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Cover Page

Order ID : P4578

Project ID : Amtrak Sawtooth Bridges 2024

Client : Portal Partners Tri-Venture

Lab Sample Number	Client Sample Number
P4578-01	WB-305-SW
P4578-02	WB-305-SW-1
P4578-03	WB-305-TOP
P4578-04	WB-305-TOP-1
P4578-05	WB-305-BOT
P4578-06	WB-305-BOT
P4578-07	WB-305-BOT-1
P4578-08	WB-305-BOT-1
P4578-09	TB-10252024

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: 11/6/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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DATA REPORTING QUALIFIERS- ORGANIC

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

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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **P4578**

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

QA Review Signature: **KETAN PATEL** **Date:** **11/06/2024**

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LAB CHRONICLE

OrderID:	P4578	**OrderDate:**	10/25/2024 3:58:00 PM
Client:	Portal Partners Tri-Venture	**Project:**	Amtrak Sawtooth Bridges 2024
Contact:	Joseph Krupansky	**Location:**	K63,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4578-01	**WB-305-SW**	**WATER**			**10/25/24**			**10/25/24**
			PCB	8082A		10/29/24	10/29/24	
			EPH	NJEPH		10/30/24	10/31/24	
P4578-02	**WB-305-SW-1**	**WATER**			**10/25/24**			**10/25/24**
			PCB	8082A		10/29/24	10/29/24	
			EPH	NJEPH		10/30/24	10/31/24	
P4578-03	**WB-305-TOP**	**SOIL**			**10/25/24**			**10/25/24**
			PCB	8082A		10/28/24	10/29/24	
			EPH	NJEPH		10/30/24	10/30/24	
			EPH	NJEPH		10/30/24	10/31/24	
P4578-04	**WB-305-TOP-1**	**SOIL**			**10/25/24**			**10/25/24**
			PCB	8082A		10/28/24	10/29/24	
			EPH	NJEPH		10/30/24	10/30/24	
			EPH	NJEPH		10/30/24	10/31/24	
P4578-05	**WB-305-BOT**	**SOIL**			**10/25/24**			**10/25/24**
			PCB	8082A		10/28/24	10/29/24	
			EPH	NJEPH		10/30/24	10/30/24	
P4578-06	**WB-305-BOT**	**TCLP**			**10/25/24**			**10/25/24**
			TCLP Pesticide	8081B		10/26/24	10/29/24	
P4578-07	**WB-305-BOT-1**	**SOIL**			**10/25/24**			**10/25/24**
			PCB	8082A		10/28/24	10/29/24	
			EPH	NJEPH		10/30/24	10/30/24	
			EPH	NJEPH		10/30/24	10/31/24	
P4578-08	**WB-305-BOT-1**	**TCLP**			**10/25/24**			**10/25/24**
			TCLP Pesticide	8081B		10/26/24	10/29/24	

QC
SUMMARY

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SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM CASE No.: P4578 SAS No.: P4578 SDG No.: P4578

Run Number: FC103024AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)			TOT OUT
WB-305-TOP	60			0
WB-305-TOP-1	48			0
WB-305-BOT	102			0
WB-305-BOTMS	95			0
WB-305-BOTMSD	92			0
WB-305-BOT-1	71			0
PB164525BL	71			0
PB164525BS	90			0
PB164525BSD	92			0

	QC LIMITS
1-chlorooctadecane (SURR)	(40-140)

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

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SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM CASE No.: P4578 SAS No.: P4578 SDG No.: P4578

Run Number: FD103024AR

Client SAMPLE NO.	2-Bromonaphthalene (SURR)	2-Flurobiphenyl (SURR)	ortho-Terphenyl (SURR)	TOT OUT
WB-305-TOP	90	89	40	0
WB-305-TOP-1	112	114	48	0
WB-305-BOT	103	99	70	0
WB-305-BOTMS	98	94	69	0
WB-305-BOTMSD	98	94	68	0
WB-305-BOT-1	102	101	54	0
PB164525BL	106	106	87	0
PB164525BS	102	105	88	0
PB164525BSD	104	106	89	0

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

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

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SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM CASE No.: P4578 SAS No.: P4578 SDG No.: P4578

Run Number: FE103024AL

Client SAMPLE NO.	1-chlorooctadecane (SURR)			TOT OUT
WB-305-SW	84			0
WB-305-SW-1	76			0
PB164532BL	63			0
PB164532BS	66			0
PB164532BSD	65			0

	QC LIMITS
1-chlorooctadecane (SURR)	(40-140)

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

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SOIL EPH SURROGATE RECOVERY

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM CASE No.: P4578 SAS No.: P4578 SDG No.: P4578

Run Number: FG103024AR

Client SAMPLE NO.	2-Bromonaphthalene (SURR)	2-Flurobiphenyl (SURR)	ortho-Terphenyl (SURR)	TOT OUT
WB-305-SW	107	105	88	0
WB-305-SW-1	103	101	81	0
PB164532BL	119	117	99	0
PB164532BS	118	114	94	0
PB164532BSD	115	111	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

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SOIL EPH SURROGATE RECOVERY

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

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

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SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : P4578-05MS **Datafile:** FC067573.D

Client ID : WB-305-BOTMS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	12.2	0	8.45	69		(40-140)
Aliphatic C12-C16	8.1	0	8.05	99		(40-140)
Aliphatic C16-C21	12.2	0	12.4	101		(40-140)
Aliphatic C21-C28	16.2	0	16.8	103		(40-140)
Aliphatic C28-C40	24.4	0	28.8	118		(40-140)

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SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : P4578-05MSD **Datafile:** FC067574.D

Client ID : WB-305-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	12.1	0	8.42	69		0 |	(40-140)	25
Aliphatic C12-C16	8.1	0	8.04	99		0.1 |	(40-140)	25
Aliphatic C16-C21	12.1	0	12.5	102		0.99 |	(40-140)	25
Aliphatic C21-C28	16.2	0	16.8	103		0 |	(40-140)	25
Aliphatic C28-C40	24.3	0	29.0	119		0.84 |	(40-140)	25

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SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : P4578-05MS **Datafile:** FD048630.D

Client ID : WB-305-BOTMS

COMPOUND	SPIKE ADDED mg/kg	SAMPLE CONCENTRATION mg/kg	MS/MSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	8.1	0	4.38	54		(40-140)
Aromatic C12-C16	12.2	0	9.67	79		(40-140)
Aromatic C16-C21	20.3	0	18.9	93		(40-140)
Aromatic C21-C36	32.5	0	29.9	92		(40-140)

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SOLID EPH MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : P4578-05MSD **Datafile:** FD048631.D

Client ID : WB-305-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	8.1	0	4.11	51		6.11 |	(40-140)	25
Aromatic C12-C16	12.1	0	9.62	79		0.25 |	(40-140)	25
Aromatic C16-C21	20.2	0	18.7	92		0.76 |	(40-140)	25
Aromatic C21-C36	32.4	0	29.7	92		0.44 |	(40-140)	25

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SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : PB164525BS **Datafile:** FC067569.D

Client ID : PB164525BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aliphatic C9-C12	10.0	5.21	52		(40-140)
Aliphatic C12-C16	6.7	5.06	76		(40-140)
Aliphatic C16-C21	10.0	8.68	87		(40-140)
Aliphatic C21-C28	13.3	11.8	88		(40-140)
Aliphatic C28-C40	20.0	18.9	94		(40-140)

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SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : PB164525BSD **Datafile:** FC067570.D

Client ID : PB164525BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aliphatic C9-C12	10	5.29	53		1.6|	(40-140)	50
Aliphatic C12-C16	6.7	5.19	78		2.6|	(40-140)	50
Aliphatic C16-C21	10	8.92	89		2.8|	(40-140)	50
Aliphatic C21-C28	13.3	12.1	91		2.6|	(40-140)	50
Aliphatic C28-C40	20.0	19.2	96		1.6|	(40-140)	50

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SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : PB164525BS **Datafile:** FD048624.D

Client ID : PB164525BS

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	QC LIMITS
Aromatic C10-C12	6.7	3.53	53		(40-140)
Aromatic C12-C16	10.0	7.16	72		(40-140)
Aromatic C16-C21	16.7	14.1	85		(40-140)
Aromatic C21-C36	26.7	22.2	83		(40-140)

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SOLID EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : PB164525BSD **Datafile:** FD048625.D

Client ID : PB164525BSD

COMPOUND	SPIKE ADDED mg/kg	LCS/LCSD CONCENTRATION mg/kg	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aromatic C10-C12	6.7	3.57	54		1.1|	(40-140)	50
Aromatic C12-C16	10	7.25	72		1.3|	(40-140)	50
Aromatic C16-C21	16.7	14.4	86		2.2|	(40-140)	50
Aromatic C21-C36	26.6	22.5	84		1.3|	(40-140)	50

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WATER EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : PB164532BS **Datafile:** FE050918.D

Client ID : PB164532BS

COMPOUND	SPIKE ADDED ug/l	LCS/LCSD CONCENTRATION ug/l	% REC	Qual	QC LIMITS
Aliphatic C9-C12	300	167	56		(40-140)
Aliphatic C12-C16	200	155	78		(40-140)
Aliphatic C16-C21	300	267	89		(40-140)
Aliphatic C21-C28	400	363	91		(40-140)
Aliphatic C28-C40	600	607	101		(40-140)

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WATER EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : PB164532BSD **Datafile:** FE050919.D

Client ID : PB164532BSD

COMPOUND	SPIKE ADDED ug/l	LCS/LCSD CONCENTRATION ug/l	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aliphatic C9-C12	300	165	55		1.3|	(40-140)	50
Aliphatic C12-C16	200	153	76		1.3|	(40-140)	50
Aliphatic C16-C21	300	265	88		0.752|	(40-140)	50
Aliphatic C21-C28	400	360	90		0.885|	(40-140)	50
Aliphatic C28-C40	600	612	102		0.98|	(40-140)	50

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WATER EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : PB164532BS **Datafile:** FG014589.D

Client ID : PB164532BS

COMPOUND	SPIKE ADDED ug/l	LCS/LCSD CONCENTRATION ug/l	% REC	Qual	QC LIMITS
Aromatic C10-C12	200	182	91		(40-140)
Aromatic C12-C16	300	300	100		(40-140)
Aromatic C16-C21	500	589	117		(40-140)
Aromatic C21-C36	800	889	111		(40-140)

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WATER EPH LABORATORY CONTROL SPIKE/LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Lab Name: Chemtech **Client:** Portal Partners Tri-Venture

Lab Code: CHEM **Cas No:** P4578 **SAS No :** P4578 **SDG No:** P4578

Sample No : PB164532BSD **Datafile:** FG014590.D

Client ID : PB164532BSD

COMPOUND	SPIKE ADDED ug/l	LCS/LCSD CONCENTRATION ug/l	% REC	Qual	RPD |	QC LIMITS	QC Limit Of RPD
Aromatic C10-C12	200	177	88		2.8|	(40-140)	50
Aromatic C12-C16	300	292	97		2.7|	(40-140)	50
Aromatic C16-C21	500	572	114		2.3|	(40-140)	50
Aromatic C21-C36	800	868	108		2.3|	(40-140)	50

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4B

METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB164525BL

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: P4578 SAS No.: P4578 SDG NO.: P4578

Instrument ID: FID_C Lab Sample ID: PB164525BL

Matrix: (soil/water) Solid Date Extracted: 10/30/2024 8:20:00

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB164525BS	PB164525BS
PB164525BSD	PB164525BSD
WB-305-BOTMSD	P4578-05MSD
WB-305-TOP	P4578-03
WB-305-TOP-1	P4578-04
WB-305-BOT	P4578-05
WB-305-BOTMS	P4578-05MS
WB-305-BOT-1	P4578-07

COMMENTS:

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4B

METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB164532BL

Lab Name: CHEMTECH Contract: PORT06

Lab Code: CHEM Case No.: P4578 SAS No.: P4578 SDG NO.: P4578

Instrument ID: FID_C Lab Sample ID: PB164532BL

Matrix: (soil/water) Water Date Extracted: 10/30/2024 8:50:00

Level: (low/med) low

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

EPA SAMPLE NO.	LAB SAMPLE ID
PB164532BS	PB164532BS
PB164532BSD	PB164532BSD
WB-305-SW	P4578-01
WB-305-SW-1	P4578-02

COMMENTS:

Alliance
TECHNICAL GROUP

SAMPLE DATA

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-SW	SDG No.:	P4578
Lab Sample ID:	P4578-01	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :	SW3510		

Prep Date :	Date Analyzed :	Prep Batch ID
10/30/24 08:50	10/31/24 2:59	PB164532

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	5.76	U	1	5.76	30.0	ug/l	FE050920.D
Aliphatic C12-C16	Aliphatic C12-C16	3.61	U	1	3.61	20.0	ug/l	FE050920.D
Aliphatic C16-C21	Aliphatic C16-C21	5.14	U	1	5.14	30.0	ug/l	FE050920.D
Aliphatic C21-C28	Aliphatic C21-C28	8.97	U	1	8.97	40.0	ug/l	FE050920.D
Aliphatic C28-C40	Aliphatic C28-C40	17.0	U	1	17.0	60.0	ug/l	FE050920.D
Aromatic C10-C12	Aromatic C10-C12	3.32	U	1	3.32	20.0	ug/l	FG014591.D
Aromatic C12-C16	Aromatic C12-C16	3.69	U	1	3.69	30.0	ug/l	FG014591.D
Aromatic C16-C21	Aromatic C16-C21	36.0	J	1	12.7	50.0	ug/l	FG014591.D
Aromatic C21-C36	Aromatic C21-C36	25.2	U	1	25.2	80.0	ug/l	FG014591.D
Total AliphaticEPH	Total AliphaticEPH	40.5	U		40.5	180	ug/l	
Total AromaticEPH	Total AromaticEPH	44.9	U		44.9	180	ug/l	
Total EPH	Total EPH	85.4	U		85.4	360	ug/l	

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

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

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-SW	SDG No.:	P4578
Lab Sample ID:	P4578-01	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :	SW3510		

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE050920.D	1	10/30/24	10/31/24	PB164532

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.76	U	5.76	30.0	ug/l
Aliphatic C12-C16	Aliphatic C12-C16	3.61	U	3.61	20.0	ug/l
Aliphatic C16-C21	Aliphatic C16-C21	5.14	U	5.14	30.0	ug/l
Aliphatic C21-C28	Aliphatic C21-C28	8.97	U	8.97	40.0	ug/l
Aliphatic C28-C40	Aliphatic C28-C40	17.0	U	17.0	60.0	ug/l
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	41.8		40 - 140	84%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4578-01	Acq On:	31 Oct 2024 02:59
Client Sample ID:	WB-305-SW	Operator:	YP\AJ
Data file:	FE050920.D	Misc:	
Instrument:	FID_E	ALS Vial:	29
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.144	6.762	0	0	300	ug/ml
Aliphatic C12-C16	6.763	10.194	0	0	200	ug/ml
Aliphatic C16-C21	10.195	13.554	0	0	300	ug/ml
Aliphatic C21-C28	13.555	17.208	0	0	400	ug/ml
Aliphatic C28-C40	17.209	22.057	0	0	600	ug/ml
Aliphatic EPH	3.144	22.057	0	0		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.292	13.292	4946678	41.82		ug/ml
Aliphatic C9-C28	3.144	17.208	0	0	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050920.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 02:59
Operator : YP\AJ
Sample : P4578-01
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
WB-305-SW

Integration File: autoint1.e
Quant Time: Oct 31 05:20:14 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 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...	13.292	4946678	41.817 ug/ml
Spiked Amount 50.000		Recovery = 83.63%	
Target Compounds			

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

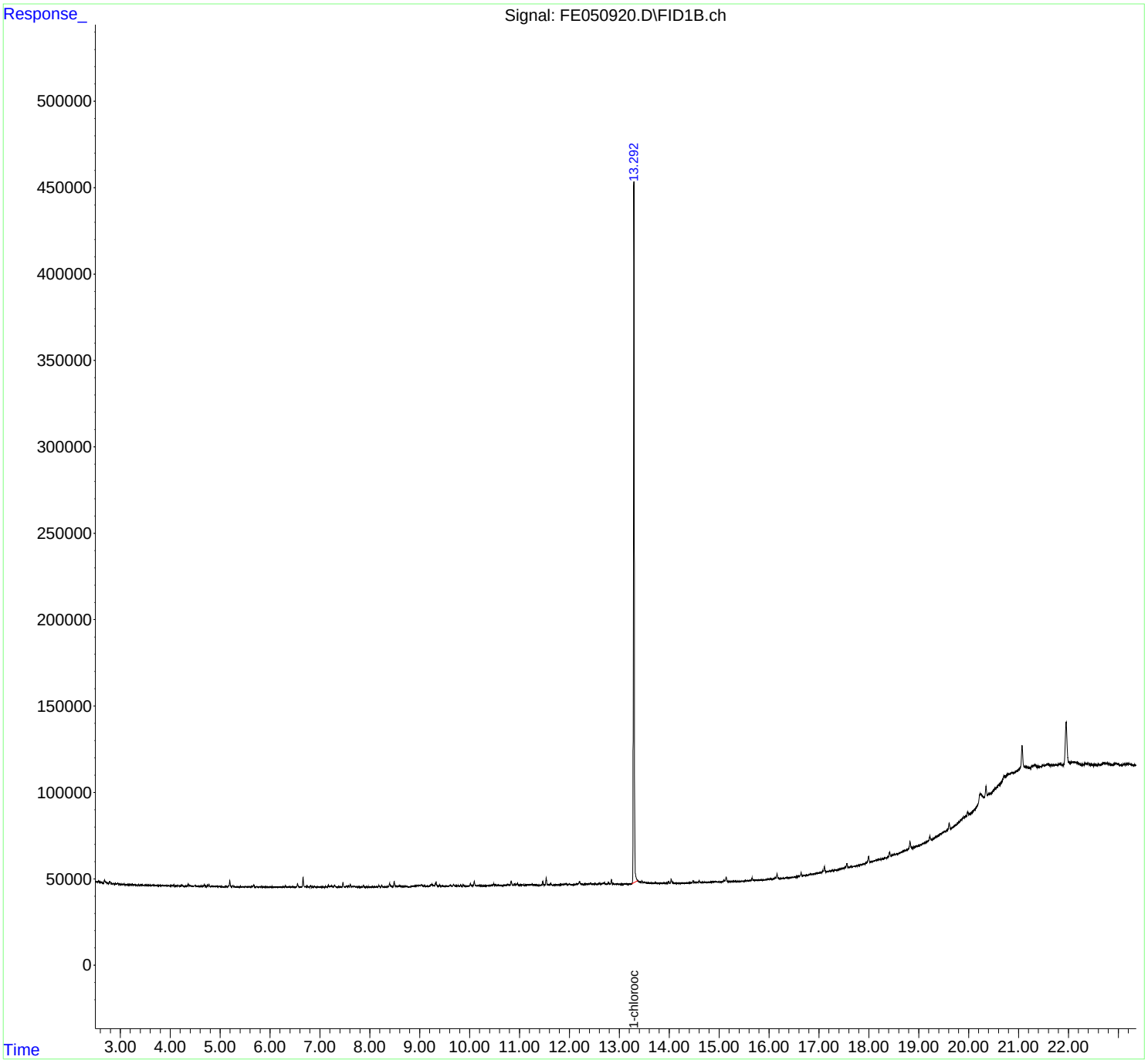
Quantitation Report (QT Reviewed)

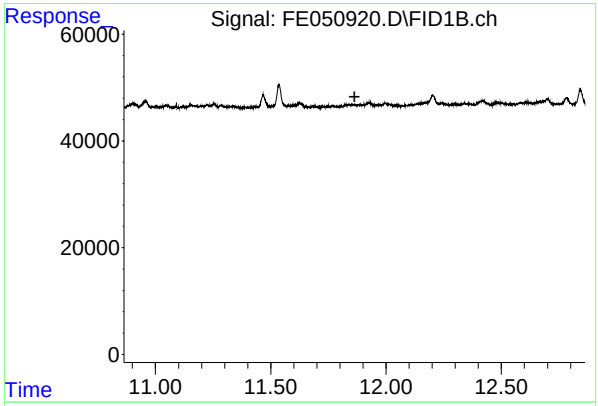
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050920.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 02:59
Operator : YP\AJ
Sample : P4578-01
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
WB-305-SW

Integration File: autoint1.e
Quant Time: Oct 31 05:20:14 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 2024
Response via : Initial Calibration
Integrator: ChemStation

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

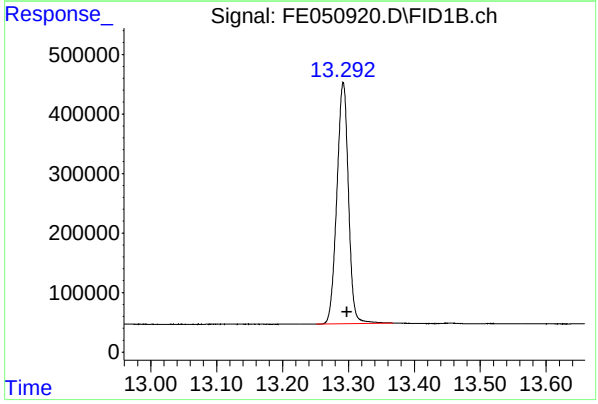




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.863 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
WB-305-SW



#12 1-chlorooctadecane (SURR)

R.T.: 13.292 min
Delta R.T.: -0.006 min
Response: 4946678
Conc: 41.82 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050920.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 02:59
Sample : P4578-01
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	13.292	13.251	13.368	BB	404108	4946678	100.00%	100.000%

Sum of corrected areas: 4946678

Aliphatic EPH 100824.M Thu Oct 31 05:56:28 2024

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-SW	SDG No.:	P4578
Lab Sample ID:	P4578-01	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :	SW3510		

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FG014591.D	1	10/30/24	10/31/24	PB164532

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	3.32	U	3.32	20.0	ug/l
Aromatic C12-C16	Aromatic C12-C16	3.69	U	3.69	30.0	ug/l
Aromatic C16-C21	Aromatic C16-C21	36.0	J	12.7	50.0	ug/l
Aromatic C21-C36	Aromatic C21-C36	25.2	U	25.2	80.0	ug/l
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	53.6		40 - 140	107%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	52.5		40 - 140	105%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	43.9		40 - 140	88%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4578-01	Acq On:	31 Oct 2024 00:42
Client Sample ID:	WB-305-SW	Operator:	YP\AJ
Data file:	FG014591.D	Misc:	
Instrument:	FID_G	ALS Vial:	43
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.519	6.389	140541	1.007	200	ug/ml
Aromatic C12-C16	6.390	9.089	54915	0.378	300	ug/ml
Aromatic C16-C21	9.090	13.408	2610293	18.023	500	ug/ml
Aromatic C21-C36	13.409	18.851	0	0	800	ug/ml
Aromatic EPH	4.519	18.851	2805749	19.409		ug/ml
ortho-Terphenyl (SURR)	11.961	11.961	6505374	43.94		ug/ml
2-Bromonaphthalene (SURR)	8.014	8.014	6728809	53.6		ug/ml
2-Flurobiphenyl (SURR)	8.889	8.889	4519510	52.47		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014591.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:42
Operator : YP\AJ
Sample : P4578-01
Misc :
ALS Vial : 43 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
WB-305-SW

Integration File: autoint1.e
Quant Time: Oct 31 06:45:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 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...	8.014	6728809	53.601 ug/ml
Spiked Amount 50.000		Recovery = 107.20%	
6) S 2-Flurobiphenyl (SURR)	8.889	4519510	52.470 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 104.94%	
11) S ortho-Terphenyl (SURR)	11.961	6505374	43.938 ug/ml
Spiked Amount 50.000		Recovery = 87.88%	
Target Compounds			

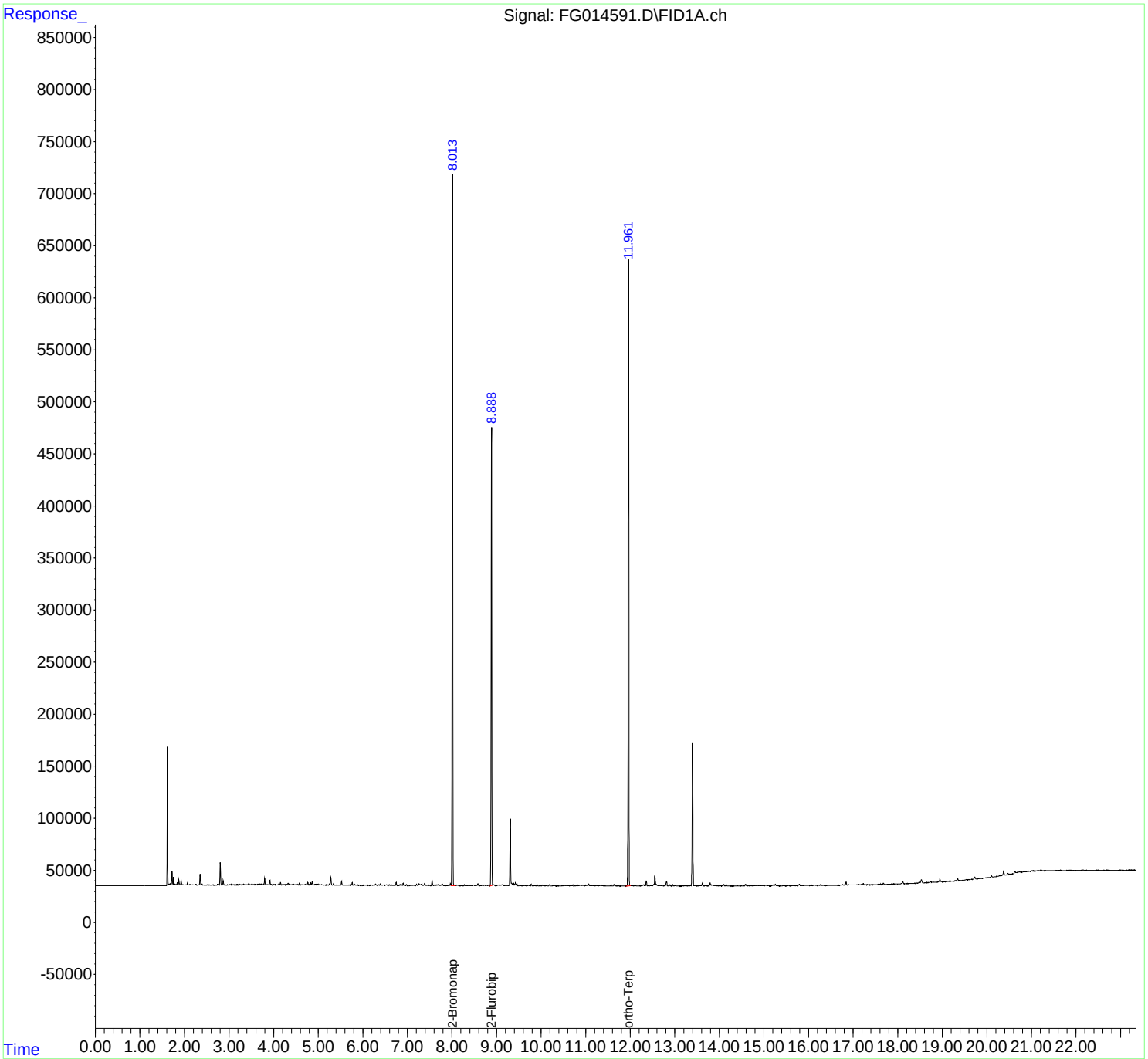
(f)=RT Delta > 1/2 Window (m)=manual int.

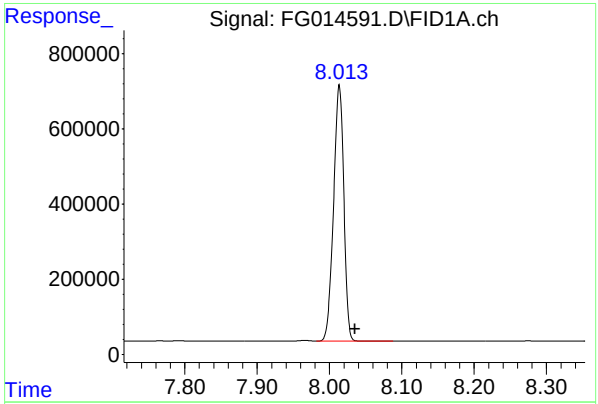
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014591.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:42
Operator : YP\AJ
Sample : P4578-01
Misc :
ALS Vial : 43 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
WB-305-SW

Integration File: autoint1.e
Quant Time: Oct 31 06:45:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

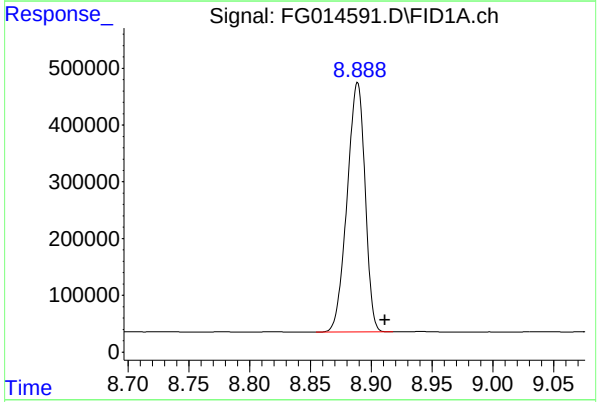




#4 2-Bromonaphthalene (SURR)

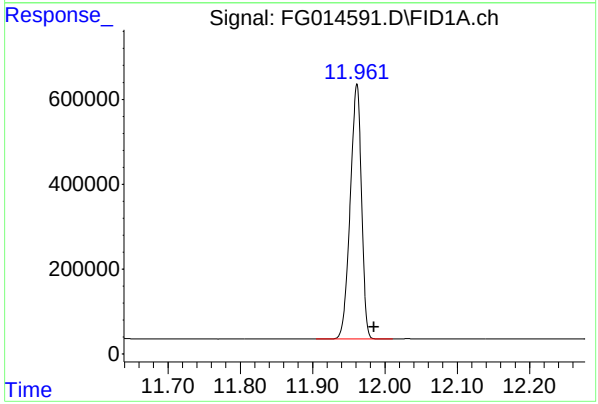
R.T.: 8.014 min
Delta R.T.: -0.022 min
Response: 6728809
Conc: 53.60 ug/ml

Instrument :
FID_G
ClientSampleId :
WB-305-SW



#6 2-Flurobiphenyl (SURR)

R.T.: 8.889 min
Delta R.T.: -0.023 min
Response: 4519510
Conc: 52.47 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.961 min
Delta R.T.: -0.024 min
Response: 6505374
Conc: 43.94 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014591.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:42
Sample : P4578-01
Misc :
ALS Vial : 43 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	3.800	3.751	3.855	BB	6092	65815	0.98%	0.318%
2	3.916	3.895	3.958	BB	4391	42982	0.64%	0.208%
3	5.283	5.231	5.318	BV	7566	102013	1.52%	0.494%
4	5.525	5.505	5.558	VB	3736	38528	0.57%	0.186%
5	7.557	7.528	7.588	BV	4955	54915	0.82%	0.266%
6	8.014	7.982	8.088	VB	682354	6728809	100.00%	32.556%
7	8.889	8.855	8.918	BV	437907	4519510	67.17%	21.867%
8	9.310	9.268	9.375	BV	63974	662782	9.85%	3.207%
9	11.961	11.905	12.011	BV	603870	6505374	96.68%	31.475%
10	12.359	12.328	12.384	VV	4710	54971	0.82%	0.266%
11	12.552	12.495	12.665	BB	9515	160612	2.39%	0.777%
12	12.813	12.698	12.865	BV	4012	72387	1.08%	0.350%
13	13.396	13.331	13.430	BB	137318	1659541	24.66%	8.029%
			Sum of corrected areas:			20668237		

Aromatic EPH 102124.M Thu Oct 31 07:09:23 2024

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-SW-1	SDG No.:	P4578
Lab Sample ID:	P4578-02	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :	SW3510		

Prep Date :	Date Analyzed :	Prep Batch ID
10/30/24 08:50	10/31/24 3:29	PB164532

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	5.76	U	1	5.76	30.0	ug/l	FE050921.D
Aliphatic C12-C16	Aliphatic C12-C16	3.61	U	1	3.61	20.0	ug/l	FE050921.D
Aliphatic C16-C21	Aliphatic C16-C21	5.14	U	1	5.14	30.0	ug/l	FE050921.D
Aliphatic C21-C28	Aliphatic C21-C28	8.97	U	1	8.97	40.0	ug/l	FE050921.D
Aliphatic C28-C40	Aliphatic C28-C40	17.0	U	1	17.0	60.0	ug/l	FE050921.D
Aromatic C10-C12	Aromatic C10-C12	3.32	U	1	3.32	20.0	ug/l	FG014592.D
Aromatic C12-C16	Aromatic C12-C16	3.69	U	1	3.69	30.0	ug/l	FG014592.D
Aromatic C16-C21	Aromatic C16-C21	30.9	J	1	12.7	50.0	ug/l	FG014592.D
Aromatic C21-C36	Aromatic C21-C36	25.2	U	1	25.2	80.0	ug/l	FG014592.D
Total AliphaticEPH	Total AliphaticEPH	40.5	U		40.5	180	ug/l	
Total AromaticEPH	Total AromaticEPH	44.9	U		44.9	180	ug/l	
Total EPH	Total EPH	85.4	U		85.4	360	ug/l	

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

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

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-SW-1	SDG No.:	P4578
Lab Sample ID:	P4578-02	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :	SW3510		

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE050921.D	1	10/30/24	10/31/24	PB164532

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.76	U	5.76	30.0	ug/l
Aliphatic C12-C16	Aliphatic C12-C16	3.61	U	3.61	20.0	ug/l
Aliphatic C16-C21	Aliphatic C16-C21	5.14	U	5.14	30.0	ug/l
Aliphatic C21-C28	Aliphatic C21-C28	8.97	U	8.97	40.0	ug/l
Aliphatic C28-C40	Aliphatic C28-C40	17.0	U	17.0	60.0	ug/l
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	38.1		40 - 140	76%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4578-02	Acq On:	31 Oct 2024 03:29
Client Sample ID:	WB-305-SW-1	Operator:	YP\AJ
Data file:	FE050921.D	Misc:	
Instrument:	FID_E	ALS Vial:	30
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.144	6.762	0	0	300	ug/ml
Aliphatic C12-C16	6.763	10.194	0	0	200	ug/ml
Aliphatic C16-C21	10.195	13.554	0	0	300	ug/ml
Aliphatic C21-C28	13.555	17.208	0	0	400	ug/ml
Aliphatic C28-C40	17.209	22.057	0	0	600	ug/ml
Aliphatic EPH	3.144	22.057	0	0		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.292	13.292	4512059	38.14		ug/ml
Aliphatic C9-C28	3.144	17.208	0	0	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050921.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 03:29
Operator : YP\AJ
Sample : P4578-02
Misc :
ALS Vial : 30 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
WB-305-SW-1

Integration File: autoint1.e
Quant Time: Oct 31 05:20:22 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 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...	13.292	4512059	38.143 ug/ml
Spiked Amount 50.000		Recovery = 76.29%	
Target Compounds			

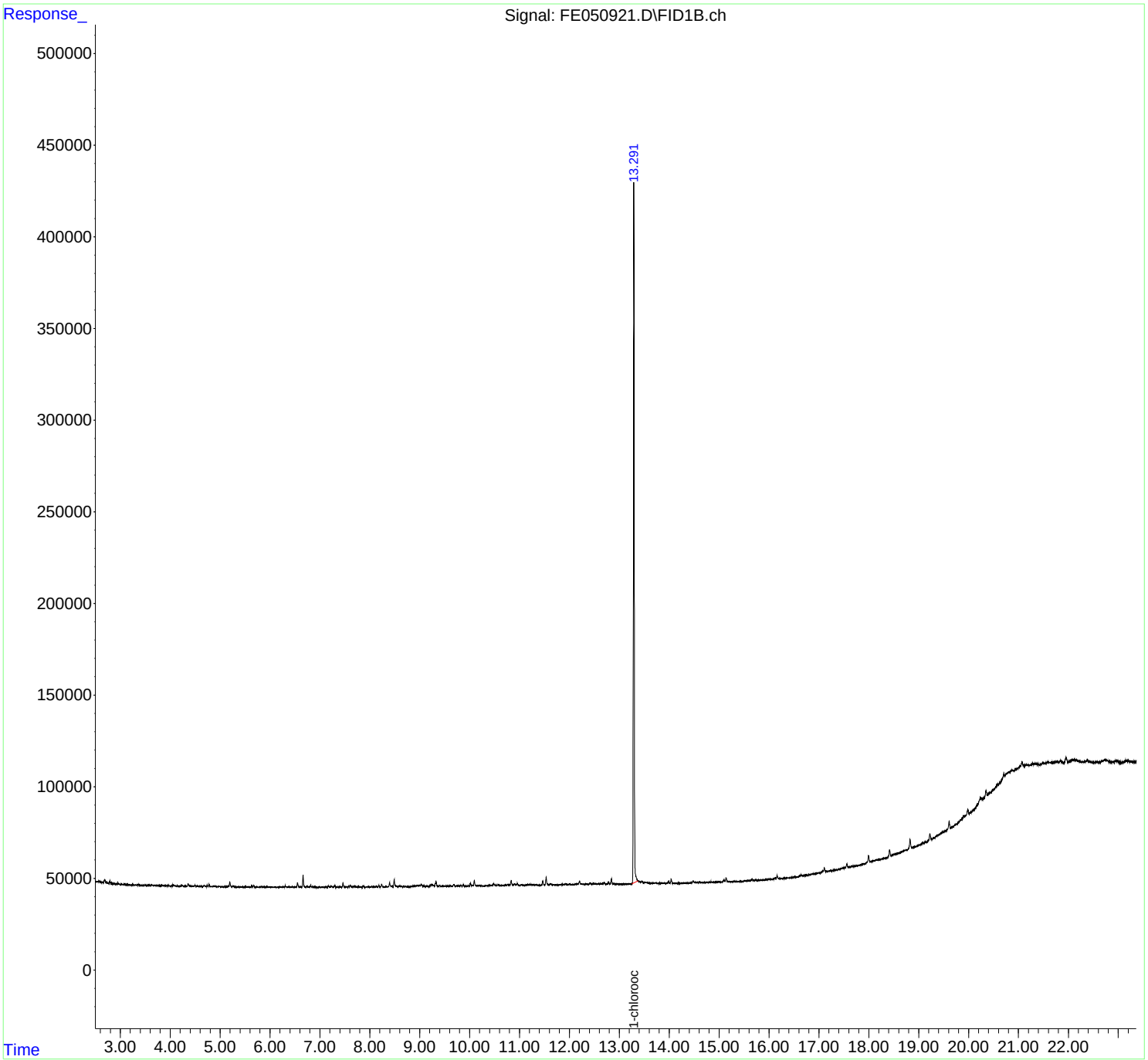
(f)=RT Delta > 1/2 Window (m)=manual int.

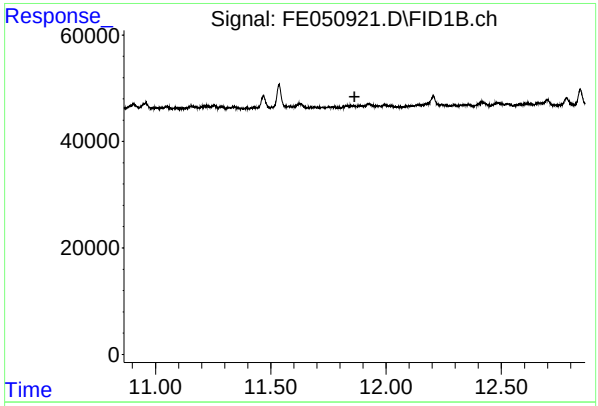
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050921.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 03:29
Operator : YP\AJ
Sample : P4578-02
Misc :
ALS Vial : 30 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
WB-305-SW-1

Integration File: autoint1.e
Quant Time: Oct 31 05:20:22 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 2024
Response via : Initial Calibration
Integrator: ChemStation

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

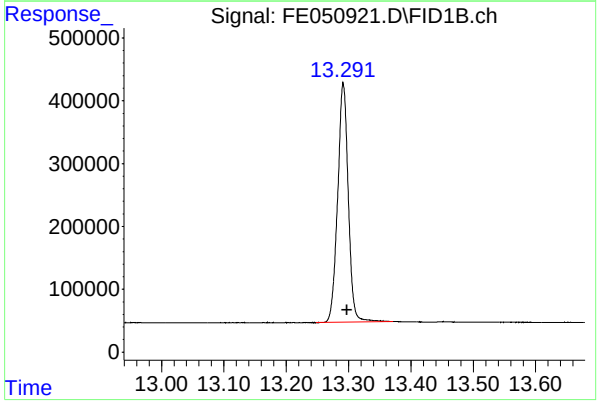




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.863 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
WB-305-SW-1



#12 1-chlorooctadecane (SURR)

R.T.: 13.292 min
Delta R.T.: -0.006 min
Response: 4512059
Conc: 38.14 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050921.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 03:29
Sample : P4578-02
Misc :
ALS Vial : 30 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	13.292	13.248	13.371	BB	380654	4512059	100.00%	100.000%

Sum of corrected areas: 4512059

Aliphatic EPH 100824.M Thu Oct 31 06:08:35 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-SW-1	SDG No.:	P4578
Lab Sample ID:	P4578-02	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :	SW3510		

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FG014592.D	1	10/30/24	10/31/24	PB164532

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	3.32	U	3.32	20.0	ug/l
Aromatic C12-C16	Aromatic C12-C16	3.69	U	3.69	30.0	ug/l
Aromatic C16-C21	Aromatic C16-C21	30.9	J	12.7	50.0	ug/l
Aromatic C21-C36	Aromatic C21-C36	25.2	U	25.2	80.0	ug/l
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	51.7		40 - 140	103%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	50.5		40 - 140	101%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	40.4		40 - 140	81%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4578-02	Acq On:	31 Oct 2024 01:11
Client Sample ID:	WB-305-SW-1	Operator:	YP\AJ
Data file:	FG014592.D	Misc:	
Instrument:	FID_G	ALS Vial:	44
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.519	6.389	121947	0.874	200	ug/ml
Aromatic C12-C16	6.390	9.089	0	0	300	ug/ml
Aromatic C16-C21	9.090	13.408	2237667	15.451	500	ug/ml
Aromatic C21-C36	13.409	18.851	0	0	800	ug/ml
Aromatic EPH	4.519	18.851	2359614	16.325		ug/ml
ortho-Terphenyl (SURR)	11.960	11.960	5979246	40.38		ug/ml
2-Bromonaphthalene (SURR)	8.014	8.014	6487135	51.68		ug/ml
2-Flurobiphenyl (SURR)	8.889	8.889	4346977	50.47		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014592.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 01:11
Operator : YP\AJ
Sample : P4578-02
Misc :
ALS Vial : 44 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
WB-305-SW-1

Integration File: autoint1.e
Quant Time: Oct 31 06:45:59 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 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...	8.014	6487135	51.676 ug/ml
Spiked Amount 50.000		Recovery = 103.35%	
6) S 2-Flurobiphenyl (SURR)	8.889	4346977	50.467 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 100.93%	
11) S ortho-Terphenyl (SURR)	11.960	5979246	40.384 ug/ml
Spiked Amount 50.000		Recovery = 80.77%	
Target Compounds			

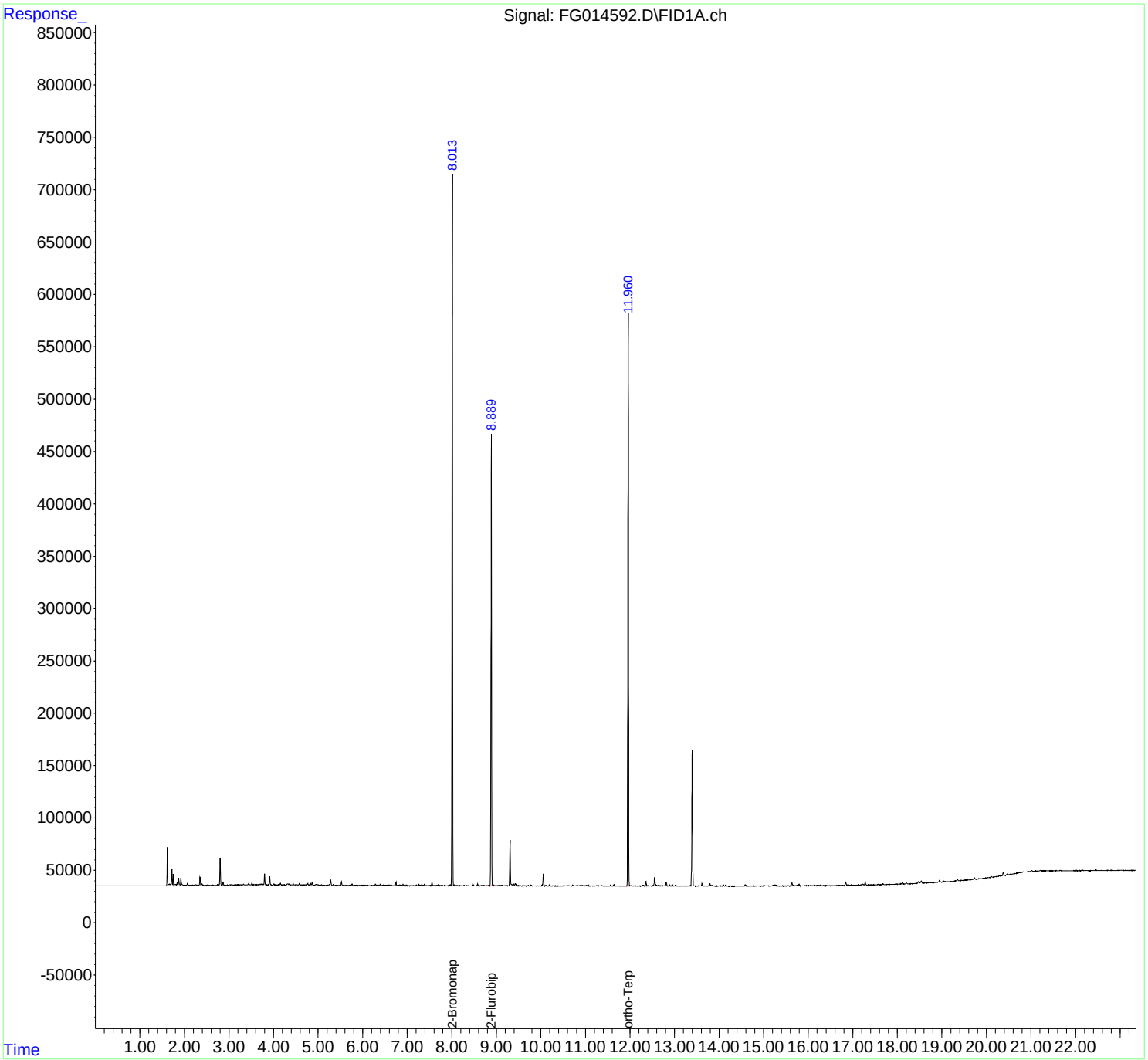
(f)=RT Delta > 1/2 Window (m)=manual int.

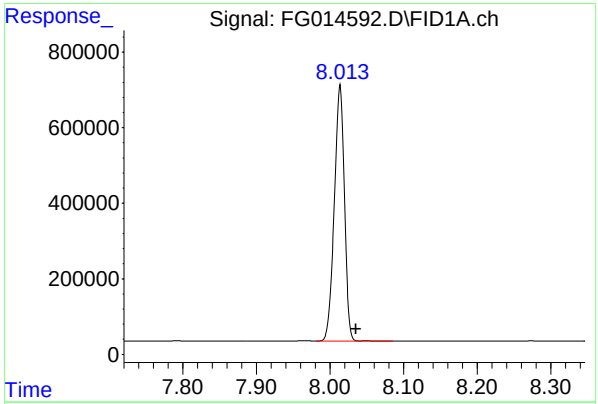
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014592.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 01:11
Operator : YP\AJ
Sample : P4578-02
Misc :
ALS Vial : 44 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
WB-305-SW-1

Integration File: autoint1.e
Quant Time: Oct 31 06:45:59 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

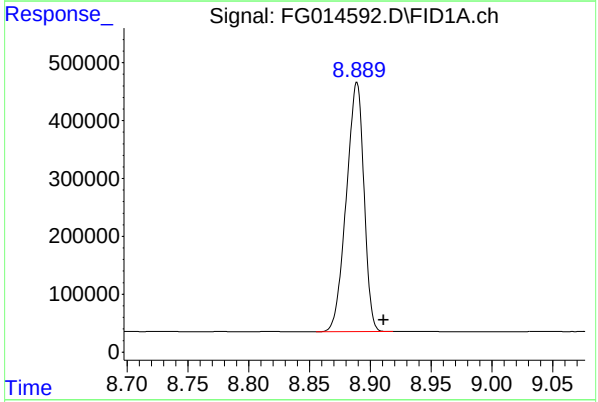




#4 2-Bromonaphthalene (SURR)

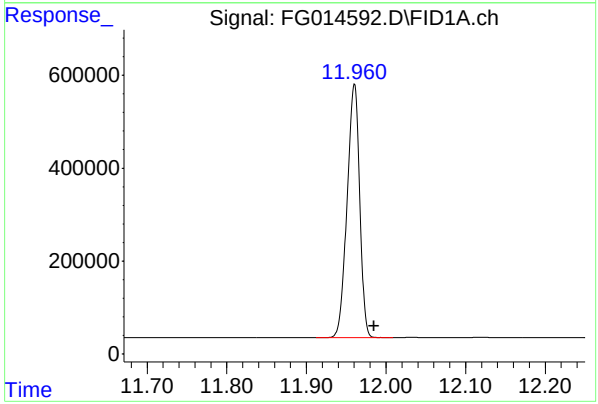
R.T.: 8.014 min
Delta R.T.: -0.022 min
Response: 6487135
Conc: 51.68 ug/ml

Instrument :
FID_G
ClientSampleId :
WB-305-SW-1



#6 2-Flurobiphenyl (SURR)

R.T.: 8.889 min
Delta R.T.: -0.022 min
Response: 4346977
Conc: 50.47 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.960 min
Delta R.T.: -0.025 min
Response: 5979246
Conc: 40.38 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014592.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 01:11
Sample : P4578-02
Misc :
ALS Vial : 44 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	3.799	3.779	3.852	BB	10497	94800	1.46%	0.490%
2	3.915	3.862	3.965	BB	8096	82141	1.27%	0.425%
3	5.283	5.175	5.313	BV	5207	76733	1.18%	0.397%
4	5.525	5.385	5.562	BB	3623	45214	0.70%	0.234%
5	8.014	7.981	8.085	VB	668460	6487135	100.00%	33.525%
6	8.889	8.855	8.919	BV	431948	4346977	67.01%	22.465%
7	9.310	9.269	9.370	BV	43148	443706	6.84%	2.293%
8	10.057	9.999	10.088	BV	11393	134510	2.07%	0.695%
9	11.960	11.912	12.009	BV	540221	5979246	92.17%	30.901%
10	12.360	12.322	12.384	VV	4422	50504	0.78%	0.261%
11	12.552	12.425	12.622	PV	7884	118138	1.82%	0.611%
12	13.396	13.362	13.430	VB	128636	1490809	22.98%	7.704%

Sum of corrected areas: 19349914

Aromatic EPH 102124.M Thu Oct 31 07:09:35 2024

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-TOP	SDG No.:	P4578
Lab Sample ID:	P4578-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	53.8
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
10/30/24 08:20	10/31/24 0:08	PB164525

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.82	J	1	0.71	1.86	mg/kg	FC067577.D
Aliphatic C12-C16	Aliphatic C12-C16	4.02		1	0.45	1.24	mg/kg	FC067577.D
Aliphatic C16-C21	Aliphatic C16-C21	1.69	J	1	0.56	1.86	mg/kg	FC067577.D
Aliphatic C21-C28	Aliphatic C21-C28	3.68		1	1.48	2.47	mg/kg	FC067577.D
Aliphatic C28-C40	Aliphatic C28-C40	3.34	U	1	3.34	3.71	mg/kg	FC067577.D
Aromatic C10-C12	Aromatic C10-C12	1.72		1	0.56	1.24	mg/kg	FD048626.D
Aromatic C12-C16	Aromatic C12-C16	1.55	J	1	0.63	1.86	mg/kg	FD048626.D
Aromatic C16-C21	Aromatic C16-C21	5.56		1	1.78	3.09	mg/kg	FD048626.D
Aromatic C21-C36	Aromatic C21-C36	6.03		1	3.71	4.95	mg/kg	FD048626.D
Total AliphaticEPH	Total AliphaticEPH	10.2	J		6.53	11.1	mg/kg	
Total AromaticEPH	Total AromaticEPH	14.9			6.68	11.1	mg/kg	
Total EPH	Total EPH	25.1			13.2	22.3	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

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-TOP	SDG No.:	P4578
Lab Sample ID:	P4578-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	53.8
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
FC067577.D	1	10/30/24	10/31/24	PB164525

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12	Aliphatic C9-C12	0.82	J	0.71	1.86	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	Aliphatic C12-C16	4.02		0.45	1.24	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	Aliphatic C16-C21	1.69	J	0.56	1.86	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	Aliphatic C21-C28	3.68		1.48	2.47	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	Aliphatic C28-C40	3.34	U	3.34	3.71	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)	1-chlorooctadecane (SURR)	30.1		40 - 140	60%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4578-03	Acq On:	31 Oct 2024 00:08
Client Sample ID:	WB-305-TOP	Operator:	YP/AJ
Data file:	FC067577.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	3.174	6.453	897620	6.626	300	ug/ml
Aliphatic C12-C16	6.454	9.842	4279108	32.496	200	ug/ml
Aliphatic C16-C21	9.843	13.199	1735952	13.644	300	ug/ml
Aliphatic C21-C28	13.200	16.852	3568706	29.717	400	ug/ml
Aliphatic C28-C40	16.853	21.694	2728897	26.994	600	ug/ml
Aliphatic EPH	3.174	21.694	13210283	109.476		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.931	12.931	3245347	30.05		ug/ml
Aliphatic C9-C28	3.174	16.852	10481386	82.483	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067577.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:08
Operator : YP/AJ
Sample : P4578-03
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-TOP

Integration File: autoint1.e
Quant Time: Nov 01 00:20:56 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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...	12.931	3245347	30.053 ug/ml
Spiked Amount 50.000		Recovery = 60.11%	
Target Compounds			

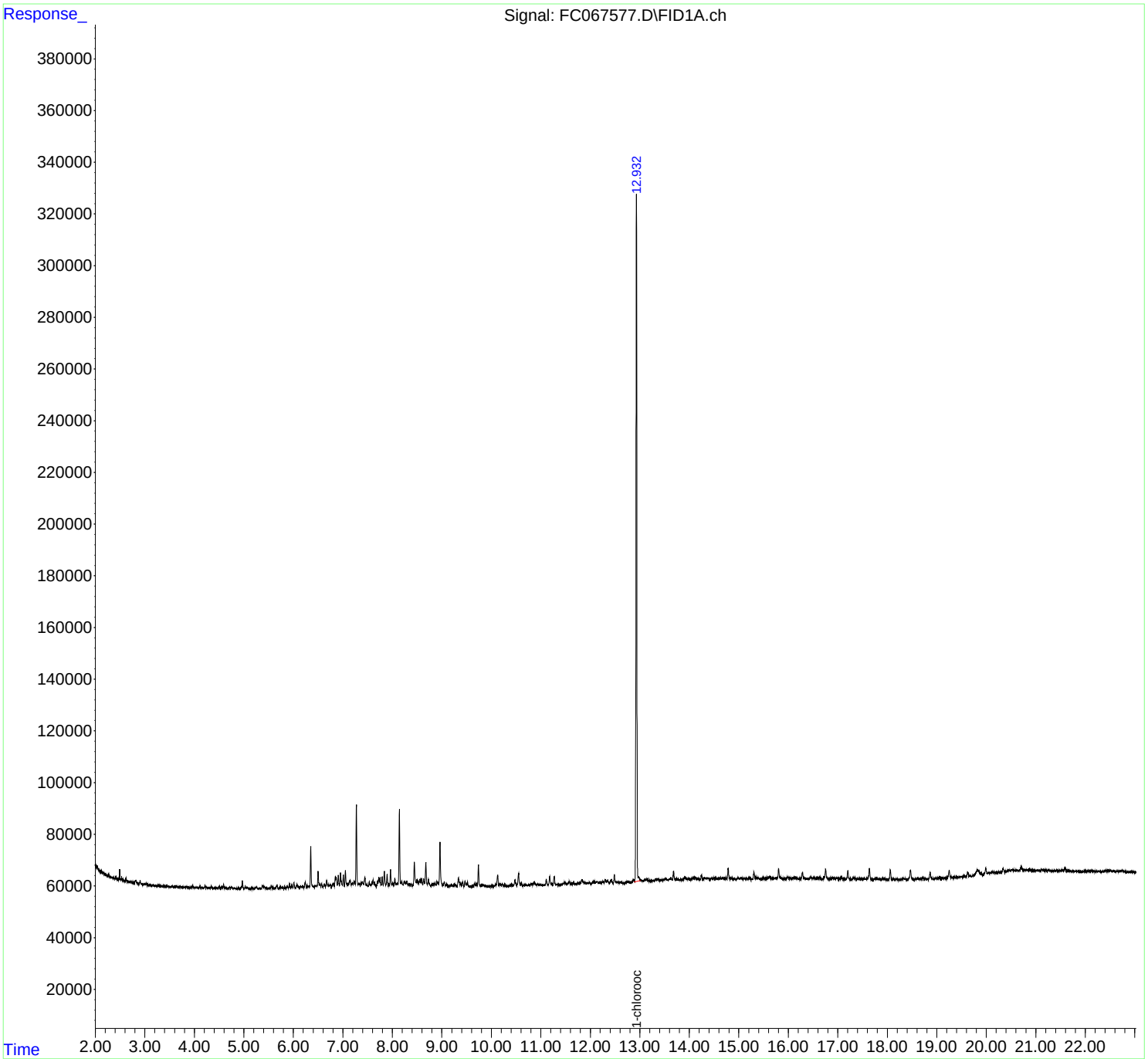
(f)=RT Delta > 1/2 Window (m)=manual int.

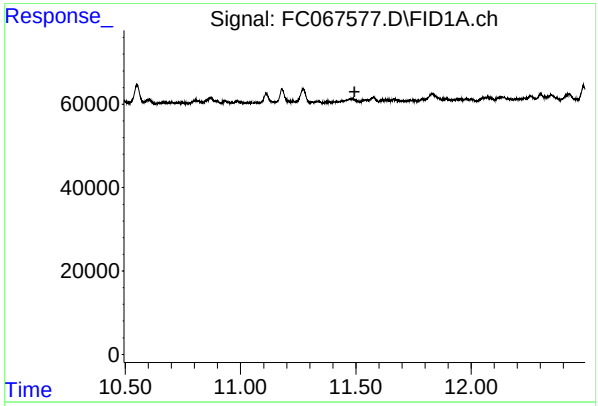
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067577.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:08
Operator : YP/AJ
Sample : P4578-03
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-TOP

Integration File: autoint1.e
Quant Time: Nov 01 00:20:56 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 2024
Response via : Initial Calibration
Integrator: ChemStation

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

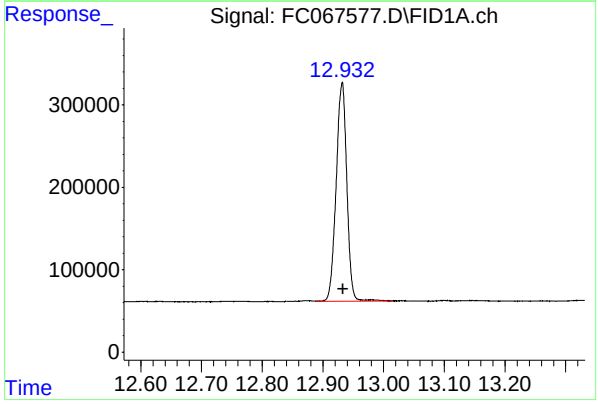




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.494 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
WB-305-TOP



#12 1-chlorooctadecane (SURR)

R.T.: 12.931 min
Delta R.T.: -0.002 min
Response: 3245347
Conc: 30.05 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067577.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:08
Sample : P4578-03
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.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	3.171	3.308	BV	304	4962	0.15%	0.030%
2	3.315	3.308	3.339	VV	125	962	0.03%	0.006%
3	3.374	3.339	3.385	PV	224	2251	0.07%	0.014%
4	3.399	3.385	3.412	VV	183	2072	0.06%	0.013%
5	3.430	3.412	3.448	VV	234	3246	0.10%	0.020%
6	3.454	3.448	3.465	VV	189	1384	0.04%	0.008%
7	3.475	3.465	3.510	VV	184	2405	0.07%	0.015%
8	3.539	3.510	3.587	PV	266	6635	0.20%	0.040%
9	3.601	3.587	3.622	VV	317	4054	0.12%	0.025%
10	3.646	3.622	3.688	VV	564	7232	0.22%	0.044%
11	3.717	3.688	3.735	VV	417	4571	0.14%	0.028%
12	3.744	3.735	3.750	PV	40	428	0.01%	0.003%
13	3.765	3.750	3.795	VV	227	3201	0.10%	0.019%
14	3.811	3.795	3.825	VV	308	2989	0.09%	0.018%
15	3.842	3.825	3.910	VV	463	9385	0.29%	0.057%
16	3.941	3.910	3.953	PV	404	4661	0.14%	0.028%
17	3.968	3.953	4.021	VV	680	9593	0.29%	0.058%
18	4.035	4.021	4.071	VV	241	2399	0.07%	0.015%
19	4.115	4.071	4.133	PV	655	9954	0.30%	0.060%
20	4.145	4.133	4.193	VV	239	5102	0.16%	0.031%
21	4.216	4.193	4.236	VV	977	10490	0.32%	0.064%
22	4.249	4.236	4.281	VV	224	4476	0.14%	0.027%
23	4.292	4.281	4.321	VV	237	3655	0.11%	0.022%
24	4.340	4.321	4.368	VV	697	8180	0.25%	0.050%
25	4.377	4.368	4.393	VV	139	1483	0.05%	0.009%
26	4.409	4.393	4.424	VV	164	1935	0.06%	0.012%
27	4.450	4.424	4.470	VV	306	4747	0.14%	0.029%
28	4.506	4.470	4.525	VV	930	12866	0.39%	0.078%
29	4.536	4.525	4.548	VV	385	3502	0.11%	0.021%
30	4.562	4.548	4.575	VV	879	8640	0.26%	0.052%
31	4.592	4.575	4.611	VV	1632	16713	0.51%	0.101%
32	4.617	4.611	4.633	VV	254	2720	0.08%	0.016%
33	4.646	4.633	4.681	VV	209	4521	0.14%	0.027%
34	4.713	4.681	4.729	VV	503	7517	0.23%	0.046%
35	4.753	4.729	4.775	VV	528	10583	0.32%	0.064%
36	4.786	4.775	4.798	VV	265	3198	0.10%	0.019%

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37	4.808	4.798	4.843	VV	372	4005	0.12%	0.024%
38	4.862	4.843	4.874	PV	277	2566	0.08%	0.016%
39	4.893	4.874	4.925	VV	314	5112	0.16%	0.031%
40	4.970	4.925	5.008	VV	3102	44886	1.37%	0.272%
41	5.027	5.008	5.042	VV	848	10477	0.32%	0.063%
42	5.054	5.042	5.065	VV	550	5606	0.17%	0.034%
43	5.076	5.065	5.113	VV	431	6559	0.20%	0.040%
44	5.132	5.113	5.142	PV	168	1707	0.05%	0.010%
45	5.149	5.142	5.153	VV	125	750	0.02%	0.005%
46	5.170	5.153	5.185	VV	380	4362	0.13%	0.026%
47	5.201	5.185	5.221	VV	303	4960	0.15%	0.030%
48	5.261	5.221	5.281	VV	940	16936	0.52%	0.103%
49	5.303	5.281	5.345	VV	288	6928	0.21%	0.042%
50	5.373	5.345	5.385	VV	1404	15779	0.48%	0.096%
51	5.393	5.385	5.404	VV	1089	10614	0.32%	0.064%
52	5.413	5.404	5.456	VV	1091	15867	0.48%	0.096%
53	5.469	5.456	5.485	VV	279	2574	0.08%	0.016%
54	5.496	5.485	5.525	PV	110	1963	0.06%	0.012%
55	5.555	5.525	5.575	VV	1369	18164	0.55%	0.110%
56	5.586	5.575	5.611	VV	576	5992	0.18%	0.036%
57	5.620	5.611	5.638	VV	329	3259	0.10%	0.020%
58	5.670	5.638	5.700	VV	1479	25300	0.77%	0.153%
59	5.741	5.700	5.752	VV	760	11089	0.34%	0.067%
60	5.761	5.752	5.771	VV	543	5515	0.17%	0.033%
61	5.784	5.771	5.804	VV	585	7184	0.22%	0.043%
62	5.825	5.804	5.847	VV	719	8453	0.26%	0.051%
63	5.877	5.847	5.896	VV	808	12696	0.39%	0.077%
64	5.925	5.896	5.946	VV	1440	24344	0.74%	0.147%
65	5.969	5.946	5.991	VV	1669	23671	0.72%	0.143%
66	6.012	5.991	6.041	VV	2348	30204	0.92%	0.183%
67	6.073	6.041	6.092	VV	1896	29435	0.90%	0.178%
68	6.102	6.092	6.119	VV	785	10289	0.31%	0.062%
69	6.157	6.119	6.171	VV	769	17927	0.55%	0.109%
70	6.187	6.171	6.215	VV	1209	18145	0.55%	0.110%
71	6.242	6.215	6.263	VV	2519	40345	1.23%	0.244%
72	6.281	6.263	6.297	VV	1010	16372	0.50%	0.099%
73	6.309	6.297	6.326	VV	790	12507	0.38%	0.076%
74	6.352	6.326	6.422	VV	16206	201364	6.15%	1.219%
75	6.442	6.422	6.460	VV	1244	21002	0.64%	0.127%
76	6.501	6.460	6.525	VV	6668	96402	2.94%	0.584%
77	6.538	6.525	6.558	VV	1848	26633	0.81%	0.161%
78	6.572	6.558	6.597	VV	1944	27019	0.83%	0.164%
79	6.627	6.597	6.648	VV	1317	29976	0.92%	0.181%
80	6.674	6.648	6.698	VV	3043	53038	1.62%	0.321%
81	6.709	6.698	6.721	VV	1351	14482	0.44%	0.088%
82	6.739	6.721	6.767	VV	1464	29136	0.89%	0.176%
83	6.809	6.767	6.826	VV	1625	40028	1.22%	0.242%
84	6.850	6.826	6.889	VV	4522	108530	3.31%	0.657%
85	6.909	6.889	6.933	VV	5026	70111	2.14%	0.424%
86	6.954	6.933	6.990	VV	5952	97739	2.98%	0.592%
87	7.011	6.990	7.031	VV	5105	64119	1.96%	0.388%
88	7.053	7.031	7.091	VV	6821	101891	3.11%	0.617%
89	7.107	7.091	7.119	VV	1924	25724	0.79%	0.156%

90	7.150	7.119	7.171	VV	2922	69137	2.11%	0.419%
91	7.195	7.171	7.208	VV	1859	34869	1.06%	0.211%
92	7.227	7.208	7.250	VV	2524	51477	1.57%	0.312%
93	7.274	7.250	7.305	VV	32243	369701	11.29%	2.238%
94	7.324	7.305	7.350	VV	1711	40852	1.25%	0.247%
95	7.366	7.350	7.379	VV	2007	28185	0.86%	0.171%
96	7.398	7.379	7.420	VV	2362	47189	1.44%	0.286%
97	7.446	7.420	7.472	VV	4147	76959	2.35%	0.466%
98	7.486	7.472	7.511	VV	1425	23143	0.71%	0.140%
99	7.534	7.511	7.568	VV	2441	46052	1.41%	0.279%
100	7.586	7.568	7.593	VV	1724	21351	0.65%	0.129%
101	7.611	7.593	7.627	VV	3129	44985	1.37%	0.272%
102	7.640	7.627	7.675	VV	1894	35744	1.09%	0.216%
103	7.700	7.675	7.711	VV	2542	33738	1.03%	0.204%
104	7.728	7.711	7.741	VV	4074	53780	1.64%	0.326%
105	7.752	7.741	7.771	VV	3849	45879	1.40%	0.278%
106	7.794	7.771	7.815	VV	4231	60446	1.85%	0.366%
107	7.840	7.815	7.865	VV	6375	92345	2.82%	0.559%
108	7.896	7.865	7.919	VV	5147	76628	2.34%	0.464%
109	7.934	7.919	7.944	VV	1272	15818	0.48%	0.096%
110	7.965	7.944	7.988	VV	7010	88060	2.69%	0.533%
111	8.011	7.988	8.031	VV	1540	33267	1.02%	0.201%
112	8.051	8.031	8.075	VV	3646	51974	1.59%	0.315%
113	8.106	8.075	8.113	VV	1554	33949	1.04%	0.206%
114	8.144	8.113	8.175	VV	30221	360771	11.02%	2.184%
115	8.191	8.175	8.216	VV	2588	43121	1.32%	0.261%
116	8.239	8.216	8.272	VV	2274	58729	1.79%	0.356%
117	8.292	8.272	8.316	VV	2482	47981	1.47%	0.290%
118	8.336	8.316	8.363	VV	1501	33933	1.04%	0.205%
119	8.382	8.363	8.405	VV	1281	25237	0.77%	0.153%
120	8.446	8.405	8.482	VV	9843	165028	5.04%	0.999%
121	8.497	8.482	8.528	VV	3090	60939	1.86%	0.369%
122	8.560	8.528	8.576	VV	2934	65706	2.01%	0.398%
123	8.592	8.576	8.614	VV	3392	52834	1.61%	0.320%
124	8.633	8.614	8.649	VV	3261	45976	1.40%	0.278%
125	8.678	8.649	8.708	VV	9621	143420	4.38%	0.868%
126	8.730	8.708	8.776	VV	3201	61189	1.87%	0.370%
127	8.801	8.776	8.812	VV	1162	18376	0.56%	0.111%
128	8.827	8.812	8.845	VV	1328	21028	0.64%	0.127%
129	8.862	8.845	8.878	VV	1622	23744	0.73%	0.144%
130	8.902	8.878	8.926	VV	2043	43068	1.32%	0.261%
131	8.964	8.926	9.027	VV	17501	266310	8.13%	1.612%
132	9.049	9.027	9.071	VV	1958	32602	1.00%	0.197%
133	9.095	9.071	9.133	VV	1073	24552	0.75%	0.149%
134	9.162	9.133	9.173	VV	605	10056	0.31%	0.061%
135	9.197	9.173	9.231	VV	777	21487	0.66%	0.130%
136	9.263	9.231	9.305	VV	1002	26763	0.82%	0.162%
137	9.336	9.305	9.369	VV	3580	68034	2.08%	0.412%
138	9.382	9.369	9.398	VV	1240	16241	0.50%	0.098%
139	9.423	9.398	9.444	VV	1840	31525	0.96%	0.191%
140	9.468	9.444	9.488	VV	2237	31602	0.97%	0.191%
141	9.521	9.488	9.567	VV	1968	37355	1.14%	0.226%

142	9.576	9.567	9.597	VV	258	2954	0.09%	0.018%
143	9.611	9.597	9.632	VV	208	2595	0.08%	0.016%
144	9.661	9.632	9.678	VV	1369	17711	0.54%	0.107%
145	9.696	9.678	9.717	VV	1163	20134	0.61%	0.122%
146	9.741	9.717	9.786	VV	8331	107896	3.29%	0.653%
147	9.813	9.786	9.830	VV	791	16701	0.51%	0.101%
148	9.842	9.830	9.885	VV	710	13154	0.40%	0.080%
149	9.912	9.885	9.934	VV	243	3874	0.12%	0.023%
150	9.987	9.934	10.001	VV	267	6585	0.20%	0.040%
151	10.020	10.001	10.035	VV	390	5255	0.16%	0.032%
152	10.088	10.035	10.098	VV	1019	15754	0.48%	0.095%
153	10.128	10.098	10.155	VV	4408	71615	2.19%	0.434%
154	10.177	10.155	10.197	VV	940	16332	0.50%	0.099%
155	10.218	10.197	10.246	VV	945	17237	0.53%	0.104%
156	10.273	10.246	10.301	VV	1060	15418	0.47%	0.093%
157	10.334	10.301	10.353	PV	272	4648	0.14%	0.028%
158	10.374	10.353	10.393	VV	441	7851	0.24%	0.048%
159	10.411	10.393	10.437	VV	737	13701	0.42%	0.083%
160	10.479	10.437	10.516	VV	2537	49111	1.50%	0.297%
161	10.551	10.516	10.581	VV	4782	82620	2.52%	0.500%
162	10.602	10.581	10.631	VV	1110	22612	0.69%	0.137%
163	10.669	10.631	10.684	VV	531	11863	0.36%	0.072%
164	10.695	10.684	10.717	VV	462	8147	0.25%	0.049%
165	10.734	10.717	10.776	VV	422	12280	0.37%	0.074%
166	10.805	10.776	10.838	VV	933	23946	0.73%	0.145%
167	10.869	10.838	10.918	VV	1518	42210	1.29%	0.256%
168	10.932	10.918	10.965	VV	708	13863	0.42%	0.084%
169	10.985	10.965	11.025	VV	763	15512	0.47%	0.094%
170	11.030	11.025	11.051	VV	319	4702	0.14%	0.028%
171	11.111	11.051	11.145	VV	2494	48037	1.47%	0.291%
172	11.180	11.145	11.236	VV	3492	67051	2.05%	0.406%
173	11.272	11.236	11.301	VV	3561	63339	1.93%	0.383%
174	11.332	11.301	11.357	VV	574	12666	0.39%	0.077%
175	11.379	11.357	11.398	VV	383	7521	0.23%	0.046%
176	11.478	11.398	11.518	VV	1090	47091	1.44%	0.285%
177	11.541	11.518	11.551	VV	774	12889	0.39%	0.078%
178	11.575	11.551	11.601	VV	1455	28121	0.86%	0.170%
179	11.616	11.601	11.628	VV	838	10855	0.33%	0.066%
180	11.635	11.628	11.648	VV	782	8551	0.26%	0.052%
181	11.665	11.648	11.715	VV	976	26115	0.80%	0.158%
182	11.749	11.715	11.764	VV	713	17748	0.54%	0.107%
183	11.830	11.764	11.876	VV	2180	80774	2.47%	0.489%
184	11.891	11.876	11.915	VV	966	18497	0.56%	0.112%
185	11.949	11.915	11.967	VV	851	23865	0.73%	0.144%
186	11.980	11.967	11.995	VV	963	14247	0.44%	0.086%
187	12.003	11.995	12.021	VV	790	10569	0.32%	0.064%
188	12.070	12.021	12.103	VV	1321	46413	1.42%	0.281%
189	12.135	12.103	12.185	VV	1337	48894	1.49%	0.296%
190	12.200	12.185	12.215	VV	864	14834	0.45%	0.090%
191	12.257	12.215	12.279	VV	1496	41779	1.28%	0.253%
192	12.301	12.279	12.321	VV	1926	35615	1.09%	0.216%
193	12.348	12.321	12.387	VV	1707	49281	1.50%	0.298%
194	12.424	12.387	12.460	VV	1967	51463	1.57%	0.312%

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195	12.487	12.460	12.535	VV	3833	72969	2.23%	0.442%
196	12.553	12.535	12.587	VV	1066	29010	0.89%	0.176%
197	12.602	12.587	12.618	VV	998	16936	0.52%	0.103%
198	12.632	12.618	12.688	VV	1039	28319	0.86%	0.171%
199	12.702	12.688	12.715	VV	644	9207	0.28%	0.056%
200	12.740	12.715	12.794	VV	1162	40804	1.25%	0.247%
201	12.814	12.794	12.835	VV	1004	19396	0.59%	0.117%
202	12.873	12.835	12.891	VV	1832	44596	1.36%	0.270%
203	12.931	12.891	12.969	VV	264920	3274680	100.00%	19.824%
204	12.980	12.969	13.079	VV	2796	115682	3.53%	0.700%
205	13.100	13.079	13.116	VV	2038	36131	1.10%	0.219%
206	13.148	13.116	13.191	VV	1886	71551	2.18%	0.433%
207	13.266	13.191	13.283	VV	1421	68761	2.10%	0.416%
208	13.327	13.283	13.355	VV	2082	69147	2.11%	0.419%
209	13.365	13.355	13.395	VV	1825	40781	1.25%	0.247%
210	13.402	13.395	13.428	VV	1629	30828	0.94%	0.187%
211	13.444	13.428	13.458	VV	1596	25709	0.79%	0.156%
212	13.481	13.458	13.491	VV	1724	31072	0.95%	0.188%
213	13.522	13.491	13.575	VV	2089	85883	2.62%	0.520%
214	13.595	13.575	13.612	VV	1867	37896	1.16%	0.229%
215	13.630	13.612	13.653	VV	2283	46869	1.43%	0.284%
216	13.682	13.653	13.711	VV	4838	95297	2.91%	0.577%
217	13.736	13.711	13.750	VV	1925	40767	1.24%	0.247%
218	13.769	13.750	13.799	VV	1893	46773	1.43%	0.283%
219	13.834	13.799	13.849	VV	1570	42650	1.30%	0.258%
220	13.859	13.849	13.865	VV	1491	13160	0.40%	0.080%
221	13.907	13.865	13.939	VV	2317	85579	2.61%	0.518%
222	13.948	13.939	13.965	VV	1785	26219	0.80%	0.159%
223	13.981	13.965	14.031	VV	1947	67673	2.07%	0.410%
224	14.069	14.031	14.085	VV	1973	58440	1.78%	0.354%
225	14.118	14.085	14.150	VV	2422	78501	2.40%	0.475%
226	14.159	14.150	14.218	VV	1784	65876	2.01%	0.399%
227	14.245	14.218	14.283	VV	3305	81508	2.49%	0.493%
228	14.306	14.283	14.331	VV	2016	53455	1.63%	0.324%
229	14.338	14.331	14.354	VV	1963	25940	0.79%	0.157%
230	14.367	14.354	14.415	VV	2000	63157	1.93%	0.382%
231	14.449	14.415	14.478	VV	1953	67220	2.05%	0.407%
232	14.499	14.478	14.512	VV	1872	36095	1.10%	0.219%
233	14.527	14.512	14.543	VV	1995	33533	1.02%	0.203%
234	14.560	14.543	14.577	VV	1772	33717	1.03%	0.204%
235	14.594	14.577	14.615	VV	1891	37413	1.14%	0.226%
236	14.635	14.615	14.658	VV	1936	43750	1.34%	0.265%
237	14.675	14.658	14.720	VV	1891	63087	1.93%	0.382%
238	14.739	14.720	14.759	VV	2195	41600	1.27%	0.252%
239	14.784	14.759	14.825	VV	5664	113654	3.47%	0.688%
240	14.848	14.825	14.949	VV	1896	115640	3.53%	0.700%
241	14.983	14.949	15.011	VV	1837	57166	1.75%	0.346%
242	15.037	15.011	15.079	VV	1825	65917	2.01%	0.399%
243	15.116	15.079	15.151	VV	1602	64472	1.97%	0.390%
244	15.171	15.151	15.184	VV	1704	28862	0.88%	0.175%
245	15.210	15.184	15.255	VV	1967	64150	1.96%	0.388%
246	15.304	15.255	15.336	VV	3954	102905	3.14%	0.623%

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247	15.352	15.336	15.411	VV	1952	75690	2.31%	0.458%
248	15.432	15.411	15.458	VV	1459	36595	1.12%	0.222%
249	15.487	15.458	15.498	VV	1680	34003	1.04%	0.206%
250	15.517	15.498	15.538	VV	1724	37603	1.15%	0.228%
251	15.561	15.538	15.574	VV	1624	32160	0.98%	0.195%
252	15.623	15.574	15.670	VV	1972	93034	2.84%	0.563%
253	15.691	15.670	15.711	VV	1600	36144	1.10%	0.219%
254	15.733	15.711	15.744	VV	1521	28456	0.87%	0.172%
255	15.764	15.744	15.777	VV	1768	30522	0.93%	0.185%
256	15.804	15.777	15.833	VV	5093	97153	2.97%	0.588%
257	15.843	15.833	15.880	VV	1711	42038	1.28%	0.254%
258	15.894	15.880	15.915	VV	1349	25125	0.77%	0.152%
259	15.934	15.915	15.948	VV	1177	22209	0.68%	0.134%
260	15.980	15.948	16.018	VV	1798	60978	1.86%	0.369%
261	16.032	16.018	16.071	VV	1461	42660	1.30%	0.258%
262	16.096	16.071	16.146	VV	1589	63352	1.93%	0.384%
263	16.161	16.146	16.211	VV	1514	49564	1.51%	0.300%
264	16.235	16.211	16.257	VV	1385	31802	0.97%	0.193%
265	16.286	16.257	16.311	VV	3566	69664	2.13%	0.422%
266	16.321	16.311	16.371	VV	1431	42460	1.30%	0.257%
267	16.391	16.371	16.403	VV	1214	20849	0.64%	0.126%
268	16.445	16.403	16.488	VV	1581	65096	1.99%	0.394%
269	16.516	16.488	16.535	VV	1484	37709	1.15%	0.228%
270	16.553	16.535	16.565	VV	1214	21475	0.66%	0.130%
271	16.584	16.565	16.608	VV	1296	30173	0.92%	0.183%
272	16.629	16.608	16.658	VV	1452	37608	1.15%	0.228%
273	16.673	16.658	16.695	VV	963	19704	0.60%	0.119%
274	16.719	16.695	16.728	VV	1519	24989	0.76%	0.151%
275	16.752	16.728	16.822	VV	4661	108769	3.32%	0.658%
276	16.875	16.822	16.884	VV	1189	36812	1.12%	0.223%
277	16.905	16.884	16.955	VV	1427	47643	1.45%	0.288%
278	16.980	16.955	17.009	VV	1323	32777	1.00%	0.198%
279	17.028	17.009	17.043	VV	958	18480	0.56%	0.112%
280	17.076	17.043	17.118	VV	1437	44792	1.37%	0.271%
281	17.139	17.118	17.170	VV	810	21936	0.67%	0.133%
282	17.201	17.170	17.281	VV	3896	89719	2.74%	0.543%
283	17.315	17.281	17.332	VV	1143	25439	0.78%	0.154%
284	17.348	17.332	17.390	VV	994	27803	0.85%	0.168%
285	17.405	17.390	17.464	VV	757	28379	0.87%	0.172%
286	17.475	17.464	17.510	VV	776	18254	0.56%	0.111%
287	17.532	17.510	17.557	VV	699	16877	0.52%	0.102%
288	17.637	17.557	17.705	VV	4596	106993	3.27%	0.648%
289	17.772	17.705	17.830	VV	1035	42487	1.30%	0.257%
290	17.847	17.830	17.890	VV	510	14489	0.44%	0.088%
291	17.923	17.890	17.938	VV	708	15857	0.48%	0.096%
292	17.945	17.938	17.991	VV	642	12063	0.37%	0.073%
293	18.002	17.991	18.031	VV	345	6676	0.20%	0.040%
294	18.060	18.031	18.101	VV	3946	63718	1.95%	0.386%
295	18.137	18.101	18.163	VV	443	10169	0.31%	0.062%
296	18.197	18.163	18.241	VV	424	9727	0.30%	0.059%
297	18.251	18.241	18.259	VV	206	1499	0.05%	0.009%
298	18.278	18.259	18.286	VV	179	2423	0.07%	0.015%
299	18.327	18.286	18.408	VV	505	17918	0.55%	0.108%

300	18.467	18.408	18.545	PV	3653	70546	2.15%	0.427%
301	18.565	18.545	18.575	VV	163	2524	0.08%	0.015%
302	18.596	18.575	18.608	VV	329	4703	0.14%	0.028%
303	18.612	18.608	18.625	VV	350	2714	0.08%	0.016%
304	18.655	18.625	18.687	VV	340	9552	0.29%	0.058%
305	18.718	18.687	18.758	VV	414	12389	0.38%	0.075%
306	18.765	18.758	18.795	VV	372	4122	0.13%	0.025%
307	18.865	18.795	18.939	PV	2731	47197	1.44%	0.286%
308	18.981	18.939	19.013	VV	266	6121	0.19%	0.037%
309	19.039	19.013	19.090	VV	422	11010	0.34%	0.067%
310	19.115	19.090	19.138	VV	313	6190	0.19%	0.037%
311	19.158	19.138	19.205	VV	194	4861	0.15%	0.029%
312	19.249	19.205	19.312	PV	3136	62484	1.91%	0.378%
313	19.325	19.312	19.341	VV	232	3200	0.10%	0.019%
314	19.355	19.341	19.387	VV	300	6735	0.21%	0.041%
315	19.402	19.387	19.425	VV	285	4869	0.15%	0.029%
316	19.429	19.425	19.457	VV	245	4020	0.12%	0.024%
317	19.484	19.457	19.509	VV	468	11440	0.35%	0.069%
318	19.547	19.509	19.583	VV	512	16645	0.51%	0.101%
319	19.624	19.583	19.655	VV	2017	39392	1.20%	0.238%
320	19.665	19.655	19.674	VV	464	5394	0.16%	0.033%
321	19.683	19.674	19.704	VV	489	6933	0.21%	0.042%
322	19.821	19.704	19.945	VV	2704	189481	5.79%	1.147%
323	19.988	19.945	20.018	VV	3028	75628	2.31%	0.458%
324	20.043	20.018	20.068	VV	1446	38385	1.17%	0.232%
325	20.131	20.068	20.151	VV	1610	70469	2.15%	0.427%
326	20.157	20.151	20.194	VV	1479	35497	1.08%	0.215%
327	20.257	20.194	20.305	VV	1426	90006	2.75%	0.545%
328	20.342	20.305	20.384	VV	2778	92537	2.83%	0.560%
329	20.515	20.384	20.608	VV	2206	246915	7.54%	1.495%
330	20.622	20.608	20.651	VV	1837	44828	1.37%	0.271%
331	20.706	20.651	20.755	VV	3091	133860	4.09%	0.810%
332	20.809	20.755	20.825	VV	1833	74392	2.27%	0.450%
333	20.852	20.825	20.898	VV	1791	73507	2.24%	0.445%
334	20.901	20.898	21.004	VV	1643	90111	2.75%	0.546%
335	21.030	21.004	21.085	VV	1441	63722	1.95%	0.386%
336	21.124	21.085	21.225	VV	1724	109162	3.33%	0.661%
337	21.254	21.225	21.278	VV	1114	33187	1.01%	0.201%
338	21.284	21.278	21.311	VV	1025	18815	0.57%	0.114%
339	21.319	21.311	21.344	VV	939	17493	0.53%	0.106%
340	21.354	21.344	21.375	VV	948	15989	0.49%	0.097%
341	21.382	21.375	21.391	VV	930	8989	0.27%	0.054%
342	21.412	21.391	21.444	VV	1005	28038	0.86%	0.170%
343	21.452	21.444	21.465	VV	881	9770	0.30%	0.059%
344	21.501	21.465	21.518	VV	834	25713	0.79%	0.156%
345	21.525	21.518	21.532	VV	807	6651	0.20%	0.040%
346	21.590	21.532	21.632	VV	1469	58881	1.80%	0.356%
347	21.647	21.632	21.701	VV	673	20900	0.64%	0.127%
348	21.733	21.701	21.810	VV	446	21006	0.64%	0.127%
349	21.821	21.810	21.882	VV	262	7564	0.23%	0.046%
350	21.890	21.882	21.921	VV	179	1972	0.06%	0.012%
351	21.934	21.921	21.982	VV	84	409	0.01%	0.002%

					rteres			
352	22.018	21.982	22.033	VV	144	1266	0.04%	0.008%
353	22.068	22.033	22.078	PV	108	1654	0.05%	0.010%

Sum of corrected areas: 16518831

Aliphatic EPH 102324.M Fri Nov 01 00:57:45 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-TOP	SDG No.:	P4578
Lab Sample ID:	P4578-03	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	53.8
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
FD048626.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	1.72		0.56	1.24	mg/kg
Aromatic C12-C16	Aromatic C12-C16	1.55	J	0.63	1.86	mg/kg
Aromatic C16-C21	Aromatic C16-C21	5.56		1.78	3.09	mg/kg
Aromatic C21-C36	Aromatic C21-C36	6.03		3.71	4.95	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	45.0		40 - 140	90%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	44.4		40 - 140	89%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	20.1		40 - 140	40%	SPK: 50

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

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4578-03	Acq On:	30 Oct 2024 19:18
Client Sample ID:	WB-305-TOP	Operator:	YP/AJ
Data file:	FD048626.D	Misc:	
Instrument:	FID_D	ALS Vial:	64
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.094	5.812	2454283	13.929	200	ug/ml
Aromatic C12-C16	5.813	8.417	2225151	12.552	300	ug/ml
Aromatic C16-C21	8.418	12.679	7360344	44.926	500	ug/ml
Aromatic C21-C36	12.680	18.085	7452316	48.799	800	ug/ml
Aromatic EPH	4.094	18.085	19492094	120.206		ug/ml
2-Bromonaphthalene (SURR)	7.372	7.372	6830901	45.01		ug/ml
2-Flurobiphenyl (SURR)	8.221	8.221	4360661	44.41		ug/ml
ortho-Terphenyl (SURR)	11.255	11.255	3427636	20.12		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048626.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 19:18
Operator : YP/AJ
Sample : P4578-03
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
WB-305-TOP

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:03:00 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.372	6830901	45.006 ug/ml
Spiked Amount 50.000		Recovery =	90.01%
6) S 2-Flurobiphenyl (SURR)	8.221	4360661	44.410 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery =	88.82%
11) S ortho-Terphenyl (SURR)	11.255	3427636	20.122 ug/mlm
Spiked Amount 50.000		Recovery =	40.24%
Target Compounds			

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

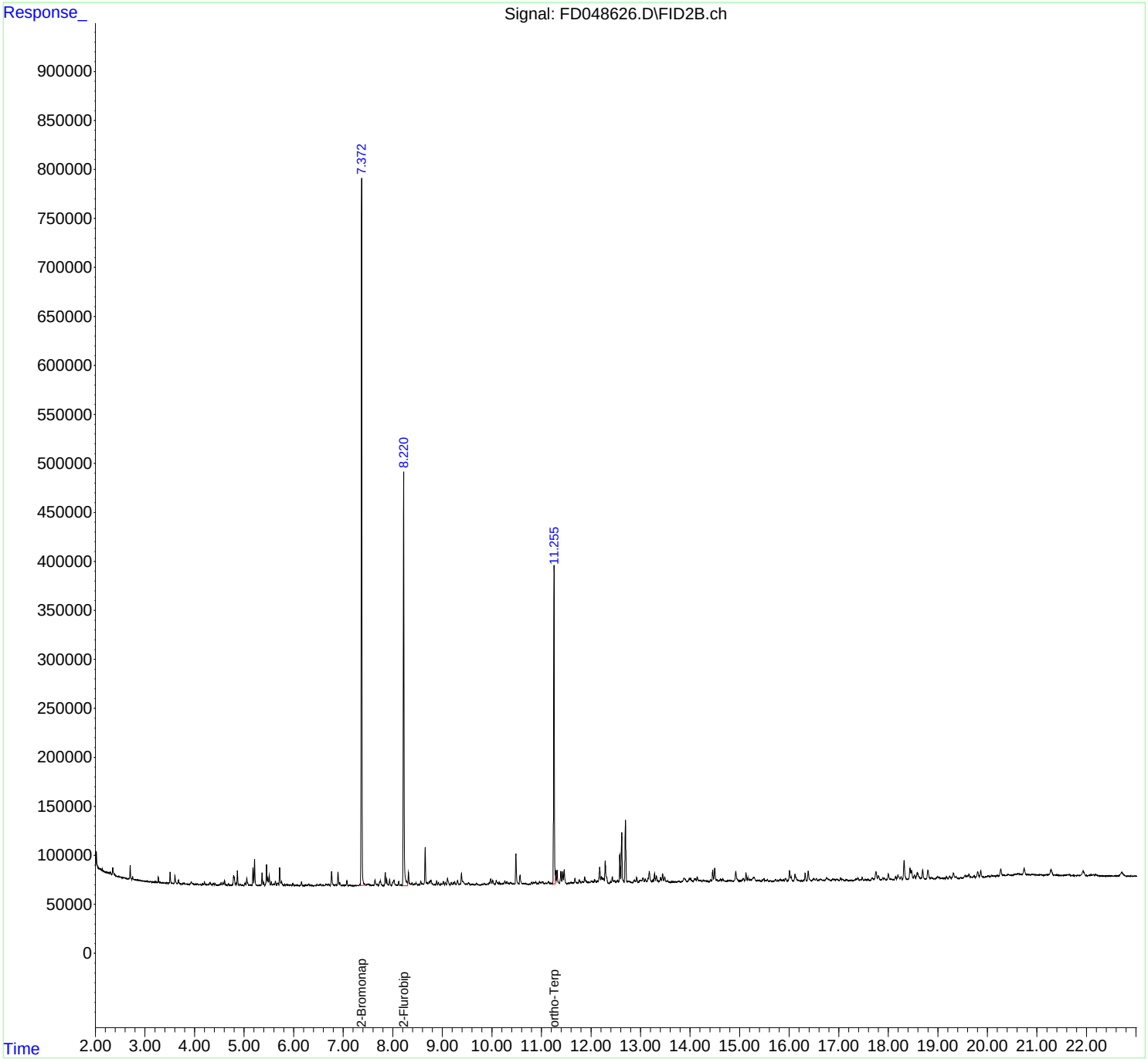
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048626.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 19:18
Operator : YP/AJ
Sample : P4578-03
Misc :
ALS Vial : 64 Sample Multiplier: 1

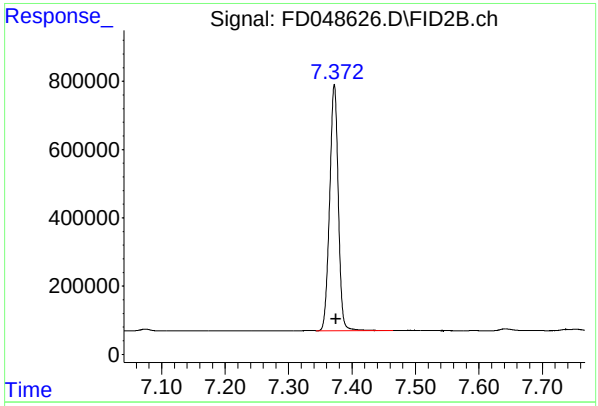
Instrument :
FID_D
ClientSampleId :
WB-305-TOP

Manual Integrations APPROVED
Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:03:00 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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





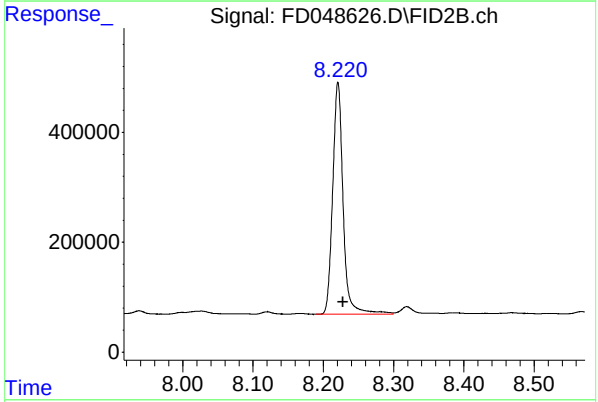
#4 2-Bromonaphthalene (SURR)

