

Cover Page

Order ID : P4471

Project ID : Amtrak Sawtooth Bridges 2024

Client : Portal Partners Tri-Venture

Lab Sample Number

P4471-01
P4471-02
P4471-03

Client Sample Number

B-180-SB01
B-180-SB02
TB100824

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

Signature : _____

Date: 10/25/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “ Results Qualifiers” are used:

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P4471

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 Custody

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SHREENA PATEL

Date: 10/25/2024

LAB CHRONICLE

OrderID:	P4471	OrderDate:	10/21/2024 1:01:00 PM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2024
Contact:	Joseph Krupansky	Location:	J61,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4471-01	B-180-SB01	Solid	EPH	NJEPH	10/19/24	10/22/24	10/23/24	10/21/24
P4471-02	B-180-SB02	Solid	EPH	NJEPH	10/20/24	10/22/24	10/23/24	10/21/24



QC SUMMARY

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM CASE No.: P4471 SAS No.: P4471 SDG No.: P4471
Run Number: FC102224AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)			TOT OUT
WB-303-BOTMS	62			0
WB-303-BOTMSD	63			0
B-180-SB01	77			0
B-180-SB02	46			0
PB164309BL	69			0
PB164309BS	65			0
PB164309BSD	68			0

QC LIMITS

1-chlorooctadecane (SURR)

(40-140)

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

SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: PORT06
Lab Code: CHEM CASE No.: P4471 SAS No.: P4471 SDG No.: P4471
Run Number: FD102224AR

Client SAMPLE NO.	2-Bromonaphthalene (SURR)	2-Flurobiphenyl (SURR)	ortho-Terphenyl (SURR)	TOT OUT
WB-303-BOTMS	96	98	67	0
WB-303-BOTMSD	95	97	66	0
B-180-SB01	91	96	78	0
B-180-SB02	85	90	42	0
PB164309BL	93	83	81	0
PB164309BS	111	118	91	0
PB164309BSD	110	118	91	0

QC LIMITS

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

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

SOIL EPH SURROGATE RECOVERY

QC LIMITS

2-Bromonaphthalene (SURRE)

(40-140)

2-Fluorobiphenyl (SURRE)

(40-140)

ortho-Terphenyl (SURRE)

(40-140)

Column to be used to flag recovery values

* Values outside of contract required QC Limits

D Surrogate diluted out

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P4471 **SAS No :** P4471 **SDG No:** P4471
Sample No : P4460-03MS **Datafile:** FC067492.D
Client ID : WB-303-BOTMS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	12.5	5.73	13.4	62		(40-140)
Aliphatic C12-C16	8.3	43.9	52.6	105		(40-140)
Aliphatic C16-C21	12.5	2.34	20.0	141	*	(40-140)
Aliphatic C21-C28	16.6	7.39	32.0	148	*	(40-140)
Aliphatic C28-C40	24.9	3.01	33.3	121		(40-140)

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P4471 **SAS No :** P4471 **SDG No:** P4471
Sample No : P4460-03MSD **Datafile:** FC067493.D
Client ID : WB-303-BOTMSD

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS QC Limit Of RPD
Aliphatic C9-C12	12.5	5.73	13.4	62		0 (40-140) 25
Aliphatic C12-C16	8.3	43.9	52.0	98		7.2 (40-140) 25
Aliphatic C16-C21	12.5	2.34	19.1	134		5.09 (40-140) 25
Aliphatic C21-C28	16.6	7.39	30.7	140	*	5.56 (40-140) 25
Aliphatic C28-C40	24.9	3.01	30.7	111		8.62 (40-140) 25

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P4471 **SAS No :** P4471 **SDG No:** P4471
Sample No : P4460-03MS **Datafile:** FD048555.D
Client ID : WB-303-BOTMS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	8.3	6.30	12.6	76		(40-140)
Aromatic C12-C16	12.5	6.32	19.1	102		(40-140)
Aromatic C16-C21	20.8	3.86	25.5	104		(40-140)
Aromatic C21-C36	33.2	6.83	42.2	106		(40-140)

SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P4471 **SAS No :** P4471 **SDG No:** P4471
Sample No : P4460-03MSD **Datafile:** FD048556.D
Client ID : WB-303-BOTMSD

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS QC Limit Of RPD
Aromatic C10-C12	8.3	6.30	12.6	76		0 (40-140) 25
Aromatic C12-C16	12.5	6.32	19.2	103		0.98 (40-140) 25
Aromatic C16-C21	20.8	3.86	25.3	103		0.97 (40-140) 25
Aromatic C21-C36	33.2	6.83	41.5	104		1.9 (40-140) 25

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P4471 **SAS No :** P4471 **SDG No:** P4471
Sample No : PB164309BS **Datafile:** FC067486.D
Client ID : PB164309BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	10	5.99	60		(40-140)
Aliphatic C12-C16	6.7	5.14	77		(40-140)
Aliphatic C16-C21	10	8.64	86		(40-140)
Aliphatic C21-C28	13.3	11.7	88		(40-140)
Aliphatic C28-C40	20.0	21.2	106		(40-140)

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P4471 **SAS No :** P4471 **SDG No:** P4471
Sample No : PB164309BSD **Datafile:** FC067487.D
Client ID : PB164309BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS	QC Limit Of RPD
Aliphatic C9-C12	10.0	5.96	60		0.636 (40-140)	50
Aliphatic C12-C16	6.7	5.14	77		0.0962 (40-140)	50
Aliphatic C16-C21	10.0	8.65	86		0.03 (40-140)	50
Aliphatic C21-C28	13.3	11.8	88		0.82 (40-140)	50
Aliphatic C28-C40	20.0	21.4	107		0.97 (40-140)	50

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P4471 **SAS No :** P4471 **SDG No:** P4471
Sample No : PB164309BS **Datafile:** FD048549.D
Client ID : PB164309BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	6.7	5.58	84		(40-140)
Aromatic C12-C16	10	8.88	89		(40-140)
Aromatic C16-C21	16.7	18.1	108		(40-140)
Aromatic C21-C36	26.6	27.4	102		(40-140)

SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture
Lab Code: CHEM **Cas No:** P4471 **SAS No :** P4471 **SDG No:** P4471
Sample No : PB164309BSD **Datafile:** FD048550.D
Client ID : PB164309BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD QC LIMITS	QC Limit Of RPD
Aromatic C10-C12	6.7	5.56	83		0.445 (40-140)	50
Aromatic C12-C16	10.0	8.89	89		0.03 (40-140)	50
Aromatic C16-C21	16.7	18.1	108		0.58 (40-140)	50
Aromatic C21-C36	26.7	27.4	102		0.76 (40-140)	50

4B
METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB164309BL

Lab Name: CHEMTECH

Contract: PORT06

Lab Code: CHEM Case No.: P4471

SAS No.: P4471 SDG NO.: P4471

Instrument ID: FID_C

Lab Sample ID: PB164309BL

Matrix: (soil/water) Solid

Date Extracted: 10/22/2024 9:40:00

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB164309BS	PB164309BS
PB164309BSD	PB164309BSD
WB-303-BOTMS	P4460-03MS
WB-303-BOTMSD	P4460-03MSD
B-180-SB01	P4471-01
B-180-SB02	P4471-02

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/19/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/21/24
Client Sample ID:	B-180-SB01	SDG No.:	P4471
Lab Sample ID:	P4471-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.8
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
10/22/24 09:40	10/23/24 6:40	PB164309

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.46	U	1	0.46	1.21	mg/kg	FC067494.D
Aliphatic C12-C16	Aliphatic C12-C16	0.48	J	1	0.29	0.81	mg/kg	FC067494.D
Aliphatic C16-C21	Aliphatic C16-C21	0.37	J	1	0.36	1.21	mg/kg	FC067494.D
Aliphatic C21-C28	Aliphatic C21-C28	1.06	J	1	0.97	1.61	mg/kg	FC067494.D
Aliphatic C28-C40	Aliphatic C28-C40	7.75		1	2.17	2.41	mg/kg	FC067494.D
Aromatic C10-C12	Aromatic C10-C12	0.36	U	1	0.36	0.81	mg/kg	FD048557.D
Aromatic C12-C16	Aromatic C12-C16	0.41	J	1	0.41	1.21	mg/kg	FD048557.D
Aromatic C16-C21	Aromatic C16-C21	5.76		1	1.16	2.01	mg/kg	FD048557.D
Aromatic C21-C36	Aromatic C21-C36	3.55		1	2.41	3.22	mg/kg	FD048557.D
Total AliphaticEPH	Total AliphaticEPH	9.67			4.25	7.25	mg/kg	
Total AromaticEPH	Total AromaticEPH	9.72			4.34	7.25	mg/kg	
Total EPH	Total EPH	19.4			8.59	14.5	mg/kg	

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/19/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/21/24
Client Sample ID:	B-180-SB01	SDG No.:	P4471
Lab Sample ID:	P4471-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.8
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
FC067494.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	0.46	U	0.46	1.21	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	0.48	J	0.29	0.81	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.37	J	0.36	1.21	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	1.06	J	0.97	1.61	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	7.75		2.17	2.41	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	38.4		40 - 140	77%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4471-01	Acq On:	23 Oct 2024 06:40
Client Sample ID:	B-180-SB01	Operator:	YP/AJ
Data file:	FC067494.D	Misc:	
Instrument:	FID_C	ALS Vial:	20
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.175	6.455	454334	3.54	300	ug/ml
Aliphatic C12-C16	6.456	9.845	785075	5.995	200	ug/ml
Aliphatic C16-C21	9.846	13.203	610593	4.644	300	ug/ml
Aliphatic C21-C28	13.204	16.857	1675885	13.214	400	ug/ml
Aliphatic C28-C40	16.858	21.701	10130489	96.283	600	ug/ml
Aliphatic EPH	3.175	21.701	13656376	123.676		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.936	12.936	4348291	38.41		ug/ml
Aliphatic C9-C28	3.175	16.857	3525887	27.393	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067494.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 06:40
Operator : YP/AJ
Sample : P4471-01
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
B-180-SB01

Integration File: autoint1.e
Quant Time: Oct 23 11:05:27 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 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...	12.936	4348291	38.415 ug/ml
Spiked Amount	50.000	Recovery	= 76.83%

Target Compounds

(f)=RT Delta > 1/2 Window

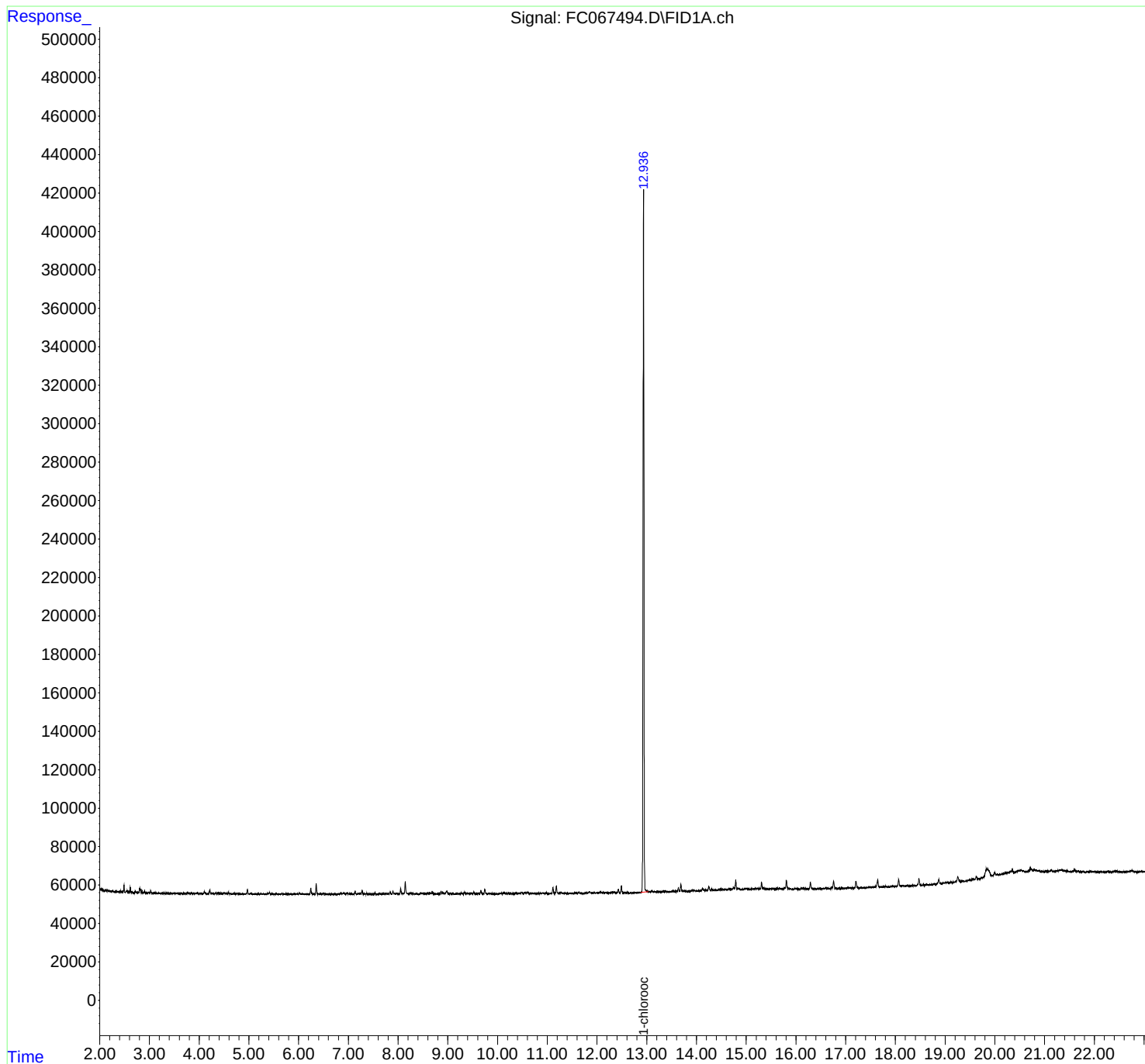
(m)=manual int.

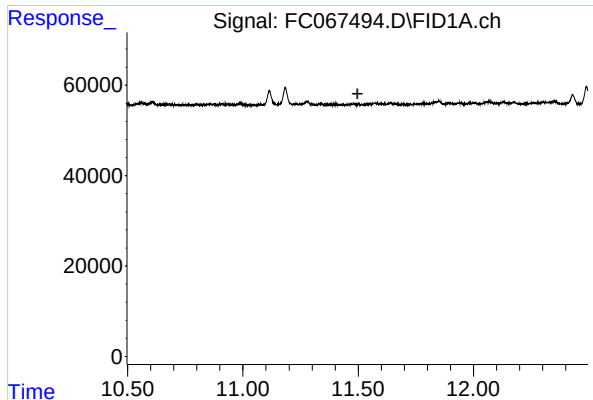
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067494.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 06:40
Operator : YP/AJ
Sample : P4471-01
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
B-180-SB01

Integration File: autoint1.e
Quant Time: Oct 23 11:05:27 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 2024
Response via : Initial Calibration
Integrator: ChemStation

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

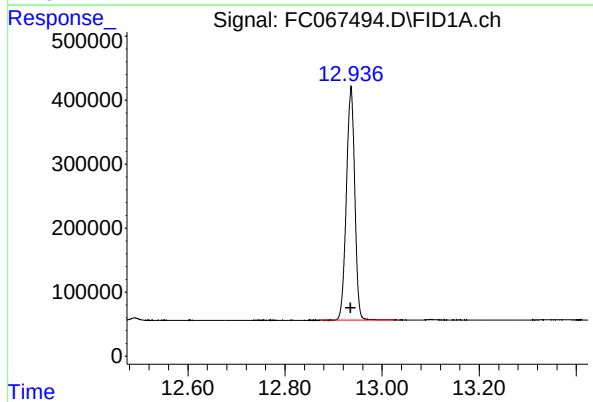




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T.: 11.497 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
B-180-SB01



#12 1-chlorooctadecane (SURR)

R.T.: 12.936 min
Delta R.T.: 0.000 min
Response: 4348291
Conc: 38.41 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067494.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 06:40
Sample : P4471-01
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.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	3.204	3.304	BV	292	3502	0.08%	0.019%
2	3.308	3.304	3.348	VV	114	1028	0.02%	0.006%
3	3.376	3.348	3.393	PV	184	3132	0.07%	0.017%
4	3.405	3.393	3.463	VV	148	3136	0.07%	0.017%
5	3.475	3.463	3.514	VV	138	1699	0.04%	0.009%
6	3.529	3.514	3.561	VV	152	2792	0.06%	0.015%
7	3.574	3.561	3.584	VV	134	1143	0.03%	0.006%
8	3.597	3.584	3.628	VV	227	3101	0.07%	0.017%
9	3.647	3.628	3.662	VV	155	1734	0.04%	0.009%
10	3.683	3.662	3.743	PV	189	3240	0.07%	0.018%
11	3.767	3.743	3.827	VV	591	10347	0.24%	0.057%
12	3.847	3.827	3.914	VV	316	5907	0.13%	0.032%
13	3.942	3.914	3.955	VV	542	5882	0.13%	0.032%
14	3.968	3.955	3.994	VV	582	6283	0.14%	0.034%
15	4.035	3.994	4.070	VV	172	5138	0.12%	0.028%
16	4.102	4.070	4.151	VV	1143	17937	0.41%	0.098%
17	4.163	4.151	4.184	VV	174	2471	0.06%	0.014%
18	4.215	4.184	4.282	VV	2186	32864	0.75%	0.180%
19	4.290	4.282	4.318	VV	150	2673	0.06%	0.015%
20	4.339	4.318	4.368	VV	733	9404	0.21%	0.051%
21	4.380	4.368	4.396	VV	507	5589	0.13%	0.031%
22	4.441	4.396	4.470	VV	441	10309	0.23%	0.056%
23	4.506	4.470	4.528	VV	677	11948	0.27%	0.065%
24	4.538	4.528	4.546	VV	220	1926	0.04%	0.011%
25	4.562	4.546	4.575	VV	584	6192	0.14%	0.034%
26	4.591	4.575	4.614	VV	934	10034	0.23%	0.055%
27	4.624	4.614	4.638	VV	134	1176	0.03%	0.006%
28	4.650	4.638	4.658	VV	110	885	0.02%	0.005%
29	4.692	4.658	4.701	VV	138	2627	0.06%	0.014%
30	4.718	4.701	4.734	VV	260	2775	0.06%	0.015%
31	4.750	4.734	4.772	VV	129	2373	0.05%	0.013%
32	4.788	4.772	4.852	VV	235	3911	0.09%	0.021%
33	4.868	4.852	4.878	VV	120	1059	0.02%	0.006%
34	4.893	4.878	4.924	VV	167	2208	0.05%	0.012%
35	4.970	4.924	5.008	PV	2411	30586	0.70%	0.167%
36	5.027	5.008	5.040	VV	491	5078	0.12%	0.028%

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37	5.054	5.040	5.098	VV	321	5056	0.11%	0.028%
38	5.107	5.098	5.124	VV	97	904	0.02%	0.005%
39	5.161	5.124	5.181	VV	148	2785	0.06%	0.015%
40	5.195	5.181	5.221	VV	267	3633	0.08%	0.020%
41	5.248	5.221	5.282	VV	208	4076	0.09%	0.022%
42	5.292	5.282	5.313	VV	137	1390	0.03%	0.008%
43	5.340	5.313	5.354	VV	149	3089	0.07%	0.017%
44	5.374	5.354	5.388	VV	614	6784	0.15%	0.037%
45	5.411	5.388	5.458	VV	925	14591	0.33%	0.080%
46	5.467	5.458	5.500	VV	246	4182	0.10%	0.023%
47	5.555	5.500	5.590	VV	295	8841	0.20%	0.048%
48	5.604	5.590	5.635	VV	131	3118	0.07%	0.017%
49	5.657	5.635	5.691	VV	316	5614	0.13%	0.031%
50	5.704	5.691	5.734	VV	215	3544	0.08%	0.019%
51	5.740	5.734	5.753	VV	140	1463	0.03%	0.008%
52	5.758	5.753	5.811	VV	147	3335	0.08%	0.018%
53	5.831	5.811	5.870	PV	136	3445	0.08%	0.019%
54	5.884	5.870	5.901	VV	164	1927	0.04%	0.011%
55	5.921	5.901	5.953	VV	392	6830	0.16%	0.037%
56	5.972	5.953	5.993	VV	265	4914	0.11%	0.027%
57	6.014	5.993	6.044	VV	633	9211	0.21%	0.050%
58	6.074	6.044	6.114	VV	366	7544	0.17%	0.041%
59	6.132	6.114	6.170	VV	206	4929	0.11%	0.027%
60	6.183	6.170	6.218	VV	227	4390	0.10%	0.024%
61	6.245	6.218	6.285	VV	3155	39291	0.89%	0.215%
62	6.294	6.285	6.324	VV	262	4236	0.10%	0.023%
63	6.354	6.324	6.420	VV	5498	67063	1.52%	0.367%
64	6.436	6.420	6.458	VV	423	6060	0.14%	0.033%
65	6.472	6.458	6.488	VV	280	3670	0.08%	0.020%
66	6.503	6.488	6.526	VV	758	9216	0.21%	0.050%
67	6.538	6.526	6.558	VV	329	4168	0.09%	0.023%
68	6.575	6.558	6.645	VV	446	8154	0.19%	0.045%
69	6.661	6.645	6.671	VV	147	1887	0.04%	0.010%
70	6.678	6.671	6.707	VV	136	2340	0.05%	0.013%
71	6.721	6.707	6.774	VV	204	4733	0.11%	0.026%
72	6.796	6.774	6.826	PV	482	6915	0.16%	0.038%
73	6.849	6.826	6.879	VV	639	12319	0.28%	0.067%
74	6.902	6.879	6.939	VV	539	13602	0.31%	0.074%
75	6.974	6.939	6.994	VV	793	15546	0.35%	0.085%
76	7.012	6.994	7.040	VV	316	6150	0.14%	0.034%
77	7.054	7.040	7.066	VV	313	3949	0.09%	0.022%
78	7.080	7.066	7.104	VV	292	5120	0.12%	0.028%
79	7.136	7.104	7.176	VV	1727	23900	0.54%	0.131%
80	7.200	7.176	7.224	VV	304	6462	0.15%	0.035%
81	7.242	7.224	7.254	VV	359	5020	0.11%	0.027%
82	7.277	7.254	7.308	VV	1985	25882	0.59%	0.142%
83	7.315	7.308	7.324	VV	280	2193	0.05%	0.012%
84	7.342	7.324	7.356	VV	326	5113	0.12%	0.028%
85	7.368	7.356	7.388	VV	471	5304	0.12%	0.029%
86	7.448	7.388	7.477	VV	250	8400	0.19%	0.046%
87	7.488	7.477	7.512	VV	167	2696	0.06%	0.015%
88	7.537	7.512	7.576	VV	678	9878	0.22%	0.054%
89	7.621	7.576	7.670	VV	293	10270	0.23%	0.056%

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90	7.701	7.670	7.716	VV	361	5988	0.14%	0.033%
91	7.730	7.716	7.744	VV	347	4844	0.11%	0.026%
92	7.754	7.744	7.774	VV	396	5161	0.12%	0.028%
93	7.798	7.774	7.818	VV	556	7275	0.17%	0.040%
94	7.842	7.818	7.874	VV	1218	17582	0.40%	0.096%
95	7.898	7.874	7.921	VV	1764	20633	0.47%	0.113%
96	7.936	7.921	7.946	VV	300	3153	0.07%	0.017%
97	7.967	7.946	7.988	VV	517	7676	0.17%	0.042%
98	7.998	7.988	8.023	VV	413	5955	0.14%	0.033%
99	8.053	8.023	8.116	VV	3010	48557	1.10%	0.266%
100	8.146	8.116	8.217	VV	6651	91667	2.08%	0.501%
101	8.244	8.217	8.278	VV	541	13603	0.31%	0.074%
102	8.292	8.278	8.320	VV	423	7536	0.17%	0.041%
103	8.340	8.320	8.361	VV	403	5851	0.13%	0.032%
104	8.379	8.361	8.413	VV	413	5977	0.14%	0.033%
105	8.457	8.413	8.481	VV	538	13013	0.30%	0.071%
106	8.491	8.481	8.533	VV	467	10645	0.24%	0.058%
107	8.562	8.533	8.578	VV	389	7947	0.18%	0.043%
108	8.601	8.578	8.621	VV	505	9462	0.22%	0.052%
109	8.635	8.621	8.650	VV	508	6711	0.15%	0.037%
110	8.682	8.650	8.720	VV	1005	21103	0.48%	0.115%
111	8.742	8.720	8.784	VV	283	6014	0.14%	0.033%
112	8.799	8.784	8.818	VV	302	3529	0.08%	0.019%
113	8.833	8.818	8.840	VV	249	2635	0.06%	0.014%
114	8.866	8.840	8.884	VV	1481	22048	0.50%	0.121%
115	8.900	8.884	8.951	VV	775	20685	0.47%	0.113%
116	8.979	8.951	9.033	VV	1513	35678	0.81%	0.195%
117	9.052	9.033	9.084	VV	429	6342	0.14%	0.035%
118	9.104	9.084	9.139	VV	298	5213	0.12%	0.029%
119	9.160	9.139	9.170	PV	181	2648	0.06%	0.014%
120	9.201	9.170	9.215	VV	298	5654	0.13%	0.031%
121	9.224	9.215	9.241	VV	232	3354	0.08%	0.018%
122	9.268	9.241	9.309	VV	552	11723	0.27%	0.064%
123	9.335	9.309	9.371	VV	869	16508	0.38%	0.090%
124	9.385	9.371	9.418	VV	381	7740	0.18%	0.042%
125	9.428	9.418	9.451	VV	248	3693	0.08%	0.020%
126	9.473	9.451	9.499	VV	510	9788	0.22%	0.054%
127	9.524	9.499	9.568	VV	1186	17217	0.39%	0.094%
128	9.579	9.568	9.601	VV	236	3047	0.07%	0.017%
129	9.616	9.601	9.639	VV	262	3879	0.09%	0.021%
130	9.664	9.639	9.718	VV	1660	25174	0.57%	0.138%
131	9.745	9.718	9.797	VV	2490	36193	0.82%	0.198%
132	9.825	9.797	9.938	VV	310	13087	0.30%	0.072%
133	9.946	9.938	9.978	VV	46	771	0.02%	0.004%
134	10.022	9.978	10.039	PV	203	3223	0.07%	0.018%
135	10.060	10.039	10.077	VV	217	3563	0.08%	0.019%
136	10.092	10.077	10.103	VV	206	2641	0.06%	0.014%
137	10.131	10.103	10.153	VV	503	9856	0.22%	0.054%
138	10.172	10.153	10.197	VV	287	6020	0.14%	0.033%
139	10.217	10.197	10.251	VV	279	5846	0.13%	0.032%
140	10.258	10.251	10.308	VV	186	3854	0.09%	0.021%
141	10.344	10.308	10.353	VV	191	3466	0.08%	0.019%

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142	10.374	10.353	10.394	VV	286	5013	0.11%	0.027%
143	10.426	10.394	10.448	VV	401	8007	0.18%	0.044%
144	10.483	10.448	10.517	VV	840	16624	0.38%	0.091%
145	10.555	10.517	10.587	VV	593	16751	0.38%	0.092%
146	10.608	10.587	10.644	VV	774	14938	0.34%	0.082%
147	10.668	10.644	10.725	VV	321	9955	0.23%	0.054%
148	10.738	10.725	10.761	VV	201	2570	0.06%	0.014%
149	10.768	10.761	10.783	VV	122	1498	0.03%	0.008%
150	10.804	10.783	10.822	VV	241	3865	0.09%	0.021%
151	10.854	10.822	10.890	VV	308	8426	0.19%	0.046%
152	10.908	10.890	10.921	VV	329	4692	0.11%	0.026%
153	10.936	10.921	10.958	VV	344	4137	0.09%	0.023%
154	10.987	10.958	11.024	VV	401	7202	0.16%	0.039%
155	11.037	11.024	11.050	VV	69	662	0.02%	0.004%
156	11.077	11.050	11.087	VV	205	2658	0.06%	0.015%
157	11.115	11.087	11.148	VV	3213	42908	0.98%	0.235%
158	11.184	11.148	11.249	VV	3956	57826	1.31%	0.316%
159	11.278	11.249	11.312	VV	825	14556	0.33%	0.080%
160	11.338	11.312	11.363	VV	261	4700	0.11%	0.026%
161	11.372	11.363	11.441	VV	158	4328	0.10%	0.024%
162	11.479	11.441	11.521	PV	245	6498	0.15%	0.036%
163	11.549	11.521	11.555	VV	220	3172	0.07%	0.017%
164	11.572	11.555	11.610	VV	404	8759	0.20%	0.048%
165	11.640	11.610	11.686	VV	395	10807	0.25%	0.059%
166	11.699	11.686	11.718	VV	126	1771	0.04%	0.010%
167	11.849	11.718	11.879	VV	895	29135	0.66%	0.159%
168	11.893	11.879	11.919	VV	369	6279	0.14%	0.034%
169	11.941	11.919	11.966	VV	401	7997	0.18%	0.044%
170	12.006	11.966	12.028	VV	401	10858	0.25%	0.059%
171	12.058	12.028	12.098	VV	624	17590	0.40%	0.096%
172	12.104	12.098	12.113	VV	330	2624	0.06%	0.014%
173	12.131	12.113	12.154	VV	626	9887	0.22%	0.054%
174	12.175	12.154	12.204	VV	557	9591	0.22%	0.052%
175	12.212	12.204	12.217	VV	193	1450	0.03%	0.008%
176	12.225	12.217	12.237	VV	254	2301	0.05%	0.013%
177	12.261	12.237	12.280	VV	421	7494	0.17%	0.041%
178	12.302	12.280	12.330	VV	545	13249	0.30%	0.072%
179	12.351	12.330	12.379	VV	653	13029	0.30%	0.071%
180	12.430	12.379	12.464	VV	2062	31545	0.72%	0.173%
181	12.490	12.464	12.516	VV	3989	50484	1.15%	0.276%
182	12.523	12.516	12.544	VV	307	4435	0.10%	0.024%
183	12.551	12.544	12.584	VV	310	5812	0.13%	0.032%
184	12.605	12.584	12.678	VV	311	8395	0.19%	0.046%
185	12.687	12.678	12.699	VV	171	942	0.02%	0.005%
186	12.768	12.699	12.799	PV	350	11845	0.27%	0.065%
187	12.814	12.799	12.828	VV	264	3008	0.07%	0.016%
188	12.885	12.828	12.894	VV	298	8525	0.19%	0.047%
189	12.936	12.894	13.078	VV	357349	4399323	100.00%	24.063%
190	13.101	13.078	13.150	VV	1206	28987	0.66%	0.159%
191	13.160	13.150	13.187	VV	605	10722	0.24%	0.059%
192	13.201	13.187	13.250	VV	377	12846	0.29%	0.070%
193	13.262	13.250	13.284	VV	354	5805	0.13%	0.032%
194	13.340	13.284	13.350	VV	584	17220	0.39%	0.094%

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195	13.362	13.350	13.429	VV	575	22032	0.50%	0.121%
196	13.445	13.429	13.469	VV	407	7636	0.17%	0.042%
197	13.482	13.469	13.501	VV	364	6882	0.16%	0.038%
198	13.529	13.501	13.574	VV	617	20260	0.46%	0.111%
199	13.635	13.574	13.660	VV	1954	41492	0.94%	0.227%
200	13.687	13.660	13.725	VV	4140	65476	1.49%	0.358%
201	13.749	13.725	13.761	VV	685	12130	0.28%	0.066%
202	13.771	13.761	13.853	VV	568	20100	0.46%	0.110%
203	13.910	13.853	13.941	VV	950	29619	0.67%	0.162%
204	13.951	13.941	13.968	VV	626	9450	0.21%	0.052%
205	13.981	13.968	14.001	VV	662	10162	0.23%	0.056%
206	14.017	14.001	14.028	VV	513	7625	0.17%	0.042%
207	14.042	14.028	14.055	VV	531	7801	0.18%	0.043%
208	14.121	14.055	14.151	VV	1792	51203	1.16%	0.280%
209	14.160	14.151	14.170	VV	734	8162	0.19%	0.045%
210	14.182	14.170	14.204	VV	787	14175	0.32%	0.078%
211	14.249	14.204	14.287	VV	2718	60180	1.37%	0.329%
212	14.308	14.287	14.368	VV	1036	38989	0.89%	0.213%
213	14.373	14.368	14.414	VV	795	19558	0.44%	0.107%
214	14.454	14.414	14.484	VV	1248	37884	0.86%	0.207%
215	14.496	14.484	14.514	VV	985	17264	0.39%	0.094%
216	14.527	14.514	14.551	VV	980	18898	0.43%	0.103%
217	14.568	14.551	14.580	VV	942	14658	0.33%	0.080%
218	14.598	14.580	14.609	VV	924	14252	0.32%	0.078%
219	14.647	14.609	14.671	VV	1120	35856	0.82%	0.196%
220	14.705	14.671	14.712	VV	1044	23510	0.53%	0.129%
221	14.744	14.712	14.764	VV	1969	43516	0.99%	0.238%
222	14.789	14.764	14.827	VV	5724	97622	2.22%	0.534%
223	14.845	14.827	14.887	VV	1398	38413	0.87%	0.210%
224	14.897	14.887	14.921	VV	845	16593	0.38%	0.091%
225	14.985	14.941	15.011	VV	1181	40436	0.92%	0.221%
226	15.036	15.011	15.088	VV	1047	40981	0.93%	0.224%
227	15.175	15.088	15.197	VV	1138	58546	1.33%	0.320%
228	15.219	15.197	15.228	VV	1064	18789	0.43%	0.103%
229	15.239	15.228	15.271	VV	1073	25204	0.57%	0.138%
230	15.308	15.271	15.338	VV	4185	76347	1.74%	0.418%
231	15.358	15.338	15.458	VV	1343	56470	1.28%	0.309%
232	15.488	15.458	15.591	VV	899	52126	1.18%	0.285%
233	15.630	15.591	15.658	VV	898	30102	0.68%	0.165%
234	15.672	15.658	15.720	VV	861	26351	0.60%	0.144%
235	15.738	15.720	15.746	VV	607	8679	0.20%	0.047%
236	15.768	15.746	15.784	VV	1435	22279	0.51%	0.122%
237	15.807	15.784	15.838	VV	4954	77878	1.77%	0.426%
238	15.848	15.838	15.927	VV	891	27435	0.62%	0.150%
239	15.938	15.927	15.956	VV	378	5143	0.12%	0.028%
240	15.982	15.956	16.034	VV	678	22593	0.51%	0.124%
241	16.046	16.034	16.071	VV	449	8043	0.18%	0.044%
242	16.116	16.071	16.138	VV	641	19560	0.44%	0.107%
243	16.167	16.138	16.245	VV	707	25295	0.57%	0.138%
244	16.290	16.245	16.318	VV	3552	55215	1.26%	0.302%
245	16.328	16.318	16.361	VV	463	9439	0.21%	0.052%
246	16.367	16.361	16.398	VV	281	4328	0.10%	0.024%

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247	16.405	16.398	16.422	VV	191	1850	0.04%	0.010%
248	16.451	16.422	16.462	VV	396	5412	0.12%	0.030%
249	16.469	16.462	16.500	VV	335	6252	0.14%	0.034%
250	16.509	16.500	16.550	VV	405	7015	0.16%	0.038%
251	16.592	16.550	16.614	VV	433	12269	0.28%	0.067%
252	16.638	16.614	16.664	VV	432	10277	0.23%	0.056%
253	16.680	16.664	16.695	VV	252	3299	0.07%	0.018%
254	16.721	16.695	16.734	VV	872	12600	0.29%	0.069%
255	16.755	16.734	16.788	VV	4036	62923	1.43%	0.344%
256	16.801	16.788	16.851	VV	443	8326	0.19%	0.046%
257	16.877	16.851	16.890	VV	224	2394	0.05%	0.013%
258	16.905	16.890	16.910	PV	199	1851	0.04%	0.010%
259	16.921	16.910	16.944	VV	270	4416	0.10%	0.024%
260	16.988	16.944	17.007	VV	322	8391	0.19%	0.046%
261	17.050	17.007	17.070	VV	380	10270	0.23%	0.056%
262	17.083	17.070	17.121	VV	478	9238	0.21%	0.051%
263	17.138	17.121	17.158	VV	235	4360	0.10%	0.024%
264	17.167	17.158	17.176	VV	228	2192	0.05%	0.012%
265	17.206	17.176	17.274	VV	3726	60067	1.37%	0.329%
266	17.315	17.274	17.338	VV	370	7981	0.18%	0.044%
267	17.354	17.338	17.374	VV	304	5349	0.12%	0.029%
268	17.487	17.374	17.504	VV	509	26227	0.60%	0.143%
269	17.541	17.504	17.561	VV	482	13385	0.30%	0.073%
270	17.642	17.561	17.696	VV	4359	97952	2.23%	0.536%
271	17.711	17.696	17.739	VV	512	10847	0.25%	0.059%
272	17.778	17.739	17.828	VV	781	30677	0.70%	0.168%
273	17.832	17.828	17.848	VV	520	5485	0.12%	0.030%
274	17.866	17.848	17.876	VV	478	6640	0.15%	0.036%
275	17.917	17.876	17.941	VV	655	20106	0.46%	0.110%
276	17.959	17.941	18.003	VV	662	21096	0.48%	0.115%
277	18.064	18.003	18.128	VV	4114	97953	2.23%	0.536%
278	18.145	18.128	18.192	VV	931	28889	0.66%	0.158%
279	18.202	18.192	18.294	VV	712	38866	0.88%	0.213%
280	18.333	18.294	18.348	VV	851	23607	0.54%	0.129%
281	18.360	18.348	18.374	VV	809	11994	0.27%	0.066%
282	18.473	18.374	18.538	VV	4285	130259	2.96%	0.712%
283	18.568	18.538	18.591	VV	949	27489	0.62%	0.150%
284	18.620	18.591	18.654	VV	1054	37392	0.85%	0.205%
285	18.665	18.654	18.704	VV	1066	29832	0.68%	0.163%
286	18.731	18.704	18.748	VV	1235	27952	0.64%	0.153%
287	18.780	18.748	18.808	VV	1222	39620	0.90%	0.217%
288	18.871	18.808	18.929	VV	3652	136267	3.10%	0.745%
289	18.969	18.929	18.978	VV	1809	48041	1.09%	0.263%
290	19.045	18.978	19.101	VV	2121	141866	3.22%	0.776%
291	19.107	19.101	19.140	VV	2001	44834	1.02%	0.245%
292	19.254	19.140	19.318	VV	4870	284591	6.47%	1.557%
293	19.328	19.318	19.341	VV	2483	33562	0.76%	0.184%
294	19.365	19.341	19.407	VV	2540	95833	2.18%	0.524%
295	19.499	19.407	19.509	VV	3095	167023	3.80%	0.914%
296	19.534	19.509	19.578	VV	3279	130491	2.97%	0.714%
297	19.629	19.578	19.661	VV	4685	185512	4.22%	1.015%
298	19.703	19.661	19.710	VV	3615	103592	2.35%	0.567%
299	19.828	19.710	19.847	VV	8393	445126	10.12%	2.435%

					rteres			
300	19.863	19.847	19.945	VV	8355	388521	8.83%	2.125%
301	19.994	19.945	20.029	VV	6643	283540	6.45%	1.551%
302	20.051	20.029	20.078	VV	5644	161911	3.68%	0.886%
303	20.177	20.078	20.188	VV	5879	372991	8.48%	2.040%
304	20.272	20.188	20.288	VV	6587	379616	8.63%	2.076%
305	20.298	20.288	20.310	VV	6713	85855	1.95%	0.470%
306	20.349	20.310	20.401	VV	7526	376825	8.57%	2.061%
307	20.455	20.401	20.463	VV	7043	252621	5.74%	1.382%
308	20.481	20.463	20.496	VV	7208	140985	3.20%	0.771%
309	20.531	20.496	20.616	VV	7415	508806	11.57%	2.783%
310	20.719	20.616	20.769	VV	8451	666241	15.14%	3.644%
311	20.775	20.769	20.796	VV	7400	117967	2.68%	0.645%
312	20.807	20.796	20.833	VV	7351	163855	3.72%	0.896%
313	20.843	20.833	21.002	VV	7195	679651	15.45%	3.718%
314	21.037	21.002	21.071	VV	6738	277077	6.30%	1.516%
315	21.081	21.071	21.094	VV	6607	90639	2.06%	0.496%
316	21.129	21.094	21.174	VV	7141	326506	7.42%	1.786%
317	21.184	21.174	21.208	VV	6590	133714	3.04%	0.731%
318	21.279	21.208	21.292	VV	6929	335473	7.63%	1.835%
319	21.340	21.292	21.445	VV	7177	622226	14.14%	3.403%
320	21.450	21.445	21.488	VV	6464	162806	3.70%	0.891%
321	21.496	21.488	21.528	VV	6294	149423	3.40%	0.817%
322	21.600	21.528	21.639	VV	6847	424964	9.66%	2.324%
323	21.653	21.639	21.660	VV	6279	77858	1.77%	0.426%
324	21.668	21.660	21.740	VV	6339	290903	6.61%	1.591%
325	21.752	21.740	21.801	VBA	6011	226746	5.15%	1.240%

Sum of corrected areas: 18282458

Aliphatic EPH 100224.M Wed Oct 23 11:12:04 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/19/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/21/24
Client Sample ID:	B-180-SB01	SDG No.:	P4471
Lab Sample ID:	P4471-01	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.8
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
FD048557.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.36	U	0.36	0.81	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.41	J	0.41	1.21	mg/kg
Aromatic C16-C21	Aromatic C16-C21	5.76		1.16	2.01	mg/kg
Aromatic C21-C36	Aromatic C21-C36	3.55		2.41	3.22	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	45.4		40 - 140	91%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	48.0		40 - 140	96%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	39.1		40 - 140	78%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4471-01	Acq On:	23 Oct 2024 06:40
Client Sample ID:	B-180-SB01	Operator:	YP/AJ
Data file:	FD048557.D	Misc:	
Instrument:	FID_D	ALS Vial:	70
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.096	5.814	494345	2.731	200	ug/ml
Aromatic C12-C16	5.815	8.420	973630	5.124	300	ug/ml
Aromatic C16-C21	8.421	12.681	12793379	71.58	500	ug/ml
Aromatic C21-C36	12.682	18.086	7295096	44.116	800	ug/ml
Aromatic EPH	4.096	18.086	21556450	123.552		ug/ml
ortho-Terphenyl (SURR)	11.260	11.260	7187892	39.07		ug/ml
2-Bromonaphthalene (SURR)	7.375	7.375	7508532	45.35		ug/ml
2-Fluorobiphenyl (SURR)	8.224	8.224	4973975	47.96		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
 Data File : FD048557.D
 Signal(s) : FID2B.ch
 Acq On : 23 Oct 2024 06:40
 Operator : YP/AJ
 Sample : P4471-01
 Misc :
 ALS Vial : 70 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 B-180-SB01

Integration File: autoint1.e
 Quant Time: Oct 23 11:14:32 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
 Quant Title : GC Extractables
 QLast Update : Mon Sep 30 14:17:34 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...	7.375	7508532	45.350 ug/ml
Spiked Amount 50.000		Recovery =	90.70%
6) S 2-Fluorobiphenyl (SURR)	8.224	4973975	47.963 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	95.93%
11) S ortho-Terphenyl (SURR)	11.260	7187892	39.065 ug/ml
Spiked Amount 50.000		Recovery =	78.13%

Target Compounds

(f)=RT Delta > 1/2 Window

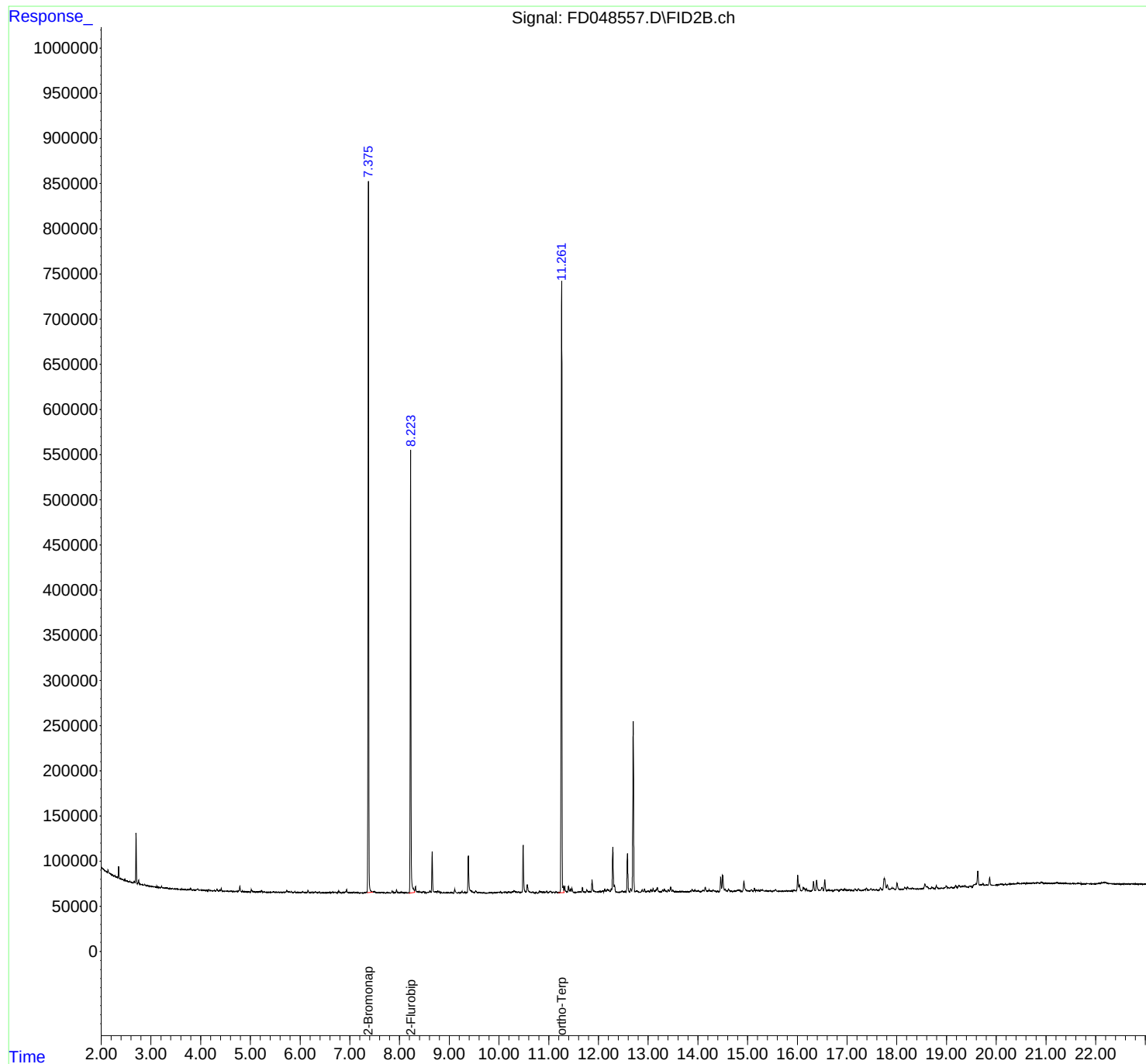
(m)=manual int.

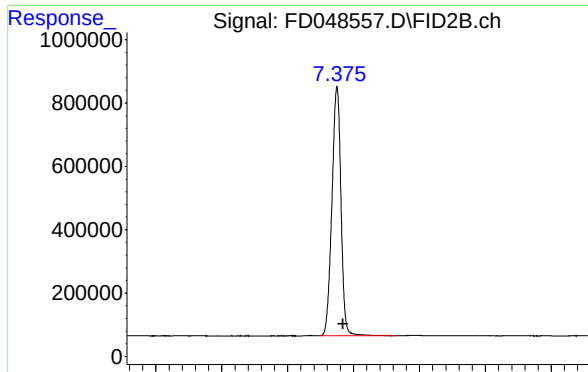
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
Data File : FD048557.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 06:40
Operator : YP/AJ
Sample : P4471-01
Misc :
ALS Vial : 70 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
B-180-SB01

Integration File: autoint1.e
Quant Time: Oct 23 11:14:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 14:17:34 2024
Response via : Initial Calibration
Integrator: ChemStation

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

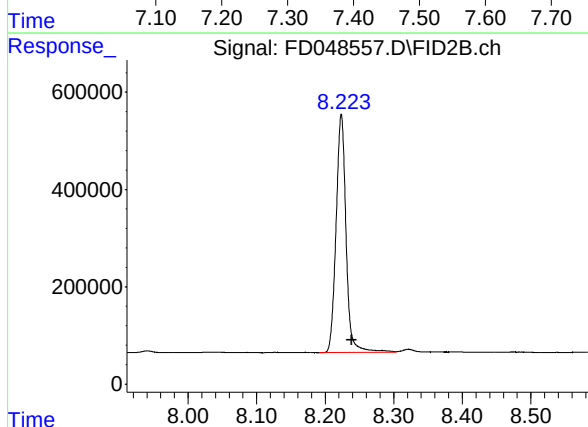




#4 2-Bromonaphthalene (SURR)

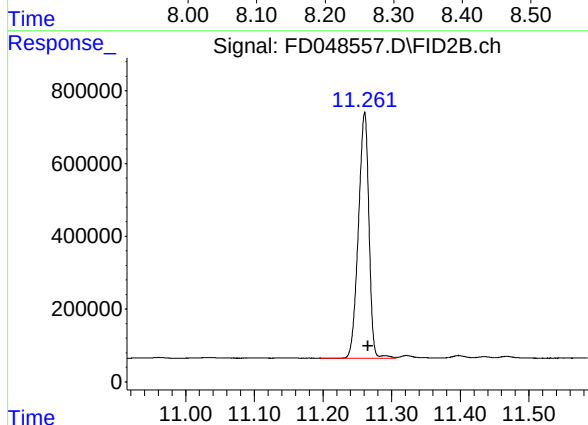
R.T.: 7.375 min
Delta R.T.: -0.010 min
Response: 7508532
Conc: 45.35 ug/ml

Instrument :
FID_D
ClientSampleId :
B-180-SB01



#6 2-Fluorobiphenyl (SURR)

R.T.: 8.224 min
Delta R.T.: -0.015 min
Response: 4973975
Conc: 47.96 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.260 min
Delta R.T.: -0.005 min
Response: 7187892
Conc: 39.07 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
Data File : FD048557.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 06:40
Sample : P4471-01
Misc :
ALS Vial : 70 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.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	4.166	4.152	4.189	PV	1546	14323	0.19%	0.042%
2	4.201	4.189	4.225	PV	453	6157	0.08%	0.018%
3	4.230	4.225	4.242	VV	254	1520	0.02%	0.004%
4	4.275	4.254	4.294	VV	596	6228	0.08%	0.018%
5	4.329	4.294	4.366	PV	2434	33762	0.45%	0.099%
6	4.385	4.366	4.399	VV	1748	18067	0.24%	0.053%
7	4.414	4.399	4.472	VV	3205	35447	0.47%	0.104%
8	4.486	4.472	4.515	VV	625	8763	0.12%	0.026%
9	4.524	4.515	4.562	VV	459	6894	0.09%	0.020%
10	4.582	4.562	4.587	VV	255	2615	0.03%	0.008%
11	4.602	4.587	4.619	VV	636	8502	0.11%	0.025%
12	4.622	4.619	4.643	VV	350	3818	0.05%	0.011%
13	4.649	4.643	4.653	VV	188	1027	0.01%	0.003%
14	4.657	4.653	4.672	VV	310	1771	0.02%	0.005%
15	4.721	4.688	4.734	VV	487	8348	0.11%	0.024%
16	4.767	4.734	4.772	VV	1153	13118	0.17%	0.038%
17	4.788	4.772	4.827	VV	6100	72182	0.95%	0.212%
18	4.842	4.827	4.863	VV	1289	13808	0.18%	0.040%
19	4.877	4.863	4.885	VV	428	3634	0.05%	0.011%
20	4.894	4.885	4.921	VV	258	3434	0.05%	0.010%
21	4.927	4.921	4.934	VV	274	1034	0.01%	0.003%
22	4.942	4.934	4.972	VV	233	3438	0.05%	0.010%
23	4.978	4.972	4.994	VV	343	3162	0.04%	0.009%
24	5.019	4.994	5.054	VV	2851	42489	0.56%	0.125%
25	5.058	5.054	5.079	VV	565	6629	0.09%	0.019%
26	5.081	5.079	5.096	VV	438	3728	0.05%	0.011%
27	5.108	5.096	5.143	VV	420	6227	0.08%	0.018%
28	5.151	5.143	5.172	VV	568	5317	0.07%	0.016%
29	5.188	5.172	5.206	VV	1277	15075	0.20%	0.044%
30	5.228	5.206	5.261	VV	2077	28479	0.38%	0.084%
31	5.287	5.261	5.320	VV	641	11570	0.15%	0.034%
32	5.336	5.320	5.359	PV	282	4561	0.06%	0.013%
33	5.364	5.359	5.395	VV	455	7014	0.09%	0.021%
34	5.404	5.395	5.419	VV	351	2820	0.04%	0.008%
35	5.434	5.419	5.447	VV	436	5623	0.07%	0.016%
36	5.460	5.447	5.504	VV	530	12633	0.17%	0.037%

					rteres			
37	5.517	5.504	5.549	VV	523	8681	0.11%	0.025%
38	5.581	5.549	5.606	VV	259	5844	0.08%	0.017%
39	5.645	5.632	5.657	PV	260	2363	0.03%	0.007%
40	5.660	5.657	5.673	VV	170	1573	0.02%	0.005%
41	5.679	5.673	5.695	VV	313	2935	0.04%	0.009%
42	5.735	5.695	5.770	VV	2013	39405	0.52%	0.116%
43	5.780	5.770	5.795	VV	905	10327	0.14%	0.030%
44	5.823	5.795	5.850	VV	1605	22401	0.30%	0.066%
45	5.855	5.850	5.865	VV	311	2001	0.03%	0.006%
46	5.869	5.865	5.872	VV	279	1042	0.01%	0.003%
47	5.895	5.872	5.910	VV	1142	14732	0.19%	0.043%
48	5.915	5.910	5.925	VV	256	1347	0.02%	0.004%
49	5.953	5.925	5.975	VV	601	10766	0.14%	0.032%
50	5.982	5.975	5.995	VV	281	2731	0.04%	0.008%
51	5.997	5.995	6.014	VV	316	1690	0.02%	0.005%
52	6.053	6.014	6.101	VV	1375	22788	0.30%	0.067%
53	6.106	6.101	6.116	VV	252	1213	0.02%	0.004%
54	6.123	6.116	6.129	VV	372	1290	0.02%	0.004%
55	6.160	6.136	6.191	VV	2749	31196	0.41%	0.091%
56	6.209	6.191	6.218	VV	369	3688	0.05%	0.011%
57	6.241	6.218	6.262	VV	930	10858	0.14%	0.032%
58	6.279	6.262	6.292	VV	528	5862	0.08%	0.017%
59	6.308	6.292	6.330	VV	1575	17133	0.23%	0.050%
60	6.341	6.330	6.362	VV	446	3946	0.05%	0.012%
61	6.380	6.362	6.417	VV	897	12353	0.16%	0.036%
62	6.419	6.417	6.434	VV	250	1885	0.02%	0.006%
63	6.442	6.434	6.462	VV	282	2342	0.03%	0.007%
64	6.469	6.462	6.501	VV	297	3880	0.05%	0.011%
65	6.516	6.501	6.533	PV	226	1837	0.02%	0.005%
66	6.539	6.533	6.546	VV	225	1037	0.01%	0.003%
67	6.553	6.546	6.567	VV	238	1678	0.02%	0.005%
68	6.597	6.580	6.632	VV	941	11784	0.16%	0.035%
69	6.651	6.632	6.670	VV	1065	15481	0.20%	0.045%
70	6.673	6.670	6.682	VV	593	4049	0.05%	0.012%
71	6.700	6.682	6.735	VV	1034	21552	0.28%	0.063%
72	6.739	6.735	6.748	VV	425	2470	0.03%	0.007%
73	6.778	6.748	6.838	VV	2100	41452	0.55%	0.122%
74	6.847	6.838	6.852	VV	598	4153	0.05%	0.012%
75	6.856	6.852	6.871	VV	595	5800	0.08%	0.017%
76	6.882	6.871	6.890	VV	684	6148	0.08%	0.018%
77	6.908	6.890	6.916	VV	1414	14837	0.20%	0.044%
78	6.935	6.916	6.965	VV	3837	47712	0.63%	0.140%
79	6.972	6.965	6.978	VV	504	3550	0.05%	0.010%
80	6.996	6.978	7.009	VV	658	9714	0.13%	0.028%
81	7.012	7.009	7.031	VV	635	6318	0.08%	0.019%
82	7.044	7.031	7.054	VV	742	7269	0.10%	0.021%
83	7.078	7.054	7.096	VV	1267	16869	0.22%	0.049%
84	7.115	7.096	7.123	VV	452	5356	0.07%	0.016%
85	7.137	7.123	7.151	VV	626	8156	0.11%	0.024%
86	7.165	7.151	7.211	VV	1010	12146	0.16%	0.036%
87	7.228	7.211	7.234	PV	395	3586	0.05%	0.011%
88	7.240	7.234	7.263	VV	387	4048	0.05%	0.012%
89	7.277	7.263	7.282	VV	362	2745	0.04%	0.008%

					rteres			
90	7.290	7.282	7.296	VV	472	2974	0.04%	0.009%
91	7.305	7.296	7.320	VV	456	4774	0.06%	0.014%
92	7.335	7.320	7.347	VV	1361	14754	0.20%	0.043%
93	7.375	7.347	7.464	VV	788408	7565092	100.00%	22.181%
94	7.495	7.464	7.551	VV	1747	58277	0.77%	0.171%
95	7.555	7.551	7.580	VV	696	9730	0.13%	0.029%
96	7.598	7.580	7.624	VV	802	14959	0.20%	0.044%
97	7.639	7.624	7.681	VV	1070	21783	0.29%	0.064%
98	7.691	7.681	7.718	VV	777	8816	0.12%	0.026%
99	7.732	7.718	7.745	VV	502	6295	0.08%	0.018%
100	7.760	7.745	7.781	VV	631	10449	0.14%	0.031%
101	7.786	7.781	7.789	VV	462	1610	0.02%	0.005%
102	7.792	7.789	7.817	VV	383	4235	0.06%	0.012%
103	7.853	7.817	7.875	VV	2157	35625	0.47%	0.104%
104	7.886	7.875	7.905	VV	930	10349	0.14%	0.030%
105	7.940	7.905	7.964	VV	3799	48064	0.64%	0.141%
106	7.970	7.964	7.982	VV	619	4549	0.06%	0.013%
107	8.001	7.982	8.011	VV	618	7239	0.10%	0.021%
108	8.028	8.011	8.069	VV	1075	25562	0.34%	0.075%
109	8.088	8.069	8.110	VV	627	9729	0.13%	0.029%
110	8.127	8.110	8.147	VV	824	9830	0.13%	0.029%
111	8.152	8.147	8.155	VV	192	1024	0.01%	0.003%
112	8.171	8.155	8.190	VV	657	7748	0.10%	0.023%
113	8.224	8.190	8.278	VV	490100	4950910	65.44%	14.516%
114	8.283	8.278	8.305	VV	4597	58416	0.77%	0.171%
115	8.321	8.305	8.354	VV	7259	106179	1.40%	0.311%
116	8.359	8.354	8.375	VV	1614	19932	0.26%	0.058%
117	8.389	8.375	8.419	VV	1670	35837	0.47%	0.105%
118	8.429	8.419	8.443	VV	1254	15524	0.21%	0.046%
119	8.474	8.443	8.533	VV	1425	51684	0.68%	0.152%
120	8.539	8.533	8.554	VV	768	5980	0.08%	0.018%
121	8.573	8.554	8.591	VV	1153	18894	0.25%	0.055%
122	8.610	8.591	8.631	VV	2329	38228	0.51%	0.112%
123	8.658	8.631	8.708	VV	46155	495383	6.55%	1.452%
124	8.728	8.708	8.749	VV	1795	33334	0.44%	0.098%
125	8.771	8.749	8.795	VV	2688	47964	0.63%	0.141%
126	8.808	8.795	8.828	VV	1196	17117	0.23%	0.050%
127	8.841	8.828	8.875	VV	834	11408	0.15%	0.033%
128	8.889	8.875	8.918	VV	966	12550	0.17%	0.037%
129	8.930	8.918	8.946	PV	600	6978	0.09%	0.020%
130	8.949	8.946	8.955	VV	429	2080	0.03%	0.006%
131	8.974	8.955	9.004	VV	789	14248	0.19%	0.042%
132	9.032	9.004	9.049	VV	781	14902	0.20%	0.044%
133	9.057	9.049	9.089	VV	659	8661	0.11%	0.025%
134	9.111	9.089	9.165	VV	4090	65458	0.87%	0.192%
135	9.188	9.165	9.205	VV	944	13889	0.18%	0.041%
136	9.228	9.205	9.237	VV	733	9723	0.13%	0.029%
137	9.257	9.237	9.285	VV	1984	28887	0.38%	0.085%
138	9.318	9.285	9.342	VV	1025	20636	0.27%	0.061%
139	9.356	9.342	9.364	VV	878	8180	0.11%	0.024%
140	9.384	9.364	9.441	VV	41077	543866	7.19%	1.595%
141	9.444	9.441	9.506	VV	2259	48391	0.64%	0.142%

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142	9.532	9.506	9.574	VV	2614	51805	0.68%	0.152%
143	9.600	9.574	9.606	VV	803	11768	0.16%	0.035%
144	9.616	9.606	9.650	VV	860	11949	0.16%	0.035%
145	9.679	9.650	9.683	VV	406	4605	0.06%	0.014%
146	9.693	9.683	9.719	VV	608	6024	0.08%	0.018%
147	9.728	9.719	9.739	PV	157	1419	0.02%	0.004%
148	9.753	9.739	9.759	VV	144	1407	0.02%	0.004%
149	9.799	9.759	9.807	VV	385	6528	0.09%	0.019%
150	9.812	9.807	9.827	VV	471	3672	0.05%	0.011%
151	9.836	9.827	9.840	VV	553	3463	0.05%	0.010%
152	9.847	9.840	9.874	VV	604	7157	0.09%	0.021%
153	9.881	9.874	9.890	VV	442	2655	0.04%	0.008%
154	9.913	9.890	9.937	VV	610	11503	0.15%	0.034%
155	9.952	9.937	9.968	VV	697	9742	0.13%	0.029%
156	9.990	9.968	10.012	VV	1234	21799	0.29%	0.064%
157	10.031	10.012	10.071	VV	1735	26611	0.35%	0.078%
158	10.098	10.071	10.112	VV	1139	17042	0.23%	0.050%
159	10.123	10.112	10.132	VV	1033	10362	0.14%	0.030%
160	10.147	10.132	10.166	VV	951	15080	0.20%	0.044%
161	10.192	10.166	10.205	VV	1345	22846	0.30%	0.067%
162	10.210	10.205	10.216	VV	1157	7117	0.09%	0.021%
163	10.225	10.216	10.244	VV	998	13740	0.18%	0.040%
164	10.266	10.244	10.279	VV	1765	25469	0.34%	0.075%
165	10.304	10.279	10.334	VV	2353	54809	0.72%	0.161%
166	10.345	10.334	10.360	VV	1296	16470	0.22%	0.048%
167	10.390	10.360	10.412	VV	1608	34333	0.45%	0.101%
168	10.422	10.412	10.430	VV	714	6926	0.09%	0.020%
169	10.435	10.430	10.446	VV	773	6129	0.08%	0.018%
170	10.487	10.446	10.547	VV	53127	659573	8.72%	1.934%
171	10.570	10.547	10.617	VV	9632	161126	2.13%	0.472%
172	10.620	10.617	10.638	VV	1198	12956	0.17%	0.038%
173	10.643	10.638	10.656	VV	1017	9117	0.12%	0.027%
174	10.673	10.656	10.707	VV	1131	22755	0.30%	0.067%
175	10.711	10.707	10.730	VV	526	5968	0.08%	0.017%
176	10.741	10.730	10.756	VV	521	5180	0.07%	0.015%
177	10.763	10.756	10.789	VV	314	2539	0.03%	0.007%
178	10.813	10.789	10.860	PV	2167	45383	0.60%	0.133%
179	10.864	10.860	10.875	VV	882	7419	0.10%	0.022%
180	10.894	10.875	10.920	VV	1758	27418	0.36%	0.080%
181	10.931	10.920	10.945	VV	1088	13046	0.17%	0.038%
182	10.961	10.945	10.988	VV	2293	30601	0.40%	0.090%
183	11.034	10.988	11.059	VV	1914	45279	0.60%	0.133%
184	11.063	11.059	11.077	VV	731	6240	0.08%	0.018%
185	11.097	11.077	11.107	VV	844	12271	0.16%	0.036%
186	11.111	11.107	11.129	VV	876	8960	0.12%	0.026%
187	11.152	11.129	11.192	VV	996	23822	0.31%	0.070%
188	11.197	11.192	11.204	VV	453	2512	0.03%	0.007%
189	11.261	11.204	11.284	VV	674582	7133372	94.29%	20.915%
190	11.290	11.284	11.306	VV	7307	72539	0.96%	0.213%
191	11.322	11.306	11.373	VV	7652	119662	1.58%	0.351%
192	11.397	11.373	11.418	VV	7354	103116	1.36%	0.302%
193	11.434	11.418	11.451	VV	4318	57825	0.76%	0.170%
194	11.468	11.451	11.515	VV	5122	78773	1.04%	0.231%

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195	11.548	11.515	11.564	VV	489	10504	0.14%	0.031%
196	11.590	11.564	11.609	VV	1100	21774	0.29%	0.064%
197	11.613	11.609	11.630	VV	937	10406	0.14%	0.031%
198	11.641	11.630	11.656	VV	874	11213	0.15%	0.033%
199	11.678	11.656	11.705	VV	5746	73827	0.98%	0.216%
200	11.710	11.705	11.736	VV	865	11905	0.16%	0.035%
201	11.766	11.736	11.802	VV	3113	59221	0.78%	0.174%
202	11.813	11.802	11.826	VV	1181	15850	0.21%	0.046%
203	11.833	11.826	11.853	VV	1411	15949	0.21%	0.047%
204	11.874	11.853	11.918	VV	14237	189717	2.51%	0.556%
205	11.924	11.918	11.944	VV	1711	21033	0.28%	0.062%
206	11.951	11.944	11.972	VV	1448	17242	0.23%	0.051%
207	11.978	11.972	11.980	VV	701	2946	0.04%	0.009%
208	11.987	11.980	11.995	VV	775	5898	0.08%	0.017%
209	12.029	11.995	12.058	VV	1438	40523	0.54%	0.119%
210	12.080	12.058	12.107	VV	1919	41949	0.55%	0.123%
211	12.128	12.107	12.144	VV	3968	55077	0.73%	0.161%
212	12.180	12.144	12.193	VV	4146	76367	1.01%	0.224%
213	12.204	12.193	12.232	VV	2804	48455	0.64%	0.142%
214	12.259	12.232	12.268	VV	4152	60870	0.80%	0.178%
215	12.289	12.268	12.313	VV	50235	614439	8.12%	1.802%
216	12.323	12.313	12.363	VV	8381	111692	1.48%	0.327%
217	12.368	12.363	12.379	VV	590	4321	0.06%	0.013%
218	12.392	12.379	12.402	VV	562	6139	0.08%	0.018%
219	12.404	12.402	12.431	VV	462	5013	0.07%	0.015%
220	12.446	12.431	12.452	VV	442	4487	0.06%	0.013%
221	12.479	12.452	12.508	VV	1886	36465	0.48%	0.107%
222	12.524	12.508	12.549	VV	941	18579	0.25%	0.054%
223	12.583	12.549	12.629	VV	43093	527270	6.97%	1.546%
224	12.650	12.629	12.669	VV	4259	60401	0.80%	0.177%
225	12.700	12.669	12.733	VV	189520	2214203	29.27%	6.492%
226	12.776	12.733	12.815	VV	1977	54285	0.72%	0.159%
227	12.818	12.815	12.836	VV	348	2695	0.04%	0.008%
228	12.877	12.836	12.903	VV	2523	46218	0.61%	0.136%
229	12.925	12.903	12.952	VV	3800	54943	0.73%	0.161%
230	12.957	12.952	12.969	VV	735	6166	0.08%	0.018%
231	12.997	12.969	13.031	VV	1704	38603	0.51%	0.113%
232	13.055	13.031	13.079	VV	3049	53247	0.70%	0.156%
233	13.100	13.079	13.139	VV	4497	72944	0.96%	0.214%
234	13.157	13.139	13.162	VV	2517	27055	0.36%	0.079%
235	13.184	13.162	13.232	VV	5367	101577	1.34%	0.298%
236	13.251	13.232	13.265	VV	806	12678	0.17%	0.037%
237	13.291	13.265	13.308	VV	2877	41005	0.54%	0.120%
238	13.326	13.308	13.346	VV	3582	50491	0.67%	0.148%
239	13.358	13.346	13.377	VV	1373	19141	0.25%	0.056%
240	13.404	13.377	13.421	VV	2686	42813	0.57%	0.126%
241	13.452	13.421	13.475	VV	5774	90911	1.20%	0.267%
242	13.495	13.475	13.533	VV	2383	47163	0.62%	0.138%
243	13.543	13.533	13.594	VV	779	17632	0.23%	0.052%
244	13.619	13.594	13.652	VV	713	16192	0.21%	0.047%
245	13.663	13.652	13.673	VV	748	7367	0.10%	0.022%
246	13.679	13.673	13.691	VV	622	5921	0.08%	0.017%

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247	13.694	13.691	13.700	VV	550	2993	0.04%	0.009%
248	13.714	13.700	13.726	VV	627	7501	0.10%	0.022%
249	13.733	13.726	13.739	VV	360	2154	0.03%	0.006%
250	13.746	13.739	13.760	VV	430	4019	0.05%	0.012%
251	13.775	13.760	13.790	VV	501	5966	0.08%	0.017%
252	13.799	13.790	13.826	VV	399	5229	0.07%	0.015%
253	13.883	13.826	13.920	VV	2880	71724	0.95%	0.210%
254	13.937	13.920	13.974	VV	2269	43615	0.58%	0.128%
255	14.013	13.974	14.057	VV	1595	45130	0.60%	0.132%
256	14.097	14.057	14.127	VV	1787	48148	0.64%	0.141%
257	14.148	14.127	14.203	VV	5287	100233	1.32%	0.294%
258	14.225	14.203	14.243	VV	2436	35786	0.47%	0.105%
259	14.260	14.243	14.287	VV	1321	27267	0.36%	0.080%
260	14.304	14.287	14.340	VV	2493	45556	0.60%	0.134%
261	14.349	14.340	14.376	VV	1052	14755	0.20%	0.043%
262	14.390	14.376	14.404	VV	699	7084	0.09%	0.021%
263	14.406	14.404	14.418	VV	474	3284	0.04%	0.010%
264	14.458	14.418	14.478	VV	16354	214754	2.84%	0.630%
265	14.497	14.478	14.533	VV	18432	296544	3.92%	0.869%
266	14.548	14.533	14.575	VV	3110	50182	0.66%	0.147%
267	14.616	14.575	14.656	VV	3021	75768	1.00%	0.222%
268	14.663	14.656	14.689	VV	929	14036	0.19%	0.041%
269	14.693	14.689	14.705	VV	623	4652	0.06%	0.014%
270	14.725	14.705	14.735	VV	802	11825	0.16%	0.035%
271	14.741	14.735	14.744	VV	833	3886	0.05%	0.011%
272	14.808	14.744	14.824	VV	1813	57591	0.76%	0.169%
273	14.833	14.824	14.885	VV	1718	33841	0.45%	0.099%
274	14.924	14.885	14.997	VV	11267	228532	3.02%	0.670%
275	15.004	14.997	15.040	VV	1002	20391	0.27%	0.060%
276	15.074	15.040	15.113	VV	2296	55702	0.74%	0.163%
277	15.136	15.113	15.162	VV	3881	58591	0.77%	0.172%
278	15.174	15.162	15.204	VV	1857	35171	0.46%	0.103%
279	15.219	15.204	15.244	VV	1346	25362	0.34%	0.074%
280	15.267	15.244	15.284	VV	1929	33927	0.45%	0.099%
281	15.299	15.284	15.344	VV	1829	39646	0.52%	0.116%
282	15.369	15.344	15.379	VV	905	16161	0.21%	0.047%
283	15.387	15.379	15.402	VV	852	10197	0.13%	0.030%
284	15.413	15.402	15.425	VV	695	8561	0.11%	0.025%
285	15.439	15.425	15.447	VV	797	8822	0.12%	0.026%
286	15.463	15.447	15.499	VV	1015	17712	0.23%	0.052%
287	15.528	15.499	15.541	VV	1139	17227	0.23%	0.051%
288	15.563	15.541	15.601	VV	2280	39638	0.52%	0.116%
289	15.607	15.601	15.614	VV	421	2519	0.03%	0.007%
290	15.620	15.614	15.627	VV	382	2163	0.03%	0.006%
291	15.633	15.627	15.650	VV	303	2570	0.03%	0.008%
292	15.657	15.650	15.682	VV	267	1923	0.03%	0.006%
293	15.693	15.682	15.699	VV	260	1316	0.02%	0.004%
294	15.738	15.699	15.758	PV	585	12447	0.16%	0.036%
295	15.780	15.758	15.797	VV	839	11717	0.15%	0.034%
296	15.803	15.797	15.820	VV	352	4924	0.07%	0.014%
297	15.833	15.820	15.855	VV	623	8003	0.11%	0.023%
298	15.884	15.855	15.896	VV	678	10297	0.14%	0.030%
299	15.900	15.896	15.910	VV	615	4260	0.06%	0.012%

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300	15.933	15.910	15.975	VV	1756	39749	0.53%	0.117%
301	16.006	15.975	16.027	VV	17957	244790	3.24%	0.718%
302	16.039	16.027	16.092	VV	7187	119015	1.57%	0.349%
303	16.118	16.092	16.134	VV	4350	63554	0.84%	0.186%
304	16.141	16.134	16.161	VV	3268	38133	0.50%	0.112%
305	16.179	16.161	16.213	VV	2440	42637	0.56%	0.125%
306	16.231	16.213	16.248	VV	777	12655	0.17%	0.037%
307	16.273	16.248	16.277	VV	591	8684	0.11%	0.025%
308	16.281	16.277	16.289	VV	537	3227	0.04%	0.009%
309	16.324	16.289	16.360	VV	10741	150806	1.99%	0.442%
310	16.385	16.360	16.457	VV	12172	216039	2.86%	0.633%
311	16.496	16.457	16.525	VV	3772	94355	1.25%	0.277%
312	16.551	16.525	16.609	VV	12622	181817	2.40%	0.533%
313	16.637	16.609	16.650	VV	1056	19587	0.26%	0.057%
314	16.663	16.650	16.684	VV	910	13831	0.18%	0.041%
315	16.693	16.684	16.726	VV	557	7431	0.10%	0.022%
316	16.758	16.726	16.770	PV	1172	18157	0.24%	0.053%
317	16.780	16.770	16.791	VV	1105	12977	0.17%	0.038%
318	16.805	16.791	16.835	VV	1188	20244	0.27%	0.059%
319	16.887	16.835	16.912	VV	1655	40533	0.54%	0.119%
320	16.916	16.912	16.930	VV	859	8457	0.11%	0.025%
321	16.953	16.930	16.979	VV	2139	37178	0.49%	0.109%
322	16.993	16.979	17.020	VV	872	15485	0.20%	0.045%
323	17.044	17.020	17.071	VV	1355	24923	0.33%	0.073%
324	17.081	17.071	17.122	VV	714	12037	0.16%	0.035%
325	17.134	17.122	17.138	VV	220	1548	0.02%	0.005%
326	17.160	17.138	17.205	VV	2108	37961	0.50%	0.111%
327	17.230	17.205	17.258	VV	2206	33472	0.44%	0.098%
328	17.261	17.258	17.274	VV	318	1871	0.02%	0.005%
329	17.295	17.287	17.307	VV	196	1364	0.02%	0.004%
330	17.322	17.307	17.328	PV	472	4045	0.05%	0.012%
331	17.360	17.328	17.372	VV	1183	21978	0.29%	0.064%
332	17.389	17.372	17.415	VV	2768	42758	0.57%	0.125%
333	17.433	17.415	17.450	VV	910	13560	0.18%	0.040%
334	17.478	17.450	17.519	VV	2128	41325	0.55%	0.121%
335	17.535	17.519	17.562	VV	699	13322	0.18%	0.039%
336	17.588	17.562	17.630	VV	698	15775	0.21%	0.046%
337	17.670	17.630	17.714	PV	2689	53286	0.70%	0.156%
338	17.755	17.714	17.787	VV	12755	317587	4.20%	0.931%
339	17.808	17.787	17.838	VV	5681	103956	1.37%	0.305%
340	17.851	17.838	17.862	VV	934	11671	0.15%	0.034%
341	17.867	17.862	17.872	VV	781	4282	0.06%	0.013%
342	17.903	17.872	17.919	VV	2074	41647	0.55%	0.122%
343	17.931	17.919	17.972	VV	1648	31076	0.41%	0.091%
344	18.005	17.972	18.061	VV	7273	120274	1.59%	0.353%
345	18.066	18.061	18.072	VV	354	1485	0.02%	0.004%
346	18.088	18.072	18.110	VV	452	4679	0.06%	0.014%
347	18.159	18.130	18.197	PV	1857	29136	0.39%	0.085%
Sum of corrected areas:					34106265			

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/20/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/21/24
Client Sample ID:	B-180-SB02	SDG No.:	P4471
Lab Sample ID:	P4471-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	49.2
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
10/22/24 09:40	10/23/24 7:17	PB164309

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	1.74	J	1	0.77	2.03	mg/kg	FC067495.D
Aliphatic C12-C16	Aliphatic C12-C16	0.80	J	1	0.49	1.35	mg/kg	FC067495.D
Aliphatic C16-C21	Aliphatic C16-C21	4.37		1	0.61	2.03	mg/kg	FC067495.D
Aliphatic C21-C28	Aliphatic C21-C28	7.17		1	1.62	2.70	mg/kg	FC067495.D
Aliphatic C28-C40	Aliphatic C28-C40	8.61		1	3.65	4.06	mg/kg	FC067495.D
Aromatic C10-C12	Aromatic C10-C12	0.61	U	1	0.61	1.35	mg/kg	FD048558.D
Aromatic C12-C16	Aromatic C12-C16	0.69	U	1	0.69	2.03	mg/kg	FD048558.D
Aromatic C16-C21	Aromatic C16-C21	5.41		1	1.95	3.38	mg/kg	FD048558.D
Aromatic C21-C36	Aromatic C21-C36	14.6		1	4.06	5.41	mg/kg	FD048558.D
Total AliphaticEPH	Total AliphaticEPH	22.7			7.14	12.2	mg/kg	
Total AromaticEPH	Total AromaticEPH	20.0			7.31	12.2	mg/kg	
Total EPH	Total EPH	42.7			14.4	24.3	mg/kg	

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/20/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/21/24
Client Sample ID:	B-180-SB02	SDG No.:	P4471
Lab Sample ID:	P4471-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	49.2
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
FC067495.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	1.74	J	0.77	2.03	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	0.80	J	0.49	1.35	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	4.37		0.61	2.03	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	7.17		1.62	2.70	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	8.61		3.65	4.06	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	22.8		40 - 140	46%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4471-02	Acq On:	23 Oct 2024 07:17
Client Sample ID:	B-180-SB02	Operator:	YP/AJ
Data file:	FC067495.D	Misc:	
Instrument:	FID_C	ALS Vial:	21
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.175	6.455	1649690	12.853	300	ug/ml
Aliphatic C12-C16	6.456	9.845	772483	5.899	200	ug/ml
Aliphatic C16-C21	9.846	13.203	4248740	32.316	300	ug/ml
Aliphatic C21-C28	13.204	16.857	6726849	53.041	400	ug/ml
Aliphatic C28-C40	16.858	21.701	6701017	63.688	600	ug/ml
Aliphatic EPH	3.175	21.701	20098779	167.796		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.934	12.934	2582219	22.81		ug/ml
Aliphatic C9-C28	3.175	16.857	13397762	104.109	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067495.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 07:17
Operator : YP/AJ
Sample : P4471-02
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
B-180-SB02

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/24/2024

Integration File: autoint1.e
Quant Time: Oct 23 11:05:44 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 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...	12.934	2582219	22.812 ug/mlm
Spiked Amount	50.000	Recovery	= 45.62%

Target Compounds

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067495.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 07:17
Operator : YP/AJ
Sample : P4471-02
Misc :
ALS Vial : 21 Sample Multiplier: 1

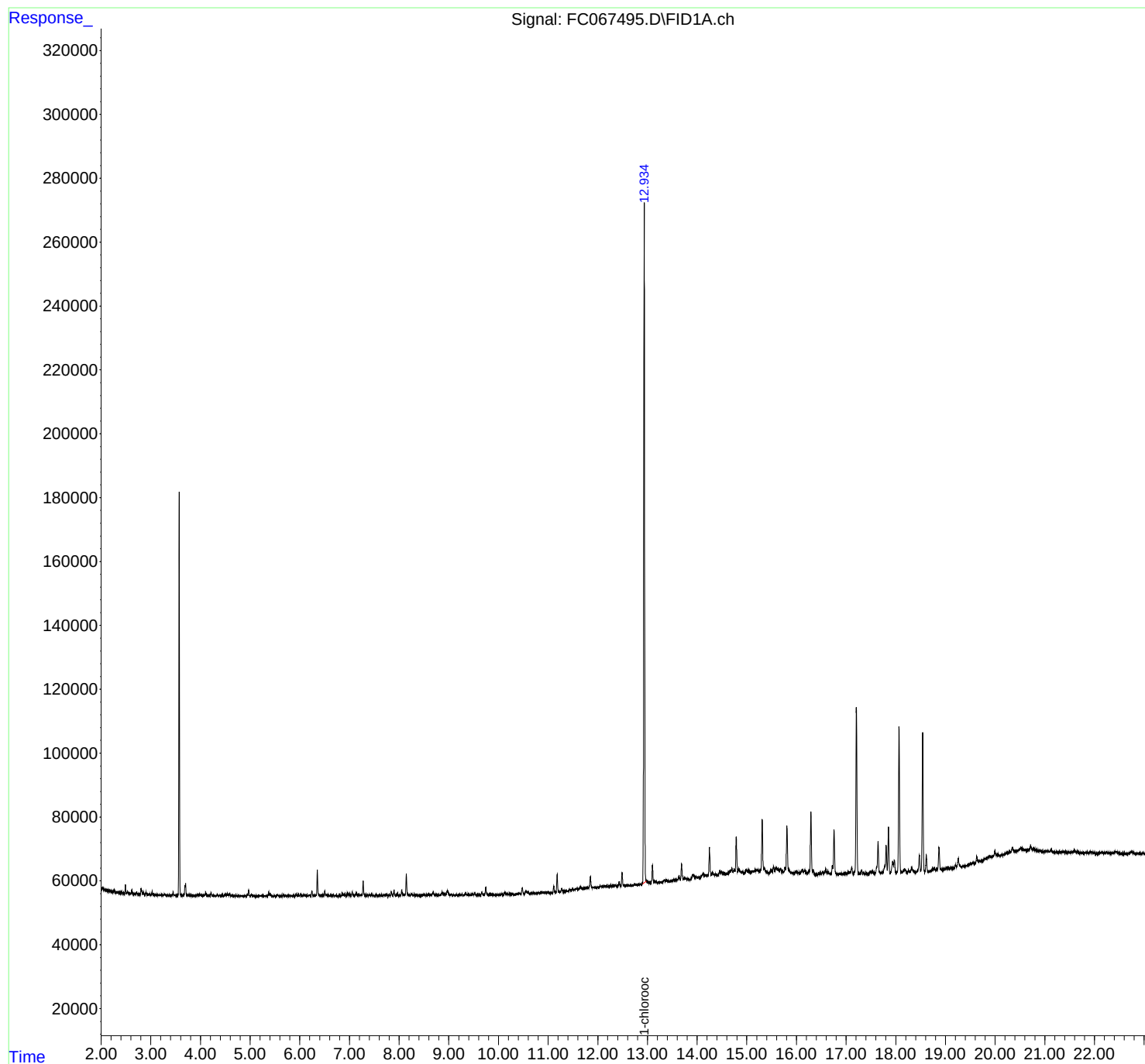
Instrument :
FID_C
ClientSampleId :
B-180-SB02

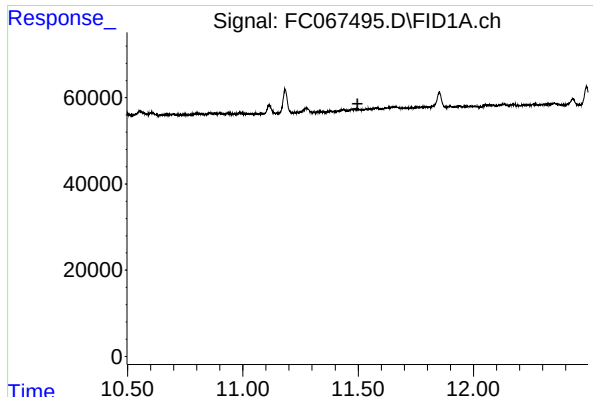
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/24/2024

Integration File: autoint1.e
Quant Time: Oct 23 11:05:44 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 2024
Response via : Initial Calibration
Integrator: ChemStation

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





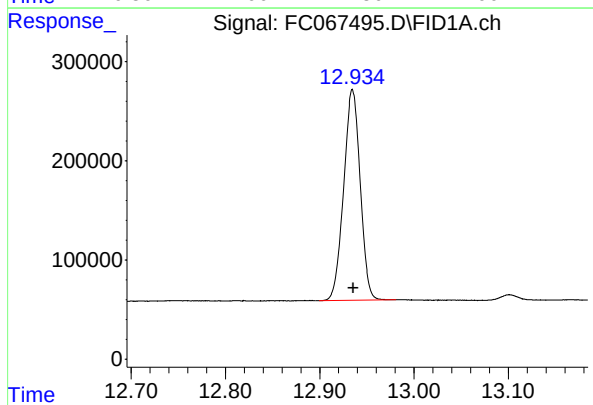
#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T.: 11.497 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
B-180-SB02

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/24/2024



#12 1-chlorooctadecane (SURR)

R.T.: 12.934 min
Delta R.T.: -0.001 min
Response: 2582219
Conc: 22.81 ug/ml m

rteres

Instrument :

FID_C

ClientSampleId :

B-180-SB02

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/24/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC10222
Data File : FC067495.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 07:17
Sample : P4471-02
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.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	3.235	3.204	3.249	BV	109	1189	0.04%	0.006%
2	3.275	3.249	3.318	PV	405	4623	0.17%	0.023%
3	3.332	3.318	3.360	PV	106	1530	0.06%	0.008%
4	3.372	3.360	3.407	VV	126	1581	0.06%	0.008%
5	3.450	3.407	3.507	VV	1268	12926	0.47%	0.064%
6	3.517	3.507	3.526	PV	70	281	0.01%	0.001%
7	3.571	3.526	3.622	VV	125412	1090024	39.75%	5.423%
8	3.647	3.622	3.660	VV	168	2796	0.10%	0.014%
9	3.700	3.660	3.747	VV	3845	61789	2.25%	0.307%
10	3.766	3.747	3.798	VV	277	4846	0.18%	0.024%
11	3.807	3.798	3.834	VV	159	2254	0.08%	0.011%
12	3.848	3.834	3.905	VV	250	3807	0.14%	0.019%
13	3.940	3.905	3.954	PV	369	4433	0.16%	0.022%
14	3.968	3.954	3.978	VV	502	4648	0.17%	0.023%
15	3.988	3.978	4.021	VV	513	6636	0.24%	0.033%
16	4.034	4.021	4.048	VV	237	2545	0.09%	0.013%
17	4.060	4.048	4.071	VV	172	1753	0.06%	0.009%
18	4.106	4.071	4.194	VV	924	17945	0.65%	0.089%
19	4.215	4.194	4.236	VV	1101	12026	0.44%	0.060%
20	4.250	4.236	4.262	VV	224	2704	0.10%	0.013%
21	4.267	4.262	4.275	VV	182	1140	0.04%	0.006%
22	4.290	4.275	4.307	VV	201	1830	0.07%	0.009%
23	4.339	4.307	4.366	VV	669	8970	0.33%	0.045%
24	4.379	4.366	4.402	VV	220	3107	0.11%	0.015%
25	4.442	4.402	4.468	VV	500	8418	0.31%	0.042%
26	4.506	4.468	4.523	VV	672	10929	0.40%	0.054%
27	4.539	4.523	4.550	VV	616	6838	0.25%	0.034%
28	4.563	4.550	4.577	VV	738	7649	0.28%	0.038%
29	4.592	4.577	4.609	VV	971	9325	0.34%	0.046%
30	4.619	4.609	4.645	VV	223	3353	0.12%	0.017%
31	4.689	4.645	4.695	VV	185	4085	0.15%	0.020%
32	4.713	4.695	4.734	VV	253	4585	0.17%	0.023%
33	4.740	4.734	4.762	VV	204	2143	0.08%	0.011%
34	4.782	4.762	4.790	PV	161	1936	0.07%	0.010%
35	4.807	4.790	4.851	VV	285	4864	0.18%	0.024%
36	4.858	4.851	4.883	VV	103	1722	0.06%	0.009%

					retention			
37	4.894	4.883	4.910	VV	188	2070	0.08%	0.010%
38	4.970	4.910	5.000	VV	1957	28121		
39	5.026	5.000	5.068	VV	522	10543		
40	5.078	5.068	5.120	VV	257	4244		
41	5.176	5.120	5.223	VV	252	10332		
42	5.237	5.223	5.255	VV	242	3372		
43	5.265	5.255	5.279	VV	161	2003	0.07%	0.010%
44	5.374	5.279	5.388	VV	1415	20003	0.73%	0.100%
45	5.412	5.388	5.458	VV	699	14454	0.53%	0.072%
46	5.473	5.458	5.486	VV	202	1636	0.06%	0.008%
47	5.498	5.486	5.521	VV	111	1358	0.05%	0.007%
48	5.555	5.521	5.581	PV	639	8610	0.31%	0.043%
49	5.663	5.581	5.704	VV	370	11695	0.43%	0.058%
50	5.718	5.704	5.733	VV	231	2305	0.08%	0.011%
51	5.763	5.733	5.779	VV	429	5307	0.19%	0.026%
52	5.784	5.779	5.797	VV	196	1206	0.04%	0.006%
53	5.821	5.797	5.851	VV	217	4575	0.17%	0.023%
54	5.864	5.851	5.893	VV	243	4604	0.17%	0.023%
55	5.923	5.893	5.951	VV	571	11482	0.42%	0.057%
56	5.971	5.951	5.996	VV	593	9634	0.35%	0.048%
57	6.014	5.996	6.044	VV	794	11618	0.42%	0.058%
58	6.075	6.044	6.122	VV	615	14026	0.51%	0.070%
59	6.137	6.122	6.152	VV	222	3393	0.12%	0.017%
60	6.188	6.152	6.217	VV	393	8311	0.30%	0.041%
61	6.245	6.217	6.275	VV	1795	24210	0.88%	0.120%
62	6.284	6.275	6.301	VV	349	3501	0.13%	0.017%
63	6.354	6.301	6.424	VV	8282	99318	3.62%	0.494%
64	6.441	6.424	6.462	VV	495	6529	0.24%	0.032%
65	6.474	6.462	6.484	VV	375	3851	0.14%	0.019%
66	6.503	6.484	6.528	VV	1679	20381	0.74%	0.101%
67	6.538	6.528	6.561	VV	341	4892	0.18%	0.024%
68	6.574	6.561	6.599	VV	509	5890	0.21%	0.029%
69	6.625	6.599	6.656	VV	243	4682	0.17%	0.023%
70	6.676	6.656	6.700	VV	501	7388	0.27%	0.037%
71	6.712	6.700	6.727	VV	235	2576	0.09%	0.013%
72	6.743	6.727	6.778	VV	237	3906	0.14%	0.019%
73	6.796	6.778	6.827	PV	381	6179	0.23%	0.031%
74	6.851	6.827	6.891	VV	718	17100	0.62%	0.085%
75	6.911	6.891	6.935	VV	736	12238	0.45%	0.061%
76	6.957	6.935	6.995	VV	928	18602	0.68%	0.093%
77	7.013	6.995	7.032	VV	672	7344	0.27%	0.037%
78	7.055	7.032	7.092	VV	1318	16908	0.62%	0.084%
79	7.137	7.092	7.180	VV	1220	21363	0.78%	0.106%
80	7.196	7.180	7.213	VV	307	5401	0.20%	0.027%
81	7.228	7.213	7.253	VV	423	8022	0.29%	0.040%
82	7.277	7.253	7.306	VV	4751	54930	2.00%	0.273%
83	7.337	7.306	7.353	VV	381	7375	0.27%	0.037%
84	7.367	7.353	7.388	VV	415	5431	0.20%	0.027%
85	7.401	7.388	7.417	VV	283	4087	0.15%	0.020%
86	7.448	7.417	7.478	VV	614	10438	0.38%	0.052%
87	7.485	7.478	7.512	VV	123	1550	0.06%	0.008%
88	7.537	7.512	7.574	VV	670	8151	0.30%	0.041%
89	7.612	7.574	7.631	VV	354	7013	0.26%	0.035%

Instrument :

FID_C

ClientSampleId :

B-180-SB02

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

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90	7.639	7.631	7.671	VV	285	4046	0.15%	0.020%
91	7.701	7.671	7.718	VV	362	4780		
92	7.730	7.718	7.742	VV	447	4824		
93	7.756	7.742	7.774	VV	513	5903		
94	7.797	7.774	7.818	VV	552	6026		
95	7.843	7.818	7.868	VV	1424	16496		
96	7.899	7.868	7.924	VV	1963	22544	0.82%	0.112%
97	7.935	7.924	7.948	VV	256	1919	0.07%	0.010%
98	7.968	7.948	7.986	VV	949	10372	0.38%	0.052%
99	8.001	7.986	8.022	VV	341	3967	0.14%	0.020%
100	8.053	8.022	8.117	VV	1807	31230	1.14%	0.155%
101	8.146	8.117	8.218	VV	6880	90980	3.32%	0.453%
102	8.245	8.218	8.280	VV	411	11225	0.41%	0.056%
103	8.297	8.280	8.321	VV	406	6001	0.22%	0.030%
104	8.340	8.321	8.360	VV	306	3741	0.14%	0.019%
105	8.379	8.360	8.414	VV	295	3807	0.14%	0.019%
106	8.436	8.414	8.448	PV	120	1129	0.04%	0.006%
107	8.497	8.448	8.530	VV	340	10513	0.38%	0.052%
108	8.560	8.530	8.580	VV	289	7187	0.26%	0.036%
109	8.598	8.580	8.621	VV	440	8285	0.30%	0.041%
110	8.635	8.621	8.648	VV	513	6061	0.22%	0.030%
111	8.682	8.648	8.718	VV	1161	22074	0.81%	0.110%
112	8.734	8.718	8.781	VV	344	6202	0.23%	0.031%
113	8.799	8.781	8.818	PV	247	3413	0.12%	0.017%
114	8.866	8.818	8.888	VV	1257	20883	0.76%	0.104%
115	8.905	8.888	8.916	VV	502	7259	0.26%	0.036%
116	8.970	8.916	9.034	VV	1517	44730	1.63%	0.223%
117	9.053	9.034	9.088	VV	415	6589	0.24%	0.033%
118	9.107	9.088	9.136	VV	252	3102	0.11%	0.015%
119	9.151	9.136	9.190	VV	137	3664	0.13%	0.018%
120	9.209	9.190	9.236	VV	222	4769	0.17%	0.024%
121	9.267	9.236	9.308	VV	448	8863	0.32%	0.044%
122	9.337	9.308	9.374	VV	761	14981	0.55%	0.075%
123	9.387	9.374	9.416	VV	368	6048	0.22%	0.030%
124	9.430	9.416	9.448	VV	259	3650	0.13%	0.018%
125	9.474	9.448	9.504	VV	464	9828	0.36%	0.049%
126	9.525	9.504	9.555	VV	968	13250	0.48%	0.066%
127	9.580	9.555	9.601	VV	194	3367	0.12%	0.017%
128	9.614	9.601	9.634	VV	224	1872	0.07%	0.009%
129	9.665	9.634	9.721	PV	1100	18183	0.66%	0.090%
130	9.745	9.721	9.798	VV	2516	34055	1.24%	0.169%
131	9.826	9.798	9.838	PV	243	4291	0.16%	0.021%
132	9.842	9.838	9.897	VV	238	4676	0.17%	0.023%
133	9.950	9.897	9.961	VV	152	2636	0.10%	0.013%
134	10.022	9.961	10.034	VV	168	2276	0.08%	0.011%
135	10.065	10.034	10.074	VV	187	2178	0.08%	0.011%
136	10.133	10.074	10.157	VV	683	14260	0.52%	0.071%
137	10.172	10.157	10.196	VV	318	4720	0.17%	0.023%
138	10.224	10.196	10.244	VV	280	5076	0.19%	0.025%
139	10.277	10.244	10.305	VV	260	4499	0.16%	0.022%
140	10.342	10.305	10.353	PV	166	1917	0.07%	0.010%
141	10.379	10.353	10.395	VV	157	3450	0.13%	0.017%

Instrument :

FID_C

ClientSampleId :

B-180-SB02

Manual IntegrationsAPPROVED

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Supervised By :Ankita Jodhani 10/24/2024

142	10.416	10.395	10.443	VV	323	5490	0.20%	0.027%
143	10.482	10.443	10.521	VV	2119	31246		
144	10.555	10.521	10.584	VV	1025	21116		
145	10.605	10.584	10.641	VV	527	10520		
146	10.701	10.641	10.728	VV	197	6277		
147	10.763	10.728	10.778	VV	127	1977		
148	10.802	10.778	10.837	PV	315	6486	0.24%	0.032%
149	10.877	10.837	10.924	VV	331	11755	0.43%	0.058%
150	10.936	10.924	10.968	VV	357	4456	0.16%	0.022%
151	10.988	10.968	11.018	VV	436	5626	0.21%	0.028%
152	11.023	11.018	11.043	VV	86	772	0.03%	0.004%
153	11.079	11.043	11.091	PV	86	1370	0.05%	0.007%
154	11.114	11.091	11.143	VV	2099	27108	0.99%	0.135%
155	11.183	11.143	11.214	VV	5578	73867	2.69%	0.367%
156	11.227	11.214	11.238	VV	211	2947	0.11%	0.015%
157	11.276	11.238	11.314	VV	1224	24360	0.89%	0.121%
158	11.338	11.314	11.364	VV	407	8200	0.30%	0.041%
159	11.436	11.364	11.451	VV	749	22457	0.82%	0.112%
160	11.486	11.451	11.518	VV	743	25775	0.94%	0.128%
161	11.580	11.518	11.600	VV	956	37290	1.36%	0.186%
162	11.663	11.600	11.705	VV	1218	60356	2.20%	0.300%
163	11.790	11.705	11.806	VV	1070	56315	2.05%	0.280%
164	11.852	11.806	11.884	VV	4478	91629	3.34%	0.456%
165	11.898	11.884	11.911	VV	1066	16021	0.58%	0.080%
166	11.939	11.911	11.954	VV	1157	26530	0.97%	0.132%
167	11.968	11.954	12.030	VV	1062	43975	1.60%	0.219%
168	12.061	12.030	12.098	VV	1298	45906	1.67%	0.228%
169	12.128	12.098	12.154	VV	1451	40135	1.46%	0.200%
170	12.174	12.154	12.204	VV	1280	33091	1.21%	0.165%
171	12.216	12.204	12.226	VV	1120	13897	0.51%	0.069%
172	12.263	12.226	12.286	VV	1300	41157	1.50%	0.205%
173	12.315	12.286	12.328	VV	1176	28305	1.03%	0.141%
174	12.350	12.328	12.391	VV	1411	43785	1.60%	0.218%
175	12.431	12.391	12.464	VV	2273	60555	2.21%	0.301%
176	12.490	12.464	12.542	VV	5131	97234	3.55%	0.484%
177	12.556	12.542	12.568	VV	1118	15757	0.57%	0.078%
178	12.595	12.568	12.625	VV	1081	35457	1.29%	0.176%
179	12.639	12.625	12.697	VV	1040	40301	1.47%	0.200%
180	12.745	12.697	12.800	VV	1327	66008	2.41%	0.328%
181	12.812	12.800	12.833	VV	1192	21637	0.79%	0.108%
182	12.854	12.833	12.871	VV	1184	25159	0.92%	0.125%
183	12.935	12.871	13.034	VV	214150	2742036	100.00%	13.641%
184	13.040	13.034	13.068	VV	1682	31232	1.14%	0.155%
185	13.101	13.068	13.142	VV	6999	137645	5.02%	0.685%
186	13.167	13.142	13.209	VV	1915	64510	2.35%	0.321%
187	13.214	13.209	13.251	VV	1460	35182	1.28%	0.175%
188	13.267	13.251	13.288	VV	1536	31092	1.13%	0.155%
189	13.337	13.288	13.360	VV	2154	76079	2.77%	0.378%
190	13.382	13.360	13.396	VV	1934	39880	1.45%	0.198%
191	13.411	13.396	13.431	VV	1740	34929	1.27%	0.174%
192	13.443	13.431	13.464	VV	1767	32817	1.20%	0.163%
193	13.478	13.464	13.491	VV	1723	26133	0.95%	0.130%
194	13.526	13.491	13.570	VV	2126	88938	3.24%	0.442%

Instrument :

FID_C

ClientSampleId :

B-180-SB02

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/24/2024

195	13.599	13.570	13.608	VV	2080	45223		
196	13.634	13.608	13.657	VV	3152	69639		
197	13.687	13.657	13.726	VV	6796	145586		
198	13.747	13.726	13.804	VV	2590	102279		
199	13.824	13.804	13.847	VV	2017	49102		
200	13.867	13.847	13.877	VV	1900	31914		
201	13.910	13.877	13.967	VV	3200	144215	5.26%	0.717%
202	13.981	13.967	14.002	VV	2611	51455	1.88%	0.256%
203	14.018	14.002	14.038	VV	2452	49570	1.81%	0.247%
204	14.123	14.038	14.150	VV	3573	183740	6.70%	0.914%
205	14.174	14.150	14.211	VV	2938	102032	3.72%	0.508%
206	14.248	14.211	14.286	VV	11381	236945	8.64%	1.179%
207	14.308	14.286	14.360	VV	3801	140473	5.12%	0.699%
208	14.381	14.360	14.419	VV	3013	99117	3.61%	0.493%
209	14.453	14.419	14.483	VV	3965	129434	4.72%	0.644%
210	14.500	14.483	14.514	VV	3406	63168	2.30%	0.314%
211	14.530	14.514	14.581	VV	3316	122311	4.46%	0.608%
212	14.597	14.581	14.612	VV	3155	55477	2.02%	0.276%
213	14.645	14.612	14.661	VV	3647	98234	3.58%	0.489%
214	14.699	14.661	14.722	VV	4623	142436	5.19%	0.709%
215	14.744	14.722	14.761	VV	4211	89392	3.26%	0.445%
216	14.787	14.761	14.820	VV	14258	264910	9.66%	1.318%
217	14.841	14.820	14.884	VV	4339	142889	5.21%	0.711%
218	14.903	14.884	14.951	VV	3432	123540	4.51%	0.615%
219	14.984	14.951	15.015	VV	4055	131752	4.80%	0.655%
220	15.034	15.015	15.078	VV	3616	124221	4.53%	0.618%
221	15.099	15.078	15.109	VV	3403	57729	2.11%	0.287%
222	15.122	15.109	15.147	VV	3381	75783	2.76%	0.377%
223	15.172	15.147	15.190	VV	3870	88797	3.24%	0.442%
224	15.209	15.190	15.252	VV	3673	128258	4.68%	0.638%
225	15.308	15.252	15.339	VV	19035	392535	14.32%	1.953%
226	15.356	15.339	15.424	VV	4014	163360	5.96%	0.813%
227	15.439	15.424	15.457	VV	2670	48800	1.78%	0.243%
228	15.493	15.457	15.512	VV	3261	97030	3.54%	0.483%
229	15.538	15.512	15.561	VV	4544	107522	3.92%	0.535%
230	15.584	15.561	15.616	VV	3897	117616	4.29%	0.585%
231	15.629	15.616	15.658	VV	3740	84310	3.07%	0.419%
232	15.680	15.658	15.724	VV	3576	119508	4.36%	0.595%
233	15.730	15.724	15.741	VV	2571	24863	0.91%	0.124%
234	15.769	15.741	15.780	VV	3904	75646	2.76%	0.376%
235	15.807	15.780	15.837	VV	16817	291288	10.62%	1.449%
236	15.847	15.837	15.898	VV	3224	94451	3.44%	0.470%
237	15.908	15.898	15.952	VV	2123	64663	2.36%	0.322%
238	15.983	15.952	16.073	VV	2543	153340	5.59%	0.763%
239	16.120	16.073	16.145	VV	3064	103027	3.76%	0.513%
240	16.165	16.145	16.231	VV	2818	108688	3.96%	0.541%
241	16.252	16.231	16.261	VV	2634	39530	1.44%	0.197%
242	16.290	16.261	16.320	VV	20658	316075	11.53%	1.572%
243	16.336	16.320	16.388	VV	2640	75441	2.75%	0.375%
244	16.405	16.388	16.427	VV	1409	28824	1.05%	0.143%
245	16.455	16.427	16.497	VV	1629	60363	2.20%	0.300%
246	16.537	16.497	16.550	VV	1837	49765	1.81%	0.248%

Instrument :

FID_C

ClientSampleId :

B-180-SB02

1.65% 0.225%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/24/2024

247	16.590	16.550	16.614	VV	2501	73035	2.66%	0.363%
248	16.634	16.614	16.694	VV	2013	69986		
249	16.721	16.694	16.732	VV	3672	53574		
250	16.756	16.732	16.833	VV	14878	258938		
251	16.873	16.833	16.890	VV	1143	30260		
252	16.908	16.890	16.945	VV	1082	30090		
253	16.988	16.945	17.008	VV	1254	38120	1.39%	0.190%
254	17.047	17.008	17.067	VV	1461	38659	1.41%	0.192%
255	17.113	17.067	17.150	VV	2936	78601	2.87%	0.391%
256	17.206	17.150	17.284	VV	52509	799867	29.17%	3.979%
257	17.311	17.284	17.383	VV	1734	53317	1.94%	0.265%
258	17.406	17.383	17.434	VV	770	17601	0.64%	0.088%
259	17.485	17.434	17.504	VV	1277	32838	1.20%	0.163%
260	17.527	17.504	17.561	VV	1174	27924	1.02%	0.139%
261	17.642	17.561	17.698	VV	10258	205372	7.49%	1.022%
262	17.724	17.698	17.737	VV	678	12026	0.44%	0.060%
263	17.805	17.737	17.826	VV	9056	175578	6.40%	0.873%
264	17.851	17.826	17.881	VV	14687	202141	7.37%	1.006%
265	17.936	17.881	17.953	VV	3944	86405	3.15%	0.430%
266	17.972	17.953	18.006	VV	4226	73760	2.69%	0.367%
267	18.064	18.006	18.123	VV	45812	654747	23.88%	3.257%
268	18.174	18.123	18.223	VV	1403	42714	1.56%	0.212%
269	18.255	18.223	18.291	VV	1179	22701	0.83%	0.113%
270	18.320	18.291	18.354	VV	1938	39147	1.43%	0.195%
271	18.374	18.354	18.401	VV	622	11231	0.41%	0.056%
272	18.473	18.401	18.503	VV	5320	98914	3.61%	0.492%
273	18.540	18.503	18.581	VV	42898	606253	22.11%	3.016%
274	18.613	18.581	18.651	VV	5392	77304	2.82%	0.385%
275	18.661	18.651	18.669	VV	179	1051	0.04%	0.005%
276	18.734	18.669	18.754	PV	739	18680	0.68%	0.093%
277	18.777	18.754	18.800	VV	1170	18971	0.69%	0.094%
278	18.820	18.800	18.834	VV	813	11377	0.41%	0.057%
279	18.869	18.834	18.939	VV	7411	125631	4.58%	0.625%
280	19.043	18.939	19.097	VV	652	37099	1.35%	0.185%
281	19.120	19.097	19.141	VV	424	7933	0.29%	0.039%
282	19.201	19.141	19.221	VV	1290	28193	1.03%	0.140%
283	19.256	19.221	19.323	VV	3137	77538	2.83%	0.386%
284	19.362	19.323	19.374	VV	522	14136	0.52%	0.070%
285	19.498	19.374	19.524	VV	1203	63506	2.32%	0.316%
286	19.559	19.524	19.594	VV	1195	43423	1.58%	0.216%
287	19.631	19.594	19.665	VV	2879	71674	2.61%	0.357%
288	19.689	19.665	19.708	VV	1584	36551	1.33%	0.182%
289	19.895	19.708	19.941	VV	2694	281672	10.27%	1.401%
290	19.993	19.941	20.024	VV	4099	146206	5.33%	0.727%
291	20.045	20.024	20.087	VV	2838	100711	3.67%	0.501%
292	20.347	20.087	20.413	VV	4554	587634	21.43%	2.923%
293	20.524	20.413	20.646	VV	3893	475689	17.35%	2.366%
294	20.716	20.646	20.765	VV	4112	238174	8.69%	1.185%
295	20.774	20.765	20.784	VV	3042	35656	1.30%	0.177%
296	20.801	20.784	20.849	VV	3084	109789	4.00%	0.546%
297	20.863	20.849	20.958	VV	2601	154457	5.63%	0.768%
298	20.968	20.958	20.981	VV	2095	28634	1.04%	0.142%
299	21.006	20.981	21.014	VV	2036	39381	1.44%	0.196%

Instrument :

FID_C

ClientSampleId :

B-180-SB02

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/24/2024

					rters		
300	21.052	21.014	21.093	VV	2087	93537	
301	21.134	21.093	21.203	VV	2180	116968	
302	21.247	21.203	21.276	VV	1400	58206	
303	21.336	21.276	21.389	VV	1286	77992	
304	21.410	21.389	21.439	VV	1105	28894	
305	21.460	21.439	21.492	VV	879	25461	
306	21.500	21.492	21.521	VV	721	11993	
307	21.549	21.521	21.557	VV	718	14345	
308	21.598	21.557	21.645	VV	1280	44707	
309	21.657	21.645	21.726	VV	617	19578	
310	21.744	21.726	21.775	VV	189	2844	

Sum of corrected areas: 20101625

Aliphatic EPH 100224.M Wed Oct 23 11:12:28 2024

Instrument :
FID_C
ClientSampleId :
B-180-SB02

3.41% 0.465%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/24/2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/20/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/21/24
Client Sample ID:	B-180-SB02	SDG No.:	P4471
Lab Sample ID:	P4471-02	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	49.2
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
FD048558.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.61	U	0.61	1.35	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.69	U	0.69	2.03	mg/kg
Aromatic C16-C21	Aromatic C16-C21	5.41		1.95	3.38	mg/kg
Aromatic C21-C36	Aromatic C21-C36	14.6		4.06	5.41	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	42.3		40 - 140	85%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	45.2		40 - 140	90%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	21.1		40 - 140	42%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4471-02	Acq On:	23 Oct 2024 07:17
Client Sample ID:	B-180-SB02	Operator:	YP/AJ
Data file:	FD048558.D	Misc:	
Instrument:	FID_D	ALS Vial:	71
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.096	5.814	746153	4.123	200	ug/ml
Aromatic C12-C16	5.815	8.420	830222	4.37	300	ug/ml
Aromatic C16-C21	8.421	12.681	7153000	40.022	500	ug/ml
Aromatic C21-C36	12.682	18.086	17797857	107.63	800	ug/ml
Aromatic EPH	4.096	18.086	26527232	156.145		ug/ml
ortho-Terphenyl (SURR)	11.257	11.257	3878838	21.08		ug/ml
2-Bromonaphthalene (SURR)	7.374	7.374	7008961	42.33		ug/ml
2-Fluorobiphenyl (SURR)	8.224	8.224	4682999	45.16		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
 Data File : FD048558.D
 Signal(s) : FID2B.ch
 Acq On : 23 Oct 2024 07:17
 Operator : YP/AJ
 Sample : P4471-02
 Misc :
 ALS Vial : 71 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 B-180-SB02

Integration File: autoint1.e
 Quant Time: Oct 23 11:14:51 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
 Quant Title : GC Extractables
 QLast Update : Mon Sep 30 14:17:34 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...	7.374	7008961	42.333 ug/ml
Spiked Amount 50.000		Recovery =	84.67%
6) S 2-Fluorobiphenyl (SURR)	8.224	4682999	45.157 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	90.31%
11) S ortho-Terphenyl (SURR)	11.257	3878838	21.081 ug/ml
Spiked Amount 50.000		Recovery =	42.16%

Target Compounds

(f)=RT Delta > 1/2 Window

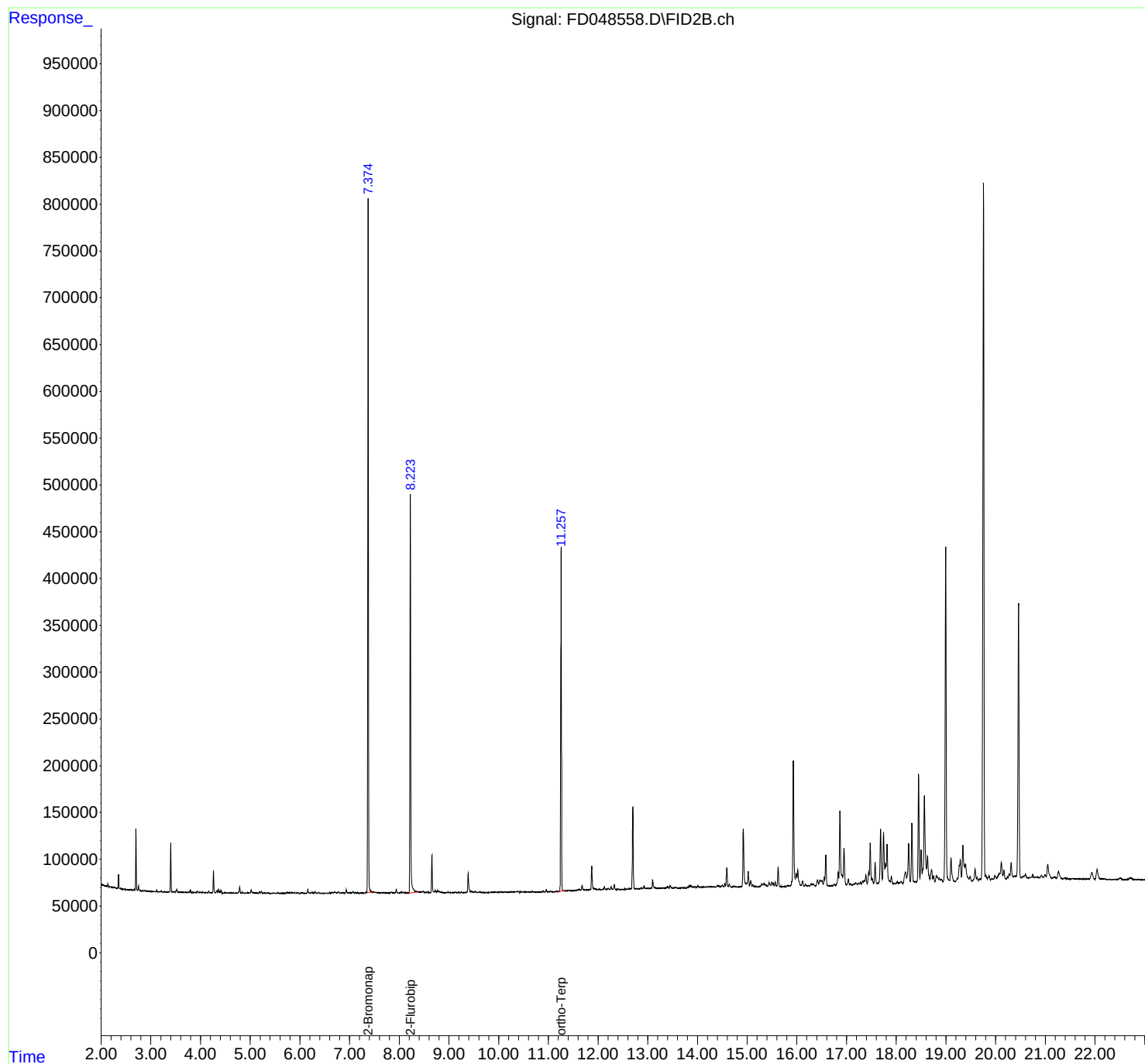
(m)=manual int.

