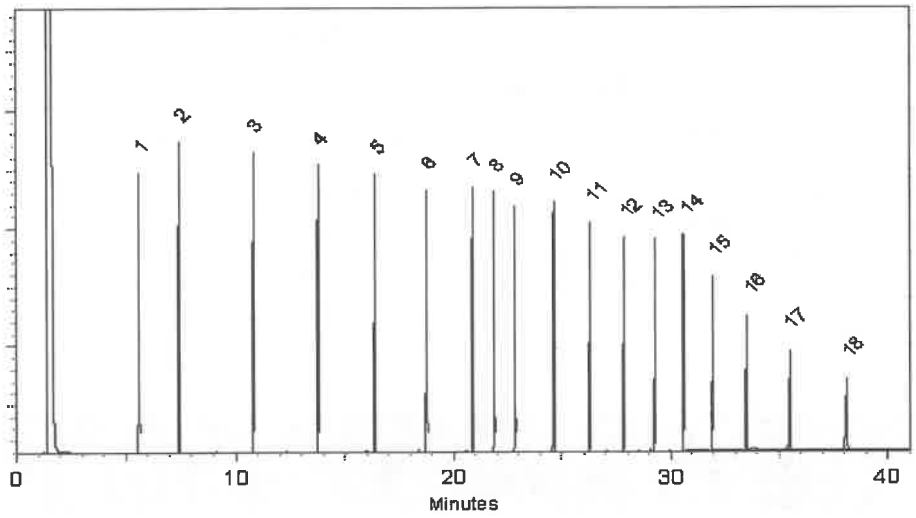
Inj. Temp:
250°C

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.

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Certificate of Analysis

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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
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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.)

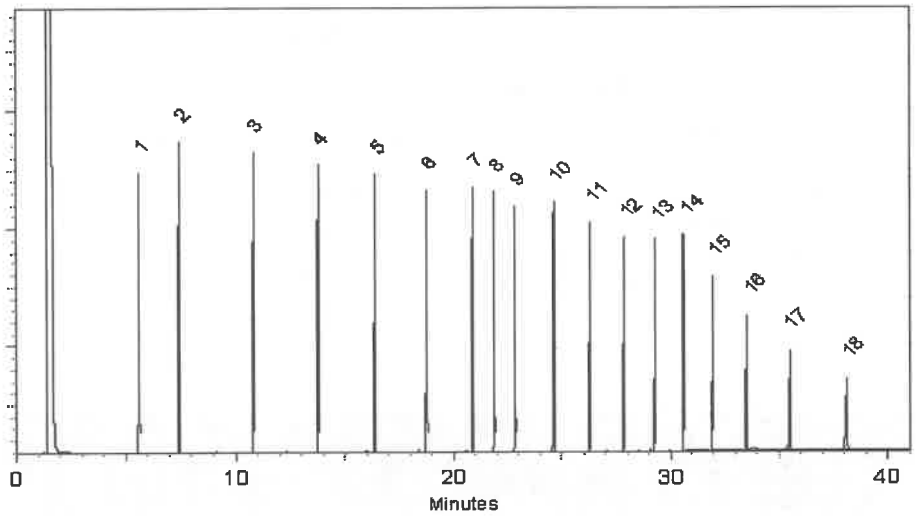
Inj. Temp:
250°C

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.

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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
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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.)

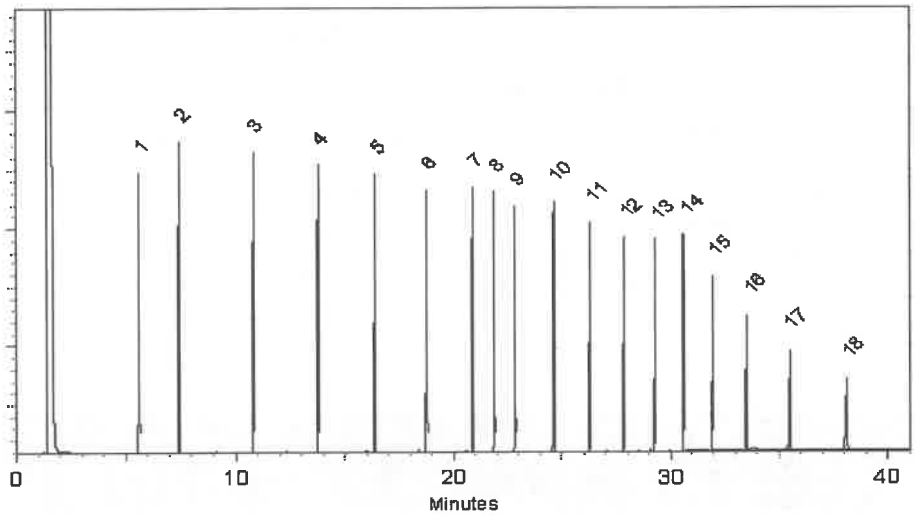
Inj. Temp:
250°C

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.

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Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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
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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.)

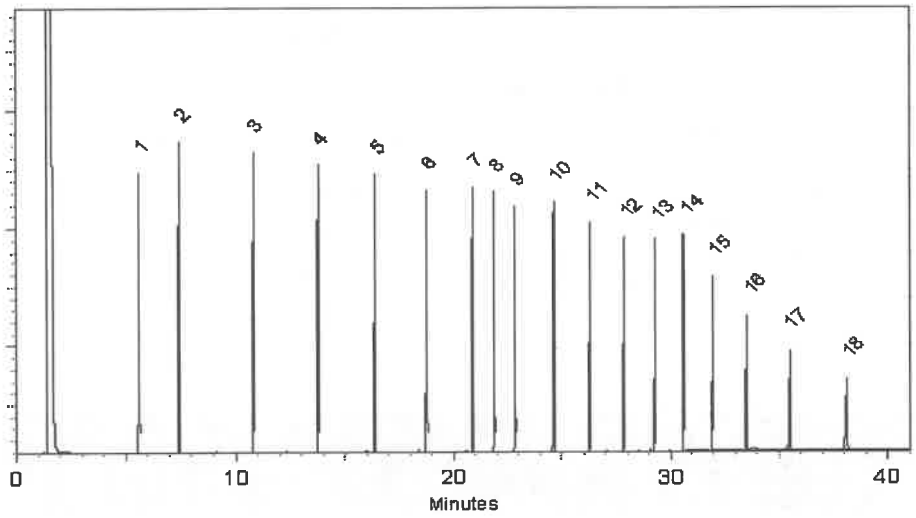
Inj. Temp:
250°C

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.