R.T.: 7.372 min
Delta R.T.: -0.003 min
Response: 6830901
Conc: 45.01 ug/ml

Instrument :
FID_D
ClientSampleId :
WB-305-TOP

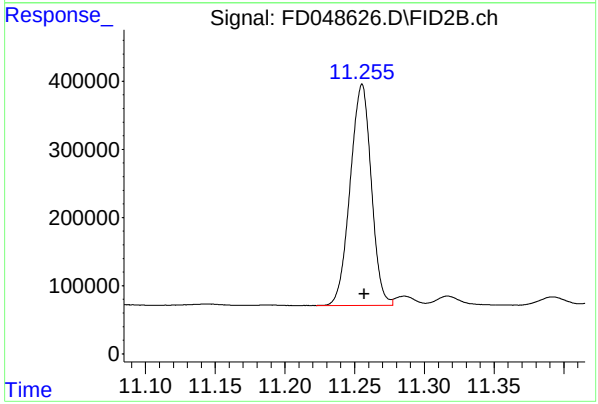
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024



#6 2-Flurobiphenyl (SURR)

R.T.: 8.221 min
Delta R.T.: -0.007 min
Response: 4360661
Conc: 44.41 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.255 min
Delta R.T.: -0.002 min
Response: 3427636
Conc: 20.12 ug/ml m

Instrument :
FID_D
ClientSampleId :
WB-305-TOP

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD10302
Data File : FD048626.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 19:18
Sample : P4578-03
Misc :
ALS Vial : 64 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.051	4.042	4.093	PH	775	11270	0.16%	0.033%
2	4.104	4.093	4.109	PV	256	1774	0.03%	0.005%
3	4.114	4.109	4.136	VV	354	2675	0.04%	0.008%
4	4.162	4.147	4.181	PV	1098	10009	0.15%	0.029%
5	4.201	4.181	4.222	VV	3268	31788	0.46%	0.093%
6	4.238	4.222	4.252	VV	410	4224	0.06%	0.012%
7	4.270	4.252	4.286	VV	812	9061	0.13%	0.026%
8	4.305	4.286	4.318	VV	2451	27430	0.40%	0.080%
9	4.327	4.318	4.347	VV	1930	20454	0.30%	0.060%
10	4.383	4.347	4.399	VV	1890	27935	0.41%	0.081%
11	4.413	4.399	4.431	VV	2086	21940	0.32%	0.064%
12	4.442	4.431	4.446	VV	308	2251	0.03%	0.007%
13	4.449	4.446	4.459	VV	258	1298	0.02%	0.004%
14	4.462	4.459	4.470	VV	241	1191	0.02%	0.003%
15	4.490	4.470	4.498	PV	612	6798	0.10%	0.020%
16	4.511	4.498	4.522	VV	1346	13470	0.20%	0.039%
17	4.536	4.522	4.559	VV	2975	34665	0.50%	0.101%
18	4.574	4.559	4.591	VV	2833	34814	0.51%	0.101%
19	4.607	4.591	4.647	VV	5272	63932	0.93%	0.186%
20	4.682	4.662	4.701	VV	1868	19745	0.29%	0.058%
21	4.707	4.701	4.723	VV	542	3702	0.05%	0.011%
22	4.730	4.723	4.748	VV	220	1289	0.02%	0.004%
23	4.764	4.748	4.768	VV	940	6035	0.09%	0.018%
24	4.789	4.768	4.798	VV	10537	105507	1.53%	0.307%
25	4.803	4.798	4.824	VV	8417	74256	1.08%	0.216%
26	4.839	4.824	4.849	VV	2854	27760	0.40%	0.081%
27	4.865	4.849	4.904	VV	15358	156054	2.27%	0.455%
28	4.920	4.904	4.950	VV	1292	17421	0.25%	0.051%
29	4.962	4.950	4.967	VV	485	3485	0.05%	0.010%
30	4.973	4.967	5.000	VV	617	6199	0.09%	0.018%
31	5.018	5.000	5.036	PV	2761	31549	0.46%	0.092%
32	5.055	5.036	5.102	VV	7720	106983	1.55%	0.312%
33	5.113	5.102	5.122	VV	789	7051	0.10%	0.021%
34	5.131	5.122	5.143	VV	891	7956	0.12%	0.023%
35	5.147	5.143	5.157	VV	526	3622	0.05%	0.011%
36	5.180	5.157	5.196	VV	18294	175774	2.55%	0.512%

Instrument :
FID_D
ClientSampleId :
WB-305-TOP

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

					rteres			
37	5.212	5.196	5.272	VV	27003	282073	4.10%	0.822%
38	5.283	5.272	5.297	VV	548	5080		
39	5.304	5.297	5.314	VV	422	3068		
40	5.322	5.314	5.327	VV	319	2153		
41	5.363	5.327	5.384	VV	13261	133530		
42	5.395	5.384	5.415	VV	3649	36781		
43	5.454	5.415	5.469	VV	21830	233022	3.38%	0.679%
44	5.479	5.469	5.494	VV	8423	94107	1.37%	0.274%
45	5.508	5.494	5.531	VV	10843	115263	1.67%	0.336%
46	5.550	5.531	5.569	VV	4008	47166	0.68%	0.137%
47	5.584	5.569	5.588	VV	1493	13623	0.20%	0.040%
48	5.601	5.588	5.613	VV	1600	19277	0.28%	0.056%
49	5.632	5.613	5.655	VV	4675	61661	0.90%	0.180%
50	5.671	5.655	5.680	VV	2776	30337	0.44%	0.088%
51	5.687	5.680	5.701	VV	2738	26879	0.39%	0.078%
52	5.718	5.701	5.745	VV	18740	210708	3.06%	0.614%
53	5.756	5.745	5.806	VV	4501	69458	1.01%	0.202%
54	5.821	5.806	5.838	VV	1355	17383	0.25%	0.051%
55	5.851	5.838	5.864	VV	1510	17587	0.26%	0.051%
56	5.883	5.864	5.905	VV	1251	24306	0.35%	0.071%
57	5.916	5.905	5.927	VV	895	9601	0.14%	0.028%
58	5.935	5.927	5.963	VV	972	18282	0.27%	0.053%
59	5.979	5.963	6.009	VV	2380	38246	0.56%	0.111%
60	6.031	6.009	6.045	VV	507	7636	0.11%	0.022%
61	6.051	6.045	6.065	VV	648	6246	0.09%	0.018%
62	6.077	6.065	6.110	VV	1294	15621	0.23%	0.046%
63	6.125	6.110	6.132	VV	467	3434	0.05%	0.010%
64	6.159	6.132	6.192	VV	4163	52002	0.76%	0.152%
65	6.197	6.192	6.220	VV	362	4728	0.07%	0.014%
66	6.239	6.220	6.259	VV	1003	13015	0.19%	0.038%
67	6.275	6.259	6.287	VV	957	12245	0.18%	0.036%
68	6.305	6.287	6.325	VV	2296	28946	0.42%	0.084%
69	6.338	6.325	6.365	VV	977	14553	0.21%	0.042%
70	6.375	6.365	6.393	VV	914	9479	0.14%	0.028%
71	6.401	6.393	6.408	VV	317	1570	0.02%	0.005%
72	6.430	6.408	6.448	PV	776	10711	0.16%	0.031%
73	6.470	6.448	6.493	VV	1277	21046	0.31%	0.061%
74	6.501	6.493	6.510	VV	934	8375	0.12%	0.024%
75	6.543	6.510	6.571	VV	1802	39818	0.58%	0.116%
76	6.592	6.571	6.619	VV	1449	23145	0.34%	0.067%
77	6.652	6.619	6.661	VV	1635	23074	0.34%	0.067%
78	6.672	6.661	6.689	VV	1549	20705	0.30%	0.060%
79	6.713	6.689	6.739	VV	1856	37589	0.55%	0.110%
80	6.767	6.739	6.804	VV	14706	193889	2.82%	0.565%
81	6.810	6.804	6.832	VV	1329	17174	0.25%	0.050%
82	6.854	6.832	6.871	VV	1736	25113	0.36%	0.073%
83	6.896	6.871	6.920	VV	14374	165055	2.40%	0.481%
84	6.932	6.920	6.963	VV	3523	45615	0.66%	0.133%
85	6.970	6.963	6.982	VV	587	4933	0.07%	0.014%
86	6.994	6.982	7.029	VV	933	18171	0.26%	0.053%
87	7.043	7.029	7.054	VV	740	8288	0.12%	0.024%
88	7.075	7.054	7.103	VV	5496	61994	0.90%	0.181%
89	7.109	7.103	7.112	VV	419	1946	0.03%	0.006%

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90	7.130	7.112	7.152	VV	690	12246	0.18%	0.036%
91	7.165	7.152	7.183	VV	727	8206		
92	7.195	7.183	7.205	VV	324	2629		
93	7.210	7.205	7.217	VV	273	1316		
94	7.246	7.217	7.262	VV	580	10108		
95	7.271	7.262	7.275	VV	302	1871		
96	7.288	7.275	7.314	VV	604	9906	0.14%	0.029%
97	7.332	7.314	7.345	VV	1527	17320	0.25%	0.050%
98	7.372	7.345	7.470	VV	721750	6887425	100.00%	20.066%
99	7.492	7.470	7.515	VV	1712	38174	0.55%	0.111%
100	7.525	7.515	7.542	VV	1436	18978	0.28%	0.055%
101	7.549	7.542	7.570	VV	960	11244	0.16%	0.033%
102	7.575	7.570	7.580	VV	474	2684	0.04%	0.008%
103	7.593	7.580	7.613	VV	995	13135	0.19%	0.038%
104	7.642	7.613	7.674	VV	6090	94948	1.38%	0.277%
105	7.687	7.674	7.709	VV	1585	24121	0.35%	0.070%
106	7.738	7.709	7.744	VV	4480	47736	0.69%	0.139%
107	7.753	7.744	7.804	VV	4907	72596	1.05%	0.212%
108	7.807	7.804	7.820	VV	429	2900	0.04%	0.008%
109	7.850	7.820	7.866	VV	13508	146858	2.13%	0.428%
110	7.879	7.866	7.908	VV	6558	84404	1.23%	0.246%
111	7.938	7.908	7.974	VV	6496	87339	1.27%	0.254%
112	7.999	7.974	8.005	VV	3537	36470	0.53%	0.106%
113	8.027	8.005	8.072	VV	5871	120167	1.74%	0.350%
114	8.087	8.072	8.100	VV	941	12711	0.18%	0.037%
115	8.120	8.100	8.149	VV	4547	51841	0.75%	0.151%
116	8.166	8.149	8.192	VV	1497	18033	0.26%	0.053%
117	8.221	8.192	8.300	PV	422699	4366071	63.39%	12.720%
118	8.319	8.300	8.369	VV	13940	200535	2.91%	0.584%
119	8.386	8.369	8.420	VV	2649	55154	0.80%	0.161%
120	8.431	8.420	8.443	VV	1572	19593	0.28%	0.057%
121	8.468	8.443	8.505	VV	2785	64110	0.93%	0.187%
122	8.519	8.505	8.543	VV	1319	24343	0.35%	0.071%
123	8.568	8.543	8.587	VV	4545	65924	0.96%	0.192%
124	8.598	8.587	8.624	VV	2128	37493	0.54%	0.109%
125	8.656	8.624	8.681	VV	39085	430491	6.25%	1.254%
126	8.689	8.681	8.712	VV	3170	45627	0.66%	0.133%
127	8.735	8.712	8.745	VV	4102	58155	0.84%	0.169%
128	8.774	8.745	8.824	VV	5606	137344	1.99%	0.400%
129	8.841	8.824	8.866	VV	1040	20024	0.29%	0.058%
130	8.888	8.866	8.907	VV	4742	57434	0.83%	0.167%
131	8.924	8.907	8.952	VV	3174	43192	0.63%	0.126%
132	8.974	8.952	8.989	VV	1662	24983	0.36%	0.073%
133	9.022	8.989	9.045	VV	3879	67833	0.98%	0.198%
134	9.062	9.045	9.085	VV	3250	40437	0.59%	0.118%
135	9.105	9.085	9.160	VV	7237	131781	1.91%	0.384%
136	9.183	9.160	9.204	VV	3132	43166	0.63%	0.126%
137	9.223	9.204	9.235	VV	3196	37529	0.54%	0.109%
138	9.251	9.235	9.278	VV	3757	54672	0.79%	0.159%
139	9.309	9.278	9.337	VV	5030	83866	1.22%	0.244%
140	9.356	9.337	9.368	VV	1422	21677	0.31%	0.063%
141	9.388	9.368	9.409	VV	12352	157768	2.29%	0.460%

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142	9.420	9.409	9.467	VV	4028	85960	1.25%	0.250%
143	9.480	9.467	9.492	VV	1622	19482		
144	9.528	9.492	9.566	VV	2796	62986		
145	9.571	9.566	9.582	VV	586	5251		
146	9.620	9.582	9.660	VV	990	29370		
147	9.692	9.660	9.720	VV	1671	31518		
148	9.725	9.720	9.750	VV	578	5118	0.07%	0.015%
149	9.805	9.750	9.823	PV	825	17231	0.25%	0.050%
150	9.844	9.823	9.882	VV	1779	33457	0.49%	0.097%
151	9.911	9.882	9.926	VV	1322	22975	0.33%	0.067%
152	9.946	9.926	9.956	VV	2454	32083	0.47%	0.093%
153	9.977	9.956	10.001	VV	6272	100422	1.46%	0.293%
154	10.019	10.001	10.053	VV	4741	80297	1.17%	0.234%
155	10.066	10.053	10.073	VV	1174	12194	0.18%	0.036%
156	10.090	10.073	10.130	VV	4642	87620	1.27%	0.255%
157	10.150	10.130	10.175	VV	2345	41693	0.61%	0.121%
158	10.184	10.175	10.201	VV	1214	14952	0.22%	0.044%
159	10.231	10.201	10.242	VV	1797	29660	0.43%	0.086%
160	10.264	10.242	10.282	VV	4180	61211	0.89%	0.178%
161	10.302	10.282	10.331	VV	2848	58697	0.85%	0.171%
162	10.333	10.331	10.355	VV	1522	19335	0.28%	0.056%
163	10.384	10.355	10.409	VV	2412	50954	0.74%	0.148%
164	10.432	10.409	10.447	VV	1362	18679	0.27%	0.054%
165	10.487	10.447	10.545	VV	31467	416390	6.05%	1.213%
166	10.569	10.545	10.613	VV	9576	154366	2.24%	0.450%
167	10.619	10.613	10.649	VV	991	17574	0.26%	0.051%
168	10.653	10.649	10.658	VV	714	3553	0.05%	0.010%
169	10.680	10.658	10.703	VV	1193	22307	0.32%	0.065%
170	10.713	10.703	10.750	VV	600	9209	0.13%	0.027%
171	10.766	10.750	10.779	VV	425	4630	0.07%	0.013%
172	10.805	10.779	10.824	VV	2349	36540	0.53%	0.106%
173	10.838	10.824	10.850	VV	2023	23316	0.34%	0.068%
174	10.860	10.850	10.871	VV	1814	20200	0.29%	0.059%
175	10.886	10.871	10.912	VV	2687	41103	0.60%	0.120%
176	10.921	10.912	10.940	VV	841	11298	0.16%	0.033%
177	10.961	10.940	10.998	VV	2421	58187	0.84%	0.170%
178	11.017	10.998	11.061	VV	2834	66806	0.97%	0.195%
179	11.085	11.061	11.106	VV	1650	28219	0.41%	0.082%
180	11.143	11.106	11.168	VV	2725	57185	0.83%	0.167%
181	11.187	11.168	11.210	VV	1316	20083	0.29%	0.059%
182	11.216	11.210	11.219	VV	501	2270	0.03%	0.007%
183	11.255	11.219	11.277	VV	325312	3432451	49.84%	10.000%
184	11.286	11.277	11.301	VV	14190	146394	2.13%	0.427%
185	11.317	11.301	11.369	VV	14208	197360	2.87%	0.575%
186	11.392	11.369	11.412	VV	12964	180665	2.62%	0.526%
187	11.430	11.412	11.445	VV	13020	156906	2.28%	0.457%
188	11.462	11.445	11.527	VV	14663	213775	3.10%	0.623%
189	11.547	11.527	11.565	VV	1187	18371	0.27%	0.054%
190	11.587	11.565	11.615	VV	1670	36234	0.53%	0.106%
191	11.625	11.615	11.652	VV	1191	21744	0.32%	0.063%
192	11.678	11.652	11.735	VV	5593	107193	1.56%	0.312%
193	11.762	11.735	11.803	VV	4345	86106	1.25%	0.251%
194	11.824	11.803	11.851	VV	2440	53115	0.77%	0.155%

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195	11.873	11.851	11.923	VV	7110	143269	2.08%	0.417%
196	11.952	11.923	11.969	VV	1819	42745		
197	12.005	11.969	12.017	VV	2967	55004		
198	12.027	12.017	12.057	VV	2554	48285		
199	12.074	12.057	12.087	VV	4407	57246		
200	12.092	12.087	12.109	VV	3022	30405		
201	12.127	12.109	12.142	VV	2940	45697	0.66%	0.133%
202	12.176	12.142	12.196	VV	16820	264607	3.84%	0.771%
203	12.212	12.196	12.229	VV	6777	110923	1.61%	0.323%
204	12.241	12.229	12.251	VV	5567	64546	0.94%	0.188%
205	12.257	12.251	12.270	VV	5126	52290	0.76%	0.152%
206	12.289	12.270	12.366	VV	23308	390031	5.66%	1.136%
207	12.391	12.366	12.409	VV	2023	29508	0.43%	0.086%
208	12.432	12.409	12.452	VV	6784	98973	1.44%	0.288%
209	12.457	12.452	12.467	VV	2571	21556	0.31%	0.063%
210	12.481	12.467	12.502	VV	3278	48283	0.70%	0.141%
211	12.535	12.502	12.557	VV	3421	75193	1.09%	0.219%
212	12.581	12.557	12.601	VV	29468	341548	4.96%	0.995%
213	12.621	12.601	12.669	VV	51955	640549	9.30%	1.866%
214	12.695	12.669	12.725	VV	64454	772098	11.21%	2.249%
215	12.769	12.725	12.815	VV	2063	86189	1.25%	0.251%
216	12.820	12.815	12.839	VV	988	11198	0.16%	0.033%
217	12.842	12.839	12.846	VV	733	2858	0.04%	0.008%
218	12.871	12.846	12.904	VV	3261	75533	1.10%	0.220%
219	12.922	12.904	12.955	VV	6096	97453	1.41%	0.284%
220	12.982	12.955	12.995	VV	3019	47701	0.69%	0.139%
221	13.009	12.995	13.027	VV	3262	53123	0.77%	0.155%
222	13.048	13.027	13.080	VV	5365	112124	1.63%	0.327%
223	13.097	13.080	13.127	VV	4377	77265	1.12%	0.225%
224	13.176	13.127	13.227	VV	12051	292654	4.25%	0.853%
225	13.249	13.227	13.263	VV	2908	46201	0.67%	0.135%
226	13.283	13.263	13.303	VV	9879	133245	1.93%	0.388%
227	13.319	13.303	13.341	VV	7621	105209	1.53%	0.307%
228	13.350	13.341	13.372	VV	2595	37114	0.54%	0.108%
229	13.403	13.372	13.423	VV	5809	101187	1.47%	0.295%
230	13.446	13.423	13.468	VV	9287	145727	2.12%	0.425%
231	13.488	13.468	13.517	VV	6279	103506	1.50%	0.302%
232	13.536	13.517	13.592	VV	2085	58076	0.84%	0.169%
233	13.629	13.592	13.645	VV	1188	26475	0.38%	0.077%
234	13.676	13.645	13.705	VV	1267	36763	0.53%	0.107%
235	13.716	13.705	13.727	VV	1059	13193	0.19%	0.038%
236	13.731	13.727	13.748	VV	1021	10839	0.16%	0.032%
237	13.765	13.748	13.775	VV	1613	21506	0.31%	0.063%
238	13.789	13.775	13.805	VV	1520	21384	0.31%	0.062%
239	13.819	13.805	13.824	VV	1023	10097	0.15%	0.029%
240	13.845	13.824	13.850	VV	1766	21541	0.31%	0.063%
241	13.879	13.850	13.939	VV	4792	158348	2.30%	0.461%
242	14.008	13.939	14.030	VV	4351	154409	2.24%	0.450%
243	14.041	14.030	14.060	VV	2124	31083	0.45%	0.091%
244	14.102	14.060	14.121	VV	3830	101346	1.47%	0.295%
245	14.144	14.121	14.168	VV	5769	104511	1.52%	0.304%
246	14.178	14.168	14.199	VV	2339	38653	0.56%	0.113%

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247	14.202	14.199	14.246	VV	2079	47508	0.69%	0.138%
248	14.272	14.246	14.290	VV	2381	47168		
249	14.305	14.290	14.327	VV	1959	35544		
250	14.343	14.327	14.372	VV	1524	32816		
251	14.415	14.372	14.435	VV	2864	57170		
252	14.455	14.435	14.475	VV	12832	160630		
253	14.495	14.475	14.529	VV	14482	233721	3.39%	0.681%
254	14.545	14.529	14.570	VV	2688	48524	0.70%	0.141%
255	14.587	14.570	14.598	VV	2317	30944	0.45%	0.090%
256	14.612	14.598	14.645	VV	3511	67749	0.98%	0.197%
257	14.663	14.645	14.723	VV	3128	85730	1.24%	0.250%
258	14.766	14.723	14.799	VV	1955	64048	0.93%	0.187%
259	14.815	14.799	14.835	VV	1692	30818	0.45%	0.090%
260	14.839	14.835	14.851	VV	1492	11289	0.16%	0.033%
261	14.857	14.851	14.862	VV	1153	6637	0.10%	0.019%
262	14.874	14.862	14.879	VV	1228	10732	0.16%	0.031%
263	14.920	14.879	14.994	VV	10750	253764	3.68%	0.739%
264	14.999	14.994	15.008	VV	1232	9215	0.13%	0.027%
265	15.027	15.008	15.032	VV	1304	16603	0.24%	0.048%
266	15.045	15.032	15.051	VV	1935	18478	0.27%	0.054%
267	15.077	15.051	15.102	VV	3706	77165	1.12%	0.225%
268	15.128	15.102	15.149	VV	9156	130916	1.90%	0.381%
269	15.165	15.149	15.195	VV	4430	79157	1.15%	0.231%
270	15.206	15.195	15.225	VV	2617	41116	0.60%	0.120%
271	15.230	15.225	15.241	VV	2239	19313	0.28%	0.056%
272	15.265	15.241	15.273	VV	4088	62125	0.90%	0.181%
273	15.286	15.273	15.345	VV	4955	123114	1.79%	0.359%
274	15.359	15.345	15.365	VV	1451	16090	0.23%	0.047%
275	15.375	15.365	15.395	VV	1535	25895	0.38%	0.075%
276	15.400	15.395	15.404	VV	1280	6227	0.09%	0.018%
277	15.408	15.404	15.436	VV	1302	19036	0.28%	0.055%
278	15.461	15.436	15.468	VV	1668	23212	0.34%	0.068%
279	15.488	15.468	15.519	VV	3310	59029	0.86%	0.172%
280	15.527	15.519	15.534	VV	1197	10395	0.15%	0.030%
281	15.560	15.534	15.589	VV	1858	41016	0.60%	0.119%
282	15.595	15.589	15.602	VV	697	4304	0.06%	0.013%
283	15.622	15.602	15.673	VV	1062	24008	0.35%	0.070%
284	15.691	15.673	15.697	VV	575	6137	0.09%	0.018%
285	15.727	15.697	15.747	VV	2066	35811	0.52%	0.104%
286	15.767	15.747	15.787	VV	1427	22343	0.32%	0.065%
287	15.828	15.787	15.855	VV	2076	56927	0.83%	0.166%
288	15.886	15.855	15.902	VV	1678	36159	0.52%	0.105%
289	15.926	15.902	15.961	VV	3305	67991	0.99%	0.198%
290	15.975	15.961	15.980	VV	1188	11565	0.17%	0.034%
291	16.005	15.980	16.026	VV	11011	161351	2.34%	0.470%
292	16.037	16.026	16.085	VV	4835	76954	1.12%	0.224%
293	16.116	16.085	16.132	VV	7476	105843	1.54%	0.308%
294	16.137	16.132	16.170	VV	4116	55921	0.81%	0.163%
295	16.178	16.170	16.221	VV	1385	25702	0.37%	0.075%
296	16.238	16.221	16.265	VV	643	11839	0.17%	0.034%
297	16.294	16.265	16.299	VV	1249	14680	0.21%	0.043%
298	16.322	16.299	16.352	VV	8228	108746	1.58%	0.317%
299	16.382	16.352	16.454	VV	10440	186832	2.71%	0.544%

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300	16.497	16.454	16.522	VV	2625	68575	1.00%	0.200%
301	16.548	16.522	16.583	VV	2994	57244		
302	16.594	16.583	16.607	VV	1045	13602		
303	16.629	16.607	16.678	VV	2081	60964		
304	16.694	16.678	16.715	VV	986	17058		
305	16.753	16.715	16.795	VV	3271	94762		
306	16.805	16.795	16.832	VV	1808	26157	0.38%	0.076%
307	16.878	16.832	16.896	VV	2232	43870	0.64%	0.128%
308	16.910	16.896	16.932	VV	1778	29734	0.43%	0.087%
309	16.957	16.932	16.964	VV	1646	25944	0.38%	0.076%
310	16.968	16.964	16.992	VV	1567	19622	0.28%	0.057%
311	16.998	16.992	17.015	VV	765	8796	0.13%	0.026%
312	17.036	17.015	17.064	VV	2945	52681	0.76%	0.153%
313	17.074	17.064	17.125	VV	1643	33322	0.48%	0.097%
314	17.158	17.125	17.201	PV	1277	26561	0.39%	0.077%
315	17.235	17.210	17.242	VV	587	6811	0.10%	0.020%
316	17.248	17.242	17.267	VV	639	5719	0.08%	0.017%
317	17.272	17.267	17.277	VV	320	1556	0.02%	0.005%
318	17.282	17.277	17.295	VV	252	1614	0.02%	0.005%
319	17.353	17.295	17.369	VV	1555	39284	0.57%	0.114%
320	17.386	17.369	17.417	VV	2683	47813	0.69%	0.139%
321	17.429	17.417	17.448	VV	1115	15862	0.23%	0.046%
322	17.472	17.448	17.505	VV	3336	53547	0.78%	0.156%
323	17.529	17.505	17.542	VV	1103	15281	0.22%	0.045%
324	17.550	17.542	17.569	VV	839	10761	0.16%	0.031%
325	17.584	17.569	17.588	VV	1048	9538	0.14%	0.028%
326	17.593	17.588	17.642	VV	1036	14082	0.20%	0.041%
327	17.675	17.642	17.717	PV	2344	65896	0.96%	0.192%
328	17.751	17.717	17.778	VV	8742	175961	2.55%	0.513%
329	17.803	17.778	17.839	VV	4236	89635	1.30%	0.261%
330	17.845	17.839	17.864	VV	616	6370	0.09%	0.019%
331	17.889	17.864	17.906	VV	2541	38316	0.56%	0.112%
332	17.917	17.906	17.953	VV	2037	33951	0.49%	0.099%
333	17.968	17.953	17.976	VV	566	6166	0.09%	0.018%
334	18.000	17.976	18.034	VV	6103	95176	1.38%	0.277%
335	18.051	18.034	18.090	VV	892	15469	0.22%	0.045%
336	18.099	18.090	18.111	PV	210	1734	0.03%	0.005%
337	18.146	18.111	18.169	PV	3008	47867	0.69%	0.139%
338	18.194	18.169	18.235	VV	4579	84247	1.22%	0.245%

Sum of corrected areas: 34323160

Aromatic EPH 102324.M Fri Nov 01 01:41:04 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-TOP-1	SDG No.:	P4578
Lab Sample ID:	P4578-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	58.7
Sample Wt/Vol:	30.09 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
10/30/24 08:20	10/31/24 0:45	PB164525

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.65	U	1	0.65	1.70	mg/kg	FC067578.D
Aliphatic C12-C16	Aliphatic C12-C16	0.90	J	1	0.41	1.13	mg/kg	FC067578.D
Aliphatic C16-C21	Aliphatic C16-C21	0.77	J	1	0.51	1.70	mg/kg	FC067578.D
Aliphatic C21-C28	Aliphatic C21-C28	1.36	U	1	1.36	2.26	mg/kg	FC067578.D
Aliphatic C28-C40	Aliphatic C28-C40	3.06	U	1	3.06	3.40	mg/kg	FC067578.D
Aromatic C10-C12	Aromatic C10-C12	0.51	U	1	0.51	1.13	mg/kg	FD048627.D
Aromatic C12-C16	Aromatic C12-C16	0.58	U	1	0.58	1.70	mg/kg	FD048627.D
Aromatic C16-C21	Aromatic C16-C21	1.63	U	1	1.63	2.83	mg/kg	FD048627.D
Aromatic C21-C36	Aromatic C21-C36	3.40	U	1	3.40	4.53	mg/kg	FD048627.D
Total AliphaticEPH	Total AliphaticEPH	5.98	U		5.98	10.2	mg/kg	
Total AromaticEPH	Total AromaticEPH	6.12	U		6.12	10.2	mg/kg	
Total EPH	Total EPH	12.1	U		12.1	20.4	mg/kg	

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

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-TOP-1	SDG No.:	P4578
Lab Sample ID:	P4578-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	58.7
Sample Wt/Vol:	30.09 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC067578.D	1	10/30/24	10/31/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	0.65	U	0.65	1.70	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	0.90	J	0.41	1.13	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.77	J	0.51	1.70	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	1.36	U	1.36	2.26	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	3.06	U	3.06	3.40	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	24.0		40 - 140	48%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4578-04	Acq On:	31 Oct 2024 00:45
Client Sample ID:	WB-305-TOP-1	Operator:	YP/AJ
Data file:	FC067578.D	Misc:	
Instrument:	FID_C	ALS Vial:	22
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.174	6.453	446942	3.299	300	ug/ml
Aliphatic C12-C16	6.454	9.842	1043029	7.921	200	ug/ml
Aliphatic C16-C21	9.843	13.199	868066	6.823	300	ug/ml
Aliphatic C21-C28	13.200	16.852	713798	5.944	400	ug/ml
Aliphatic C28-C40	16.853	21.694	2237970	22.138	600	ug/ml
Aliphatic EPH	3.174	21.694	5309805	46.124		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.930	12.930	2587727	23.96		ug/ml
Aliphatic C9-C28	3.174	16.852	3071835	23.987	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067578.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:45
Operator : YP/AJ
Sample : P4578-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-TOP-1

Integration File: autoint1.e
Quant Time: Nov 01 00:21:05 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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...	12.930	2587727	23.963 ug/ml
Spiked Amount 50.000		Recovery = 47.93%	
Target Compounds			

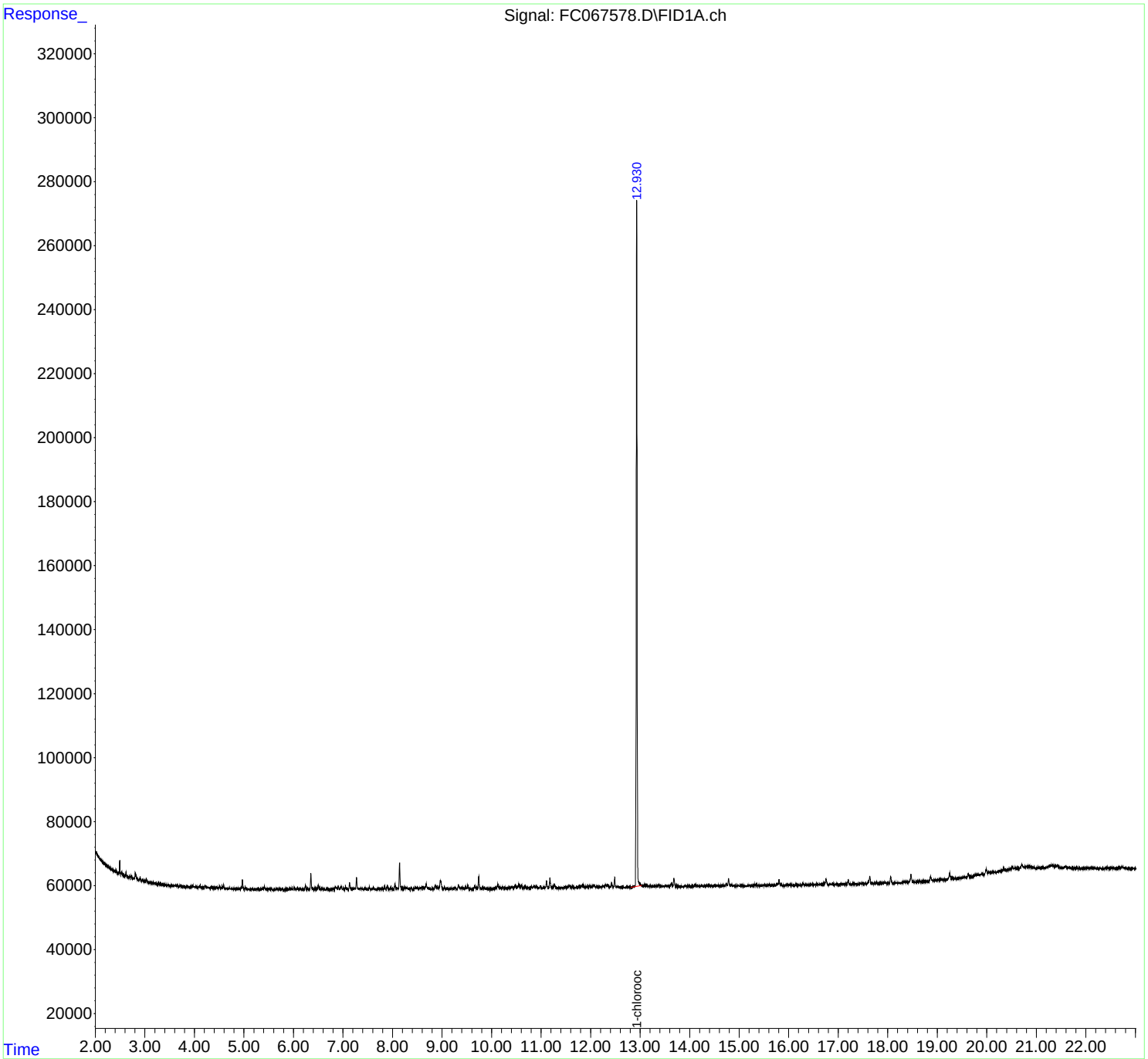
(f)=RT Delta > 1/2 Window (m)=manual int.

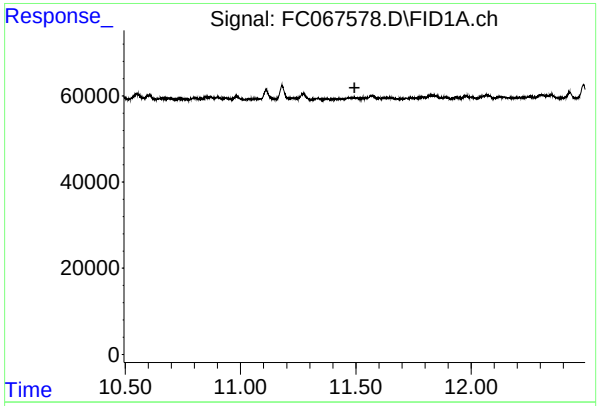
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067578.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:45
Operator : YP/AJ
Sample : P4578-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-TOP-1

Integration File: autoint1.e
Quant Time: Nov 01 00:21:05 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 2024
Response via : Initial Calibration
Integrator: ChemStation

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

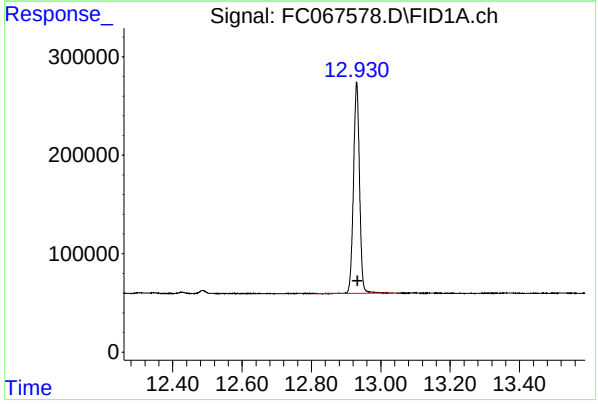




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.494 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
WB-305-TOP-1



#12 1-chlorooctadecane (SURR)

R.T.: 12.930 min
Delta R.T.: -0.003 min
Response: 2587727
Conc: 23.96 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067578.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:45
Sample : P4578-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.276	3.221	3.358	BV	280	2576	0.10%	0.032%
2	3.373	3.358	3.528	PV	175	2697	0.10%	0.034%
3	3.549	3.528	3.583	PV	121	1700	0.06%	0.021%
4	3.597	3.583	3.631	VV	196	2086	0.08%	0.026%
5	3.646	3.631	3.691	VV	198	1769	0.07%	0.022%
6	3.715	3.691	3.729	PV	173	2070	0.08%	0.026%
7	3.736	3.729	3.758	VV	97	687	0.03%	0.009%
8	3.767	3.758	3.828	VV	173	2343	0.09%	0.029%
9	3.848	3.828	3.901	VV	179	3665	0.14%	0.046%
10	3.942	3.901	3.954	PV	442	5170	0.20%	0.065%
11	3.968	3.954	4.018	VV	613	7373	0.28%	0.092%
12	4.032	4.018	4.067	VV	176	2108	0.08%	0.026%
13	4.115	4.067	4.149	VV	634	10806	0.41%	0.135%
14	4.159	4.149	4.172	VV	144	1353	0.05%	0.017%
15	4.184	4.172	4.197	VV	95	969	0.04%	0.012%
16	4.217	4.197	4.240	PV	844	9361	0.35%	0.117%
17	4.253	4.240	4.317	VV	228	7315	0.28%	0.091%
18	4.340	4.317	4.367	VV	601	7633	0.29%	0.095%
19	4.376	4.367	4.424	VV	207	4028	0.15%	0.050%
20	4.441	4.424	4.476	VV	321	6777	0.26%	0.085%
21	4.506	4.476	4.526	VV	886	11361	0.43%	0.142%
22	4.562	4.526	4.576	VV	748	11013	0.42%	0.138%
23	4.592	4.576	4.614	VV	1291	13040	0.49%	0.163%
24	4.620	4.614	4.632	VV	194	1474	0.06%	0.018%
25	4.648	4.632	4.686	VV	187	2995	0.11%	0.037%
26	4.708	4.686	4.734	VV	228	3390	0.13%	0.042%
27	4.745	4.734	4.791	VV	124	4199	0.16%	0.052%
28	4.800	4.791	4.837	VV	189	3301	0.12%	0.041%
29	4.851	4.837	4.873	PV	159	1548	0.06%	0.019%
30	4.888	4.873	4.926	VV	225	3471	0.13%	0.043%
31	4.969	4.926	5.004	VV	2970	39326	1.49%	0.492%
32	5.027	5.004	5.045	VV	670	8375	0.32%	0.105%
33	5.054	5.045	5.116	VV	204	4782	0.18%	0.060%
34	5.127	5.116	5.150	VV	131	1796	0.07%	0.022%
35	5.164	5.150	5.176	VV	162	2120	0.08%	0.027%
36	5.199	5.176	5.234	VV	214	4911	0.19%	0.061%

rteres

37	5.260	5.234	5.310	VV	242	5679	0.21%	0.071%
38	5.337	5.310	5.356	VV	137	2445	0.09%	0.031%
39	5.374	5.356	5.398	VV	511	7731	0.29%	0.097%
40	5.413	5.398	5.447	VV	1036	13632	0.52%	0.170%
41	5.470	5.447	5.511	VV	290	7056	0.27%	0.088%
42	5.554	5.511	5.586	VV	498	10325	0.39%	0.129%
43	5.600	5.586	5.614	VV	165	1918	0.07%	0.024%
44	5.623	5.614	5.638	VV	198	1847	0.07%	0.023%
45	5.665	5.638	5.698	VV	413	9008	0.34%	0.113%
46	5.720	5.698	5.752	VV	253	6701	0.25%	0.084%
47	5.781	5.752	5.804	VV	263	5696	0.22%	0.071%
48	5.824	5.804	5.844	PV	349	3810	0.14%	0.048%
49	5.879	5.844	5.893	VV	377	6068	0.23%	0.076%
50	5.927	5.893	5.947	VV	562	11448	0.43%	0.143%
51	5.969	5.947	5.990	VV	636	8781	0.33%	0.110%
52	6.012	5.990	6.040	VV	969	13751	0.52%	0.172%
53	6.073	6.040	6.111	VV	703	14700	0.56%	0.184%
54	6.138	6.111	6.168	VV	382	8968	0.34%	0.112%
55	6.187	6.168	6.214	VV	337	5341	0.20%	0.067%
56	6.243	6.214	6.271	VV	1483	21665	0.82%	0.271%
57	6.280	6.271	6.323	VV	377	7757	0.29%	0.097%
58	6.353	6.323	6.413	VV	4993	63768	2.41%	0.797%
59	6.435	6.413	6.456	VV	616	9259	0.35%	0.116%
60	6.470	6.456	6.481	VV	484	4871	0.18%	0.061%
61	6.501	6.481	6.523	VV	1680	20338	0.77%	0.254%
62	6.536	6.523	6.554	VV	573	7080	0.27%	0.088%
63	6.572	6.554	6.600	VV	657	8774	0.33%	0.110%
64	6.628	6.600	6.648	VV	268	5311	0.20%	0.066%
65	6.672	6.648	6.698	VV	436	7899	0.30%	0.099%
66	6.709	6.698	6.718	VV	198	2273	0.09%	0.028%
67	6.746	6.718	6.769	VV	254	5142	0.19%	0.064%
68	6.795	6.769	6.824	PV	627	9707	0.37%	0.121%
69	6.847	6.824	6.884	VV	1025	22424	0.85%	0.280%
70	6.908	6.884	6.938	VV	897	17741	0.67%	0.222%
71	6.971	6.938	6.994	VV	1141	22901	0.87%	0.286%
72	7.011	6.994	7.031	VV	643	7930	0.30%	0.099%
73	7.053	7.031	7.094	VV	965	15963	0.60%	0.200%
74	7.134	7.094	7.170	VV	2325	32991	1.25%	0.412%
75	7.195	7.170	7.206	VV	480	7567	0.29%	0.095%
76	7.241	7.206	7.252	VV	664	12598	0.48%	0.157%
77	7.275	7.252	7.314	VV	3912	51324	1.94%	0.642%
78	7.336	7.314	7.350	VV	554	9255	0.35%	0.116%
79	7.365	7.350	7.384	VV	607	8046	0.30%	0.101%
80	7.398	7.384	7.417	VV	341	5931	0.22%	0.074%
81	7.445	7.417	7.470	VV	518	10319	0.39%	0.129%
82	7.490	7.470	7.508	VV	206	2999	0.11%	0.037%
83	7.534	7.508	7.574	PV	1000	14601	0.55%	0.182%
84	7.614	7.574	7.658	VV	481	14274	0.54%	0.178%
85	7.726	7.658	7.740	VV	554	14048	0.53%	0.176%
86	7.752	7.740	7.773	VV	520	6513	0.25%	0.081%
87	7.796	7.773	7.817	VV	681	8536	0.32%	0.107%
88	7.840	7.817	7.866	VV	1393	17441	0.66%	0.218%
89	7.896	7.866	7.919	VV	1409	18498	0.70%	0.231%

rteres

90	7.932	7.919	7.951	VV	313	3768	0.14%	0.047%
91	7.965	7.951	7.983	VV	916	9402	0.36%	0.118%
92	7.998	7.983	8.009	VV	267	3387	0.13%	0.042%
93	8.051	8.009	8.111	VV	1941	34879	1.32%	0.436%
94	8.144	8.111	8.212	VV	8335	112370	4.25%	1.405%
95	8.241	8.212	8.273	VV	673	17247	0.65%	0.216%
96	8.293	8.273	8.318	VV	720	11896	0.45%	0.149%
97	8.336	8.318	8.356	VV	432	6415	0.24%	0.080%
98	8.378	8.356	8.421	VV	505	8984	0.34%	0.112%
99	8.454	8.421	8.475	VV	484	10616	0.40%	0.133%
100	8.495	8.475	8.522	VV	679	13919	0.53%	0.174%
101	8.533	8.522	8.544	VV	427	5181	0.20%	0.065%
102	8.564	8.544	8.576	VV	517	8624	0.33%	0.108%
103	8.596	8.576	8.617	VV	819	14896	0.56%	0.186%
104	8.632	8.617	8.647	VV	708	9805	0.37%	0.123%
105	8.681	8.647	8.720	VV	1870	36769	1.39%	0.460%
106	8.734	8.720	8.778	VV	491	10137	0.38%	0.127%
107	8.797	8.778	8.814	PV	326	4628	0.18%	0.058%
108	8.833	8.814	8.843	VV	262	4221	0.16%	0.053%
109	8.863	8.843	8.880	VV	1329	17202	0.65%	0.215%
110	8.900	8.880	8.940	VV	1009	24896	0.94%	0.311%
111	8.968	8.940	9.031	VV	2674	62831	2.38%	0.785%
112	9.049	9.031	9.074	VV	715	9766	0.37%	0.122%
113	9.099	9.074	9.138	VV	417	6916	0.26%	0.086%
114	9.198	9.138	9.232	PV	317	11513	0.44%	0.144%
115	9.264	9.232	9.303	VV	617	13756	0.52%	0.172%
116	9.332	9.303	9.366	VV	1444	24967	0.94%	0.312%
117	9.383	9.366	9.399	VV	509	7392	0.28%	0.092%
118	9.422	9.399	9.444	VV	463	9039	0.34%	0.113%
119	9.470	9.444	9.504	VV	861	15610	0.59%	0.195%
120	9.522	9.504	9.564	VV	1409	18882	0.71%	0.236%
121	9.577	9.564	9.595	VV	183	1852	0.07%	0.023%
122	9.614	9.595	9.634	PV	240	3058	0.12%	0.038%
123	9.662	9.634	9.721	VV	1262	23728	0.90%	0.297%
124	9.742	9.721	9.787	VV	3922	52964	2.00%	0.662%
125	9.817	9.787	9.901	VV	448	18218	0.69%	0.228%
126	9.912	9.901	9.936	VV	175	2505	0.09%	0.031%
127	9.948	9.936	9.977	VV	105	1081	0.04%	0.014%
128	9.988	9.977	9.997	VV	130	839	0.03%	0.010%
129	10.020	9.997	10.038	VV	331	4282	0.16%	0.054%
130	10.087	10.038	10.104	VV	370	11108	0.42%	0.139%
131	10.129	10.104	10.153	VV	1552	26406	1.00%	0.330%
132	10.170	10.153	10.191	VV	507	10018	0.38%	0.125%
133	10.217	10.191	10.251	VV	527	13311	0.50%	0.166%
134	10.270	10.251	10.301	VV	421	8182	0.31%	0.102%
135	10.339	10.301	10.350	VV	399	7096	0.27%	0.089%
136	10.377	10.350	10.392	VV	434	8937	0.34%	0.112%
137	10.414	10.392	10.442	VV	692	15269	0.58%	0.191%
138	10.480	10.442	10.511	VV	1118	26346	1.00%	0.329%
139	10.551	10.511	10.584	VV	1534	37001	1.40%	0.462%
140	10.603	10.584	10.628	VV	1207	20677	0.78%	0.258%
141	10.659	10.628	10.678	VV	503	11147	0.42%	0.139%

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142	10.693	10.678	10.721	VV	449	8654	0.33%	0.108%
143	10.736	10.721	10.777	VV	342	8808	0.33%	0.110%
144	10.801	10.777	10.830	VV	608	12799	0.48%	0.160%
145	10.870	10.830	10.888	VV	830	19910	0.75%	0.249%
146	10.901	10.888	10.918	VV	726	10128	0.38%	0.127%
147	10.931	10.918	10.960	VV	441	8949	0.34%	0.112%
148	10.984	10.960	11.020	VV	941	15096	0.57%	0.189%
149	11.036	11.020	11.051	VV	218	3273	0.12%	0.041%
150	11.068	11.051	11.083	VV	347	5114	0.19%	0.064%
151	11.111	11.083	11.147	VV	2398	36019	1.36%	0.450%
152	11.180	11.147	11.213	VV	3335	48865	1.85%	0.611%
153	11.223	11.213	11.244	VV	387	6725	0.25%	0.084%
154	11.272	11.244	11.318	VV	1457	26390	1.00%	0.330%
155	11.337	11.318	11.358	VV	372	4532	0.17%	0.057%
156	11.378	11.358	11.391	VV	242	3112	0.12%	0.039%
157	11.485	11.391	11.518	VV	489	21054	0.80%	0.263%
158	11.568	11.518	11.607	VV	967	26916	1.02%	0.336%
159	11.644	11.607	11.704	VV	507	18580	0.70%	0.232%
160	11.743	11.704	11.764	VV	404	11420	0.43%	0.143%
161	11.786	11.764	11.799	VV	552	9403	0.36%	0.118%
162	11.827	11.799	11.873	VV	961	31421	1.19%	0.393%
163	11.888	11.873	11.911	VV	501	8562	0.32%	0.107%
164	11.937	11.911	11.949	VV	484	8308	0.31%	0.104%
165	11.978	11.949	12.028	VV	776	22615	0.86%	0.283%
166	12.069	12.028	12.103	VV	1013	29043	1.10%	0.363%
167	12.124	12.103	12.187	VV	554	20967	0.79%	0.262%
168	12.214	12.187	12.241	VV	415	11893	0.45%	0.149%
169	12.255	12.241	12.279	VV	723	12497	0.47%	0.156%
170	12.303	12.279	12.338	VV	1019	27826	1.05%	0.348%
171	12.348	12.338	12.388	VV	1047	17451	0.66%	0.218%
172	12.427	12.388	12.458	VV	1525	27001	1.02%	0.337%
173	12.487	12.458	12.564	VV	3406	56150	2.12%	0.702%
174	12.578	12.564	12.592	VV	311	4080	0.15%	0.051%
175	12.607	12.592	12.658	VV	351	8881	0.34%	0.111%
176	12.671	12.658	12.695	VV	157	2605	0.10%	0.033%
177	12.741	12.695	12.756	VV	381	7327	0.28%	0.092%
178	12.768	12.756	12.798	VV	394	6661	0.25%	0.083%
179	12.810	12.798	12.830	VV	227	2727	0.10%	0.034%
180	12.881	12.830	12.890	PV	450	10622	0.40%	0.133%
181	12.930	12.890	13.073	VV	215363	2643591	100.00%	33.042%
182	13.097	13.073	13.128	VV	838	20638	0.78%	0.258%
183	13.145	13.128	13.159	VV	667	10939	0.41%	0.137%
184	13.168	13.159	13.194	VV	518	9900	0.37%	0.124%
185	13.205	13.194	13.242	VV	504	11151	0.42%	0.139%
186	13.260	13.242	13.278	VV	394	6875	0.26%	0.086%
187	13.315	13.278	13.338	VV	548	15409	0.58%	0.193%
188	13.370	13.338	13.438	VV	659	26631	1.01%	0.333%
189	13.444	13.438	13.457	VV	377	3967	0.15%	0.050%
190	13.475	13.457	13.488	VV	367	6045	0.23%	0.076%
191	13.527	13.488	13.574	VV	565	22036	0.83%	0.275%
192	13.595	13.574	13.603	VV	484	6726	0.25%	0.084%
193	13.630	13.603	13.656	VV	1288	23496	0.89%	0.294%
194	13.683	13.656	13.728	VV	2746	46146	1.75%	0.577%

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195	13.732	13.728	13.755	VV	428	5316	0.20%	0.066%
196	13.774	13.755	13.791	VV	370	5564	0.21%	0.070%
197	13.818	13.791	13.848	VV	293	6830	0.26%	0.085%
198	13.911	13.848	13.963	VV	429	17725	0.67%	0.222%
199	13.978	13.963	14.007	VV	314	6051	0.23%	0.076%
200	14.018	14.007	14.048	VV	295	5929	0.22%	0.074%
201	14.064	14.048	14.084	VV	303	5377	0.20%	0.067%
202	14.121	14.084	14.168	VV	815	21294	0.81%	0.266%
203	14.176	14.168	14.221	VV	298	8152	0.31%	0.102%
204	14.245	14.221	14.279	VV	534	11356	0.43%	0.142%
205	14.314	14.279	14.326	VV	375	7850	0.30%	0.098%
206	14.344	14.326	14.360	VV	377	7356	0.28%	0.092%
207	14.376	14.360	14.421	VV	403	11543	0.44%	0.144%
208	14.439	14.421	14.449	VV	359	5102	0.19%	0.064%
209	14.459	14.449	14.477	VV	305	4718	0.18%	0.059%
210	14.498	14.477	14.511	VV	347	6253	0.24%	0.078%
211	14.526	14.511	14.544	VV	383	6784	0.26%	0.085%
212	14.561	14.544	14.614	VV	385	14673	0.56%	0.183%
213	14.640	14.614	14.658	VV	346	7485	0.28%	0.094%
214	14.697	14.658	14.713	VV	378	10637	0.40%	0.133%
215	14.740	14.713	14.764	VV	1048	18123	0.69%	0.227%
216	14.784	14.764	14.831	VV	2478	40584	1.54%	0.507%
217	14.854	14.831	14.877	VV	377	8107	0.31%	0.101%
218	14.897	14.877	14.937	VV	341	7981	0.30%	0.100%
219	14.980	14.937	15.000	VV	336	7811	0.30%	0.098%
220	15.048	15.000	15.098	VV	404	12539	0.47%	0.157%
221	15.117	15.098	15.149	VV	184	3855	0.15%	0.048%
222	15.212	15.149	15.248	VV	375	10021	0.38%	0.125%
223	15.303	15.248	15.401	VV	603	22500	0.85%	0.281%
224	15.407	15.401	15.438	VV	190	3241	0.12%	0.041%
225	15.462	15.438	15.466	VV	145	2078	0.08%	0.026%
226	15.490	15.466	15.501	VV	254	3956	0.15%	0.049%
227	15.520	15.501	15.542	VV	290	5102	0.19%	0.064%
228	15.616	15.542	15.651	VV	383	16321	0.62%	0.204%
229	15.660	15.651	15.677	VV	320	4112	0.16%	0.051%
230	15.694	15.677	15.734	VV	258	6304	0.24%	0.079%
231	15.764	15.734	15.781	VV	755	11765	0.45%	0.147%
232	15.803	15.781	15.882	VV	1847	36399	1.38%	0.455%
233	15.902	15.882	15.927	VV	229	3301	0.12%	0.041%
234	15.979	15.927	16.025	VV	371	10294	0.39%	0.129%
235	16.040	16.025	16.051	VV	203	2693	0.10%	0.034%
236	16.058	16.051	16.068	VV	188	1402	0.05%	0.018%
237	16.094	16.068	16.114	PV	237	4480	0.17%	0.056%
238	16.121	16.114	16.131	VV	131	1497	0.06%	0.019%
239	16.145	16.131	16.199	VV	261	7208	0.27%	0.090%
240	16.249	16.199	16.261	VV	143	3307	0.13%	0.041%
241	16.286	16.261	16.316	VV	646	11848	0.45%	0.148%
242	16.327	16.316	16.398	VV	281	9174	0.35%	0.115%
243	16.453	16.398	16.481	VV	350	9537	0.36%	0.119%
244	16.485	16.481	16.492	VV	277	1632	0.06%	0.020%
245	16.509	16.492	16.536	VV	264	6467	0.24%	0.081%
246	16.550	16.536	16.561	VV	283	3173	0.12%	0.040%

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247	16.594	16.561	16.638	VV	237	10414	0.39%	0.130%
248	16.653	16.638	16.693	VV	318	7616	0.29%	0.095%
249	16.717	16.693	16.731	VV	708	11214	0.42%	0.140%
250	16.751	16.731	16.822	VV	1836	37099	1.40%	0.464%
251	16.848	16.822	16.878	VV	227	6166	0.23%	0.077%
252	16.912	16.878	16.941	VV	261	7261	0.27%	0.091%
253	16.971	16.941	17.008	VV	256	7049	0.27%	0.088%
254	17.021	17.008	17.033	VV	207	1796	0.07%	0.022%
255	17.079	17.033	17.124	VV	308	10030	0.38%	0.125%
256	17.139	17.124	17.164	VV	210	3462	0.13%	0.043%
257	17.201	17.164	17.274	PV	1448	26208	0.99%	0.328%
258	17.309	17.274	17.381	PV	288	10893	0.41%	0.136%
259	17.443	17.381	17.464	VV	272	7998	0.30%	0.100%
260	17.481	17.464	17.513	VV	245	4313	0.16%	0.054%
261	17.532	17.513	17.559	VV	228	3648	0.14%	0.046%
262	17.636	17.559	17.673	VV	2410	48443	1.83%	0.605%
263	17.685	17.673	17.728	VV	248	5110	0.19%	0.064%
264	17.770	17.728	17.824	VV	349	12380	0.47%	0.155%
265	17.839	17.824	17.860	VV	136	1988	0.08%	0.025%
266	17.875	17.860	17.893	VV	135	2218	0.08%	0.028%
267	17.942	17.893	17.951	VV	226	6577	0.25%	0.082%
268	17.960	17.951	17.998	VV	194	3455	0.13%	0.043%
269	18.060	17.998	18.111	VV	2172	36051	1.36%	0.451%
270	18.131	18.111	18.162	VV	252	4570	0.17%	0.057%
271	18.181	18.162	18.199	VV	175	2249	0.09%	0.028%
272	18.330	18.199	18.365	PV	296	13533	0.51%	0.169%
273	18.374	18.365	18.410	VV	170	3582	0.14%	0.045%
274	18.468	18.410	18.549	VV	2489	50644	1.92%	0.633%
275	18.660	18.549	18.694	VV	232	11727	0.44%	0.147%
276	18.722	18.694	18.753	VV	182	4578	0.17%	0.057%
277	18.764	18.753	18.807	VV	195	3503	0.13%	0.044%
278	18.864	18.807	18.925	PV	1604	31313	1.18%	0.391%
279	18.956	18.925	18.990	VV	201	5298	0.20%	0.066%
280	19.043	18.990	19.061	VV	354	10483	0.40%	0.131%
281	19.111	19.061	19.138	VV	359	10617	0.40%	0.133%
282	19.188	19.138	19.203	VV	223	7191	0.27%	0.090%
283	19.249	19.203	19.288	VV	2071	45497	1.72%	0.569%
284	19.302	19.288	19.384	VV	442	17347	0.66%	0.217%
285	19.393	19.384	19.416	VV	222	3589	0.14%	0.045%
286	19.486	19.416	19.501	VV	407	14211	0.54%	0.178%
287	19.545	19.501	19.580	VV	462	18025	0.68%	0.225%
288	19.623	19.580	19.678	VV	1356	37465	1.42%	0.468%
289	19.819	19.678	19.824	VV	889	53809	2.04%	0.673%
290	19.890	19.824	19.940	VV	1007	61086	2.31%	0.764%
291	19.987	19.940	20.024	VV	2403	73475	2.78%	0.918%
292	20.051	20.024	20.068	VV	1382	32980	1.25%	0.412%
293	20.080	20.068	20.091	VV	1195	17040	0.64%	0.213%
294	20.130	20.091	20.148	VV	1349	41972	1.59%	0.525%
295	20.158	20.148	20.191	VV	1237	31508	1.19%	0.394%
296	20.342	20.191	20.393	VV	2157	186560	7.06%	2.332%
297	20.439	20.393	20.447	VV	1768	53061	2.01%	0.663%
298	20.518	20.447	20.548	VV	2257	117274	4.44%	1.466%
299	20.575	20.548	20.588	VV	2018	46679	1.77%	0.583%

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300	20.611	20.588	20.651	VV	1881	69191	2.62%	0.865%
301	20.710	20.651	20.744	VV	2752	123890	4.69%	1.549%
302	20.771	20.744	20.779	VV	2105	43343	1.64%	0.542%
303	20.794	20.779	20.810	VV	2162	39031	1.48%	0.488%
304	20.825	20.810	20.835	VV	2108	30308	1.15%	0.379%
305	20.845	20.835	20.858	VV	2153	28278	1.07%	0.353%
306	20.861	20.858	21.009	VV	2132	155849	5.90%	1.948%
307	21.034	21.009	21.093	VV	1616	73344	2.77%	0.917%
308	21.117	21.093	21.190	VV	1624	83238	3.15%	1.040%
309	21.296	21.190	21.306	VV	1903	107532	4.07%	1.344%
310	21.325	21.306	21.386	VV	1896	81951	3.10%	1.024%
311	21.415	21.386	21.516	VV	1566	94840	3.59%	1.185%
312	21.583	21.516	21.632	VV	1225	65685	2.48%	0.821%
313	21.648	21.632	21.712	VV	845	31744	1.20%	0.397%
314	21.727	21.712	21.821	VV	609	27850	1.05%	0.348%
315	21.828	21.821	21.864	VV	347	7150	0.27%	0.089%
316	21.872	21.864	21.958	VV	225	7480	0.28%	0.093%
317	21.967	21.958	22.018	VV	133	1273	0.05%	0.016%
318	22.039	22.018	22.056	VV	149	2186	0.08%	0.027%
319	22.073	22.056	22.086	VV	114	1276	0.05%	0.016%

Sum of corrected areas: 8000608

Aliphatic EPH 102324.M Fri Nov 01 00:57:23 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-TOP-1	SDG No.:	P4578
Lab Sample ID:	P4578-04	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	58.7
Sample Wt/Vol:	30.09 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048627.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.51	U	0.51	1.13	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.58	U	0.58	1.70	mg/kg
Aromatic C16-C21	Aromatic C16-C21	1.63	U	1.63	2.83	mg/kg
Aromatic C21-C36	Aromatic C21-C36	3.40	U	3.40	4.53	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	56.1		40 - 140	112%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	57.1		40 - 140	114%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	24.2		40 - 140	48%	SPK: 50

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

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4578-04	Acq On:	30 Oct 2024 19:54
Client Sample ID:	WB-305-TOP-1	Operator:	YP/AJ
Data file:	FD048627.D	Misc:	
Instrument:	FID_D	ALS Vial:	65
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.094	5.812	270650	1.536	200	ug/ml
Aromatic C12-C16	5.813	8.417	303924	1.714	300	ug/ml
Aromatic C16-C21	8.418	12.679	2138542	13.053	500	ug/ml
Aromatic C21-C36	12.680	18.085	1695863	11.105	800	ug/ml
Aromatic EPH	4.094	18.085	4408979	27.409		ug/ml
2-Bromonaphthalene (SURR)	7.372	7.372	8509675	56.07		ug/ml
2-Flurobiphenyl (SURR)	8.221	8.221	5606681	57.1		ug/ml
ortho-Terphenyl (SURR)	11.256	11.256	4117839	24.17		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048627.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 19:54
Operator : YP/AJ
Sample : P4578-04
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
WB-305-TOP-1

Integration File: autoint1.e
Quant Time: Nov 01 01:03:10 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.372	8509675	56.066 ug/ml
Spiked Amount 50.000		Recovery = 112.13%	
6) S 2-Flurobiphenyl (SURR)	8.221	5606681	57.099 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 114.20%	
11) S ortho-Terphenyl (SURR)	11.256	4117839	24.174 ug/ml
Spiked Amount 50.000		Recovery = 48.35%	
Target Compounds			

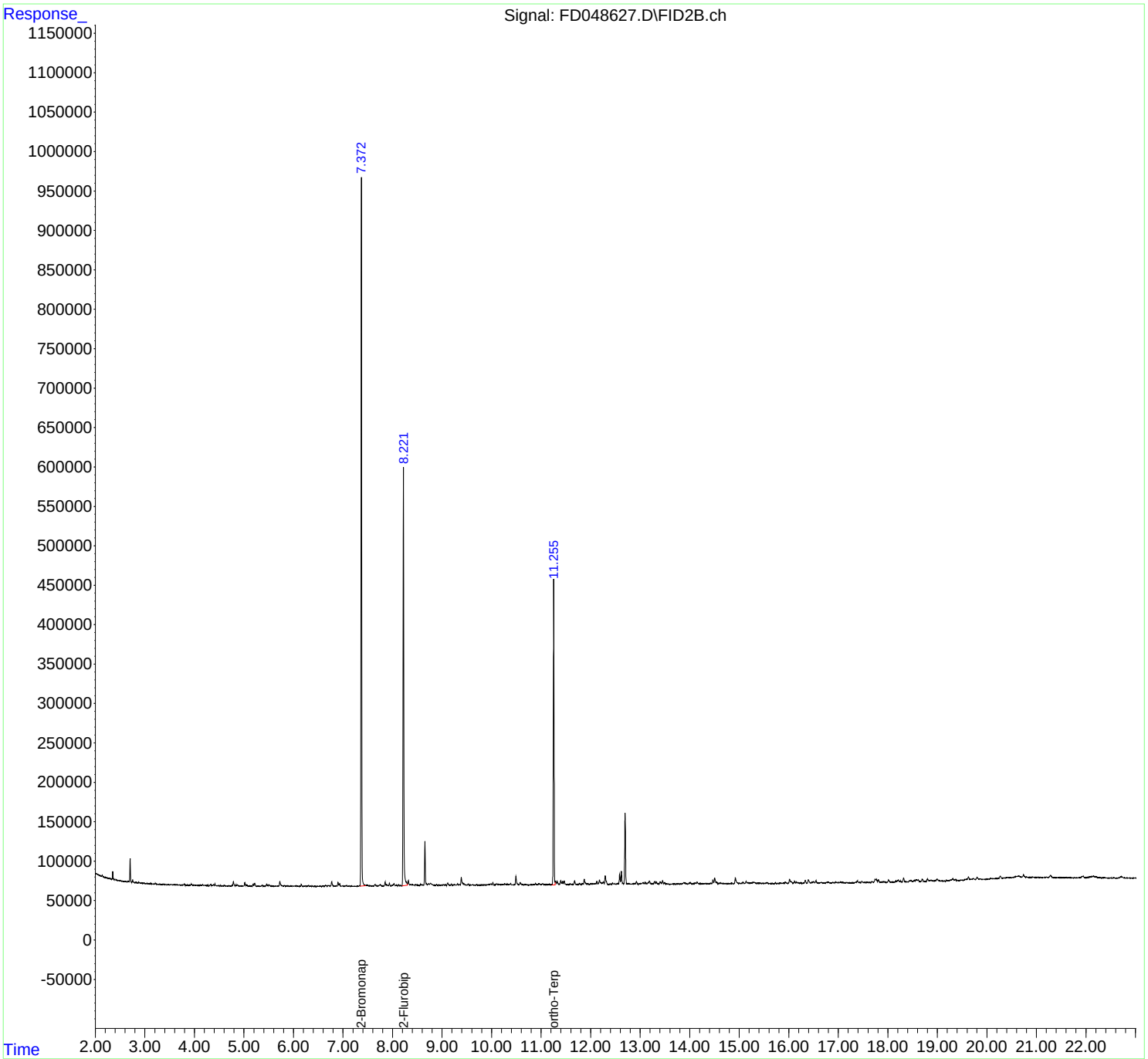
(f)=RT Delta > 1/2 Window (m)=manual int.

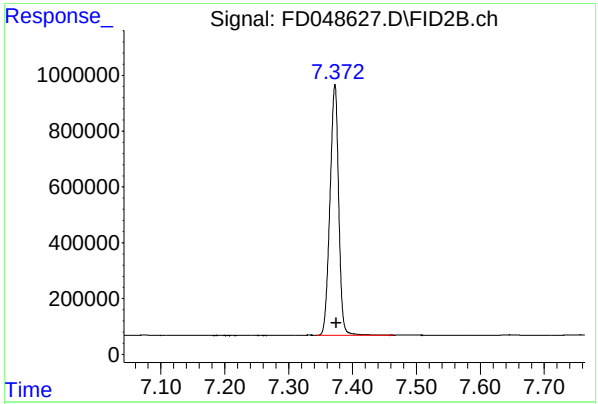
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048627.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 19:54
Operator : YP/AJ
Sample : P4578-04
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
WB-305-TOP-1

Integration File: autoint1.e
Quant Time: Nov 01 01:03:10 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

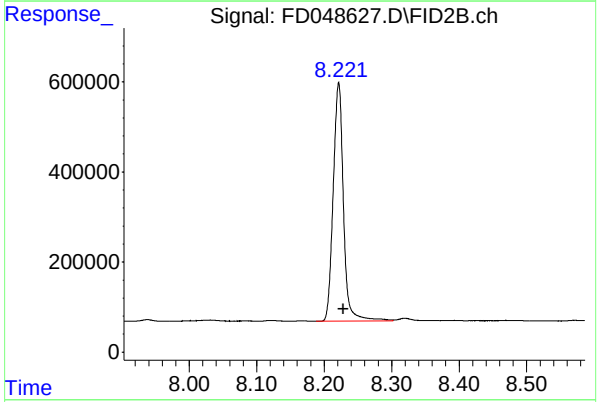




#4 2-Bromonaphthalene (SURR)

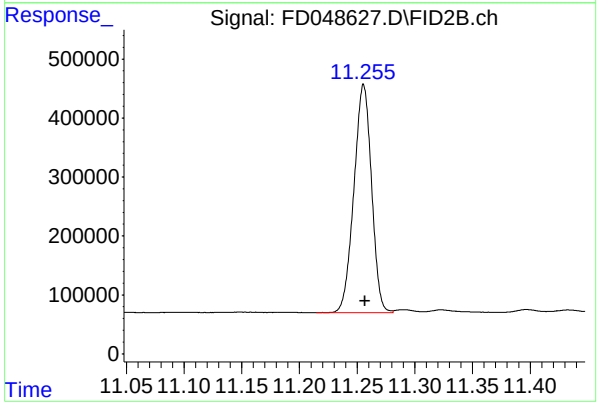
R.T.: 7.372 min
Delta R.T.: -0.003 min
Response: 8509675
Conc: 56.07 ug/ml

Instrument :
FID_D
ClientSampleId :
WB-305-TOP-1



#6 2-Flurobiphenyl (SURR)

R.T.: 8.221 min
Delta R.T.: -0.007 min
Response: 5606681
Conc: 57.10 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.256 min
Delta R.T.: -0.001 min
Response: 4117839
Conc: 24.17 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048627.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 19:54
Sample : P4578-04
Misc :
ALS Vial : 65 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.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	4.787	4.741	4.826	BV	5625	78950	0.93%	0.349%
2	5.017	4.998	5.046	BV	4279	48265	0.57%	0.213%
3	5.218	5.200	5.268	VV	3687	52751	0.62%	0.233%
4	5.725	5.664	5.795	BV	5768	90684	1.07%	0.400%
5	6.773	6.736	6.854	VB	5941	85408	1.00%	0.377%
6	6.900	6.858	6.918	BV	4122	33321	0.39%	0.147%
7	7.372	7.343	7.463	PV	888303	8509675	100.00%	37.582%
8	7.852	7.814	7.869	PV	5092	59955	0.70%	0.265%
9	7.938	7.914	7.960	VV	3849	43219	0.51%	0.191%
10	8.221	8.188	8.302	PV	529403	5606681	65.89%	24.761%
11	8.320	8.302	8.371	VV	5785	82021	0.96%	0.362%
12	8.656	8.621	8.708	BV	54884	554034	6.51%	2.447%
13	9.390	9.370	9.498	VV	9674	175776	2.07%	0.776%
14	10.493	10.458	10.554	BV	10858	142829	1.68%	0.631%
15	11.256	11.214	11.281	BV	385121	4117839	48.39%	18.186%
16	11.290	11.281	11.307	VV	5102	57397	0.67%	0.253%
17	11.323	11.307	11.373	VV	4750	81780	0.96%	0.361%
18	11.397	11.373	11.415	VV	5253	69043	0.81%	0.305%
19	11.433	11.415	11.450	VV	4474	64494	0.76%	0.285%
20	11.467	11.450	11.534	VV	4929	76027	0.89%	0.336%
21	11.677	11.644	11.738	BB	4766	63979	0.75%	0.283%
22	11.873	11.851	11.964	VB	6835	115871	1.36%	0.512%
23	12.125	12.060	12.148	VV	4221	81219	0.95%	0.359%
24	12.181	12.148	12.232	VV	5675	131304	1.54%	0.580%
25	12.295	12.275	12.371	VV	11152	194273	2.28%	0.858%
26	12.586	12.564	12.604	PV	11907	139536	1.64%	0.616%
27	12.621	12.604	12.667	VV	15957	190980	2.24%	0.843%
28	12.696	12.667	12.731	VB	89339	1049430	12.33%	4.635%
29	12.924	12.900	12.958	VV	3459	48179	0.57%	0.213%
30	13.185	13.128	13.234	VV	3988	94762	1.11%	0.419%
31	13.451	13.428	13.475	VV	3814	45326	0.53%	0.200%
32	14.467	14.444	14.484	PV	4226	48569	0.57%	0.214%
33	14.504	14.484	14.533	VV	6192	83892	0.99%	0.370%
34	14.921	14.874	15.028	BV	7382	142952	1.68%	0.631%
35	16.015	15.961	16.037	BV	4001	34933	0.41%	0.154%
36	16.332	16.215	16.368	VV	3941	61256	0.72%	0.271%

rteres

37	16.396	16.368	16.458	PV	4298	75665	0.89%	0.334%
38	17.743	17.701	17.758	BV	1928	10899	0.13%	0.048%

Sum of corrected areas: 22643175

Aromatic EPH 102324.M Fri Nov 01 01:39:50 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-BOT	SDG No.:	P4578
Lab Sample ID:	P4578-05	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.1
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
10/30/24 08:20	10/30/24 19:18	PB164525

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.46	U	1	0.46	1.22	mg/kg	FC067571.D
Aliphatic C12-C16	Aliphatic C12-C16	0.29	U	1	0.29	0.81	mg/kg	FC067571.D
Aliphatic C16-C21	Aliphatic C16-C21	0.37	U	1	0.37	1.22	mg/kg	FC067571.D
Aliphatic C21-C28	Aliphatic C21-C28	0.97	U	1	0.97	1.62	mg/kg	FC067571.D
Aliphatic C28-C40	Aliphatic C28-C40	2.19	U	1	2.19	2.43	mg/kg	FC067571.D
Aromatic C10-C12	Aromatic C10-C12	0.37	U	1	0.37	0.81	mg/kg	FD048628.D
Aromatic C12-C16	Aromatic C12-C16	0.41	U	1	0.41	1.22	mg/kg	FD048628.D
Aromatic C16-C21	Aromatic C16-C21	1.17	U	1	1.17	2.03	mg/kg	FD048628.D
Aromatic C21-C36	Aromatic C21-C36	2.43	U	1	2.43	3.24	mg/kg	FD048628.D
Total AliphaticEPH	Total AliphaticEPH	4.28	U		4.28	7.30	mg/kg	
Total AromaticEPH	Total AromaticEPH	4.38	U		4.38	7.30	mg/kg	
Total EPH	Total EPH	8.66	U		8.66	14.6	mg/kg	

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

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-BOT	SDG No.:	P4578
Lab Sample ID:	P4578-05	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.1
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC067571.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter		Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
Aliphatic C9-C12	Aliphatic C9-C12		0.46	U	0.46	1.22	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16		0.29	U	0.29	0.81	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21		0.37	U	0.37	1.22	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28		0.97	U	0.97	1.62	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40		2.19	U	2.19	2.43	mg/kg
SURROGATES							
3383-33-2	1-chlorooctadecane (SURR)		51.1		40 - 140	102%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)		0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4578-05	Acq On:	30 Oct 2024 19:18
Client Sample ID:	WB-305-BOT	Operator:	YP/AJ
Data file:	FC067571.D	Misc:	
Instrument:	FID_C	ALS Vial:	17
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.174	6.453	49826	0.368	300	ug/ml
Aliphatic C12-C16	6.454	9.842	204741	1.555	200	ug/ml
Aliphatic C16-C21	9.843	13.199	0	0	300	ug/ml
Aliphatic C21-C28	13.200	16.852	158301	1.318	400	ug/ml
Aliphatic C28-C40	16.853	21.694	282099	2.79	600	ug/ml
Aliphatic EPH	3.174	21.694	694967	6.031		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.933	12.933	5516704	51.09		ug/ml
Aliphatic C9-C28	3.174	16.852	412868	3.241	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067571.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 19:18
Operator : YP/AJ
Sample : P4578-05
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-BOT

Integration File: autoint1.e
Quant Time: Nov 01 00:19:55 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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...	12.933	5516704	51.086 ug/ml
Spiked Amount 50.000		Recovery = 102.17%	
Target Compounds			

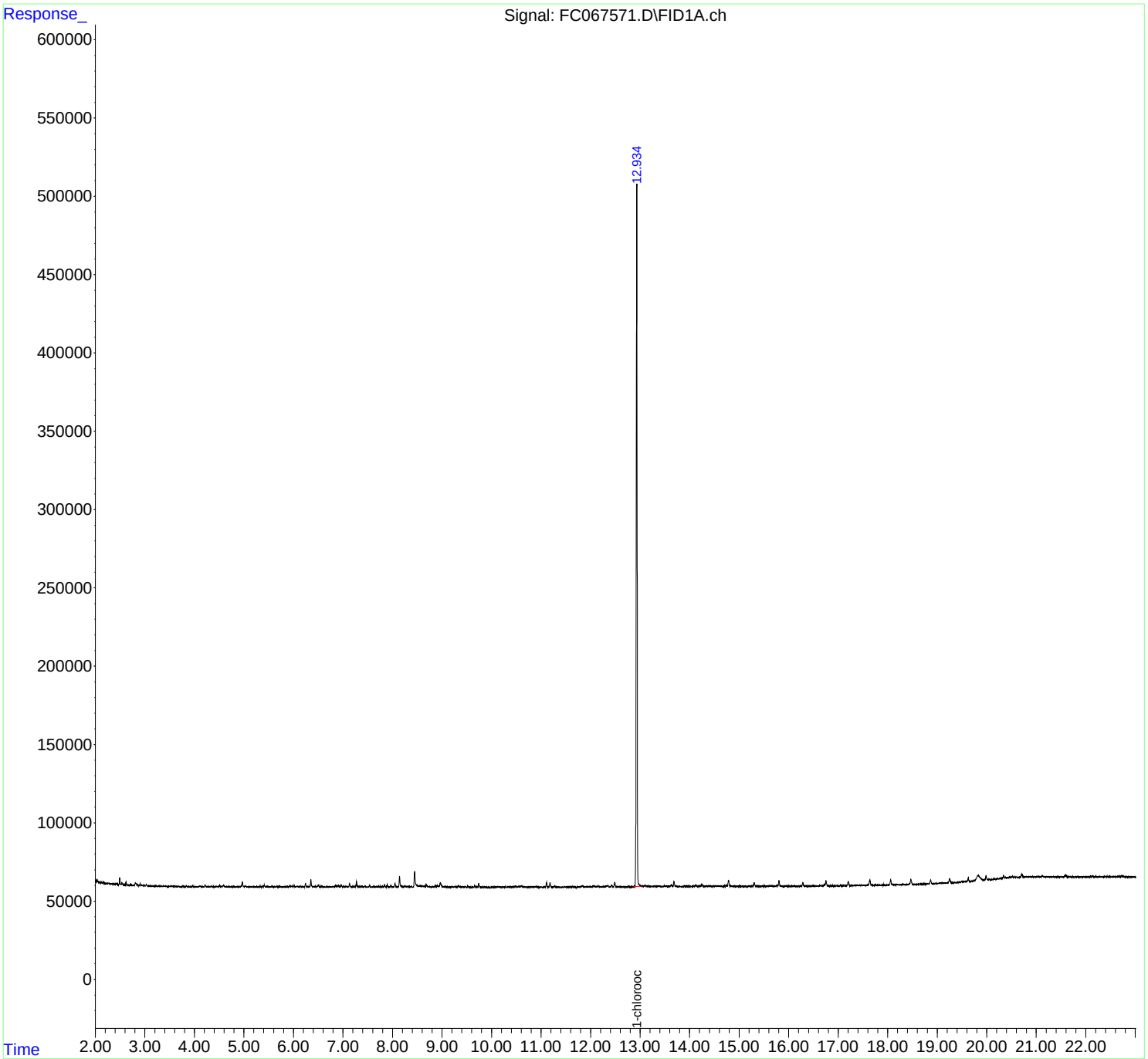
(f)=RT Delta > 1/2 Window (m)=manual int.

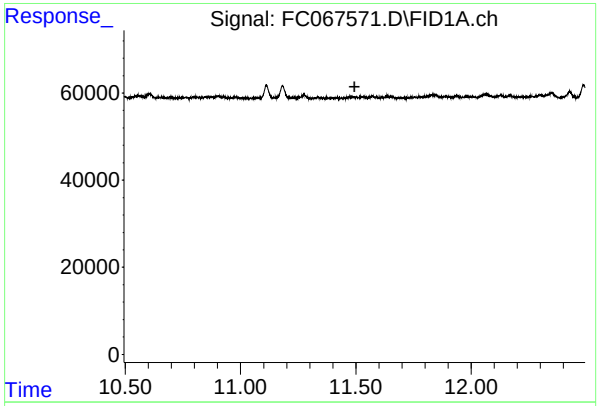
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067571.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 19:18
Operator : YP/AJ
Sample : P4578-05
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-BOT

Integration File: autoint1.e
Quant Time: Nov 01 00:19:55 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 2024
Response via : Initial Calibration
Integrator: ChemStation

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

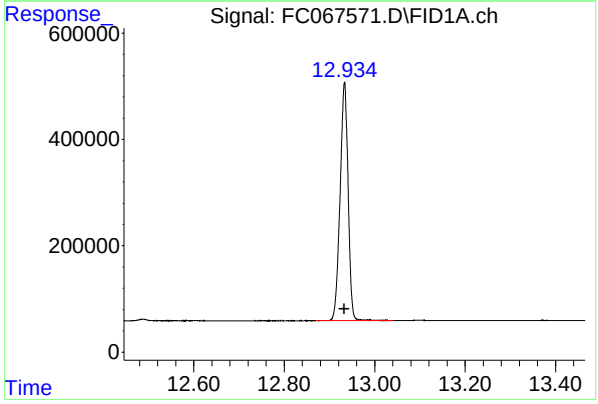




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.494 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
WB-305-BOT



#12 1-chlorooctadecane (SURR)

R.T.: 12.933 min
Delta R.T.: 0.000 min
Response: 5516704
Conc: 51.09 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067571.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 19:18
Sample : P4578-05
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.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	6.353	6.307	6.394	BB	4645	49826	0.90%	0.802%
2	8.143	8.099	8.180	BB	6728	74339	1.35%	1.197%
3	8.447	8.342	8.522	BB	9465	130402	2.36%	2.099%
4	12.933	12.870	13.040	BB	449416	5516704	100.00%	88.812%
5	14.785	14.759	14.824	VB	3903	53354	0.97%	0.859%
6	15.804	15.717	15.844	BB	3446	51787	0.94%	0.834%
7	16.752	16.672	16.800	BB	3306	53160	0.96%	0.856%
8	17.637	17.575	17.679	BB	3411	56172	1.02%	0.904%
9	18.467	18.397	18.512	BB	3326	55882	1.01%	0.900%
10	19.821	19.744	19.925	BB	3436	170045	3.08%	2.738%

Sum of corrected areas: 6211672

Aliphatic EPH 102324.M Fri Nov 01 00:50:29 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-BOT	SDG No.:	P4578
Lab Sample ID:	P4578-05	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.1
Sample Wt/Vol:	30.07 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048628.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.37	U	0.37	0.81	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.41	U	0.41	1.22	mg/kg
Aromatic C16-C21	Aromatic C16-C21	1.17	U	1.17	2.03	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.43	U	2.43	3.24	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	51.4		40 - 140	103%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	49.5		40 - 140	99%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	35.0		40 - 140	70%	SPK: 50

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

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4578-05	Acq On:	30 Oct 2024 20:30
Client Sample ID:	WB-305-BOT	Operator:	YP/AJ
Data file:	FD048628.D	Misc:	
Instrument:	FID_D	ALS Vial:	66
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.094	5.812	62243	0.353	200	ug/ml
Aromatic C12-C16	5.813	8.417	47188	0.266	300	ug/ml
Aromatic C16-C21	8.418	12.679	1611537	9.836	500	ug/ml
Aromatic C21-C36	12.680	18.085	1658638	10.861	800	ug/ml
Aromatic EPH	4.094	18.085	3379606	21.317		ug/ml
2-Bromonaphthalene (SURR)	7.373	7.373	7799979	51.39		ug/ml
2-Flurobiphenyl (SURR)	8.221	8.221	4862498	49.52		ug/ml
ortho-Terphenyl (SURR)	11.257	11.257	5960099	34.99		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048628.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 20:30
Operator : YP/AJ
Sample : P4578-05
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
WB-305-BOT

Integration File: autoint1.e
Quant Time: Nov 01 01:03:19 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.373	7799979	51.390 ug/ml
Spiked Amount 50.000		Recovery = 102.78%	
6) S 2-Flurobiphenyl (SURR)	8.221	4862498	49.520 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 99.04%	
11) S ortho-Terphenyl (SURR)	11.257	5960099	34.989 ug/ml
Spiked Amount 50.000		Recovery = 69.98%	
Target Compounds			

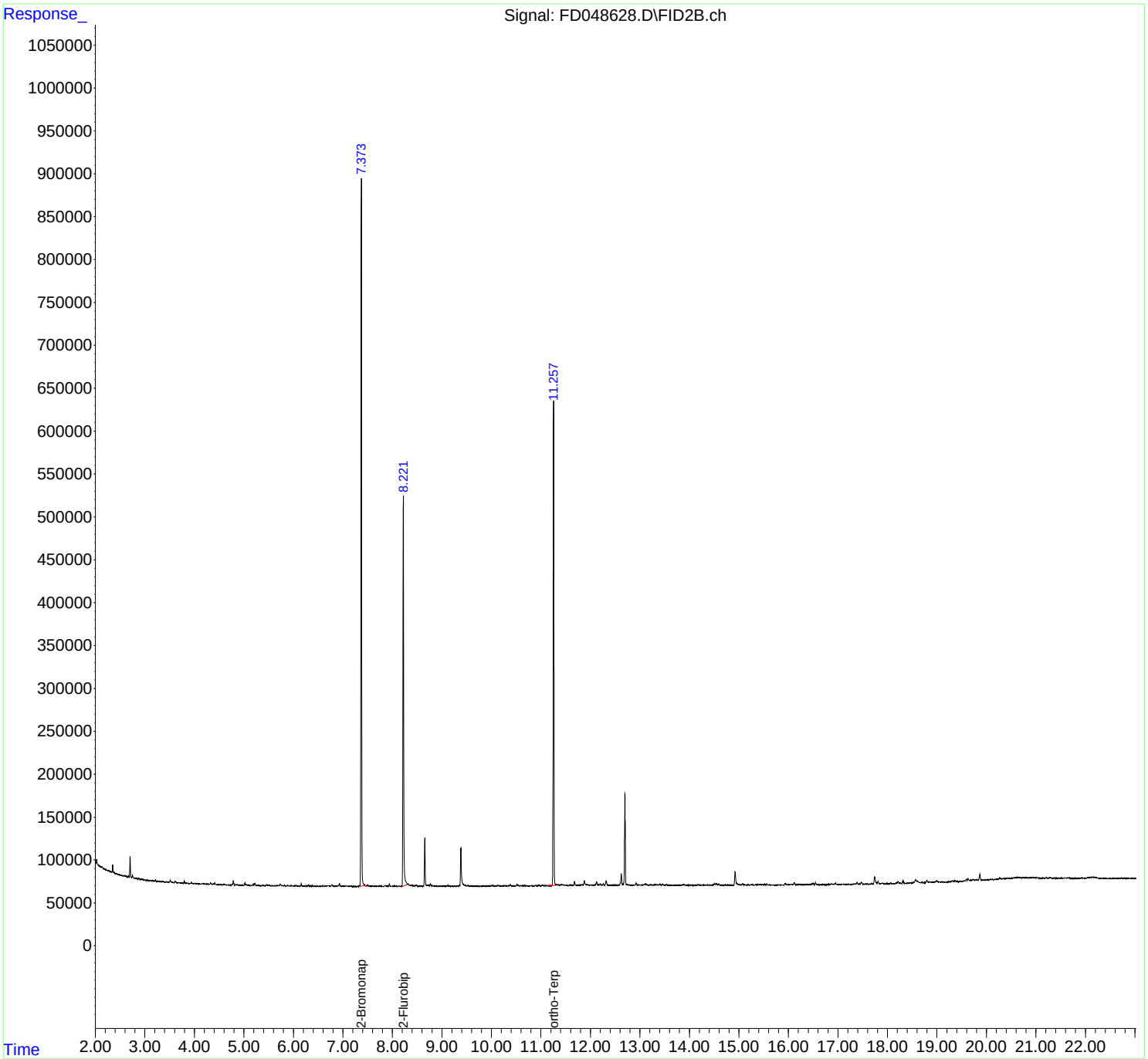
(f)=RT Delta > 1/2 Window (m)=manual int.

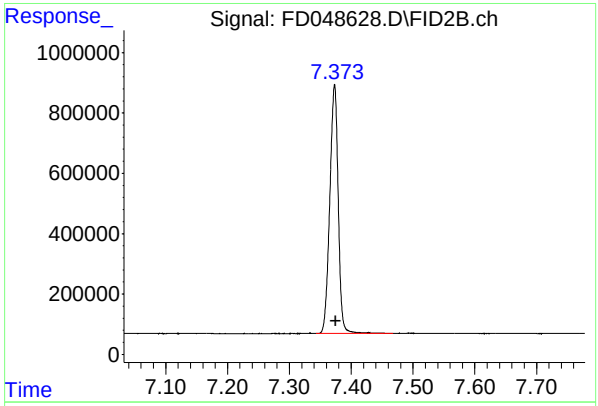
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048628.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 20:30
Operator : YP/AJ
Sample : P4578-05
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
WB-305-BOT

Integration File: autoint1.e
Quant Time: Nov 01 01:03:19 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

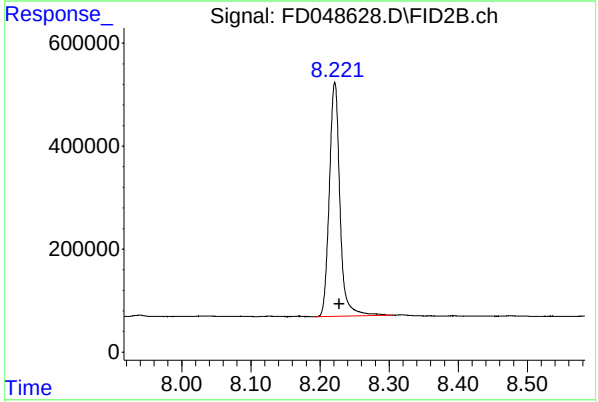




#4 2-Bromonaphthalene (SURR)

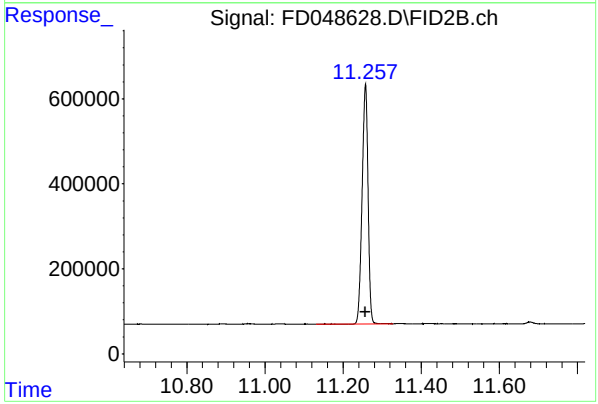
R.T.: 7.373 min
Delta R.T.: -0.002 min
Response: 7799979
Conc: 51.39 ug/ml

Instrument :
FID_D
ClientSampleId :
WB-305-BOT



#6 2-Flurobiphenyl (SURR)

R.T.: 8.221 min
Delta R.T.: -0.007 min
Response: 4862498
Conc: 49.52 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.257 min
Delta R.T.: 0.000 min
Response: 5960099
Conc: 34.99 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048628.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 20:30
Sample : P4578-05
Misc :
ALS Vial : 66 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.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	4.787	4.711	4.828	BV	5104	62243	0.80%	0.283%
2	6.933	6.890	6.968	PV	3477	47188	0.60%	0.214%
3	7.373	7.343	7.468	PV	830948	7799979	100.00%	35.451%
4	8.221	8.194	8.306	PV	454499	4862498	62.34%	22.100%
5	8.656	8.618	8.713	BV	55941	555483	7.12%	2.525%
6	9.385	9.337	9.501	VV	44171	607218	7.78%	2.760%
7	11.257	11.131	11.328	PV	566377	5960099	76.41%	27.089%
8	11.678	11.648	11.738	BV	4546	60986	0.78%	0.277%
9	11.877	11.858	11.941	VV	5265	76588	0.98%	0.348%
10	12.126	12.051	12.149	BV	3728	52284	0.67%	0.238%
11	12.318	12.291	12.364	PB	5063	80179	1.03%	0.364%
12	12.622	12.554	12.647	BV	13296	178799	2.29%	0.813%
13	12.697	12.647	12.824	VB	106791	1260797	16.16%	5.730%
14	14.922	14.841	15.044	BV	15435	269862	3.46%	1.227%
15	17.741	17.701	17.787	BV	7751	127979	1.64%	0.582%

Sum of corrected areas: 22002183

Aromatic EPH 102324.M Fri Nov 01 01:38:40 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-BOT-1	SDG No.:	P4578
Lab Sample ID:	P4578-07	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.4
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
10/30/24 08:20	10/31/24 1:21	PB164525

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.40	U	1	0.40	1.06	mg/kg	FC067579.D
Aliphatic C12-C16	Aliphatic C12-C16	1.95		1	0.25	0.70	mg/kg	FC067579.D
Aliphatic C16-C21	Aliphatic C16-C21	0.34	J	1	0.32	1.06	mg/kg	FC067579.D
Aliphatic C21-C28	Aliphatic C21-C28	0.89	J	1	0.85	1.41	mg/kg	FC067579.D
Aliphatic C28-C40	Aliphatic C28-C40	1.90	U	1	1.90	2.11	mg/kg	FC067579.D
Aromatic C10-C12	Aromatic C10-C12	0.32	U	1	0.32	0.70	mg/kg	FD048632.D
Aromatic C12-C16	Aromatic C12-C16	0.36	U	1	0.36	1.06	mg/kg	FD048632.D
Aromatic C16-C21	Aromatic C16-C21	1.01	U	1	1.01	1.76	mg/kg	FD048632.D
Aromatic C21-C36	Aromatic C21-C36	2.11	U	1	2.11	2.82	mg/kg	FD048632.D
Total AliphaticEPH	Total AliphaticEPH	3.72	U		3.72	6.34	mg/kg	
Total AromaticEPH	Total AromaticEPH	3.80	U		3.80	6.34	mg/kg	
Total EPH	Total EPH	7.51	U		7.51	12.7	mg/kg	

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

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-BOT-1	SDG No.:	P4578
Lab Sample ID:	P4578-07	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.4
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
FC067579.D	1	10/30/24	10/31/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	0.40	U	0.40	1.06	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	1.95		0.25	0.70	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	0.34	J	0.32	1.06	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	0.89	J	0.85	1.41	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	1.90	U	1.90	2.11	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	35.6		40 - 140	71%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4578-07	Acq On:	31 Oct 2024 01:21
Client Sample ID:	WB-305-BOT-1	Operator:	YP/AJ
Data file:	FC067579.D	Misc:	
Instrument:	FID_C	ALS Vial:	23
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.174	6.453	680358	5.022	300	ug/ml
Aliphatic C12-C16	6.454	9.842	3648617	27.708	200	ug/ml
Aliphatic C16-C21	9.843	13.199	621108	4.882	300	ug/ml
Aliphatic C21-C28	13.200	16.852	1518789	12.647	400	ug/ml
Aliphatic C28-C40	16.853	21.694	2374621	23.489	600	ug/ml
Aliphatic EPH	3.174	21.694	8843493	73.748		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.932	12.932	3849518	35.65		ug/ml
Aliphatic C9-C28	3.174	16.852	6468872	50.259	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067579.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 01:21
Operator : YP/AJ
Sample : P4578-07
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-BOT-1

Integration File: autoint1.e
Quant Time: Nov 01 00:21:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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...	12.932	3849518	35.648 ug/ml
Spiked Amount 50.000		Recovery = 71.30%	
Target Compounds			

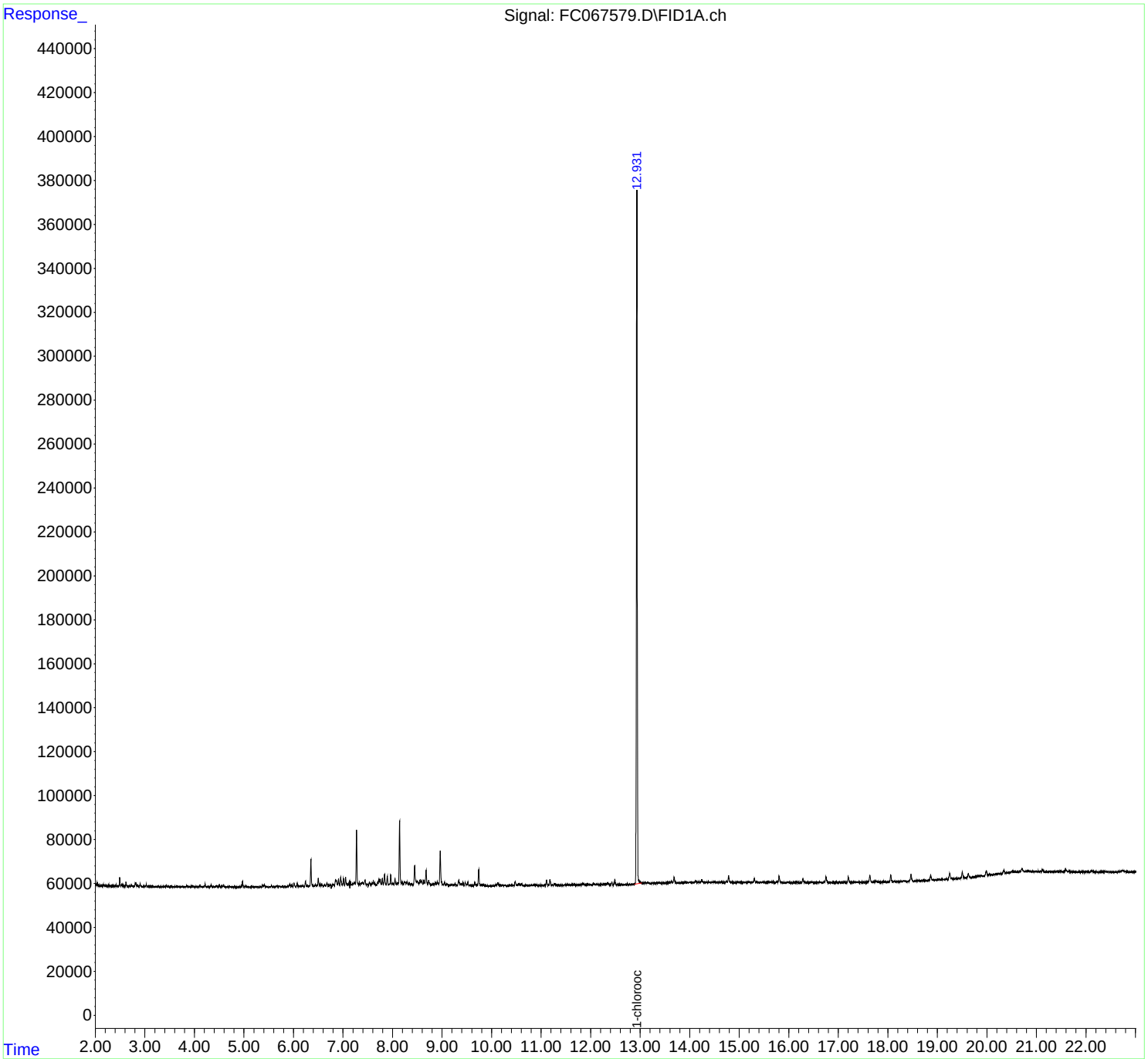
(f)=RT Delta > 1/2 Window (m)=manual int.