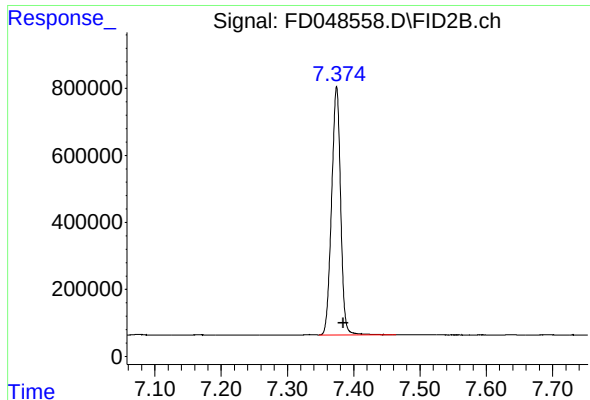
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
Data File : FD048558.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 07:17
Operator : YP/AJ
Sample : P4471-02
Misc :
ALS Vial : 71 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
B-180-SB02

Integration File: autoint1.e
Quant Time: Oct 23 11:14:51 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 14:17:34 2024
Response via : Initial Calibration
Integrator: ChemStation

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

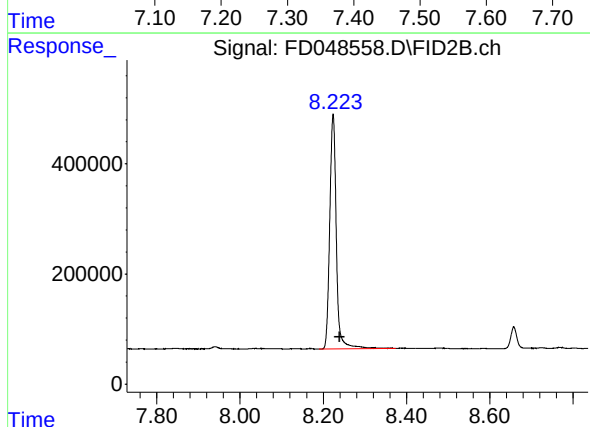




#4 2-Bromonaphthalene (SURR)

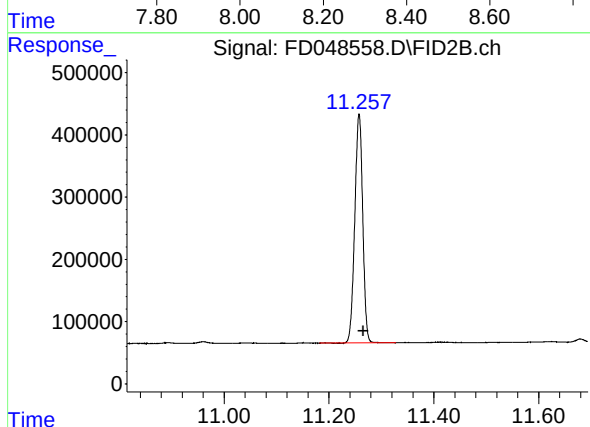
R.T.: 7.374 min
Delta R.T.: -0.010 min
Response: 7008961
Conc: 42.33 ug/ml

Instrument :
FID_D
ClientSampleId :
B-180-SB02



#6 2-Fluorobiphenyl (SURR)

R.T.: 8.224 min
Delta R.T.: -0.015 min
Response: 4682999
Conc: 45.16 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.257 min
Delta R.T.: -0.008 min
Response: 3878838
Conc: 21.08 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
Data File : FD048558.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 07:17
Sample : P4471-02
Misc :
ALS Vial : 71 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.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	4.233	4.220	4.242	PV	242	1732	0.02%	0.004%
2	4.261	4.242	4.303	VV	23787	220791	3.12%	0.569%
3	4.329	4.303	4.344	VV	2685	33489	0.47%	0.086%
4	4.358	4.344	4.373	VV	3991	38237	0.54%	0.099%
5	4.385	4.373	4.399	VV	2276	20415	0.29%	0.053%
6	4.414	4.399	4.449	VV	3690	36185	0.51%	0.093%
7	4.458	4.449	4.467	PV	217	1341	0.02%	0.003%
8	4.485	4.467	4.504	VV	774	9323	0.13%	0.024%
9	4.534	4.504	4.565	VV	538	10169	0.14%	0.026%
10	4.571	4.565	4.579	VV	254	1145	0.02%	0.003%
11	4.602	4.579	4.633	VV	689	10068	0.14%	0.026%
12	4.652	4.633	4.680	PV	316	3698	0.05%	0.010%
13	4.690	4.680	4.694	VV	173	1032	0.01%	0.003%
14	4.710	4.694	4.740	VV	467	7202	0.10%	0.019%
15	4.765	4.740	4.774	VV	1235	13830	0.20%	0.036%
16	4.788	4.774	4.816	VV	6596	74496	1.05%	0.192%
17	4.845	4.816	4.864	VV	1238	16274	0.23%	0.042%
18	4.870	4.864	4.882	VV	258	1655	0.02%	0.004%
19	4.899	4.882	4.915	VV	242	3418	0.05%	0.009%
20	4.926	4.915	4.934	VV	252	2521	0.04%	0.007%
21	4.955	4.934	4.968	VV	939	10205	0.14%	0.026%
22	4.976	4.968	4.992	VV	565	5243	0.07%	0.014%
23	4.995	4.992	4.999	VV	301	1205	0.02%	0.003%
24	5.017	4.999	5.052	VV	3495	49113	0.69%	0.127%
25	5.061	5.052	5.088	VV	776	11716	0.17%	0.030%
26	5.093	5.088	5.145	VV	524	10419	0.15%	0.027%
27	5.157	5.145	5.168	VV	366	3243	0.05%	0.008%
28	5.192	5.168	5.208	VV	1616	20632	0.29%	0.053%
29	5.228	5.208	5.254	VV	2318	24447	0.35%	0.063%
30	5.263	5.254	5.269	VV	268	1561	0.02%	0.004%
31	5.283	5.269	5.309	VV	588	8450	0.12%	0.022%
32	5.344	5.309	5.364	VV	420	9480	0.13%	0.024%
33	5.370	5.364	5.397	VV	395	4015	0.06%	0.010%
34	5.429	5.418	5.447	VV	283	3996	0.06%	0.010%
35	5.479	5.447	5.506	VV	609	11053	0.16%	0.029%
36	5.517	5.506	5.522	VV	353	1844	0.03%	0.005%

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37	5.540	5.522	5.556	VV	348	5200	0.07%	0.013%
38	5.561	5.556	5.602	VV	302	4589	0.06%	0.012%
39	5.621	5.602	5.625	VV	237	2246	0.03%	0.006%
40	5.636	5.625	5.658	VV	302	4841	0.07%	0.012%
41	5.667	5.658	5.676	VV	185	1812	0.03%	0.005%
42	5.686	5.676	5.702	VV	521	3682	0.05%	0.009%
43	5.711	5.702	5.719	VV	423	3215	0.05%	0.008%
44	5.735	5.719	5.760	VV	1167	18530	0.26%	0.048%
45	5.779	5.760	5.800	VV	981	15988	0.23%	0.041%
46	5.804	5.800	5.808	VV	631	2407	0.03%	0.006%
47	5.822	5.808	5.845	VV	1725	21195	0.30%	0.055%
48	5.850	5.845	5.862	VV	470	3114	0.04%	0.008%
49	5.867	5.862	5.874	VV	353	2106	0.03%	0.005%
50	5.892	5.874	5.920	VV	1170	16469	0.23%	0.042%
51	5.953	5.920	5.980	VV	736	17060	0.24%	0.044%
52	5.986	5.980	6.009	VV	391	4918	0.07%	0.013%
53	6.023	6.009	6.035	VV	827	10316	0.15%	0.027%
54	6.039	6.035	6.043	VV	707	2868	0.04%	0.007%
55	6.051	6.043	6.079	VV	990	12099	0.17%	0.031%
56	6.090	6.079	6.111	VV	264	3255	0.05%	0.008%
57	6.160	6.111	6.218	PV	4112	57814	0.82%	0.149%
58	6.240	6.218	6.260	VV	1060	16168	0.23%	0.042%
59	6.277	6.260	6.291	VV	872	10517	0.15%	0.027%
60	6.307	6.291	6.329	VV	2088	23504	0.33%	0.061%
61	6.337	6.329	6.359	VV	598	7949	0.11%	0.020%
62	6.380	6.359	6.409	VV	1220	16518	0.23%	0.043%
63	6.416	6.409	6.420	VV	280	1560	0.02%	0.004%
64	6.425	6.420	6.447	VV	406	3315	0.05%	0.009%
65	6.462	6.455	6.468	VV	282	1573	0.02%	0.004%
66	6.477	6.468	6.492	VV	424	3499	0.05%	0.009%
67	6.517	6.492	6.533	PV	356	6173	0.09%	0.016%
68	6.551	6.533	6.565	VV	428	5232	0.07%	0.013%
69	6.569	6.565	6.577	VV	157	1005	0.01%	0.003%
70	6.594	6.577	6.617	VV	1113	13943	0.20%	0.036%
71	6.650	6.617	6.667	VV	1347	23284	0.33%	0.060%
72	6.674	6.667	6.679	VV	970	6584	0.09%	0.017%
73	6.696	6.679	6.706	VV	1243	16245	0.23%	0.042%
74	6.712	6.706	6.745	VV	1191	17065	0.24%	0.044%
75	6.775	6.745	6.805	VV	2095	34869	0.49%	0.090%
76	6.810	6.805	6.831	VV	534	6556	0.09%	0.017%
77	6.852	6.831	6.870	VV	860	13579	0.19%	0.035%
78	6.878	6.870	6.903	VV	680	8505	0.12%	0.022%
79	6.935	6.903	6.974	VV	3817	49589	0.70%	0.128%
80	7.001	6.974	7.006	VV	631	8556	0.12%	0.022%
81	7.014	7.006	7.030	VV	762	7771	0.11%	0.020%
82	7.042	7.030	7.057	VV	916	9822	0.14%	0.025%
83	7.075	7.057	7.100	VV	2115	25388	0.36%	0.065%
84	7.107	7.100	7.119	VV	358	2870	0.04%	0.007%
85	7.129	7.119	7.135	VV	417	3211	0.05%	0.008%
86	7.141	7.135	7.149	VV	522	3403	0.05%	0.009%
87	7.169	7.149	7.202	VV	925	12779	0.18%	0.033%
88	7.230	7.202	7.239	VV	489	6546	0.09%	0.017%
89	7.242	7.239	7.265	VV	396	3312	0.05%	0.009%

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90	7.305	7.265	7.312	VV	415	8541	0.12%	0.022%
91	7.334	7.312	7.347	VV	1538	17546	0.25%	0.045%
92	7.374	7.347	7.464	VV	741916	7066809	100.00%	18.224%
93	7.482	7.464	7.489	VV	1283	18117	0.26%	0.047%
94	7.493	7.489	7.518	VV	1314	18820	0.27%	0.049%
95	7.526	7.518	7.544	VV	942	11654	0.16%	0.030%
96	7.549	7.544	7.578	VV	584	10600	0.15%	0.027%
97	7.590	7.578	7.616	VV	604	9844	0.14%	0.025%
98	7.637	7.616	7.675	VV	1036	16762	0.24%	0.043%
99	7.691	7.675	7.713	VV	867	11927	0.17%	0.031%
100	7.730	7.713	7.750	VV	580	6522	0.09%	0.017%
101	7.765	7.750	7.779	VV	529	5219	0.07%	0.013%
102	7.797	7.784	7.814	VV	418	3771	0.05%	0.010%
103	7.847	7.814	7.871	VV	1331	21929	0.31%	0.057%
104	7.874	7.871	7.880	VV	416	1961	0.03%	0.005%
105	7.890	7.880	7.901	VV	387	4097	0.06%	0.011%
106	7.909	7.901	7.913	VV	403	2366	0.03%	0.006%
107	7.940	7.913	7.968	VV	4325	51471	0.73%	0.133%
108	7.974	7.968	8.013	VV	555	7775	0.11%	0.020%
109	8.033	8.013	8.045	VV	997	12310	0.17%	0.032%
110	8.054	8.045	8.078	VV	894	14087	0.20%	0.036%
111	8.091	8.078	8.119	VV	731	9937	0.14%	0.026%
112	8.131	8.119	8.154	VV	683	8562	0.12%	0.022%
113	8.170	8.154	8.190	VV	844	7022	0.10%	0.018%
114	8.224	8.190	8.374	PV	425992	4750875	67.23%	12.252%
115	8.386	8.374	8.409	VV	1464	27278	0.39%	0.070%
116	8.424	8.409	8.454	VV	1242	29282	0.41%	0.076%
117	8.477	8.454	8.521	VV	1624	43305	0.61%	0.112%
118	8.537	8.521	8.551	VV	889	12227	0.17%	0.032%
119	8.555	8.551	8.567	VV	754	6022	0.09%	0.016%
120	8.587	8.567	8.620	VV	999	21098	0.30%	0.054%
121	8.658	8.620	8.689	VV	39984	422051	5.97%	1.088%
122	8.692	8.689	8.702	VV	1758	12239	0.17%	0.032%
123	8.723	8.702	8.745	VV	2331	40594	0.57%	0.105%
124	8.769	8.745	8.789	VV	2799	47466	0.67%	0.122%
125	8.806	8.789	8.825	VV	1612	25481	0.36%	0.066%
126	8.840	8.825	8.864	VV	1290	19523	0.28%	0.050%
127	8.869	8.864	8.875	VV	318	1894	0.03%	0.005%
128	8.891	8.875	8.905	VV	606	7421	0.11%	0.019%
129	8.909	8.905	8.921	VV	402	2466	0.03%	0.006%
130	8.952	8.921	8.962	VV	616	10206	0.14%	0.026%
131	8.974	8.962	9.017	VV	944	19146	0.27%	0.049%
132	9.051	9.017	9.095	VV	569	17811	0.25%	0.046%
133	9.117	9.095	9.164	VV	1072	19724	0.28%	0.051%
134	9.192	9.164	9.212	PV	683	12342	0.17%	0.032%
135	9.224	9.212	9.237	VV	415	4807	0.07%	0.012%
136	9.257	9.237	9.275	VV	796	12093	0.17%	0.031%
137	9.281	9.275	9.288	VV	284	1511	0.02%	0.004%
138	9.299	9.288	9.304	VV	436	3072	0.04%	0.008%
139	9.315	9.304	9.334	VV	553	6757	0.10%	0.017%
140	9.358	9.334	9.367	VV	1149	14669	0.21%	0.038%
141	9.387	9.367	9.439	VV	21077	296441	4.19%	0.764%

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142	9.447	9.439	9.464	VV	1720	22308	0.32%	0.058%
143	9.469	9.464	9.509	VV	1276	23744	0.34%	0.061%
144	9.530	9.509	9.552	VV	2041	28708	0.41%	0.074%
145	9.564	9.552	9.581	VV	490	7141	0.10%	0.018%
146	9.598	9.581	9.650	VV	676	20577	0.29%	0.053%
147	9.656	9.650	9.667	VV	528	4143	0.06%	0.011%
148	9.672	9.667	9.675	VV	372	1715	0.02%	0.004%
149	9.678	9.675	9.688	VV	440	2104	0.03%	0.005%
150	9.693	9.688	9.717	VV	348	3316	0.05%	0.009%
151	9.741	9.717	9.751	PV	419	4809	0.07%	0.012%
152	9.773	9.751	9.789	VV	364	5873	0.08%	0.015%
153	9.807	9.789	9.821	VV	463	5654	0.08%	0.015%
154	9.843	9.821	9.865	VV	600	10043	0.14%	0.026%
155	9.875	9.865	9.881	VV	405	3286	0.05%	0.008%
156	9.884	9.881	9.887	VV	391	1189	0.02%	0.003%
157	9.891	9.887	9.911	VV	560	6436	0.09%	0.017%
158	9.920	9.911	9.935	VV	555	7183	0.10%	0.019%
159	9.951	9.935	9.956	VV	824	7580	0.11%	0.020%
160	9.960	9.956	9.973	VV	799	6685	0.09%	0.017%
161	9.976	9.973	9.980	VV	381	1865	0.03%	0.005%
162	9.985	9.980	10.004	VV	538	5451	0.08%	0.014%
163	10.032	10.004	10.050	VV	1153	17551	0.25%	0.045%
164	10.056	10.050	10.073	VV	311	3498	0.05%	0.009%
165	10.095	10.073	10.104	VV	362	5149	0.07%	0.013%
166	10.126	10.104	10.137	VV	686	10083	0.14%	0.026%
167	10.145	10.137	10.172	VV	634	9772	0.14%	0.025%
168	10.177	10.172	10.181	VV	294	1382	0.02%	0.004%
169	10.191	10.181	10.199	VV	552	4334	0.06%	0.011%
170	10.214	10.199	10.230	VV	617	9126	0.13%	0.024%
171	10.266	10.230	10.297	VV	1120	24875	0.35%	0.064%
172	10.316	10.297	10.326	VV	769	9084	0.13%	0.023%
173	10.346	10.326	10.363	VV	844	14472	0.20%	0.037%
174	10.389	10.363	10.410	VV	1291	22118	0.31%	0.057%
175	10.430	10.410	10.459	VV	969	10151	0.14%	0.026%
176	10.486	10.459	10.509	VV	845	15069	0.21%	0.039%
177	10.538	10.509	10.549	VV	626	7035	0.10%	0.018%
178	10.557	10.549	10.565	VV	409	3584	0.05%	0.009%
179	10.573	10.565	10.579	VV	635	4327	0.06%	0.011%
180	10.585	10.579	10.594	VV	563	4296	0.06%	0.011%
181	10.598	10.594	10.603	VV	335	1574	0.02%	0.004%
182	10.615	10.603	10.620	VV	342	2905	0.04%	0.007%
183	10.626	10.620	10.637	VV	429	3393	0.05%	0.009%
184	10.657	10.637	10.665	VV	637	6654	0.09%	0.017%
185	10.680	10.665	10.706	VV	787	11675	0.17%	0.030%
186	10.713	10.706	10.743	VV	485	6302	0.09%	0.016%
187	10.757	10.743	10.776	VV	319	4911	0.07%	0.013%
188	10.783	10.776	10.797	VV	306	2549	0.04%	0.007%
189	10.803	10.797	10.822	VV	225	1778	0.03%	0.005%
190	10.832	10.822	10.870	VV	393	3665	0.05%	0.009%
191	10.893	10.870	10.912	PV	1242	15748	0.22%	0.041%
192	10.961	10.912	10.998	VV	2909	42635	0.60%	0.110%
193	11.005	10.998	11.010	VV	298	1602	0.02%	0.004%
194	11.040	11.018	11.055	VV	853	11685	0.17%	0.030%

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195	11.060	11.055	11.099	VV	472	6278	0.09%	0.016%
196	11.110	11.099	11.131	PV	303	3089	0.04%	0.008%
197	11.150	11.131	11.170	VV	779	10362	0.15%	0.027%
198	11.194	11.170	11.224	VV	767	11494	0.16%	0.030%
199	11.258	11.224	11.310	VV	368843	3911296	55.35%	10.087%
200	11.315	11.310	11.327	VV	899	8031	0.11%	0.021%
201	11.352	11.327	11.373	VV	1117	25514	0.36%	0.066%
202	11.415	11.373	11.447	VV	1606	52402	0.74%	0.135%
203	11.452	11.447	11.468	VV	865	9912	0.14%	0.026%
204	11.474	11.468	11.497	VV	873	13794	0.20%	0.036%
205	11.510	11.497	11.525	VV	1058	16343	0.23%	0.042%
206	11.568	11.525	11.571	VV	1243	30237	0.43%	0.078%
207	11.624	11.571	11.641	VV	2276	70527	1.00%	0.182%
208	11.645	11.641	11.655	VV	1485	11939	0.17%	0.031%
209	11.680	11.655	11.707	VV	6357	101055	1.43%	0.261%
210	11.717	11.707	11.736	VV	1630	24213	0.34%	0.062%
211	11.760	11.736	11.775	VV	1580	31084	0.44%	0.080%
212	11.778	11.775	11.800	VV	1390	19238	0.27%	0.050%
213	11.840	11.800	11.854	VV	2005	52853	0.75%	0.136%
214	11.874	11.854	11.920	VV	26744	370098	5.24%	0.954%
215	11.926	11.920	11.952	VV	2732	44651	0.63%	0.115%
216	11.955	11.952	11.973	VV	2108	24255	0.34%	0.063%
217	11.981	11.973	11.987	VV	1742	13449	0.19%	0.035%
218	11.993	11.987	12.007	VV	1718	19181	0.27%	0.049%
219	12.026	12.007	12.047	VV	1972	40427	0.57%	0.104%
220	12.062	12.047	12.079	VV	1576	27608	0.39%	0.071%
221	12.128	12.079	12.152	VV	4541	101893	1.44%	0.263%
222	12.167	12.152	12.180	VV	1780	27842	0.39%	0.072%
223	12.203	12.180	12.239	VV	2728	64723	0.92%	0.167%
224	12.262	12.239	12.292	VV	4233	75450	1.07%	0.195%
225	12.326	12.292	12.350	VV	6565	114286	1.62%	0.295%
226	12.356	12.350	12.407	VV	1455	42556	0.60%	0.110%
227	12.409	12.407	12.417	VV	1257	7281	0.10%	0.019%
228	12.421	12.417	12.431	VV	1206	9054	0.13%	0.023%
229	12.437	12.431	12.447	VV	1133	10612	0.15%	0.027%
230	12.453	12.447	12.460	VV	1203	8635	0.12%	0.022%
231	12.471	12.460	12.487	VV	1430	19502	0.28%	0.050%
232	12.492	12.487	12.502	VV	1071	8509	0.12%	0.022%
233	12.521	12.502	12.534	VV	1429	22852	0.32%	0.059%
234	12.539	12.534	12.565	VV	1505	21193	0.30%	0.055%
235	12.581	12.565	12.605	VV	1362	28387	0.40%	0.073%
236	12.624	12.605	12.642	VV	2253	37098	0.52%	0.096%
237	12.658	12.642	12.665	VV	1780	21357	0.30%	0.055%
238	12.699	12.665	12.742	VV	88924	1088273	15.40%	2.807%
239	12.747	12.742	12.764	VV	1718	19939	0.28%	0.051%
240	12.782	12.764	12.825	VV	1797	52376	0.74%	0.135%
241	12.832	12.825	12.846	VV	1377	16270	0.23%	0.042%
242	12.870	12.846	12.896	VV	2870	58141	0.82%	0.150%
243	12.925	12.896	12.975	VV	4481	108670	1.54%	0.280%
244	13.000	12.975	13.037	VV	1867	60141	0.85%	0.155%
245	13.060	13.037	13.076	VV	2366	44668	0.63%	0.115%
246	13.098	13.076	13.195	VV	10423	243129	3.44%	0.627%

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247	13.202	13.195	13.207	VV	1720	11458	0.16%	0.030%
248	13.211	13.207	13.230	VV	1672	21270	0.30%	0.055%
249	13.242	13.230	13.257	VV	1681	24891	0.35%	0.064%
250	13.274	13.257	13.279	VV	1803	22420	0.32%	0.058%
251	13.282	13.279	13.286	VV	1757	7680	0.11%	0.020%
252	13.296	13.286	13.327	VV	1868	41443	0.59%	0.107%
253	13.333	13.327	13.339	VV	1624	11006	0.16%	0.028%
254	13.370	13.339	13.381	VV	1994	44067	0.62%	0.114%
255	13.402	13.381	13.431	VV	3395	70180	0.99%	0.181%
256	13.452	13.431	13.499	VV	4300	100098	1.42%	0.258%
257	13.507	13.499	13.522	VV	1750	21749	0.31%	0.056%
258	13.559	13.522	13.596	VV	2096	73944	1.05%	0.191%
259	13.602	13.596	13.622	VV	1514	20397	0.29%	0.053%
260	13.628	13.622	13.634	VV	1329	8933	0.13%	0.023%
261	13.639	13.634	13.650	VV	1335	11649	0.16%	0.030%
262	13.678	13.650	13.707	VV	1572	47696	0.67%	0.123%
263	13.713	13.707	13.743	VV	1610	30794	0.44%	0.079%
264	13.753	13.743	13.766	VV	1304	17167	0.24%	0.044%
265	13.812	13.766	13.819	VV	1870	48279	0.68%	0.125%
266	13.841	13.819	13.868	VV	4215	90998	1.29%	0.235%
267	13.886	13.868	13.908	VV	3112	60287	0.85%	0.155%
268	13.916	13.908	13.922	VV	1906	15880	0.22%	0.041%
269	13.944	13.922	13.971	VV	2629	61302	0.87%	0.158%
270	13.987	13.971	13.994	VV	1881	23897	0.34%	0.062%
271	14.009	13.994	14.029	VV	3411	53072	0.75%	0.137%
272	14.044	14.029	14.055	VV	1976	28907	0.41%	0.075%
273	14.060	14.055	14.065	VV	1676	9444	0.13%	0.024%
274	14.070	14.065	14.075	VV	1707	10309	0.15%	0.027%
275	14.088	14.075	14.093	VV	1880	18934	0.27%	0.049%
276	14.107	14.093	14.128	VV	1944	37097	0.52%	0.096%
277	14.146	14.128	14.165	VV	1988	38850	0.55%	0.100%
278	14.189	14.165	14.205	VV	2006	41734	0.59%	0.108%
279	14.231	14.205	14.250	VV	2100	50920	0.72%	0.131%
280	14.255	14.250	14.282	VV	1960	36261	0.51%	0.094%
281	14.306	14.282	14.331	VV	2165	54728	0.77%	0.141%
282	14.335	14.331	14.342	VV	1653	11423	0.16%	0.029%
283	14.352	14.342	14.378	VV	1718	33594	0.48%	0.087%
284	14.400	14.378	14.417	VV	2891	57072	0.81%	0.147%
285	14.431	14.417	14.451	VV	2881	49493	0.70%	0.128%
286	14.455	14.451	14.460	VV	1848	9367	0.13%	0.024%
287	14.467	14.460	14.475	VV	2193	17696	0.25%	0.046%
288	14.500	14.475	14.527	VV	3162	73872	1.05%	0.191%
289	14.549	14.527	14.564	VV	5178	74341	1.05%	0.192%
290	14.590	14.564	14.618	VV	22057	308234	4.36%	0.795%
291	14.640	14.618	14.680	VV	4402	89550	1.27%	0.231%
292	14.738	14.680	14.768	VV	2116	72829	1.03%	0.188%
293	14.786	14.768	14.830	VV	1451	43841	0.62%	0.113%
294	14.859	14.830	14.889	VV	1573	43535	0.62%	0.112%
295	14.921	14.889	14.977	VV	62913	955247	13.52%	2.463%
296	14.989	14.977	14.996	VV	4678	49648	0.70%	0.128%
297	15.020	14.996	15.047	VV	17668	271036	3.84%	0.699%
298	15.072	15.047	15.098	VV	7221	132061	1.87%	0.341%
299	15.114	15.098	15.140	VV	3222	52467	0.74%	0.135%

					rteres			
300	15.166	15.140	15.215	VV	1741	51552	0.73%	0.133%
301	15.221	15.215	15.225	VV	858	4562	0.06%	0.012%
302	15.290	15.225	15.312	VV	3770	102169	1.45%	0.263%
303	15.333	15.312	15.363	VV	3896	95798	1.36%	0.247%
304	15.376	15.363	15.409	VV	2853	59353	0.84%	0.153%
305	15.441	15.409	15.472	VV	4926	112596	1.59%	0.290%
306	15.500	15.472	15.514	VV	5631	95276	1.35%	0.246%
307	15.526	15.514	15.545	VV	4077	58967	0.83%	0.152%
308	15.563	15.545	15.592	VV	5725	87433	1.24%	0.225%
309	15.622	15.592	15.678	VV	21431	295925	4.19%	0.763%
310	15.691	15.678	15.701	VV	586	6780	0.10%	0.017%
311	15.708	15.701	15.719	VV	479	4300	0.06%	0.011%
312	15.724	15.719	15.732	VV	532	3150	0.04%	0.008%
313	15.738	15.732	15.751	VV	591	5433	0.08%	0.014%
314	15.770	15.751	15.777	VV	674	8828	0.12%	0.023%
315	15.779	15.777	15.785	VV	610	2751	0.04%	0.007%
316	15.814	15.785	15.849	VV	1641	44276	0.63%	0.114%
317	15.872	15.849	15.878	VV	1630	23811	0.34%	0.061%
318	15.928	15.878	15.967	VV	135179	1966926	27.83%	5.072%
319	15.985	15.967	16.001	VV	14259	231789	3.28%	0.598%
320	16.017	16.001	16.089	VV	18019	363358	5.14%	0.937%
321	16.113	16.089	16.147	VV	5895	104566	1.48%	0.270%
322	16.173	16.147	16.210	VV	2580	45961	0.65%	0.119%
323	16.236	16.210	16.256	VV	1231	23179	0.33%	0.060%
324	16.261	16.256	16.265	VV	906	4398	0.06%	0.011%
325	16.292	16.265	16.312	VV	2941	54484	0.77%	0.141%
326	16.336	16.312	16.381	VV	2405	59435	0.84%	0.153%
327	16.413	16.381	16.439	VV	6888	135880	1.92%	0.350%
328	16.462	16.439	16.478	VV	6441	122028	1.73%	0.315%
329	16.490	16.478	16.502	VV	6063	81002	1.15%	0.209%
330	16.508	16.502	16.530	VV	5705	68813	0.97%	0.177%
331	16.551	16.530	16.561	VV	9381	115117	1.63%	0.297%
332	16.581	16.561	16.629	VV	33391	467968	6.62%	1.207%
333	16.634	16.629	16.655	VV	635	6252	0.09%	0.016%
334	16.659	16.655	16.662	VV	513	1601	0.02%	0.004%
335	16.666	16.662	16.679	VV	481	3627	0.05%	0.009%
336	16.689	16.679	16.694	VV	277	1818	0.03%	0.005%
337	16.704	16.694	16.720	VV	381	2077	0.03%	0.005%
338	16.753	16.720	16.777	PV	2147	38045	0.54%	0.098%
339	16.831	16.777	16.843	VV	14445	231481	3.28%	0.597%
340	16.865	16.843	16.900	VV	80109	1208030	17.09%	3.115%
341	16.909	16.900	16.923	VV	11586	146854	2.08%	0.379%
342	16.948	16.923	17.002	VV	40135	665440	9.42%	1.716%
343	17.036	17.002	17.064	VV	7072	116078	1.64%	0.299%
344	17.081	17.064	17.116	VV	1732	33535	0.47%	0.086%
345	17.139	17.116	17.152	VV	1540	21617	0.31%	0.056%
346	17.183	17.152	17.190	VV	2390	41394	0.59%	0.107%
347	17.197	17.190	17.214	VV	2355	27337	0.39%	0.070%
348	17.256	17.214	17.269	VV	2559	61920	0.88%	0.160%
349	17.281	17.269	17.300	VV	3379	48917	0.69%	0.126%
350	17.323	17.300	17.334	VV	4474	67902	0.96%	0.175%
351	17.352	17.334	17.367	VV	5219	89047	1.26%	0.230%

						rteres		
352	17.388	17.367	17.414	VV	11425	177963	2.52%	0.459%
353	17.445	17.414	17.455	VV	13748	189340	2.68%	0.488%
354	17.476	17.455	17.502	VV	44797	643810	9.11%	1.660%
355	17.515	17.502	17.546	VV	6415	116162	1.64%	0.300%
356	17.574	17.546	17.615	VV	24151	358052	5.07%	0.923%
357	17.684	17.615	17.720	VV	59434	1027245	14.54%	2.649%
358	17.744	17.720	17.769	VV	56182	903036	12.78%	2.329%
359	17.785	17.769	17.795	VV	22325	320735	4.54%	0.827%
360	17.814	17.795	17.877	VV	43273	770529	10.90%	1.987%
361	17.901	17.877	17.932	VV	8830	154346	2.18%	0.398%
362	17.943	17.932	17.951	VV	1242	13119	0.19%	0.034%
363	17.960	17.951	17.980	VV	1407	19402	0.27%	0.050%
364	18.017	17.980	18.055	VV	3080	78628	1.11%	0.203%
365	18.096	18.055	18.135	VV	3141	100622	1.42%	0.259%
366	18.185	18.135	18.200	VBA	13243	331320	4.69%	0.854%
					Sum of corrected areas:		38776854	

Aromatic EPH 093024.M Wed Oct 23 11:26:07 2024



CALIBRATION SUMMARY

Initial Calibration Report for SequenceID : FC100224AL

AreaCount

Parameter Range	FC067312.D	FC067313.D	FC067314.D	FC067315.D	FC067316.D	
Aliphatic C9-C12	36157754.000	18468554.000	7796622.000	3912320.000	2066528.000	
Aliphatic C12-C16	24671572.000	12642565.000	5319639.000	2676246.000	1382016.000	
Aliphatic C16-C21	36539622.000	18852548.000	8005327.000	4100822.000	2096729.000	
Aliphatic C21-C28	47235980.000	24590379.000	10215208.000	5219473.000	2697991.000	
Aliphatic C28-C40	57341685.000	29822245.000	12674884.000	6440179.000	3544258.000	
Aliphatic EPH	201946613.000	104376291.000	44011680.000	22349040.000	11787522.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	128354.4879996	5.284				
Aliphatic C12-C16	130957.677	4.567				
Aliphatic C16-C21	131476.1019996	5.732				
Aliphatic C21-C28	126823.664	5.15				
Aliphatic C28-C40	105215.848333	8.211				
Aliphatic EPH	121110.9372216	6.036				

Concentration

Parameter Range	FC067312.D	FC067313.D	FC067314.D	FC067315.D	FC067316.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	FC067312.D	FC067313.D	FC067314.D	FC067315.D	FC067316.D	
Aliphatic C9-C12	120525.846666	123123.693333	129943.700000	130410.666666	137768.533333	
Aliphatic C12-C16	123357.860000	126425.650000	132990.975000	133812.300000	138201.600000	
Aliphatic C16-C21	121798.740000	125683.653333	133422.116666	136694.066666	139781.933333	

Initial Calibration Report for SequenceID : FC100224AL

Aliphatic C21-C28	118089.950000	122951.895000	127690.100000	130486.825000	134899.550000	
Aliphatic C28-C40	95569.475000	99407.483333	105624.033333	107336.316666	118141.933333	
Aliphatic EPH	112192.562777	115973.656666	122254.666666	124161.333333	130972.466666	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\F100224AL\
 Data File : FC067312.D
 Signal(s) : FID1A.ch
 Acq On : 30 Sep 2024 10:32
 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: Oct 01 09:09:41 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:07:31 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)	11.507	14031279	90.846 ug/ml
Spiked Amount 50.000		Recovery =	181.69%
12) S 1-chlorooctadecane (S...	12.944	10549566	91.667 ug/ml
Spiked Amount 50.000		Recovery =	183.33%
Target Compounds			
1) T n-Nonane (C9)	3.274	11861469	92.598 ug/ml
2) T n-Decane (C10)	4.341	12068578	92.595 ug/ml
3) T A~Naphthalene (C11.7)	5.920	13362934	92.860 ug/ml
4) T n-Dodecane (C12)	6.359	12227707	93.059 ug/ml
5) T A~2-methylnaphthalene...	6.977	13024556	93.287 ug/ml
6) T n-Tetradecane (C14)	8.152	12180763	93.109 ug/ml
7) T n-Hexadecane (C16)	9.752	12490809	92.415 ug/ml
8) T n-Octadecane (C18)	11.195	12572452	91.327 ug/ml
10) T n-Eicosane (C20)	12.501	12084501	91.351 ug/ml
11) T n-Heneicosane (C21)	13.112	11882669	91.183 ug/ml
13) T n-Docosane (C22)	13.698	11869877	91.916 ug/ml
14) T n-Tetracosane (C24)	14.799	11932581	92.694 ug/ml
15) T n-Hexacosane (C26)	15.819	11803866	93.014 ug/ml
16) T n-Octacosane (C28)	16.768	11629656	92.309 ug/ml
17) T n-Tricontane (C30)	17.655	11716937	91.007 ug/ml
18) T n-Dotriacontane (C32)	18.486	11186042	89.566 ug/ml
19) T n-Tetratriacontane (C34)	19.267	9833987	89.675 ug/ml
20) T n-Hexatriacontane (C36)	20.005	8551618	89.685 ug/ml
21) T n-Octatriacontane (C38)	20.730	8143888	91.977 ug/ml
22) T n-Tetracontane (C40)	21.618	7909213	91.385 ug/ml

(f)=RT Delta > 1/2 Window

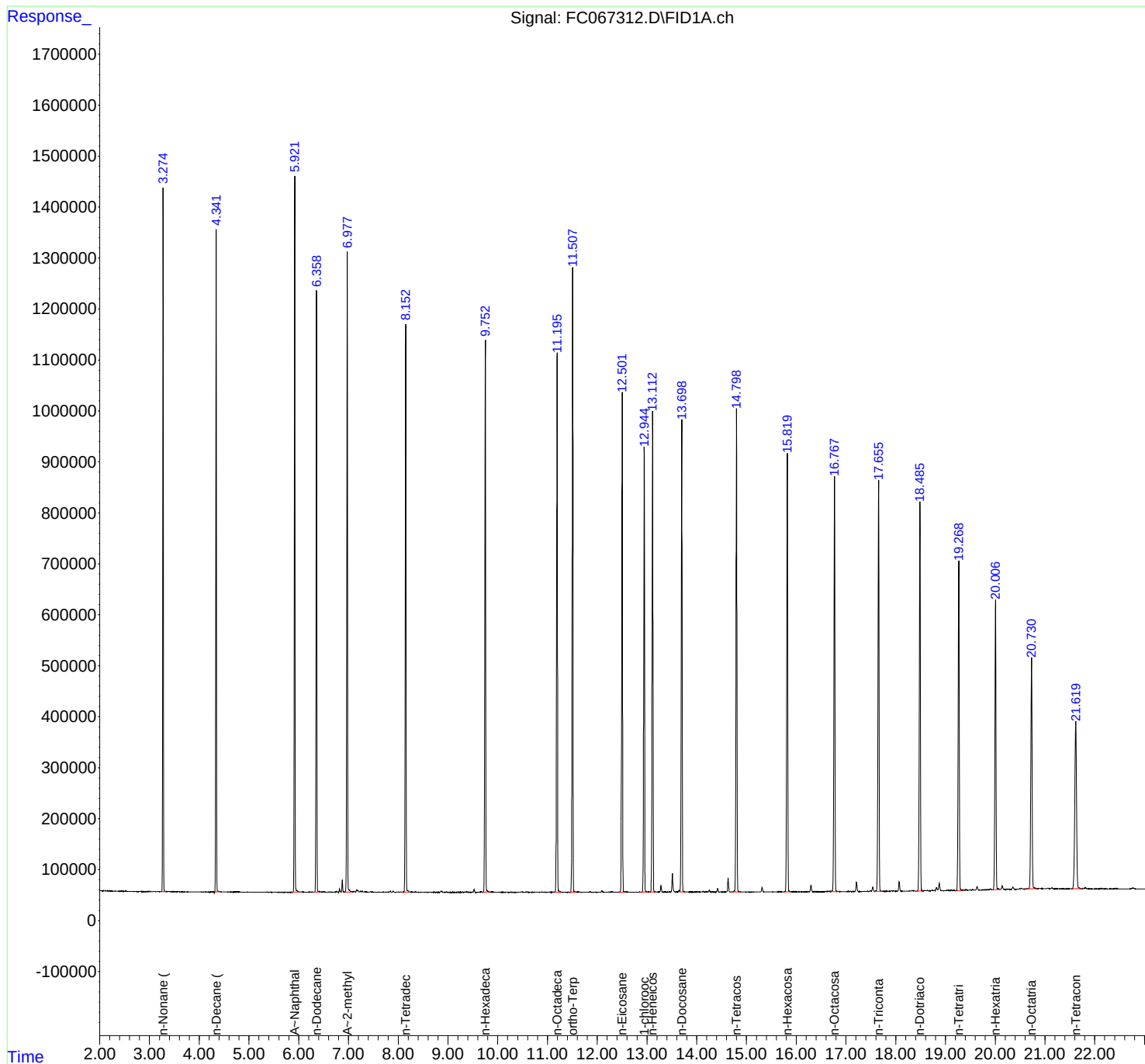
(m)=manual int.

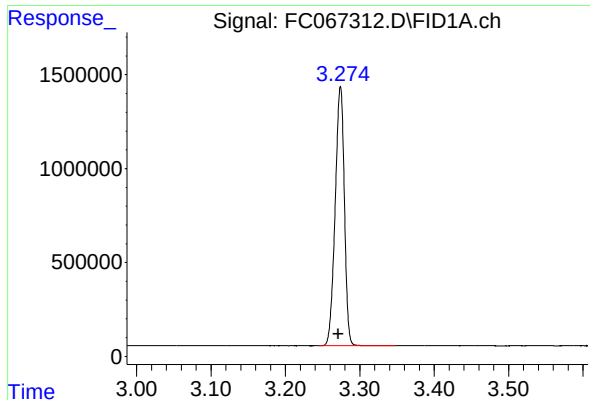
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067312.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 10:32
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Oct 01 09:09:41 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:07:31 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)

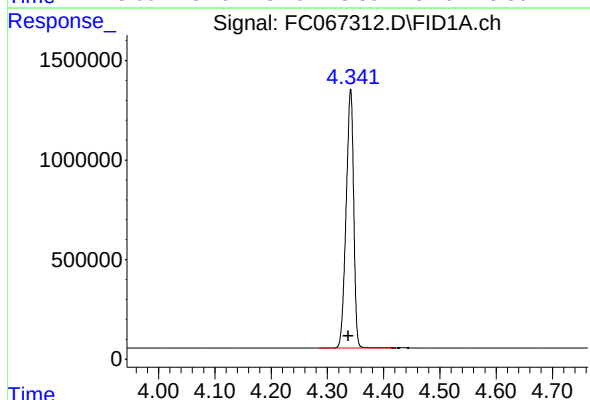
R.T.: 3.274 min
Delta R.T.: 0.003 min
Response: 11861469
Conc: 92.60 ug/ml

Instrument :

FID_C

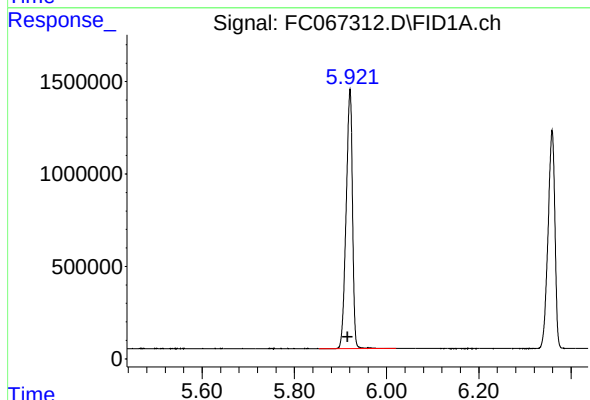
ClientSampleId :

100 PPM ALIPHATIC HC STD1



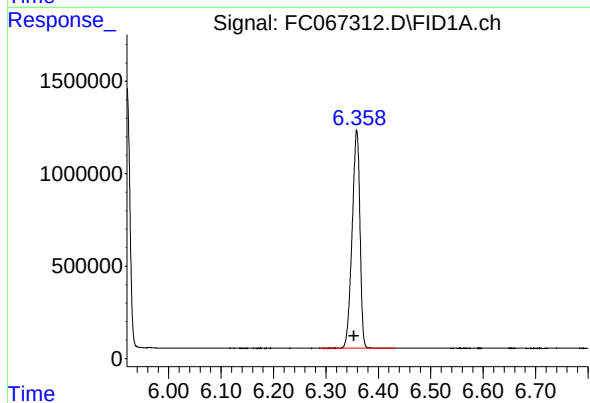
#2 n-Decane (C10)

R.T.: 4.341 min
Delta R.T.: 0.004 min
Response: 12068578
Conc: 92.59 ug/ml



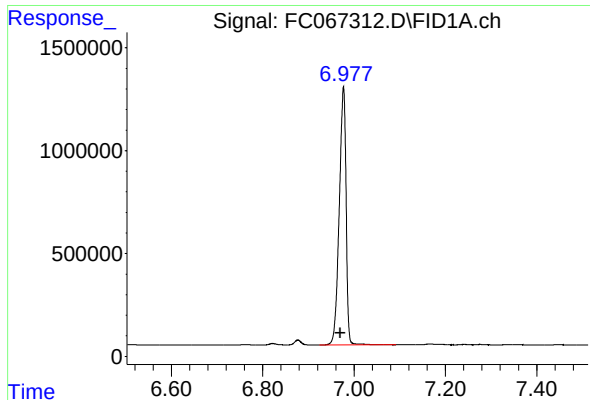
#3 A~Naphthalene (C11.7)

R.T.: 5.920 min
Delta R.T.: 0.005 min
Response: 13362934
Conc: 92.86 ug/ml



#4 n-Dodecane (C12)

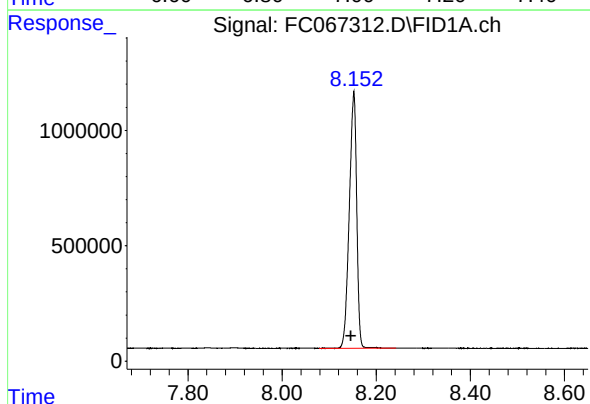
R.T.: 6.359 min
Delta R.T.: 0.005 min
Response: 12227707
Conc: 93.06 ug/ml



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

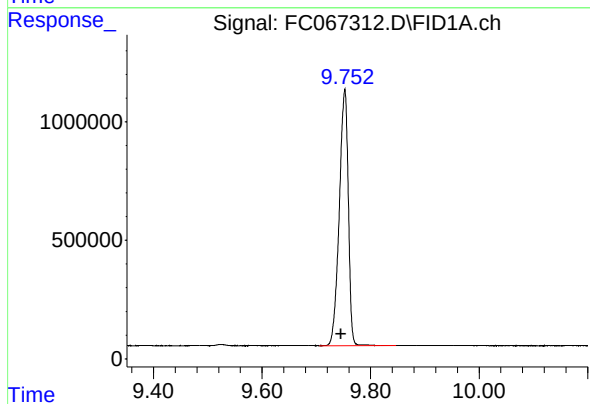
R.T.: 6.977 min
Delta R.T.: 0.007 min
Response: 13024556
Conc: 93.29 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



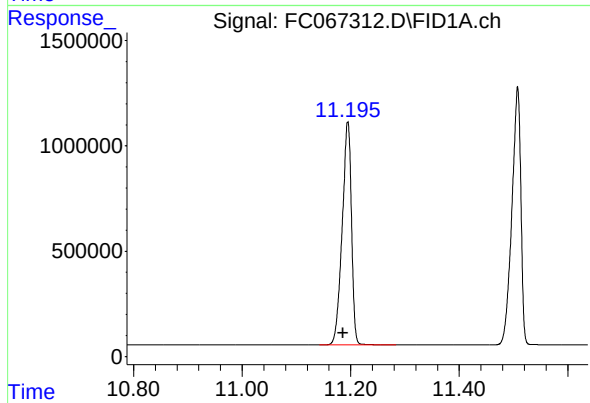
#6 n-Tetradecane (C14)

R.T.: 8.152 min
Delta R.T.: 0.006 min
Response: 12180763
Conc: 93.11 ug/ml



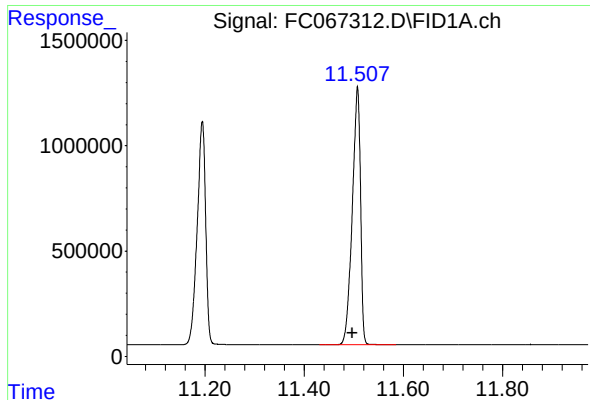
#7 n-Hexadecane (C16)

R.T.: 9.752 min
Delta R.T.: 0.007 min
Response: 12490809
Conc: 92.42 ug/ml



#8 n-Octadecane (C18)

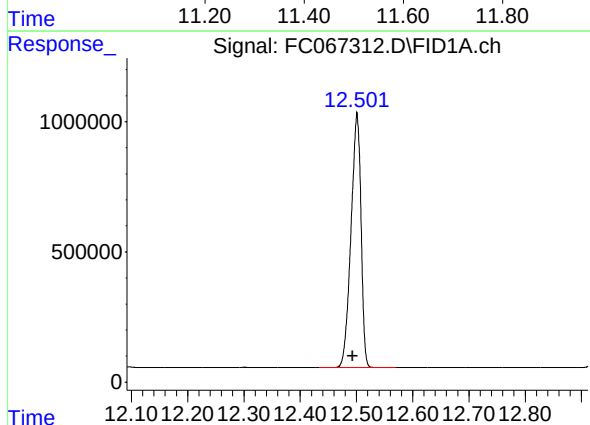
R.T.: 11.195 min
Delta R.T.: 0.008 min
Response: 12572452
Conc: 91.33 ug/ml



#9 ortho-Terphenyl (SURR)

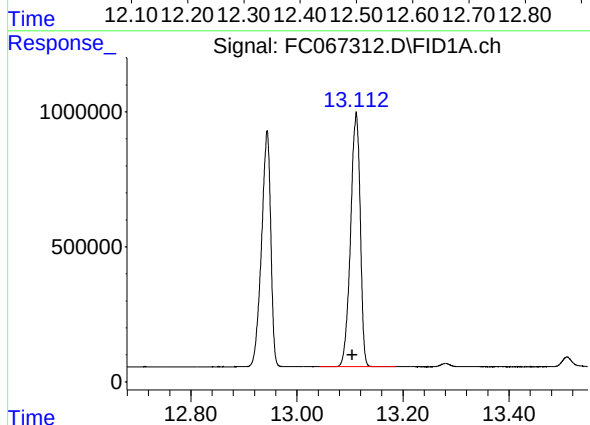
R.T.: 11.507 min
Delta R.T.: 0.010 min
Response: 14031279
Conc: 90.85 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



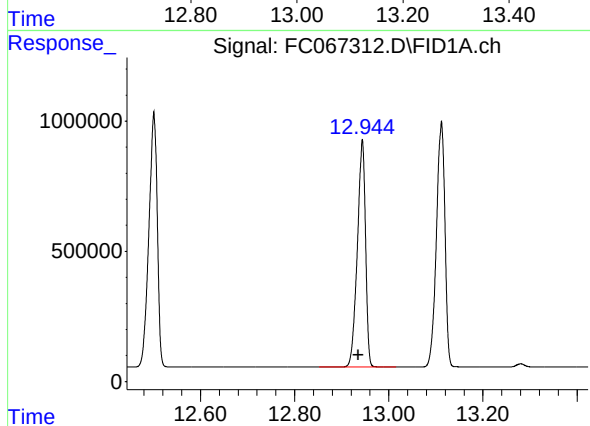
#10 n-Eicosane (C20)

R.T.: 12.501 min
Delta R.T.: 0.007 min
Response: 12084501
Conc: 91.35 ug/ml



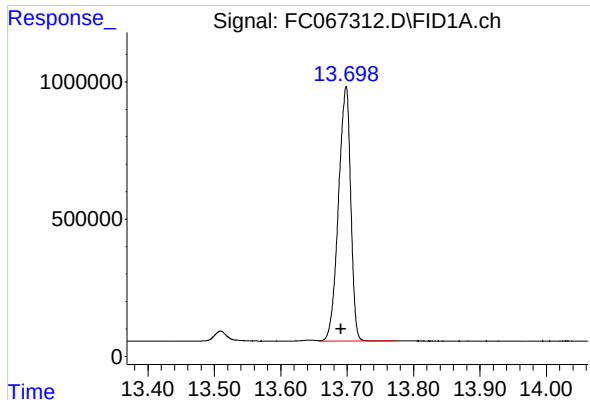
#11 n-Heneicosane (C21)

R.T.: 13.112 min
Delta R.T.: 0.007 min
Response: 11882669
Conc: 91.18 ug/ml



#12 1-chlorooctadecane (SURR)

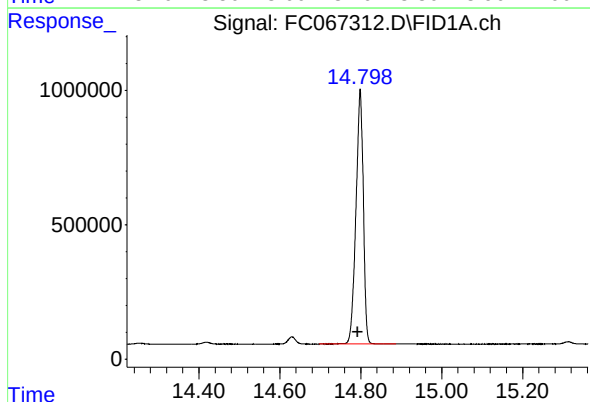
R.T.: 12.944 min
Delta R.T.: 0.008 min
Response: 10549566
Conc: 91.67 ug/ml



#13 n-Docosane (C22)

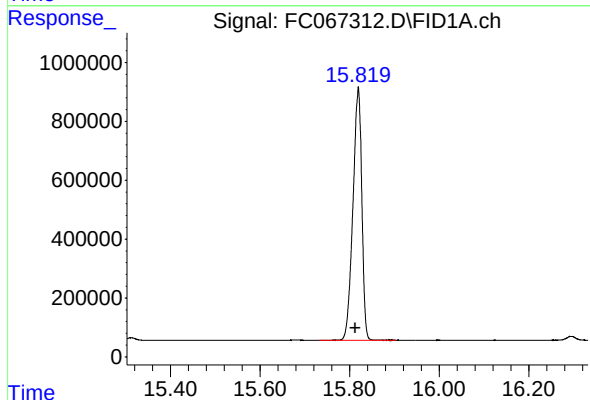
R.T.: 13.698 min
Delta R.T.: 0.007 min
Response: 11869877
Conc: 91.92 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



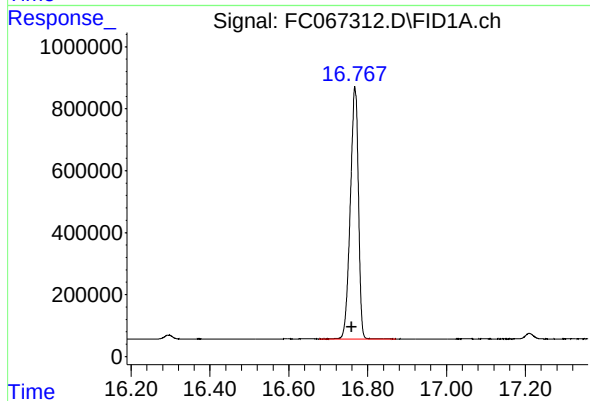
#14 n-Tetracosane (C24)

R.T.: 14.799 min
Delta R.T.: 0.007 min
Response: 11932581
Conc: 92.69 ug/ml



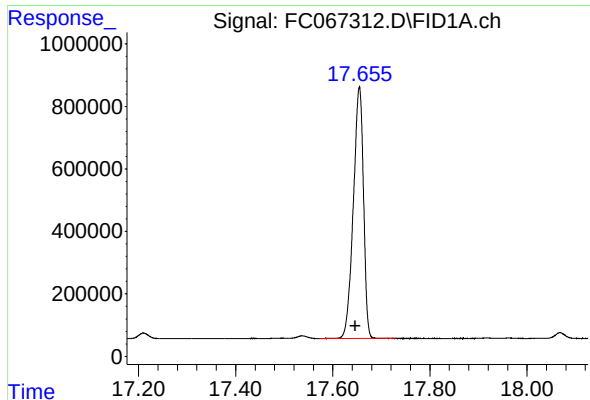
#15 n-Hexacosane (C26)

R.T.: 15.819 min
Delta R.T.: 0.007 min
Response: 11803866
Conc: 93.01 ug/ml



#16 n-Octacosane (C28)

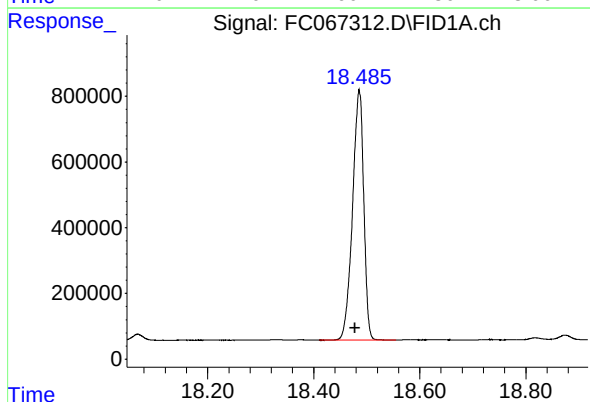
R.T.: 16.768 min
Delta R.T.: 0.008 min
Response: 11629656
Conc: 92.31 ug/ml



#17 n-Tricontane (C30)

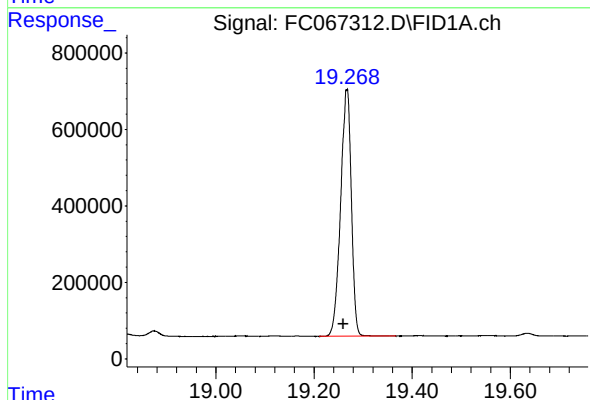
R.T.: 17.655 min
Delta R.T.: 0.009 min
Response: 11716937
Conc: 91.01 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



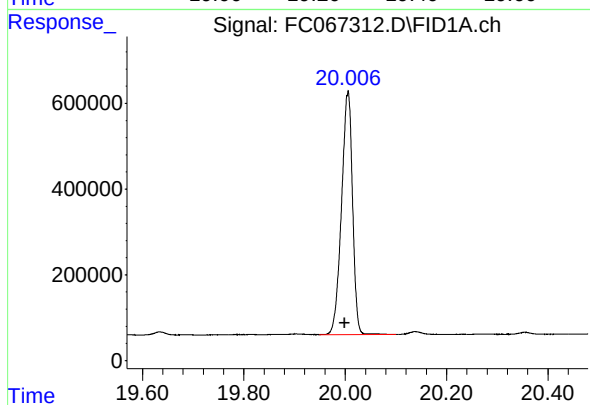
#18 n-Dotriacontane (C32)

R.T.: 18.486 min
Delta R.T.: 0.008 min
Response: 11186042
Conc: 89.57 ug/ml



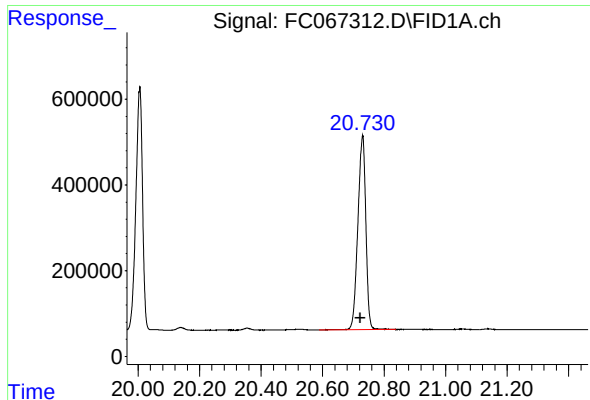
#19 n-Tetratriacontane (C34)

R.T.: 19.267 min
Delta R.T.: 0.007 min
Response: 9833987
Conc: 89.67 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.005 min
Delta R.T.: 0.006 min
Response: 8551618
Conc: 89.68 ug/ml



#21 n-Octatriacontane (C38)

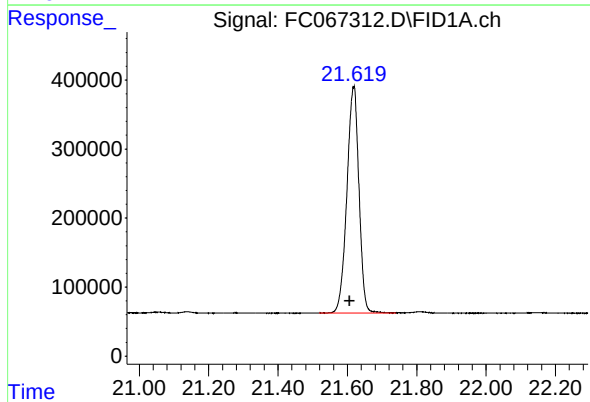
R.T.: 20.730 min
Delta R.T.: 0.007 min
Response: 8143888
Conc: 91.98 ug/ml

Instrument :

FID_C

ClientSampleId :

100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 21.618 min
Delta R.T.: 0.011 min
Response: 7909213
Conc: 91.39 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067312.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 10:32
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 100224.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	3.348	BB	1383198	11861469	84.54%	4.690%
2	4.341	4.285	4.422	BB	1311158	12068578	86.01%	4.772%
3	5.920	5.853	6.020	BB	1395892	13362934	95.24%	5.284%
4	6.359	6.287	6.433	BB	1182095	12227707	87.15%	4.835%
5	6.977	6.923	7.092	BV	1262404	13024556	92.83%	5.150%
6	8.152	8.078	8.242	BB	1106375	12180763	86.81%	4.816%
7	9.752	9.705	9.847	BB	1075584	12490809	89.02%	4.939%
8	11.195	11.142	11.283	BB	1062471	12572452	89.60%	4.971%
9	11.507	11.430	11.585	BB	1222706	14031279	100.00%	5.548%
10	12.501	12.433	12.570	BB	971541	12084501	86.13%	4.778%
11	12.944	12.852	13.015	BB	876626	10549566	75.19%	4.171%
12	13.112	13.042	13.187	BB	943769	11882669	84.69%	4.698%
13	13.698	13.658	13.773	VB	931064	11869877	84.60%	4.693%
14	14.799	14.697	14.887	BB	947814	11932581	85.04%	4.718%
15	15.819	15.732	15.903	BB	851235	11803866	84.13%	4.667%
16	16.768	16.677	16.872	BB	807852	11629656	82.88%	4.598%
17	17.655	17.572	17.730	PB	806791	11716937	83.51%	4.633%
18	18.486	18.410	18.555	BV	761825	11186042	79.72%	4.423%
19	19.267	19.210	19.367	BB	643849	9833987	70.09%	3.888%
20	20.005	19.948	20.100	BB	565289	8551618	60.95%	3.381%
21	20.730	20.588	20.838	BV	454057	8143888	58.04%	3.220%
22	21.618	21.518	21.740	BB	326286	7909213	56.37%	3.127%
Sum of corrected areas:						252914944		

Aliphatic EPH 100224.M Tue Oct 01 09:20:12 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
 Data File : FC067313.D
 Signal(s) : FID1A.ch
 Acq On : 30 Sep 2024 11:10
 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: Oct 01 09:10:44 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:07:31 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)	11.501	7231579	49.067 ug/ml
Spiked Amount 50.000		Recovery =	98.13%
12) S 1-chlorooctadecane (S...	12.939	5426500	49.202 ug/ml
Spiked Amount 50.000		Recovery =	98.40%
Target Compounds			
1) T n-Nonane (C9)	3.272	6059731	49.124 ug/ml
2) T n-Decane (C10)	4.338	6163543	49.107 ug/ml
3) T A~Naphthalene (C11.7)	5.917	6821781	49.160 ug/ml
4) T n-Dodecane (C12)	6.355	6245280	49.239 ug/ml
5) T A~2-methylnaphthalene...	6.972	6641948	49.224 ug/ml
6) T n-Tetradecane (C14)	8.149	6219770	49.240 ug/ml
7) T n-Hexadecane (C16)	9.748	6422795	49.393 ug/ml
8) T n-Octadecane (C18)	11.188	6493088	49.304 ug/ml
10) T n-Eicosane (C20)	12.497	6235508	49.267 ug/ml
11) T n-Heneicosane (C21)	13.107	6123952	49.160 ug/ml
13) T n-Docosane (C22)	13.693	6132673	49.489 ug/ml
14) T n-Tetracosane (C24)	14.795	6211203	50.079 ug/ml
15) T n-Hexacosane (C26)	15.814	6151165	50.225 ug/ml
16) T n-Octacosane (C28)	16.763	6095338	50.316 ug/ml
17) T n-Tricontane (C30)	17.650	6178045	50.245 ug/ml
18) T n-Dotriacontane (C32)	18.481	5889852	49.755 ug/ml
19) T n-Tetratriacontane (C34)	19.263	5143313	49.454 ug/ml
20) T n-Hexatriacontane (C36)	20.001	4380994	48.444 ug/ml
21) T n-Octatriacontane (C38)	20.724	4146667	48.790 ug/ml
22) T n-Tetracontane (C40)	21.611	4083374	49.304 ug/ml

(f)=RT Delta > 1/2 Window

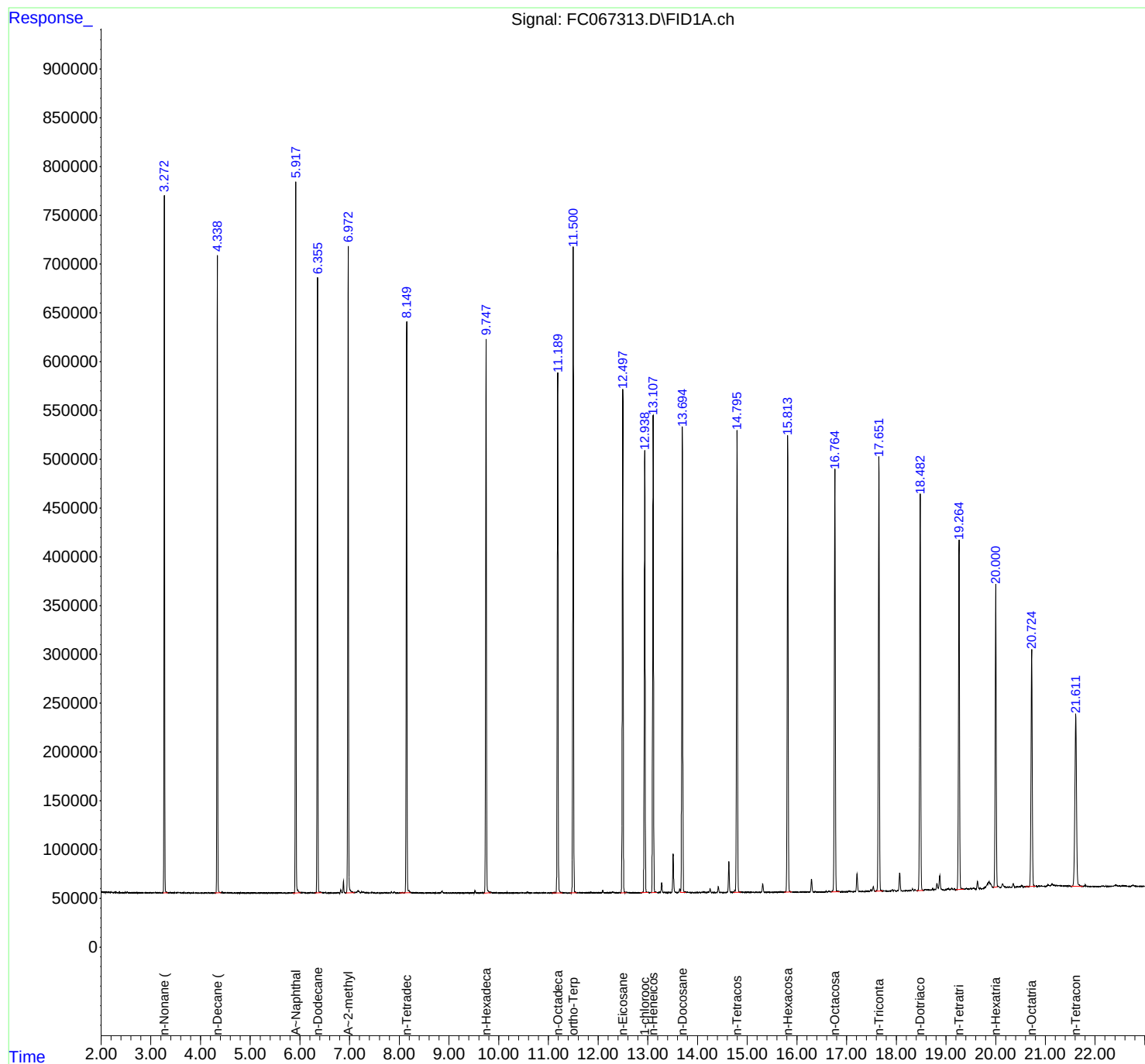
(m)=manual int.

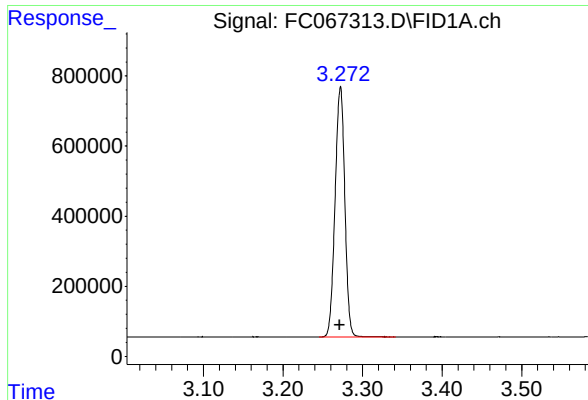
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067313.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 11:10
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Oct 01 09:10:44 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:07:31 2024
Response via : Initial Calibration
Integrator: ChemStation

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

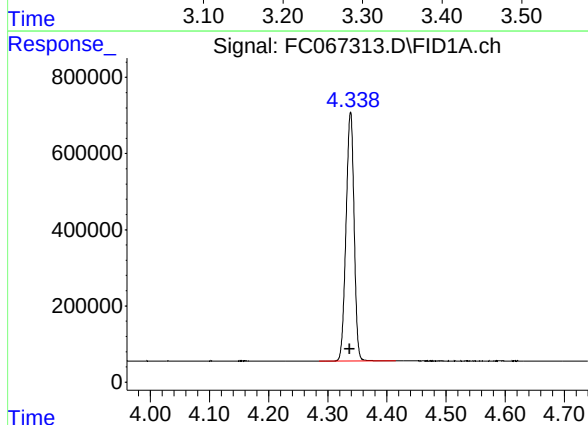




#1 n-Nonane (C9)

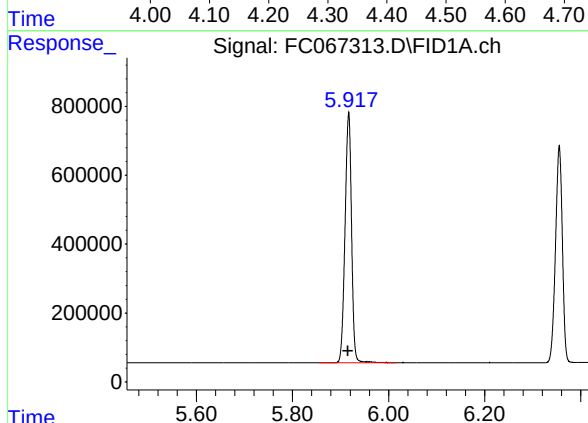
R.T.: 3.272 min
Delta R.T.: 0.001 min
Response: 6059731
Conc: 49.12 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



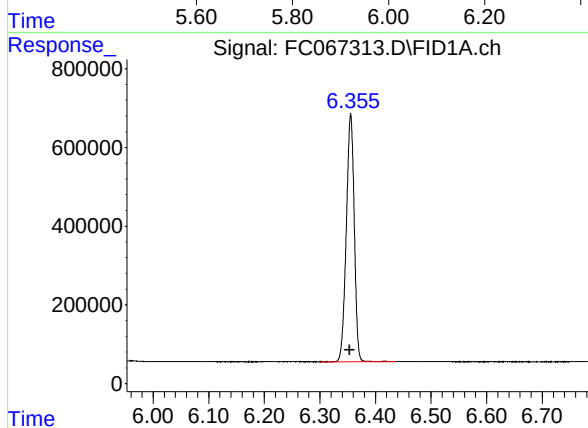
#2 n-Decane (C10)

R.T.: 4.338 min
Delta R.T.: 0.001 min
Response: 6163543
Conc: 49.11 ug/ml



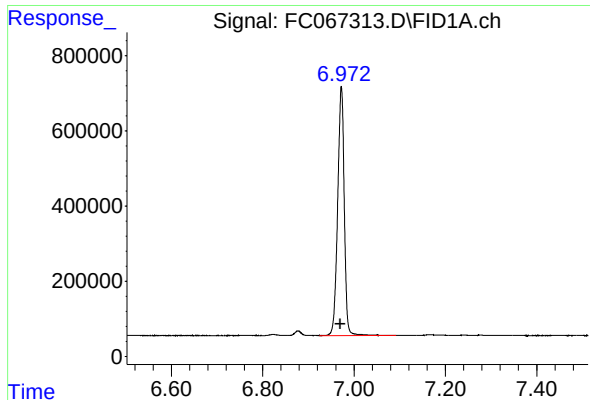
#3 A~Naphthalene (C11.7)

R.T.: 5.917 min
Delta R.T.: 0.002 min
Response: 6821781
Conc: 49.16 ug/ml



#4 n-Dodecane (C12)

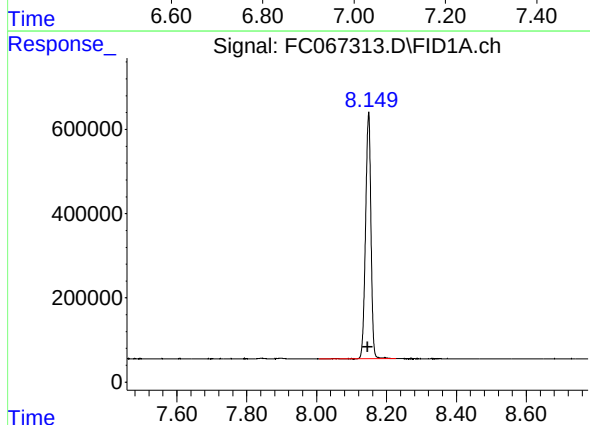
R.T.: 6.355 min
Delta R.T.: 0.002 min
Response: 6245280
Conc: 49.24 ug/ml



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

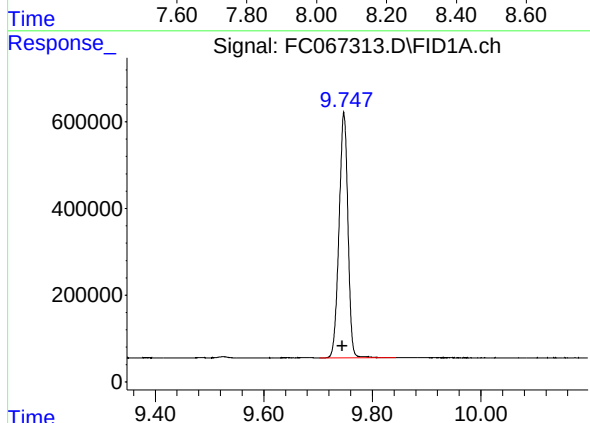
R.T.: 6.972 min
Delta R.T.: 0.002 min
Response: 6641948
Conc: 49.22 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



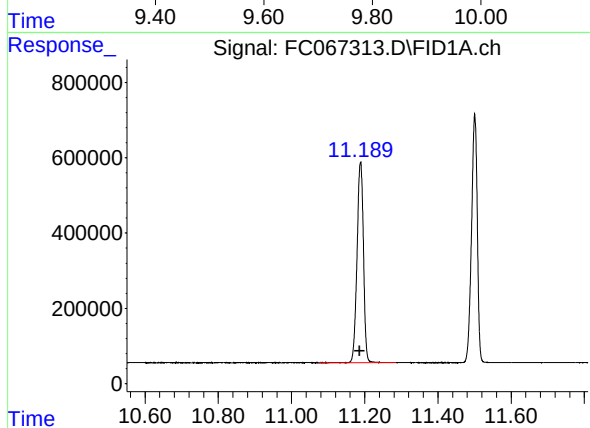
#6 n-Tetradecane (C14)

R.T.: 8.149 min
Delta R.T.: 0.002 min
Response: 6219770
Conc: 49.24 ug/ml



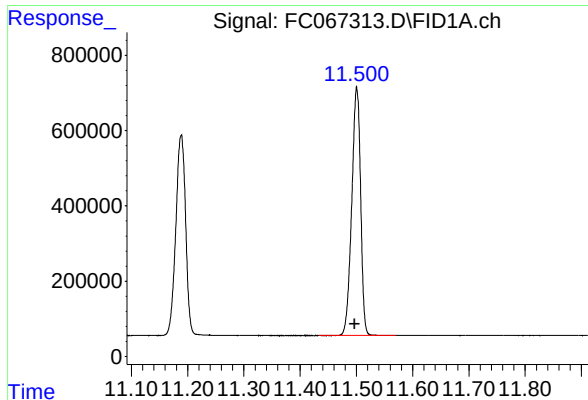
#7 n-Hexadecane (C16)

R.T.: 9.748 min
Delta R.T.: 0.003 min
Response: 6422795
Conc: 49.39 ug/ml



#8 n-Octadecane (C18)

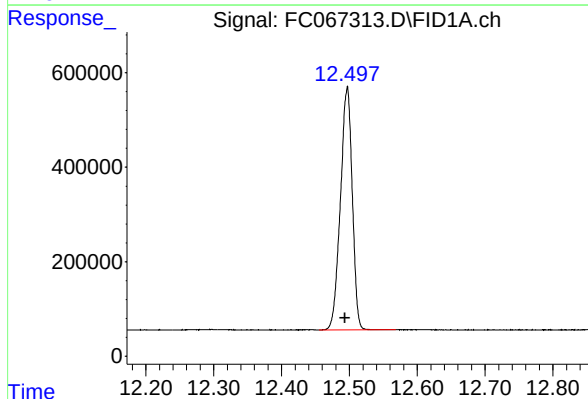
R.T.: 11.188 min
Delta R.T.: 0.002 min
Response: 6493088
Conc: 49.30 ug/ml



#9 ortho-Terphenyl (SURR)

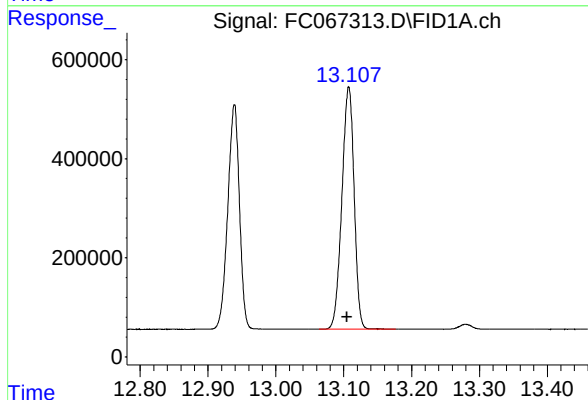
R.T.: 11.501 min
Delta R.T.: 0.004 min
Response: 7231579
Conc: 49.07 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



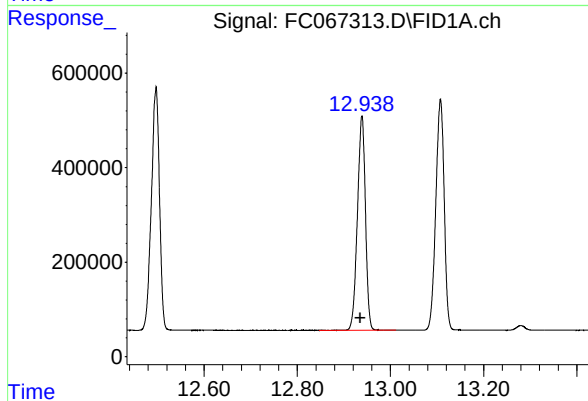
#10 n-Eicosane (C20)

R.T.: 12.497 min
Delta R.T.: 0.003 min
Response: 6235508
Conc: 49.27 ug/ml



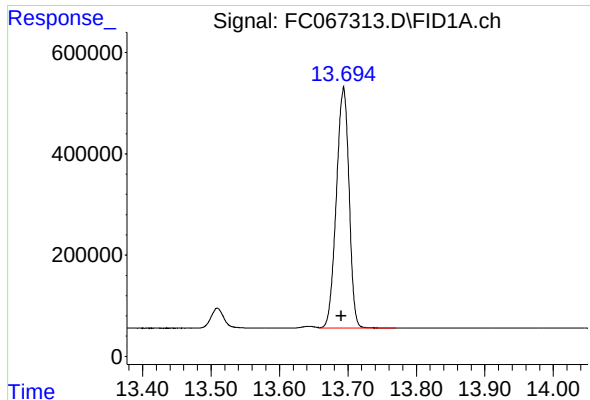
#11 n-Heneicosane (C21)

R.T.: 13.107 min
Delta R.T.: 0.003 min
Response: 6123952
Conc: 49.16 ug/ml



#12 1-chlorooctadecane (SURR)

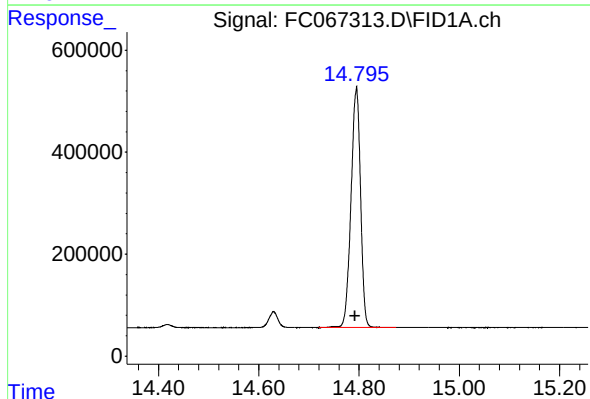
R.T.: 12.939 min
Delta R.T.: 0.003 min
Response: 5426500
Conc: 49.20 ug/ml



#13 n-Docosane (C22)

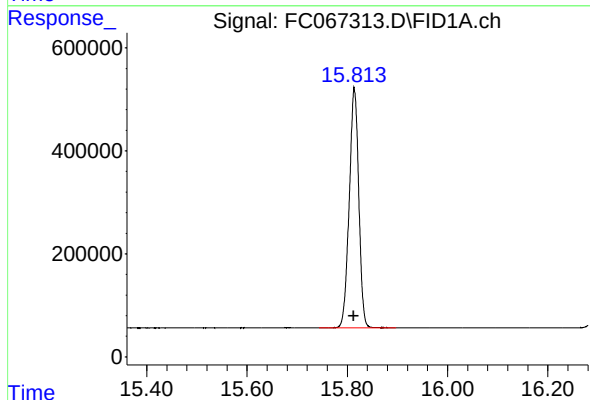
R.T.: 13.693 min
Delta R.T.: 0.003 min
Response: 6132673
Conc: 49.49 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



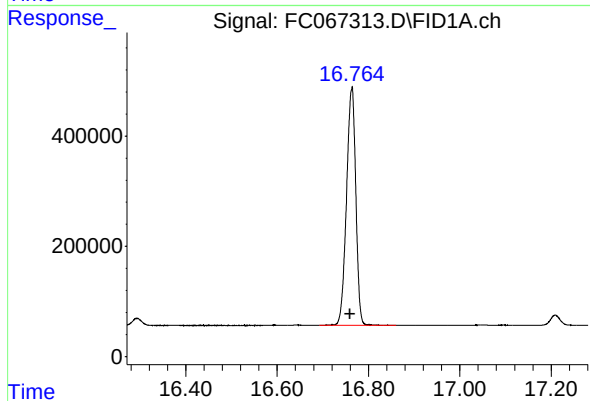
#14 n-Tetracosane (C24)

R.T.: 14.795 min
Delta R.T.: 0.003 min
Response: 6211203
Conc: 50.08 ug/ml



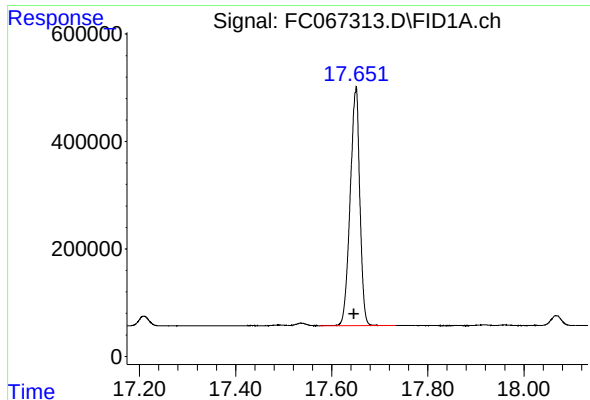
#15 n-Hexacosane (C26)

R.T.: 15.814 min
Delta R.T.: 0.002 min
Response: 6151165
Conc: 50.23 ug/ml



#16 n-Octacosane (C28)

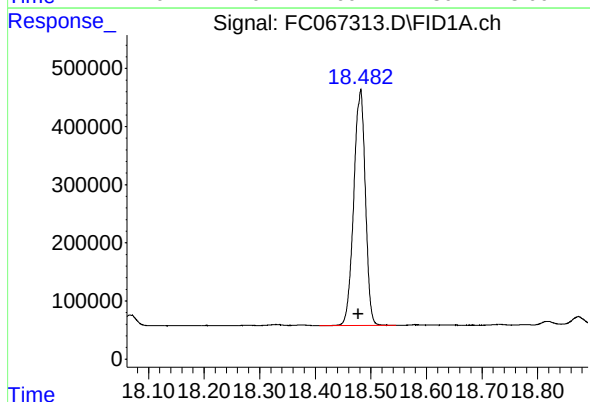
R.T.: 16.763 min
Delta R.T.: 0.004 min
Response: 6095338
Conc: 50.32 ug/ml



#17 n-Tricontane (C30)

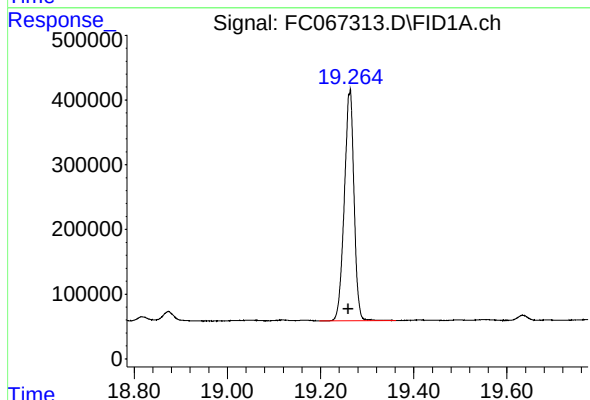
R.T.: 17.650 min
Delta R.T.: 0.004 min
Response: 6178045
Conc: 50.25 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



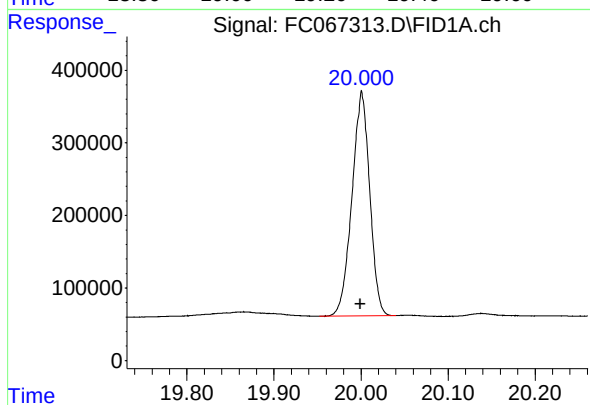
#18 n-Dotriacontane (C32)

R.T.: 18.481 min
Delta R.T.: 0.003 min
Response: 5889852
Conc: 49.76 ug/ml



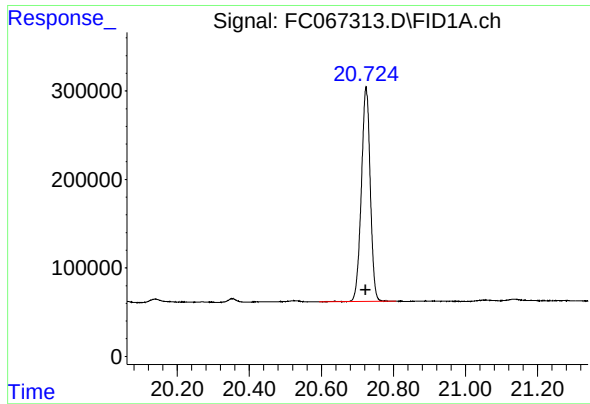
#19 n-Tetratriacontane (C34)

R.T.: 19.263 min
Delta R.T.: 0.003 min
Response: 5143313
Conc: 49.45 ug/ml



#20 n-Hexatriacontane (C36)

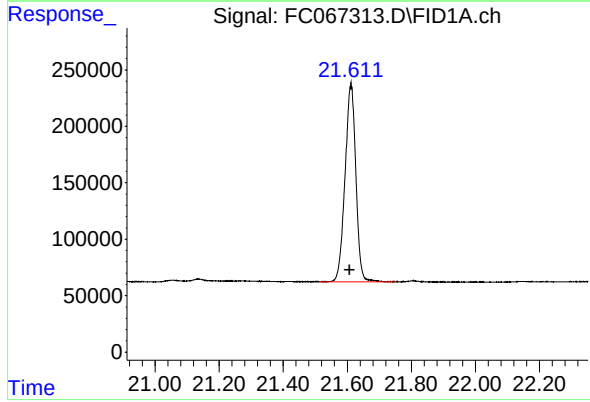
R.T.: 20.001 min
Delta R.T.: 0.002 min
Response: 4380994
Conc: 48.44 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.724 min
Delta R.T.: 0.001 min
Response: 4146667
Conc: 48.79 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 21.611 min
Delta R.T.: 0.004 min
Response: 4083374
Conc: 49.30 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067313.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 11:10
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 100224.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	3.342	BB	711248	6059731	83.80%	4.644%
2	4.338	4.285	4.415	BB	654161	6163543	85.23%	4.723%
3	5.917	5.855	6.015	BB	727635	6821781	94.33%	5.227%
4	6.355	6.299	6.437	BB	629757	6245280	86.36%	4.786%
5	6.972	6.924	7.092	BV	663765	6641948	91.85%	5.090%
6	8.149	8.007	8.227	BB	582329	6219770	86.01%	4.766%
7	9.748	9.702	9.844	BB	565794	6422795	88.82%	4.922%
8	11.189	11.075	11.285	BB	532485	6493088	89.79%	4.976%
9	11.501	11.434	11.570	BB	661071	7231579	100.00%	5.542%
10	12.497	12.455	12.569	BB	514506	6235508	86.23%	4.778%
11	12.939	12.847	13.012	BB	454745	5426500	75.04%	4.158%
12	13.107	13.064	13.177	BB	490056	6123952	84.68%	4.693%
13	13.693	13.658	13.770	VB	476110	6132673	84.80%	4.699%
14	14.795	14.720	14.874	BB	473209	6211203	85.89%	4.760%
15	15.814	15.744	15.897	BB	466583	6151165	85.06%	4.714%
16	16.763	16.692	16.860	BB	430820	6095338	84.29%	4.671%
17	17.650	17.574	17.734	PB	438958	6178045	85.43%	4.734%
18	18.481	18.407	18.545	BV	399853	5889852	81.45%	4.513%
19	19.263	19.197	19.362	BB	356265	5143313	71.12%	3.941%
20	20.001	19.952	20.040	PV	308867	4380994	60.58%	3.357%
21	20.724	20.594	20.807	BB	242057	4146667	57.34%	3.178%
22	21.611	21.512	21.752	BB	176788	4083374	56.47%	3.129%
Sum of corrected areas:						130498098		

Aliphatic EPH 100224.M Tue Oct 01 09:20:55 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
 Data File : FC067314.D
 Signal(s) : FID1A.ch
 Acq On : 30 Sep 2024 11:48
 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: Oct 01 09:08:18 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:07:31 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)	11.497	3089013	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
12) S 1-chlorooctadecane (S...	12.936	2301706	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T n-Nonane (C9)	3.271	2561935	20.000 ug/ml
2) T n-Decane (C10)	4.337	2606750	20.000 ug/ml
3) T A~Naphthalene (C11.7)	5.915	2878074	20.000 ug/ml
4) T n-Dodecane (C12)	6.353	2627937	20.000 ug/ml
5) T A~2-methylnaphthalene...	6.970	2792361	20.000 ug/ml
6) T n-Tetradecane (C14)	8.146	2616449	20.000 ug/ml
7) T n-Hexadecane (C16)	9.745	2703190	20.000 ug/ml
8) T n-Octadecane (C18)	11.186	2753269	20.000 ug/ml
10) T n-Eicosane (C20)	12.493	2645737	20.000 ug/ml
11) T n-Heneicosane (C21)	13.105	2606321	20.000 ug/ml
13) T n-Docosane (C22)	13.690	2582773	20.000 ug/ml
14) T n-Tetracosane (C24)	14.792	2574621	20.000 ug/ml
15) T n-Hexacosane (C26)	15.813	2538087	20.000 ug/ml
16) T n-Octacosane (C28)	16.760	2519727	20.000 ug/ml
17) T n-Tricontane (C30)	17.646	2574944	20.000 ug/ml
18) T n-Dotriacontane (C32)	18.478	2497831	20.000 ug/ml
19) T n-Tetratriacontane (C34)	19.260	2193263	20.000 ug/ml
20) T n-Hexatriacontane (C36)	19.999	1907034	20.000 ug/ml
21) T n-Octatriacontane (C38)	20.723	1770855	20.000 ug/ml
22) T n-Tetracontane (C40)	21.608	1730957	20.000 ug/ml

(f)=RT Delta > 1/2 Window

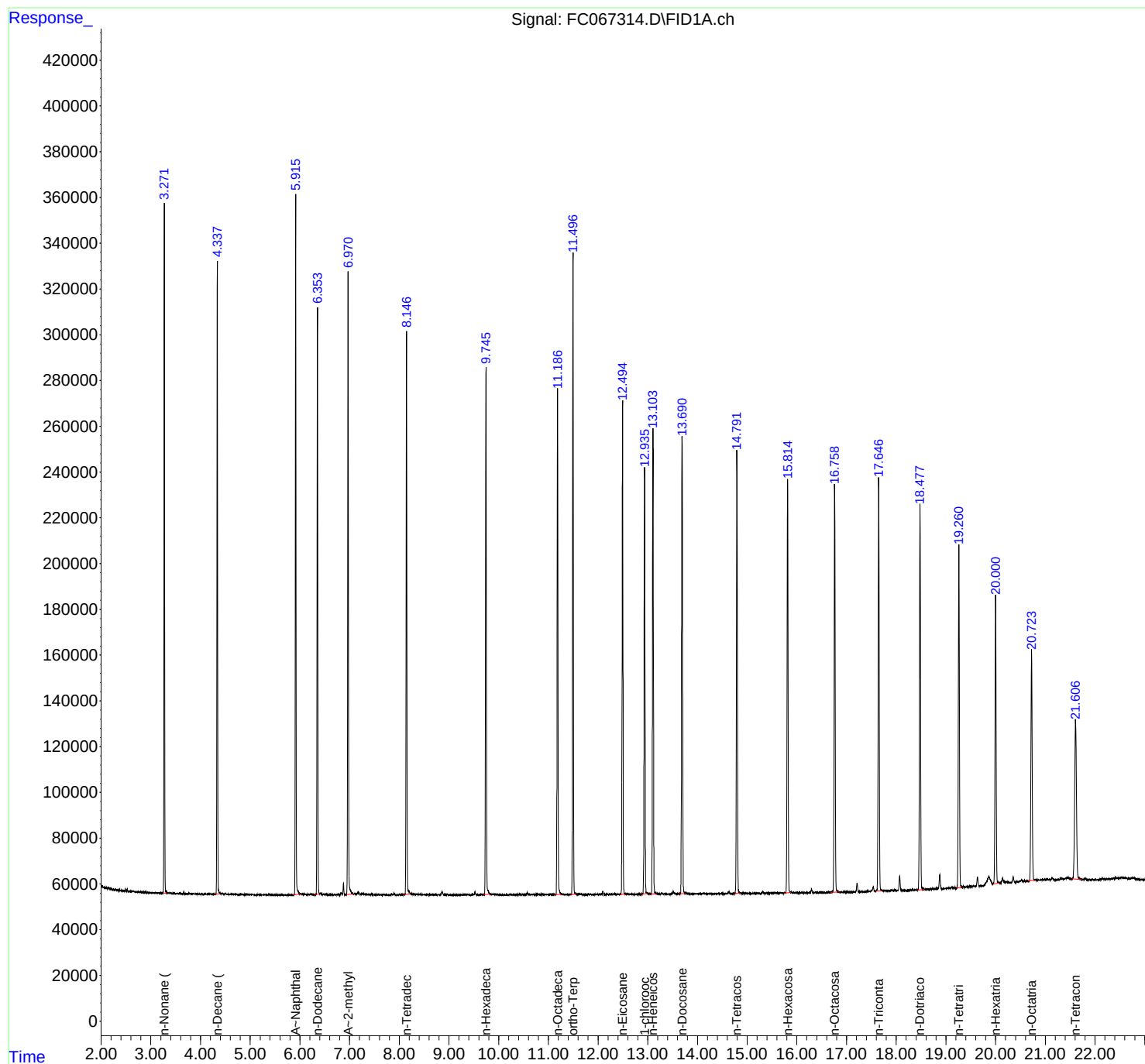
(m)=manual int.