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Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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
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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.)

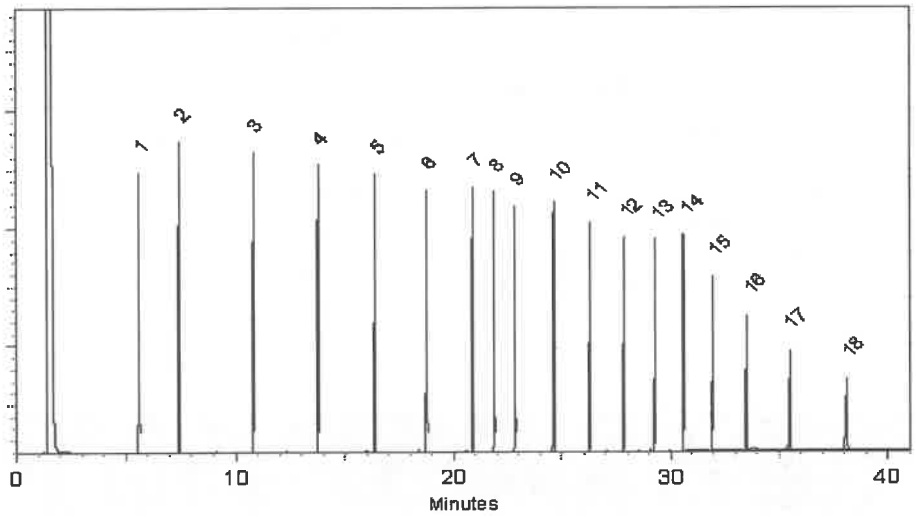
Inj. Temp:
250°C

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.

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Certificate of Analysis

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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
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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.)

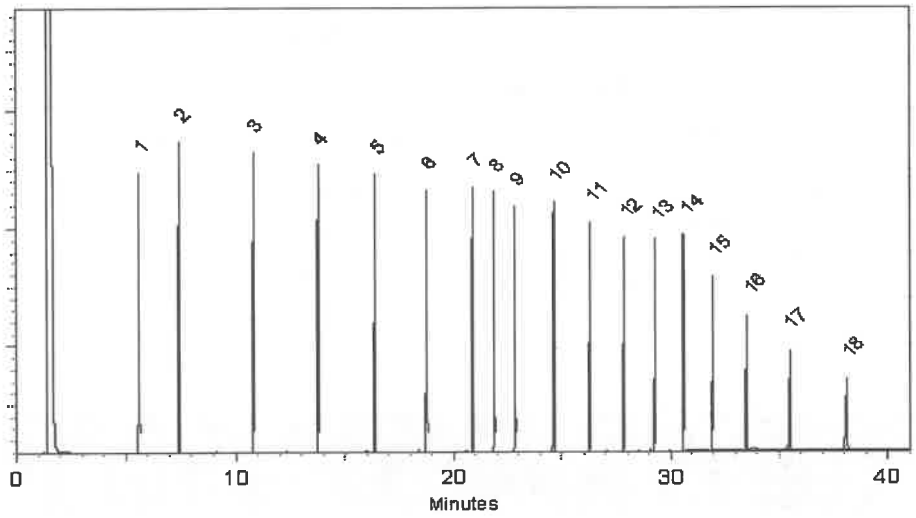
Inj. Temp:
250°C

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.
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Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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
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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.)

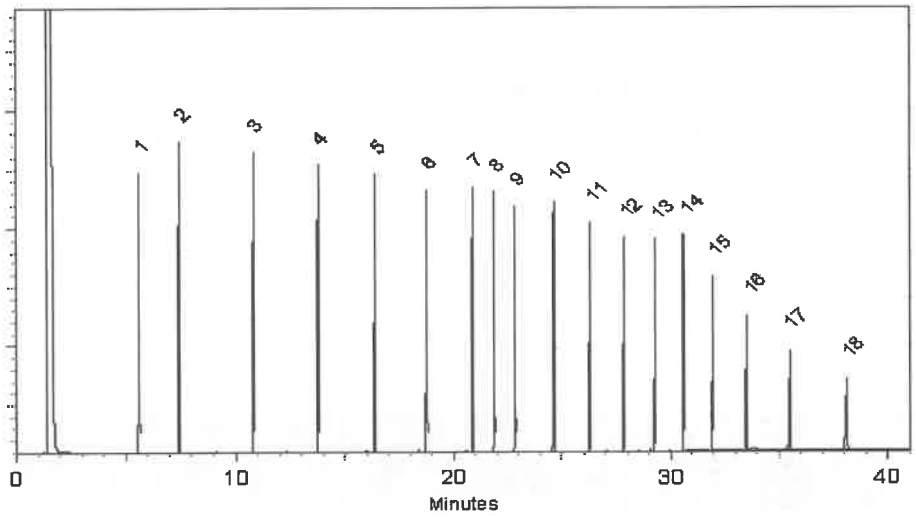
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate of Analysis

chromatographic plus

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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
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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)
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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.)

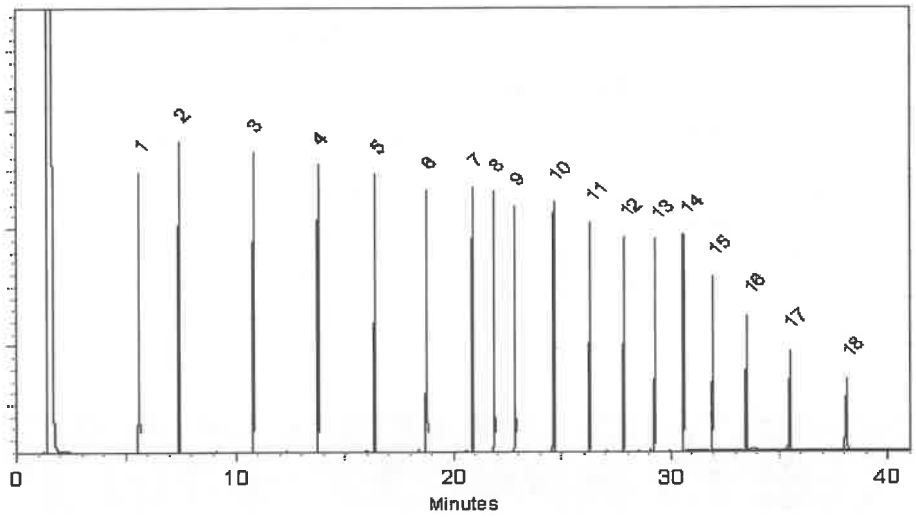
Inj. Temp:
250°C

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.