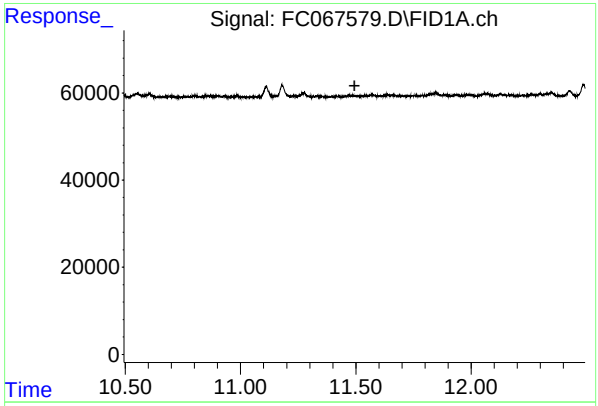
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067579.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 01:21
Operator : YP/AJ
Sample : P4578-07
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-BOT-1

Integration File: autoint1.e
Quant Time: Nov 01 00:21:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 2024
Response via : Initial Calibration
Integrator: ChemStation

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

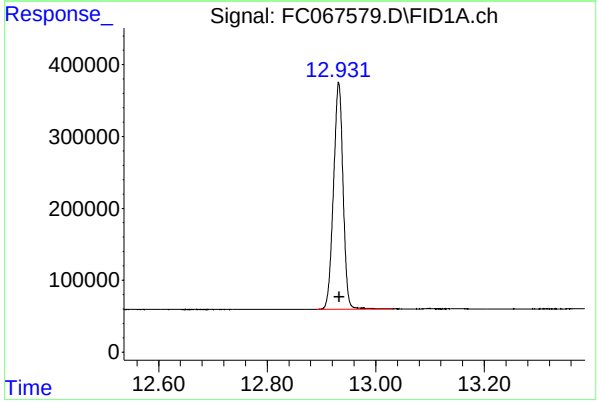




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.494 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
WB-305-BOT-1



#12 1-chlorooctadecane (SURR)

R.T.: 12.932 min
Delta R.T.: -0.001 min
Response: 3849518
Conc: 35.65 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067579.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 01:21
Sample : P4578-07
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: sample.E

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.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	3.277	3.194	3.304	PV	316	5906	0.15%	0.046%
2	3.310	3.304	3.354	VV	84	1486	0.04%	0.012%
3	3.374	3.354	3.414	VV	238	3193	0.08%	0.025%
4	3.428	3.414	3.526	PV	358	5946	0.15%	0.046%
5	3.553	3.526	3.588	VV	113	2870	0.07%	0.022%
6	3.599	3.588	3.634	VV	197	2855	0.07%	0.022%
7	3.654	3.634	3.747	VV	178	5748	0.15%	0.045%
8	3.767	3.747	3.817	PV	288	5424	0.14%	0.042%
9	3.841	3.817	3.888	VV	737	10146	0.26%	0.079%
10	3.891	3.888	3.910	VV	127	985	0.03%	0.008%
11	3.943	3.910	3.953	VV	284	4484	0.11%	0.035%
12	3.969	3.953	4.004	VV	684	8795	0.22%	0.069%
13	4.030	4.004	4.068	VV	232	4522	0.12%	0.035%
14	4.113	4.068	4.154	VV	719	14743	0.38%	0.115%
15	4.161	4.154	4.172	VV	184	1516	0.04%	0.012%
16	4.216	4.172	4.311	VV	1412	24319	0.62%	0.190%
17	4.340	4.311	4.362	VV	863	10864	0.28%	0.085%
18	4.377	4.362	4.402	VV	288	4755	0.12%	0.037%
19	4.449	4.402	4.472	VV	358	8793	0.22%	0.069%
20	4.506	4.472	4.543	VV	887	14479	0.37%	0.113%
21	4.562	4.543	4.576	VV	759	8860	0.23%	0.069%
22	4.592	4.576	4.634	VV	1108	13182	0.34%	0.103%
23	4.640	4.634	4.677	VV	148	2742	0.07%	0.021%
24	4.710	4.677	4.750	VV	226	5976	0.15%	0.047%
25	4.763	4.750	4.782	VV	209	2377	0.06%	0.019%
26	4.805	4.782	4.847	VV	142	2870	0.07%	0.022%
27	4.892	4.847	4.920	VV	221	3794	0.10%	0.030%
28	4.970	4.920	5.005	VV	2783	37688	0.96%	0.294%
29	5.026	5.005	5.044	VV	652	8481	0.22%	0.066%
30	5.054	5.044	5.066	VV	328	2988	0.08%	0.023%
31	5.079	5.066	5.124	VV	228	4338	0.11%	0.034%
32	5.132	5.124	5.139	PV	93	710	0.02%	0.006%
33	5.161	5.139	5.184	VV	212	3378	0.09%	0.026%
34	5.201	5.184	5.228	VV	176	3558	0.09%	0.028%
35	5.245	5.228	5.254	VV	304	3588	0.09%	0.028%
36	5.262	5.254	5.310	VV	365	5375	0.14%	0.042%

rteres

37	5.334	5.310	5.353	VV	168	3162	0.08%	0.025%
38	5.373	5.353	5.389	VV	1321	13921	0.36%	0.109%
39	5.412	5.389	5.454	VV	1197	20547	0.52%	0.160%
40	5.469	5.454	5.501	VV	309	3802	0.10%	0.030%
41	5.519	5.501	5.528	VV	126	1562	0.04%	0.012%
42	5.554	5.528	5.578	VV	701	9815	0.25%	0.077%
43	5.586	5.578	5.601	VV	191	2012	0.05%	0.016%
44	5.623	5.601	5.641	VV	195	3533	0.09%	0.028%
45	5.666	5.641	5.691	VV	586	11474	0.29%	0.090%
46	5.719	5.691	5.733	VV	402	6519	0.17%	0.051%
47	5.745	5.733	5.771	VV	296	5407	0.14%	0.042%
48	5.780	5.771	5.808	VV	351	4372	0.11%	0.034%
49	5.825	5.808	5.845	VV	383	5416	0.14%	0.042%
50	5.874	5.845	5.894	VV	429	8001	0.20%	0.062%
51	5.927	5.894	5.951	VV	1062	21922	0.56%	0.171%
52	5.969	5.951	5.990	VV	1264	16383	0.42%	0.128%
53	6.012	5.990	6.043	VV	1896	24680	0.63%	0.193%
54	6.074	6.043	6.121	VV	1626	26653	0.68%	0.208%
55	6.156	6.121	6.174	VV	502	12407	0.32%	0.097%
56	6.186	6.174	6.214	VV	744	10832	0.28%	0.085%
57	6.243	6.214	6.266	VV	2713	35939	0.92%	0.281%
58	6.282	6.266	6.313	VV	600	12351	0.32%	0.096%
59	6.352	6.313	6.424	VV	12462	155039	3.96%	1.210%
60	6.439	6.424	6.456	VV	870	12875	0.33%	0.101%
61	6.472	6.456	6.481	VV	844	10930	0.28%	0.085%
62	6.501	6.481	6.524	VV	3965	49853	1.27%	0.389%
63	6.538	6.524	6.556	VV	1205	17500	0.45%	0.137%
64	6.572	6.556	6.601	VV	1497	22018	0.56%	0.172%
65	6.627	6.601	6.650	VV	934	19157	0.49%	0.150%
66	6.675	6.650	6.698	VV	1729	30463	0.78%	0.238%
67	6.708	6.698	6.721	VV	822	8888	0.23%	0.069%
68	6.739	6.721	6.769	VV	909	19151	0.49%	0.150%
69	6.807	6.769	6.826	VV	1128	27755	0.71%	0.217%
70	6.850	6.826	6.888	VV	3247	75215	1.92%	0.587%
71	6.910	6.888	6.933	VV	3580	51960	1.33%	0.406%
72	6.954	6.933	6.990	VV	4504	73818	1.88%	0.576%
73	7.011	6.990	7.031	VV	3799	48033	1.23%	0.375%
74	7.053	7.031	7.091	VV	4335	68271	1.74%	0.533%
75	7.109	7.091	7.118	VV	1411	18081	0.46%	0.141%
76	7.132	7.118	7.169	VV	2374	48874	1.25%	0.382%
77	7.195	7.169	7.211	VV	1371	28184	0.72%	0.220%
78	7.225	7.211	7.250	VV	1780	35417	0.90%	0.276%
79	7.275	7.250	7.308	VV	25924	298253	7.62%	2.328%
80	7.316	7.308	7.350	VV	1350	31906	0.81%	0.249%
81	7.396	7.350	7.419	VV	1775	61351	1.57%	0.479%
82	7.445	7.419	7.474	VV	3000	60694	1.55%	0.474%
83	7.486	7.474	7.514	VV	1159	21060	0.54%	0.164%
84	7.534	7.514	7.566	VV	2094	38069	0.97%	0.297%
85	7.611	7.566	7.627	VV	2324	54734	1.40%	0.427%
86	7.638	7.627	7.671	VV	1661	30838	0.79%	0.241%
87	7.700	7.671	7.711	VV	2057	30836	0.79%	0.241%
88	7.728	7.711	7.741	VV	3578	46587	1.19%	0.364%
89	7.752	7.741	7.771	VV	3257	40255	1.03%	0.314%

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90	7.794	7.771	7.815	VV	3784	54375	1.39%	0.424%
91	7.840	7.815	7.864	VV	5692	82279	2.10%	0.642%
92	7.895	7.864	7.919	VV	4791	71752	1.83%	0.560%
93	7.934	7.919	7.944	VV	1229	15907	0.41%	0.124%
94	7.965	7.944	7.988	VV	5489	72143	1.84%	0.563%
95	8.004	7.988	8.031	VV	1280	28610	0.73%	0.223%
96	8.051	8.031	8.073	VV	3675	51661	1.32%	0.403%
97	8.104	8.073	8.113	VV	1349	31155	0.80%	0.243%
98	8.143	8.113	8.175	VV	29656	359868	9.19%	2.809%
99	8.191	8.175	8.216	VV	2153	38729	0.99%	0.302%
100	8.239	8.216	8.273	VV	2221	57203	1.46%	0.447%
101	8.291	8.273	8.315	VV	2144	39526	1.01%	0.309%
102	8.338	8.315	8.361	VV	1449	31057	0.79%	0.242%
103	8.382	8.361	8.404	VV	1203	25553	0.65%	0.199%
104	8.447	8.404	8.484	VV	9430	161444	4.12%	1.260%
105	8.497	8.484	8.531	VV	2565	53509	1.37%	0.418%
106	8.560	8.531	8.577	VV	2734	57809	1.48%	0.451%
107	8.592	8.577	8.614	VV	2763	44541	1.14%	0.348%
108	8.633	8.614	8.651	VV	3050	44035	1.12%	0.344%
109	8.679	8.651	8.711	VV	7367	114818	2.93%	0.896%
110	8.731	8.711	8.776	VV	2768	53922	1.38%	0.421%
111	8.799	8.776	8.813	VV	1062	18483	0.47%	0.144%
112	8.827	8.813	8.844	VV	1125	17513	0.45%	0.137%
113	8.863	8.844	8.879	VV	1811	26539	0.68%	0.207%
114	8.902	8.879	8.931	VV	1742	41450	1.06%	0.324%
115	8.965	8.931	9.031	VV	16113	246750	6.30%	1.926%
116	9.050	9.031	9.071	VV	1823	29546	0.75%	0.231%
117	9.098	9.071	9.133	VV	1120	28750	0.73%	0.224%
118	9.154	9.133	9.177	VV	610	13338	0.34%	0.104%
119	9.200	9.177	9.230	VV	843	20204	0.52%	0.158%
120	9.264	9.230	9.307	VV	962	27439	0.70%	0.214%
121	9.337	9.307	9.368	VV	2643	52641	1.34%	0.411%
122	9.383	9.368	9.398	VV	1184	16571	0.42%	0.129%
123	9.423	9.398	9.446	VV	1351	25369	0.65%	0.198%
124	9.469	9.446	9.500	VV	1756	31658	0.81%	0.247%
125	9.522	9.500	9.563	VV	1707	28606	0.73%	0.223%
126	9.575	9.563	9.596	VV	297	4774	0.12%	0.037%
127	9.610	9.596	9.638	VV	300	5143	0.13%	0.040%
128	9.661	9.638	9.681	VV	1478	20497	0.52%	0.160%
129	9.697	9.681	9.716	VV	563	10661	0.27%	0.083%
130	9.741	9.716	9.788	VV	7604	99525	2.54%	0.777%
131	9.816	9.788	9.831	VV	650	13287	0.34%	0.104%
132	9.834	9.831	9.899	VV	565	11826	0.30%	0.092%
133	9.913	9.899	9.938	VV	208	2004	0.05%	0.016%
134	9.949	9.938	9.981	PV	145	1580	0.04%	0.012%
135	9.987	9.981	9.997	VV	64	421	0.01%	0.003%
136	10.018	9.997	10.041	VV	185	2549	0.07%	0.020%
137	10.088	10.041	10.099	VV	533	8800	0.22%	0.069%
138	10.129	10.099	10.154	VV	1379	23891	0.61%	0.187%
139	10.177	10.154	10.197	VV	520	8492	0.22%	0.066%
140	10.218	10.197	10.242	VV	516	7781	0.20%	0.061%
141	10.274	10.242	10.296	VV	385	6572	0.17%	0.051%

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142	10.338	10.296	10.356	VV	239	3137	0.08%	0.024%
143	10.370	10.356	10.391	VV	222	3540	0.09%	0.028%
144	10.412	10.391	10.444	VV	316	7270	0.19%	0.057%
145	10.479	10.444	10.514	VV	1902	30879	0.79%	0.241%
146	10.552	10.514	10.580	VV	946	21668	0.55%	0.169%
147	10.604	10.580	10.637	VV	845	15543	0.40%	0.121%
148	10.678	10.637	10.748	VV	222	8897	0.23%	0.069%
149	10.768	10.748	10.781	VV	172	2591	0.07%	0.020%
150	10.797	10.781	10.834	VV	384	7280	0.19%	0.057%
151	10.851	10.834	10.888	VV	322	7954	0.20%	0.062%
152	10.900	10.888	10.918	VV	407	5115	0.13%	0.040%
153	10.928	10.918	10.944	VV	275	3195	0.08%	0.025%
154	10.984	10.944	11.043	VV	334	6474	0.17%	0.051%
155	11.074	11.043	11.084	VV	142	2187	0.06%	0.017%
156	11.111	11.084	11.150	VV	2517	35371	0.90%	0.276%
157	11.180	11.150	11.244	VV	2632	43700	1.12%	0.341%
158	11.274	11.244	11.317	VV	903	17050	0.44%	0.133%
159	11.331	11.317	11.388	VV	260	4524	0.12%	0.035%
160	11.417	11.388	11.444	PV	153	2835	0.07%	0.022%
161	11.472	11.444	11.484	VV	338	5194	0.13%	0.041%
162	11.488	11.484	11.521	VV	331	5177	0.13%	0.040%
163	11.537	11.521	11.551	VV	293	4567	0.12%	0.036%
164	11.571	11.551	11.600	VV	428	9071	0.23%	0.071%
165	11.634	11.600	11.717	VV	403	17550	0.45%	0.137%
166	11.845	11.717	11.874	VV	860	34302	0.88%	0.268%
167	11.888	11.874	11.917	VV	349	6958	0.18%	0.054%
168	11.939	11.917	11.958	VV	392	6621	0.17%	0.052%
169	11.984	11.958	12.024	VV	411	10605	0.27%	0.083%
170	12.063	12.024	12.107	VV	663	19294	0.49%	0.151%
171	12.125	12.107	12.157	VV	457	10360	0.26%	0.081%
172	12.168	12.157	12.198	VV	350	6002	0.15%	0.047%
173	12.261	12.198	12.279	VV	421	12497	0.32%	0.098%
174	12.299	12.279	12.311	VV	489	7327	0.19%	0.057%
175	12.349	12.311	12.381	VV	849	19676	0.50%	0.154%
176	12.427	12.381	12.455	VV	1216	19885	0.51%	0.155%
177	12.487	12.455	12.540	VV	2667	38978	1.00%	0.304%
178	12.555	12.540	12.574	VV	186	3451	0.09%	0.027%
179	12.600	12.574	12.653	VV	280	7977	0.20%	0.062%
180	12.666	12.653	12.672	PV	108	763	0.02%	0.006%
181	12.700	12.672	12.718	VV	128	2199	0.06%	0.017%
182	12.740	12.718	12.753	VV	291	3628	0.09%	0.028%
183	12.763	12.753	12.792	VV	260	4705	0.12%	0.037%
184	12.813	12.792	12.833	VV	254	4377	0.11%	0.034%
185	12.845	12.833	12.867	VV	321	5296	0.14%	0.041%
186	12.932	12.867	13.067	VV	315486	3916589	100.00%	30.576%
187	13.098	13.067	13.120	VV	1245	28507	0.73%	0.223%
188	13.145	13.120	13.188	VV	1079	34841	0.89%	0.272%
189	13.203	13.188	13.214	VV	605	9197	0.23%	0.072%
190	13.222	13.214	13.227	VV	581	4513	0.12%	0.035%
191	13.256	13.227	13.284	VV	771	22257	0.57%	0.174%
192	13.311	13.284	13.348	VV	798	27188	0.69%	0.212%
193	13.379	13.348	13.439	VV	923	41678	1.06%	0.325%
194	13.447	13.439	13.463	VV	665	9545	0.24%	0.075%

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195	13.485	13.463	13.501	VV	711	15249	0.39%	0.119%
196	13.529	13.501	13.577	VV	914	36178	0.92%	0.282%
197	13.632	13.577	13.655	VV	1537	46482	1.19%	0.363%
198	13.683	13.655	13.751	VV	3380	78968	2.02%	0.616%
199	13.760	13.751	13.787	VV	777	15563	0.40%	0.121%
200	13.820	13.787	13.853	VV	817	27972	0.71%	0.218%
201	13.865	13.853	13.870	VV	715	6784	0.17%	0.053%
202	13.917	13.870	13.955	VV	998	43363	1.11%	0.339%
203	13.992	13.955	14.032	VV	893	37260	0.95%	0.291%
204	14.068	14.032	14.086	VV	874	25539	0.65%	0.199%
205	14.119	14.086	14.163	VV	1518	49332	1.26%	0.385%
206	14.183	14.163	14.218	VV	991	28948	0.74%	0.226%
207	14.244	14.218	14.281	VV	2165	46641	1.19%	0.364%
208	14.289	14.281	14.295	VV	815	6441	0.16%	0.050%
209	14.344	14.295	14.354	VV	885	29133	0.74%	0.227%
210	14.379	14.354	14.437	VV	865	41175	1.05%	0.321%
211	14.447	14.437	14.458	VV	815	9718	0.25%	0.076%
212	14.495	14.458	14.516	VV	996	28763	0.73%	0.225%
213	14.532	14.516	14.543	VV	815	12111	0.31%	0.095%
214	14.553	14.543	14.574	VV	842	14414	0.37%	0.113%
215	14.633	14.574	14.691	VV	824	51801	1.32%	0.404%
216	14.704	14.691	14.721	VV	808	12844	0.33%	0.100%
217	14.740	14.721	14.758	VV	1265	22275	0.57%	0.174%
218	14.784	14.758	14.891	VV	3878	98254	2.51%	0.767%
219	14.898	14.891	14.948	VV	656	19372	0.49%	0.151%
220	14.981	14.948	15.048	VV	757	38821	0.99%	0.303%
221	15.054	15.048	15.078	VV	608	10303	0.26%	0.080%
222	15.121	15.078	15.142	VV	621	21954	0.56%	0.171%
223	15.213	15.142	15.264	VV	769	44668	1.14%	0.349%
224	15.302	15.264	15.337	VV	2245	49725	1.27%	0.388%
225	15.348	15.337	15.409	VV	775	25426	0.65%	0.198%
226	15.421	15.409	15.451	VV	579	12335	0.31%	0.096%
227	15.484	15.451	15.518	VV	633	20928	0.53%	0.163%
228	15.525	15.518	15.544	VV	613	8154	0.21%	0.064%
229	15.566	15.544	15.583	VV	519	11713	0.30%	0.091%
230	15.627	15.583	15.644	VV	749	22270	0.57%	0.174%
231	15.664	15.644	15.678	VV	683	11169	0.29%	0.087%
232	15.681	15.678	15.730	VV	658	14676	0.37%	0.115%
233	15.763	15.730	15.779	VV	926	18528	0.47%	0.145%
234	15.804	15.779	15.934	VV	3056	76765	1.96%	0.599%
235	15.988	15.934	16.043	VV	624	24184	0.62%	0.189%
236	16.056	16.043	16.074	VV	307	4944	0.13%	0.039%
237	16.118	16.074	16.138	VV	438	12785	0.33%	0.100%
238	16.164	16.138	16.241	VV	477	18609	0.48%	0.145%
239	16.285	16.241	16.393	VV	2061	45689	1.17%	0.357%
240	16.446	16.393	16.493	VV	429	14850	0.38%	0.116%
241	16.501	16.493	16.558	VV	371	8841	0.23%	0.069%
242	16.590	16.558	16.625	VV	391	11246	0.29%	0.088%
243	16.638	16.625	16.668	VV	392	6487	0.17%	0.051%
244	16.718	16.668	16.726	VV	603	10802	0.28%	0.084%
245	16.751	16.726	16.828	VV	2807	48859	1.25%	0.381%
246	16.852	16.828	16.894	VV	194	5100	0.13%	0.040%

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247	16.906	16.894	16.921	VV	181	1845	0.05%	0.014%
248	16.935	16.921	16.950	VV	189	1990	0.05%	0.016%
249	16.970	16.950	17.004	VV	204	4292	0.11%	0.034%
250	17.043	17.004	17.054	VV	199	3529	0.09%	0.028%
251	17.086	17.054	17.114	VV	246	4948	0.13%	0.039%
252	17.130	17.114	17.147	VV	191	2288	0.06%	0.018%
253	17.155	17.147	17.169	VV	133	1177	0.03%	0.009%
254	17.201	17.169	17.266	VV	2387	38159	0.97%	0.298%
255	17.308	17.266	17.321	PV	238	4708	0.12%	0.037%
256	17.336	17.321	17.438	VV	227	8892	0.23%	0.069%
257	17.454	17.438	17.463	VV	179	1705	0.04%	0.013%
258	17.483	17.463	17.509	VV	289	3816	0.10%	0.030%
259	17.536	17.509	17.558	VV	167	2785	0.07%	0.022%
260	17.637	17.558	17.706	PV	3153	63359	1.62%	0.495%
261	17.726	17.706	17.742	VV	301	4952	0.13%	0.039%
262	17.771	17.742	17.864	VV	480	16779	0.43%	0.131%
263	17.872	17.864	17.877	PV	32	244	0.01%	0.002%
264	17.919	17.877	17.941	VV	269	5212	0.13%	0.041%
265	17.952	17.941	17.999	VV	147	3811	0.10%	0.030%
266	18.059	17.999	18.110	VV	3109	52614	1.34%	0.411%
267	18.137	18.110	18.159	VV	344	5230	0.13%	0.041%
268	18.182	18.159	18.232	PV	168	4168	0.11%	0.033%
269	18.264	18.232	18.281	VV	120	2867	0.07%	0.022%
270	18.319	18.281	18.333	VV	330	5932	0.15%	0.046%
271	18.344	18.333	18.398	VV	386	5575	0.14%	0.044%
272	18.406	18.398	18.414	PV	101	715	0.02%	0.006%
273	18.467	18.414	18.539	VV	3447	62519	1.60%	0.488%
274	18.607	18.539	18.648	VV	256	9288	0.24%	0.073%
275	18.667	18.648	18.681	VV	206	2639	0.07%	0.021%
276	18.685	18.681	18.701	VV	131	1153	0.03%	0.009%
277	18.724	18.701	18.744	VV	279	4463	0.11%	0.035%
278	18.758	18.744	18.792	VV	256	4547	0.12%	0.035%
279	18.865	18.792	18.902	PV	2683	50086	1.28%	0.391%
280	18.923	18.902	18.944	VV	357	6972	0.18%	0.054%
281	19.041	18.944	19.084	VV	415	22023	0.56%	0.172%
282	19.105	19.084	19.140	VV	383	8731	0.22%	0.068%
283	19.191	19.140	19.206	VV	362	11291	0.29%	0.088%
284	19.250	19.206	19.350	VV	2930	73183	1.87%	0.571%
285	19.502	19.350	19.531	VV	3194	81276	2.08%	0.635%
286	19.547	19.531	19.578	VV	599	15238	0.39%	0.119%
287	19.624	19.578	19.675	VV	2292	57876	1.48%	0.452%
288	19.730	19.675	19.745	VV	643	23884	0.61%	0.186%
289	19.894	19.745	19.931	VV	1171	97912	2.50%	0.764%
290	19.939	19.931	19.944	VV	910	6730	0.17%	0.053%
291	19.988	19.944	20.021	VV	3186	81127	2.07%	0.633%
292	20.045	20.021	20.101	VV	1403	59895	1.53%	0.468%
293	20.258	20.101	20.275	VV	1512	139541	3.56%	1.089%
294	20.341	20.275	20.388	VV	2964	126515	3.23%	0.988%
295	20.414	20.388	20.428	VV	1741	40290	1.03%	0.315%
296	20.519	20.428	20.555	VV	2285	150889	3.85%	1.178%
297	20.565	20.555	20.607	VV	2097	61208	1.56%	0.478%
298	20.629	20.607	20.638	VV	1935	34757	0.89%	0.271%
299	20.710	20.638	20.758	VV	3240	165529	4.23%	1.292%

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300	20.794	20.758	20.854	VV	2019	112267	2.87%	0.876%
301	20.865	20.854	20.909	VV	1837	57818	1.48%	0.451%
302	20.916	20.909	20.941	VV	1725	30927	0.79%	0.241%
303	20.946	20.941	20.991	VV	1615	45369	1.16%	0.354%
304	21.037	20.991	21.071	VV	1623	72525	1.85%	0.566%
305	21.122	21.071	21.201	VV	2067	117105	2.99%	0.914%
306	21.240	21.201	21.288	VV	1176	57340	1.46%	0.448%
307	21.292	21.288	21.314	VV	1092	16333	0.42%	0.128%
308	21.332	21.314	21.345	VV	1083	19203	0.49%	0.150%
309	21.369	21.345	21.383	VV	1096	22863	0.58%	0.178%
310	21.415	21.383	21.451	VV	1107	41913	1.07%	0.327%
311	21.466	21.451	21.479	VV	972	15866	0.41%	0.124%
312	21.489	21.479	21.498	VV	981	10495	0.27%	0.082%
313	21.506	21.498	21.548	VV	934	25539	0.65%	0.199%
314	21.589	21.548	21.641	VV	1539	59835	1.53%	0.467%
315	21.660	21.641	21.684	VV	770	18069	0.46%	0.141%
316	21.753	21.734	21.801	VV	426	15590	0.40%	0.122%
317	21.820	21.801	21.848	VV	388	9149	0.23%	0.071%
318	21.864	21.848	21.923	VV	341	11771	0.30%	0.092%
319	21.934	21.923	21.943	VV	244	2323	0.06%	0.018%
320	21.978	21.943	21.987	VV	205	4714	0.12%	0.037%
321	21.998	21.987	22.028	VV	215	3732	0.10%	0.029%
322	22.061	22.028	22.074	VV	127	2107	0.05%	0.016%

Sum of corrected areas: 12809470

Aliphatic EPH 102324.M Fri Nov 01 00:56:49 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	10/25/24
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	10/25/24
Client Sample ID:	WB-305-BOT-1	SDG No.:	P4578
Lab Sample ID:	P4578-07	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	94.4
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
FD048632.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.32	U	0.32	0.70	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.36	U	0.36	1.06	mg/kg
Aromatic C16-C21	Aromatic C16-C21	1.01	U	1.01	1.76	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.11	U	2.11	2.82	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	51.2		40 - 140	102%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	50.7		40 - 140	101%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	26.9		40 - 140	54%	SPK: 50

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

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4578-07	Acq On:	30 Oct 2024 22:56
Client Sample ID:	WB-305-BOT-1	Operator:	YP/AJ
Data file:	FD048632.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	4.094	5.812	413470	2.347	200	ug/ml
Aromatic C12-C16	5.813	8.417	140651	0.793	300	ug/ml
Aromatic C16-C21	8.418	12.679	694928	4.242	500	ug/ml
Aromatic C21-C36	12.680	18.085	1286522	8.424	800	ug/ml
Aromatic EPH	4.094	18.085	2535571	15.806		ug/ml
2-Bromonaphthalene (SURR)	7.372	7.372	7769712	51.19		ug/ml
2-Flurobiphenyl (SURR)	8.222	8.222	4979570	50.71		ug/ml
ortho-Terphenyl (SURR)	11.255	11.255	4579944	26.89		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048632.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 22:56
Operator : YP/AJ
Sample : P4578-07
Misc :
ALS Vial : 70 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
WB-305-BOT-1

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:03:56 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.372	7769712	51.191 ug/ml
Spiked Amount 50.000		Recovery = 102.38%	
6) S 2-Flurobiphenyl (SURR)	8.222	4979570	50.713 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 101.43%	
11) S ortho-Terphenyl (SURR)	11.255	4579944	26.887 ug/mlm
Spiked Amount 50.000		Recovery = 53.77%	
Target Compounds			

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

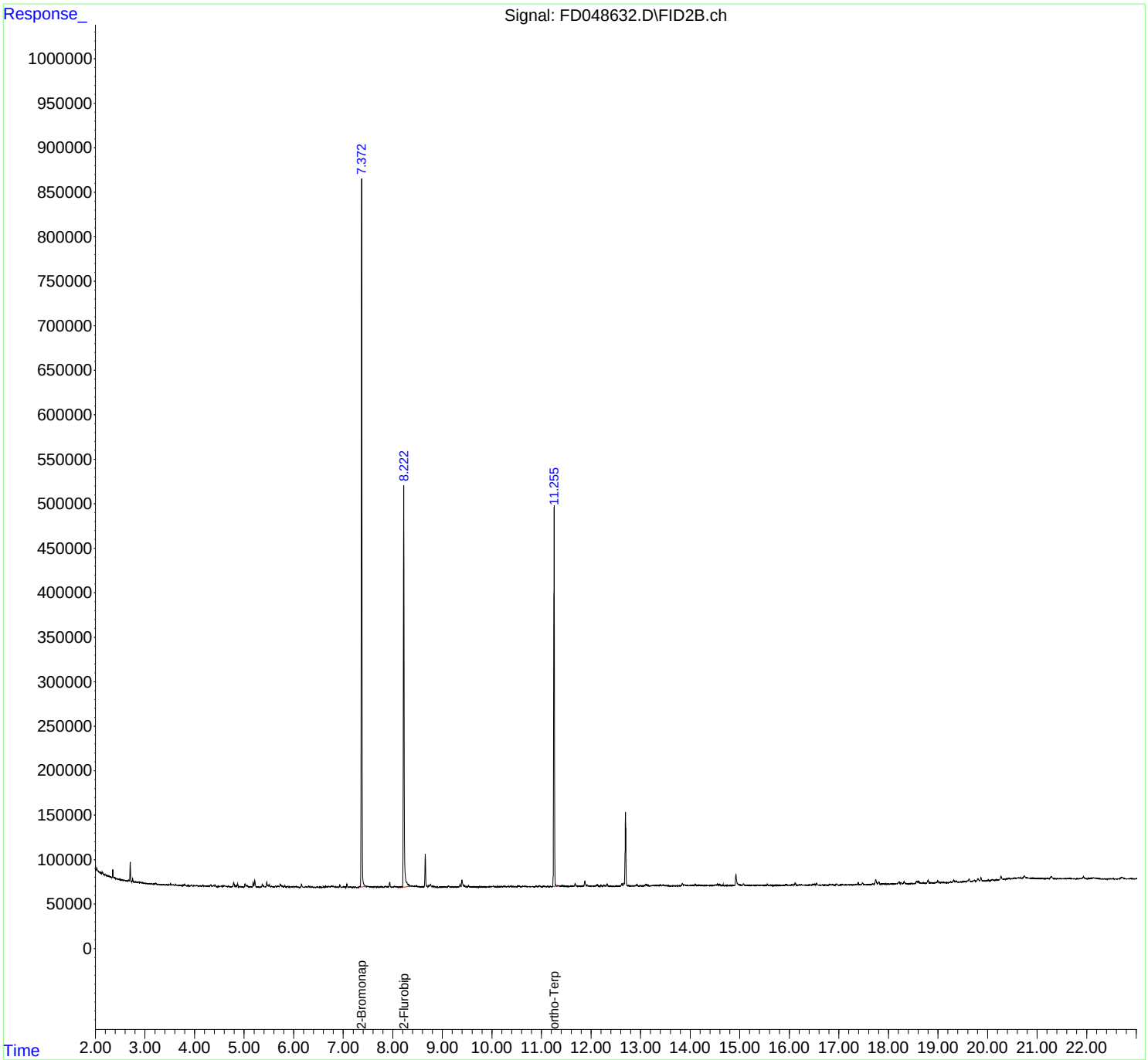
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048632.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 22:56
Operator : YP/AJ
Sample : P4578-07
Misc :
ALS Vial : 70 Sample Multiplier: 1

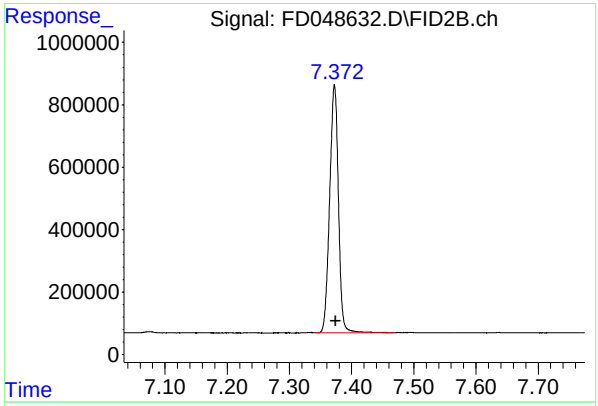
Instrument :
FID_D
ClientSampleId :
WB-305-BOT-1

Manual Integrations APPROVED
Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:03:56 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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





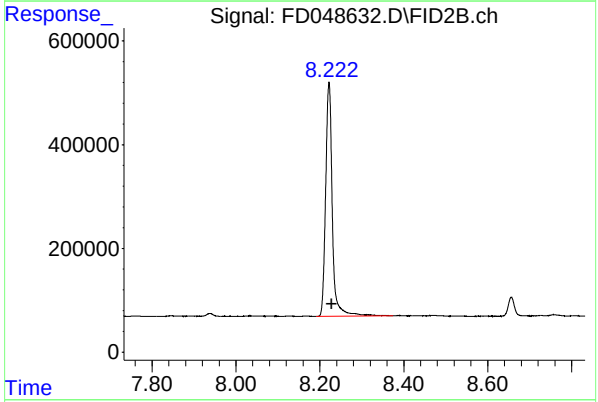
#4 2-Bromonaphthalene (SURR)

R.T.: 7.372 min
Delta R.T.: -0.002 mi
Response: 7769712
Conc: 51.19 ug/m

Instrument :
FID_D
ClientSampleId :
WB-305-BOT-1

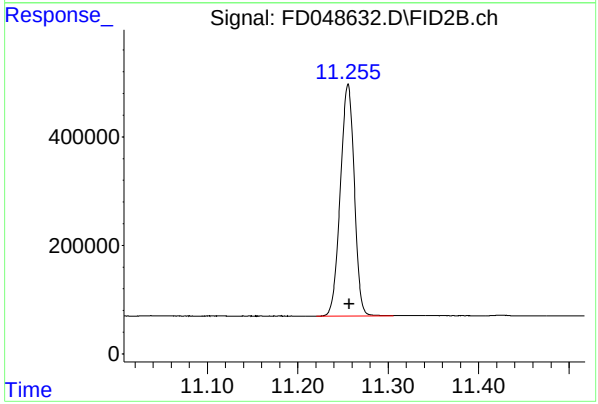
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024



#6 2-Flurobiphenyl (SURR)

R.T.: 8.222 min
Delta R.T.: -0.006 min
Response: 4979570
Conc: 50.71 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.255 min
Delta R.T.: -0.001 min
Response: 4579944
Conc: 26.89 ug/ml m

Instrument :
FID_D
ClientSampleId :
WB-305-BOT-1

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD10302
Data File : FD048632.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 22:56
Sample : P4578-07
Misc :
ALS Vial : 70 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.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	4.789	4.728	4.826	BV	5203	79611	1.02%	0.401%
2	4.869	4.853	4.908	VV	3599	37274	0.48%	0.188%
3	5.018	4.992	5.042	PV	3708	46195	0.59%	0.233%
4	5.183	5.161	5.199	VV	5293	54362	0.70%	0.274%
5	5.215	5.199	5.266	VV	7440	91850	1.18%	0.463%
6	5.367	5.314	5.387	BV	3420	39363	0.51%	0.199%
7	5.458	5.414	5.497	PV	5205	64815	0.83%	0.327%
8	6.159	6.098	6.221	BB	3607	40292	0.52%	0.203%
9	7.075	7.031	7.118	BV	3882	41102	0.53%	0.207%
10	7.372	7.343	7.467	PV	784628	7769712	100.00%	39.184%
11	7.938	7.891	7.991	BB	5528	59257	0.76%	0.299%
12	8.222	8.191	8.374	PV	450106	4979570	64.09%	25.113%
13	8.656	8.601	8.701	BV	36340	364504	4.69%	1.838%
14	9.396	9.376	9.504	PB	7634	143372	1.85%	0.723%
15	11.255	11.074	11.331	BB	424221	4543965	58.48%	22.916%
16	11.876	11.853	11.941	PB	5491	80167	1.03%	0.404%
17	12.623	12.468	12.641	BV	3027	66134	0.85%	0.334%
18	12.661	12.641	12.670	VV	3487	40751	0.52%	0.206%
19	12.697	12.670	12.764	VB	82594	979976	12.61%	4.942%
20	14.922	14.878	15.044	BB	12187	229737	2.96%	1.159%
21	17.742	17.701	17.784	BV	4850	76809	0.99%	0.387%
			Sum of corrected areas:			19828819		

Aromatic EPH 102324.M Fri Nov 01 01:39:32 2024

CALIBRATION SUMMARY

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

Inital Calibration Report for SequenceID : FC102324AL

AreaCount

Parameter Range	FC067506.D	FC067507.D	FC067508.D	FC067509.D	FC067510.D	
Aliphatic C9-C12	39022992.000	19933185.000	8061570.000	4198329.000	2101198.000	
Aliphatic C12-C16	25467967.000	12990634.000	5208245.000	2702045.000	1358541.000	
Aliphatic C16-C21	36713606.000	18782701.000	7526010.000	3934678.000	1979840.000	
Aliphatic C21-C28	45946180.000	23609090.000	9458827.000	4951672.000	2510279.000	
Aliphatic C28-C40	56250650.000	29316600.000	11954663.000	6283522.000	3289360.000	
Aliphatic EPH	203401395.000	104632210.000	42209315.000	22070246.000	11239218.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	135469.6413332	3.265				
Aliphatic C12-C16	131681.73	2.772				
Aliphatic C16-C21	127235.0919996	3.261				
Aliphatic C21-C28	120090.3975	3.678				
Aliphatic C28-C40	101093.1949996	6.133				
Aliphatic EPH	118799.912222	4.081				

Concentration

Parameter Range	FC067506.D	FC067507.D	FC067508.D	FC067509.D	FC067510.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	FC067506.D	FC067507.D	FC067508.D	FC067509.D	FC067510.D	
Aliphatic C9-C12	130076.640000	132887.900000	134359.500000	139944.300000	140079.866666	
Aliphatic C12-C16	127339.835000	129906.340000	130206.125000	135102.250000	135854.100000	
Aliphatic C16-C21	122378.686666	125218.006666	125433.500000	131155.933333	131989.333333	

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

Inital Calibration Report for SequenceID : FC102324AL

Aliphatic C21-C28	114865.450000	118045.450000	118235.337500	123791.800000	125513.950000	
Aliphatic C28-C40	93751.083333	97722.000000	99622.191666	104725.366666	109645.333333	
Aliphatic EPH	113000.775000	116258.011111	117248.097222	122612.477777	124880.200000	

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067506.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 15:12
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 23 17:19:34 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:19:01 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	ortho-Terphenyl (SURR)	11.506	14037783	98.632 ug/ml
Spiked Amount	50.000		Recovery =	197.26%
12) S	1-chlorooctadecane (S...	12.941	10490435	99.221 ug/ml
Spiked Amount	50.000		Recovery =	198.44%
	Target Compounds			
1) T	n-Nonane (C9)	3.278	12920314	98.296 ug/ml
2) T	n-Decane (C10)	4.343	13085907	98.393 ug/ml
3) T	A~Naphthalene (C11.7)	5.922	14394132	98.923 ug/ml
4) T	n-Dodecane (C12)	6.360	13016771	98.452 ug/ml
5) T	A~2-methylnaphthalene...	6.979	13836866	99.334 ug/ml
6) T	n-Tetradecane (C14)	8.152	12659193	98.737 ug/ml
7) T	n-Hexadecane (C16)	9.751	12808774	99.036 ug/ml
8) T	n-Octadecane (C18)	11.193	12738874	98.786 ug/ml
10) T	n-Eicosane (C20)	12.499	12105735	98.678 ug/ml
11) T	n-Heneicosane (C21)	13.110	11868997	98.838 ug/ml
13) T	n-Docosane (C22)	13.695	11751176	98.736 ug/ml
14) T	n-Tetracosane (C24)	14.797	11637443	98.776 ug/ml
15) T	n-Hexacosane (C26)	15.816	11410589	98.652 ug/ml
16) T	n-Octacosane (C28)	16.765	11146972	98.035 ug/ml
17) T	n-Tricontane (C30)	17.651	11224678	97.103 ug/ml
18) T	n-Dotriacontane (C32)	18.483	10806351	96.387 ug/ml
19) T	n-Tetratriacontane (C34)	19.263	9619727	96.453 ug/ml
20) T	n-Hexatriacontane (C36)	20.002	8494635	97.259 ug/ml
21) T	n-Octatriacontane (C38)	20.726	8112623	97.297 ug/ml
22) T	n-Tetracontane (C40)	21.614	7992636	97.524 ug/ml

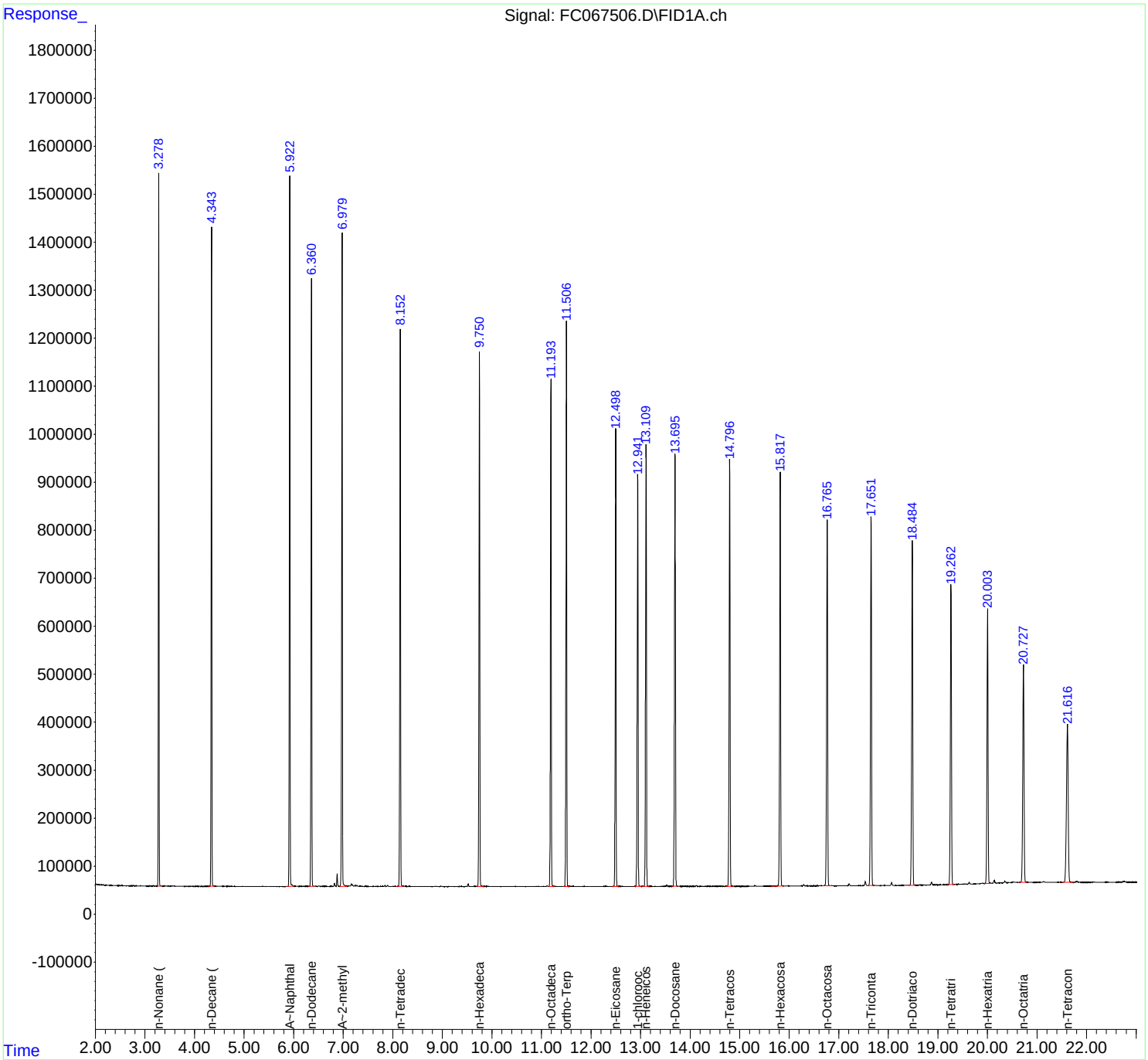
(f)=RT Delta > 1/2 Window (m)=manual int.

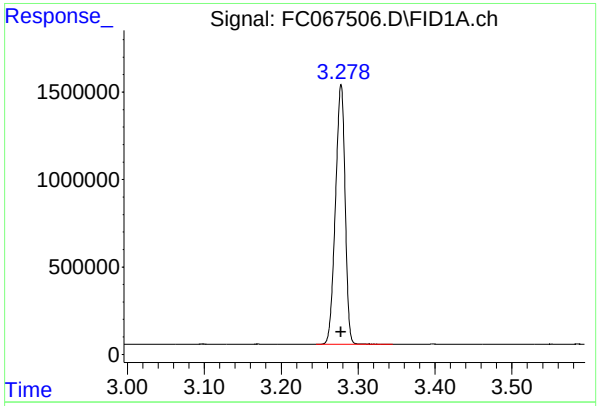
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067506.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 15:12
Operator : YP/AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Oct 23 17:19:34 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:19:01 2024
Response via : Initial Calibration
Integrator: ChemStation

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

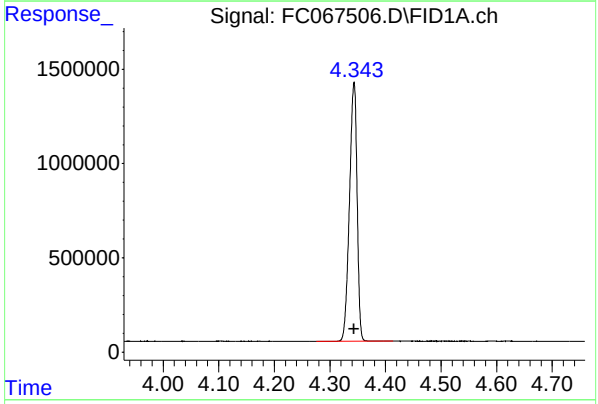




#1 n-Nonane (C9)

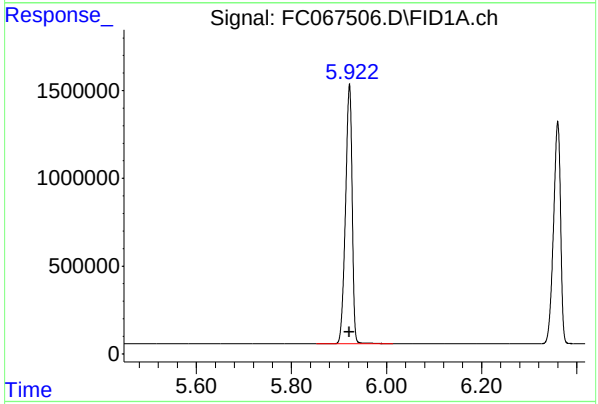
R.T.: 3.278 min
Delta R.T.: 0.000 min
Response: 12920314
Conc: 98.30 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



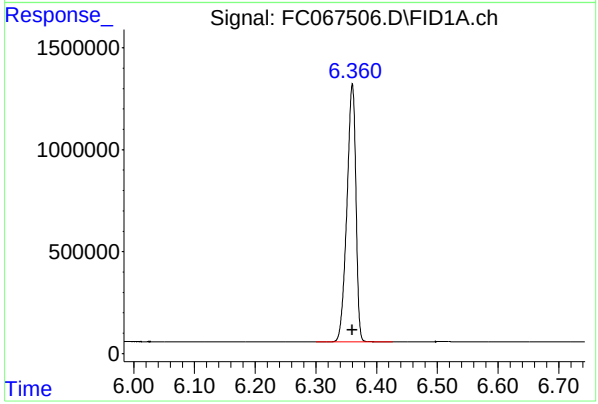
#2 n-Decane (C10)

R.T.: 4.343 min
Delta R.T.: 0.000 min
Response: 13085907
Conc: 98.39 ug/ml



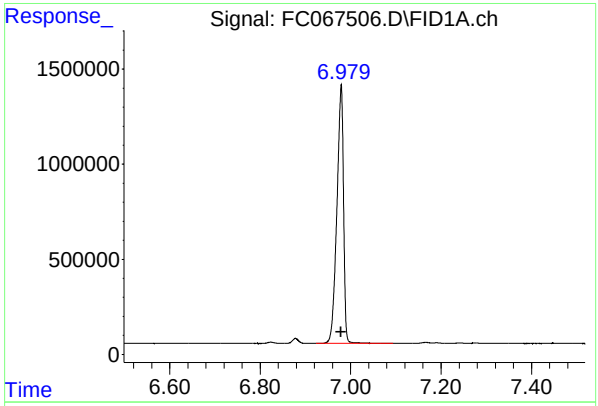
#3 A~Naphthalene (C11.7)

R.T.: 5.922 min
Delta R.T.: 0.000 min
Response: 14394132
Conc: 98.92 ug/ml



#4 n-Dodecane (C12)

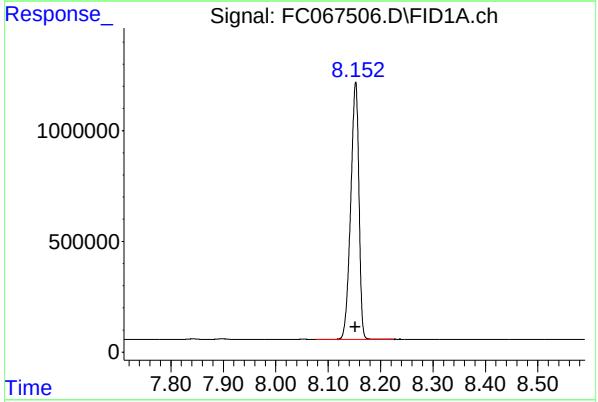
R.T.: 6.360 min
Delta R.T.: 0.000 min
Response: 13016771
Conc: 98.45 ug/ml



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

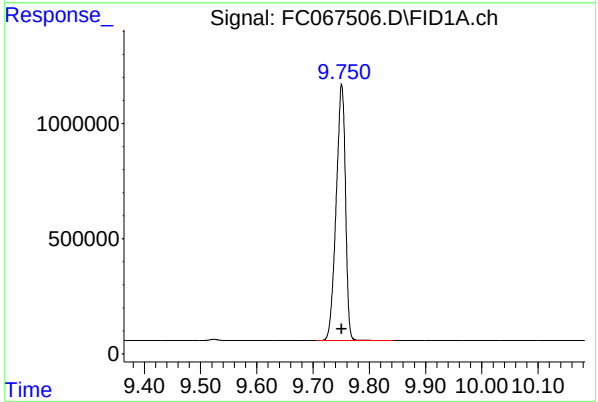
R.T.: 6.979 min
Delta R.T.: 0.000 min
Response: 13836866
Conc: 99.33 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



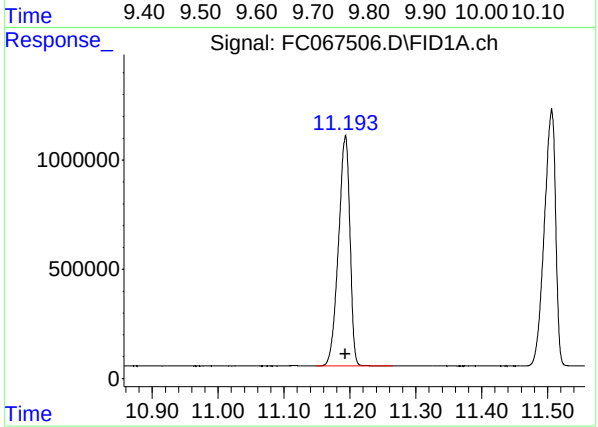
#6 n-Tetradecane (C14)

R.T.: 8.152 min
Delta R.T.: 0.000 min
Response: 12659193
Conc: 98.74 ug/ml



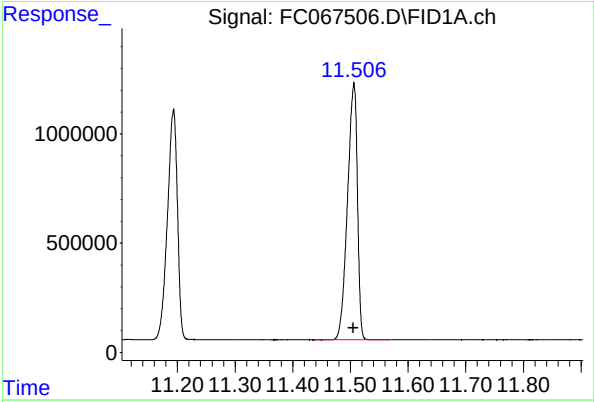
#7 n-Hexadecane (C16)

R.T.: 9.751 min
Delta R.T.: 0.000 min
Response: 12808774
Conc: 99.04 ug/ml



#8 n-Octadecane (C18)

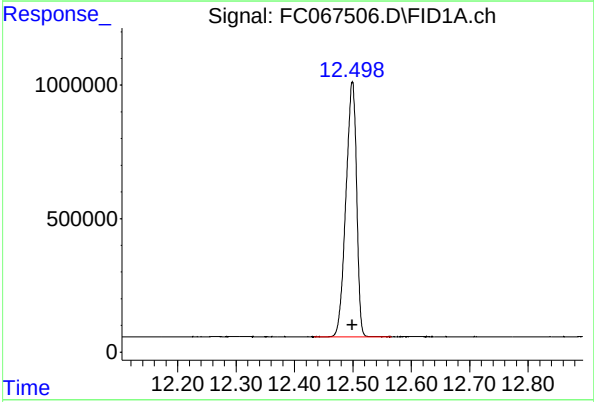
R.T.: 11.193 min
Delta R.T.: 0.000 min
Response: 12738874
Conc: 98.79 ug/ml



#9 ortho-Terphenyl (SURR)

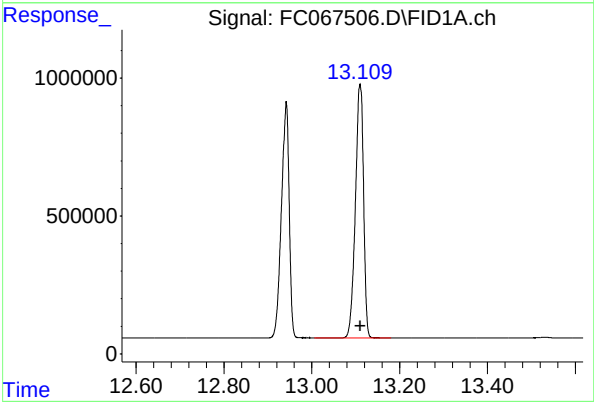
R.T.: 11.506 min
Delta R.T.: 0.000 min
Response: 14037783
Conc: 98.63 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



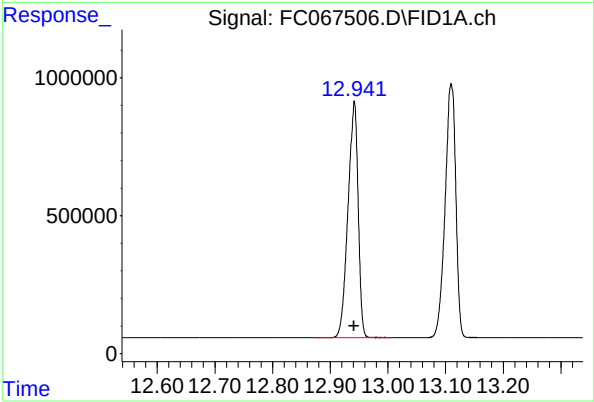
#10 n-Eicosane (C20)

R.T.: 12.499 min
Delta R.T.: 0.000 min
Response: 12105735
Conc: 98.68 ug/ml



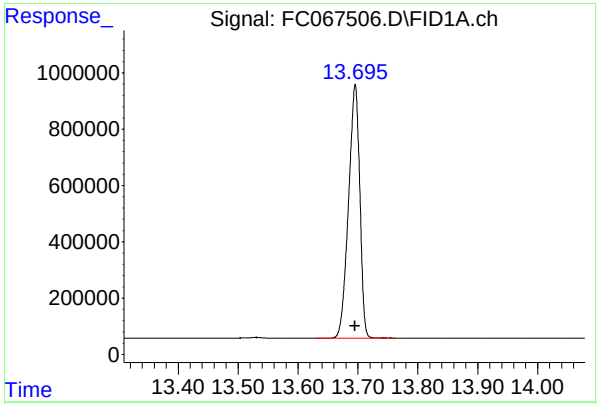
#11 n-Heneicosane (C21)

R.T.: 13.110 min
Delta R.T.: 0.000 min
Response: 11868997
Conc: 98.84 ug/ml



#12 1-chlorooctadecane (SURR)

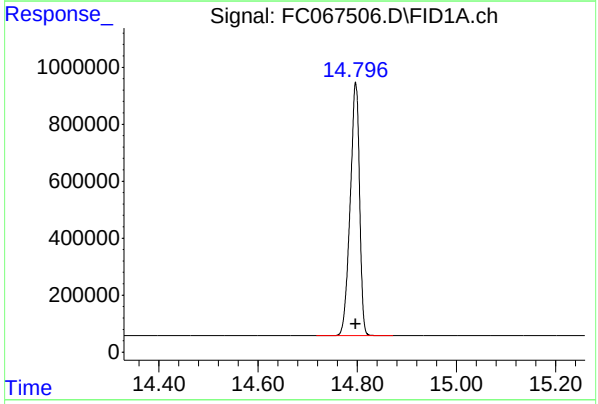
R.T.: 12.941 min
Delta R.T.: 0.000 min
Response: 10490435
Conc: 99.22 ug/ml



#13 n-Docosane (C22)

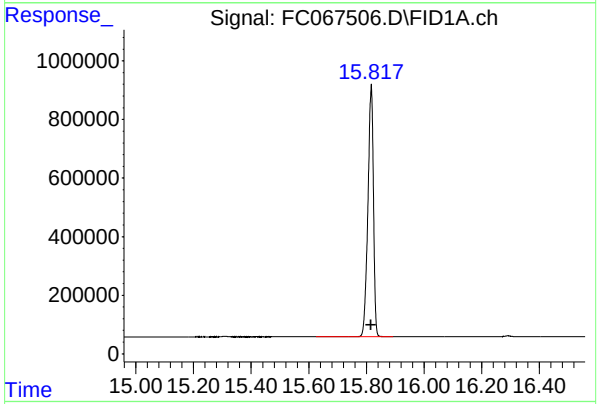
R.T.: 13.695 min
Delta R.T.: 0.000 min
Response: 11751176
Conc: 98.74 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



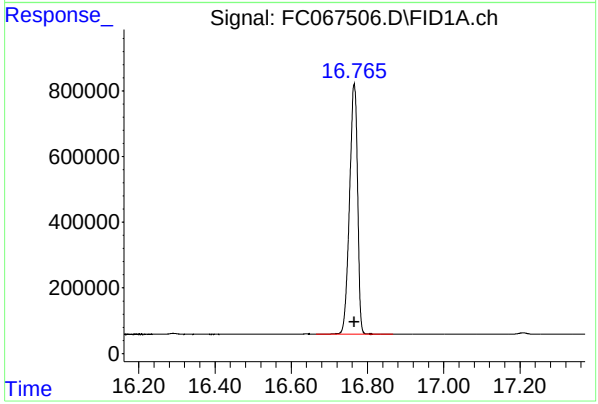
#14 n-Tetracosane (C24)

R.T.: 14.797 min
Delta R.T.: 0.000 min
Response: 11637443
Conc: 98.78 ug/ml



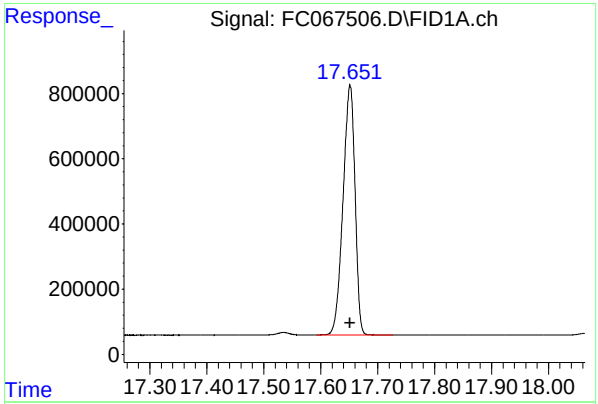
#15 n-Hexacosane (C26)

R.T.: 15.816 min
Delta R.T.: 0.000 min
Response: 11410589
Conc: 98.65 ug/ml



#16 n-Octacosane (C28)

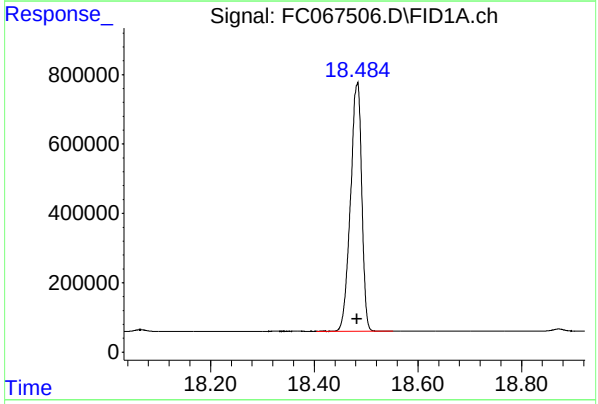
R.T.: 16.765 min
Delta R.T.: 0.000 min
Response: 11146972
Conc: 98.03 ug/ml



#17 n-Tricontane (C30)

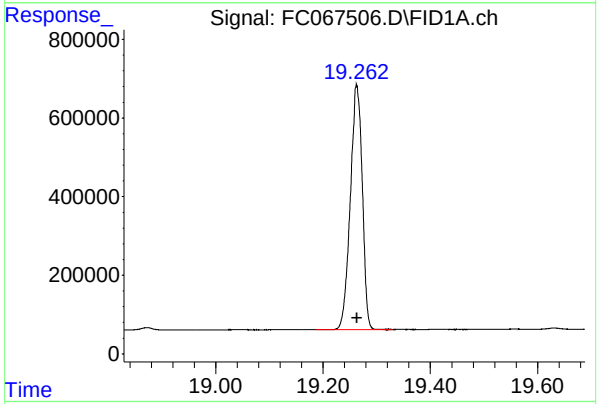
R.T.: 17.651 min
Delta R.T.: 0.000 min
Response: 11224678
Conc: 97.10 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



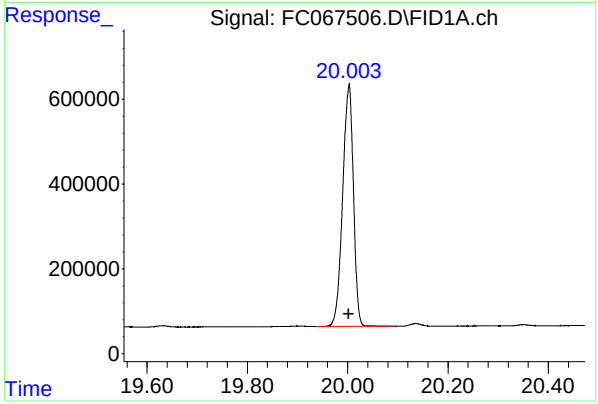
#18 n-Dotriacontane (C32)

R.T.: 18.483 min
Delta R.T.: 0.000 min
Response: 10806351
Conc: 96.39 ug/ml



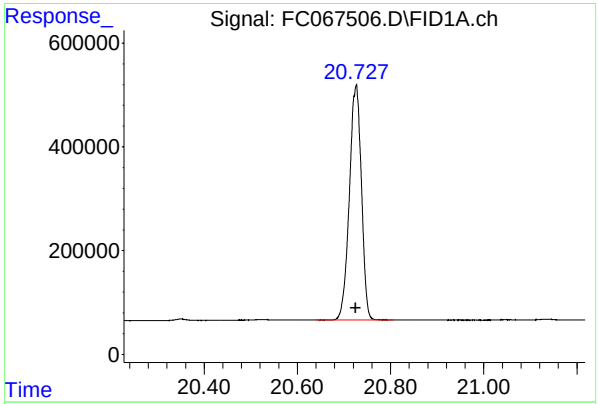
#19 n-Tetratriacontane (C34)

R.T.: 19.263 min
Delta R.T.: 0.000 min
Response: 9619727
Conc: 96.45 ug/ml



#20 n-Hexatriacontane (C36)

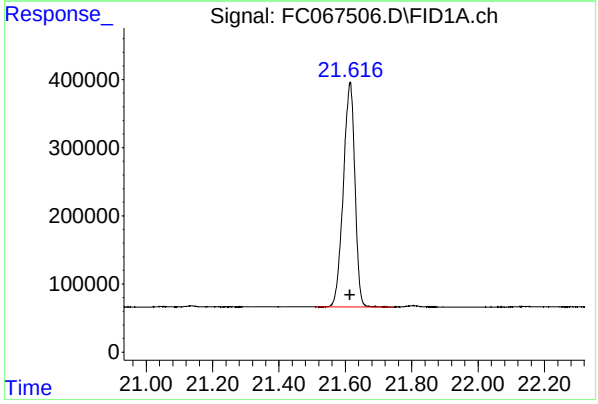
R.T.: 20.002 min
Delta R.T.: 0.000 min
Response: 8494635
Conc: 97.26 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.726 min
Delta R.T.: 0.000 min
Response: 8112623
Conc: 97.30 ug/ml

Instrument :
FID_C
ClientSampleId :
100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 21.614 min
Delta R.T.: 0.000 min
Response: 7992636
Conc: 97.52 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067506.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 15:12
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 102324.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	3.278	3.245	3.345	BB	1482982	12920314	89.76%	5.044%
2	4.343	4.275	4.414	BB	1378444	13085907	90.91%	5.108%
3	5.922	5.852	6.014	BB	1478546	14394132	100.00%	5.619%
4	6.360	6.300	6.427	BB	1268307	13016771	90.43%	5.081%
5	6.979	6.924	7.094	BV	1345672	13836866	96.13%	5.402%
6	8.152	8.077	8.224	BB	1158926	12659193	87.95%	4.942%
7	9.751	9.705	9.842	BB	1114390	12808774	88.99%	5.000%
8	11.193	11.149	11.265	BV	1059950	12738874	88.50%	4.973%
9	11.506	11.437	11.570	BB	1165644	14037783	97.52%	5.480%
10	12.499	12.434	12.565	BB	956464	12105735	84.10%	4.726%
11	12.941	12.872	13.005	BB	861029	10490435	72.88%	4.095%
12	13.110	13.005	13.180	BB	919632	11868997	82.46%	4.633%
13	13.695	13.630	13.759	BB	900624	11751176	81.64%	4.587%
14	14.797	14.717	14.872	BB	888415	11637443	80.85%	4.543%
15	15.816	15.625	15.892	BB	863938	11410589	79.27%	4.454%
16	16.765	16.665	16.867	BB	761325	11146972	77.44%	4.352%
17	17.651	17.592	17.727	BB	765890	11224678	77.98%	4.382%
18	18.483	18.404	18.552	BB	712666	10806351	75.07%	4.219%
19	19.263	19.187	19.330	BB	619243	9619727	66.83%	3.755%
20	20.002	19.937	20.090	BB	565569	8494635	59.01%	3.316%
21	20.726	20.640	20.805	BB	451489	8112623	56.36%	3.167%
22	21.614	21.512	21.744	BB	329592	7992636	55.53%	3.120%
			Sum of corrected areas:			256160611		

Aliphatic EPH 102324.M Wed Oct 23 18:20:49 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067507.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 15:48
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 23 17:21:14 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:19:01 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	ortho-Terphenyl (SURR)	11.500	7186867	50.330 ug/ml
Spiked Amount	50.000		Recovery =	100.66%
12) S	1-chlorooctadecane (S...	12.937	5350584	50.403 ug/ml
Spiked Amount	50.000		Recovery =	100.81%
	Target Compounds			
1) T	n-Nonane (C9)	3.275	6596270	50.122 ug/ml
2) T	n-Decane (C10)	4.340	6686022	50.181 ug/ml
3) T	A~Naphthalene (C11.7)	5.918	7350672	50.344 ug/ml
4) T	n-Dodecane (C12)	6.356	6650893	50.202 ug/ml
5) T	A~2-methylnaphthalene...	6.974	7049073	50.402 ug/ml
6) T	n-Tetradecane (C14)	8.149	6466785	50.292 ug/ml
7) T	n-Hexadecane (C16)	9.747	6523849	50.293 ug/ml
8) T	n-Octadecane (C18)	11.188	6511575	50.329 ug/ml
10) T	n-Eicosane (C20)	12.495	6199533	50.355 ug/ml
11) T	n-Heneicosane (C21)	13.105	6071593	50.372 ug/ml
13) T	n-Docosane (C22)	13.691	6022373	50.399 ug/ml
14) T	n-Tetracosane (C24)	14.793	5967985	50.435 ug/ml
15) T	n-Hexacosane (C26)	15.812	5860085	50.441 ug/ml
16) T	n-Octacosane (C28)	16.761	5758647	50.429 ug/ml
17) T	n-Tricontane (C30)	17.647	5830292	50.290 ug/ml
18) T	n-Dotriacontane (C32)	18.477	5634053	50.168 ug/ml
19) T	n-Tetratriacontane (C34)	19.260	5024380	50.251 ug/ml
20) T	n-Hexatriacontane (C36)	19.998	4430530	50.483 ug/ml
21) T	n-Octatriacontane (C38)	20.720	4230730	50.491 ug/ml
22) T	n-Tetracontane (C40)	21.606	4166615	50.557 ug/ml

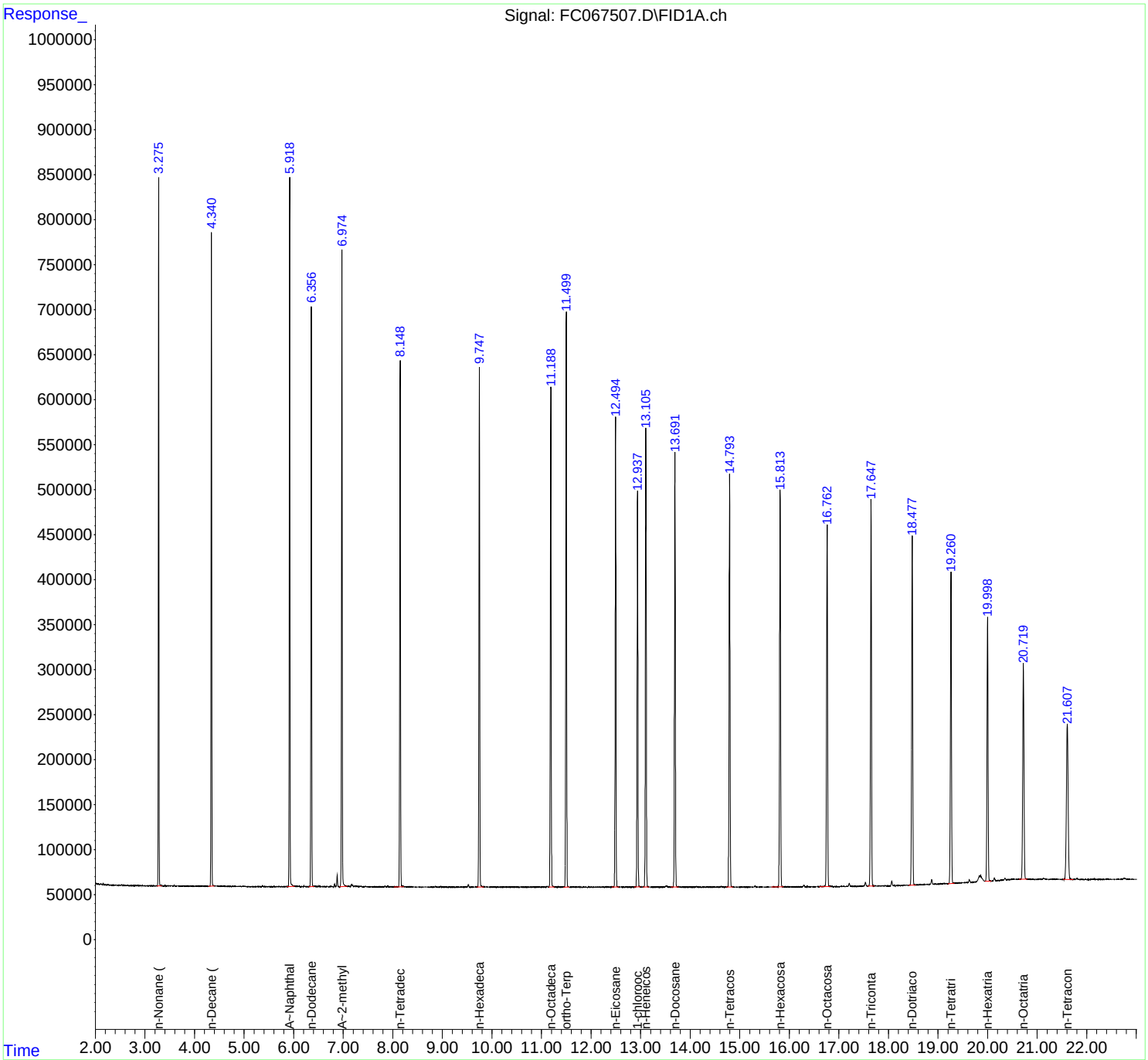
(f)=RT Delta > 1/2 Window (m)=manual int.

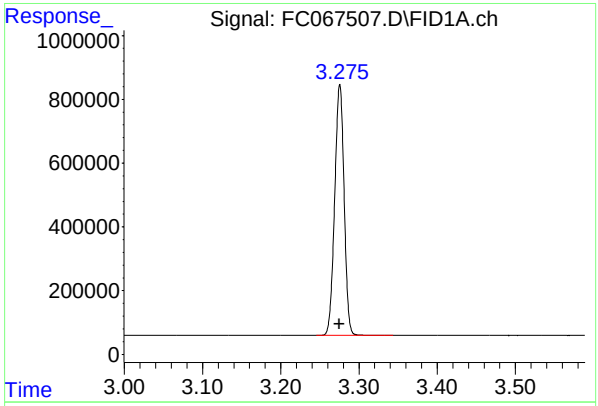
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067507.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 15:48
Operator : YP/AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Oct 23 17:21:14 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:19:01 2024
Response via : Initial Calibration
Integrator: ChemStation

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

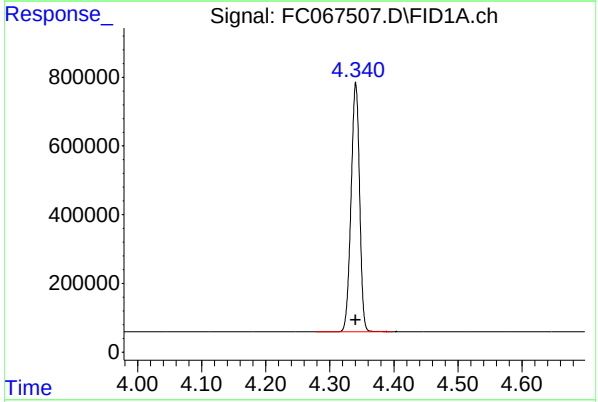




#1 n-Nonane (C9)

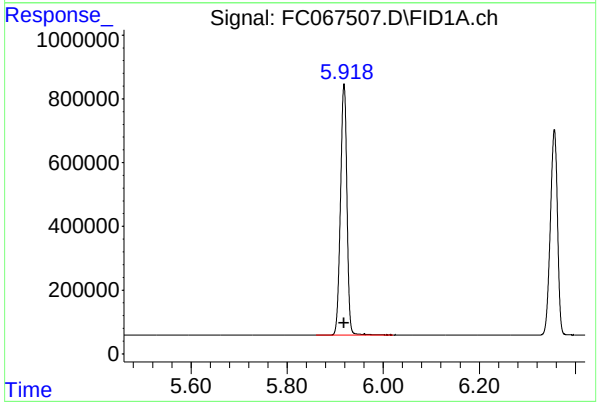
R.T.: 3.275 min
Delta R.T.: 0.000 min
Response: 6596270
Conc: 50.12 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



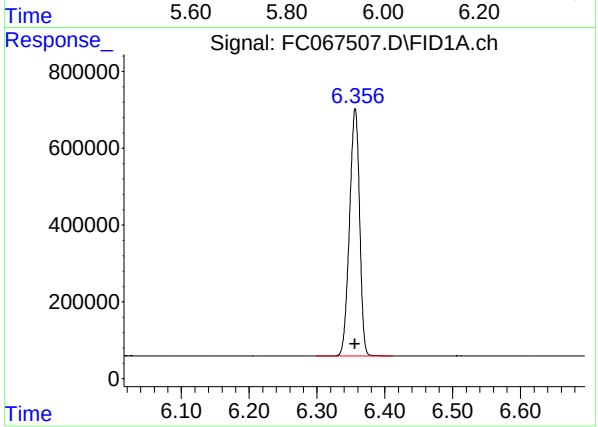
#2 n-Decane (C10)

R.T.: 4.340 min
Delta R.T.: 0.000 min
Response: 6686022
Conc: 50.18 ug/ml



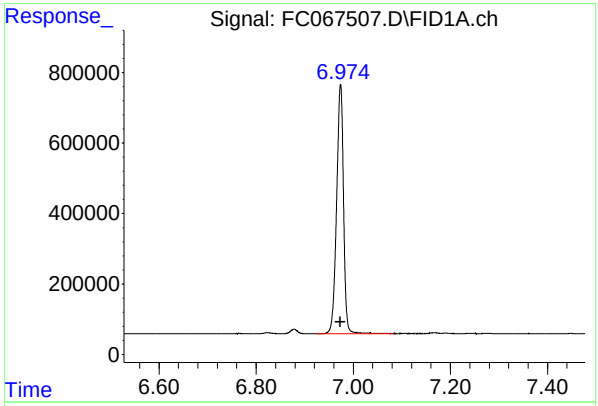
#3 A~Naphthalene (C11.7)

R.T.: 5.918 min
Delta R.T.: 0.000 min
Response: 7350672
Conc: 50.34 ug/ml



#4 n-Dodecane (C12)

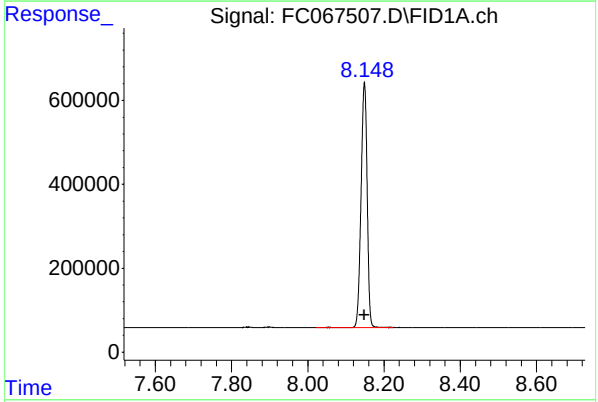
R.T.: 6.356 min
Delta R.T.: 0.000 min
Response: 6650893
Conc: 50.20 ug/ml



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

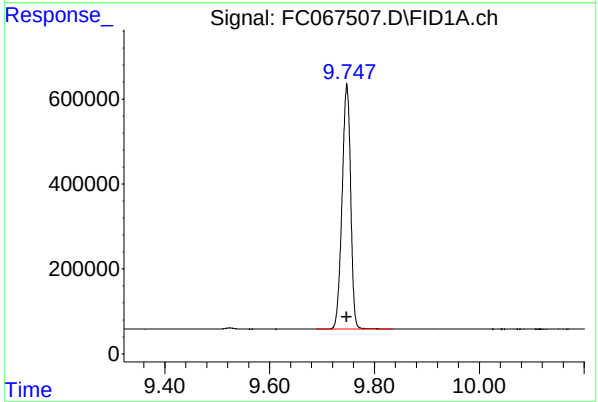
R.T.: 6.974 min
Delta R.T.: 0.000 min
Response: 7049073
Conc: 50.40 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



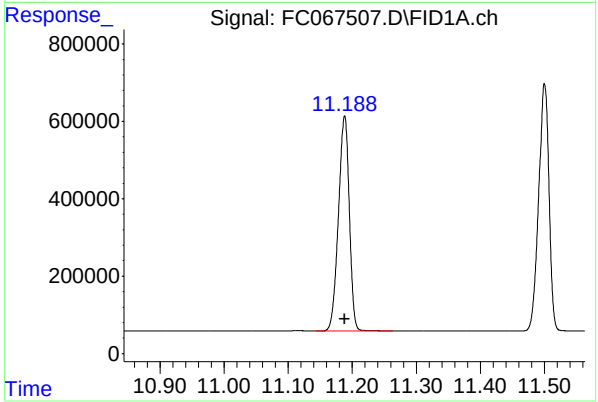
#6 n-Tetradecane (C14)

R.T.: 8.149 min
Delta R.T.: 0.000 min
Response: 6466785
Conc: 50.29 ug/ml



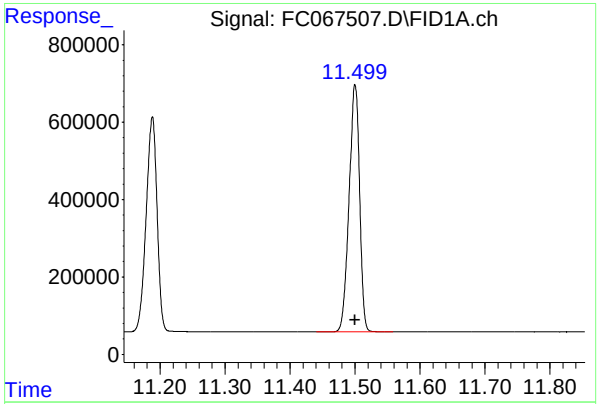
#7 n-Hexadecane (C16)

R.T.: 9.747 min
Delta R.T.: 0.000 min
Response: 6523849
Conc: 50.29 ug/ml



#8 n-Octadecane (C18)

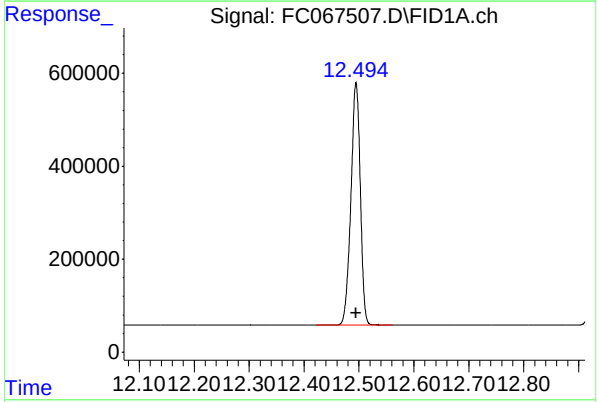
R.T.: 11.188 min
Delta R.T.: 0.000 min
Response: 6511575
Conc: 50.33 ug/ml



#9 ortho-Terphenyl (SURR)

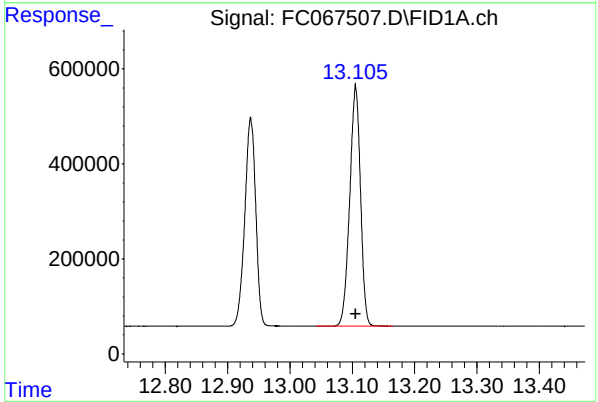
R.T.: 11.500 min
Delta R.T.: 0.000 min
Response: 7186867
Conc: 50.33 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



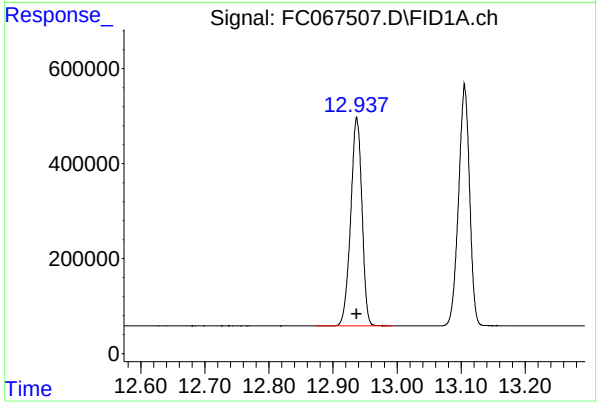
#10 n-Eicosane (C20)

R.T.: 12.495 min
Delta R.T.: 0.000 min
Response: 6199533
Conc: 50.36 ug/ml



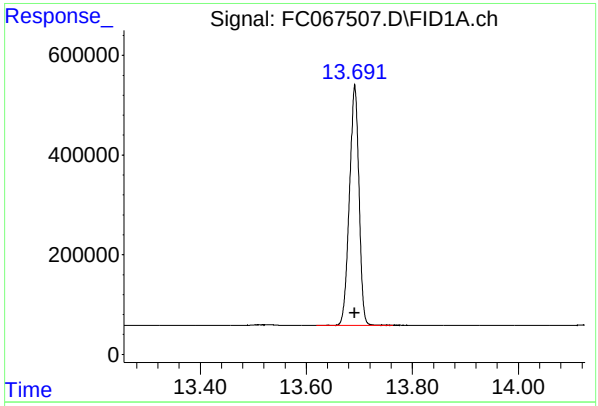
#11 n-Heneicosane (C21)

R.T.: 13.105 min
Delta R.T.: 0.000 min
Response: 6071593
Conc: 50.37 ug/ml



#12 1-chlorooctadecane (SURR)

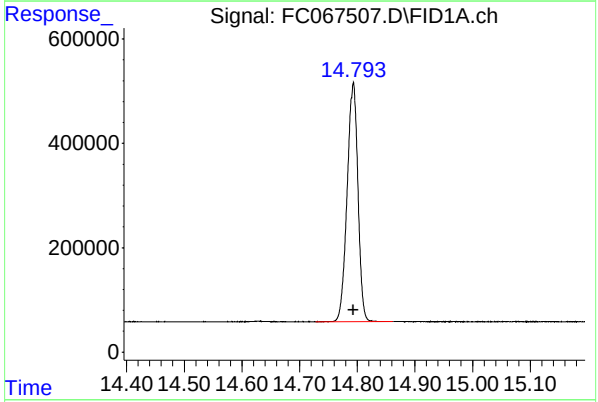
R.T.: 12.937 min
Delta R.T.: 0.000 min
Response: 5350584
Conc: 50.40 ug/ml



#13 n-Docosane (C22)

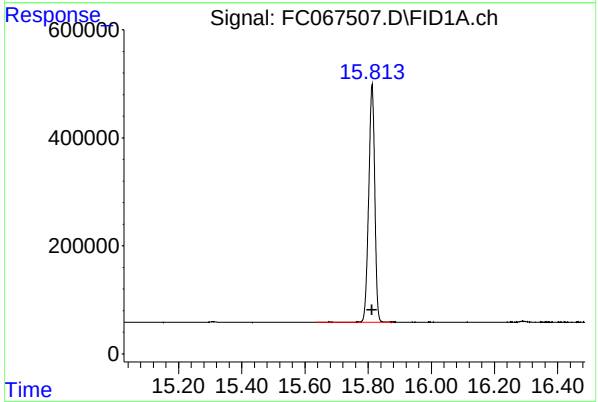
R.T.: 13.691 min
Delta R.T.: 0.000 min
Response: 6022373
Conc: 50.40 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



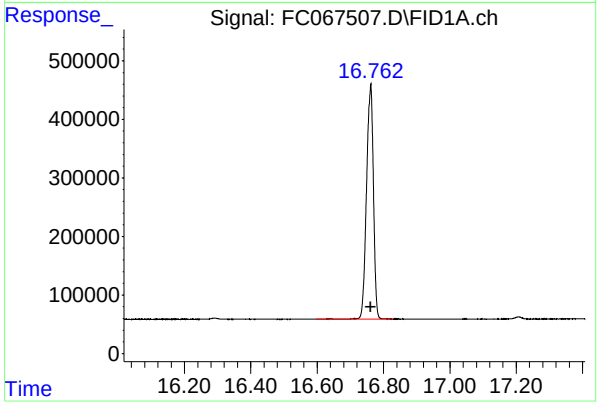
#14 n-Tetracosane (C24)

R.T.: 14.793 min
Delta R.T.: 0.000 min
Response: 5967985
Conc: 50.43 ug/ml



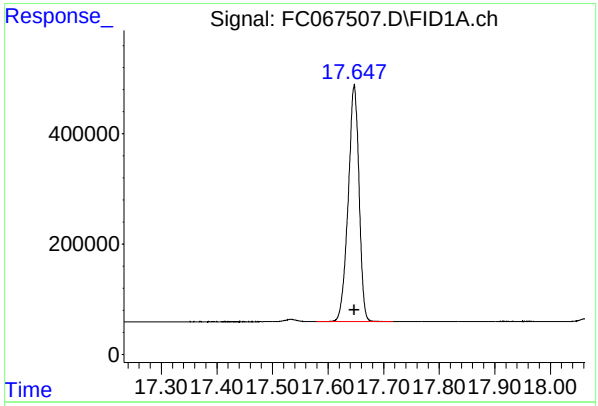
#15 n-Hexacosane (C26)

R.T.: 15.812 min
Delta R.T.: 0.000 min
Response: 5860085
Conc: 50.44 ug/ml



#16 n-Octacosane (C28)

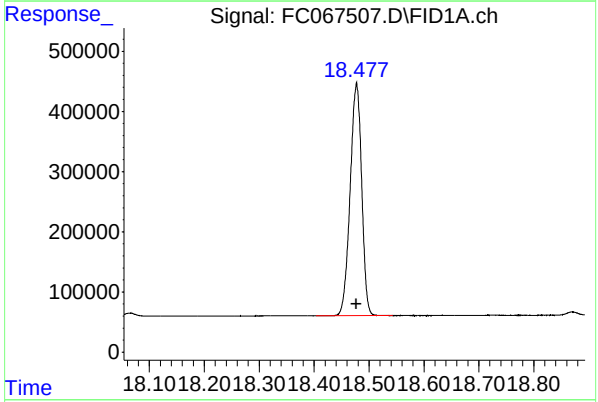
R.T.: 16.761 min
Delta R.T.: 0.000 min
Response: 5758647
Conc: 50.43 ug/ml