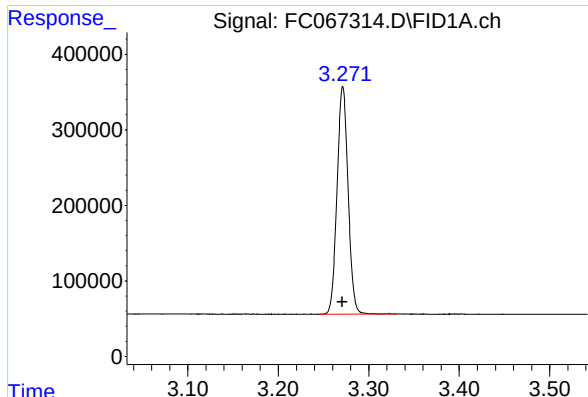
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067314.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 11:48
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Oct 01 09:08:18 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:07:31 2024
Response via : Initial Calibration
Integrator: ChemStation

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

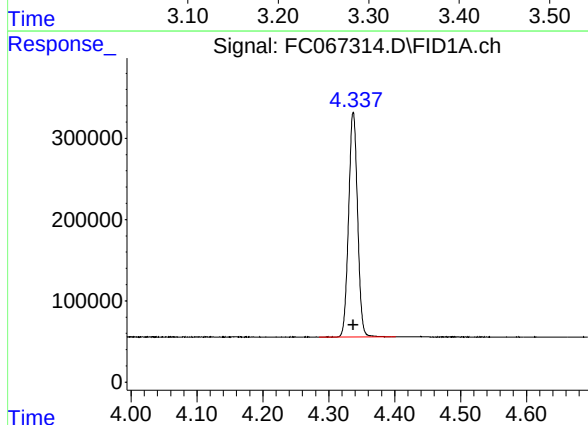




#1 n-Nonane (C9)

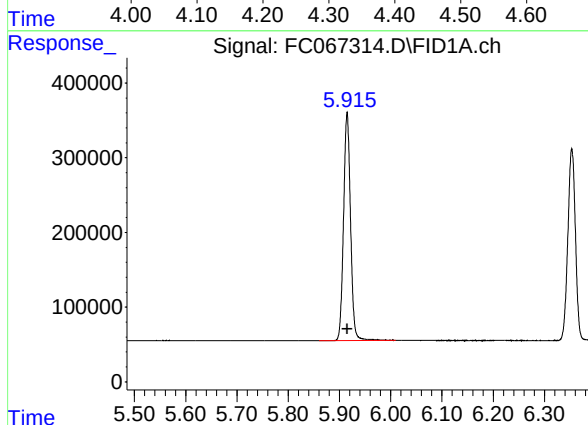
R.T.: 3.271 min
Delta R.T.: 0.000 min
Response: 2561935
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



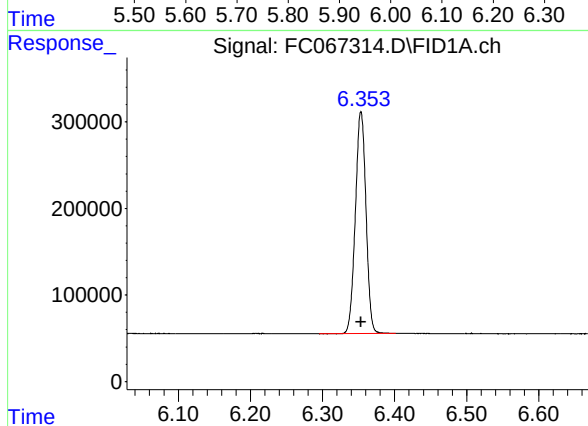
#2 n-Decane (C10)

R.T.: 4.337 min
Delta R.T.: 0.000 min
Response: 2606750
Conc: 20.00 ug/ml



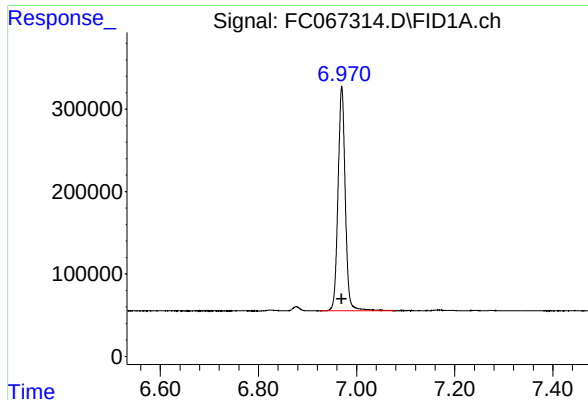
#3 A~Naphthalene (C11.7)

R.T.: 5.915 min
Delta R.T.: 0.000 min
Response: 2878074
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

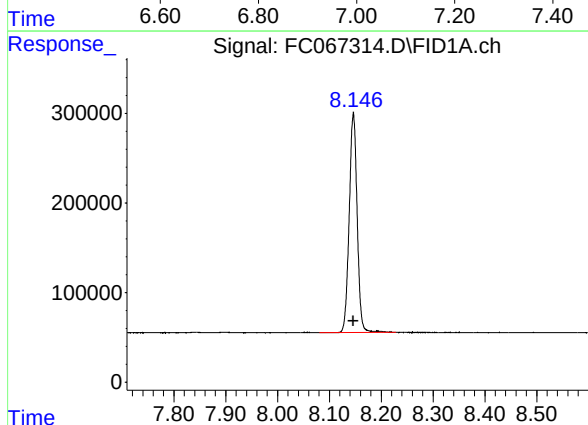
R.T.: 6.353 min
Delta R.T.: 0.000 min
Response: 2627937
Conc: 20.00 ug/ml



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

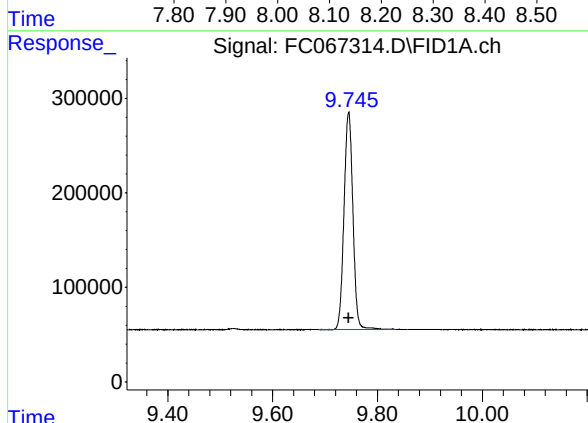
R.T.: 6.970 min
Delta R.T.: 0.000 min
Response: 2792361
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



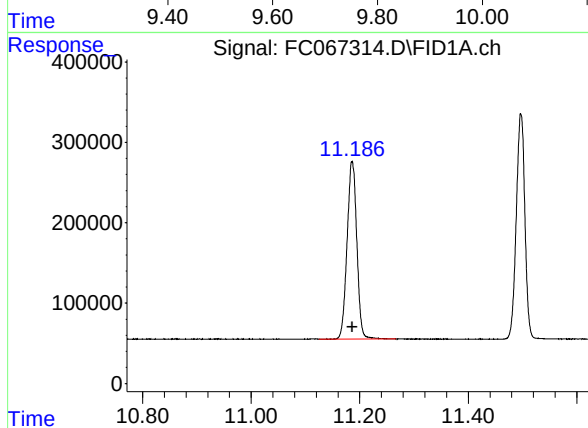
#6 n-Tetradecane (C14)

R.T.: 8.146 min
Delta R.T.: 0.000 min
Response: 2616449
Conc: 20.00 ug/ml



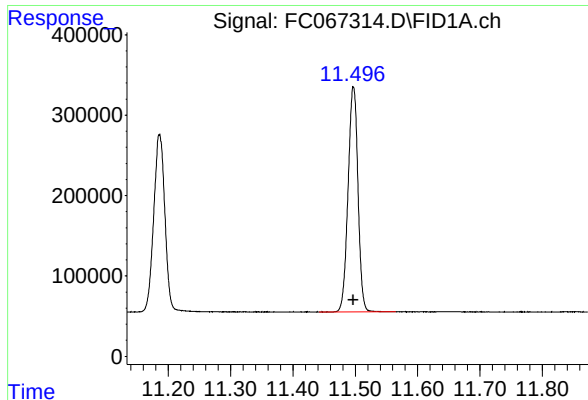
#7 n-Hexadecane (C16)

R.T.: 9.745 min
Delta R.T.: 0.000 min
Response: 2703190
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

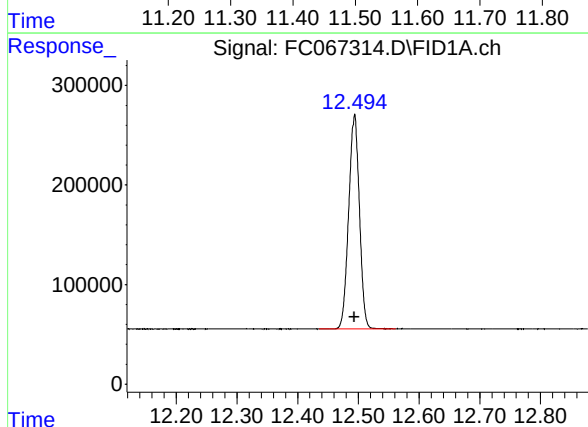
R.T.: 11.186 min
Delta R.T.: 0.000 min
Response: 2753269
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

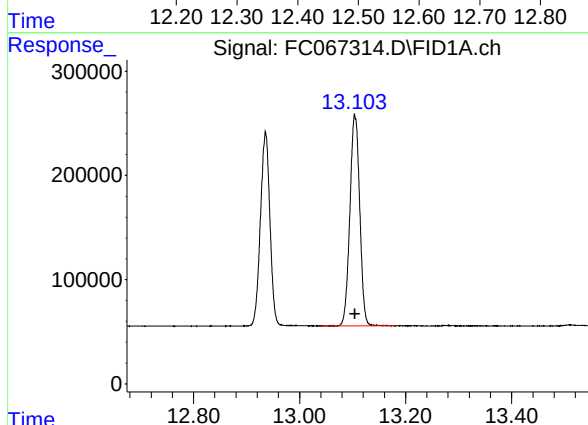
R.T.: 11.497 min
Delta R.T.: 0.000 min
Response: 3089013
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



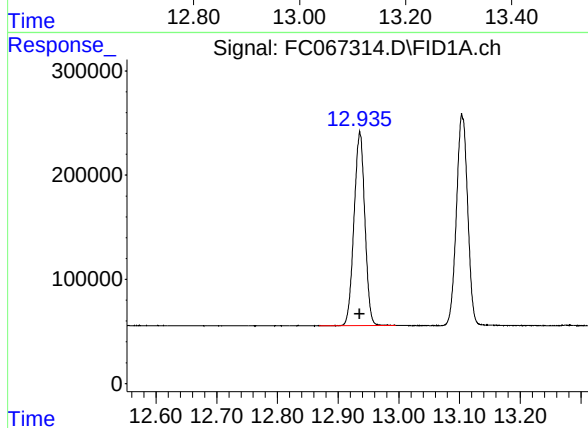
#10 n-Eicosane (C20)

R.T.: 12.493 min
Delta R.T.: 0.000 min
Response: 2645737
Conc: 20.00 ug/ml



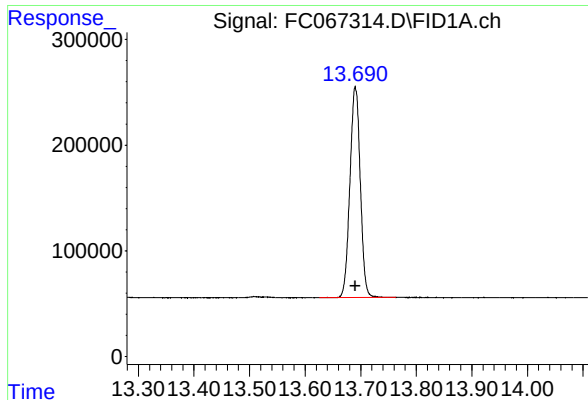
#11 n-Heneicosane (C21)

R.T.: 13.105 min
Delta R.T.: 0.000 min
Response: 2606321
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

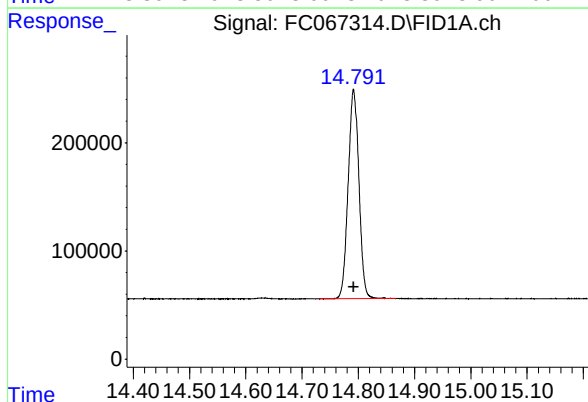
R.T.: 12.936 min
Delta R.T.: 0.000 min
Response: 2301706
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

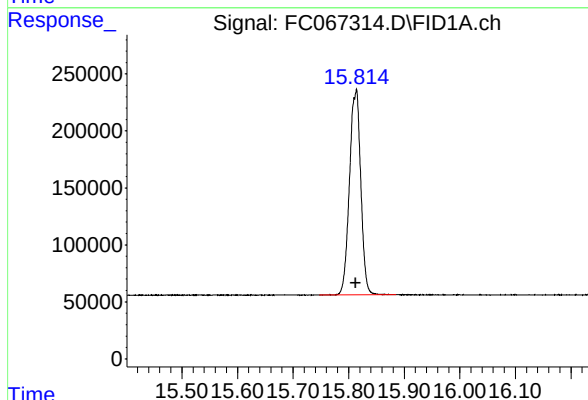
R.T.: 13.690 min
Delta R.T.: 0.000 min
Response: 2582773
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



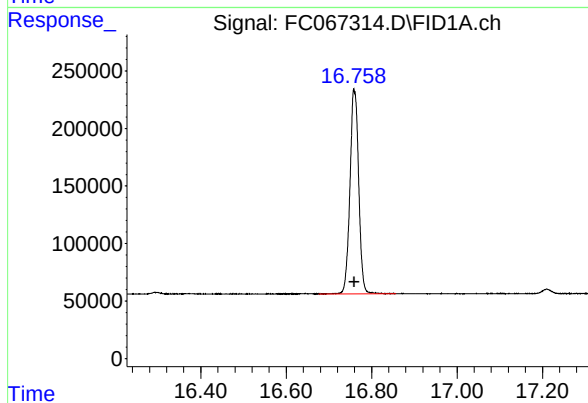
#14 n-Tetracosane (C24)

R.T.: 14.792 min
Delta R.T.: 0.000 min
Response: 2574621
Conc: 20.00 ug/ml



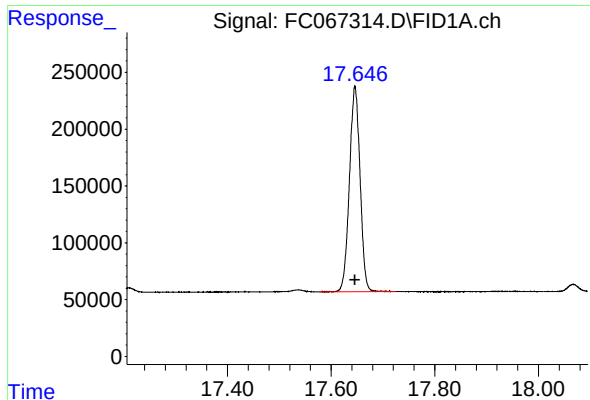
#15 n-Hexacosane (C26)

R.T.: 15.813 min
Delta R.T.: 0.000 min
Response: 2538087
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

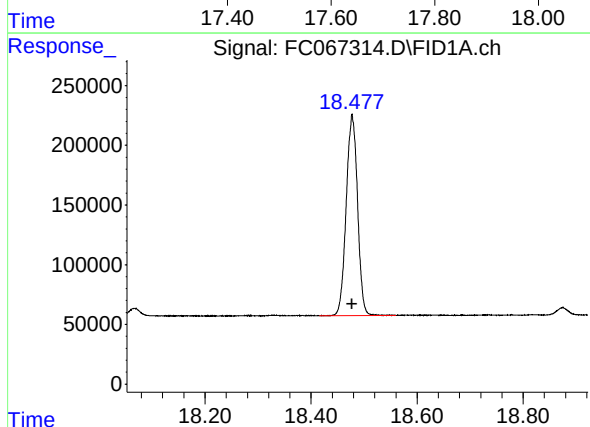
R.T.: 16.760 min
Delta R.T.: 0.000 min
Response: 2519727
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

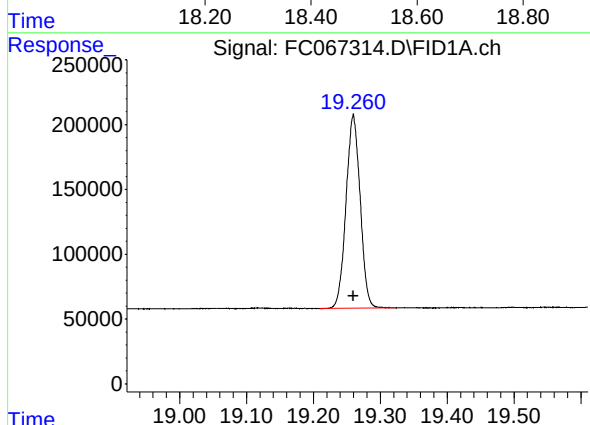
R.T.: 17.646 min
Delta R.T.: 0.000 min
Response: 2574944
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



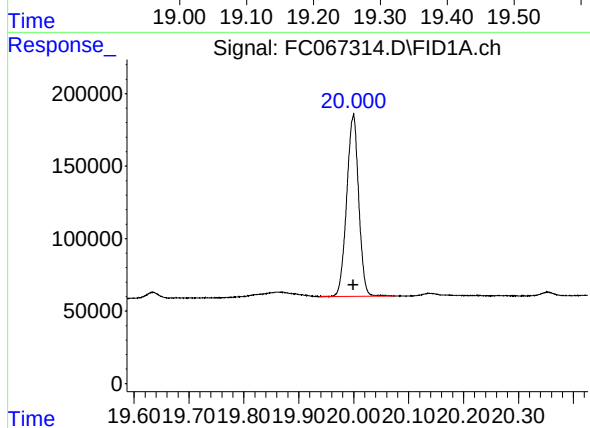
#18 n-Dotriacontane (C32)

R.T.: 18.478 min
Delta R.T.: 0.000 min
Response: 2497831
Conc: 20.00 ug/ml



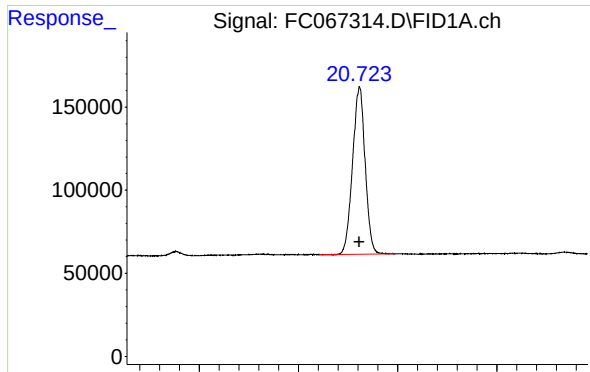
#19 n-Tetratriacontane (C34)

R.T.: 19.260 min
Delta R.T.: 0.000 min
Response: 2193263
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

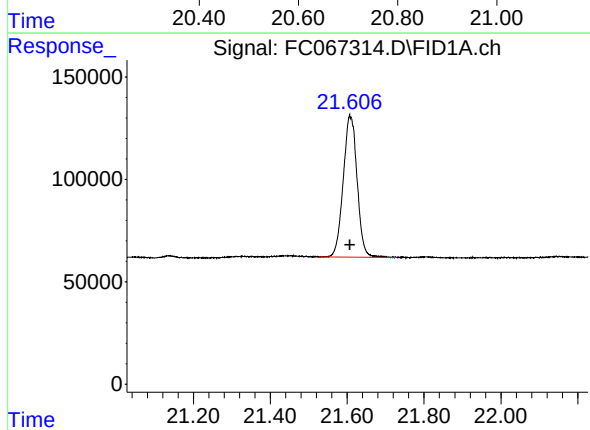
R.T.: 19.999 min
Delta R.T.: 0.000 min
Response: 1907034
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.723 min
Delta R.T.: 0.000 min
Response: 1770855
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 21.608 min
Delta R.T.: 0.000 min
Response: 1730957
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067314.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 11:48
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 100224.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	3.271	3.245	3.330	BB	301355	2561935	82.94%	4.652%
2	4.337	4.285	4.402	BB	276151	2606750	84.39%	4.733%
3	5.915	5.860	6.010	BB	306302	2878074	93.17%	5.226%
4	6.353	6.295	6.402	BB	256127	2627937	85.07%	4.772%
5	6.970	6.923	7.080	BB	272068	2792361	90.40%	5.070%
6	8.146	8.080	8.228	BB	246166	2616449	84.70%	4.751%
7	9.745	9.688	9.835	BB	229678	2703190	87.51%	4.908%
8	11.186	11.125	11.267	BB	220672	2753269	89.13%	4.999%
9	11.497	11.442	11.565	BB	280480	3089013	100.00%	5.609%
10	12.493	12.435	12.562	BB	214435	2645737	85.65%	4.804%
11	12.936	12.868	12.995	BB	185389	2301706	74.51%	4.179%
12	13.105	13.037	13.182	BB	199408	2606321	84.37%	4.732%
13	13.690	13.625	13.763	BB	199133	2582773	83.61%	4.690%
14	14.792	14.730	14.867	BB	192816	2574621	83.35%	4.675%
15	15.813	15.747	15.885	BB	175714	2538087	82.16%	4.609%
16	16.760	16.677	16.857	BB	174965	2519727	81.57%	4.575%
17	17.646	17.577	17.725	BB	180572	2574944	83.36%	4.676%
18	18.478	18.415	18.560	BB	168215	2497831	80.86%	4.536%
19	19.260	19.208	19.323	BB	149736	2193263	71.00%	3.982%
20	19.999	19.937	20.077	VB	124156	1907034	61.74%	3.463%
21	20.723	20.642	20.797	BB	100926	1770855	57.33%	3.215%
22	21.608	21.527	21.727	BB	68950	1730957	56.04%	3.143%
Sum of corrected areas:							55072832	

Aliphatic EPH 100224.M Tue Oct 01 09:21:20 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
 Data File : FC067315.D
 Signal(s) : FID1A.ch
 Acq On : 30 Sep 2024 12:47
 Operator : YP/AJ
 Sample : 10 PPM ALIPHATIC HC STD4
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
 Quant Time: Oct 01 09:11:43 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:07:31 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)	11.496	1571986	10.733 ug/ml
Spiked Amount 50.000		Recovery =	21.47%
12) S 1-chlorooctadecane (S...	12.936	1173605	10.698 ug/ml
Spiked Amount 50.000		Recovery =	21.40%
Target Compounds			
1) T n-Nonane (C9)	3.270	1286606	10.491 ug/ml
2) T n-Decane (C10)	4.336	1306831	10.474 ug/ml
3) T A~Naphthalene (C11.7)	5.915	1437407	10.417 ug/ml
4) T n-Dodecane (C12)	6.353	1318883	10.451 ug/ml
5) T A~2-methylnaphthalene...	6.970	1392618	10.375 ug/ml
6) T n-Tetradecane (C14)	8.146	1308417	10.411 ug/ml
7) T n-Hexadecane (C16)	9.745	1367829	10.562 ug/ml
8) T n-Octadecane (C18)	11.185	1404957	10.718 ug/ml
10) T n-Eicosane (C20)	12.493	1359651	10.795 ug/ml
11) T n-Heneicosane (C21)	13.104	1336214	10.787 ug/ml
13) T n-Docosane (C22)	13.689	1324859	10.728 ug/ml
14) T n-Tetracosane (C24)	14.791	1318090	10.622 ug/ml
15) T n-Hexacosane (C26)	15.811	1292438	10.537 ug/ml
16) T n-Octacosane (C28)	16.761	1284086	10.578 ug/ml
17) T n-Tricontane (C30)	17.647	1321139	10.727 ug/ml
18) T n-Dotriacontane (C32)	18.478	1282377	10.851 ug/ml
19) T n-Tetratriacontane (C34)	19.261	1119659	10.805 ug/ml
20) T n-Hexatriacontane (C36)	20.000	974156	10.885 ug/ml
21) T n-Octatriacontane (C38)	20.724	893961	10.604 ug/ml
22) T n-Tetracontane (C40)	21.611	848887	10.298 ug/ml

(f)=RT Delta > 1/2 Window

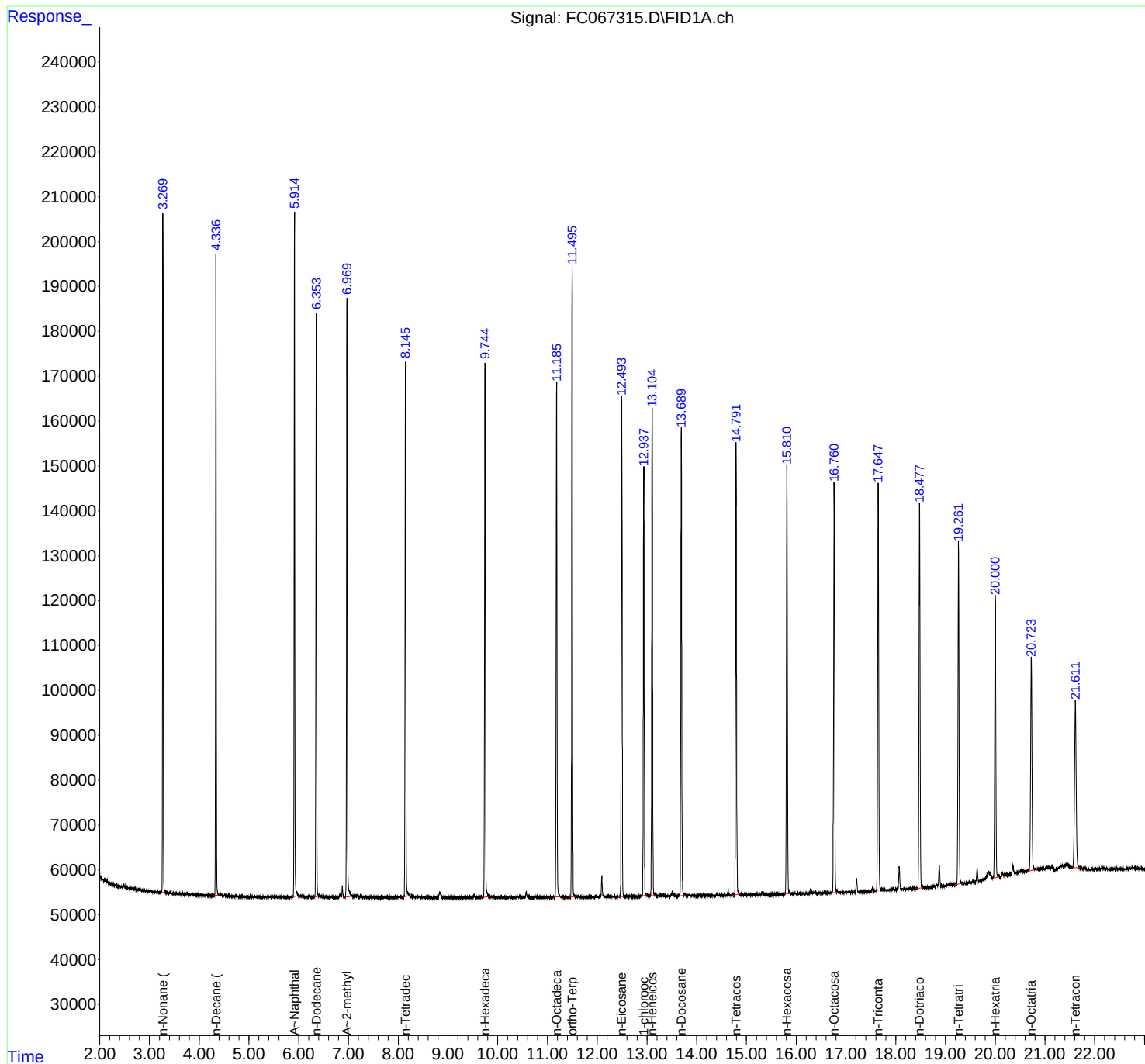
(m)=manual int.

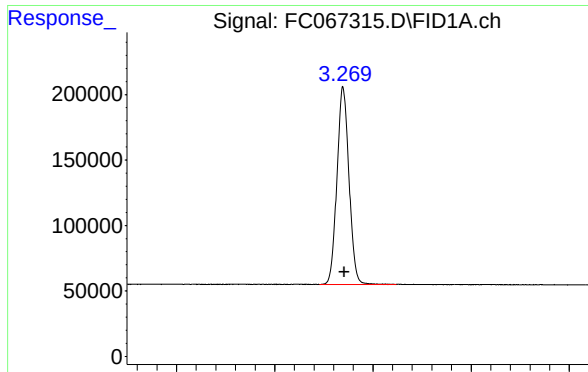
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067315.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 12:47
Operator : YP/AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Oct 01 09:11:43 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:07:31 2024
Response via : Initial Calibration
Integrator: ChemStation

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

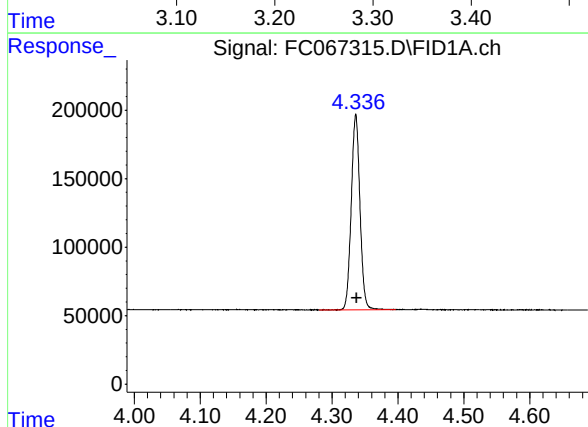




#1 n-Nonane (C9)

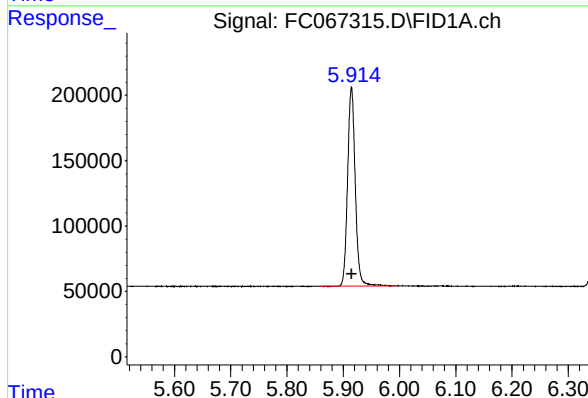
R.T.: 3.270 min
Delta R.T.: -0.001 min
Response: 1286606
Conc: 10.49 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



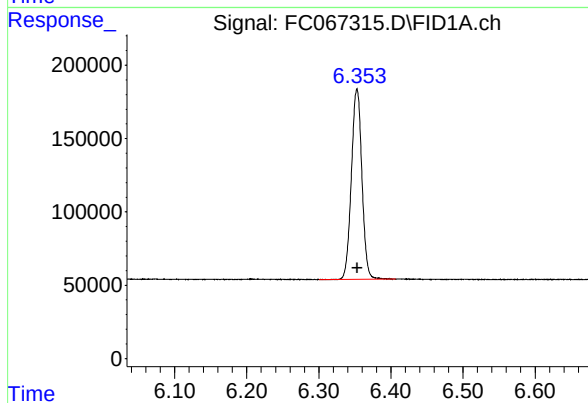
#2 n-Decane (C10)

R.T.: 4.336 min
Delta R.T.: -0.001 min
Response: 1306831
Conc: 10.47 ug/ml



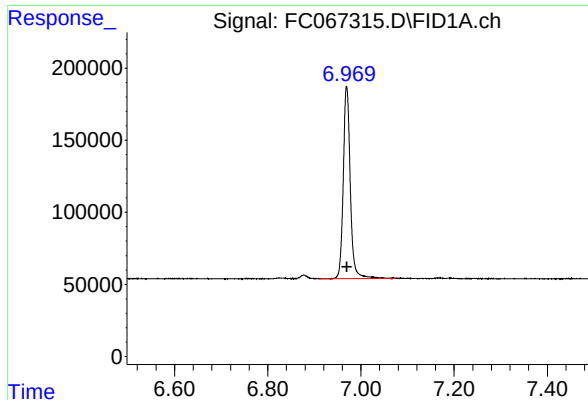
#3 A~Naphthalene (C11.7)

R.T.: 5.915 min
Delta R.T.: 0.000 min
Response: 1437407
Conc: 10.42 ug/ml



#4 n-Dodecane (C12)

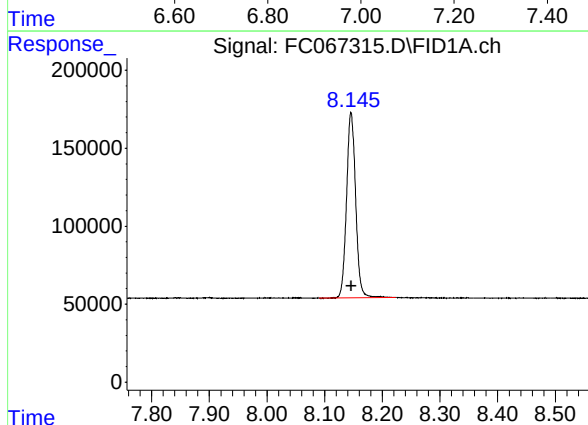
R.T.: 6.353 min
Delta R.T.: 0.000 min
Response: 1318883
Conc: 10.45 ug/ml



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

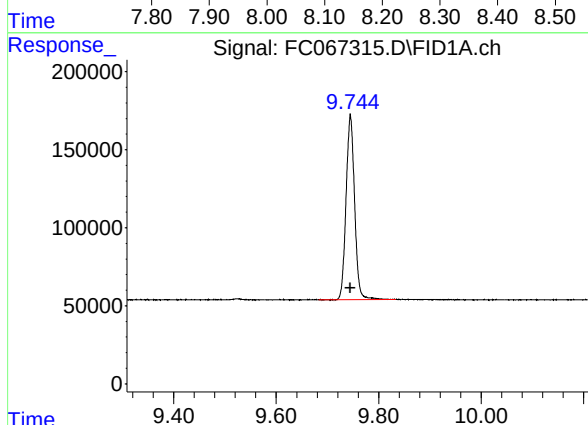
R.T.: 6.970 min
Delta R.T.: 0.000 min
Response: 1392618
Conc: 10.37 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



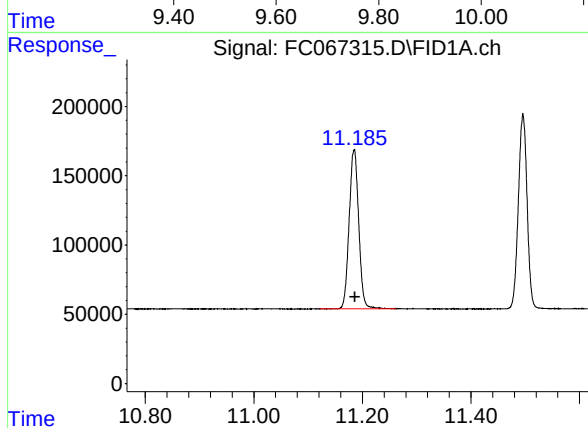
#6 n-Tetradecane (C14)

R.T.: 8.146 min
Delta R.T.: 0.000 min
Response: 1308417
Conc: 10.41 ug/ml



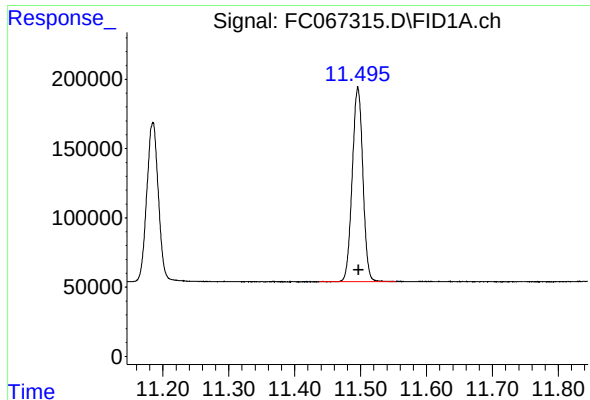
#7 n-Hexadecane (C16)

R.T.: 9.745 min
Delta R.T.: 0.000 min
Response: 1367829
Conc: 10.56 ug/ml



#8 n-Octadecane (C18)

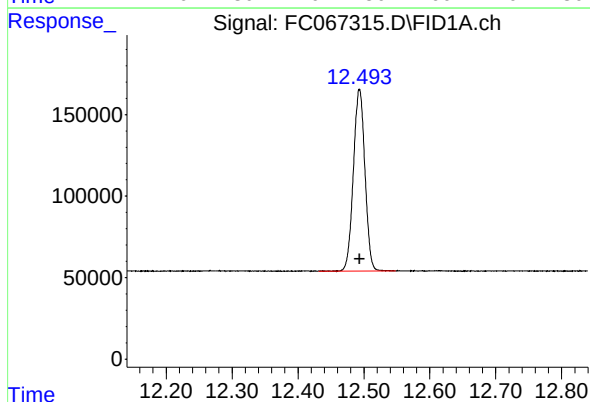
R.T.: 11.185 min
Delta R.T.: -0.001 min
Response: 1404957
Conc: 10.72 ug/ml



#9 ortho-Terphenyl (SURR)

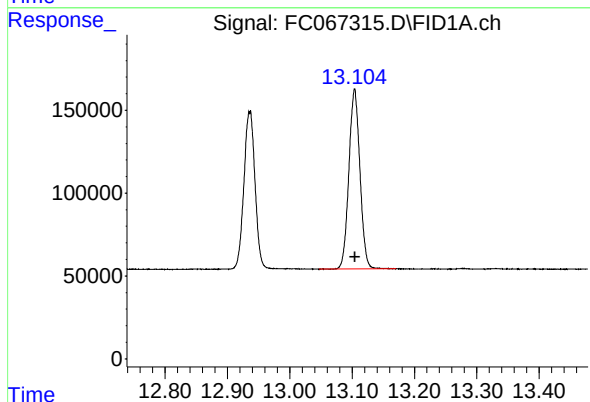
R.T.: 11.496 min
Delta R.T.: -0.001 min
Response: 1571986
Conc: 10.73 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



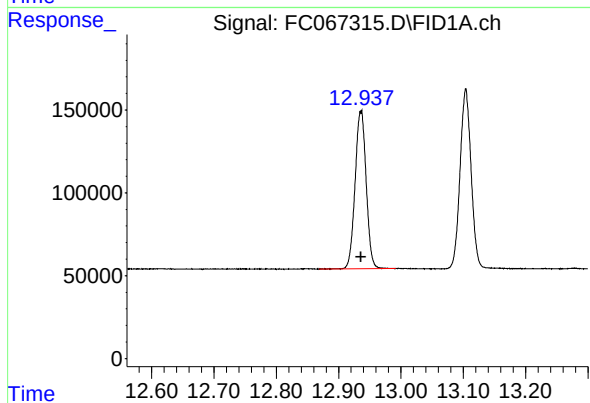
#10 n-Eicosane (C20)

R.T.: 12.493 min
Delta R.T.: 0.000 min
Response: 1359651
Conc: 10.80 ug/ml



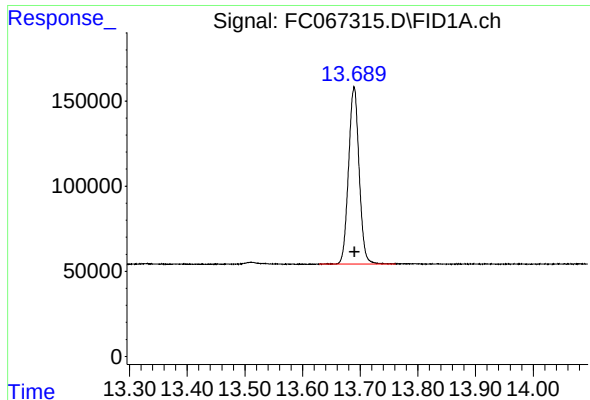
#11 n-Heneicosane (C21)

R.T.: 13.104 min
Delta R.T.: 0.000 min
Response: 1336214
Conc: 10.79 ug/ml



#12 1-chlorooctadecane (SURR)

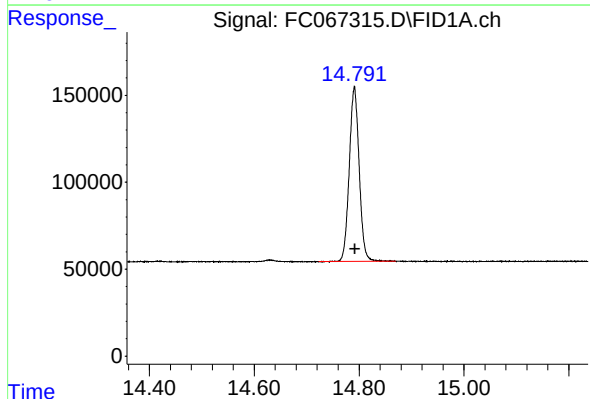
R.T.: 12.936 min
Delta R.T.: 0.000 min
Response: 1173605
Conc: 10.70 ug/ml



#13 n-Docosane (C22)

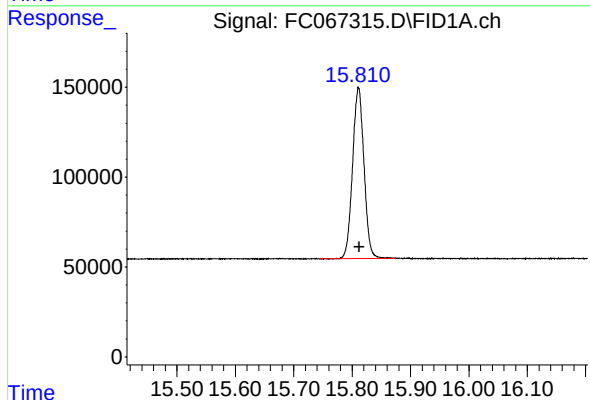
R.T.: 13.689 min
Delta R.T.: -0.001 min
Response: 1324859
Conc: 10.73 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



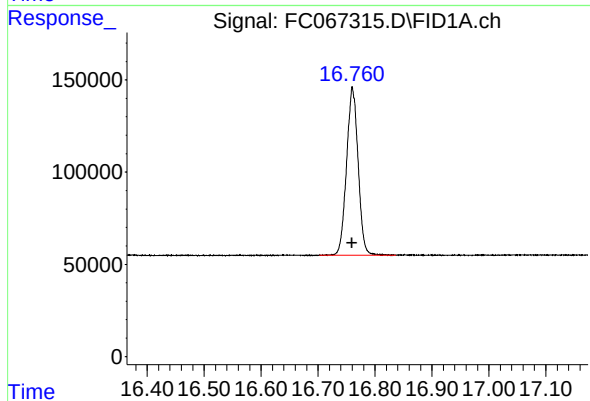
#14 n-Tetracosane (C24)

R.T.: 14.791 min
Delta R.T.: 0.000 min
Response: 1318090
Conc: 10.62 ug/ml



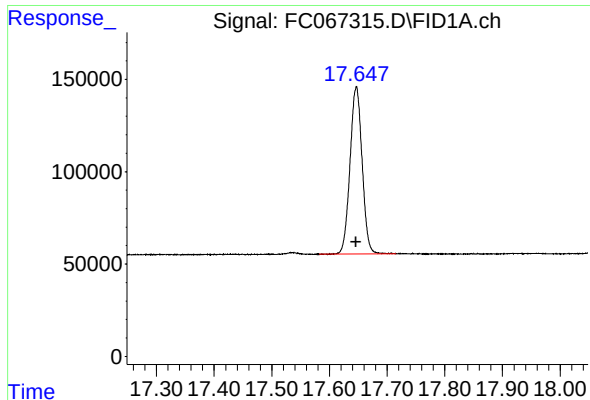
#15 n-Hexacosane (C26)

R.T.: 15.811 min
Delta R.T.: -0.002 min
Response: 1292438
Conc: 10.54 ug/ml



#16 n-Octacosane (C28)

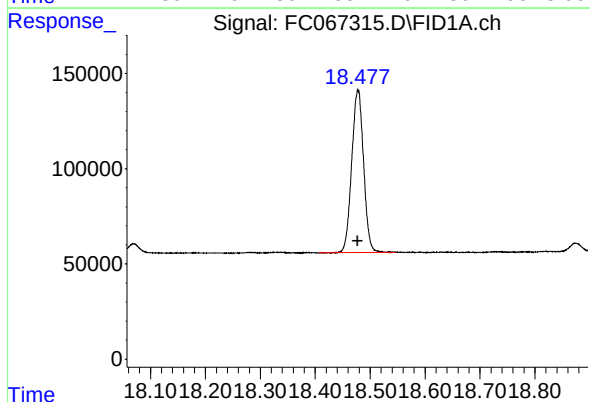
R.T.: 16.761 min
Delta R.T.: 0.000 min
Response: 1284086
Conc: 10.58 ug/ml



#17 n-Tricontane (C30)

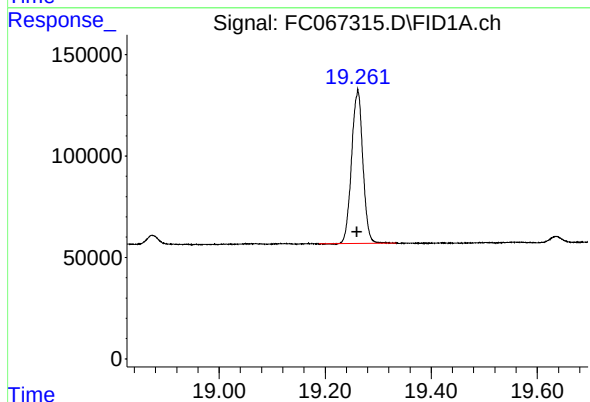
R.T.: 17.647 min
Delta R.T.: 0.000 min
Response: 1321139
Conc: 10.73 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



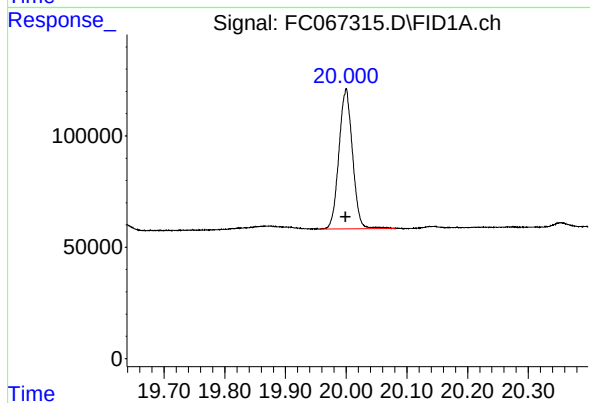
#18 n-Dotriacontane (C32)

R.T.: 18.478 min
Delta R.T.: 0.000 min
Response: 1282377
Conc: 10.85 ug/ml



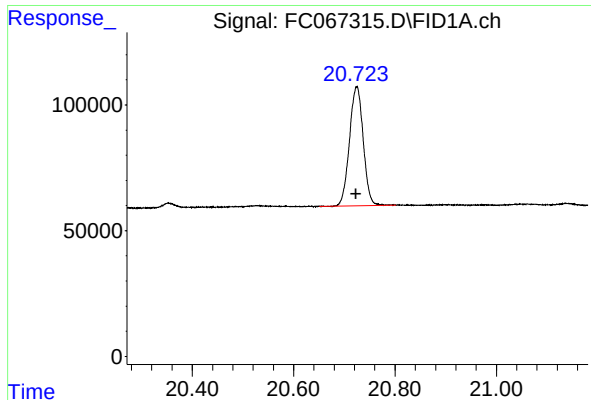
#19 n-Tetatriacontane (C34)

R.T.: 19.261 min
Delta R.T.: 0.002 min
Response: 1119659
Conc: 10.81 ug/ml



#20 n-Hexatriacontane (C36)

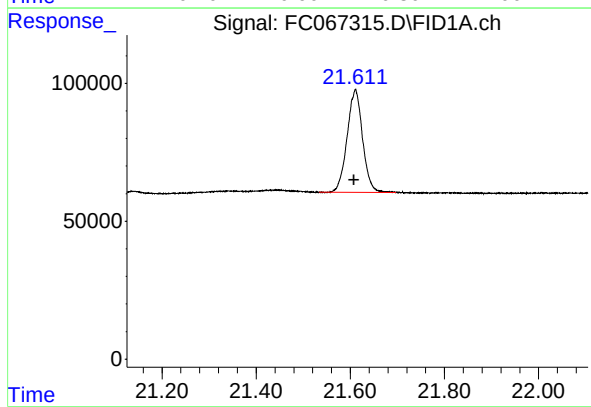
R.T.: 20.000 min
Delta R.T.: 0.000 min
Response: 974156
Conc: 10.88 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.724 min
Delta R.T.: 0.001 min
Response: 893961
Conc: 10.60 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 21.611 min
Delta R.T.: 0.003 min
Response: 848887
Conc: 10.30 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067315.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 12:47
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.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	3.270	3.245	3.324	BB	149654	1286606	81.85%	4.607%
2	4.336	4.280	4.397	BB	143345	1306831	83.13%	4.680%
3	5.915	5.857	5.994	BB	152594	1437407	91.44%	5.147%
4	6.353	6.300	6.407	BB	129992	1318883	83.90%	4.723%
5	6.970	6.910	7.075	BB	132847	1392618	88.59%	4.987%
6	8.146	8.090	8.224	BB	118854	1308417	83.23%	4.686%
7	9.745	9.684	9.834	BB	118309	1367829	87.01%	4.898%
8	11.185	11.120	11.262	BB	115074	1404957	89.37%	5.031%
9	11.496	11.437	11.554	BB	139977	1571986	100.00%	5.629%
10	12.493	12.432	12.549	BB	111570	1359651	86.49%	4.869%
11	12.936	12.869	12.992	BB	94987	1173605	74.66%	4.203%
12	13.104	13.047	13.170	BB	108646	1336214	85.00%	4.785%
13	13.689	13.629	13.762	BB	103488	1324859	84.28%	4.744%
14	14.791	14.724	14.870	BB	99895	1318090	83.85%	4.720%
15	15.811	15.744	15.875	BB	95486	1292438	82.22%	4.628%
16	16.761	16.702	16.837	BB	90915	1284086	81.69%	4.598%
17	17.647	17.582	17.715	BB	90874	1321139	84.04%	4.731%
18	18.478	18.407	18.547	BB	85034	1282377	81.58%	4.592%
19	19.261	19.189	19.334	BB	76227	1119659	71.23%	4.010%
20	20.000	19.955	20.082	BB	63358	974156	61.97%	3.489%
21	20.724	20.650	20.802	BB	47317	893961	56.87%	3.201%
22	21.611	21.534	21.697	BB	37257	848887	54.00%	3.040%
Sum of corrected areas:							27924656	

Aliphatic EPH 100224.M Tue Oct 01 09:21:38 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
 Data File : FC067316.D
 Signal(s) : FID1A.ch
 Acq On : 30 Sep 2024 13:35
 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

Integration File: autoint1.e
 Quant Time: Oct 01 09:12:40 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:07:31 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)	11.496	821094	5.505 ug/ml
Spiked Amount 50.000		Recovery =	11.01%
12) S 1-chlorooctadecane (S...	12.936	597484	5.353 ug/ml
Spiked Amount 50.000		Recovery =	10.71%
Target Compounds			
1) T n-Nonane (C9)	3.271	686146	5.527 ug/ml
2) T n-Decane (C10)	4.336	688670	5.455 ug/ml
3) T A~Naphthalene (C11.7)	5.915	757843	5.435 ug/ml
4) T n-Dodecane (C12)	6.352	691712	5.420 ug/ml
5) T A~2-methylnaphthalene...	6.970	719915	5.313 ug/ml
6) T n-Tetradecane (C14)	8.146	680596	5.360 ug/ml
7) T n-Hexadecane (C16)	9.745	701420	5.341 ug/ml
8) T n-Octadecane (C18)	11.185	721326	5.406 ug/ml
10) T n-Eicosane (C20)	12.493	695208	5.412 ug/ml
11) T n-Heneicosane (C21)	13.105	680195	5.385 ug/ml
13) T n-Docosane (C22)	13.690	677301	5.386 ug/ml
14) T n-Tetracosane (C24)	14.792	676857	5.371 ug/ml
15) T n-Hexacosane (C26)	15.811	666097	5.359 ug/ml
16) T n-Octacosane (C28)	16.759	677736	5.503 ug/ml
17) T n-Tricontane (C30)	17.647	712654	5.683 ug/ml
18) T n-Dotriacontane (C32)	18.478	709265	5.876 ug/ml
19) T n-Tetratriacontane (C34)	19.260	617762	5.844 ug/ml
20) T n-Hexatriacontane (C36)	20.000	533422	5.831 ug/ml
21) T n-Octatriacontane (C38)	20.724	480941	5.620 ug/ml
22) T n-Tetracontane (C40)	21.612	490214	5.903 ug/ml

(f)=RT Delta > 1/2 Window

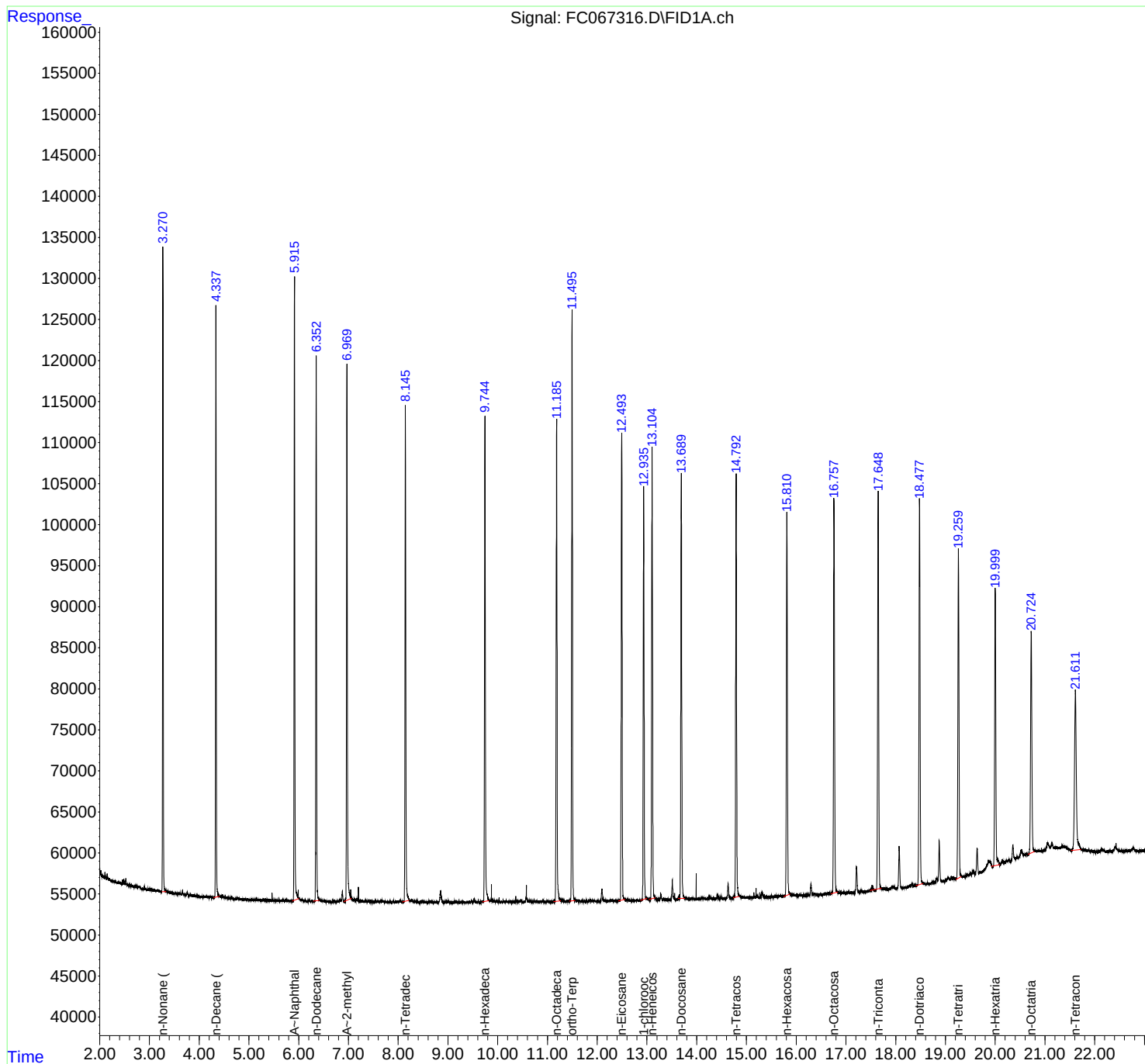
(m)=manual int.

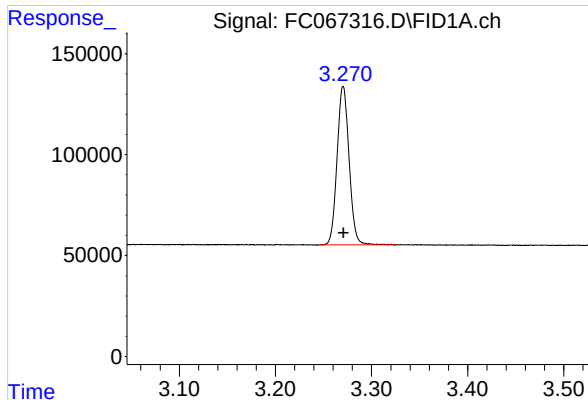
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067316.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 13:35
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Oct 01 09:12:40 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:07:31 2024
Response via : Initial Calibration
Integrator: ChemStation

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

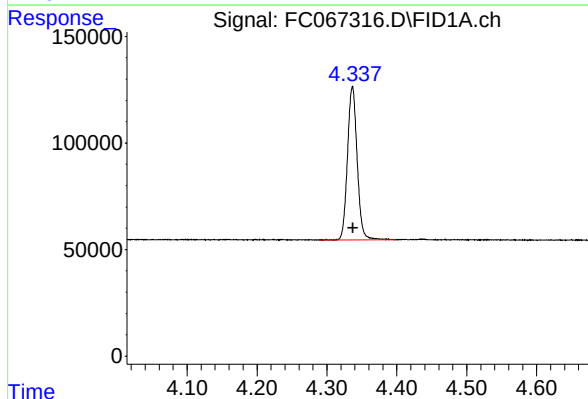




#1 n-Nonane (C9)

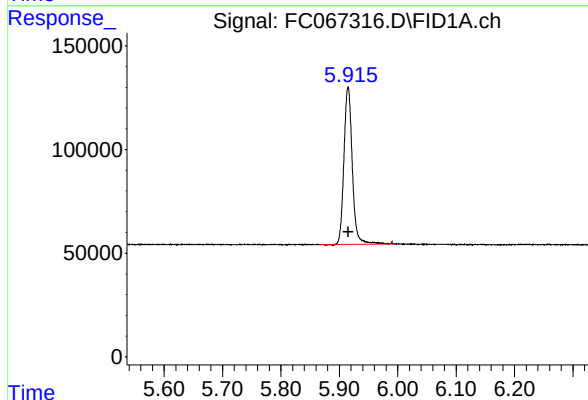
R.T.: 3.271 min
Delta R.T.: 0.000 min
Response: 686146
Conc: 5.53 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



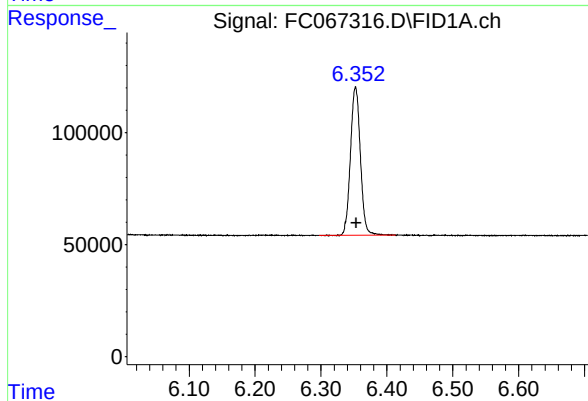
#2 n-Decane (C10)

R.T.: 4.336 min
Delta R.T.: 0.000 min
Response: 688670
Conc: 5.46 ug/ml



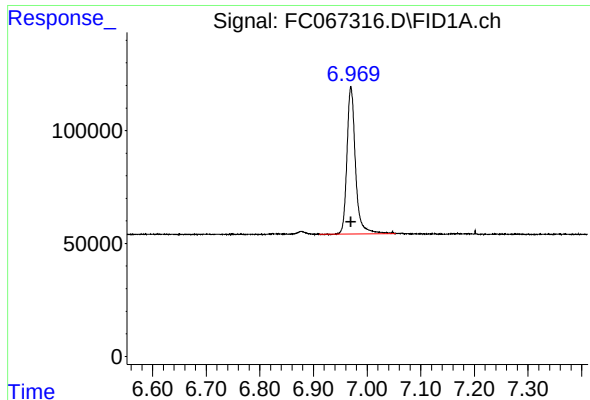
#3 A~Naphthalene (C11.7)

R.T.: 5.915 min
Delta R.T.: 0.000 min
Response: 757843
Conc: 5.44 ug/ml



#4 n-Dodecane (C12)

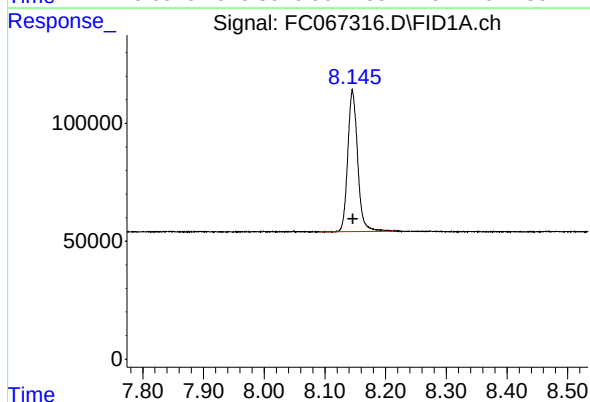
R.T.: 6.352 min
Delta R.T.: 0.000 min
Response: 691712
Conc: 5.42 ug/ml



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

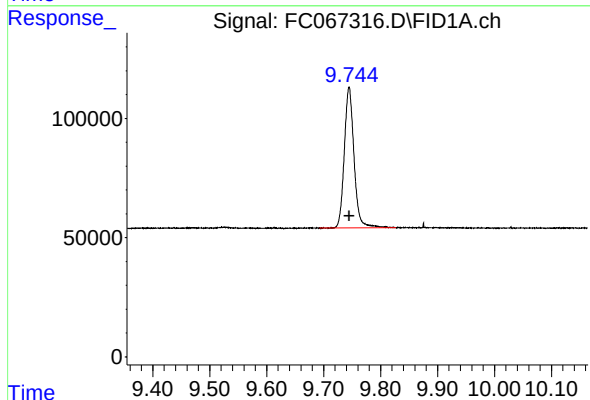
R.T.: 6.970 min
Delta R.T.: 0.000 min
Response: 719915
Conc: 5.31 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



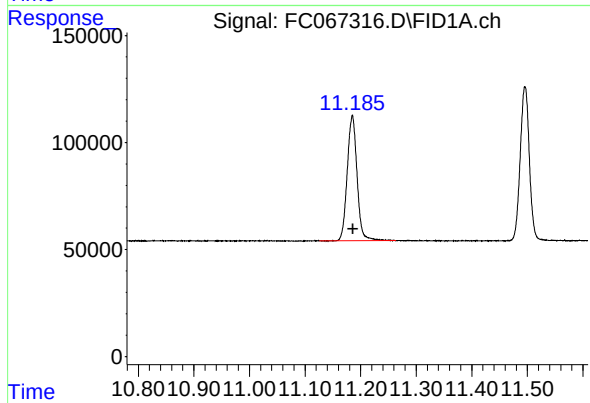
#6 n-Tetradecane (C14)

R.T.: 8.146 min
Delta R.T.: 0.000 min
Response: 680596
Conc: 5.36 ug/ml



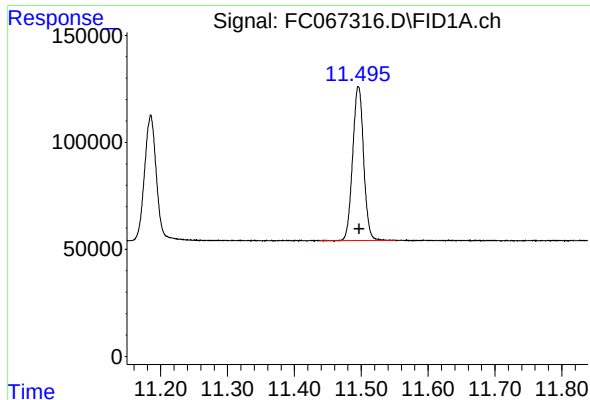
#7 n-Hexadecane (C16)

R.T.: 9.745 min
Delta R.T.: 0.000 min
Response: 701420
Conc: 5.34 ug/ml



#8 n-Octadecane (C18)

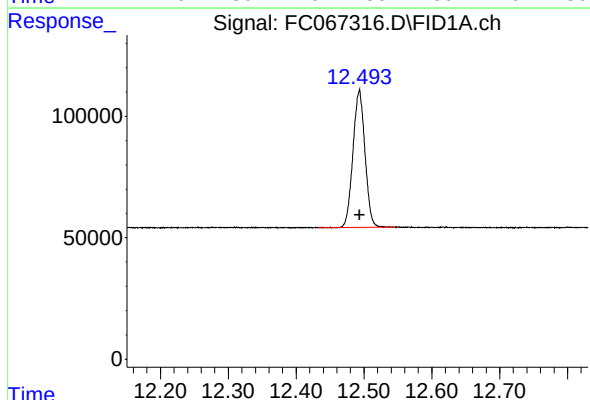
R.T.: 11.185 min
Delta R.T.: -0.001 min
Response: 721326
Conc: 5.41 ug/ml



#9 ortho-Terphenyl (SURRE)

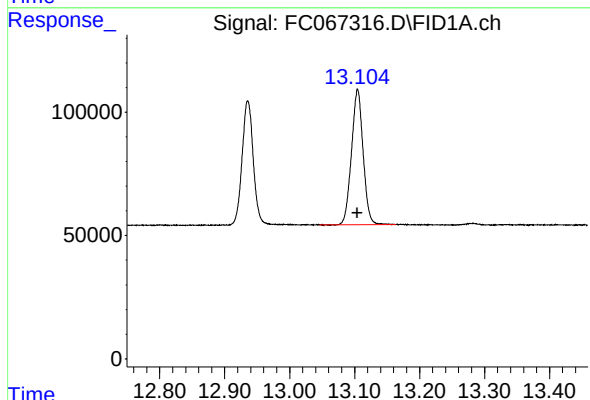
R.T.: 11.496 min
Delta R.T.: -0.001 min
Response: 821094
Conc: 5.51 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



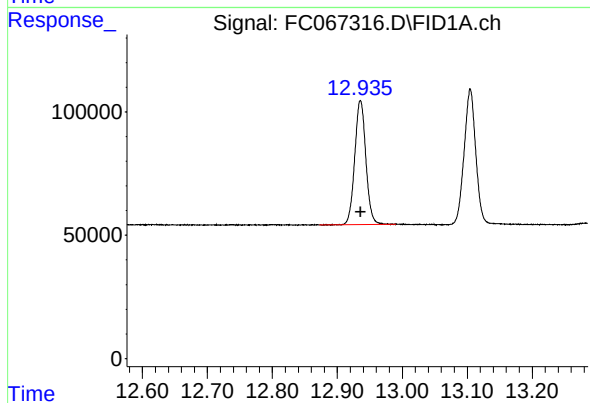
#10 n-Eicosane (C20)

R.T.: 12.493 min
Delta R.T.: 0.000 min
Response: 695208
Conc: 5.41 ug/ml



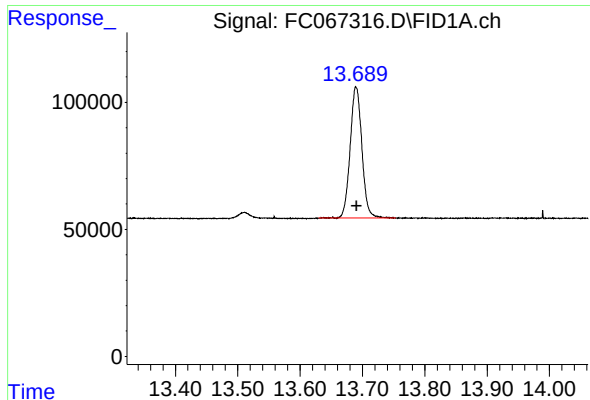
#11 n-Heneicosane (C21)

R.T.: 13.105 min
Delta R.T.: 0.000 min
Response: 680195
Conc: 5.39 ug/ml



#12 1-chlorooctadecane (SURRE)

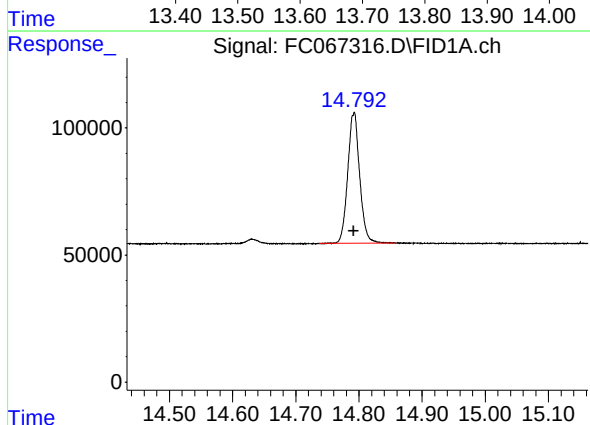
R.T.: 12.936 min
Delta R.T.: 0.000 min
Response: 597484
Conc: 5.35 ug/ml



#13 n-Docosane (C22)

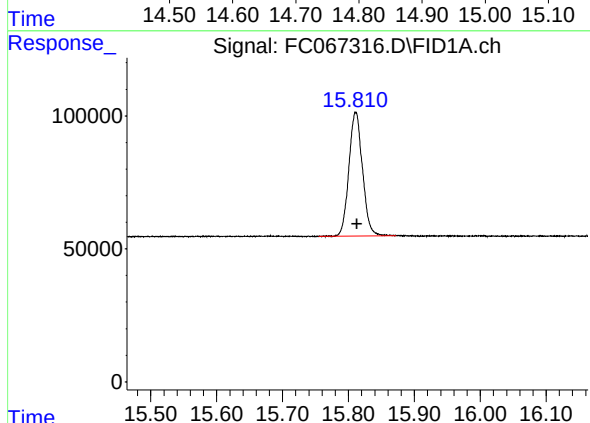
R.T.: 13.690 min
Delta R.T.: 0.000 min
Response: 677301
Conc: 5.39 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



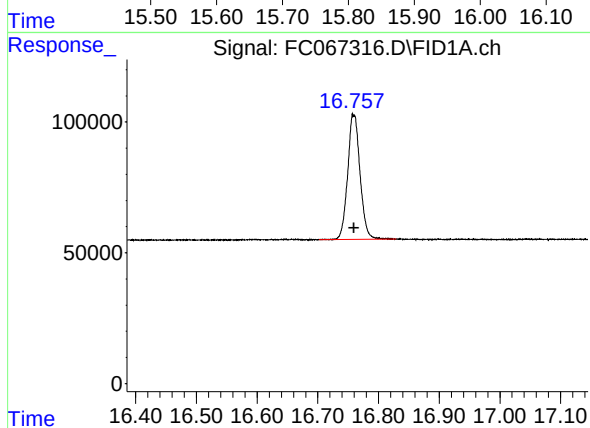
#14 n-Tetracosane (C24)

R.T.: 14.792 min
Delta R.T.: 0.000 min
Response: 676857
Conc: 5.37 ug/ml



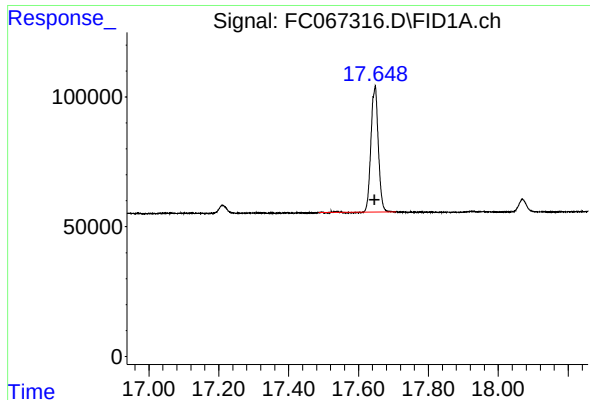
#15 n-Hexacosane (C26)

R.T.: 15.811 min
Delta R.T.: -0.002 min
Response: 666097
Conc: 5.36 ug/ml



#16 n-Octacosane (C28)

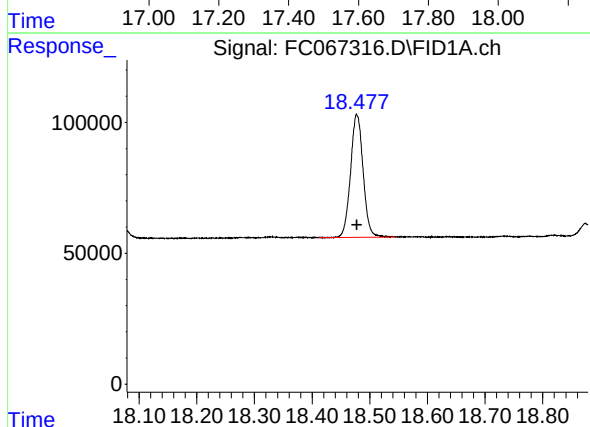
R.T.: 16.759 min
Delta R.T.: 0.000 min
Response: 677736
Conc: 5.50 ug/ml



#17 n-Tricontane (C30)

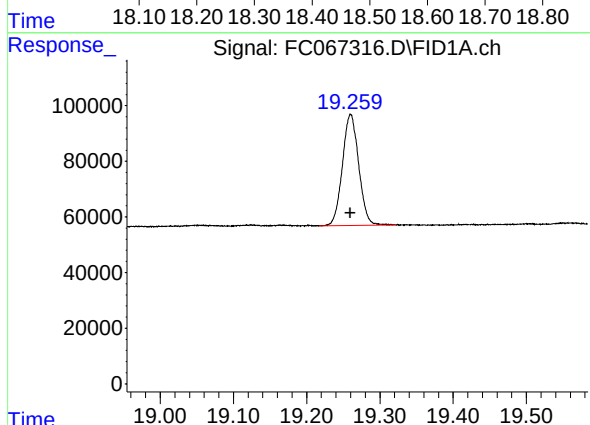
R.T.: 17.647 min
Delta R.T.: 0.000 min
Response: 712654
Conc: 5.68 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



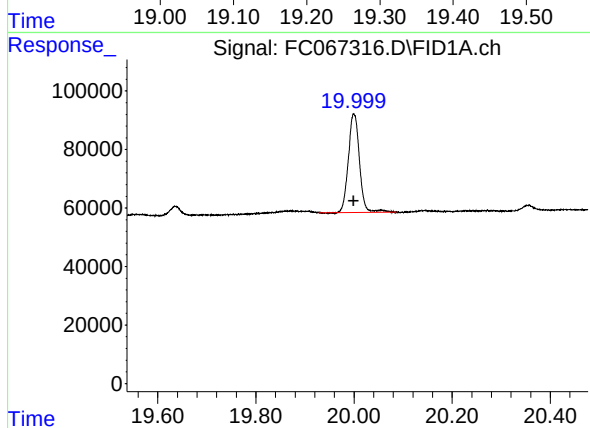
#18 n-Dotriacontane (C32)

R.T.: 18.478 min
Delta R.T.: 0.000 min
Response: 709265
Conc: 5.88 ug/ml



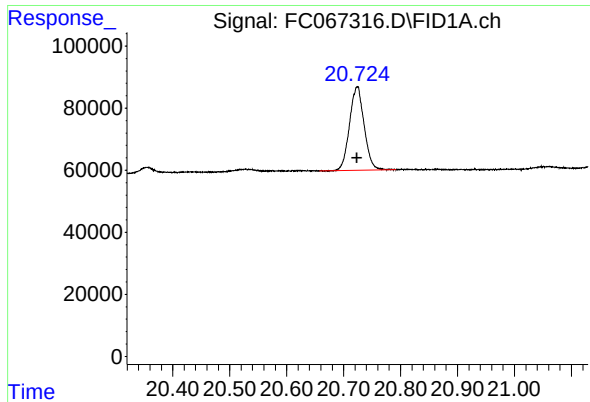
#19 n-Tetratriacontane (C34)

R.T.: 19.260 min
Delta R.T.: 0.000 min
Response: 617762
Conc: 5.84 ug/ml



#20 n-Hexatriacontane (C36)

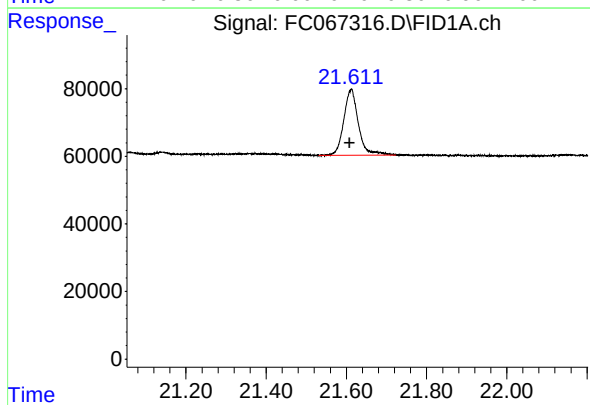
R.T.: 20.000 min
Delta R.T.: 0.000 min
Response: 533422
Conc: 5.83 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.724 min
Delta R.T.: 0.000 min
Response: 480941
Conc: 5.62 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

R.T.: 21.612 min
Delta R.T.: 0.004 min
Response: 490214
Conc: 5.90 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067316.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 13:35
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 100224.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	3.271	3.245	3.325	BB	78681	686146	83.56%	4.673%
2	4.336	4.289	4.399	BB	72152	688670	83.87%	4.690%
3	5.915	5.865	5.997	BB	76027	757843	92.30%	5.161%
4	6.352	6.297	6.414	BB	66053	691712	84.24%	4.711%
5	6.970	6.910	7.054	BB	65101	719915	87.68%	4.903%
6	8.146	8.090	8.217	BB	60011	680596	82.89%	4.635%
7	9.745	9.692	9.827	BB	59283	701420	85.42%	4.777%
8	11.185	11.125	11.264	BB	58904	721326	87.85%	4.912%
9	11.496	11.437	11.552	BB	72136	821094	100.00%	5.592%
10	12.493	12.434	12.547	BB	56965	695208	84.67%	4.735%
11	12.936	12.872	12.990	BB	50290	597484	72.77%	4.069%
12	13.105	13.045	13.164	BB	54789	680195	82.84%	4.632%
13	13.690	13.630	13.754	BB	51352	677301	82.49%	4.613%
14	14.792	14.737	14.859	BB	51124	676857	82.43%	4.610%
15	15.811	15.755	15.872	BB	46744	666097	81.12%	4.536%
16	16.759	16.702	16.829	BB	47167	677736	82.54%	4.616%
17	17.647	17.487	17.707	BB	48207	712654	86.79%	4.853%
18	18.478	18.412	18.545	BB	46869	709265	86.38%	4.830%
19	19.260	19.217	19.322	BB	39937	617762	75.24%	4.207%
20	20.000	19.929	20.085	BB	33595	533422	64.96%	3.633%
21	20.724	20.657	20.792	BB	26905	480941	58.57%	3.275%
22	21.612	21.532	21.724	BB	19525	490214	59.70%	3.338%
Sum of corrected areas:							14683859	

Aliphatic EPH 100224.M Tue Oct 01 09:21:54 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
 Data File : FC067317.D
 Signal(s) : FID1A.ch
 Acq On : 30 Sep 2024 14:29
 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: Oct 01 09:15:12 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:13:32 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)	11.498	2856514	18.773 ug/ml
Spiked Amount 50.000		Recovery =	37.55%
12) S 1-chlorooctadecane (S...	12.936	2133568	18.849 ug/ml
Spiked Amount 50.000		Recovery =	37.70%
Target Compounds			
1) T n-Nonane (C9)	3.270	2407553	18.993 ug/ml
2) T n-Decane (C10)	4.336	2442213	18.999 ug/ml
3) T A~Naphthalene (C11.7)	5.915	2689038	18.956 ug/ml
4) T n-Dodecane (C12)	6.353	2456420	18.930 ug/ml
5) T A~2-methylnaphthalene...	6.970	2597570	18.934 ug/ml
6) T n-Tetradecane (C14)	8.146	2450775	19.028 ug/ml
7) T n-Hexadecane (C16)	9.746	2523898	18.960 ug/ml
8) T n-Octadecane (C18)	11.186	2573183	18.976 ug/ml
10) T n-Eicosane (C20)	12.494	2485014	19.032 ug/ml
11) T n-Heneicosane (C21)	13.105	2426455	18.919 ug/ml
13) T n-Docosane (C22)	13.691	2465913	19.312 ug/ml
14) T n-Tetracosane (C24)	14.792	2609769	20.406 ug/ml
15) T n-Hexacosane (C26)	15.813	2600091	20.622 ug/ml
16) T n-Octacosane (C28)	16.762	2654837	21.132 ug/ml
17) T n-Tricontane (C30)	17.647	2708550	21.025 ug/ml
18) T n-Dotriacontane (C32)	18.478	2596492	20.784 ug/ml
19) T n-Tetratriacontane (C34)	19.261	2217081	20.289 ug/ml
20) T n-Hexatriacontane (C36)	20.000	1805047	19.097 ug/ml
21) T n-Octatriacontane (C38)	20.724	1666956	19.008 ug/ml
22) T n-Tetracontane (C40)	21.608	1643254	19.097 ug/ml

(f)=RT Delta > 1/2 Window

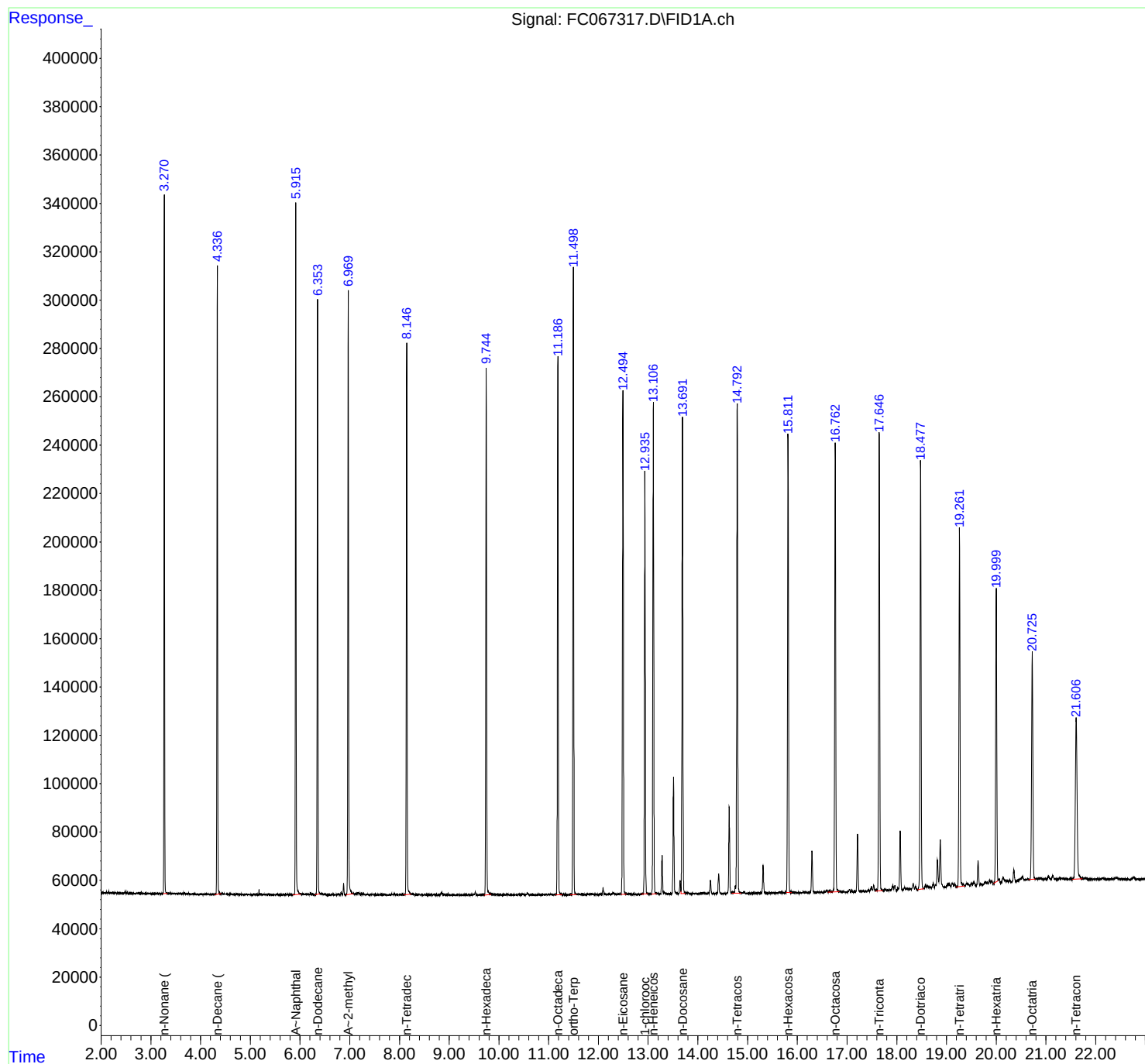
(m)=manual int.

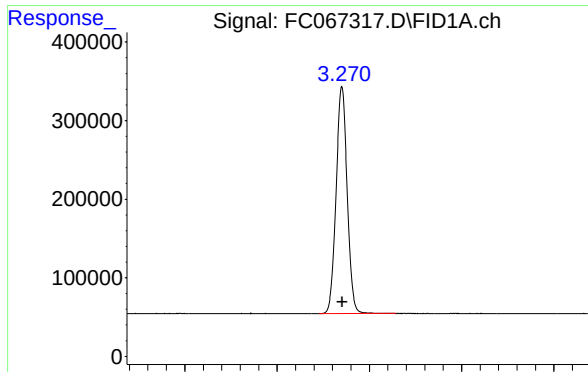
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067317.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 14:29
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Oct 01 09:15:12 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 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)

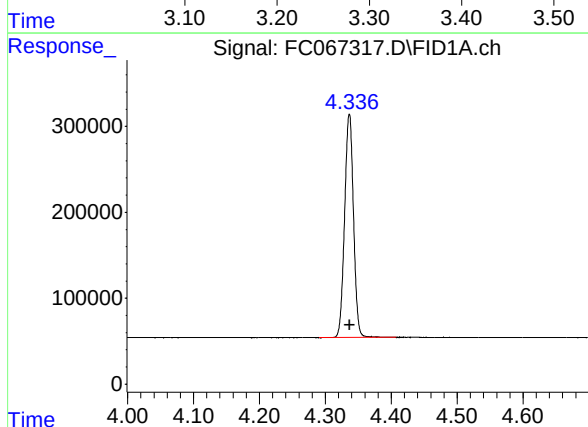
R.T.: 3.270 min
Delta R.T.: 0.000 min
Response: 2407553
Conc: 18.99 ug/ml

Instrument :

FID_C

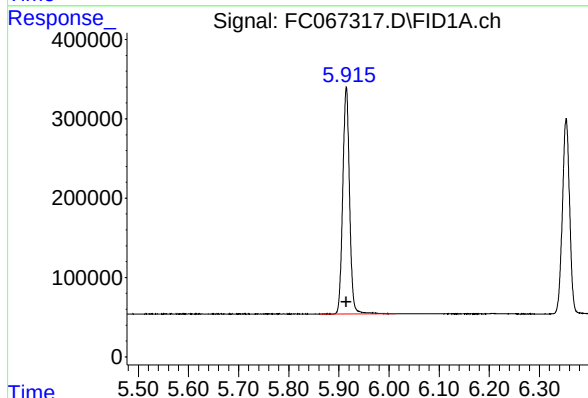
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



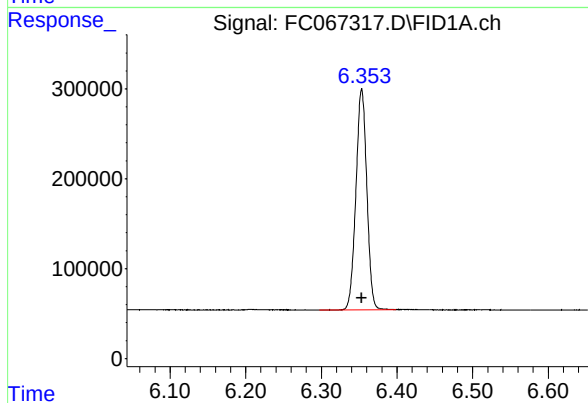
#2 n-Decane (C10)

R.T.: 4.336 min
Delta R.T.: 0.000 min
Response: 2442213
Conc: 19.00 ug/ml



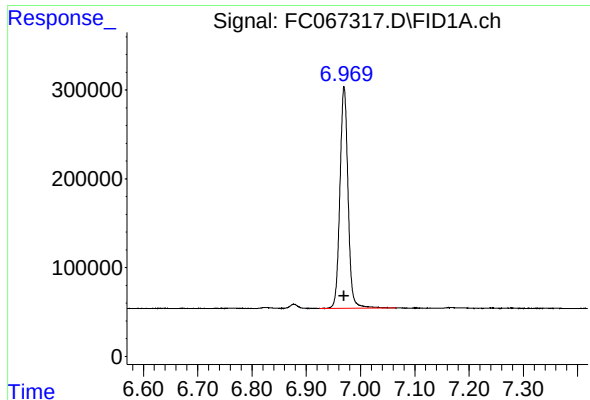
#3 A~Naphthalene (C11.7)

R.T.: 5.915 min
Delta R.T.: 0.000 min
Response: 2689038
Conc: 18.96 ug/ml



#4 n-Dodecane (C12)

R.T.: 6.353 min
Delta R.T.: 0.000 min
Response: 2456420
Conc: 18.93 ug/ml



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

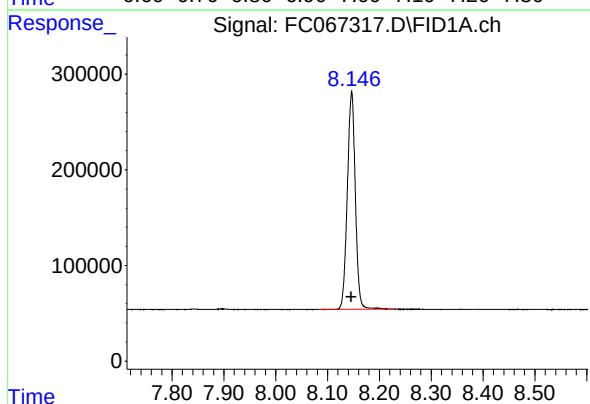
R.T.: 6.970 min
Delta R.T.: 0.000 min
Response: 2597570
Conc: 18.93 ug/ml

Instrument :

FID_C

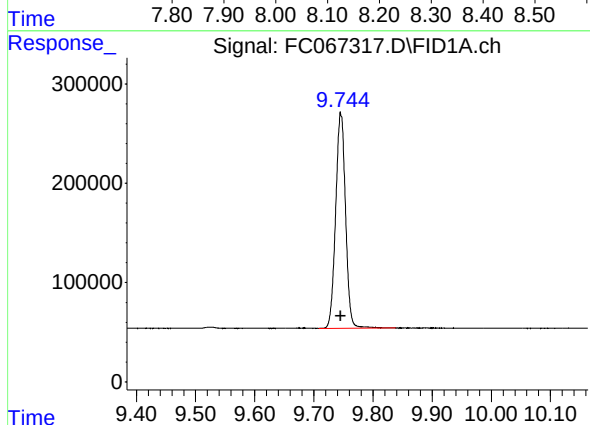
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



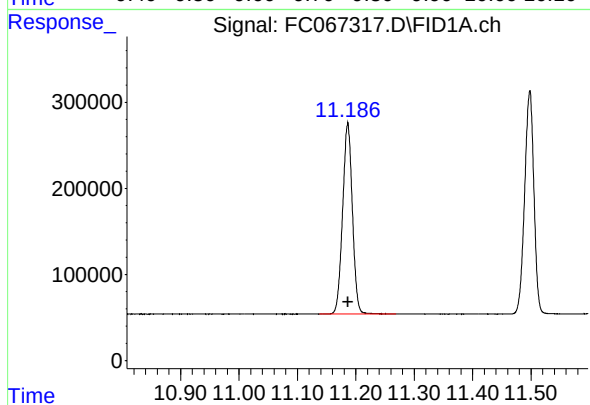
#6 n-Tetradecane (C14)

R.T.: 8.146 min
Delta R.T.: 0.000 min
Response: 2450775
Conc: 19.03 ug/ml



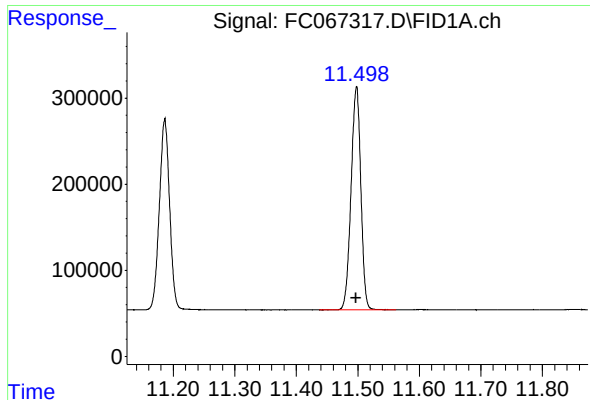
#7 n-Hexadecane (C16)

R.T.: 9.746 min
Delta R.T.: 0.000 min
Response: 2523898
Conc: 18.96 ug/ml



#8 n-Octadecane (C18)

R.T.: 11.186 min
Delta R.T.: 0.000 min
Response: 2573183
Conc: 18.98 ug/ml



#9 ortho-Terphenyl (SURR)

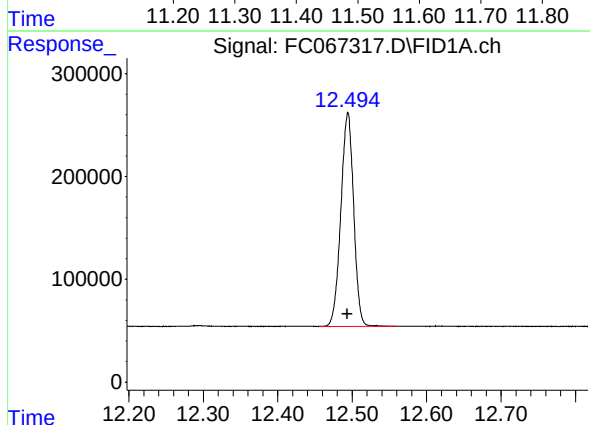
R.T.: 11.498 min
Delta R.T.: 0.000 min
Response: 2856514
Conc: 18.77 ug/ml

Instrument :

FID_C

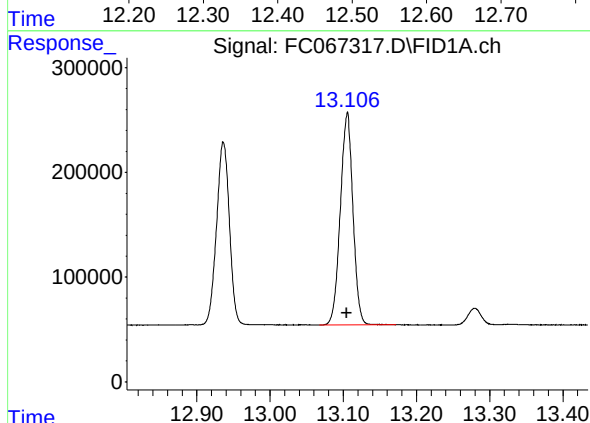
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



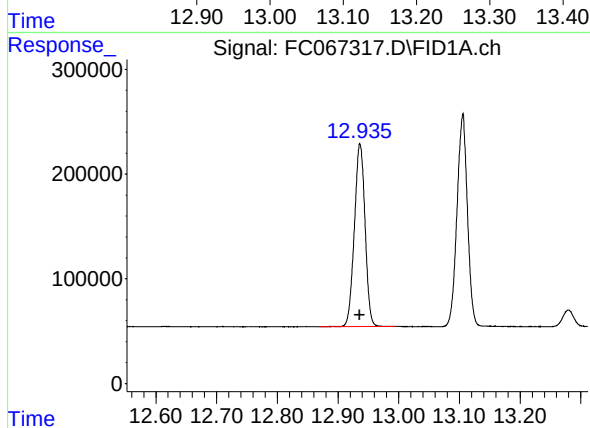
#10 n-Eicosane (C20)

R.T.: 12.494 min
Delta R.T.: 0.000 min
Response: 2485014
Conc: 19.03 ug/ml



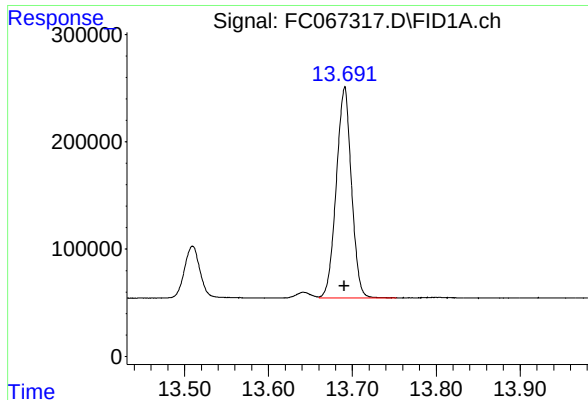
#11 n-Heneicosane (C21)

R.T.: 13.105 min
Delta R.T.: 0.000 min
Response: 2426455
Conc: 18.92 ug/ml



#12 1-chlorooctadecane (SURR)

R.T.: 12.936 min
Delta R.T.: 0.000 min
Response: 2133568
Conc: 18.85 ug/ml



#13 n-Docosane (C22)

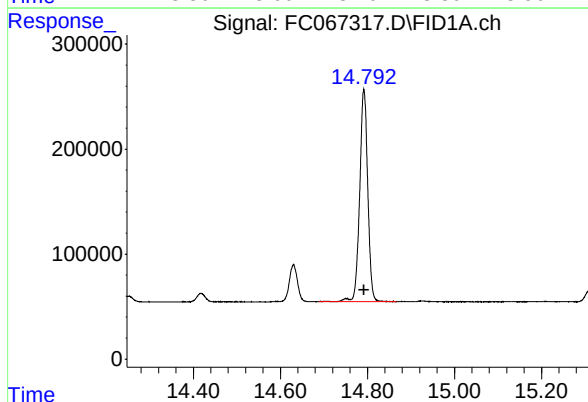
R.T.: 13.691 min
Delta R.T.: 0.000 min
Response: 2465913
Conc: 19.31 ug/ml

Instrument :

FID_C

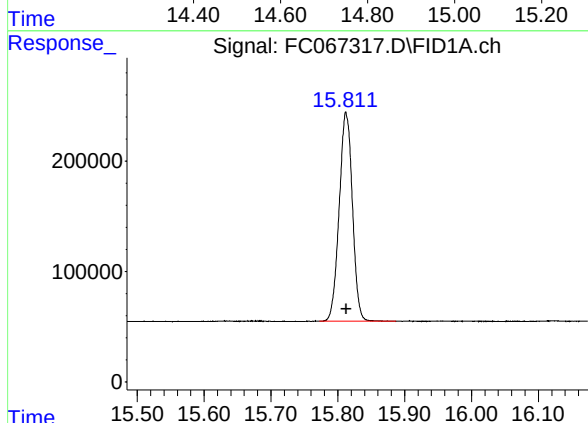
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



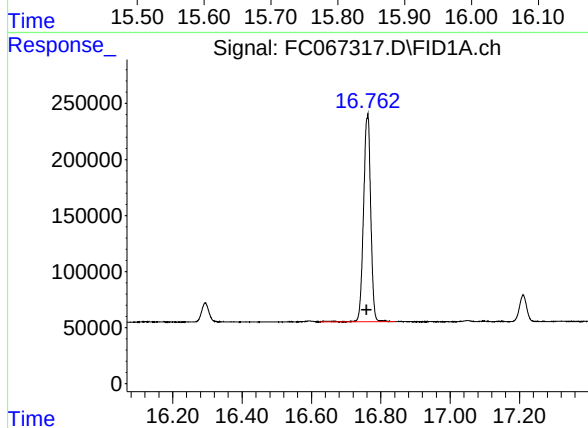
#14 n-Tetracosane (C24)

R.T.: 14.792 min
Delta R.T.: 0.000 min
Response: 2609769
Conc: 20.41 ug/ml



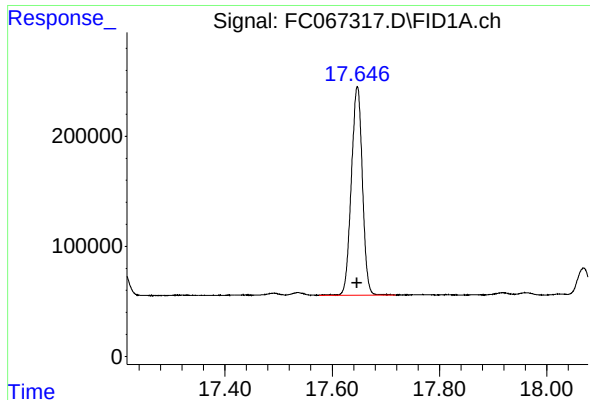
#15 n-Hexacosane (C26)

R.T.: 15.813 min
Delta R.T.: 0.000 min
Response: 2600091
Conc: 20.62 ug/ml



#16 n-Octacosane (C28)

R.T.: 16.762 min
Delta R.T.: 0.002 min
Response: 2654837
Conc: 21.13 ug/ml



#17 n-Tricontane (C30)

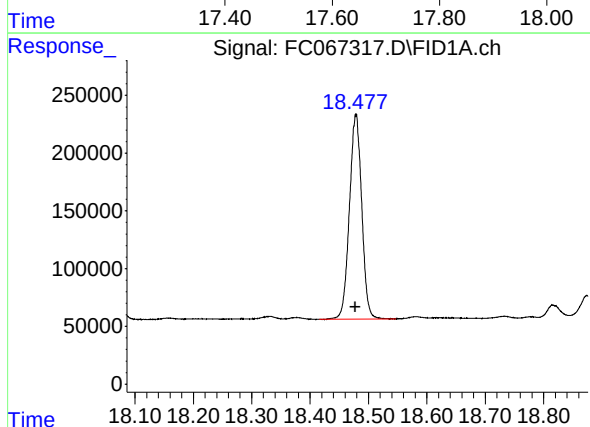
R.T.: 17.647 min
Delta R.T.: 0.000 min
Response: 2708550
Conc: 21.03 ug/ml

Instrument :

FID_C

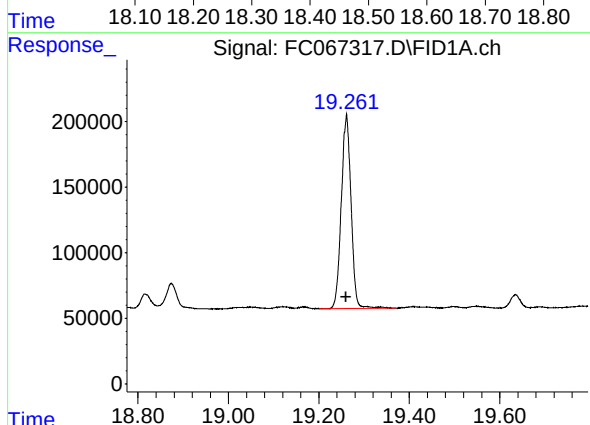
ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



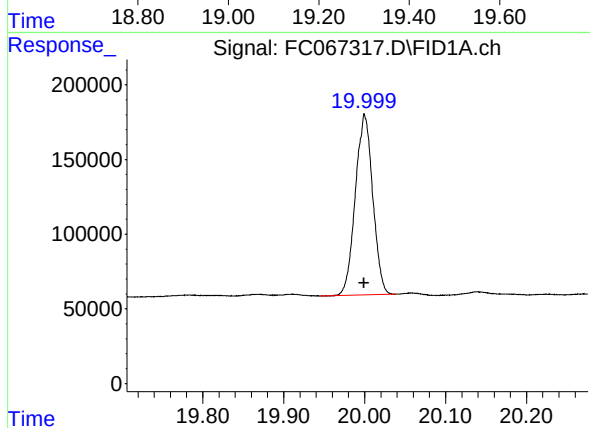
#18 n-Dotriacontane (C32)

R.T.: 18.478 min
Delta R.T.: 0.000 min
Response: 2596492
Conc: 20.78 ug/ml



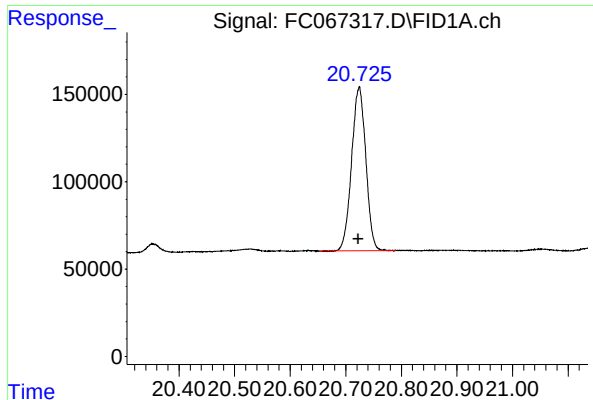
#19 n-Tetatriacontane (C34)

R.T.: 19.261 min
Delta R.T.: 0.001 min
Response: 2217081
Conc: 20.29 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.000 min
Delta R.T.: 0.000 min
Response: 1805047
Conc: 19.10 ug/ml



#21 n-Octatriacontane (C38)

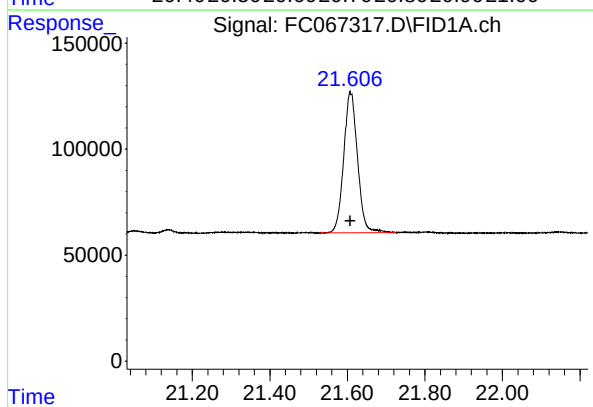
R.T.: 20.724 min
Delta R.T.: 0.000 min
Response: 1666956
Conc: 19.01 ug/ml

Instrument :

FID_C

ClientSampleId :

20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 21.608 min
Delta R.T.: 0.000 min
Response: 1643254
Conc: 19.10 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC100224AL\
Data File : FC067317.D
Signal(s) : FID1A.ch
Acq On : 30 Sep 2024 14:29
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 100224.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	3.270	3.245	3.329	BB	288931	2407553	84.28%	4.542%
2	4.336	4.290	4.407	BB	261348	2442213	85.50%	4.607%
3	5.915	5.860	6.014	BB	287508	2689038	94.14%	5.073%
4	6.353	6.297	6.399	BB	245767	2456420	85.99%	4.634%
5	6.970	6.924	7.065	BB	249458	2597570	90.93%	4.900%
6	8.146	8.084	8.232	BB	228794	2450775	85.80%	4.623%
7	9.746	9.709	9.839	BB	216843	2523898	88.36%	4.761%
8	11.186	11.137	11.269	BB	220536	2573183	90.08%	4.854%
9	11.498	11.437	11.562	BB	258215	2856514	100.00%	5.389%
10	12.494	12.455	12.559	BB	207733	2485014	86.99%	4.688%
11	12.936	12.869	12.995	BB	173785	2133568	74.69%	4.025%
12	13.105	13.067	13.172	BB	202480	2426455	84.94%	4.577%
13	13.691	13.660	13.752	VB	195897	2465913	86.33%	4.652%
14	14.792	14.689	14.865	BB	201649	2609769	91.36%	4.923%
15	15.813	15.772	15.887	BB	189215	2600091	91.02%	4.905%
16	16.762	16.622	16.844	BB	184812	2654837	92.94%	5.008%
17	17.647	17.575	17.719	BB	189586	2708550	94.82%	5.109%
18	18.478	18.415	18.547	BV	176605	2596492	90.90%	4.898%
19	19.261	19.200	19.370	BB	146116	2217081	77.61%	4.182%
20	20.000	19.944	20.039	BV	119921	1805047	63.19%	3.405%
21	20.724	20.652	20.790	BB	93568	1666956	58.36%	3.145%
22	21.608	21.527	21.725	BB	65123	1643254	57.53%	3.100%
Sum of corrected areas:							53010189	

Aliphatic EPH 100224.M Tue Oct 01 09:22:28 2024

Initial Calibration Report for SequenceID : FD093024AR

AreaCount

Parameter Range	FD048398.D	FD048399.D	FD048400.D	FD048401.D	FD048402.D	
Aromatic C10-C12	34648059.000	18252378.000	7283031.000	3571721.000	1884983.000	
Aromatic C12-C16	52772389.000	27987173.000	11349711.000	5750614.000	3099577.000	
Aromatic C16-C21	67557629.000	35880273.000	14451391.000	7136049.000	3726042.000	
Aromatic C21-C36	141518244.000	74756685.000	30035782.000	14897193.000	7697046.000	
Aromatic EPH	296496321.000	156876509.000	63119915.000	31355577.000	16407648.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aromatic C10-C12	180984.84	3.098				
Aromatic C12-C16	189995.313333	5.829				
Aromatic C16-C21	178728.23	3.52				
Aromatic C21-C36	165360.7497772	3.04				
Aromatic EPH	174173.0715554	3.596				

Concentration

Parameter Range	FD048398.D	FD048399.D	FD048400.D	FD048401.D	FD048402.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	FD048398.D	FD048399.D	FD048400.D	FD048401.D	FD048402.D	
Aromatic C10-C12	173240.295000	182523.780000	182075.775000	178586.050000	188498.300000	
Aromatic C12-C16	175907.963333	186581.153333	189161.850000	191687.133333	206638.466666	
Aromatic C16-C21	168894.072500	179401.365000	180642.387500	178401.225000	186302.100000	
Aromatic C21-C36	157242.493333	166125.966666	166865.455555	165524.366666	171045.466666	
Aromatic EPH	164720.178333	174307.232222	175333.097222	174197.650000	182307.200000	

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
 Data File : FD048398.D
 Signal(s) : FID2B.ch
 Acq On : 30 Sep 2024 10:32
 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: Sep 30 12:32:39 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
 Quant Title : GC Extractables
 QLast Update : Mon Sep 30 12:29:39 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...	7.387	15133598	96.497 ug/ml
Spiked Amount 50.000		Recovery =	192.99%
6) S 2-Fluorobiphenyl (SURR)	8.238	10225240	98.366 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	196.73%#
11) S ortho-Terphenyl (SURR)	11.276	17090754	95.957 ug/ml
Spiked Amount 50.000		Recovery =	191.91%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.207	16849228	97.651 ug/ml
2) T Naphthalene (C11.7)	5.727	17798831	97.384 ug/ml
3) T 2-Methylnaphthalene (...)	6.776	17826888	97.043 ug/ml
5) T Acenaphthylene (C15.06)	8.042	17456164	95.975 ug/ml
7) T Acenaphthene (C15.5)	8.339	17489337	96.084 ug/ml
8) T Fluorene (C16.55)	9.117	17164502	96.742 ug/ml
9) T Phenanthrene (C19.36)	10.505	17038003	97.268 ug/ml
10) T Anthracene (C19.43)	10.582	16550190	96.030 ug/ml
12) T Fluoranthene (C21.85)	12.312	16931938	96.606 ug/ml
13) T Pyrene (C20.8)	12.605	16804934	96.504 ug/ml
14) T Benzo[a]anthracene (C...	14.474	16142668	98.545 ug/ml
15) T Chrysene (C27.41)	14.521	16511891	94.840 ug/ml
16) T benzo[b]fluoranthene ...	16.024	16340653	97.826 ug/ml
17) T Bnezo[k]fluoranthene ...	16.062	15204824	95.933 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.403	15774557	97.005 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.769	14738374	104.652 ug/ml
20) T Dibenz[a,h]anthracene...	17.808	14680138	92.545 ug/ml
21) T Benzo[g,h,i]perylene ...	18.026	15193201	96.345 ug/ml

(f)=RT Delta > 1/2 Window

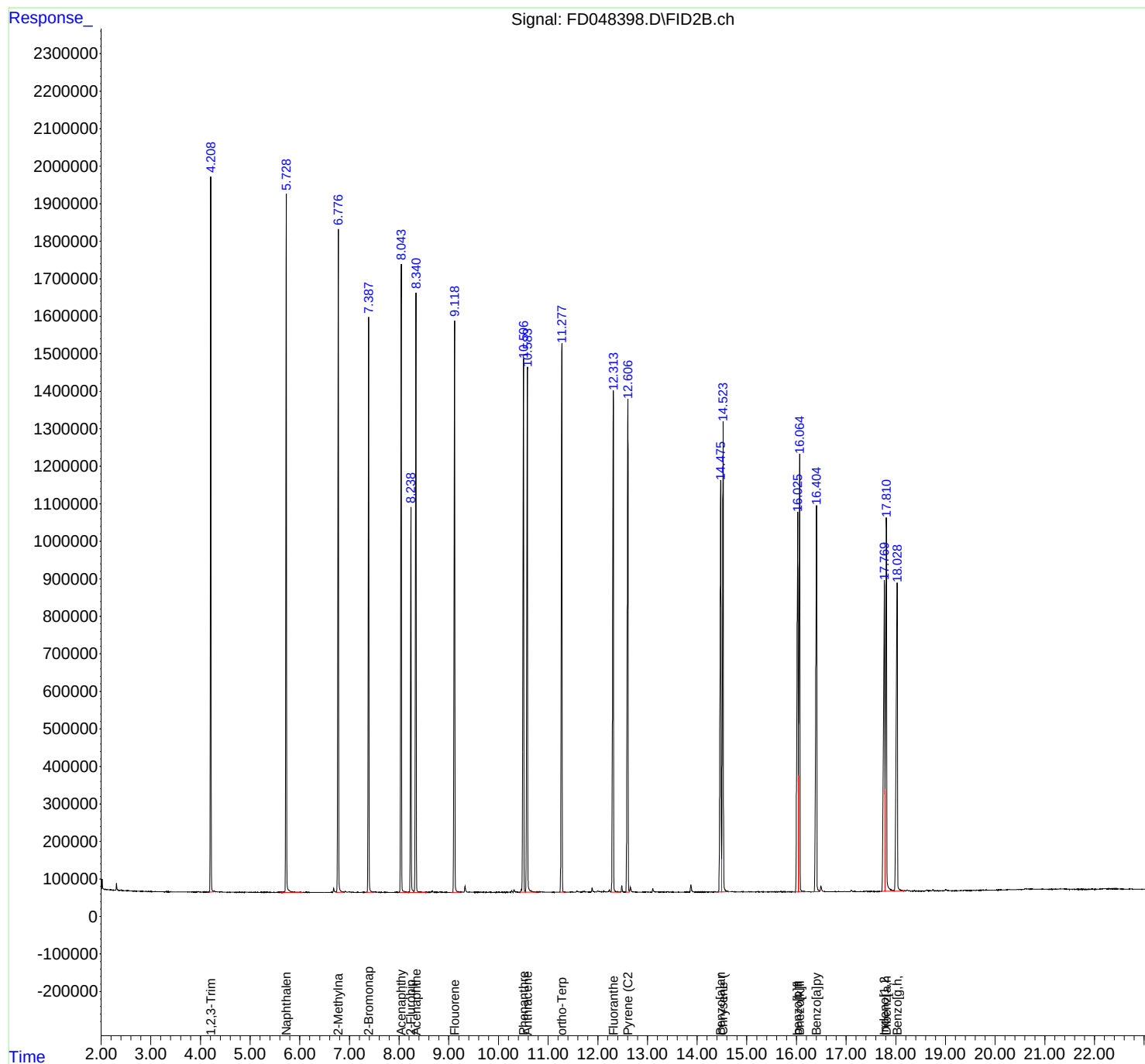
(m)=manual int.