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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.)

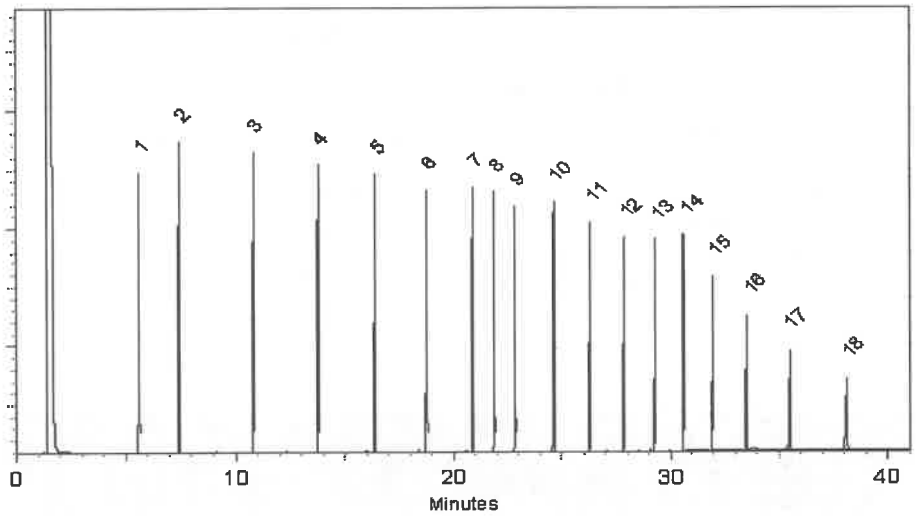
Inj. Temp:
250°C

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.

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Certificate #3222.02

Certificate of Analysis

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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.)

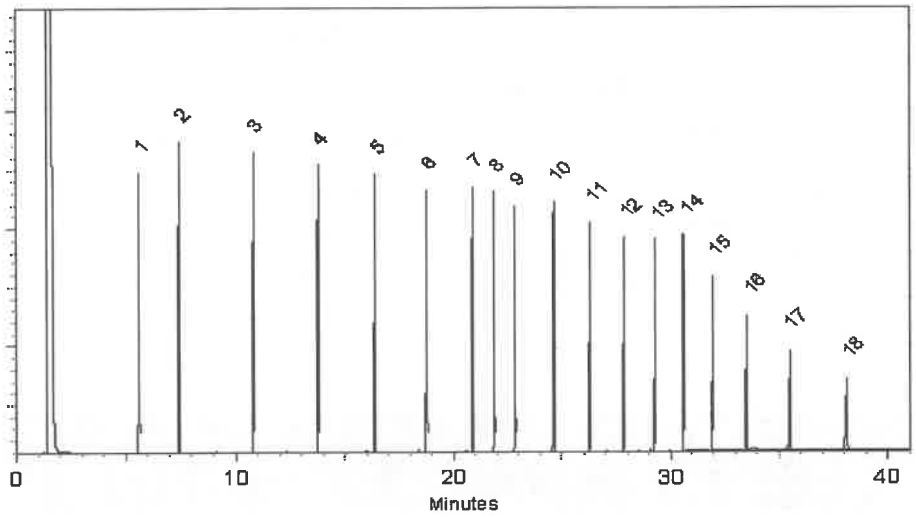
Inj. Temp:
250°C

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.

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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.)

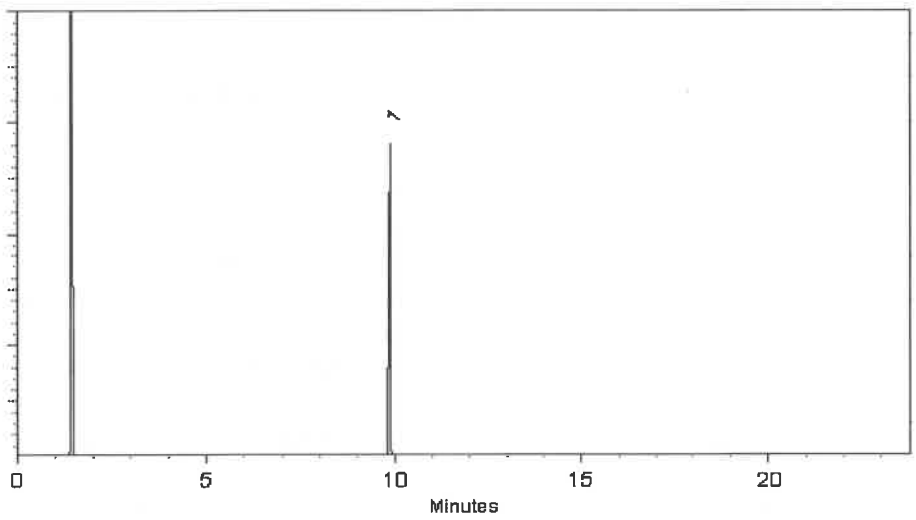
Inj. Temp:
250°C

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.
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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.)