#17 n-Tricontane (C30)

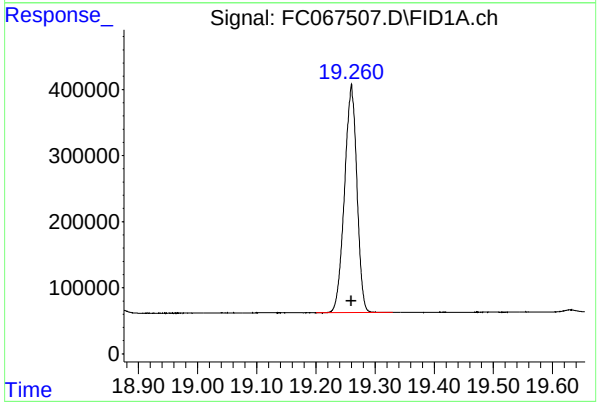
R.T.: 17.647 min
Delta R.T.: 0.000 min
Response: 5830292
Conc: 50.29 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



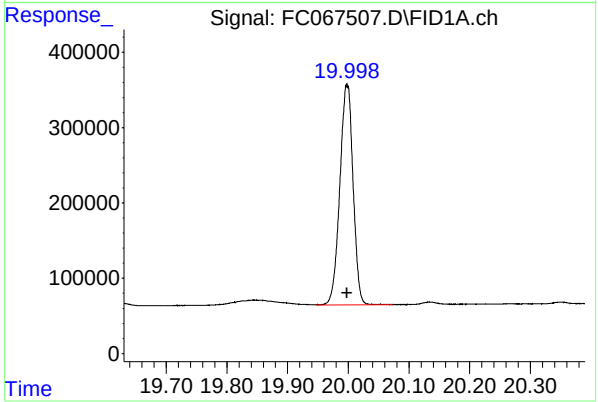
#18 n-Dotriacontane (C32)

R.T.: 18.477 min
Delta R.T.: 0.000 min
Response: 5634053
Conc: 50.17 ug/ml



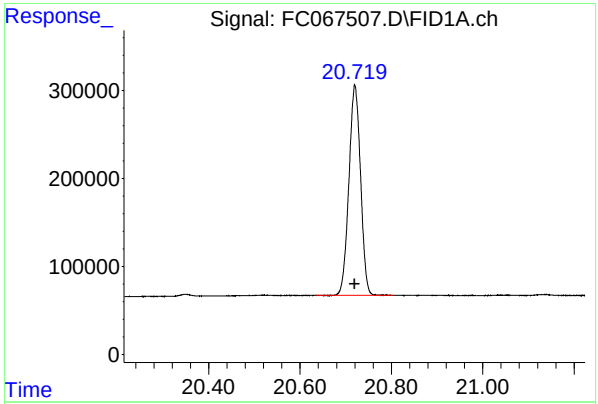
#19 n-Tetratriacontane (C34)

R.T.: 19.260 min
Delta R.T.: 0.000 min
Response: 5024380
Conc: 50.25 ug/ml



#20 n-Hexatriacontane (C36)

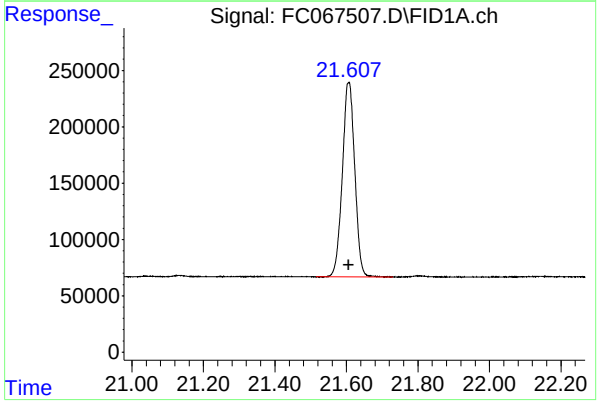
R.T.: 19.998 min
Delta R.T.: 0.000 min
Response: 4430530
Conc: 50.48 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.720 min
Delta R.T.: 0.000 min
Response: 4230730
Conc: 50.49 ug/ml

Instrument :
FID_C
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 21.606 min
Delta R.T.: 0.000 min
Response: 4166615
Conc: 50.56 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067507.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 15:48
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 102324.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	3.343	BB	787475	6596270	89.74%	5.014%
2	4.340	4.278	4.398	BB	725048	6686022	90.96%	5.082%
3	5.918	5.860	6.020	BB	788107	7350672	100.00%	5.587%
4	6.356	6.298	6.412	BB	647440	6650893	90.48%	5.055%
5	6.974	6.923	7.082	BB	708667	7049073	95.90%	5.358%
6	8.149	8.022	8.223	BB	584678	6466785	87.98%	4.915%
7	9.747	9.688	9.835	BB	574143	6523849	88.75%	4.958%
8	11.188	11.143	11.263	BB	557552	6511575	88.58%	4.949%
9	11.500	11.440	11.558	BB	638489	7186867	97.77%	5.462%
10	12.495	12.422	12.562	BB	521546	6199533	84.34%	4.712%
11	12.937	12.873	12.993	BB	438883	5350584	72.79%	4.067%
12	13.105	13.042	13.165	BB	507791	6071593	82.60%	4.615%
13	13.691	13.618	13.763	BB	482823	6022373	81.93%	4.577%
14	14.793	14.728	14.862	BB	460497	5967985	81.19%	4.536%
15	15.812	15.635	15.878	BB	438034	5860085	79.72%	4.454%
16	16.761	16.597	16.828	BB	395517	5758647	78.34%	4.377%
17	17.647	17.578	17.717	BB	427620	5830292	79.32%	4.431%
18	18.477	18.403	18.543	BB	385150	5634053	76.65%	4.282%
19	19.260	19.200	19.330	BB	345032	5024380	68.35%	3.819%
20	19.998	19.947	20.073	VB	291698	4430530	60.27%	3.367%
21	20.720	20.635	20.803	BB	239127	4230730	57.56%	3.216%
22	21.606	21.515	21.730	BB	172709	4166615	56.68%	3.167%

Sum of corrected areas: 131569405

Aliphatic EPH 102324.M Wed Oct 23 18:21:16 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067508.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 16:25
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 23 17:17:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:16:59 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	2885453	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
12)	S 1-chlorooctadecane (S...	12.935	2131037	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
	Target Compounds			
1)	T n-Nonane (C9)	3.275	2673666	20.000 ug/ml
2)	T n-Decane (C10)	4.339	2702691	20.000 ug/ml
3)	T A~Naphthalene (C11.7)	5.916	2941492	20.000 ug/ml
4)	T n-Dodecane (C12)	6.354	2685213	20.000 ug/ml
5)	T A~2-methylnaphthalene...	6.971	2804469	20.000 ug/ml
6)	T n-Tetradecane (C14)	8.146	2596600	20.000 ug/ml
7)	T n-Hexadecane (C16)	9.745	2611645	20.000 ug/ml
8)	T n-Octadecane (C18)	11.185	2610385	20.000 ug/ml
10)	T n-Eicosane (C20)	12.492	2486010	20.000 ug/ml
11)	T n-Heneicosane (C21)	13.103	2429615	20.000 ug/ml
13)	T n-Docosane (C22)	13.688	2410406	20.000 ug/ml
14)	T n-Tetracosane (C24)	14.790	2385181	20.000 ug/ml
15)	T n-Hexacosane (C26)	15.809	2344463	20.000 ug/ml
16)	T n-Octacosane (C28)	16.757	2318777	20.000 ug/ml
17)	T n-Tricontane (C30)	17.644	2378909	20.000 ug/ml
18)	T n-Dotriacontane (C32)	18.475	2323289	20.000 ug/ml
19)	T n-Tetratriacontane (C34)	19.258	2065430	20.000 ug/ml
20)	T n-Hexatriacontane (C36)	19.995	1794670	20.000 ug/ml
21)	T n-Octatriacontane (C38)	20.718	1712685	20.000 ug/ml
22)	T n-Tetracontane (C40)	21.604	1679680	20.000 ug/ml

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

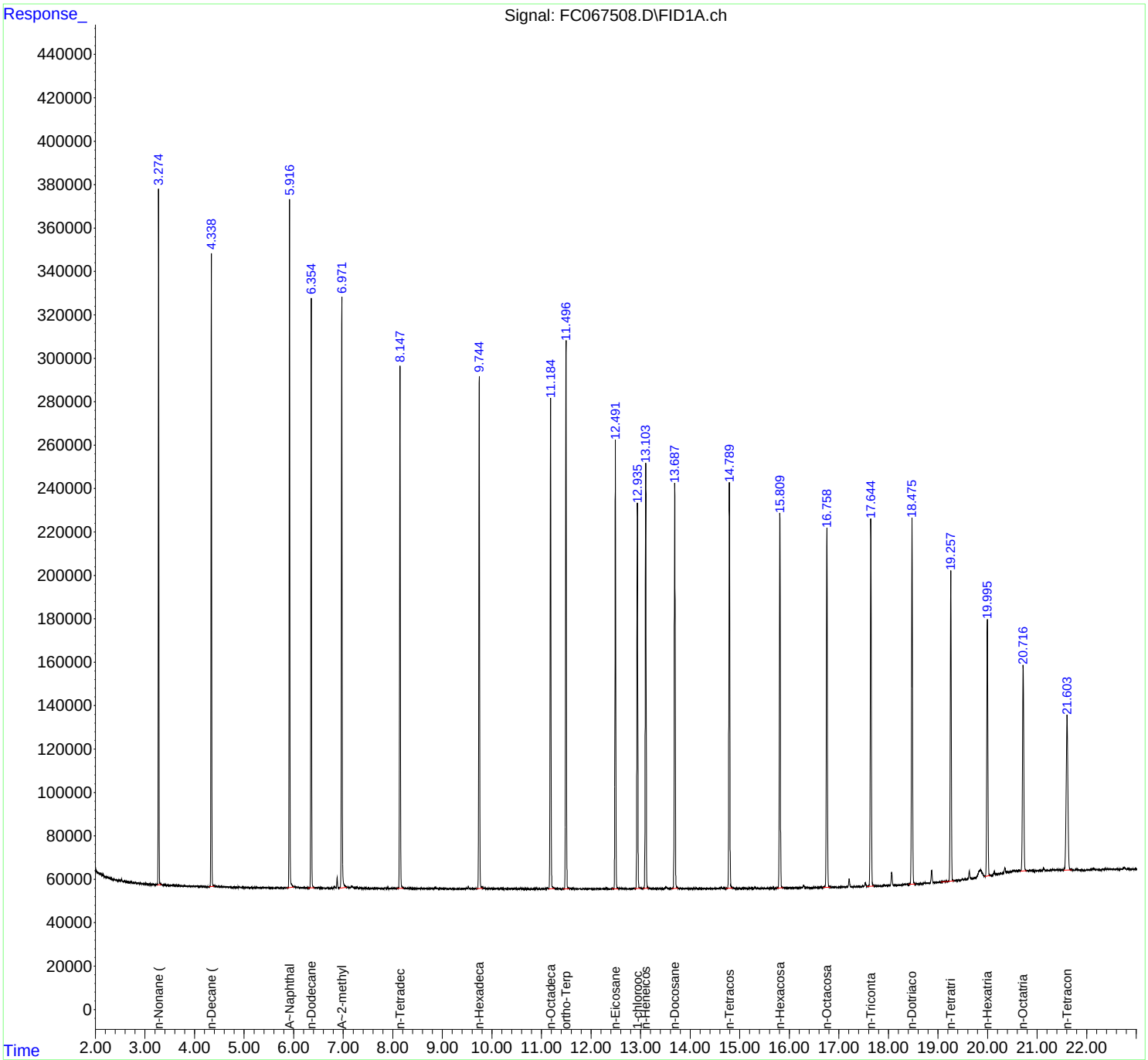
Quantitation Report (QT Reviewed)

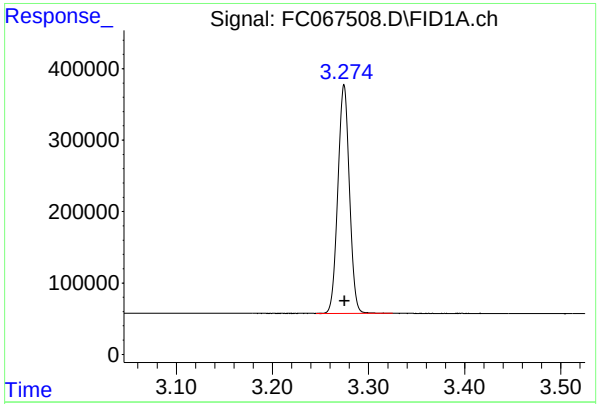
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067508.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 16:25
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Oct 23 17:17:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:16:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

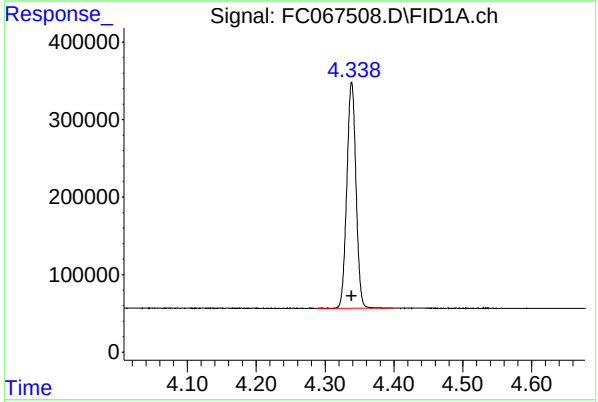




#1 n-Nonane (C9)

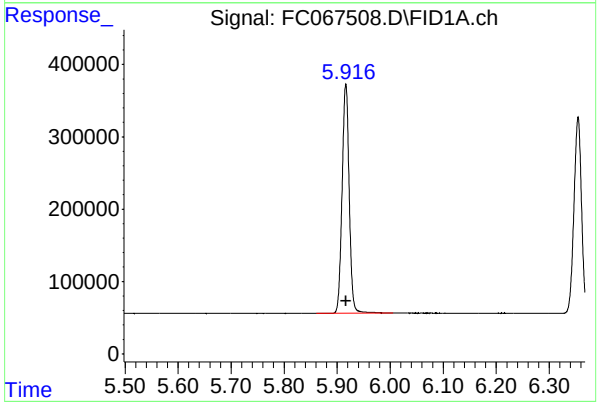
R.T.: 3.275 min
Delta R.T.: 0.000 min
Response: 2673666
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



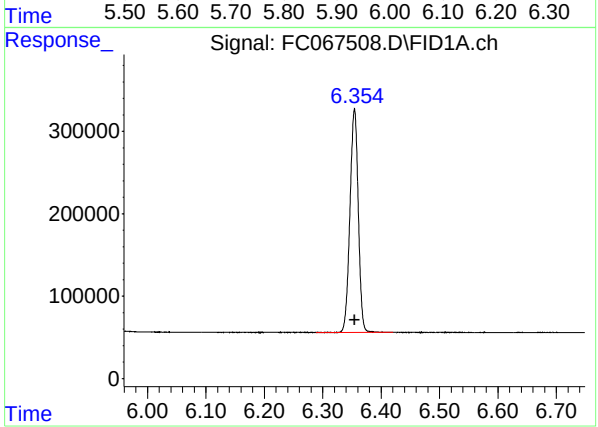
#2 n-Decane (C10)

R.T.: 4.339 min
Delta R.T.: 0.000 min
Response: 2702691
Conc: 20.00 ug/ml



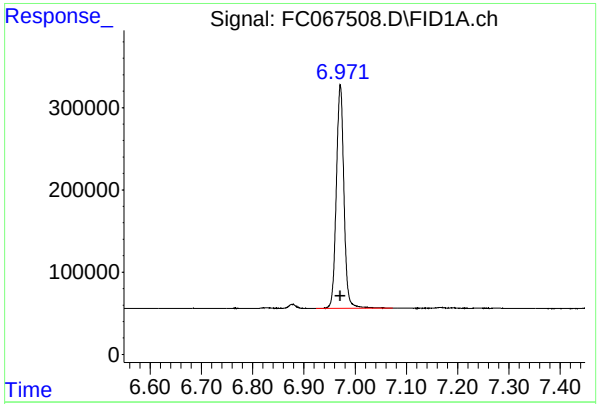
#3 A~Naphthalene (C11.7)

R.T.: 5.916 min
Delta R.T.: 0.000 min
Response: 2941492
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

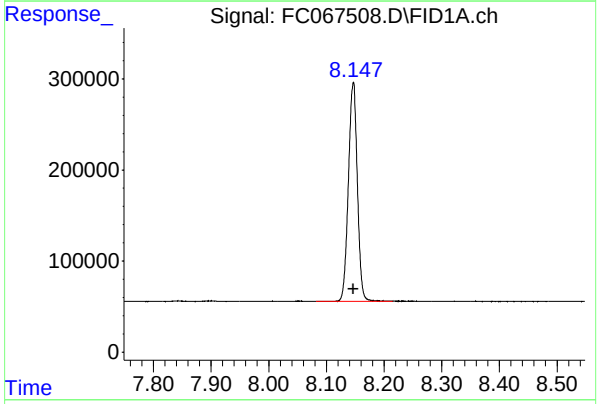
R.T.: 6.354 min
Delta R.T.: 0.000 min
Response: 2685213
Conc: 20.00 ug/ml



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

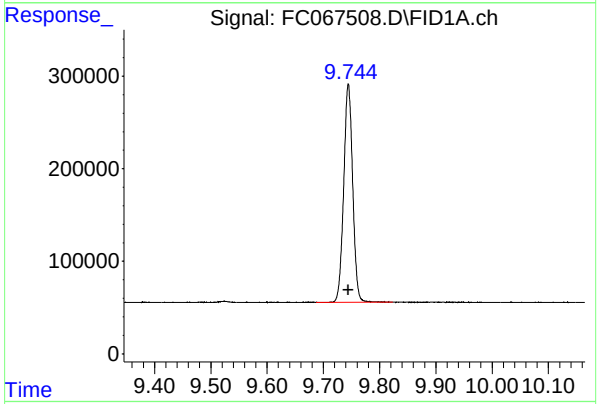
R.T.: 6.971 min
Delta R.T.: 0.000 min
Response: 2804469
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



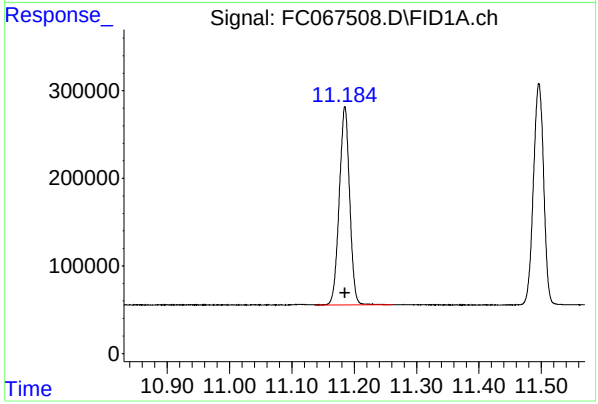
#6 n-Tetradecane (C14)

R.T.: 8.146 min
Delta R.T.: 0.000 min
Response: 2596600
Conc: 20.00 ug/ml



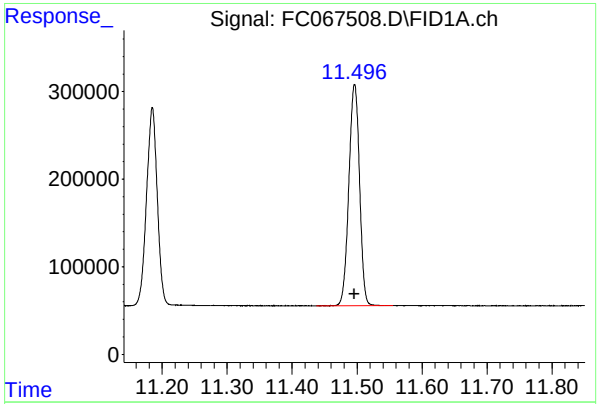
#7 n-Hexadecane (C16)

R.T.: 9.745 min
Delta R.T.: 0.000 min
Response: 2611645
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

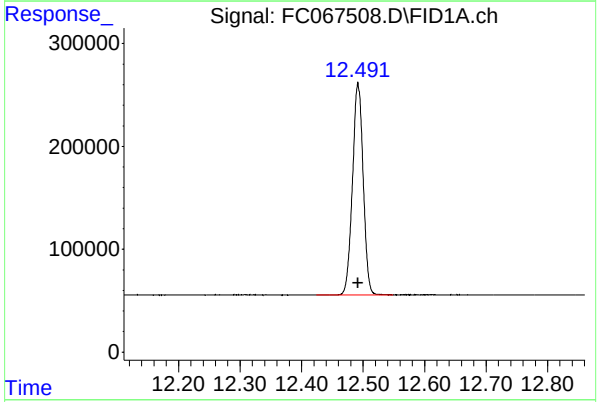
R.T.: 11.185 min
Delta R.T.: 0.000 min
Response: 2610385
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

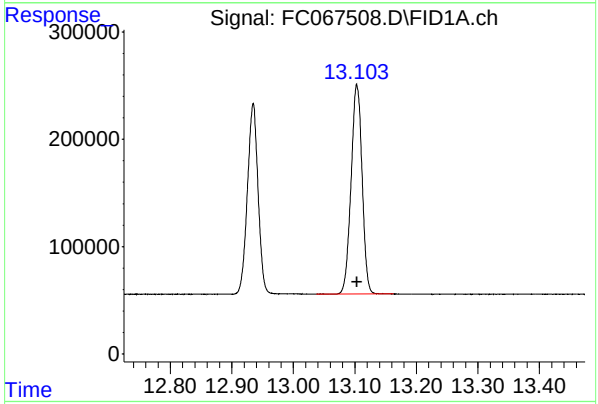
R.T.: 11.496 min
Delta R.T.: 0.000 min
Response: 2885453
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



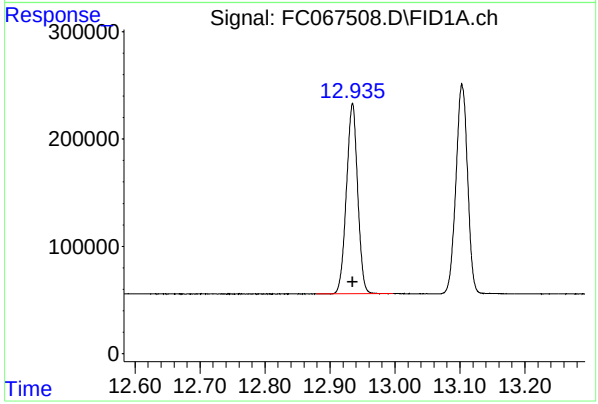
#10 n-Eicosane (C20)

R.T.: 12.492 min
Delta R.T.: 0.000 min
Response: 2486010
Conc: 20.00 ug/ml



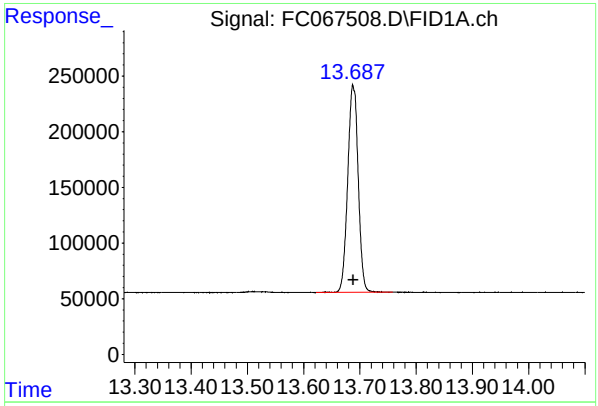
#11 n-Heneicosane (C21)

R.T.: 13.103 min
Delta R.T.: 0.000 min
Response: 2429615
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

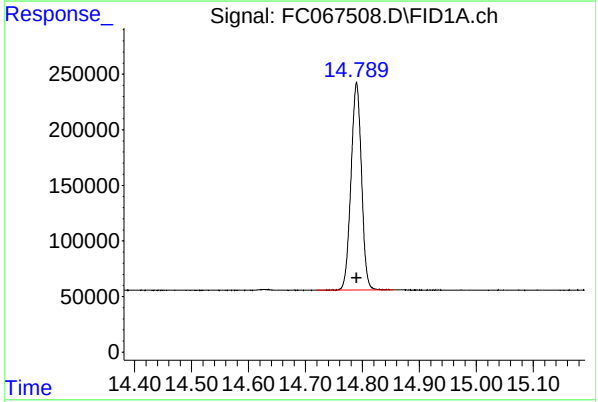
R.T.: 12.935 min
Delta R.T.: 0.000 min
Response: 2131037
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

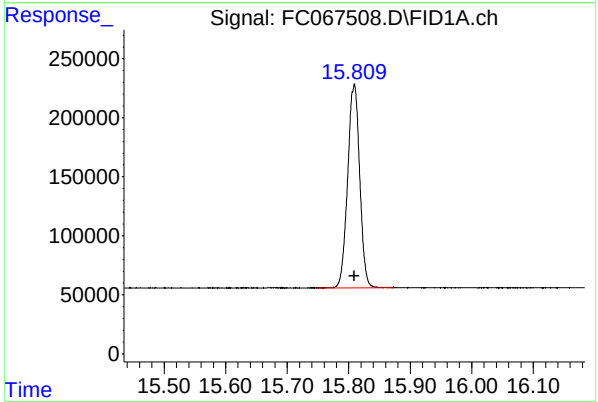
R.T.: 13.688 min
Delta R.T.: 0.000 min
Response: 2410406
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



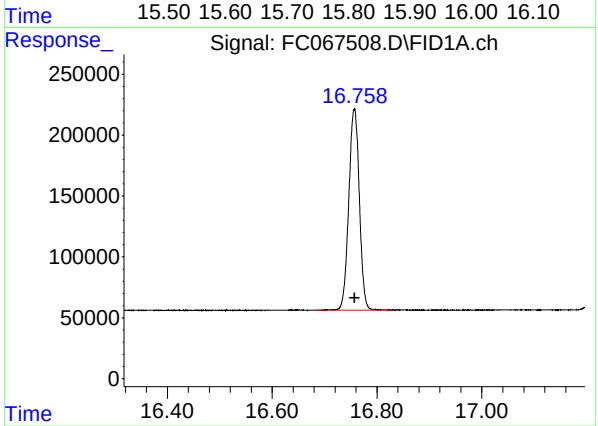
#14 n-Tetracosane (C24)

R.T.: 14.790 min
Delta R.T.: 0.000 min
Response: 2385181
Conc: 20.00 ug/ml



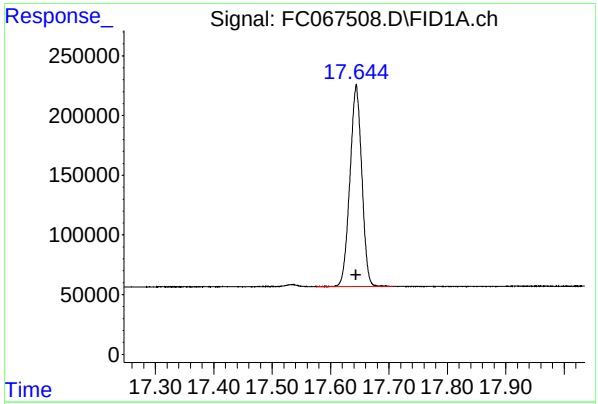
#15 n-Hexacosane (C26)

R.T.: 15.809 min
Delta R.T.: 0.000 min
Response: 2344463
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

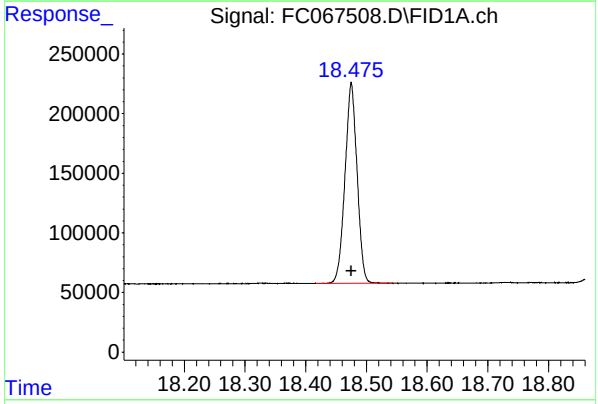
R.T.: 16.757 min
Delta R.T.: 0.000 min
Response: 2318777
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

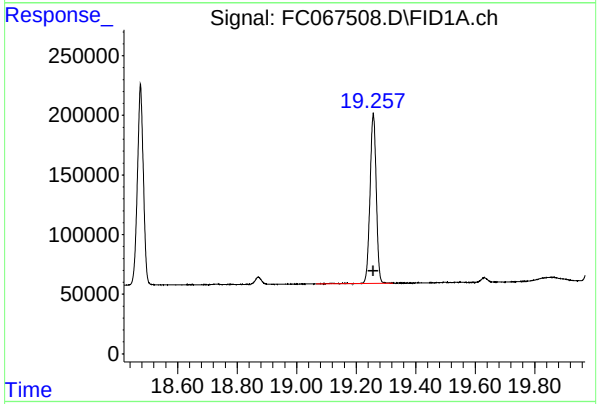
R.T.: 17.644 min
Delta R.T.: 0.000 min
Response: 2378909
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



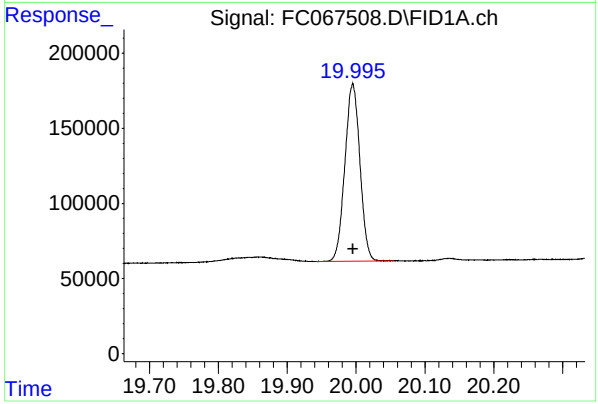
#18 n-Dotriacontane (C32)

R.T.: 18.475 min
Delta R.T.: 0.000 min
Response: 2323289
Conc: 20.00 ug/ml



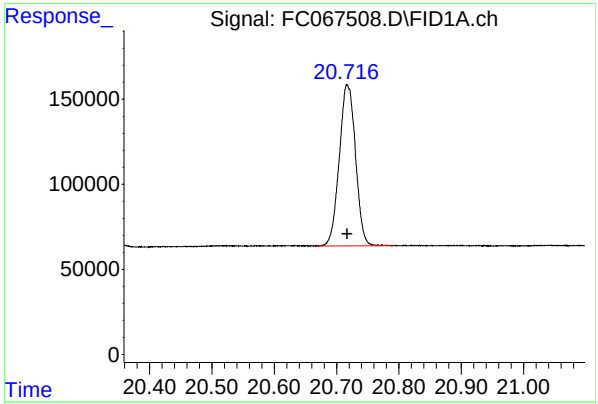
#19 n-Tetratriacontane (C34)

R.T.: 19.258 min
Delta R.T.: 0.000 min
Response: 2065430
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

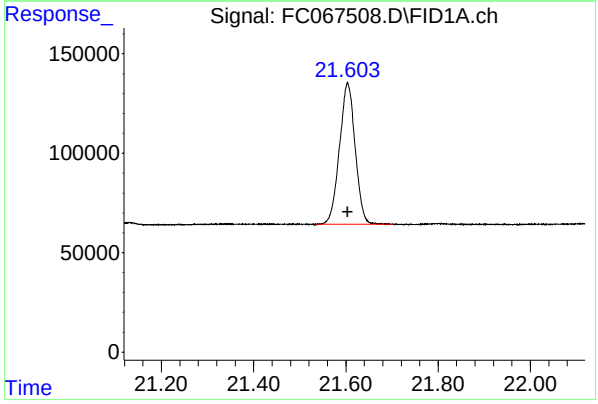
R.T.: 19.995 min
Delta R.T.: 0.000 min
Response: 1794670
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.718 min
Delta R.T.: 0.000 min
Response: 1712685
Conc: 20.00 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 21.604 min
Delta R.T.: 0.000 min
Response: 1679680
Conc: 20.00 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067508.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 16:25
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 102324.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	321230	2673666	90.89%	5.047%
2	4.339	4.287	4.399	BB	291890	2702691	91.88%	5.102%
3	5.916	5.860	6.005	BB	318035	2941492	100.00%	5.553%
4	6.354	6.289	6.420	BB	270407	2685213	91.29%	5.069%
5	6.971	6.924	7.074	BB	271627	2804469	95.34%	5.294%
6	8.146	8.082	8.215	BB	241446	2596600	88.27%	4.902%
7	9.745	9.687	9.824	BB	236243	2611645	88.79%	4.930%
8	11.185	11.139	11.262	BB	226739	2610385	88.74%	4.928%
9	11.496	11.437	11.555	BB	253146	2885453	98.09%	5.447%
10	12.492	12.424	12.549	BB	205716	2486010	84.52%	4.693%
11	12.935	12.879	12.997	BB	178352	2131037	72.45%	4.023%
12	13.103	13.037	13.162	BB	194305	2429615	82.60%	4.587%
13	13.688	13.622	13.759	BB	184039	2410406	81.95%	4.550%
14	14.790	14.719	14.854	BB	186782	2385181	81.09%	4.503%
15	15.809	15.747	15.872	BB	171744	2344463	79.70%	4.426%
16	16.757	16.684	16.830	BB	165164	2318777	78.83%	4.377%
17	17.644	17.575	17.707	BB	168160	2378909	80.87%	4.491%
18	18.475	18.417	18.544	BB	168488	2323289	78.98%	4.386%
19	19.258	19.065	19.324	BB	141960	2065430	70.22%	3.899%
20	19.995	19.942	20.054	PB	118336	1794670	61.01%	3.388%
21	20.718	20.667	20.790	BB	94381	1712685	58.23%	3.233%
22	21.604	21.535	21.702	BB	71304	1679680	57.10%	3.171%
			Sum of corrected areas:			52971767		

Aliphatic EPH 102324.M Wed Oct 23 18:21:40 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067509.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 17:02
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 23 17:42:18 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:42:09 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)	11.495	1516253	10.457 ug/ml
Spiked Amount	50.000		Recovery =	20.91%
12) S	1-chlorooctadecane (S...	12.934	1104370	10.299 ug/ml
Spiked Amount	50.000		Recovery =	20.60%
	Target Compounds			
1) T	n-Nonane (C9)	3.274	1392325	10.429 ug/ml
2) T	n-Decane (C10)	4.338	1408883	10.425 ug/ml
3) T	A~Naphthalene (C11.7)	5.916	1523229	10.321 ug/ml
4) T	n-Dodecane (C12)	6.353	1397121	10.404 ug/ml
5) T	A~2-methylnaphthalene...	6.971	1445653	10.250 ug/ml
6) T	n-Tetradecane (C14)	8.146	1348794	10.363 ug/ml
7) T	n-Hexadecane (C16)	9.744	1353251	10.321 ug/ml
8) T	n-Octadecane (C18)	11.184	1362847	10.395 ug/ml
10) T	n-Eicosane (C20)	12.491	1299257	10.409 ug/ml
11) T	n-Heneicosane (C21)	13.102	1272574	10.413 ug/ml
13) T	n-Docosane (C22)	13.687	1260218	10.404 ug/ml
14) T	n-Tetracosane (C24)	14.789	1251574	10.427 ug/ml
15) T	n-Hexacosane (C26)	15.808	1226594	10.413 ug/ml
16) T	n-Octacosane (C28)	16.756	1213286	10.461 ug/ml
17) T	n-Tricontane (C30)	17.643	1249088	10.570 ug/ml
18) T	n-Dotriacontane (C32)	18.474	1225099	10.667 ug/ml
19) T	n-Tetratriacontane (C34)	19.257	1087201	10.641 ug/ml
20) T	n-Hexatriacontane (C36)	19.995	941330	10.535 ug/ml
21) T	n-Octatriacontane (C38)	20.719	898154	10.530 ug/ml
22) T	n-Tetracontane (C40)	21.604	882650	10.523 ug/ml

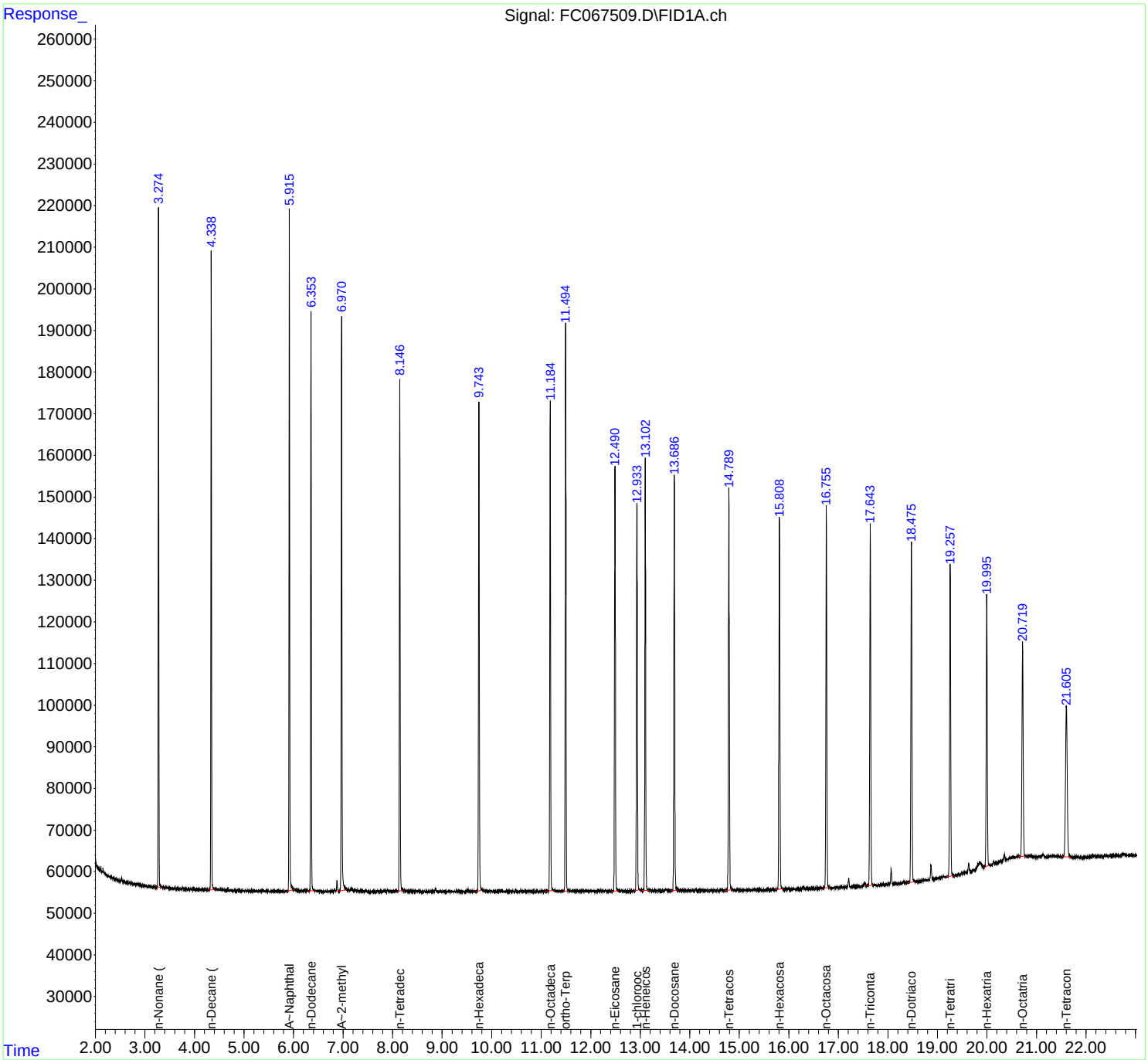
(f)=RT Delta > 1/2 Window (m)=manual int.

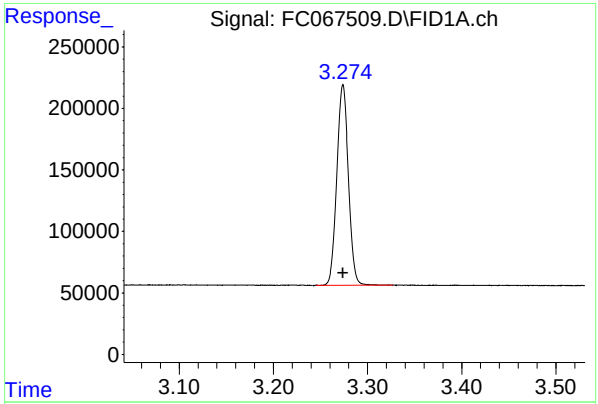
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067509.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 17:02
Operator : YP/AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Integration File: autoint1.e
Quant Time: Oct 23 17:42:18 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:42:09 2024
Response via : Initial Calibration
Integrator: ChemStation

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

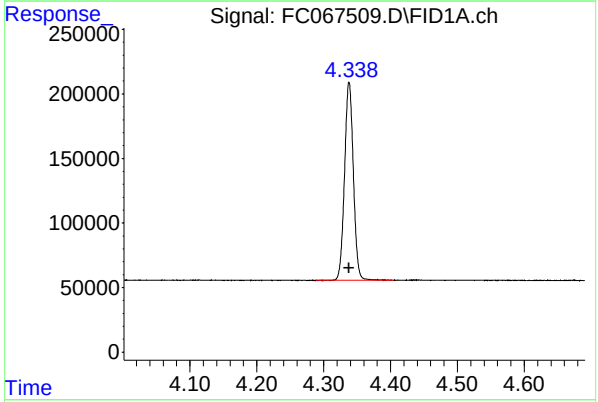




#1 n-Nonane (C9)

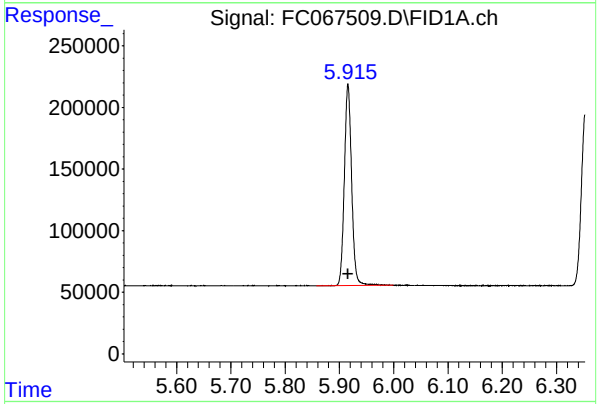
R.T.: 3.274 min
Delta R.T.: 0.000 min
Response: 1392325
Conc: 10.43 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



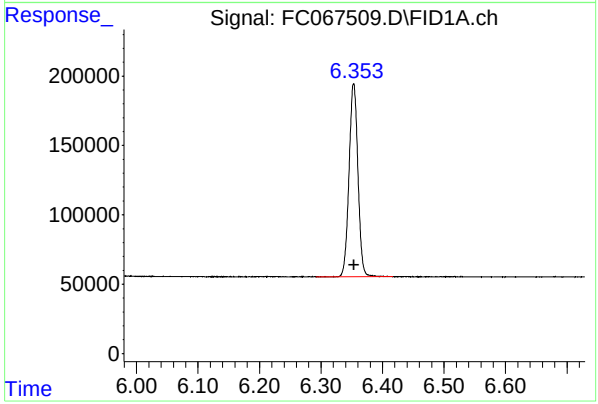
#2 n-Decane (C10)

R.T.: 4.338 min
Delta R.T.: 0.000 min
Response: 1408883
Conc: 10.42 ug/ml



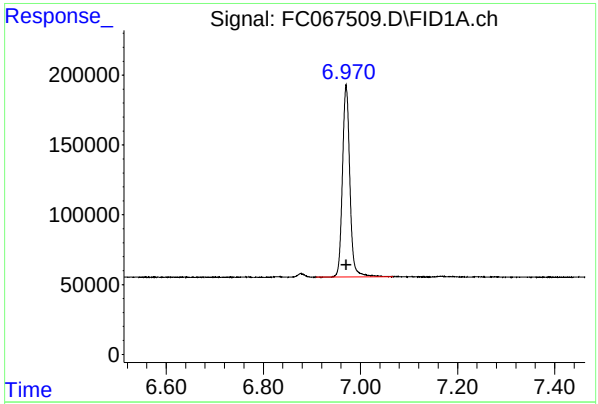
#3 A~Naphthalene (C11.7)

R.T.: 5.916 min
Delta R.T.: 0.000 min
Response: 1523229
Conc: 10.32 ug/ml



#4 n-Dodecane (C12)

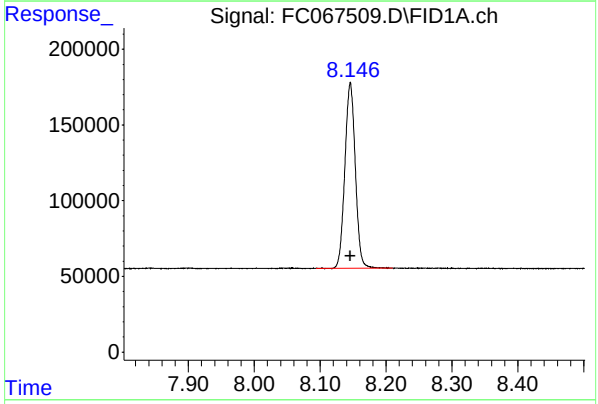
R.T.: 6.353 min
Delta R.T.: 0.000 min
Response: 1397121
Conc: 10.40 ug/ml



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

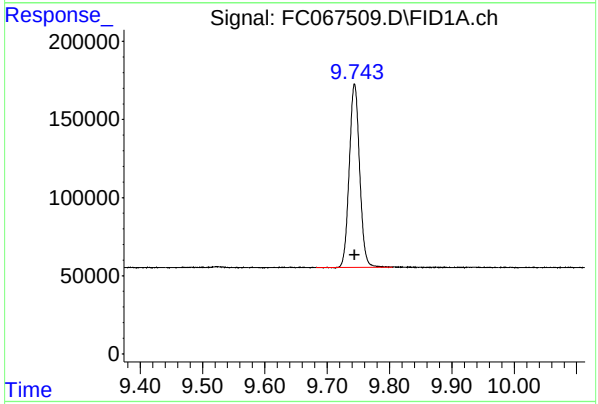
R.T.: 6.971 min
Delta R.T.: 0.000 min
Response: 1445653
Conc: 10.25 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



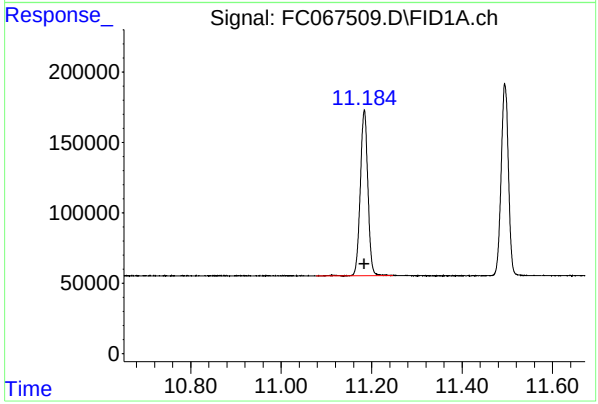
#6 n-Tetradecane (C14)

R.T.: 8.146 min
Delta R.T.: 0.000 min
Response: 1348794
Conc: 10.36 ug/ml



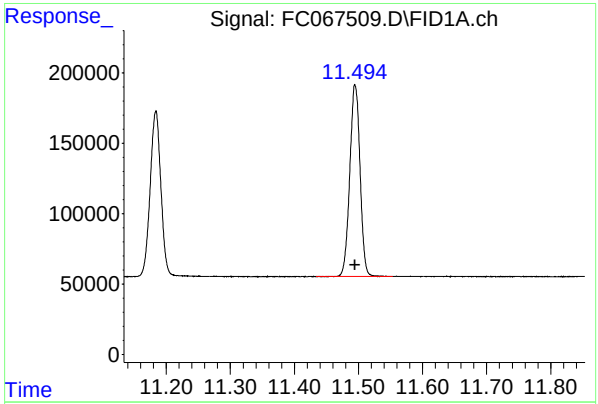
#7 n-Hexadecane (C16)

R.T.: 9.744 min
Delta R.T.: 0.000 min
Response: 1353251
Conc: 10.32 ug/ml



#8 n-Octadecane (C18)

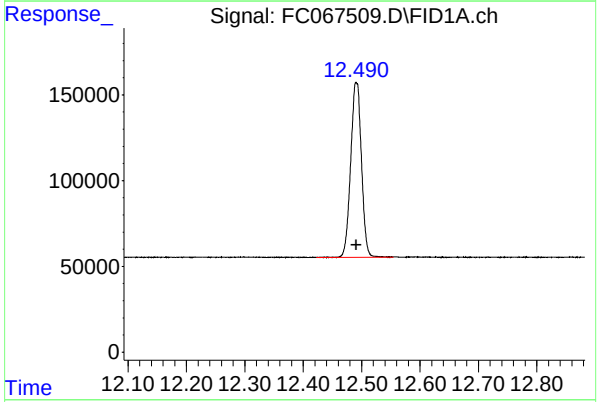
R.T.: 11.184 min
Delta R.T.: 0.000 min
Response: 1362847
Conc: 10.39 ug/ml



#9 ortho-Terphenyl (SURR)

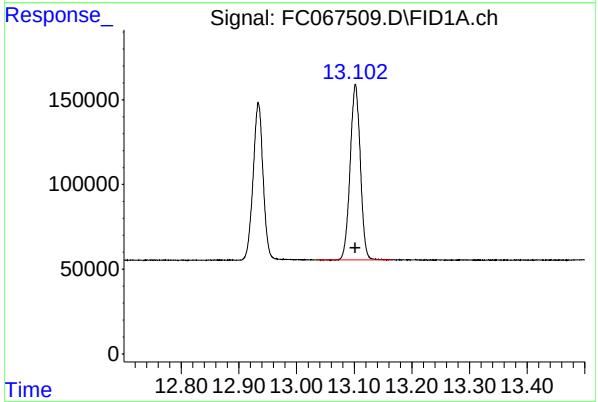
R.T.: 11.495 min
Delta R.T.: 0.000 min
Response: 1516253
Conc: 10.46 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



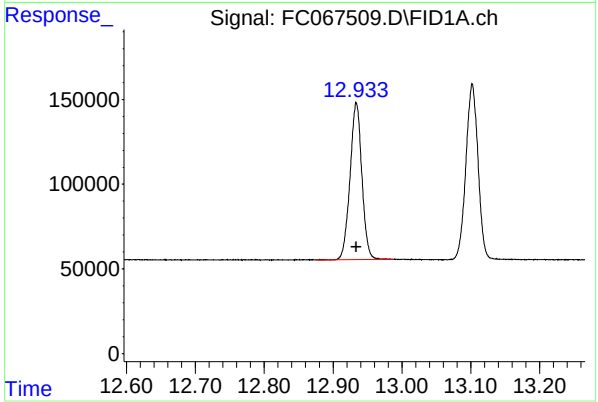
#10 n-Eicosane (C20)

R.T.: 12.491 min
Delta R.T.: 0.000 min
Response: 1299257
Conc: 10.41 ug/ml



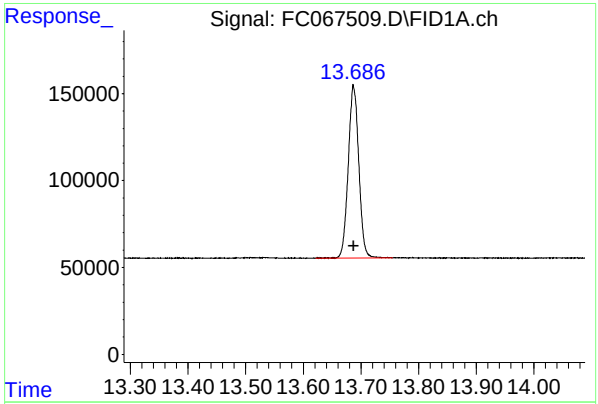
#11 n-Heneicosane (C21)

R.T.: 13.102 min
Delta R.T.: 0.000 min
Response: 1272574
Conc: 10.41 ug/ml



#12 1-chlorooctadecane (SURR)

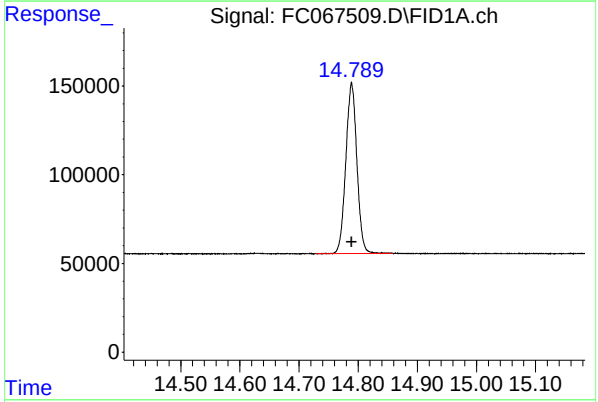
R.T.: 12.934 min
Delta R.T.: 0.000 min
Response: 1104370
Conc: 10.30 ug/ml



#13 n-Docosane (C22)

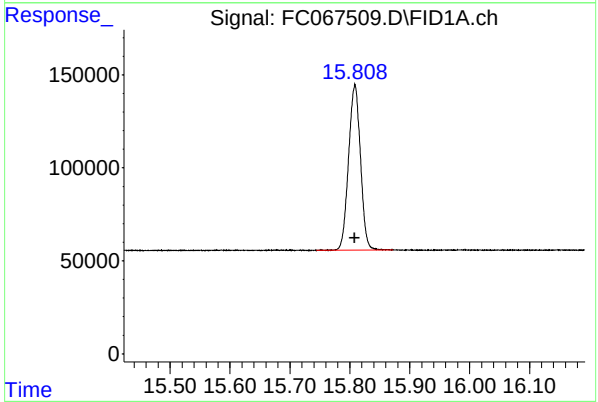
R.T.: 13.687 min
Delta R.T.: 0.000 min
Response: 1260218
Conc: 10.40 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



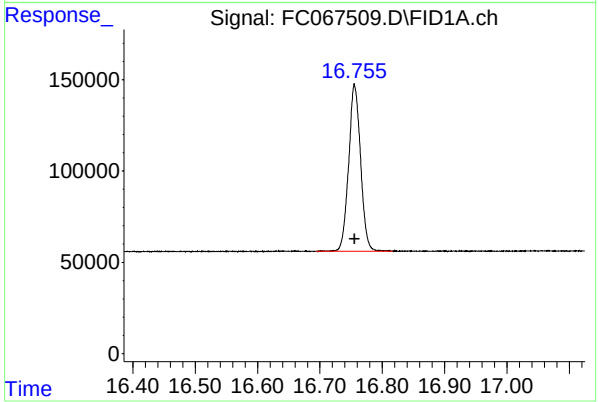
#14 n-Tetracosane (C24)

R.T.: 14.789 min
Delta R.T.: 0.000 min
Response: 1251574
Conc: 10.43 ug/ml



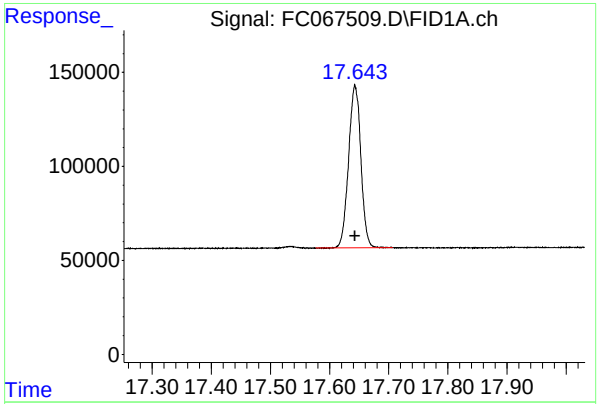
#15 n-Hexacosane (C26)

R.T.: 15.808 min
Delta R.T.: 0.000 min
Response: 1226594
Conc: 10.41 ug/ml



#16 n-Octacosane (C28)

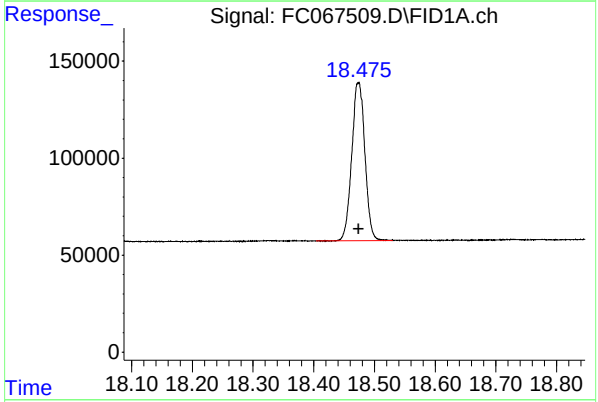
R.T.: 16.756 min
Delta R.T.: 0.000 min
Response: 1213286
Conc: 10.46 ug/ml



#17 n-Tricontane (C30)

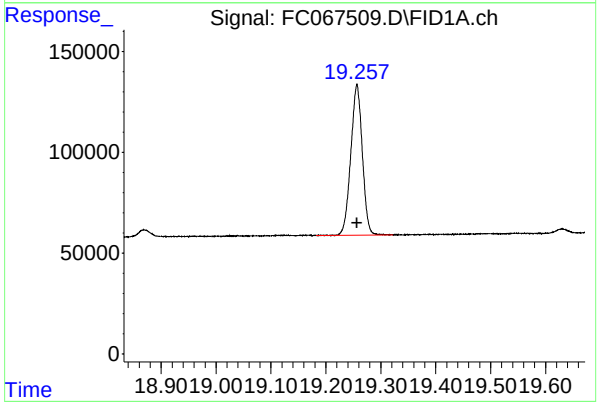
R.T.: 17.643 min
Delta R.T.: 0.000 min
Response: 1249088
Conc: 10.57 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



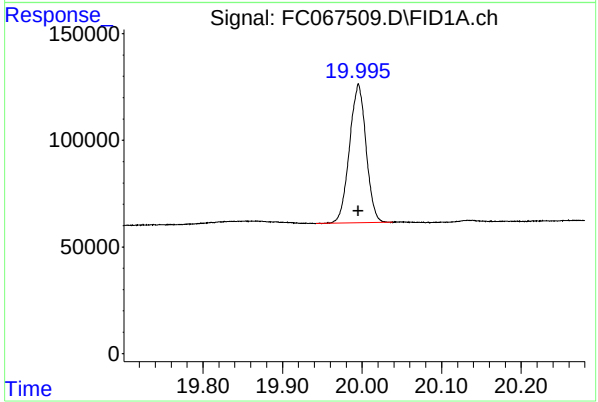
#18 n-Dotriacontane (C32)

R.T.: 18.474 min
Delta R.T.: 0.000 min
Response: 1225099
Conc: 10.67 ug/ml



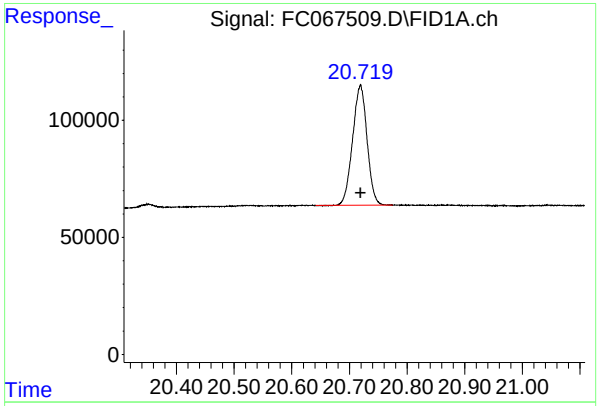
#19 n-Tetratriacontane (C34)

R.T.: 19.257 min
Delta R.T.: 0.000 min
Response: 1087201
Conc: 10.64 ug/ml



#20 n-Hexatriacontane (C36)

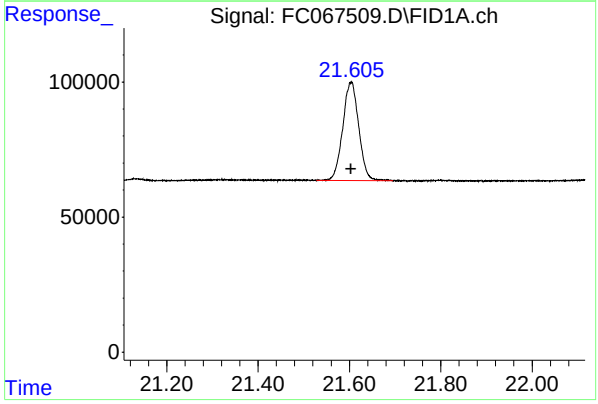
R.T.: 19.995 min
Delta R.T.: 0.000 min
Response: 941330
Conc: 10.53 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.719 min
Delta R.T.: 0.000 min
Response: 898154
Conc: 10.53 ug/ml

Instrument :
FID_C
ClientSampleId :
10 PPM ALIPHATIC HC STD4



#22 n-Tetracontane (C40)

R.T.: 21.604 min
Delta R.T.: 0.000 min
Response: 882650
Conc: 10.52 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067509.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 17:02
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 102324.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	3.327	BB	163023	1392325	91.41%	5.034%
2	4.338	4.289	4.404	BB	153448	1408883	92.49%	5.094%
3	5.916	5.857	5.999	BB	163420	1523229	100.00%	5.507%
4	6.353	6.292	6.417	BB	139335	1397121	91.72%	5.051%
5	6.971	6.909	7.067	BB	137359	1445653	94.91%	5.227%
6	8.146	8.094	8.210	BB	122199	1348794	88.55%	4.876%
7	9.744	9.682	9.805	BB	117477	1353251	88.84%	4.892%
8	11.184	11.077	11.247	BB	117457	1362847	89.47%	4.927%
9	11.495	11.434	11.554	BB	135385	1516253	99.54%	5.482%
10	12.491	12.422	12.554	BB	101975	1299257	85.30%	4.697%
11	12.934	12.875	12.987	BB	92846	1104370	72.50%	3.993%
12	13.102	13.034	13.167	BB	103848	1272574	83.54%	4.601%
13	13.687	13.622	13.755	BB	98770	1260218	82.73%	4.556%
14	14.789	14.729	14.859	BB	96250	1251574	82.17%	4.525%
15	15.808	15.744	15.872	BB	89337	1226594	80.53%	4.435%
16	16.756	16.694	16.817	BB	91173	1213286	79.65%	4.386%
17	17.643	17.577	17.707	BB	85908	1249088	82.00%	4.516%
18	18.474	18.404	18.530	BB	81392	1225099	80.43%	4.429%
19	19.257	19.182	19.322	BB	75084	1087201	71.37%	3.931%
20	19.995	19.942	20.039	BB	65222	941330	61.80%	3.403%
21	20.719	20.642	20.775	BB	51277	898154	58.96%	3.247%
22	21.604	21.527	21.695	BB	35971	882650	57.95%	3.191%
			Sum of corrected areas:			27659751		

Aliphatic EPH 102324.M Wed Oct 23 18:21:58 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067510.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 17:38
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 23 18:12:12 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:02 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
9) S	ortho-Terphenyl (SURR)	11.494	768220	5.236 ug/ml
Spiked Amount	50.000		Recovery =	10.47%
12) S	1-chlorooctadecane (S...	12.933	555182	5.141 ug/ml
Spiked Amount	50.000		Recovery =	10.28%
	Target Compounds			
1) T	n-Nonane (C9)	3.275	697792	5.180 ug/ml
2) T	n-Decane (C10)	4.339	703136	5.161 ug/ml
3) T	A~Naphthalene (C11.7)	5.917	752949	5.081 ug/ml
4) T	n-Dodecane (C12)	6.354	700270	5.170 ug/ml
5) T	A~2-methylnaphthalene...	6.971	709834	5.026 ug/ml
6) T	n-Tetradecane (C14)	8.146	678328	5.168 ug/ml
7) T	n-Hexadecane (C16)	9.744	680213	5.149 ug/ml
8) T	n-Octadecane (C18)	11.184	680709	5.152 ug/ml
10) T	n-Eicosane (C20)	12.491	658066	5.215 ug/ml
11) T	n-Heneicosane (C21)	13.102	641065	5.194 ug/ml
13) T	n-Docosane (C22)	13.687	638712	5.216 ug/ml
14) T	n-Tetracosane (C24)	14.789	629495	5.193 ug/ml
15) T	n-Hexacosane (C26)	15.808	620443	5.211 ug/ml
16) T	n-Octacosane (C28)	16.758	621629	5.284 ug/ml
17) T	n-Tricontane (C30)	17.643	658247	5.446 ug/ml
18) T	n-Dotriacontane (C32)	18.474	660916	5.586 ug/ml
19) T	n-Tetratriacontane (C34)	19.256	574804	5.489 ug/ml
20) T	n-Hexatriacontane (C36)	19.994	488556	5.367 ug/ml
21) T	n-Octatriacontane (C38)	20.718	459107	5.301 ug/ml
22) T	n-Tetracontane (C40)	21.603	447730	5.267 ug/ml

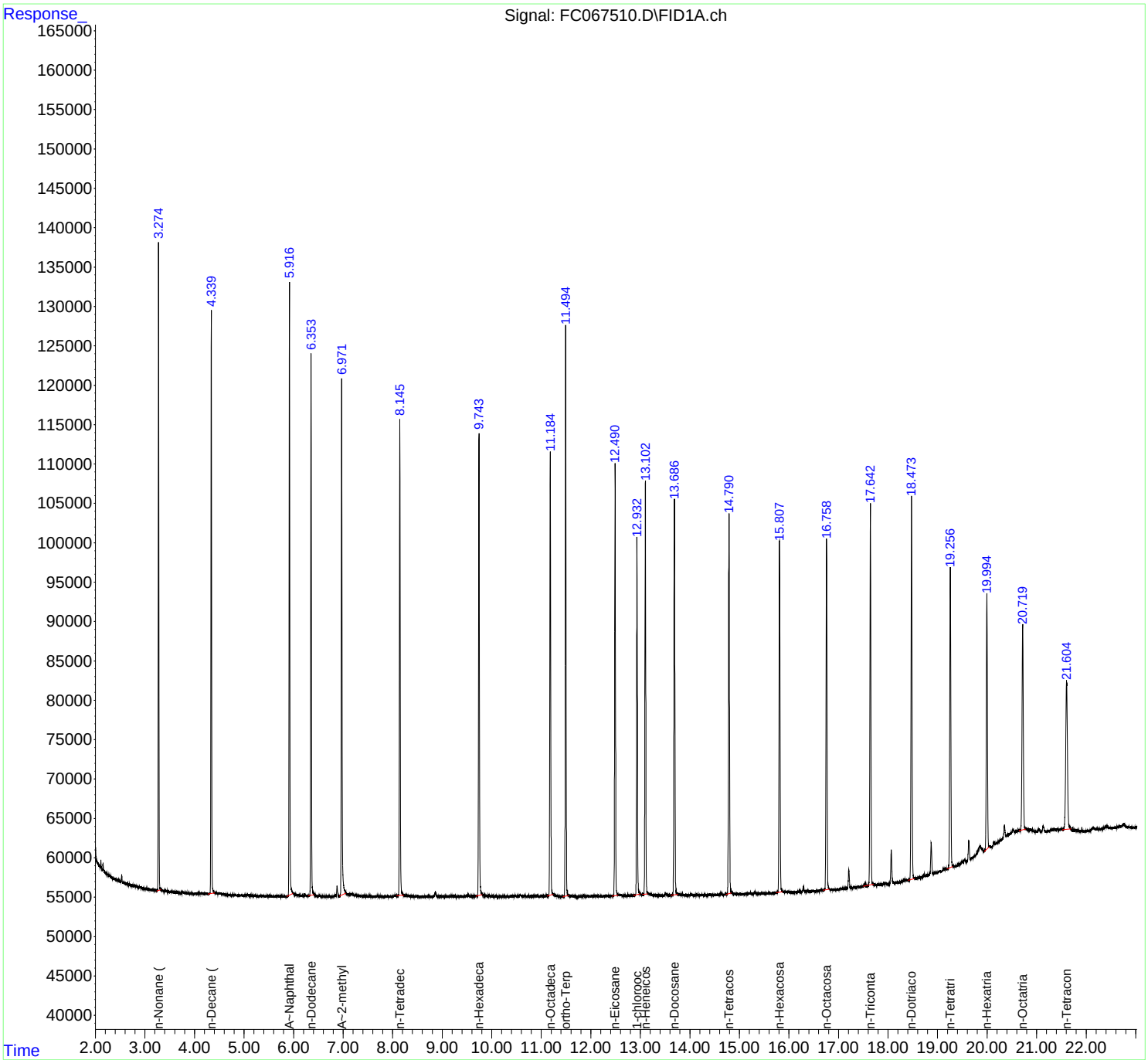
(f)=RT Delta > 1/2 Window (m)=manual int.

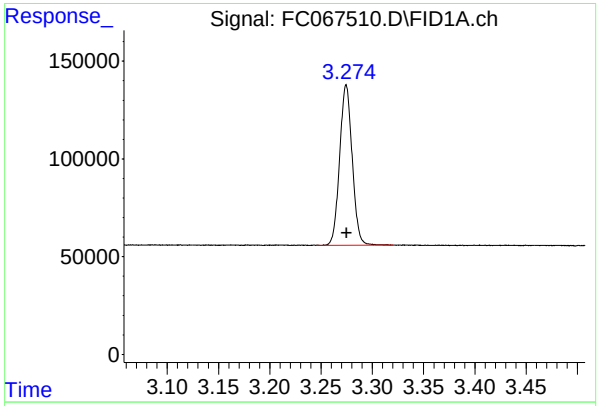
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067510.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 17:38
Operator : YP/AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Integration File: autoint1.e
Quant Time: Oct 23 18:12:12 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:02 2024
Response via : Initial Calibration
Integrator: ChemStation

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

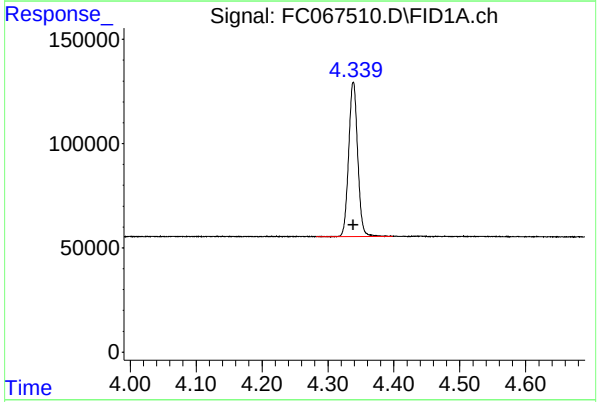




#1 n-Nonane (C9)

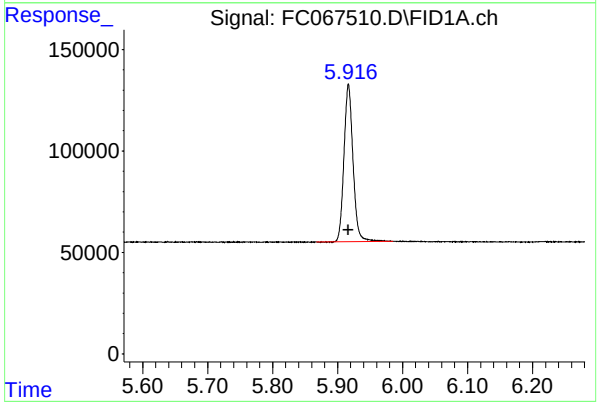
R.T.: 3.275 min
Delta R.T.: 0.000 min
Response: 697792
Conc: 5.18 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



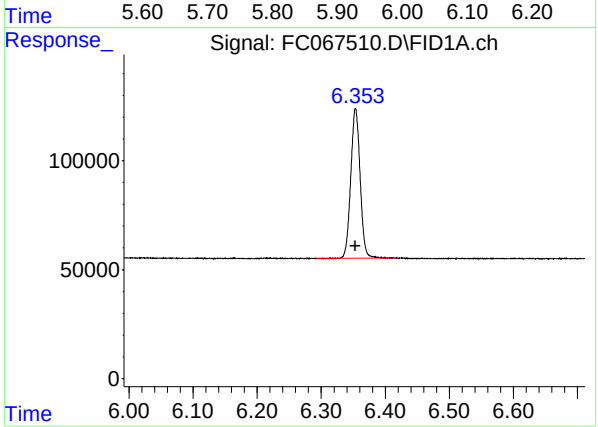
#2 n-Decane (C10)

R.T.: 4.339 min
Delta R.T.: 0.000 min
Response: 703136
Conc: 5.16 ug/ml



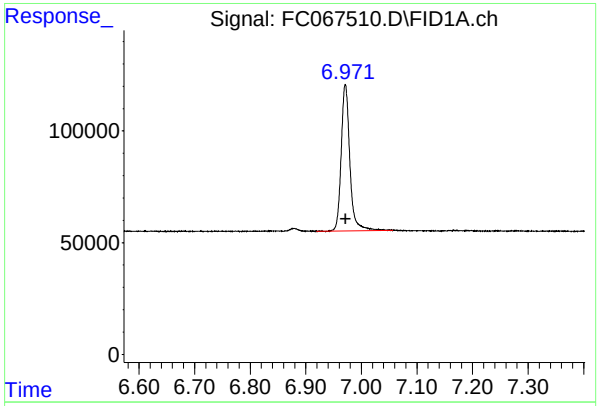
#3 A~Naphthalene (C11.7)

R.T.: 5.917 min
Delta R.T.: 0.000 min
Response: 752949
Conc: 5.08 ug/ml



#4 n-Dodecane (C12)

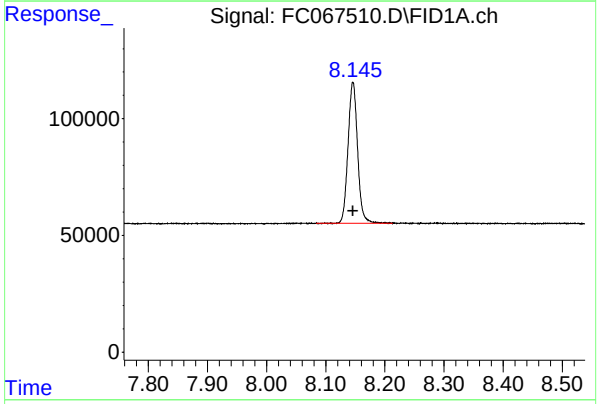
R.T.: 6.354 min
Delta R.T.: 0.000 min
Response: 700270
Conc: 5.17 ug/ml



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

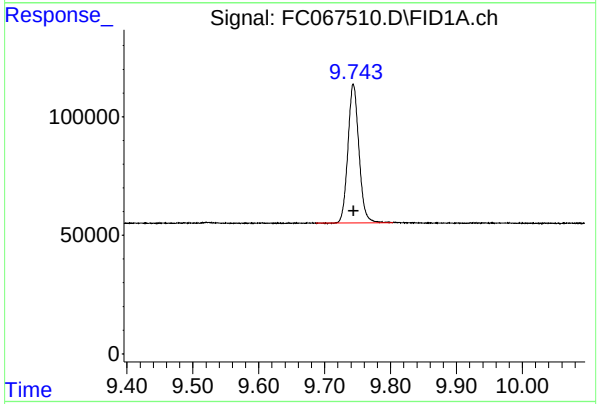
R.T.: 6.971 min
Delta R.T.: 0.000 min
Response: 709834
Conc: 5.03 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



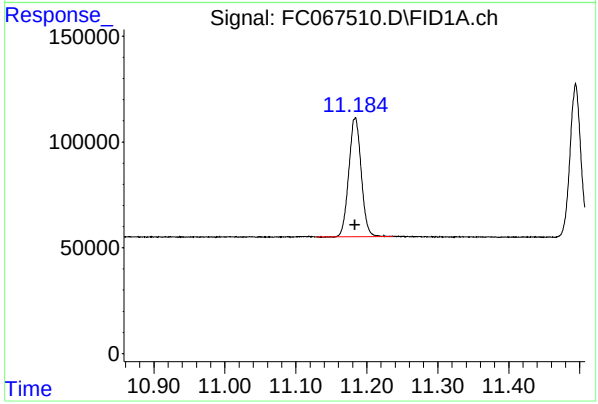
#6 n-Tetradecane (C14)

R.T.: 8.146 min
Delta R.T.: 0.000 min
Response: 678328
Conc: 5.17 ug/ml



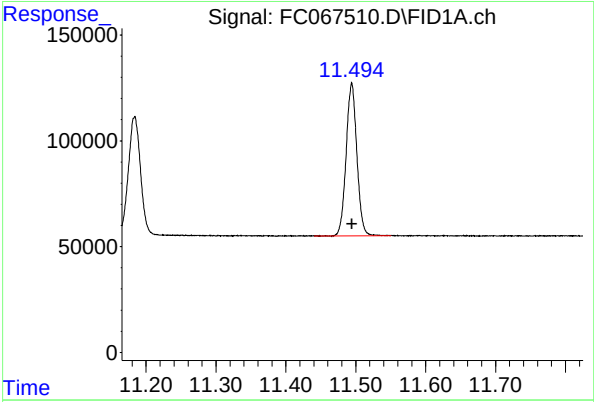
#7 n-Hexadecane (C16)

R.T.: 9.744 min
Delta R.T.: 0.000 min
Response: 680213
Conc: 5.15 ug/ml



#8 n-Octadecane (C18)

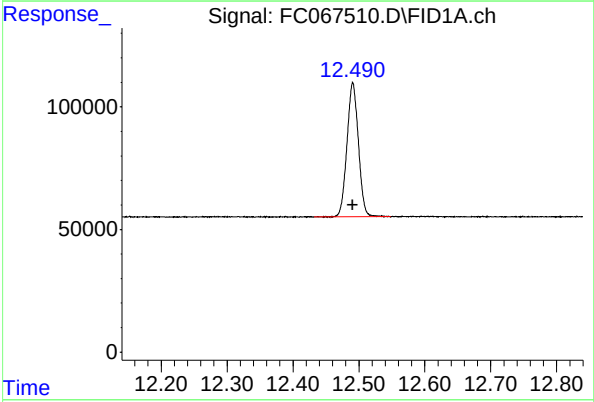
R.T.: 11.184 min
Delta R.T.: 0.000 min
Response: 680709
Conc: 5.15 ug/ml



#9 ortho-Terphenyl (SURR)

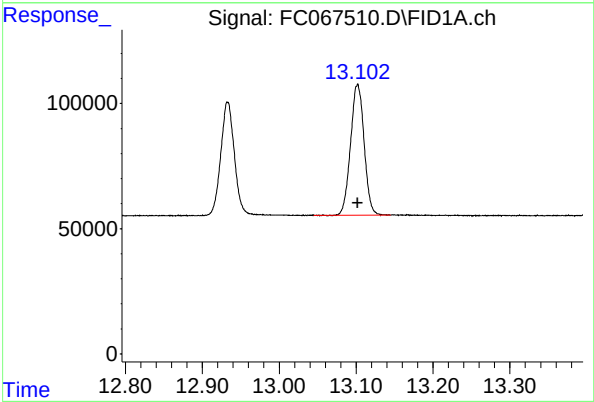
R.T.: 11.494 min
Delta R.T.: 0.000 min
Response: 768220
Conc: 5.24 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



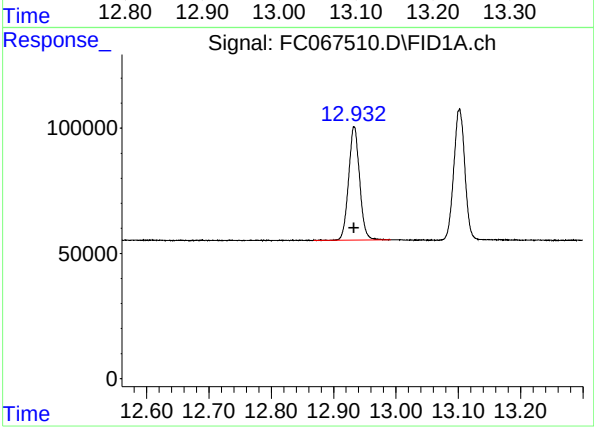
#10 n-Eicosane (C20)

R.T.: 12.491 min
Delta R.T.: 0.000 min
Response: 658066
Conc: 5.22 ug/ml



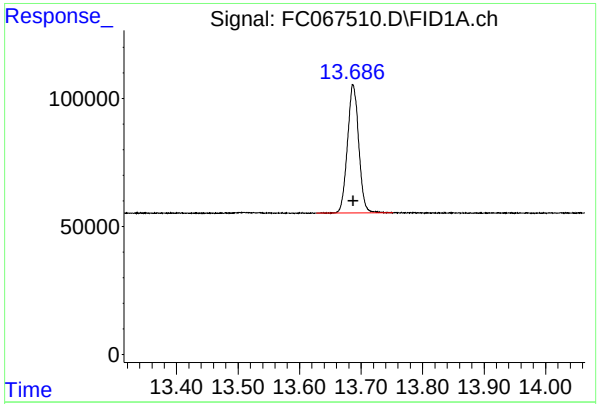
#11 n-Heneicosane (C21)

R.T.: 13.102 min
Delta R.T.: 0.000 min
Response: 641065
Conc: 5.19 ug/ml



#12 1-chlorooctadecane (SURR)

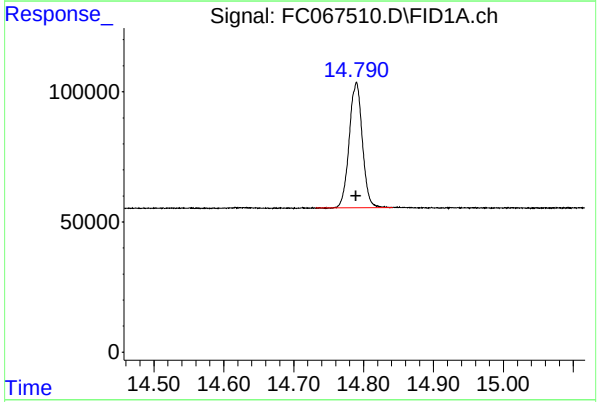
R.T.: 12.933 min
Delta R.T.: 0.000 min
Response: 555182
Conc: 5.14 ug/ml



#13 n-Docosane (C22)

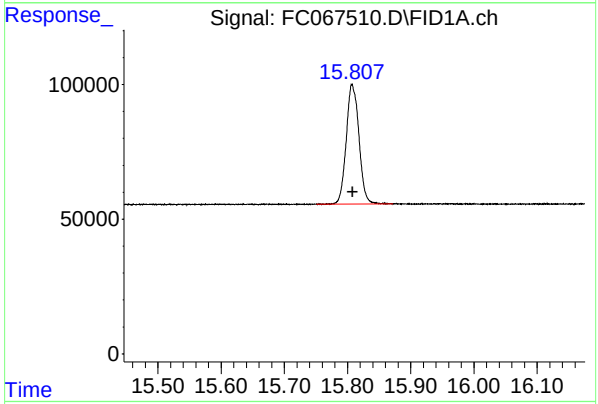
R.T.: 13.687 min
Delta R.T.: 0.000 min
Response: 638712
Conc: 5.22 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



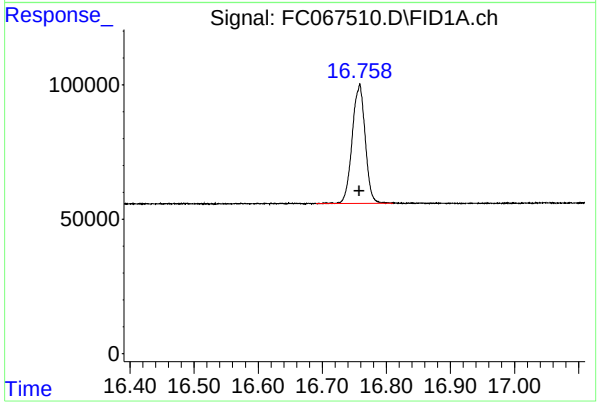
#14 n-Tetracosane (C24)

R.T.: 14.789 min
Delta R.T.: 0.000 min
Response: 629495
Conc: 5.19 ug/ml



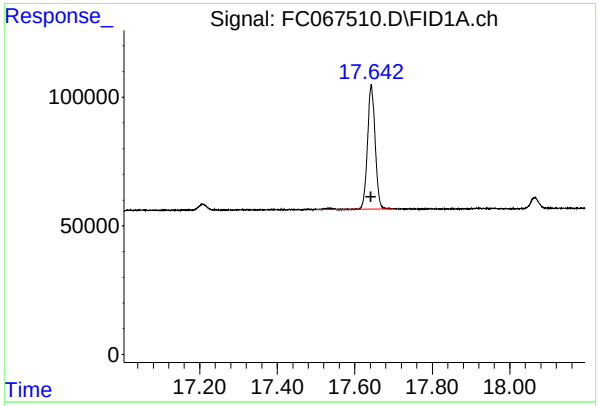
#15 n-Hexacosane (C26)

R.T.: 15.808 min
Delta R.T.: 0.000 min
Response: 620443
Conc: 5.21 ug/ml



#16 n-Octacosane (C28)

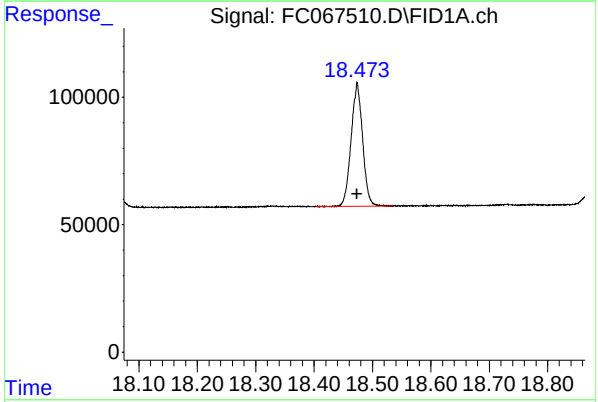
R.T.: 16.758 min
Delta R.T.: 0.000 min
Response: 621629
Conc: 5.28 ug/ml



#17 n-Tricontane (C30)

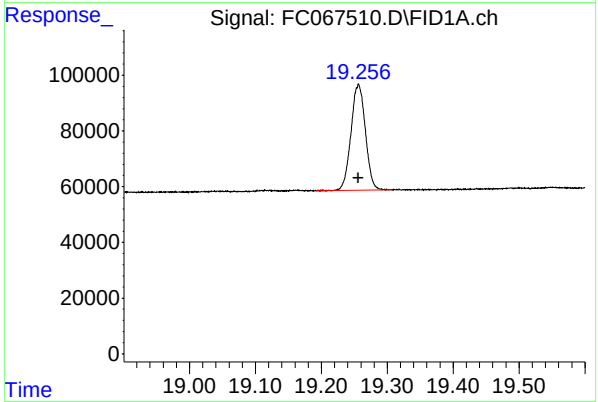
R.T.: 17.643 min
Delta R.T.: 0.000 min
Response: 658247
Conc: 5.45 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



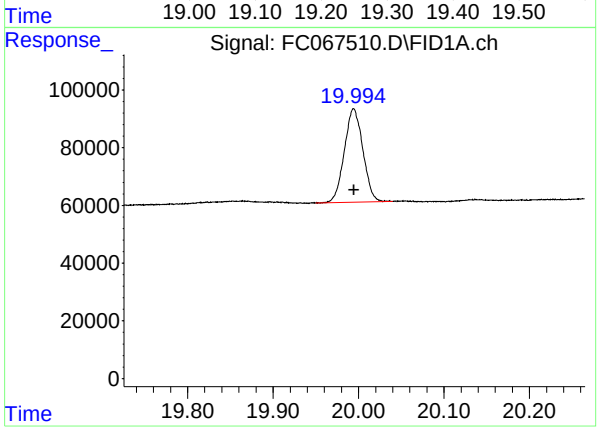
#18 n-Dotriacontane (C32)

R.T.: 18.474 min
Delta R.T.: 0.000 min
Response: 660916
Conc: 5.59 ug/ml



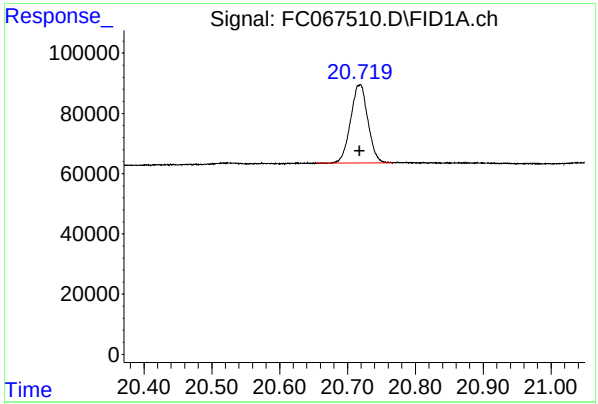
#19 n-Tetratriacontane (C34)

R.T.: 19.256 min
Delta R.T.: 0.000 min
Response: 574804
Conc: 5.49 ug/ml



#20 n-Hexatriacontane (C36)

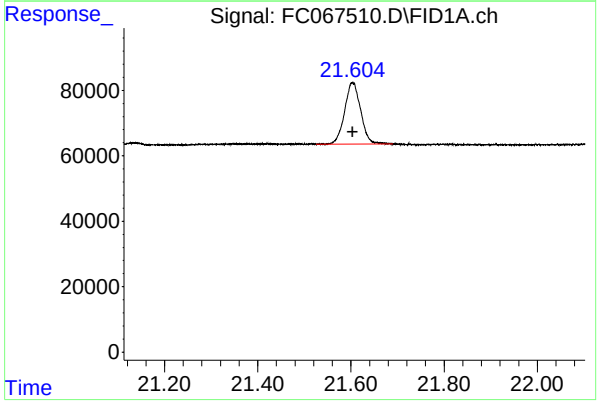
R.T.: 19.994 min
Delta R.T.: 0.000 min
Response: 488556
Conc: 5.37 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.718 min
Delta R.T.: 0.000 min
Response: 459107
Conc: 5.30 ug/ml

Instrument :
FID_C
ClientSampleId :
5 PPM ALIPHATIC HC STD5



#22 n-Tetracontane (C40)

R.T.: 21.603 min
Delta R.T.: 0.000 min
Response: 447730
Conc: 5.27 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067510.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 17:38
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 102324.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	3.320	BB	82274	697792	90.83%	4.975%
2	4.339	4.282	4.399	BB	74065	703136	91.53%	5.013%
3	5.917	5.867	5.985	BB	77688	752949	98.01%	5.368%
4	6.354	6.292	6.412	BB	68794	700270	91.15%	4.993%
5	6.971	6.919	7.057	BB	65640	709834	92.40%	5.061%
6	8.146	8.084	8.214	BB	60655	678328	88.30%	4.836%
7	9.744	9.687	9.804	BB	58521	680213	88.54%	4.850%
8	11.184	11.129	11.237	BB	55995	680709	88.61%	4.853%
9	11.494	11.440	11.550	BB	71976	768220	100.00%	5.477%
10	12.491	12.432	12.549	BB	54755	658066	85.66%	4.692%
11	12.933	12.869	12.992	BB	45156	555182	72.27%	3.958%
12	13.102	13.045	13.145	BB	52087	641065	83.45%	4.571%
13	13.687	13.627	13.752	BB	50083	638712	83.14%	4.554%
14	14.789	14.732	14.842	BB	47789	629495	81.94%	4.488%
15	15.808	15.750	15.872	BB	43825	620443	80.76%	4.424%
16	16.758	16.690	16.810	BB	44656	621629	80.92%	4.432%
17	17.643	17.500	17.699	BB	47945	658247	85.68%	4.693%
18	18.474	18.404	18.535	BB	48459	660916	86.03%	4.712%
19	19.256	19.192	19.309	BB	38187	574804	74.82%	4.098%
20	19.994	19.950	20.040	BB	32420	488556	63.60%	3.483%
21	20.718	20.654	20.767	BB	25975	459107	59.76%	3.273%
22	21.603	21.525	21.690	BB	18849	447730	58.28%	3.192%
			Sum of corrected areas:			14025400		

Aliphatic EPH 102324.M Wed Oct 23 18:22:16 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067511.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 18:14
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 23 18:51:58 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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	2853188	19.445 ug/ml
Spiked Amount	50.000		Recovery =	38.89%
12) S	1-chlorooctadecane (S...	12.935	2112213	19.560 ug/ml
Spiked Amount	50.000		Recovery =	39.12%
	Target Compounds			
1) T	n-Nonane (C9)	3.274	2613683	19.401 ug/ml
2) T	n-Decane (C10)	4.339	2649286	19.445 ug/ml
3) T	A~Naphthalene (C11.7)	5.916	2894144	19.530 ug/ml
4) T	n-Dodecane (C12)	6.354	2640477	19.495 ug/ml
5) T	A~2-methylnaphthalene...	6.971	2771002	19.622 ug/ml
6) T	n-Tetradecane (C14)	8.147	2559793	19.502 ug/ml
7) T	n-Hexadecane (C16)	9.744	2585935	19.575 ug/ml
8) T	n-Octadecane (C18)	11.185	2593351	19.630 ug/ml
10) T	n-Eicosane (C20)	12.493	2466507	19.548 ug/ml
11) T	n-Heneicosane (C21)	13.103	2414000	19.560 ug/ml
13) T	n-Docosane (C22)	13.688	2390568	19.523 ug/ml
14) T	n-Tetracosane (C24)	14.790	2369147	19.546 ug/ml
15) T	n-Hexacosane (C26)	15.809	2326770	19.544 ug/ml
16) T	n-Octacosane (C28)	16.757	2297199	19.526 ug/ml
17) T	n-Tricontane (C30)	17.643	2353840	19.474 ug/ml
18) T	n-Dotriacontane (C32)	18.474	2301371	19.450 ug/ml
19) T	n-Tetratriacontane (C34)	19.258	2044186	19.519 ug/ml
20) T	n-Hexatriacontane (C36)	19.996	1784212	19.601 ug/ml
21) T	n-Octatriacontane (C38)	20.719	1698313	19.610 ug/ml
22) T	n-Tetracontane (C40)	21.604	1661417	19.544 ug/ml

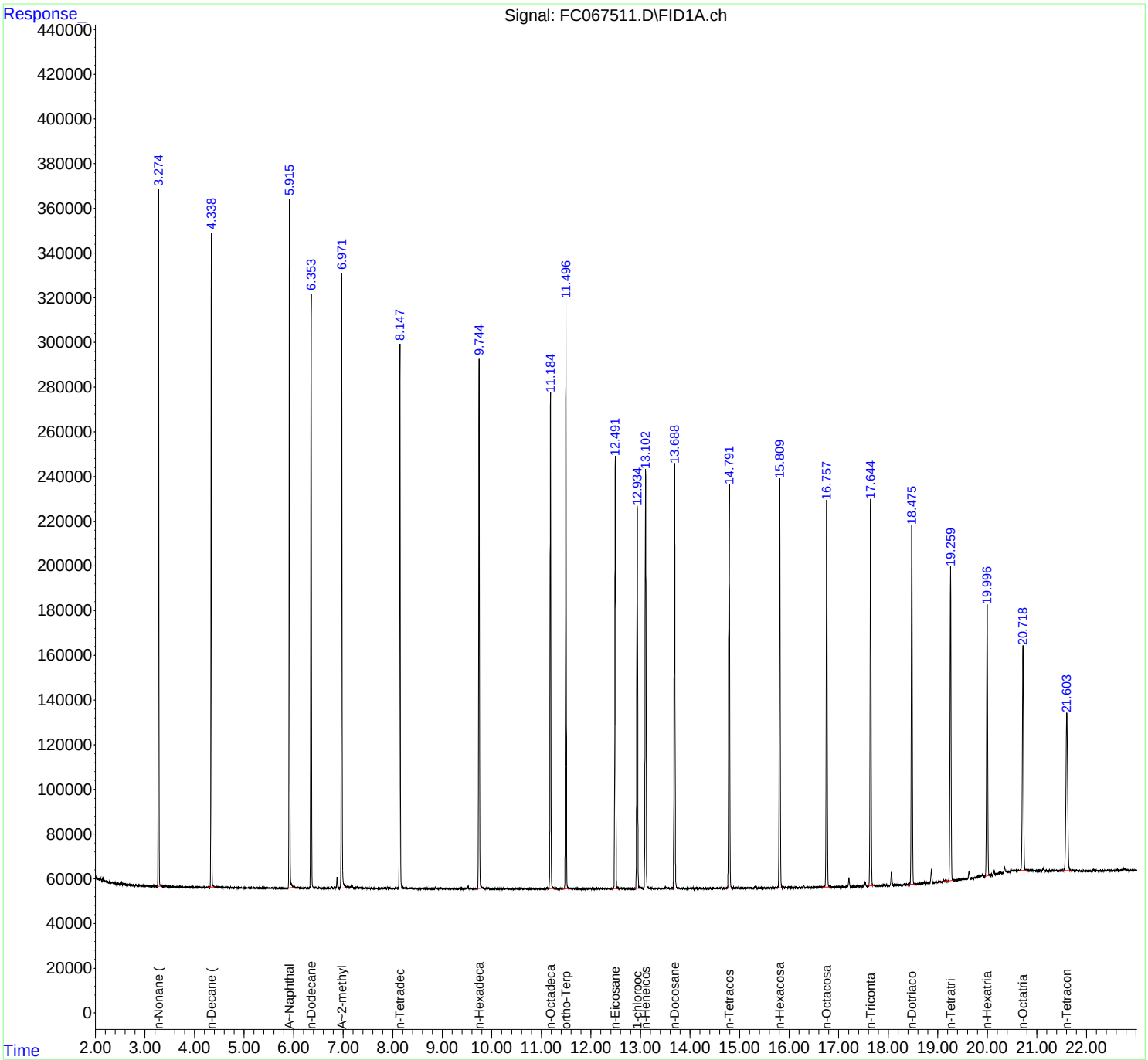
(f)=RT Delta > 1/2 Window (m)=manual int.