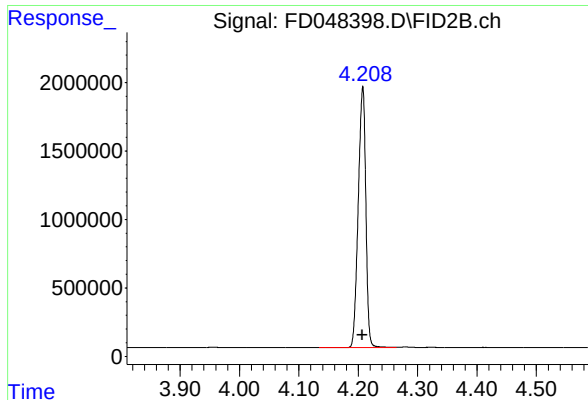
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048398.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 10:32
Operator : YP/AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1

Integration File: autoint1.e
Quant Time: Sep 30 12:32:39 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 12:29:39 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)

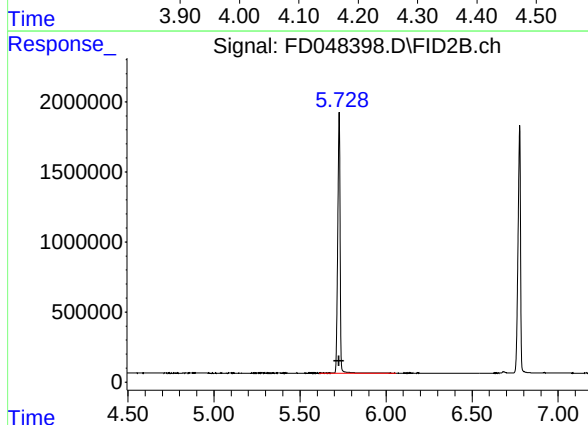
R.T.: 4.207 min
Delta R.T.: 0.000 min
Response: 16849228
Conc: 97.65 ug/ml

Instrument :

FID_D

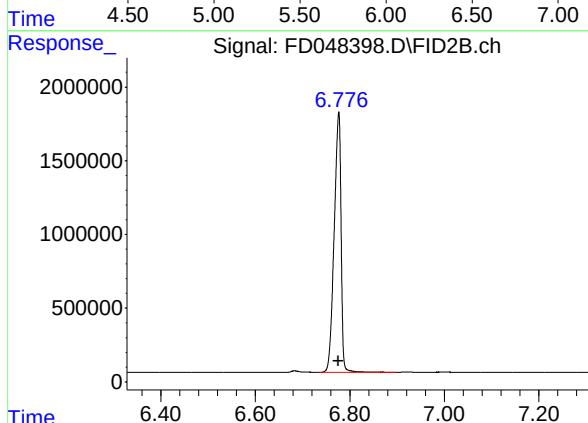
ClientSampleId :

100 PPM AROMATIC HC STD1



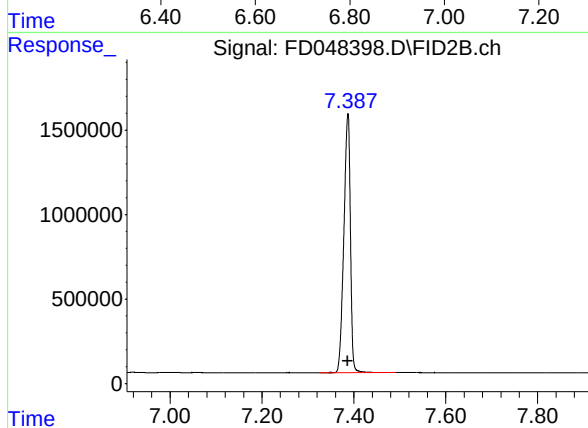
#2 Naphthalene (C11.7)

R.T.: 5.727 min
Delta R.T.: 0.000 min
Response: 17798831
Conc: 97.38 ug/ml



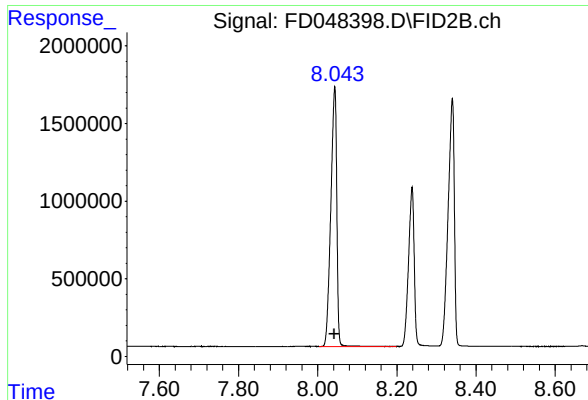
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.776 min
Delta R.T.: 0.000 min
Response: 17826888
Conc: 97.04 ug/ml



#4 2-Bromonaphthalene (SURR)

R.T.: 7.387 min
Delta R.T.: 0.000 min
Response: 15133598
Conc: 96.50 ug/ml



#5 Acenaphthylene (C15.06)

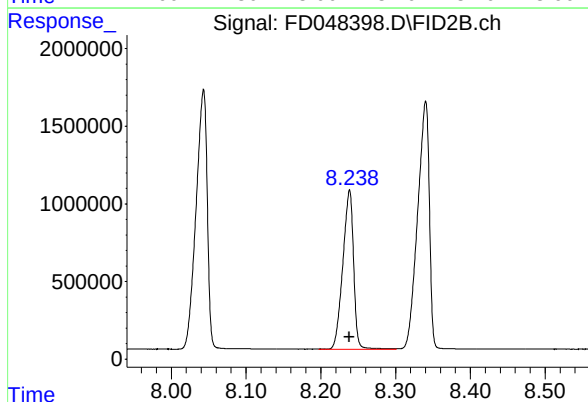
R.T.: 8.042 min
Delta R.T.: 0.000 min
Response: 17456164
Conc: 95.98 ug/ml

Instrument :

FID_D

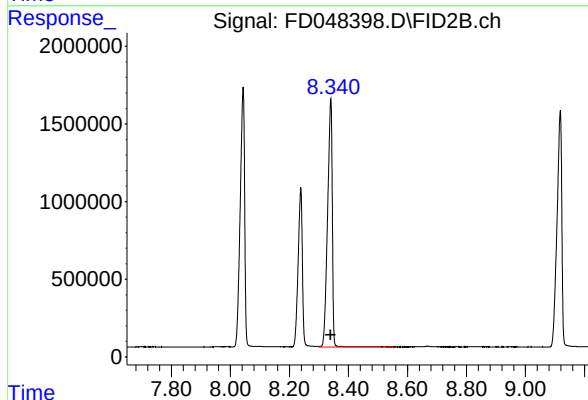
ClientSampleId :

100 PPM AROMATIC HC STD1



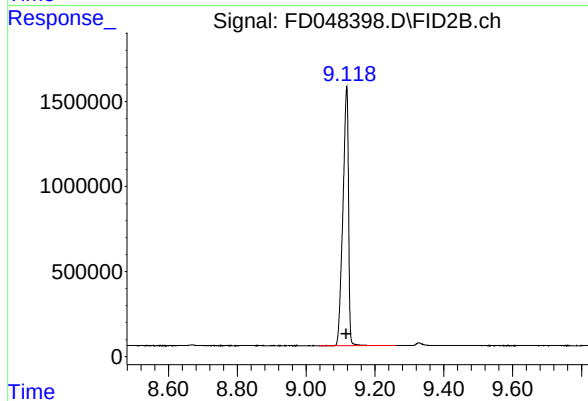
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.238 min
Delta R.T.: 0.000 min
Response: 10225240
Conc: 98.37 ug/ml



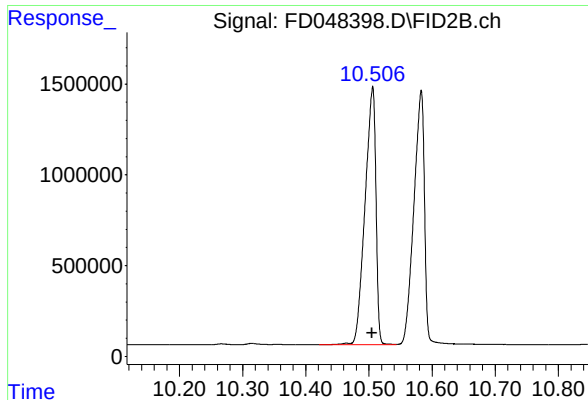
#7 Acenaphthene (C15.5)

R.T.: 8.339 min
Delta R.T.: 0.000 min
Response: 17489337
Conc: 96.08 ug/ml



#8 Fluorene (C16.55)

R.T.: 9.117 min
Delta R.T.: 0.000 min
Response: 17164502
Conc: 96.74 ug/ml



#9 Phenanthrene (C19.36)

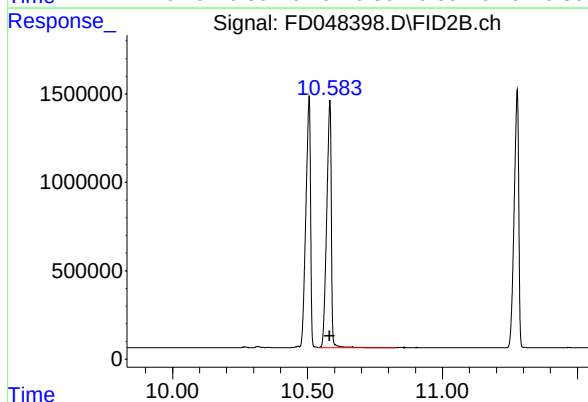
R.T.: 10.505 min
Delta R.T.: 0.000 min
Response: 17038003
Conc: 97.27 ug/ml

Instrument :

FID_D

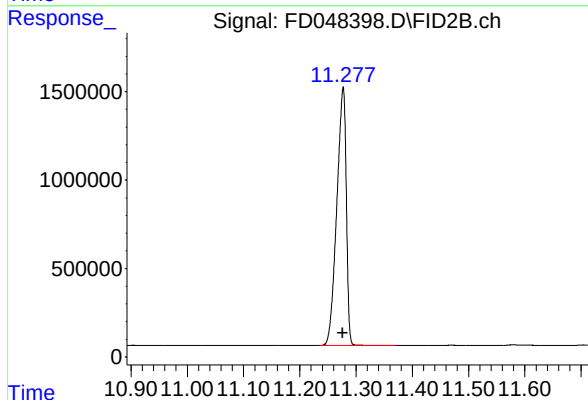
ClientSampleId :

100 PPM AROMATIC HC STD1



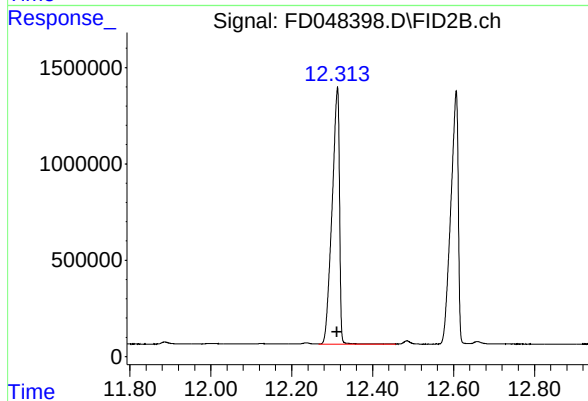
#10 Anthracene (C19.43)

R.T.: 10.582 min
Delta R.T.: 0.000 min
Response: 16550190
Conc: 96.03 ug/ml



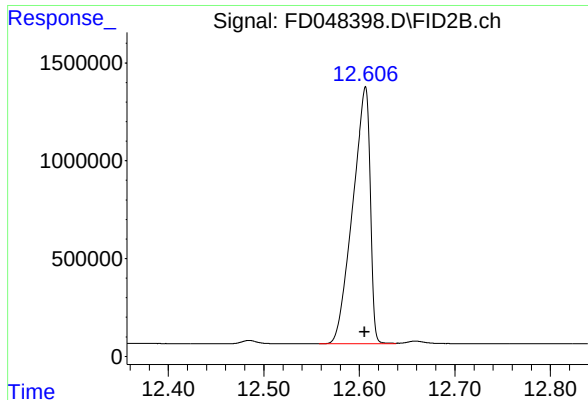
#11 ortho-Terphenyl (SURR)

R.T.: 11.276 min
Delta R.T.: 0.000 min
Response: 17090754
Conc: 95.96 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 12.312 min
Delta R.T.: 0.000 min
Response: 16931938
Conc: 96.61 ug/ml



#13 Pyrene (C20.8)

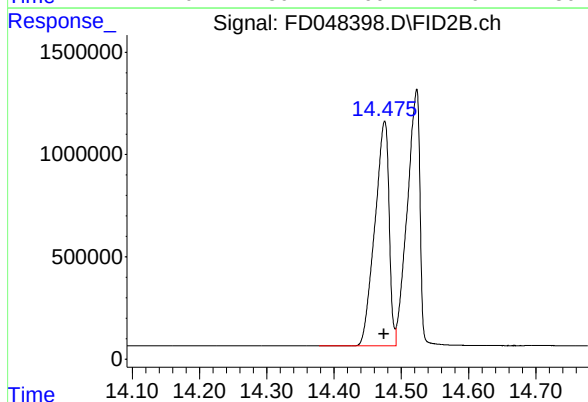
R.T.: 12.605 min
Delta R.T.: 0.000 min
Response: 16804934
Conc: 96.50 ug/ml

Instrument :

FID_D

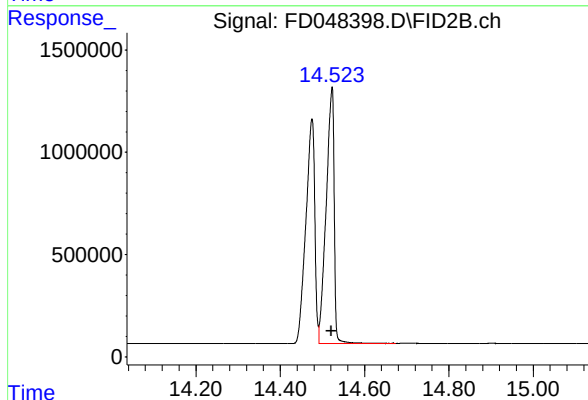
ClientSampleId :

100 PPM AROMATIC HC STD1



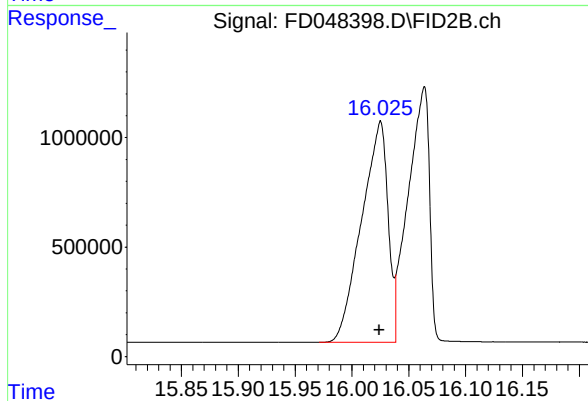
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.474 min
Delta R.T.: 0.000 min
Response: 16142668
Conc: 98.54 ug/ml



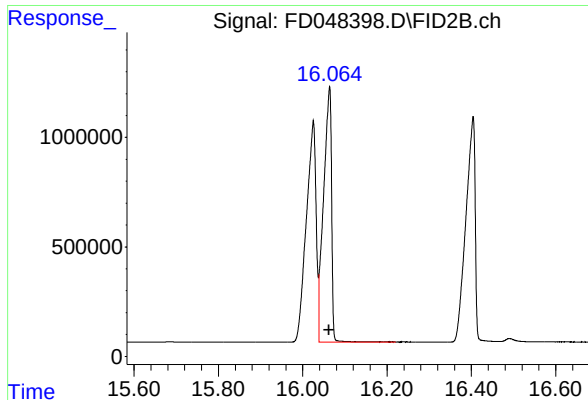
#15 Chrysene (C27.41)

R.T.: 14.521 min
Delta R.T.: 0.000 min
Response: 16511891
Conc: 94.84 ug/ml



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

R.T.: 16.024 min
Delta R.T.: 0.000 min
Response: 16340653
Conc: 97.83 ug/ml



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

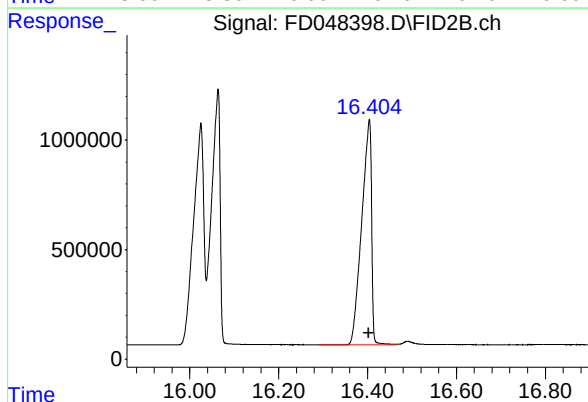
R.T.: 16.062 min
Delta R.T.: 0.000 min
Response: 15204824
Conc: 95.93 ug/ml

Instrument :

FID_D

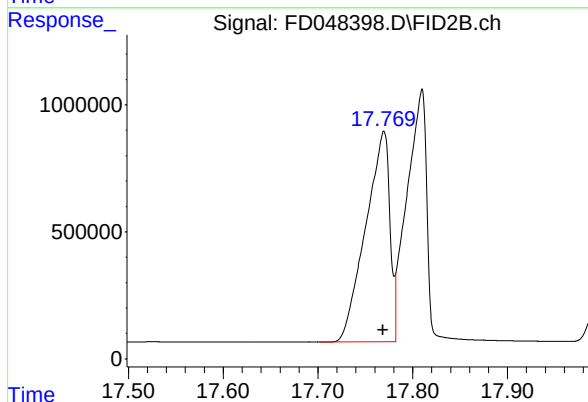
ClientSampleId :

100 PPM AROMATIC HC STD1



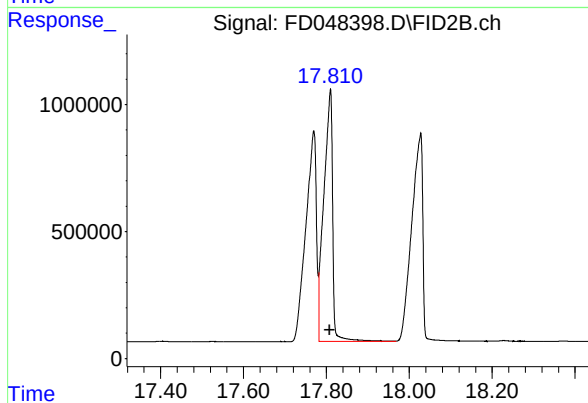
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.403 min
Delta R.T.: 0.000 min
Response: 15774557
Conc: 97.01 ug/ml



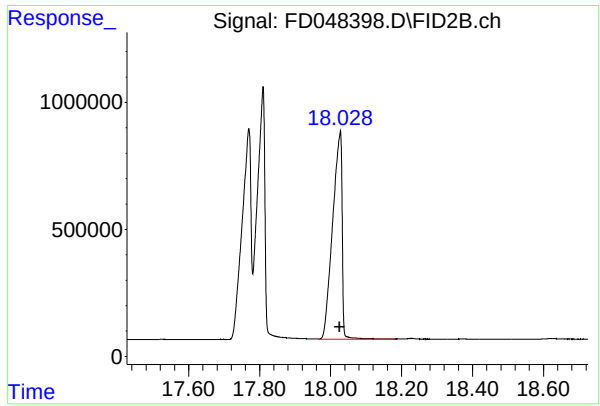
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.769 min
Delta R.T.: 0.000 min
Response: 14738374
Conc: 104.65 ug/ml



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

R.T.: 17.808 min
Delta R.T.: 0.000 min
Response: 14680138
Conc: 92.54 ug/ml



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

R.T.: 18.026 min

Delta R.T.: 0.000 min

Response: 15193201

Conc: 96.34 ug/ml

Instrument :

FID_D

ClientSampleId :

100 PPM AROMATIC HC STD1

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048398.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 10:32
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 093024.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	4.207	4.164	4.263	BV	1915723	16808820	94.42%	4.964%
2	5.727	5.664	5.941	BB	1872447	17729732	99.59%	5.236%
3	6.776	6.735	6.897	VV	1717584	17802071	100.00%	5.257%
4	7.387	7.288	7.492	BV	1560603	15119127	84.93%	4.465%
5	8.042	8.003	8.198	PB	1635352	17444290	97.99%	5.152%
6	8.238	8.198	8.300	BV	1016626	10212063	57.36%	3.016%
7	8.339	8.300	8.481	VB	1641134	17443576	97.99%	5.152%
8	9.117	8.988	9.261	BV	1531823	17126947	96.21%	5.058%
9	10.505	10.421	10.543	BV	1397756	17035396	95.69%	5.031%
10	10.582	10.543	10.784	VB	1374690	16525531	92.83%	4.880%
11	11.276	11.074	11.371	BB	1486072	17092393	96.01%	5.048%
12	12.312	12.268	12.458	VV	1302464	16901440	94.94%	4.991%
13	12.605	12.558	12.638	BV	1285020	16803834	94.39%	4.963%
14	14.474	14.301	14.492	BV	1097241	16141236	90.67%	4.767%
15	14.521	14.492	14.674	VV	1228449	16510593	92.75%	4.876%
16	16.024	15.971	16.039	BV	1003738	16339021	91.78%	4.825%
17	16.062	16.039	16.184	VB	1128407	15185368	85.30%	4.485%
18	16.403	16.291	16.464	BV	1053085	15772391	88.60%	4.658%
19	17.769	17.701	17.782	BV	822737	14738374	82.79%	4.353%
20	17.808	17.782	17.968	VV	969287	14680138	82.46%	4.335%
21	18.026	17.968	18.184	VV	801967	15193201	85.35%	4.487%
Sum of corrected areas:						338605545		

Aromatic EPH 093024.M Tue Oct 01 01:47:33 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
 Data File : FD048399.D
 Signal(s) : FID2B.ch
 Acq On : 30 Sep 2024 11:10
 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: Sep 30 12:34:15 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
 Quant Title : GC Extractables
 QLast Update : Mon Sep 30 12:29:39 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...	7.383	8053284	50.892 ug/ml
Spiked Amount 50.000		Recovery =	101.78%
6) S 2-Fluorobiphenyl (SURR)	8.233	5363905	51.056 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	102.11%
11) S ortho-Terphenyl (SURR)	11.270	9118209	50.790 ug/ml
Spiked Amount 50.000		Recovery =	101.58%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.204	8896963	51.031 ug/ml
2) T Naphthalene (C11.7)	5.723	9355415	50.785 ug/ml
3) T 2-Methylnaphthalene (...)	6.771	9401412	50.779 ug/ml
5) T Acenaphthylene (C15.06)	8.037	9277174	50.667 ug/ml
7) T Acenaphthene (C15.5)	8.333	9308587	50.754 ug/ml
8) T Fluorene (C16.55)	9.111	9110768	50.892 ug/ml
9) T Phenanthrene (C19.36)	10.498	9022332	50.995 ug/ml
10) T Anthracene (C19.43)	10.574	8792165	50.672 ug/ml
12) T Fluoranthene (C21.85)	12.304	9031075	51.008 ug/ml
13) T Pyrene (C20.8)	12.597	8955008	50.941 ug/ml
14) T Benzo[a]anthracene (C...	14.466	8534836	51.382 ug/ml
15) T Chrysene (C27.41)	14.509	8851759	50.558 ug/ml
16) T benzo[b]fluoranthene ...	16.013	8576544	50.889 ug/ml
17) T Bnezo[k]fluoranthene ...	16.048	8089512	50.688 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.390	8357472	50.921 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.754	7322210	51.311 ug/ml
20) T Dibenz[a,h]anthracene...	17.793	8013212	50.343 ug/ml
21) T Benzo[g,h,i]perylene ...	18.008	7980065	50.401 ug/ml

(f)=RT Delta > 1/2 Window

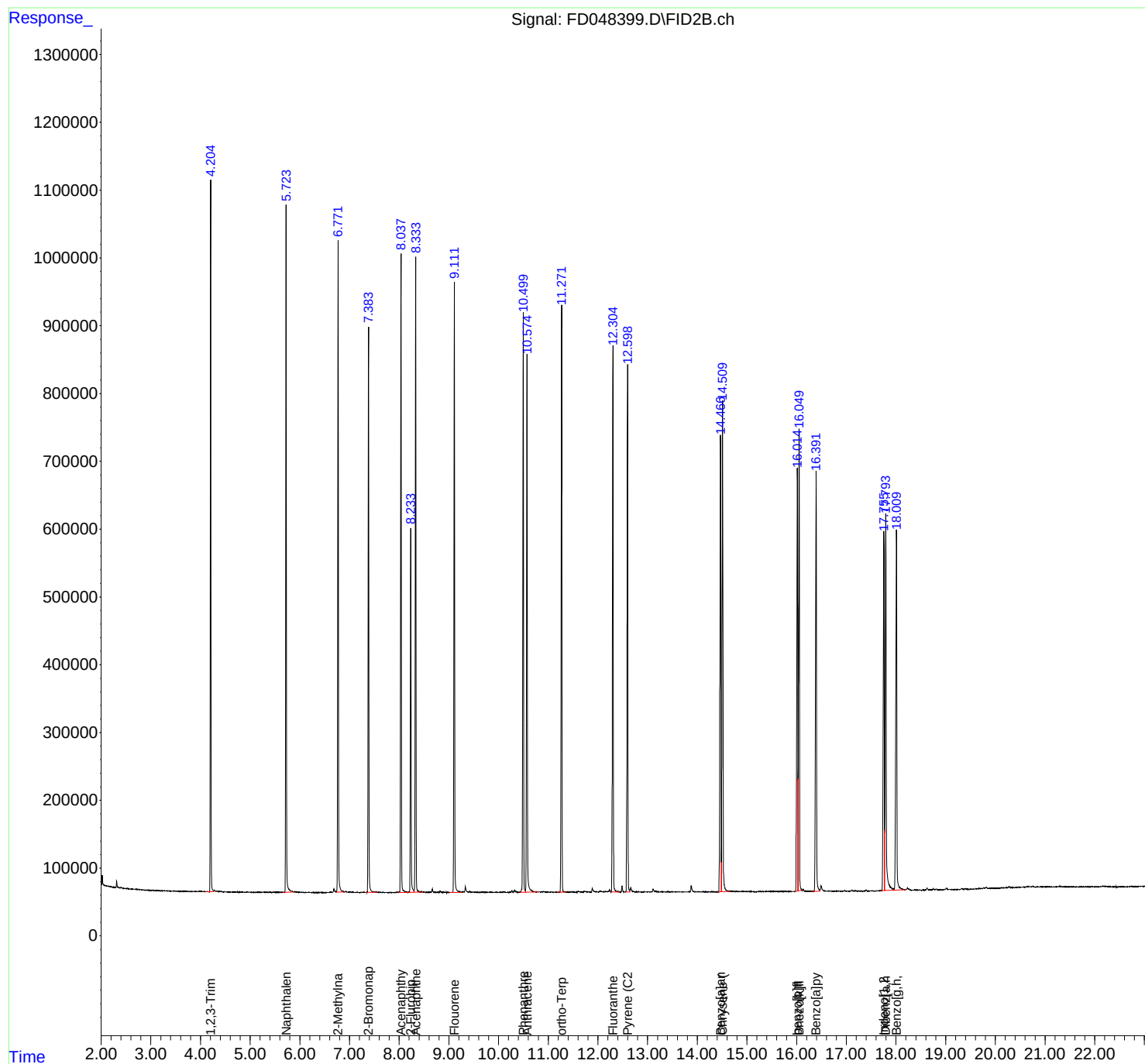
(m)=manual int.

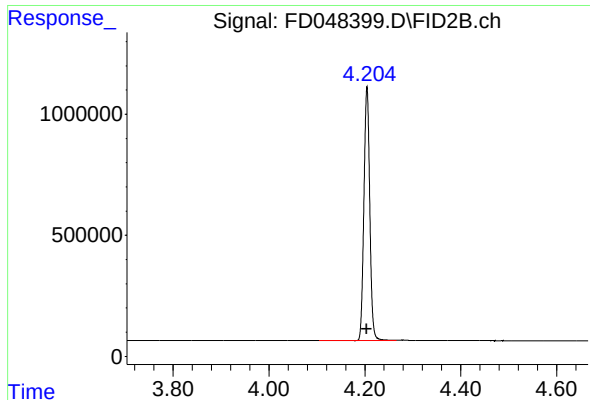
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048399.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 11:10
Operator : YP/AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Sep 30 12:34:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 12:29:39 2024
Response via : Initial Calibration
Integrator: ChemStation

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

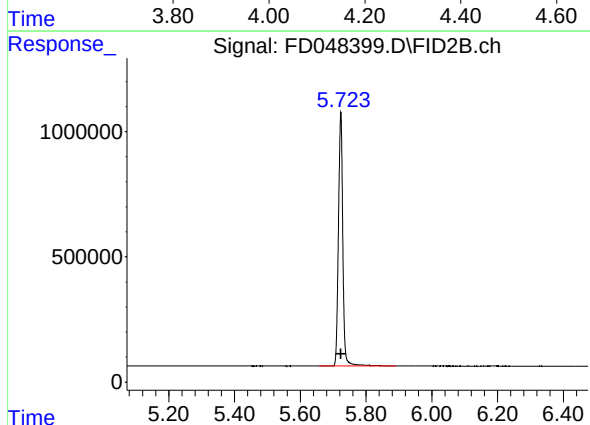




#1 1,2,3-Trimethylbenzene (C10.1)

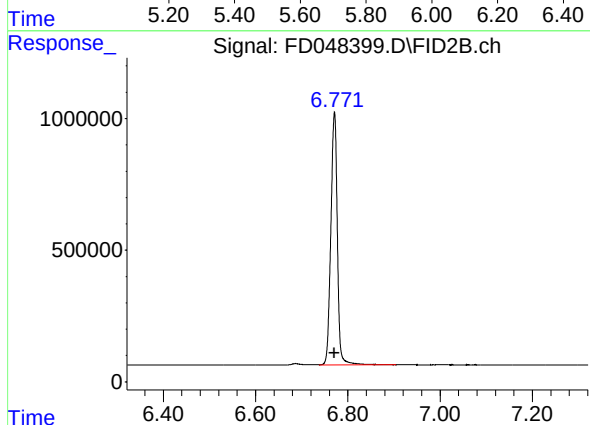
R.T.: 4.204 min
Delta R.T.: 0.000 min
Response: 8896963
Conc: 51.03 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



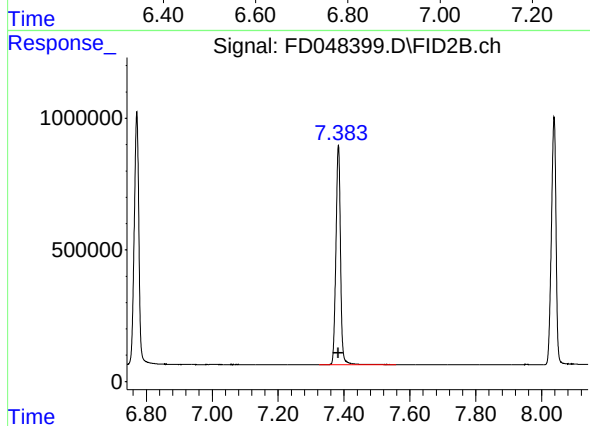
#2 Naphthalene (C11.7)

R.T.: 5.723 min
Delta R.T.: 0.000 min
Response: 9355415
Conc: 50.78 ug/ml



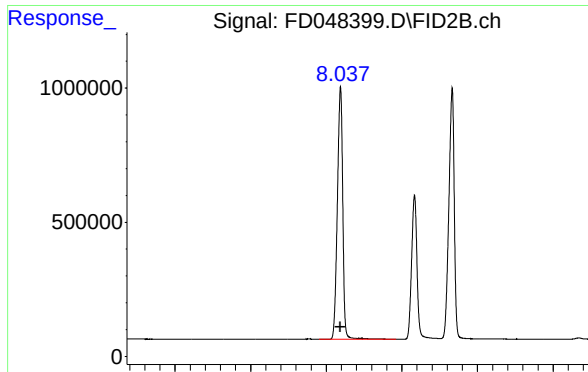
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.771 min
Delta R.T.: 0.000 min
Response: 9401412
Conc: 50.78 ug/ml



#4 2-Bromonaphthalene (SURR)

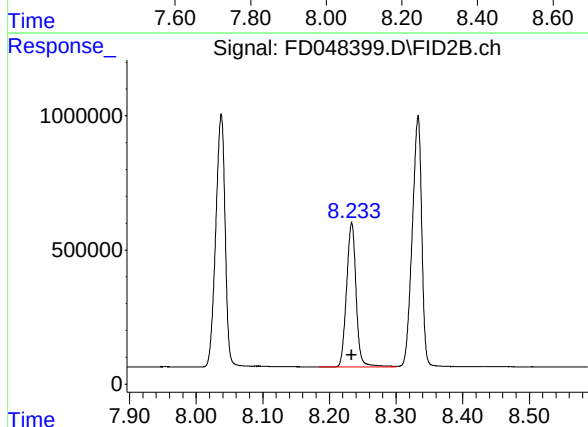
R.T.: 7.383 min
Delta R.T.: 0.000 min
Response: 8053284
Conc: 50.89 ug/ml



#5 Acenaphthylene (C15.06)

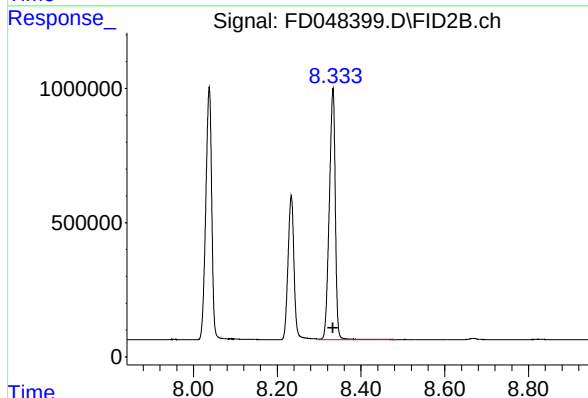
R.T.: 8.037 min
Delta R.T.: 0.000 min
Response: 9277174
Conc: 50.67 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



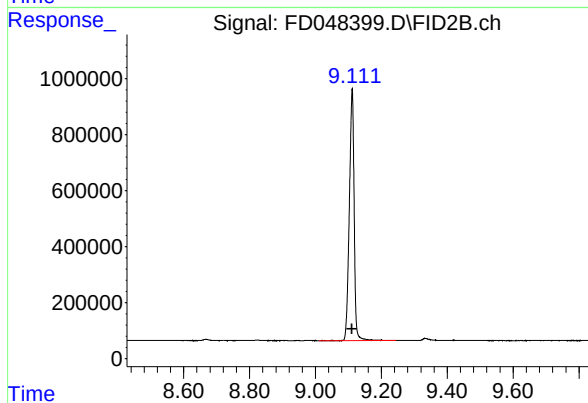
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.233 min
Delta R.T.: 0.000 min
Response: 5363905
Conc: 51.06 ug/ml



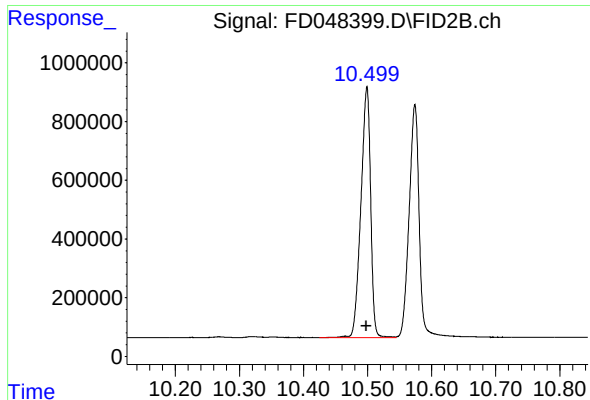
#7 Acenaphthene (C15.5)

R.T.: 8.333 min
Delta R.T.: 0.000 min
Response: 9308587
Conc: 50.75 ug/ml



#8 Flouorene (C16.55)

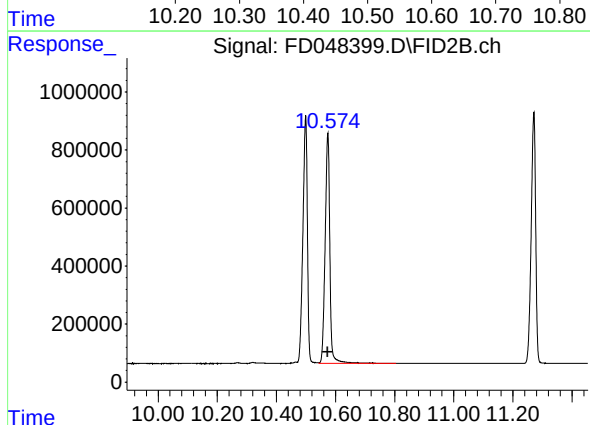
R.T.: 9.111 min
Delta R.T.: 0.000 min
Response: 9110768
Conc: 50.89 ug/ml



#9 Phenanthrene (C19.36)

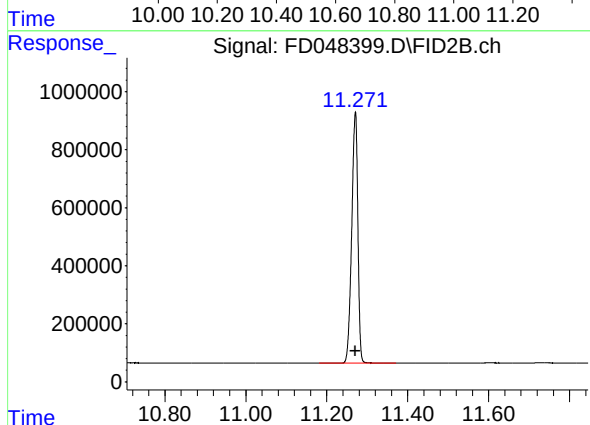
R.T.: 10.498 min
Delta R.T.: 0.000 min
Response: 9022332
Conc: 51.00 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



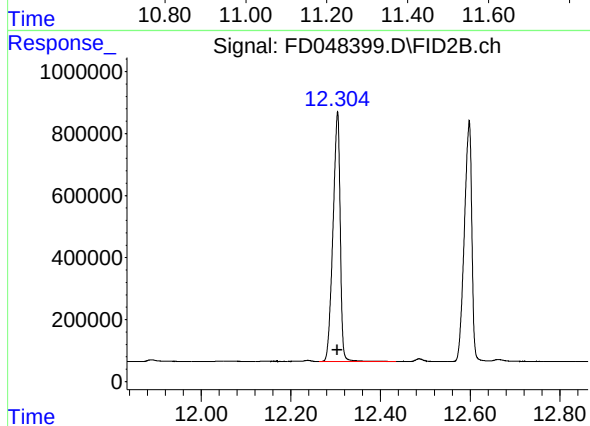
#10 Anthracene (C19.43)

R.T.: 10.574 min
Delta R.T.: 0.000 min
Response: 8792165
Conc: 50.67 ug/ml



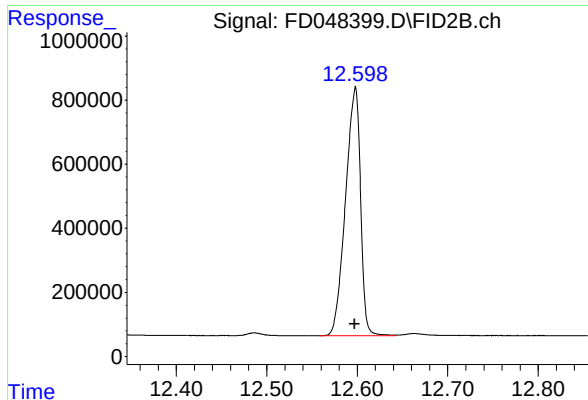
#11 ortho-Terphenyl (SURR)

R.T.: 11.270 min
Delta R.T.: 0.000 min
Response: 9118209
Conc: 50.79 ug/ml



#12 Fluoranthene (C21.85)

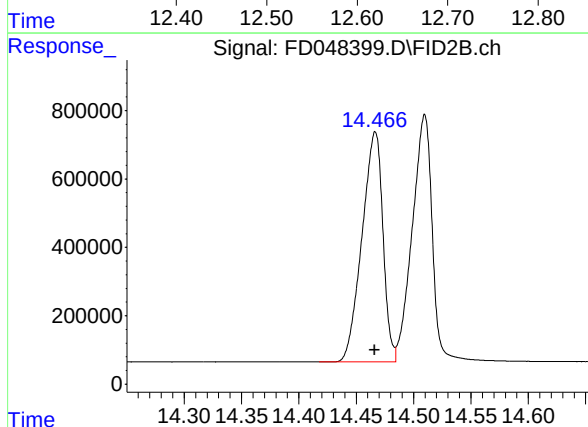
R.T.: 12.304 min
Delta R.T.: 0.000 min
Response: 9031075
Conc: 51.01 ug/ml



#13 Pyrene (C20.8)

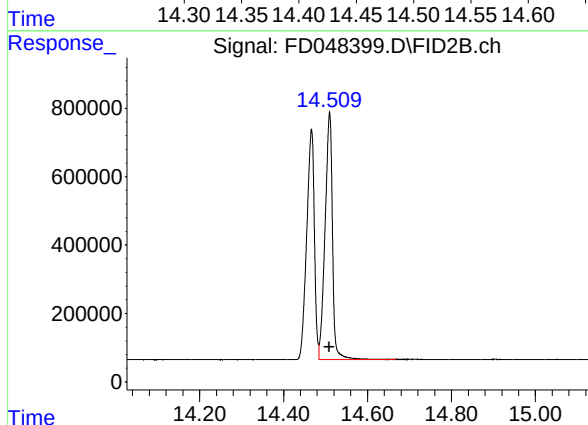
R.T.: 12.597 min
Delta R.T.: 0.000 min
Response: 8955008
Conc: 50.94 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



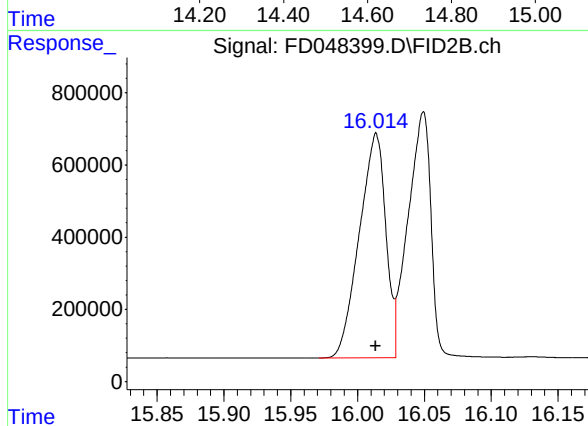
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.466 min
Delta R.T.: 0.000 min
Response: 8534836
Conc: 51.38 ug/ml



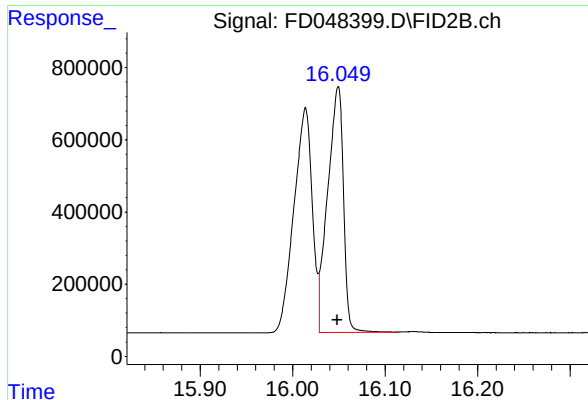
#15 Chrysene (C27.41)

R.T.: 14.509 min
Delta R.T.: 0.000 min
Response: 8851759
Conc: 50.56 ug/ml



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

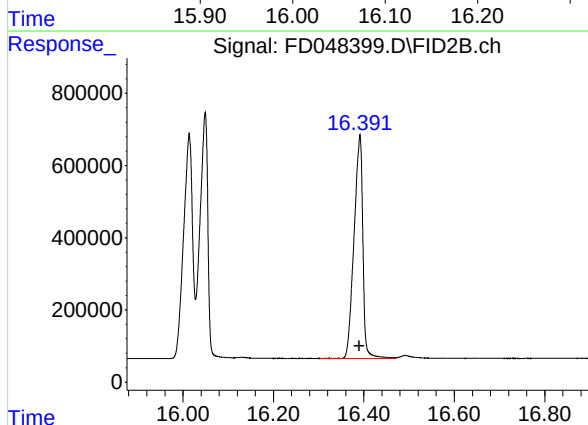
R.T.: 16.013 min
Delta R.T.: 0.000 min
Response: 8576544
Conc: 50.89 ug/ml



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

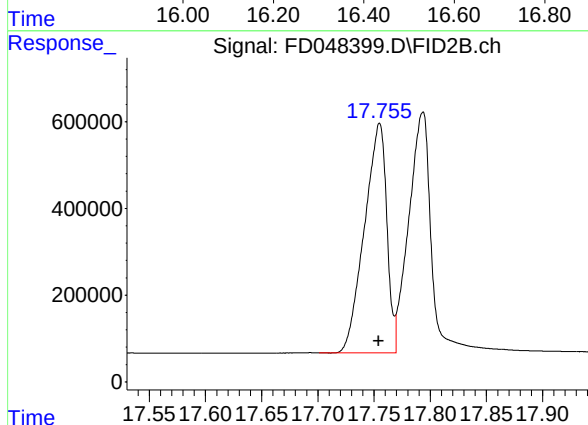
R.T.: 16.048 min
Delta R.T.: 0.000 min
Response: 8089512
Conc: 50.69 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



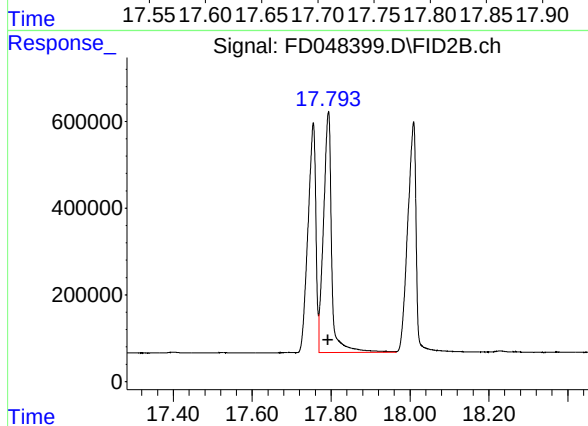
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.390 min
Delta R.T.: 0.000 min
Response: 8357472
Conc: 50.92 ug/ml



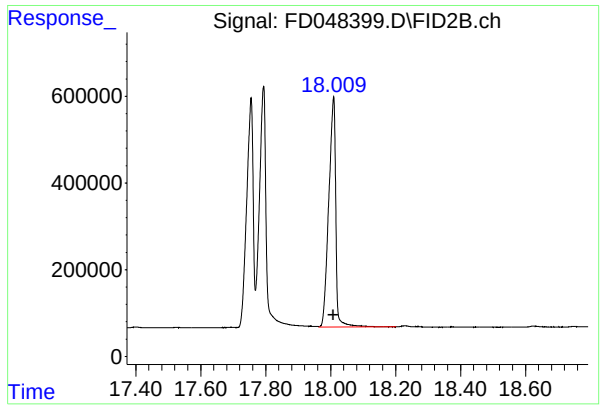
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.754 min
Delta R.T.: 0.000 min
Response: 7322210
Conc: 51.31 ug/ml



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

R.T.: 17.793 min
Delta R.T.: 0.000 min
Response: 8013212
Conc: 50.34 ug/ml



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

R.T.: 18.008 min
Delta R.T.: 0.000 min
Response: 7980065
Conc: 50.40 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048399.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 11:10
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 093024.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	4.204	4.138	4.265	BV	1045239	8844267	94.06%	4.936%
2	5.723	5.658	5.891	BV	1020976	9343668	99.37%	5.215%
3	6.771	6.738	6.904	VV	960640	9403190	100.00%	5.248%
4	7.383	7.275	7.528	PB	837974	8028291	85.38%	4.480%
5	8.037	7.981	8.168	VB	944306	9271271	98.60%	5.174%
6	8.233	8.178	8.300	BV	539343	5360312	57.01%	2.991%
7	8.333	8.300	8.481	VB	915788	9306766	98.97%	5.194%
8	9.111	9.021	9.244	BV	895204	9076333	96.52%	5.065%
9	10.498	10.398	10.544	BV	844446	9014676	95.87%	5.031%
10	10.574	10.544	10.781	VB	797965	8775430	93.32%	4.897%
11	11.270	11.184	11.371	BV	872834	9112859	96.91%	5.086%
12	12.304	12.263	12.434	PB	812257	8998589	95.70%	5.022%
13	12.597	12.558	12.643	BV	778213	8954963	95.23%	4.998%
14	14.466	14.318	14.485	BV	683059	8526273	90.67%	4.758%
15	14.509	14.485	14.668	VB	714287	8844035	94.05%	4.936%
16	16.013	15.971	16.029	BV	624297	8576544	91.21%	4.786%
17	16.048	16.029	16.112	VV	674122	8089512	86.03%	4.515%
18	16.390	16.204	16.471	BV	618316	8343619	88.73%	4.656%
19	17.754	17.701	17.769	BV	530824	7322210	77.87%	4.086%
20	17.793	17.769	17.964	VV	549809	8013212	85.22%	4.472%
21	18.008	17.964	18.201	VBA	525536	7980065	84.87%	4.454%
Sum of corrected areas:						179186086		

Aromatic EPH 093024.M Tue Oct 01 01:48:30 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
 Data File : FD048400.D
 Signal(s) : FID2B.ch
 Acq On : 30 Sep 2024 11:48
 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: Sep 30 12:30:02 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
 Quant Title : GC Extractables
 QLast Update : Mon Sep 30 12:29:39 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...	7.382	3246497	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
6) S 2-Fluorobiphenyl (SURR)	8.232	2113006	20.000 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	40.00%
11) S ortho-Terphenyl (SURR)	11.267	3706162	20.000 ug/ml
Spiked Amount 50.000		Recovery =	40.00%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.204	3531993	20.000 ug/ml
2) T Naphthalene (C11.7)	5.722	3751038	20.000 ug/ml
3) T 2-Methylnaphthalene (...)	6.769	3782649	20.000 ug/ml
5) T Acenaphthylene (C15.06)	8.034	3784046	20.000 ug/ml
7) T Acenaphthene (C15.5)	8.328	3783016	20.000 ug/ml
8) T Fluorene (C16.55)	9.107	3664123	20.000 ug/ml
9) T Phenanthrene (C19.36)	10.494	3599000	20.000 ug/ml
10) T Anthracene (C19.43)	10.569	3583756	20.000 ug/ml
12) T Fluoranthene (C21.85)	12.298	3624323	20.000 ug/ml
13) T Pyrene (C20.8)	12.591	3604512	20.000 ug/ml
14) T Benzo[a]anthracene (C...	14.460	3323894	20.000 ug/ml
15) T Chrysene (C27.41)	14.501	3661741	20.000 ug/ml
16) T benzo[b]fluoranthene ...	16.005	3413368	20.000 ug/ml
17) T Bnezo[k]fluoranthene ...	16.037	3298832	20.000 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.380	3349724	20.000 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.743	2685595	20.000 ug/ml
20) T Dibenz[a,h]anthracene...	17.784	3409082	20.000 ug/ml
21) T Benzo[g,h,i]perylene ...	17.993	3269223	20.000 ug/ml

(f)=RT Delta > 1/2 Window

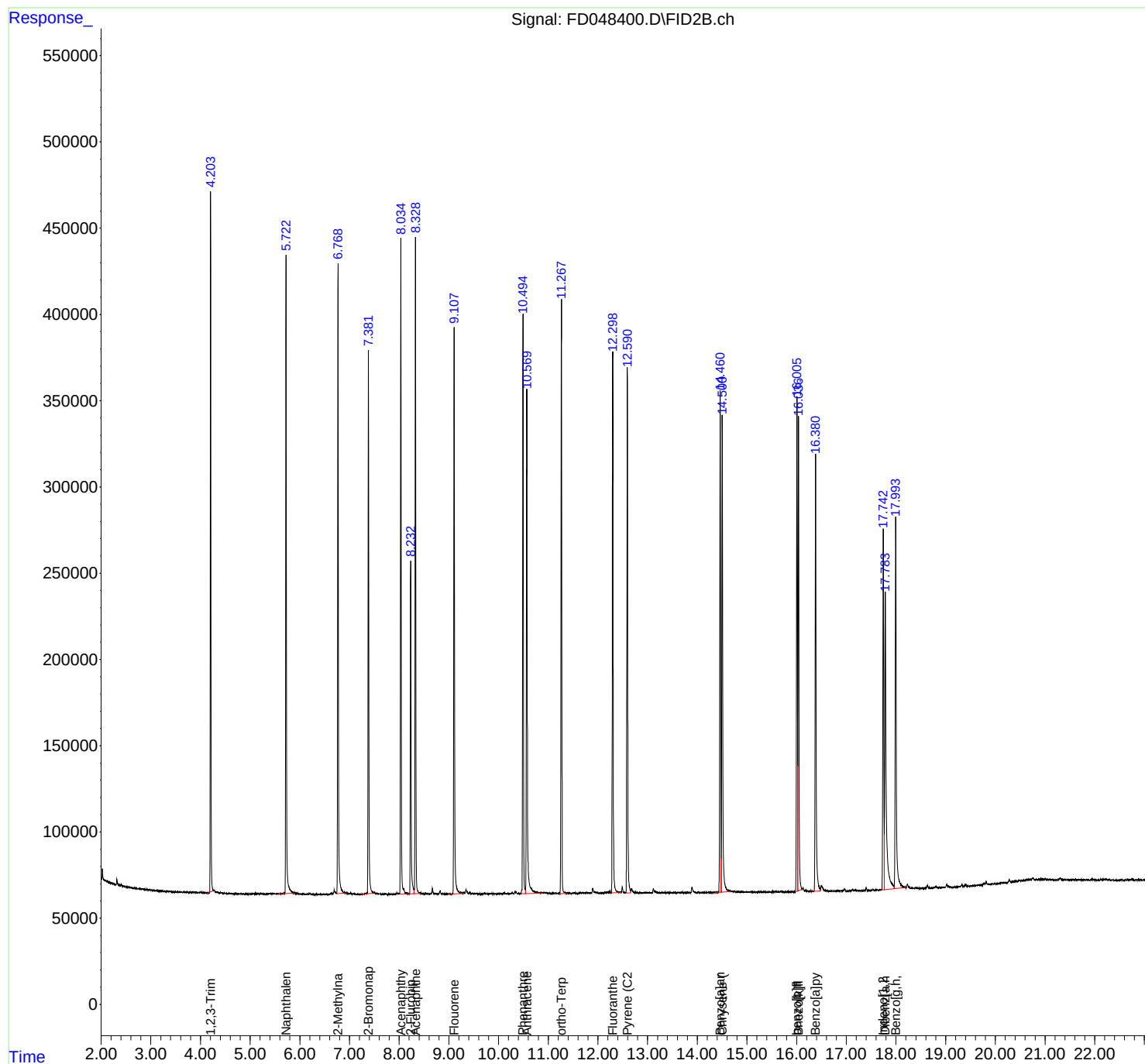
(m)=manual int.

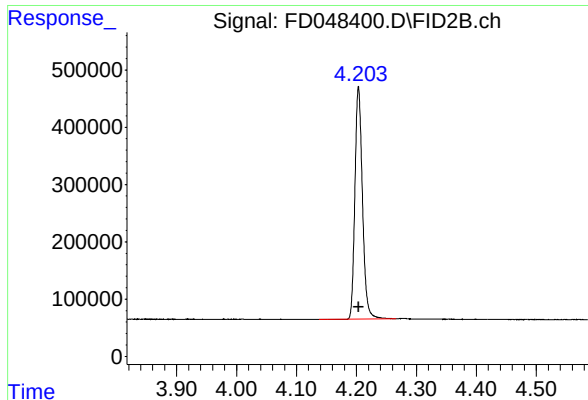
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048400.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 11:48
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Sep 30 12:30:02 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 12:29:39 2024
Response via : Initial Calibration
Integrator: ChemStation

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

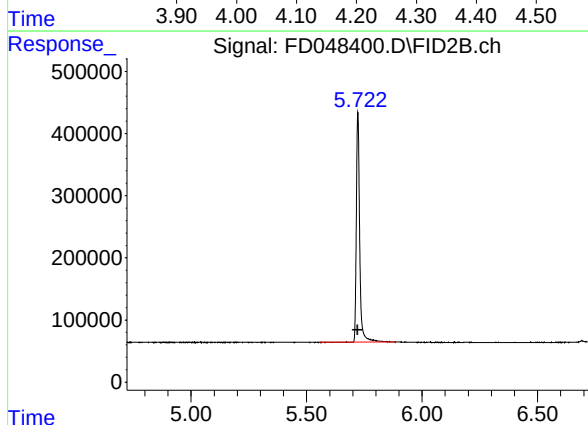




#1 1,2,3-Trimethylbenzene (C10.1)

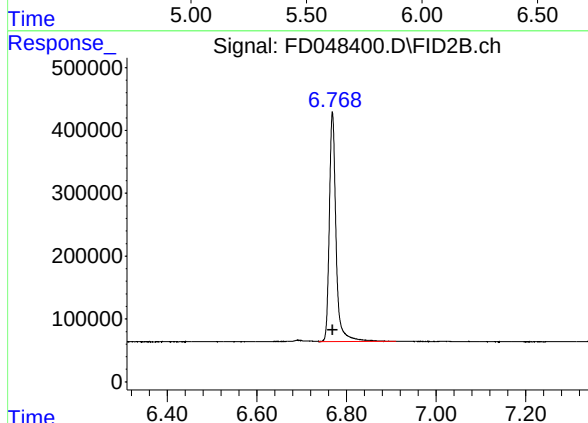
R.T.: 4.204 min
Delta R.T.: 0.000 min
Response: 3531993
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



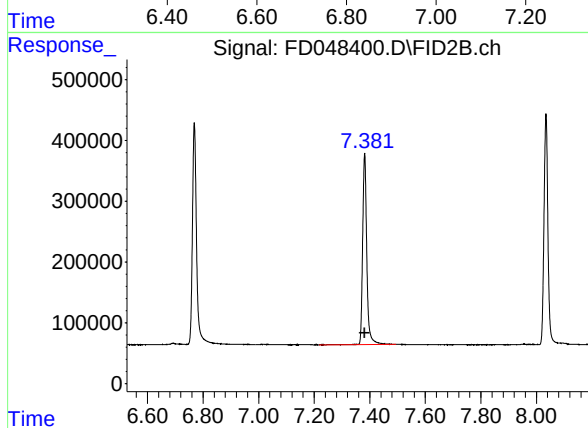
#2 Naphthalene (C11.7)

R.T.: 5.722 min
Delta R.T.: 0.000 min
Response: 3751038
Conc: 20.00 ug/ml



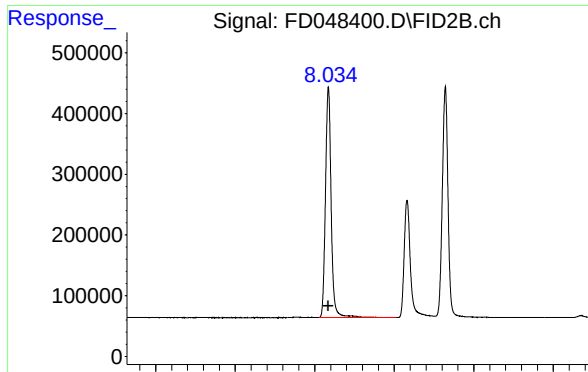
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.769 min
Delta R.T.: 0.000 min
Response: 3782649
Conc: 20.00 ug/ml



#4 2-Bromonaphthalene (SURR)

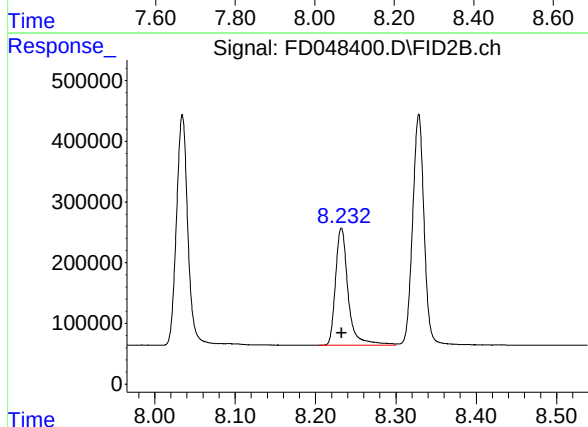
R.T.: 7.382 min
Delta R.T.: 0.000 min
Response: 3246497
Conc: 20.00 ug/ml



#5 Acenaphthylene (C15.06)

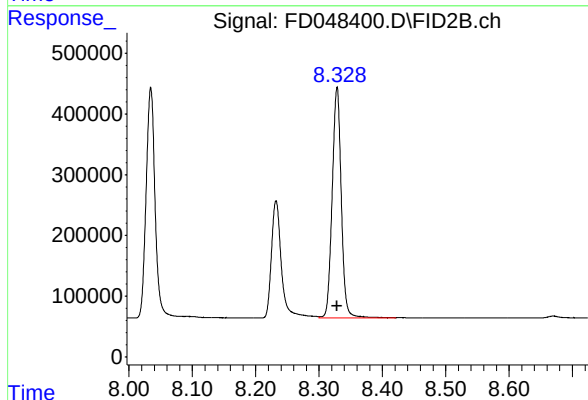
R.T.: 8.034 min
Delta R.T.: 0.000 min
Response: 3784046
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



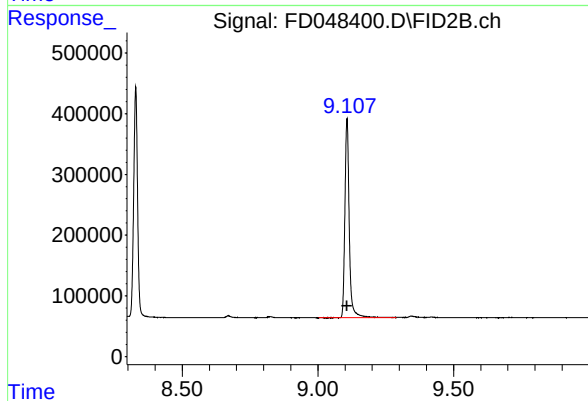
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.232 min
Delta R.T.: 0.000 min
Response: 2113006
Conc: 20.00 ug/ml



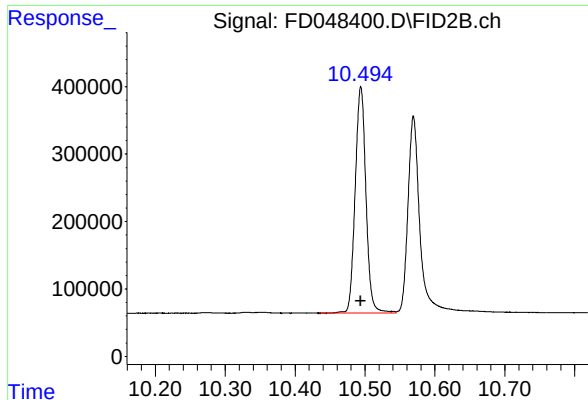
#7 Acenaphthene (C15.5)

R.T.: 8.328 min
Delta R.T.: 0.000 min
Response: 3783016
Conc: 20.00 ug/ml



#8 Flouorene (C16.55)

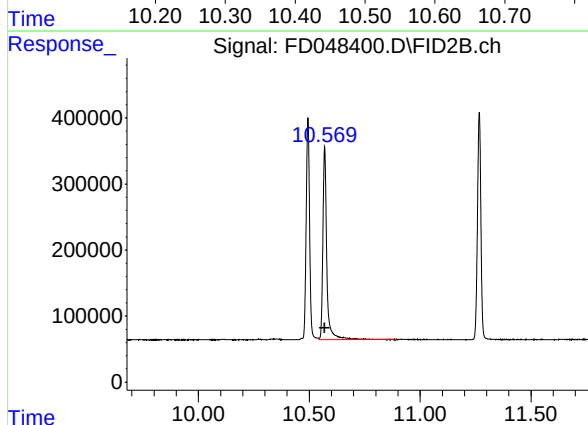
R.T.: 9.107 min
Delta R.T.: 0.000 min
Response: 3664123
Conc: 20.00 ug/ml



#9 Phenanthrene (C19.36)

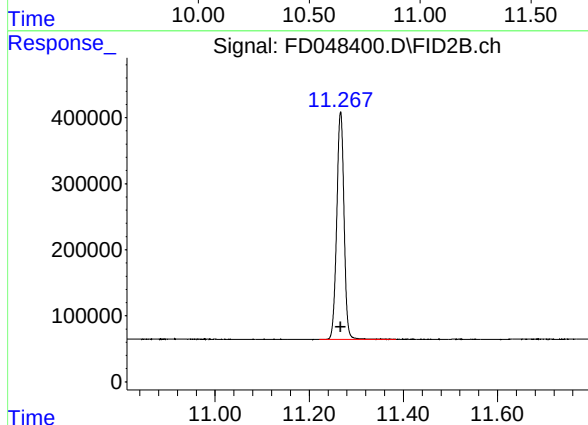
R.T.: 10.494 min
Delta R.T.: 0.000 min
Response: 3599000
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



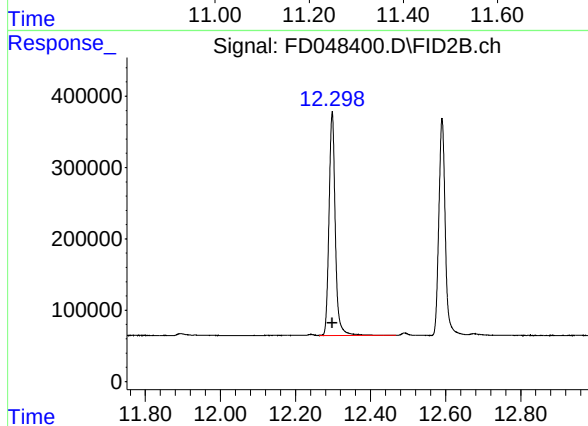
#10 Anthracene (C19.43)

R.T.: 10.569 min
Delta R.T.: 0.000 min
Response: 3583756
Conc: 20.00 ug/ml



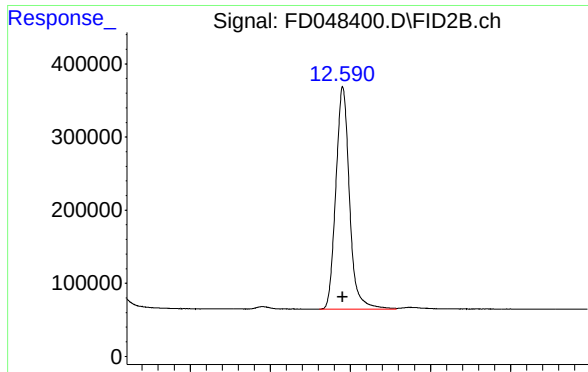
#11 ortho-Terphenyl (SURR)

R.T.: 11.267 min
Delta R.T.: 0.000 min
Response: 3706162
Conc: 20.00 ug/ml



#12 Fluoranthene (C21.85)

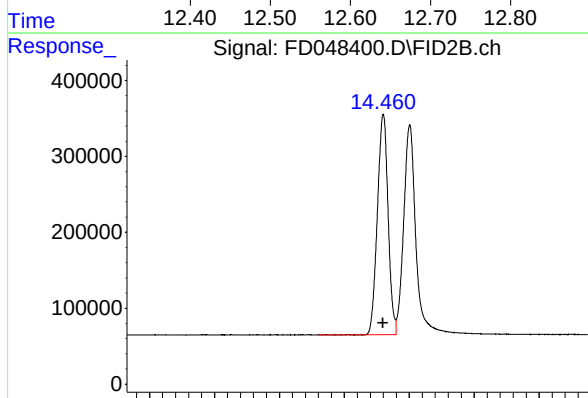
R.T.: 12.298 min
Delta R.T.: 0.000 min
Response: 3624323
Conc: 20.00 ug/ml



#13 Pyrene (C20.8)

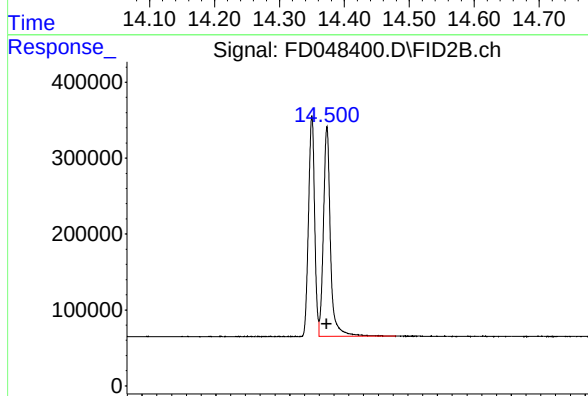
R.T.: 12.591 min
Delta R.T.: 0.000 min
Response: 3604512
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



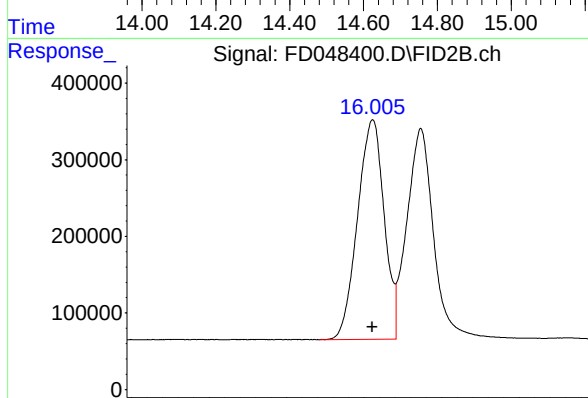
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.460 min
Delta R.T.: 0.000 min
Response: 3323894
Conc: 20.00 ug/ml



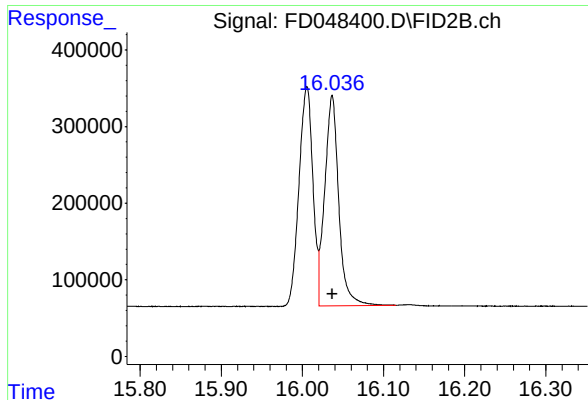
#15 Chrysene (C27.41)

R.T.: 14.501 min
Delta R.T.: 0.000 min
Response: 3661741
Conc: 20.00 ug/ml



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

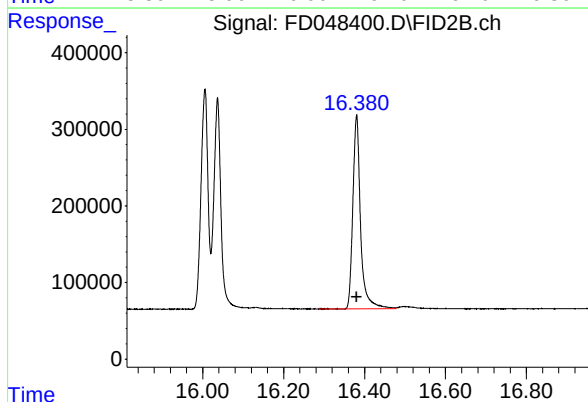
R.T.: 16.005 min
Delta R.T.: 0.000 min
Response: 3413368
Conc: 20.00 ug/ml



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

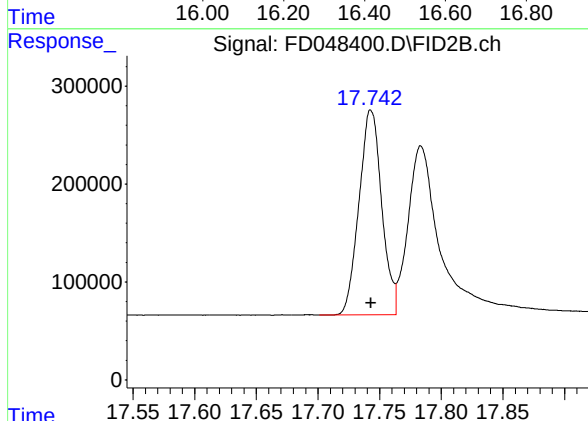
R.T.: 16.037 min
Delta R.T.: 0.000 min
Response: 3298832
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



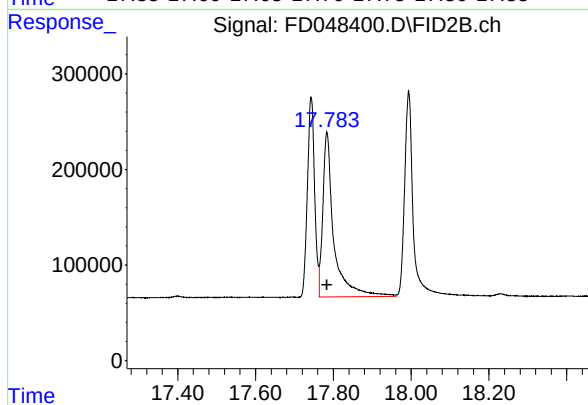
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.380 min
Delta R.T.: 0.000 min
Response: 3349724
Conc: 20.00 ug/ml



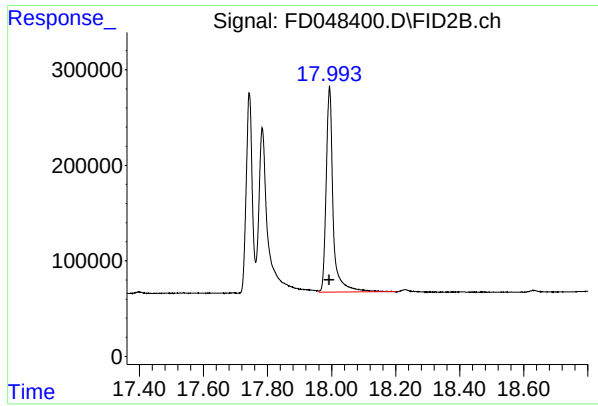
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.743 min
Delta R.T.: 0.000 min
Response: 2685595
Conc: 20.00 ug/ml



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

R.T.: 17.784 min
Delta R.T.: 0.000 min
Response: 3409082
Conc: 20.00 ug/ml



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

R.T.: 17.993 min
Delta R.T.: 0.000 min
Response: 3269223
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048400.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 11:48
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 093024.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	4.204	4.151	4.266	BV	400376	3537815	93.04%	4.912%
2	5.722	5.581	5.888	BV	369307	3754770	98.74%	5.213%
3	6.769	6.739	6.911	VB	364360	3783797	99.50%	5.253%
4	7.382	7.114	7.574	BB	313593	3296950	86.70%	4.577%
5	8.034	7.984	8.204	BB	379343	3765462	99.02%	5.228%
6	8.232	8.204	8.300	BV	193436	2116292	55.65%	2.938%
7	8.328	8.300	8.468	VB	378708	3802634	100.00%	5.279%
8	9.107	9.038	9.264	BB	327878	3643058	95.80%	5.058%
9	10.494	10.401	10.544	BV	335819	3590326	94.42%	4.985%
10	10.569	10.544	10.798	VB	289199	3544937	93.22%	4.921%
11	11.267	11.181	11.384	BB	345260	3694652	97.16%	5.129%
12	12.298	12.263	12.444	PB	312362	3617732	95.14%	5.023%
13	12.591	12.531	12.657	BV	303618	3561567	93.66%	4.945%
14	14.460	14.388	14.479	BV	292456	3322945	87.39%	4.613%
15	14.501	14.479	14.684	VB	276578	3655582	96.13%	5.075%
16	16.005	15.971	16.021	BV	284955	3413368	89.76%	4.739%
17	16.037	16.021	16.115	VV	275555	3298832	86.75%	4.580%
18	16.380	16.284	16.478	BV	253350	3265182	85.87%	4.533%
19	17.743	17.701	17.763	BV	209613	2685595	70.62%	3.728%
20	17.784	17.763	17.961	VV	171664	3409082	89.65%	4.733%
21	17.993	17.961	18.201	VBA	216275	3269223	85.97%	4.539%
Sum of corrected areas:						72029803		

Aromatic EPH 093024.M Tue Oct 01 01:49:11 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
 Data File : FD048401.D
 Signal(s) : FID2B.ch
 Acq On : 30 Sep 2024 12:47
 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

Integration File: autoint1.e
 Quant Time: Sep 30 13:23:11 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
 Quant Title : GC Extractables
 QLast Update : Mon Sep 30 13:23:03 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...	7.381	1605451	10.109 ug/ml
Spiked Amount 50.000		Recovery =	20.22%
6) S 2-Fluorobiphenyl (SURR)	8.233	1016463	9.754 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	19.51%
11) S ortho-Terphenyl (SURR)	11.265	1833921	10.161 ug/ml
Spiked Amount 50.000		Recovery =	20.32%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.202	1731147	9.947 ug/ml
2) T Naphthalene (C11.7)	5.721	1840574	9.994 ug/ml
3) T 2-Methylnaphthalene (...)	6.768	1908614	10.230 ug/ml
5) T Acenaphthylene (C15.06)	8.033	1960832	10.522 ug/ml
7) T Acenaphthene (C15.5)	8.326	1881168	10.191 ug/ml
8) T Fluorene (C16.55)	9.107	1798234	10.034 ug/ml
9) T Phenanthrene (C19.36)	10.493	1754425	9.937 ug/ml
10) T Anthracene (C19.43)	10.570	1840011	10.447 ug/ml
12) T Fluoranthene (C21.85)	12.298	1804434	10.143 ug/ml
13) T Pyrene (C20.8)	12.590	1743379	9.938 ug/ml
14) T Benzo[a]anthracene (C...	14.458	1549123	9.486 ug/ml
15) T Chrysene (C27.41)	14.499	1921102	10.712 ug/ml
16) T benzo[b]fluoranthene ...	16.003	1647278	9.830 ug/ml
17) T Bnezo[k]fluoranthene ...	16.034	1761068	10.756 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.384	1649795	10.039 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.747	1182778	8.659 ug/ml
20) T Dibenz[a,h]anthracene...	17.791	1747599	10.717 ug/ml
21) T Benzo[g,h,i]perylene ...	17.994	1634016	10.238 ug/ml

(f)=RT Delta > 1/2 Window

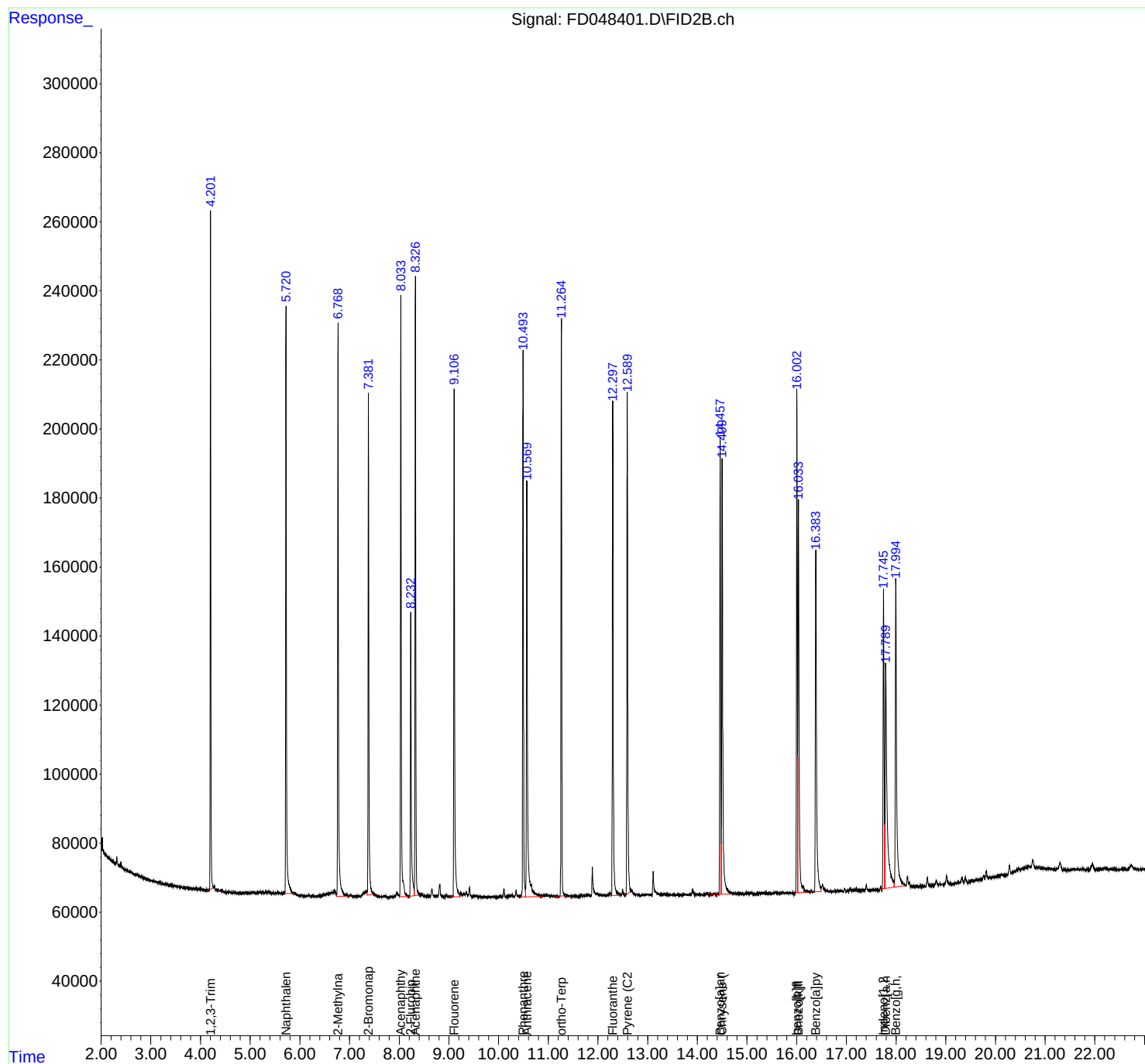
(m)=manual int.

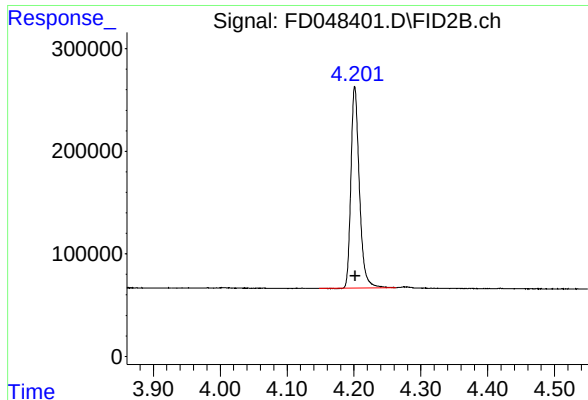
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048401.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 12:47
Operator : YP/AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

Integration File: autoint1.e
Quant Time: Sep 30 13:23:11 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 13:23:03 2024
Response via : Initial Calibration
Integrator: ChemStation

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

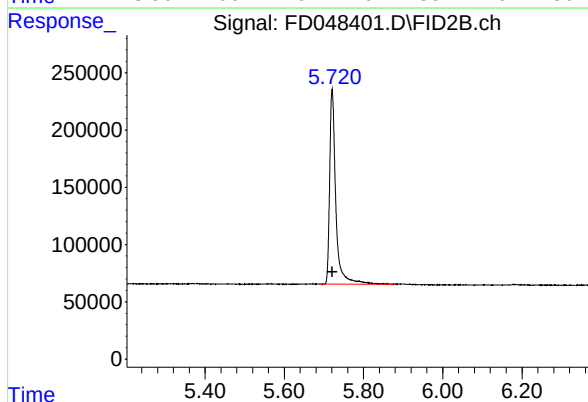




#1 1,2,3-Trimethylbenzene (C10.1)

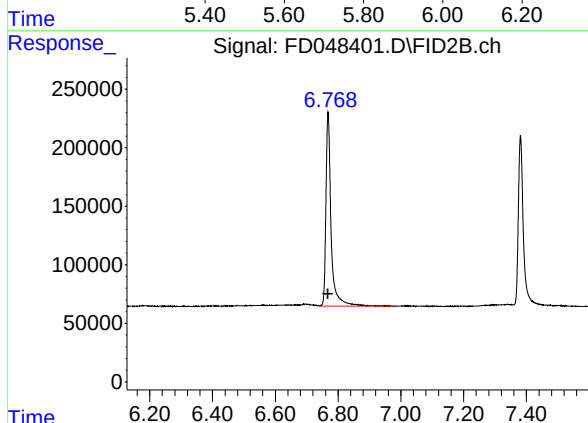
R.T.: 4.202 min
Delta R.T.: 0.000 min
Response: 1731147
Conc: 9.95 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



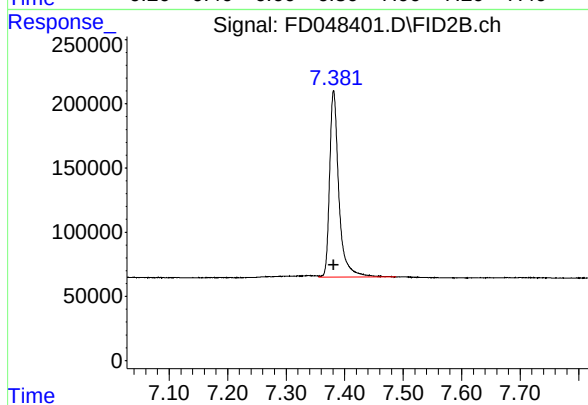
#2 Naphthalene (C11.7)

R.T.: 5.721 min
Delta R.T.: 0.000 min
Response: 1840574
Conc: 9.99 ug/ml



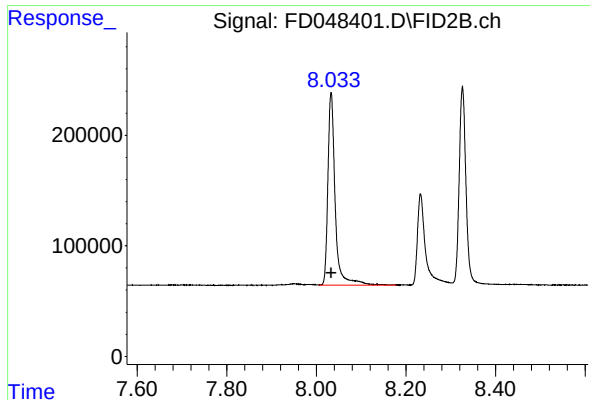
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.768 min
Delta R.T.: 0.000 min
Response: 1908614
Conc: 10.23 ug/ml



#4 2-Bromonaphthalene (SURR)

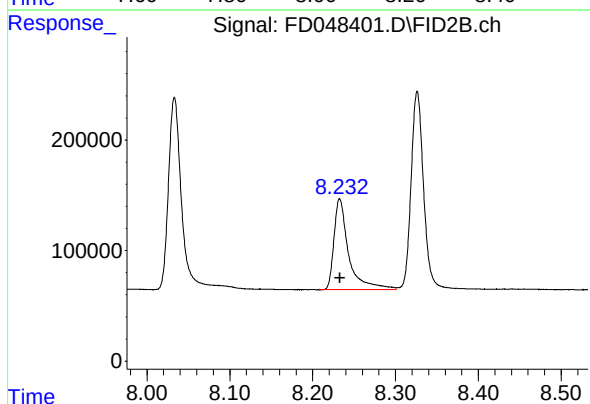
R.T.: 7.381 min
Delta R.T.: 0.000 min
Response: 1605451
Conc: 10.11 ug/ml



#5 Acenaphthylene (C15.06)

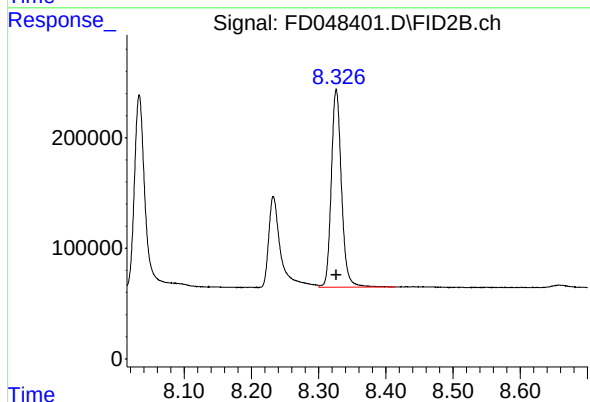
R.T.: 8.033 min
Delta R.T.: 0.000 min
Response: 1960832
Conc: 10.52 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



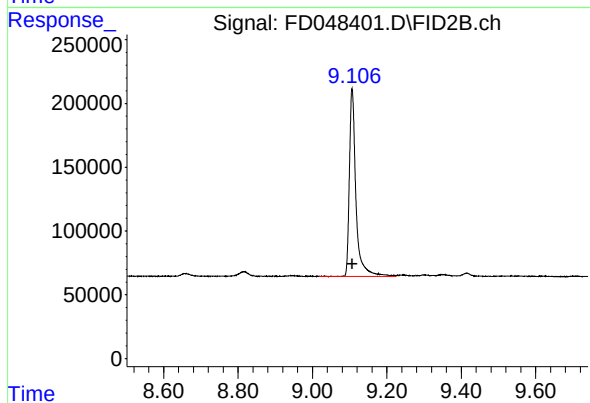
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.233 min
Delta R.T.: 0.000 min
Response: 1016463
Conc: 9.75 ug/ml



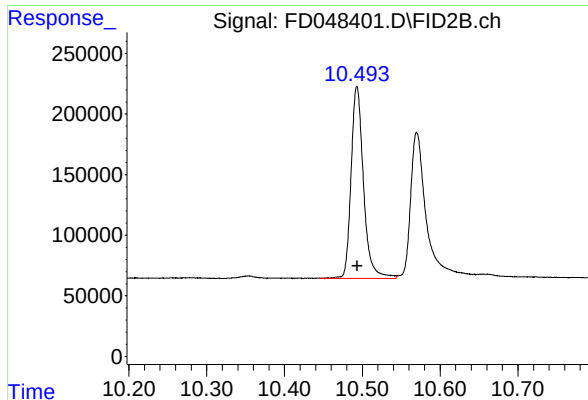
#7 Acenaphthene (C15.5)

R.T.: 8.326 min
Delta R.T.: 0.000 min
Response: 1881168
Conc: 10.19 ug/ml



#8 Flouorene (C16.55)

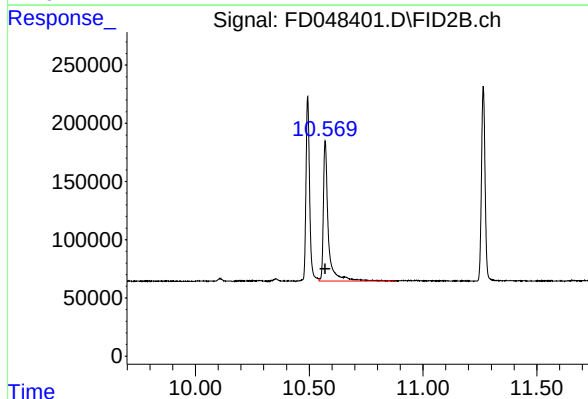
R.T.: 9.107 min
Delta R.T.: 0.000 min
Response: 1798234
Conc: 10.03 ug/ml



#9 Phenanthrene (C19.36)

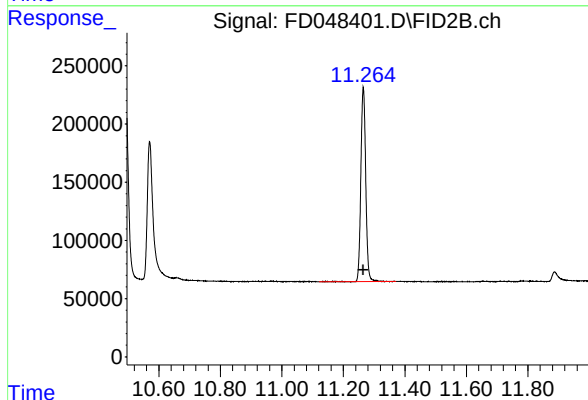
R.T.: 10.493 min
Delta R.T.: 0.000 min
Response: 1754425
Conc: 9.94 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



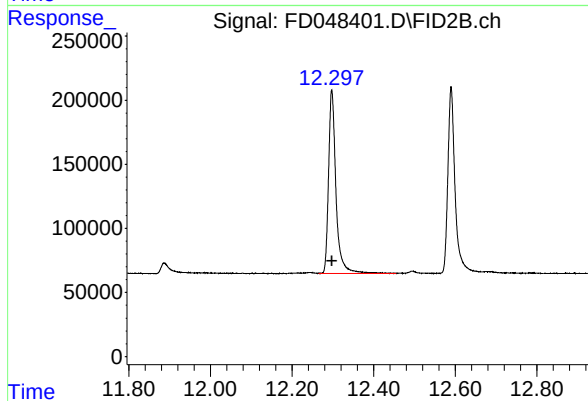
#10 Anthracene (C19.43)

R.T.: 10.570 min
Delta R.T.: 0.000 min
Response: 1840011
Conc: 10.45 ug/ml



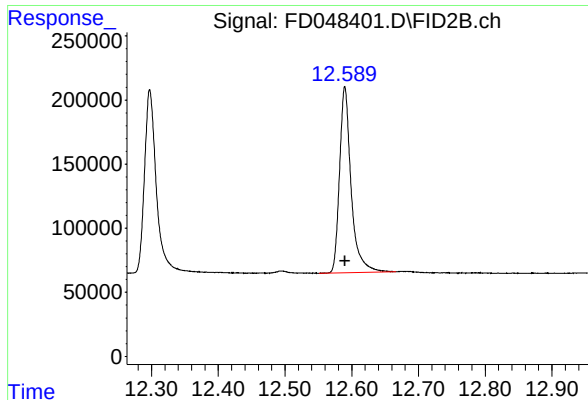
#11 ortho-Terphenyl (SURR)

R.T.: 11.265 min
Delta R.T.: 0.000 min
Response: 1833921
Conc: 10.16 ug/ml



#12 Fluoranthene (C21.85)

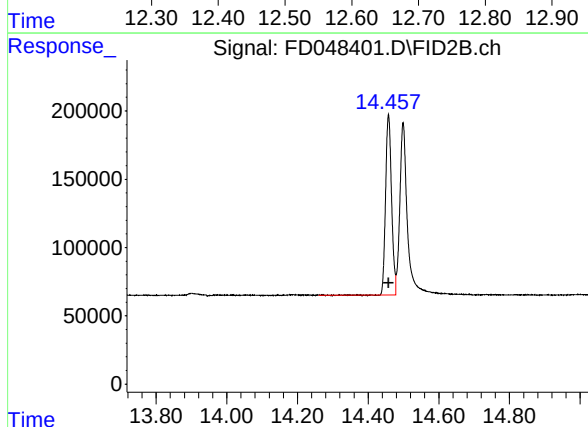
R.T.: 12.298 min
Delta R.T.: 0.000 min
Response: 1804434
Conc: 10.14 ug/ml



#13 Pyrene (C20.8)

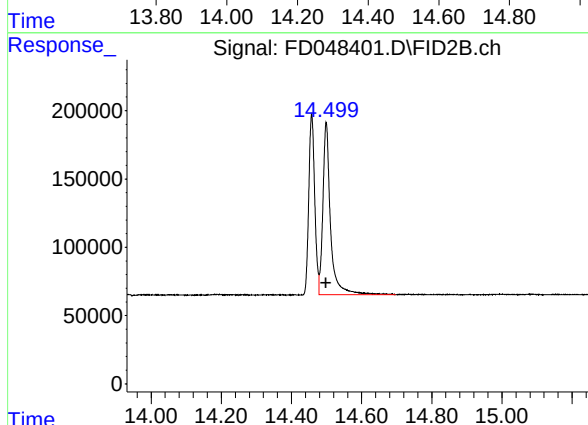
R.T.: 12.590 min
Delta R.T.: 0.000 min
Response: 1743379
Conc: 9.94 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



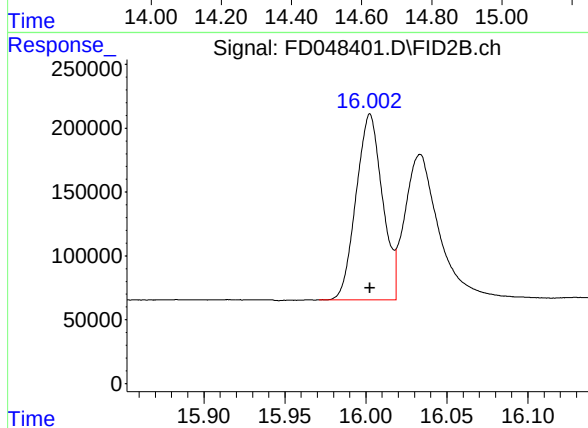
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.458 min
Delta R.T.: 0.000 min
Response: 1549123
Conc: 9.49 ug/ml



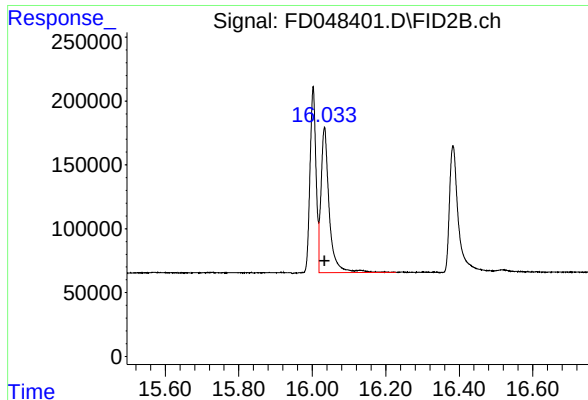
#15 Chrysene (C27.41)

R.T.: 14.499 min
Delta R.T.: 0.000 min
Response: 1921102
Conc: 10.71 ug/ml



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

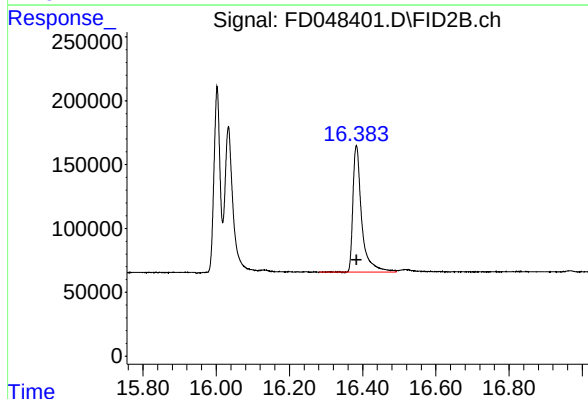
R.T.: 16.003 min
Delta R.T.: 0.000 min
Response: 1647278
Conc: 9.83 ug/ml



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

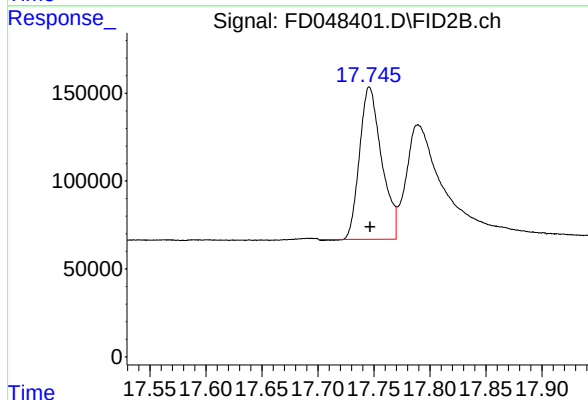
R.T.: 16.034 min
Delta R.T.: 0.000 min
Response: 1761068
Conc: 10.76 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



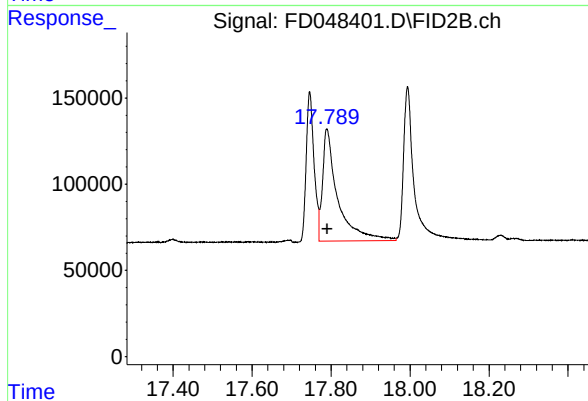
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.384 min
Delta R.T.: 0.000 min
Response: 1649795
Conc: 10.04 ug/ml



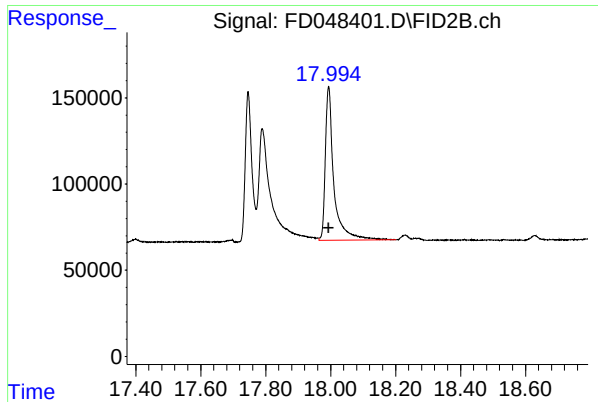
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.747 min
Delta R.T.: 0.000 min
Response: 1182778
Conc: 8.66 ug/ml



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

R.T.: 17.791 min
Delta R.T.: 0.000 min
Response: 1747599
Conc: 10.72 ug/ml



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

R.T.: 17.994 min
Delta R.T.: 0.000 min
Response: 1634016
Conc: 10.24 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048401.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 12:47
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 093024.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	4.202	4.138	4.263	BV	195850	1727884	88.39%	4.846%
2	5.721	5.631	5.941	BB	169208	1881784	96.26%	5.278%
3	6.768	6.740	6.918	VB	165020	1866265	95.46%	5.234%
4	7.381	7.356	7.488	VV	144807	1606006	82.15%	4.504%
5	8.033	8.011	8.178	BB	173492	1954924	100.00%	5.483%
6	8.233	8.191	8.301	BV	81005	1014853	51.91%	2.846%
7	8.326	8.301	8.414	VB	178121	1880303	96.18%	5.274%
8	9.107	9.034	9.224	BV	145407	1763617	90.21%	4.947%
9	10.493	10.404	10.543	BV	157368	1740277	89.02%	4.881%
10	10.570	10.543	10.764	VB	119507	1763147	90.19%	4.945%
11	11.265	11.188	11.371	BB	166999	1838895	94.06%	5.158%
12	12.298	12.268	12.454	VB	142765	1797355	91.94%	5.041%
13	12.590	12.531	12.731	BB	144505	1794544	91.80%	5.033%
14	14.458	14.381	14.479	BV	131788	1551742	79.38%	4.352%
15	14.499	14.479	14.698	VB	126126	1922381	98.34%	5.392%
16	16.003	15.971	16.019	BV	143982	1646846	84.24%	4.619%
17	16.034	16.019	16.188	VB	113857	1748508	89.44%	4.904%
18	16.384	16.301	16.491	BV	97799	1590023	81.33%	4.460%
19	17.747	17.701	17.770	BV	85150	1182778	60.50%	3.317%
20	17.791	17.770	17.964	VV	64132	1747599	89.39%	4.902%
21	17.994	17.964	18.201	VBA	88993	1634016	83.58%	4.583%
Sum of corrected areas:							35653748	

Aromatic EPH 093024.M Tue Oct 01 01:49:52 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
 Data File : FD048402.D
 Signal(s) : FID2B.ch
 Acq On : 30 Sep 2024 13:35
 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

Integration File: autoint1.e
 Quant Time: Sep 30 14:16:46 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
 Quant Title : GC Extractables
 QLast Update : Mon Sep 30 14:16:33 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...	7.384	962842	5.815 ug/ml
Spiked Amount 50.000		Recovery =	11.63%
6) S 2-Fluorobiphenyl (SURR)	8.239	508479	4.903 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	9.81%
11) S ortho-Terphenyl (SURR)	11.266	990050	5.381 ug/ml
Spiked Amount 50.000		Recovery =	10.76%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.204	900690	5.139 ug/ml
2) T Naphthalene (C11.7)	5.725	984293	5.272 ug/ml
3) T 2-Methylnaphthalene (...)	6.772	993261	5.256 ug/ml
5) T Acenaphthylene (C15.06)	8.035	1069085	5.573 ug/ml
7) T Acenaphthene (C15.5)	8.328	1037231	5.483 ug/ml
8) T Fluorene (C16.55)	9.111	932385	5.161 ug/ml
9) T Phenanthrene (C19.36)	10.497	899656	5.076 ug/ml
10) T Anthracene (C19.43)	10.575	925856	5.203 ug/ml
12) T Fluoranthene (C21.85)	12.301	963834	5.329 ug/ml
13) T Pyrene (C20.8)	12.593	968145	5.407 ug/ml
14) T Benzo[a]anthracene (C...	14.464	729221	4.563 ug/ml
15) T Chrysene (C27.41)	14.502	1076419	5.771 ug/ml
16) T benzo[b]fluoranthene ...	16.008	811870	4.875 ug/ml
17) T Bnezo[k]fluoranthene ...	16.040	969266	5.710 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.393	799268	4.890 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.760	556571	4.231 ug/ml
20) T Dibenz[a,h]anthracene...	17.806	921954	5.510 ug/ml
21) T Benzo[g,h,i]perylene ...	18.001	868643	5.348 ug/ml

(f)=RT Delta > 1/2 Window

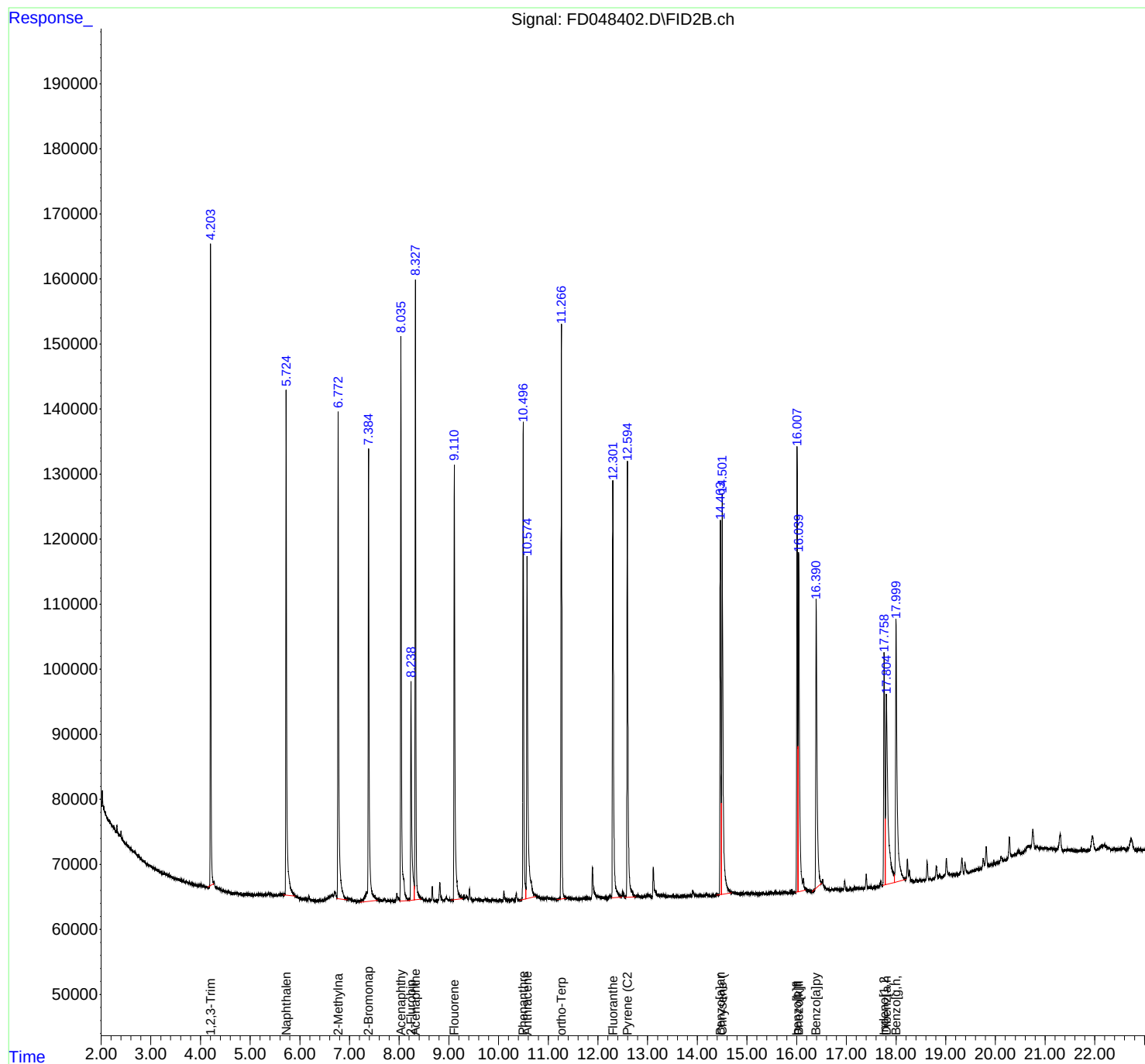
(m)=manual int.