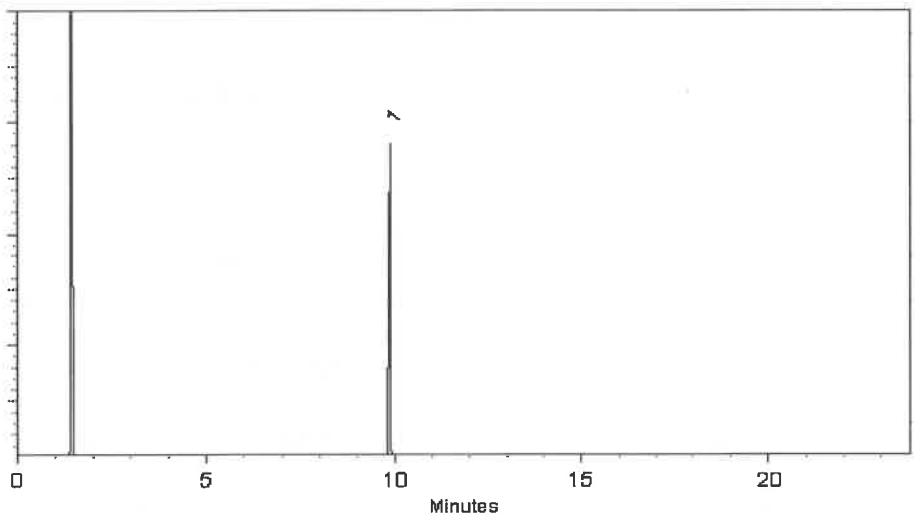
Inj. Temp:
250°C

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.
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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.)

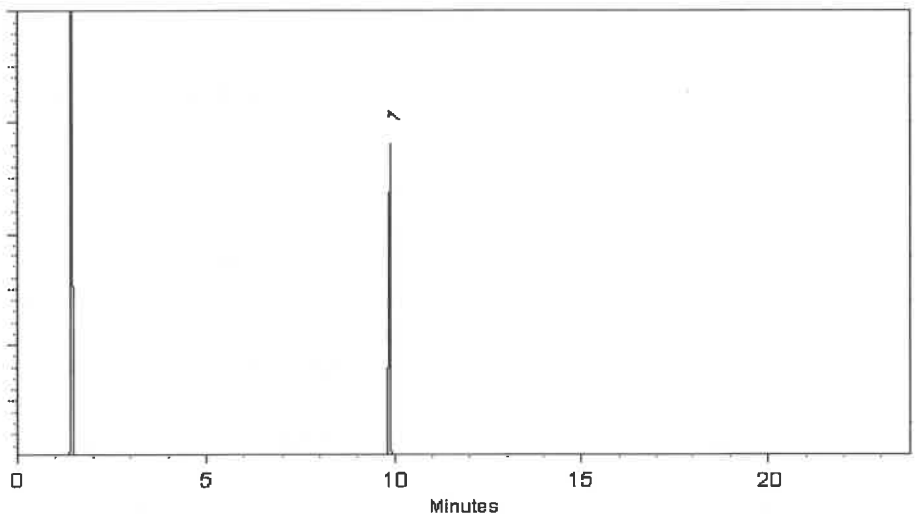
Inj. Temp:
250°C

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:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

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.)

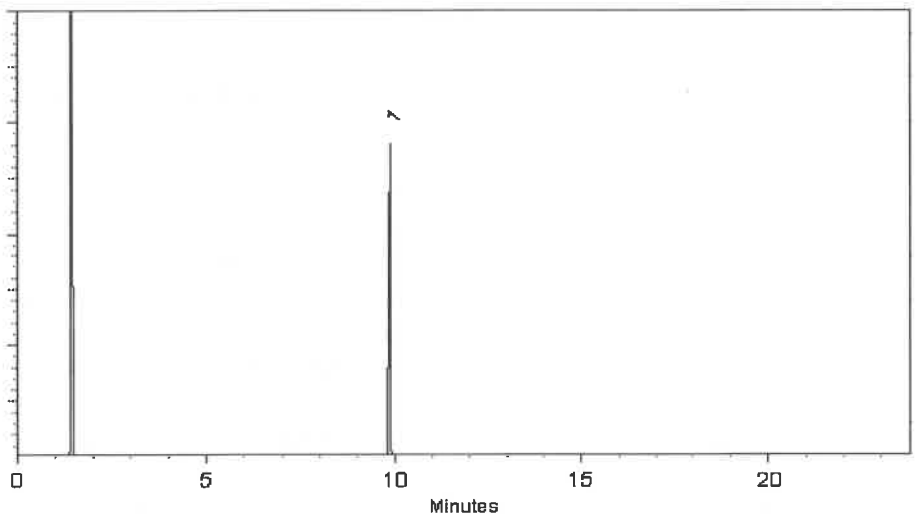
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Manufacturing Notes:

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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:
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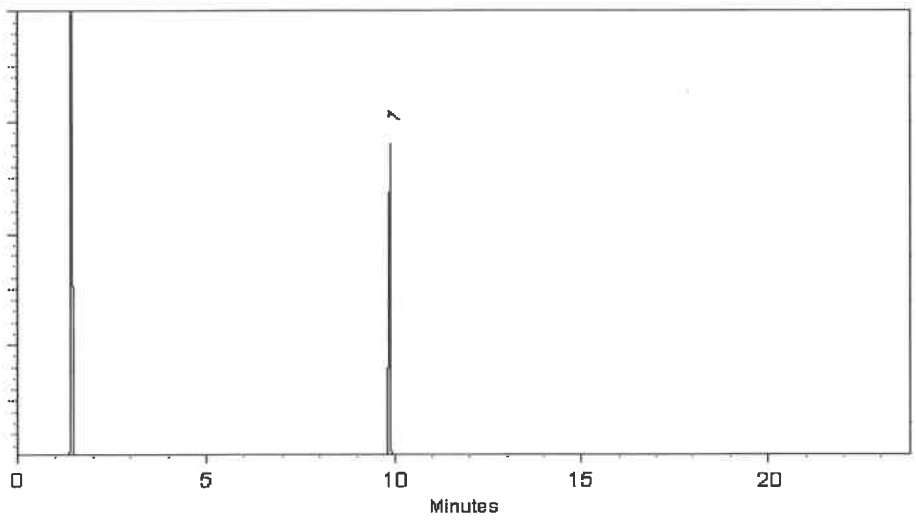
Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Catalog No. : 31097 **Lot No.:** A0216631

Description : o-Terphenyl Standard

o-Terphenyl Standard 10,000 µg/mL, Methylene Chloride, 1mL/ampul

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.)