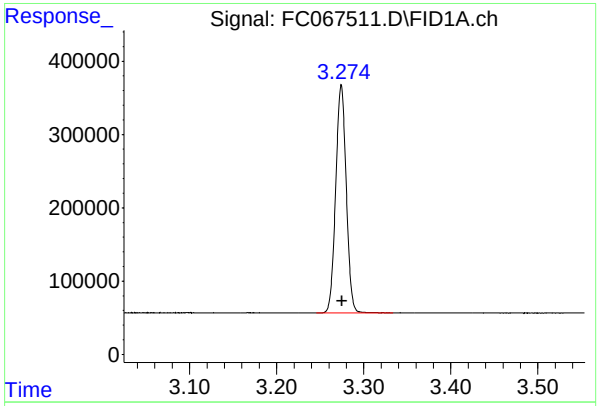
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067511.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 18:14
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Oct 23 18:51:58 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 2024
Response via : Initial Calibration
Integrator: ChemStation

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

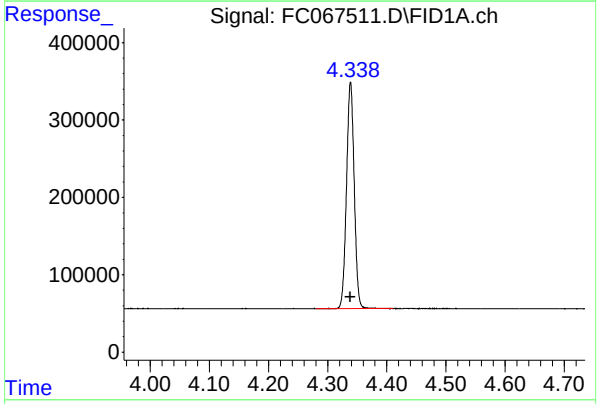




#1 n-Nonane (C9)

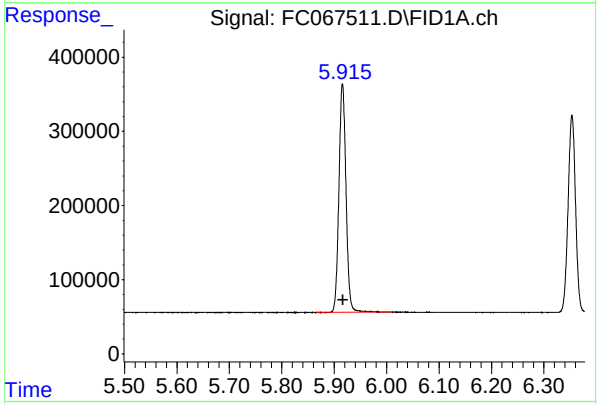
R.T.: 3.274 min
Delta R.T.: 0.000 min
Response: 2613683
Conc: 19.40 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



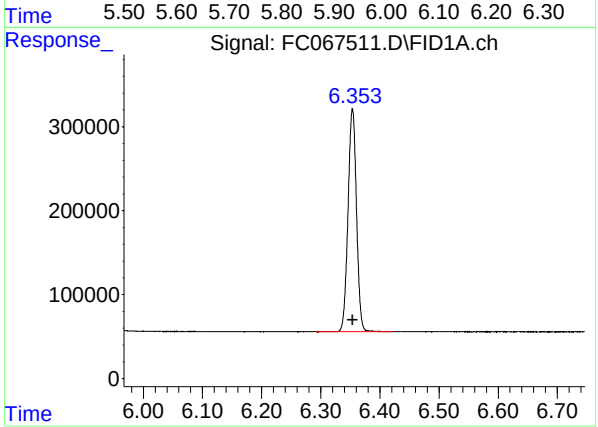
#2 n-Decane (C10)

R.T.: 4.339 min
Delta R.T.: 0.000 min
Response: 2649286
Conc: 19.44 ug/ml



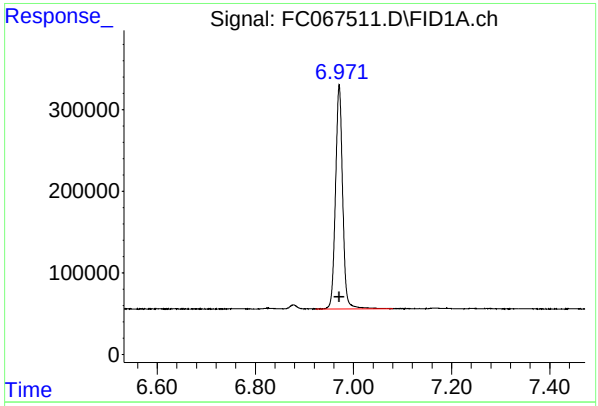
#3 A~Naphthalene (C11.7)

R.T.: 5.916 min
Delta R.T.: 0.000 min
Response: 2894144
Conc: 19.53 ug/ml



#4 n-Dodecane (C12)

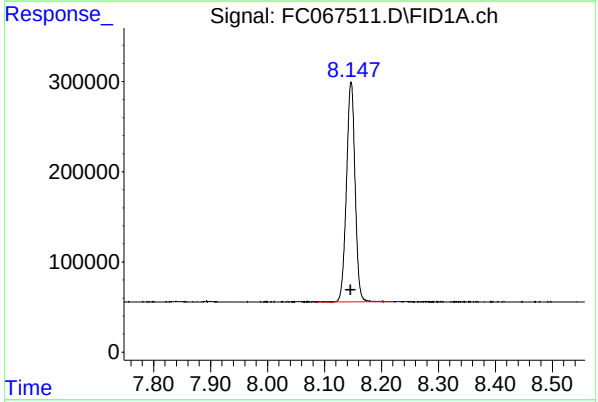
R.T.: 6.354 min
Delta R.T.: 0.000 min
Response: 2640477
Conc: 19.50 ug/ml



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

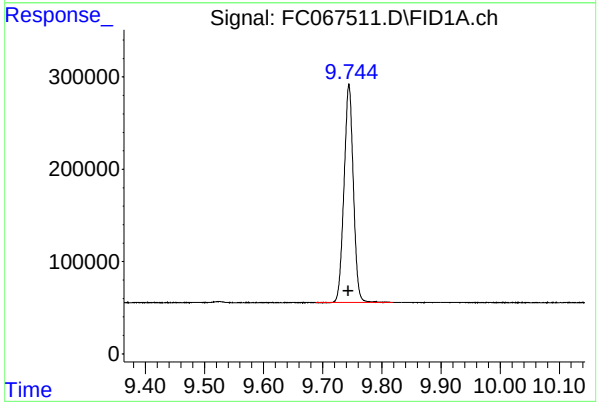
R.T.: 6.971 min
Delta R.T.: 0.000 min
Response: 2771002
Conc: 19.62 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



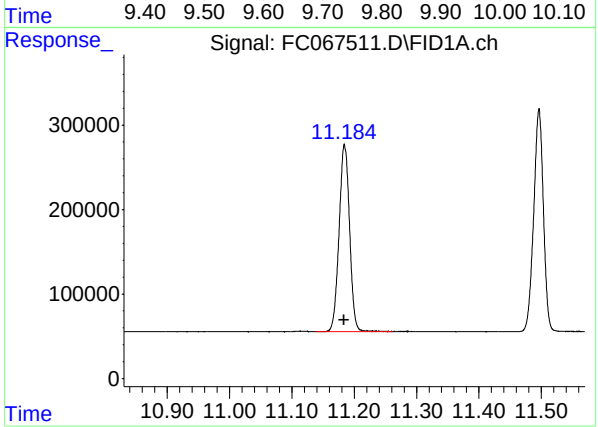
#6 n-Tetradecane (C14)

R.T.: 8.147 min
Delta R.T.: 0.000 min
Response: 2559793
Conc: 19.50 ug/ml



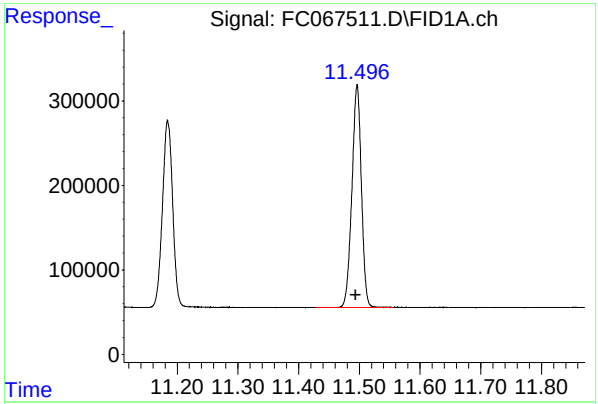
#7 n-Hexadecane (C16)

R.T.: 9.744 min
Delta R.T.: 0.000 min
Response: 2585935
Conc: 19.58 ug/ml



#8 n-Octadecane (C18)

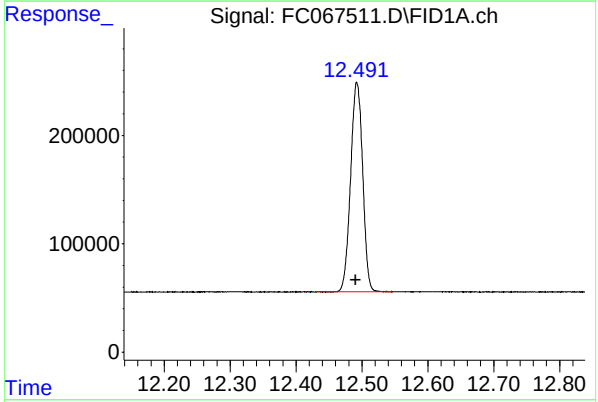
R.T.: 11.185 min
Delta R.T.: 0.000 min
Response: 2593351
Conc: 19.63 ug/ml



#9 ortho-Terphenyl (SURR)

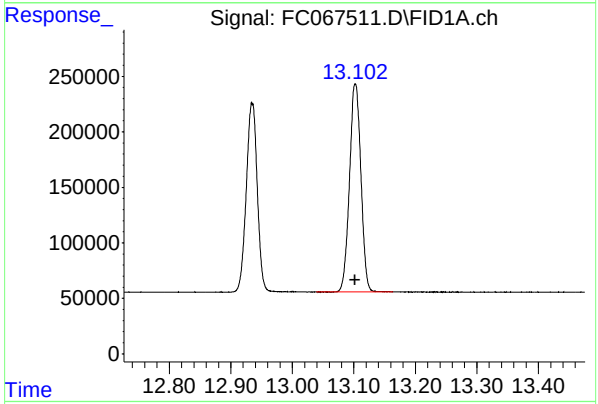
R.T.: 11.496 min
Delta R.T.: 0.002 min
Response: 2853188
Conc: 19.44 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



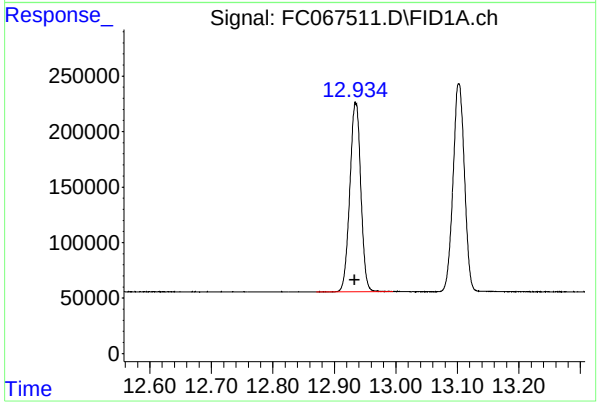
#10 n-Eicosane (C20)

R.T.: 12.493 min
Delta R.T.: 0.002 min
Response: 2466507
Conc: 19.55 ug/ml



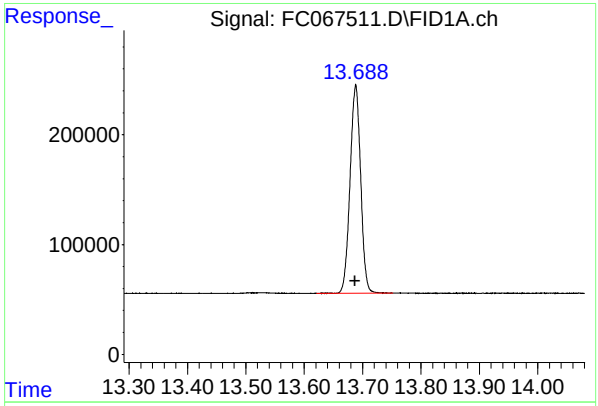
#11 n-Heneicosane (C21)

R.T.: 13.103 min
Delta R.T.: 0.000 min
Response: 2414000
Conc: 19.56 ug/ml



#12 1-chlorooctadecane (SURR)

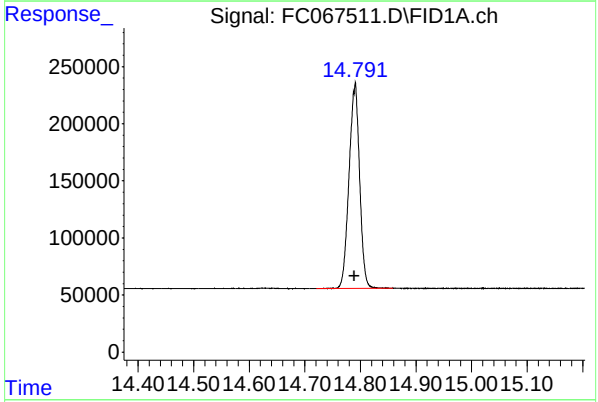
R.T.: 12.935 min
Delta R.T.: 0.002 min
Response: 2112213
Conc: 19.56 ug/ml



#13 n-Docosane (C22)

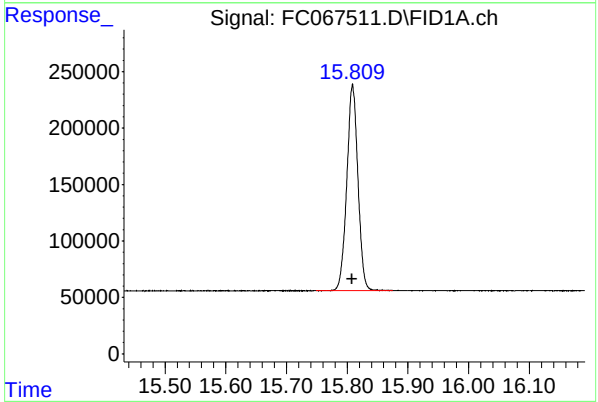
R.T.: 13.688 min
Delta R.T.: 0.000 min
Response: 2390568
Conc: 19.52 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



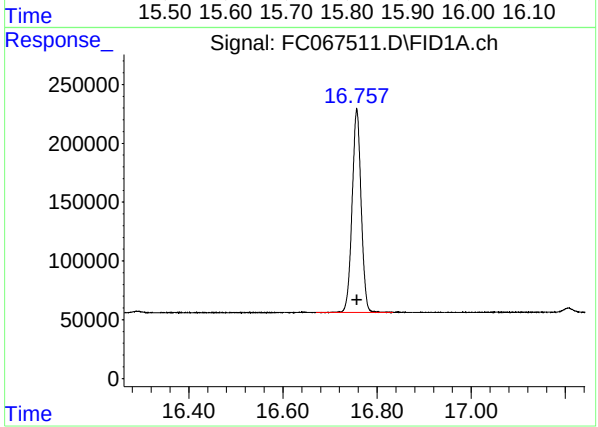
#14 n-Tetracosane (C24)

R.T.: 14.790 min
Delta R.T.: 0.000 min
Response: 2369147
Conc: 19.55 ug/ml



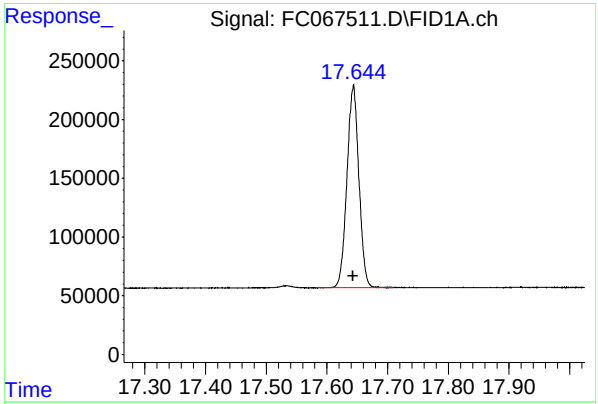
#15 n-Hexacosane (C26)

R.T.: 15.809 min
Delta R.T.: 0.001 min
Response: 2326770
Conc: 19.54 ug/ml



#16 n-Octacosane (C28)

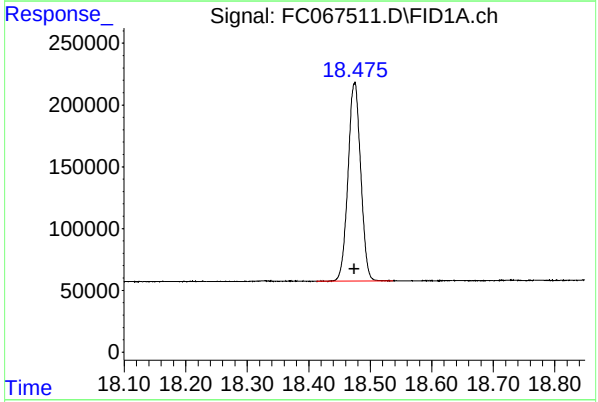
R.T.: 16.757 min
Delta R.T.: 0.000 min
Response: 2297199
Conc: 19.53 ug/ml



#17 n-Tricontane (C30)

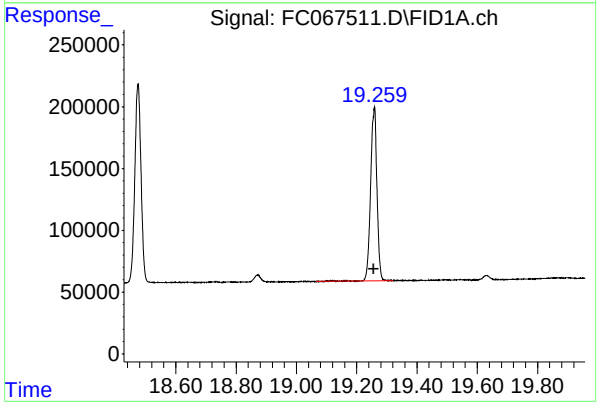
R.T.: 17.643 min
Delta R.T.: 0.000 min
Response: 2353840
Conc: 19.47 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



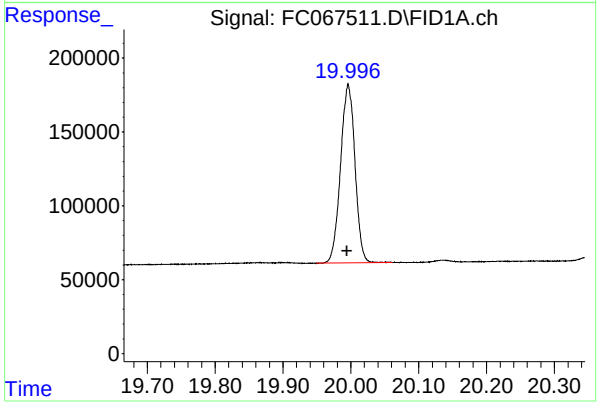
#18 n-Dotriacontane (C32)

R.T.: 18.474 min
Delta R.T.: 0.000 min
Response: 2301371
Conc: 19.45 ug/ml



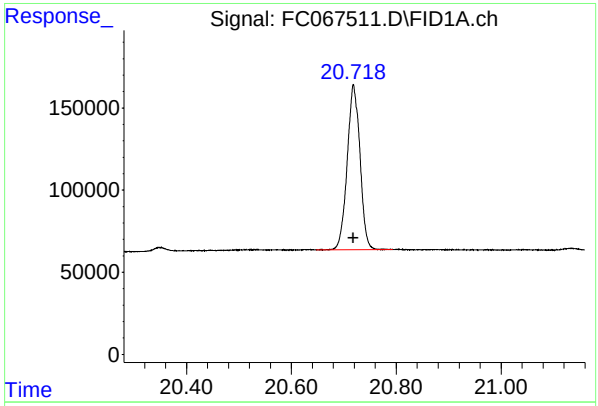
#19 n-Tetratriacontane (C34)

R.T.: 19.258 min
Delta R.T.: 0.002 min
Response: 2044186
Conc: 19.52 ug/ml



#20 n-Hexatriacontane (C36)

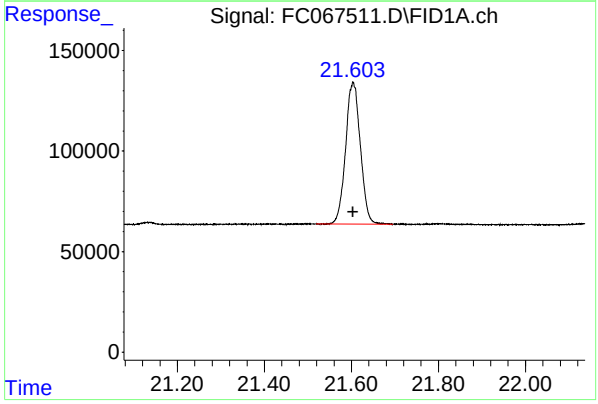
R.T.: 19.996 min
Delta R.T.: 0.002 min
Response: 1784212
Conc: 19.60 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 20.719 min
Delta R.T.: 0.000 min
Response: 1698313
Conc: 19.61 ug/ml

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 21.604 min
Delta R.T.: 0.000 min
Response: 1661417
Conc: 19.54 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC102324AL\
Data File : FC067511.D
Signal(s) : FID1A.ch
Acq On : 23 Oct 2024 18:14
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 102324.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	3.334	BB	310826	2613683	90.31%	4.990%
2	4.339	4.280	4.410	BB	292955	2649286	91.54%	5.058%
3	5.916	5.865	6.012	BB	308318	2894144	100.00%	5.525%
4	6.354	6.292	6.422	BB	265716	2640477	91.24%	5.041%
5	6.971	6.924	7.080	BB	274073	2771002	95.75%	5.290%
6	8.147	8.085	8.220	BB	244098	2559793	88.45%	4.887%
7	9.744	9.689	9.819	BB	236009	2585935	89.35%	4.937%
8	11.185	11.139	11.262	BB	218367	2593351	89.61%	4.951%
9	11.496	11.429	11.555	BB	264747	2853188	98.58%	5.447%
10	12.493	12.430	12.547	BB	193698	2466507	85.22%	4.709%
11	12.935	12.870	12.995	BB	169232	2112213	72.98%	4.032%
12	13.103	13.039	13.164	BB	187529	2414000	83.41%	4.609%
13	13.688	13.620	13.752	BB	190590	2390568	82.60%	4.564%
14	14.790	14.720	14.859	BB	178398	2369147	81.86%	4.523%
15	15.809	15.749	15.875	BB	181908	2326770	80.40%	4.442%
16	16.757	16.670	16.834	BB	173028	2297199	79.37%	4.386%
17	17.643	17.582	17.709	BB	172064	2353840	81.33%	4.494%
18	18.474	18.412	18.537	BB	160280	2301371	79.52%	4.394%
19	19.258	19.065	19.320	BB	140731	2044186	70.63%	3.903%
20	19.996	19.949	20.062	BB	120232	1784212	61.65%	3.406%
21	20.719	20.647	20.794	BB	100162	1698313	58.68%	3.242%
22	21.604	21.519	21.695	BB	70657	1661417	57.41%	3.172%
			Sum of corrected areas:			52380600		

Aliphatic EPH 102324.M Wed Oct 23 18:53:21 2024

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

Inital Calibration Report for SequenceID : FD102324AR

AreaCount

Parameter Range	FD048568.D	FD048569.D	FD048570.D	FD048571.D	FD048572.D	
Aromatic C10-C12	34560081.000	17413124.000	7062069.000	3602660.000	1773971.000	
Aromatic C12-C16	51756513.000	26214353.000	10660566.000	5474983.000	2683618.000	
Aromatic C16-C21	64464447.000	32614919.000	13171585.000	6675037.000	3268126.000	
Aromatic C21-C36	134161995.000	67904676.000	27627174.000	14154223.000	6877987.000	
Aromatic EPH	284943036.000	144147072.000	58521394.000	29906903.000	14603702.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aromatic C10-C12	176202.694	1.627				
Aromatic C12-C16	177273.4926664	2.167				
Aromatic C16-C21	163832.55	1.288				
Aromatic C21-C36	152713.1526664	2.017				
Aromatic EPH	161887.4688884	1.816				

Concentration

Parameter Range	FD048568.D	FD048569.D	FD048570.D	FD048571.D	FD048572.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	FD048568.D	FD048569.D	FD048570.D	FD048571.D	FD048572.D	
Aromatic C10-C12	172800.405000	174131.240000	176551.725000	180133.000000	177397.100000	
Aromatic C12-C16	172521.710000	174762.353333	177676.100000	182499.433333	178907.866666	
Aromatic C16-C21	161161.117500	163074.595000	164644.812500	166875.925000	163406.300000	
Aromatic C21-C36	149068.883333	150899.280000	153484.300000	157269.144444	152844.155555	
Aromatic EPH	158301.686666	160163.413333	162559.427777	166149.461111	162263.355555	

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048568.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 15:12
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: Oct 23 17:13:28 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:09:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.379	14919837	98.962 ug/ml
Spiked Amount	50.000		Recovery =	197.92%
6) S	2-Flurobiphenyl (SURR)	8.230	10015694	100.124 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	200.25%#
11) S	ortho-Terphenyl (SURR)	11.267	16385129	98.289 ug/ml
Spiked Amount	50.000		Recovery =	196.58%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.199	16947170	98.911 ug/ml
2) T	Naphthalene (C11.7)	5.719	17612911	98.941 ug/ml
3) T	2-Methylnaphthalene (...	6.767	17624448	99.004 ug/ml
5) T	Acenaphthylene (C15.06)	8.034	17045088	98.400 ug/ml
7) T	Acenaphthene (C15.5)	8.331	17086977	98.169 ug/ml
8) T	Flouorene (C16.55)	9.109	16673063	98.964 ug/ml
9) T	Phenanthrene (C19.36)	10.496	16410378	99.314 ug/ml
10) T	Anthracene (C19.43)	10.573	15569819	98.435 ug/ml
12) T	Fluoranthene (C21.85)	12.302	15981856	98.532 ug/ml
13) T	Pyrene (C20.8)	12.596	15811187	98.991 ug/ml
14) T	Benzo[a]anthracene (C...	14.466	14979852	100.189 ug/ml
15) T	Chrysene (C27.41)	14.512	15332543	97.081 ug/ml
16) T	benzo[b]fluoranthene ...	16.016	15350623	99.928 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.054	14161475	97.899 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.395	14921521	99.306 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.761	14261058	103.933 ug/ml
20) T	Dibenz[a,h]anthracene...	17.801	14330700	95.355 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.019	14842367	98.211 ug/ml

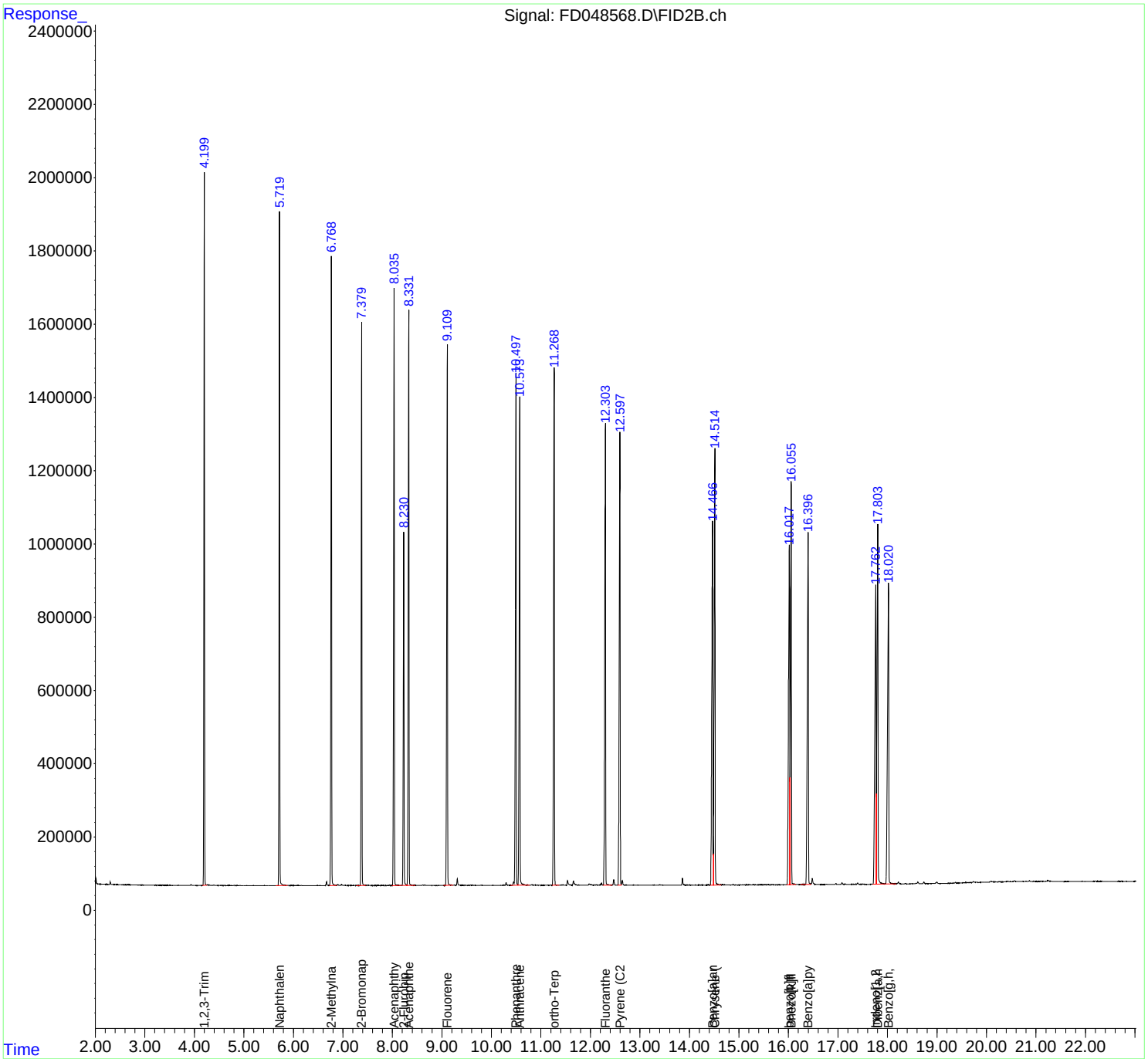
(f)=RT Delta > 1/2 Window (m)=manual int.

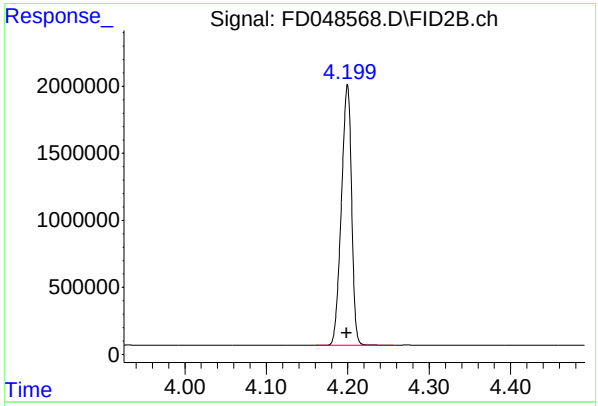
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048568.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 15:12
Operator : YP/AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1

Integration File: autoint1.e
Quant Time: Oct 23 17:13:28 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:09:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

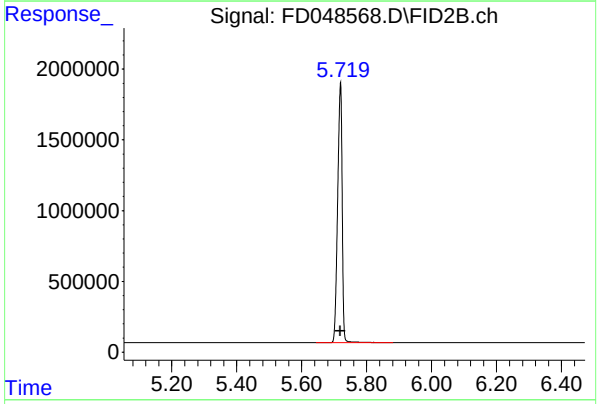




#1 1,2,3-Trimethylbenzene (C10.1)

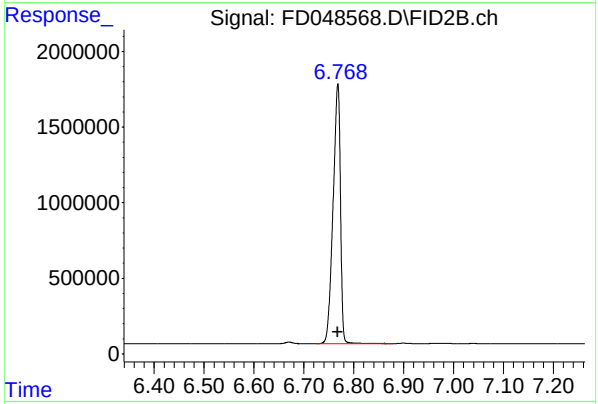
R.T.: 4.199 min
Delta R.T.: 0.000 min
Response: 16947170
Conc: 98.91 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



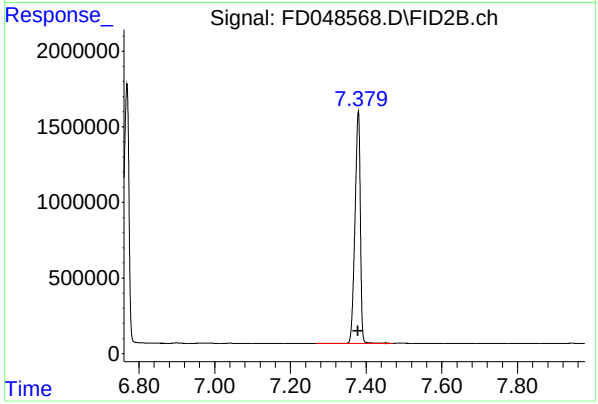
#2 Naphthalene (C11.7)

R.T.: 5.719 min
Delta R.T.: 0.000 min
Response: 17612911
Conc: 98.94 ug/ml



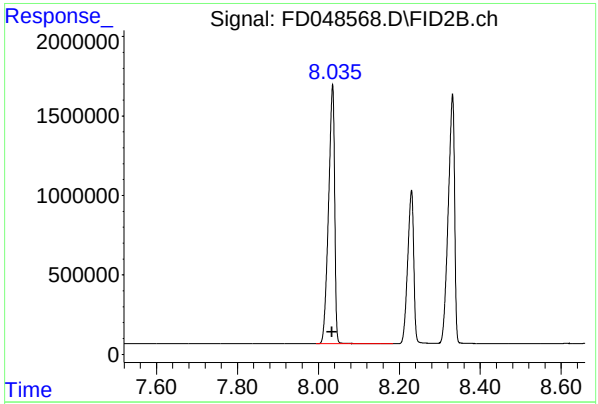
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.767 min
Delta R.T.: 0.000 min
Response: 17624448
Conc: 99.00 ug/ml



#4 2-Bromonaphthalene (SURR)

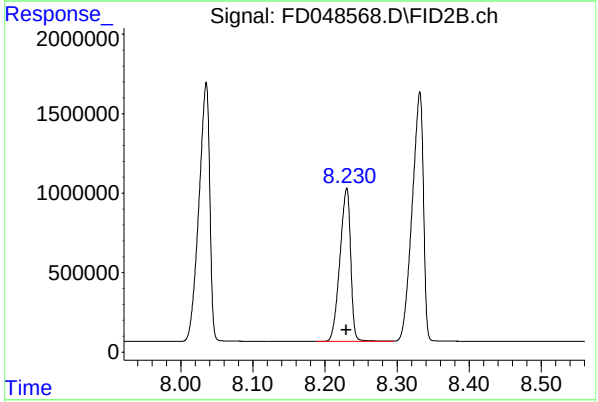
R.T.: 7.379 min
Delta R.T.: 0.000 min
Response: 14919837
Conc: 98.96 ug/ml



#5 Acenaphthylene (C15.06)

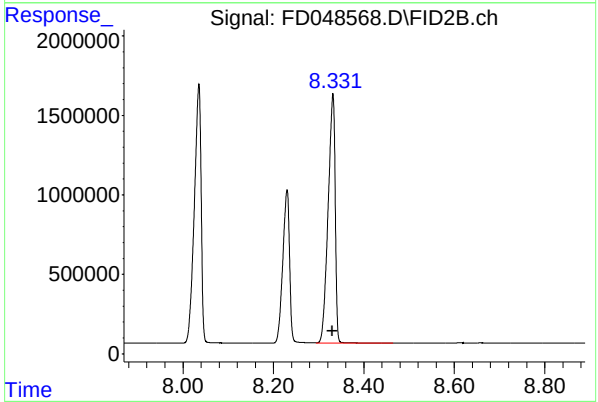
R.T.: 8.034 min
Delta R.T.: 0.000 min
Response: 17045088
Conc: 98.40 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



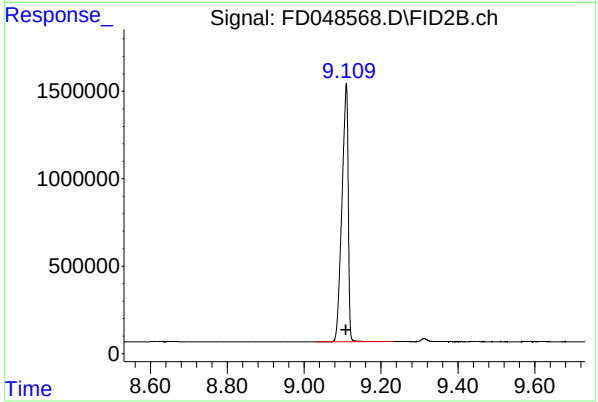
#6 2-Flurobiphenyl (SURR)

R.T.: 8.230 min
Delta R.T.: 0.000 min
Response: 10015694
Conc: 100.12 ug/ml



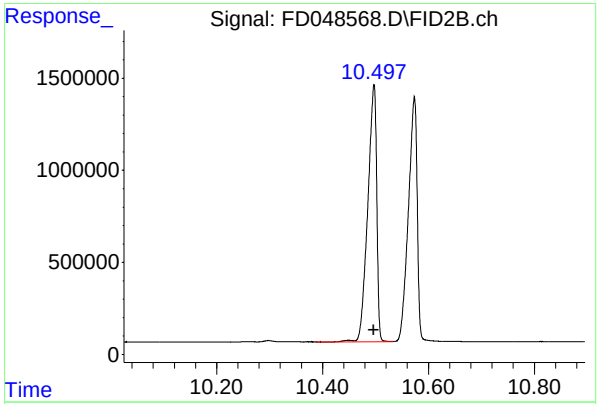
#7 Acenaphthene (C15.5)

R.T.: 8.331 min
Delta R.T.: 0.000 min
Response: 17086977
Conc: 98.17 ug/ml



#8 Flouorene (C16.55)

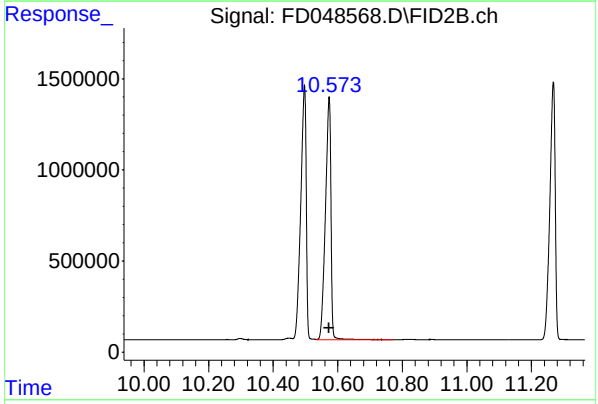
R.T.: 9.109 min
Delta R.T.: 0.000 min
Response: 16673063
Conc: 98.96 ug/ml



#9 Phenanthrene (C19.36)

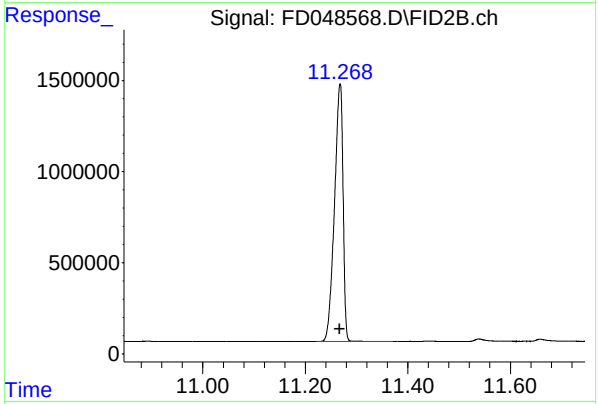
R.T.: 10.496 min
Delta R.T.: 0.000 min
Response: 16410378
Conc: 99.31 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



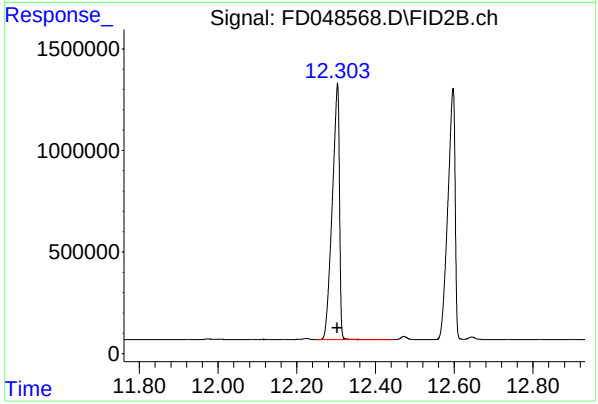
#10 Anthracene (C19.43)

R.T.: 10.573 min
Delta R.T.: 0.000 min
Response: 15569819
Conc: 98.44 ug/ml



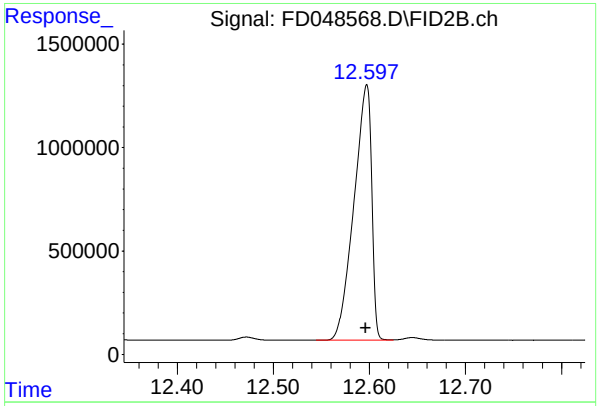
#11 ortho-Terphenyl (SURR)

R.T.: 11.267 min
Delta R.T.: 0.000 min
Response: 16385129
Conc: 98.29 ug/ml



#12 Fluoranthene (C21.85)

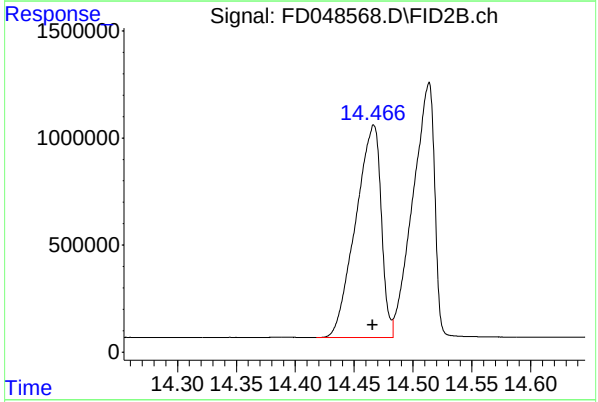
R.T.: 12.302 min
Delta R.T.: 0.000 min
Response: 15981856
Conc: 98.53 ug/ml



#13 Pyrene (C20.8)

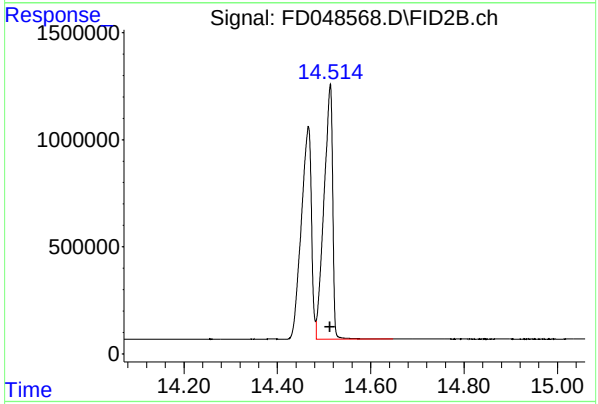
R.T.: 12.596 min
Delta R.T.: 0.000 min
Response: 15811187
Conc: 98.99 ug/ml

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



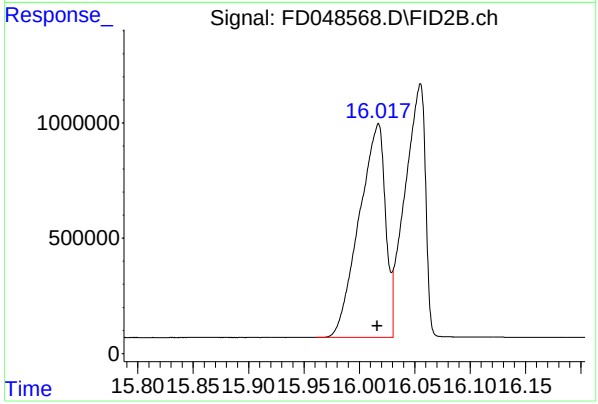
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.466 min
Delta R.T.: 0.000 min
Response: 14979852
Conc: 100.19 ug/ml



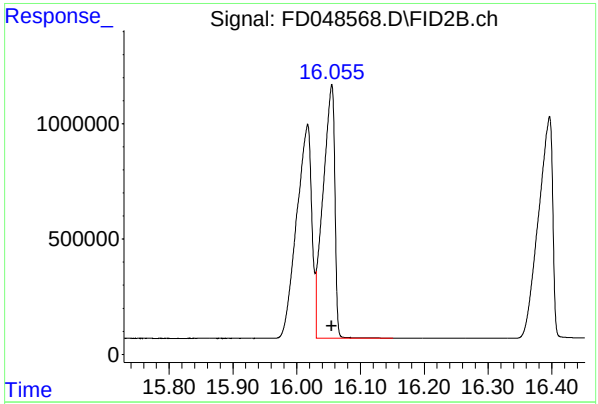
#15 Chrysene (C27.41)

R.T.: 14.512 min
Delta R.T.: 0.000 min
Response: 15332543
Conc: 97.08 ug/ml



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

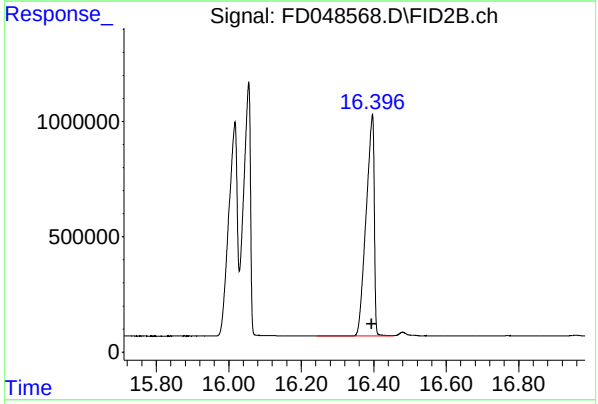
R.T.: 16.016 min
Delta R.T.: 0.000 min
Response: 15350623
Conc: 99.93 ug/ml



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

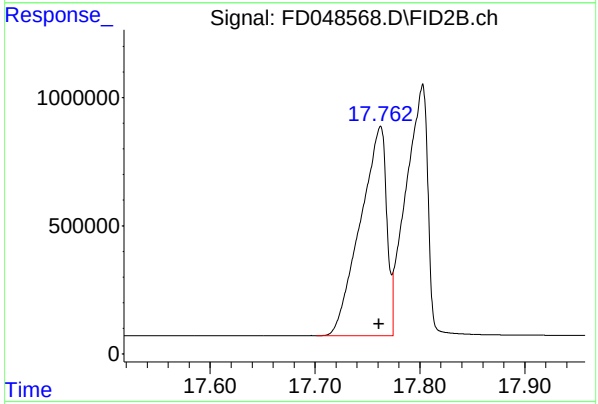
R.T.: 16.054 min
Delta R.T.: -0.001 mi
Response: 14161475
Conc: 97.90 ug/m

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1



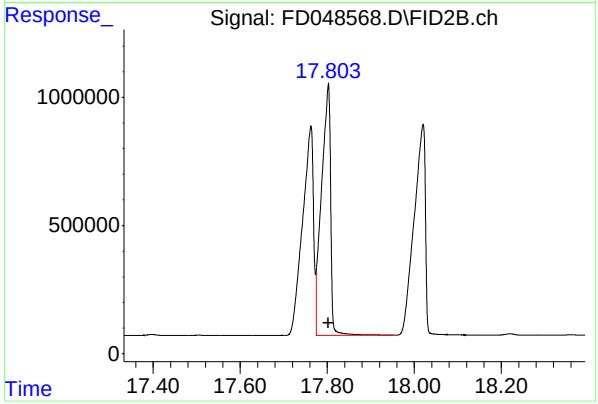
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.395 min
Delta R.T.: 0.000 min
Response: 14921521
Conc: 99.31 ug/ml



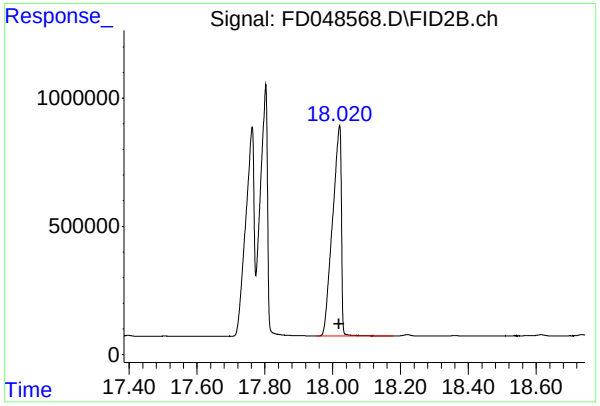
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.761 min
Delta R.T.: 0.000 min
Response: 14261058
Conc: 103.93 ug/ml



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

R.T.: 17.801 min
Delta R.T.: -0.002 min
Response: 14330700
Conc: 95.35 ug/ml



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

R.T.: 18.019 min
Delta R.T.: 0.000 mi
Response: 14842367
Conc: 98.21 ug/m

Instrument :
FID_D
ClientSampleId :
100 PPM AROMATIC HC STD1

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048568.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 15:12
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 102324.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	4.199	4.161	4.256	BV	1903452	16947170	96.16%	5.194%
2	5.719	5.644	5.881	BV	1794310	17612911	99.93%	5.398%
3	6.767	6.724	6.878	PV	1721582	17624448	100.00%	5.402%
4	7.379	7.268	7.471	PV	1511924	14919837	84.65%	4.573%
5	8.034	7.994	8.184	BB	1618840	17045088	96.71%	5.224%
6	8.230	8.188	8.294	BV	985430	10015694	56.83%	3.070%
7	8.331	8.294	8.464	VB	1571009	17086977	96.95%	5.237%
8	9.109	9.031	9.231	BB	1435050	16673063	94.60%	5.110%
9	10.496	10.388	10.533	BV	1431777	16410378	93.11%	5.030%
10	10.573	10.533	10.771	VB	1362012	15569819	88.34%	4.772%
11	11.267	11.221	11.371	BV	1423748	16385129	92.97%	5.022%
12	12.302	12.249	12.444	VV	1225147	15981856	90.68%	4.898%
13	12.596	12.544	12.624	BV	1267297	15811187	89.71%	4.846%
14	14.466	14.418	14.483	PV	976483	14979852	84.99%	4.591%
15	14.512	14.483	14.648	VB	1164623	15332543	87.00%	4.699%
16	16.016	15.961	16.031	BV	945594	15350623	87.10%	4.705%
17	16.054	16.031	16.151	VB	1101985	14161475	80.35%	4.340%
18	16.395	16.241	16.453	BV	941300	14921521	84.66%	4.573%
19	17.761	17.701	17.774	BV	810590	14261058	80.92%	4.371%
20	17.801	17.774	17.951	VV	963681	14330700	81.31%	4.392%
21	18.019	17.951	18.178	VV	811340	14842367	84.21%	4.549%

Sum of corrected areas: 326263695

Aromatic EPH 102324.M Wed Oct 23 18:16:59 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048569.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 15:48
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: Oct 23 17:15:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:09:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4)	S 2-Bromonaphthalene (S...	7.375	7529591	49.962 ug/ml
	Spiked Amount 50.000		Recovery = 99.92%	
6)	S 2-Flurobiphenyl (SURR)	8.225	5021501	50.132 ug/ml
	Spiked Amount 50.000 Range 0 - 131		Recovery = 100.26%	
11)	S ortho-Terphenyl (SURR)	11.261	8334280	49.996 ug/ml
	Spiked Amount 50.000		Recovery = 99.99%	
	Target Compounds			
1)	T 1,2,3-Trimethylbenzen...	4.196	8539641	49.894 ug/ml
2)	T Naphthalene (C11.7)	5.715	8873483	49.898 ug/ml
3)	T 2-Methylnaphthalene (...	6.762	8891978	49.967 ug/ml
5)	T Acenaphthylene (C15.06)	8.029	8649197	49.954 ug/ml
7)	T Acenaphthene (C15.5)	8.324	8673178	49.886 ug/ml
8)	T Flouorene (C16.55)	9.102	8428307	50.018 ug/ml
9)	T Phenanthrene (C19.36)	10.489	8272929	50.044 ug/ml
10)	T Anthracene (C19.43)	10.565	7888616	49.915 ug/ml
12)	T Fluoranthene (C21.85)	12.294	8076662	49.863 ug/ml
13)	T Pyrene (C20.8)	12.587	8025067	50.162 ug/ml
14)	T Benzo[a]anthracene (C...	14.456	7527575	50.230 ug/ml
15)	T Chrysene (C27.41)	14.500	7833293	49.731 ug/ml
16)	T benzo[b]fluoranthene ...	16.005	7671770	49.961 ug/ml
17)	T Bnezo[k]fluoranthene ...	16.039	7231888	49.599 ug/ml
18)	T Benzo[a]pyrene (C31.34)	16.381	7547267	50.152 ug/ml
19)	T Indeno[1,2,3-cd]pyren...	17.747	6949708	50.431 ug/ml
20)	T Dibenz[a,h]anthracene...	17.785	7539487	49.466 ug/ml
21)	T Benzo[g,h,i]perylene ...	18.000	7527026	49.870 ug/ml

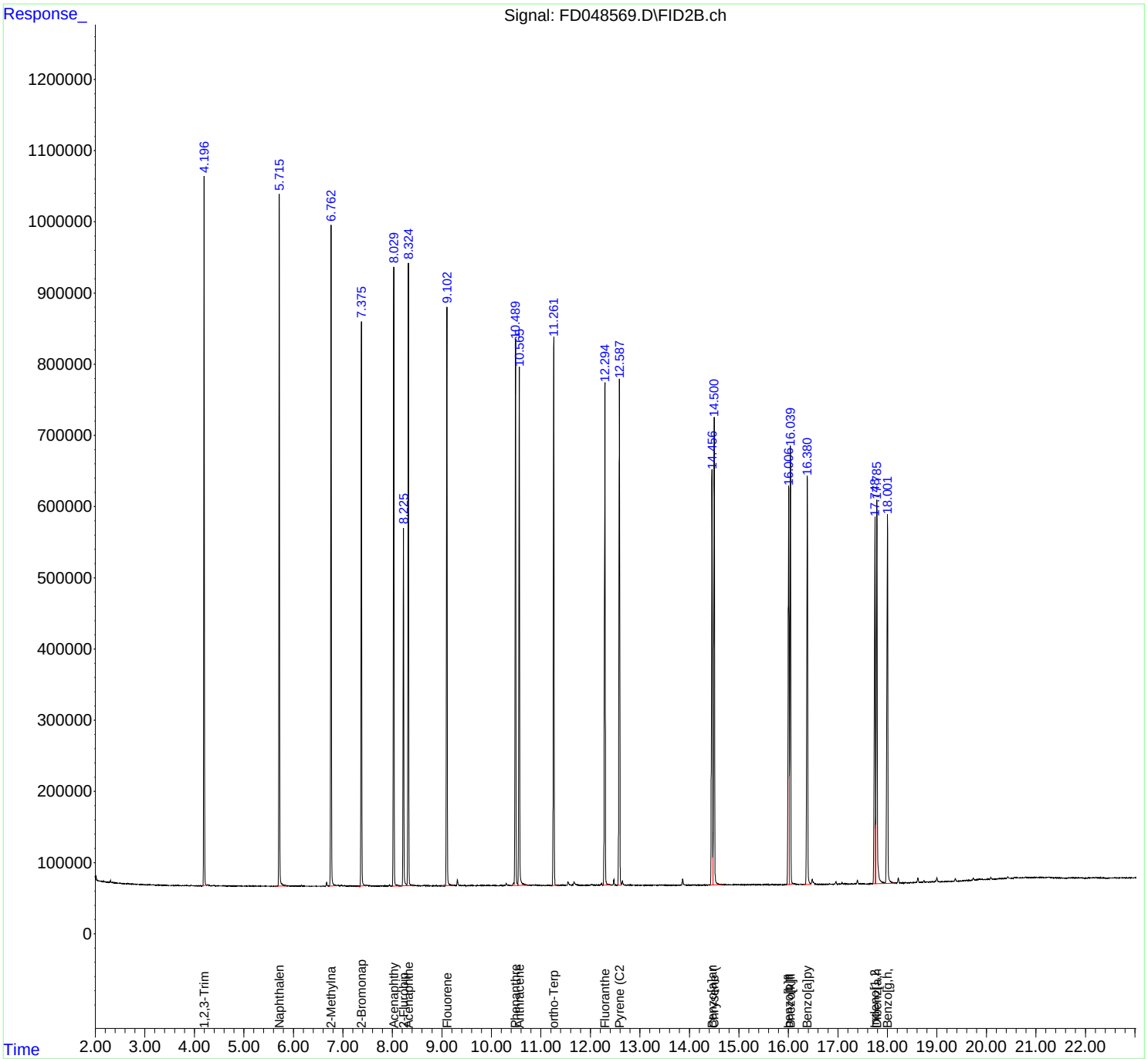
(f)=RT Delta > 1/2 Window (m)=manual int.

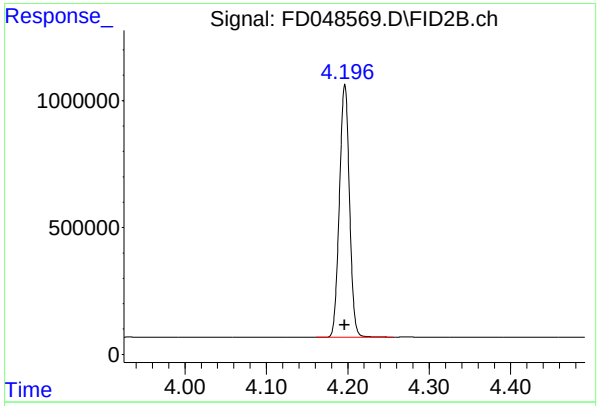
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048569.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 15:48
Operator : YP/AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Oct 23 17:15:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:09:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

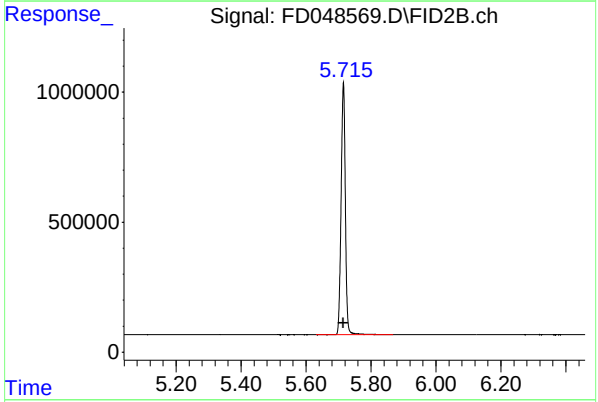




#1 1,2,3-Trimethylbenzene (C10.1)

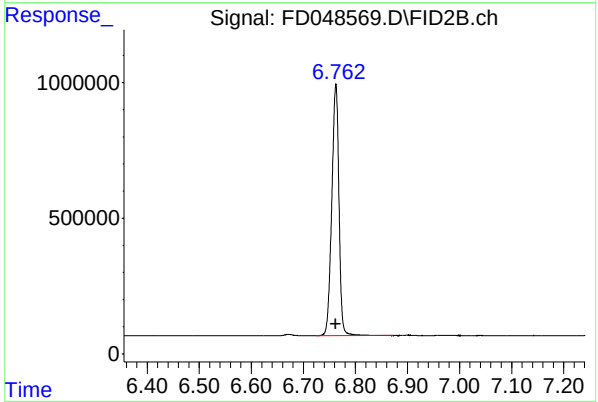
R.T.: 4.196 min
Delta R.T.: 0.000 min
Response: 8539641
Conc: 49.89 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



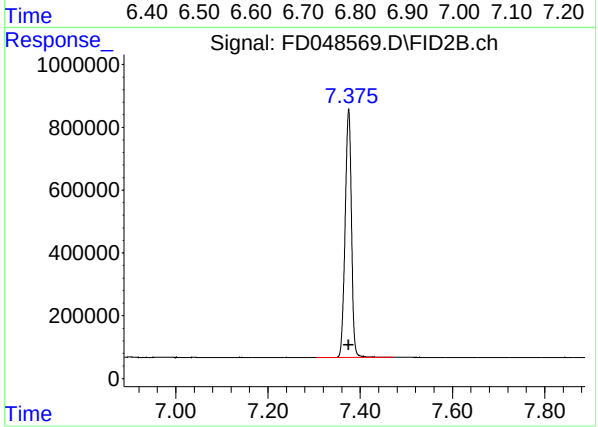
#2 Naphthalene (C11.7)

R.T.: 5.715 min
Delta R.T.: 0.000 min
Response: 8873483
Conc: 49.90 ug/ml



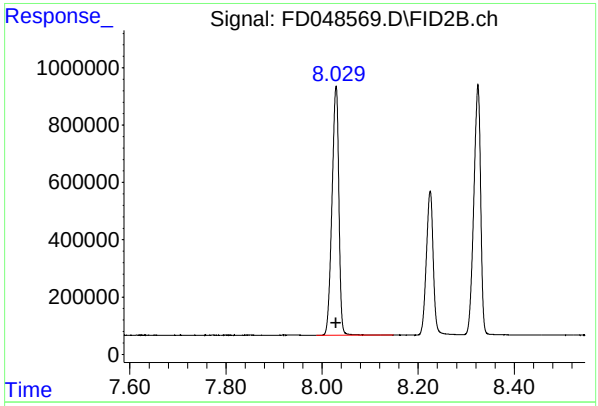
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.762 min
Delta R.T.: 0.000 min
Response: 8891978
Conc: 49.97 ug/ml



#4 2-Bromonaphthalene (SURR)

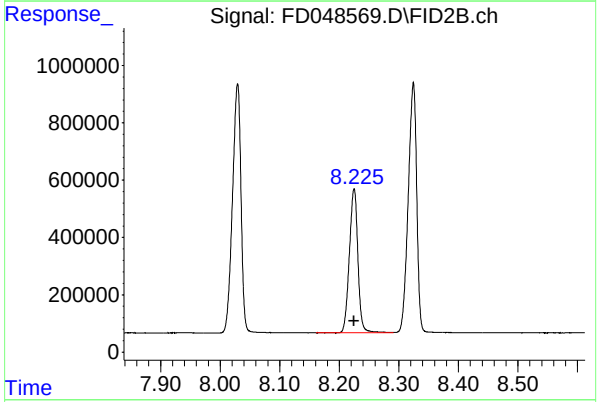
R.T.: 7.375 min
Delta R.T.: 0.000 min
Response: 7529591
Conc: 49.96 ug/ml



#5 Acenaphthylene (C15.06)

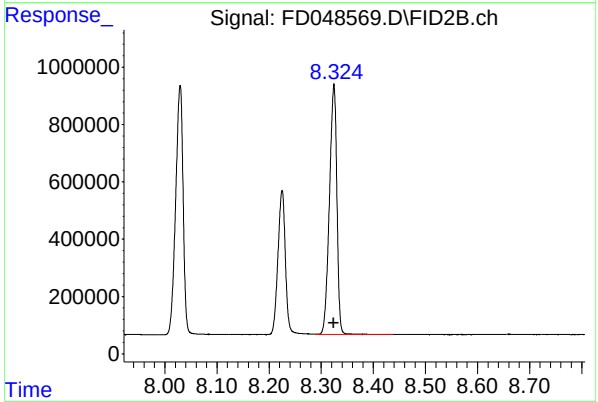
R.T.: 8.029 min
Delta R.T.: 0.000 min
Response: 8649197
Conc: 49.95 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



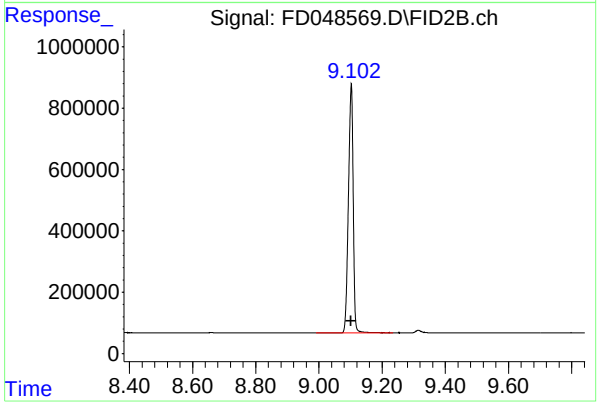
#6 2-Flurobiphenyl (SURR)

R.T.: 8.225 min
Delta R.T.: 0.000 min
Response: 5021501
Conc: 50.13 ug/ml



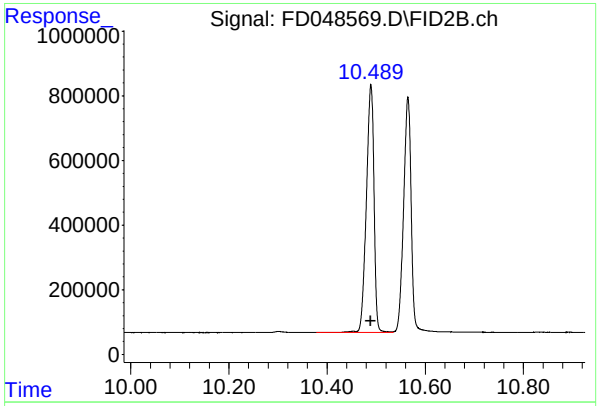
#7 Acenaphthene (C15.5)

R.T.: 8.324 min
Delta R.T.: 0.000 min
Response: 8673178
Conc: 49.89 ug/ml



#8 Flouorene (C16.55)

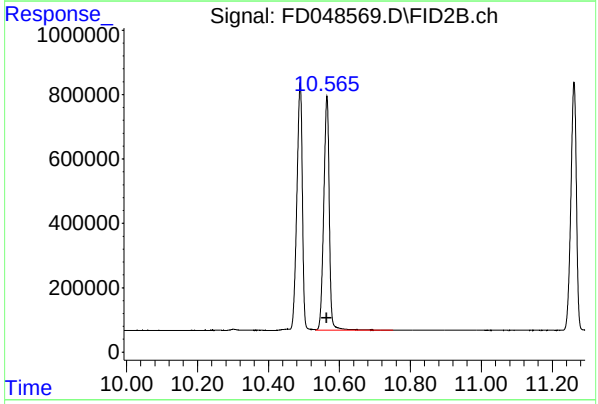
R.T.: 9.102 min
Delta R.T.: 0.000 min
Response: 8428307
Conc: 50.02 ug/ml



#9 Phenanthrene (C19.36)

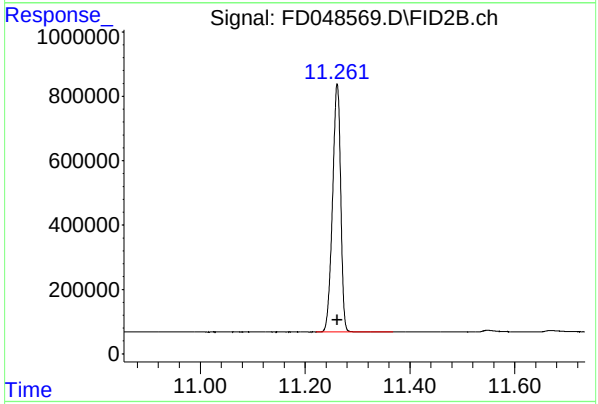
R.T.: 10.489 min
Delta R.T.: 0.000 min
Response: 8272929
Conc: 50.04 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



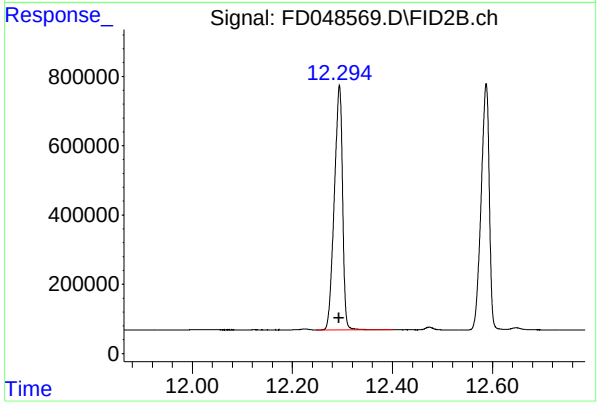
#10 Anthracene (C19.43)

R.T.: 10.565 min
Delta R.T.: 0.000 min
Response: 7888616
Conc: 49.92 ug/ml



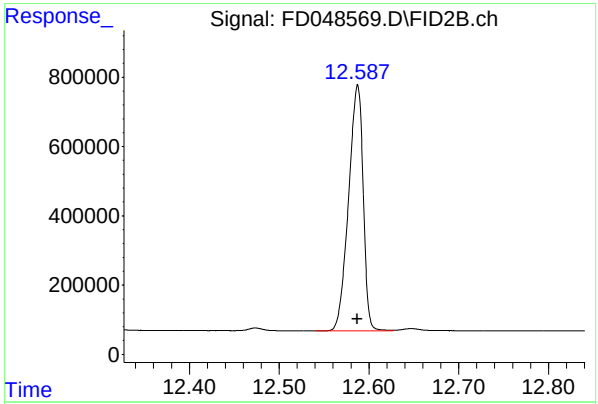
#11 ortho-Terphenyl (SURR)

R.T.: 11.261 min
Delta R.T.: 0.000 min
Response: 8334280
Conc: 50.00 ug/ml



#12 Fluoranthene (C21.85)

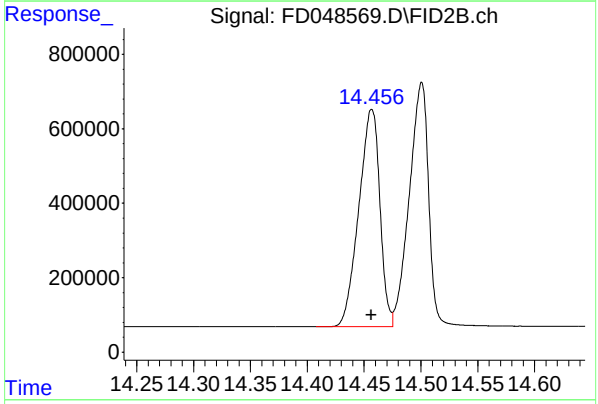
R.T.: 12.294 min
Delta R.T.: 0.000 min
Response: 8076662
Conc: 49.86 ug/ml



#13 Pyrene (C20.8)

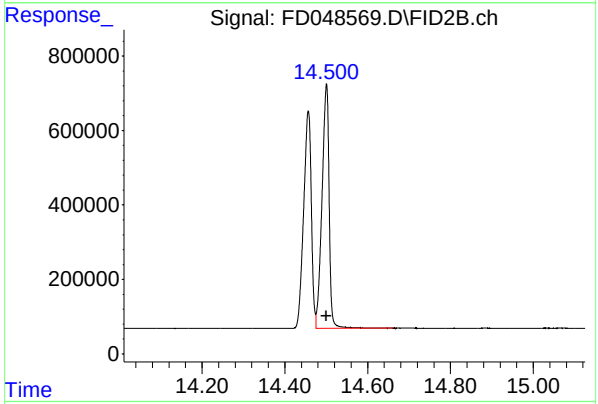
R.T.: 12.587 min
Delta R.T.: 0.000 min
Response: 8025067
Conc: 50.16 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



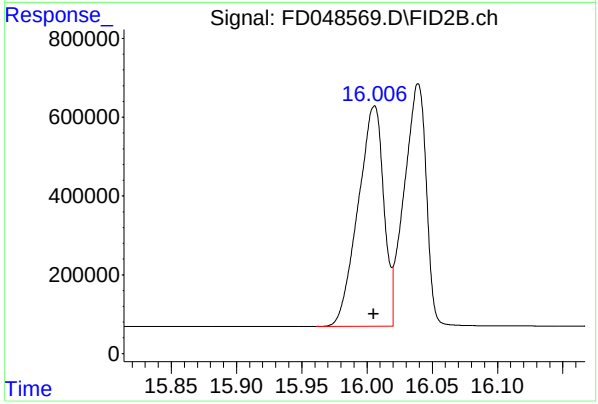
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.456 min
Delta R.T.: 0.000 min
Response: 7527575
Conc: 50.23 ug/ml



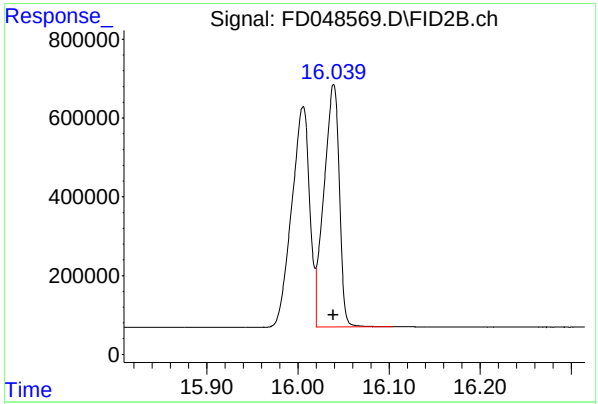
#15 Chrysene (C27.41)

R.T.: 14.500 min
Delta R.T.: 0.000 min
Response: 7833293
Conc: 49.73 ug/ml



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

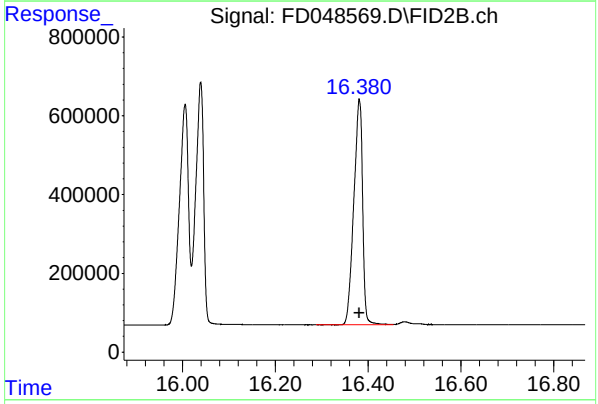
R.T.: 16.005 min
Delta R.T.: 0.000 min
Response: 7671770
Conc: 49.96 ug/ml



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

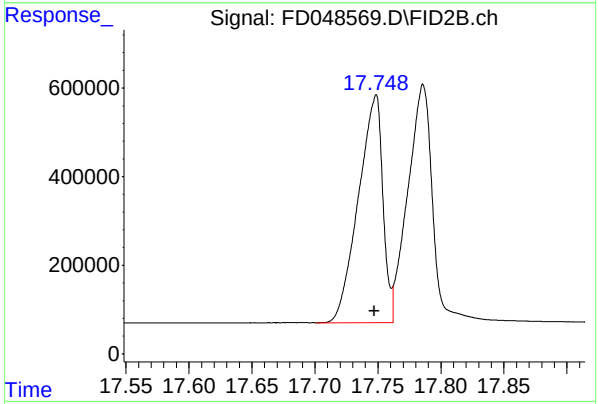
R.T.: 16.039 min
Delta R.T.: 0.000 min
Response: 7231888
Conc: 49.60 ug/ml

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2



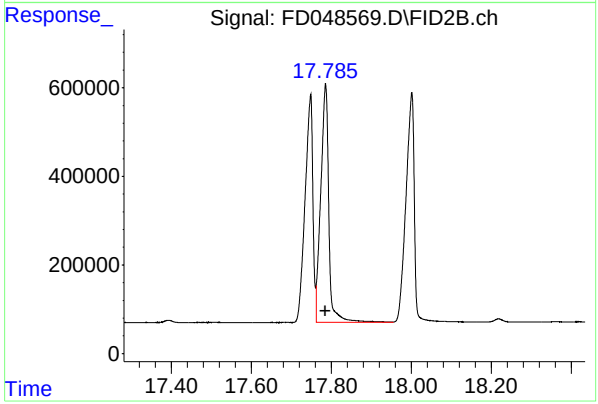
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.381 min
Delta R.T.: 0.000 min
Response: 7547267
Conc: 50.15 ug/ml



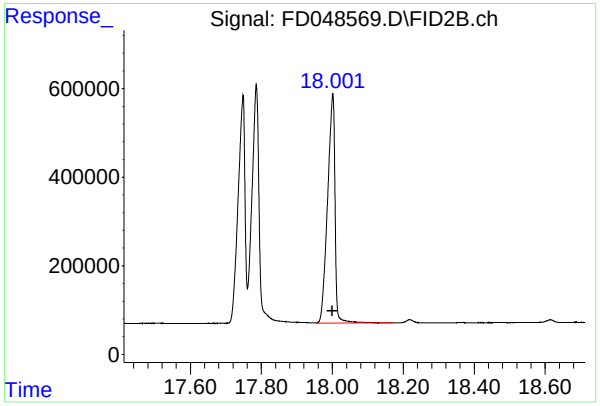
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.747 min
Delta R.T.: 0.000 min
Response: 6949708
Conc: 50.43 ug/ml



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

R.T.: 17.785 min
Delta R.T.: 0.000 min
Response: 7539487
Conc: 49.47 ug/ml



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

R.T.: 18.000 min
Delta R.T.: 0.000 mi
Response: 7527026
Conc: 49.87 ug/m

Instrument :
FID_D
ClientSampleId :
50 PPM AROMATIC HC STD2

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048569.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 15:48
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 102324.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	4.161	4.255	BV	998732	8539641	96.04%	5.175%
2	5.715	5.631	5.868	BB	961300	8873483	99.79%	5.377%
3	6.762	6.724	6.872	PV	916254	8891978	100.00%	5.388%
4	7.375	7.304	7.471	BB	788165	7529591	84.68%	4.562%
5	8.029	7.988	8.148	BB	861509	8649197	97.27%	5.241%
6	8.225	8.161	8.290	BV	502069	5021501	56.47%	3.043%
7	8.324	8.290	8.438	VB	874209	8673178	97.54%	5.255%
8	9.102	8.991	9.234	BV	799296	8428307	94.79%	5.107%
9	10.489	10.378	10.534	BV	757282	8272929	93.04%	5.013%
10	10.565	10.534	10.751	VB	727764	7888616	88.72%	4.780%
11	11.261	11.221	11.368	BB	773174	8334280	93.73%	5.050%
12	12.294	12.247	12.401	PB	711390	8076662	90.83%	4.894%
13	12.587	12.541	12.627	BV	714458	8025067	90.25%	4.863%
14	14.456	14.408	14.475	PV	588127	7527575	84.66%	4.561%
15	14.500	14.475	14.661	VB	663541	7833293	88.09%	4.747%
16	16.005	15.961	16.020	BV	559367	7671770	86.28%	4.649%
17	16.039	16.020	16.104	VV	611862	7231888	81.33%	4.382%
18	16.381	16.288	16.453	BV	574389	7547267	84.88%	4.573%
19	17.747	17.701	17.762	BV	512967	6949708	78.16%	4.211%
20	17.785	17.762	17.954	VV	532723	7539487	84.79%	4.568%
21	18.000	17.954	18.171	VV	519884	7527026	84.65%	4.561%

Sum of corrected areas: 165032443

Aromatic EPH 102324.M Wed Oct 23 18:18:22 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048570.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 16:25
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: Oct 23 17:10:51 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:09:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.372	3046545	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
6) S	2-Flurobiphenyl (SURR)	8.222	1998164	20.000 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	40.00%
11) S	ortho-Terphenyl (SURR)	11.258	3391146	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.195	3464073	20.000 ug/ml
2) T	Naphthalene (C11.7)	5.713	3597996	20.000 ug/ml
3) T	2-Methylnaphthalene (...	6.760	3595810	20.000 ug/ml
5) T	Acenaphthylene (C15.06)	8.025	3519888	20.000 ug/ml
7) T	Acenaphthene (C15.5)	8.319	3544868	20.000 ug/ml
8) T	Flouorene (C16.55)	9.097	3404430	20.000 ug/ml
9) T	Phenanthrene (C19.36)	10.485	3327445	20.000 ug/ml
10) T	Anthracene (C19.43)	10.560	3212978	20.000 ug/ml
12) T	Fluoranthene (C21.85)	12.288	3291616	20.000 ug/ml
13) T	Pyrene (C20.8)	12.581	3226732	20.000 ug/ml
14) T	Benzo[a]anthracene (C...	14.451	2984688	20.000 ug/ml
15) T	Chrysene (C27.41)	14.492	3250919	20.000 ug/ml
16) T	benzo[b]fluoranthene ...	15.997	3074553	20.000 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.027	3023398	20.000 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.372	3026012	20.000 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.737	2636324	20.000 ug/ml
20) T	Dibenz[a,h]anthracene...	17.777	3263027	20.000 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.987	3076637	20.000 ug/ml

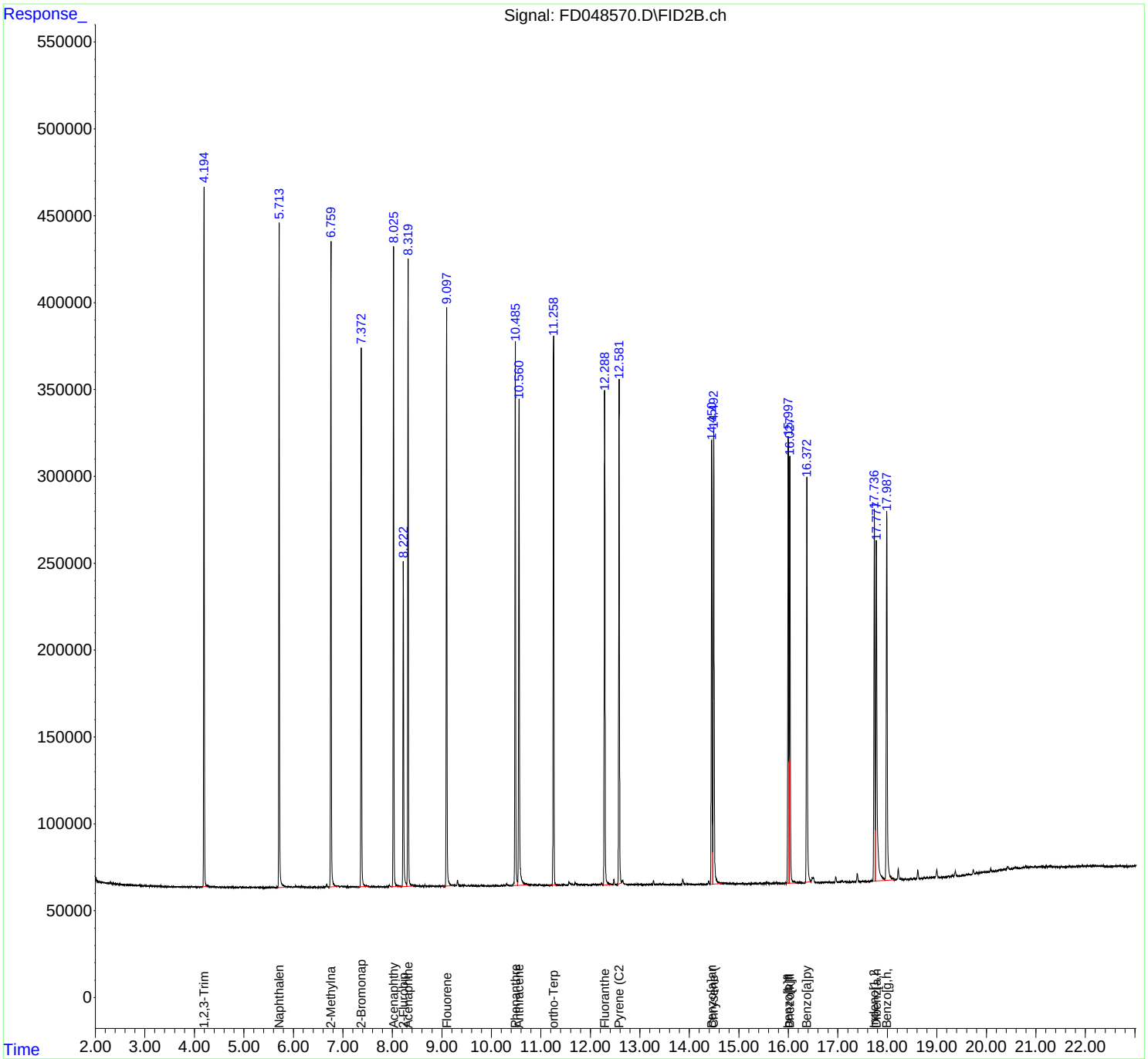
(f)=RT Delta > 1/2 Window (m)=manual int.