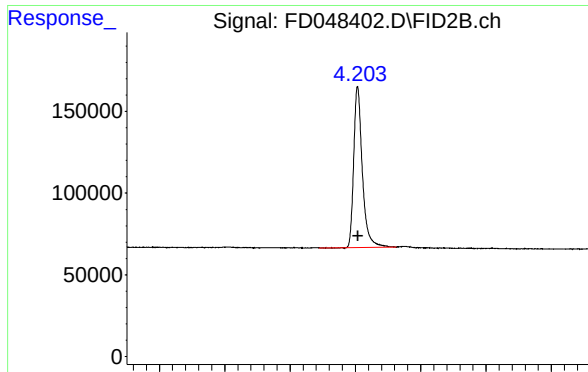
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048402.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 13:35
Operator : YP/AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

Integration File: autoint1.e
Quant Time: Sep 30 14:16:46 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 14:16:33 2024
Response via : Initial Calibration
Integrator: ChemStation

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

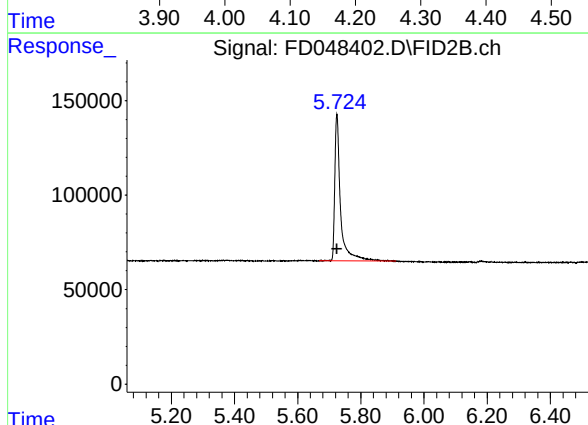




#1 1,2,3-Trimethylbenzene (C10.1)

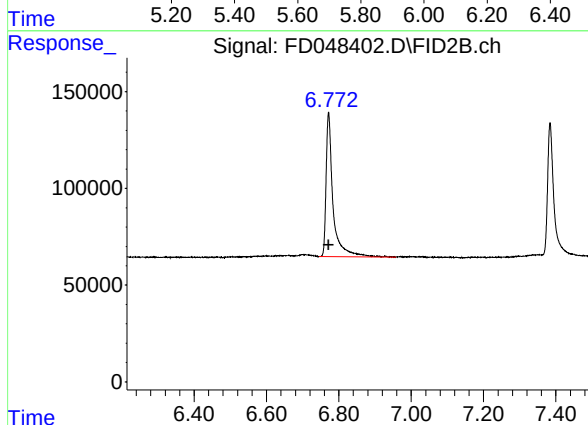
R.T.: 4.204 min
Delta R.T.: 0.000 min
Response: 900690
Conc: 5.14 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



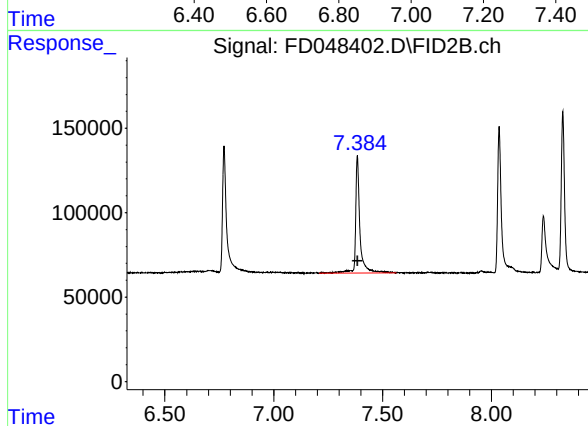
#2 Naphthalene (C11.7)

R.T.: 5.725 min
Delta R.T.: 0.000 min
Response: 984293
Conc: 5.27 ug/ml



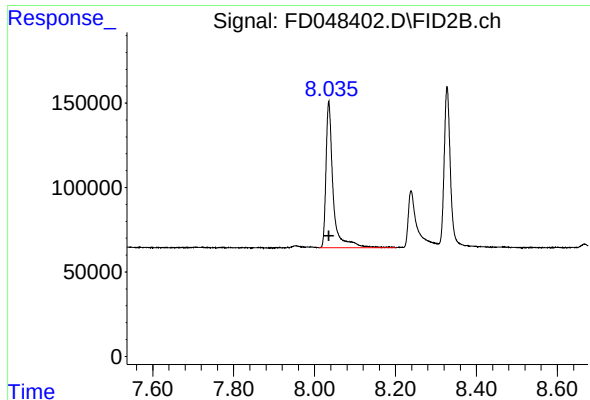
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.772 min
Delta R.T.: 0.000 min
Response: 993261
Conc: 5.26 ug/ml



#4 2-Bromonaphthalene (SURR)

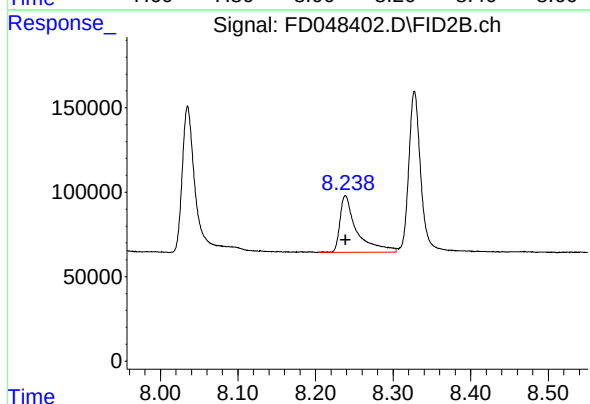
R.T.: 7.384 min
Delta R.T.: 0.000 min
Response: 962842
Conc: 5.82 ug/ml



#5 Acenaphthylene (C15.06)

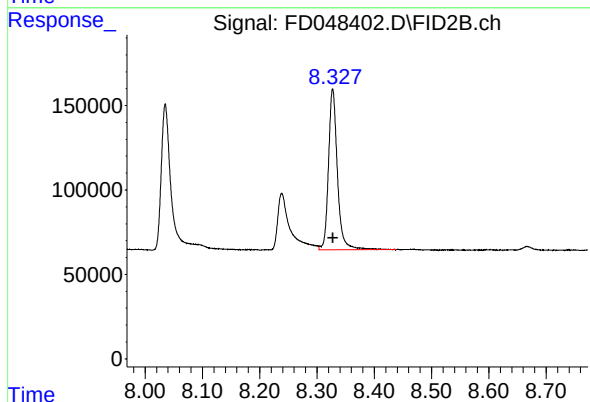
R.T.: 8.035 min
Delta R.T.: 0.000 min
Response: 1069085
Conc: 5.57 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



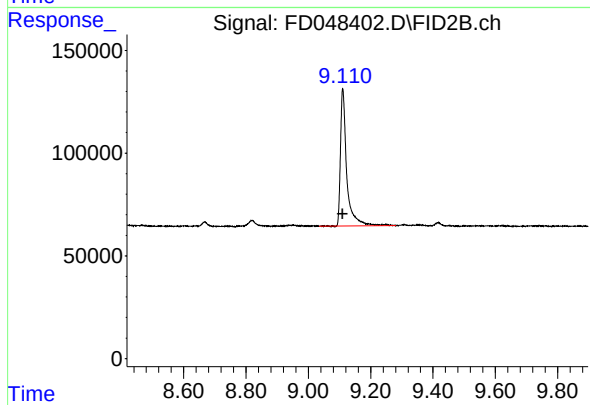
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.239 min
Delta R.T.: 0.000 min
Response: 508479
Conc: 4.90 ug/ml



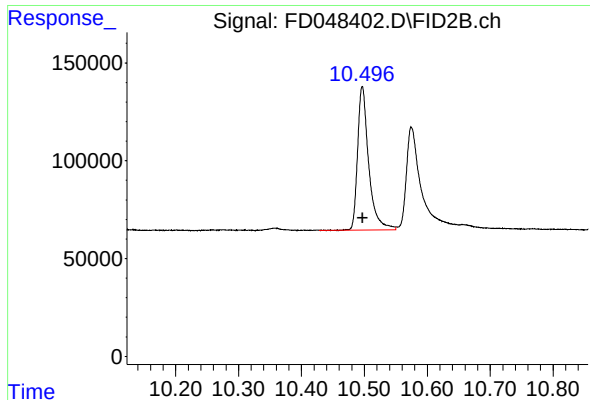
#7 Acenaphthene (C15.5)

R.T.: 8.328 min
Delta R.T.: 0.000 min
Response: 1037231
Conc: 5.48 ug/ml



#8 Flouorene (C16.55)

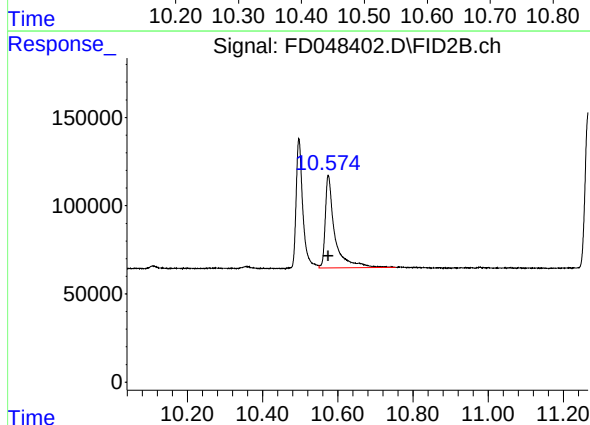
R.T.: 9.111 min
Delta R.T.: 0.000 min
Response: 932385
Conc: 5.16 ug/ml



#9 Phenanthrene (C19.36)

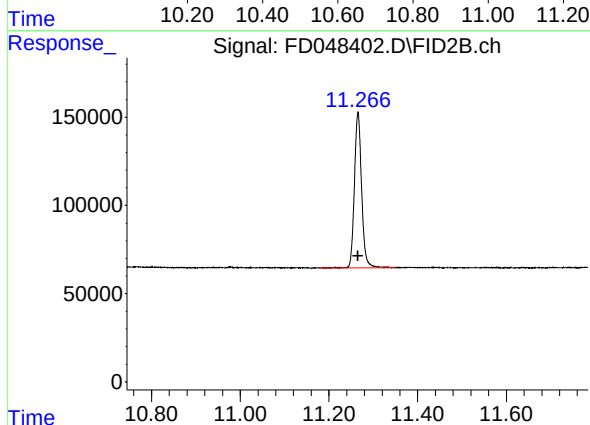
R.T.: 10.497 min
Delta R.T.: 0.000 min
Response: 899656
Conc: 5.08 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



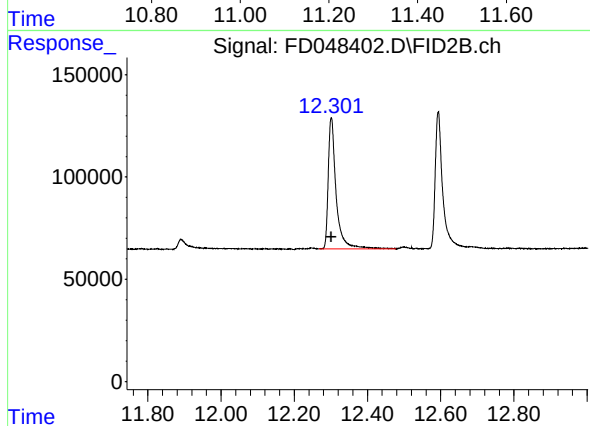
#10 Anthracene (C19.43)

R.T.: 10.575 min
Delta R.T.: 0.000 min
Response: 925856
Conc: 5.20 ug/ml



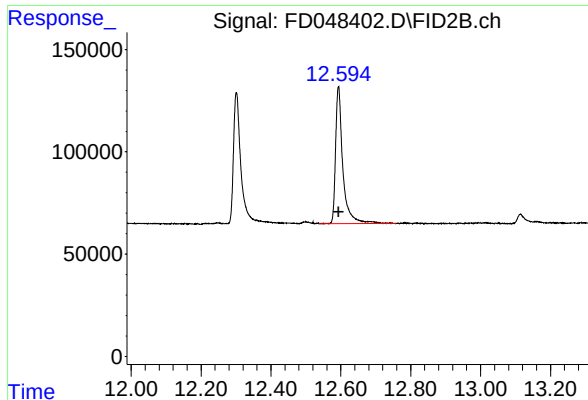
#11 ortho-Terphenyl (SURRE)

R.T.: 11.266 min
Delta R.T.: 0.000 min
Response: 990050
Conc: 5.38 ug/ml



#12 Fluoranthene (C21.85)

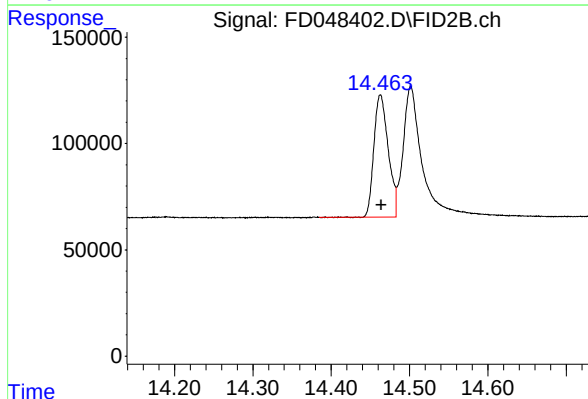
R.T.: 12.301 min
Delta R.T.: 0.000 min
Response: 963834
Conc: 5.33 ug/ml



#13 Pyrene (C20.8)

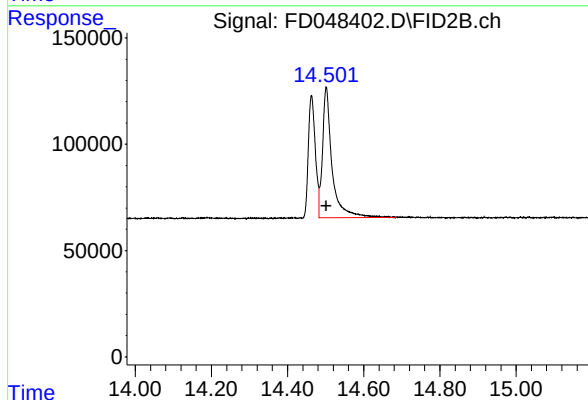
R.T.: 12.593 min
Delta R.T.: 0.000 min
Response: 968145
Conc: 5.41 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



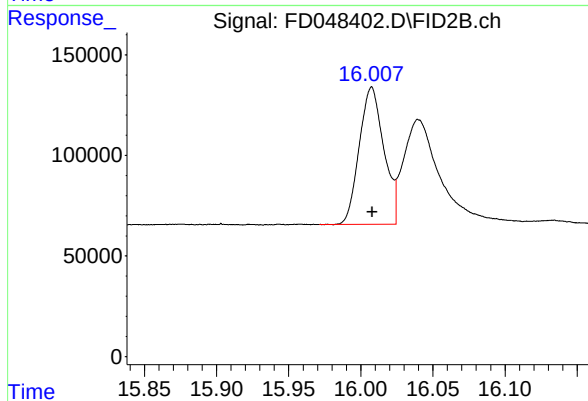
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.464 min
Delta R.T.: 0.000 min
Response: 729221
Conc: 4.56 ug/ml



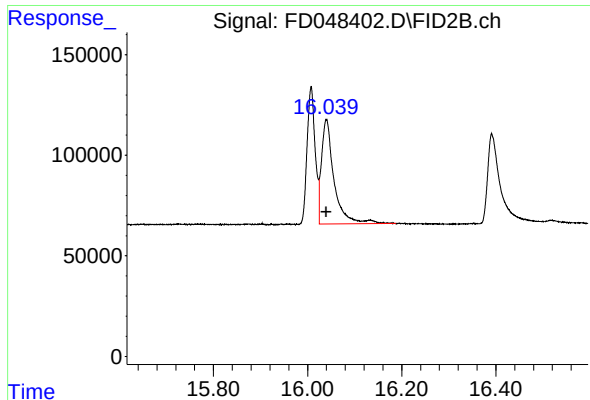
#15 Chrysene (C27.41)

R.T.: 14.502 min
Delta R.T.: 0.000 min
Response: 1076419
Conc: 5.77 ug/ml



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

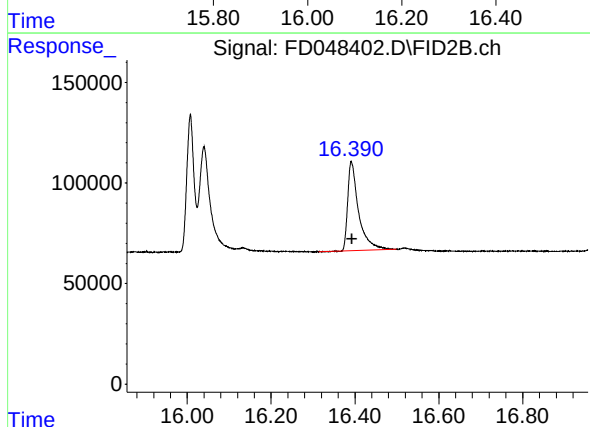
R.T.: 16.008 min
Delta R.T.: 0.000 min
Response: 811870
Conc: 4.87 ug/ml



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

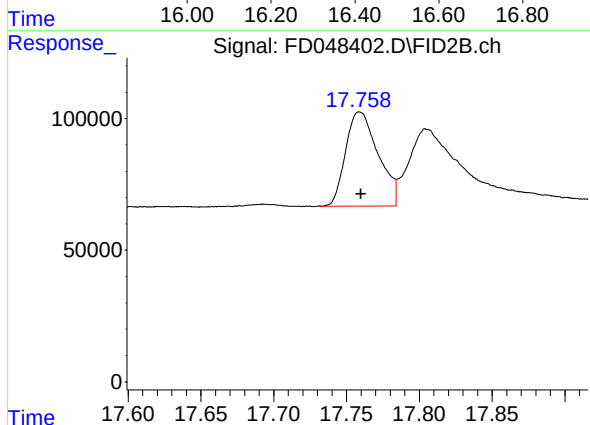
R.T.: 16.040 min
Delta R.T.: 0.000 min
Response: 969266
Conc: 5.71 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



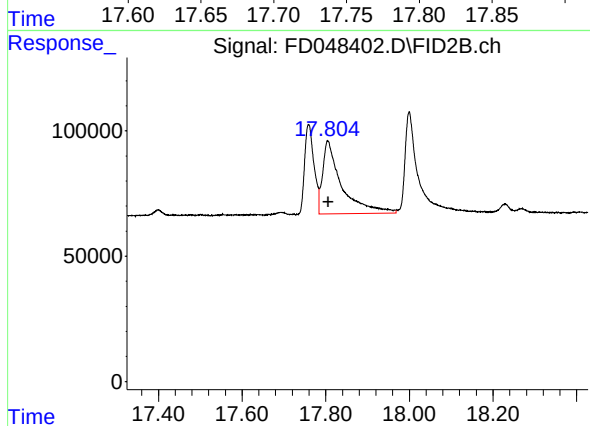
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.393 min
Delta R.T.: 0.000 min
Response: 799268
Conc: 4.89 ug/ml



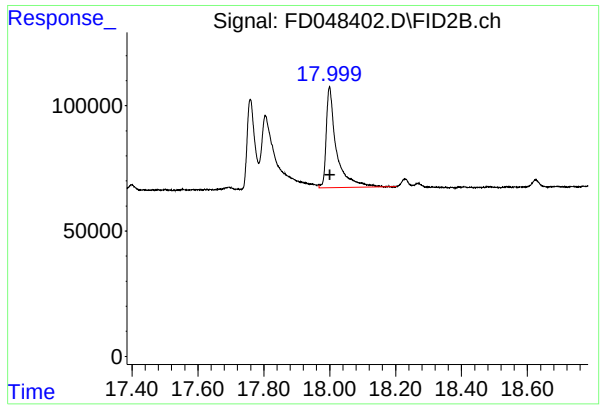
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.760 min
Delta R.T.: 0.000 min
Response: 556571
Conc: 4.23 ug/ml



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

R.T.: 17.806 min
Delta R.T.: 0.000 min
Response: 921954
Conc: 5.51 ug/ml



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

R.T.: 18.001 min
Delta R.T.: 0.000 min
Response: 868643
Conc: 5.35 ug/ml

Instrument :

FID_D

ClientSampleId :

5 PPM AROMATIC HC STD5

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048402.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 13:35
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 093024.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	4.204	4.144	4.262	BV	97231	900690	83.67%	4.797%
2	5.725	5.668	5.911	BB	77378	984293	91.44%	5.242%
3	6.772	6.745	6.958	PB	74354	993261	92.27%	5.290%
4	7.384	7.208	7.561	PB	69110	962842	89.45%	5.128%
5	8.035	8.011	8.201	VB	86238	1069085	99.32%	5.693%
6	8.239	8.204	8.304	BV	33580	508479	47.24%	2.708%
7	8.328	8.304	8.438	VB	95153	1037231	96.36%	5.524%
8	9.111	9.034	9.281	BB	66500	932385	86.62%	4.965%
9	10.497	10.428	10.550	BV	72885	899656	83.58%	4.791%
10	10.575	10.550	10.754	VB	52531	925856	86.01%	4.931%
11	11.266	11.178	11.351	BB	87312	990050	91.98%	5.273%
12	12.301	12.268	12.478	VV	64148	963834	89.54%	5.133%
13	12.593	12.538	12.758	BB	67056	968145	89.94%	5.156%
14	14.464	14.384	14.483	BV	56526	729221	67.75%	3.884%
15	14.502	14.483	14.684	VB	61254	1076419	100.00%	5.733%
16	16.008	15.971	16.024	BV	67889	811870	75.42%	4.324%
17	16.040	16.024	16.188	VB	51872	969266	90.05%	5.162%
18	16.393	16.314	16.498	BV	42523	799268	74.25%	4.257%
19	17.760	17.701	17.784	BV	34912	529921	49.23%	2.822%
20	17.806	17.784	17.968	VV	28206	877691	81.54%	4.674%
21	18.001	17.968	18.201	VBA	39468	847929	78.77%	4.516%
Sum of corrected areas:						18777392		

Aromatic EPH 093024.M Tue Oct 01 01:50:24 2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
 Data File : FD048403.D
 Signal(s) : FID2B.ch
 Acq On : 30 Sep 2024 14:29
 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: Sep 30 17:02:16 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
 Quant Title : GC Extractables
 QLast Update : Mon Sep 30 14:17:34 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...	7.381	3368404	20.345 ug/ml
Spiked Amount 50.000		Recovery =	40.69%
6) S 2-Fluorobiphenyl (SURR)	8.232	2141410	20.649 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	41.30%
11) S ortho-Terphenyl (SURR)	11.266	3698580	20.101 ug/ml
Spiked Amount 50.000		Recovery =	40.20%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.201	3521081	20.091 ug/ml
2) T Naphthalene (C11.7)	5.720	3788301	20.289 ug/ml
3) T 2-Methylnaphthalene (...)	6.767	3802093	20.118 ug/ml
5) T Acenaphthylene (C15.06)	8.033	3842612	20.030 ug/ml
7) T Acenaphthene (C15.5)	8.328	3785313	20.012 ug/ml
8) T Fluorene (C16.55)	9.106	3658929	20.252 ug/ml
9) T Phenanthrene (C19.36)	10.493	3597204	20.297 ug/ml
10) T Anthracene (C19.43)	10.569	3532678	19.853 ug/ml
12) T Fluoranthene (C21.85)	12.298	3625812	20.046 ug/ml
13) T Pyrene (C20.8)	12.590	3567943	19.925 ug/ml
14) T Benzo[a]anthracene (C...	14.459	3346833	20.942 ug/ml
15) T Chrysene (C27.41)	14.500	3657712	19.610 ug/ml
16) T benzo[b]fluoranthene ...	16.006	3457542	20.761 ug/ml
17) T Bnezo[k]fluoranthene ...	16.036	3379645	19.910 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.381	3303676	20.213 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.744	2730501	20.758 ug/ml
20) T Dibenz[a,h]anthracene...	17.785	3415613	20.412 ug/ml
21) T Benzo[g,h,i]perylene ...	17.994	3278515	20.185 ug/ml

(f)=RT Delta > 1/2 Window

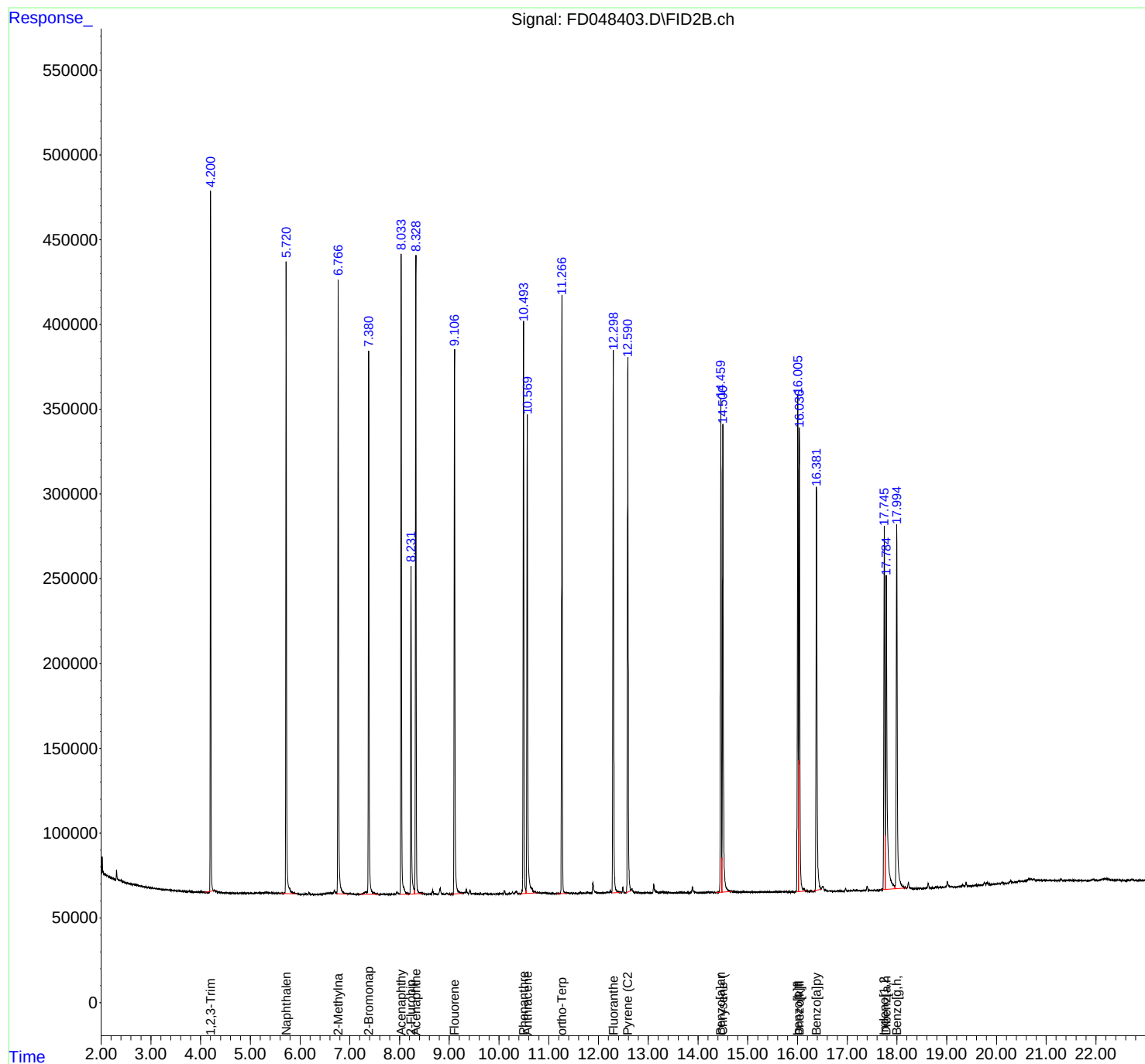
(m)=manual int.

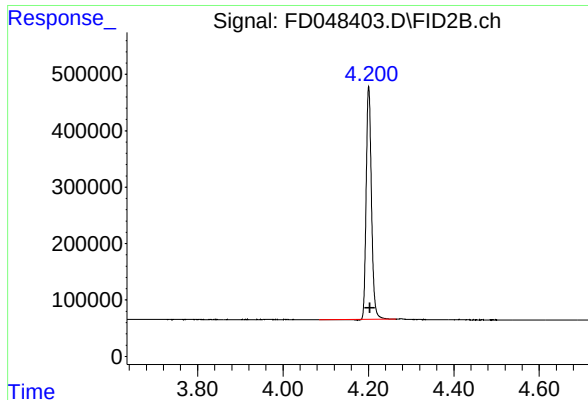
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048403.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 14:29
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Sep 30 17:02:16 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 14:17:34 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)

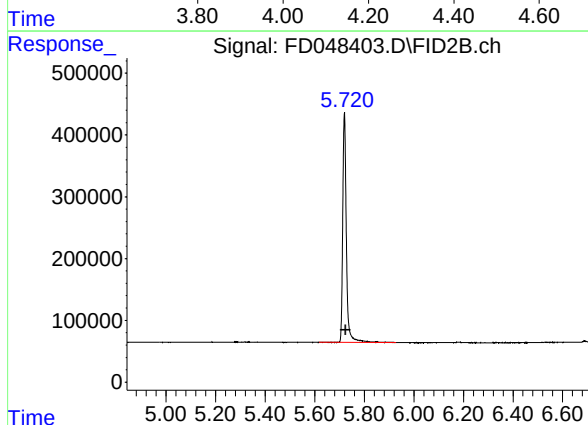
R.T.: 4.201 min
Delta R.T.: -0.003 min
Response: 3521081
Conc: 20.09 ug/ml

Instrument :

FID_D

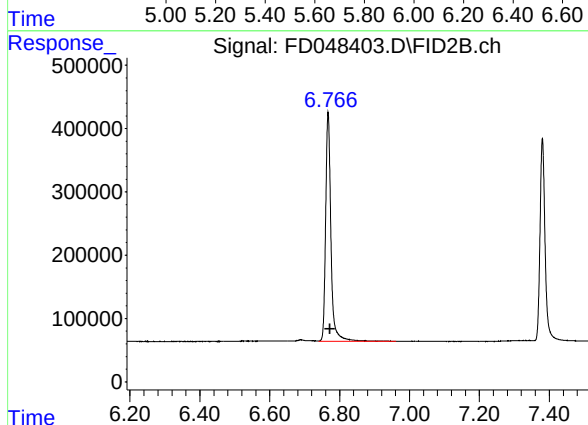
ClientSampleId :

20 PPM AROMATIC HC STD ICV



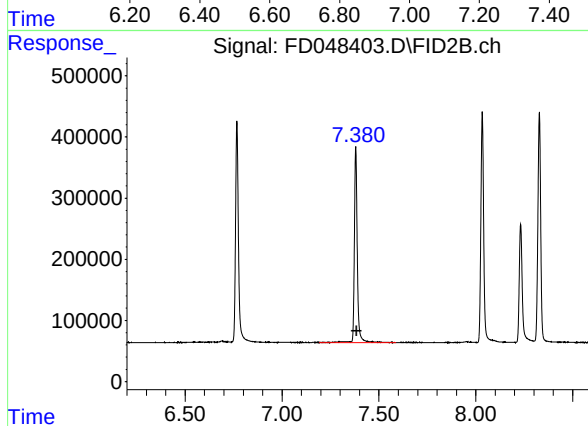
#2 Naphthalene (C11.7)

R.T.: 5.720 min
Delta R.T.: -0.004 min
Response: 3788301
Conc: 20.29 ug/ml



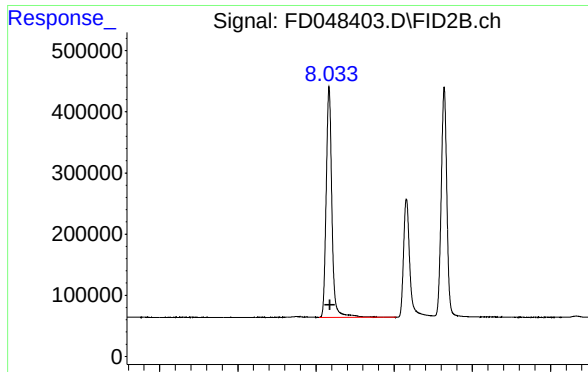
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.767 min
Delta R.T.: -0.005 min
Response: 3802093
Conc: 20.12 ug/ml



#4 2-Bromonaphthalene (SURR)

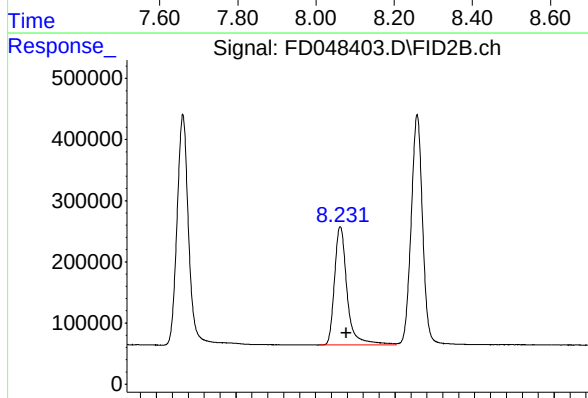
R.T.: 7.381 min
Delta R.T.: -0.004 min
Response: 3368404
Conc: 20.34 ug/ml



#5 Acenaphthylene (C15.06)

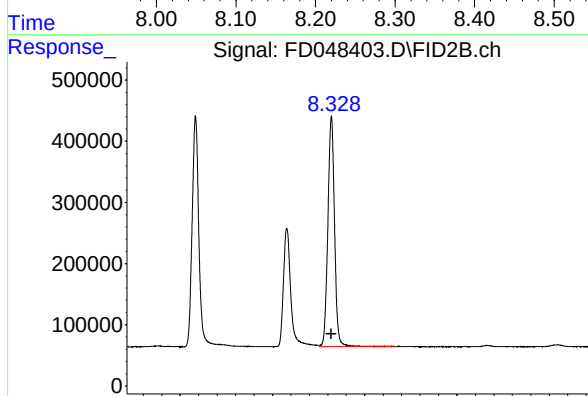
R.T.: 8.033 min
Delta R.T.: -0.002 min
Response: 3842612
Conc: 20.03 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



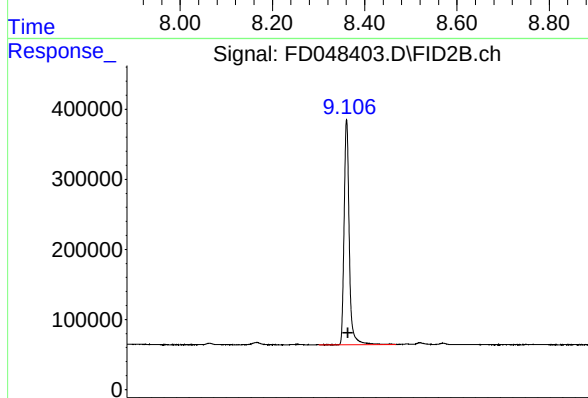
#6 2-Fluorobiphenyl (SURR)

R.T.: 8.232 min
Delta R.T.: -0.007 min
Response: 2141410
Conc: 20.65 ug/ml



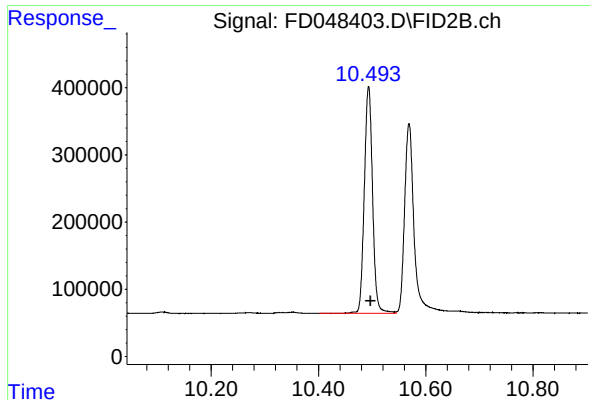
#7 Acenaphthene (C15.5)

R.T.: 8.328 min
Delta R.T.: 0.000 min
Response: 3785313
Conc: 20.01 ug/ml



#8 Flouorene (C16.55)

R.T.: 9.106 min
Delta R.T.: -0.005 min
Response: 3658929
Conc: 20.25 ug/ml



#9 Phenanthrene (C19.36)

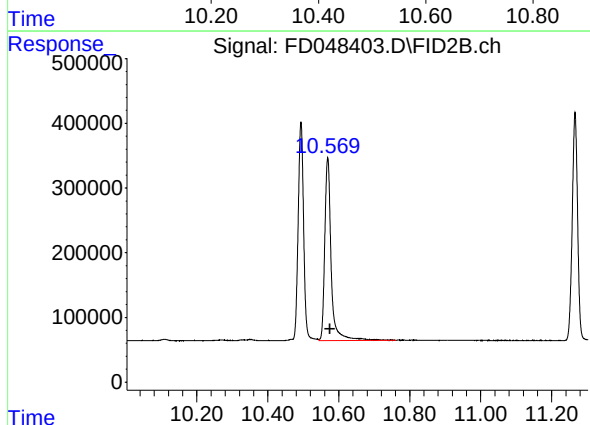
R.T.: 10.493 min
Delta R.T.: -0.004 min
Response: 3597204
Conc: 20.30 ug/ml

Instrument :

FID_D

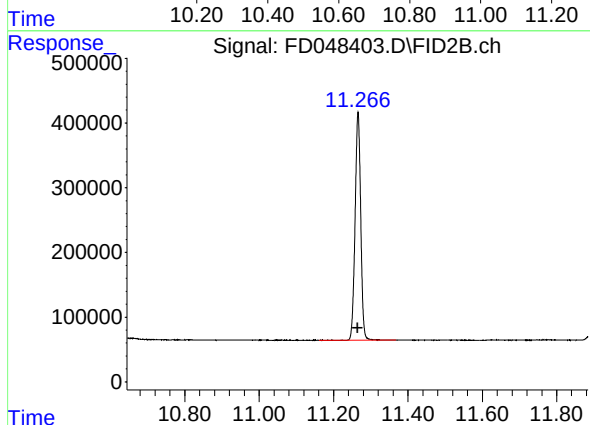
ClientSampleId :

20 PPM AROMATIC HC STD ICV



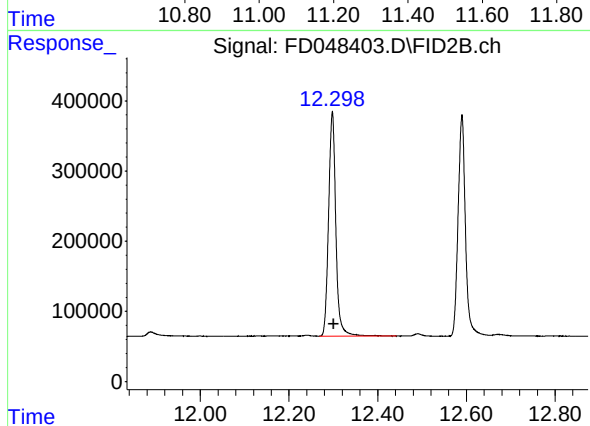
#10 Anthracene (C19.43)

R.T.: 10.569 min
Delta R.T.: -0.006 min
Response: 3532678
Conc: 19.85 ug/ml



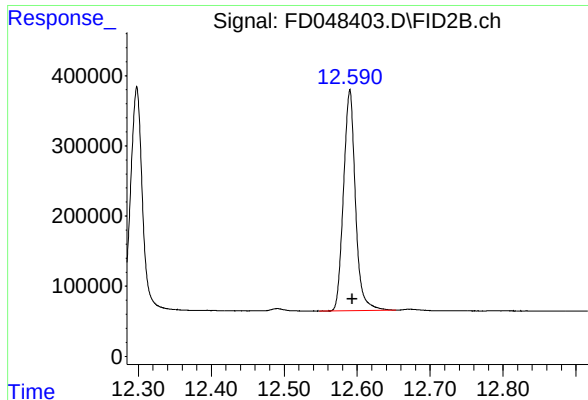
#11 ortho-Terphenyl (SURR)

R.T.: 11.266 min
Delta R.T.: 0.000 min
Response: 3698580
Conc: 20.10 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 12.298 min
Delta R.T.: -0.004 min
Response: 3625812
Conc: 20.05 ug/ml



#13 Pyrene (C20.8)

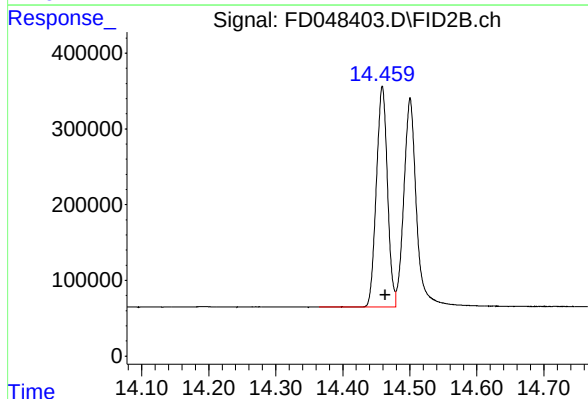
R.T.: 12.590 min
Delta R.T.: -0.004 min
Response: 3567943
Conc: 19.93 ug/ml

Instrument :

FID_D

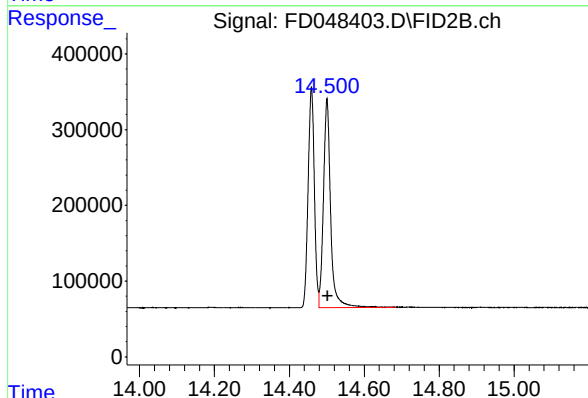
ClientSampleId :

20 PPM AROMATIC HC STD ICV



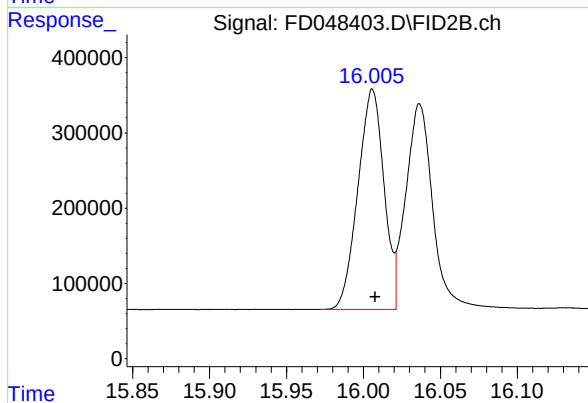
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.459 min
Delta R.T.: -0.005 min
Response: 3346833
Conc: 20.94 ug/ml



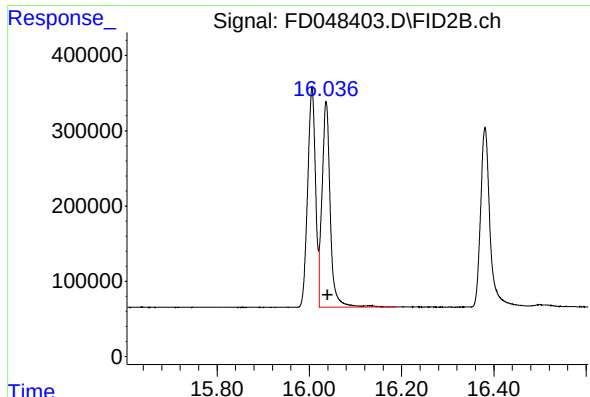
#15 Chrysene (C27.41)

R.T.: 14.500 min
Delta R.T.: -0.002 min
Response: 3657712
Conc: 19.61 ug/ml



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

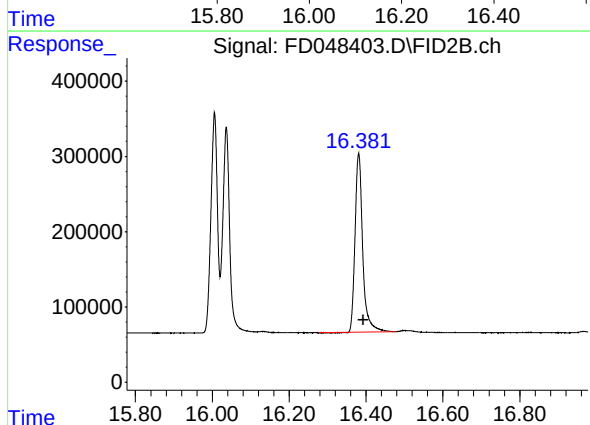
R.T.: 16.006 min
Delta R.T.: -0.002 min
Response: 3457542
Conc: 20.76 ug/ml



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

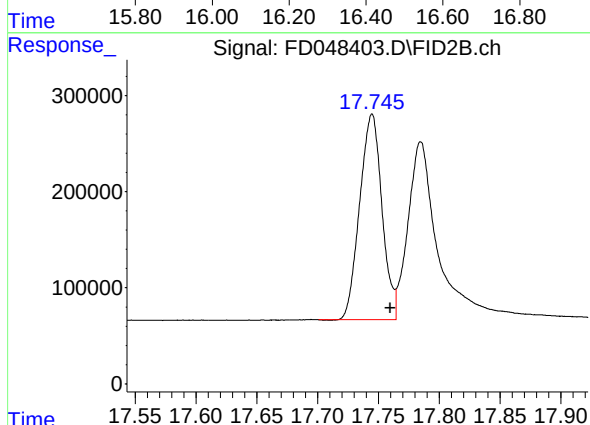
R.T.: 16.036 min
Delta R.T.: -0.004 min
Response: 3379645
Conc: 19.91 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



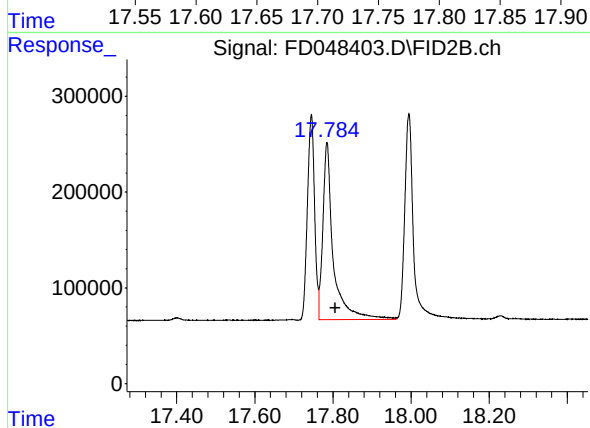
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.381 min
Delta R.T.: -0.012 min
Response: 3303676
Conc: 20.21 ug/ml



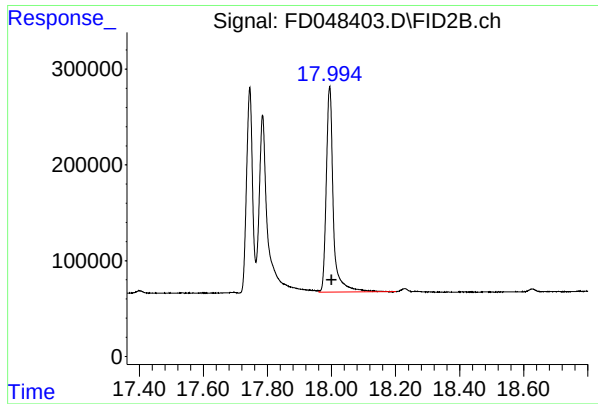
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.744 min
Delta R.T.: -0.016 min
Response: 2730501
Conc: 20.76 ug/ml



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

R.T.: 17.785 min
Delta R.T.: -0.022 min
Response: 3415613
Conc: 20.41 ug/ml



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

R.T.: 17.994 min
Delta R.T.: -0.007 min
Response: 3278515
Conc: 20.18 ug/ml

Instrument :

FID_D

ClientSampleId :

20 PPM AROMATIC HC STD ICV

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD093024AR\
Data File : FD048403.D
Signal(s) : FID2B.ch
Acq On : 30 Sep 2024 14:29
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 093024.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	4.201	4.085	4.265	BV	411728	3521081	91.63%	4.857%
2	5.720	5.618	5.928	BB	370028	3788301	98.59%	5.225%
3	6.767	6.741	6.961	VB	359837	3802093	98.95%	5.244%
4	7.381	7.191	7.588	BB	318926	3368404	87.66%	4.646%
5	8.033	8.008	8.205	PV	376973	3842612	100.00%	5.300%
6	8.232	8.205	8.301	PV	192929	2141410	55.73%	2.954%
7	8.328	8.301	8.468	VB	377334	3785313	98.51%	5.221%
8	9.106	9.018	9.265	BB	320863	3658929	95.22%	5.047%
9	10.493	10.401	10.545	BV	339349	3597204	93.61%	4.962%
10	10.569	10.545	10.761	VB	281554	3532678	91.93%	4.873%
11	11.266	11.161	11.368	BB	349437	3698580	96.25%	5.101%
12	12.298	12.268	12.441	PB	319741	3625812	94.36%	5.001%
13	12.590	12.548	12.653	PV	318445	3567943	92.85%	4.921%
14	14.459	14.365	14.479	BV	290579	3346833	87.10%	4.616%
15	14.500	14.479	14.685	VB	276082	3657712	95.19%	5.045%
16	16.006	15.971	16.021	BV	290942	3457542	89.98%	4.769%
17	16.036	16.021	16.188	VB	275149	3379645	87.95%	4.662%
18	16.381	16.278	16.478	BV	237513	3303676	85.97%	4.557%
19	17.744	17.701	17.764	BV	214980	2730501	71.06%	3.766%
20	17.785	17.764	17.961	VV	185327	3415613	88.89%	4.711%
21	17.994	17.961	18.201	VBA	215211	3278515	85.32%	4.522%
Sum of corrected areas:							72500396	

Aromatic EPH 093024.M Tue Oct 01 01:51:11 2024

Continuing Calibration Report for SequenceID : FC102224AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV

File ID : FC067484.D

Aliphatic C9-C12	7061530.000	60.000	3.175	6.455	117692.167	128354.488	8.307
Aliphatic C12-C16	4662702.000	40.000	6.456	9.845	116567.550	130957.677	10.988
Aliphatic C16-C21	6773563.000	60.000	9.846	13.203	112892.717	131476.102	14.134
Aliphatic C21-C28	9096898.000	80.000	13.204	16.857	113711.225	126823.664	10.339
Aliphatic C28-C40	11940513.000	120.000	16.858	21.701	99504.275	105215.848	5.428
Aliphatic EPH	39535206.000	360.000	3.175	21.701	109820.017	121110.937	9.323

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	22 Oct 2024 12:09
Client Sample ID:		Operator:	YP/AJ
Data file:	FC067484.D	Misc:	
Instrument:	FID_C	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.175	6.455	7061530.000	60.000	ug/ml
Aliphatic C12-C16	6.456	9.845	4662702.000	40.000	ug/ml
Aliphatic C16-C21	9.846	13.203	6773563.000	60.000	ug/ml
Aliphatic C21-C28	13.204	16.857	9096898.000	80.000	ug/ml
Aliphatic C28-C40	16.858	21.701	11940513.000	120.000	ug/ml
Aliphatic EPH	3.175	21.701	39535206.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
 Data File : FC067484.D
 Signal(s) : FID1A.ch
 Acq On : 22 Oct 2024 12:09
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: Oct 23 04:50:50 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:13:32 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)	11.496	2569062	16.884 ug/ml
Spiked Amount 50.000		Recovery =	33.77%
12) S 1-chlorooctadecane (S...	12.934	1893814	16.731 ug/ml
Spiked Amount 50.000		Recovery =	33.46%
Target Compounds			
1) T n-Nonane (C9)	3.275	2298916	18.136 ug/ml
2) T n-Decane (C10)	4.339	2382020	18.531 ug/ml
3) T A~Naphthalene (C11.7)	5.918	2586674	18.235 ug/ml
4) T n-Dodecane (C12)	6.355	2380594	18.346 ug/ml
5) T A~2-methylnaphthalene...	6.972	2479108	18.071 ug/ml
6) T n-Tetradecane (C14)	8.147	2320426	18.016 ug/ml
7) T n-Hexadecane (C16)	9.745	2342276	17.595 ug/ml
8) T n-Octadecane (C18)	11.185	2345861	17.300 ug/ml
10) T n-Eicosane (C20)	12.492	2241615	17.168 ug/ml
11) T n-Heneicosane (C21)	13.103	2186087	17.045 ug/ml
13) T n-Docosane (C22)	13.689	2199697	17.227 ug/ml
14) T n-Tetracosane (C24)	14.789	2267103	17.727 ug/ml
15) T n-Hexacosane (C26)	15.809	2283312	18.109 ug/ml
16) T n-Octacosane (C28)	16.757	2346786	18.680 ug/ml
17) T n-Tricontane (C30)	17.644	2461936	19.111 ug/ml
18) T n-Dotriacontane (C32)	18.476	2448385	19.598 ug/ml
19) T n-Tetratriacontane (C34)	19.257	2102446	19.240 ug/ml
20) T n-Hexatriacontane (C36)	19.994	1751894	18.535 ug/ml
21) T n-Octatriacontane (C38)	20.718	1610078	18.359 ug/ml
22) T n-Tetracontane (C40)	21.601	1565774	18.197 ug/ml

(f)=RT Delta > 1/2 Window

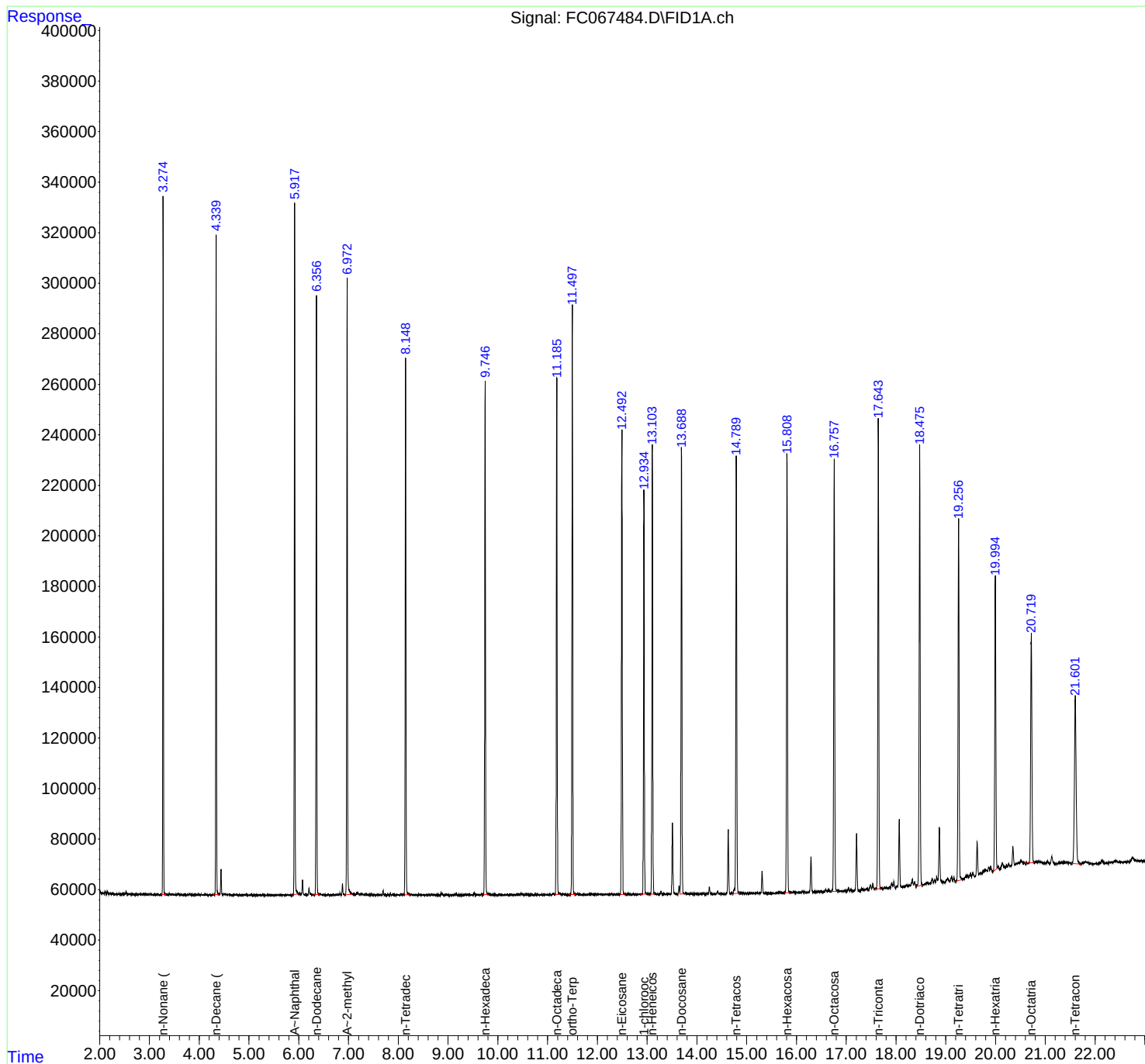
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067484.D
Signal(s) : FID1A.ch
Acq On : 22 Oct 2024 12:09
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Oct 23 04:50:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 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\FC102224AL\
Data File : FC067484.D
Signal(s) : FID1A.ch
Acq On : 22 Oct 2024 12:09
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.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	3.245	3.325	BB	276402	2298916	88.88%	4.686%
2	4.339	4.282	4.395	BB	261641	2382020	92.09%	4.855%
3	5.918	5.867	5.997	BB	273067	2586674	100.00%	5.272%
4	6.355	6.292	6.410	BB	236395	2380594	92.03%	4.852%
5	6.972	6.925	7.079	BB	244668	2479108	95.84%	5.053%
6	8.147	8.114	8.214	BB	211152	2320426	89.71%	4.729%
7	9.745	9.699	9.812	BB	202861	2342276	90.55%	4.774%
8	11.185	11.144	11.252	BB	205117	2345861	90.69%	4.781%
9	11.496	11.434	11.565	BB	234758	2569062	99.32%	5.236%
10	12.492	12.454	12.555	BB	183367	2241615	86.66%	4.569%
11	12.934	12.870	12.995	BB	160120	1893814	73.21%	3.860%
12	13.103	13.065	13.157	BB	177694	2186087	84.51%	4.456%
13	13.689	13.656	13.752	VB	176547	2199697	85.04%	4.483%
14	14.789	14.717	14.860	BB	173079	2267103	87.65%	4.621%
15	15.809	15.754	15.872	BB	173312	2283312	88.27%	4.654%
16	16.757	16.692	16.830	BB	171124	2346786	90.73%	4.783%
17	17.644	17.565	17.694	PB	185470	2461936	95.18%	5.018%
18	18.476	18.415	18.537	BB	175154	2448385	94.65%	4.990%
19	19.257	19.197	19.329	BB	141431	2102446	81.28%	4.285%
20	19.994	19.950	20.034	BV	115948	1751894	67.73%	3.571%
21	20.718	20.590	20.775	BB	90711	1610078	62.25%	3.282%
22	21.601	21.524	21.717	BV	66493	1565774	60.53%	3.191%
Sum of corrected areas:							49063864	

Aliphatic EPH 100224.M Wed Oct 23 05:02:59 2024

Continuing Calibration Report for SequenceID : FC102224AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV

File ID : FC067497.D

Aliphatic C9-C12	7120345.000	60.000	3.175	6.455	118672.417	128354.488	7.543
Aliphatic C12-C16	4707454.000	40.000	6.456	9.845	117686.350	130957.677	10.134
Aliphatic C16-C21	6832576.000	60.000	9.846	13.203	113876.267	131476.102	13.386
Aliphatic C21-C28	9183247.000	80.000	13.204	16.857	114790.588	126823.664	9.488
Aliphatic C28-C40	12317337.000	120.000	16.858	21.701	102644.475	105215.848	2.444
Aliphatic EPH	40160959.000	360.000	3.175	21.701	111558.219	121110.937	7.888

Lab Sample ID:	20 PPM ALIPHATIC HC 9	Acq On:	23 Oct 2024 08:30
Client Sample ID:		Operator:	YP/AJ
Data file:	FC067497.D	Misc:	
Instrument:	FID_C	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.175	6.455	7120345.000	60.000	ug/ml
Aliphatic C12-C16	6.456	9.845	4707454.000	40.000	ug/ml
Aliphatic C16-C21	9.846	13.203	6832576.000	60.000	ug/ml
Aliphatic C21-C28	13.204	16.857	9183247.000	80.000	ug/ml
Aliphatic C28-C40	16.858	21.701	12317337.000	120.000	ug/ml
Aliphatic EPH	3.175	21.701	40160959.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
 Data File : FC067497.D
 Signal(s) : FID1A.ch
 Acq On : 23 Oct 2024 08:30
 Operator : YP/AJ
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
 Quant Time: Oct 23 11:06:18 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:13:32 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)	11.496	2591904	17.034 ug/ml
Spiked Amount 50.000		Recovery =	34.07%
12) S 1-chlorooctadecane (S...	12.935	1924189	16.999 ug/ml
Spiked Amount 50.000		Recovery =	34.00%
Target Compounds			
1) T n-Nonane (C9)	3.274	2320831	18.309 ug/ml
2) T n-Decane (C10)	4.339	2399146	18.664 ug/ml
3) T A~Naphthalene (C11.7)	5.917	2612095	18.414 ug/ml
4) T n-Dodecane (C12)	6.355	2400368	18.498 ug/ml
5) T A~2-methylnaphthalene...	6.972	2502088	18.238 ug/ml
6) T n-Tetradecane (C14)	8.147	2339988	18.168 ug/ml
7) T n-Hexadecane (C16)	9.745	2367466	17.785 ug/ml
8) T n-Octadecane (C18)	11.185	2368684	17.468 ug/ml
10) T n-Eicosane (C20)	12.492	2260374	17.312 ug/ml
11) T n-Heneicosane (C21)	13.103	2203518	17.181 ug/ml
13) T n-Docosane (C22)	13.689	2222141	17.403 ug/ml
14) T n-Tetracosane (C24)	14.789	2284137	17.860 ug/ml
15) T n-Hexacosane (C26)	15.808	2303813	18.272 ug/ml
16) T n-Octacosane (C28)	16.757	2373156	18.890 ug/ml
17) T n-Tricontane (C30)	17.643	2507932	19.468 ug/ml
18) T n-Dotriacontane (C32)	18.475	2575666	20.617 ug/ml
19) T n-Tetratriacontane (C34)	19.256	2157404	19.742 ug/ml
20) T n-Hexatriacontane (C36)	19.995	1810308	19.153 ug/ml
21) T n-Octatriacontane (C38)	20.718	1660764	18.937 ug/ml
22) T n-Tetracontane (C40)	21.604	1605263	18.655 ug/ml

(f)=RT Delta > 1/2 Window

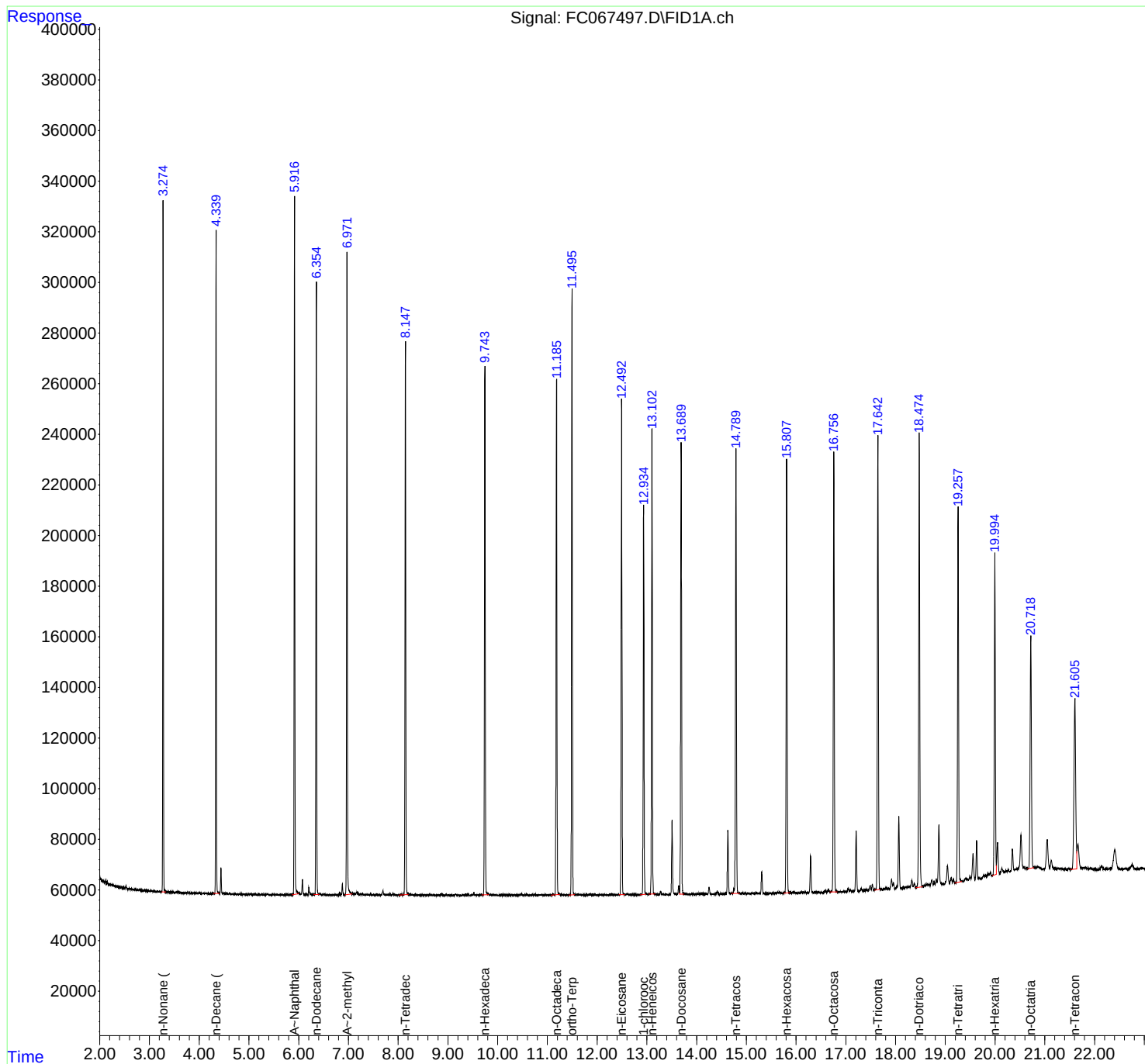
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067497.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 08:30
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Oct 23 11:06:18 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 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\FC102224AL\
 Data File : FC067497.D
 Signal(s) : FID1A.ch
 Acq On : 23 Oct 2024 08:30
 Sample : 20 PPM ALIPHATIC HC STD
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.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	272315	2320831	88.85%	4.661%
2	4.339	4.287	4.405	BB	261593	2399146	91.85%	4.818%
3	5.917	5.863	6.000	BB	275502	2612095	100.00%	5.246%
4	6.355	6.297	6.413	BB	241264	2400368	91.89%	4.821%
5	6.972	6.925	7.075	BB	253341	2502088	95.79%	5.025%
6	8.147	8.015	8.207	BB	218432	2339988	89.58%	4.700%
7	9.745	9.685	9.825	BB	206654	2367466	90.63%	4.755%
8	11.185	11.075	11.253	BB	204105	2368684	90.68%	4.757%
9	11.496	11.428	11.550	BB	238512	2591904	99.23%	5.206%
10	12.492	12.433	12.560	BB	194742	2260374	86.53%	4.540%
11	12.935	12.867	12.985	BB	153582	1924189	73.66%	3.865%
12	13.103	13.033	13.163	BB	183297	2203518	84.36%	4.426%
13	13.689	13.656	13.755	VB	176175	2222141	85.07%	4.463%
14	14.789	14.697	14.862	BB	176235	2284137	87.44%	4.587%
15	15.808	15.745	15.872	BB	168287	2303813	88.20%	4.627%
16	16.757	16.683	16.830	BB	172845	2373156	90.85%	4.766%
17	17.643	17.572	17.688	BB	179408	2507932	96.01%	5.037%
18	18.475	18.410	18.548	BV	177428	2575666	98.61%	5.173%
19	19.256	19.195	19.333	BB	147047	2157404	82.59%	4.333%
20	19.995	19.938	20.025	BV	126362	1810308	69.30%	3.636%
21	20.718	20.652	20.783	BB	91496	1660764	63.58%	3.335%
22	21.604	21.508	21.645	BV	66997	1605263	61.46%	3.224%
Sum of corrected areas:							49791234	

Aliphatic EPH 100224.M Wed Oct 23 11:11:19 2024

Continuing Calibration Report for SequenceID : FD102224AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV

File ID : FD048547.D

Aromatic C10-C12	7943019.000	40.000	4.096	5.814	198575.475	180984.840	-9.719
Aromatic C12-C16	11857455.000	60.000	5.815	8.420	197624.250	189995.313	-4.015
Aromatic C16-C21	14282295.000	80.000	8.421	12.681	178528.688	178728.230	0.112
Aromatic C21-C36	30751520.000	180.000	12.682	18.086	170841.778	165360.750	-3.315
Aromatic EPH	64834289.000	360.000	4.096	18.086	180095.247	174173.072	-3.400

Lab Sample ID:	20 PPM AROMATIC HC	Acq On:	22 Oct 2024 12:09
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048547.D	Misc:	
Instrument:	FID_D	ALS Vial:	52
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.096	5.814	7943019.000	40.000	ug/ml
Aromatic C12-C16	5.815	8.420	11857455.000	60.000	ug/ml
Aromatic C16-C21	8.421	12.681	14282295.000	80.000	ug/ml
Aromatic C21-C36	12.682	18.086	30751520.000	180.000	ug/ml
Aromatic EPH	4.096	18.086	64834289.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
 Data File : FD048547.D
 Signal(s) : FID2B.ch
 Acq On : 22 Oct 2024 12:09
 Operator : YP/AJ
 Sample : 20 PPM AROMATIC HC STD
 Misc :
 ALS Vial : 52 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 20 PPM AROMATIC HC STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 10/23/2024
 Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e
 Quant Time: Oct 23 05:08:39 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
 Quant Title : GC Extractables
 QLast Update : Mon Sep 30 14:17:34 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	3411038	20.602 ug/ml
Spiked Amount 50.000		Recovery =	41.20%
6) S 2-Fluorobiphenyl (SURR)	8.223	2215061	21.359 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	42.72%
11) S ortho-Terphenyl (SURR)	11.258	3793765	20.619 ug/ml
Spiked Amount 50.000		Recovery =	41.24%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.196	3910031	22.310 ug/ml
2) T Naphthalene (C11.7)	5.714	4032988	21.600 ug/ml
3) T 2-Methylnaphthalene (...)	6.760	4003544	21.184 ug/ml
5) T Acenaphthylene (C15.06)	8.026	3896360	20.310 ug/ml
7) T Acenaphthene (C15.5)	8.320	3957551	20.922 ug/ml
8) T Fluorene (C16.55)	9.098	3773985	20.888 ug/ml
9) T Phenanthrene (C19.36)	10.485	3668698	20.700 ug/ml
10) T Anthracene (C19.43)	10.560	3226280	18.131 ug/ml
12) T Fluoranthene (C21.85)	12.288	3651993	20.191 ug/ml
13) T Pyrene (C20.8)	12.581	3613332	20.179 ug/ml
14) T Benzo[a]anthracene (C...	14.450	3292658	20.603 ug/ml
15) T Chrysene (C27.41)	14.491	3625013	19.434 ug/ml
16) T benzo[b]fluoranthene ...	15.996	3456324	20.754 ug/mlm
17) T Bnezo[k]fluoranthene ...	16.028	3339092	19.671 ug/mlm
18) T Benzo[a]pyrene (C31.34)	16.372	3388070	20.729 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.735	2964224	22.535 ug/mlm
20) T Dibenz[a,h]anthracene...	17.775	3595036	21.484 ug/ml
21) T Benzo[g,h,i]perylene ...	17.986	3439110	21.174 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
Data File : FD048547.D
Signal(s) : FID2B.ch
Acq On : 22 Oct 2024 12:09
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

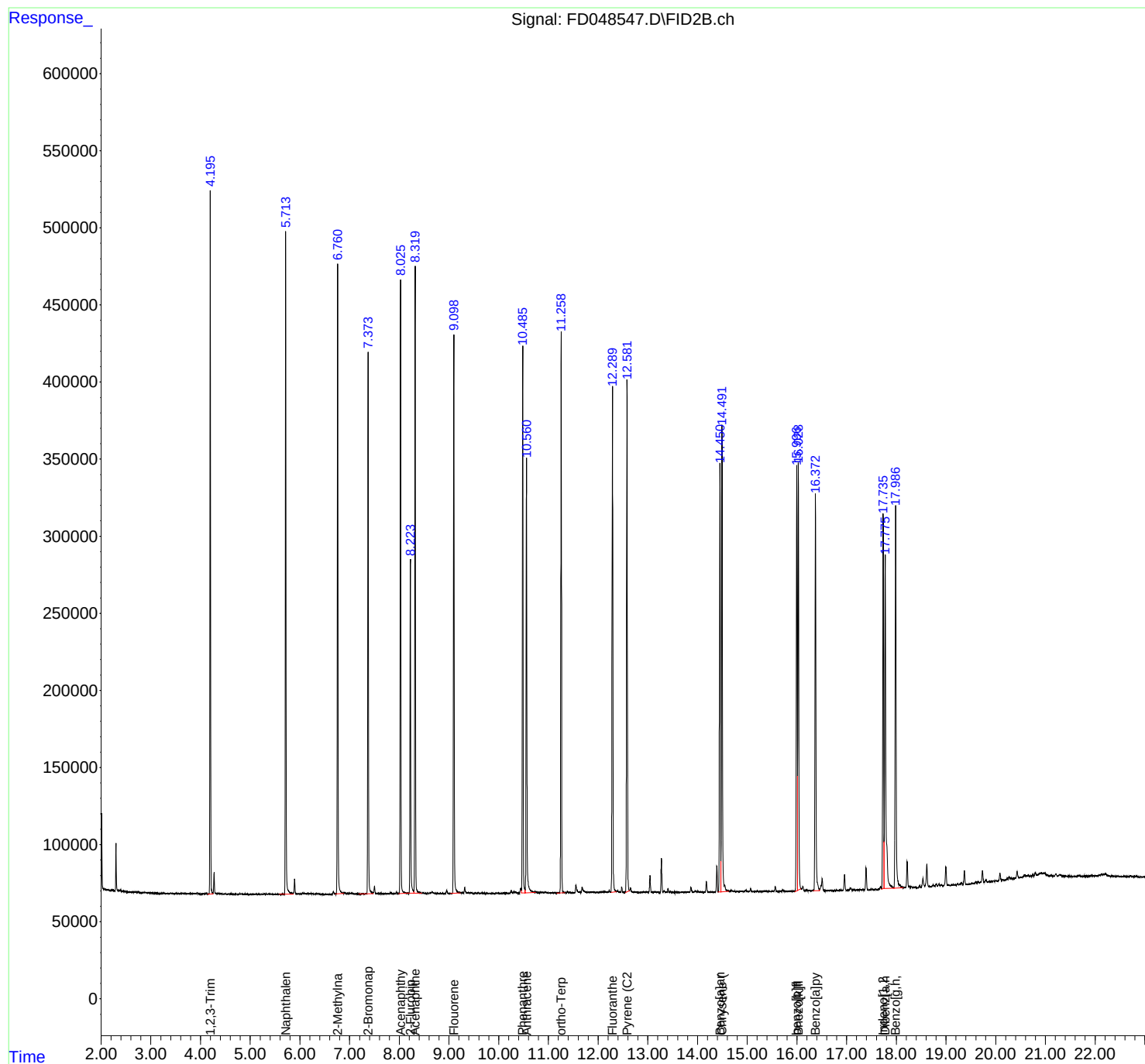
Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e
Quant Time: Oct 23 05:08:39 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 14:17:34 2024
Response via : Initial Calibration
Integrator: ChemStation

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



riteres

Instrument :
FID_D
LabSampleId :
20 PPM AROMATIC HC STD
Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD10222
Data File : FD048547.D
Signal(s) : FID2B.ch
Acq On : 22 Oct 2024 12:09
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.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	4.196	4.138	4.250	BV	452272	3910031	96.95%	5.276%
2	5.714	5.581	5.864	BV	427588	4032988	100.00%	5.442%
3	6.760	6.714	6.888	PV	410026	4003544	99.27%	5.402%
4	7.373	7.188	7.471	BV	347917	3411038	84.58%	4.603%
5	8.026	7.981	8.138	BB	395642	3896360	96.61%	5.258%
6	8.223	8.141	8.294	BV	216410	2215061	54.92%	2.989%
7	8.320	8.294	8.454	VB	404012	3957551	98.13%	5.340%
8	9.098	9.028	9.234	BB	360931	3773985	93.58%	5.093%
9	10.485	10.457	10.531	VV	354583	3668698	90.97%	4.951%
10	10.560	10.531	10.741	VB	281888	3226280	80.00%	4.354%
11	11.258	11.161	11.334	BB	363302	3793765	94.07%	5.119%
12	12.288	12.254	12.368	PV	325002	3651993	90.55%	4.928%
13	12.581	12.544	12.630	PV	331289	3613332	89.59%	4.876%
14	14.450	14.417	14.470	PV	278614	3292658	81.64%	4.443%
15	14.491	14.470	14.634	VB	301999	3625013	89.88%	4.892%
16	15.996	15.971	16.012	BV	270870	3360457	83.32%	4.535%
17	16.028	16.012	16.095	VV	275066	3286854	81.50%	4.435%
18	16.372	16.321	16.455	BV	252793	3388070	84.01%	4.572%
19	17.735	17.701	17.754	BV	241700	2963669	73.49%	3.999%
20	17.775	17.754	17.951	VV	215040	3595036	89.14%	4.851%
21	17.986	17.951	18.148	VB	249411	3439110	85.27%	4.641%
Sum of corrected areas:						74105491		

Aromatic EPH 093024.M Wed Oct 23 05:17:20 2024

Continuing Calibration Report for SequenceID : FD102224AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV

File ID : FD048560.D

Aromatic C10-C12	8157685.000	40.000	4.096	5.814	203942.125	180984.840	-12.685
Aromatic C12-C16	12219474.000	60.000	5.815	8.420	203657.900	189995.313	-7.191
Aromatic C16-C21	14694945.000	80.000	8.421	12.681	183686.813	178728.230	-2.774
Aromatic C21-C36	31489467.000	180.000	12.682	18.086	174941.483	165360.750	-5.794
Aromatic EPH	66561571.000	360.000	4.096	18.086	184893.253	174173.072	-6.155

Lab Sample ID:	20 PPM AROMATIC HC	Acq On:	23 Oct 2024 08:30
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048560.D	Misc:	
Instrument:	FID_D	ALS Vial:	52
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.096	5.814	8157685.000	40.000	ug/ml
Aromatic C12-C16	5.815	8.420	12219474.000	60.000	ug/ml
Aromatic C16-C21	8.421	12.681	14694945.000	80.000	ug/ml
Aromatic C21-C36	12.682	18.086	31489467.000	180.000	ug/ml
Aromatic EPH	4.096	18.086	66561571.000	360.000	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
 Data File : FD048560.D
 Signal(s) : FID2B.ch
 Acq On : 23 Oct 2024 08:30
 Operator : YP/AJ
 Sample : 20 PPM AROMATIC HC STD
 Misc :
 ALS Vial : 52 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 20 PPM AROMATIC HC STD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 10/23/2024
 Supervised By :Ankita Jodhani 10/24/2024

Integration File: autoint1.e
 Quant Time: Oct 23 11:15:24 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
 Quant Title : GC Extractables
 QLast Update : Mon Sep 30 14:17:34 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	3525385	21.293 ug/ml
Spiked Amount 50.000		Recovery =	42.59%
6) S 2-Fluorobiphenyl (SURR)	8.224	2306789	22.244 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	44.49%
11) S ortho-Terphenyl (SURR)	11.258	3865893	21.011 ug/ml
Spiked Amount 50.000		Recovery =	42.02%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.196	4001432	22.832 ug/ml
2) T Naphthalene (C11.7)	5.714	4156253	22.260 ug/ml
3) T 2-Methylnaphthalene (...)	6.761	4140663	21.910 ug/ml
5) T Acenaphthylene (C15.06)	8.026	4012235	20.914 ug/ml
7) T Acenaphthene (C15.5)	8.320	4066576	21.499 ug/ml
8) T Fluorene (C16.55)	9.099	3911944	21.652 ug/ml
9) T Phenanthrene (C19.36)	10.485	3796924	21.424 ug/ml
10) T Anthracene (C19.43)	10.560	3291716	18.499 ug/ml
12) T Fluoranthene (C21.85)	12.288	3740967	20.683 ug/ml
13) T Pyrene (C20.8)	12.582	3694361	20.631 ug/ml
14) T Benzo[a]anthracene (C...	14.451	3381231	21.157 ug/ml
15) T Chrysene (C27.41)	14.492	3532694	18.939 ug/ml
16) T benzo[b]fluoranthene ...	15.997	3540329	21.258 ug/mlm
17) T Bnezo[k]fluoranthene ...	16.029	3404860	20.058 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.373	3490880	21.358 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.736	3090975	23.498 ug/mlm
20) T Dibenz[a,h]anthracene...	17.776	3790233	22.651 ug/ml
21) T Benzo[g,h,i]perylene ...	17.987	3517298	21.655 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
Data File : FD048560.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 08:30
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

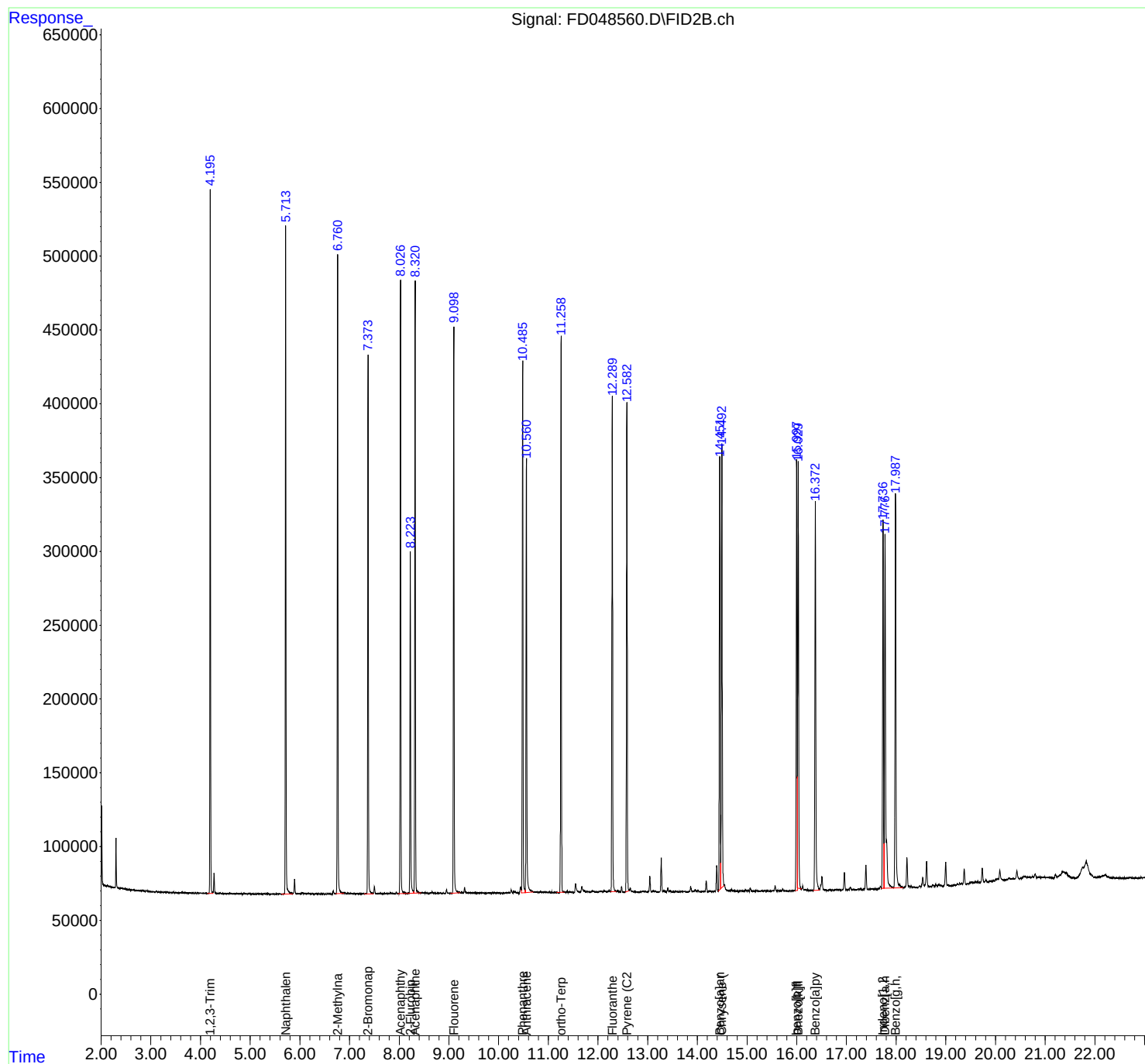
Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/24/2024

Integration File: autoint1.e
Quant Time: Oct 23 11:15:24 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 14:17:34 2024
Response via : Initial Calibration
Integrator: ChemStation

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





QC SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164309BL	SDG No.:	P4471
Lab Sample ID:	PB164309BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
10/22/24 09:40	10/23/24 1:18	PB164309

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.38	U	1	0.38	1.00	mg/kg	FC067485.D
Aliphatic C12-C16	Aliphatic C12-C16	0.24	U	1	0.24	0.67	mg/kg	FC067485.D
Aliphatic C16-C21	Aliphatic C16-C21	0.30	U	1	0.30	1.00	mg/kg	FC067485.D
Aliphatic C21-C28	Aliphatic C21-C28	0.80	U	1	0.80	1.33	mg/kg	FC067485.D
Aliphatic C28-C40	Aliphatic C28-C40	1.80	U	1	1.80	2.00	mg/kg	FC067485.D
Aromatic C10-C12	Aromatic C10-C12	0.30	U	1	0.30	0.67	mg/kg	FD048548.D
Aromatic C12-C16	Aromatic C12-C16	0.34	U	1	0.34	1.00	mg/kg	FD048548.D
Aromatic C16-C21	Aromatic C16-C21	0.96	U	1	0.96	1.67	mg/kg	FD048548.D
Aromatic C21-C36	Aromatic C21-C36	2.00	U	1	2.00	2.66	mg/kg	FD048548.D
Total AliphaticEPH	Total AliphaticEPH	3.52	U		3.52	5.99	mg/kg	
Total AromaticEPH	Total AromaticEPH	3.60	U		3.60	6.00	mg/kg	
Total EPH	Total EPH	7.12	U		7.12	12.0	mg/kg	

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164309BL	SDG No.:	P4471
Lab Sample ID:	PB164309BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC067485.D	1	10/22/24	10/23/24	PB164309

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)	34.5		40 - 140	69%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB164309BL	Acq On:	23 Oct 2024 01:18
Client Sample ID:	PB164309BL	Operator:	YP/AJ
Data file:	FC067485.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	3.175	6.455	0	0	300	ug/ml
Aliphatic C12-C16	6.456	9.845	0	0	200	ug/ml
Aliphatic C16-C21	9.846	13.203	0	0	300	ug/ml
Aliphatic C21-C28	13.204	16.857	0	0	400	ug/ml
Aliphatic C28-C40	16.858	21.701	0	0	600	ug/ml
Aliphatic EPH	3.175	21.701	0	0		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.937	12.937	3901025	34.46		ug/ml
Aliphatic C9-C28	3.175	16.857	0	0	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067485.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 01:18
Operator : YP/AJ
Sample : PB164309BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB164309BL

Integration File: autoint1.e
Quant Time: Oct 23 04:51:00 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 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	3901025	34.463 ug/ml
Spiked Amount	50.000	Recovery	= 68.93%

Target Compounds

(f)=RT Delta > 1/2 Window

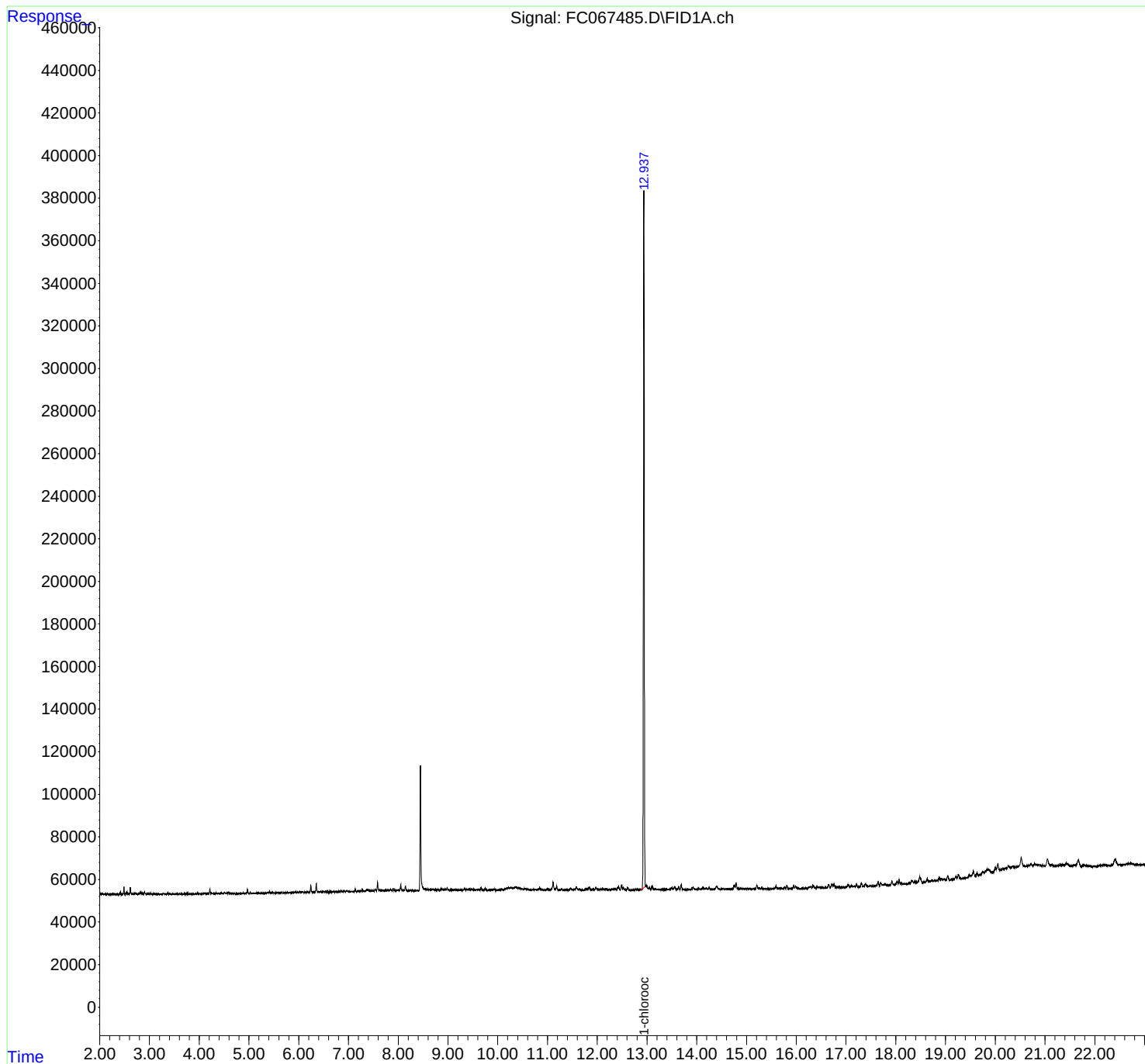
(m)=manual int.