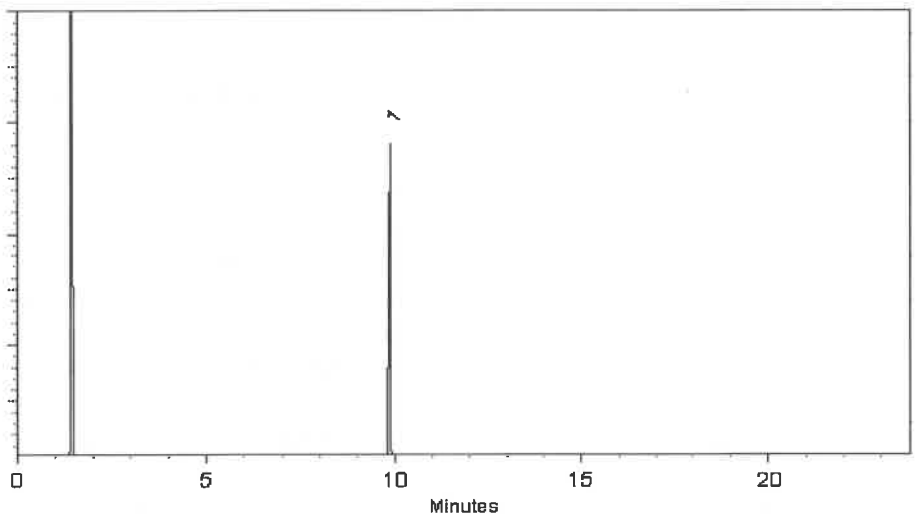
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Ven Kelley - Operations Tech I

Date Mixed: 17-Sep-2024 **Balance Serial #** 1128353505

Dillan Murphy - Operations Technician I

Date Passed: 23-Sep-2024

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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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.)

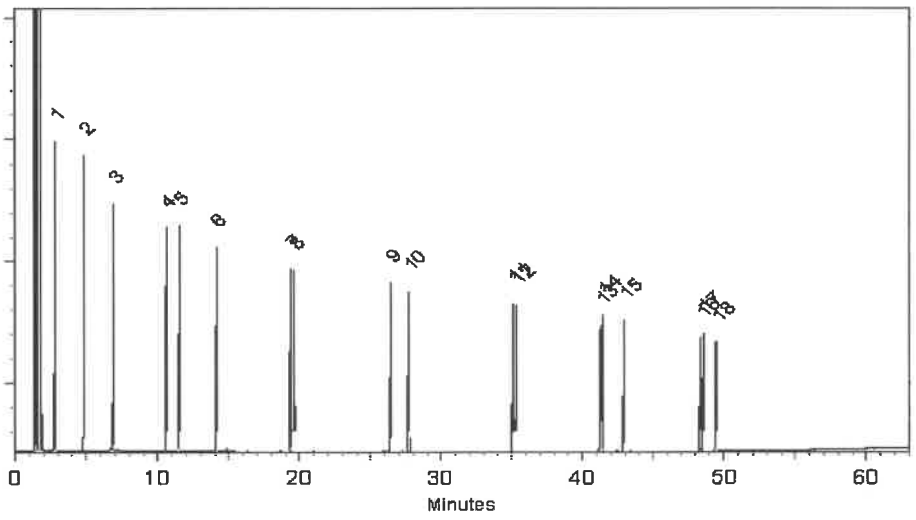
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

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.)

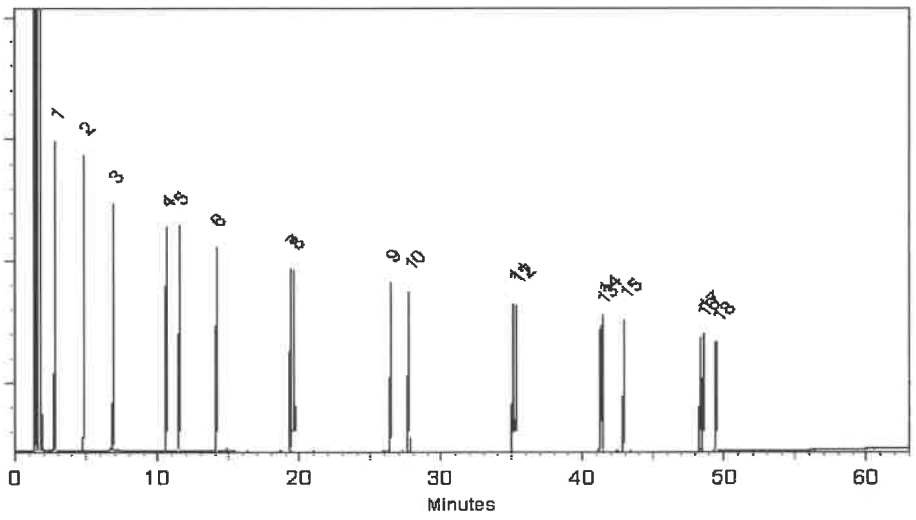
Inj. Temp:
250°C

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.
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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.)

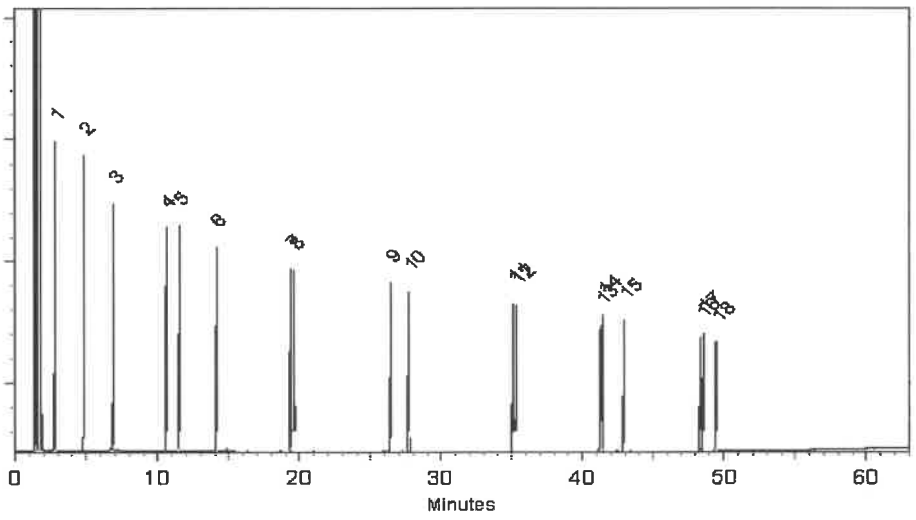
Inj. Temp:
250°C

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:

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Certificate of Analysis

chromatographic plus

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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.)