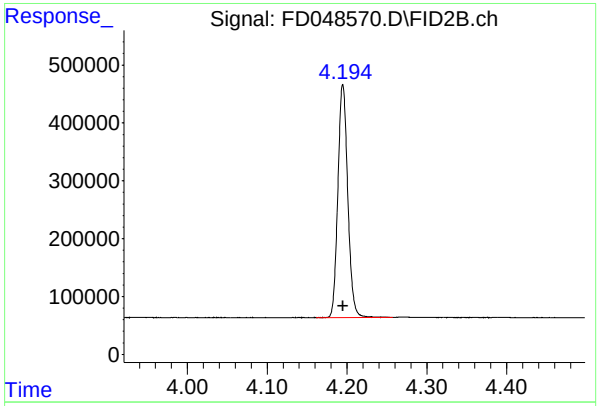
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048570.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 16:25
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Oct 23 17:10:51 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:09:25 2024
Response via : Initial Calibration
Integrator: ChemStation

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

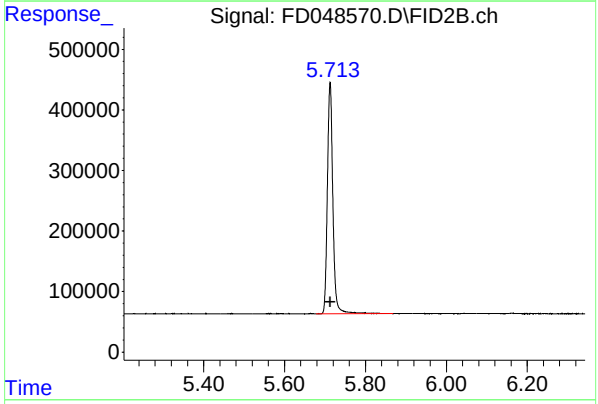




#1 1,2,3-Trimethylbenzene (C10.1)

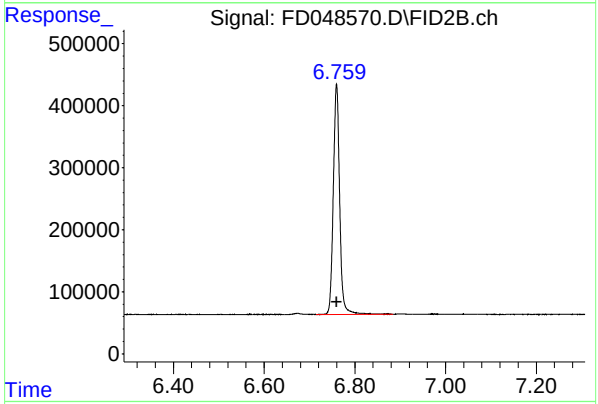
R.T.: 4.195 min
Delta R.T.: 0.000 min
Response: 3464073
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



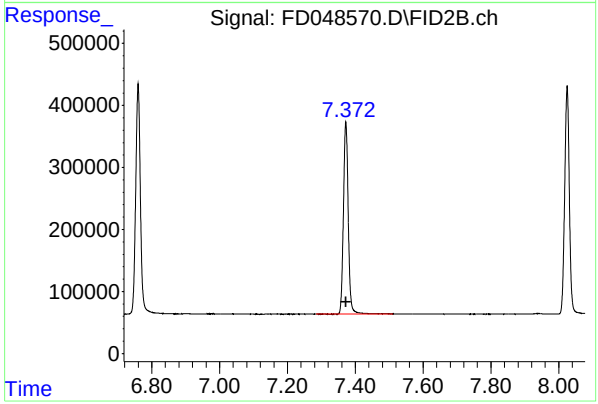
#2 Naphthalene (C11.7)

R.T.: 5.713 min
Delta R.T.: 0.000 min
Response: 3597996
Conc: 20.00 ug/ml



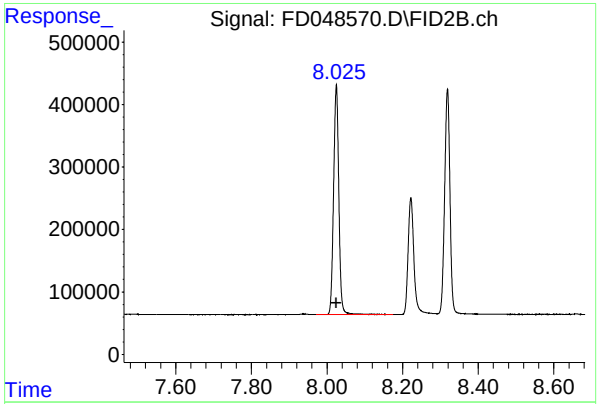
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.760 min
Delta R.T.: 0.000 min
Response: 3595810
Conc: 20.00 ug/ml



#4 2-Bromonaphthalene (SURR)

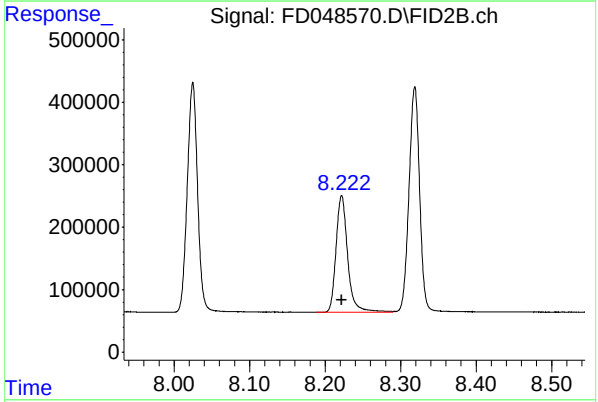
R.T.: 7.372 min
Delta R.T.: 0.000 min
Response: 3046545
Conc: 20.00 ug/ml



#5 Acenaphthylene (C15.06)

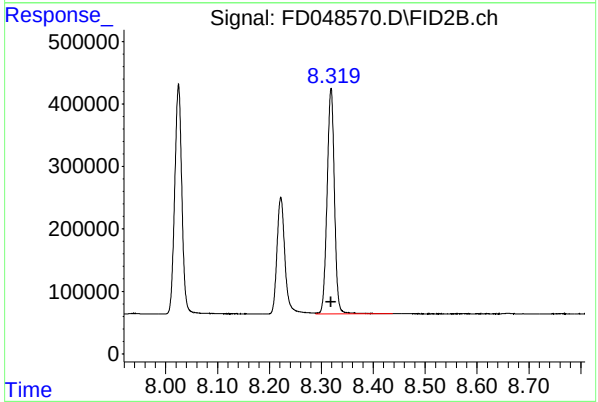
R.T.: 8.025 min
Delta R.T.: 0.000 min
Response: 3519888
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



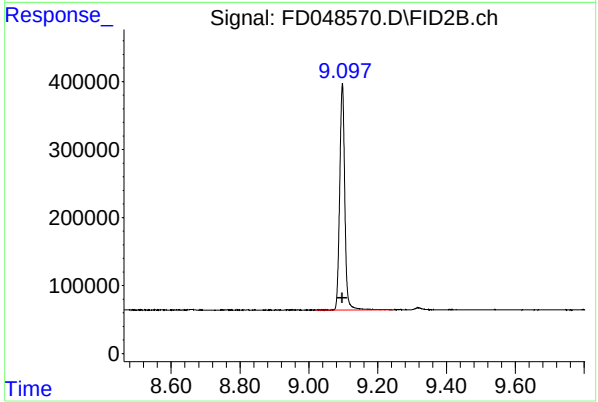
#6 2-Flurobiphenyl (SURR)

R.T.: 8.222 min
Delta R.T.: 0.000 min
Response: 1998164
Conc: 20.00 ug/ml



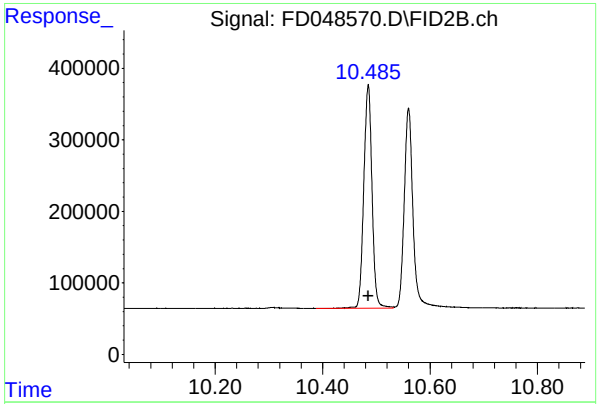
#7 Acenaphthene (C15.5)

R.T.: 8.319 min
Delta R.T.: 0.000 min
Response: 3544868
Conc: 20.00 ug/ml



#8 Flouorene (C16.55)

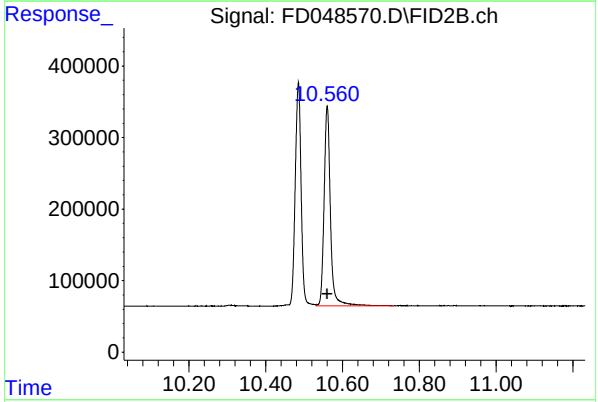
R.T.: 9.097 min
Delta R.T.: 0.000 min
Response: 3404430
Conc: 20.00 ug/ml



#9 Phenanthrene (C19.36)

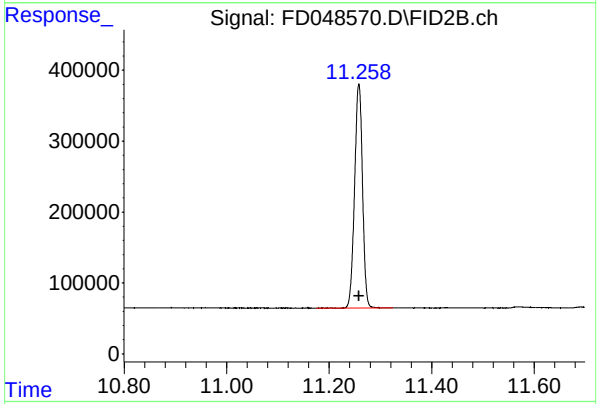
R.T.: 10.485 min
Delta R.T.: 0.000 min
Response: 3327445
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



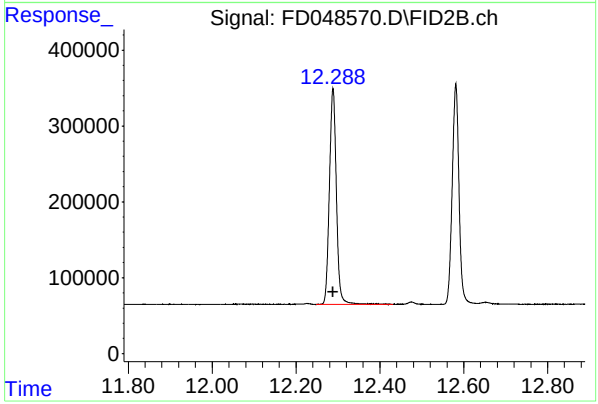
#10 Anthracene (C19.43)

R.T.: 10.560 min
Delta R.T.: 0.000 min
Response: 3212978
Conc: 20.00 ug/ml



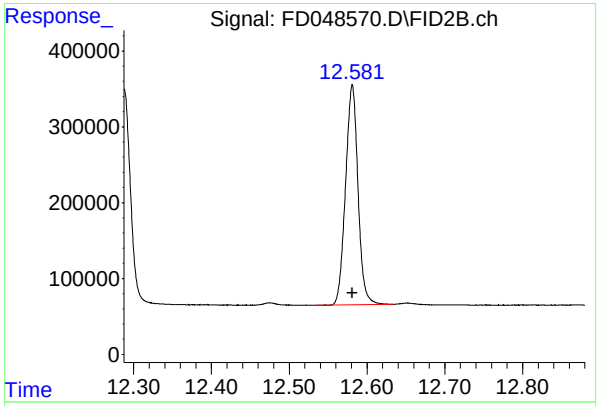
#11 ortho-Terphenyl (SURR)

R.T.: 11.258 min
Delta R.T.: 0.000 min
Response: 3391146
Conc: 20.00 ug/ml



#12 Fluoranthene (C21.85)

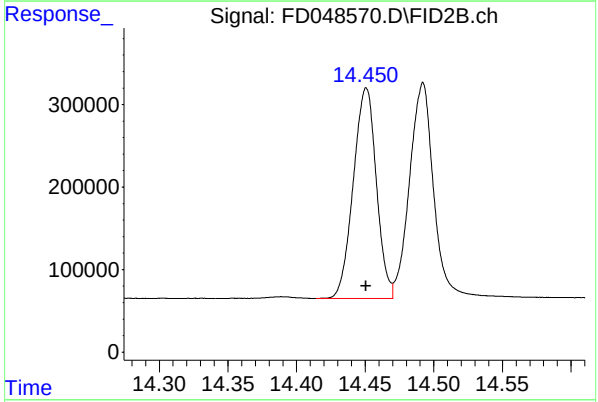
R.T.: 12.288 min
Delta R.T.: 0.000 min
Response: 3291616
Conc: 20.00 ug/ml



#13 Pyrene (C20.8)

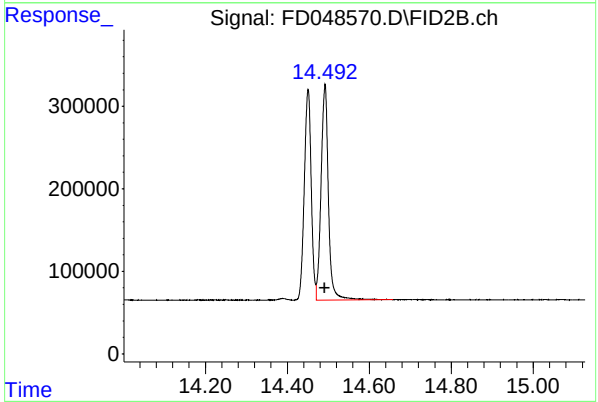
R.T.: 12.581 min
Delta R.T.: 0.000 min
Response: 3226732
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



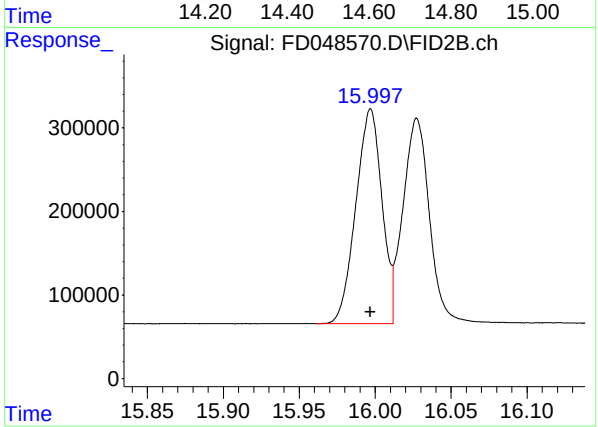
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.451 min
Delta R.T.: 0.000 min
Response: 2984688
Conc: 20.00 ug/ml



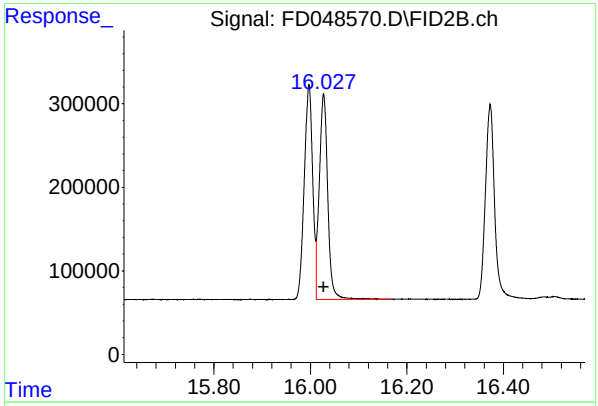
#15 Chrysene (C27.41)

R.T.: 14.492 min
Delta R.T.: 0.000 min
Response: 3250919
Conc: 20.00 ug/ml



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

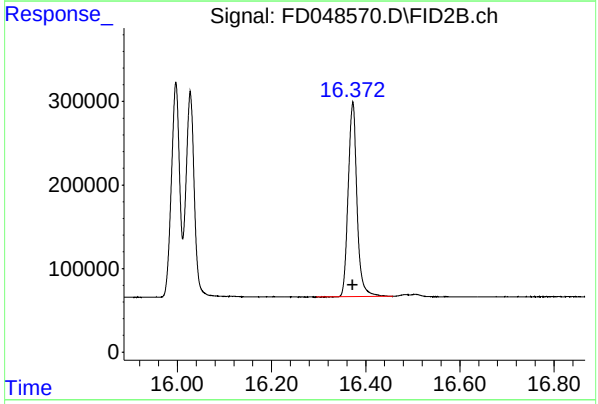
R.T.: 15.997 min
Delta R.T.: 0.000 min
Response: 3074553
Conc: 20.00 ug/ml



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

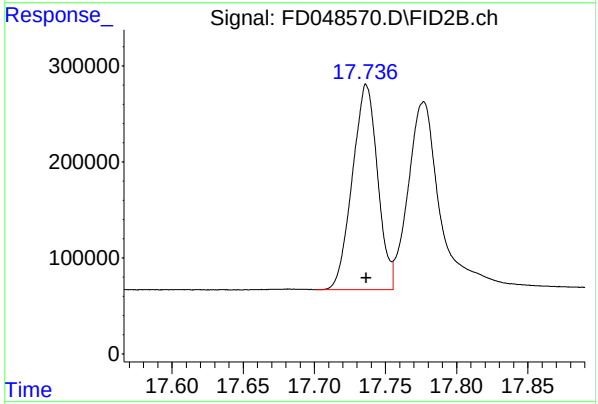
R.T.: 16.027 min
Delta R.T.: 0.000 min
Response: 3023398
Conc: 20.00 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3



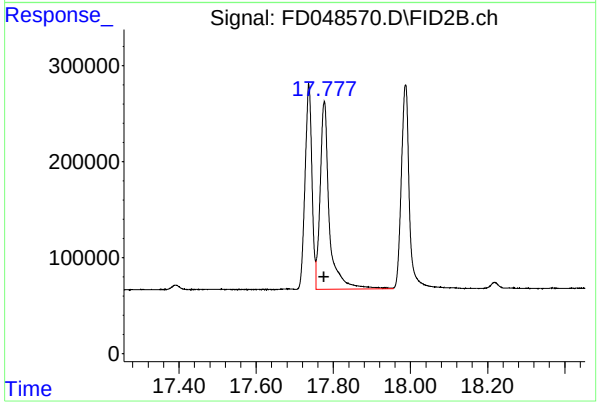
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.372 min
Delta R.T.: 0.000 min
Response: 3026012
Conc: 20.00 ug/ml



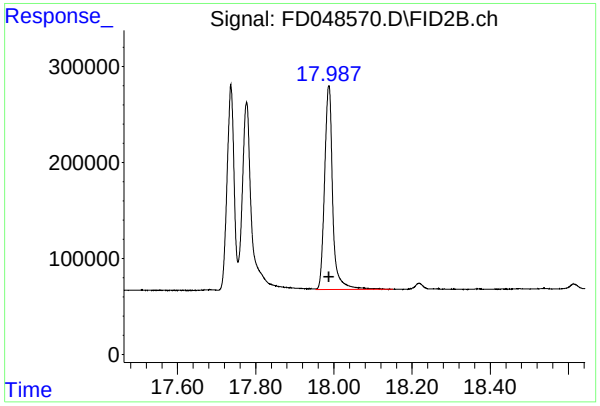
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.737 min
Delta R.T.: 0.000 min
Response: 2636324
Conc: 20.00 ug/ml



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

R.T.: 17.777 min
Delta R.T.: 0.000 min
Response: 3263027
Conc: 20.00 ug/ml



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

R.T.: 17.987 min
Delta R.T.: 0.000 mi
Response: 3076637
Conc: 20.00 ug/m

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD3

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048570.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 16:25
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 102324.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	4.195	4.161	4.257	BV	402734	3464073	96.28%	5.174%
2	5.713	5.678	5.868	PB	378310	3597996	100.00%	5.374%
3	6.760	6.714	6.884	PV	369607	3595810	99.94%	5.370%
4	7.372	7.284	7.511	BB	309427	3046545	84.67%	4.550%
5	8.025	7.971	8.174	BV	366415	3519888	97.83%	5.257%
6	8.222	8.188	8.290	PV	185974	1998164	55.54%	2.984%
7	8.319	8.290	8.438	VB	358996	3544868	98.52%	5.294%
8	9.097	9.021	9.244	BB	332486	3404430	94.62%	5.084%
9	10.485	10.388	10.531	BV	311516	3327445	92.48%	4.970%
10	10.560	10.531	10.731	VB	280274	3212978	89.30%	4.799%
11	11.258	11.174	11.324	BB	316403	3391146	94.25%	5.065%
12	12.288	12.248	12.431	PB	284432	3291616	91.48%	4.916%
13	12.581	12.534	12.633	PV	290024	3226732	89.68%	4.819%
14	14.451	14.414	14.470	PV	256334	2984688	82.95%	4.458%
15	14.492	14.470	14.658	VB	259225	3250919	90.35%	4.855%
16	15.997	15.961	16.012	BV	257955	3074553	85.45%	4.592%
17	16.027	16.012	16.171	VB	245800	3023398	84.03%	4.515%
18	16.372	16.294	16.458	BV	230365	3026012	84.10%	4.519%
19	17.737	17.701	17.755	BV	213338	2636324	73.27%	3.937%
20	17.777	17.755	17.954	VV	197036	3263027	90.69%	4.873%
21	17.987	17.954	18.151	VB	213971	3076637	85.51%	4.595%

Sum of corrected areas: 66957247

Aromatic EPH 102324.M Wed Oct 23 18:18:39 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048571.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 17:02
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: Oct 23 17:44:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:44:12 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	1535833	10.143 ug/ml
	Spiked Amount 50.000		Recovery =	20.29%
6)	S 2-Flurobiphenyl (SURR)	8.224	998081	9.973 ug/ml
	Spiked Amount 50.000 Range 0 - 131		Recovery =	19.95%
11)	S ortho-Terphenyl (SURR)	11.257	1758096	10.404 ug/ml
	Spiked Amount 50.000		Recovery =	20.81%
	Target Compounds			
1)	T 1,2,3-Trimethylbenzen...	4.196	1780007	10.297 ug/ml
2)	T Naphthalene (C11.7)	5.714	1822653	10.186 ug/ml
3)	T 2-Methylnaphthalene (...	6.760	1826622	10.197 ug/ml
5)	T Acenaphthylene (C15.06)	8.025	1809718	10.335 ug/ml
7)	T Acenaphthene (C15.5)	8.318	1838643	10.425 ug/ml
8)	T Flouorene (C16.55)	9.098	1719817	10.154 ug/ml
9)	T Phenanthrene (C19.36)	10.484	1680489	10.124 ug/ml
10)	T Anthracene (C19.43)	10.560	1635709	10.260 ug/ml
12)	T Fluoranthene (C21.85)	12.288	1671203	10.236 ug/ml
13)	T Pyrene (C20.8)	12.581	1639022	10.183 ug/ml
14)	T Benzo[a]anthracene (C...	14.450	1472368	9.868 ug/ml
15)	T Chrysene (C27.41)	14.491	1725560	10.700 ug/ml
16)	T benzo[b]fluoranthene ...	15.995	1544713	10.045 ug/ml
17)	T Bnezo[k]fluoranthene ...	16.026	1579300	10.611 ug/ml
18)	T Benzo[a]pyrene (C31.34)	16.374	1518079	10.066 ug/ml
19)	T Indeno[1,2,3-cd]pyren...	17.737	1259393	9.340 ug/ml
20)	T Dibenz[a,h]anthracene...	17.779	1780079	11.209 ug/ml
21)	T Benzo[g,h,i]perylene ...	17.986	1603528	10.461 ug/ml

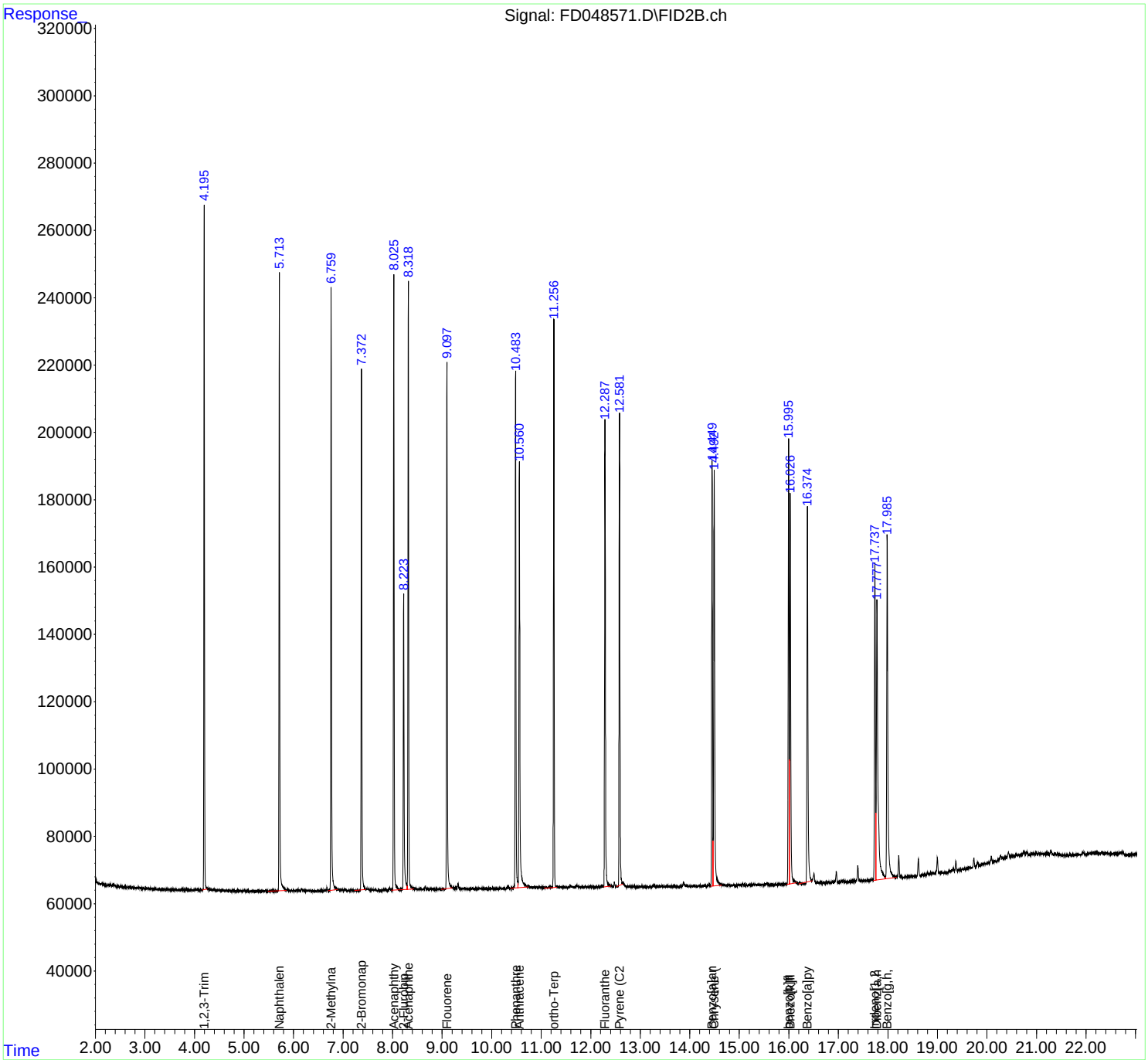
(f)=RT Delta > 1/2 Window (m)=manual int.

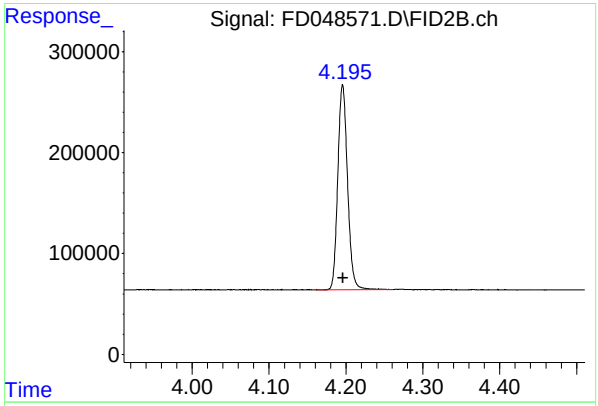
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048571.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 17:02
Operator : YP/AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 64 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

Integration File: autoint1.e
Quant Time: Oct 23 17:44:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 17:44:12 2024
Response via : Initial Calibration
Integrator: ChemStation

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

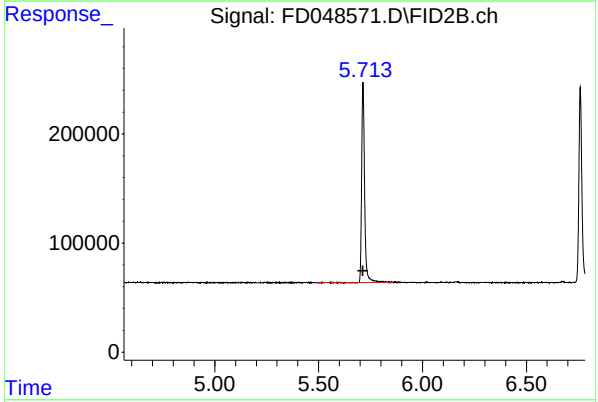




#1 1,2,3-Trimethylbenzene (C10.1)

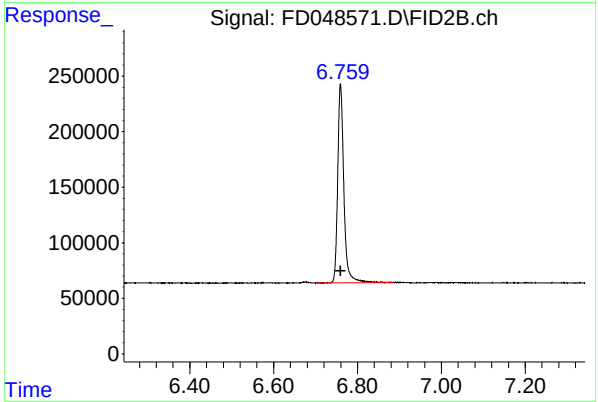
R.T.: 4.196 min
Delta R.T.: 0.000 min
Response: 1780007
Conc: 10.30 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



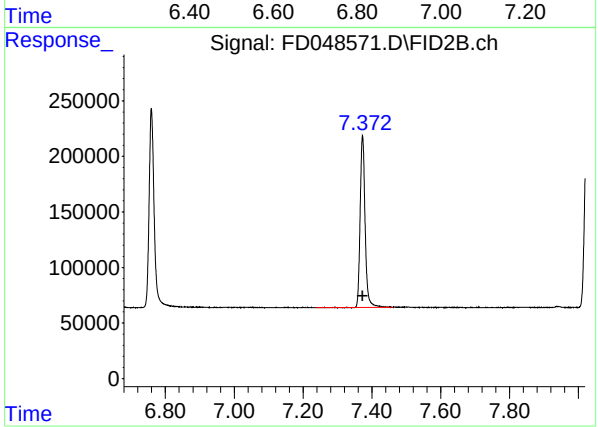
#2 Naphthalene (C11.7)

R.T.: 5.714 min
Delta R.T.: 0.000 min
Response: 1822653
Conc: 10.19 ug/ml



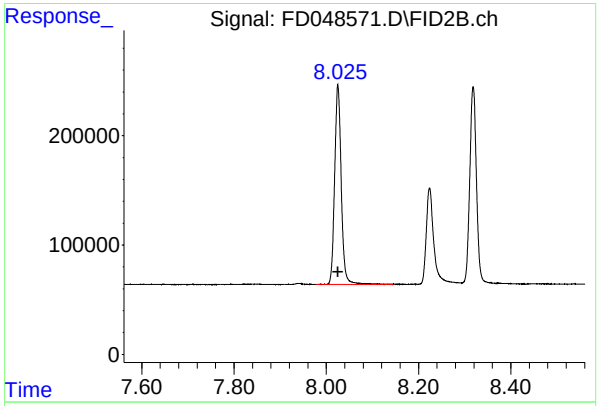
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.760 min
Delta R.T.: 0.000 min
Response: 1826622
Conc: 10.20 ug/ml



#4 2-Bromonaphthalene (SURR)

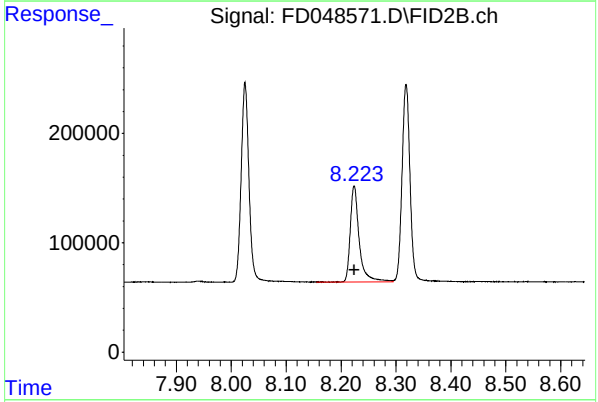
R.T.: 7.373 min
Delta R.T.: 0.000 min
Response: 1535833
Conc: 10.14 ug/ml



#5 Acenaphthylene (C15.06)

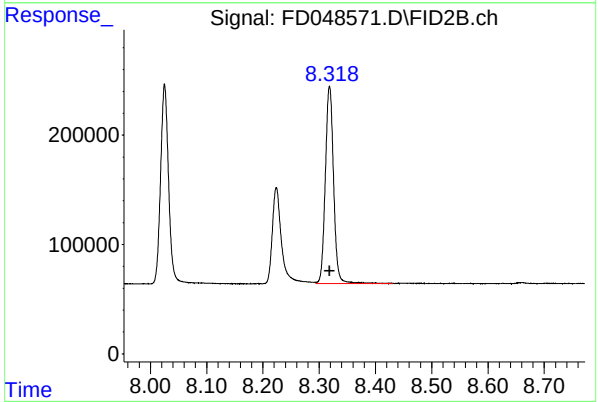
R.T.: 8.025 min
Delta R.T.: 0.000 min
Response: 1809718
Conc: 10.34 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



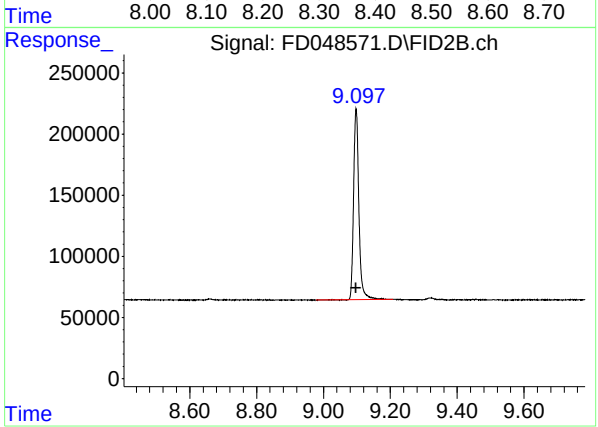
#6 2-Flurobiphenyl (SURR)

R.T.: 8.224 min
Delta R.T.: 0.000 min
Response: 998081
Conc: 9.97 ug/ml



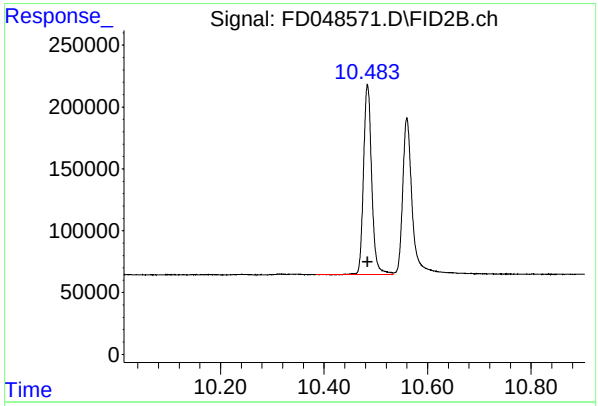
#7 Acenaphthene (C15.5)

R.T.: 8.318 min
Delta R.T.: 0.000 min
Response: 1838643
Conc: 10.43 ug/ml



#8 Flouorene (C16.55)

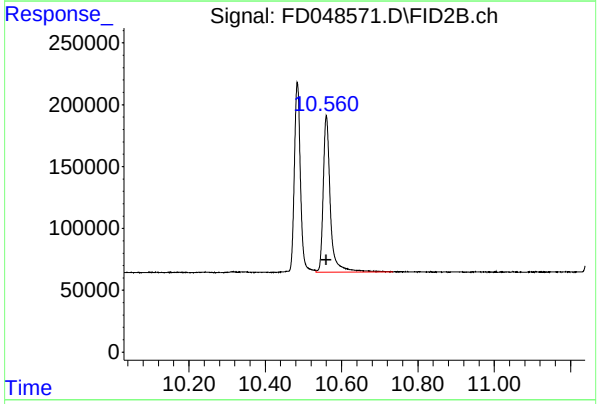
R.T.: 9.098 min
Delta R.T.: 0.000 min
Response: 1719817
Conc: 10.15 ug/ml



#9 Phenanthrene (C19.36)

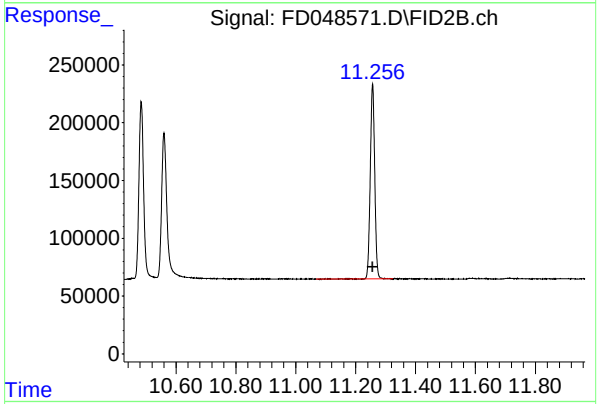
R.T.: 10.484 min
Delta R.T.: 0.000 min
Response: 1680489
Conc: 10.12 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



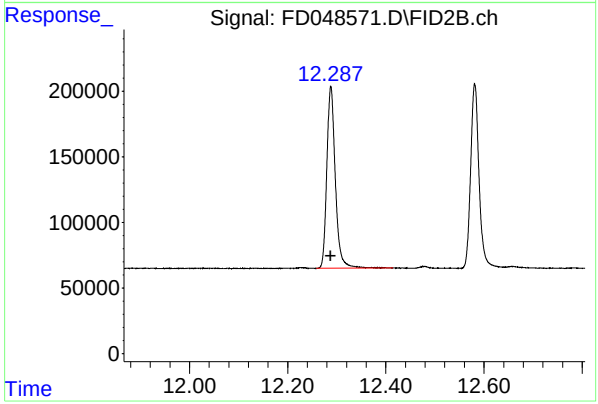
#10 Anthracene (C19.43)

R.T.: 10.560 min
Delta R.T.: 0.000 min
Response: 1635709
Conc: 10.26 ug/ml



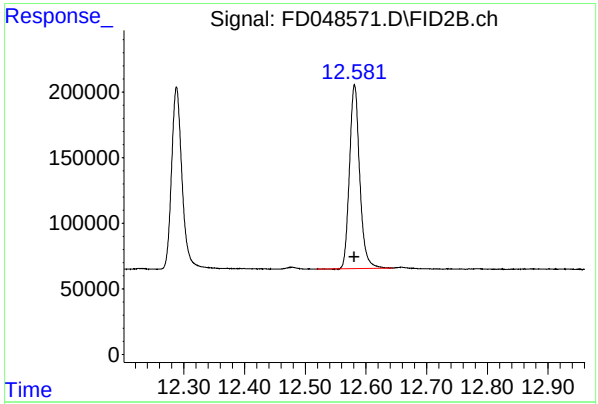
#11 ortho-Terphenyl (SURR)

R.T.: 11.257 min
Delta R.T.: 0.000 min
Response: 1758096
Conc: 10.40 ug/ml



#12 Fluoranthene (C21.85)

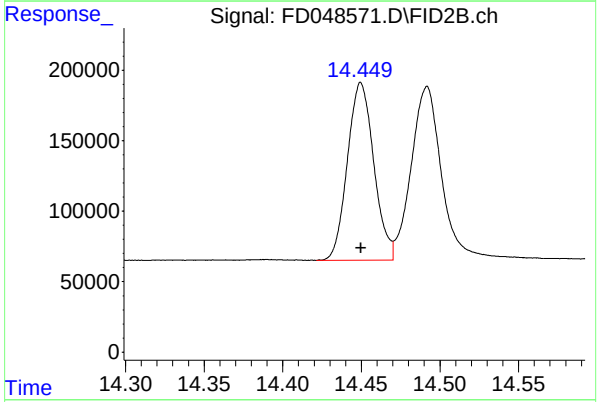
R.T.: 12.288 min
Delta R.T.: 0.000 min
Response: 1671203
Conc: 10.24 ug/ml



#13 Pyrene (C20.8)

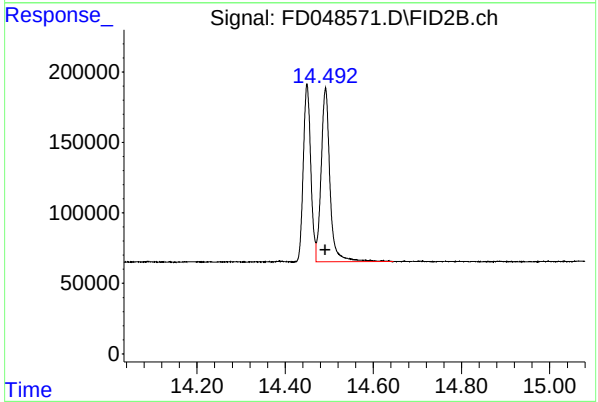
R.T.: 12.581 min
Delta R.T.: 0.000 min
Response: 1639022
Conc: 10.18 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



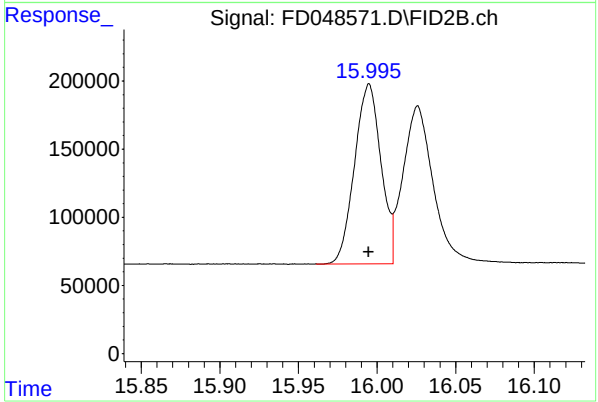
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.450 min
Delta R.T.: 0.000 min
Response: 1472368
Conc: 9.87 ug/ml



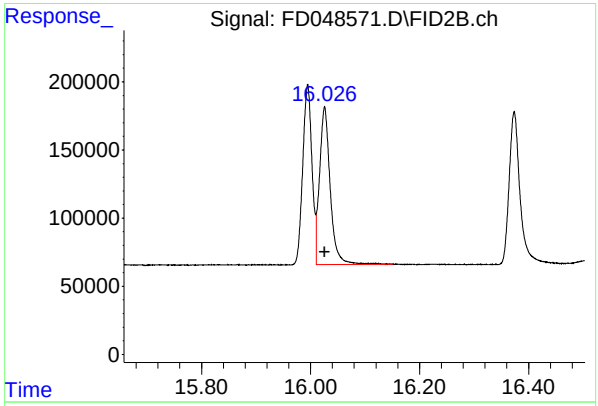
#15 Chrysene (C27.41)

R.T.: 14.491 min
Delta R.T.: 0.000 min
Response: 1725560
Conc: 10.70 ug/ml



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

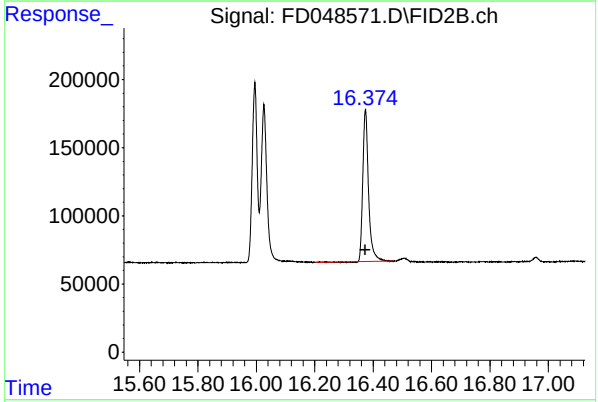
R.T.: 15.995 min
Delta R.T.: 0.000 min
Response: 1544713
Conc: 10.04 ug/ml



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

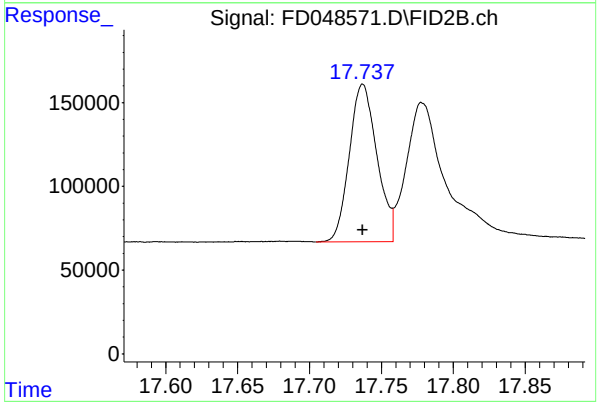
R.T.: 16.026 min
Delta R.T.: 0.000 min
Response: 1579300
Conc: 10.61 ug/ml

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4



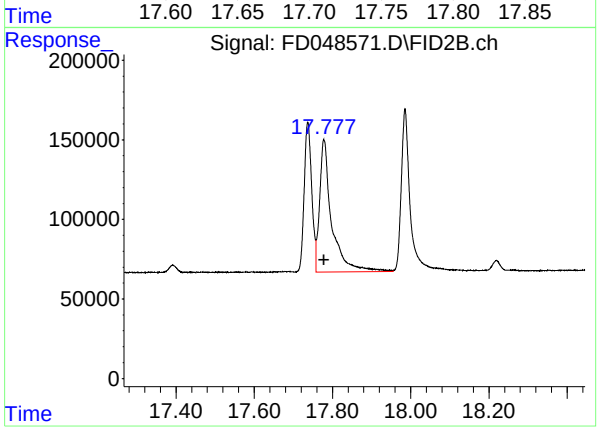
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.374 min
Delta R.T.: 0.000 min
Response: 1518079
Conc: 10.07 ug/ml



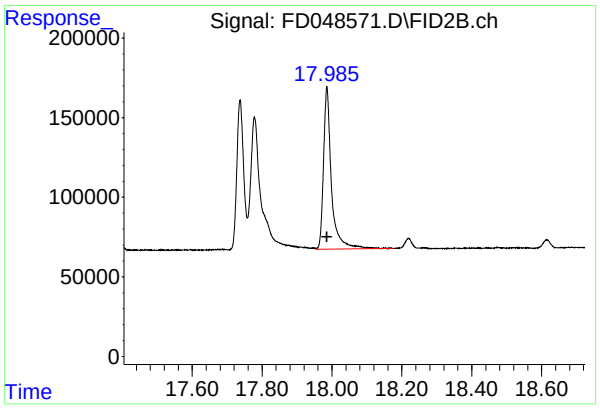
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.737 min
Delta R.T.: 0.000 min
Response: 1259393
Conc: 9.34 ug/ml



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

R.T.: 17.779 min
Delta R.T.: 0.000 min
Response: 1780079
Conc: 11.21 ug/ml



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

R.T.: 17.986 min
Delta R.T.: 0.000 mi
Response: 1603528
Conc: 10.46 ug/m

Instrument :
FID_D
ClientSampleId :
10 PPM AROMATIC HC STD4

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048571.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 17:02
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 102324.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	4.161	4.261	BV	201703	1780007	96.81%	5.205%
2	5.714	5.488	5.858	BB	181375	1822653	99.13%	5.330%
3	6.760	6.701	6.885	BB	175216	1826622	99.35%	5.341%
4	7.373	7.238	7.461	BB	154245	1535833	83.53%	4.491%
5	8.025	7.978	8.145	BB	181606	1809718	98.43%	5.292%
6	8.224	8.155	8.295	BV	87703	998081	54.28%	2.918%
7	8.318	8.295	8.431	VV	180640	1838643	100.00%	5.376%
8	9.098	8.978	9.208	BB	155949	1719817	93.54%	5.029%
9	10.484	10.385	10.533	BV	153275	1680489	91.40%	4.914%
10	10.560	10.533	10.735	VB	125868	1635709	88.96%	4.783%
11	11.257	11.068	11.325	BB	168238	1758096	95.62%	5.141%
12	12.288	12.258	12.415	BB	138726	1671203	90.89%	4.887%
13	12.581	12.518	12.645	BV	140018	1639022	89.14%	4.793%
14	14.450	14.421	14.470	PV	124977	1472368	80.08%	4.305%
15	14.491	14.470	14.645	VB	122848	1725560	93.85%	5.046%
16	15.995	15.961	16.010	BV	131640	1544713	84.01%	4.517%
17	16.026	16.010	16.151	VB	114804	1579300	85.89%	4.618%
18	16.374	16.205	16.468	BV	111460	1518079	82.57%	4.439%
19	17.737	17.705	17.758	BV	94271	1259393	68.50%	3.683%
20	17.779	17.758	17.955	VV	83223	1780079	96.81%	5.205%
21	17.986	17.955	18.175	VB	101691	1603528	87.21%	4.689%
			Sum of corrected areas:			34198912		

Aromatic EPH 102324.M Wed Oct 23 18:19:08 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048572.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 17:38
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: Oct 23 18:14:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:05 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.375	765966	5.047 ug/ml
Spiked Amount	50.000		Recovery =	10.09%
6) S	2-Flurobiphenyl (SURR)	8.228	453280	4.616 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	9.23%
11) S	ortho-Terphenyl (SURR)	11.257	878976	5.160 ug/ml
Spiked Amount	50.000		Recovery =	10.32%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.197	891941	5.127 ug/ml
2) T	Naphthalene (C11.7)	5.716	882030	4.943 ug/ml
3) T	2-Methylnaphthalene (...	6.762	888953	4.970 ug/ml
5) T	Acenaphthylene (C15.06)	8.026	887785	5.056 ug/ml
7) T	Acenaphthene (C15.5)	8.319	906880	5.113 ug/ml
8) T	Flouorene (C16.55)	9.101	838419	4.960 ug/ml
9) T	Phenanthrene (C19.36)	10.487	812730	4.917 ug/ml
10) T	Anthracene (C19.43)	10.565	809302	5.061 ug/ml
12) T	Fluoranthene (C21.85)	12.291	849157	5.160 ug/ml
13) T	Pyrene (C20.8)	12.583	807675	5.014 ug/ml
14) T	Benzo[a]anthracene (C...	14.453	671281	4.591 ug/ml
15) T	Chrysene (C27.41)	14.493	886842	5.391 ug/ml
16) T	benzo[b]fluoranthene ...	15.998	725025	4.769 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.030	780831	5.195 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.381	746043	4.957 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.744	565150	4.331 ug/ml
20) T	Dibenz[a,h]anthracene...	17.787	892102	5.482 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.990	761556	4.974 ug/ml

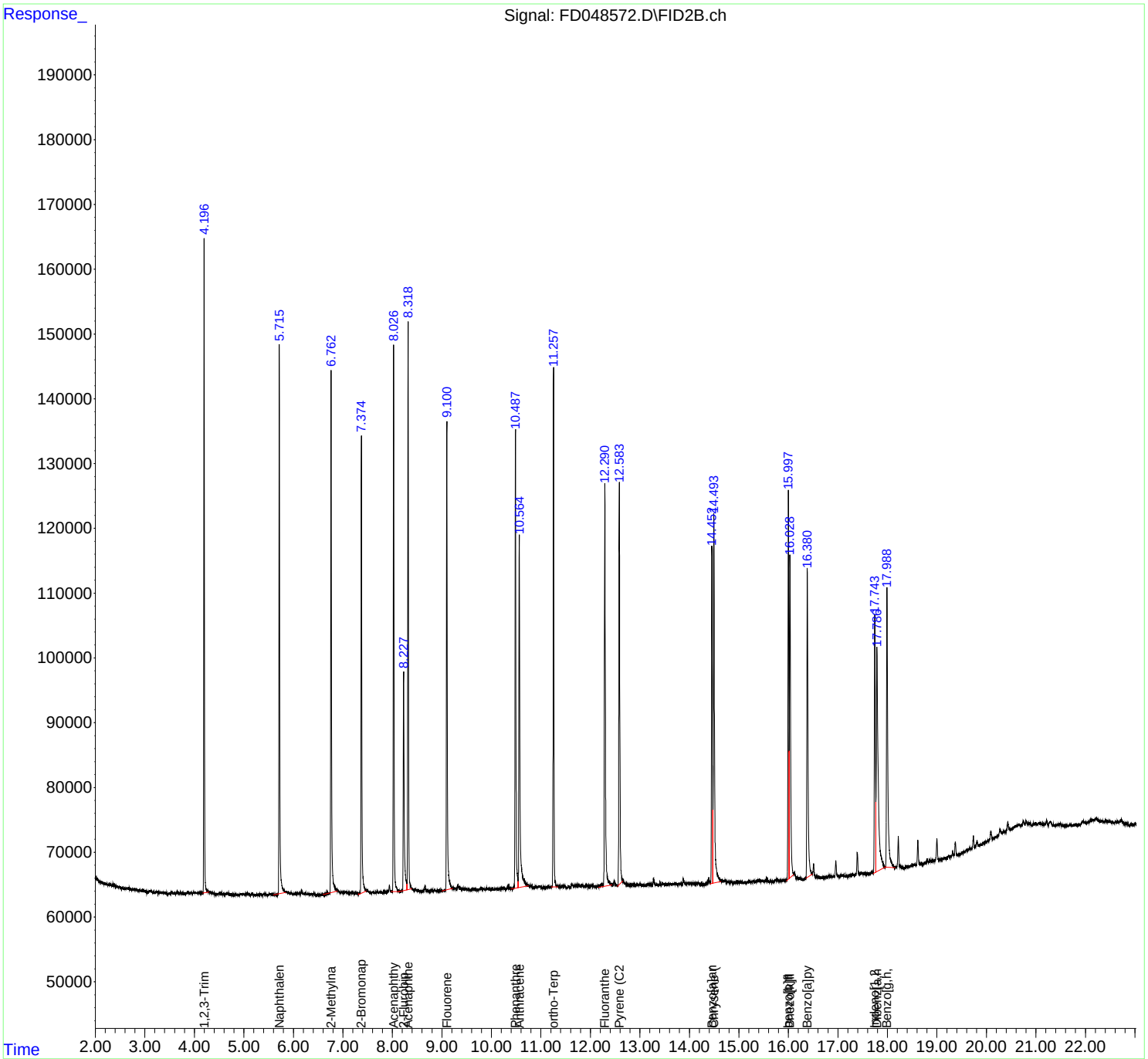
(f)=RT Delta > 1/2 Window (m)=manual int.

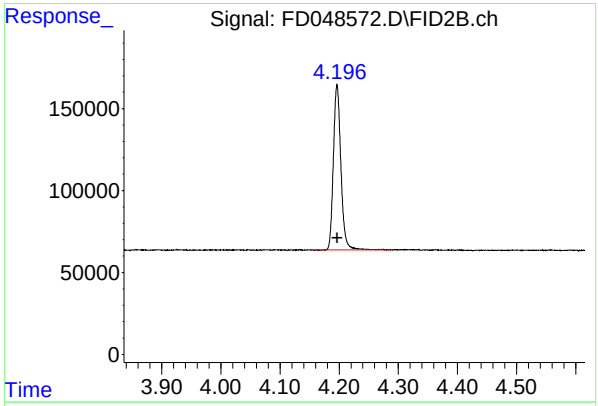
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048572.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 17:38
Operator : YP/AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 65 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

Integration File: autoint1.e
Quant Time: Oct 23 18:14:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:05 2024
Response via : Initial Calibration
Integrator: ChemStation

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

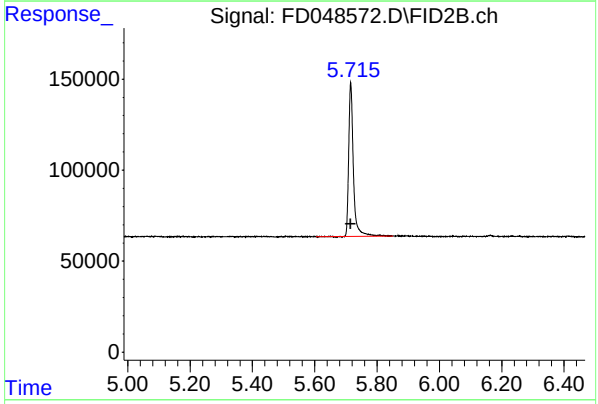




#1 1,2,3-Trimethylbenzene (C10.1)

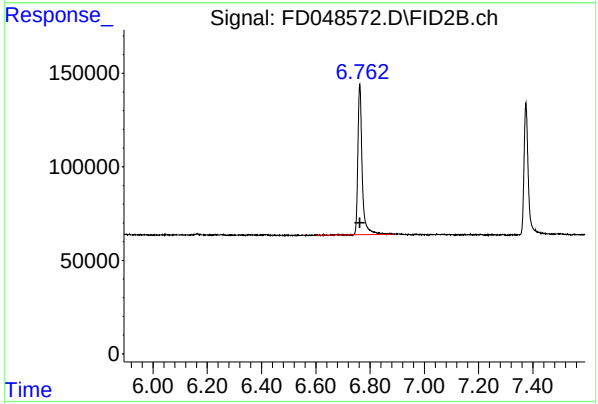
R.T.: 4.197 min
Delta R.T.: 0.000 min
Response: 891941
Conc: 5.13 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



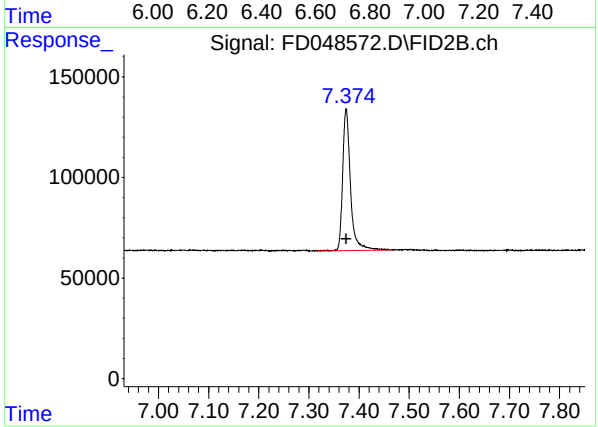
#2 Naphthalene (C11.7)

R.T.: 5.716 min
Delta R.T.: 0.000 min
Response: 882030
Conc: 4.94 ug/ml



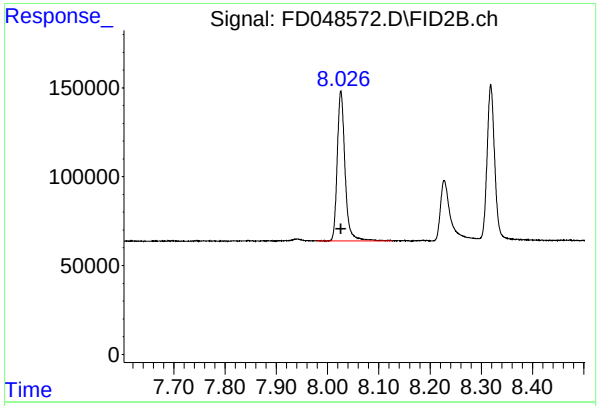
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.762 min
Delta R.T.: 0.000 min
Response: 888953
Conc: 4.97 ug/ml



#4 2-Bromonaphthalene (SURR)

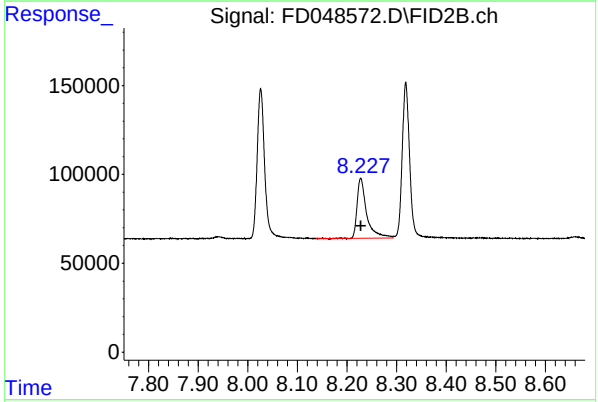
R.T.: 7.375 min
Delta R.T.: 0.000 min
Response: 765966
Conc: 5.05 ug/ml



#5 Acenaphthylene (C15.06)

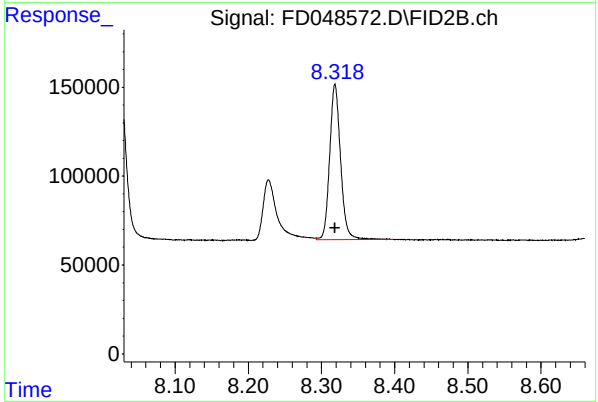
R.T.: 8.026 min
Delta R.T.: 0.000 min
Response: 887785
Conc: 5.06 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



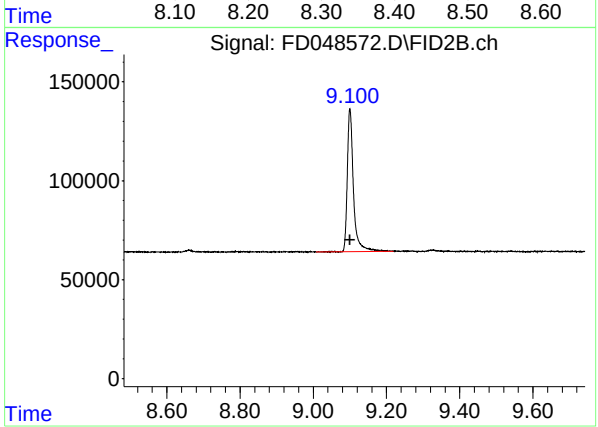
#6 2-Flurobiphenyl (SURR)

R.T.: 8.228 min
Delta R.T.: 0.000 min
Response: 453280
Conc: 4.62 ug/ml



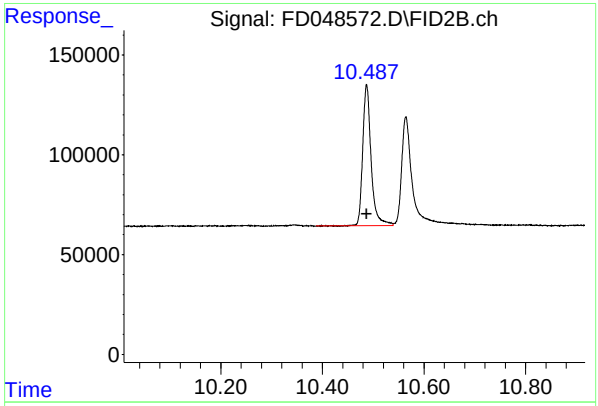
#7 Acenaphthene (C15.5)

R.T.: 8.319 min
Delta R.T.: 0.000 min
Response: 906880
Conc: 5.11 ug/ml



#8 Flouorene (C16.55)

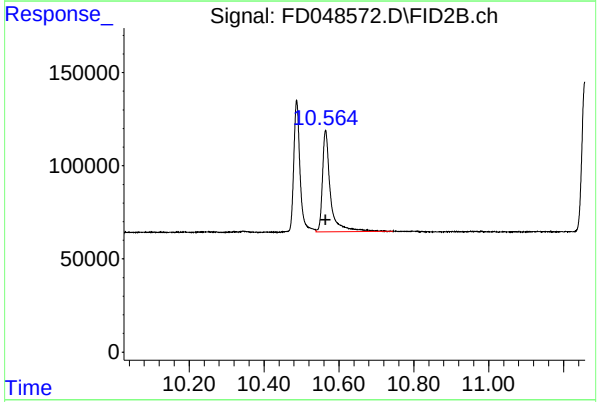
R.T.: 9.101 min
Delta R.T.: 0.000 min
Response: 838419
Conc: 4.96 ug/ml



#9 Phenanthrene (C19.36)

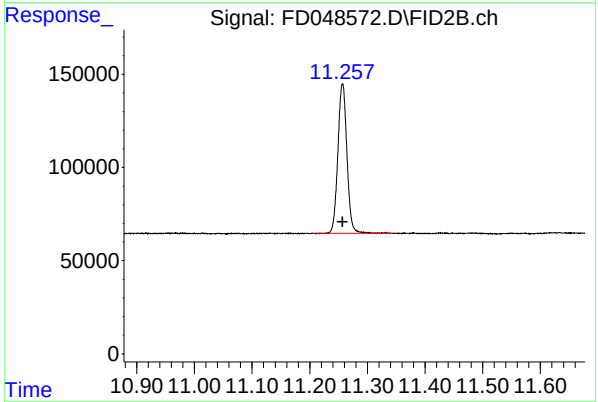
R.T.: 10.487 min
Delta R.T.: 0.000 min
Response: 812730
Conc: 4.92 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



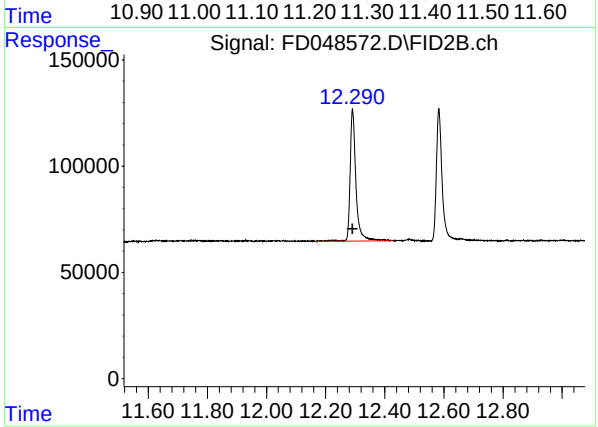
#10 Anthracene (C19.43)

R.T.: 10.565 min
Delta R.T.: 0.000 min
Response: 809302
Conc: 5.06 ug/ml



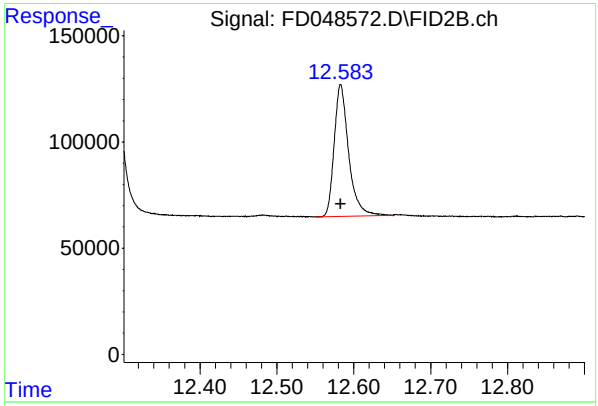
#11 ortho-Terphenyl (SURR)

R.T.: 11.257 min
Delta R.T.: 0.000 min
Response: 878976
Conc: 5.16 ug/ml



#12 Fluoranthene (C21.85)

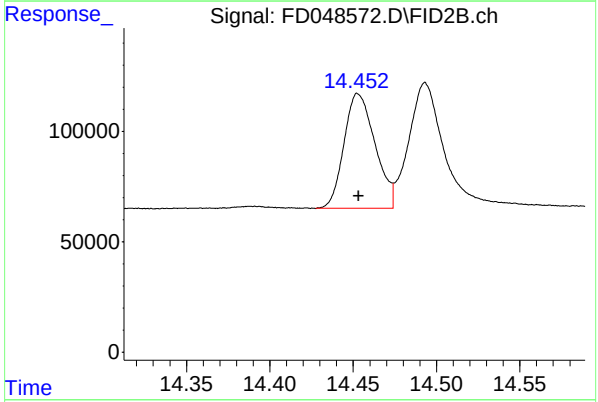
R.T.: 12.291 min
Delta R.T.: 0.000 min
Response: 849157
Conc: 5.16 ug/ml



#13 Pyrene (C20.8)

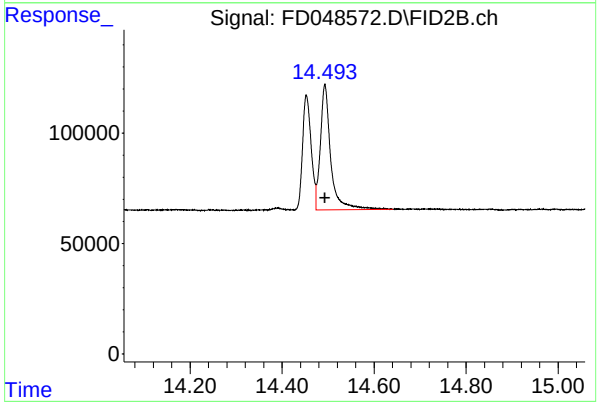
R.T.: 12.583 min
Delta R.T.: 0.000 min
Response: 807675
Conc: 5.01 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



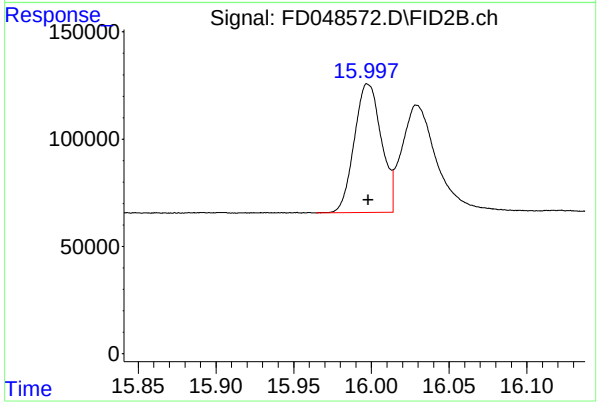
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.453 min
Delta R.T.: 0.000 min
Response: 671281
Conc: 4.59 ug/ml



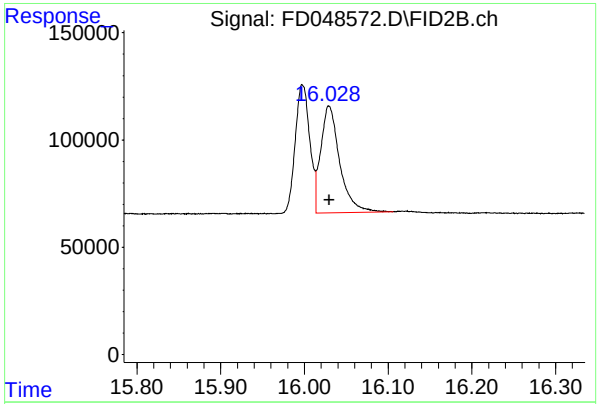
#15 Chrysene (C27.41)

R.T.: 14.493 min
Delta R.T.: 0.000 min
Response: 886842
Conc: 5.39 ug/ml



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

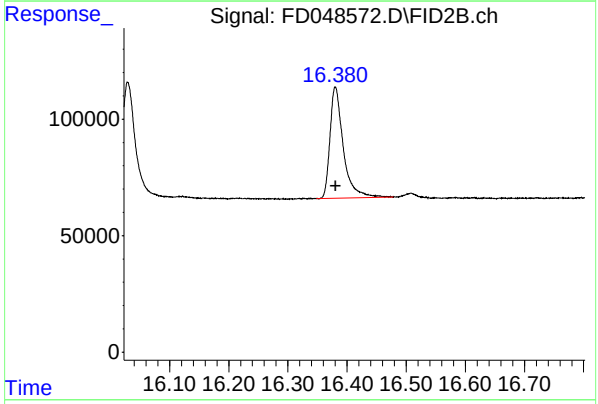
R.T.: 15.998 min
Delta R.T.: 0.000 min
Response: 725025
Conc: 4.77 ug/ml



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

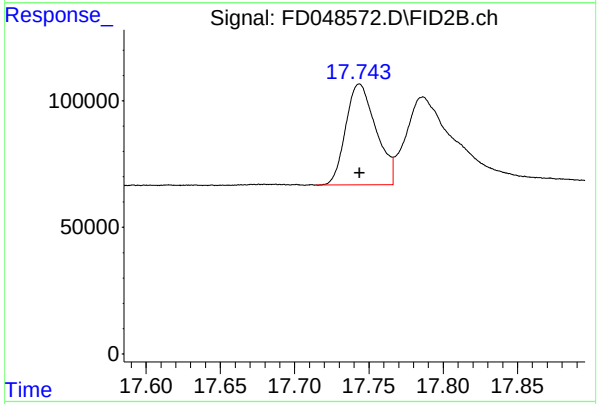
R.T.: 16.030 min
Delta R.T.: 0.000 min
Response: 780831
Conc: 5.20 ug/ml

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5



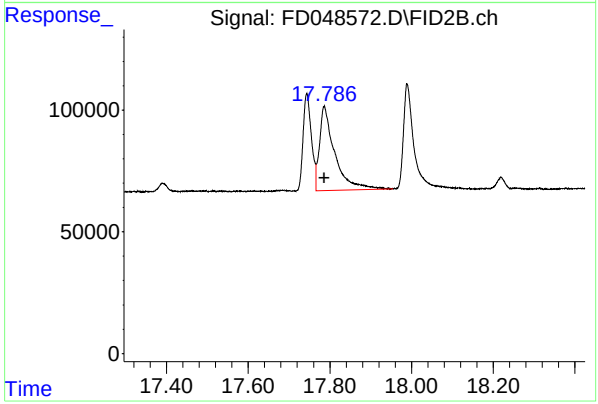
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.381 min
Delta R.T.: 0.000 min
Response: 746043
Conc: 4.96 ug/ml



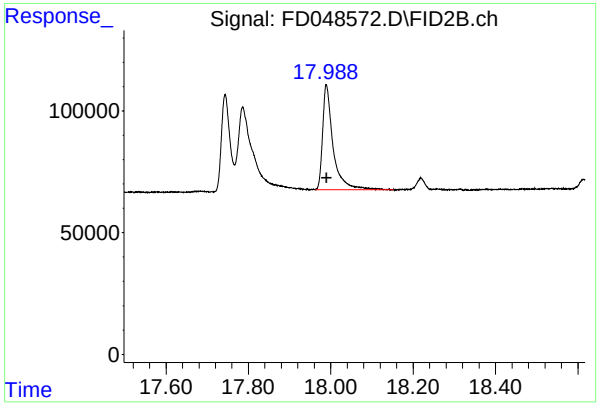
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.744 min
Delta R.T.: 0.000 min
Response: 565150
Conc: 4.33 ug/ml



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

R.T.: 17.787 min
Delta R.T.: 0.000 min
Response: 892102
Conc: 5.48 ug/ml



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

R.T.: 17.990 min
Delta R.T.: 0.000 mi
Response: 761556
Conc: 4.97 ug/m

Instrument :
FID_D
ClientSampleId :
5 PPM AROMATIC HC STD5

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048572.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 17:38
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 102324.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	4.197	4.161	4.291	BB	99856	891941	98.35%	5.340%
2	5.716	5.604	5.851	BB	84500	882030	97.26%	5.281%
3	6.762	6.601	6.884	BB	80288	888953	98.02%	5.322%
4	7.375	7.314	7.468	BB	70282	765966	84.46%	4.586%
5	8.026	7.978	8.128	BB	83372	887785	97.89%	5.315%
6	8.228	8.138	8.293	BV	33723	453280	49.98%	2.714%
7	8.319	8.293	8.398	VB	87190	906880	100.00%	5.430%
8	9.101	9.008	9.218	BB	71759	838419	92.45%	5.020%
9	10.487	10.388	10.539	BV	70612	812730	89.62%	4.866%
10	10.565	10.539	10.744	VB	54403	809302	89.24%	4.846%
11	11.257	11.211	11.344	BB	80592	878976	96.92%	5.263%
12	12.291	12.168	12.428	BB	61860	849157	93.64%	5.084%
13	12.583	12.551	12.651	BV	61467	807675	89.06%	4.836%
14	14.453	14.428	14.474	PV	51289	671281	74.02%	4.019%
15	14.493	14.474	14.641	VB	56549	886842	97.79%	5.310%
16	15.998	15.964	16.014	BV	60013	725025	79.95%	4.341%
17	16.030	16.014	16.106	VV	49388	780831	86.10%	4.675%
18	16.381	16.348	16.478	BV	47621	746043	82.26%	4.467%
19	17.744	17.714	17.766	BV	39855	565150	62.32%	3.384%
20	17.787	17.766	17.954	VB	34397	892102	98.37%	5.341%
21	17.990	17.964	18.151	BB	42474	761556	83.98%	4.560%
			Sum of corrected areas:			16701921		

Aromatic EPH 102324.M Wed Oct 23 18:19:26 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048573.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 18:14
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: Oct 23 18:50:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.372	3035391	19.999 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
6) S	2-Flurobiphenyl (SURR)	8.222	2009011	20.460 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	40.92%
11) S	ortho-Terphenyl (SURR)	11.258	3418196	20.067 ug/ml
Spiked Amount	50.000		Recovery =	40.13%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.195	3511974	20.187 ug/ml
2) T	Naphthalene (C11.7)	5.713	3621999	20.299 ug/ml
3) T	2-Methylnaphthalene (...	6.760	3629138	20.290 ug/ml
5) T	Acenaphthylene (C15.06)	8.025	3549708	20.216 ug/ml
7) T	Acenaphthene (C15.5)	8.319	3566386	20.108 ug/ml
8) T	Flouorene (C16.55)	9.098	3449130	20.405 ug/ml
9) T	Phenanthrene (C19.36)	10.485	3337748	20.191 ug/ml
10) T	Anthracene (C19.43)	10.560	3166872	19.804 ug/ml
12) T	Fluoranthene (C21.85)	12.288	3304952	20.082 ug/ml
13) T	Pyrene (C20.8)	12.581	3231023	20.059 ug/ml
14) T	Benzo[a]anthracene (C...	14.450	2986450	20.425 ug/ml
15) T	Chrysene (C27.41)	14.492	3268283	19.869 ug/ml
16) T	benzo[b]fluoranthene ...	15.997	3076351	20.235 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.029	3007230	20.008 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.372	3055729	20.304 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.737	2639364	20.228 ug/ml
20) T	Dibenz[a,h]anthracene...	17.776	3309486	20.337 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.987	3030209	19.793 ug/ml

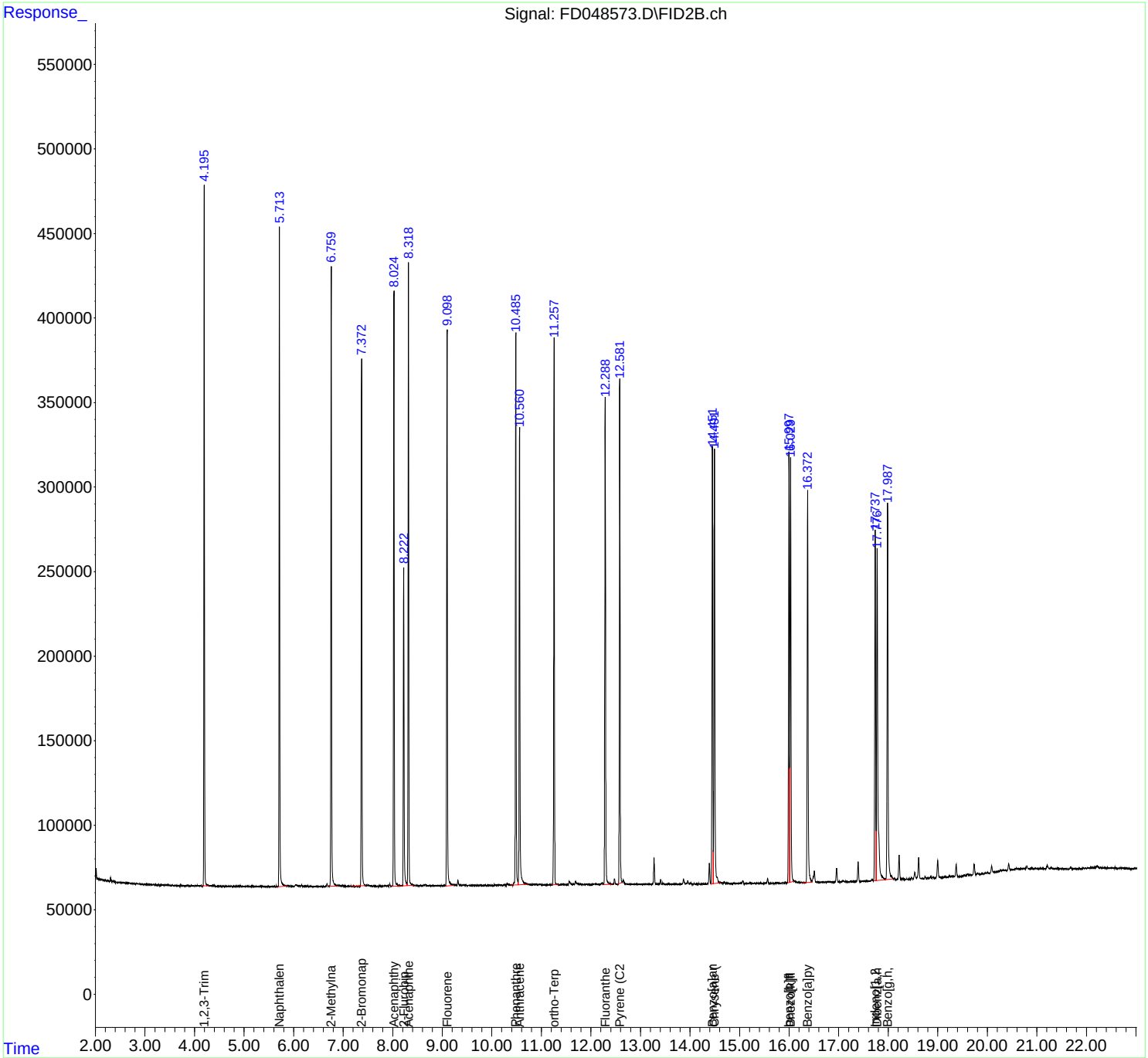
(f)=RT Delta > 1/2 Window (m)=manual int.

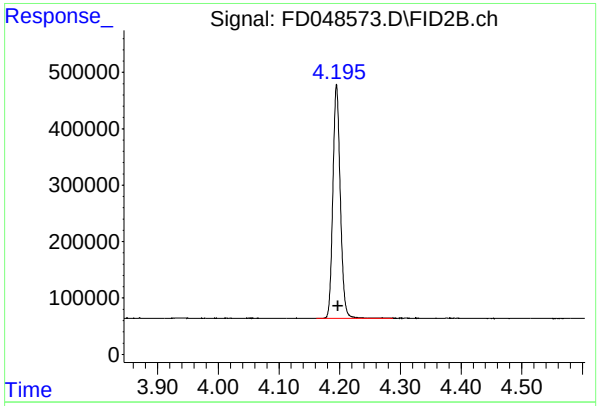
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048573.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 18:14
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 66 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Oct 23 18:50:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

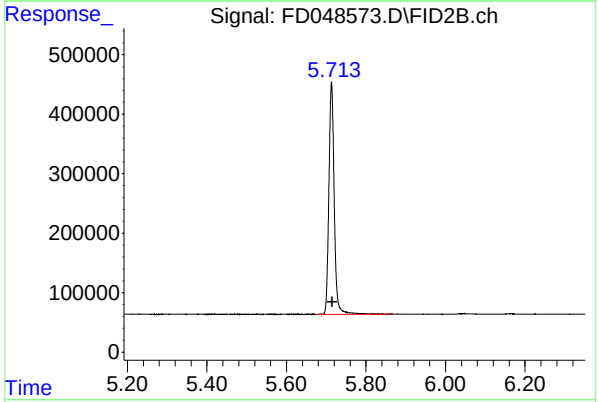




#1 1,2,3-Trimethylbenzene (C10.1)

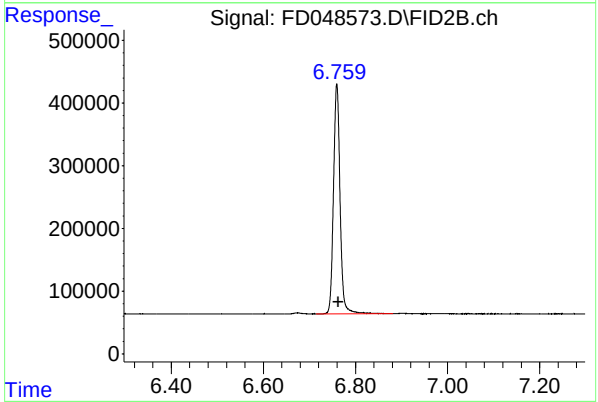
R.T.: 4.195 min
Delta R.T.: -0.002 min
Response: 3511974
Conc: 20.19 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



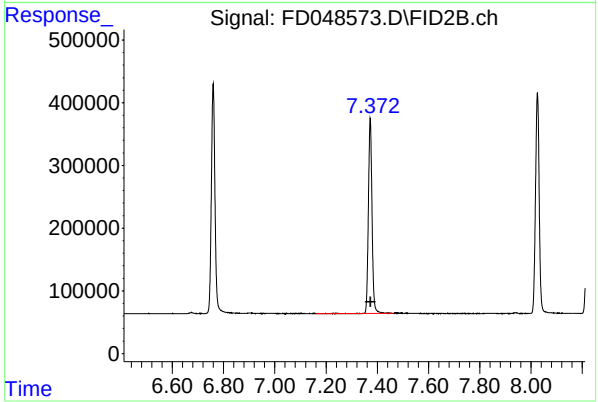
#2 Naphthalene (C11.7)

R.T.: 5.713 min
Delta R.T.: -0.002 min
Response: 3621999
Conc: 20.30 ug/ml



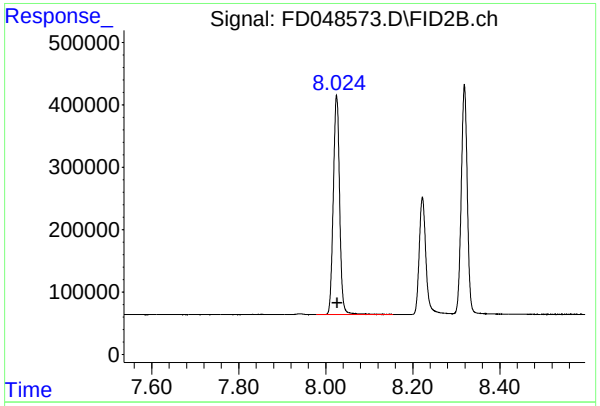
#3 2-Methylnaphthalene (C12.89)

R.T.: 6.760 min
Delta R.T.: -0.003 min
Response: 3629138
Conc: 20.29 ug/ml



#4 2-Bromonaphthalene (SURR)

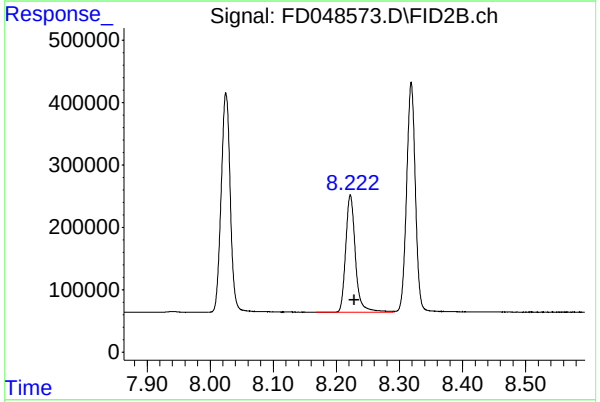
R.T.: 7.372 min
Delta R.T.: -0.002 min
Response: 3035391
Conc: 20.00 ug/ml



#5 Acenaphthylene (C15.06)

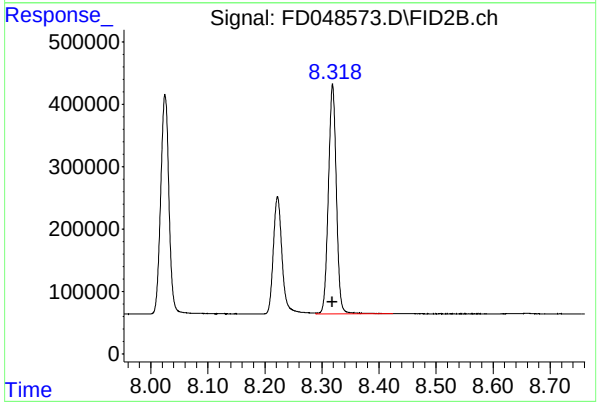
R.T.: 8.025 min
Delta R.T.: -0.001 min
Response: 3549708
Conc: 20.22 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



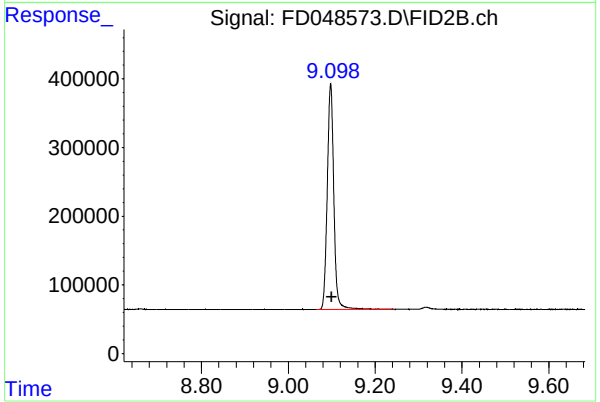
#6 2-Flurobiphenyl (SURR)

R.T.: 8.222 min
Delta R.T.: -0.006 min
Response: 2009011
Conc: 20.46 ug/ml



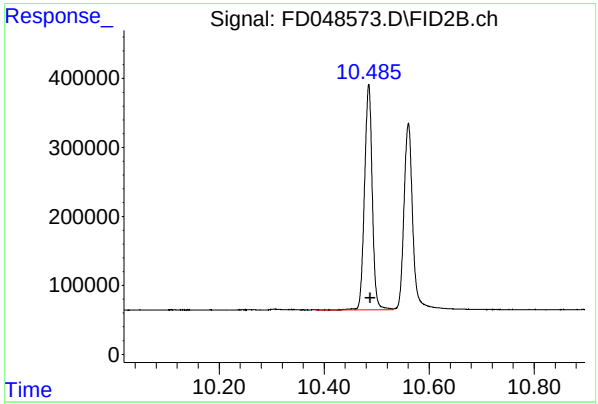
#7 Acenaphthene (C15.5)

R.T.: 8.319 min
Delta R.T.: 0.000 min
Response: 3566386
Conc: 20.11 ug/ml



#8 Flouorene (C16.55)

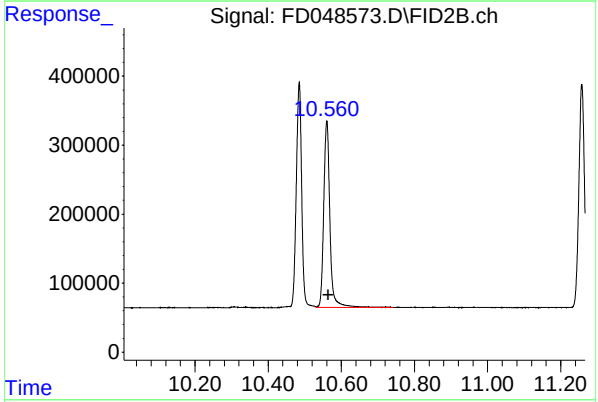
R.T.: 9.098 min
Delta R.T.: -0.003 min
Response: 3449130
Conc: 20.40 ug/ml



#9 Phenanthrene (C19.36)

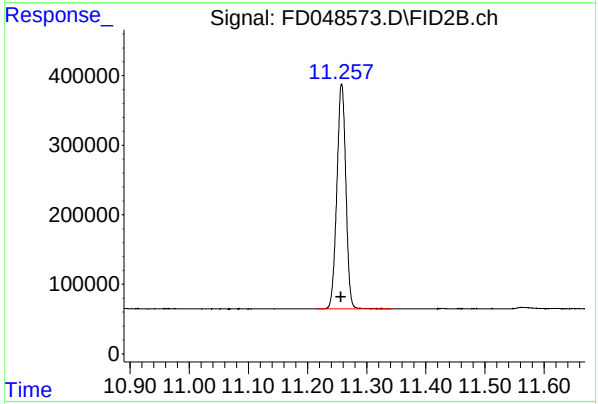
R.T.: 10.485 min
Delta R.T.: -0.003 min
Response: 3337748
Conc: 20.19 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



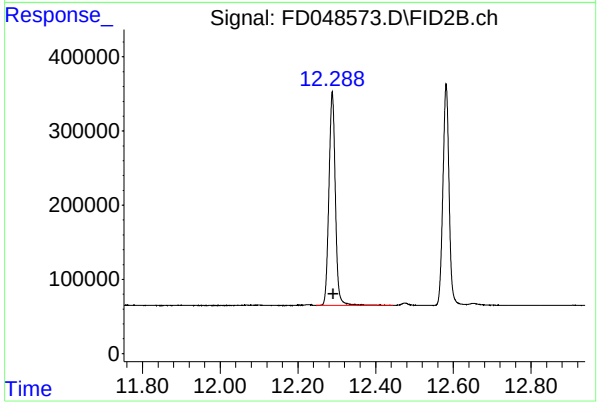
#10 Anthracene (C19.43)

R.T.: 10.560 min
Delta R.T.: -0.004 min
Response: 3166872
Conc: 19.80 ug/ml



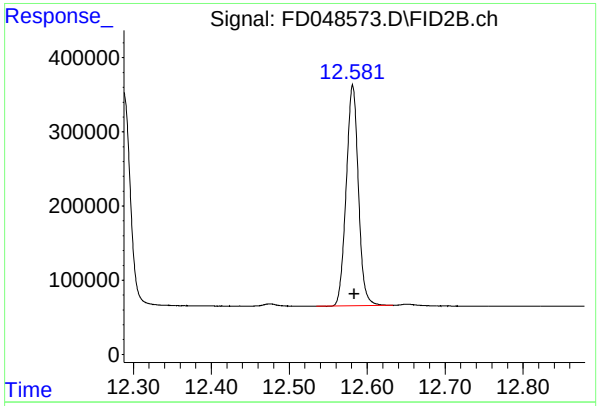
#11 ortho-Terphenyl (SURR)

R.T.: 11.258 min
Delta R.T.: 0.000 min
Response: 3418196
Conc: 20.07 ug/ml



#12 Fluoranthene (C21.85)

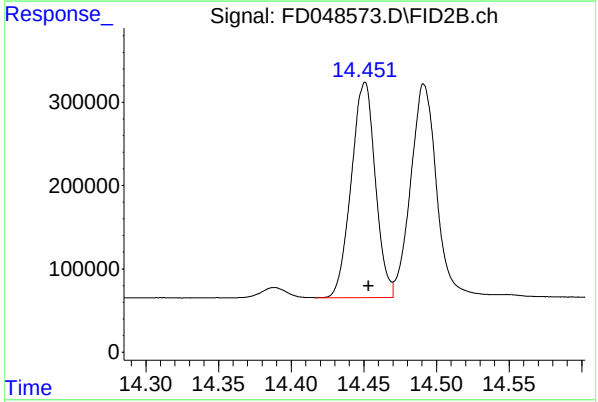
R.T.: 12.288 min
Delta R.T.: -0.003 min
Response: 3304952
Conc: 20.08 ug/ml



#13 Pyrene (C20.8)

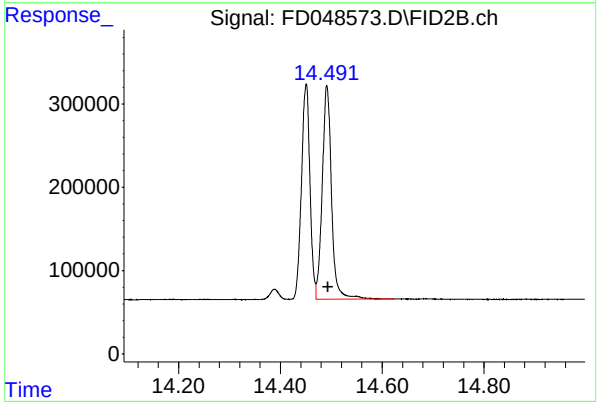
R.T.: 12.581 min
Delta R.T.: -0.002 min
Response: 3231023
Conc: 20.06 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



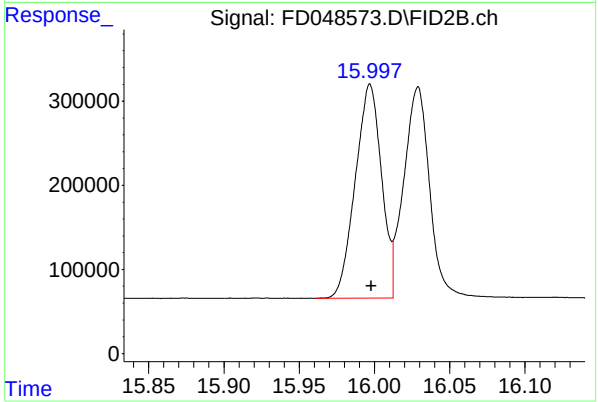
#14 Benzo[a]anthracene (C26.37)

R.T.: 14.450 min
Delta R.T.: -0.003 min
Response: 2986450
Conc: 20.42 ug/ml



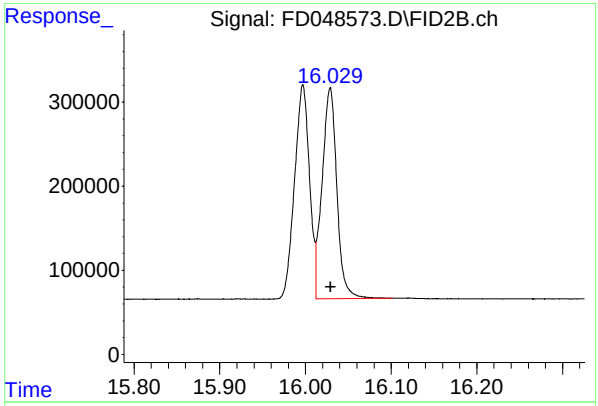
#15 Chrysene (C27.41)

R.T.: 14.492 min
Delta R.T.: -0.002 min
Response: 3268283
Conc: 19.87 ug/ml



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

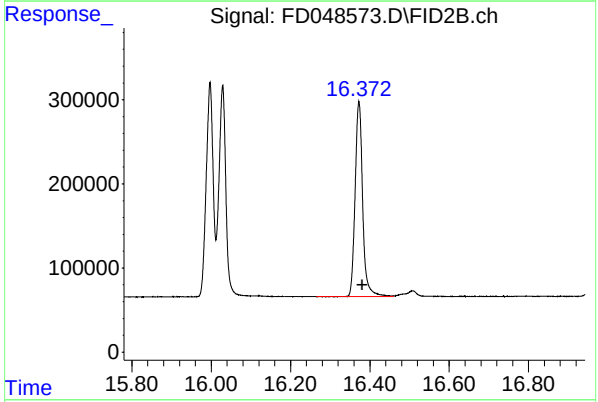
R.T.: 15.997 min
Delta R.T.: 0.000 min
Response: 3076351
Conc: 20.24 ug/ml



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

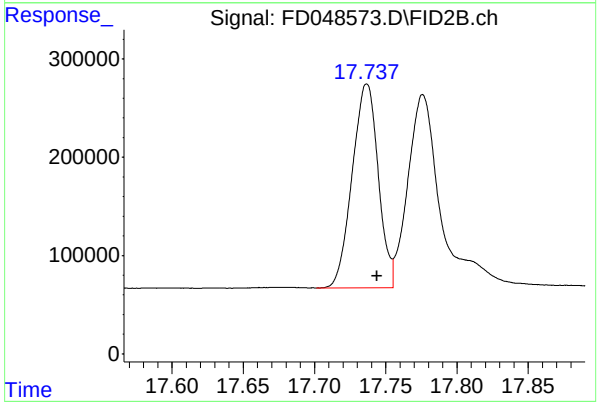
R.T.: 16.029 min
Delta R.T.: 0.000 min
Response: 3007230
Conc: 20.01 ug/ml

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV



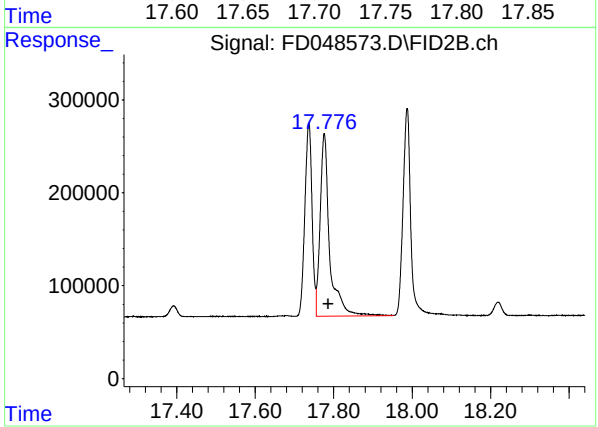
#18 Benzo[a]pyrene (C31.34)

R.T.: 16.372 min
Delta R.T.: -0.008 min
Response: 3055729
Conc: 20.30 ug/ml



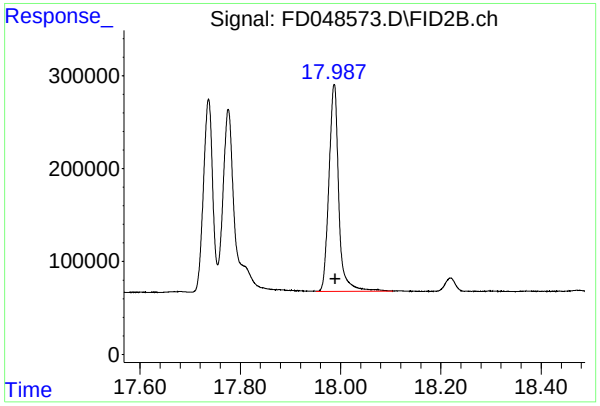
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 17.737 min
Delta R.T.: -0.007 min
Response: 2639364
Conc: 20.23 ug/ml



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

R.T.: 17.776 min
Delta R.T.: -0.011 min
Response: 3309486
Conc: 20.34 ug/ml



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

R.T.: 17.987 min
Delta R.T.: -0.003 mi
Response: 3030209
Conc: 19.79 ug/m

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD ICV

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD102324AR\
Data File : FD048573.D
Signal(s) : FID2B.ch
Acq On : 23 Oct 2024 18:14
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 102324.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	4.195	4.161	4.288	BB	411534	3511974	96.77%	5.226%
2	5.713	5.674	5.868	BB	387327	3621999	99.80%	5.390%
3	6.760	6.714	6.881	BV	365701	3629138	100.00%	5.400%
4	7.372	7.161	7.461	BB	308815	3035391	83.64%	4.517%
5	8.025	7.978	8.154	BB	351890	3549708	97.81%	5.282%
6	8.222	8.168	8.290	BV	187045	2009011	55.36%	2.989%
7	8.319	8.290	8.424	VB	365720	3566386	98.27%	5.307%
8	9.098	9.064	9.241	PB	328779	3449130	95.04%	5.132%
9	10.485	10.384	10.531	BV	326000	3337748	91.97%	4.967%
10	10.560	10.531	10.741	VB	271677	3166872	87.26%	4.712%
11	11.258	11.214	11.344	BB	324343	3418196	94.19%	5.086%
12	12.288	12.247	12.444	PB	286640	3304952	91.07%	4.918%
13	12.581	12.534	12.633	BV	297215	3231023	89.03%	4.808%
14	14.450	14.417	14.470	VV	260406	2986450	82.29%	4.444%
15	14.492	14.470	14.621	VB	257062	3268283	90.06%	4.863%
16	15.997	15.961	16.012	BV	254462	3076351	84.77%	4.578%
17	16.029	16.012	16.102	VV	249107	3007230	82.86%	4.475%
18	16.372	16.264	16.458	BV	231238	3055729	84.20%	4.547%
19	17.737	17.701	17.755	BV	208961	2639364	72.73%	3.927%
20	17.776	17.755	17.951	VV	196335	3309486	91.19%	4.924%
21	17.987	17.951	18.104	VV	224512	3030209	83.50%	4.509%
			Sum of corrected areas:			67204630		

Aromatic EPH 102324.M Wed Oct 23 18:51:40 2024

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

Inital Calibration Report for SequenceID : FE100824AL

AreaCount

Parameter Range	FE050535.D	FE050536.D	FE050537.D	FE050538.D	FE050539.D	
Aliphatic C9-C12	40745791.000	21072572.000	8517410.000	4337343.000	2274924.000	
Aliphatic C12-C16	27735737.000	14244783.000	5792628.000	2930237.000	1531373.000	
Aliphatic C16-C21	40974621.000	21203318.000	8666410.000	4379658.000	2304599.000	
Aliphatic C21-C28	52777882.000	27581000.000	11356069.000	5708818.000	3125067.000	
Aliphatic C28-C40	72232829.000	38094965.000	16699677.000	8422068.000	4938401.000	
Aliphatic EPH	234466860.000	122196638.000	51032194.000	25778124.000	14174364.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aliphatic C9-C12	142899.9299998	4.087				
Aliphatic C12-C16	145118.273	3.694				
Aliphatic C16-C21	144401.2446664	4.356				
Aliphatic C21-C28	142154.8735	6.306				
Aliphatic C28-C40	138303.281333	12.24				
Aliphatic EPH	141698.847333	7.212				

Concentration

Parameter Range	FE050535.D	FE050536.D	FE050537.D	FE050538.D	FE050539.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	FE050535.D	FE050536.D	FE050537.D	FE050538.D	FE050539.D	
Aliphatic C9-C12	135819.303333	140483.813333	141956.833333	144578.100000	151661.600000	
Aliphatic C12-C16	138678.685000	142447.830000	144815.700000	146511.850000	153137.300000	
Aliphatic C16-C21	136582.070000	141355.453333	144440.166666	145988.600000	153639.933333	

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

Inital Calibration Report for SequenceID : FE100824AL

Aliphatic C21-C28	131944.705000	137905.000000	141950.862500	142720.450000	156253.350000	
Aliphatic C28-C40	120388.048333	126983.216666	139163.975000	140367.800000	164613.366666	
Aliphatic EPH	130259.366666	135774.042222	141756.094444	143211.800000	157492.933333	

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050535.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 14:06
Operator : YP\AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Oct 07 15:50:00 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 15:49:51 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)	11.874	14935989	97.121 ug/ml
Spiked Amount	50.000		Recovery =	194.24%
12) S	1-chlorooctadecane (S...	13.307	11405346	97.767 ug/ml
Spiked Amount	50.000		Recovery =	195.53%
	Target Compounds			
1) T	n-Nonane (C9)	3.256	13375492	97.682 ug/ml
2) T	n-Decane (C10)	4.508	13622130	97.695 ug/ml
3) T	A~Naphthalene (C11.7)	6.217	14355926	100.128 ug/ml
4) T	n-Dodecane (C12)	6.676	13748169	97.991 ug/ml
5) T	A~2-methylnaphthalene...	7.315	13570374	100.663 ug/ml
6) T	n-Tetradecane (C14)	8.504	13662645	97.909 ug/ml
7) T	n-Hexadecane (C16)	10.111	14073092	97.764 ug/ml
8) T	n-Octadecane (C18)	11.554	14160630	97.396 ug/ml
10) T	n-Eicosane (C20)	12.861	13543211	97.115 ug/ml
11) T	n-Heneicosane (C21)	13.472	13270780	97.090 ug/ml
13) T	n-Docosane (C22)	14.058	13205478	96.773 ug/ml
14) T	n-Tetracosane (C24)	15.160	13226380	96.742 ug/ml
15) T	n-Hexacosane (C26)	16.179	13147754	96.576 ug/ml
16) T	n-Octacosane (C28)	17.129	13198270	95.311 ug/ml
17) T	n-Tricontane (C30)	18.016	13716170	92.688 ug/ml
18) T	n-Dotriacontane (C32)	18.847	13640074	91.715 ug/ml
19) T	n-Tetratriacontane (C34)	19.629	12565721	92.262 ug/ml
20) T	n-Hexatriacontane (C36)	20.368	11275380	94.013 ug/ml
21) T	n-Octatriacontane (C38)	21.094	10872225	93.405 ug/ml
22) T	n-Tetracontane (C40)	21.983	10163259	92.882 ug/ml

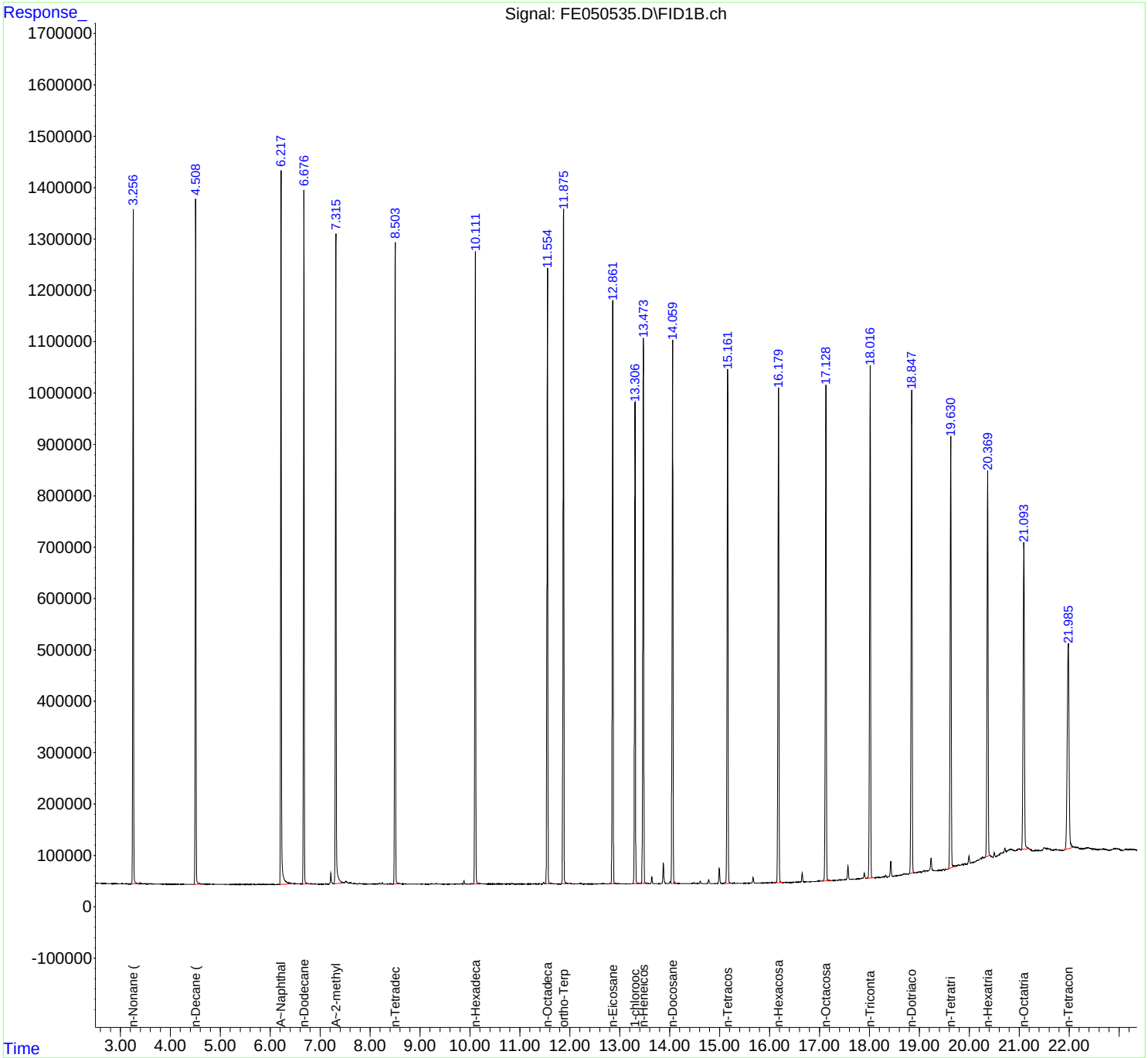
(f)=RT Delta > 1/2 Window (m)=manual int.