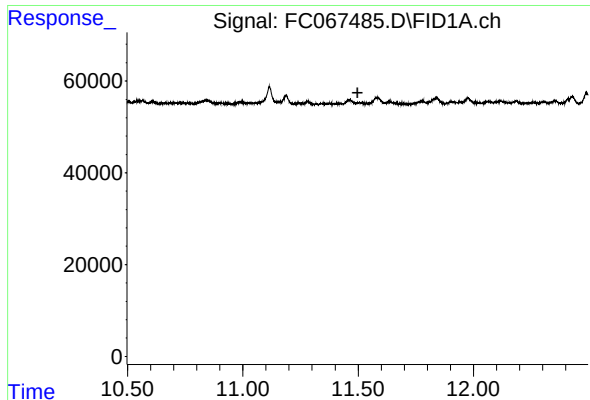
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067485.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 01:18
Operator : YP/AJ
Sample : PB164309BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB164309BL

Integration File: autoint1.e
Quant Time: Oct 23 04:51:00 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 2024
Response via : Initial Calibration
Integrator: ChemStation

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

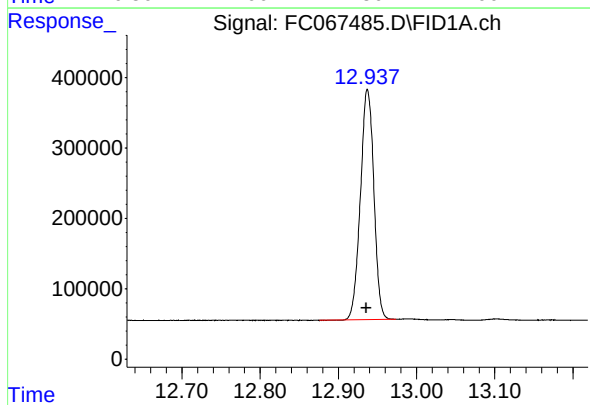




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T.: 11.497 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
PB164309BL



#12 1-chlorooctadecane (SURR)

R.T.: 12.937 min
Delta R.T.: 0.002 min
Response: 3901025
Conc: 34.46 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067485.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 01:18
Sample : PB164309BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.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	12.937	12.875	12.974	BV	326561	3901025	100.00%	100.000%
Sum of corrected areas:							3901025	

Aliphatic EPH 100224.M Wed Oct 23 05:03:16 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164309BL	SDG No.:	P4471
Lab Sample ID:	PB164309BL	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	100
Sample Wt/Vol:	30.02 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048548.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.30	U	0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.34	U	0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	0.96	U	0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.00	U	2.00	2.66	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	46.5		40 - 140	93%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	41.3		40 - 140	83%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	40.5		40 - 140	81%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB164309BL	Acq On:	23 Oct 2024 01:18
Client Sample ID:	PB164309BL	Operator:	YP/AJ
Data file:	FD048548.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	4.096	5.814	0	0	200	ug/ml
Aromatic C12-C16	5.815	8.420	0	0	300	ug/ml
Aromatic C16-C21	8.421	12.681	0	0	500	ug/ml
Aromatic C21-C36	12.682	18.086	0	0	800	ug/ml
Aromatic EPH	4.096	18.086	0	0		ug/ml
ortho-Terphenyl (SURR)	11.259	11.259	7455289	40.52		ug/ml
2-Bromonaphthalene (SURR)	7.372	7.372	7693093	46.46		ug/ml
2-Fluorobiphenyl (SURR)	8.220	8.220	4279022	41.26		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
 Data File : FD048548.D
 Signal(s) : FID2B.ch
 Acq On : 23 Oct 2024 01:18
 Operator : YP/AJ
 Sample : PB164309BL
 Misc :
 ALS Vial : 61 Sample Multiplier: 1

Instrument :
 FID_D
 ClientSampleId :
 PB164309BL

Integration File: autoint1.e
 Quant Time: Oct 23 05:08:50 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
 Quant Title : GC Extractables
 QLast Update : Mon Sep 30 14:17:34 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...	7.372	7693093	46.465 ug/ml
Spiked Amount 50.000		Recovery =	92.93%
6) S 2-Fluorobiphenyl (SURR)	8.220	4279022	41.262 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	82.52%
11) S ortho-Terphenyl (SURR)	11.259	7455289	40.519 ug/ml
Spiked Amount 50.000		Recovery =	81.04%

Target Compounds

(f)=RT Delta > 1/2 Window

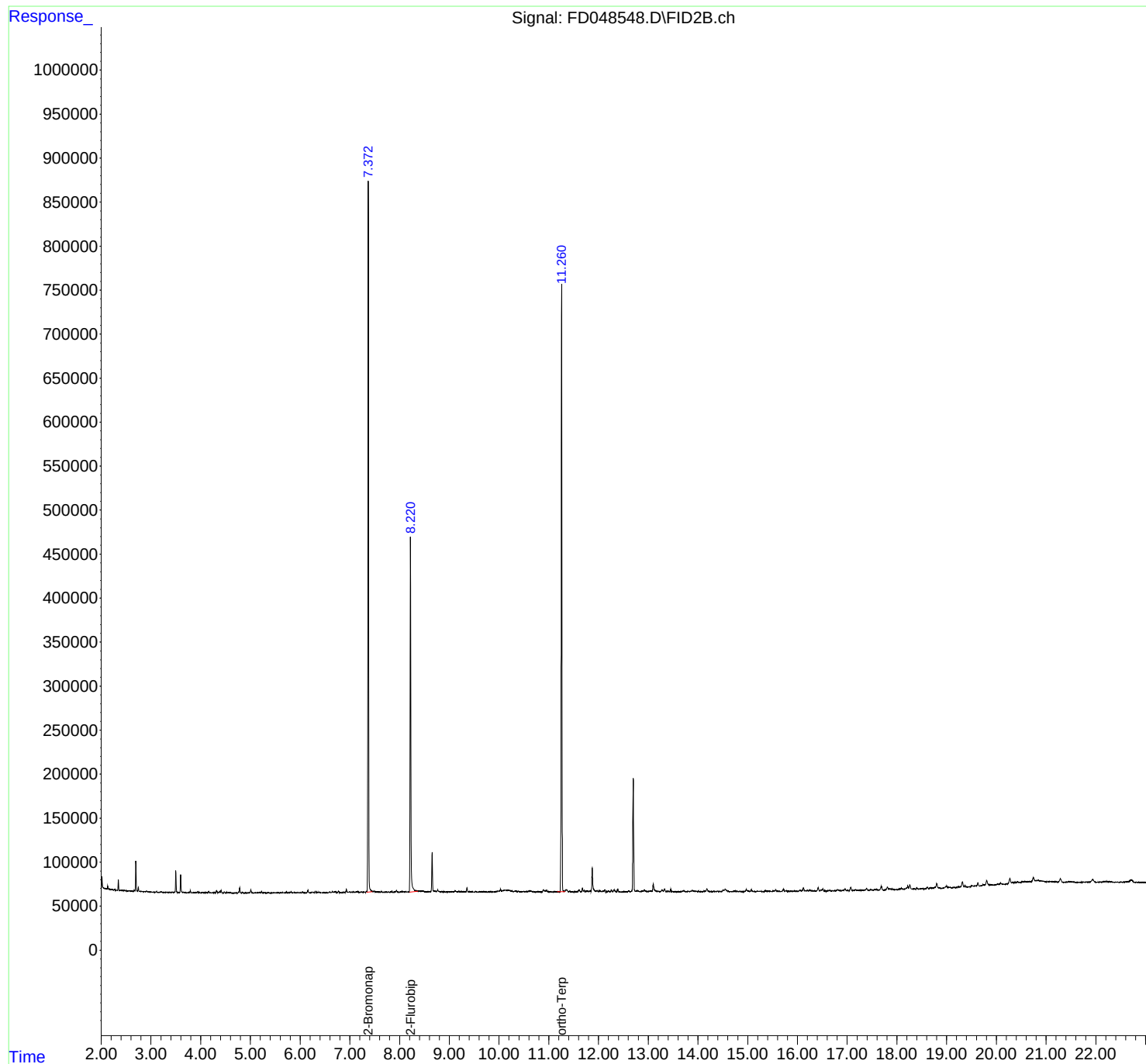
(m)=manual int.

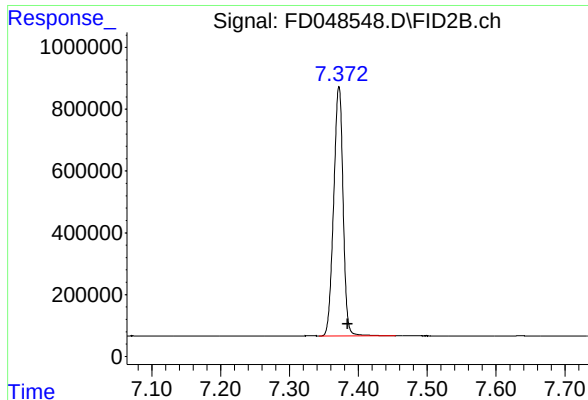
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
Data File : FD048548.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 01:18
Operator : YP/AJ
Sample : PB164309BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB164309BL

Integration File: autoint1.e
Quant Time: Oct 23 05:08:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 14:17:34 2024
Response via : Initial Calibration
Integrator: ChemStation

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

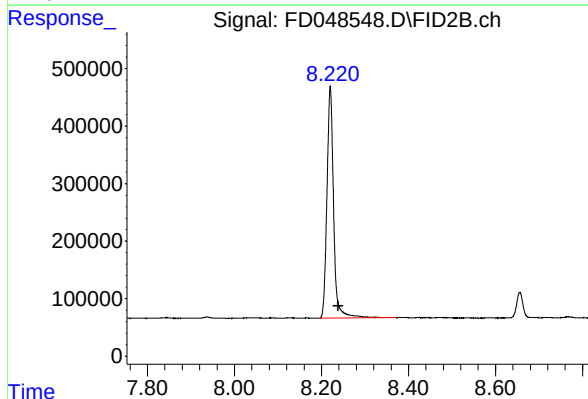




#4 2-Bromonaphthalene (SURR)

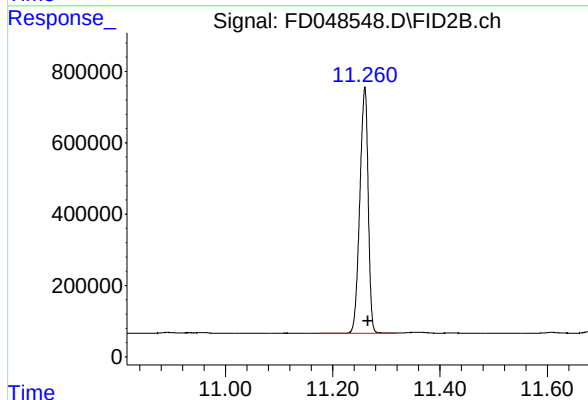
R.T.: 7.372 min
Delta R.T.: -0.013 min
Response: 7693093
Conc: 46.46 ug/ml

Instrument :
FID_D
ClientSampleId :
PB164309BL



#6 2-Fluorobiphenyl (SURR)

R.T.: 8.220 min
Delta R.T.: -0.019 min
Response: 4279022
Conc: 41.26 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.259 min
Delta R.T.: -0.006 min
Response: 7455289
Conc: 40.52 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
Data File : FD048548.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 01:18
Sample : PB164309BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.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	7.372	7.343	7.455	PV	807969	7693093	100.00%	39.599%
2	8.220	8.195	8.371	BV	402444	4279022	55.62%	22.026%
3	11.259	11.175	11.318	BV	676625	7455289	96.91%	38.375%
Sum of corrected areas:							19427404	

Aromatic EPH 093024.M Wed Oct 23 05:17:38 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164309BS	SDG No.:	P4471
Lab Sample ID:	PB164309BS	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
10/22/24 09:40	10/23/24 1:53	PB164309

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12	5.99		1	0.38	1.00	mg/kg FC067486.D
Aliphatic C12-C16	Aliphatic C12-C16	5.14		1	0.24	0.67	mg/kg FC067486.D
Aliphatic C16-C21	Aliphatic C16-C21	8.64		1	0.30	1.00	mg/kg FC067486.D
Aliphatic C21-C28	Aliphatic C21-C28	11.7		1	0.80	1.33	mg/kg FC067486.D
Aliphatic C28-C40	Aliphatic C28-C40	21.2		1	1.80	2.00	mg/kg FC067486.D
Aromatic C10-C12	Aromatic C10-C12	5.58		1	0.30	0.67	mg/kg FD048549.D
Aromatic C12-C16	Aromatic C12-C16	8.88		1	0.34	1.00	mg/kg FD048549.D
Aromatic C16-C21	Aromatic C16-C21	18.1		1	0.96	1.67	mg/kg FD048549.D
Aromatic C21-C36	Aromatic C21-C36	27.4		1	2.00	2.66	mg/kg FD048549.D
Total AliphaticEPH	Total AliphaticEPH	52.7			3.52	5.99	mg/kg
Total AromaticEPH	Total AromaticEPH	60.0			3.60	6.00	mg/kg
Total EPH	Total EPH	113			7.12	12.0	mg/kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164309BS	SDG No.:	P4471
Lab Sample ID:	PB164309BS	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
FC067486.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.99		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	5.14		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	8.64		0.30	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	11.7		0.80	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	21.2		1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	32.6		40 - 140	65%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB164309BS	Acq On:	23 Oct 2024 01:53
Client Sample ID:	PB164309BS	Operator:	YP/AJ
Data file:	FC067486.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	3.175	6.455	11537941	89.891	300	ug/ml
Aliphatic C12-C16	6.456	9.845	10110452	77.204	200	ug/ml
Aliphatic C16-C21	9.846	13.203	17054429	129.715	300	ug/ml
Aliphatic C21-C28	13.204	16.857	22350514	176.233	400	ug/ml
Aliphatic C28-C40	16.858	21.701	33507080	318.46	600	ug/ml
Aliphatic EPH	3.175	21.701	94560416	791.504		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.936	12.936	3694096	32.64		ug/ml
Aliphatic C9-C28	3.175	16.857	61053336	473.043	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\F102224AL\
 Data File : FC067486.D
 Signal(s) : FID1A.ch
 Acq On : 23 Oct 2024 01:53
 Operator : YP/AJ
 Sample : PB164309BS
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 PB164309BS

Integration File: autoint1.e
 Quant Time: Oct 23 04:51:08 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:13:32 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...	12.936	3694096	32.635 ug/ml
Spiked Amount 50.000		Recovery =	65.27%
Target Compounds			
1) T n-Nonane (C9)	3.274	3101220	24.465 ug/ml
2) T n-Decane (C10)	4.339	3906174	30.388 ug/ml
4) T n-Dodecane (C12)	6.355	4530547	34.914 ug/ml
6) T n-Tetradecane (C14)	8.148	4866594	37.785 ug/ml
7) T n-Hexadecane (C16)	9.747	5243858	39.393 ug/ml
8) T n-Octadecane (C18)	11.187	5496331	40.533 ug/ml
10) T n-Eicosane (C20)	12.495	5863944	44.910 ug/ml
11) T n-Heneicosane (C21)	13.105	5694154	44.397 ug/ml
13) T n-Docosane (C22)	13.691	5690962	44.569 ug/ml
14) T n-Tetracosane (C24)	14.793	5624464	43.978 ug/ml
15) T n-Hexacosane (C26)	15.812	5544919	43.977 ug/ml
16) T n-Octacosane (C28)	16.761	5490169	43.701 ug/ml
17) T n-Tricontane (C30)	17.647	5540886	43.011 ug/ml
18) T n-Dotriacontane (C32)	18.479	5534007	44.298 ug/ml
19) T n-Tetratriacontane (C34)	19.260	5567290	50.946 ug/ml
20) T n-Hexatriacontane (C36)	19.998	5533924	58.549 ug/ml
21) T n-Octatriacontane (C38)	20.723	5625748	64.148 ug/ml
22) T n-Tetracontane (C40)	21.608	5705225	66.303 ug/ml

(f)=RT Delta > 1/2 Window

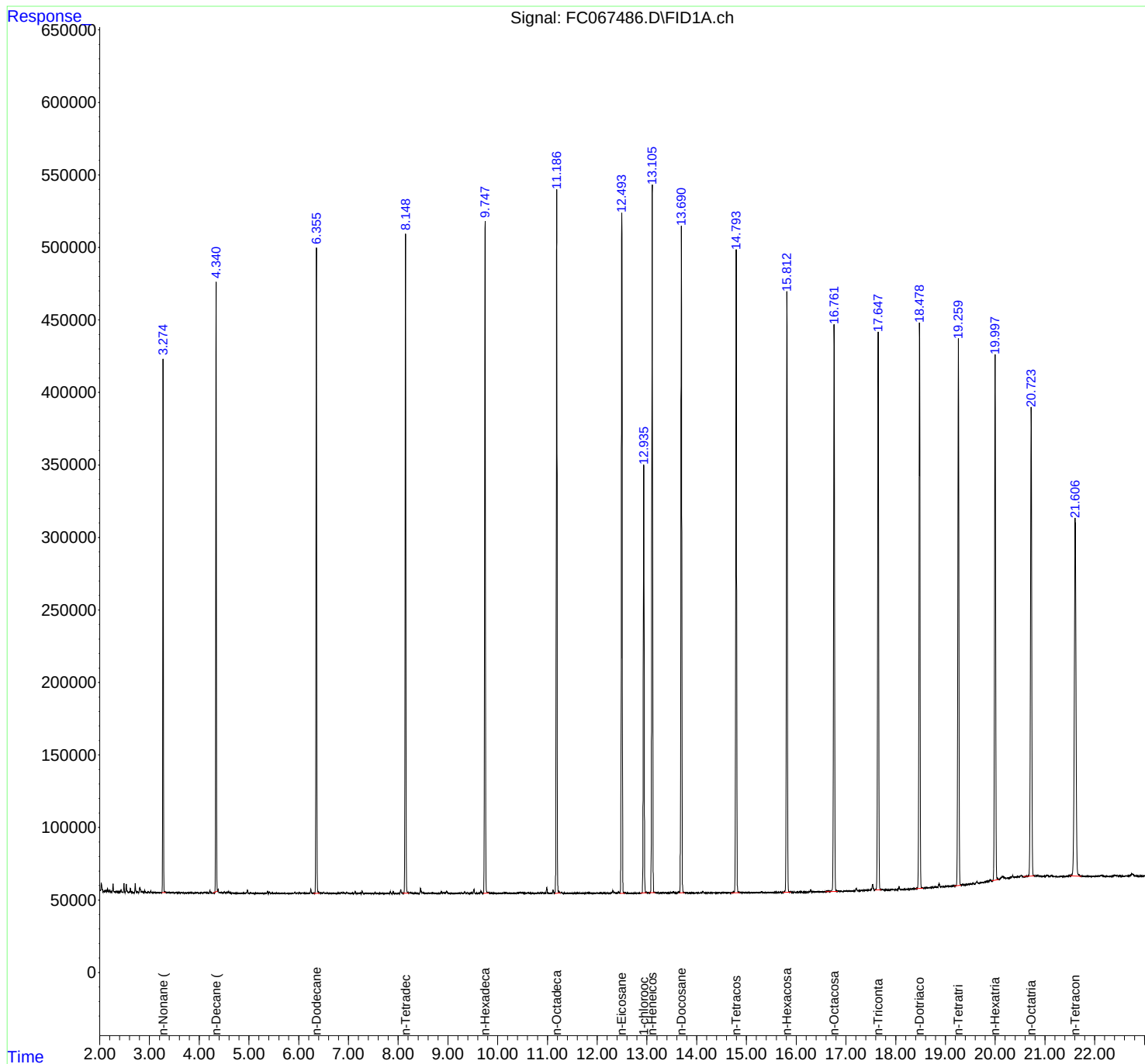
(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067486.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 01:53
Operator : YP/AJ
Sample : PB164309BS
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB164309BS

Integration File: autoint1.e
Quant Time: Oct 23 04:51:08 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 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\FC102224AL\
 Data File : FC067486.D
 Signal(s) : FID1A.ch
 Acq On : 23 Oct 2024 01:53
 Sample : PB164309BS
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.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	3.329	BB	367995	3101220	52.89%	3.156%
2	4.339	4.284	4.370	BV	423405	3906174	66.61%	3.976%
3	6.355	6.294	6.422	BV	445721	4530547	77.26%	4.611%
4	8.148	8.087	8.219	BB	453822	4866594	82.99%	4.953%
5	9.747	9.707	9.824	BB	463712	5243858	89.43%	5.337%
6	11.187	11.147	11.260	PV	486044	5496331	93.73%	5.594%
7	12.495	12.455	12.559	PB	465632	5863944	100.00%	5.968%
8	12.936	12.867	13.000	BB	294263	3694096	63.00%	3.760%
9	13.105	13.040	13.165	BB	483462	5694154	97.10%	5.795%
10	13.691	13.652	13.759	VB	457631	5690962	97.05%	5.792%
11	14.793	14.690	14.867	BB	445800	5624464	95.92%	5.724%
12	15.812	15.725	15.887	BB	413991	5544919	94.56%	5.643%
13	16.761	16.592	16.834	BB	391172	5490169	93.63%	5.588%
14	17.647	17.584	17.714	BB	384030	5540886	94.49%	5.639%
15	18.479	18.404	18.552	BB	390079	5534007	94.37%	5.632%
16	19.260	19.177	19.317	BB	377523	5567290	94.94%	5.666%
17	19.998	19.927	20.072	BB	357729	5533924	94.37%	5.632%
18	20.723	20.570	20.794	BB	323012	5625748	95.94%	5.726%
19	21.608	21.500	21.734	BB	244753	5705225	97.29%	5.807%
Sum of corrected areas:							98254512	

Aliphatic EPH 100224.M Wed Oct 23 05:03:33 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164309BS	SDG No.:	P4471
Lab Sample ID:	PB164309BS	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
FD048549.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	5.58		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	8.88		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	18.1		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	27.4		2.00	2.66	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	55.3		40 - 140	111%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	58.8		40 - 140	118%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	45.5		40 - 140	91%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB164309BS	Acq On:	23 Oct 2024 01:53
Client Sample ID:	PB164309BS	Operator:	YP/AJ
Data file:	FD048549.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	4.096	5.814	15164647	83.79	200	ug/ml
Aromatic C12-C16	5.815	8.420	25335084	133.346	300	ug/ml
Aromatic C16-C21	8.421	12.681	48665677	272.289	500	ug/ml
Aromatic C21-C36	12.682	18.086	68020061	411.343	800	ug/ml
Aromatic EPH	4.096	18.086	157185469	900.768		ug/ml
2-Bromonaphthalene (SURRE)	7.375	7.375	9156141	55.3		ug/ml
2-Fluorobiphenyl (SURRE)	8.226	8.226	6092899	58.75		ug/ml
ortho-Terphenyl (SURRE)	11.262	11.262	8373445	45.51		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
 Data File : FD048549.D
 Signal(s) : FID2B.ch
 Acq On : 23 Oct 2024 01:53
 Operator : YP/AJ
 Sample : PB164309BS
 Misc :
 ALS Vial : 62 Sample Multiplier: 1

Instrument :

FID_D

ClientSampleId :

PB164309BS

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e

Quant Time: Oct 23 05:08:59 2024

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M

Quant Title : GC Extractables

QLast Update : Mon Sep 30 14:17:34 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...	7.375	9156141	55.301 ug/ml
Spiked Amount 50.000		Recovery =	110.60%
6) S 2-Fluorobiphenyl (SURR)	8.226	6092899	58.752 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	117.50%
11) S ortho-Terphenyl (SURR)	11.262	8373445	45.509 ug/ml
Spiked Amount 50.000		Recovery =	91.02%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.198	7084905	40.426 ug/ml
2) T Naphthalene (C11.7)	5.715	8079742	43.274 ug/ml
3) T 2-Methylnaphthalene (...)	6.762	7936048	41.992 ug/ml
5) T Acenaphthylene (C15.06)	8.028	8489019	44.250 ug/ml
7) T Acenaphthene (C15.5)	8.324	8910017	47.104 ug/ml
8) T Flouorene (C16.55)	9.102	9180269	50.811 ug/ml
9) T Phenanthrene (C19.36)	10.490	9364043	52.836 ug/ml
10) T Anthracene (C19.43)	10.566	9496638	53.370 ug/ml
12) T Fluoranthene (C21.85)	12.296	9500306	52.525 ug/mlm
13) T Pyrene (C20.8)	12.589	9898866	55.280 ug/ml
14) T Benzo[a]anthracene (C...	14.457	8783760	54.962 ug/ml
15) T Chrysene (C27.41)	14.501	8916179	47.801 ug/ml
16) T benzo[b]fluoranthene ...	16.006	8570622	51.462 ug/ml
17) T Bnezo[k]fluoranthene ...	16.041	8531946	50.262 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.382	8266390	50.577 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.750	8684848	66.024 ug/ml
20) T Dibenz[a,h]anthracene...	17.788	8271453	49.431 ug/ml
21) T Benzo[g,h,i]perylene ...	18.002	7994863	49.222 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
Data File : FD048549.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 01:53
Operator : YP/AJ
Sample : PB164309BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :

FID_D

ClientSampleId :

PB164309BS

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e

Quant Time: Oct 23 05:08:59 2024

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M

Quant Title : GC Extractables

QLast Update : Mon Sep 30 14:17:34 2024

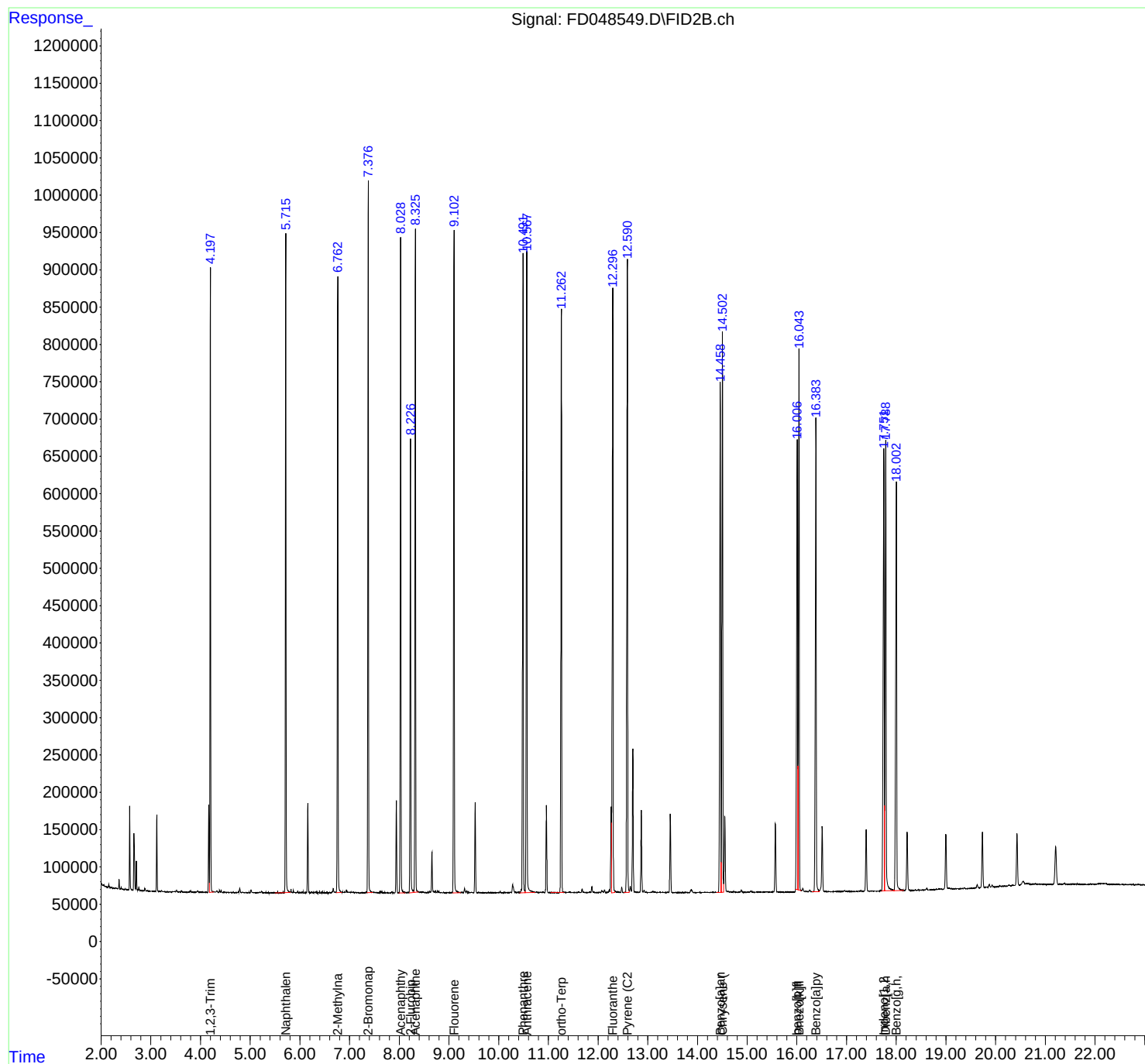
Response via : Initial Calibration

Integrator: ChemStation

Volume Inj. : 1 µl

Signal Phase : Rxi-1ms

Signal Info : 20M x 0.18mm x 0.18µm



Instrument :

FID_D

ClientSampleId :

PB164309BS

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD10222
Data File : FD048549.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 01:53
Sample : PB164309BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.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	4.198	4.180	4.268	VV	836237	7084905	66.05%	3.918%
2	5.715	5.498	5.804	BV	878875	8079742	75.33%	4.469%
3	6.762	6.728	6.845	PV	817737	7936048	73.99%	4.389%
4	7.375	7.348	7.466	VV	937076	9156141	85.37%	5.064%
5	8.028	7.989	8.114	VV	869583	8489019	79.15%	4.695%
6	8.226	8.193	8.294	PV	599262	6092899	56.81%	3.370%
7	8.324	8.294	8.384	VV	888565	8910017	83.07%	4.928%
8	9.102	9.067	9.238	VV	874266	9180269	85.59%	5.077%
9	10.490	10.415	10.531	PV	864037	9364043	87.30%	5.179%
10	10.566	10.531	10.738	VV	873741	9496638	88.54%	5.252%
11	11.262	11.051	11.321	BV	777876	8373445	78.07%	4.631%
12	12.296	12.236	12.448	VV	799823	10725861	100.00%	5.932%
13	12.589	12.518	12.627	PV	868528	9898866	92.29%	5.475%
14	14.457	14.381	14.476	BV	684953	8783760	81.89%	4.858%
15	14.501	14.476	14.526	VV	749601	8916179	83.13%	4.931%
16	16.006	15.971	16.021	BV	601254	8570622	79.91%	4.740%
17	16.041	16.021	16.094	VV	714118	8531946	79.55%	4.719%
18	16.382	16.304	16.453	BV	623291	8266390	77.07%	4.572%
19	17.750	17.701	17.764	BV	603505	8684848	80.97%	4.803%
20	17.788	17.764	17.953	VV	602947	8271453	77.12%	4.575%
21	18.002	17.953	18.158	VV	540430	7994863	74.54%	4.422%
Sum of corrected areas:						180807953		

Aromatic EPH 093024.M Wed Oct 23 05:18:21 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164309BSD	SDG No.:	P4471
Lab Sample ID:	PB164309BSD	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
FD048550.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	5.56		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	8.89		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	18.1		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	27.4		2.00	2.67	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	55.3		40 - 140	110%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	58.8		40 - 140	118%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	45.5		40 - 140	91%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB164309BSD	Acq On:	23 Oct 2024 02:29
Client Sample ID:	PB164309BSD	Operator:	YP/AJ
Data file:	FD048550.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	4.096	5.814	15086475	83.358	200	ug/ml
Aromatic C12-C16	5.815	8.420	25338712	133.365	300	ug/ml
Aromatic C16-C21	8.421	12.681	48490961	271.311	500	ug/ml
Aromatic C21-C36	12.682	18.086	67994853	411.191	800	ug/ml
Aromatic EPH	4.096	18.086	156911001	899.225		ug/ml
2-Bromonaphthalene (SURRE)	7.376	7.376	9146806	55.25		ug/ml
2-Fluorobiphenyl (SURRE)	8.226	8.226	6093512	58.76		ug/ml
ortho-Terphenyl (SURRE)	11.262	11.262	8378054	45.53		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
 Data File : FD048550.D
 Signal(s) : FID2B.ch
 Acq On : 23 Oct 2024 02:29
 Operator : YP/AJ
 Sample : PB164309BSD
 Misc :
 ALS Vial : 63 Sample Multiplier: 1

Instrument :

FID_D

ClientSampleId :

PB164309BSD

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e

Quant Time: Oct 23 05:09:10 2024

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M

Quant Title : GC Extractables

QLast Update : Mon Sep 30 14:17:34 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...	7.376	9146806	55.245 ug/ml
Spiked Amount 50.000		Recovery =	110.49%
6) S 2-Fluorobiphenyl (SURR)	8.226	6093512	58.758 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	117.52%
11) S ortho-Terphenyl (SURR)	11.262	8378054	45.534 ug/ml
Spiked Amount 50.000		Recovery =	91.07%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.198	7030766	40.117 ug/ml
2) T Naphthalene (C11.7)	5.716	8055709	43.145 ug/ml
3) T 2-Methylnaphthalene (...)	6.762	7931709	41.969 ug/ml
5) T Acenaphthylene (C15.06)	8.029	8484379	44.226 ug/ml
7) T Acenaphthene (C15.5)	8.325	8922624	47.171 ug/ml
8) T Fluorene (C16.55)	9.102	9130828	50.538 ug/ml
9) T Phenanthrene (C19.36)	10.490	9336772	52.682 ug/ml
10) T Anthracene (C19.43)	10.566	9469937	53.220 ug/ml
12) T Fluoranthene (C21.85)	12.295	9385127	51.888 ug/mlm
13) T Pyrene (C20.8)	12.589	9864483	55.088 ug/ml
14) T Benzo[a]anthracene (C...	14.457	8774935	54.907 ug/ml
15) T Chrysene (C27.41)	14.501	8903794	47.735 ug/ml
16) T benzo[b]fluoranthene ...	16.005	8569342	51.455 ug/ml
17) T Bnezo[k]fluoranthene ...	16.041	8532341	50.265 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.381	8284459	50.687 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.750	8723460	66.318 ug/ml
20) T Dibenz[a,h]anthracene...	17.787	8242945	49.260 ug/ml
21) T Benzo[g,h,i]perylene ...	18.001	7963577	49.029 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
Data File : FD048550.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 02:29
Operator : YP/AJ
Sample : PB164309BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

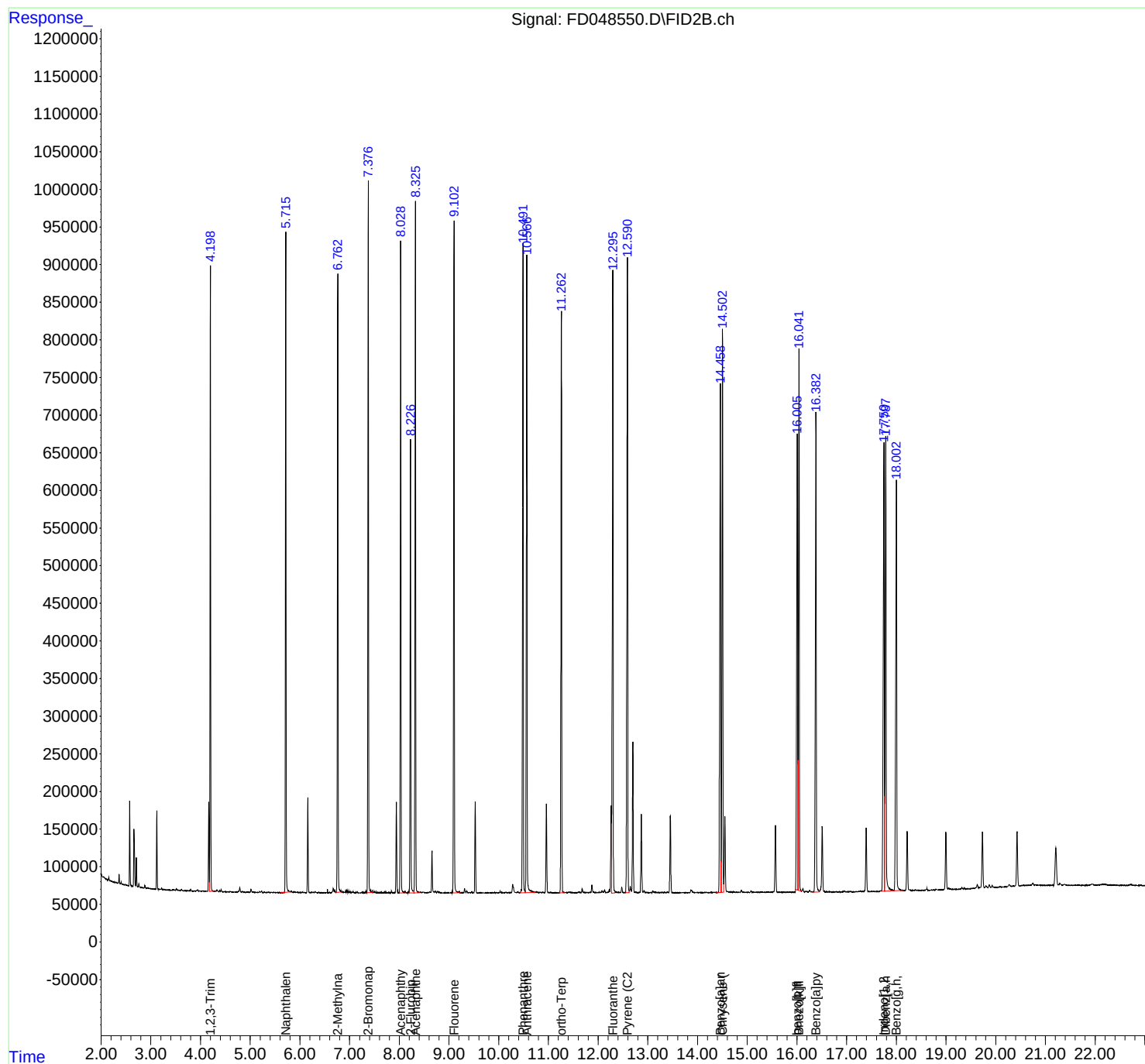
Instrument :
FID_D
ClientSampleId :
PB164309BSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e
Quant Time: Oct 23 05:09:10 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 14:17:34 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 :

PB164309BSD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD10222
Data File : FD048550.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 02:29
Sample : PB164309BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.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	4.198	4.180	4.268	VV	827714	7030766	65.78%	3.895%
2	5.716	5.608	5.807	BV	872198	8055709	75.36%	4.462%
3	6.762	6.727	6.851	PV	817087	7931709	74.20%	4.394%
4	7.376	7.348	7.464	PV	934237	9146806	85.57%	5.067%
5	8.029	7.996	8.151	PV	862691	8484379	79.38%	4.700%
6	8.226	8.194	8.294	PV	599105	6093512	57.01%	3.375%
7	8.325	8.294	8.414	VV	907957	8922624	83.48%	4.942%
8	9.102	9.071	9.234	VV	881688	9130828	85.42%	5.058%
9	10.490	10.418	10.534	PV	875080	9336772	87.35%	5.172%
10	10.566	10.534	10.738	VV	832435	9469937	88.60%	5.246%
11	11.262	11.204	11.334	BV	772465	8378054	78.38%	4.641%
12	12.295	12.236	12.451	VV	821608	10688941	100.00%	5.921%
13	12.589	12.548	12.626	BV	832540	9864483	92.29%	5.464%
14	14.457	14.378	14.476	BV	678979	8774935	82.09%	4.861%
15	14.501	14.476	14.526	VV	744673	8903794	83.30%	4.932%
16	16.005	15.971	16.020	BV	603474	8569342	80.17%	4.747%
17	16.041	16.020	16.092	VV	721893	8532341	79.82%	4.726%
18	16.381	16.311	16.454	PV	632223	8284459	77.50%	4.589%
19	17.750	17.701	17.764	BV	607539	8723460	81.61%	4.832%
20	17.787	17.764	17.951	VV	610154	8242945	77.12%	4.566%
21	18.001	17.951	18.154	VB	543219	7963577	74.50%	4.411%
Sum of corrected areas:						180529374		

Aromatic EPH 093024.M Wed Oct 23 05:19:15 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164309BSD	SDG No.:	P4471
Lab Sample ID:	PB164309BSD	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
10/22/24 09:40	10/23/24 2:29	PB164309

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12	5.96		1	0.38	1.00	mg/kg FC067487.D
Aliphatic C12-C16	Aliphatic C12-C16	5.14		1	0.24	0.67	mg/kg FC067487.D
Aliphatic C16-C21	Aliphatic C16-C21	8.65		1	0.30	1.00	mg/kg FC067487.D
Aliphatic C21-C28	Aliphatic C21-C28	11.8		1	0.80	1.33	mg/kg FC067487.D
Aliphatic C28-C40	Aliphatic C28-C40	21.4		1	1.80	2.00	mg/kg FC067487.D
Aromatic C10-C12	Aromatic C10-C12	5.56		1	0.30	0.67	mg/kg FD048550.D
Aromatic C12-C16	Aromatic C12-C16	8.89		1	0.34	1.00	mg/kg FD048550.D
Aromatic C16-C21	Aromatic C16-C21	18.1		1	0.96	1.67	mg/kg FD048550.D
Aromatic C21-C36	Aromatic C21-C36	27.4		1	2.00	2.67	mg/kg FD048550.D
Total AliphaticEPH	Total AliphaticEPH	53.0			3.52	6.00	mg/kg
Total AromaticEPH	Total AromaticEPH	60.0			3.60	6.01	mg/kg
Total EPH	Total EPH	113			7.12	12.0	mg/kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164309BSD	SDG No.:	P4471
Lab Sample ID:	PB164309BSD	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
FC067487.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.96		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	5.14		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	8.65		0.30	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	11.8		0.80	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	21.4		1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	34.0		40 - 140	68%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB164309BSD	Acq On:	23 Oct 2024 02:29
Client Sample ID:	PB164309BSD	Operator:	YP/AJ
Data file:	FC067487.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	3.175	6.455	11471929	89.377	300	ug/ml
Aliphatic C12-C16	6.456	9.845	10096608	77.098	200	ug/ml
Aliphatic C16-C21	9.846	13.203	17062894	129.779	300	ug/ml
Aliphatic C21-C28	13.204	16.857	22411550	176.714	400	ug/ml
Aliphatic C28-C40	16.858	21.701	33787413	321.125	600	ug/ml
Aliphatic EPH	3.175	21.701	94830394	794.094		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.936	12.936	3849203	34.01		ug/ml
Aliphatic C9-C28	3.175	16.857	61042981	472.968	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\F102224AL\
 Data File : FC067487.D
 Signal(s) : FID1A.ch
 Acq On : 23 Oct 2024 02:29
 Operator : YP/AJ
 Sample : PB164309BSD
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 PB164309BSD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 10/23/2024
 Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e
 Quant Time: Oct 23 04:51:18 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:13:32 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...	12.936	3849203	34.005 ug/ml
Spiked Amount 50.000		Recovery =	68.01%
Target Compounds			
1) T n-Nonane (C9)	3.274	3057838	24.123 ug/ml
2) T n-Decane (C10)	4.340	3912928	30.441 ug/ml
4) T n-Dodecane (C12)	6.356	4501163	34.688 ug/ml
6) T n-Tetradecane (C14)	8.149	4855616	37.700 ug/ml
7) T n-Hexadecane (C16)	9.748	5240992	39.371 ug/ml
8) T n-Octadecane (C18)	11.187	5496714	40.536 ug/ml
10) T n-Eicosane (C20)	12.495	5865513	44.922 ug/ml
11) T n-Heneicosane (C21)	13.106	5700667	44.447 ug/ml
13) T n-Docosane (C22)	13.691	5698783	44.631 ug/ml
14) T n-Tetracosane (C24)	14.791	5633195	44.046 ug/ml
15) T n-Hexacosane (C26)	15.812	5565510	44.141 ug/ml
16) T n-Octacosane (C28)	16.759	5506276	43.830 ug/mlm
17) T n-Tricontane (C30)	17.646	5575869	43.283 ug/ml
18) T n-Dotriacontane (C32)	18.478	5572714	44.607 ug/ml
19) T n-Tetratriacontane (C34)	19.260	5614082	51.375 ug/ml
20) T n-Hexatriacontane (C36)	19.999	5593128	59.176 ug/ml
21) T n-Octatriacontane (C38)	20.724	5700340	64.998 ug/ml
22) T n-Tetracontane (C40)	21.610	5731280	66.606 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067487.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 02:29
Operator : YP/AJ
Sample : PB164309BSD
Misc :
ALS Vial : 13 Sample Multiplier: 1

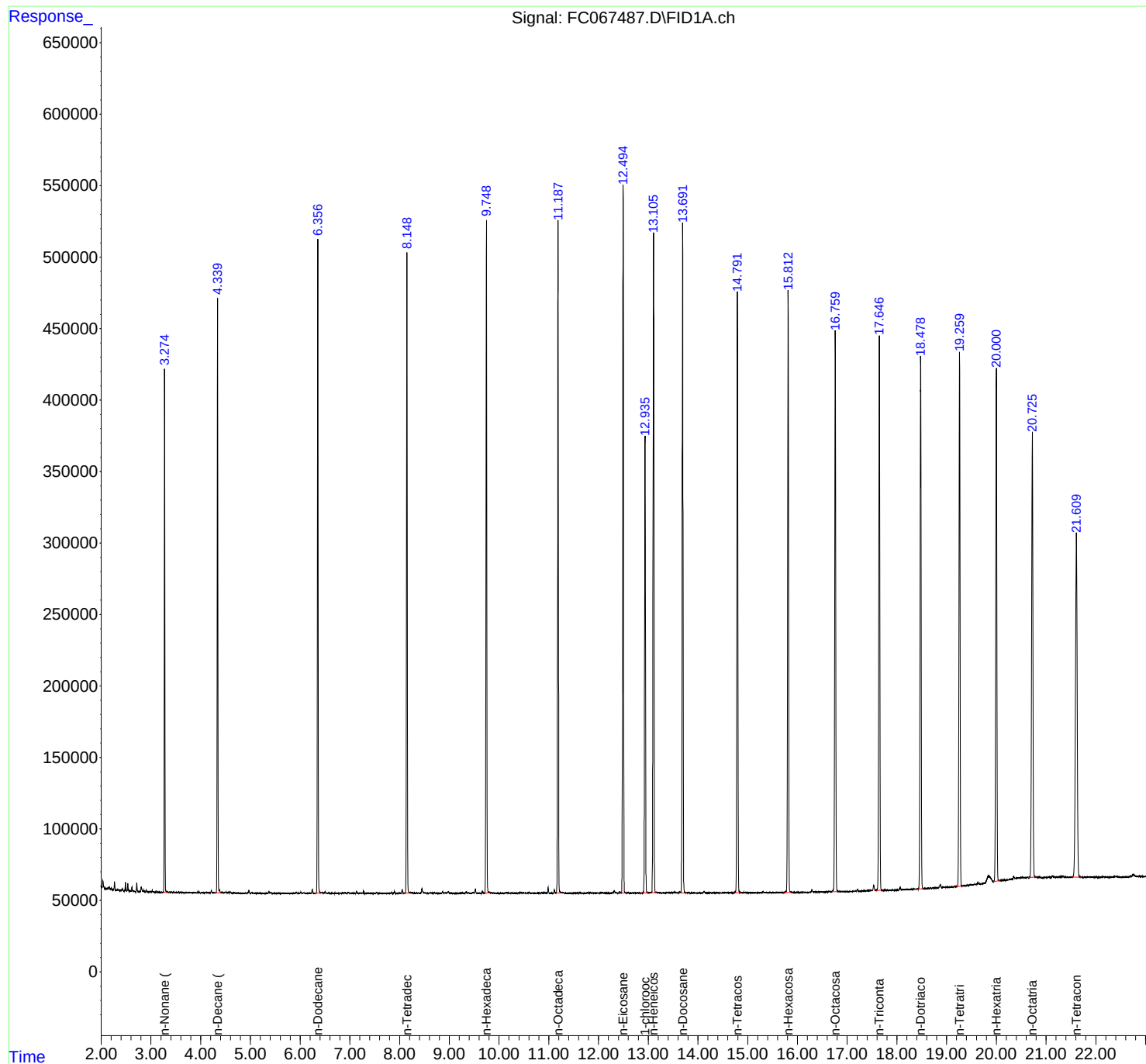
Instrument :
FID_C
ClientSampleId :
PB164309BSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e
Quant Time: Oct 23 04:51:18 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 2024
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Instrument :

FID_C

ClientSampleId :

PB164309BSD

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC10224

Data File : FC067487.D

Signal(s) : FID1A.ch

Acq On : 23 Oct 2024 02:29

Sample : PB164309BSD

Misc :

ALS Vial : 13 Sample Multiplier: 1

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.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	366078	3057838	52.13%	3.099%
2	4.340	4.285	4.415	BB	416364	3912928	66.71%	3.965%
3	6.356	6.292	6.424	BB	458751	4501163	76.74%	4.561%
4	8.149	8.087	8.222	BB	448023	4855616	82.78%	4.921%
5	9.748	9.709	9.822	BB	470622	5240992	89.35%	5.311%
6	11.187	11.145	11.262	PB	471530	5496714	93.71%	5.570%
7	12.495	12.457	12.557	PB	491809	5865513	100.00%	5.944%
8	12.936	12.867	13.002	BB	319117	3849203	65.62%	3.901%
9	13.106	13.042	13.172	BB	461521	5700667	97.19%	5.777%
10	13.691	13.654	13.757	VB	466546	5698783	97.16%	5.775%
11	14.791	14.702	14.862	BB	420256	5633195	96.04%	5.709%
12	15.812	15.720	15.884	BB	420461	5565510	94.89%	5.640%
13	16.760	16.590	16.830	BB	391958	5514062	94.01%	5.588%
14	17.646	17.580	17.709	BB	388927	5575869	95.06%	5.650%
15	18.478	18.397	18.537	BB	369606	5572714	95.01%	5.647%
16	19.260	19.192	19.319	BB	370975	5614082	95.71%	5.689%
17	19.999	19.939	20.065	VB	359379	5593128	95.36%	5.668%
18	20.724	20.640	20.794	BB	308136	5700340	97.18%	5.777%
19	21.610	21.514	21.717	BB	239739	5731280	97.71%	5.808%
Sum of corrected areas:						98679597		

Aliphatic EPH 100224.M Wed Oct 23 05:03:54 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-303-BOTMS	SDG No.:	P4471
Lab Sample ID:	P4460-03MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.1
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
FD048555.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	12.6		0.37	0.83	mg/kg
Aromatic C12-C16	Aromatic C12-C16	19.1		0.42	1.25	mg/kg
Aromatic C16-C21	Aromatic C16-C21	25.5		1.20	2.08	mg/kg
Aromatic C21-C36	Aromatic C21-C36	42.2		2.49	3.32	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	47.9		40 - 140	96%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	48.8		40 - 140	98%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.4		40 - 140	67%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4460-03MS	Acq On:	23 Oct 2024 05:28
Client Sample ID:	WB-303-BOTMS	Operator:	YP/AJ
Data file:	FD048555.D	Misc:	
Instrument:	FID_D	ALS Vial:	68
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.096	5.814	27440112	151.616	200	ug/ml
Aromatic C12-C16	5.815	8.420	43822658	230.651	300	ug/ml
Aromatic C16-C21	8.421	12.681	54983413	307.637	500	ug/ml
Aromatic C21-C36	12.682	18.086	84049586	508.28	800	ug/ml
Aromatic EPH	4.096	18.086	210295769	1200		ug/ml
2-Bromonaphthalene (SURRE)	7.375	7.375	7933941	47.92		ug/ml
2-Fluorobiphenyl (SURRE)	8.225	8.225	5063781	48.83		ug/ml
ortho-Terphenyl (SURRE)	11.260	11.260	6142126	33.38		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
 Data File : FD048555.D
 Signal(s) : FID2B.ch
 Acq On : 23 Oct 2024 05:28
 Operator : YP/AJ
 Sample : P4460-03MS
 Misc :
 ALS Vial : 68 Sample Multiplier: 1

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMS

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e

Quant Time: Oct 23 07:10:31 2024

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M

Quant Title : GC Extractables

QLast Update : Mon Sep 30 14:17:34 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...	7.375	7933941	47.920 ug/ml
Spiked Amount 50.000		Recovery =	95.84%
6) S 2-Fluorobiphenyl (SURR)	8.225	5063781	48.829 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	97.66%
11) S ortho-Terphenyl (SURR)	11.260	6142126	33.382 ug/ml
Spiked Amount 50.000		Recovery =	66.76%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.198	6421054	36.638 ug/ml
2) T Naphthalene (C11.7)	5.716	7710327	41.295 ug/ml
3) T 2-Methylnaphthalene (...)	6.762	7476924	39.563 ug/ml
5) T Acenaphthylene (C15.06)	8.028	7602154	39.627 ug/ml
7) T Acenaphthene (C15.5)	8.324	8174836	43.217 ug/ml
8) T Flouorene (C16.55)	9.102	8088227	44.767 ug/ml
9) T Phenanthrene (C19.36)	10.489	8298893	46.826 ug/ml
10) T Anthracene (C19.43)	10.565	8378684	47.087 ug/ml
12) T Fluoranthene (C21.85)	12.294	8634562	47.738 ug/mlm
13) T Pyrene (C20.8)	12.588	8939667	49.923 ug/ml
14) T Benzo[a]anthracene (C...	14.457	7986328	49.972 ug/ml
15) T Chrysene (C27.41)	14.501	8083838	43.339 ug/ml
16) T benzo[b]fluoranthene ...	16.005	7807241	46.879 ug/ml
17) T Bnezo[k]fluoranthene ...	16.040	7804948	45.980 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.381	7535154	46.103 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.748	8092726	61.523 ug/ml
20) T Dibenz[a,h]anthracene...	17.786	7635770	45.632 ug/ml
21) T Benzo[g,h,i]perylene ...	18.000	7369748	45.373 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

rters

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMS

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD10222

Data File : FD048555.D

Signal(s) : FID2B.ch

Acq On : 23 Oct 2024 05:28

Sample : P4460-03MS

Misc :

ALS Vial : 68 Sample Multiplier: 1

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.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	4.166	4.152	4.180	PV	102409	824568	9.04%	0.367%
2	4.198	4.180	4.260	PV	751843	6125746	67.17%	2.728%
3	4.278	4.260	4.293	PV	401	3591	0.04%	0.002%
4	4.307	4.293	4.315	PV	1715	13804	0.15%	0.006%
5	4.331	4.315	4.360	VV	2221	27033	0.30%	0.012%
6	4.387	4.360	4.402	VV	2124	24957	0.27%	0.011%
7	4.417	4.402	4.454	VV	3400	33115	0.36%	0.015%
8	4.484	4.454	4.495	PV	733	8659	0.09%	0.004%
9	4.511	4.495	4.522	VV	2566	23806	0.26%	0.011%
10	4.537	4.522	4.556	VV	9131	87050	0.95%	0.039%
11	4.574	4.556	4.593	VV	7617	89066	0.98%	0.040%
12	4.609	4.593	4.655	VV	17904	179315	1.97%	0.080%
13	4.683	4.655	4.707	PV	6275	62699	0.69%	0.028%
14	4.710	4.707	4.732	VV	751	6561	0.07%	0.003%
15	4.766	4.732	4.773	PV	2111	19777	0.22%	0.009%
16	4.792	4.773	4.798	VV	34485	290990	3.19%	0.130%
17	4.805	4.798	4.825	VV	35697	317099	3.48%	0.141%
18	4.839	4.825	4.848	VV	5268	50035	0.55%	0.022%
19	4.866	4.848	4.892	VV	73150	677103	7.43%	0.302%
20	4.895	4.892	4.905	VV	2071	13668	0.15%	0.006%
21	4.919	4.905	4.947	VV	5174	49300	0.54%	0.022%
22	4.956	4.947	4.962	VV	412	1654	0.02%	0.001%
23	4.979	4.962	5.000	VV	890	9128	0.10%	0.004%
24	5.015	5.000	5.035	PV	3820	37239	0.41%	0.017%
25	5.056	5.035	5.069	VV	43515	407270	4.47%	0.181%
26	5.076	5.069	5.097	VV	13888	115087	1.26%	0.051%
27	5.115	5.097	5.124	VV	4566	40082	0.44%	0.018%
28	5.133	5.124	5.157	VV	4880	44585	0.49%	0.020%
29	5.181	5.157	5.197	VV	135376	1264520	13.87%	0.563%
30	5.213	5.197	5.244	VV	203972	1893558	20.76%	0.843%
31	5.252	5.244	5.277	VV	2458	24598	0.27%	0.011%
32	5.295	5.277	5.309	VV	1559	15349	0.17%	0.007%
33	5.318	5.309	5.332	VV	615	6861	0.08%	0.003%
34	5.363	5.332	5.381	VV	82560	777174	8.52%	0.346%
35	5.395	5.381	5.416	VV	31148	294385	3.23%	0.131%
36	5.455	5.416	5.469	VV	166282	1582383	17.35%	0.705%

					rters			
37	5.481	5.469	5.495	VV	72564	716283	7.85%	0.319%
38	5.508	5.495	5.530	VV	87335	806919		
39	5.549	5.530	5.568	VV	49770	464052		
40	5.585	5.568	5.590	VV	16592	144363		
41	5.600	5.590	5.614	VV	18563	187797		
42	5.634	5.614	5.654	VV	54656	653625		
43	5.671	5.654	5.679	VV	36802	351865	3.86%	0.157%
44	5.688	5.679	5.696	VV	34806	307627	3.37%	0.137%
45	5.716	5.696	5.738	VV	848000	7679406	84.21%	3.420%
46	5.755	5.738	5.797	VV	56927	686360	7.53%	0.306%
47	5.821	5.797	5.836	VV	9024	115337	1.26%	0.051%
48	5.854	5.836	5.861	VV	8225	92286	1.01%	0.041%
49	5.875	5.861	5.899	VV	11681	186685	2.05%	0.083%
50	5.913	5.899	5.927	VV	7816	89684	0.98%	0.040%
51	5.937	5.927	5.946	VV	4273	41695	0.46%	0.019%
52	5.978	5.946	6.020	VV	34167	578339	6.34%	0.258%
53	6.036	6.020	6.057	VV	4333	74019	0.81%	0.033%
54	6.076	6.057	6.102	VV	16636	201643	2.21%	0.090%
55	6.125	6.102	6.137	VV	2746	49757	0.55%	0.022%
56	6.160	6.137	6.208	VV	164015	1658543	18.19%	0.739%
57	6.245	6.208	6.257	VV	5023	98551	1.08%	0.044%
58	6.273	6.257	6.286	VV	7551	102429	1.12%	0.046%
59	6.307	6.286	6.328	VV	22727	304775	3.34%	0.136%
60	6.341	6.328	6.363	VV	5354	94817	1.04%	0.042%
61	6.378	6.363	6.392	VV	7309	92149	1.01%	0.041%
62	6.401	6.392	6.413	VV	3961	45383	0.50%	0.020%
63	6.429	6.413	6.451	VV	10930	153309	1.68%	0.068%
64	6.470	6.451	6.501	VV	13134	224648	2.46%	0.100%
65	6.507	6.501	6.522	VV	5450	54567	0.60%	0.024%
66	6.542	6.522	6.575	VV	9334	177663	1.95%	0.079%
67	6.596	6.575	6.608	VV	6347	102287	1.12%	0.046%
68	6.617	6.608	6.628	VV	5587	63994	0.70%	0.028%
69	6.657	6.628	6.661	VV	18123	202843	2.22%	0.090%
70	6.672	6.661	6.690	VV	23333	271200	2.97%	0.121%
71	6.715	6.690	6.735	VV	22903	358542	3.93%	0.160%
72	6.762	6.735	6.798	VV	777509	7492437	82.16%	3.337%
73	6.814	6.798	6.832	VV	23130	281520	3.09%	0.125%
74	6.856	6.832	6.873	VV	28452	355252	3.90%	0.158%
75	6.901	6.873	6.925	VV	13018	288702	3.17%	0.129%
76	6.947	6.925	6.966	VV	12197	220844	2.42%	0.098%
77	6.977	6.966	6.985	VV	6911	75740	0.83%	0.034%
78	7.011	6.985	7.026	VV	11729	219091	2.40%	0.098%
79	7.037	7.026	7.052	VV	8129	114257	1.25%	0.051%
80	7.077	7.052	7.100	VV	149774	1578326	17.31%	0.703%
81	7.126	7.100	7.145	VV	7032	163614	1.79%	0.073%
82	7.181	7.145	7.186	VV	8527	163736	1.80%	0.073%
83	7.199	7.186	7.220	VV	9822	176081	1.93%	0.078%
84	7.246	7.220	7.272	VV	17082	323741	3.55%	0.144%
85	7.288	7.272	7.314	VV	6912	121726	1.33%	0.054%
86	7.334	7.314	7.349	VV	9980	146512	1.61%	0.065%
87	7.375	7.349	7.421	VV	797215	7957209	87.26%	3.544%
88	7.434	7.421	7.468	VV	10380	191357	2.10%	0.085%
89	7.488	7.468	7.508	VV	10575	177880	1.95%	0.079%

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

90	7.529	7.508	7.543	VV	20066	267149	2.93%	0.119%
91	7.553	7.543	7.572	VV	15196	185733		
92	7.594	7.572	7.612	VV	18340	252196		
93	7.639	7.612	7.661	VV	25722	368416		
94	7.667	7.661	7.675	VV	5941	46739		
95	7.694	7.675	7.714	VV	18981	238485		
96	7.729	7.714	7.742	VV	5480	79172	0.87%	0.035%
97	7.763	7.742	7.784	VV	27653	331870	3.64%	0.148%
98	7.799	7.784	7.826	VV	6288	123886	1.36%	0.055%
99	7.847	7.826	7.865	VV	9513	140952	1.55%	0.063%
100	7.905	7.865	7.917	VV	6651	177880	1.95%	0.079%
101	7.943	7.917	7.975	VV	231426	2441094	26.77%	1.087%
102	7.990	7.975	8.002	VV	9849	124870	1.37%	0.056%
103	8.028	8.002	8.070	VV	757461	7621293	83.57%	3.394%
104	8.082	8.070	8.104	VV	10020	157044	1.72%	0.070%
105	8.136	8.104	8.158	VV	6972	164101	1.80%	0.073%
106	8.177	8.158	8.198	VV	4975	97996	1.07%	0.044%
107	8.226	8.198	8.273	VV	499900	5092189	55.84%	2.268%
108	8.288	8.273	8.297	VV	10737	123106	1.35%	0.055%
109	8.325	8.297	8.371	VV	784435	8087768	88.69%	3.602%
110	8.384	8.371	8.407	VV	11973	174758	1.92%	0.078%
111	8.427	8.407	8.452	VV	11874	190202	2.09%	0.085%
112	8.472	8.452	8.500	VV	30263	393616	4.32%	0.175%
113	8.524	8.500	8.575	VV	11248	215658	2.36%	0.096%
114	8.596	8.575	8.602	VV	3987	51867	0.57%	0.023%
115	8.614	8.602	8.634	VV	4919	79862	0.88%	0.036%
116	8.659	8.634	8.683	VV	57878	633924	6.95%	0.282%
117	8.694	8.683	8.707	VV	5525	71763	0.79%	0.032%
118	8.723	8.707	8.734	VV	5342	77171	0.85%	0.034%
119	8.757	8.734	8.815	VV	71682	877530	9.62%	0.391%
120	8.840	8.815	8.861	VV	5602	98076	1.08%	0.044%
121	8.875	8.861	8.880	VV	3001	28756	0.32%	0.013%
122	8.891	8.880	8.925	VV	3214	53719	0.59%	0.024%
123	8.943	8.925	8.959	VV	1887	28847	0.32%	0.013%
124	8.977	8.959	8.983	VV	2249	26544	0.29%	0.012%
125	8.987	8.983	9.007	VV	2233	25117	0.28%	0.011%
126	9.036	9.007	9.047	VV	2309	43357	0.48%	0.019%
127	9.057	9.047	9.073	VV	2242	29622	0.32%	0.013%
128	9.103	9.073	9.159	VV	794188	8127287	89.12%	3.619%
129	9.172	9.159	9.190	VV	4795	72257	0.79%	0.032%
130	9.212	9.190	9.236	VV	5333	95616	1.05%	0.043%
131	9.257	9.236	9.275	VV	6748	90453	0.99%	0.040%
132	9.312	9.275	9.337	VV	9181	146797	1.61%	0.065%
133	9.357	9.337	9.363	VV	2263	28417	0.31%	0.013%
134	9.383	9.363	9.438	VV	43283	533647	5.85%	0.238%
135	9.443	9.438	9.457	VV	2041	20795	0.23%	0.009%
136	9.479	9.457	9.503	VV	2665	56103	0.62%	0.025%
137	9.529	9.503	9.560	VV	134821	1428234	15.66%	0.636%
138	9.574	9.560	9.583	VV	1174	14067	0.15%	0.006%
139	9.600	9.583	9.647	VV	1860	48912	0.54%	0.022%
140	9.651	9.647	9.665	VV	815	6697	0.07%	0.003%
141	9.670	9.665	9.675	VV	539	2554	0.03%	0.001%

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

rterres							WB-303-BOTMS	
142	9.694	9.675	9.714	VV	810	13311	0.15%	0.006%
143	9.740	9.714	9.768	PV	887	16596	0.15%	0.006%
144	9.772	9.768	9.781	VV	500	2870	0.15%	0.006%
145	9.801	9.781	9.822	VV	935	16463	0.15%	0.006%
146	9.829	9.822	9.839	VV	703	6766	0.15%	0.006%
147	9.849	9.839	9.855	VV	775	6716	0.15%	0.006%
148	9.874	9.855	9.885	VV	1982	25599	0.28%	0.011%
149	9.917	9.885	9.947	VV	4174	91097	1.00%	0.041%
150	9.964	9.947	9.982	VV	1853	28761	0.32%	0.013%
151	9.987	9.982	9.990	VV	1137	5174	0.06%	0.002%
152	10.006	9.990	10.017	VV	1659	20947	0.23%	0.009%
153	10.031	10.017	10.046	VV	2058	26214	0.29%	0.012%
154	10.056	10.046	10.077	VV	1764	20554	0.23%	0.009%
155	10.111	10.077	10.120	VV	869	13741	0.15%	0.006%
156	10.144	10.120	10.177	VV	1358	32473	0.36%	0.014%
157	10.213	10.177	10.220	VV	1154	24605	0.27%	0.011%
158	10.236	10.220	10.243	VV	1466	18605	0.20%	0.008%
159	10.264	10.243	10.270	VV	7346	73225	0.80%	0.033%
160	10.282	10.270	10.320	VV	10831	208343	2.28%	0.093%
161	10.336	10.320	10.368	VV	3185	64989	0.71%	0.029%
162	10.390	10.368	10.419	VV	2506	44751	0.49%	0.020%
163	10.455	10.419	10.460	VV	5084	52817	0.58%	0.024%
164	10.490	10.460	10.533	VV	776625	8306630	91.09%	3.699%
165	10.566	10.533	10.622	VV	751373	8383351	91.93%	3.733%
166	10.644	10.622	10.673	VV	4216	114959	1.26%	0.051%
167	10.677	10.673	10.697	VV	3056	36949	0.41%	0.016%
168	10.716	10.697	10.726	VV	2461	39301	0.43%	0.018%
169	10.731	10.726	10.750	VV	2251	29119	0.32%	0.013%
170	10.767	10.750	10.795	VV	2722	59015	0.65%	0.026%
171	10.828	10.795	10.862	VV	2513	88157	0.97%	0.039%
172	10.871	10.862	10.880	VV	2332	24680	0.27%	0.011%
173	10.894	10.880	10.909	VV	2912	45295	0.50%	0.020%
174	10.914	10.909	10.933	VV	2356	33420	0.37%	0.015%
175	10.961	10.933	11.013	VV	109059	1290894	14.16%	0.575%
176	11.050	11.013	11.081	VV	3220	102307	1.12%	0.046%
177	11.108	11.081	11.135	VV	2627	74036	0.81%	0.033%
178	11.156	11.135	11.181	VV	2540	62719	0.69%	0.028%
179	11.189	11.181	11.194	VV	2331	16874	0.19%	0.008%
180	11.200	11.194	11.211	VV	2200	21497	0.24%	0.010%
181	11.260	11.211	11.303	VV	577711	6288375	68.96%	2.800%
182	11.318	11.303	11.335	VV	3291	59104	0.65%	0.026%
183	11.350	11.335	11.377	VV	3426	78073	0.86%	0.035%
184	11.382	11.377	11.385	VV	3079	13564	0.15%	0.006%
185	11.413	11.385	11.436	VV	4968	116808	1.28%	0.052%
186	11.440	11.436	11.457	VV	3393	40130	0.44%	0.018%
187	11.476	11.457	11.495	VV	3278	68157	0.75%	0.030%
188	11.505	11.495	11.515	VV	2831	32143	0.35%	0.014%
189	11.519	11.515	11.522	VV	2739	10728	0.12%	0.005%
190	11.543	11.522	11.572	VV	2985	83705	0.92%	0.037%
191	11.621	11.572	11.654	VV	4354	169498	1.86%	0.075%
192	11.679	11.654	11.701	VV	8131	140075	1.54%	0.062%
193	11.708	11.701	11.730	VV	3509	52212	0.57%	0.023%
194	11.749	11.730	11.767	VV	2859	58719	0.64%	0.026%

195	11.787	11.767	11.796	VV	2848	47567	0.52%	0.021%
196	11.841	11.796	11.851	VV	3258	95774		
197	11.875	11.851	11.903	VV	18227	265672		
198	11.909	11.903	11.942	VV	4633	92719		
199	11.952	11.942	11.972	VV	3473	58629		
200	12.000	11.972	12.012	VV	3100	70430		
201	12.029	12.012	12.047	VV	3319	67125	0.74%	0.030%
202	12.051	12.047	12.058	VV	2996	19732	0.22%	0.009%
203	12.078	12.058	12.107	VV	5348	122943	1.35%	0.055%
204	12.130	12.107	12.153	VV	5484	115036	1.26%	0.051%
205	12.172	12.153	12.187	VV	3646	67180	0.74%	0.030%
206	12.224	12.187	12.237	VV	6924	136929	1.50%	0.061%
207	12.263	12.237	12.270	VV	109488	1114168	12.22%	0.496%
208	12.294	12.270	12.368	VV	762686	8805317	96.56%	3.921%
209	12.375	12.368	12.415	VV	4255	106333	1.17%	0.047%
210	12.426	12.415	12.432	VV	3645	37355	0.41%	0.017%
211	12.474	12.432	12.519	VV	10791	268285	2.94%	0.119%
212	12.540	12.519	12.549	VV	4485	77343	0.85%	0.034%
213	12.589	12.549	12.627	VV	786036	9119141	100.00%	4.061%
214	12.647	12.627	12.672	VV	11534	231532	2.54%	0.103%
215	12.700	12.672	12.731	VV	139742	1734118	19.02%	0.772%
216	12.762	12.731	12.790	VV	6159	202213	2.22%	0.090%
217	12.822	12.790	12.841	VV	5835	174616	1.91%	0.078%
218	12.869	12.841	12.900	VV	105784	1340634	14.70%	0.597%
219	12.923	12.900	12.962	VV	10685	291321	3.19%	0.130%
220	12.979	12.962	12.985	VV	6840	91739	1.01%	0.041%
221	12.994	12.985	13.000	VV	6918	61310	0.67%	0.027%
222	13.005	13.000	13.028	VV	7072	114864	1.26%	0.051%
223	13.038	13.028	13.045	VV	6750	65024	0.71%	0.029%
224	13.067	13.045	13.072	VV	7157	110735	1.21%	0.049%
225	13.099	13.072	13.125	VV	13311	300087	3.29%	0.134%
226	13.129	13.125	13.155	VV	8025	137553	1.51%	0.061%
227	13.162	13.155	13.170	VV	7609	67806	0.74%	0.030%
228	13.176	13.170	13.186	VV	7617	72680	0.80%	0.032%
229	13.193	13.186	13.212	VV	7368	112624	1.24%	0.050%
230	13.222	13.212	13.240	VV	7282	120224	1.32%	0.054%
231	13.252	13.240	13.257	VV	7368	75145	0.82%	0.033%
232	13.260	13.257	13.263	VV	7252	25182	0.28%	0.011%
233	13.281	13.263	13.298	VV	7942	160638	1.76%	0.072%
234	13.303	13.298	13.317	VV	7810	85115	0.93%	0.038%
235	13.332	13.317	13.362	VV	8445	216068	2.37%	0.096%
236	13.366	13.362	13.373	VV	7763	52385	0.57%	0.023%
237	13.375	13.373	13.380	VV	7690	30477	0.33%	0.014%
238	13.381	13.380	13.385	VV	7676	22380	0.25%	0.010%
239	13.404	13.385	13.423	VV	8541	184788	2.03%	0.082%
240	13.453	13.423	13.490	VV	105048	1442983	15.82%	0.643%
241	13.496	13.490	13.522	VV	7685	145053	1.59%	0.065%
242	13.544	13.522	13.563	VV	8431	192063	2.11%	0.086%
243	13.583	13.563	13.608	VV	7850	205030	2.25%	0.091%
244	13.634	13.608	13.660	VV	8043	233236	2.56%	0.104%
245	13.667	13.660	13.672	VV	7349	50639	0.56%	0.023%
246	13.688	13.672	13.715	VV	7564	193624	2.12%	0.086%

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

						rteres		WB-303-BOTMS	
247	13.719	13.715	13.733	VV	7320	76718	0.84%	0.034%	
248	13.740	13.733	13.752	VV	7431	83690	Manual Integration		
249	13.756	13.752	13.764	VV	7406	53480			
250	13.769	13.764	13.779	VV	7300	66144			
251	13.785	13.779	13.810	VV	7174	128341		Reviewed By : Yogesh	
252	13.837	13.810	13.845	VV	7515	151471	Supervised By : Anurag		
253	13.865	13.845	13.909	VV	10808	330392	3.62%	0.147%	
254	13.925	13.909	13.950	VV	7797	182017	2.00%	0.081%	
255	13.953	13.950	13.975	VV	6794	100674	1.10%	0.045%	
256	13.984	13.975	13.996	VV	6661	81953	0.90%	0.036%	
257	14.013	13.996	14.028	VV	7331	134149	1.47%	0.060%	
258	14.044	14.028	14.052	VV	7032	95485	1.05%	0.043%	
259	14.058	14.052	14.061	VV	6813	37707	0.41%	0.017%	
260	14.071	14.061	14.091	VV	7104	120314	1.32%	0.054%	
261	14.100	14.091	14.120	VV	6646	112769	1.24%	0.050%	
262	14.139	14.120	14.145	VV	6421	95746	1.05%	0.043%	
263	14.155	14.145	14.171	VV	6512	97884	1.07%	0.044%	
264	14.179	14.171	14.188	VV	6347	62314	0.68%	0.028%	
265	14.194	14.188	14.198	VV	6228	38698	0.42%	0.017%	
266	14.204	14.198	14.208	VV	6423	37673	0.41%	0.017%	
267	14.217	14.208	14.222	VV	6461	51023	0.56%	0.023%	
268	14.231	14.222	14.258	VV	6522	133742	1.47%	0.060%	
269	14.264	14.258	14.293	VV	6064	123843	1.36%	0.055%	
270	14.301	14.293	14.323	VV	6274	111201	1.22%	0.050%	
271	14.331	14.323	14.337	VV	5947	47360	0.52%	0.021%	
272	14.343	14.337	14.355	VV	5972	64020	0.70%	0.029%	
273	14.361	14.355	14.383	VV	5841	96470	1.06%	0.043%	
274	14.401	14.383	14.406	VV	5936	78565	0.86%	0.035%	
275	14.413	14.406	14.418	VV	5953	41809	0.46%	0.019%	
276	14.458	14.418	14.476	VV	615757	8175171	89.65%	3.641%	
277	14.502	14.476	14.526	VV	717591	8257203	90.55%	3.677%	
278	14.550	14.526	14.628	VV	97218	1533843	16.82%	0.683%	
279	14.645	14.628	14.676	VV	5780	159056	1.74%	0.071%	
280	14.684	14.676	14.693	VV	5406	53261	0.58%	0.024%	
281	14.702	14.693	14.710	VV	5094	51021	0.56%	0.023%	
282	14.732	14.710	14.760	VV	5429	153130	1.68%	0.068%	
283	14.765	14.760	14.785	VV	4986	73300	0.80%	0.033%	
284	14.790	14.785	14.794	VV	4960	25249	0.28%	0.011%	
285	14.798	14.794	14.834	VV	4962	116108	1.27%	0.052%	
286	14.840	14.834	14.863	VV	5027	82212	0.90%	0.037%	
287	14.882	14.863	14.899	VV	7078	127738	1.40%	0.057%	
288	14.923	14.899	14.993	VV	24126	578524	6.34%	0.258%	
289	14.998	14.993	15.025	VV	5170	94623	1.04%	0.042%	
290	15.032	15.025	15.048	VV	4759	63704	0.70%	0.028%	
291	15.072	15.048	15.104	VV	6466	178172	1.95%	0.079%	
292	15.116	15.104	15.149	VV	4546	111129	1.22%	0.049%	
293	15.158	15.149	15.170	VV	4043	50451	0.55%	0.022%	
294	15.182	15.170	15.205	VV	4164	82509	0.90%	0.037%	
295	15.208	15.205	15.228	VV	3774	50280	0.55%	0.022%	
296	15.263	15.228	15.280	VV	4275	120470	1.32%	0.054%	
297	15.285	15.280	15.289	VV	3849	19962	0.22%	0.009%	
298	15.291	15.289	15.319	VV	3789	65844	0.72%	0.029%	
299	15.330	15.319	15.347	VV	3757	58463	0.64%	0.026%	

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300	15.363	15.347	15.369	VV	3953	48441	0.53%	0.022%
301	15.392	15.369	15.410	VV	4082	95073		
302	15.430	15.410	15.435	VV	4083	56892		
303	15.450	15.435	15.482	VV	4186	108288		
304	15.490	15.482	15.510	VV	3343	54283		
305	15.567	15.510	15.603	VV	88248	1240609	13.13%	0.533%
306	15.608	15.603	15.648	VV	3789	86986	0.95%	0.039%
307	15.659	15.648	15.676	VV	2714	43474	0.48%	0.019%
308	15.690	15.676	15.702	VV	2634	38906	0.43%	0.017%
309	15.722	15.702	15.753	VV	3366	93717	1.03%	0.042%
310	15.769	15.753	15.775	VV	2898	35932	0.39%	0.016%
311	15.790	15.775	15.802	VV	2859	42434	0.47%	0.019%
312	15.818	15.802	15.827	VV	2780	38794	0.43%	0.017%
313	15.855	15.827	15.863	VV	2897	58996	0.65%	0.026%
314	15.876	15.863	15.891	VV	2936	45932	0.50%	0.020%
315	15.932	15.891	15.965	VV	4405	149804	1.64%	0.067%
316	16.005	15.965	16.020	VV	550171	7914472	86.79%	3.525%
317	16.041	16.020	16.100	VV	661204	8046326	88.24%	3.583%
318	16.120	16.100	16.152	VV	7118	142594	1.56%	0.064%
319	16.176	16.152	16.198	VV	4178	94702	1.04%	0.042%
320	16.207	16.198	16.235	VV	3061	61540	0.67%	0.027%
321	16.256	16.235	16.312	VV	4791	141002	1.55%	0.063%
322	16.327	16.312	16.335	VV	2544	32511	0.36%	0.014%
323	16.382	16.335	16.456	VV	585088	7711740	84.57%	3.434%
324	16.508	16.456	16.540	VV	81401	1197317	13.13%	0.533%
325	16.551	16.540	16.572	VV	3768	55874	0.61%	0.025%
326	16.579	16.572	16.632	VV	2046	59348	0.65%	0.026%
327	16.651	16.632	16.659	VV	1792	25999	0.29%	0.012%
328	16.669	16.659	16.695	VV	1751	35853	0.39%	0.016%
329	16.701	16.695	16.764	VV	1978	60241	0.66%	0.027%
330	16.797	16.764	16.848	VV	2040	79876	0.88%	0.036%
331	16.873	16.848	16.896	VV	2123	48991	0.54%	0.022%
332	16.902	16.896	16.910	VV	1433	10880	0.12%	0.005%
333	16.916	16.910	16.928	VV	1284	13119	0.14%	0.006%
334	16.955	16.928	16.982	VV	3348	65191	0.71%	0.029%
335	16.988	16.982	17.001	VV	1218	12365	0.14%	0.006%
336	17.029	17.001	17.050	VV	1199	30956	0.34%	0.014%
337	17.075	17.050	17.127	VV	1892	57832	0.63%	0.026%
338	17.131	17.127	17.149	VV	964	10401	0.11%	0.005%
339	17.182	17.149	17.188	VV	1109	21304	0.23%	0.009%
340	17.193	17.188	17.207	VV	1122	10633	0.12%	0.005%
341	17.209	17.207	17.214	VV	859	3540	0.04%	0.002%
342	17.218	17.214	17.227	VV	856	5633	0.06%	0.003%
343	17.283	17.227	17.305	VV	1527	51649	0.57%	0.023%
344	17.312	17.305	17.323	VV	1132	10323	0.11%	0.005%
345	17.393	17.323	17.428	VV	76977	1071898	11.75%	0.477%
346	17.435	17.428	17.446	VV	694	5687	0.06%	0.003%
347	17.482	17.446	17.522	VV	1739	45451	0.50%	0.020%
348	17.525	17.522	17.532	VV	890	4513	0.05%	0.002%
349	17.535	17.532	17.555	VV	712	7765	0.09%	0.003%
350	17.561	17.555	17.576	VV	512	3992	0.04%	0.002%
351	17.596	17.576	17.628	VV	650	9285	0.10%	0.004%

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

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352	17.650	17.628	17.657	PV	340	2339
353	17.686	17.657	17.703	VV	2053	30700
354	17.749	17.703	17.762	VV	541836	8065689
355	17.787	17.762	17.954	VV	571005	7745899
356	18.001	17.954	18.087	VV	516263	7376166
357	18.093	18.087	18.136	VV	815	13301

Sum of corrected areas: 224554658

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMS

0.03% 0.001%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

Aromatic EPH 093024.M Wed Oct 23 08:00:08 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-303-BOTMS	SDG No.:	P4471
Lab Sample ID:	P4460-03MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.1
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
10/22/24 09:40	10/23/24 5:28	PB164309

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	13.4		1	0.47	1.25	mg/kg	FC067492.D
Aliphatic C12-C16	Aliphatic C12-C16	52.6	E	1	0.30	0.83	mg/kg	FC067492.D
Aliphatic C16-C21	Aliphatic C16-C21	20.0		1	0.37	1.25	mg/kg	FC067492.D
Aliphatic C21-C28	Aliphatic C21-C28	32.0		1	1.00	1.66	mg/kg	FC067492.D
Aliphatic C28-C40	Aliphatic C28-C40	33.3		1	2.24	2.49	mg/kg	FC067492.D
Aromatic C10-C12	Aromatic C10-C12	12.6		1	0.37	0.83	mg/kg	FD048555.D
Aromatic C12-C16	Aromatic C12-C16	19.1		1	0.42	1.25	mg/kg	FD048555.D
Aromatic C16-C21	Aromatic C16-C21	25.5		1	1.20	2.08	mg/kg	FD048555.D
Aromatic C21-C36	Aromatic C21-C36	42.2		1	2.49	3.32	mg/kg	FD048555.D
Total AliphaticEPH	Total AliphaticEPH	151			4.38	7.48	mg/kg	
Total AromaticEPH	Total AromaticEPH	99.4			4.49	7.48	mg/kg	
Total EPH	Total EPH	251			8.87	15.0	mg/kg	

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-303-BOTMS	SDG No.:	P4471
Lab Sample ID:	P4460-03MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.1
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
FC067492.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	13.4		0.47	1.25	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	52.6	E	0.30	0.83	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	20.0		0.37	1.25	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	32.0		1.00	1.66	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	33.3		2.24	2.49	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	30.9		40 - 140	62%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4460-03MS	Acq On:	23 Oct 2024 05:28
Client Sample ID:	WB-303-BOTMS	Operator:	YP/AJ
Data file:	FC067492.D	Misc:	
Instrument:	FID_C	ALS Vial:	18
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.175	6.455	20761466	161.751	300	ug/ml
Aliphatic C12-C16	6.456	9.845	82918311	633.169	200	ug/ml
Aliphatic C16-C21	9.846	13.203	31741633	241.425	300	ug/ml
Aliphatic C21-C28	13.204	16.857	48852275	385.198	400	ug/ml
Aliphatic C28-C40	16.858	21.701	42238111	401.442	600	ug/ml
Aliphatic EPH	3.175	21.701	226511796	1820		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.935	12.935	3499428	30.92		ug/ml
Aliphatic C9-C28	3.175	16.857	184273685	1420	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\F102224AL\
 Data File : FC067492.D
 Signal(s) : FID1A.ch
 Acq On : 23 Oct 2024 05:28
 Operator : YP/AJ
 Sample : P4460-03MS
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 WB-303-BOTMS

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 10/23/2024
 Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e
 Quant Time: Oct 23 07:10:20 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:13:32 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	3499428	30.915 ug/mlm
Spiked Amount 50.000		Recovery =	61.83%
Target Compounds			
1) T n-Nonane (C9)	3.274	3168879	24.999 ug/ml
2) T n-Decane (C10)	4.340	4004691	31.155 ug/ml
4) T n-Dodecane (C12)	6.357	6833351	52.661 ug/mlm
6) T n-Tetradecane (C14)	8.152	10424558	80.938 ug/mlm
7) T n-Hexadecane (C16)	9.748	6570361	49.357 ug/ml
8) T n-Octadecane (C18)	11.187	5637137	41.571 ug/ml
10) T n-Eicosane (C20)	12.494	5679037	43.494 ug/ml
11) T n-Heneicosane (C21)	13.106	5457323	42.550 ug/ml
13) T n-Docosane (C22)	13.692	5494434	43.030 ug/ml
14) T n-Tetracosane (C24)	14.793	5335575	41.719 ug/ml
15) T n-Hexacosane (C26)	15.812	5255785	41.684 ug/mlm
16) T n-Octacosane (C28)	16.761	5245867	41.757 ug/ml
17) T n-Tricontane (C30)	17.647	5249681	40.751 ug/ml
18) T n-Dotriacontane (C32)	18.478	5231590	41.877 ug/ml
19) T n-Tetratriacontane (C34)	19.260	5283731	48.352 ug/ml
20) T n-Hexatriacontane (C36)	20.000	5262809	55.681 ug/mlm
21) T n-Octatriacontane (C38)	20.722	5358205	61.097 ug/ml
22) T n-Tetracontane (C40)	21.609	5468787	63.555 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Instrument :

FID_C

ClientSampleId :

WB-303-BOTMS

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC10222
Data File : FC067492.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 05:28
Sample : P4460-03MS
Misc :
ALS Vial : 18 Sample Multiplier: 1

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.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	3.243	3.358	PV	375417	3182670	26.98%	1.404%
2	3.371	3.358	3.384	VV	335	3628	0.03%	0.002%
3	3.398	3.384	3.437	VV	393	7340	0.06%	0.003%
4	3.474	3.437	3.503	VV	488	9158	0.08%	0.004%
5	3.514	3.503	3.521	VV	230	1633	0.01%	0.001%
6	3.540	3.521	3.569	VV	631	11210	0.10%	0.005%
7	3.598	3.569	3.628	VV	530	9119	0.08%	0.004%
8	3.646	3.628	3.685	VV	790	11943	0.10%	0.005%
9	3.714	3.685	3.750	VV	292	6211	0.05%	0.003%
10	3.765	3.750	3.799	VV	373	5710	0.05%	0.003%
11	3.811	3.799	3.827	VV	202	2069	0.02%	0.001%
12	3.858	3.827	3.900	PV	535	12541	0.11%	0.006%
13	3.939	3.900	3.953	PV	1687	21376	0.18%	0.009%
14	3.968	3.953	3.987	VV	2425	21828	0.19%	0.010%
15	4.001	3.987	4.018	VV	502	5898	0.05%	0.003%
16	4.035	4.018	4.085	VV	1892	20992	0.18%	0.009%
17	4.117	4.085	4.134	VV	1309	17985	0.15%	0.008%
18	4.144	4.134	4.194	VV	731	11910	0.10%	0.005%
19	4.215	4.194	4.234	VV	1377	13220	0.11%	0.006%
20	4.253	4.234	4.275	VV	397	5510	0.05%	0.002%
21	4.291	4.275	4.309	VV	430	4361	0.04%	0.002%
22	4.340	4.309	4.365	VV	438253	4012442	34.01%	1.771%
23	4.380	4.365	4.427	VV	11049	115468	0.98%	0.051%
24	4.447	4.427	4.474	VV	398	8215	0.07%	0.004%
25	4.505	4.474	4.524	VV	1428	23277	0.20%	0.010%
26	4.536	4.524	4.551	VV	877	11801	0.10%	0.005%
27	4.563	4.551	4.576	VV	1501	15285	0.13%	0.007%
28	4.592	4.576	4.608	VV	3406	32242	0.27%	0.014%
29	4.620	4.608	4.632	VV	1357	12162	0.10%	0.005%
30	4.646	4.632	4.659	VV	1032	13603	0.12%	0.006%
31	4.664	4.659	4.682	VV	831	8025	0.07%	0.004%
32	4.713	4.682	4.731	VV	2157	28697	0.24%	0.013%
33	4.754	4.731	4.775	VV	2037	28373	0.24%	0.013%
34	4.790	4.775	4.841	VV	1206	27164	0.23%	0.012%
35	4.862	4.841	4.878	VV	980	12433	0.11%	0.005%
36	4.892	4.878	4.918	VV	1043	14733	0.12%	0.007%

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37	4.947	4.918	4.958	PV	3434	34986	0.30%	0.015%
38	4.975	4.958	5.000	VV	6154	80841		
39	5.016	5.000	5.039	VV	4900	59634		
40	5.053	5.039	5.064	VV	3035	30047		
41	5.078	5.064	5.117	VV	4923	55610		
42	5.133	5.117	5.153	PV	474	5461		
43	5.174	5.153	5.201	VV	2051	29589	0.25%	0.013%
44	5.240	5.201	5.252	VV	3685	55755	0.47%	0.025%
45	5.263	5.252	5.280	VV	3702	39531	0.34%	0.017%
46	5.302	5.280	5.312	VV	1778	27466	0.23%	0.012%
47	5.322	5.312	5.346	VV	1704	21867	0.19%	0.010%
48	5.373	5.346	5.421	VV	38672	472004	4.00%	0.208%
49	5.431	5.421	5.457	VV	2802	42916	0.36%	0.019%
50	5.467	5.457	5.479	VV	1086	11666	0.10%	0.005%
51	5.494	5.479	5.503	VV	1336	15609	0.13%	0.007%
52	5.519	5.503	5.534	VV	1698	28110	0.24%	0.012%
53	5.557	5.534	5.576	VV	11755	158049	1.34%	0.070%
54	5.587	5.576	5.604	VV	5594	60096	0.51%	0.027%
55	5.622	5.604	5.634	VV	3697	51486	0.44%	0.023%
56	5.671	5.634	5.701	VV	14386	283782	2.41%	0.125%
57	5.742	5.701	5.755	VV	9526	168313	1.43%	0.074%
58	5.764	5.755	5.774	VV	6520	65922	0.56%	0.029%
59	5.786	5.774	5.805	VV	6754	94561	0.80%	0.042%
60	5.827	5.805	5.848	VV	8847	136314	1.16%	0.060%
61	5.877	5.848	5.897	VV	9137	181379	1.54%	0.080%
62	5.924	5.897	5.949	VV	19948	394295	3.34%	0.174%
63	5.970	5.949	5.993	VV	22280	334651	2.84%	0.148%
64	6.014	5.993	6.040	VV	31994	408135	3.46%	0.180%
65	6.075	6.040	6.094	VV	27835	431891	3.66%	0.191%
66	6.105	6.094	6.125	VV	10515	159543	1.35%	0.070%
67	6.160	6.125	6.171	VV	10642	227582	1.93%	0.100%
68	6.188	6.171	6.214	VV	18097	293732	2.49%	0.130%
69	6.236	6.214	6.262	VV	19517	377891	3.20%	0.167%
70	6.284	6.262	6.298	VV	15683	266959	2.26%	0.118%
71	6.309	6.298	6.316	VV	12408	122490	1.04%	0.054%
72	6.357	6.316	6.428	VV	675336	7467517	63.29%	3.295%
73	6.448	6.428	6.463	VV	18517	315554	2.67%	0.139%
74	6.504	6.463	6.529	VV	89010	1415625	12.00%	0.625%
75	6.542	6.529	6.559	VV	26373	394480	3.34%	0.174%
76	6.574	6.559	6.602	VV	30413	521763	4.42%	0.230%
77	6.630	6.602	6.652	VV	26915	614551	5.21%	0.271%
78	6.677	6.652	6.702	VV	50358	939905	7.97%	0.415%
79	6.711	6.702	6.724	VV	24468	279685	2.37%	0.123%
80	6.741	6.724	6.773	VV	27302	616954	5.23%	0.272%
81	6.812	6.773	6.830	VV	30801	758128	6.43%	0.335%
82	6.854	6.830	6.892	VV	73933	1817242	15.40%	0.802%
83	6.912	6.892	6.935	VV	84503	1200593	10.18%	0.530%
84	6.957	6.935	6.987	VV	111070	1657303	14.05%	0.731%
85	7.014	6.987	7.034	VV	98384	1347823	11.42%	0.595%
86	7.056	7.034	7.094	VV	115288	1834383	15.55%	0.809%
87	7.112	7.094	7.131	VV	37404	656023	5.56%	0.289%
88	7.155	7.131	7.173	VV	51812	869545	7.37%	0.384%
89	7.200	7.173	7.212	VV	34410	699457	5.93%	0.309%

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90	7.229	7.212	7.253	VV	50891	970935	8.23%	0.428%
91	7.281	7.253	7.306	VV	634819	7112863	60.00%	0.000%
92	7.327	7.306	7.354	VV	33526	803028	6.00%	0.000%
93	7.399	7.354	7.424	VV	47648	1556067	13.00%	0.000%
94	7.449	7.424	7.476	VV	77824	1516519	12.00%	0.000%
95	7.490	7.476	7.514	VV	32369	575357	4.00%	0.000%
96	7.536	7.514	7.571	VV	37406	898276	7.61%	0.396%
97	7.614	7.571	7.630	VV	57365	1380145	11.70%	0.609%
98	7.642	7.630	7.679	VV	39030	818359	6.94%	0.361%
99	7.704	7.679	7.714	VV	49170	699168	5.93%	0.309%
100	7.732	7.714	7.745	VV	81353	1082672	9.18%	0.478%
101	7.756	7.745	7.775	VV	75469	955211	8.10%	0.421%
102	7.798	7.775	7.820	VV	82095	1289622	10.93%	0.569%
103	7.844	7.820	7.870	VV	113905	1748710	14.82%	0.772%
104	7.899	7.870	7.923	VV	83873	1369989	11.61%	0.605%
105	7.938	7.923	7.947	VV	27414	355426	3.01%	0.157%
106	7.969	7.947	7.993	VV	120230	1633640	13.85%	0.721%
107	8.012	7.993	8.038	VV	29408	682242	5.78%	0.301%
108	8.057	8.038	8.076	VV	38709	638942	5.42%	0.282%
109	8.152	8.076	8.179	VV	942756	11798262	100.00%	5.206%
110	8.196	8.179	8.219	VV	45176	773497	6.56%	0.341%
111	8.244	8.219	8.276	VV	40165	1072786	9.09%	0.473%
112	8.294	8.276	8.319	VV	40002	815074	6.91%	0.360%
113	8.340	8.319	8.373	VV	28631	774799	6.57%	0.342%
114	8.390	8.373	8.409	VV	24302	444211	3.77%	0.196%
115	8.446	8.409	8.483	VV	36759	1107387	9.39%	0.489%
116	8.503	8.483	8.531	VV	38681	803149	6.81%	0.354%
117	8.562	8.531	8.580	VV	47719	1073106	9.10%	0.474%
118	8.594	8.580	8.617	VV	49712	758495	6.43%	0.335%
119	8.636	8.617	8.655	VV	52426	774487	6.56%	0.342%
120	8.683	8.655	8.710	VV	129299	1909167	16.18%	0.842%
121	8.734	8.710	8.781	VV	53726	1075531	9.12%	0.475%
122	8.829	8.781	8.854	VV	22295	736579	6.24%	0.325%
123	8.860	8.854	8.880	VV	15006	207830	1.76%	0.092%
124	8.910	8.880	8.929	VV	24018	553576	4.69%	0.244%
125	8.969	8.929	9.024	VV	307474	4147887	35.16%	1.830%
126	9.052	9.024	9.074	VV	27404	563177	4.77%	0.249%
127	9.095	9.074	9.137	VV	17438	534539	4.53%	0.236%
128	9.159	9.137	9.177	VV	10728	238867	2.02%	0.105%
129	9.200	9.177	9.219	VV	14137	295172	2.50%	0.130%
130	9.227	9.219	9.235	VV	10967	101978	0.86%	0.045%
131	9.250	9.235	9.284	VV	12286	321018	2.72%	0.142%
132	9.293	9.284	9.311	VV	8474	130378	1.11%	0.058%
133	9.341	9.311	9.372	VV	41390	834691	7.07%	0.368%
134	9.385	9.372	9.402	VV	20346	287948	2.44%	0.127%
135	9.426	9.402	9.449	VV	25859	475610	4.03%	0.210%
136	9.471	9.449	9.492	VV	30373	464635	3.94%	0.205%
137	9.524	9.492	9.553	VV	25077	496921	4.21%	0.219%
138	9.580	9.553	9.631	VV	6374	253250	2.15%	0.112%
139	9.663	9.631	9.677	VV	7883	168476	1.43%	0.074%
140	9.701	9.677	9.716	VV	11510	215577	1.83%	0.095%
141	9.748	9.716	9.791	VV	594449	6766244	57.35%	2.986%

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142	9.818	9.791	9.839	VV	9622	233376	1.98%	0.103%
143	9.846	9.839	9.894	VV	7829	197668		
144	9.915	9.894	9.936	VV	5005	107946		
145	9.957	9.936	9.998	VV	4821	154538		
146	10.020	9.998	10.047	VV	4524	106795		
147	10.091	10.047	10.104	VV	9840	192704		
148	10.132	10.104	10.159	VV	20038	381674	3.24%	0.168%
149	10.180	10.159	10.200	VV	7640	137559	1.17%	0.061%
150	10.222	10.200	10.248	VV	8363	152365	1.29%	0.067%
151	10.276	10.248	10.303	VV	7934	145958	1.24%	0.064%
152	10.330	10.303	10.353	VV	2340	68039	0.58%	0.030%
153	10.380	10.353	10.391	VV	3093	63020	0.53%	0.028%
154	10.413	10.391	10.441	VV	3863	94219	0.80%	0.042%
155	10.482	10.441	10.517	VV	31000	458570	3.89%	0.202%
156	10.554	10.517	10.588	VV	11511	267887	2.27%	0.118%
157	10.599	10.588	10.630	VV	4377	91613	0.78%	0.040%
158	10.649	10.630	10.659	VV	2713	44366	0.38%	0.020%
159	10.682	10.659	10.699	VV	3516	73972	0.63%	0.033%
160	10.719	10.699	10.738	VV	3604	77924	0.66%	0.034%
161	10.755	10.738	10.779	VV	3558	77207	0.65%	0.034%
162	10.804	10.779	10.836	VV	5002	134767	1.14%	0.059%
163	10.856	10.836	10.888	VV	4960	132280	1.12%	0.058%
164	10.894	10.888	10.916	VV	4496	67448	0.57%	0.030%
165	10.936	10.916	10.949	VV	4415	74597	0.63%	0.033%
166	10.988	10.949	11.046	VV	8548	277521	2.35%	0.122%
167	11.076	11.046	11.091	VV	4124	104933	0.89%	0.046%
168	11.114	11.091	11.149	VV	6529	176153	1.49%	0.078%
169	11.187	11.149	11.244	VV	486463	5880119	49.84%	2.595%
170	11.275	11.244	11.312	VV	9204	249129	2.11%	0.110%
171	11.340	11.312	11.371	VV	4662	152035	1.29%	0.067%
172	11.419	11.371	11.436	VV	4655	170297	1.44%	0.075%
173	11.481	11.436	11.521	VV	6595	271101	2.30%	0.120%
174	11.576	11.521	11.605	VV	5725	257138	2.18%	0.113%
175	11.632	11.605	11.651	VV	5231	139676	1.18%	0.062%
176	11.676	11.651	11.694	VV	6245	142341	1.21%	0.063%
177	11.707	11.694	11.724	VV	5213	90323	0.77%	0.040%
178	11.741	11.724	11.764	VV	5278	122018	1.03%	0.054%
179	11.793	11.764	11.806	VV	5610	131794	1.12%	0.058%
180	11.850	11.806	11.891	VV	9294	324212	2.75%	0.143%
181	11.894	11.891	11.914	VV	5041	67003	0.57%	0.030%
182	11.937	11.914	11.948	VV	5157	96749	0.82%	0.043%
183	11.980	11.948	12.028	VV	5278	231255	1.96%	0.102%
184	12.073	12.028	12.097	VV	5551	204129	1.73%	0.090%
185	12.127	12.097	12.197	VV	5429	302008	2.56%	0.133%
186	12.265	12.197	12.290	VV	5703	283791	2.41%	0.125%
187	12.319	12.290	12.338	VV	6965	170521	1.45%	0.075%
188	12.347	12.338	12.389	VV	5921	163068	1.38%	0.072%
189	12.428	12.389	12.457	VV	6397	223593	1.90%	0.099%
190	12.494	12.457	12.548	VV	484020	5957829	50.50%	2.629%
191	12.593	12.548	12.661	VV	7390	411786	3.49%	0.182%
192	12.704	12.661	12.727	VV	6048	226173	1.92%	0.100%
193	12.750	12.727	12.794	VV	6646	258731	2.19%	0.114%
194	12.822	12.794	12.841	VV	7348	191980	1.63%	0.085%

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195	12.936	12.841	12.969	VV	287005	4099493	34.75%	1.809%
196	12.989	12.969	13.018	VV	9897	278150		
197	13.037	13.018	13.058	VV	10424	237740		
198	13.106	13.058	13.136	VV	450721	5921656	50.72%	2.509%
199	13.155	13.136	13.214	VV	17464	624072	8.56%	0.409%
200	13.264	13.214	13.294	VV	14038	574721	2.42%	0.119%
201	13.317	13.294	13.341	VV	13354	362614	3.07%	0.160%
202	13.372	13.341	13.398	VV	13978	454861	3.86%	0.201%
203	13.416	13.398	13.445	VV	14165	386021	3.27%	0.170%
204	13.483	13.445	13.500	VV	14095	448906	3.80%	0.198%
205	13.533	13.500	13.564	VV	15796	564542	4.78%	0.249%
206	13.610	13.564	13.649	VV	16159	775393	6.57%	0.342%
207	13.692	13.649	13.724	VV	429624	6103422	51.73%	2.693%
208	13.735	13.724	13.799	VV	17003	692382	5.87%	0.306%
209	13.840	13.799	13.878	VV	16068	719119	6.10%	0.317%
210	13.903	13.878	13.974	VV	16950	925022	7.84%	0.408%
211	14.005	13.974	14.034	VV	15827	550910	4.67%	0.243%
212	14.078	14.034	14.104	VV	15582	643173	5.45%	0.284%
213	14.135	14.104	14.156	VV	15511	471930	4.00%	0.208%
214	14.191	14.156	14.233	VV	17748	717731	6.08%	0.317%
215	14.253	14.233	14.286	VV	17192	488982	4.14%	0.216%
216	14.311	14.286	14.328	VV	15828	377054	3.20%	0.166%
217	14.335	14.328	14.361	VV	15309	303146	2.57%	0.134%
218	14.367	14.361	14.428	VV	15101	572635	4.85%	0.253%
219	14.497	14.428	14.531	VV	16001	897856	7.61%	0.396%
220	14.538	14.531	14.582	VV	14381	412601	3.50%	0.182%
221	14.597	14.582	14.611	VV	13696	236559	2.01%	0.104%
222	14.639	14.611	14.653	VV	14044	344581	2.92%	0.152%
223	14.678	14.653	14.741	VV	14475	723368	6.13%	0.319%
224	14.793	14.741	14.834	VV	428638	6098987	51.69%	2.691%
225	14.844	14.834	14.918	VV	15104	674867	5.72%	0.298%
226	14.926	14.918	14.961	VV	13117	327309	2.77%	0.144%
227	14.985	14.961	15.013	VV	14204	416227	3.53%	0.184%
228	15.040	15.013	15.078	VV	13725	507950	4.31%	0.224%
229	15.098	15.078	15.148	VV	13452	540823	4.58%	0.239%
230	15.182	15.148	15.193	VV	13497	356345	3.02%	0.157%
231	15.218	15.193	15.266	VV	13671	575691	4.88%	0.254%
232	15.279	15.266	15.286	VV	13089	157452	1.33%	0.069%
233	15.308	15.286	15.332	VV	17571	403721	3.42%	0.178%
234	15.352	15.332	15.414	VV	14298	647517	5.49%	0.286%
235	15.423	15.414	15.463	VV	12658	351386	2.98%	0.155%
236	15.490	15.463	15.554	VV	12763	666298	5.65%	0.294%
237	15.563	15.554	15.588	VV	12386	235947	2.00%	0.104%
238	15.619	15.588	15.647	VV	12982	443050	3.76%	0.196%
239	15.669	15.647	15.675	VV	12663	204538	1.73%	0.090%
240	15.682	15.675	15.692	VV	12572	130918	1.11%	0.058%
241	15.706	15.692	15.751	VV	12526	415411	3.52%	0.183%
242	15.812	15.751	15.894	VV	400500	6250048	52.97%	2.758%
243	15.913	15.894	15.948	VV	10601	329975	2.80%	0.146%
244	15.990	15.948	16.081	VV	13293	882187	7.48%	0.389%
245	16.120	16.081	16.138	VV	11705	375193	3.18%	0.166%
246	16.164	16.138	16.228	VV	12007	575388	4.88%	0.254%

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247	16.290	16.228	16.311	VV	13660	530964	4.50%	0.234%
248	16.324	16.311	16.362	VV	10220	289724		
249	16.372	16.362	16.395	VV	8815	171876		
250	16.405	16.395	16.427	VV	9190	166701		
251	16.456	16.427	16.578	VV	9969	809609		
252	16.598	16.578	16.618	VV	9291	213027		
253	16.635	16.618	16.658	VV	9296	208352	1.77%	0.092%
254	16.671	16.658	16.694	VV	7918	170297	1.44%	0.075%
255	16.761	16.694	16.872	VV	378733	5976968	50.66%	2.637%
256	16.923	16.872	16.957	VV	7570	365693	3.10%	0.161%
257	16.982	16.957	17.031	VV	8004	302649	2.57%	0.134%
258	17.081	17.031	17.147	VV	7046	440737	3.74%	0.194%
259	17.158	17.147	17.180	VV	6230	117265	0.99%	0.052%
260	17.208	17.180	17.258	VV	8839	307876	2.61%	0.136%
261	17.267	17.258	17.287	VV	5190	83321	0.71%	0.037%
262	17.320	17.287	17.380	VV	6348	306687	2.60%	0.135%
263	17.393	17.380	17.418	VV	4975	106050	0.90%	0.047%
264	17.441	17.418	17.461	VV	4756	115407	0.98%	0.051%
265	17.480	17.461	17.504	VV	4810	121639	1.03%	0.054%
266	17.532	17.504	17.568	VV	8260	226884	1.92%	0.100%
267	17.577	17.568	17.598	VV	4814	81281	0.69%	0.036%
268	17.647	17.598	17.728	VV	373286	5547652	47.02%	2.448%
269	17.779	17.728	17.881	VV	5666	355117	3.01%	0.157%
270	17.927	17.881	17.966	VV	3977	164701	1.40%	0.073%
271	17.971	17.966	17.993	VV	3169	48573	0.41%	0.021%
272	18.008	17.993	18.018	VV	3294	44121	0.37%	0.019%
273	18.026	18.018	18.040	VV	2845	37094	0.31%	0.016%
274	18.065	18.040	18.121	VV	5905	167758	1.42%	0.074%
275	18.144	18.121	18.197	VV	4120	127240	1.08%	0.056%
276	18.206	18.197	18.261	VV	2285	72552	0.61%	0.032%
277	18.335	18.261	18.421	VV	2314	177863	1.51%	0.078%
278	18.478	18.421	18.539	VV	387826	5324275	45.13%	2.349%
279	18.567	18.539	18.591	VV	2154	51557	0.44%	0.023%
280	18.617	18.591	18.641	VV	2028	48918	0.41%	0.022%
281	18.664	18.641	18.681	VV	1597	33835	0.29%	0.015%
282	18.705	18.681	18.713	VV	1429	24843	0.21%	0.011%
283	18.738	18.713	18.750	VV	1601	32266	0.27%	0.014%
284	18.759	18.750	18.833	VV	1569	66213	0.56%	0.029%
285	18.871	18.833	18.943	VV	4363	143211	1.21%	0.063%
286	18.964	18.943	18.985	VV	1718	37304	0.32%	0.016%
287	18.995	18.985	19.004	VV	1364	14898	0.13%	0.007%
288	19.040	19.004	19.091	VV	2479	99236	0.84%	0.044%
289	19.102	19.091	19.121	VV	1627	27025	0.23%	0.012%
290	19.126	19.121	19.140	VV	1582	16575	0.14%	0.007%
291	19.166	19.140	19.180	VV	1755	37008	0.31%	0.016%
292	19.198	19.180	19.210	VV	1587	26945	0.23%	0.012%
293	19.260	19.210	19.327	VV	346443	5398120	45.75%	2.382%
294	19.369	19.327	19.394	VV	2147	77826	0.66%	0.034%
295	19.408	19.394	19.425	VV	1914	33112	0.28%	0.015%
296	19.556	19.425	19.605	VV	3615	256591	2.17%	0.113%
297	19.632	19.605	19.668	VV	3867	115303	0.98%	0.051%
298	19.675	19.668	19.714	VV	2953	75215	0.64%	0.033%
299	19.794	19.714	19.802	VV	3056	145312	1.23%	0.064%

Instrument :

FID_C

ClientSampleId :