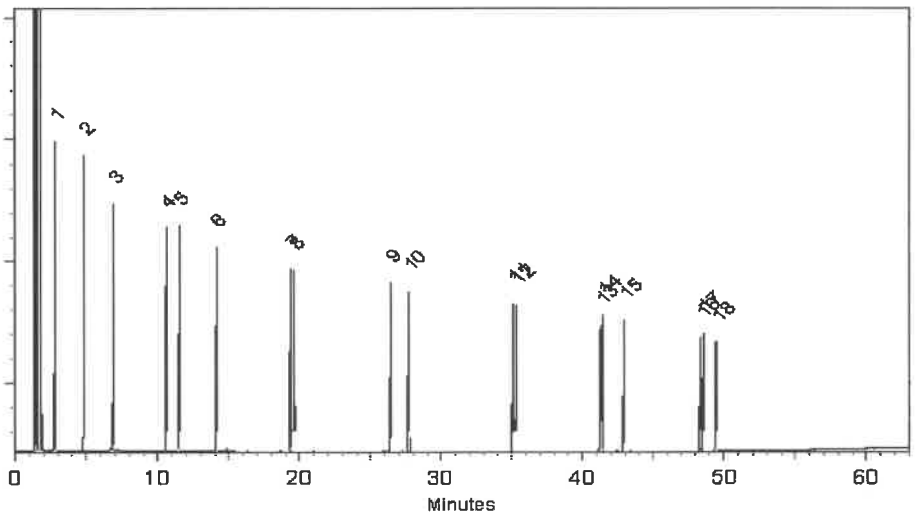
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- 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.
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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

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
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9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
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
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18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

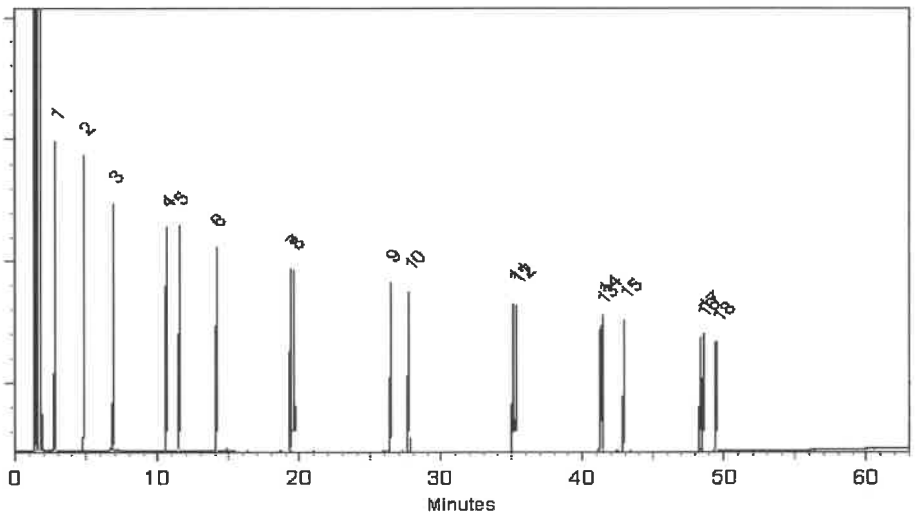
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- 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.

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Certificate of Analysis

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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.)

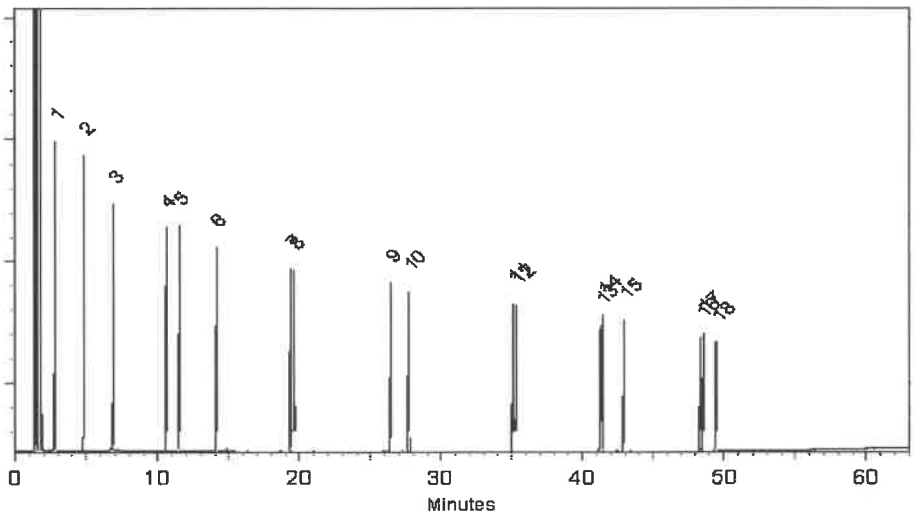
Inj. Temp:
250°C

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:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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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.)

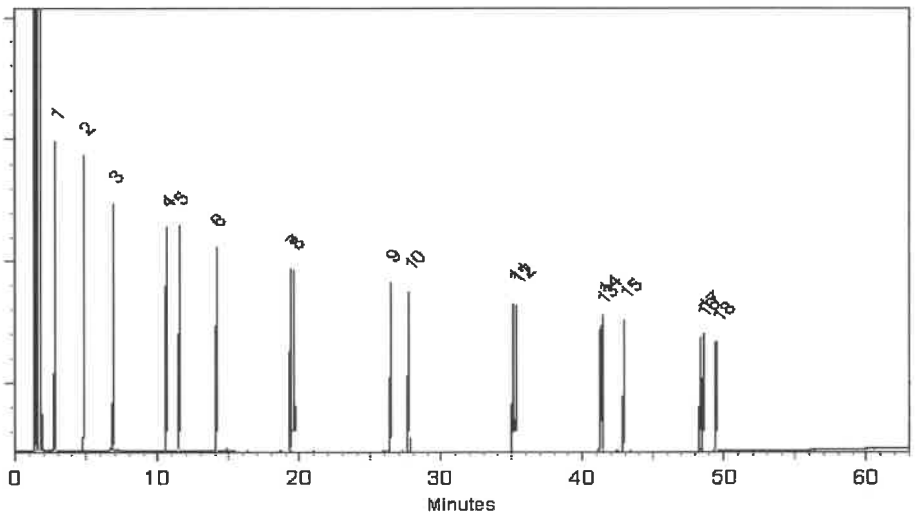
Inj. Temp:
250°C

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.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