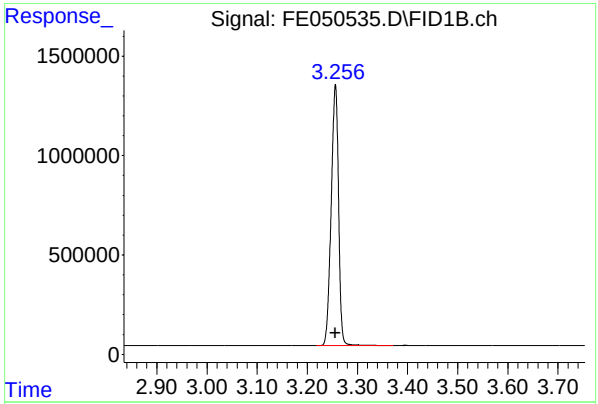
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050535.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 14:06
Operator : YP\AJ
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1

Integration File: autoint1.e
Quant Time: Oct 07 15:50:00 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 15:49:51 2024
Response via : Initial Calibration
Integrator: ChemStation

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

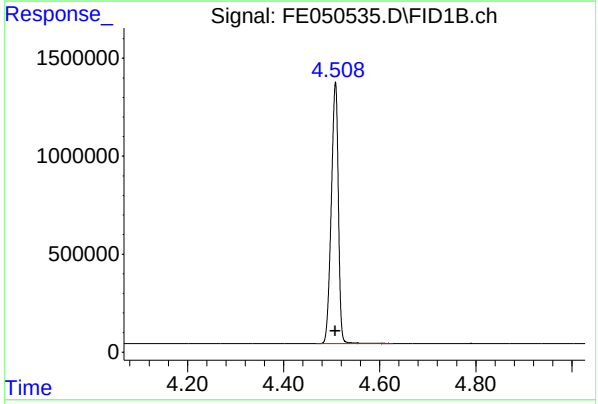




#1 n-Nonane (C9)

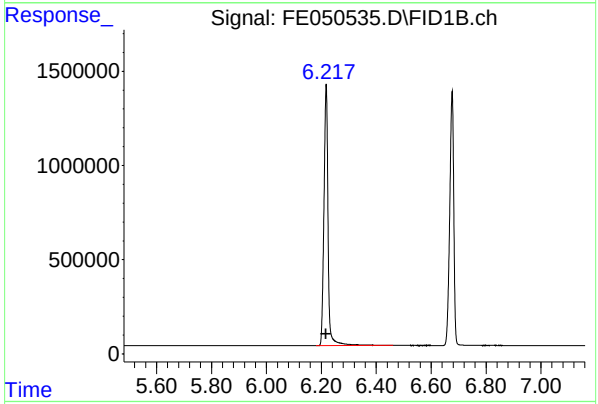
R.T.: 3.256 min
Delta R.T.: 0.000 min
Response: 13375492
Conc: 97.68 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



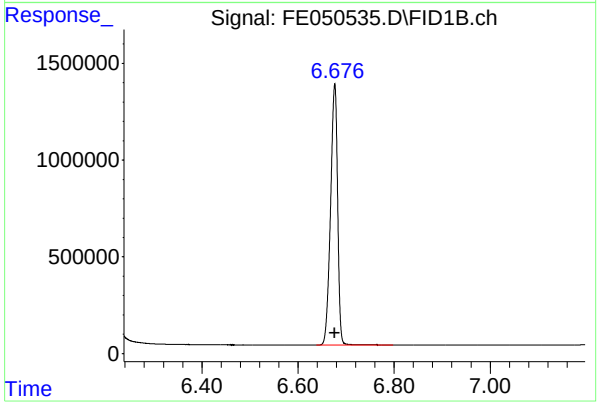
#2 n-Decane (C10)

R.T.: 4.508 min
Delta R.T.: 0.000 min
Response: 13622130
Conc: 97.70 ug/ml



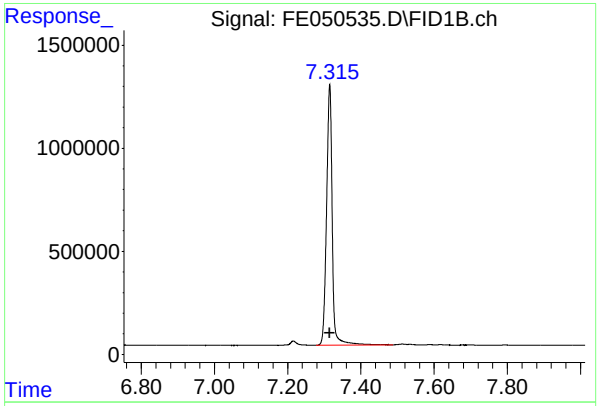
#3 A~Naphthalene (C11.7)

R.T.: 6.217 min
Delta R.T.: 0.000 min
Response: 14355926
Conc: 100.13 ug/ml



#4 n-Dodecane (C12)

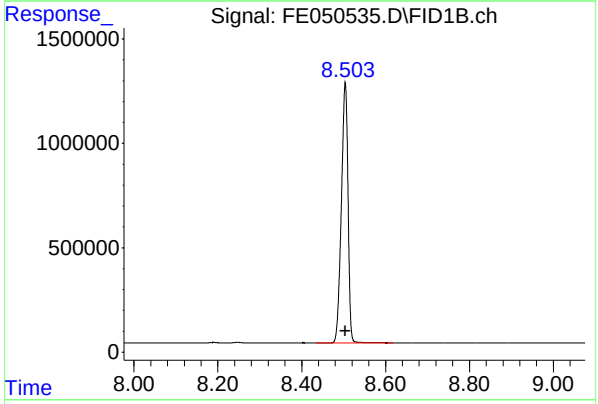
R.T.: 6.676 min
Delta R.T.: 0.000 min
Response: 13748169
Conc: 97.99 ug/ml



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

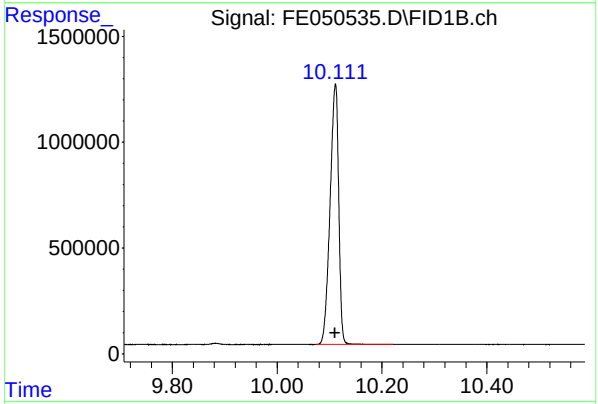
R.T.: 7.315 min
Delta R.T.: 0.000 min
Response: 13570374
Conc: 100.66 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



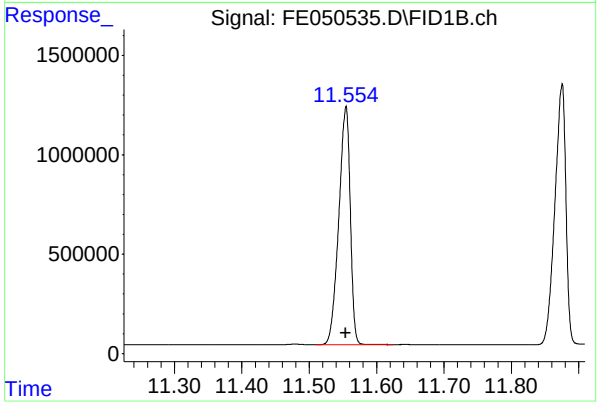
#6 n-Tetradecane (C14)

R.T.: 8.504 min
Delta R.T.: 0.000 min
Response: 13662645
Conc: 97.91 ug/ml



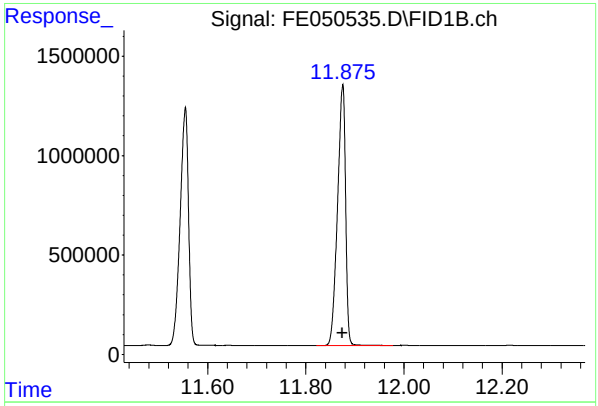
#7 n-Hexadecane (C16)

R.T.: 10.111 min
Delta R.T.: 0.000 min
Response: 14073092
Conc: 97.76 ug/ml



#8 n-Octadecane (C18)

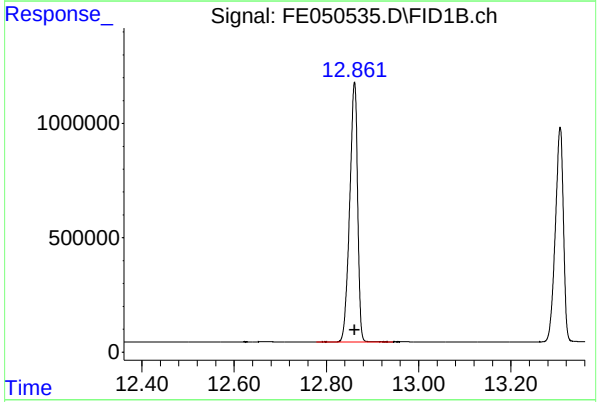
R.T.: 11.554 min
Delta R.T.: 0.000 min
Response: 14160630
Conc: 97.40 ug/ml



#9 ortho-Terphenyl (SURR)

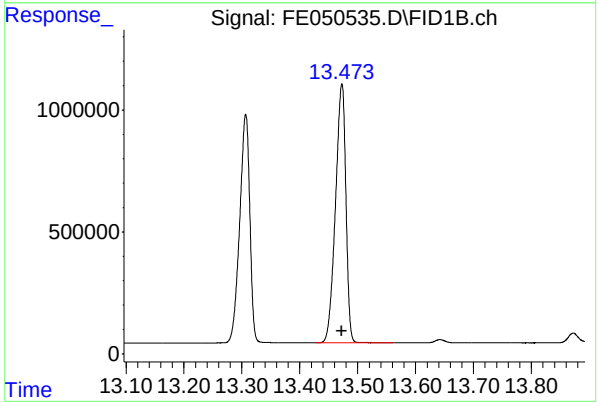
R.T.: 11.874 min
Delta R.T.: 0.000 min
Response: 14935989
Conc: 97.12 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



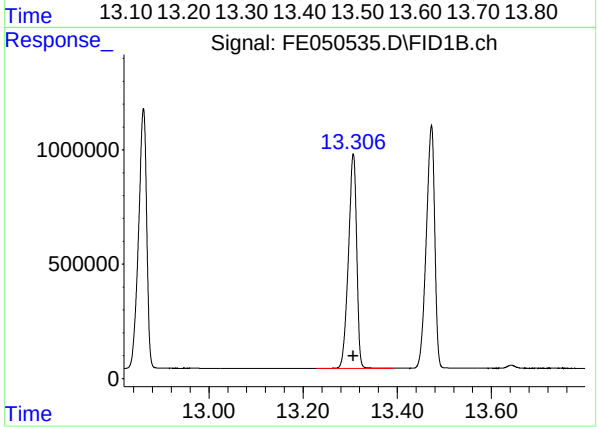
#10 n-Eicosane (C20)

R.T.: 12.861 min
Delta R.T.: 0.000 min
Response: 13543211
Conc: 97.12 ug/ml



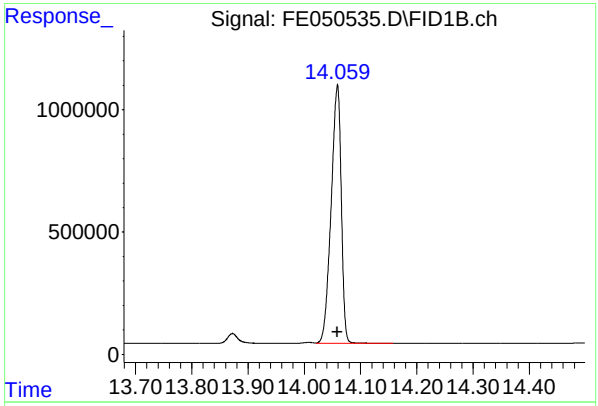
#11 n-Heneicosane (C21)

R.T.: 13.472 min
Delta R.T.: 0.000 min
Response: 13270780
Conc: 97.09 ug/ml



#12 1-chlorooctadecane (SURR)

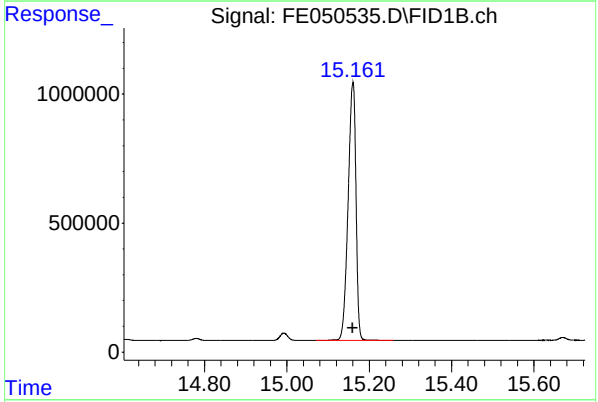
R.T.: 13.307 min
Delta R.T.: 0.000 min
Response: 11405346
Conc: 97.77 ug/ml



#13 n-Docosane (C22)

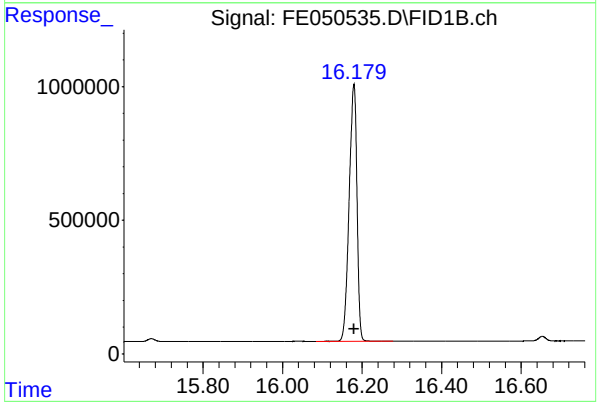
R.T.: 14.058 min
Delta R.T.: 0.000 min
Response: 13205478
Conc: 96.77 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



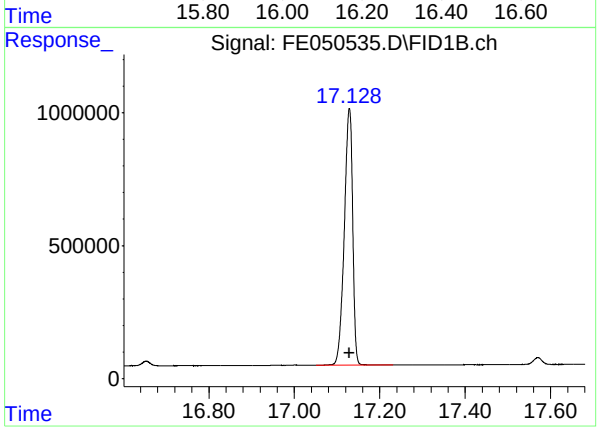
#14 n-Tetracosane (C24)

R.T.: 15.160 min
Delta R.T.: 0.000 min
Response: 13226380
Conc: 96.74 ug/ml



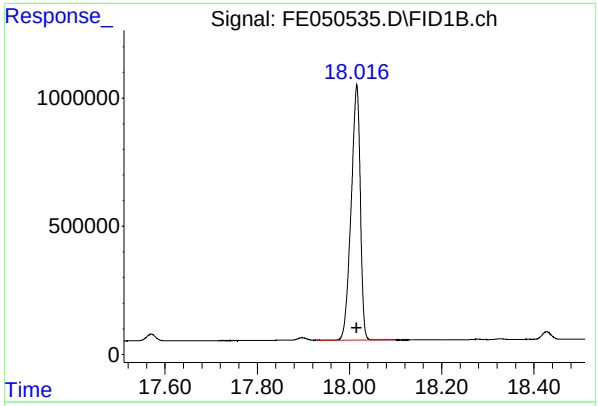
#15 n-Hexacosane (C26)

R.T.: 16.179 min
Delta R.T.: 0.000 min
Response: 13147754
Conc: 96.58 ug/ml



#16 n-Octacosane (C28)

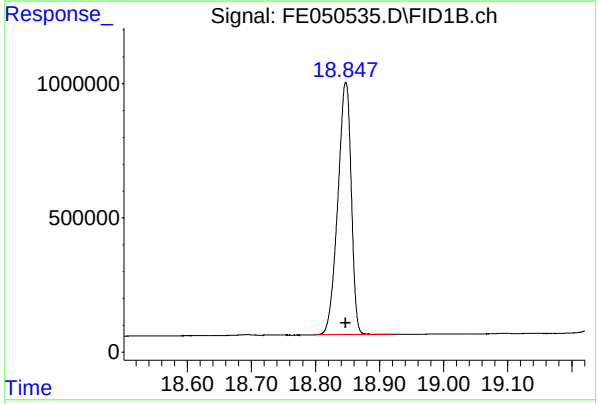
R.T.: 17.129 min
Delta R.T.: 0.000 min
Response: 13198270
Conc: 95.31 ug/ml



#17 n-Tricontane (C30)

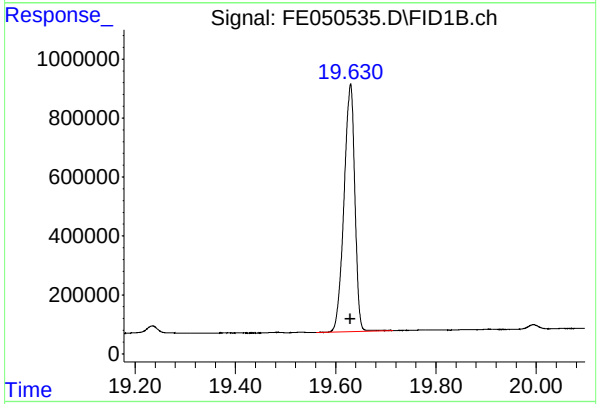
R.T.: 18.016 min
Delta R.T.: 0.000 min
Response: 13716170
Conc: 92.69 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



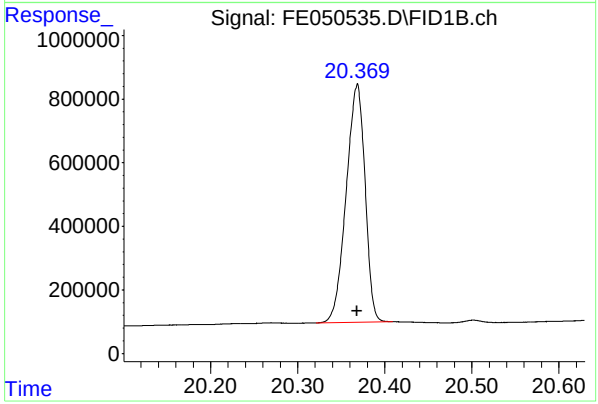
#18 n-Dotriacontane (C32)

R.T.: 18.847 min
Delta R.T.: 0.000 min
Response: 13640074
Conc: 91.72 ug/ml



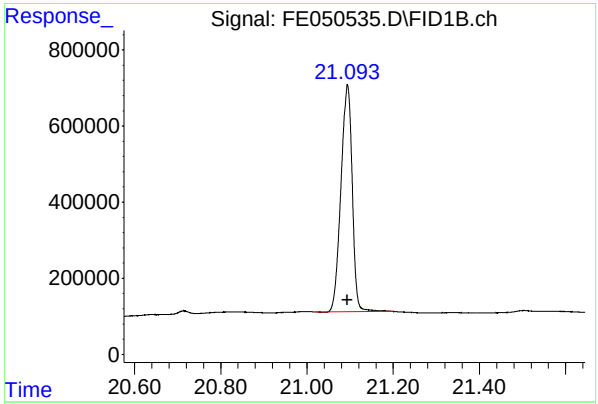
#19 n-Tetratriacontane (C34)

R.T.: 19.629 min
Delta R.T.: 0.000 min
Response: 12565721
Conc: 92.26 ug/ml



#20 n-Hexatriacontane (C36)

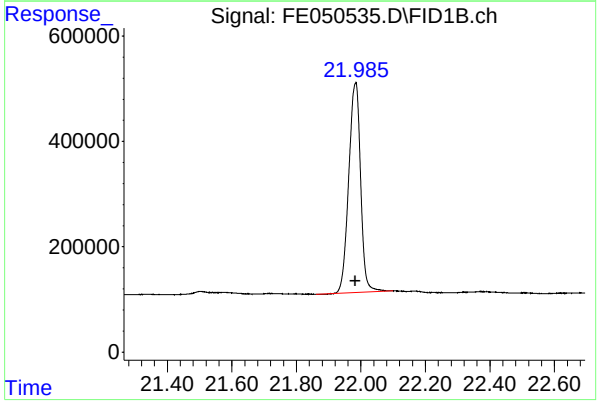
R.T.: 20.368 min
Delta R.T.: 0.000 min
Response: 11275380
Conc: 94.01 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.094 min
Delta R.T.: 0.000 min
Response: 10872225
Conc: 93.40 ug/ml

Instrument :
FID_E
ClientSampleId :
100 PPM ALIPHATIC HC STD1



#22 n-Tetracontane (C40)

R.T.: 21.983 min
Delta R.T.: 0.000 min
Response: 10163259
Conc: 92.88 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050535.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 14:06
Sample : 100 PPM ALIPHATIC HC STD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.256	3.218	3.371	BB	1324173	13375492	89.55%	4.632%
2	4.508	4.468	4.628	BB	1334655	13622130	91.20%	4.718%
3	6.217	6.181	6.461	BB	1389687	14355926	96.12%	4.972%
4	6.676	6.638	6.798	BB	1369652	13748169	92.05%	4.762%
5	7.315	7.278	7.488	PV	1264853	13570374	90.86%	4.700%
6	8.504	8.434	8.618	BB	1252011	13662645	91.47%	4.732%
7	10.111	10.074	10.221	BB	1234885	14073092	94.22%	4.874%
8	11.554	11.510	11.624	PV	1196443	14160630	94.81%	4.904%
9	11.874	11.821	11.978	BV	1305138	14935989	100.00%	5.173%
10	12.861	12.778	12.944	BB	1141004	13543211	90.68%	4.691%
11	13.307	13.228	13.391	BV	945279	11405346	76.36%	3.950%
12	13.472	13.428	13.561	PB	1054961	13270780	88.85%	4.596%
13	14.058	14.021	14.158	VB	1044935	13205478	88.41%	4.574%
14	15.160	15.071	15.258	BB	1007834	13226380	88.55%	4.581%
15	16.179	16.084	16.278	BB	960164	13147754	88.03%	4.554%
16	17.129	17.051	17.231	BB	966376	13198270	88.37%	4.571%
17	18.016	17.928	18.094	PB	987186	13716170	91.83%	4.750%
18	18.847	18.801	18.921	BB	942433	13640074	91.32%	4.724%
19	19.629	19.561	19.714	BB	849738	12565721	84.13%	4.352%
20	20.368	20.321	20.409	BBA	745438	11275380	75.49%	3.905%
21	21.094	21.021	21.199	BBA	598100	10872225	72.79%	3.765%
22	21.983	21.861	22.099	BBA	399118	10163259	68.05%	3.520%
			Sum of corrected areas:			288734494		

Aliphatic EPH 100824.M Mon Oct 07 16:35:00 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050536.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 14:36
Operator : YP\AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Oct 07 15:51:39 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 15:51:32 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)	11.869	7668467	49.909 ug/ml
Spiked Amount	50.000		Recovery =	99.82%
12) S	1-chlorooctadecane (S...	13.302	5839164	50.036 ug/ml
Spiked Amount	50.000		Recovery =	100.07%
	Target Compounds			
1) T	n-Nonane (C9)	3.254	6949960	50.501 ug/ml
2) T	n-Decane (C10)	4.505	7054723	50.395 ug/ml
3) T	A~Naphthalene (C11.7)	6.215	7328645	50.738 ug/ml
4) T	n-Dodecane (C12)	6.673	7067889	50.251 ug/ml
5) T	A~2-methylnaphthalene...	7.311	6885410	50.712 ug/ml
6) T	n-Tetradecane (C14)	8.500	6999728	50.107 ug/ml
7) T	n-Hexadecane (C16)	10.106	7245055	50.220 ug/ml
8) T	n-Octadecane (C18)	11.549	7346700	50.352 ug/ml
10) T	n-Eicosane (C20)	12.857	7008593	50.171 ug/ml
11) T	n-Heneicosane (C21)	13.467	6848025	50.067 ug/ml
13) T	n-Docosane (C22)	14.053	6831662	50.043 ug/ml
14) T	n-Tetracosane (C24)	15.155	6893925	50.282 ug/ml
15) T	n-Hexacosane (C26)	16.174	6879086	50.352 ug/ml
16) T	n-Octacosane (C28)	17.123	6976327	50.252 ug/ml
17) T	n-Tricontane (C30)	18.011	7324087	49.661 ug/ml
18) T	n-Dotriacontane (C32)	18.842	7246744	49.144 ug/ml
19) T	n-Tetratriacontane (C34)	19.624	6582481	48.875 ug/ml
20) T	n-Hexatriacontane (C36)	20.364	5833635	49.085 ug/ml
21) T	n-Octatriacontane (C38)	21.090	5653192	49.036 ug/ml
22) T	n-Tetracontane (C40)	21.980	5454826	49.901 ug/ml

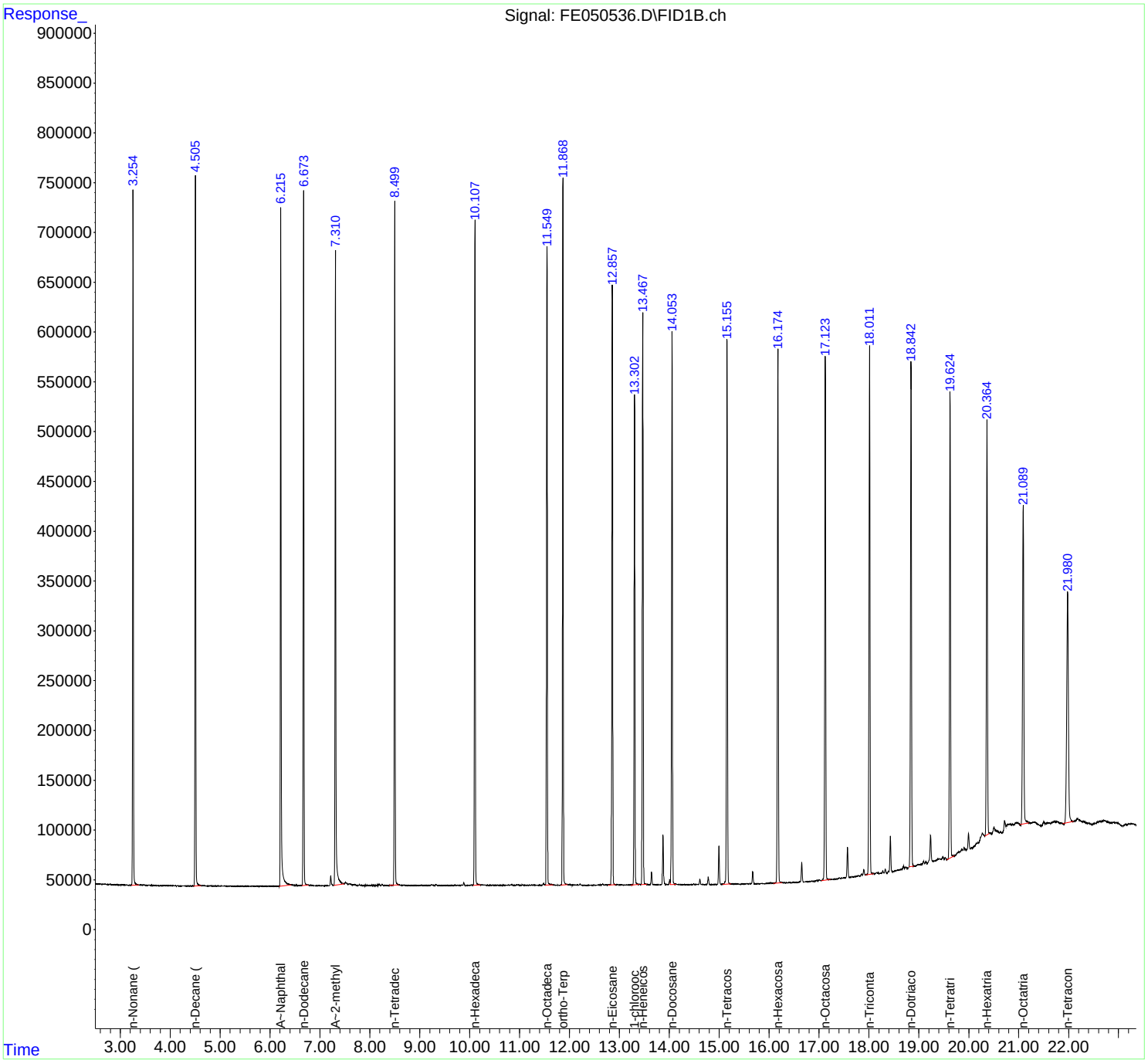
(f)=RT Delta > 1/2 Window (m)=manual int.

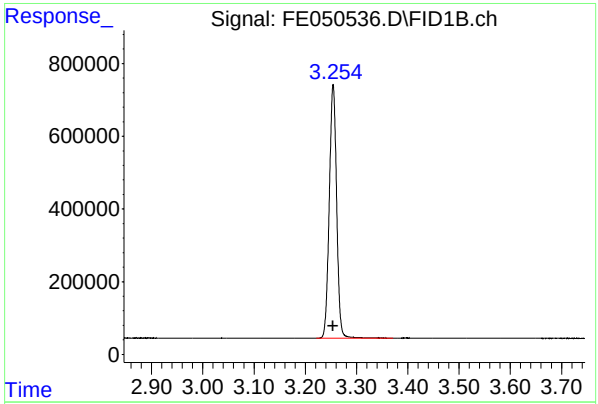
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050536.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 14:36
Operator : YP\AJ
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2

Integration File: autoint1.e
Quant Time: Oct 07 15:51:39 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 15:51:32 2024
Response via : Initial Calibration
Integrator: ChemStation

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

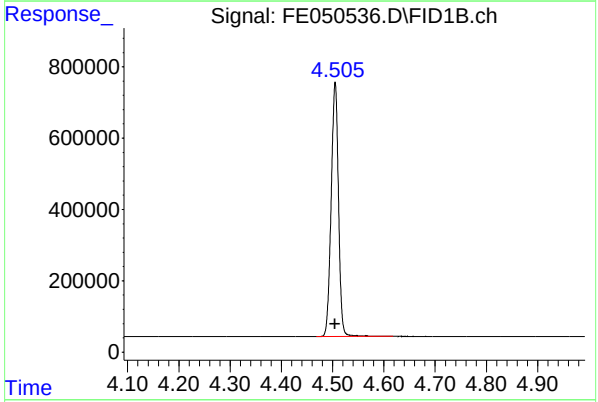




#1 n-Nonane (C9)

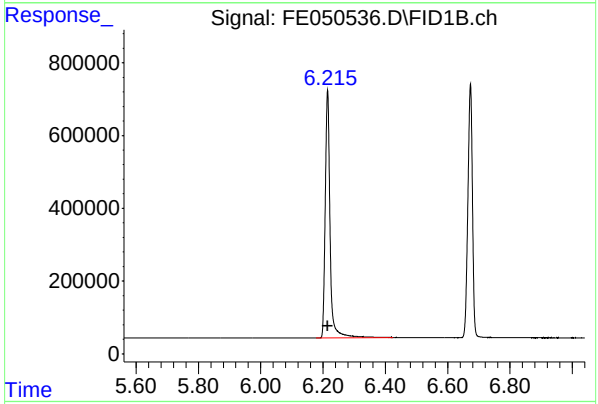
R.T.: 3.254 min
Delta R.T.: 0.000 min
Response: 6949960
Conc: 50.50 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



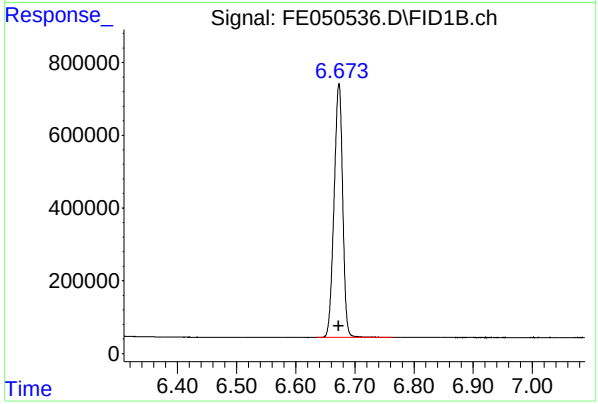
#2 n-Decane (C10)

R.T.: 4.505 min
Delta R.T.: 0.000 min
Response: 7054723
Conc: 50.40 ug/ml



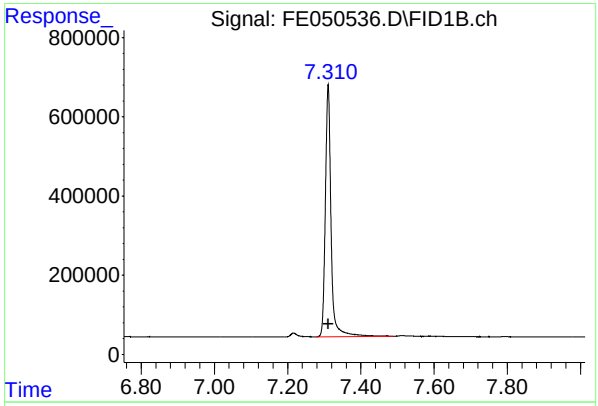
#3 A~Naphthalene (C11.7)

R.T.: 6.215 min
Delta R.T.: 0.000 min
Response: 7328645
Conc: 50.74 ug/ml



#4 n-Dodecane (C12)

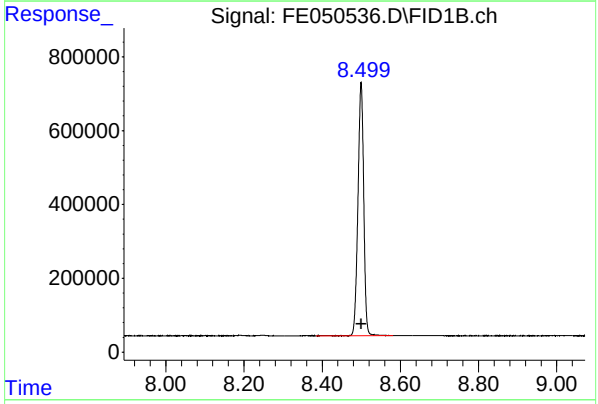
R.T.: 6.673 min
Delta R.T.: 0.000 min
Response: 7067889
Conc: 50.25 ug/ml



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

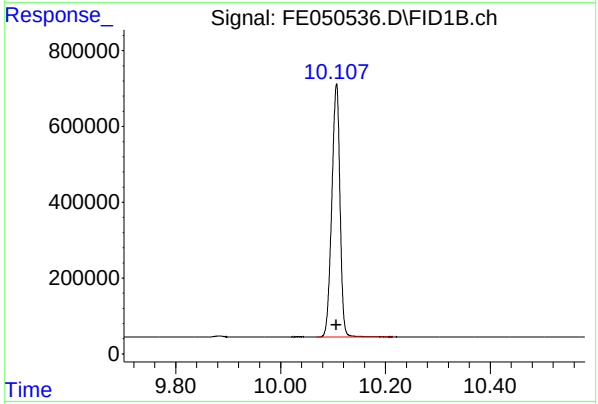
R.T.: 7.311 min
Delta R.T.: 0.000 min
Response: 6885410
Conc: 50.71 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



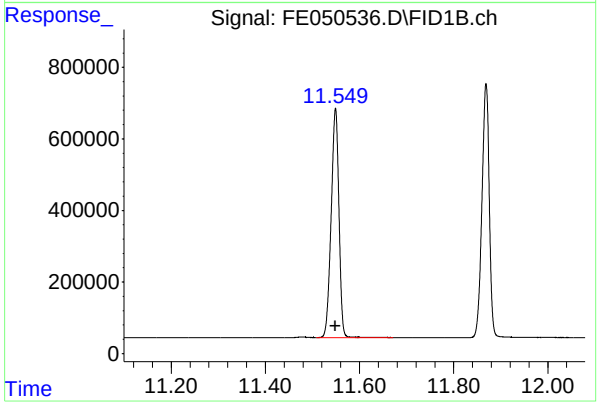
#6 n-Tetradecane (C14)

R.T.: 8.500 min
Delta R.T.: 0.000 min
Response: 6999728
Conc: 50.11 ug/ml



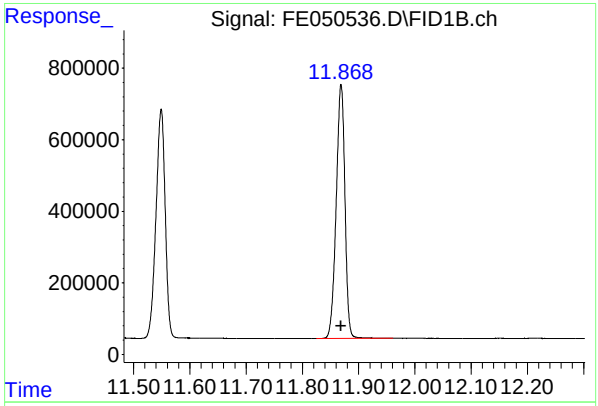
#7 n-Hexadecane (C16)

R.T.: 10.106 min
Delta R.T.: 0.000 min
Response: 7245055
Conc: 50.22 ug/ml



#8 n-Octadecane (C18)

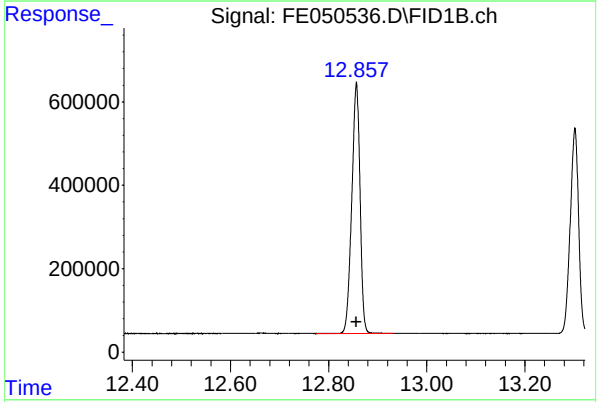
R.T.: 11.549 min
Delta R.T.: 0.000 min
Response: 7346700
Conc: 50.35 ug/ml



#9 ortho-Terphenyl (SURR)

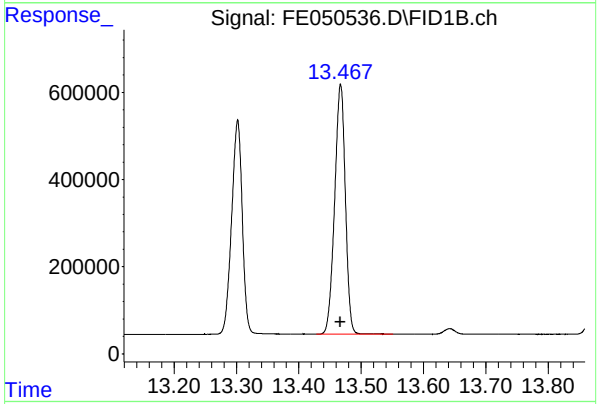
R.T.: 11.869 min
Delta R.T.: 0.000 min
Response: 7668467
Conc: 49.91 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



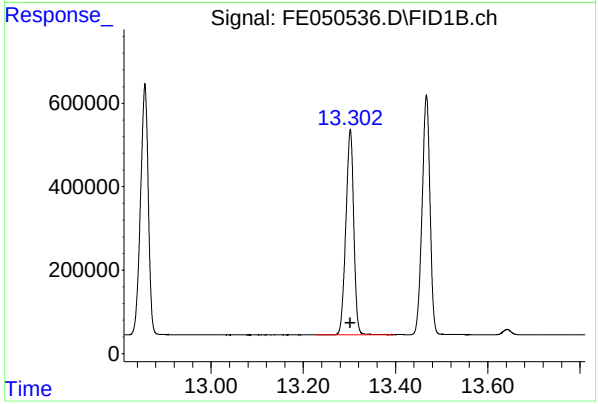
#10 n-Eicosane (C20)

R.T.: 12.857 min
Delta R.T.: 0.000 min
Response: 7008593
Conc: 50.17 ug/ml



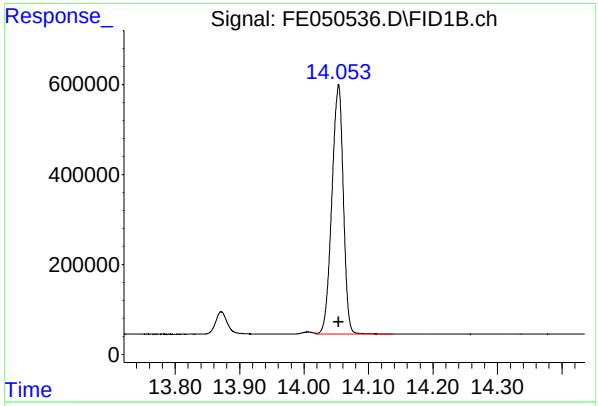
#11 n-Heneicosane (C21)

R.T.: 13.467 min
Delta R.T.: 0.000 min
Response: 6848025
Conc: 50.07 ug/ml



#12 1-chlorooctadecane (SURR)

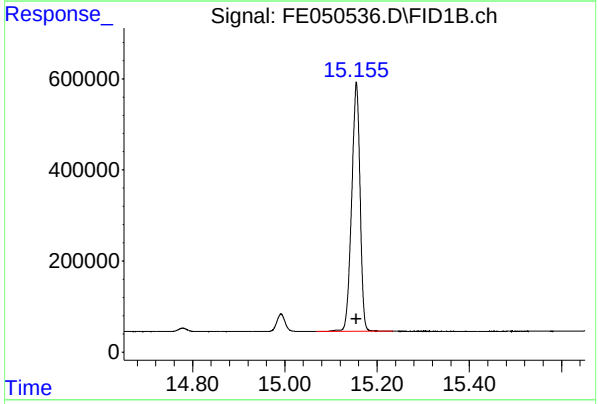
R.T.: 13.302 min
Delta R.T.: 0.000 min
Response: 5839164
Conc: 50.04 ug/ml



#13 n-Docosane (C22)

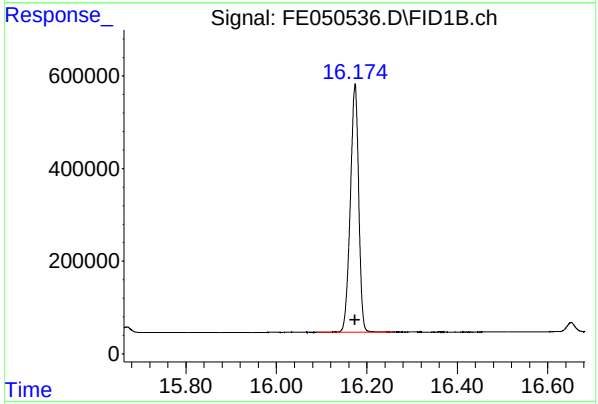
R.T.: 14.053 min
Delta R.T.: 0.000 min
Response: 6831662
Conc: 50.04 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



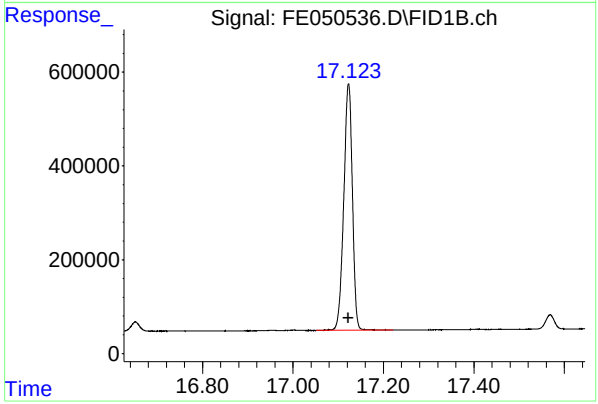
#14 n-Tetracosane (C24)

R.T.: 15.155 min
Delta R.T.: 0.000 min
Response: 6893925
Conc: 50.28 ug/ml



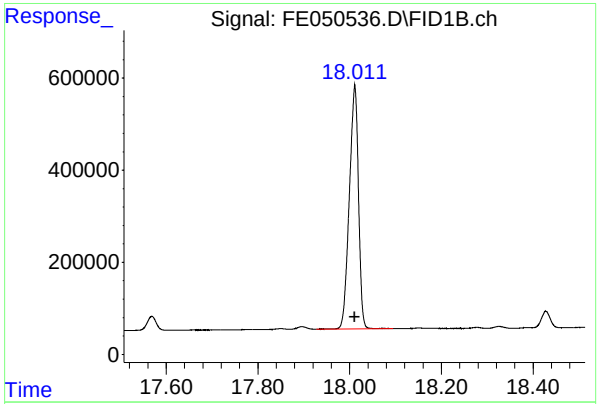
#15 n-Hexacosane (C26)

R.T.: 16.174 min
Delta R.T.: 0.000 min
Response: 6879086
Conc: 50.35 ug/ml



#16 n-Octacosane (C28)

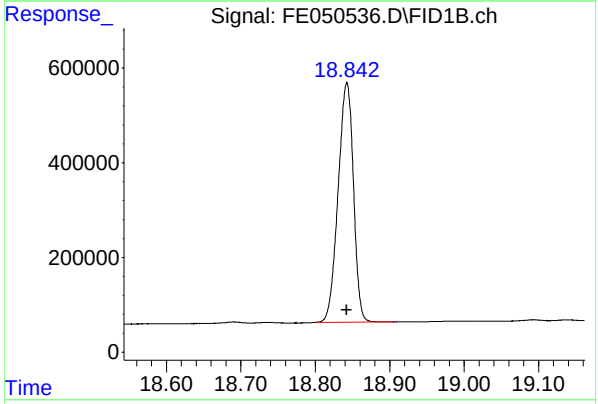
R.T.: 17.123 min
Delta R.T.: 0.000 min
Response: 6976327
Conc: 50.25 ug/ml



#17 n-Tricontane (C30)

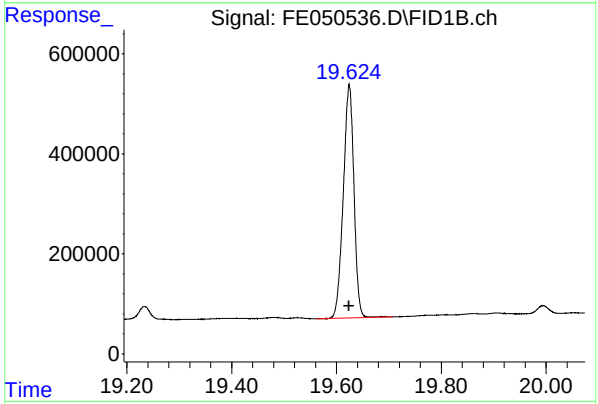
R.T.: 18.011 min
Delta R.T.: 0.000 min
Response: 7324087
Conc: 49.66 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



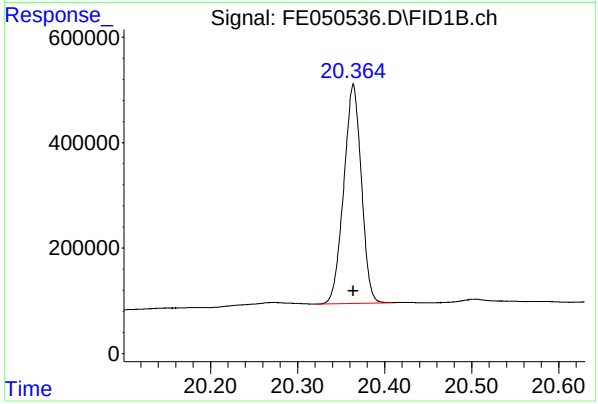
#18 n-Dotriacontane (C32)

R.T.: 18.842 min
Delta R.T.: 0.000 min
Response: 7246744
Conc: 49.14 ug/ml



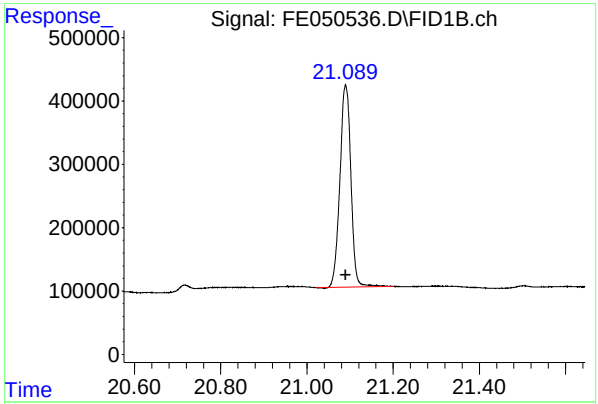
#19 n-Tetratriacontane (C34)

R.T.: 19.624 min
Delta R.T.: 0.000 min
Response: 6582481
Conc: 48.87 ug/ml



#20 n-Hexatriacontane (C36)

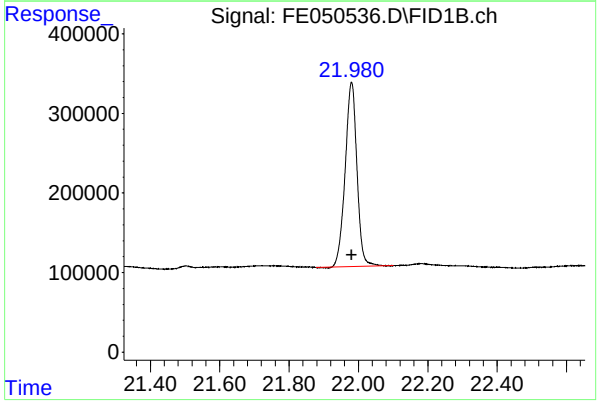
R.T.: 20.364 min
Delta R.T.: 0.000 min
Response: 5833635
Conc: 49.09 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.090 min
Delta R.T.: 0.000 min
Response: 5653192
Conc: 49.04 ug/ml

Instrument :
FID_E
ClientSampleId :
50 PPM ALIPHATIC HC STD2



#22 n-Tetracontane (C40)

R.T.: 21.980 min
Delta R.T.: 0.000 min
Response: 5454826
Conc: 49.90 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050536.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 14:36
Sample : 50 PPM ALIPHATIC HC STD2
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.254	3.221	3.371	BB	696678	6949960	90.63%	4.636%
2	4.505	4.468	4.618	BB	709894	7054723	92.00%	4.706%
3	6.215	6.178	6.424	BB	680238	7328645	95.57%	4.888%
4	6.673	6.634	6.764	BB	704403	7067889	92.17%	4.714%
5	7.311	7.278	7.488	PV	637269	6885410	89.79%	4.593%
6	8.500	8.384	8.581	BB	683389	6999728	91.28%	4.669%
7	10.106	10.068	10.214	BB	676338	7245055	94.48%	4.833%
8	11.549	11.508	11.671	VB	636950	7346700	95.80%	4.900%
9	11.869	11.824	11.961	BB	709474	7668467	100.00%	5.115%
10	12.857	12.774	12.931	BB	601442	7008593	91.39%	4.675%
11	13.302	13.228	13.394	BB	488293	5839164	76.15%	3.895%
12	13.467	13.428	13.551	BB	574970	6848025	89.30%	4.568%
13	14.053	14.018	14.138	VB	559199	6831662	89.09%	4.557%
14	15.155	15.068	15.234	BB	545336	6893925	89.90%	4.598%
15	16.174	16.088	16.258	BB	536276	6879086	89.71%	4.589%
16	17.123	17.051	17.221	BB	528256	6976327	90.97%	4.653%
17	18.011	17.927	18.094	PB	529796	7324087	95.51%	4.885%
18	18.842	18.801	18.904	BB	503954	7246744	94.50%	4.834%
19	19.624	19.561	19.708	BB	466127	6582481	85.84%	4.391%
20	20.364	20.321	20.409	BBA	415446	5833635	76.07%	3.891%
21	21.090	21.021	21.199	BBA	318153	5653192	73.72%	3.771%
22	21.980	21.878	22.099	BBA	231697	5454826	71.13%	3.639%

Sum of corrected areas: 149918324

Aliphatic EPH 100824.M Mon Oct 07 16:35:43 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050537.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 15:06
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Oct 07 15:48:35 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 15:48:28 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)	11.865	3164300	20.000 ug/ml
	Spiked Amount 50.000		Recovery = 40.00%	
12)	S 1-chlorooctadecane (S...	13.300	2385261	20.000 ug/ml
	Spiked Amount 50.000		Recovery = 40.00%	
	Target Compounds			
1)	T n-Nonane (C9)	3.252	2802051	20.000 ug/ml
2)	T n-Decane (C10)	4.503	2852963	20.000 ug/ml
3)	T A~Naphthalene (C11.7)	6.214	2863853	20.000 ug/ml
4)	T n-Dodecane (C12)	6.671	2862396	20.000 ug/ml
5)	T A~2-methylnaphthalene...	7.310	2678310	20.000 ug/ml
6)	T n-Tetradecane (C14)	8.498	2849272	20.000 ug/ml
7)	T n-Hexadecane (C16)	10.103	2943356	20.000 ug/ml
8)	T n-Octadecane (C18)	11.546	2983567	20.000 ug/ml
10)	T n-Eicosane (C20)	12.853	2869562	20.000 ug/ml
11)	T n-Heneicosane (C21)	13.465	2813281	20.000 ug/ml
13)	T n-Docosane (C22)	14.050	2817220	20.000 ug/ml
14)	T n-Tetracosane (C24)	15.151	2823423	20.000 ug/ml
15)	T n-Hexacosane (C26)	16.171	2816031	20.000 ug/ml
16)	T n-Octacosane (C28)	17.120	2899395	20.000 ug/ml
17)	T n-Tricontane (C30)	18.007	3176058	20.000 ug/ml
18)	T n-Dotriacontane (C32)	18.840	3220879	20.000 ug/ml
19)	T n-Tetratriacontane (C34)	19.621	2934710	20.000 ug/ml
20)	T n-Hexatriacontane (C36)	20.361	2542299	20.000 ug/ml
21)	T n-Octatriacontane (C38)	21.086	2481528	20.000 ug/ml
22)	T n-Tetracontane (C40)	21.974	2344203	20.000 ug/ml

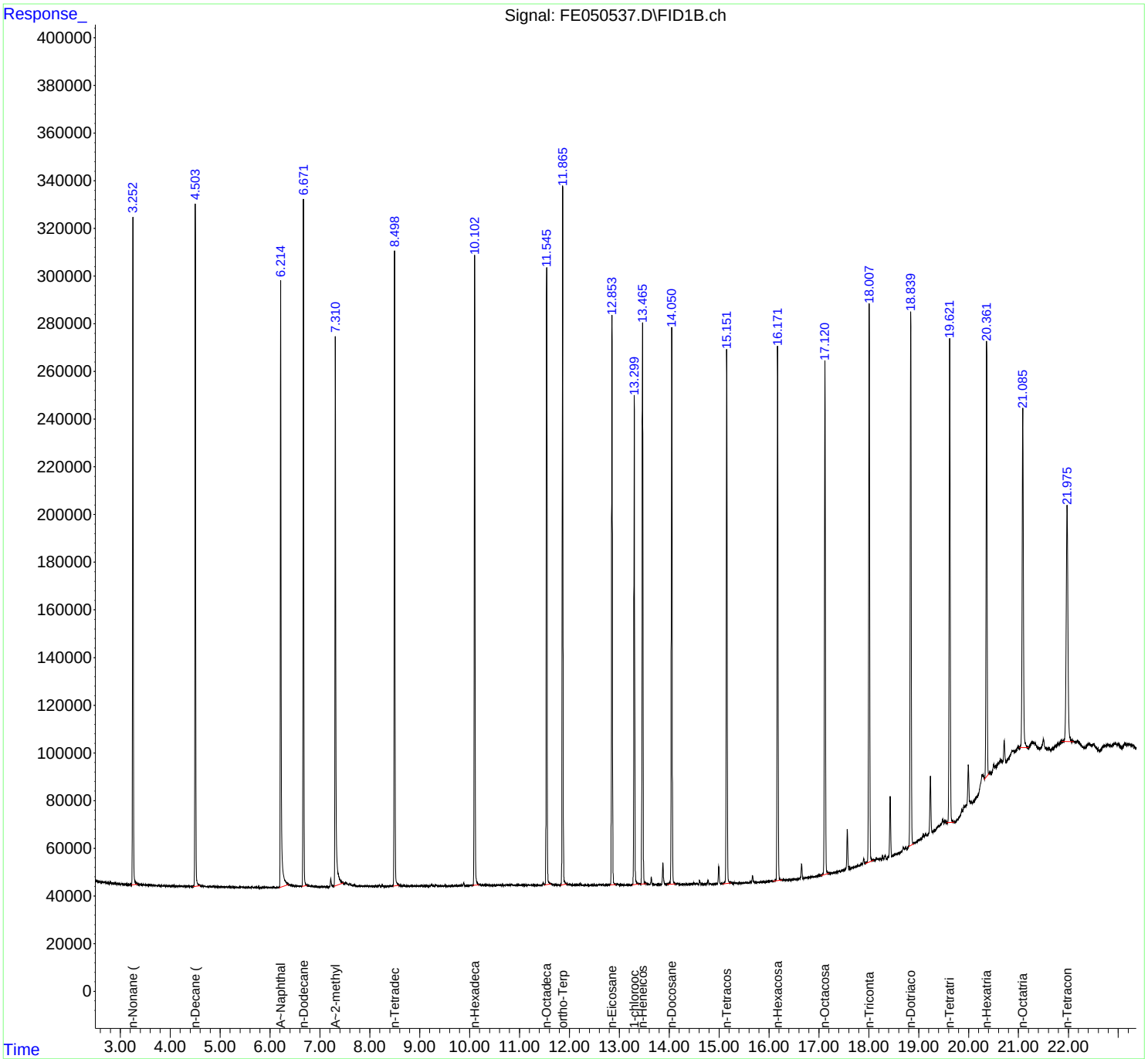
(f)=RT Delta > 1/2 Window (m)=manual int.

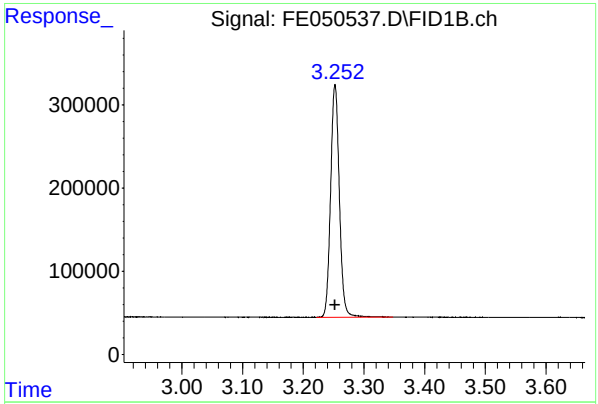
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050537.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 15:06
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3

Integration File: autoint1.e
Quant Time: Oct 07 15:48:35 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 15:48:28 2024
Response via : Initial Calibration
Integrator: ChemStation

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

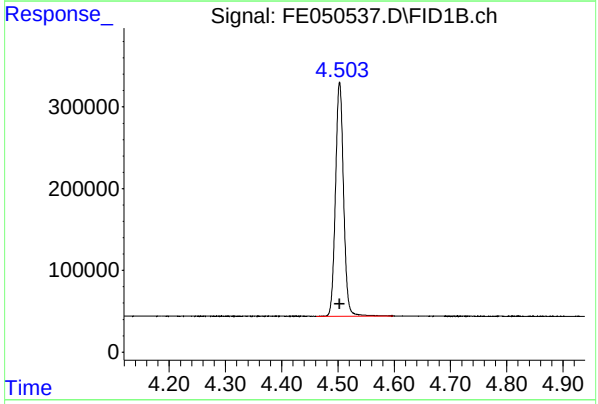




#1 n-Nonane (C9)

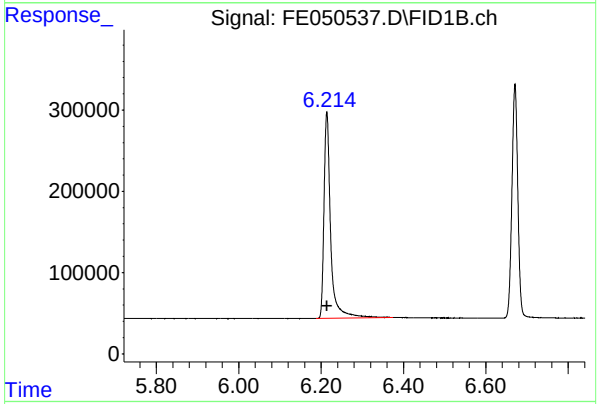
R.T.: 3.252 min
Delta R.T.: 0.000 min
Response: 2802051
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



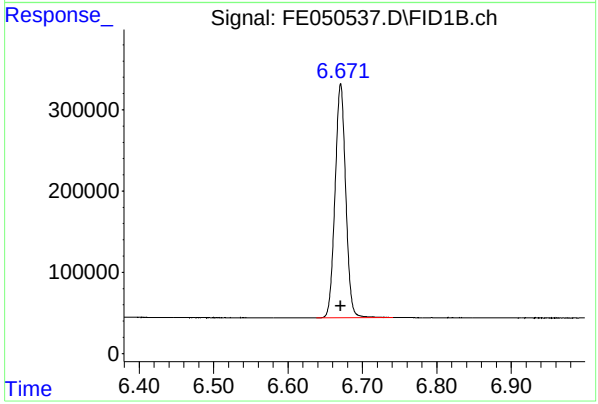
#2 n-Decane (C10)

R.T.: 4.503 min
Delta R.T.: 0.000 min
Response: 2852963
Conc: 20.00 ug/ml



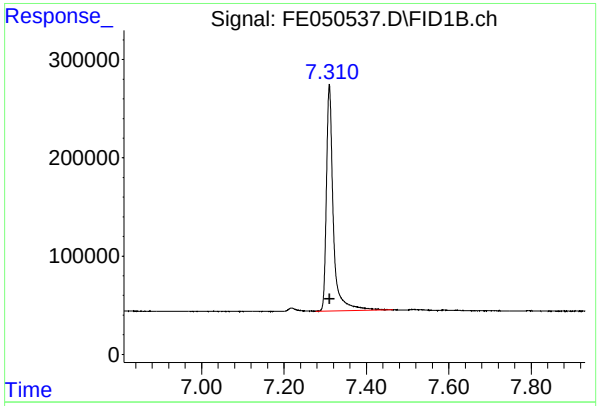
#3 A~Naphthalene (C11.7)

R.T.: 6.214 min
Delta R.T.: 0.000 min
Response: 2863853
Conc: 20.00 ug/ml



#4 n-Dodecane (C12)

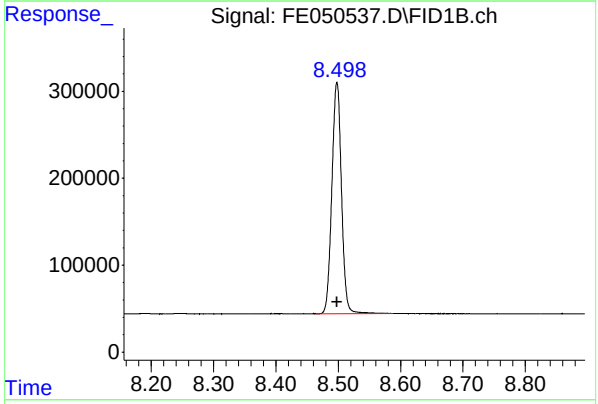
R.T.: 6.671 min
Delta R.T.: 0.000 min
Response: 2862396
Conc: 20.00 ug/ml



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

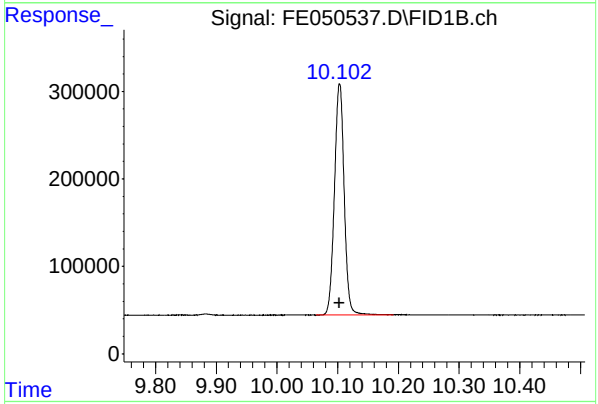
R.T.: 7.310 min
Delta R.T.: 0.000 min
Response: 2678310
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



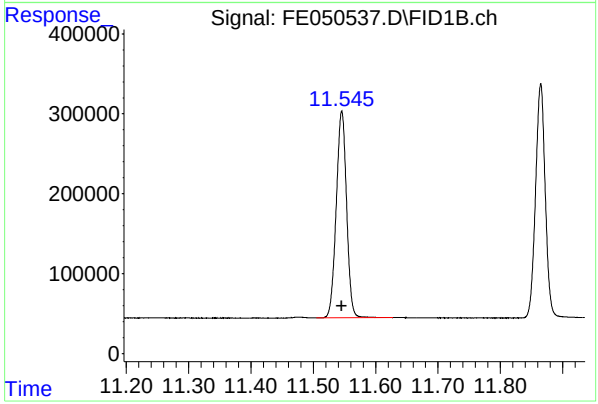
#6 n-Tetradecane (C14)

R.T.: 8.498 min
Delta R.T.: 0.000 min
Response: 2849272
Conc: 20.00 ug/ml



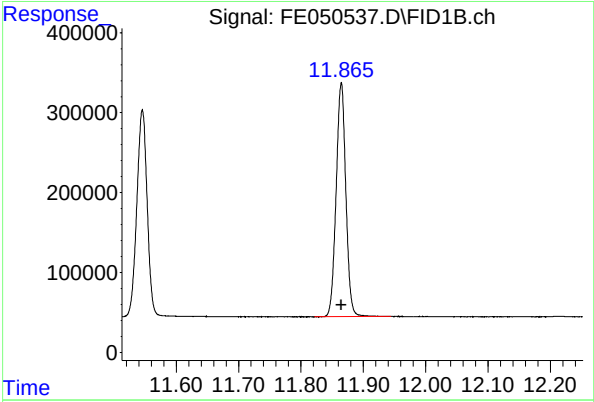
#7 n-Hexadecane (C16)

R.T.: 10.103 min
Delta R.T.: 0.000 min
Response: 2943356
Conc: 20.00 ug/ml



#8 n-Octadecane (C18)

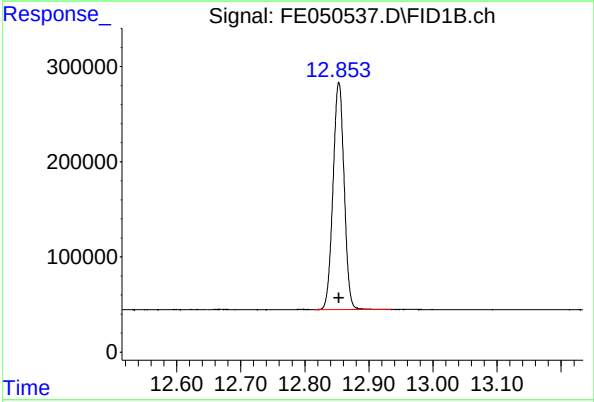
R.T.: 11.546 min
Delta R.T.: 0.000 min
Response: 2983567
Conc: 20.00 ug/ml



#9 ortho-Terphenyl (SURR)

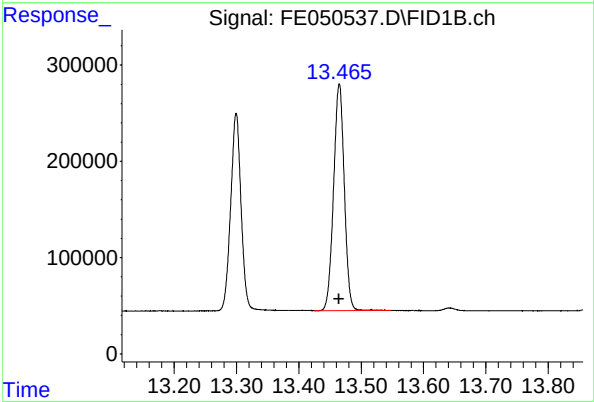
R.T.: 11.865 min
Delta R.T.: 0.000 min
Response: 3164300
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



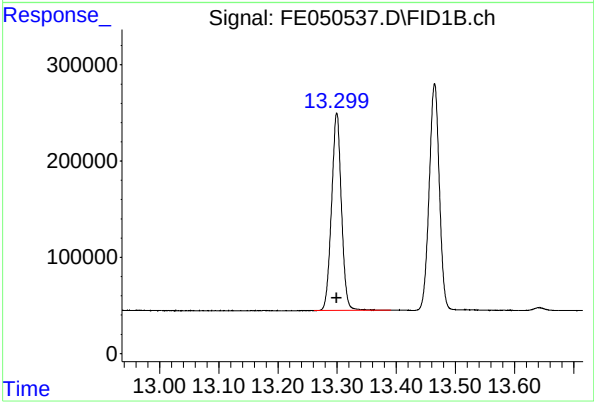
#10 n-Eicosane (C20)

R.T.: 12.853 min
Delta R.T.: 0.000 min
Response: 2869562
Conc: 20.00 ug/ml



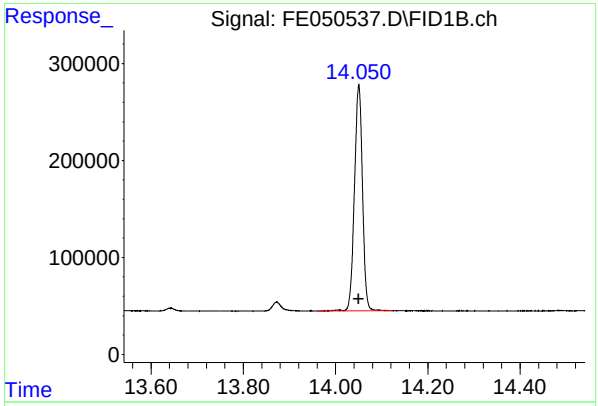
#11 n-Heneicosane (C21)

R.T.: 13.465 min
Delta R.T.: 0.000 min
Response: 2813281
Conc: 20.00 ug/ml



#12 1-chlorooctadecane (SURR)

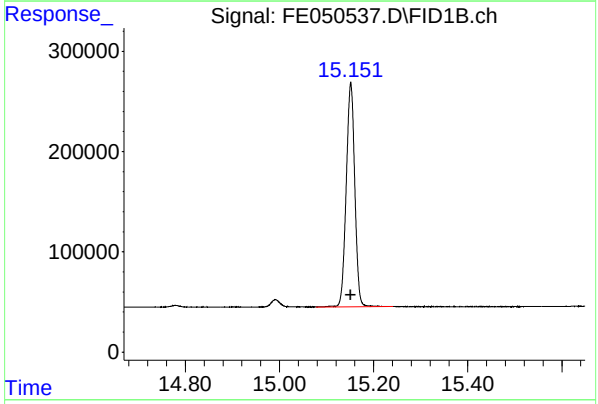
R.T.: 13.300 min
Delta R.T.: 0.000 min
Response: 2385261
Conc: 20.00 ug/ml



#13 n-Docosane (C22)

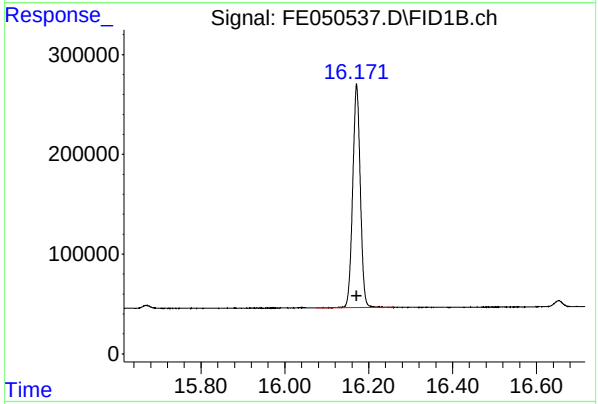
R.T.: 14.050 min
Delta R.T.: 0.000 min
Response: 2817220
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



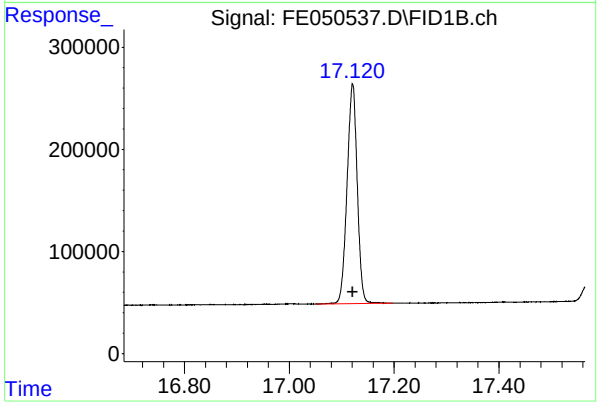
#14 n-Tetracosane (C24)

R.T.: 15.151 min
Delta R.T.: 0.000 min
Response: 2823423
Conc: 20.00 ug/ml



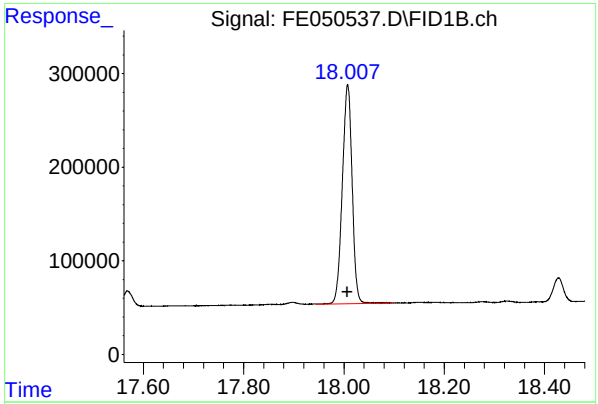
#15 n-Hexacosane (C26)

R.T.: 16.171 min
Delta R.T.: 0.000 min
Response: 2816031
Conc: 20.00 ug/ml



#16 n-Octacosane (C28)

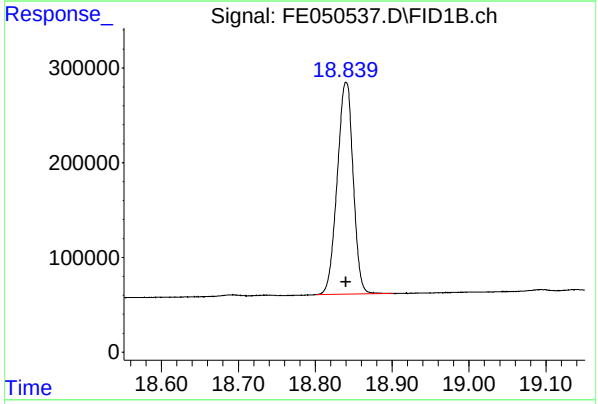
R.T.: 17.120 min
Delta R.T.: 0.000 min
Response: 2899395
Conc: 20.00 ug/ml



#17 n-Tricontane (C30)

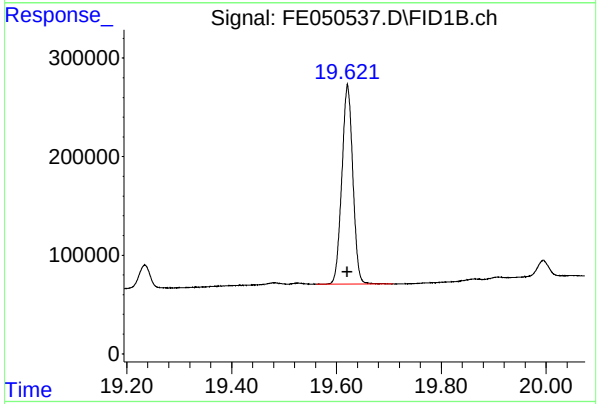
R.T.: 18.007 min
Delta R.T.: 0.000 min
Response: 3176058
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



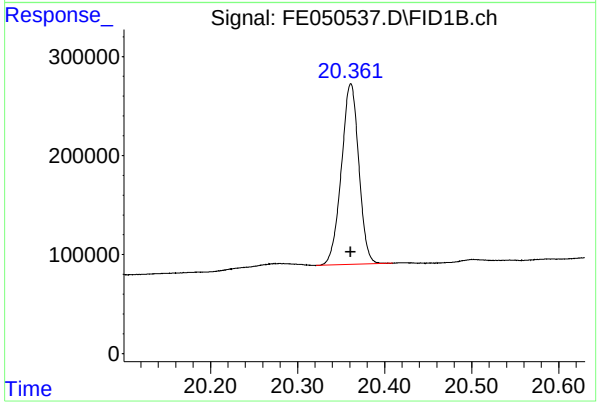
#18 n-Dotriacontane (C32)

R.T.: 18.840 min
Delta R.T.: 0.000 min
Response: 3220879
Conc: 20.00 ug/ml



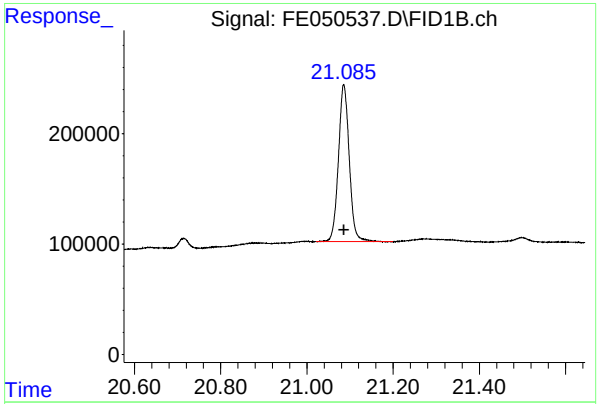
#19 n-Tetratriacontane (C34)

R.T.: 19.621 min
Delta R.T.: 0.000 min
Response: 2934710
Conc: 20.00 ug/ml



#20 n-Hexatriacontane (C36)

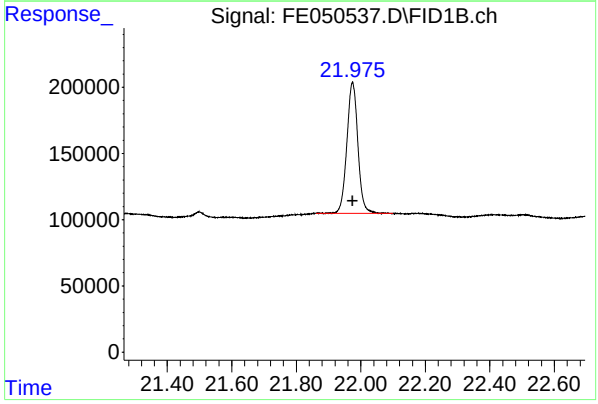
R.T.: 20.361 min
Delta R.T.: 0.000 min
Response: 2542299
Conc: 20.00 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.086 min
Delta R.T.: 0.000 min
Response: 2481528
Conc: 20.00 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD3



#22 n-Tetracontane (C40)

R.T.: 21.974 min
Delta R.T.: 0.000 min
Response: 2344203
Conc: 20.00 ug/ml

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050537.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 15:06
Sample : 20 PPM ALIPHATIC HC STD3
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.252	3.221	3.348	BB	278890	2802051	87.00%	4.510%
2	4.503	4.461	4.598	BB	285202	2852963	88.58%	4.592%
3	6.214	6.188	6.374	BB	253669	2863853	88.92%	4.610%
4	6.671	6.638	6.741	BB	287721	2862396	88.87%	4.608%
5	7.310	7.278	7.464	BB	228423	2678310	83.15%	4.311%
6	8.498	8.464	8.588	BB	266356	2849272	88.46%	4.586%
7	10.103	10.064	10.191	BB	266110	2943356	91.38%	4.738%
8	11.546	11.504	11.628	BB	258038	2983567	92.63%	4.803%
9	11.865	11.821	11.944	BB	292339	3164300	98.24%	5.094%
10	12.853	12.814	12.934	BB	239829	2869562	89.09%	4.619%
11	13.300	13.261	13.391	BB	206276	2385261	74.06%	3.840%
12	13.465	13.424	13.548	BB	235274	2813281	87.35%	4.528%
13	14.050	13.958	14.124	BB	234213	2817220	87.47%	4.535%
14	15.151	15.078	15.241	BB	223761	2823423	87.66%	4.545%
15	16.171	16.074	16.258	BB	223622	2816031	87.43%	4.533%
16	17.120	17.051	17.198	BB	216983	2899395	90.02%	4.667%
17	18.007	17.944	18.098	BB	235301	3176058	98.61%	5.112%
18	18.840	18.801	18.901	BB	226230	3220879	100.00%	5.185%
19	19.621	19.561	19.708	BB	201438	2934710	91.12%	4.724%
20	20.361	20.321	20.409	BBA	182901	2542299	78.93%	4.092%
21	21.086	21.021	21.199	BBA	142625	2481528	77.05%	3.994%
22	21.974	21.861	22.099	BBA	99090	2344203	72.78%	3.773%
			Sum of corrected areas:			62123918		

Aliphatic EPH 100824.M Mon Oct 07 16:36:17 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050538.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 15:37
Operator : YP\AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024

Integration File: autoint1.e
Quant Time: Oct 07 16:03:16 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:03:08 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)	11.864	1598249	10.299 ug/ml
Spiked Amount	50.000		Recovery =	20.60%
12) S	1-chlorooctadecane (S...	13.298	1184740	10.114 ug/ml
Spiked Amount	50.000		Recovery =	20.23%
	Target Compounds			
1) T	n-Nonane (C9)	3.253	1429353	10.287 ug/ml
2) T	n-Decane (C10)	4.503	1451977	10.277 ug/ml
3) T	A~Naphthalene (C11.7)	6.215	1409508	9.818 ug/ml
4) T	n-Dodecane (C12)	6.670	1456013	10.262 ug/ml
5) T	A~2-methylnaphthalene...	7.311	1303112	9.695 ug/ml
6) T	n-Tetradecane (C14)	8.497	1444120	10.251 ug/ml
7) T	n-Hexadecane (C16)	10.103	1486117	10.224 ug/ml
8) T	n-Octadecane (C18)	11.544	1509351	10.256 ug/ml
10) T	n-Eicosane (C20)	12.852	1447741	10.270 ug/ml
11) T	n-Heneicosane (C21)	13.463	1422566	10.297 ug/ml
13) T	n-Docosane (C22)	14.049	1407717	10.232 ug/ml
14) T	n-Tetracosane (C24)	15.149	1417214	10.250 ug/ml
15) T	n-Hexacosane (C26)	16.170	1413994	10.260 ug/ml
16) T	n-Octacosane (C28)	17.118	1469893	10.435 ug/ml
17) T	n-Tricontane (C30)	18.006	1614246	10.693 ug/ml
18) T	n-Dotriacontane (C32)	18.837	1666044	10.943 ug/ml
19) T	n-Tetratriacontane (C34)	19.621	1525013	10.961 ug/ml
20) T	n-Hexatriacontane (C36)	20.359	1301715	10.698 ug/ml
21) T	n-Octatriacontane (C38)	21.086	1173667	10.191 ug/mlm
22) T	n-Tetracontane (C40)	21.971	1141383	10.327 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050538.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 15:37
Operator : YP\AJ
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

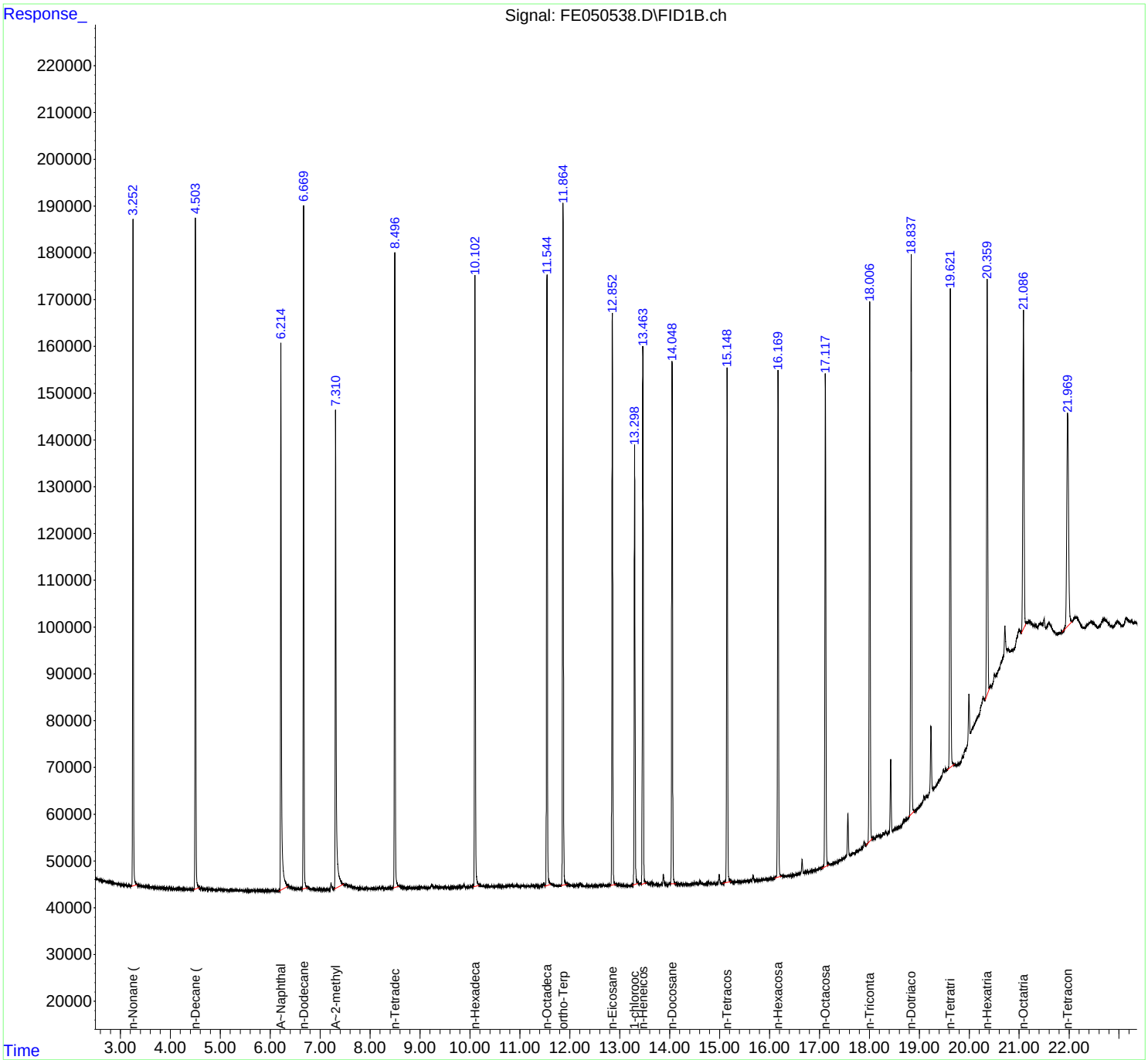
Integration File: autoint1.e
Quant Time: Oct 07 16:03:16 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:03:08 2024
Response via : Initial Calibration
Integrator: ChemStation

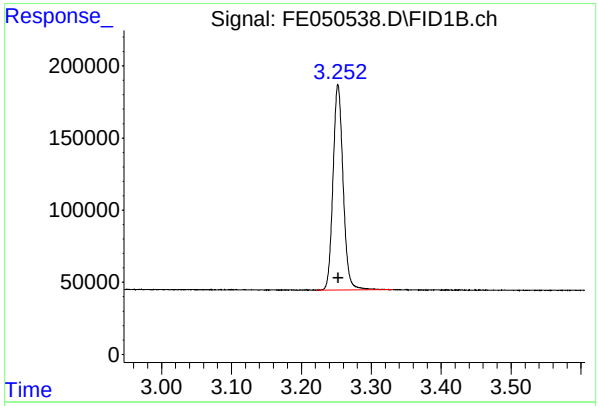
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024