WB-303-BOTMS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

					rters			
300	19.897	19.802	19.938	VV	4077	275926	2.34%	0.122%
301	19.999	19.938	20.037	VV	359143	5478127	46.11%	0.122%
302	20.046	20.037	20.113	VV	6764	244822	2.34%	0.122%
303	20.171	20.113	20.195	VV	5386	246670	2.34%	0.122%
304	20.207	20.195	20.217	VV	5176	66583	0.66%	0.122%
305	20.264	20.217	20.308	VV	5428	286411	2.86%	0.122%
306	20.348	20.308	20.401	VV	6784	308382	2.61%	0.136%
307	20.522	20.401	20.644	VV	8201	839338	7.11%	0.370%
308	20.722	20.644	20.957	VV	305333	6232503	52.83%	2.750%
309	20.967	20.957	20.984	VV	3962	62609	0.53%	0.028%
310	21.046	20.984	21.104	VV	6396	336805	2.85%	0.149%
311	21.131	21.104	21.191	VV	4718	201868	1.71%	0.089%
312	21.196	21.191	21.214	VV	3198	43939	0.37%	0.019%
313	21.223	21.214	21.238	VV	3199	44821	0.38%	0.020%
314	21.279	21.238	21.294	VV	3225	103687	0.88%	0.046%
315	21.301	21.294	21.327	VV	3136	59656	0.51%	0.026%
316	21.334	21.327	21.348	VV	3138	38920	0.33%	0.017%
317	21.392	21.388	21.405	VV	2921	29799	0.25%	0.013%
318	21.429	21.405	21.471	VV	2842	107628	0.91%	0.047%
319	21.487	21.471	21.521	VV	2691	77611	0.66%	0.034%
320	21.608	21.521	21.724	VV	228469	5748258	48.72%	2.536%
321	21.733	21.724	21.769	VV	2404	59067	0.50%	0.026%
322	21.778	21.769	21.801	VBA	2072	52173	0.44%	0.023%
Sum of corrected areas:					226623030			

Instrument :
FID_C
ClientSampleId :
WB-303-BOTMS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

Aliphatic EPH 100224.M Wed Oct 23 07:56:05 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-303-BOTMSD	SDG No.:	P4471
Lab Sample ID:	P4460-03MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.1
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048556.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	12.6		0.37	0.83	mg/kg
Aromatic C12-C16	Aromatic C12-C16	19.2		0.42	1.25	mg/kg
Aromatic C16-C21	Aromatic C16-C21	25.3		1.20	2.08	mg/kg
Aromatic C21-C36	Aromatic C21-C36	41.5		2.49	3.32	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	47.7		40 - 140	95%	SPK: 50
321-60-8	2-Fluorobiphenyl (SURR)	48.4		40 - 140	97%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	33.1		40 - 140	66%	SPK: 50

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4460-03MSD	Acq On:	23 Oct 2024 06:04
Client Sample ID:	WB-303-BOTMSD	Operator:	YP/AJ
Data file:	FD048556.D	Misc:	
Instrument:	FID_D	ALS Vial:	69
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.096	5.814	27424014	151.527	200	ug/ml
Aromatic C12-C16	5.815	8.420	44002707	231.599	300	ug/ml
Aromatic C16-C21	8.421	12.681	54458100	304.698	500	ug/ml
Aromatic C21-C36	12.682	18.086	82550383	499.214	800	ug/ml
Aromatic EPH	4.096	18.086	208435204	1190		ug/ml
ortho-Terphenyl (SURR)	11.260	11.260	6082274	33.06		ug/ml
2-Bromonaphthalene (SURR)	7.375	7.375	7899041	47.71		ug/ml
2-Fluorobiphenyl (SURR)	8.225	8.225	5015716	48.37		ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
 Data File : FD048556.D
 Signal(s) : FID2B.ch
 Acq On : 23 Oct 2024 06:04
 Operator : YP/AJ
 Sample : P4460-03MSD
 Misc :
 ALS Vial : 69 Sample Multiplier: 1

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMSD

Manual Integrations**APPROVED**

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e

Quant Time: Oct 23 07:10:41 2024

Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M

Quant Title : GC Extractables

QLast Update : Mon Sep 30 14:17:34 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...	7.375	7899041	47.709 ug/ml
Spiked Amount 50.000		Recovery =	95.42%
6) S 2-Fluorobiphenyl (SURR)	8.225	5015716	48.365 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	96.73%
11) S ortho-Terphenyl (SURR)	11.260	6082274	33.056 ug/ml
Spiked Amount 50.000		Recovery =	66.11%
Target Compounds			
1) T 1,2,3-Trimethylbenzen...	4.198	6374636	36.373 ug/ml
2) T Naphthalene (C11.7)	5.715	7633567	40.884 ug/mlm
3) T 2-Methylnaphthalene (...)	6.762	7443549	39.386 ug/ml
5) T Acenaphthylene (C15.06)	8.028	7547141	39.340 ug/ml
7) T Acenaphthene (C15.5)	8.324	8110504	42.877 ug/ml
8) T Flouorene (C16.55)	9.102	8010751	44.338 ug/ml
9) T Phenanthrene (C19.36)	10.489	8213285	46.342 ug/ml
10) T Anthracene (C19.43)	10.565	8331375	46.821 ug/ml
12) T Fluoranthene (C21.85)	12.295	8519629	47.103 ug/mlm
13) T Pyrene (C20.8)	12.588	8815200	49.228 ug/ml
14) T Benzo[a]anthracene (C...	14.458	7881258	49.315 ug/ml
15) T Chrysene (C27.41)	14.501	7985711	42.813 ug/ml
16) T benzo[b]fluoranthene ...	16.005	7687518	46.160 ug/ml
17) T Bnezo[k]fluoranthene ...	16.040	7711796	45.431 ug/ml
18) T Benzo[a]pyrene (C31.34)	16.381	7442521	45.536 ug/ml
19) T Indeno[1,2,3-cd]pyren...	17.749	8029953	61.046 ug/ml
20) T Dibenz[a,h]anthracene...	17.786	7568699	45.231 ug/ml
21) T Benzo[g,h,i]perylene ...	18.000	7295893	44.919 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102224AR\
Data File : FD048556.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 06:04
Operator : YP/AJ
Sample : P4460-03MSD
Misc :
ALS Vial : 69 Sample Multiplier: 1

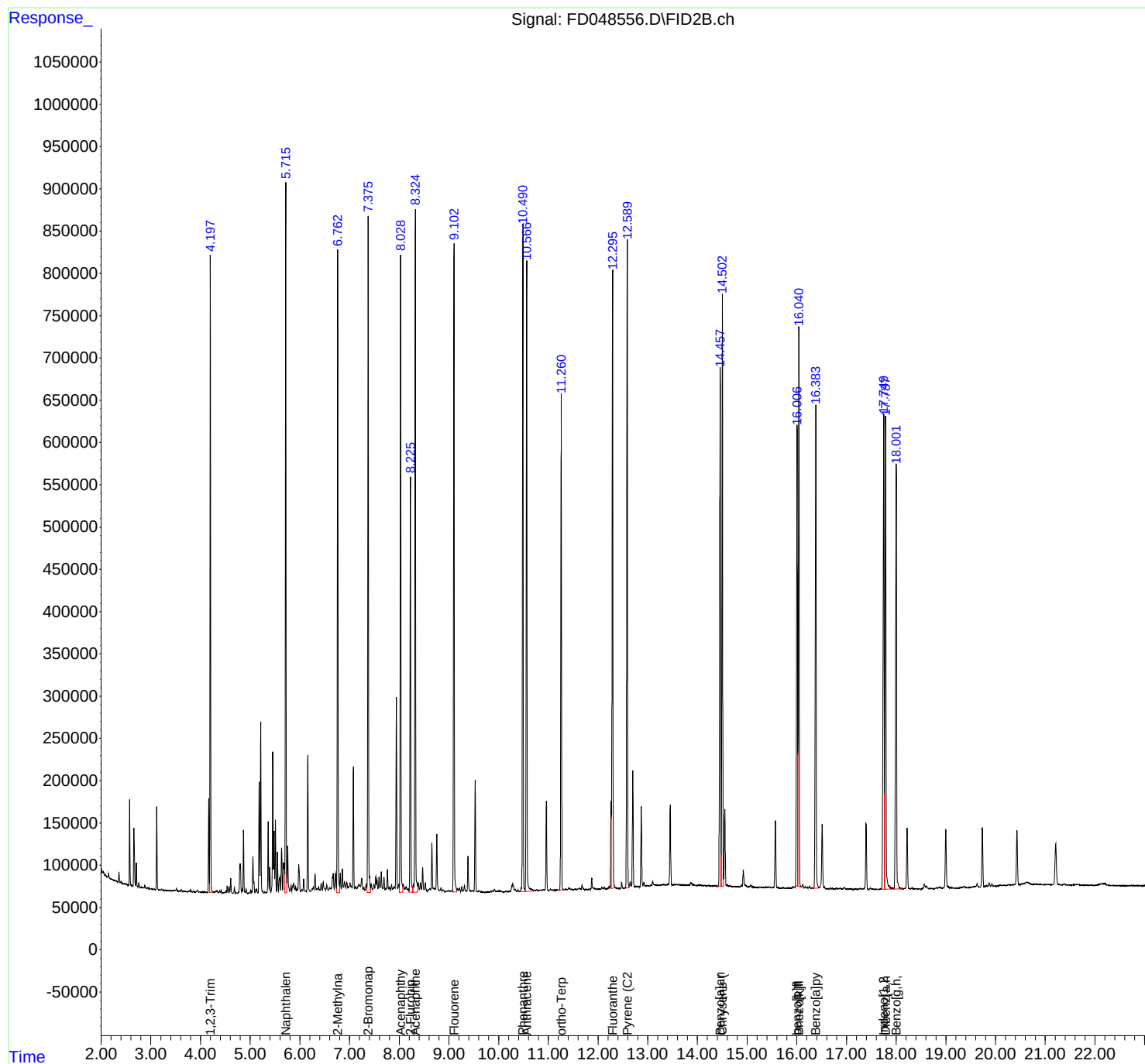
Instrument :
FID_D
ClientSampleId :
WB-303-BOTMSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e
Quant Time: Oct 23 07:10:41 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.M
Quant Title : GC Extractables
QLast Update : Mon Sep 30 14:17:34 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 :

WB-303-BOTMSD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD10222

Data File : FD048556.D

Signal(s) : FID2B.ch

Acq On : 23 Oct 2024 06:04

Sample : P4460-03MSD

Misc :

ALS Vial : 69 Sample Multiplier: 1

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 093024.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	4.166	4.152	4.180	PV	103910	826790	9.18%	0.372%
2	4.198	4.180	4.262	PV	744828	6113084	67.89%	2.749%
3	4.277	4.262	4.291	PV	468	3786	0.04%	0.002%
4	4.306	4.291	4.318	PV	1874	18111	0.20%	0.008%
5	4.332	4.318	4.352	VV	2379	26111	0.29%	0.012%
6	4.387	4.352	4.402	VV	2268	26059	0.29%	0.012%
7	4.417	4.402	4.452	VV	3245	30486	0.34%	0.014%
8	4.456	4.452	4.473	PV	265	1203	0.01%	0.001%
9	4.487	4.473	4.497	VV	707	5003	0.06%	0.002%
10	4.511	4.497	4.522	VV	2468	20892	0.23%	0.009%
11	4.537	4.522	4.556	VV	8518	79298	0.88%	0.036%
12	4.574	4.556	4.593	VV	7316	87620	0.97%	0.039%
13	4.609	4.593	4.651	VV	17559	176950	1.97%	0.080%
14	4.659	4.651	4.665	PV	179	1133	0.01%	0.001%
15	4.683	4.665	4.702	VV	6348	61856	0.69%	0.028%
16	4.711	4.702	4.740	VV	1022	9692	0.11%	0.004%
17	4.767	4.740	4.774	PV	2067	19732	0.22%	0.009%
18	4.791	4.774	4.798	VV	34652	291255	3.23%	0.131%
19	4.805	4.798	4.826	VV	35494	313911	3.49%	0.141%
20	4.840	4.826	4.848	VV	5246	50866	0.56%	0.023%
21	4.866	4.848	4.892	VV	74848	675620	7.50%	0.304%
22	4.896	4.892	4.905	VV	2059	13789	0.15%	0.006%
23	4.920	4.905	4.956	VV	5295	51899	0.58%	0.023%
24	4.979	4.956	4.998	VV	912	10059	0.11%	0.005%
25	5.014	4.998	5.032	VV	3904	39576	0.44%	0.018%
26	5.056	5.032	5.070	VV	43191	412690	4.58%	0.186%
27	5.075	5.070	5.098	VV	14091	116674	1.30%	0.052%
28	5.115	5.098	5.123	VV	4649	41542	0.46%	0.019%
29	5.133	5.123	5.158	VV	4843	46656	0.52%	0.021%
30	5.181	5.158	5.197	VV	131123	1259331	13.98%	0.566%
31	5.212	5.197	5.243	VV	202487	1888179	20.97%	0.849%
32	5.252	5.243	5.279	VV	2754	30054	0.33%	0.014%
33	5.295	5.279	5.311	VV	1861	21829	0.24%	0.010%
34	5.321	5.311	5.332	VV	836	8429	0.09%	0.004%
35	5.362	5.332	5.381	VV	84892	780841	8.67%	0.351%
36	5.395	5.381	5.416	VV	31019	295501	3.28%	0.133%

Parameters									
37	5.455	5.416	5.469	VV	166881	1582381	17.57%	0.712%	
38	5.481	5.469	5.495	VV	73498	716321			
39	5.508	5.495	5.530	VV	86755	806350			
40	5.549	5.530	5.569	VV	48731	467317			
41	5.585	5.569	5.591	VV	16595	148603			
42	5.599	5.591	5.614	VV	19117	188894			
43	5.633	5.614	5.654	VV	53753	657403	7.30%	0.296%	
44	5.671	5.654	5.679	VV	36433	346242	3.84%	0.156%	
45	5.688	5.679	5.696	VV	35407	319629	3.55%	0.144%	
46	5.716	5.696	5.738	VV	840032	7647609	84.93%	3.439%	
47	5.755	5.738	5.796	VV	55853	686758	7.63%	0.309%	
48	5.822	5.796	5.837	VV	9013	121528	1.35%	0.055%	
49	5.853	5.837	5.861	VV	8496	93815	1.04%	0.042%	
50	5.875	5.861	5.900	VV	11854	194448	2.16%	0.087%	
51	5.914	5.900	5.927	VV	7993	87774	0.97%	0.039%	
52	5.937	5.927	5.947	VV	4754	47951	0.53%	0.022%	
53	5.978	5.947	6.020	VV	34120	585499	6.50%	0.263%	
54	6.036	6.020	6.055	VV	4271	71823	0.80%	0.032%	
55	6.077	6.055	6.101	VV	16894	206857	2.30%	0.093%	
56	6.122	6.101	6.136	VV	2940	51234	0.57%	0.023%	
57	6.160	6.136	6.208	VV	163242	1661570	18.45%	0.747%	
58	6.245	6.208	6.256	VV	5202	101948	1.13%	0.046%	
59	6.273	6.256	6.285	VV	7657	104287	1.16%	0.047%	
60	6.307	6.285	6.328	VV	22854	313895	3.49%	0.141%	
61	6.340	6.328	6.362	VV	5535	94571	1.05%	0.043%	
62	6.377	6.362	6.392	VV	7605	100794	1.12%	0.045%	
63	6.401	6.392	6.413	VV	4275	47188	0.52%	0.021%	
64	6.429	6.413	6.450	VV	11427	157755	1.75%	0.071%	
65	6.470	6.450	6.520	VV	12935	286148	3.18%	0.129%	
66	6.541	6.520	6.572	VV	9473	180020	2.00%	0.081%	
67	6.597	6.572	6.609	VV	6583	112849	1.25%	0.051%	
68	6.617	6.609	6.627	VV	5735	60035	0.67%	0.027%	
69	6.671	6.627	6.690	VV	23369	482066	5.35%	0.217%	
70	6.715	6.690	6.735	VV	23153	365249	4.06%	0.164%	
71	6.762	6.735	6.798	VV	761531	7459370	82.84%	3.354%	
72	6.814	6.798	6.832	VV	23908	283086	3.14%	0.127%	
73	6.856	6.832	6.874	VV	28843	363269	4.03%	0.163%	
74	6.899	6.874	6.925	VV	13194	295324	3.28%	0.133%	
75	6.948	6.925	6.965	VV	12541	226550	2.52%	0.102%	
76	6.975	6.965	6.984	VV	7348	77435	0.86%	0.035%	
77	7.011	6.984	7.026	VV	11922	230277	2.56%	0.104%	
78	7.035	7.026	7.052	VV	8299	112312	1.25%	0.051%	
79	7.077	7.052	7.100	VV	149365	1580030	17.55%	0.710%	
80	7.125	7.100	7.148	VV	7070	175920	1.95%	0.079%	
81	7.180	7.148	7.185	VV	8616	156013	1.73%	0.070%	
82	7.198	7.185	7.221	VV	10076	190512	2.12%	0.086%	
83	7.246	7.221	7.274	VV	17085	325622	3.62%	0.146%	
84	7.288	7.274	7.306	VV	6954	101713	1.13%	0.046%	
85	7.334	7.306	7.349	VV	10171	165216	1.83%	0.074%	
86	7.375	7.349	7.398	VV	799769	7730095	85.84%	3.476%	
87	7.403	7.398	7.421	VV	18623	184209	2.05%	0.083%	
88	7.434	7.421	7.467	VV	10429	195288	2.17%	0.088%	
89	7.489	7.467	7.509	VV	10582	184392	2.05%	0.083%	

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

90	7.528	7.509	7.542	VV	19302	262062	2.91%	0.118%
91	7.553	7.542	7.573	VV	15062	193175		
92	7.594	7.573	7.611	VV	18924	249786		
93	7.639	7.611	7.677	VV	25130	429717		
94	7.694	7.677	7.714	VV	18599	233714		
95	7.731	7.714	7.742	VV	5659	78993		
96	7.763	7.742	7.784	VV	27661	339750	3.77%	0.153%
97	7.800	7.784	7.826	VV	6548	126726	1.41%	0.057%
98	7.846	7.826	7.865	VV	9643	148207	1.65%	0.067%
99	7.905	7.865	7.916	VV	6589	174639	1.94%	0.079%
100	7.943	7.916	7.971	VV	231346	2422331	26.90%	1.089%
101	7.990	7.971	8.002	VV	10098	139400	1.55%	0.063%
102	8.028	8.002	8.069	VV	754411	7567120	84.03%	3.403%
103	8.082	8.069	8.104	VV	10172	162687	1.81%	0.073%
104	8.118	8.104	8.122	VV	5194	51440	0.57%	0.023%
105	8.136	8.122	8.160	VV	7129	123468	1.37%	0.056%
106	8.177	8.160	8.197	VV	4974	89438	0.99%	0.040%
107	8.226	8.197	8.274	VV	492178	5056253	56.15%	2.274%
108	8.287	8.274	8.297	VV	10878	121783	1.35%	0.055%
109	8.324	8.297	8.371	VV	808181	8023223	89.10%	3.608%
110	8.384	8.371	8.406	VV	11840	172953	1.92%	0.078%
111	8.427	8.406	8.450	VV	11924	191670	2.13%	0.086%
112	8.472	8.450	8.499	VV	30118	399678	4.44%	0.180%
113	8.524	8.499	8.570	VV	11470	215553	2.39%	0.097%
114	8.595	8.570	8.601	VV	3976	58677	0.65%	0.026%
115	8.615	8.601	8.632	VV	5087	78619	0.87%	0.035%
116	8.658	8.632	8.682	VV	58850	639146	7.10%	0.287%
117	8.693	8.682	8.708	VV	5790	78001	0.87%	0.035%
118	8.722	8.708	8.734	VV	5075	72518	0.81%	0.033%
119	8.757	8.734	8.795	VV	69527	843318	9.36%	0.379%
120	8.800	8.795	8.820	VV	3215	42774	0.48%	0.019%
121	8.841	8.820	8.860	VV	5986	96134	1.07%	0.043%
122	8.875	8.860	8.880	VV	3260	32523	0.36%	0.015%
123	8.884	8.880	8.887	VV	3306	14912	0.17%	0.007%
124	8.892	8.887	8.923	VV	3331	41415	0.46%	0.019%
125	8.944	8.923	8.957	VV	1871	30546	0.34%	0.014%
126	8.980	8.957	9.005	VV	2369	56123	0.62%	0.025%
127	9.033	9.005	9.047	VV	2404	47007	0.52%	0.021%
128	9.057	9.047	9.072	VV	2185	26827	0.30%	0.012%
129	9.102	9.072	9.159	VV	766605	8055691	89.46%	3.622%
130	9.173	9.159	9.192	VV	4952	76185	0.85%	0.034%
131	9.213	9.192	9.236	VV	5386	93987	1.04%	0.042%
132	9.257	9.236	9.279	VV	6804	95394	1.06%	0.043%
133	9.287	9.279	9.295	VV	2691	24198	0.27%	0.011%
134	9.313	9.295	9.341	VV	9103	123331	1.37%	0.055%
135	9.358	9.341	9.364	VV	2473	28174	0.31%	0.013%
136	9.384	9.364	9.437	VV	43353	526681	5.85%	0.237%
137	9.447	9.437	9.460	VV	2060	25417	0.28%	0.011%
138	9.480	9.460	9.503	VV	2929	56241	0.62%	0.025%
139	9.529	9.503	9.562	VV	132689	1423030	15.80%	0.640%
140	9.573	9.562	9.583	VV	1272	14147	0.16%	0.006%
141	9.604	9.583	9.668	VV	2093	60993	0.68%	0.027%

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

						rteres		WB-303-BOTMSD	
142	9.692	9.668	9.717	VV	937	14357	0.16%	0.006%	
143	9.743	9.717	9.779	PV	748	18042	Manual Integration : Reviewed By :Yog Supervised By :An		
144	9.781	9.779	9.783	VV	556	1433			
145	9.798	9.783	9.820	VV	981	16442			
146	9.843	9.820	9.847	VV	1027	12682			
147	9.852	9.847	9.857	VV	945	5208			
148	9.873	9.857	9.884	VV	2035	24711	0.27%	0.011%	
149	9.918	9.884	9.938	VV	4040	83817	0.93%	0.038%	
150	9.965	9.938	9.982	VV	1589	32880	0.37%	0.015%	
151	9.986	9.982	9.990	VV	1051	4929	0.05%	0.002%	
152	10.005	9.990	10.018	VV	1627	22559	0.25%	0.010%	
153	10.030	10.018	10.045	VV	1891	24898	0.28%	0.011%	
154	10.056	10.045	10.084	VV	1830	24233	0.27%	0.011%	
155	10.145	10.084	10.178	VV	1263	44987	0.50%	0.020%	
156	10.192	10.178	10.199	VV	976	10758	0.12%	0.005%	
157	10.216	10.199	10.221	VV	1123	14032	0.16%	0.006%	
158	10.264	10.221	10.270	VV	7602	92397	1.03%	0.042%	
159	10.282	10.270	10.323	VV	10618	210872	2.34%	0.095%	
160	10.337	10.323	10.364	VV	3198	57013	0.63%	0.026%	
161	10.389	10.364	10.422	VV	2395	52115	0.58%	0.023%	
162	10.455	10.422	10.460	VV	5203	53744	0.60%	0.024%	
163	10.490	10.460	10.533	VV	792666	8215084	91.23%	3.694%	
164	10.566	10.533	10.632	VV	745278	8315823	92.35%	3.739%	
165	10.639	10.632	10.669	VV	4324	82369	0.91%	0.037%	
166	10.679	10.669	10.702	VV	3133	53915	0.60%	0.024%	
167	10.716	10.702	10.745	VV	2587	56435	0.63%	0.025%	
168	10.765	10.745	10.802	VV	2766	72546	0.81%	0.033%	
169	10.829	10.802	10.859	VV	2615	75388	0.84%	0.034%	
170	10.867	10.859	10.876	VV	2466	23211	0.26%	0.010%	
171	10.894	10.876	10.912	VV	2711	52783	0.59%	0.024%	
172	10.961	10.912	11.010	VV	107725	1304328	14.48%	0.587%	
173	11.014	11.010	11.017	VV	2201	8954	0.10%	0.004%	
174	11.051	11.017	11.085	VV	3334	103782	1.15%	0.047%	
175	11.112	11.085	11.143	VV	2576	76407	0.85%	0.034%	
176	11.152	11.143	11.176	VV	2385	44074	0.49%	0.020%	
177	11.180	11.176	11.188	VV	2270	15973	0.18%	0.007%	
178	11.193	11.188	11.215	VV	2237	34332	0.38%	0.015%	
179	11.260	11.215	11.306	VV	589122	6216661	69.04%	2.795%	
180	11.312	11.306	11.333	VV	2977	46432	0.52%	0.021%	
181	11.343	11.333	11.352	VV	3209	33959	0.38%	0.015%	
182	11.355	11.352	11.380	VV	3266	48650	0.54%	0.022%	
183	11.414	11.380	11.458	VV	4802	166498	1.85%	0.075%	
184	11.473	11.458	11.505	VV	3437	81981	0.91%	0.037%	
185	11.540	11.505	11.561	VV	3090	94373	1.05%	0.042%	
186	11.565	11.561	11.574	VV	2992	20020	0.22%	0.009%	
187	11.614	11.574	11.657	VV	4322	169986	1.89%	0.076%	
188	11.680	11.657	11.703	VV	7998	139829	1.55%	0.063%	
189	11.709	11.703	11.730	VV	3562	51308	0.57%	0.023%	
190	11.750	11.730	11.758	VV	3045	45025	0.50%	0.020%	
191	11.762	11.758	11.777	VV	2911	31385	0.35%	0.014%	
192	11.782	11.777	11.797	VV	2806	32662	0.36%	0.015%	
193	11.810	11.797	11.822	VV	2848	41228	0.46%	0.019%	
194	11.842	11.822	11.855	VV	3397	63326	0.70%	0.028%	

195	11.875	11.855	11.900	VV	16021	228648	2.54%	0.103%
196	11.907	11.900	11.943	VV	4500	99681		
197	11.958	11.943	11.975	VV	3401	59217		
198	11.986	11.975	12.016	VV	3043	71750		
199	12.033	12.016	12.037	VV	3047	35971		
200	12.042	12.037	12.055	VV	3106	32298		
201	12.078	12.055	12.114	VV	5153	136976	1.52%	0.062%
202	12.130	12.114	12.151	VV	5387	92106	1.02%	0.041%
203	12.172	12.151	12.187	VV	3523	70738	0.79%	0.032%
204	12.224	12.187	12.237	VV	6704	136612	1.52%	0.061%
205	12.264	12.237	12.270	VV	106650	1075699	11.95%	0.484%
206	12.295	12.270	12.405	VV	736858	8803572	97.76%	3.959%
207	12.410	12.405	12.426	VV	3735	45739	0.51%	0.021%
208	12.437	12.426	12.442	VV	3655	33073	0.37%	0.015%
209	12.475	12.442	12.504	VV	10400	206360	2.29%	0.093%
210	12.541	12.504	12.550	VV	4386	109408	1.21%	0.049%
211	12.589	12.550	12.628	VV	768992	9005041	100.00%	4.049%
212	12.648	12.628	12.672	VV	11375	222126	2.47%	0.100%
213	12.700	12.672	12.730	VV	141853	1708609	18.97%	0.768%
214	12.773	12.730	12.789	VV	6046	194023	2.15%	0.087%
215	12.825	12.789	12.839	VV	5994	167556	1.86%	0.075%
216	12.870	12.839	12.901	VV	100339	1335864	14.83%	0.601%
217	12.924	12.901	12.949	VV	10733	233066	2.59%	0.105%
218	12.954	12.949	12.967	VV	6266	66635	0.74%	0.030%
219	12.989	12.967	12.997	VV	6660	117056	1.30%	0.053%
220	13.009	12.997	13.025	VV	7092	112958	1.25%	0.051%
221	13.038	13.025	13.044	VV	6358	68292	0.76%	0.031%
222	13.063	13.044	13.070	VV	7048	107167	1.19%	0.048%
223	13.099	13.070	13.150	VV	11604	398074	4.42%	0.179%
224	13.160	13.150	13.180	VV	7583	132390	1.47%	0.060%
225	13.185	13.180	13.197	VV	7277	70818	0.79%	0.032%
226	13.211	13.197	13.236	VV	7420	167529	1.86%	0.075%
227	13.249	13.236	13.260	VV	7380	104975	1.17%	0.047%
228	13.301	13.260	13.317	VV	7824	253870	2.82%	0.114%
229	13.327	13.317	13.342	VV	8255	119260	1.32%	0.054%
230	13.347	13.342	13.354	VV	7673	51223	0.57%	0.023%
231	13.371	13.354	13.380	VV	7496	115692	1.28%	0.052%
232	13.405	13.380	13.422	VV	8536	201520	2.24%	0.091%
233	13.453	13.422	13.491	VV	101850	1423944	15.81%	0.640%
234	13.503	13.491	13.527	VV	7622	157139	1.75%	0.071%
235	13.545	13.527	13.569	VV	8229	192170	2.13%	0.086%
236	13.579	13.569	13.589	VV	7841	90973	1.01%	0.041%
237	13.593	13.589	13.617	VV	7666	123637	1.37%	0.056%
238	13.633	13.617	13.652	VV	7899	157915	1.75%	0.071%
239	13.655	13.652	13.663	VV	7284	46729	0.52%	0.021%
240	13.681	13.663	13.699	VV	7458	155497	1.73%	0.070%
241	13.703	13.699	13.716	VV	7367	75223	0.84%	0.034%
242	13.720	13.716	13.744	VV	7178	118035	1.31%	0.053%
243	13.758	13.744	13.769	VV	7305	107187	1.19%	0.048%
244	13.774	13.769	13.779	VV	7017	38568	0.43%	0.017%
245	13.789	13.779	13.798	VV	7082	81334	0.90%	0.037%
246	13.804	13.798	13.810	VV	7025	50170	0.56%	0.023%

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

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247	13.817	13.810	13.827	VV	7301	68346
248	13.865	13.827	13.909	VV	10310	402092
249	13.929	13.909	13.967	VV	7558	240526
250	13.972	13.967	13.992	VV	6542	97025
251	14.014	13.992	14.055	VV	7235	253646
252	14.068	14.055	14.087	VV	7053	127013
253	14.101	14.087	14.122	VV	6644	133977
254	14.148	14.122	14.152	VV	6412	109193
255	14.158	14.152	14.187	VV	6477	126768
256	14.209	14.187	14.225	VV	6087	137797
257	14.235	14.225	14.264	VV	6337	139145
258	14.269	14.264	14.274	VV	5748	31870
259	14.288	14.274	14.299	VV	5766	84488
260	14.307	14.299	14.326	VV	5916	93359
261	14.346	14.326	14.374	VV	5798	163011
262	14.378	14.374	14.388	VV	5603	47851
263	14.396	14.388	14.412	VV	5768	77896
264	14.458	14.412	14.476	VV	617919	8083594
265	14.502	14.476	14.526	VV	706153	8152653
266	14.550	14.526	14.630	VV	96347	1515615
267	14.634	14.630	14.639	VV	5534	27374
268	14.643	14.639	14.704	VV	5594	202261
269	14.737	14.704	14.769	VV	5256	189393
270	14.775	14.769	14.787	VV	4723	51428
271	14.791	14.787	14.812	VV	4685	67645
272	14.824	14.812	14.841	VV	4758	79579
273	14.848	14.841	14.862	VV	4558	56142
274	14.883	14.862	14.897	VV	6929	119874
275	14.923	14.897	14.964	VV	23871	464392
276	14.970	14.964	14.990	VV	6220	88127
277	14.995	14.990	15.020	VV	5113	86201
278	15.028	15.020	15.042	VV	4639	57809
279	15.075	15.042	15.107	VV	6366	195711
280	15.118	15.107	15.156	VV	4351	115377
281	15.160	15.156	15.166	VV	3785	22328
282	15.181	15.166	15.227	VV	3886	134030
283	15.266	15.227	15.317	VV	4105	196110
284	15.337	15.317	15.349	VV	3384	62524
285	15.393	15.349	15.402	VV	3808	113059
286	15.408	15.402	15.417	VV	3704	32121
287	15.434	15.417	15.440	VV	4060	50802
288	15.447	15.440	15.487	VV	4103	101236
289	15.493	15.487	15.504	VV	3261	30955
290	15.524	15.504	15.533	VV	3446	56592
291	15.567	15.533	15.600	VV	82220	1158932
292	15.606	15.600	15.661	VV	3444	108435
293	15.670	15.661	15.689	VV	2592	40652
294	15.727	15.689	15.757	VV	3266	108894
295	15.761	15.757	15.770	VV	2454	18805
296	15.780	15.770	15.794	VV	2462	33201
297	15.820	15.794	15.852	VV	2647	88221
298	15.903	15.852	15.910	VV	2757	89917
299	15.934	15.910	15.964	VV	4271	107575

Instrument :

FID_D

ClientSampleId :

WB-303-BOTMSD

0.76% 0.031%

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

1.49% 0.060%

1.21% 0.049%

1.41% 0.057%

1.53% 0.062%

1.55% 0.063%

0.35% 0.014%

0.94% 0.038%

1.04% 0.042%

1.81% 0.073%

0.53% 0.022%

0.87% 0.035%

89.77% 3.635%

90.53% 3.666%

16.83% 0.682%

0.30% 0.012%

2.25% 0.091%

2.10% 0.085%

0.57% 0.023%

0.75% 0.030%

0.88% 0.036%

0.62% 0.025%

1.33% 0.054%

5.16% 0.209%

0.98% 0.040%

0.96% 0.039%

0.64% 0.026%

2.17% 0.088%

1.28% 0.052%

0.25% 0.010%

1.49% 0.060%

2.18% 0.088%

0.69% 0.028%

1.26% 0.051%

0.36% 0.014%

0.56% 0.023%

1.12% 0.046%

0.34% 0.014%

0.63% 0.025%

12.87% 0.521%

1.20% 0.049%

0.45% 0.018%

1.21% 0.049%

0.21% 0.008%

0.37% 0.015%

0.98% 0.040%

1.00% 0.040%

1.19% 0.048%

300	16.005	15.964	16.020	VV	549103	7824560	86.89%	3.518%
301	16.040	16.020	16.099	VV	668113	7919704	87.12%	3.518%
302	16.120	16.099	16.154	VV	6969	144770	1.21%	0.049%
303	16.175	16.154	16.235	VV	4087	146151	0.56%	0.023%
304	16.257	16.235	16.309	VV	4631	127621	0.24%	0.010%
305	16.321	16.309	16.339	VV	2198	37879	0.28%	0.011%
306	16.382	16.339	16.455	VV	572492	7588338	13.04%	0.528%
307	16.509	16.455	16.540	VV	77404	1174234	1.21%	0.049%
308	16.552	16.540	16.639	VV	3576	108686	0.56%	0.023%
309	16.684	16.639	16.700	VV	1562	50240	0.24%	0.010%
310	16.711	16.700	16.727	VV	1638	21631	0.28%	0.011%
311	16.738	16.727	16.765	VV	1275	25128	0.75%	0.031%
312	16.804	16.765	16.848	VV	1946	67929	0.66%	0.027%
313	16.871	16.848	16.919	VV	2006	59740	0.84%	0.034%
314	16.955	16.919	17.004	VV	3003	75727	0.25%	0.010%
315	17.028	17.004	17.050	VV	1000	22845	0.24%	0.010%
316	17.073	17.050	17.094	VV	1000	21348	0.10%	0.004%
317	17.098	17.094	17.116	VV	798	9266	0.12%	0.005%
318	17.126	17.116	17.150	VV	638	10854	0.31%	0.012%
319	17.182	17.150	17.224	VV	991	27600	0.48%	0.019%
320	17.283	17.224	17.307	VV	1467	43197	0.13%	0.005%
321	17.320	17.307	17.331	VV	980	11766	11.56%	0.468%
322	17.393	17.331	17.444	VV	78044	1041143	0.48%	0.020%
323	17.481	17.444	17.549	VV	1631	43529	0.05%	0.002%
324	17.556	17.549	17.582	VV	352	4608	0.09%	0.004%
325	17.605	17.582	17.627	VV	548	8136	0.02%	0.001%
326	17.638	17.627	17.652	PV	174	1735	0.12%	0.005%
327	17.687	17.652	17.701	VV	744	10663	89.21%	3.612%
328	17.749	17.701	17.763	VV	561603	8033492	84.37%	3.416%
329	17.786	17.763	17.955	VV	553870	7597757	81.10%	3.284%
330	18.000	17.955	18.147	VV	501807	7303441	0.04%	0.002%
331	18.167	18.147	18.179	PV	416	3498		
Sum of corrected areas:					222385460			

Instrument :
FID_D
ClientSampleId :
WB-303-BOTMSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

Aromatic EPH 093024.M Wed Oct 23 08:00:31 2024

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-303-BOTMSD	SDG No.:	P4471
Lab Sample ID:	P4460-03MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.1
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
10/22/24 09:40	10/23/24 6:04	PB164309

Datafile

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	13.4		1	0.47	1.25	mg/kg	FC067493.D
Aliphatic C12-C16	Aliphatic C12-C16	52.0	E	1	0.30	0.83	mg/kg	FC067493.D
Aliphatic C16-C21	Aliphatic C16-C21	19.1		1	0.37	1.25	mg/kg	FC067493.D
Aliphatic C21-C28	Aliphatic C21-C28	30.7		1	1.00	1.66	mg/kg	FC067493.D
Aliphatic C28-C40	Aliphatic C28-C40	30.7		1	2.24	2.49	mg/kg	FC067493.D
Aromatic C10-C12	Aromatic C10-C12	12.6		1	0.37	0.83	mg/kg	FD048556.D
Aromatic C12-C16	Aromatic C12-C16	19.2		1	0.42	1.25	mg/kg	FD048556.D
Aromatic C16-C21	Aromatic C16-C21	25.3		1	1.20	2.08	mg/kg	FD048556.D
Aromatic C21-C36	Aromatic C21-C36	41.5		1	2.49	3.32	mg/kg	FD048556.D
Total AliphaticEPH	Total AliphaticEPH	146			4.38	7.48	mg/kg	
Total AromaticEPH	Total AromaticEPH	98.6			4.49	7.48	mg/kg	
Total EPH	Total EPH	245			8.87	15.0	mg/kg	

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-303-BOTMSD	SDG No.:	P4471
Lab Sample ID:	P4460-03MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	80.1
Sample Wt/Vol:	30.05 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC067493.D	1	10/22/24	10/23/24	PB164309

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	13.4		0.47	1.25	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	52.0	E	0.30	0.83	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	19.1		0.37	1.25	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	30.7		1.00	1.66	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	30.7		2.24	2.49	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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4460-03MSD	Acq On:	23 Oct 2024 06:04
Client Sample ID:	WB-303-BOTMSD	Operator:	YP/AJ
Data file:	FC067493.D	Misc:	
Instrument:	FID_C	ALS Vial:	19
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.175	6.455	20626184	160.697	300	ug/ml
Aliphatic C12-C16	6.456	9.845	82030665	626.391	200	ug/ml
Aliphatic C16-C21	9.846	13.203	30240713	230.009	300	ug/ml
Aliphatic C21-C28	13.204	16.857	46878638	369.636	400	ug/ml
Aliphatic C28-C40	16.858	21.701	38886916	369.592	600	ug/ml
Aliphatic EPH	3.175	21.701	218663116	1760		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.937	12.937	3543503	31.3		ug/ml
Aliphatic C9-C28	3.175	16.857	179776200	1390	1200	ug/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\F102224AL\
 Data File : FC067493.D
 Signal(s) : FID1A.ch
 Acq On : 23 Oct 2024 06:04
 Operator : YP/AJ
 Sample : P4460-03MSD
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 FID_C
 ClientSampleId :
 WB-303-BOTMSD

Manual Integrations
 APPROVED

Reviewed By :Yogesh Patel 10/23/2024
 Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e
 Quant Time: Oct 23 07:10:30 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
 Quant Title : GC Extractables
 QLast Update : Tue Oct 01 09:13:32 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	3543503	31.305 ug/mlm
Spiked Amount 50.000		Recovery =	62.61%
Target Compounds			
1) T n-Nonane (C9)	3.274	3154930	24.889 ug/ml
2) T n-Decane (C10)	4.340	3977939	30.947 ug/ml
4) T n-Dodecane (C12)	6.357	7279911	56.102 ug/ml
6) T n-Tetradecane (C14)	8.153	10288528	79.882 ug/mlm
7) T n-Hexadecane (C16)	9.749	6502212	48.845 ug/ml
8) T n-Octadecane (C18)	11.187	5571827	41.090 ug/ml
10) T n-Eicosane (C20)	12.495	5615180	43.005 ug/ml
11) T n-Heneicosane (C21)	13.107	5383307	41.973 ug/mlm
13) T n-Docosane (C22)	13.691	5482947	42.940 ug/ml
14) T n-Tetracosane (C24)	14.793	5315369	41.561 ug/ml
15) T n-Hexacosane (C26)	15.812	5316897	42.169 ug/ml
16) T n-Octacosane (C28)	16.761	5232176	41.648 ug/ml
17) T n-Tricontane (C30)	17.647	5250715	40.759 ug/ml
18) T n-Dotriacontane (C32)	18.478	5215577	41.749 ug/ml
19) T n-Tetratriacontane (C34)	19.261	5278547	48.304 ug/ml
20) T n-Hexatriacontane (C36)	19.998	5246311	55.506 ug/ml
21) T n-Octatriacontane (C38)	20.723	5369622	61.227 ug/ml
22) T n-Tetracontane (C40)	21.610	5446080	63.291 ug/ml

(f)=RT Delta > 1/2 Window

(m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102224AL\
Data File : FC067493.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 06:04
Operator : YP/AJ
Sample : P4460-03MSD
Misc :
ALS Vial : 19 Sample Multiplier: 1

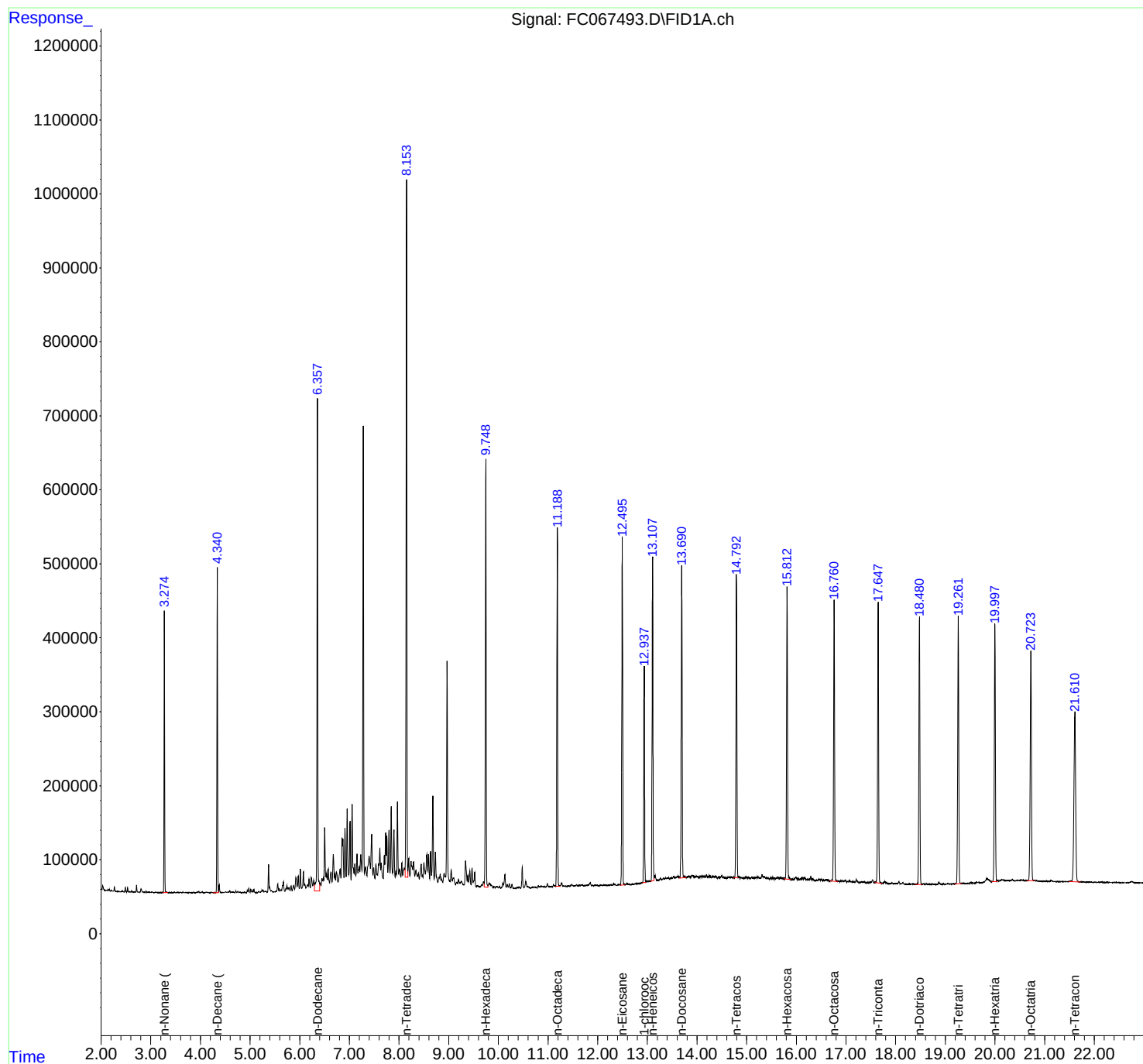
Instrument :
FID_C
ClientSampleId :
WB-303-BOTMSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

Integration File: autoint1.e
Quant Time: Oct 23 07:10:30 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.M
Quant Title : GC Extractables
QLast Update : Tue Oct 01 09:13:32 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 :

WB-303-BOTMSD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC10222

Data File : FC067493.D

Signal(s) : FID1A.ch

Acq On : 23 Oct 2024 06:04

Sample : P4460-03MSD

Misc :

ALS Vial : 19 Sample Multiplier: 1

Reviewed By :Yogesh Patel 10/23/2024

Supervised By :Ankita Jodhani 10/23/2024

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 100224.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	3.205	3.355	BV	378429	3159484	27.03%	1.445%
2	3.372	3.355	3.383	VV	293	2699	0.02%	0.001%
3	3.396	3.383	3.409	VV	333	3385	0.03%	0.002%
4	3.421	3.409	3.435	VV	240	2564	0.02%	0.001%
5	3.475	3.435	3.499	VV	458	8218	0.07%	0.004%
6	3.552	3.499	3.569	VV	574	12192	0.10%	0.006%
7	3.598	3.569	3.627	PV	495	9316	0.08%	0.004%
8	3.646	3.627	3.677	VV	753	9022	0.08%	0.004%
9	3.699	3.677	3.711	VV	262	3591	0.03%	0.002%
10	3.716	3.711	3.751	VV	293	3368	0.03%	0.002%
11	3.766	3.751	3.800	VV	342	5013	0.04%	0.002%
12	3.811	3.800	3.831	VV	228	2241	0.02%	0.001%
13	3.858	3.831	3.904	VV	592	13031	0.11%	0.006%
14	3.940	3.904	3.953	PV	1603	21244	0.18%	0.010%
15	3.969	3.953	3.987	VV	2364	22595	0.19%	0.010%
16	4.002	3.987	4.014	VV	540	5543	0.05%	0.003%
17	4.035	4.014	4.061	VV	1881	20054	0.17%	0.009%
18	4.117	4.061	4.132	VV	1310	20356	0.17%	0.009%
19	4.145	4.132	4.175	VV	780	11144	0.10%	0.005%
20	4.216	4.198	4.232	VV	1387	13264	0.11%	0.006%
21	4.253	4.232	4.272	VV	445	6389	0.05%	0.003%
22	4.292	4.272	4.310	VV	470	6117	0.05%	0.003%
23	4.340	4.310	4.365	VV	438271	3989568	34.13%	1.824%
24	4.380	4.365	4.431	VV	11057	117114	1.00%	0.054%
25	4.444	4.431	4.471	VV	522	9051	0.08%	0.004%
26	4.506	4.471	4.525	VV	1546	26377	0.23%	0.012%
27	4.537	4.525	4.549	VV	920	11479	0.10%	0.005%
28	4.563	4.549	4.576	VV	1598	17029	0.15%	0.008%
29	4.593	4.576	4.608	VV	3312	33000	0.28%	0.015%
30	4.620	4.608	4.632	VV	1365	13209	0.11%	0.006%
31	4.647	4.632	4.681	VV	1169	22458	0.19%	0.010%
32	4.713	4.681	4.731	VV	2151	29766	0.25%	0.014%
33	4.754	4.731	4.774	VV	2096	28403	0.24%	0.013%
34	4.789	4.774	4.799	VV	1209	12426	0.11%	0.006%
35	4.808	4.799	4.836	VV	1273	13602	0.12%	0.006%
36	4.862	4.836	4.876	VV	975	12045	0.10%	0.006%

					retention			
37	4.892	4.876	4.917	VV	1028	14407	0.12%	0.007%
38	4.947	4.917	4.959	PV	3476	35325	0.00%	0.000%
39	4.975	4.959	5.000	VV	6179	78853	0.00%	0.000%
40	5.017	5.000	5.039	VV	4730	59310	0.00%	0.000%
41	5.054	5.039	5.064	VV	2990	29745	0.00%	0.000%
42	5.078	5.064	5.117	VV	4859	55684	0.00%	0.000%
43	5.132	5.117	5.152	PV	490	5992	0.05%	0.003%
44	5.175	5.152	5.199	VV	2101	29430	0.25%	0.013%
45	5.241	5.199	5.252	VV	3587	56235	0.48%	0.026%
46	5.263	5.252	5.280	VV	3675	37988	0.32%	0.017%
47	5.302	5.280	5.348	VV	1856	50313	0.43%	0.023%
48	5.374	5.348	5.420	VV	38087	470622	4.03%	0.215%
49	5.431	5.420	5.458	VV	2835	44612	0.38%	0.020%
50	5.469	5.458	5.479	VV	1037	11716	0.10%	0.005%
51	5.522	5.479	5.533	VV	1761	43594	0.37%	0.020%
52	5.557	5.533	5.576	VV	11704	159587	1.37%	0.073%
53	5.587	5.576	5.604	VV	5560	61233	0.52%	0.028%
54	5.622	5.604	5.634	VV	3676	51573	0.44%	0.024%
55	5.671	5.634	5.701	VV	14198	280701	2.40%	0.128%
56	5.742	5.701	5.755	VV	9596	167165	1.43%	0.076%
57	5.764	5.755	5.774	VV	6426	63527	0.54%	0.029%
58	5.786	5.774	5.805	VV	6674	95735	0.82%	0.044%
59	5.827	5.805	5.848	VV	8761	134160	1.15%	0.061%
60	5.877	5.848	5.898	VV	9149	180189	1.54%	0.082%
61	5.924	5.898	5.950	VV	19645	391207	3.35%	0.179%
62	5.971	5.950	5.993	VV	22276	329794	2.82%	0.151%
63	6.014	5.993	6.041	VV	31532	406018	3.47%	0.186%
64	6.075	6.041	6.095	VV	27881	426379	3.65%	0.195%
65	6.105	6.095	6.125	VV	10561	157785	1.35%	0.072%
66	6.161	6.125	6.172	VV	10438	226277	1.94%	0.103%
67	6.189	6.172	6.214	VV	17638	290286	2.48%	0.133%
68	6.236	6.214	6.263	VV	19453	376723	3.22%	0.172%
69	6.284	6.263	6.299	VV	15822	262538	2.25%	0.120%
70	6.357	6.299	6.428	VV	666284	7528207	64.40%	3.443%
71	6.449	6.428	6.464	VV	18187	316917	2.71%	0.145%
72	6.504	6.464	6.530	VV	86928	1398885	11.97%	0.640%
73	6.542	6.530	6.559	VV	25612	389589	3.33%	0.178%
74	6.575	6.559	6.602	VV	30946	515745	4.41%	0.236%
75	6.630	6.602	6.652	VV	26760	608650	5.21%	0.278%
76	6.677	6.652	6.701	VV	50235	925183	7.91%	0.423%
77	6.711	6.701	6.724	VV	23958	282780	2.42%	0.129%
78	6.742	6.724	6.773	VV	26914	600040	5.13%	0.274%
79	6.813	6.773	6.831	VV	30578	756205	6.47%	0.346%
80	6.855	6.831	6.892	VV	72628	1802780	15.42%	0.824%
81	6.913	6.892	6.936	VV	85653	1182064	10.11%	0.541%
82	6.957	6.936	6.988	VV	111191	1649385	14.11%	0.754%
83	7.014	6.988	7.035	VV	95420	1329776	11.38%	0.608%
84	7.057	7.035	7.094	VV	117877	1811098	15.49%	0.828%
85	7.111	7.094	7.130	VV	37318	643138	5.50%	0.294%
86	7.155	7.130	7.173	VV	51096	869604	7.44%	0.398%
87	7.200	7.173	7.212	VV	33671	692706	5.93%	0.317%
88	7.229	7.212	7.253	VV	49537	956444	8.18%	0.437%
89	7.281	7.253	7.306	VV	626749	7050578	60.32%	3.224%

Instrument :

FID_C

ClientSampleId :

WB-303-BOTMSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

							Instrument : FID_C	
							ClientSampleId : WB-303-BOTMSD	
	Parameters							
90	7.327	7.306	7.354	VV	32981	796410	6.81%	0.364%
							Manual IntegrationsAPPROVED	
91	7.399	7.354	7.424	VV	47709	1542014	13.84%	0.793%
92	7.450	7.424	7.476	VV	77938	1499855	12.58%	0.619%
93	7.490	7.476	7.514	VV	32022	569208	2.98%	0.159%
94	7.536	7.514	7.571	VV	37033	889831	7.81%	0.738%
95	7.615	7.571	7.631	VV	58466	1362643	11.75%	0.308%
96	7.642	7.631	7.680	VV	38469	810926	6.94%	0.371%
97	7.704	7.680	7.714	VV	48346	677065	5.79%	0.310%
98	7.732	7.714	7.745	VV	79034	1086464	9.29%	0.497%
99	7.756	7.745	7.775	VV	75007	935157	8.00%	0.428%
100	7.798	7.775	7.819	VV	82206	1269430	10.86%	0.581%
101	7.844	7.819	7.870	VV	114770	1734247	14.84%	0.793%
102	7.899	7.870	7.923	VV	82417	1353176	11.58%	0.619%
103	7.938	7.923	7.947	VV	26796	348593	2.98%	0.159%
104	7.969	7.947	7.993	VV	119792	1613799	13.81%	0.738%
105	8.012	7.993	8.038	VV	28700	672633	5.75%	0.308%
106	8.057	8.038	8.076	VV	37536	632970	5.41%	0.289%
107	8.153	8.076	8.180	VV	944616	11689439	100.00%	5.346%
108	8.196	8.180	8.219	VV	44017	759663	6.50%	0.347%
109	8.243	8.219	8.276	VV	39613	1066699	9.13%	0.488%
110	8.294	8.276	8.318	VV	39595	783128	6.70%	0.358%
111	8.341	8.318	8.372	VV	27854	758271	6.49%	0.347%
112	8.391	8.372	8.409	VV	24085	448662	3.84%	0.205%
113	8.447	8.409	8.484	VV	36195	1085518	9.29%	0.496%
114	8.503	8.484	8.531	VV	38222	792804	6.78%	0.363%
115	8.562	8.531	8.580	VV	48883	1062318	9.09%	0.486%
116	8.595	8.580	8.617	VV	48840	747562	6.40%	0.342%
117	8.636	8.617	8.655	VV	52239	754297	6.45%	0.345%
118	8.683	8.655	8.710	VV	127346	1885342	16.13%	0.862%
119	8.734	8.710	8.782	VV	52320	1067919	9.14%	0.488%
120	8.830	8.782	8.850	VV	21990	681340	5.83%	0.312%
121	8.862	8.850	8.881	VV	14605	242247	2.07%	0.111%
122	8.909	8.881	8.931	VV	22996	556516	4.76%	0.254%
123	8.969	8.931	9.018	VV	311085	4024712	34.43%	1.841%
124	9.052	9.018	9.074	VV	27369	594198	5.08%	0.272%
125	9.095	9.074	9.138	VV	16907	524736	4.49%	0.240%
126	9.160	9.138	9.179	VV	10765	237518	2.03%	0.109%
127	9.201	9.179	9.236	VV	13798	381062	3.26%	0.174%
128	9.251	9.236	9.310	VV	12022	427303	3.66%	0.195%
129	9.341	9.310	9.373	VV	39540	826149	7.07%	0.378%
130	9.385	9.373	9.402	VV	19942	277530	2.37%	0.127%
131	9.427	9.402	9.449	VV	25929	464320	3.97%	0.212%
132	9.472	9.449	9.492	VV	30101	451624	3.86%	0.207%
133	9.525	9.492	9.554	VV	24385	484606	4.15%	0.222%
134	9.579	9.554	9.638	VV	6160	250837	2.15%	0.115%
135	9.663	9.638	9.677	VV	7537	140642	1.20%	0.064%
136	9.702	9.677	9.716	VV	11196	210226	1.80%	0.096%
137	9.749	9.716	9.791	VV	581140	6676928	57.12%	3.053%
138	9.818	9.791	9.898	VV	9202	417478	3.57%	0.191%
139	9.918	9.898	9.936	VV	4748	91659	0.78%	0.042%
140	9.957	9.936	10.000	VV	4607	143923	1.23%	0.066%
141	10.020	10.000	10.045	VV	4141	91703	0.78%	0.042%

WB-303-BOTMSD							WB-303-BOTMSD	
142	10.092	10.045	10.105	VV	9361	184463	1.58%	0.084%
143	10.133	10.105	10.159	VV	20488	365898	3.06%	0.094%
144	10.180	10.159	10.201	VV	7018	127065	1.12%	0.084%
145	10.222	10.201	10.248	VV	7936	141091	1.12%	0.084%
146	10.276	10.248	10.305	VV	7391	135127	1.12%	0.084%
147	10.331	10.305	10.355	VV	2003	56096	0.46%	0.024%
148	10.379	10.355	10.393	VV	2686	53545	0.46%	0.024%
149	10.413	10.393	10.441	VV	3479	79521	0.68%	0.036%
150	10.482	10.441	10.521	VV	30320	443274	3.79%	0.203%
151	10.554	10.521	10.588	VV	10747	240618	2.06%	0.110%
152	10.599	10.588	10.629	VV	3962	79195	0.68%	0.036%
153	10.644	10.629	10.659	VV	2358	40012	0.34%	0.018%
154	10.682	10.659	10.701	VV	3100	66411	0.57%	0.030%
155	10.720	10.701	10.745	VV	3190	76085	0.65%	0.035%
156	10.756	10.745	10.781	VV	3028	58853	0.50%	0.027%
157	10.805	10.781	10.837	VV	4574	117617	1.01%	0.054%
158	10.858	10.837	10.884	VV	4438	110396	0.94%	0.050%
159	10.895	10.884	10.918	VV	4004	70581	0.60%	0.032%
160	10.936	10.918	10.955	VV	3996	73405	0.63%	0.034%
161	10.988	10.955	11.048	VV	7934	240787	2.06%	0.110%
162	11.075	11.048	11.091	VV	3945	92379	0.79%	0.042%
163	11.114	11.091	11.142	VV	5980	139099	1.19%	0.064%
164	11.187	11.142	11.244	VV	488155	5808210	49.69%	2.656%
165	11.275	11.244	11.325	VV	8340	260036	2.22%	0.119%
166	11.342	11.325	11.367	VV	4315	96249	0.82%	0.044%
167	11.409	11.367	11.438	VV	4150	162964	1.39%	0.075%
168	11.482	11.438	11.525	VV	6144	249768	2.14%	0.114%
169	11.551	11.525	11.560	VV	4965	94524	0.81%	0.043%
170	11.579	11.560	11.605	VV	5300	127102	1.09%	0.058%
171	11.637	11.605	11.655	VV	4841	138214	1.18%	0.063%
172	11.674	11.655	11.692	VV	5659	110566	0.95%	0.051%
173	11.706	11.692	11.716	VV	4716	65820	0.56%	0.030%
174	11.739	11.716	11.770	VV	4483	144513	1.24%	0.066%
175	11.794	11.770	11.807	VV	5143	103801	0.89%	0.047%
176	11.851	11.807	11.878	VV	8549	259701	2.22%	0.119%
177	11.897	11.878	11.925	VV	4477	119689	1.02%	0.055%
178	11.980	11.925	12.024	VV	4729	257464	2.20%	0.118%
179	12.071	12.024	12.095	VV	4881	181209	1.55%	0.083%
180	12.127	12.095	12.174	VV	5015	214279	1.83%	0.098%
181	12.185	12.174	12.203	VV	4466	74977	0.64%	0.034%
182	12.265	12.203	12.291	VV	5188	238637	2.04%	0.109%
183	12.318	12.291	12.383	VV	6525	276451	2.36%	0.126%
184	12.427	12.383	12.455	VV	5574	205975	1.76%	0.094%
185	12.495	12.455	12.552	VV	473385	5880605	50.31%	2.689%
186	12.594	12.552	12.621	VV	6597	233683	2.00%	0.107%
187	12.640	12.621	12.660	VV	5684	121216	1.04%	0.055%
188	12.709	12.660	12.724	VV	5475	195815	1.68%	0.090%
189	12.749	12.724	12.792	VV	6197	229895	1.97%	0.105%
190	12.820	12.792	12.835	VV	6656	163210	1.40%	0.075%
191	12.860	12.835	12.871	VV	7101	142071	1.22%	0.065%
192	12.936	12.871	12.969	VV	302779	3977796	34.03%	1.819%
193	13.035	12.969	13.055	VV	9806	460964	3.94%	0.211%
194	13.106	13.055	13.136	VV	444060	5843638	49.99%	2.672%

195	13.155	13.136	13.196	VV	16782	482868	4.13%	0.221%
196	13.206	13.196	13.228	VV	10587	194670		
197	13.263	13.228	13.285	VV	13116	397753		
198	13.326	13.285	13.348	VV	12622	449452		
199	13.369	13.348	13.391	VV	13620	330125		
200	13.411	13.391	13.447	VV	13282	430835		
201	13.458	13.447	13.465	VV	12603	134300	1.15%	0.061%
202	13.496	13.465	13.505	VV	13450	310552	2.66%	0.142%
203	13.532	13.505	13.554	VV	15293	412624	3.53%	0.189%
204	13.593	13.554	13.618	VV	14718	547701	4.69%	0.250%
205	13.631	13.618	13.652	VV	14804	294888	2.52%	0.135%
206	13.691	13.652	13.801	VV	435067	6672186	57.08%	3.051%
207	13.842	13.801	13.861	VV	15202	526573	4.50%	0.241%
208	13.904	13.861	13.965	VV	16411	934353	7.99%	0.427%
209	13.988	13.965	14.041	VV	15482	667592	5.71%	0.305%
210	14.071	14.041	14.111	VV	14842	608479	5.21%	0.278%
211	14.128	14.111	14.171	VV	15140	520415	4.45%	0.238%
212	14.191	14.171	14.223	VV	17121	465129	3.98%	0.213%
213	14.250	14.223	14.281	VV	16009	510168	4.36%	0.233%
214	14.307	14.281	14.327	VV	14758	394567	3.38%	0.180%
215	14.337	14.327	14.370	VV	14768	364946	3.12%	0.167%
216	14.382	14.370	14.411	VV	14212	333335	2.85%	0.152%
217	14.419	14.411	14.426	VV	13018	113151	0.97%	0.052%
218	14.450	14.426	14.468	VV	14076	336628	2.88%	0.154%
219	14.493	14.468	14.531	VV	15191	530139	4.54%	0.242%
220	14.540	14.531	14.568	VV	13424	280009	2.40%	0.128%
221	14.574	14.568	14.609	VV	12584	307484	2.63%	0.141%
222	14.657	14.609	14.690	VV	13326	629473	5.38%	0.288%
223	14.699	14.690	14.753	VV	13601	485421	4.15%	0.222%
224	14.793	14.753	14.833	VV	410030	5909091	50.55%	2.702%
225	14.844	14.833	14.951	VV	13893	874440	7.48%	0.400%
226	14.987	14.951	15.017	VV	13341	492243	4.21%	0.225%
227	15.026	15.017	15.030	VV	12700	99952	0.86%	0.046%
228	15.040	15.030	15.075	VV	12956	324743	2.78%	0.149%
229	15.092	15.075	15.106	VV	12487	227639	1.95%	0.104%
230	15.119	15.106	15.138	VV	12424	228183	1.95%	0.104%
231	15.171	15.138	15.185	VV	12580	343589	2.94%	0.157%
232	15.208	15.185	15.271	VV	12780	628344	5.38%	0.287%
233	15.309	15.271	15.344	VV	16300	586520	5.02%	0.268%
234	15.358	15.344	15.393	VV	13286	361756	3.09%	0.165%
235	15.400	15.393	15.428	VV	11668	244447	2.09%	0.112%
236	15.434	15.428	15.463	VV	11760	225822	1.93%	0.103%
237	15.496	15.463	15.515	VV	11821	351062	3.00%	0.161%
238	15.528	15.515	15.552	VV	11935	256085	2.19%	0.117%
239	15.562	15.552	15.581	VV	11429	189902	1.62%	0.087%
240	15.636	15.581	15.651	VV	11957	476040	4.07%	0.218%
241	15.665	15.651	15.695	VV	11861	298553	2.55%	0.137%
242	15.699	15.695	15.751	VV	11762	368458	3.15%	0.168%
243	15.812	15.751	15.895	VV	402200	6155486	52.66%	2.815%
244	15.906	15.895	15.947	VV	9660	293036	2.51%	0.134%
245	15.991	15.947	16.041	VV	12272	589916	5.05%	0.270%
246	16.046	16.041	16.072	VV	9738	175213	1.50%	0.080%

Instrument :

FID_C

ClientSampleId :

WB-303-BOTMSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

rteres									
247	16.127	16.072	16.148	VV	10796	452772	3.87%	0.207%	
248	16.168	16.148	16.211	VV	11699	381819			
249	16.289	16.211	16.315	VV	12920	592181			
250	16.333	16.315	16.394	VV	9548	391540			
251	16.462	16.394	16.485	VV	8873	449288			
252	16.496	16.485	16.578	VV	8648	437040			
253	16.604	16.578	16.665	VV	8253	407556	3.49%	0.186%	
254	16.683	16.665	16.705	VV	6992	160798	1.38%	0.074%	
255	16.761	16.705	16.841	VV	385344	5722176	48.95%	2.617%	
256	16.862	16.841	16.881	VV	6328	142828	1.22%	0.065%	
257	16.908	16.881	16.961	VV	6856	301964	2.58%	0.138%	
258	16.986	16.961	17.021	VV	6867	220458	1.89%	0.101%	
259	17.072	17.021	17.122	VV	6413	332795	2.85%	0.152%	
260	17.140	17.122	17.155	VV	5461	102124	0.87%	0.047%	
261	17.166	17.155	17.180	VV	5020	74121	0.63%	0.034%	
262	17.207	17.180	17.255	VV	8002	258363	2.21%	0.118%	
263	17.272	17.255	17.285	VV	4273	75732	0.65%	0.035%	
264	17.317	17.285	17.424	VV	5114	365933	3.13%	0.167%	
265	17.441	17.424	17.461	VV	4033	80939	0.69%	0.037%	
266	17.487	17.461	17.508	VV	4496	115086	0.98%	0.053%	
267	17.534	17.508	17.568	VV	7335	190681	1.63%	0.087%	
268	17.576	17.568	17.581	VV	4006	31717	0.27%	0.015%	
269	17.647	17.581	17.732	VV	380568	5527223	47.28%	2.528%	
270	17.780	17.732	17.875	VV	4696	257436	2.20%	0.118%	
271	17.915	17.875	17.925	VV	2614	66087	0.57%	0.030%	
272	17.934	17.925	17.957	VV	2459	44092	0.38%	0.020%	
273	17.978	17.957	17.992	VV	2274	43462	0.37%	0.020%	
274	18.005	17.992	18.041	VV	1999	58644	0.50%	0.027%	
275	18.066	18.041	18.124	VV	4122	119241	1.02%	0.055%	
276	18.144	18.124	18.242	VV	3426	105240	0.90%	0.048%	
277	18.339	18.242	18.348	VV	1499	64151	0.55%	0.029%	
278	18.356	18.348	18.426	VV	1330	37392	0.32%	0.017%	
279	18.478	18.426	18.535	VV	362190	5245884	44.88%	2.399%	
280	18.562	18.535	18.588	VV	1231	24979	0.21%	0.011%	
281	18.616	18.588	18.648	VV	926	23633	0.20%	0.011%	
282	18.655	18.648	18.715	VV	705	16287	0.14%	0.007%	
283	18.729	18.715	18.737	VV	600	6165	0.05%	0.003%	
284	18.757	18.737	18.771	VV	691	9683	0.08%	0.004%	
285	18.775	18.771	18.807	VV	415	4987	0.04%	0.002%	
286	18.817	18.807	18.832	PV	326	3184	0.03%	0.001%	
287	18.872	18.832	18.938	VV	3381	68165	0.58%	0.031%	
288	18.946	18.938	18.955	VV	380	3132	0.03%	0.001%	
289	18.964	18.955	18.996	VV	708	12046	0.10%	0.006%	
290	19.041	18.996	19.088	VV	987	30619	0.26%	0.014%	
291	19.114	19.088	19.174	VV	605	20302	0.17%	0.009%	
292	19.261	19.174	19.341	VV	363672	5340669	45.69%	2.442%	
293	19.345	19.341	19.355	VV	980	6537	0.06%	0.003%	
294	19.370	19.355	19.435	VV	1091	35716	0.31%	0.016%	
295	19.458	19.435	19.471	VV	953	17821	0.15%	0.008%	
296	19.558	19.471	19.590	VV	1460	83400	0.71%	0.038%	
297	19.631	19.590	19.652	VV	2652	64525	0.55%	0.030%	
298	19.671	19.652	19.710	VV	2045	54820	0.47%	0.025%	
299	19.835	19.710	19.844	VV	6309	242090	2.07%	0.111%	

Instrument :

FID_C

ClientSampleId :

WB-303-BOTMSD

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Reviewed By :Yogesh Patel 10/23/2024

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				rters				
300	19.854	19.844	19.944	VV	6881	258656	2.21%	0.118%
301	19.998	19.944	20.042	VV	352738	5399101	46.00%	0.000%
302	20.052	20.042	20.075	VV	3934	72735	0.00%	0.000%
303	20.141	20.075	20.231	VV	5076	381315	0.00%	0.000%
304	20.272	20.231	20.295	VV	3875	140967	0.00%	0.000%
305	20.348	20.295	20.408	VV	5010	259905	0.00%	0.000%
306	20.465	20.408	20.501	VV	4068	210020	1.80%	0.096%
307	20.517	20.501	20.542	VV	4198	98656	0.84%	0.045%
308	20.551	20.542	20.608	VV	4098	146264	1.25%	0.067%
309	20.618	20.608	20.641	VV	3294	63856	0.55%	0.029%
310	20.723	20.641	20.951	VV	314370	5906520	50.53%	2.701%
311	20.999	20.951	21.013	VV	2216	75546	0.65%	0.035%
312	21.040	21.013	21.055	VV	2234	50757	0.43%	0.023%
313	21.085	21.055	21.097	VV	2040	49721	0.43%	0.023%
314	21.132	21.097	21.223	VV	2662	139208	1.19%	0.064%
315	21.234	21.223	21.245	VV	1314	16606	0.14%	0.008%
316	21.254	21.245	21.295	VV	1367	35885	0.31%	0.016%
317	21.335	21.295	21.351	VV	1301	39247	0.34%	0.018%
318	21.362	21.351	21.381	VV	1129	18946	0.16%	0.009%
319	21.408	21.381	21.457	VV	1153	43938	0.38%	0.020%
320	21.610	21.457	21.724	VV	232069	5548714	47.47%	2.537%
321	21.751	21.724	21.783	VV	387	8603	0.07%	0.004%
Sum of corrected areas:					218671718			

Instrument :
FID_C
ClientSampleId :
WB-303-BOTMSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/23/2024
Supervised By :Ankita Jodhani 10/23/2024

Aliphatic EPH 100224.M Wed Oct 23 07:56:27 2024



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

Manual Integration Report

Sequence:

FC100224AL

Instrument

FID_c

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Manual Integration Report

Sequence:	FC102224AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB164309BSD	FC067487.D	n-Octacosane (C28)	yogesh	10/23/2024 8:03:21 AM	Ankita	10/23/2024 10:01:04	Peak Integrated by Software
P4456-01	FC067488.D	1-chlorooctadecane (SURRE)	yogesh	10/23/2024 8:03:23 AM	Ankita	10/23/2024 10:01:05	Peak Integrated by Software
P4460-03	FC067490.D	1-chlorooctadecane (SURRE)	yogesh	10/23/2024 8:03:24 AM	Ankita	10/23/2024 10:01:07	Peak Integrated by Software
P4460-03D	FC067491.D	1-chlorooctadecane (SURRE)	yogesh	10/23/2024 8:03:26 AM	Ankita	10/23/2024 10:01:08	Peak Integrated by Software
P4460-03MS	FC067492.D	1-chlorooctadecane (SURRE)	yogesh	10/23/2024 8:03:28 AM	Ankita	10/23/2024 10:01:10	Peak Integrated by Software
P4460-03MS	FC067492.D	n-Dodecane (C12)	yogesh	10/23/2024 8:03:28 AM	Ankita	10/23/2024 10:01:10	Peak Integrated by Software
P4460-03MS	FC067492.D	n-Hexacosane (C26)	yogesh	10/23/2024 8:03:28 AM	Ankita	10/23/2024 10:01:10	Peak Integrated by Software
P4460-03MS	FC067492.D	n-Hexatriacontane (C36)	yogesh	10/23/2024 8:03:28 AM	Ankita	10/23/2024 10:01:10	Peak Integrated by Software
P4460-03MS	FC067492.D	n-Tetradecane (C14)	yogesh	10/23/2024 8:03:28 AM	Ankita	10/23/2024 10:01:10	Peak Integrated by Software
P4460-03MSD	FC067493.D	1-chlorooctadecane (SURRE)	yogesh	10/23/2024 8:03:30 AM	Ankita	10/23/2024 10:01:11	Peak Integrated by Software
P4460-03MSD	FC067493.D	n-Heneicosane (C21)	yogesh	10/23/2024 8:03:30 AM	Ankita	10/23/2024 10:01:11	Peak Integrated by Software
P4460-03MSD	FC067493.D	n-Tetradecane (C14)	yogesh	10/23/2024 8:03:30 AM	Ankita	10/23/2024 10:01:11	Peak Integrated by Software
P4471-02	FC067495.D	1-chlorooctadecane (SURRE)	yogesh	10/23/2024 11:25:14 AM	Ankita	10/24/2024 9:20:12	Peak Integrated by Software

Manual Integration Report

Sequence:

FC102224AL

Instrument

FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
P4456-01DL	FC067500.D	1-chlorooctadecane (SURR)	yogesh	10/24/2024 8:26:50 AM	Ankita	10/24/2024 9:20:13	Peak Integrated by Software
20 PPM ALIPHATIC HC	FC067503.D	n-Tetracontane (C40)	yogesh	10/24/2024 8:26:52 AM	Ankita	10/24/2024 9:20:15	Peak Integrated by Software



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Manual Integration Report

Sequence:

FD093024AR

Instrument

FID_d

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Manual Integration Report

Sequence:	FD102224AR	Instrument	FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM AROMATIC HC	FD048547.D	benzo[b]fluoranthene (C30.41)	yogesh	10/23/2024 8:45:26 AM	Ankita	10/23/2024 10:01:32	Peak Integrated by Software
20 PPM AROMATIC HC	FD048547.D	Bnezo[k]fluoranthene (C30.14)	yogesh	10/23/2024 8:45:26 AM	Ankita	10/23/2024 10:01:32	Peak Integrated by Software
20 PPM AROMATIC HC	FD048547.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	10/23/2024 8:45:26 AM	Ankita	10/23/2024 10:01:32	Peak Integrated by Software
PB164309BS	FD048549.D	Fluoranthene (C21.85)	yogesh	10/23/2024 8:45:28 AM	Ankita	10/23/2024 10:01:34	Peak Integrated by Software
PB164309BSD	FD048550.D	Fluoranthene (C21.85)	yogesh	10/23/2024 8:45:29 AM	Ankita	10/23/2024 10:01:35	Peak Integrated by Software
P4456-01	FD048551.D	ortho-Terphenyl (SURR)	yogesh	10/23/2024 8:45:31 AM	Ankita	10/23/2024 10:01:36	Peak Integrated by Software
P4460-03MS	FD048555.D	Fluoranthene (C21.85)	yogesh	10/23/2024 8:45:32 AM	Ankita	10/23/2024 10:01:38	Peak Integrated by Software
P4460-03MSD	FD048556.D	Fluoranthene (C21.85)	yogesh	10/23/2024 8:45:34 AM	Ankita	10/23/2024 10:01:39	Peak Integrated by Software
P4460-03MSD	FD048556.D	Naphthalene (C11.7)	yogesh	10/23/2024 8:45:34 AM	Ankita	10/23/2024 10:01:39	Peak Integrated by Software
20 PPM AROMATIC HC	FD048560.D	benzo[b]fluoranthene (C30.41)	yogesh	10/23/2024 11:25:21 AM	Ankita	10/24/2024 9:20:32	Peak Integrated by Software
20 PPM AROMATIC HC	FD048560.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	10/23/2024 11:25:21 AM	Ankita	10/24/2024 9:20:32	Peak Integrated by Software
P4456-01DL	FD048563.D	ortho-Terphenyl (SURR)	yogesh	10/24/2024 8:27:15 AM	Ankita	10/24/2024 9:20:33	Peak Integrated by Software
20 PPM AROMATIC HC	FD048565.D	Dibenz[a,h]anthracene (C30.36)	yogesh	10/24/2024 8:27:16 AM	Ankita	10/24/2024 9:20:35	Peak Integrated by Software



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Manual Integration Report

Sequence:

FD102224AR

Instrument

FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM AROMATIC HC	FD048565.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	10/24/2024 8:27:16 AM	Ankita	10/24/2024 9:20:35	Peak Integrated by Software

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC100224AL

Review By	yogesh	Review On	10/1/2024 9:33:02 AM
Supervise By	Ankita	Supervise On	10/1/2024 10:31:51 AM
SubDirectory	FC100224AL	HP Acquire Method	HP Processing Method FC100224AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649		
CCC Internal Standard/PEM	PP23647		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23645,PP23650		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC067310.D	30 Sep 2024 09:18	YP/AJ	Ok
2	I.BLK	FC067311.D	30 Sep 2024 09:55	YP/AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FC067312.D	30 Sep 2024 10:32	YP/AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FC067313.D	30 Sep 2024 11:10	YP/AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FC067314.D	30 Sep 2024 11:48	YP/AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FC067315.D	30 Sep 2024 12:47	YP/AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FC067316.D	30 Sep 2024 13:35	YP/AJ	Ok
8	20 PPM ALIPHATIC HC STD ICV	FC067317.D	30 Sep 2024 14:29	YP/AJ	Ok
9	I.BLK	FC067318.D	30 Sep 2024 15:06	YP/AJ	Ok
10	20 PPM ALIPHATIC HC STD	FC067319.D	30 Sep 2024 15:49	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC102224AL

Review By	yogesh	Review On	10/22/2024 1:46:45 PM
Supervise By	Ankita	Supervise On	10/23/2024 10:01:20 AM
SubDirectory	FC102224AL	HP Acquire Method	HP Processing Method FC100224AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649		
CCC Internal Standard/PEM	PP23647		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23645,PP23650		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC067482.D	22 Oct 2024 10:55	YP/AJ	Ok
2	I.BLK	FC067483.D	22 Oct 2024 11:32	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC067484.D	22 Oct 2024 12:09	YP/AJ	Ok
4	PB164309BL	FC067485.D	23 Oct 2024 01:18	YP/AJ	Ok
5	PB164309BS	FC067486.D	23 Oct 2024 01:53	YP/AJ	Ok
6	PB164309BSD	FC067487.D	23 Oct 2024 02:29	YP/AJ	Ok,M
7	P4456-01	FC067488.D	23 Oct 2024 03:05	YP/AJ	Dilution
8	P4460-02	FC067489.D	23 Oct 2024 03:41	YP/AJ	Ok
9	P4460-03	FC067490.D	23 Oct 2024 04:16	YP/AJ	Dilution
10	P4460-03D	FC067491.D	23 Oct 2024 04:52	YP/AJ	Ok,M
11	P4460-03MS	FC067492.D	23 Oct 2024 05:28	YP/AJ	Ok,M
12	P4460-03MSD	FC067493.D	23 Oct 2024 06:04	YP/AJ	Ok,M
13	P4471-01	FC067494.D	23 Oct 2024 06:40	YP/AJ	Ok
14	P4471-02	FC067495.D	23 Oct 2024 07:17	YP/AJ	Ok,M
15	I.BLK	FC067496.D	23 Oct 2024 07:54	YP/AJ	Ok
16	20 PPM ALIPHATIC HC STD	FC067497.D	23 Oct 2024 08:30	YP/AJ	Ok
17	P4473-01	FC067498.D	23 Oct 2024 10:19	YP/AJ	Ok
18	P4474-01	FC067499.D	23 Oct 2024 10:56	YP/AJ	Ok
19	P4456-01DL	FC067500.D	23 Oct 2024 11:33	YP/AJ	Ok,M
20	P4460-03DL	FC067501.D	23 Oct 2024 12:09	YP/AJ	Ok
21	I.BLK	FC067502.D	23 Oct 2024 12:46	YP/AJ	Ok

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC102224AL

Review By	yogesh	Review On	10/22/2024 1:46:45 PM
Supervise By	Ankita	Supervise On	10/23/2024 10:01:20 AM
SubDirectory	FC102224AL	HP Acquire Method	HP Processing Method FC100224AL
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649		
CCC Internal Standard/PEM	PP23647		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23645,PP23650		

22	20 PPM ALIPHATIC HC STD	FC067503.D	23 Oct 2024 13:22	YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD093024AR

Review By	yogesh	Review On	9/30/2024 3:32:01 PM
Supervise By	Ankita	Supervise On	10/1/2024 10:34:21 AM
SubDirectory	FD093024AR	HP Acquire Method	HP Processing Method FD093024AR
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23429,PP23519,PP23520,PP23521,PP23522		
CCC Internal Standard/PEM	PP23520		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23430,PP23523		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FD048396.D	30 Sep 2024 09:18	YP/AJ	Ok
2	I.BLK	FD048397.D	30 Sep 2024 09:55	YP/AJ	Ok
3	100 PPM AROMATIC HC STD1	FD048398.D	30 Sep 2024 10:32	YP/AJ	Ok
4	50 PPM AROMATIC HC STD2	FD048399.D	30 Sep 2024 11:10	YP/AJ	Ok
5	20 PPM AROMATIC HC STD3	FD048400.D	30 Sep 2024 11:48	YP/AJ	Ok
6	10 PPM AROMATIC HC STD4	FD048401.D	30 Sep 2024 12:47	YP/AJ	Ok
7	5 PPM AROMATIC HC STD5	FD048402.D	30 Sep 2024 13:35	YP/AJ	Ok
8	20 PPM AROMATIC HC STD ICV	FD048403.D	30 Sep 2024 14:29	YP/AJ	Ok
9	I.BLK	FD048404.D	30 Sep 2024 15:06	YP/AJ	Ok
10	20 PPM AROMATIC HC STD	FD048405.D	30 Sep 2024 15:49	YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD102224AR

Review By	yogesh	Review On	10/22/2024 1:47:57 PM
Supervise By	Ankita	Supervise On	10/23/2024 10:01:56 AM
SubDirectory	FD102224AR	HP Acquire Method	HP Processing Method FD093024AR
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23429,PP23519,PP23520,PP23521,PP23522		
CCC Internal Standard/PEM	PP23520		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23430,PP23523		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FD048545.D	22 Oct 2024 10:55	YP/AJ	Ok
2	I.BLK	FD048546.D	22 Oct 2024 11:32	YP/AJ	Ok
3	20 PPM AROMATIC HC STD	FD048547.D	22 Oct 2024 12:09	YP/AJ	Ok,M
4	PB164309BL	FD048548.D	23 Oct 2024 01:18	YP/AJ	Ok
5	PB164309BS	FD048549.D	23 Oct 2024 01:53	YP/AJ	Ok,M
6	PB164309BSD	FD048550.D	23 Oct 2024 02:29	YP/AJ	Ok,M
7	P4456-01	FD048551.D	23 Oct 2024 03:05	YP/AJ	Dilution
8	P4460-02	FD048552.D	23 Oct 2024 03:41	YP/AJ	Ok
9	P4460-03	FD048553.D	23 Oct 2024 04:16	YP/AJ	Ok
10	P4460-03D	FD048554.D	23 Oct 2024 04:52	YP/AJ	Ok
11	P4460-03MS	FD048555.D	23 Oct 2024 05:28	YP/AJ	Ok,M
12	P4460-03MSD	FD048556.D	23 Oct 2024 06:04	YP/AJ	Ok,M
13	P4471-01	FD048557.D	23 Oct 2024 06:40	YP/AJ	Ok
14	P4471-02	FD048558.D	23 Oct 2024 07:17	YP/AJ	Ok
15	I.BLK	FD048559.D	23 Oct 2024 07:54	YP/AJ	Ok
16	20 PPM AROMATIC HC STD	FD048560.D	23 Oct 2024 08:30	YP/AJ	Ok,M
17	P4473-01	FD048561.D	23 Oct 2024 10:19	YP/AJ	Ok
18	P4474-01	FD048562.D	23 Oct 2024 10:56	YP/AJ	Ok
19	P4456-01DL	FD048563.D	23 Oct 2024 11:33	YP/AJ	Ok,M
20	I.BLK	FD048564.D	23 Oct 2024 12:09	YP/AJ	Ok
21	20 PPM AROMATIC HC STD	FD048565.D	23 Oct 2024 12:46	YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC100224AL

Review By	yogesh	Review On	10/1/2024 9:33:02 AM
Supervise By	Ankita	Supervise On	10/1/2024 10:31:51 AM
SubDirectory	FC100224AL	HP Acquire Method	HP Processing Method FC100224AL

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649
CCC Internal Standard/PEM	PP23647
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23645,PP23650

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FC067310.D	30 Sep 2024 09:18		YP/AJ	Ok
2	I.BLK	I.BLK	FC067311.D	30 Sep 2024 09:55		YP/AJ	Ok
3	100 PPM ALIPHATIC HC	100 PPM ALIPHATIC HC	FC067312.D	30 Sep 2024 10:32		YP/AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FC067313.D	30 Sep 2024 11:10		YP/AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067314.D	30 Sep 2024 11:48		YP/AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FC067315.D	30 Sep 2024 12:47		YP/AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FC067316.D	30 Sep 2024 13:35		YP/AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067317.D	30 Sep 2024 14:29		YP/AJ	Ok
9	I.BLK	I.BLK	FC067318.D	30 Sep 2024 15:06		YP/AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067319.D	30 Sep 2024 15:49		YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC102224AL

Review By	yogesh	Review On	10/22/2024 1:46:45 PM
Supervise By	Ankita	Supervise On	10/23/2024 10:01:20 AM
SubDirectory	FC102224AL	HP Acquire Method	HP Processing Method FC100224AL

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP23644,PP23646,PP23647,PP23648,PP23649
CCC Internal Standard/PEM	PP23647
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23645,PP23650

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FC067482.D	22 Oct 2024 10:55		YP/AJ	Ok
2	I.BLK	I.BLK	FC067483.D	22 Oct 2024 11:32		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067484.D	22 Oct 2024 12:09		YP/AJ	Ok
4	PB164309BL	PB164309BL	FC067485.D	23 Oct 2024 01:18		YP/AJ	Ok
5	PB164309BS	PB164309BS	FC067486.D	23 Oct 2024 01:53		YP/AJ	Ok
6	PB164309BSD	PB164309BSD	FC067487.D	23 Oct 2024 02:29		YP/AJ	Ok,M
7	P4456-01	PAD-10182024	FC067488.D	23 Oct 2024 03:05	need 50x dilution	YP/AJ	Dilution
8	P4460-02	WB-303-TOP	FC067489.D	23 Oct 2024 03:41		YP/AJ	Ok
9	P4460-03	WB-303-BOT	FC067490.D	23 Oct 2024 04:16	need 5x dilution	YP/AJ	Dilution
10	P4460-03D	P4460-03D	FC067491.D	23 Oct 2024 04:52		YP/AJ	Ok,M
11	P4460-03MS	WB-303-BOTMS	FC067492.D	23 Oct 2024 05:28	FC067490.D	YP/AJ	Ok,M
12	P4460-03MSD	WB-303-BOTMSD	FC067493.D	23 Oct 2024 06:04	FC067490.D!FC067492.D	YP/AJ	Ok,M
13	P4471-01	B-180-SB01	FC067494.D	23 Oct 2024 06:40		YP/AJ	Ok
14	P4471-02	B-180-SB02	FC067495.D	23 Oct 2024 07:17		YP/AJ	Ok,M
15	I.BLK	I.BLK	FC067496.D	23 Oct 2024 07:54		YP/AJ	Ok
16	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067497.D	23 Oct 2024 08:30		YP/AJ	Ok
17	P4473-01	TS-1	FC067498.D	23 Oct 2024 10:19		YP/AJ	Ok
18	P4474-01	TS-2	FC067499.D	23 Oct 2024 10:56		YP/AJ	Ok

Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QC Batch ID # FC102224AL

Review By	yogesh	Review On	10/22/2024 1:46:45 PM
Supervise By	Ankita	Supervise On	10/23/2024 10:01:20 AM
SubDirectory	FC102224AL	HP Acquire Method	HP Processing Method FC100224AL
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	P4456-01DL	PAD-10182024DL	FC067500.D	23 Oct 2024 11:33		YP/AJ	Ok,M
20	P4460-03DL	WB-303-BOTDL	FC067501.D	23 Oct 2024 12:09		YP/AJ	Ok
21	I.BLK	I.BLK	FC067502.D	23 Oct 2024 12:46		YP/AJ	Ok
22	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067503.D	23 Oct 2024 13:22		YP/AJ	Ok,M

M : Manual Integration

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD093024AR

Review By	yogesh	Review On	9/30/2024 3:32:01 PM
Supervise By	Ankita	Supervise On	10/1/2024 10:34:21 AM
SubDirectory	FD093024AR	HP Acquire Method	HP Processing Method FD093024AR

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP23429,PP23519,PP23520,PP23521,PP23522
CCC	PP23520
Internal Standard/PEM	
ICV/I.BLK	PP23430,PP23523
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FD048396.D	30 Sep 2024 09:18		YP/AJ	Ok
2	I.BLK	I.BLK	FD048397.D	30 Sep 2024 09:55		YP/AJ	Ok
3	100 PPM AROMATIC HC	100 PPM AROMATIC HC	FD048398.D	30 Sep 2024 10:32		YP/AJ	Ok
4	50 PPM AROMATIC HC	50 PPM AROMATIC HC	FD048399.D	30 Sep 2024 11:10		YP/AJ	Ok
5	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048400.D	30 Sep 2024 11:48		YP/AJ	Ok
6	10 PPM AROMATIC HC	10 PPM AROMATIC HC	FD048401.D	30 Sep 2024 12:47		YP/AJ	Ok
7	5 PPM AROMATIC HC	5 PPM AROMATIC HC	FD048402.D	30 Sep 2024 13:35		YP/AJ	Ok
8	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048403.D	30 Sep 2024 14:29		YP/AJ	Ok
9	I.BLK	I.BLK	FD048404.D	30 Sep 2024 15:06		YP/AJ	Ok
10	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048405.D	30 Sep 2024 15:49		YP/AJ	Ok

M : Manual Integration

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD102224AR

Review By	yogesh	Review On	10/22/2024 1:47:57 PM
Supervise By	Ankita	Supervise On	10/23/2024 10:01:56 AM
SubDirectory	FD102224AR	HP Acquire Method	HP Processing Method FD093024AR

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP23429,PP23519,PP23520,PP23521,PP23522
CCC Internal Standard/PEM	PP23520
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23430,PP23523

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FD048545.D	22 Oct 2024 10:55		YP/AJ	Ok
2	I.BLK	I.BLK	FD048546.D	22 Oct 2024 11:32		YP/AJ	Ok
3	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048547.D	22 Oct 2024 12:09		YP/AJ	Ok,M
4	PB164309BL	PB164309BL	FD048548.D	23 Oct 2024 01:18		YP/AJ	Ok
5	PB164309BS	PB164309BS	FD048549.D	23 Oct 2024 01:53		YP/AJ	Ok,M
6	PB164309BSD	PB164309BSD	FD048550.D	23 Oct 2024 02:29		YP/AJ	Ok,M
7	P4456-01	PAD-10182024	FD048551.D	23 Oct 2024 03:05	need 5x dilution	YP/AJ	Dilution
8	P4460-02	WB-303-TOP	FD048552.D	23 Oct 2024 03:41		YP/AJ	Ok
9	P4460-03	WB-303-BOT	FD048553.D	23 Oct 2024 04:16		YP/AJ	Ok
10	P4460-03D	P4460-03D	FD048554.D	23 Oct 2024 04:52		YP/AJ	Ok
11	P4460-03MS	WB-303-BOTMS	FD048555.D	23 Oct 2024 05:28	FD048553.D	YP/AJ	Ok,M
12	P4460-03MSD	WB-303-BOTMSD	FD048556.D	23 Oct 2024 06:04	FD048553.D!FD048555.D	YP/AJ	Ok,M
13	P4471-01	B-180-SB01	FD048557.D	23 Oct 2024 06:40		YP/AJ	Ok
14	P4471-02	B-180-SB02	FD048558.D	23 Oct 2024 07:17		YP/AJ	Ok
15	I.BLK	I.BLK	FD048559.D	23 Oct 2024 07:54		YP/AJ	Ok
16	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048560.D	23 Oct 2024 08:30		YP/AJ	Ok,M
17	P4473-01	TS-1	FD048561.D	23 Oct 2024 10:19		YP/AJ	Ok
18	P4474-01	TS-2	FD048562.D	23 Oct 2024 10:56		YP/AJ	Ok

Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QC Batch ID # FD102224AR

Review By	yogesh	Review On	10/22/2024 1:47:57 PM				
Supervise By	Ankita	Supervise On	10/23/2024 10:01:56 AM				
SubDirectory	FD102224AR	HP Acquire Method	HP Processing Method			FD093024AR	
STD. NAME		STD REF.#					
Tune/Reschk Initial Calibration Stds		PP23429,PP23519,PP23520,PP23521,PP23522					
CCC		PP23520					
Internal Standard/PEM							
ICV/I.BLK		PP23430,PP23523					
Surrogate Standard							
MS/MSD Standard							
LCS Standard							

19	P4456-01DL	PAD-10182024DL	FD048563.D	23 Oct 2024 11:33		YP/AJ	Ok,M
20	I.BLK	I.BLK	FD048564.D	23 Oct 2024 12:09		YP/AJ	Ok
21	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048565.D	23 Oct 2024 12:46		YP/AJ	Ok,M

M : Manual Integration



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/23/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 16:40
In Date: 10/21/2024
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: 10/22/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133030

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
P4416-01	A0BD7	1	1.15	8.81	9.96	8.6	84.6	
P4416-02	A0BD8	2	1.12	8.61	9.73	7.33	72.1	
P4416-03	A0BD8MS	3	1.12	8.61	9.73	7.33	72.1	
P4416-04	A0BD8MSD	4	1.12	8.61	9.73	7.33	72.1	
P4467-01	TP-1	5	1.15	8.84	9.99	9.17	90.7	
P4467-02	TP-1-EPH	6	1.17	8.60	9.77	8.89	89.8	
P4467-03	TP-1-VOC	7	1.15	8.57	9.72	8.87	90.1	
P4468-01	ETGI-331	8	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4468-03	ETGI-329	9	1.15	8.82	9.97	9.35	93.0	
P4468-05	ETGI-345	10	1.12	8.75	9.87	9.11	91.3	
P4469-01	16-PIPE	11	1.00	1.00	2.00	2.00	100.0	wipe sample
P4469-02	21-PIPE	12	1.00	1.00	2.00	2.00	100.0	wipe sample
P4469-03	32-PIPE	13	1.00	1.00	2.00	2.00	100.0	wipe sample
P4469-04	34-PIPE	14	1.00	1.00	2.00	2.00	100.0	wipe sample
P4470-01	CL-01-102124	15	1.12	8.75	9.87	9.39	94.5	
P4470-02	CL-01-102124-E2	16	1.12	8.76	9.88	9.36	94.1	
P4471-01	B-180-SB01	17	1.18	8.59	9.77	8.29	82.8	
P4471-02	B-180-SB02	18	1.16	8.80	9.96	5.49	49.2	
P4472-01	BP-F-28	19	1.16	8.46	9.62	8.75	89.7	
P4472-02	BP-F-28-VOC	20	1.18	8.45	9.63	8.92	91.6	
P4472-03	BP-F-28-EPH	21	1.15	8.64	9.79	8.94	90.2	
P4472-05	BP-F-6	22	1.18	8.58	9.76	9.00	91.1	
P4472-06	BP-F-6-VOC	23	1.15	8.83	9.98	9.31	92.4	
P4472-07	BP-F-6-EPH	24	1.16	8.83	9.99	9.35	92.8	

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

WORKLIST(Hardcopy Internal Chain)

133030

WorkList Name : %1-102124 WorkList ID : 184616 Department : Wet-Chemistry Date : 10-21-2024 08:15:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4416-01	A0BD7	Solid	Percent Solids	Cool 4 deg C	USEP04	Q11	10/09/2024	Chemtech -SO
P4416-02	A0BD8	Solid	Percent Solids	Cool 4 deg C	USEP04	Q11	10/15/2024	Chemtech -SO
P4416-03	A0BD8MS	Solid	Percent Solids	Cool 4 deg C	USEP04	Q11	10/15/2024	Chemtech -SO
P4416-04	A0BD8MSD	Solid	Percent Solids	Cool 4 deg C	USEP04	Q11	10/15/2024	Chemtech -SO
P4467-01	TP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K41	10/21/2024	Chemtech -SO
P4467-02	TP-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K41	10/21/2024	Chemtech -SO
P4467-03	TP-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	K41	10/21/2024	Chemtech -SO
P4468-01	ETGI-331	Solid	Percent Solids	Cool 4 deg C	PSEG03	K51	10/21/2024	Chemtech -SO
P4468-03	ETGI-329	Solid	Percent Solids	Cool 4 deg C	PSEG03	K51	10/21/2024	Chemtech -SO
P4468-05	ETGI-345	Solid	Percent Solids	Cool 4 deg C	PSEG03	K51	10/21/2024	Chemtech -SO
P4469-01	16-PIPE	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/21/2024	Chemtech -SO
P4469-02	21-PIPE	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/21/2024	Chemtech -SO
P4469-03	32-PIPE	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/21/2024	Chemtech -SO
P4469-04	34-PIPE	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/21/2024	Chemtech -SO
P4470-01	CL-01-102124	Solid	Percent Solids	Cool 4 deg C	PSEG05	K51	10/21/2024	Chemtech -SO
P4470-02	CL-01-102124-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	K51	10/21/2024	Chemtech -SO
P4471-01	B-180-SB01	Solid	Percent Solids	Cool 4 deg C	PORT06	J61	10/19/2024	Chemtech -SO
P4471-02	B-180-SB02	Solid	Percent Solids	Cool 4 deg C	PORT06	J61	10/20/2024	Chemtech -SO
P4472-01	BP-F-28	Solid	Percent Solids	Cool 4 deg C	PSEG03	K51	10/21/2024	Chemtech -SO
P4472-02	BP-F-28-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	K51	10/21/2024	Chemtech -SO
P4472-03	BP-F-28-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K51	10/21/2024	Chemtech -SO

Date/Time 10/21/24 15:35 Date/Time 10/21/24 17:10
 Raw Sample Received by: 1060C Raw Sample Received by: CL SW
 Raw Sample Relinquished by: CL SW Raw Sample Relinquished by: CL SW

WORKLIST(Hardcopy Internal Chain)

8133030

WorkList Name : %1-102124 WorkList ID : 184616 Department : Wet-Chemistry Date : 10-21-2024 08:15:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4472-05	BP-F-6	Solid	Percent Solids	Cool 4 deg C	PSEG03	K51	10/21/2024	Chemtech -SO
P4472-06	BP-F-6-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	K51	10/21/2024	Chemtech -SO
P4472-07	BP-F-6-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K51	10/21/2024	Chemtech -SO

Date/Time 10/21/24 15:35
Raw Sample Received by: SL CDC
Raw Sample Relinquished by: SL CDC

Date/Time 10/21/24 17:10
Raw Sample Received by: SL CDC
Raw Sample Relinquished by: SL CDC

SOP ID: MNJDEP-EPH-7

Clean Up SOP #: N/A

Matrix: Solid

Wigh By: EH

Balance check: RJ

Balance ID: EX-SC-2

pH Strip Lot#: N/A

Extraction By: RS

Filter By: RJ

pH Meter ID: N/A

Hood ID: 3,7

Extraction Start Date: 10/22/2024

Extraction Start Time: 09:40

Extraction End Date: 10/22/2024

Extraction End Time: 16:55

Concentration By: EH

Supervisor By: rajesh

Extraction Method: ☐ Seperatory Funnel

☐ Continious Liquid/Liquid

☐ Sonication

☐ Waste Dilution

☒ Soxhlet

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Surrogate	1.0ML	100 PPM	PP23706
Fractionation Surrogate	1.0ML	100 PPM	PP23704
Spike Sol 1	1.0ML	100 PPM	PP23712
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	EP2538
Baked Na2SO4	N/A	EP2551
Sand	N/A	E2865
Hexane	N/A	E3819
EPH Cartridge	N/A	E3757
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:

1.5ML Vial Lot # 2210673.

KD Bath ID: N/A

Envap ID: NE VAP-02

KD Bath Temperature: N/A

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/22/24	RP (Ext. Lab)	Y-P. P. P. P. P.
17:00	Preparation Group	Analysis Group

Analytical Method: MNJDEP-EPH-7

Concentration Date: 10/22/2024

Sample ID	Client Sample ID	Test	g/mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB164309BL	PB164309BL	EPH	30.02	N/A	ritesh	Evelyn	2			U1-1
PB164309BS	PB164309BS	EPH	30.03	N/A	ritesh	Evelyn	2			2
PB164309BSD	PB164309BSD	EPH	30.01	N/A	ritesh	Evelyn	2			3
P4456-01	PAD-10182024	EPH	30.04	N/A	ritesh	Evelyn	2	B	Concrete	4
P4460-02	WB-303-TOP	EPH	30.02	N/A	ritesh	Evelyn	2	E		5
P4460-03	WB-303-BOT	EPH	30.05	N/A	ritesh	Evelyn	2	E		6
P4460-03DUP	WB-303-BOTDUP	EPH	30.06	N/A	ritesh	Evelyn	2	E		U5-1
P4460-03MS	WB-303-BOTMS	EPH	30.08	N/A	ritesh	Evelyn	2	E		2
P4460-03MS D	WB-303-BOTMSD	EPH	30.05	N/A	ritesh	Evelyn	2	E		3
P4471-01	B-180-SB01	EPH	30.01	N/A	ritesh	Evelyn	2	E		4
P4471-02	B-180-SB02	EPH	30.06	N/A	ritesh	Evelyn	2	E		5
P4473-01	TS-1	EPH	30.03	N/A	ritesh	Evelyn	2	C		6
P4474-01	TS-2	EPH	30.05	N/A	ritesh	Evelyn	2	V		U6-1

* Extracts relinquished on the same date as received.