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
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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
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18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

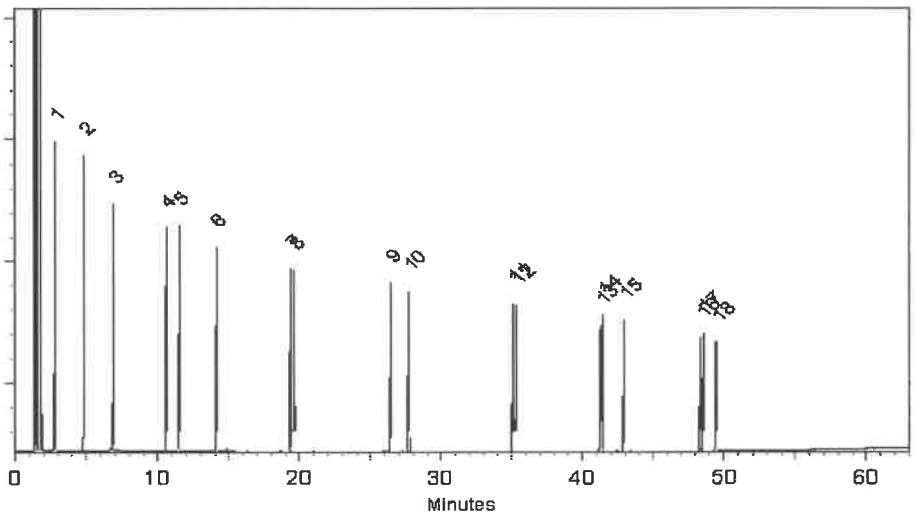
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

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)
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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
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9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

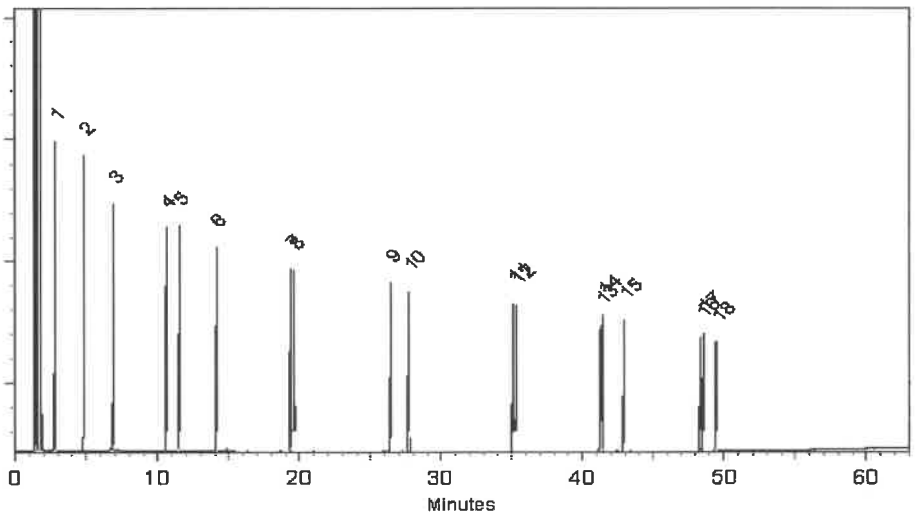
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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.

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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.)

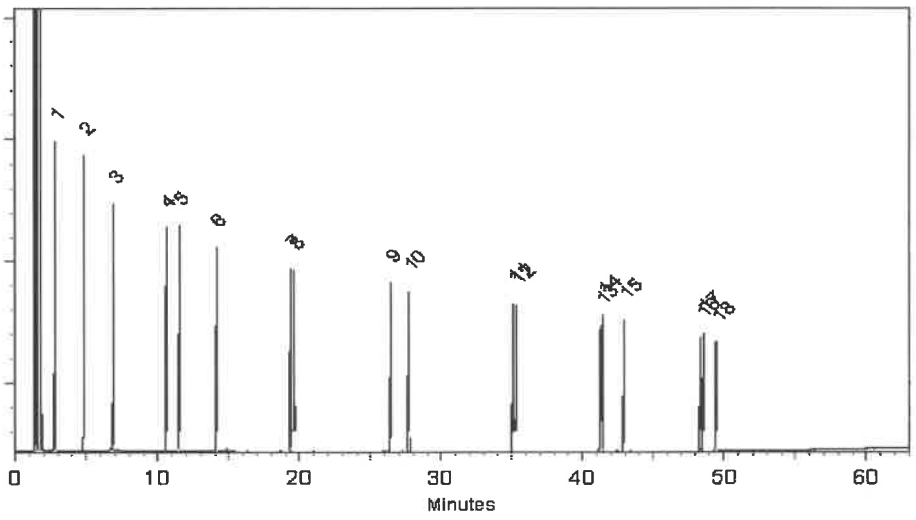
Inj. Temp:
250°C

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.
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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.)