8
10/22/24

WORKLIST(Hardcopy Internal Chain)

164303
10-21-24

Worklist Name : P4456 Worklist ID : 184648 Department : Extraction Date : 10-22-2024 08:18:56

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4456-01	PAD-10182024	Solid	EPH	Cool 4 deg C	PSEG03	K51	10/18/2024	NUEPH
P4460-02	WB-303-TOP	Solid	EPH	Cool 4 deg C	PORT06	K51	10/18/2024	NUEPH
P4460-03	WB-303-BOT	Solid	EPH	Cool 4 deg C	PORT06	K51	10/18/2024	NUEPH
P4467-01	TP-1	Solid	EPH_NF	Cool 4 deg C	PSEG03	K41	10/21/2024	NUEPH
P4467-02	TP-1-EPH	Solid	EPH_NF	Cool 4 deg C	PSEG03	K41	10/21/2024	NUEPH
P4468-03	ETGI-329	Solid	EPH_NF	Cool 4 deg C	PSEG03	K51	10/21/2024	NUEPH
P4468-05	ETGI-345	Solid	EPH_NF	Cool 4 deg C	PSEG03	K51	10/21/2024	NUEPH
P4470-01	CL-01-102124	Solid	EPH_NF	Cool 4 deg C	PSEG05	K51	10/21/2024	NUEPH
P4470-02	CL-01-102124-E2	Solid	EPH_NF	Cool 4 deg C	PSEG05	K51	10/21/2024	NUEPH
P4471-01	B-180-SB01	Solid	EPH	Cool 4 deg C	PORT06	J61	10/19/2024	NUEPH
P4471-02	B-180-SB02	Solid	EPH	Cool 4 deg C	PORT06	J61	10/20/2024	NUEPH
P4472-01	BP-F-28	Solid	EPH_NF	Cool 4 deg C	PSEG03	K51	10/21/2024	NUEPH
P4472-03	BP-F-28-EPH	Solid	EPH_NF	Cool 4 deg C	PSEG03	K51	10/21/2024	NUEPH
P4472-05	BP-F-6	Solid	EPH_NF	Cool 4 deg C	PSEG03	K51	10/21/2024	NUEPH
P4472-07	BP-F-6-EPH	Solid	EPH_NF	Cool 4 deg C	PSEG03	K51	10/21/2024	NUEPH

Date/Time 10/22/24 9:35
 Raw Sample Received by: RJ (84-10-1)
 Raw Sample Relinquished by: CP Sam

Date/Time 10/22/24 10:08
 Raw Sample Received by: CP Sam
 Raw Sample Relinquished by: RJ (Set 104)

16113291
6:1117

WORKLIST(Hardcopy Internal Chain)

WorkList Name : P4473E

WorkList ID : 184660

Department : Extraction

Date : 10-22-2024 09:42:00

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4473-01	TS-1	Solid	EPH	Cool 4 deg C	YANN01	K61	10/18/2024	NJEPH
P4474-01	TS-2	Solid	EPH	Cool 4 deg C	YANN01	K61	10/18/2024	NJEPH

Date/Time 10/22/20 9:42
Raw Sample Received by: PJ (P4473E)
Raw Sample Relinquished by: AS (P4474E)

Date/Time 10/22/24 9:54
Raw Sample Received by: AS (P4474E) SM
Raw Sample Relinquished by: AS (P4474E)

Prep Standard - Chemical Standard Summary

Order ID : P4471

Test : EPH

Prepbatch ID : PB164309,

Sequence ID/Qc Batch ID: FC102224AL,FD102224AR,

Standard ID :

EP2538,EP2551,PP23429,PP23430,PP23519,PP23520,PP23521,PP23522,PP23523,PP23534,PP23538,PP23644,PP
23645,PP23646,PP23647,PP23648,PP23649,PP23650,PP23704,PP23706,PP23712,

Chemical ID :

E2865,E3551,E3743,E3757,E3768,E3788,E3789,E3793,E3794,E3819,P10259,P 11137,P12362,P12972,P13004,P1300
5,P13017,P13018,P13019,P13020,P13022,P13044,P13045,P13047,P13048,P13094,P13096,P13258,P13259,P13278,
P13424,P13430,P13431,P13432,P13433,P13434,P13435,P13436,P13442,P13444,P13447,P13448,P13451,P13452,P
13453,P13454,P13455,P13456,P9826,V 11252,V14143,W3112,

Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3868	METHELENE CHLORIDE+ACETONE	EP2538	09/17/2024	03/11/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 09/17/2024

FROM 8000.00000ml of E3793 + 8000.00000ml of E3794 = Final Quantity: 1600.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2551	10/18/2024	01/03/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 10/18/2024

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
782	100 PPM Aromatic HC Working STD	PP23429	05/21/2024	11/16/2024	Yogesh Patel	None	None	Ankita Jodhani
								05/24/2024

FROM 0.25000ml of P13004 + 0.62500ml of P13259 + 1.25000ml of P10259 + 22.87500ml of E3743 = Final Quantity: 25.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2945	100 PPM Aromatic HC Working STD (Absolute)	PP23430	05/21/2024	11/16/2024	Yogesh Patel	None	None	Ankita Jodhani
								05/24/2024

FROM 0.25000ml of P13005 + 0.62500ml of P13258 + 1.25000ml of P11137 + 22.87500ml of E3743 = Final Quantity: 25.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
787	50 PPM Aromatic HC STD	PP23519	07/15/2024	11/16/2024	Yogesh Patel	None	None	Ankita Jodhani
07/16/2024								

FROM 0.50000ml of E3768 + 0.50000ml of PP23429 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
788	20 PPM Aromatic HC STD	PP23520	07/15/2024	11/16/2024	Yogesh Patel	None	None	Ankita Jodhani
07/16/2024								

FROM 0.80000ml of E3768 + 0.20000ml of PP23429 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
789	10 PPM Aromatic HC STD	PP23521	07/15/2024	11/16/2024	Yogesh Patel	None	None	Ankita Jodhani
								07/16/2024

FROM 0.90000ml of E3768 + 0.10000ml of PP23429 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
790	5 PPM Aromatic HC STD	PP23522	07/15/2024	11/16/2024	Yogesh Patel	None	None	Ankita Jodhani
								07/16/2024

FROM 0.90000ml of E3768 + 0.10000ml of PP23519 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2946	20 PPM Aromatic HC STD ICV (Absolute)	PP23523	07/15/2024	11/16/2024	Yogesh Patel	None	None	Ankita Jodhani
								07/16/2024

FROM 0.80000ml of E3768 + 0.20000ml of PP23430 = Final Quantity: 1.000 ml

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

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

Pest/Pcb STANDARD PREPARATION LOG

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

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
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

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
783	50 PPM Aliphatic HC STD	PP23646	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
								09/10/2024

FROM 0.50000ml of E3789 + 0.50000ml of PP23644 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
785	10 PPM Aliphatic HC STD	PP23648	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
09/10/2024								

FROM 0.90000ml of E3789 + 0.10000ml of PP23644 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2901	20 PPM Aliphatic HC STD ICV (Absolute)	PP23650	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
09/10/2024								

FROM 0.80000ml of E3789 + 0.20000ml of PP23645 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
234	100 PPB ICC GRO STD	PP23704	09/24/2024	01/22/2025	Yogesh Patel	None	None	Ankita Jodhani
								10/01/2024

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1339	100 PPM NJEPH Surrogate Spike	PP23706	09/26/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani
								10/01/2024

FROM 1.25000ml of P13018 + 1.25000ml of P13019 + 1.25000ml of P13020 + 1.25000ml of P13022 + 1.25000ml of P13044 +
1.25000ml of P13045 + 1.25000ml of P13047 + 1.25000ml of P13048 + 490.00000ml of E3788 = Final Quantity: 500.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1330	100 PPM NJEPH Spike Solution	PP23712	09/30/2024	03/30/2025	Yogesh Patel	None	None	Ankita Jodhani 10/01/2024
<u>FROM</u>	5.00000ml of P13094 + 5.00000ml of P13096 + 5.00000ml of P13424 + 5.00000ml of P13430 + 5.00000ml of P13431 + 5.00000ml of P13432 + 5.00000ml of P13433 + 5.00000ml of P13434 + 5.00000ml of P13435 + 5.00000ml of P13436 + 5.00000ml of P13442 + 5.00000ml of P13444 + 5.00000ml of P13447 + 5.00000ml of P13448 + 5.00000ml of P13451 + 5.00000ml of P13452 + 5.00000ml of P13453 + 5.00000ml of P13454 + 5.00000ml of P13455 + 5.00000ml of P13456 = Final Quantity: 100.000 ml							

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-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24C0162011	11/16/2024	05/16/2024 / Rajesh	04/26/2024 / Rajesh	E3743

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
phenomenex	SI500025-30 / Cleanert SPE Silica, 5000 mg/25 ml	Z0513CK1	03/04/2025	09/04/2024 / Rajesh	04/03/2024 / Rajesh	E3757

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)	24E2462004	01/08/2025	07/08/2024 / Rajesh	06/21/2024 / Rajesh	E3768

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)	23H1462005	04/23/2025	08/13/2024 / Rajesh	08/13/2024 / Rajesh	E3788

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)	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	9005-05 / Acetone Ultra (cs/4x4L)	24E0761004	03/11/2025	09/12/2024 / Rajesh	09/11/2024 / Rajesh	E3793

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)	24G2362009	03/17/2025	09/17/2024 / Rajesh	09/03/2024 / Rajesh	E3794

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	04/15/2025	10/15/2024 / Rajesh	10/09/2024 / Rajesh	E3819

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30541 / Custom NJEPH Aromatics Calibration Standard	A0165529	11/21/2024	05/21/2024 / yogesh	01/26/2021 / dhaval	P10259

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	07/08/2024	01/08/2024 / yogesh	10/29/2021 / Abdul	P11137

CHEMICAL RECEIPT LOG BOOK

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	11/21/2024	05/21/2024 / yogesh	12/21/2023 / Yogesh	P13004

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0204177	11/21/2024	05/21/2024 / yogesh	12/21/2023 / Yogesh	P13005

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 #
Restek	31097 / o-Terphenyl Standard	A0204177	03/26/2025	09/26/2024 / yogesh	12/21/2023 / Yogesh	P13018

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	A0204177	03/26/2025	09/26/2024 / yogesh	12/21/2023 / Yogesh	P13019

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0204177	03/26/2025	09/26/2024 / yogesh	12/21/2023 / Yogesh	P13020

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31097 / o-Terphenyl Standard	A0204177	03/26/2025	09/26/2024 / yogesh	12/21/2023 / Yogesh	P13022

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0200707	03/26/2025	09/26/2024 / yogesh	12/26/2023 / Yogesh	P13044

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0200707	03/26/2025	09/26/2024 / yogesh	12/26/2023 / Yogesh	P13045

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0200707	03/26/2025	09/26/2024 / yogesh	12/26/2023 / Yogesh	P13047

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31098 / 1-Chlorooctadecane Standard	A0200707	03/26/2025	09/26/2024 / yogesh	12/26/2023 / Yogesh	P13048

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0203911	03/30/2025	09/30/2024 / yogesh	01/12/2024 / Yogesh	P13094

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0203911	03/30/2025	09/30/2024 / yogesh	01/12/2024 / Yogesh	P13096

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0206496	11/21/2024	05/21/2024 / yogesh	02/20/2024 / yogesh	P13258

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0206496	11/21/2024	05/21/2024 / yogesh	02/20/2024 / yogesh	P13259

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Absolute Standards, Inc.	95899 / NJ EPH Aliphatic n-Hydrocarbons-Revised, 1000 PPM	040524	03/09/2025	09/09/2024 / yogesh	04/11/2024 / yogesh	P13278

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0207239	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13424

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	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13430

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	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13431

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	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13432

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	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13433

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	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13434

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	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13435

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	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13436

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13442

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13444

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13447

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13448

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	A0211254	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13451

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0211254	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13452

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0207019	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13453

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0207019	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13454

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0207019	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13455

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0207019	03/30/2025	09/30/2024 / yogesh	07/16/2024 / Yogesh	P13456

CHEMICAL RECEIPT LOG BOOK

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

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

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

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



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

DD
06/17/2021

Catalog No. : 30541 **Lot No.:** A0172403

Description : NJEPH Aromatics Calibration Standard

NJEPH Aromatics Calibration Standard 2,000µg/mL, Methylene Chloride, 1mL/ampul

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

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

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

P10758
TO
P10762
- (S)

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene CAS # 526-73-8 (Lot 8776.10-36) Purity 98%	2,010.0 µg/mL	+/- 11.7957 µg/mL Gravimetric +/- 90.5449 µg/mL Unstressed +/- 100.4678 µg/mL Stressed
2	Naphthalene CAS # 91-20-3 (Lot MKBZ8680V) Purity 99%	2,006.0 µg/mL	+/- 11.7723 µg/mL Gravimetric +/- 90.3656 µg/mL Unstressed +/- 100.2689 µg/mL Stressed
3	2-Methylnaphthalene CAS # 91-57-6 (Lot STBG8884) Purity 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL Gravimetric +/- 90.4557 µg/mL Unstressed +/- 100.3688 µg/mL Stressed
4	Acenaphthylene CAS # 208-96-8 (Lot N19U) Purity 95%	2,002.6 µg/mL	+/- 11.7524 µg/mL Gravimetric +/- 90.2125 µg/mL Unstressed +/- 100.0989 µg/mL Stressed
5	Acenaphthene CAS # 83-32-9 (Lot MKCN0610) Purity 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL Gravimetric +/- 90.0953 µg/mL Unstressed +/- 99.9689 µg/mL Stressed
6	Fluorene CAS # 86-73-7 (Lot 10217947) Purity 99%	2,016.0 µg/mL	+/- 11.8310 µg/mL Gravimetric +/- 90.8161 µg/mL Unstressed +/- 100.7687 µg/mL Stressed
7	Phenanthrene CAS # 85-01-8 (Lot MKCL7390) Purity 99%	2,012.0 µg/mL	+/- 11.8075 µg/mL Gravimetric +/- 90.6359 µg/mL Unstressed +/- 100.5688 µg/mL Stressed

8	Anthracene			2,002.0	µg/mL	+/-	11.7489	µg/mL	Gravimetric
	CAS #	120-12-7	(Lot MKCM0015)			+/-	90.1854	µg/mL	Unstressed
	Purity	99%				+/-	100.0689	µg/mL	Stressed
9	Fluoranthene			2,003.0	µg/mL	+/-	11.7547	µg/mL	Gravimetric
	CAS #	206-44-0	(Lot MKCF7378)			+/-	90.2305	µg/mL	Unstressed
	Purity	99%				+/-	100.1189	µg/mL	Stressed
10	Pyrene			2,011.0	µg/mL	+/-	11.8017	µg/mL	Gravimetric
	CAS #	129-00-0	(Lot BCCB9880)			+/-	90.5909	µg/mL	Unstressed
	Purity	99%				+/-	100.5188	µg/mL	Stressed
11	Benz(a)anthracene			2,011.0	µg/mL	+/-	11.8014	µg/mL	Gravimetric
	CAS #	56-55-3	(Lot P0022018-0505)			+/-	90.5890	µg/mL	Unstressed
	Purity	98%				+/-	100.5168	µg/mL	Stressed
12	Chrysene			2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS #	218-01-9	(Lot STBJ8094)			+/-	90.0953	µg/mL	Unstressed
	Purity	99%				+/-	99.9689	µg/mL	Stressed
13	Benzo(b)fluoranthene			2,006.0	µg/mL	+/-	11.7721	µg/mL	Gravimetric
	CAS #	205-99-2	(Lot 012012B)			+/-	90.3638	µg/mL	Unstressed
	Purity	97%				+/-	100.2669	µg/mL	Stressed
14	Benzo(k)fluoranthene			2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS #	207-08-9	(Lot 012019K)			+/-	90.5458	µg/mL	Unstressed
	Purity	99%				+/-	100.4688	µg/mL	Stressed
15	Benzo(a)pyrene			2,004.0	µg/mL	+/-	11.7606	µg/mL	Gravimetric
	CAS #	50-32-8	(Lot RP210113)			+/-	90.2755	µg/mL	Unstressed
	Purity	99%				+/-	100.1689	µg/mL	Stressed
16	Indeno(1,2,3-cd)pyrene			2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS #	193-39-5	(Lot 1-RAK-33-4)			+/-	90.5458	µg/mL	Unstressed
	Purity	99%				+/-	100.4688	µg/mL	Stressed
17	Dibenz(a,h)anthracene			2,017.0	µg/mL	+/-	11.8369	µg/mL	Gravimetric
	CAS #	53-70-3	(Lot ER032211-01)			+/-	90.8611	µg/mL	Unstressed
	Purity	99%				+/-	100.8187	µg/mL	Stressed
18	Benzo(g,h,i)perylene			2,003.0	µg/mL	+/-	11.7547	µg/mL	Gravimetric
	CAS #	191-24-2	(Lot 8GFYJ)			+/-	90.2305	µg/mL	Unstressed
	Purity	99%				+/-	100.1189	µg/mL	Stressed
Solvent:	Methylene chloride								
	CAS #	75-09-2							
	Purity	99%							

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

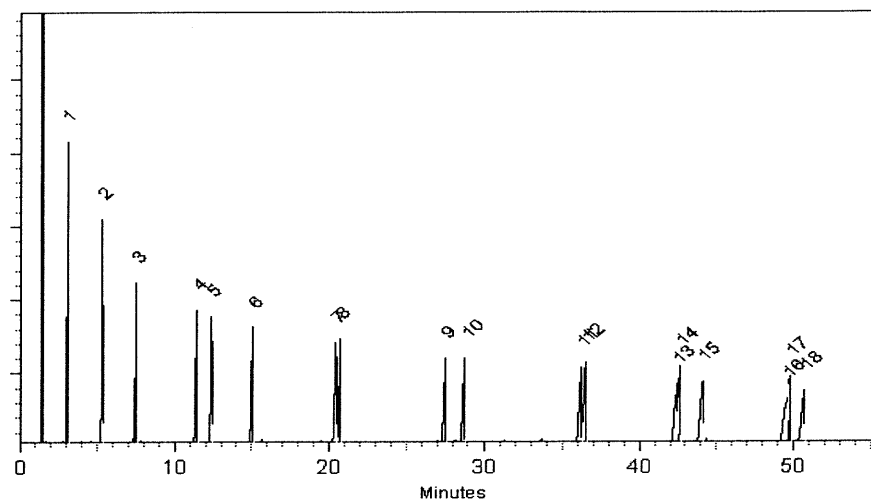
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

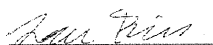
Inj. Temp:
250°C

Det. Temp:
330°C

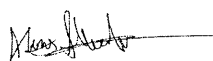
Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Lane Kibe - Mix Technician

Date Mixed: 14-May-2021 Balance: B345965662


Alexis Shelow - Operations Tech I

Date Passed: 18-May-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Sand
Purified
Washed and Ignited



Material No.: 3382-05
Batch No.: 0000243821
Manufactured Date: 2018/04/09
Retest Date: 2025/04/07
Revision No: 1

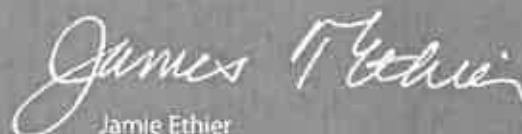
Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	$\leq 0.16\%$	0.01

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

E 2865


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700



**PRODUCTOS
QUÍMICOS
MONTERREY, S.A. DE C.V.**

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MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na ₂ SO ₄
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3

Material No.: 92E
Batch No.: 24C016
Manufactured Date: 2024-C
Expiration Date: 2025-C
Revision 1

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	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	100.0 %
Color (APHA)	≤ 10	10
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.2 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	$\leq 10 \text{ ppm}$	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG24A04224

E 3743


Ken Koehnlein
Sr. Manager, Quality Assurance

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
Page 1 of 1

Cleanert EPH

5g/25ml 15/pkg

固相萃取产品

LOT#:Z0513CK1



MFG#:F04005



Made in China



CAT# SI500025-30

Agela Technologies

E 3757



Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)



Material No.: 9266-A4
Batch No.: 24E2462004
Manufactured Date: 2024-04-10
Expiration Date: 2025-07-10
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	3
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.1 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	$\leq 10 \text{ ppm}$	5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG24D10725

E 3768

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

100 Matsonford Rd, Suite 200, Radnor, PA 19087, U.S.A. Phone 610.386.1700

Acetone

BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

Avantor™



Material No.: 9254-03
Batch No.: 23H1462005
Manufactured Date: 2023-07-26
Expiration Date: 2026-07-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	≥ 99.4 %	99.7 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	≤ 0.3	0.1
Titration Base (μeq/g)	≤ 0.6	< 0.1
Water (H ₂ O)	≤ 0.5 %	0.3 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

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

Recd by RP on 8/13/24

E 3788

Ken Koehnlein
Sr. Manager, Quality Assurance

Material No.: 926
Batch No.: 24C186
Manufactured Date: 2024-0
Expiration Date: 2025-0
Revision N

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	≥ 99.5 %	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.4 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

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

Recd. by RP on 8/13/24

E 3789



Jamie Croak
Director Quality Operations, Bioscience 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

Acetone
CMOS

avantor™



Material No.: 9005-05
Batch No.: 24E0761004
Manufactured Date: 2024-05-02
Retest Date: 2029-05-01
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	≥ 99.5 %	99.8 %
Color (APHA)	≤ 10	< 5
Residue after Evaporation	≤ 5 ppm	< 1 ppm
Titration Acid (μeq/g)	≤ 0.3	0.1
Titration Base (μeq/g)	≤ 0.5	0.1
Water (H ₂ O)	≤ 0.5 %	0.1 %
Solubility in H ₂ O	Passes Test	Passes Test
Chloride (Cl)	≤ 0.2 ppm	< 0.2 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.05 ppm
Trace Impurities – Aluminum (Al)	≤ 50.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 5.0 ppb
Trace Impurities – Barium (Ba)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Calcium (Ca)	≤ 25.0 ppb	3.6 ppb
Trace Impurities – Chromium (Cr)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Trace Impurities – Iron (Fe)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb

>>> Continued on page 2 >>>

Recd. by RP on 9/11/24

E3793

Acetone
CMOS



Material No.: 9005-05
Batch No.: 24E0761004

Test	Specification	Result
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Nickel (Ni)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Strontium (Sr)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 50.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	7.9 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater (Rion KS42AF)	≤ 100 par/ml	8 par/ml
Particle Count – 1.0 µm and greater (Rion KS42AF)	≤ 8 par/ml	2 par/ml

>>> Continued on page 3 >>>

Acetone
CMOS



Material No.: 9005-05
Batch No.: 24E0761004

Test	Specification	Result

For Microelectronic Use
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

Michelle Bales
Sr. Manager, Quality Assurance

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis



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)	$\geq 99.5 \%$	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	< 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 10/09/24

E 3819

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
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700
Page 1 of 1

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



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

Certificate of Analysis

Test	Specification	Result
Assay (CH ₃ OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid (µeq/g)	≤ 0.3	0.2
Titration Base (µeq/g)	≤ 0.10	0.03
Water (by KF, coulometric)	≤ 0.08 %	< 0.01 %
Volatile Organic Trace Analysis - Below EPA 8260B CRQL	Conforms	Conforms

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

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

Jamie Ethier
Vice President Global Quality



CERTIFIED WEIGHT REPORT

Part Number: 95709
Lot Number: 060420
Description: NJ EPH Aromatic Hydrocarbons
18 components
Expiration Date: 060425
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 23060
Weight(s) shown below were combined and diluted to (mL): 500.0
Balance Uncertainty: 5E-05
Flask Uncertainty: 0.058

Solvent(s): Methylene chloride
Lot# 104923

Formulated By:	Benson Chan	060420
Reviewed By:	Pedro L. Renteria	060420
		DATE

Compound	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (±) (µg/mL)	CAS#	SDS Information (Solvent Safety Info. On Attached pg.)	LD50
1. Acenaphthene	1 MKB14871V	2000	99	0.2	1.01003	1.01010	2000.1	8.1	83-32-9	N/A	ip-rat 600mg/kg
2. Acenaphthylene	3 012014	2000	98	0.2	1.02033	1.02053	2000.4	8.2	208-96-6	N/A	N/A
3. Anthracene	13 A0210580	2000	99	0.2	1.01003	1.01009	2000.1	8.1	120-12-7	0.2mg/m3 (8h)	ip-rat 430mg/kg
4. Benz(a)anthracene	28 JY2TD-JT	2000	98	0.2	1.02033	1.02051	2000.3	8.2	56-55-3	N/A	N/A
5. Benz(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. Benz(b)fluoranthene	31 012012b	2000	99	0.2	1.01003	1.01012	2000.2	8.1	205-99-2	N/A	N/A
7. Benz(k)fluoranthene	33 012012k	2000	99	0.2	1.01003	1.01018	2000.3	8.1	207-08-9	N/A	N/A
8. Benz(g,h,i)perylene	32 012018	2000	99	0.2	1.01003	1.01019	2000.3	8.1	191-24-2	N/A	N/A
9. Chrysene	91 012015	2000	98	0.2	1.02033	1.02040	2000.1	8.2	218-01-9	0.2mg/m3	N/A
10. Dibenzo(a,h)anthracene	112 012011	2000	98	0.2	1.02033	1.02050	2000.3	8.2	53-70-3	0.2mg/m3	N/A
11. Fluoranthene	183 04221PV	2000	98	0.2	1.02033	1.02050	2000.3	8.2	206-44-0	N/A	or-rat 2000mg/kg
12. Fluorene	184 07211MV	2000	98	0.2	1.02033	1.02047	2000.3	8.2	86-73-7	N/A	ip-rat 2 g/kg
13. Indeno(1,2,3-cd)pyrene	202 012014	2000	99.9	0.2	1.00093	1.00119	2000.5	8.0	193-39-5	N/A	N/A
14. 2-Methylnaphthalene	214 MKB13783V	2000	97	0.2	1.03085	1.03090	2000.1	8.3	91-57-6	N/A	or-rat 1630mg/kg
15. Naphthalene	222 MKB28690V	2000	100	0.2	0.99993	0.99999	2000.1	8.0	91-20-3	10 ppm (50mg/m3/8h)	or-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	or-rat 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	or-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

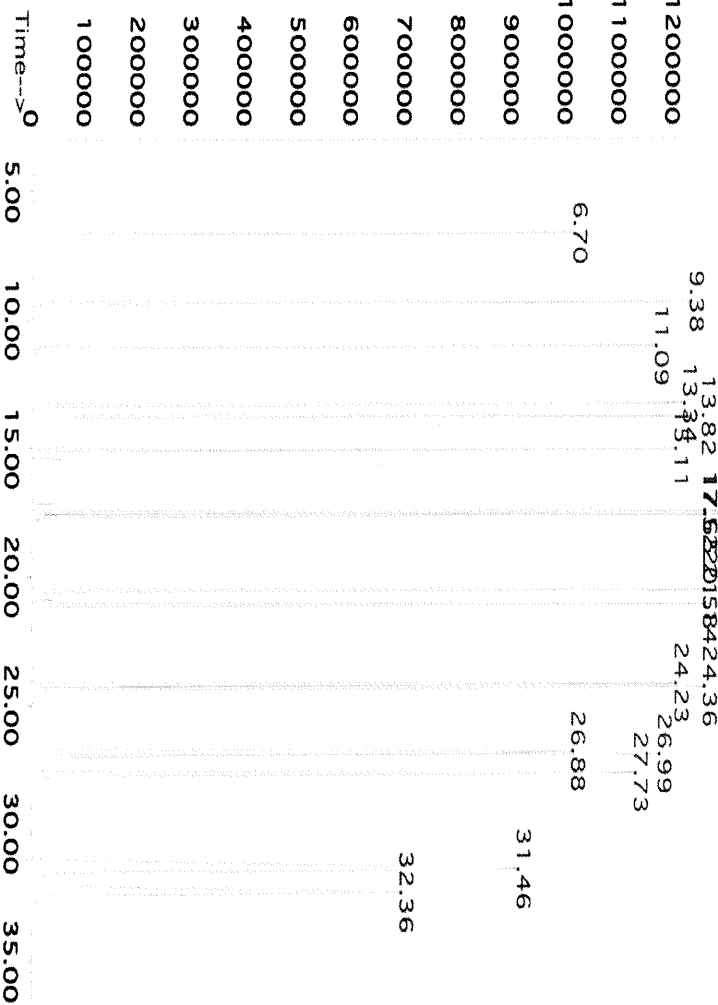
• The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
• Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
• Standards are certified (±) 0.5% of the stated value, unless otherwise stated.
• All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
• Uncertainty Reference: Taylor, B.N., and Kuyat, C.F., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).



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.

Abundance

TIC: 95709.D



Peak No.	Name	MSD RT (min.)
1	1,2,3-Trimethylbenzene	6.70
2	Naphthalene	9.38
3	2-Methylnaphthalene	11.09
4	Acenaphthylene	13.34
5	Acenaphthene	13.82
6	Fluorene	15.11
7	Phenanthrene	17.52
8	Anthracene	17.65
9	Fluoranthene	20.58
10	Pyrene	21.14
11	Chrysene	24.23
12	Benzo(a)anthracene	24.36
13	Benzo(b)fluoranthene/Benzo(k)fluoranthene	26.98
14	Benzo(a)pyrene	27.73
15	Indeno(1,2,3-cd)pyrene/Dibenzo(a,h)anthracene	31.46
16	Benzo(g,h,i)perylene	32.36



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30540 **Lot No.:** A0190424

Description : NJEPH Aliphatics Calibration Standard

Aliphatics Calibration Standard 2000µg/mL, Hexane/Carbon Disulfide (80:20), 1mL/ampul

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

Expiration Date : November 30, 2029 **Storage:** 25°C nominal

Handling: Sonicate prior to use. **Ship:** Ambient

P12361
↓
P12370 } Y.P.
031/6/23

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Nonane (C9) CAS # 111-84-2 Purity 99% (Lot SHBN5361)	2,014.0 µg/mL	+/- 11.8193 +/- 50.0027 +/- 59.9491	µg/mL Gravimetric Unstressed Stressed
2	n-Decane (C10) CAS # 124-18-5 Purity 99% (Lot SHBN8619)	2,014.7 µg/mL	+/- 11.8232 +/- 50.0193 +/- 59.9689	µg/mL Gravimetric Unstressed Stressed
3	Naphthalene CAS # 91-20-3 Purity 99% (Lot MKCH0219)	2,015.3 µg/mL	+/- 11.8271 +/- 50.0358 +/- 59.9888	µg/mL Gravimetric Unstressed Stressed
4	n-Dodecane (C12) CAS # 112-40-3 Purity 99% (Lot SHBN7174)	2,008.0 µg/mL	+/- 11.7841 +/- 49.8538 +/- 59.7705	µg/mL Gravimetric Unstressed Stressed
5	2-Methylnaphthalene CAS # 91-57-6 Purity 96% (Lot STBK0259)	2,007.0 µg/mL	+/- 11.7784 +/- 49.8299 +/- 59.7419	µg/mL Gravimetric Unstressed Stressed
6	n-Tetradecane (C14) CAS # 629-59-4 Purity 99% (Lot STBK2282)	2,016.7 µg/mL	+/- 11.8349 +/- 50.0689 +/- 60.0284	µg/mL Gravimetric Unstressed Stressed
7	n-Hexadecane (C16) CAS # 544-76-3 Purity 98% (Lot SHBM4146)	2,014.9 µg/mL	+/- 11.8244 +/- 50.0246 +/- 59.9753	µg/mL Gravimetric Unstressed Stressed

8	n-Octadecane (C18) CAS # 593-45-3 Purity 97%	(Lot VZKOJ)	2,004.7 µg/mL	+/-	11.7645	µg/mL	Gravimetric
				+/-	49.7710	µg/mL	Unstressed
				+/-	59.6712	µg/mL	Stressed
9	n-Eicosane (C20) CAS # 112-95-8 Purity 99%	(Lot MKCF7888)	2,018.0 µg/mL	+/-	11.8428	µg/mL	Gravimetric
				+/-	50.1020	µg/mL	Unstressed
				+/-	60.0681	µg/mL	Stressed
10	n-Heneicosane (C21) CAS # 629-94-7 Purity 99%	(Lot MKCL3226)	2,000.7 µg/mL	+/-	11.7410	µg/mL	Gravimetric
				+/-	49.6717	µg/mL	Unstressed
				+/-	59.5522	µg/mL	Stressed
11	n-Docosane (C22) CAS # 629-97-0 Purity 99%	(Lot MKCL8918)	2,005.3 µg/mL	+/-	11.7684	µg/mL	Gravimetric
				+/-	49.7876	µg/mL	Unstressed
				+/-	59.6911	µg/mL	Stressed
12	n-Tetracosane (C24) CAS # 646-31-1 Purity 99%	(Lot MKCN2863)	2,018.0 µg/mL	+/-	11.8428	µg/mL	Gravimetric
				+/-	50.1020	µg/mL	Unstressed
				+/-	60.0681	µg/mL	Stressed
13	n-Hexacosane (C26) CAS # 630-01-3 Purity 99%	(Lot MKCD4540)	2,014.0 µg/mL	+/-	11.8193	µg/mL	Gravimetric
				+/-	50.0027	µg/mL	Unstressed
				+/-	59.9491	µg/mL	Stressed
14	n-Octacosane (C28) CAS # 630-02-4 Purity 99%	(Lot BCCG0084)	2,002.0 µg/mL	+/-	11.7489	µg/mL	Gravimetric
				+/-	49.7048	µg/mL	Unstressed
				+/-	59.5919	µg/mL	Stressed
15	n-Triacontane (C30) CAS # 638-68-6 Purity 97%	(Lot MKCQ9436)	2,011.1 µg/mL	+/-	11.8025	µg/mL	Gravimetric
				+/-	49.9316	µg/mL	Unstressed
				+/-	59.8637	µg/mL	Stressed
16	n-Dotriacontane (C32) CAS # 544-85-4 Purity 99%	(Lot BCBW0661)	2,012.0 µg/mL	+/-	11.8075	µg/mL	Gravimetric
				+/-	49.9531	µg/mL	Unstressed
				+/-	59.8895	µg/mL	Stressed
17	n-Tetratriacontane (C34) CAS # 14167-59-0 Purity 99%	(Lot OML4N)	2,006.7 µg/mL	+/-	11.7762	µg/mL	Gravimetric
				+/-	49.8207	µg/mL	Unstressed
				+/-	59.7308	µg/mL	Stressed
18	n-Hexatriacontane (C36) CAS # 630-06-8 Purity 99%	(Lot Z27H018)	2,017.3 µg/mL	+/-	11.8388	µg/mL	Gravimetric
				+/-	50.0855	µg/mL	Unstressed
				+/-	60.0483	µg/mL	Stressed
19	n-Octatriacontane (C38) CAS # 7194-85-6 Purity 96%	(Lot 0000145137)	2,017.3 µg/mL	+/-	11.8385	µg/mL	Gravimetric
				+/-	50.0842	µg/mL	Unstressed
				+/-	60.0467	µg/mL	Stressed
20	n-Tetracontane (C40) CAS # 4181-95-7 Purity 99%	(Lot BSBME)	2,008.7 µg/mL	+/-	11.7880	µg/mL	Gravimetric
				+/-	49.8703	µg/mL	Unstressed
				+/-	59.7903	µg/mL	Stressed
Solvent: Hexane/Carbon disulfide (80:20)							
CAS # 110-54-3/75-15-0							
Purity 99%							

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

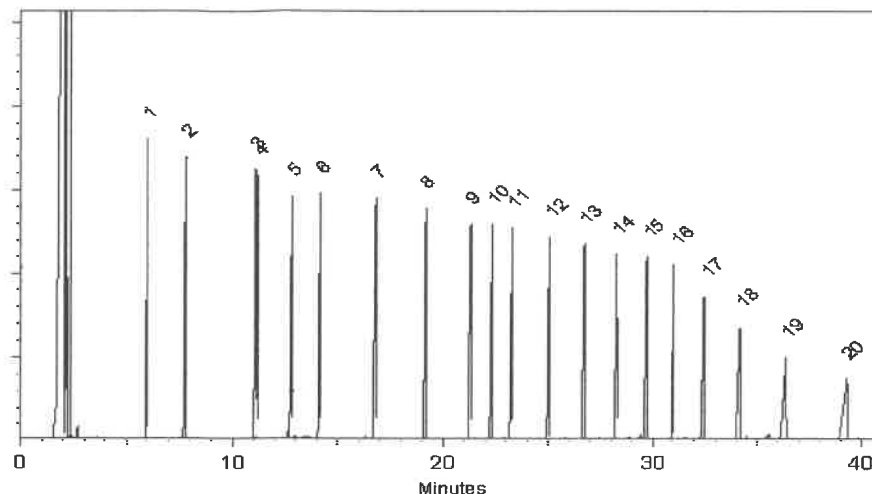
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Morgan Craighead - Mix Technician

Date Mixed: 10-Oct-2022 Balance: 1128360905


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Oct-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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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 combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31098 **Lot No.:** A0204989

Description: 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

P12960
↓
P12991 } Y.P.
12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	14738400	99%	10,097.3 µg/mL	+/- 567.2675

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

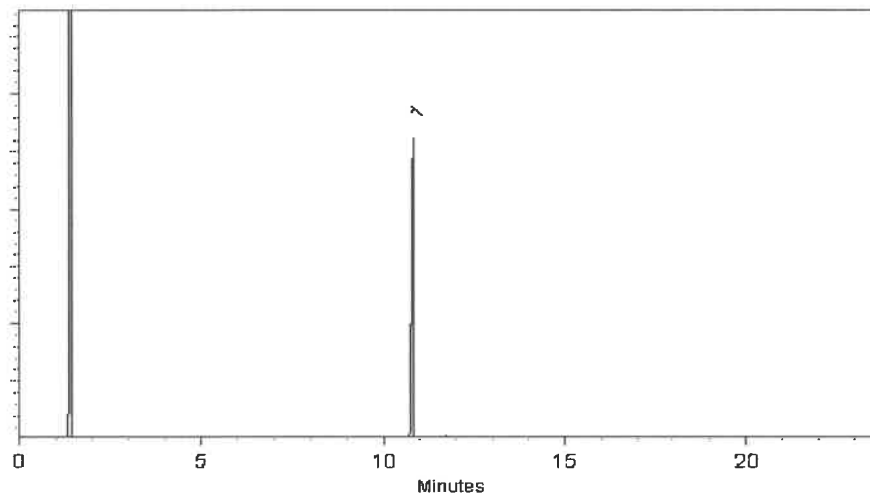
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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Peter Robbins - Operations Technician I

Date Mixed: 02-Dec-2023

Balance Serial # B345965662

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Dec-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



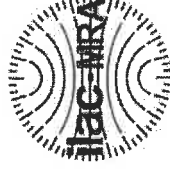
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31097 Lot No.: A0204177

Description: o-Terphenyl Standard

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

Container Size: 2 mL Pkg Amt: > 1 mL

Expiration Date: June 30, 2027 Storage: 10°C or colder

Handling: Sonicate prior to use. Ship: Ambient

P12992 } Y.P.
↓
P13031 } 12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

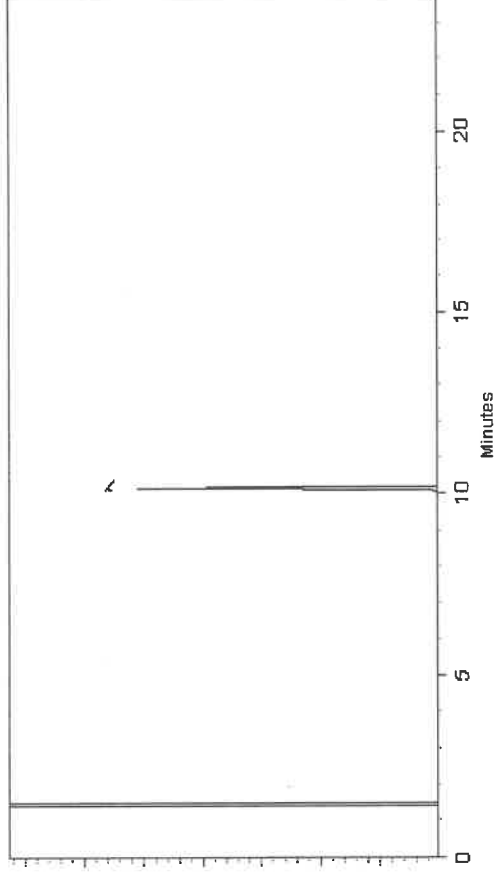
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905



Dillian Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31097 **Lot No.:** A0204177

Description: o-Terphenyl Standard

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

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

Expiration Date: June 30, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P12992 } Y.P.
↓
P13031 } 12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

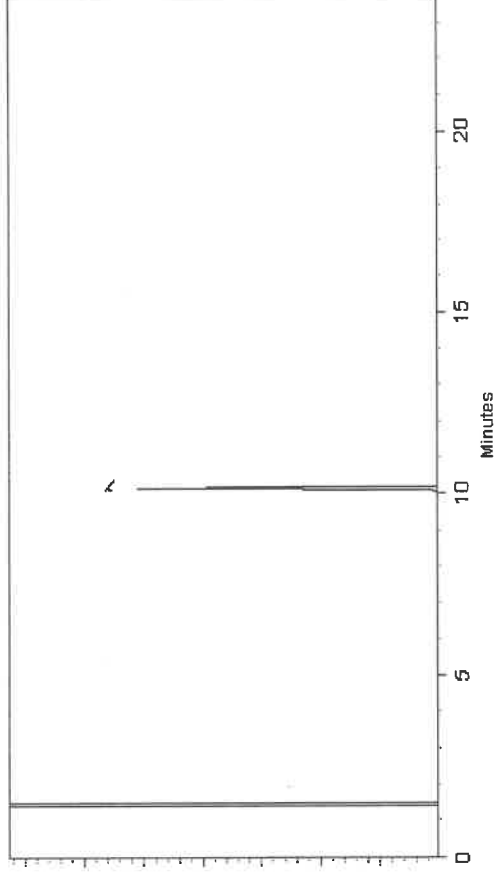
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905


Dillian Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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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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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31097 Lot No.: A0204177

Description: o-Terphenyl Standard

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

Container Size: 2 mL Pkg Amt: > 1 mL

Expiration Date: June 30, 2027 Storage: 10°C or colder

Handling: Sonicate prior to use. Ship: Ambient

P12992 } Y.P.
↓
P13031 } 12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

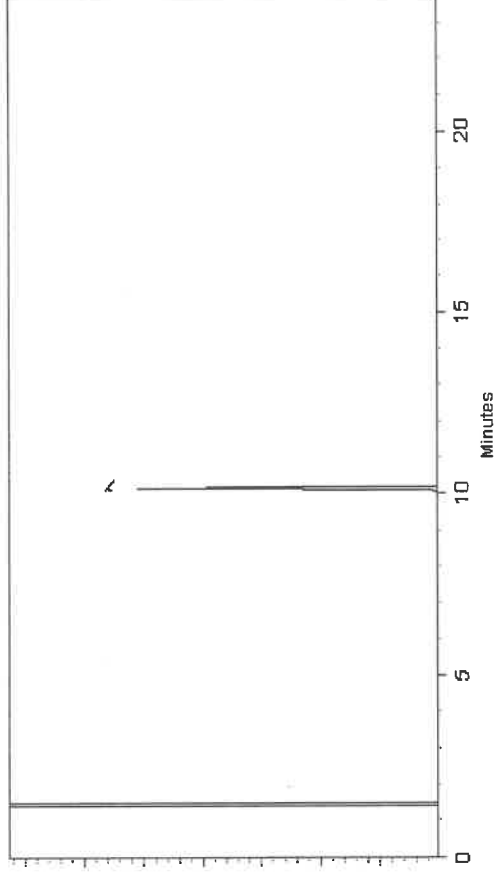
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905



Dillian Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

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- Purity values are rounded to the nearest whole number.

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

Catalog No.: 31097 Lot No.: A0204177

Description: o-Terphenyl Standard

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

Container Size: 2 mL Pkg Amt: > 1 mL

Expiration Date: June 30, 2027 Storage: 10°C or colder

Handling: Sonicate prior to use. Ship: Ambient

P12992 } Y.P.
↓
P13031 } 12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

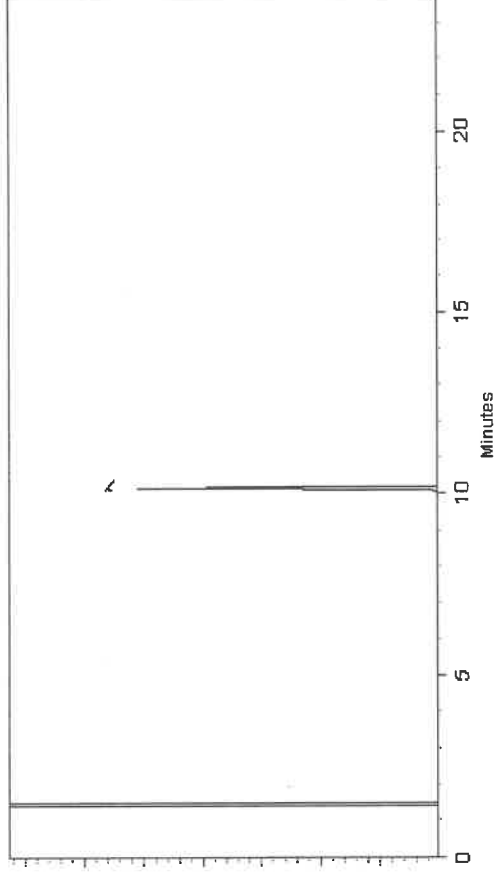
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905


Dillian Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



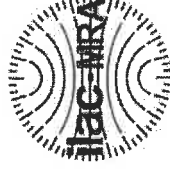
110 Benner Circle
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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No.: 31097 **Lot No.:** A0204177

Description: o-Terphenyl Standard

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

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

Expiration Date: June 30, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P12992 } Y.P.
↓
P13031 } 12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

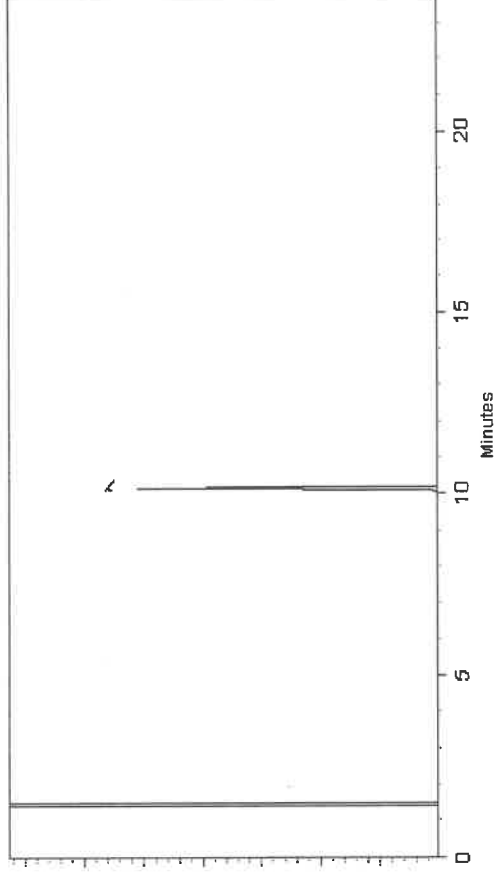
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905


Dillian Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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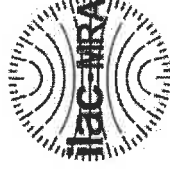
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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.: 31097 Lot No.: A0204177

Description: o-Terphenyl Standard

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

Container Size: 2 mL Pkg Amt: > 1 mL

Expiration Date: June 30, 2027 Storage: 10°C or colder

Handling: Sonicate prior to use. Ship: Ambient

P12992 } Y.P.
↓
P13031 } 12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

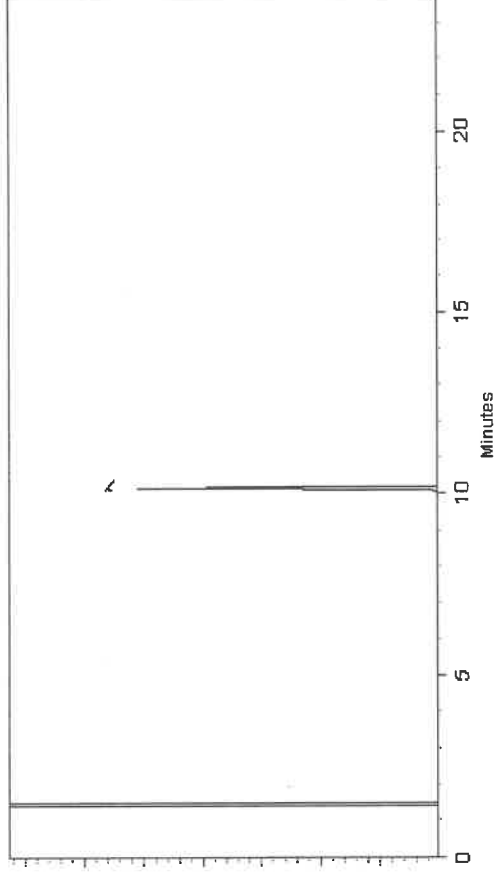
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905



Dillian Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/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:

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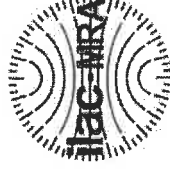
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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 31097 **Lot No.:** A0204177

Description: o-Terphenyl Standard

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

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

Expiration Date: June 30, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P12992 } Y.P.
↓
P13031 } 12/21/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

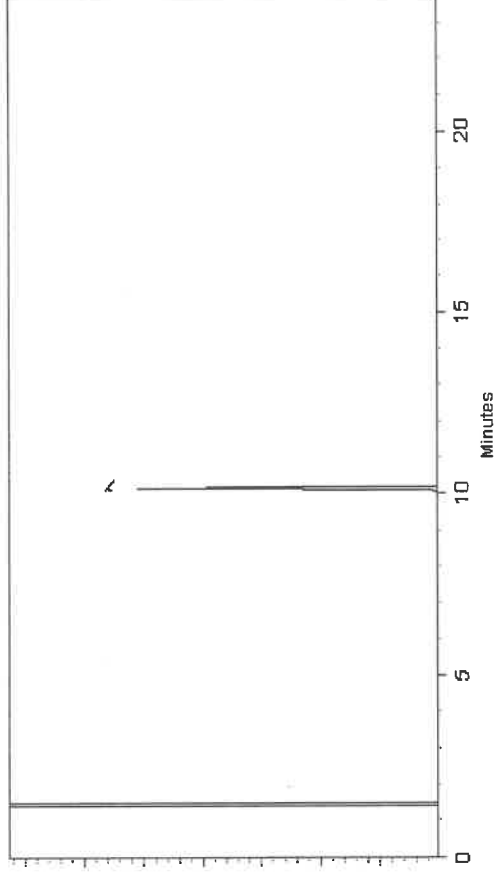
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905



Dillian Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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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.:** A0200707

Description : 1-Chlorooctadecane Standard

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

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

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Ship: Ambient

P130hh
2
P13051 } Y.B.
12/26/23

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	E230426RSRB	99%	10,018.0 µg/mL	+/- 562.8106

* 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:

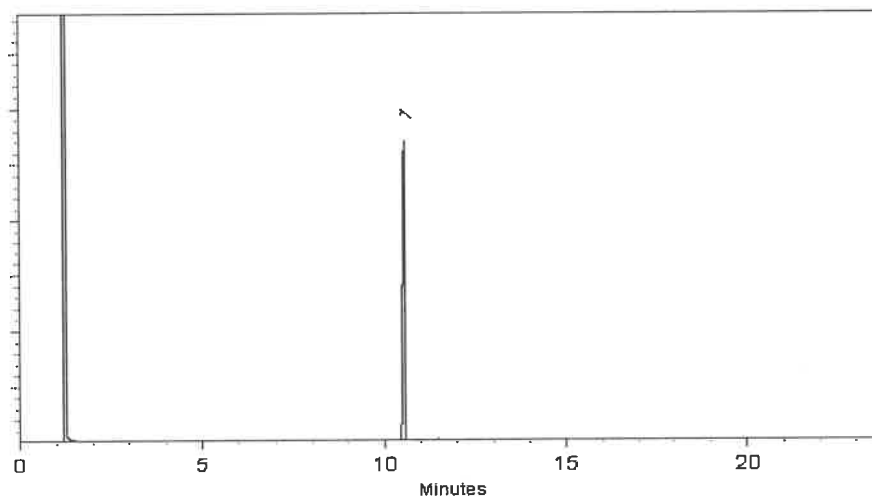
FID

Split Vent:

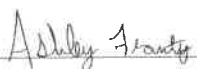
10 ml/min.

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.


Ashley Frantz - Quoting Technician

Date Mixed: 07-Aug-2023

Balance Serial # 1128360905


Dillan Murphy - Operations Technician I

Date Passed: 10-Aug-2023

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



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Catalog No. : 31098 **Lot No.:** A0200707

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

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

Expiration Date : September 30, 2030 **Storage:** 10°C or colder
Ship: Ambient

P130hh
↓
P13051 } Y.B.
12/26/23

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	E230426RSRB	99%	10,018.0 µg/mL	+/- 562.8106

* 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:

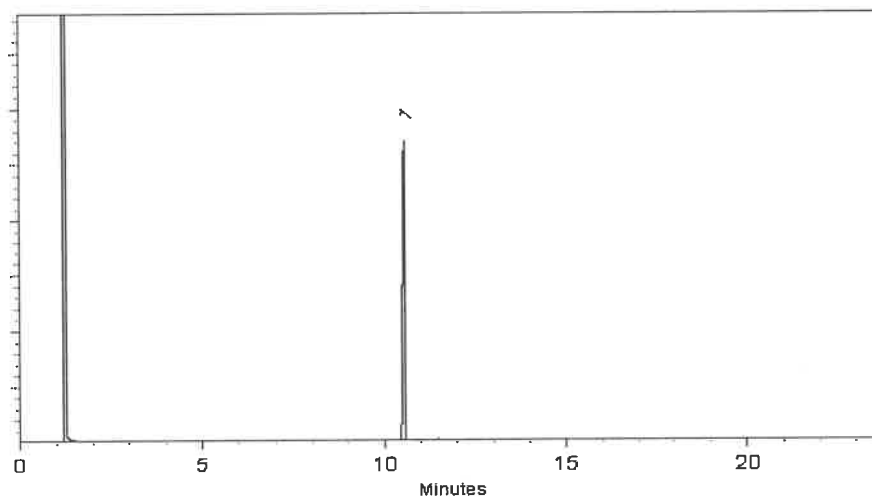
FID

Split Vent:

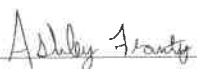
10 ml/min.

Inj. Vol

1µl



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Ashley Frantz - Quoting Technician

Date Mixed: 07-Aug-2023

Balance Serial # 1128360905


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Catalog No. : 31098 **Lot No.:** A0200707

Description : 1-Chlorooctadecane Standard

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

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

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

Ship: Ambient

P130hh
2
P13051 } Y.B.
12/26/23

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	E230426RSRB	99%	10,018.0 µg/mL	+/- 562.8106

* 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:

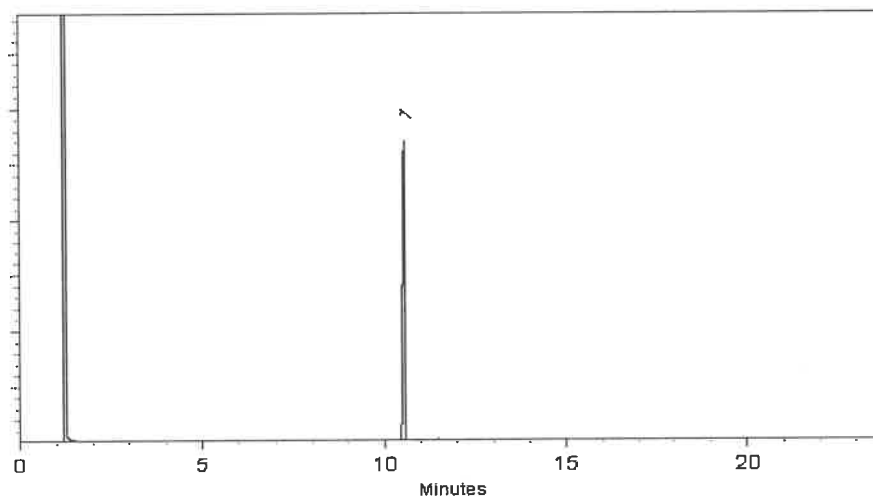
FID

Split Vent:

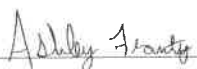
10 ml/min.

Inj. Vol

1µl



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Ashley Frantz - Quoting Technician

Date Mixed: 07-Aug-2023

Balance Serial # 1128360905


Dillan Murphy - Operations Technician I

Date Passed: 10-Aug-2023

Manufactured under Restek's ISO 9001:2015
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Catalog No. : 31098 **Lot No.:** A0200707

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

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

Expiration Date : September 30, 2030 **Storage:** 10°C or colder
Ship: Ambient

P130hh
2
P13051 } Y.B.
12/26/23

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	E230426RSRB	99%	10,018.0 µg/mL	+/- 562.8106

* 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
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Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

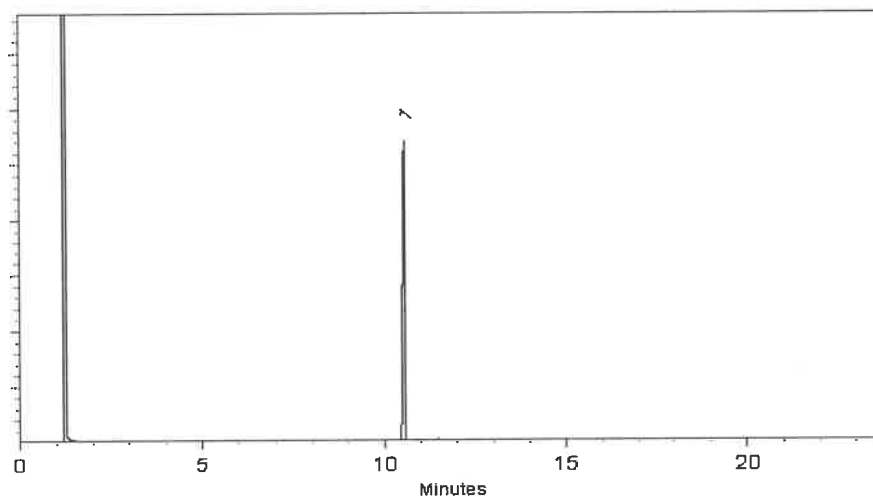
FID

Split Vent:

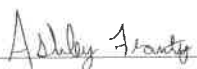
10 ml/min.

Inj. Vol

1µl



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Ashley Frantz - Quoting Technician

Date Mixed: 07-Aug-2023

Balance Serial # 1128360905


Dillan Murphy - Operations Technician I

Date Passed: 10-Aug-2023

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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.:** A0203911

Description : NJEPH Aliphatics Matrix Spike Mix
NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2030 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13053 } Y.P.
↓
P13099 } 01/12/24

CERTIFIED VALUES

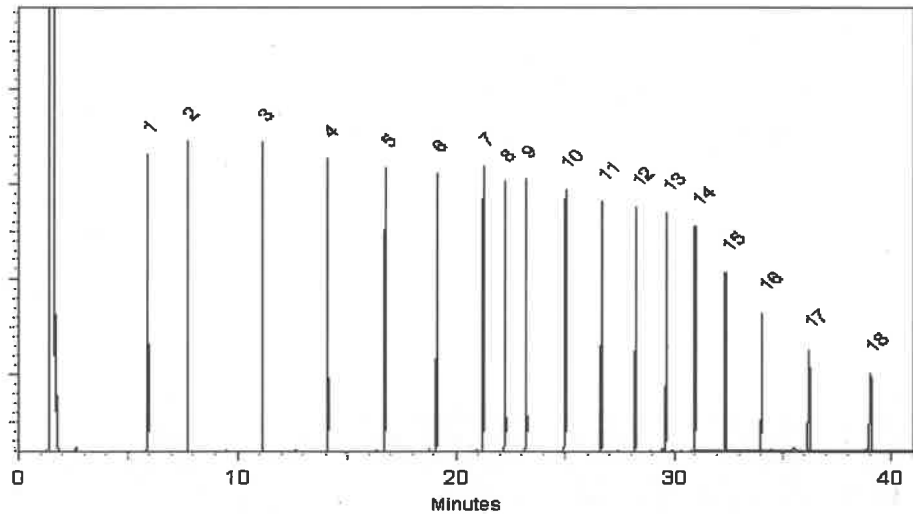
Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.0 µg/mL	+/- 5.1667
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.0 µg/mL	+/- 5.1667
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.7 µg/mL	+/- 5.1839
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBP8192	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.6 µg/mL	+/- 5.1815
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCL8682	99%	200.3 µg/mL	+/- 5.1753
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	MKCQ8345	99%	200.3 µg/mL	+/- 5.1753
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.0 µg/mL	+/- 5.1667
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.5 µg/mL	+/- 5.1788
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.0 µg/mL	+/- 5.1667
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.0 µg/mL	+/- 5.1667
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.0 µg/mL	+/- 5.1667

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

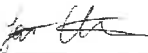
Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

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: 31-Oct-2023

Balance Serial # B345965662


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 06-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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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.:** A0203911

Description : NJEPH Aliphatics Matrix Spike Mix
NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : November 30, 2030 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13053 } Y.P.
↓
P13099 } 01/12/24

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%	200.0 µg/mL	+/- 5.1667
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.0 µg/mL	+/- 5.1667
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.7 µg/mL	+/- 5.1839
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBP8192	99%	200.3 µg/mL	+/- 5.1753
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.6 µg/mL	+/- 5.1815
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.1 µg/mL	+/- 5.1704
8	n-Heneicosane (C21)	629-94-7	MKCL8682	99%	200.3 µg/mL	+/- 5.1753
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	MKCQ8345	99%	200.3 µg/mL	+/- 5.1753
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.0 µg/mL	+/- 5.1667
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.5 µg/mL	+/- 5.1788
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.0 µg/mL	+/- 5.1667
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.0 µg/mL	+/- 5.1667
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.0 µg/mL	+/- 5.1667

* 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.)

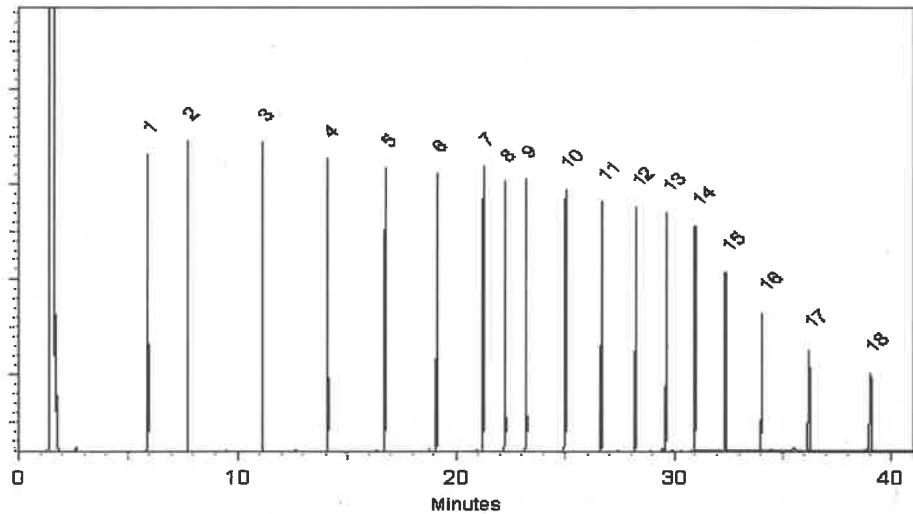
Inj. Temp:
250°C

Det. Temp:
330°C

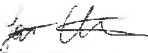
Det. Type:
FID

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: 31-Oct-2023

Balance Serial # B345965662


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 06-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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31480 **Lot No.:** A0206496

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 : December 31, 2029 **Storage:** 10°C or colder

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

P13258 } 7-P.
↓
P13277 } 02/20/24

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%	4,008.5 µg/mL	+/- 180.5736
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,001.5 µg/mL	+/- 180.2582

* 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:

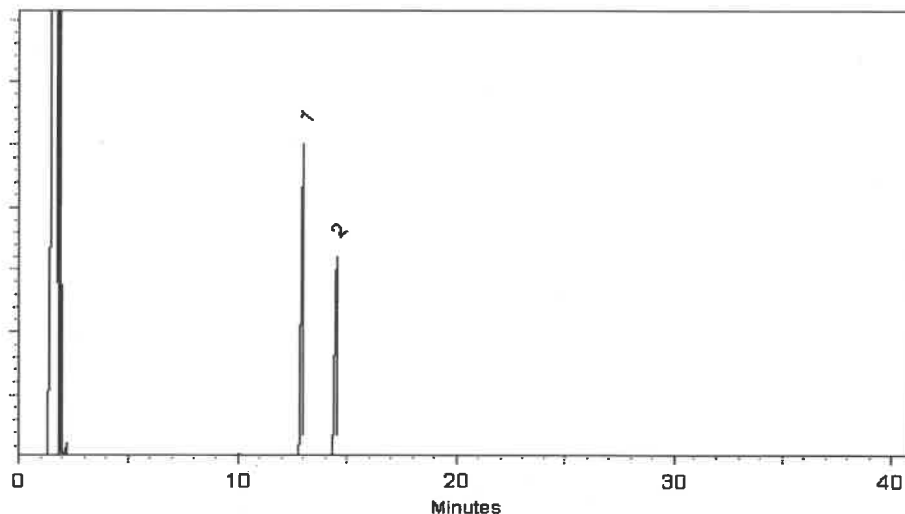
FID

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.

Rebecca Gingerich

Rebecca Gingerich - Operations Tech II

Date Mixed: 11-Jan-2024

Balance Serial # B345965662

Dylan Murphy

Dylan Murphy - Operations Technician I

Date Passed: 15-Jan-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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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.:** A0206496

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 : December 31, 2029 **Storage:** 10°C or colder

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

P13258 } 7-P.
↓
P13277 } 02/20/24

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%	4,008.5 µg/mL	+/- 180.5736
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,001.5 µg/mL	+/- 180.2582

* 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:

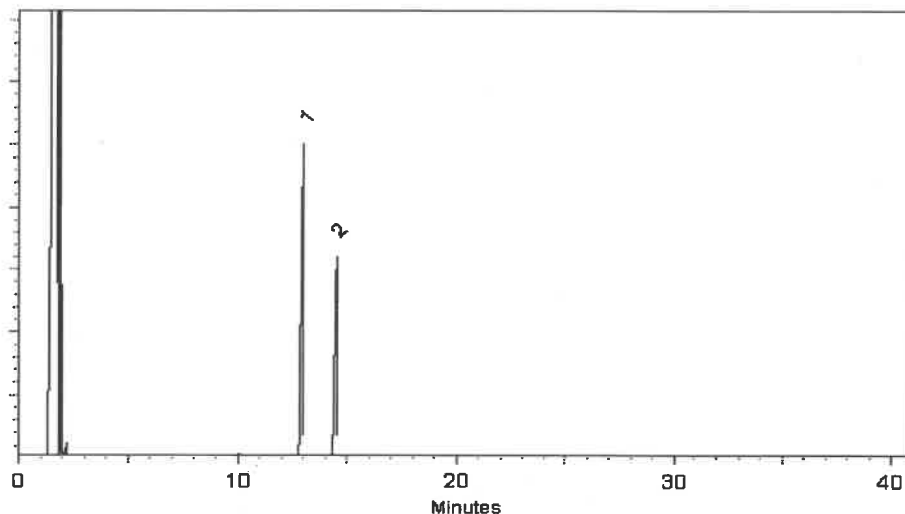
FID

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.

Rebecca Gingerich - Operations Tech II

Date Mixed: 11-Jan-2024

Balance Serial # B345965662

Dillan Murphy - Operations Technician I

Date Passed: 15-Jan-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%.

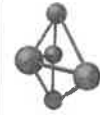
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

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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CERTIFIED WEIGHT REPORT

Part Number: 95999

Lot Number: 040524

Description: NJ EPH Aliphatic n-Hydrocarbons - Revised
20 components

Expiration Date: 040534

Recommended Storage: Ambient (20 °C)

Nominal Concentration (µg/mL): 1000

NIST Test ID#: 6UTB

Weight(s) shown below were combined and diluted to (mL):

CAUTION: Sonicate Before Use

Solvent(s):
Cyclohexane

Lot#
28930

Formulated By:	Anthony Mahoney	040524	DATE
Reviewed By:	Pedro L. Rentas	040524	DATE

P13278
Y.P.
P13287
04/11/24

5E-05 Balance Uncertainty
0.001 Flask Uncertainty

CAUTION: Sonicate Before Use															SDS Information			
Compound															(Solvent Safety Info. On Attached pg.)			
(RM#)	Lot	Dil.	Initial	Initial	Nominal	Purity	Purity	Uncertainty	Target	Actual	Actual	Expanded						
Part Number	Number	Factor	Vol. (mL)	Conc. (µg/mL)	Conc. (µg/mL)	(%)	Uncertainty	Pipette	Weight(g)	Weight(g)	Conc. (µg/mL)	(+/-) (µg/mL)	CAS#	OSHA PEL (TWA)	LD50			
1. 2-Methylnaphthalene	(0214)	MKB3783V	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)	MKB28680V	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	0.013	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m3/8H)	ivr-mus 218mg/kg			
4. n-Decane	95708	120222	1.00	25.00	1000.9	1000	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	0.013	NA	NA	1000.0	4.2	112-40-3	N/A	ivr-mus 3494mg/kg			
6. n-Tetradecane	95708	120222	1.00	25.00	1002.1	1000	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	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	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	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	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	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	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	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	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	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	0.013	NA	NA	999.8	4.3	544-85-4	N/A	ivr-mus 100mg/kg			
17. n-Tetracontane	95708	120222	1.00	25.00	1000.4	1000	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	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	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	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).



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chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0207239

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 : February 28, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13h17 } Y-P.
2 }
P13h29 } 07/11/24.

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%	201.0 µg/mL	+/- 5.1926
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1839
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.7 µg/mL	+/- 5.1839
4	n-Tetradecane (C14)	629-59-4	STBL0465	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBM4146	98%	200.6 µg/mL	+/- 5.1815
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	199.9 µg/mL	+/- 5.1647
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	199.8 µg/mL	+/- 5.1621
8	n-Heneicosane (C21)	629-94-7	MKCL8682	99%	200.7 µg/mL	+/- 5.1839
9	n-Docosane (C22)	629-97-0	MKQC3882	99%	200.0 µg/mL	+/- 5.1667
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.7 µg/mL	+/- 5.1839
11	n-Hexacosane (C26)	630-01-3	MKQC4814	99%	200.3 µg/mL	+/- 5.1753
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.3 µg/mL	+/- 5.1753
13	n-Triacontane (C30)	638-68-6	MKQC9436	97%	199.8 µg/mL	+/- 5.1621
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.0 µg/mL	+/- 5.1926
15	n-Tetratriacontane (C34)	14167-59-0	OML4N	99%	200.7 µg/mL	+/- 5.1839
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.0 µg/mL	+/- 5.1667
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	201.0 µg/mL	+/- 5.1915

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.3 µg/mL	+/- 5.1753

* 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-S (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.)

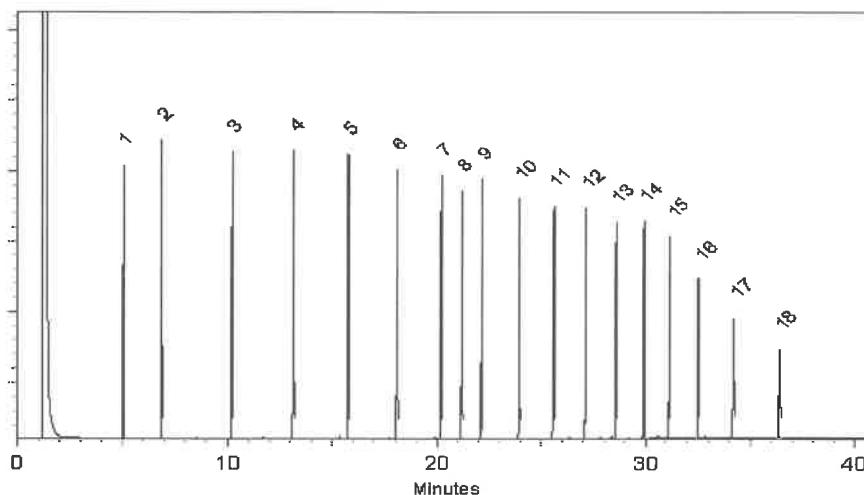
Inj. Temp:
250°C

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.

Matt Fraga
Matt Fragaesi - Mix Technician

Date Mixed: 31-Jan-2024 **Balance Serial #** 1128353505

Dylan Murphy
Dylan Murphy - Operations Technician I

Date Passed: 02-Feb-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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

P13430 } Y-8.
↓
P13436 } 67116124

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-S (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.)

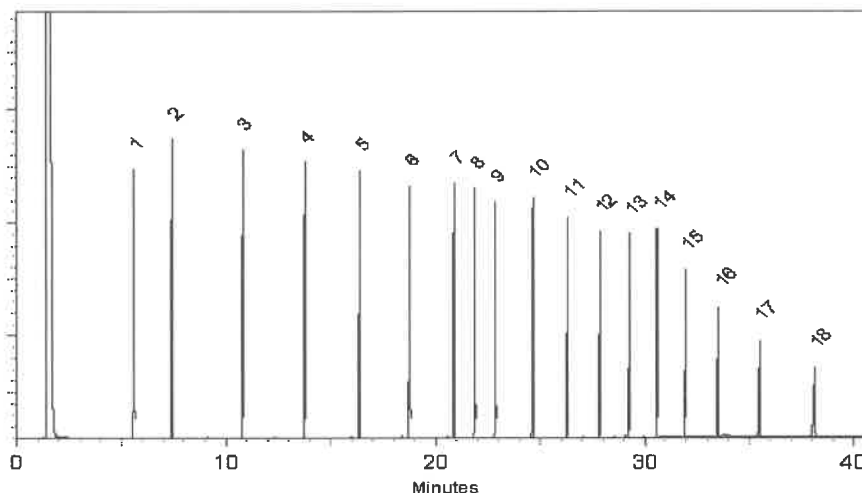
Inj. Temp:
250°C

Det. Temp:
330°C

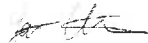
Det. Type:
FID

Split Vent:
2 ml/min.

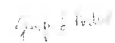
Inj. Vol
1µl



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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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

P13430 } Y-8.
↓
P13436 } 67116124

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-S (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.)

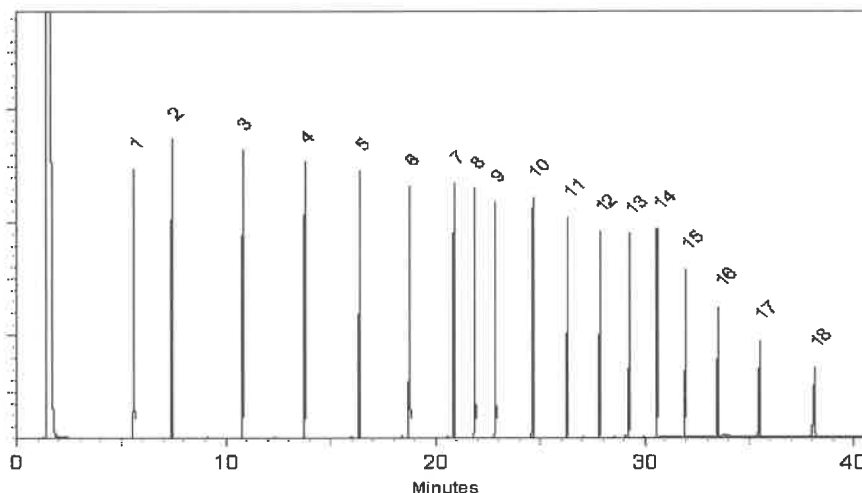
Inj. Temp:
250°C

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.

[Signature]
Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

[Signature]
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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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

P13430 } Y-8.
↓
P13436 } 67116124

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-S (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.)

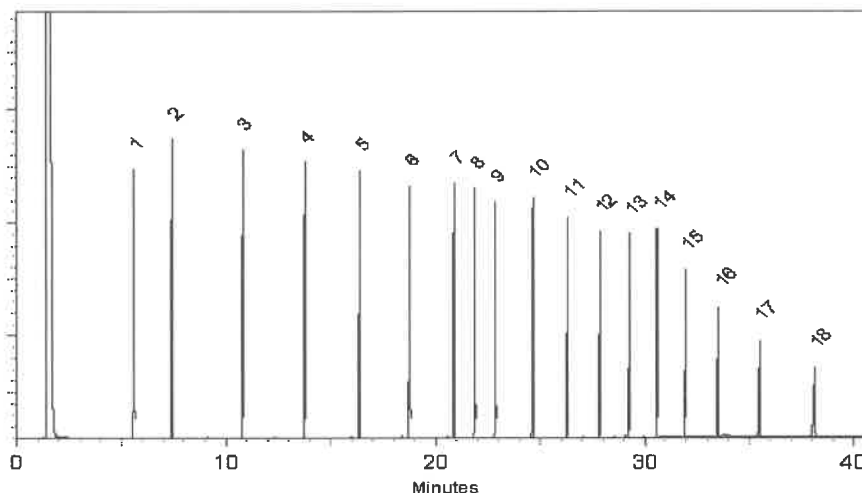
Inj. Temp:
250°C

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.

[Signature]
Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

[Signature]
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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** 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

P13430 } Y-8.
↓
P13436 } 67116124

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-S (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.)

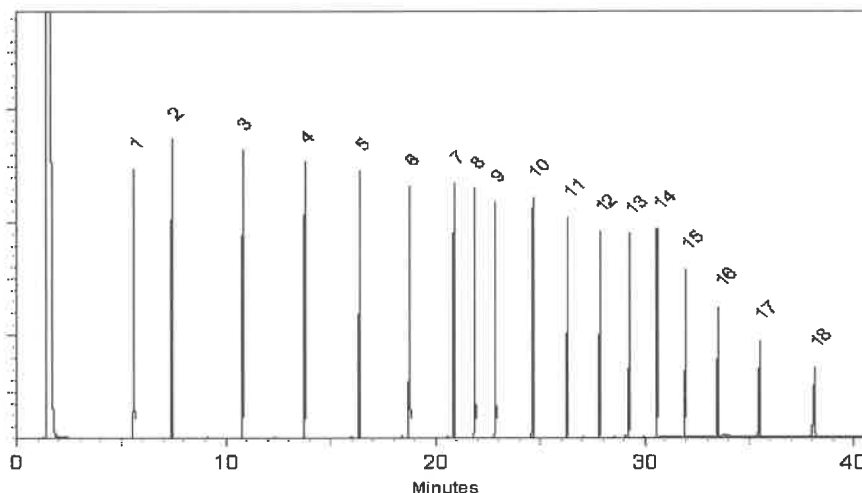
Inj. Temp:
250°C

Det. Temp:
330°C

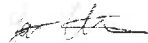
Det. Type:
FID

Split Vent:
2 ml/min.

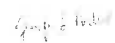
Inj. Vol
1µl



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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:

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Purity Notes:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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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

P13430 } Y-8.
↓
P13436 } 67116124

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-S (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.)

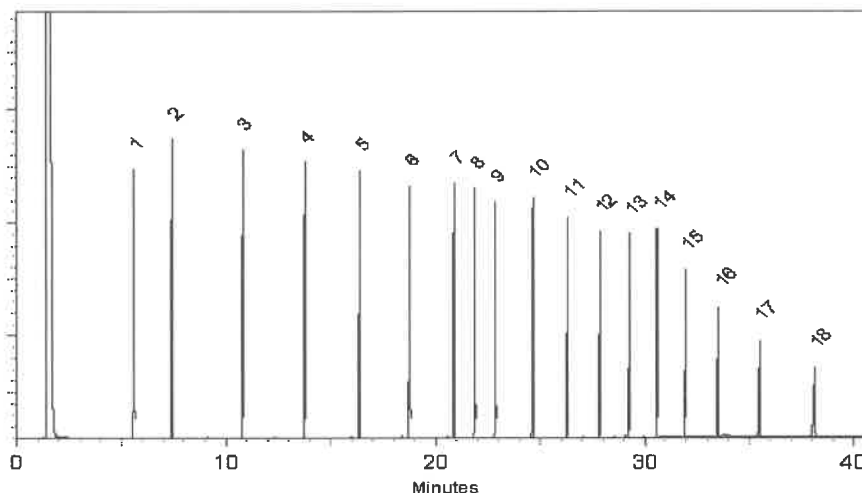
Inj. Temp:
250°C

Det. Temp:
330°C

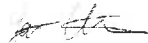
Det. Type:
FID

Split Vent:
2 ml/min.

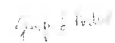
Inj. Vol
1µl



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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:

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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

P13430 } Y-8.
↓
P13436 } 67116124

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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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
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-S (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.)

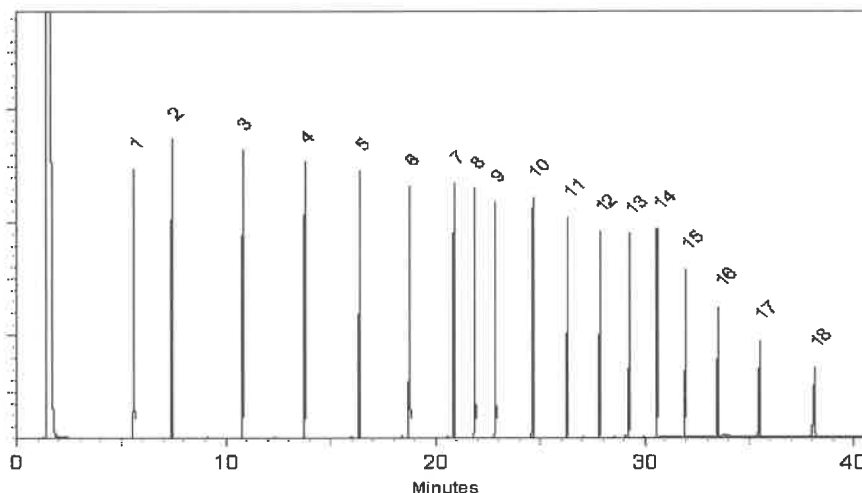
Inj. Temp:
250°C

Det. Temp:
330°C

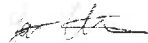
Det. Type:
FID

Split Vent:
2 ml/min.

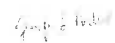
Inj. Vol
1µl



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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
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Certificate #FM 80397

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NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13430 } Y-8.
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P13436 } 67116124

CERTIFIED VALUES

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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-S (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.)

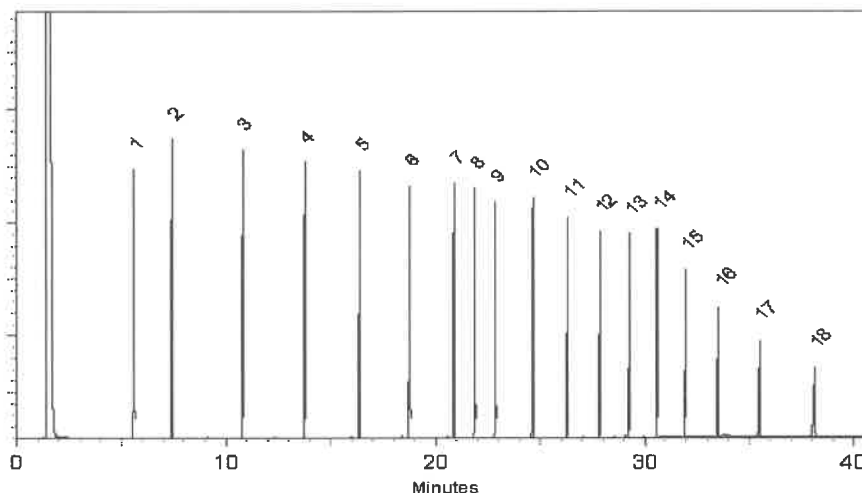
Inj. Temp:
250°C

Det. Temp:
330°C

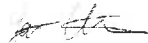
Det. Type:
FID

Split Vent:
2 ml/min.

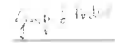
Inj. Vol
1µl



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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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.:** A0211254

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 : April 30, 2030 **Storage:** 10°C or colder

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

P13437
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P13452 } Y-P.
07/16/24

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%	200.0 µg/mL	+/- 9.0114
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
11	Benz(a)anthracene	56-55-3	I30012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.8 µg/mL	+/- 9.0033

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	RP240105ECS	99%	200.8 µg/mL	+/- 9.0474

* 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.)

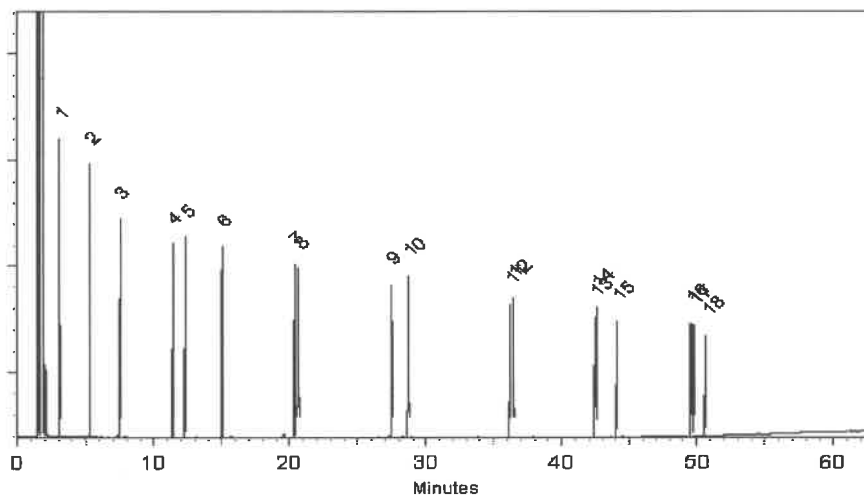
Inj. Temp:
250°C

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.

Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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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.:** A0211254

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 : April 30, 2030 **Storage:** 10°C or colder

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

P13437
↓
P13452 } 7-P.
07/16/24

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%	200.0 µg/mL	+/- 9.0114
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
11	Benz(a)anthracene	56-55-3	I30012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.8 µg/mL	+/- 9.0033

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	RP240105ECS	99%	200.8 µg/mL	+/- 9.0474

* 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.)

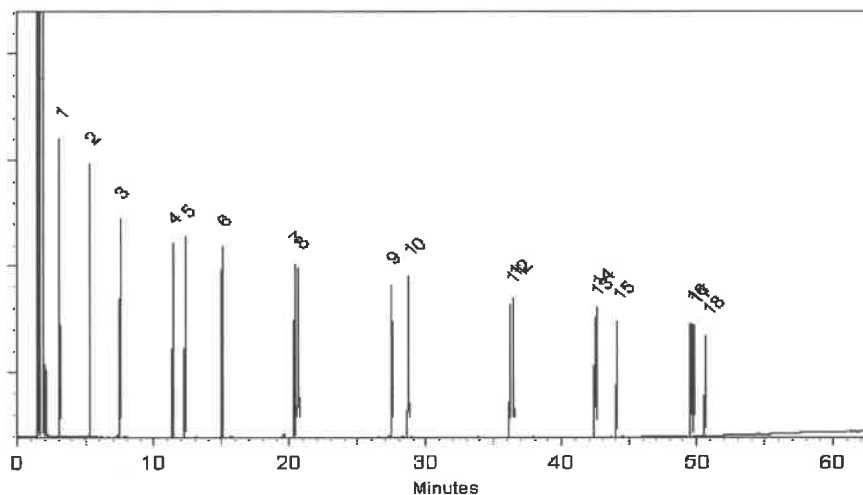
Inj. Temp:
250°C

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.

Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30543 **Lot No.:** A0211254

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 : April 30, 2030 **Storage:** 10°C or colder

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

P13437
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P13452 } Y-P.
07/16/24.

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%	200.0 µg/mL	+/- 9.0114
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
11	Benz(a)anthracene	56-55-3	I30012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

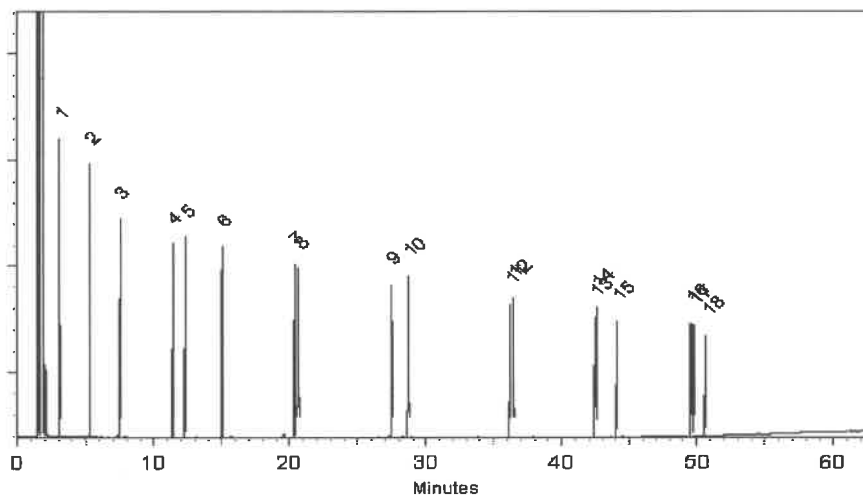
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-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.
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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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CERTIFIED REFERENCE MATERIAL

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Catalog No. : 30543 **Lot No.:** A0211254

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 : April 30, 2030 **Storage:** 10°C or colder

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

P13437
↓
P13452 } Y-P.
07/16/24

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%	200.0 µg/mL	+/- 9.0114
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3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
11	Benz(a)anthracene	56-55-3	I30012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.8 µg/mL	+/- 9.0033

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	RP240105ECS	99%	200.8 µg/mL	+/- 9.0474

* 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.)

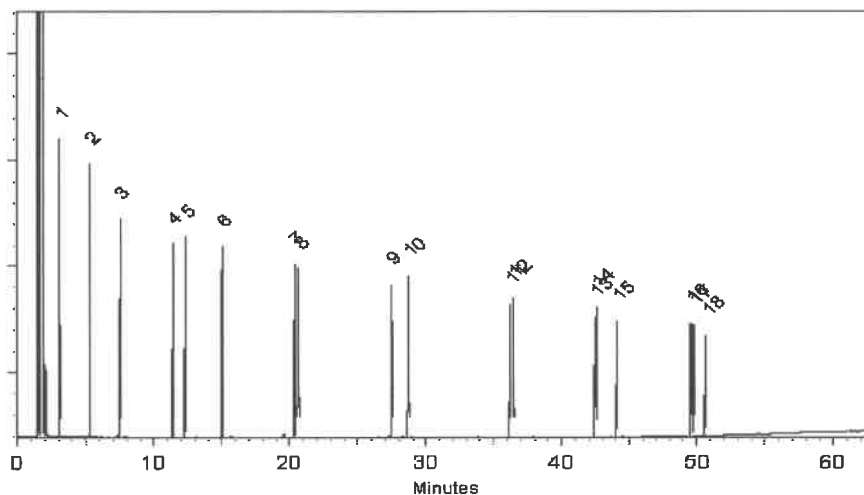
Inj. Temp:
250°C

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.

Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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.:** A0211254

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 : April 30, 2030 **Storage:** 10°C or colder

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

P13437
↓
P13452 } 7-P.
07/16/24

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%	200.0 µg/mL	+/- 9.0114
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
11	Benz(a)anthracene	56-55-3	I30012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.8 µg/mL	+/- 9.0033

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	RP240105ECS	99%	200.8 µg/mL	+/- 9.0474

* 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.)

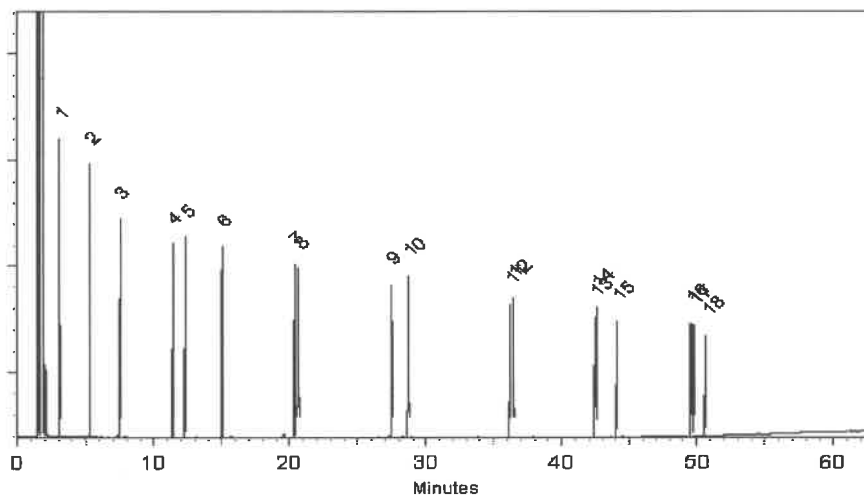
Inj. Temp:
250°C

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.

Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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.:** A0211254

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 : April 30, 2030 **Storage:** 10°C or colder

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

P13437
↓
P13452 } 7-P.
07/16/24

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%	200.0 µg/mL	+/- 9.0114
2	Naphthalene	91-20-3	STBL1057	99%	200.8 µg/mL	+/- 9.0474
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0316
4	Acenaphthylene	208-96-8	214935L31M	98%	200.3 µg/mL	+/- 9.0255
5	Acenaphthene	83-32-9	MKCR7169	99%	202.0 µg/mL	+/- 9.1015
6	Fluorene	86-73-7	10241100	99%	201.2 µg/mL	+/- 9.0655
7	Phenanthrene	85-01-8	MKCS5188	99%	200.4 µg/mL	+/- 9.0294
8	Anthracene	120-12-7	MKCR0570	99%	200.4 µg/mL	+/- 9.0294
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.8 µg/mL	+/- 9.0474
10	Pyrene	129-00-0	BCCK2592	99%	201.2 µg/mL	+/- 9.0655
11	Benz(a)anthracene	56-55-3	I30012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP231206RSR	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	012013B	99%	200.4 µg/mL	+/- 9.0294
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.0 µg/mL	+/- 9.0114
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.7 µg/mL	+/- 9.0431
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.8 µg/mL	+/- 9.0033

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	RP240105ECS	99%	200.8 µg/mL	+/- 9.0474

* 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.)

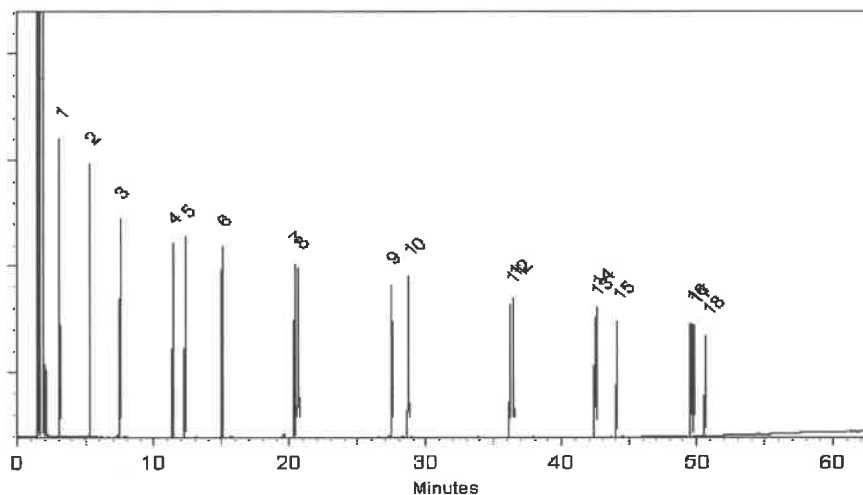
Inj. Temp:
250°C

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.

Michael Maye
Michael Maye - Operations Tech I

Date Mixed: 09-May-2024 **Balance Serial #** 1128353505

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-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:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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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.:** A0207019

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 : December 31, 2029 **Storage:** 10°C or colder

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

P13h53
↓
P13h56 } 7-P.
07/16/24

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%	200.6 µg/mL	+/- 9.0384
2	Naphthalene	91-20-3	STBL1057	99%	200.6 µg/mL	+/- 9.0384
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0299
4	Acenaphthylene	208-96-8	L10L	95%	200.7 µg/mL	+/- 9.0437
5	Acenaphthene	83-32-9	MKCR7169	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10241100	99%	200.4 µg/mL	+/- 9.0294
7	Phenanthrene	85-01-8	MKQCQ2033	99%	200.5 µg/mL	+/- 9.0330
8	Anthracene	120-12-7	MKCR0570	99%	200.7 µg/mL	+/- 9.0438
9	Fluoranthene	206-44-0	MKQCQ4728	99%	200.6 µg/mL	+/- 9.0366
10	Pyrene	129-00-0	BCCG8479	98%	200.7 µg/mL	+/- 9.0449
11	Benz(a)anthracene	56-55-3	I20012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP230601	99%	200.5 µg/mL	+/- 9.0330
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.6 µg/mL	+/- 9.0384
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.8 µg/mL	+/- 9.0456
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.6 µg/mL	+/- 9.0378
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0400

17	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	200.4 µg/mL	+/- 9.0276
18	Benzo(g,h,i)perylene	191-24-2	RP231003RSR	99%	200.5 µg/mL	+/- 9.0330

* 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:

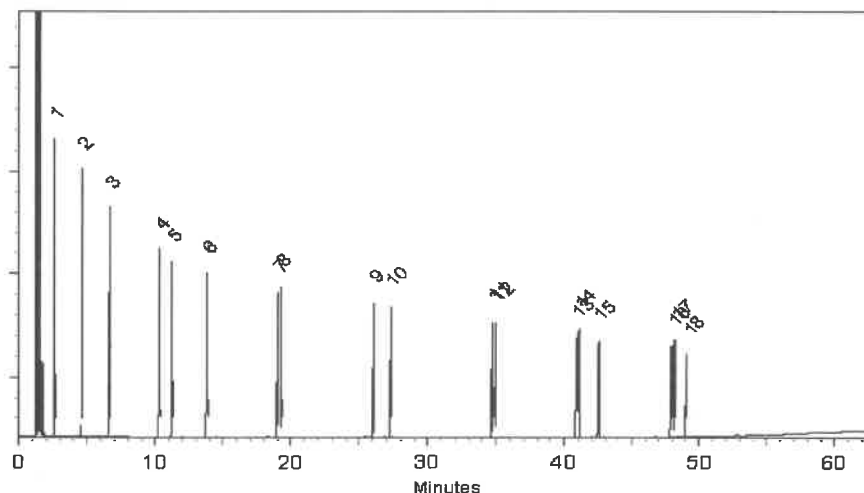
FID

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.

Laith Clemente
Laith Clemente - Operations Technician I

Date Mixed: 25-Jan-2024

Balance Serial # 1128360905

Dylan Murphy
Dylan Murphy - Operations Technician I

Date Passed: 29-Jan-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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CERTIFIED REFERENCE MATERIAL

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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.:** A0207019

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 : December 31, 2029 **Storage:** 10°C or colder

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

P13h53
↓
P13h56 } 7-P.
07/16/24

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%	200.6 µg/mL	+/- 9.0384
2	Naphthalene	91-20-3	STBL1057	99%	200.6 µg/mL	+/- 9.0384
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0299
4	Acenaphthylene	208-96-8	L10L	95%	200.7 µg/mL	+/- 9.0437
5	Acenaphthene	83-32-9	MKCR7169	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10241100	99%	200.4 µg/mL	+/- 9.0294
7	Phenanthrene	85-01-8	MKQCQ2033	99%	200.5 µg/mL	+/- 9.0330
8	Anthracene	120-12-7	MKCR0570	99%	200.7 µg/mL	+/- 9.0438
9	Fluoranthene	206-44-0	MKQCQ4728	99%	200.6 µg/mL	+/- 9.0366
10	Pyrene	129-00-0	BCCG8479	98%	200.7 µg/mL	+/- 9.0449
11	Benz(a)anthracene	56-55-3	I20012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP230601	99%	200.5 µg/mL	+/- 9.0330
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.6 µg/mL	+/- 9.0384
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.8 µg/mL	+/- 9.0456
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.6 µg/mL	+/- 9.0378
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0400

17	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	200.4 µg/mL	+/- 9.0276
18	Benzo(g,h,i)perylene	191-24-2	RP231003RSR	99%	200.5 µg/mL	+/- 9.0330

* 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:

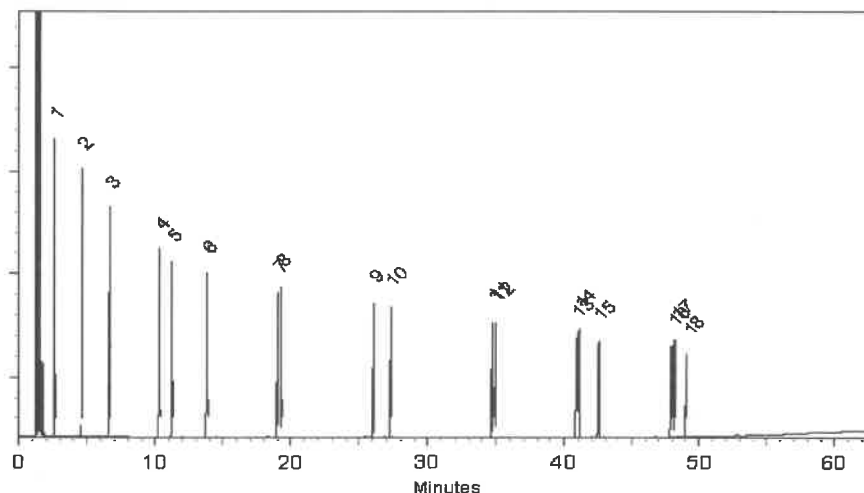
FID

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.

Laith Clemente
Laith Clemente - Operations Technician I

Date Mixed: 25-Jan-2024

Balance Serial # 1128360905

Dylan Murphy
Dylan Murphy - Operations Technician I

Date Passed: 29-Jan-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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Bellefonte, PA 16823-8812
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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0207019

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 : December 31, 2029 **Storage:** 10°C or colder

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

P13h53
↓
P13h56 } 7-P.
07/16/24

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%	200.6 µg/mL	+/- 9.0384
2	Naphthalene	91-20-3	STBL1057	99%	200.6 µg/mL	+/- 9.0384
3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0299
4	Acenaphthylene	208-96-8	L10L	95%	200.7 µg/mL	+/- 9.0437
5	Acenaphthene	83-32-9	MKCR7169	99%	200.0 µg/mL	+/- 9.0114
6	Fluorene	86-73-7	10241100	99%	200.4 µg/mL	+/- 9.0294
7	Phenanthrene	85-01-8	MKQCQ2033	99%	200.5 µg/mL	+/- 9.0330
8	Anthracene	120-12-7	MKCR0570	99%	200.7 µg/mL	+/- 9.0438
9	Fluoranthene	206-44-0	MKQCQ4728	99%	200.6 µg/mL	+/- 9.0366
10	Pyrene	129-00-0	BCCG8479	98%	200.7 µg/mL	+/- 9.0449
11	Benz(a)anthracene	56-55-3	I20012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP230601	99%	200.5 µg/mL	+/- 9.0330
13	Benzo(b)fluoranthene	205-99-2	022013B	99%	200.6 µg/mL	+/- 9.0384
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.8 µg/mL	+/- 9.0456
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.6 µg/mL	+/- 9.0378
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	200.6 µg/mL	+/- 9.0400

17	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	200.4 µg/mL	+/- 9.0276
18	Benzo(g,h,i)perylene	191-24-2	RP231003RSR	99%	200.5 µg/mL	+/- 9.0330

* 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:

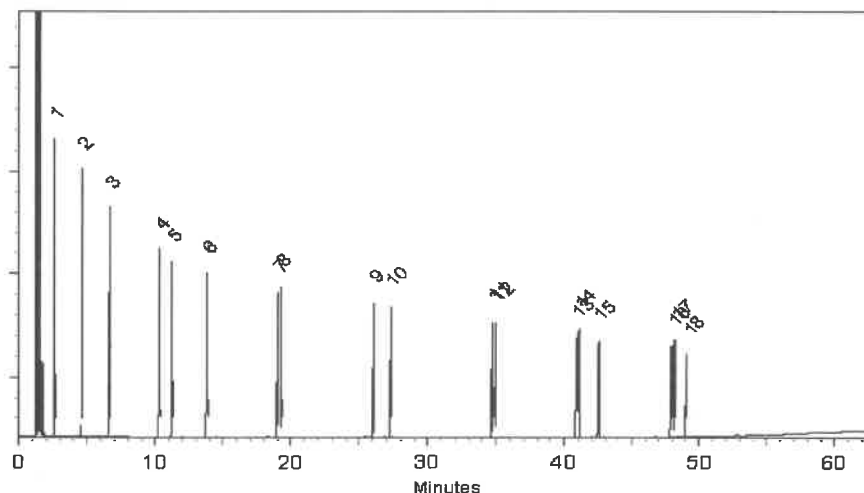
FID

Split Vent:

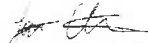
20 ml/min.

Inj. Vol

1µl

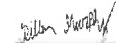


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Laith Clemente - Operations Technician I

Date Mixed: 25-Jan-2024

Balance Serial # 1128360905


Dillan Murphy - Operations Technician I

Date Passed: 29-Jan-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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$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0207019

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 : December 31, 2029 **Storage:** 10°C or colder

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

P13h53
↓
P13h56 } 7-P.
07/16/24

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%	200.6 µg/mL	+/- 9.0384
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3	2-Methylnaphthalene	91-57-6	STBK0259	96%	200.4 µg/mL	+/- 9.0299
4	Acenaphthylene	208-96-8	L10L	95%	200.7 µg/mL	+/- 9.0437
5	Acenaphthene	83-32-9	MKCR7169	99%	200.0 µg/mL	+/- 9.0114
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7	Phenanthrene	85-01-8	MKQCQ2033	99%	200.5 µg/mL	+/- 9.0330
8	Anthracene	120-12-7	MKCR0570	99%	200.7 µg/mL	+/- 9.0438
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10	Pyrene	129-00-0	BCCG8479	98%	200.7 µg/mL	+/- 9.0449
11	Benz(a)anthracene	56-55-3	I20012022BAA	99%	200.8 µg/mL	+/- 9.0474
12	Chrysene	218-01-9	RP230601	99%	200.5 µg/mL	+/- 9.0330
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14	Benzo(k)fluoranthene	207-08-9	012022K	99%	200.8 µg/mL	+/- 9.0456
15	Benzo(a)pyrene	50-32-8	O45GL	98%	200.6 µg/mL	+/- 9.0378
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17	Dibenz(a,h)anthracene	53-70-3	ER032211-01	99%	200.4 µg/mL	+/- 9.0276
18	Benzo(g,h,i)perylene	191-24-2	RP231003RSR	99%	200.5 µg/mL	+/- 9.0330

* 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:

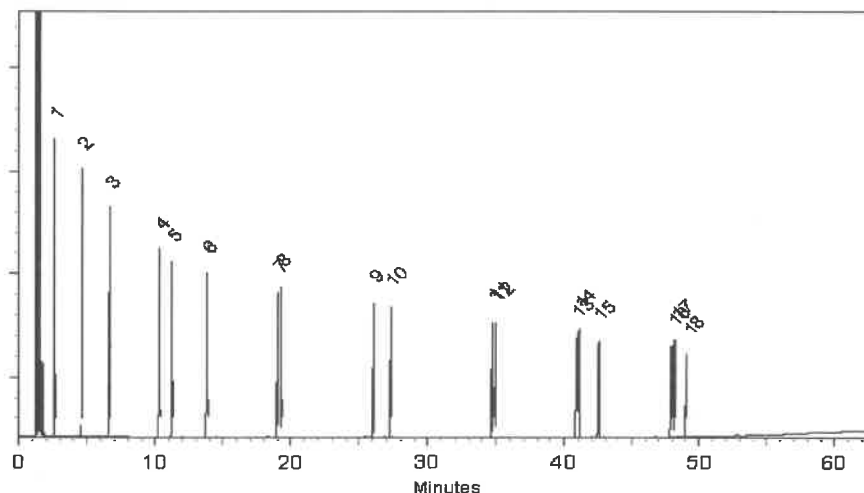
FID

Split Vent:

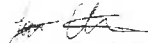
20 ml/min.

Inj. Vol

1µl

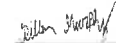


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Laith Clemente - Operations Technician I

Date Mixed: 25-Jan-2024

Balance Serial # 1128360905


Dillan Murphy - Operations Technician I

Date Passed: 29-Jan-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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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.



SHIPPING DOCUMENTS

CLIENT INFORMATION				CLIENT PROJECT INFORMATION				CLIENT BILLING INFORMATION									
REPORT TO BE SENT TO: COMPANY: GANNETT FLEMING ADDRESS: 1010 ADAMS AVENUE CITY: AUDUBON STATE: NJ ZIP: 19403 ATTENTION: JOE KRUPANSKY PHONE: 610-301-8342 FAX:				PROJECT NAME: AMTRAK'S REPLACEMENT OF SAWTOOTH BRIDGES PROJECT NO.: 9500000878 LOCATION: KEARNY, NJ PROJECT MANAGER: JOE KRUPANSKY e-mail: QAQC@bemsys.com PHONE: 610-301-8342 FAX:				BILL TO: CHEMTECH PO#: ADDRESS: 284 SHEFFIELD ST CITY: MOUNTAINSIDE STATE: NJ ZIP: 07092 ATTENTION: SAMANTHA BEADLEY PHONE: 908-789-7225 ANALYSIS 728-3148									
DATA TURNAROUND INFORMATION				DATA DELIVERABLE INFORMATION													
FAX (RUSH) _____ DAYS* HARDCOPY (DATA PACKAGE): 10 DAYS* EDD: 10 DAYS* *TO BE APPROVED BY CHEMTECH STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS				☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data) ☐ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP ☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B + Raw Data ☐ Other _____ ☐ EDD FORMAT BEM EDD				1 TCL VOC+10 2 TCL PAH 3 PCBs 4 TAL METALS 5 EPA 6 CR (VI) 7 CR (III) 8 9									
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS ← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	B-180-SB01	S		✓	10/19/24	200	4	x	x	x	x	x	x	x			5
2.	B-180-SB02	S		✓	10/20/24	1245	4	x	x	x	x	x	x	x			7
3.	TB100824	W			10/08/24	16/08/24	2	x									
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY																	
RELINQUISHED BY SAMPLER: 1. [Signature]		DATE/TIME: 10/21/24 1240		RECEIVED BY: 1. [Signature]		Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 23.0 °C Comments: [Signature]											
RELINQUISHED BY SAMPLER: 2.		DATE/TIME:		RECEIVED BY: 2. [Signature]													
RELINQUISHED BY SAMPLER: 3.		DATE/TIME:		RECEIVED BY: 3.		Page ____ of ____ CLIENT: ☐ Hand Delivered ☐ Other _____ CHEMTECH: ☐ Picked Up ☐ Field Sampling Shipment Complete ☐ YES ☐ NO											

Shreena

To: jkrupansky@gfnet.com
Subject: P4471

Good afternoon,

Just informing you P4471 samples were received out of temp.

Best Regards,



Yazmeen Gomez
Sr. Project Manager, CHEMTECH Laboratory
An Alliance Technical Group Company
Main: 908-789-8900
Direct: 908-728-3147
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com



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 (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488