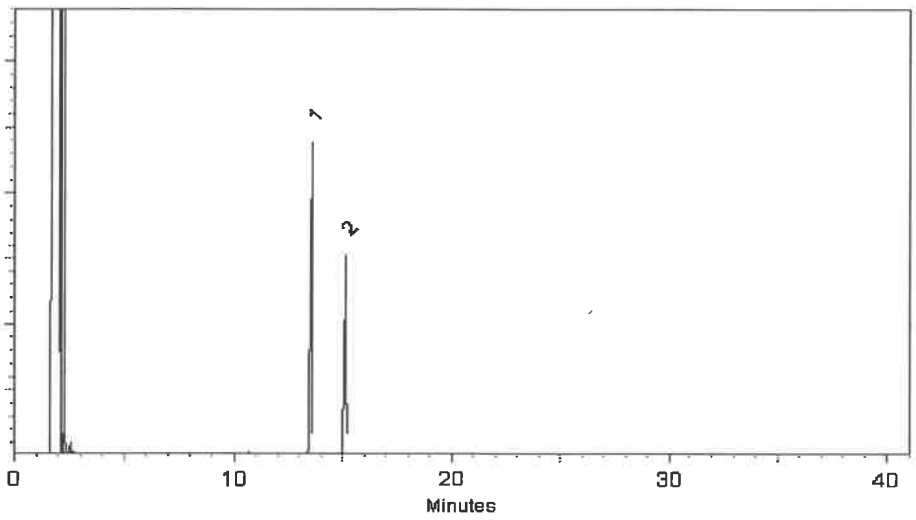
Inj. Temp:
250°C

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.

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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.)

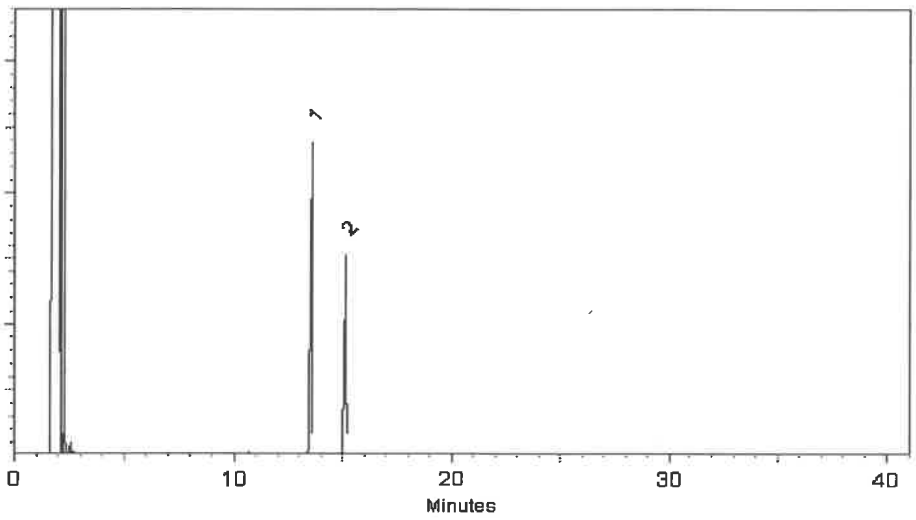
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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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:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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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.)

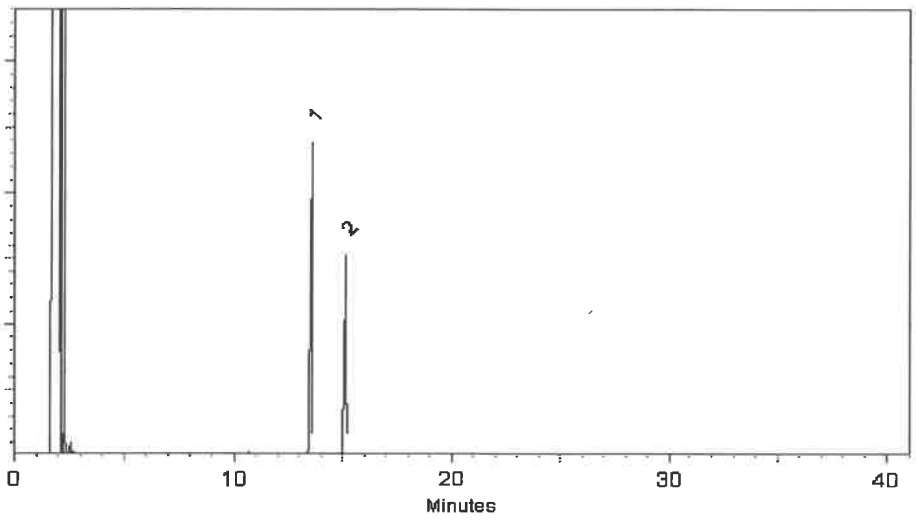
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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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:

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- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

  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.
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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.)

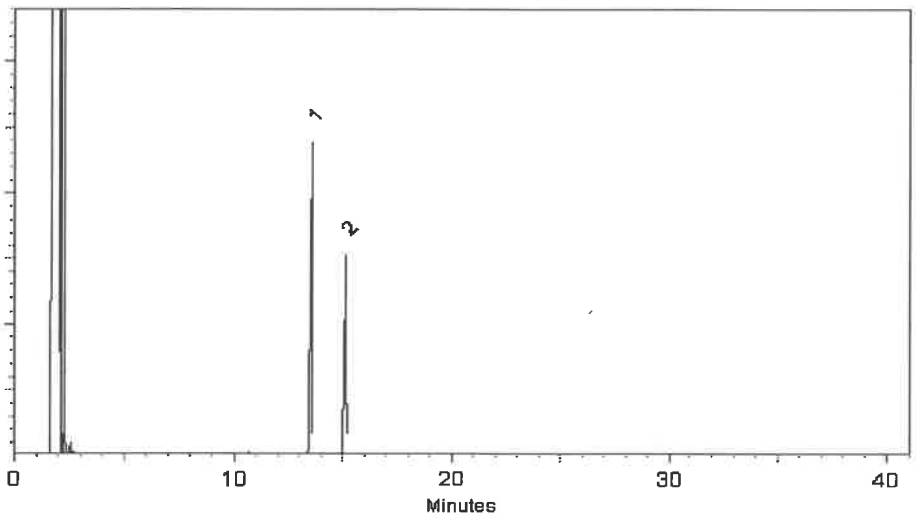
Inj. Temp:
250°C

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

P5002

ENTACT

CHAIN OF CUSTODY RECORD

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-7-TPH-1	TPH	11/25	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:	11-25-24	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: Austin Farmerie ENTACT	4:00	PRINTED NAME/COMPANY:		PRINTED NAME/COMPANY:	
1. RECEIVED BY	DATE	2. RECEIVED BY	DATE	3. RECEIVED BY	DATE
SIGNATURE:	11-25-24	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY:	16:00	PRINTED NAME/COMPANY:		PRINTED NAME/COMPANY:	

14.2 °C

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