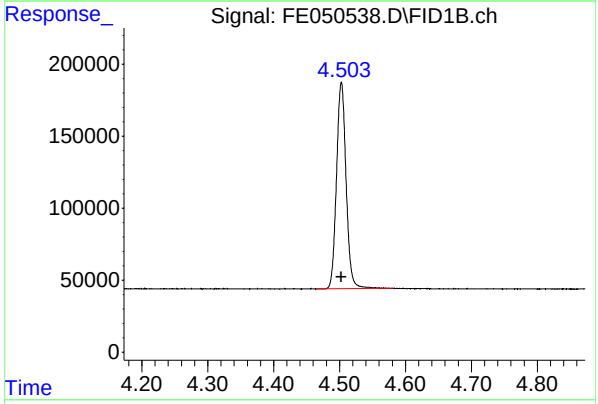
#1 n-Nonane (C9)

R.T.: 3.253 min
Delta R.T.: 0.000 min
Response: 1429353
Conc: 10.29 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

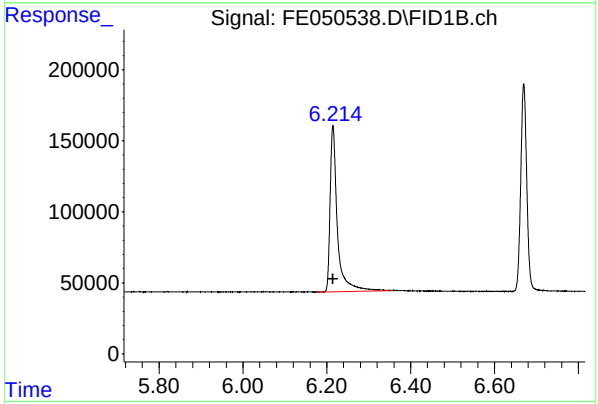
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



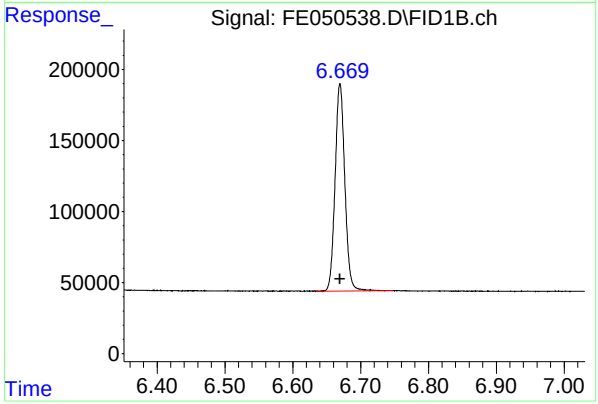
#2 n-Decane (C10)

R.T.: 4.503 min
Delta R.T.: 0.000 min
Response: 1451977
Conc: 10.28 ug/ml



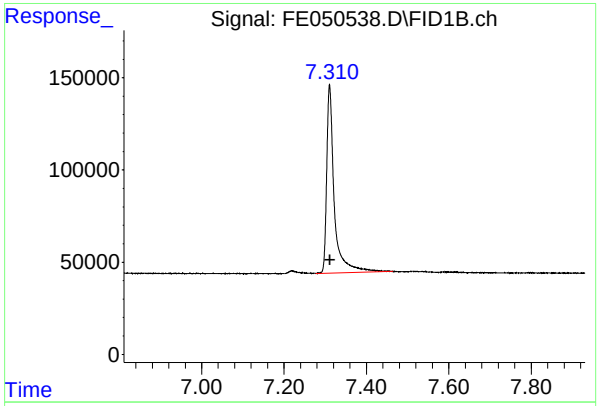
#3 A~Naphthalene (C11.7)

R.T.: 6.215 min
Delta R.T.: 0.000 min
Response: 1409508
Conc: 9.82 ug/ml



#4 n-Dodecane (C12)

R.T.: 6.670 min
Delta R.T.: 0.000 min
Response: 1456013
Conc: 10.26 ug/ml



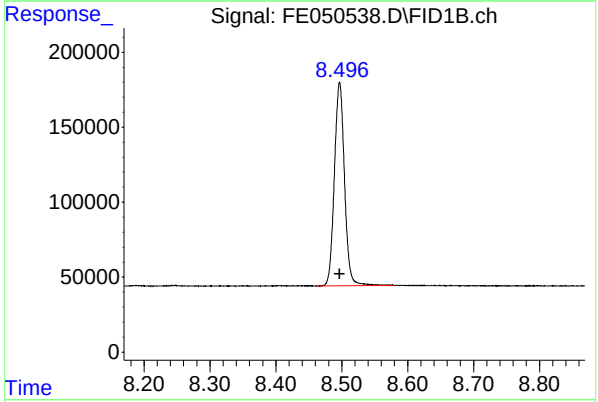
#5 A~2-methylnaphthalene (C12.89)

R.T.: 7.311 min
Delta R.T.: 0.000 min
Response: 1303112
Conc: 9.70 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

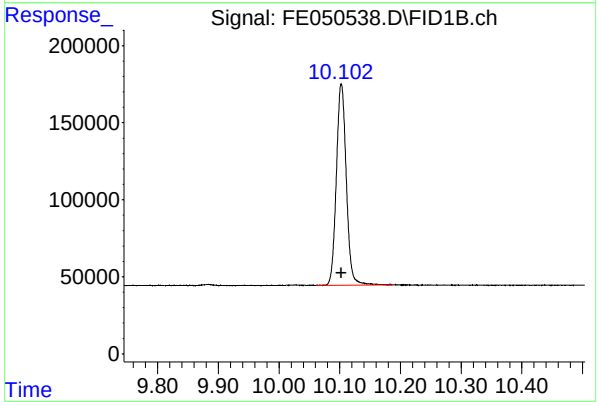
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



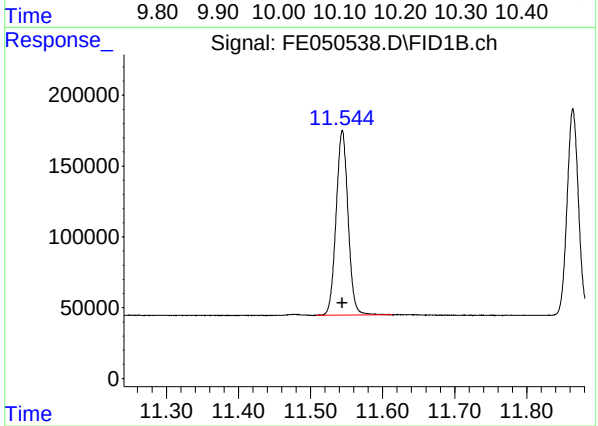
#6 n-Tetradecane (C14)

R.T.: 8.497 min
Delta R.T.: 0.000 min
Response: 1444120
Conc: 10.25 ug/ml



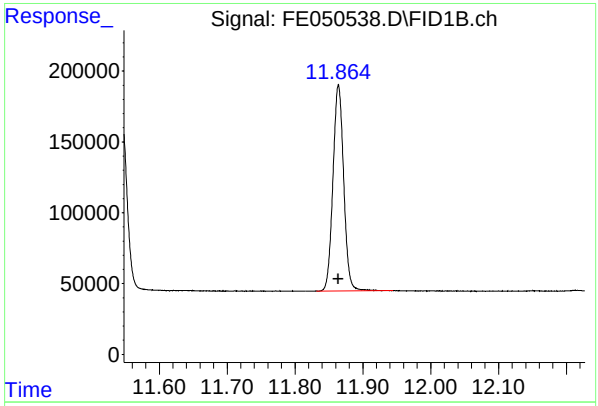
#7 n-Hexadecane (C16)

R.T.: 10.103 min
Delta R.T.: 0.000 min
Response: 1486117
Conc: 10.22 ug/ml



#8 n-Octadecane (C18)

R.T.: 11.544 min
Delta R.T.: 0.000 min
Response: 1509351
Conc: 10.26 ug/ml



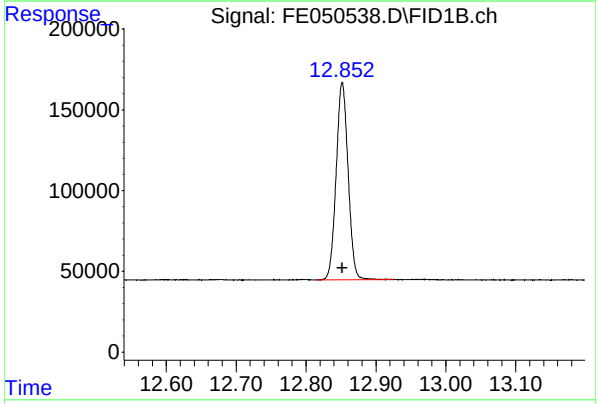
#9 ortho-Terphenyl (SURR)

R.T.: 11.864 min
Delta R.T.: 0.000 min
Response: 1598249
Conc: 10.30 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

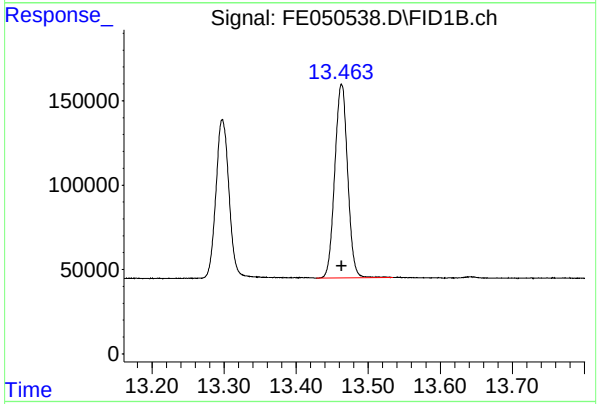
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



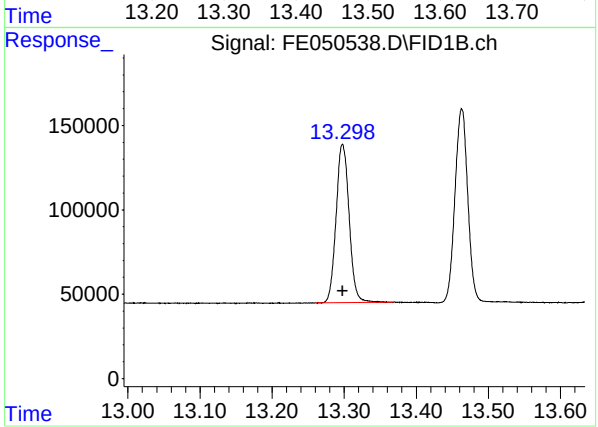
#10 n-Eicosane (C20)

R.T.: 12.852 min
Delta R.T.: 0.000 min
Response: 1447741
Conc: 10.27 ug/ml



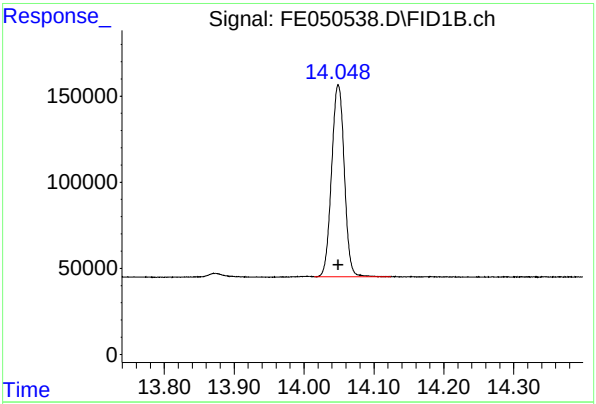
#11 n-Heneicosane (C21)

R.T.: 13.463 min
Delta R.T.: 0.000 min
Response: 1422566
Conc: 10.30 ug/ml



#12 1-chlorooctadecane (SURR)

R.T.: 13.298 min
Delta R.T.: 0.000 min
Response: 1184740
Conc: 10.11 ug/ml



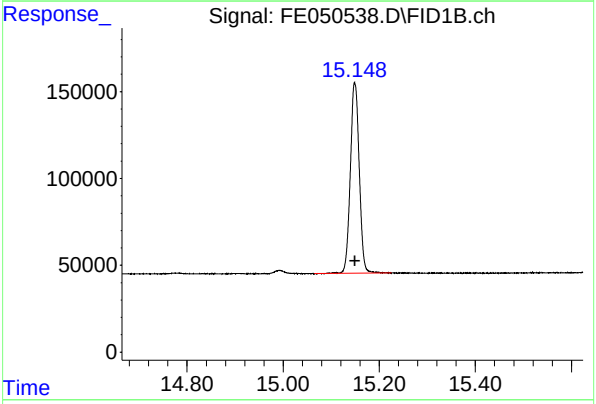
#13 n-Docosane (C22)

R.T.: 14.049 min
Delta R.T.: 0.000 min
Response: 1407717
Conc: 10.23 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

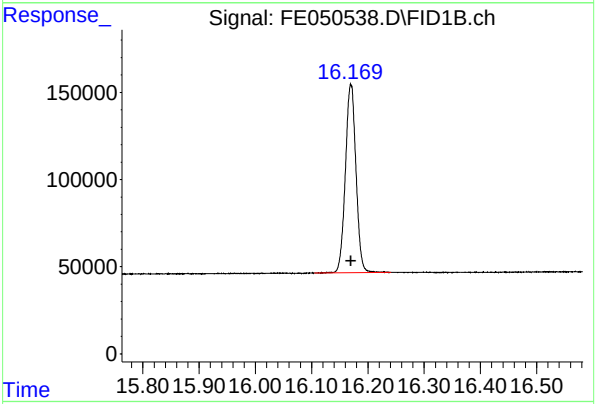
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



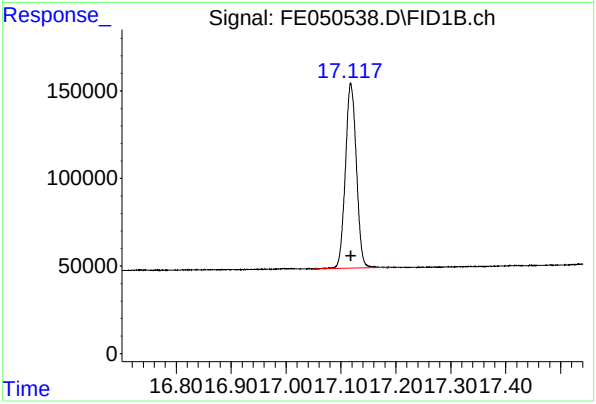
#14 n-Tetracosane (C24)

R.T.: 15.149 min
Delta R.T.: 0.000 min
Response: 1417214
Conc: 10.25 ug/ml



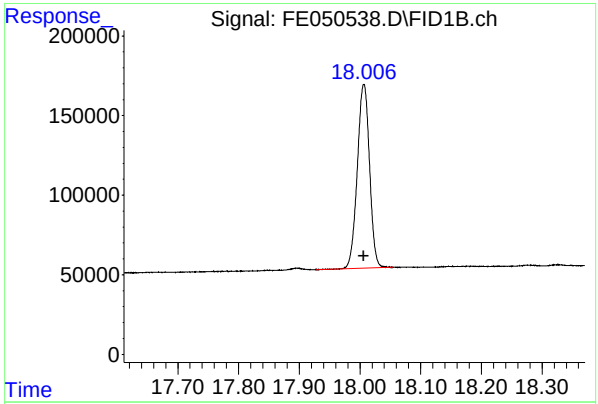
#15 n-Hexacosane (C26)

R.T.: 16.170 min
Delta R.T.: 0.000 min
Response: 1413994
Conc: 10.26 ug/ml



#16 n-Octacosane (C28)

R.T.: 17.118 min
Delta R.T.: 0.000 min
Response: 1469893
Conc: 10.43 ug/ml



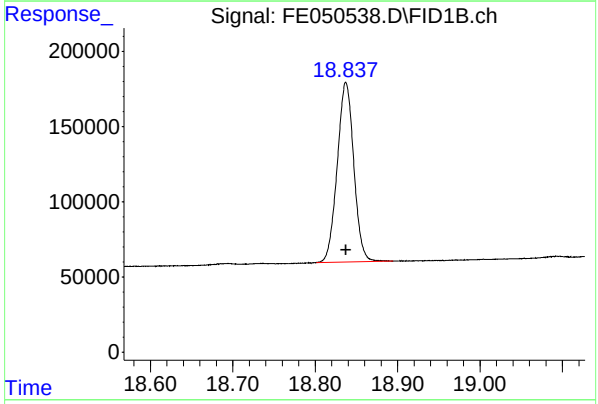
#17 n-Tricontane (C30)

R.T.: 18.006 min
Delta R.T.: 0.000 min
Response: 1614246
Conc: 10.69 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

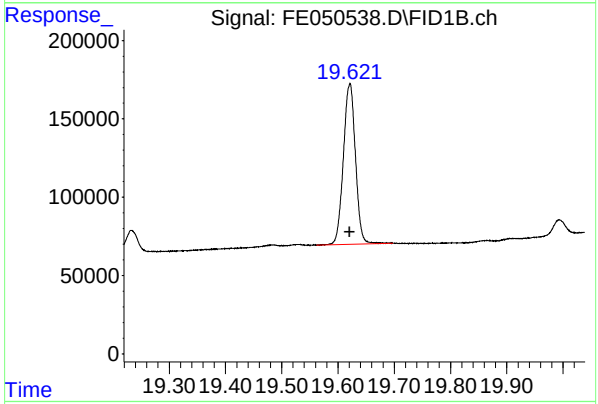
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



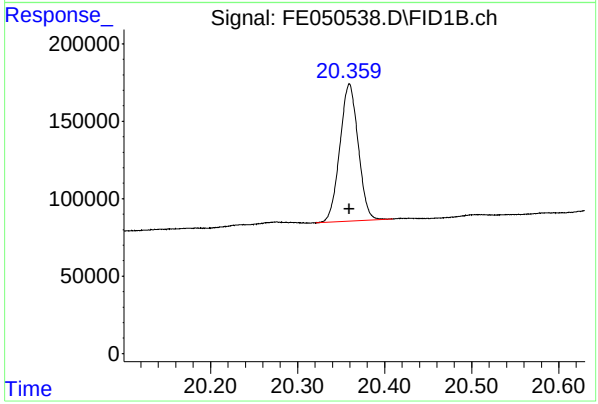
#18 n-Dotriacontane (C32)

R.T.: 18.837 min
Delta R.T.: 0.000 min
Response: 1666044
Conc: 10.94 ug/ml



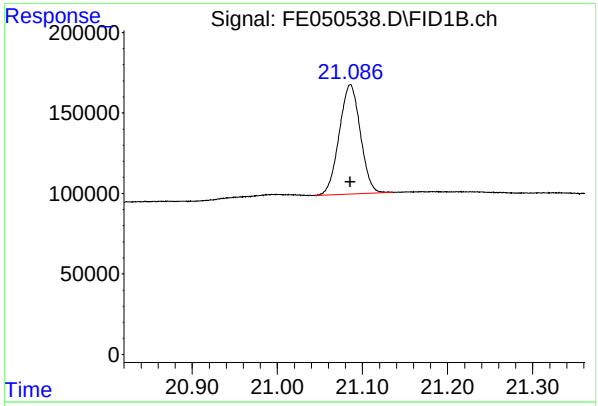
#19 n-Tetratriacontane (C34)

R.T.: 19.621 min
Delta R.T.: 0.000 min
Response: 1525013
Conc: 10.96 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.359 min
Delta R.T.: 0.000 min
Response: 1301715
Conc: 10.70 ug/ml



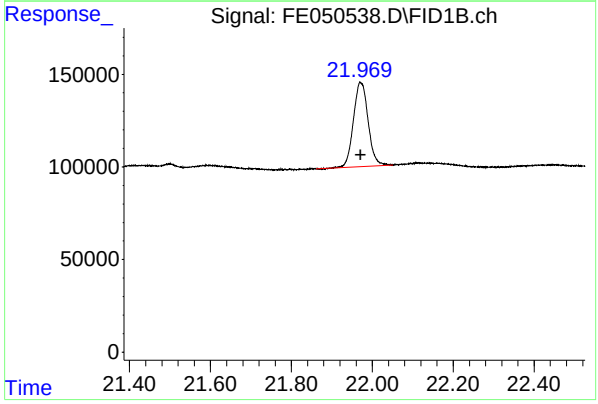
#21 n-Octatriacontane (C38)

R.T.: 21.086 min
Delta R.T.: 0.000 min
Response: 1173667
Conc: 10.19 ug/ml

Instrument :
FID_E
ClientSampleId :
10 PPM ALIPHATIC HC STD4

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



#22 n-Tetracontane (C40)

R.T.: 21.971 min
Delta R.T.: 0.000 min
Response: 1141383
Conc: 10.33 ug/ml

rteres

Instrument :
FID_E
LabSampleId :
10 PPM ALIPHATIC HC STD4

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE10082
Data File : FE050538.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 15:37
Sample : 10 PPM ALIPHATIC HC STD4
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.253	3.221	3.331	BB	141842	1429353	85.79%	4.574%
2	4.503	4.464	4.581	BB	143204	1451977	87.15%	4.647%
3	6.215	6.174	6.358	BB	116535	1409508	84.60%	4.511%
4	6.670	6.634	6.748	BB	145347	1456013	87.39%	4.660%
5	7.311	7.278	7.464	BB	101321	1303112	78.22%	4.170%
6	8.497	8.461	8.578	BB	135582	1444120	86.68%	4.621%
7	10.103	10.061	10.188	BB	130078	1486117	89.20%	4.756%
8	11.544	11.508	11.614	BB	130433	1509351	90.59%	4.830%
9	11.864	11.831	11.944	BB	145215	1598249	95.93%	5.115%
10	12.852	12.814	12.924	BB	122059	1447741	86.90%	4.633%
11	13.298	13.261	13.368	BB	93873	1184740	71.11%	3.791%
12	13.463	13.428	13.534	BB	115675	1422566	85.39%	4.553%
13	14.049	14.014	14.124	BB	111578	1407717	84.49%	4.505%
14	15.149	15.064	15.224	BB	110566	1417214	85.06%	4.535%
15	16.170	16.104	16.241	BB	108964	1413994	84.87%	4.525%
16	17.118	17.051	17.191	BB	105302	1469893	88.23%	4.704%
17	18.006	17.928	18.054	BB	116031	1614246	96.89%	5.166%
18	18.837	18.801	18.894	BB	119499	1666044	100.00%	5.332%
19	19.621	19.561	19.698	BB	102286	1525013	91.53%	4.880%
20	20.359	20.321	20.409	BBA	88720	1301715	78.13%	4.166%
21	21.086	21.021	21.138	BB	67480	1147945	68.90%	3.674%
22	21.971	21.861	22.051	BV	45313	1141383	68.51%	3.653%
			Sum of corrected areas:			31248008		

Aliphatic EPH 100824.M Mon Oct 07 16:36:37 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050539.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 16:07
Operator : YP\AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024

Integration File: autoint1.e
Quant Time: Oct 07 16:31:29 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:31:21 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)	11.863	837545	5.312 ug/ml
Spiked Amount	50.000		Recovery =	10.62%
12) S	1-chlorooctadecane (S...	13.298	614466	5.194 ug/ml
Spiked Amount	50.000		Recovery =	10.39%
	Target Compounds			
1) T	n-Nonane (C9)	3.254	753304	5.332 ug/ml
2) T	n-Decane (C10)	4.503	761079	5.305 ug/ml
3) T	A~Naphthalene (C11.7)	6.217	703385	4.919 ug/ml
4) T	n-Dodecane (C12)	6.670	760541	5.284 ug/ml
5) T	A~2-methylnaphthalene...	7.313	623807	4.709 ug/ml
6) T	n-Tetradecane (C14)	8.496	759193	5.307 ug/ml
7) T	n-Hexadecane (C16)	10.102	772180	5.247 ug/ml
8) T	n-Octadecane (C18)	11.544	790974	5.295 ug/ml
10) T	n-Eicosane (C20)	12.852	765738	5.340 ug/ml
11) T	n-Heneicosane (C21)	13.463	747887	5.326 ug/ml
13) T	n-Docosane (C22)	14.048	755779	5.387 ug/ml
14) T	n-Tetracosane (C24)	15.150	766754	5.427 ug/ml
15) T	n-Hexacosane (C26)	16.169	761614	5.412 ug/ml
16) T	n-Octacosane (C28)	17.117	840920	5.747 ug/ml
17) T	n-Tricontane (C30)	18.004	955708	6.011 ug/ml
18) T	n-Dotriacontane (C32)	18.837	1007931	6.217 ug/ml
19) T	n-Tetratriacontane (C34)	19.619	889564	6.056 ug/ml
20) T	n-Hexatriacontane (C36)	20.358	736787	5.810 ug/ml
21) T	n-Octatriacontane (C38)	21.084	775038	6.268 ug/ml
22) T	n-Tetracontane (C40)	21.969	573373	5.145 ug/mlm

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050539.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 16:07
Operator : YP\AJ
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

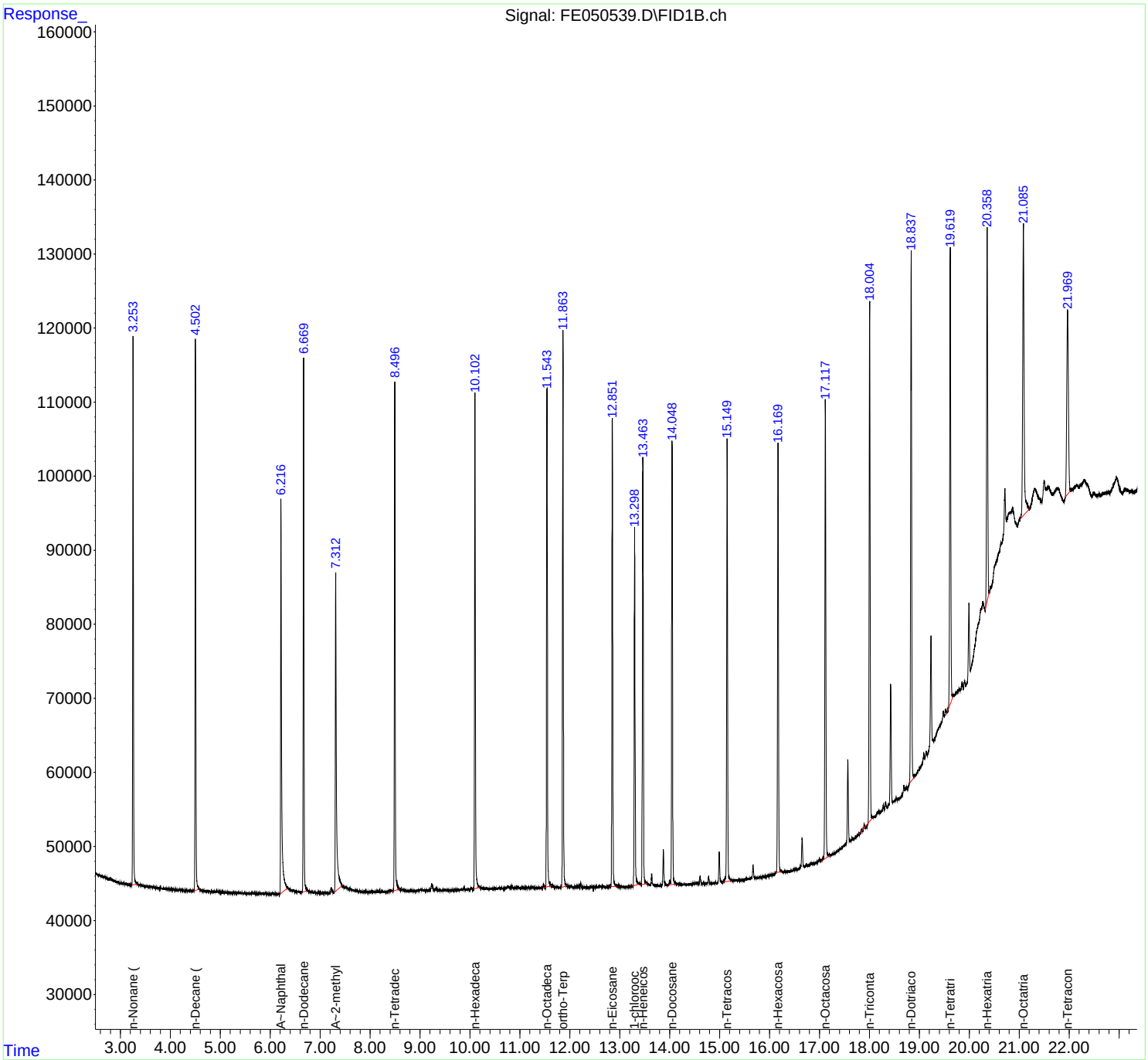
Integration File: autoint1.e
Quant Time: Oct 07 16:31:29 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:31:21 2024
Response via : Initial Calibration
Integrator: ChemStation

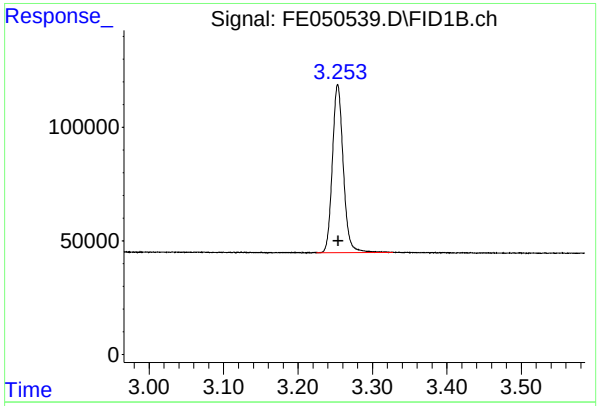
Volume Inj. : 1 ul
Signal Phase : Rxi-1ms
Signal Info : 20M x 0.18mm x 0.18um

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024





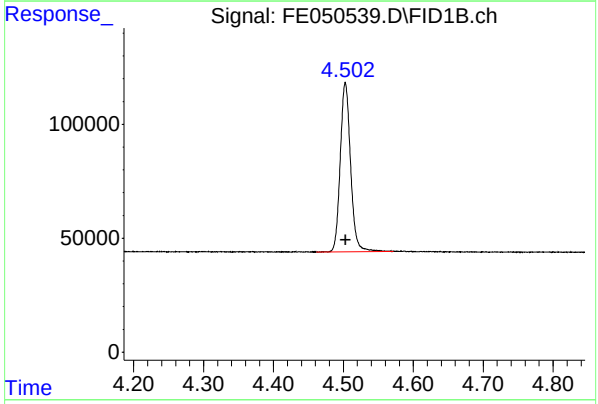
#1 n-Nonane (C9)

R.T.: 3.254 min
Delta R.T.: 0.000 min
Response: 753304
Conc: 5.33 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

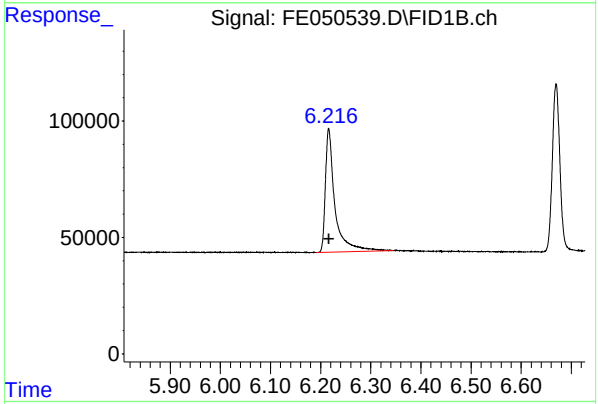
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



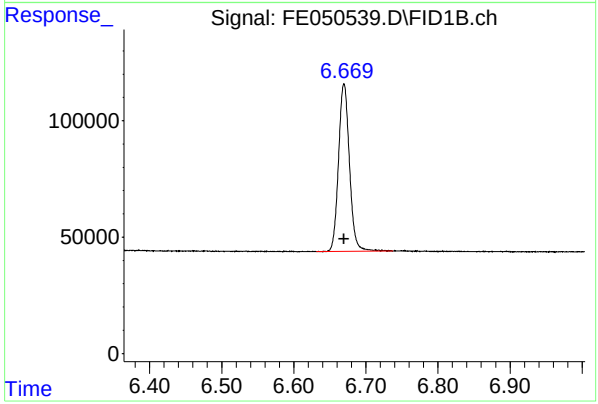
#2 n-Decane (C10)

R.T.: 4.503 min
Delta R.T.: 0.000 min
Response: 761079
Conc: 5.30 ug/ml



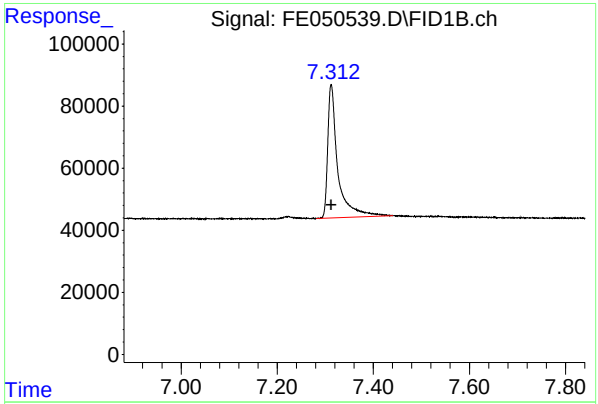
#3 A~Naphthalene (C11.7)

R.T.: 6.217 min
Delta R.T.: 0.000 min
Response: 703385
Conc: 4.92 ug/ml



#4 n-Dodecane (C12)

R.T.: 6.670 min
Delta R.T.: 0.000 min
Response: 760541
Conc: 5.28 ug/ml



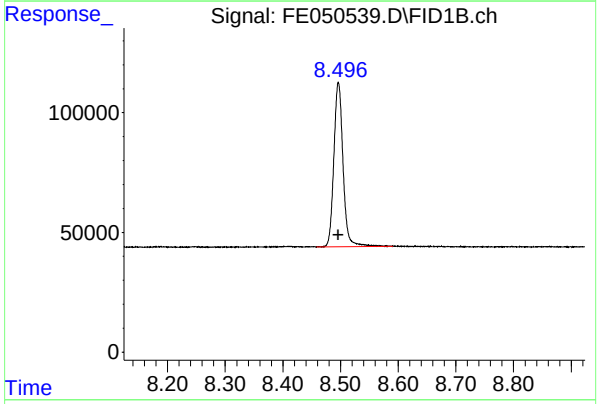
#5 A~2-methylnaphthalene (C12.89)

R.T.: 7.313 min
Delta R.T.: 0.000 min
Response: 623807
Conc: 4.71 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

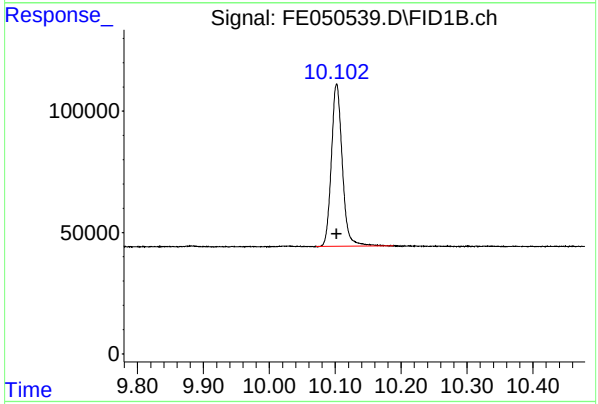
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



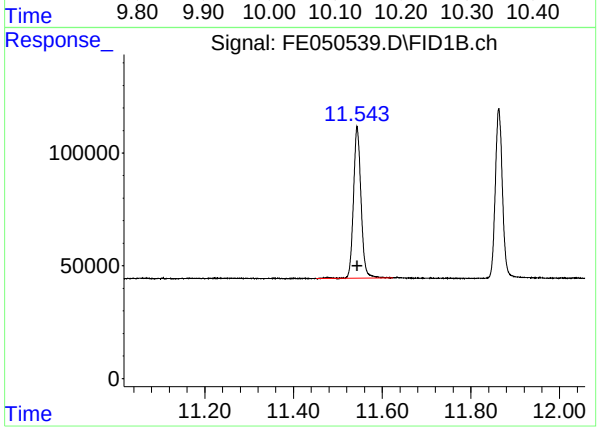
#6 n-Tetradecane (C14)

R.T.: 8.496 min
Delta R.T.: 0.000 min
Response: 759193
Conc: 5.31 ug/ml



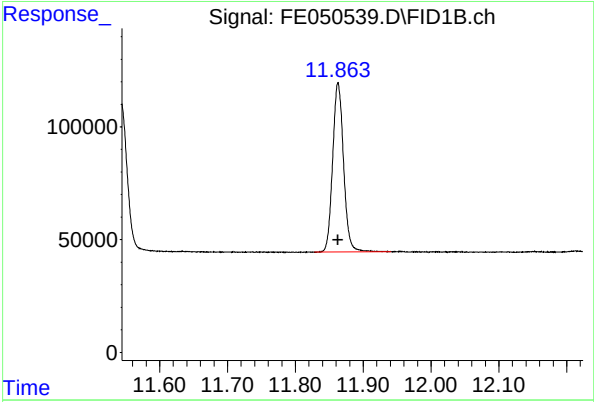
#7 n-Hexadecane (C16)

R.T.: 10.102 min
Delta R.T.: 0.000 min
Response: 772180
Conc: 5.25 ug/ml



#8 n-Octadecane (C18)

R.T.: 11.544 min
Delta R.T.: 0.000 min
Response: 790974
Conc: 5.30 ug/ml



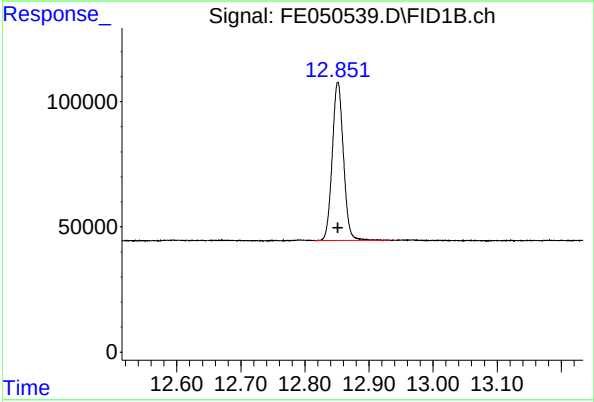
#9 ortho-Terphenyl (SURR)

R.T.: 11.863 min
Delta R.T.: 0.000 min
Response: 837545
Conc: 5.31 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

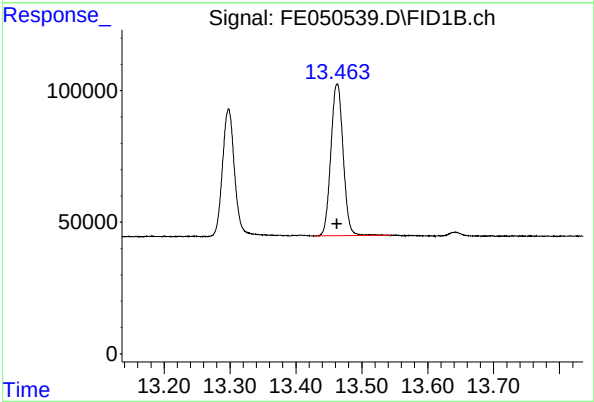
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



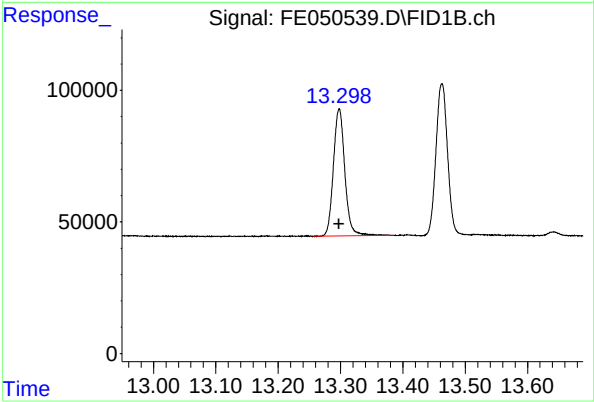
#10 n-Eicosane (C20)

R.T.: 12.852 min
Delta R.T.: 0.000 min
Response: 765738
Conc: 5.34 ug/ml



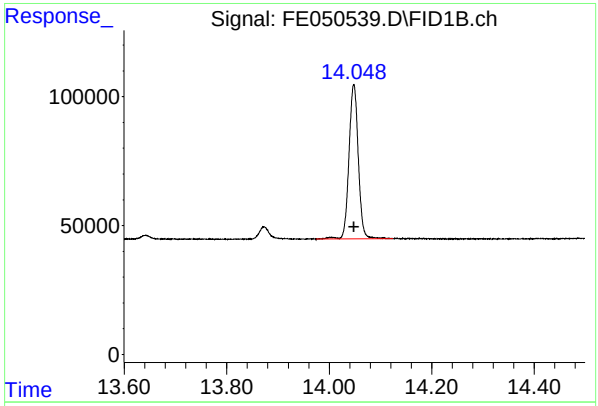
#11 n-Heneicosane (C21)

R.T.: 13.463 min
Delta R.T.: 0.000 min
Response: 747887
Conc: 5.33 ug/ml



#12 1-chlorooctadecane (SURR)

R.T.: 13.298 min
Delta R.T.: 0.000 min
Response: 614466
Conc: 5.19 ug/ml



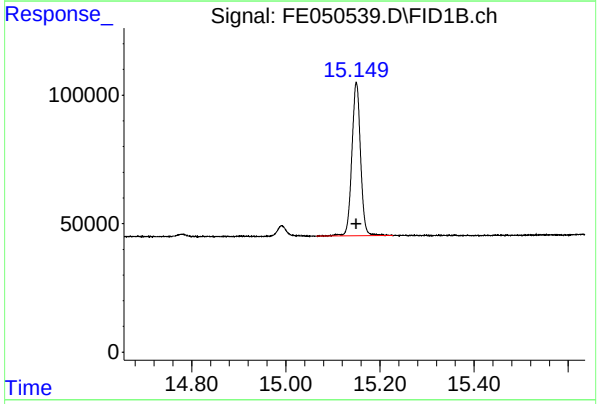
#13 n-Docosane (C22)

R.T.: 14.048 min
Delta R.T.: 0.000 min
Response: 755779
Conc: 5.39 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

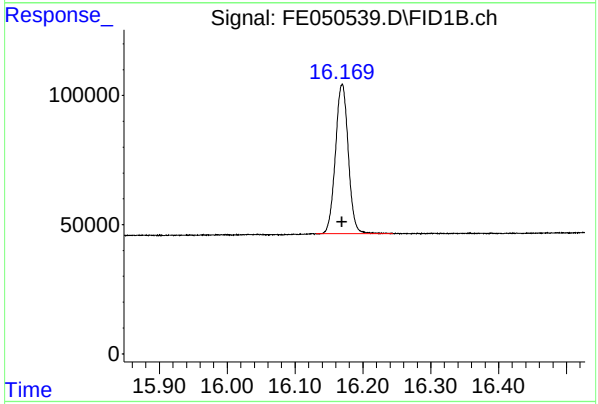
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



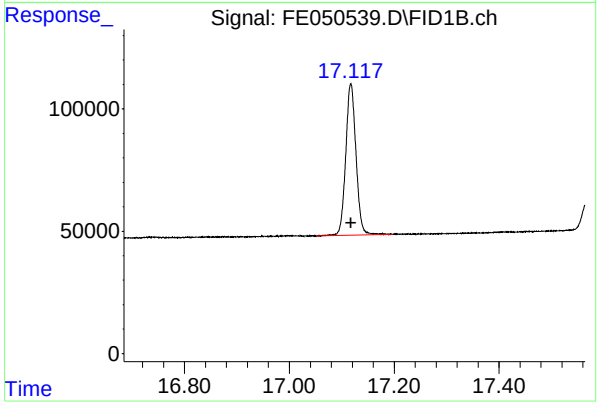
#14 n-Tetracosane (C24)

R.T.: 15.150 min
Delta R.T.: 0.000 min
Response: 766754
Conc: 5.43 ug/ml



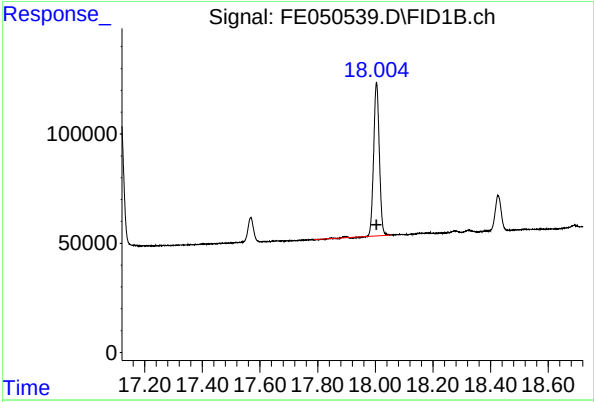
#15 n-Hexacosane (C26)

R.T.: 16.169 min
Delta R.T.: 0.000 min
Response: 761614
Conc: 5.41 ug/ml



#16 n-Octacosane (C28)

R.T.: 17.117 min
Delta R.T.: 0.000 min
Response: 840920
Conc: 5.75 ug/ml



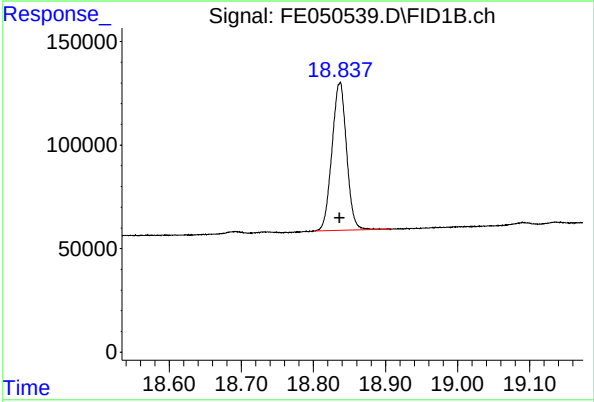
#17 n-Tricontane (C30)

R.T.: 18.004 min
Delta R.T.: 0.000 min
Response: 955708
Conc: 6.01 ug/ml

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

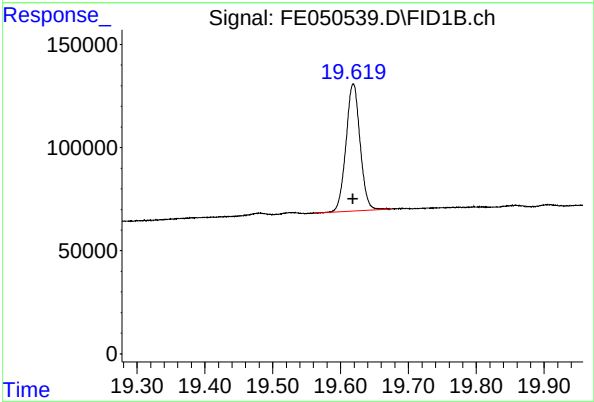
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



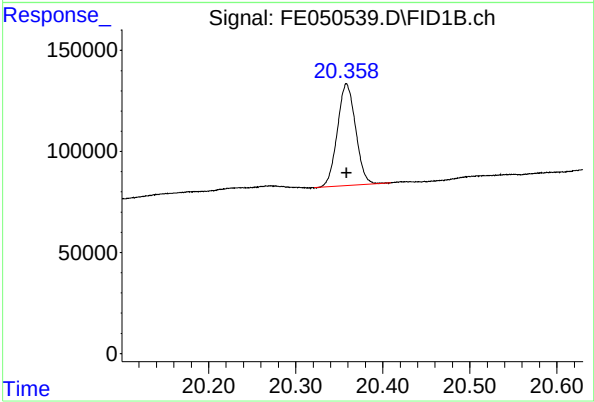
#18 n-Dotriacontane (C32)

R.T.: 18.837 min
Delta R.T.: 0.000 min
Response: 1007931
Conc: 6.22 ug/ml



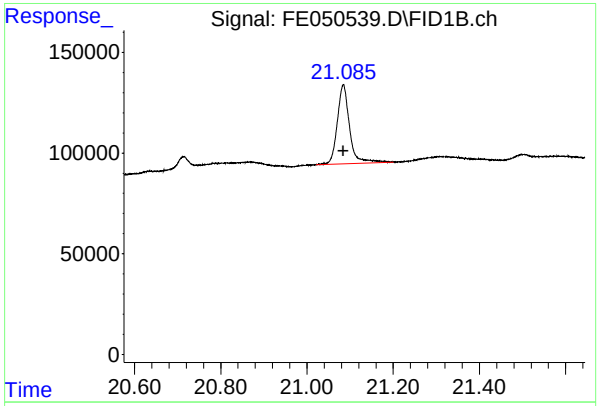
#19 n-Tetratriacontane (C34)

R.T.: 19.619 min
Delta R.T.: 0.000 min
Response: 889564
Conc: 6.06 ug/ml



#20 n-Hexatriacontane (C36)

R.T.: 20.358 min
Delta R.T.: 0.000 min
Response: 736787
Conc: 5.81 ug/ml



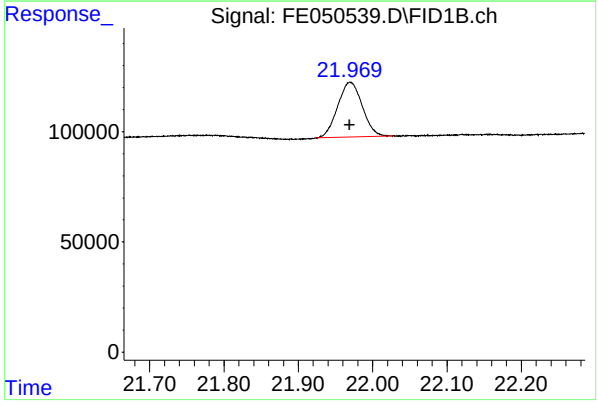
#21 n-Octatriacontane (C38)

R.T.: 21.084 min
Delta R.T.: 0.000 mi
Response: 775038
Conc: 6.27 ug/m

Instrument :
FID_E
ClientSampleId :
5 PPM ALIPHATIC HC STD5

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024



#22 n-Tetracontane (C40)

R.T.: 21.969 min
Delta R.T.: 0.000 min
Response: 573373
Conc: 5.14 ug/ml m

Instrument :
FID_E
LabSampleId :
5 PPM ALIPHATIC HC STD5

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/08/2024
Supervised By :Ankita Jodhani 10/08/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE10082
Data File : FE050539.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 16:07
Sample : 5 PPM ALIPHATIC HC STD5
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.254	3.224	3.328	BB	73662	753304	74.74%	4.447%
2	4.503	4.461	4.571	BB	73626	761079	75.51%	4.493%
3	6.217	6.191	6.344	BB	52188	703385	69.78%	4.152%
4	6.670	6.631	6.738	BB	72076	760541	75.46%	4.490%
5	7.313	7.281	7.441	BB	42388	623807	61.89%	3.683%
6	8.496	8.458	8.591	BB	68361	759193	75.32%	4.482%
7	10.102	10.071	10.188	BB	66932	772180	76.61%	4.559%
8	11.544	11.451	11.624	BB	66625	790974	78.47%	4.670%
9	11.863	11.828	11.941	BB	74273	837545	83.10%	4.945%
10	12.852	12.814	12.934	BB	63313	765738	75.97%	4.521%
11	13.298	13.258	13.381	BB	48212	614466	60.96%	3.628%
12	13.463	13.428	13.544	BB	58070	747887	74.20%	4.415%
13	14.048	13.974	14.124	BB	59898	755779	74.98%	4.462%
14	15.150	15.064	15.228	BB	59559	766754	76.07%	4.527%
15	16.169	16.131	16.244	BB	57691	761614	75.56%	4.496%
16	17.117	17.051	17.198	BB	61897	840920	83.43%	4.964%
17	18.004	17.788	18.054	BB	70215	955708	94.82%	5.642%
18	18.837	18.801	18.908	BB	71875	1007931	100.00%	5.950%
19	19.619	19.561	19.674	BB	61617	889564	88.26%	5.252%
20	20.358	20.321	20.409	BBA	50235	736787	73.10%	4.350%
21	21.084	21.021	21.199	BBA	39404	775038	76.89%	4.575%
22	21.970	21.861	22.031	BB	24838	558694	55.43%	3.298%
			Sum of corrected areas:			16938887		

Aliphatic EPH 100824.M Mon Oct 07 16:37:05 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050540.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 16:37
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Oct 07 17:01:08 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 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)	11.865	2942962	18.667 ug/ml
	Spiked Amount 50.000		Recovery = 37.33%	
12)	S 1-chlorooctadecane (S...	13.299	2228627	18.840 ug/ml
	Spiked Amount 50.000		Recovery = 37.68%	
	Target Compounds			
1)	T n-Nonane (C9)	3.253	2689462	19.035 ug/ml
2)	T n-Decane (C10)	4.503	2733520	19.052 ug/ml
3)	T A~Naphthalene (C11.7)	6.214	2714676	18.985 ug/ml
4)	T n-Dodecane (C12)	6.670	2741257	19.045 ug/ml
5)	T A~2-methylnaphthalene...	7.310	2535659	19.140 ug/ml
6)	T n-Tetradecane (C14)	8.497	2716479	18.987 ug/ml
7)	T n-Hexadecane (C16)	10.103	2790671	18.962 ug/ml
8)	T n-Octadecane (C18)	11.544	2821757	18.891 ug/ml
10)	T n-Eicosane (C20)	12.852	2729389	19.033 ug/ml
11)	T n-Heneicosane (C21)	13.464	2653621	18.896 ug/ml
13)	T n-Docosane (C22)	14.049	2698315	19.233 ug/ml
14)	T n-Tetracosane (C24)	15.151	2823967	19.989 ug/ml
15)	T n-Hexacosane (C26)	16.170	2863872	20.352 ug/ml
16)	T n-Octacosane (C28)	17.118	2984657	20.397 ug/ml
17)	T n-Tricontane (C30)	18.005	3160183	19.875 ug/ml
18)	T n-Dotriacontane (C32)	18.837	3132221	19.321 ug/ml
19)	T n-Tetratriacontane (C34)	19.619	2741344	18.662 ug/ml
20)	T n-Hexatriacontane (C36)	20.359	2393312	18.873 ug/ml
21)	T n-Octatriacontane (C38)	21.084	2140081	17.308 ug/ml
22)	T n-Tetracontane (C40)	21.972	2032080	18.249 ug/ml

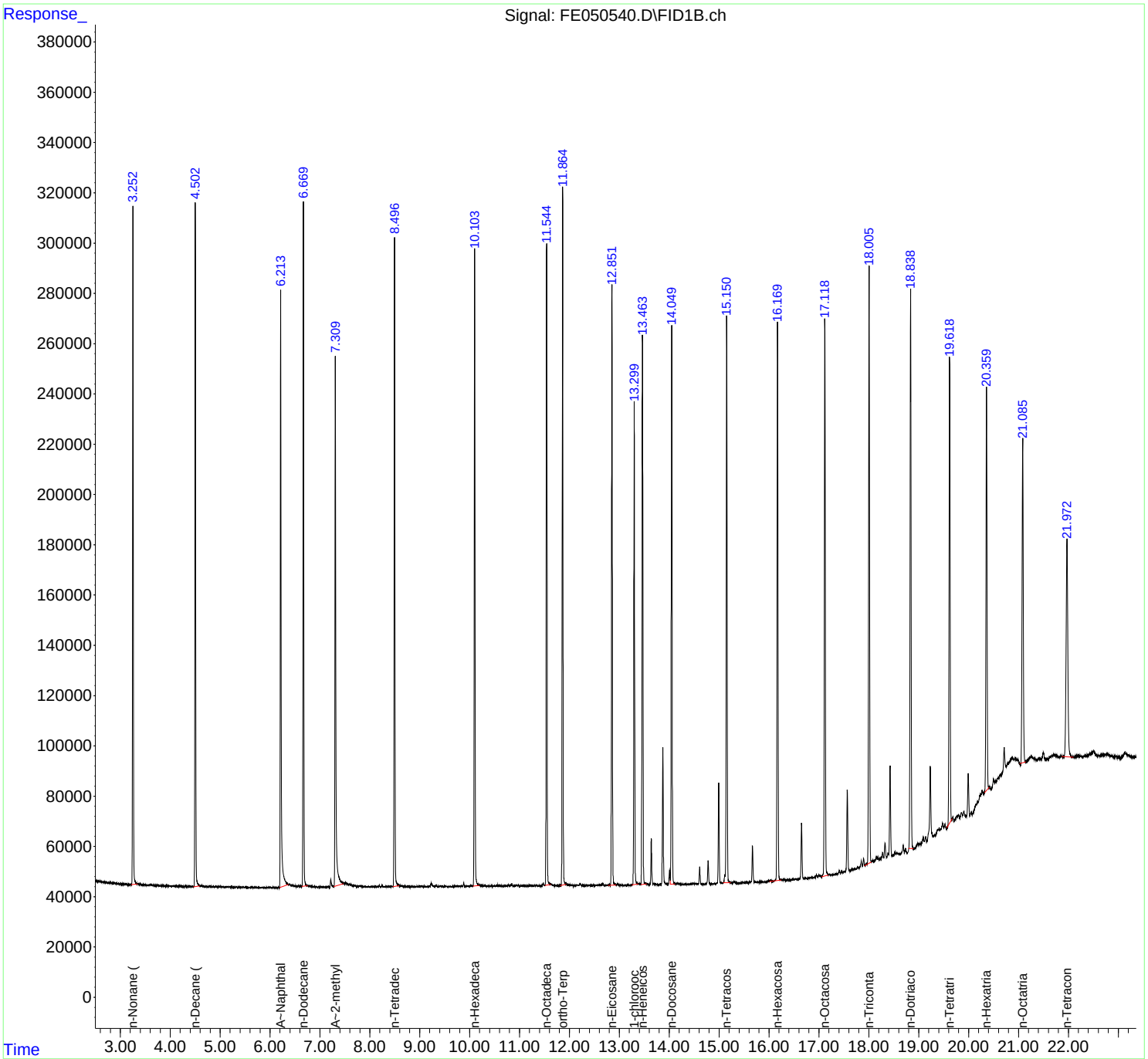
(f)=RT Delta > 1/2 Window (m)=manual int.

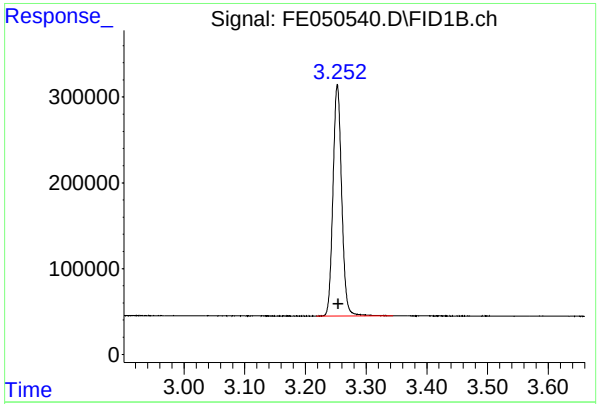
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050540.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 16:37
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Oct 07 17:01:08 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 2024
Response via : Initial Calibration
Integrator: ChemStation

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

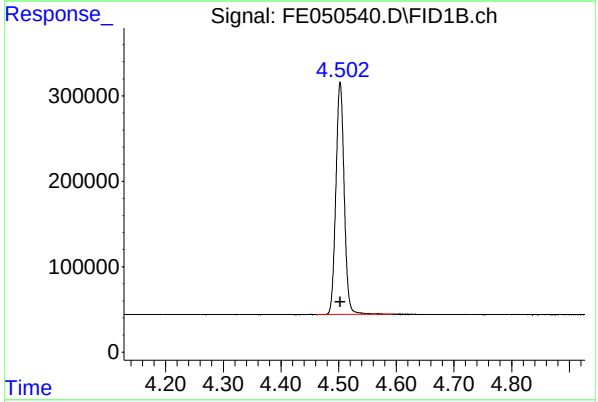




#1 n-Nonane (C9)

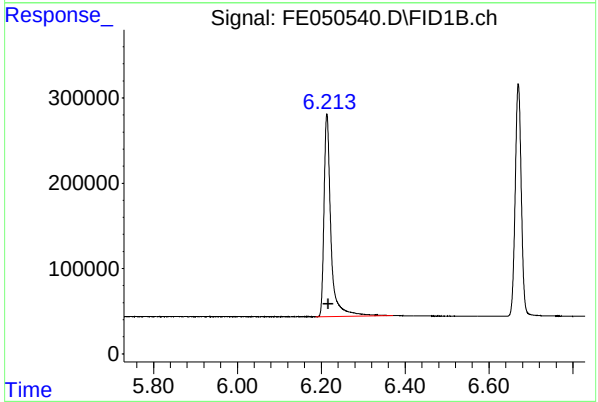
R.T.: 3.253 min
Delta R.T.: -0.001 min
Response: 2689462
Conc: 19.03 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



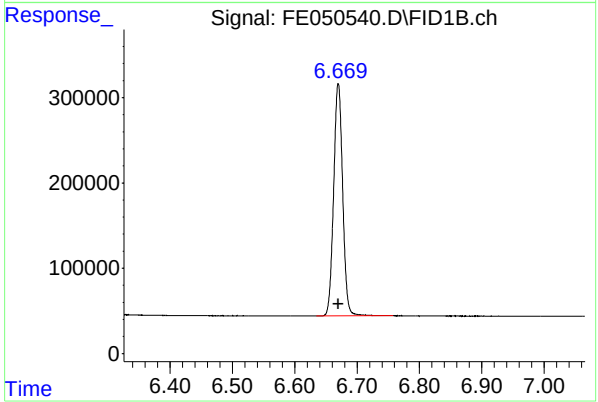
#2 n-Decane (C10)

R.T.: 4.503 min
Delta R.T.: 0.000 min
Response: 2733520
Conc: 19.05 ug/ml



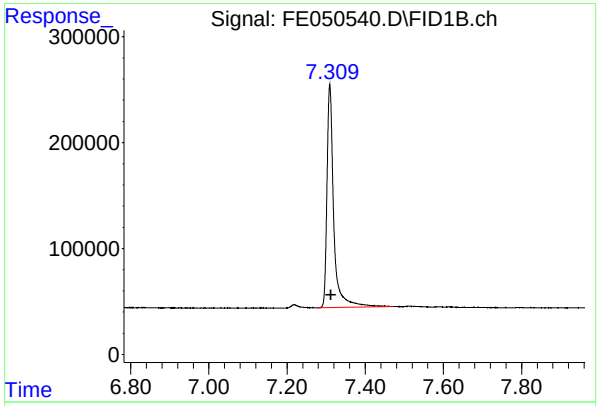
#3 A~Naphthalene (C11.7)

R.T.: 6.214 min
Delta R.T.: -0.003 min
Response: 2714676
Conc: 18.99 ug/ml



#4 n-Dodecane (C12)

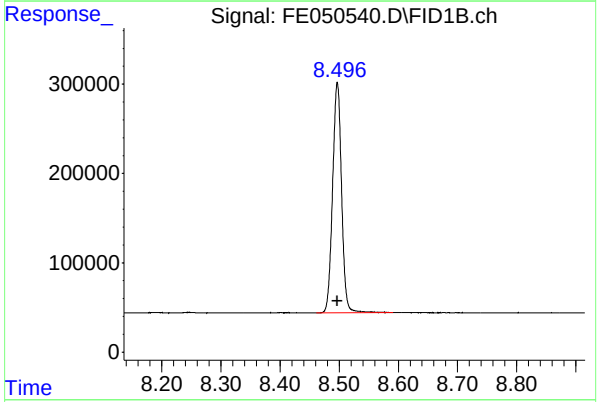
R.T.: 6.670 min
Delta R.T.: 0.000 min
Response: 2741257
Conc: 19.05 ug/ml



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

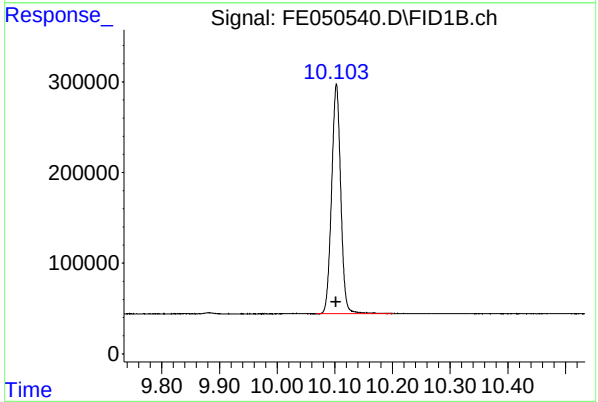
R.T.: 7.310 min
Delta R.T.: -0.003 min
Response: 2535659
Conc: 19.14 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



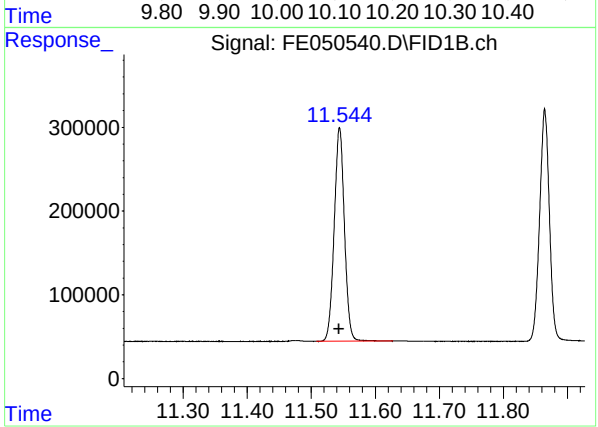
#6 n-Tetradecane (C14)

R.T.: 8.497 min
Delta R.T.: 0.000 min
Response: 2716479
Conc: 18.99 ug/ml



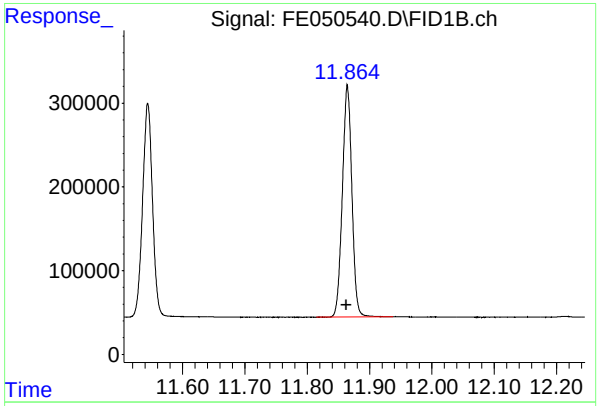
#7 n-Hexadecane (C16)

R.T.: 10.103 min
Delta R.T.: 0.000 min
Response: 2790671
Conc: 18.96 ug/ml



#8 n-Octadecane (C18)

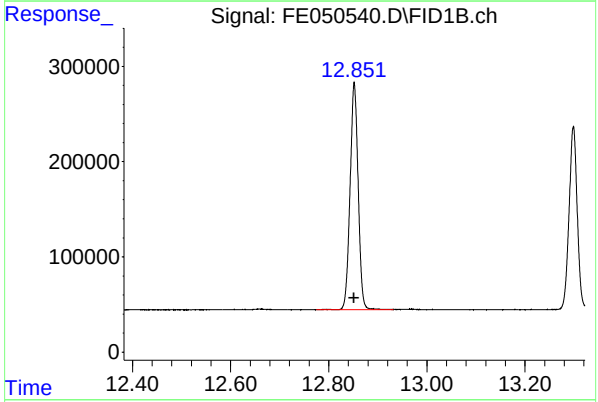
R.T.: 11.544 min
Delta R.T.: 0.000 min
Response: 2821757
Conc: 18.89 ug/ml



#9 ortho-Terphenyl (SURR)

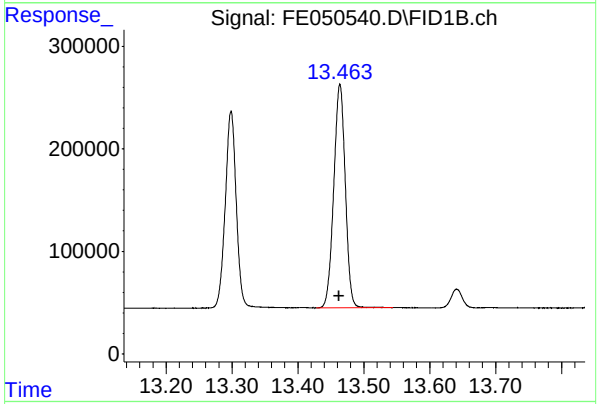
R.T.: 11.865 min
Delta R.T.: 0.001 min
Response: 2942962
Conc: 18.67 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



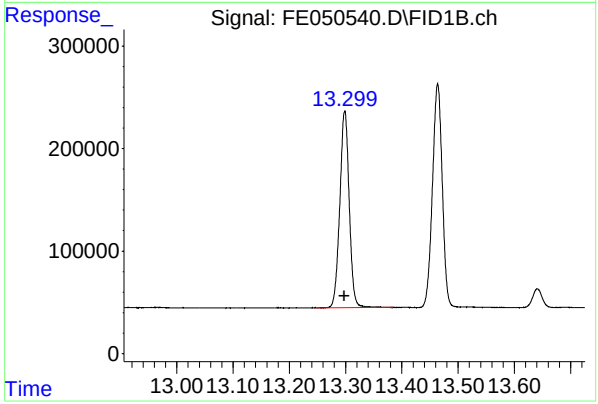
#10 n-Eicosane (C20)

R.T.: 12.852 min
Delta R.T.: 0.000 min
Response: 2729389
Conc: 19.03 ug/ml



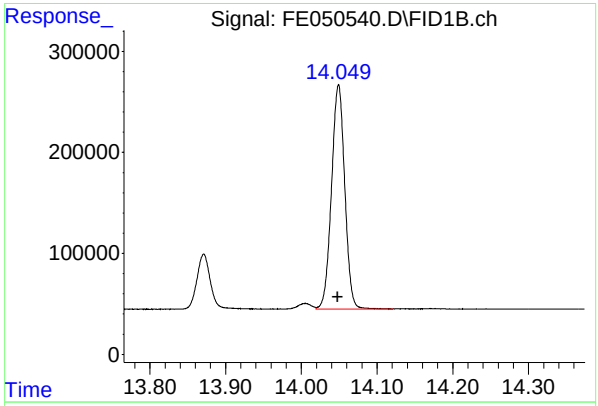
#11 n-Heneicosane (C21)

R.T.: 13.464 min
Delta R.T.: 0.001 min
Response: 2653621
Conc: 18.90 ug/ml



#12 1-chlorooctadecane (SURR)

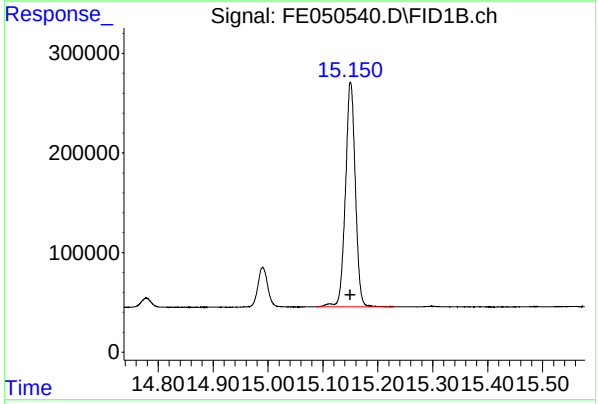
R.T.: 13.299 min
Delta R.T.: 0.000 min
Response: 2228627
Conc: 18.84 ug/ml



#13 n-Docosane (C22)

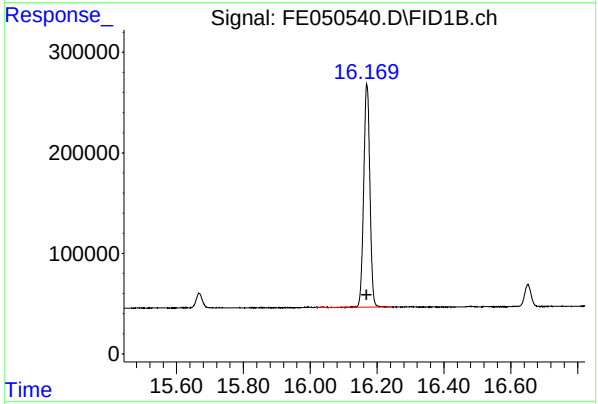
R.T.: 14.049 min
Delta R.T.: 0.001 min
Response: 2698315
Conc: 19.23 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



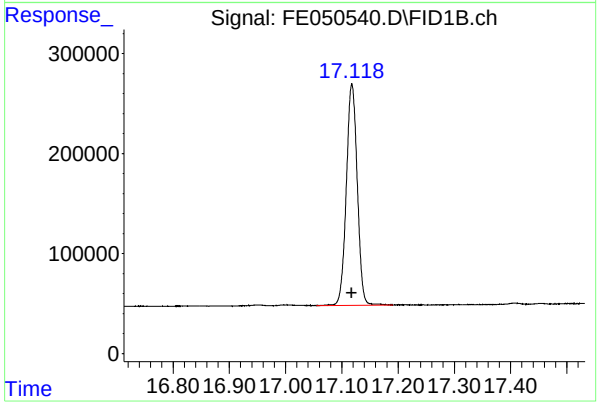
#14 n-Tetracosane (C24)

R.T.: 15.151 min
Delta R.T.: 0.000 min
Response: 2823967
Conc: 19.99 ug/ml



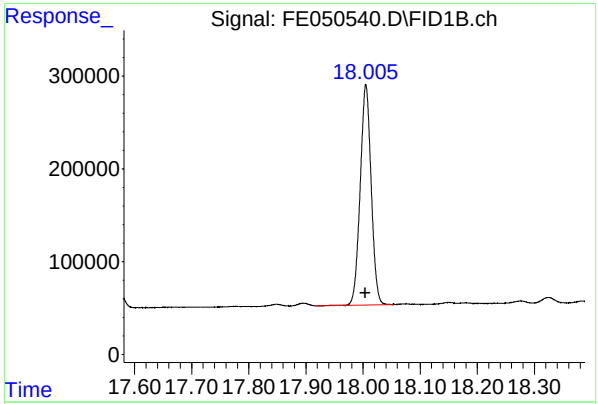
#15 n-Hexacosane (C26)

R.T.: 16.170 min
Delta R.T.: 0.000 min
Response: 2863872
Conc: 20.35 ug/ml



#16 n-Octacosane (C28)

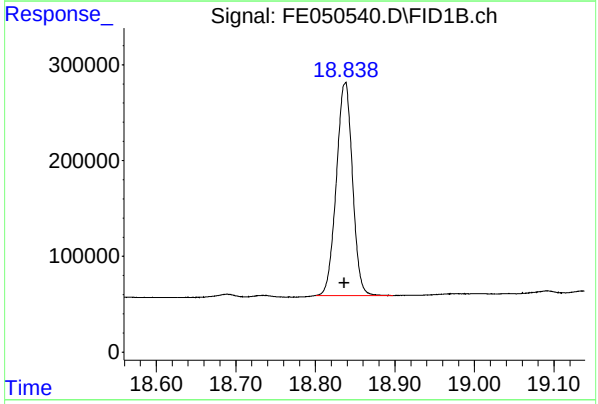
R.T.: 17.118 min
Delta R.T.: 0.000 min
Response: 2984657
Conc: 20.40 ug/ml



#17 n-Tricontane (C30)

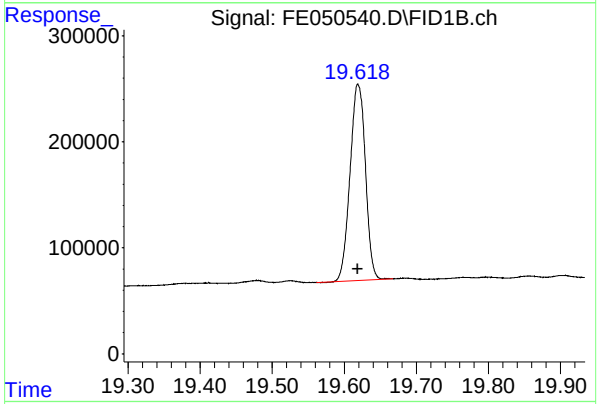
R.T.: 18.005 min
Delta R.T.: 0.000 min
Response: 3160183
Conc: 19.88 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



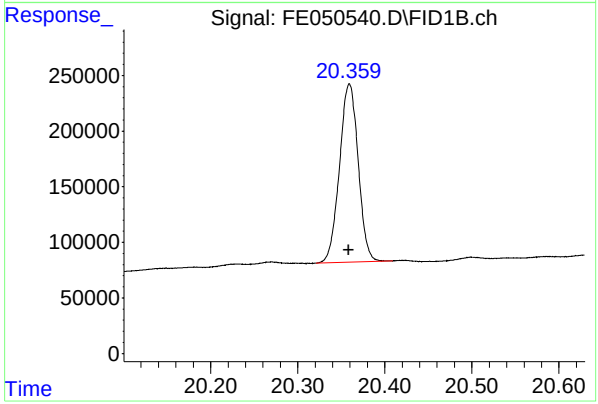
#18 n-Dotriacontane (C32)

R.T.: 18.837 min
Delta R.T.: 0.000 min
Response: 3132221
Conc: 19.32 ug/ml



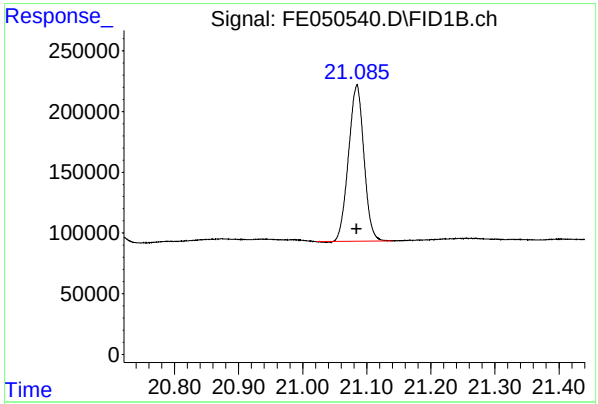
#19 n-Tetratriacontane (C34)

R.T.: 19.619 min
Delta R.T.: 0.000 min
Response: 2741344
Conc: 18.66 ug/ml



#20 n-Hexatriacontane (C36)

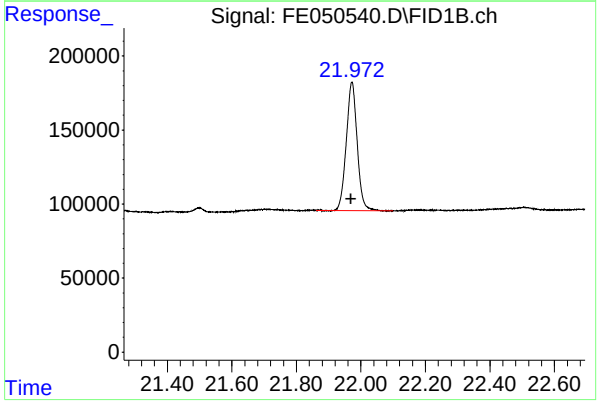
R.T.: 20.359 min
Delta R.T.: 0.000 min
Response: 2393312
Conc: 18.87 ug/ml



#21 n-Octatriacontane (C38)

R.T.: 21.084 min
Delta R.T.: 0.000 min
Response: 2140081
Conc: 17.31 ug/ml

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD ICV



#22 n-Tetracontane (C40)

R.T.: 21.972 min
Delta R.T.: 0.003 min
Response: 2032080
Conc: 18.25 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE100824AL\
Data File : FE050540.D
Signal(s) : FID1B.ch
Acq On : 07 Oct 2024 16:37
Sample : 20 PPM ALIPHATIC HC STD ICV
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.253	3.218	3.344	BB	267501	2689462	85.10%	4.538%
2	4.503	4.461	4.594	BB	270567	2733520	86.50%	4.612%
3	6.214	6.188	6.371	BB	236720	2714676	85.90%	4.580%
4	6.670	6.634	6.758	BB	272468	2741257	86.74%	4.625%
5	7.310	7.274	7.471	BB	208837	2535659	80.24%	4.278%
6	8.497	8.461	8.591	BB	258171	2716479	85.96%	4.583%
7	10.103	10.068	10.201	BB	252751	2790671	88.31%	4.709%
8	11.544	11.508	11.628	BB	255454	2821757	89.29%	4.761%
9	11.865	11.814	11.938	BB	276376	2942962	93.13%	4.966%
10	12.852	12.774	12.931	BB	237336	2729389	86.37%	4.605%
11	13.299	13.248	13.384	BB	192003	2228627	70.52%	3.760%
12	13.464	13.428	13.544	BB	218379	2653621	83.97%	4.477%
13	14.049	14.019	14.121	VB	220938	2698315	85.38%	4.553%
14	15.151	15.088	15.228	BB	225510	2823967	89.36%	4.765%
15	16.170	16.018	16.248	BB	220922	2863872	90.62%	4.832%
16	17.118	17.054	17.191	BB	221073	2984657	94.45%	5.036%
17	18.005	17.918	18.052	PV	237213	3160183	100.00%	5.332%
18	18.837	18.801	18.898	BB	222662	3132221	99.12%	5.285%
19	19.619	19.561	19.668	BV	184014	2741344	86.75%	4.625%
20	20.359	20.321	20.409	BBA	159661	2393312	75.73%	4.038%
21	21.084	21.021	21.141	BV	128474	2140081	67.72%	3.611%
22	21.972	21.861	22.099	BBA	86878	2032080	64.30%	3.429%
			Sum of corrected areas:			59268111		

Aliphatic EPH 100824.M Mon Oct 07 17:02:35 2024

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

Inital Calibration Report for SequenceID : FG102124AR

AreaCount

Parameter Range	FG014461.D	FG014462.D	FG014463.D	FG014464.D	FG014465.D	
Aromatic C10-C12	25666133.000	13944641.000	5674868.000	2855389.000	1450608.000	
Aromatic C12-C16	40005389.000	21745855.000	8835761.000	4478653.000	2285842.000	
Aromatic C16-C21	52867791.000	28659966.000	11693067.000	5954910.000	3072620.000	
Aromatic C21-C36	118599058.000	61512047.000	25541591.000	13291959.000	6868694.000	
Aromatic EPH	237138371.000	125862509.000	51745287.000	26580911.000	13677764.000	

AVG Response Factor

Parameter Range	AVG RF	% RSD				
Aromatic C10-C12	139495.805	4.701				
Aromatic C12-C16	145452.8493328	5.014				
Aromatic C16-C21	144827.279	5.548				
Aromatic C21-C36	142138.7948884	5.866				
Aromatic EPH	142994.9126662	5.412				

Concentration

Parameter Range	FG014461.D	FG014462.D	FG014463.D	FG014464.D	FG014465.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	FG014461.D	FG014462.D	FG014463.D	FG014464.D	FG014465.D	
Aromatic C10-C12	128330.665000	139446.410000	141871.700000	142769.450000	145060.800000	
Aromatic C12-C16	133351.296666	144972.366666	147262.683333	149288.433333	152389.466666	
Aromatic C16-C21	132169.477500	143299.830000	146163.337500	148872.750000	153631.000000	
Aromatic C21-C36	131776.731111	136693.437777	141897.727777	147688.433333	152637.644444	
Aromatic EPH	131743.539444	139847.232222	143736.908333	147671.727777	151975.155555	

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014461.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 19:11
Operator : YP\AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 22 04:31:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:30:07 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_G
ClientSampleId :
100 PPM AROMATIC HC STD1

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/22/2024
Supervised By :Ankita Jodhani 10/22/2024

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	8.041	11445142	90.193 ug/ml
Spiked Amount	50.000		Recovery =	180.39%
6) S	2-Flurobiphenyl (SURR)	8.919	7906331	90.714 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	181.43%#
11) S	ortho-Terphenyl (SURR)	11.993	13392311	89.617 ug/ml
Spiked Amount	50.000		Recovery =	179.23%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.640	12446477	90.201 ug/ml
2) T	Naphthalene (C11.7)	6.314	13219656	90.696 ug/ml
3) T	2-Methylnaphthalene (...	7.414	13436105	90.592 ug/ml
5) T	Acenaphthylene (C15.06)	8.720	13296506	90.404 ug/ml
7) T	Acenaphthene (C15.5)	9.022	13272778	90.664 ug/ml
8) T	Flouorene (C16.55)	9.813	13245341	90.494 ug/ml
9) T	Phenanthrene (C19.36)	11.223	13458381	90.575 ug/ml
10) T	Anthracene (C19.43)	11.301	12748608	89.987 ug/ml
12) T	Fluoranthene (C21.85)	13.050	13469156	90.432 ug/ml
13) T	Pyrene (C20.8)	13.350	13415461	90.629 ug/ml
14) T	Benzo[a]anthracene (C...	15.232	13315853	91.516 ug/ml
15) T	Chrysene (C27.41)	15.281	13441483	91.191 ug/ml
16) T	benzo[b]fluoranthene ...	16.794	13784033	93.927 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.833	12812088	93.113 ug/mlm
18) T	Benzo[a]pyrene (C31.34)	17.178	13241162	93.030 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.549	12956528	98.569 ug/ml
20) T	Dibenz[a,h]anthracene...	18.591	12603686	90.848 ug/mlm
21) T	Benzo[g,h,i]perylene ...	18.813	12975069	93.768 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014461.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 19:11
Operator : YP\AJ
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 21 Sample Multiplier: 1

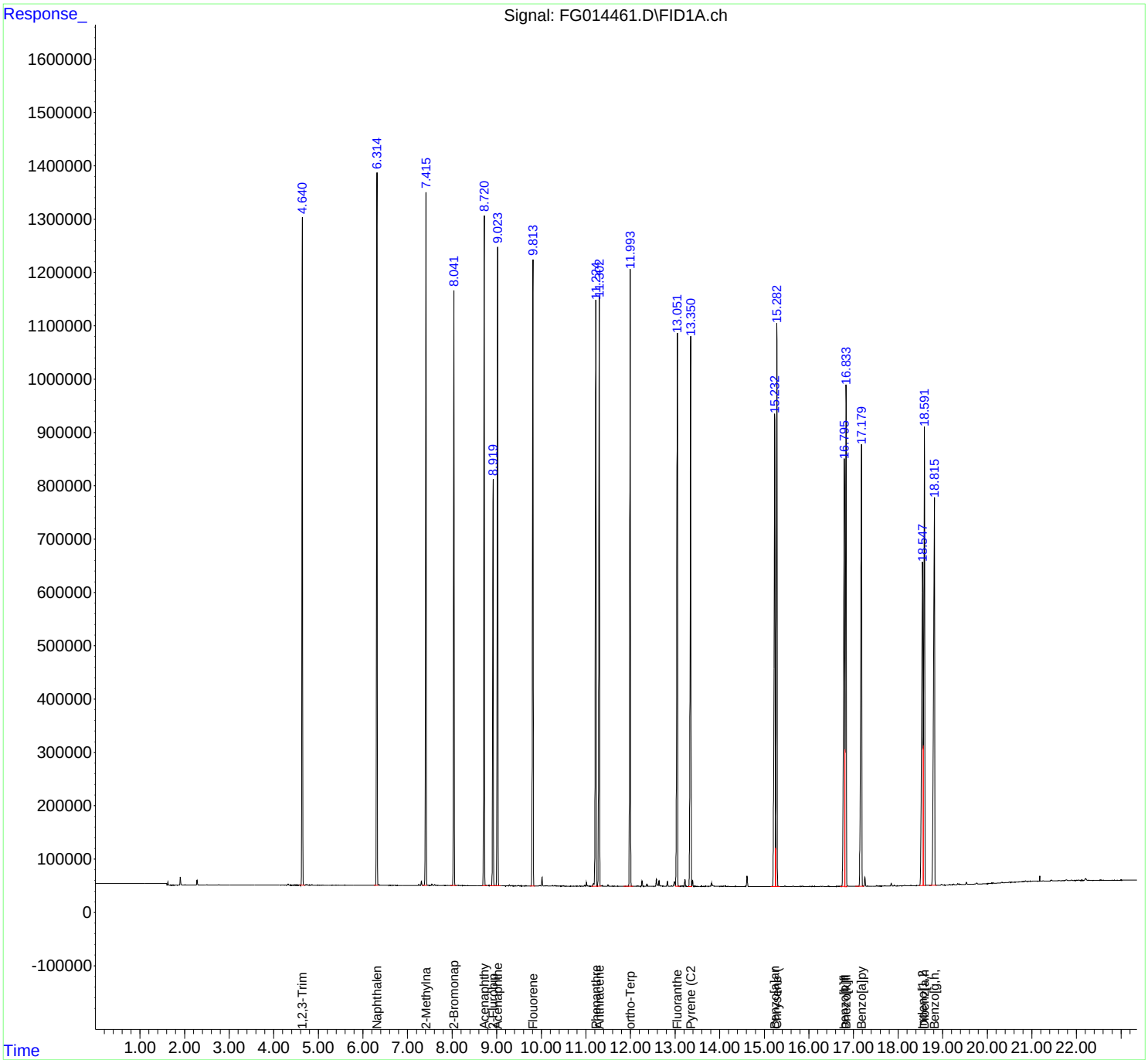
Instrument :
FID_G
ClientSampleId :
100 PPM AROMATIC HC STD1

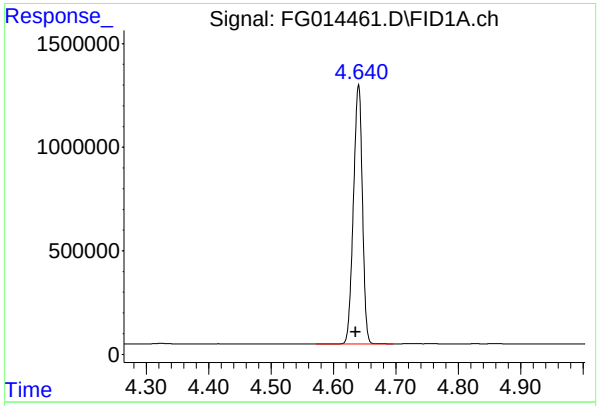
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/22/2024
Supervised By :Ankita Jodhani 10/22/2024

Integration File: autoint1.e
Quant Time: Oct 22 04:31:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:30:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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





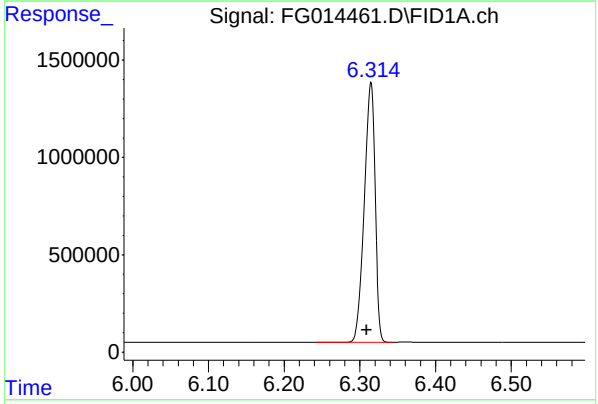
#1 1,2,3-Trimethylbenzene (C10.1)

R.T.: 4.640 min
Delta R.T.: 0.004 min
Response: 12446477
Conc: 90.20 ug/ml

Instrument :
FID_G
ClientSampleId :
100 PPM AROMATIC HC STD1

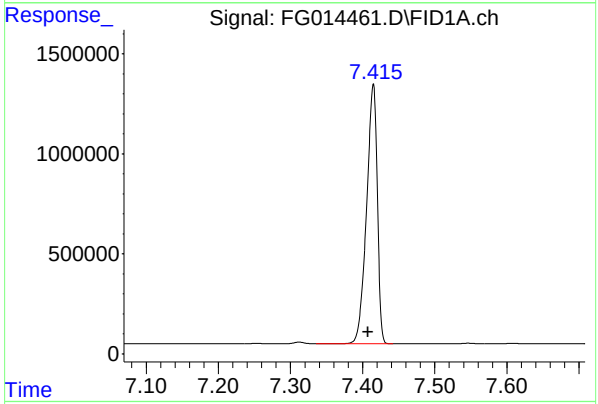
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/22/2024
Supervised By :Ankita Jodhani 10/22/2024



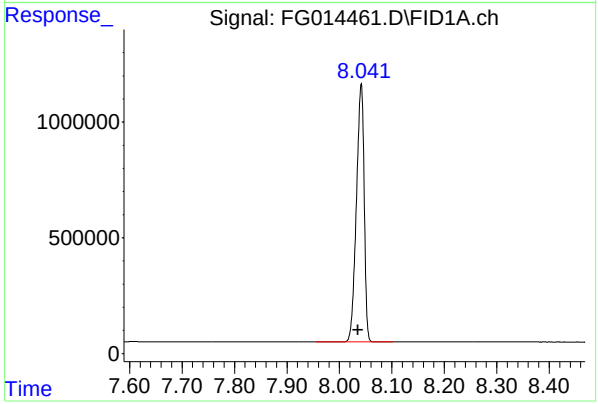
#2 Naphthalene (C11.7)

R.T.: 6.314 min
Delta R.T.: 0.005 min
Response: 13219656
Conc: 90.70 ug/ml



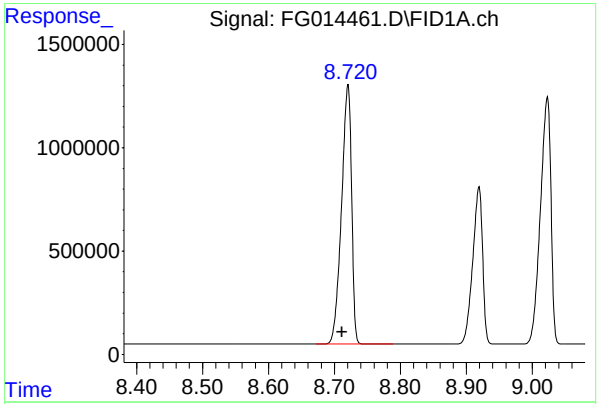
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.414 min
Delta R.T.: 0.007 min
Response: 13436105
Conc: 90.59 ug/ml



#4 2-Bromonaphthalene (SURR)

R.T.: 8.041 min
Delta R.T.: 0.006 min
Response: 11445142
Conc: 90.19 ug/ml



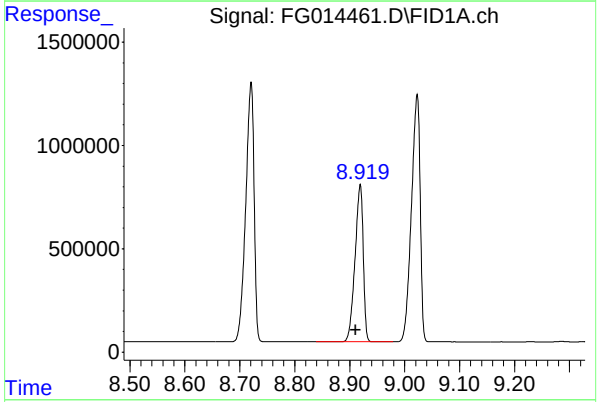
#5 Acenaphthylene (C15.06)

R.T.: 8.720 min
Delta R.T.: 0.008 min
Response: 13296506
Conc: 90.40 ug/ml

Instrument :
FID_G
ClientSampleId :
100 PPM AROMATIC HC STD1

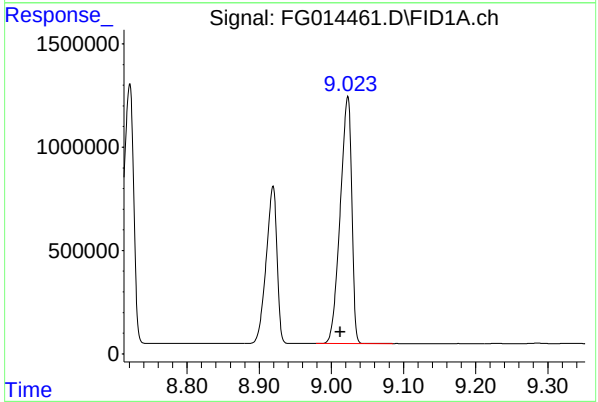
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/22/2024
Supervised By :Ankita Jodhani 10/22/2024



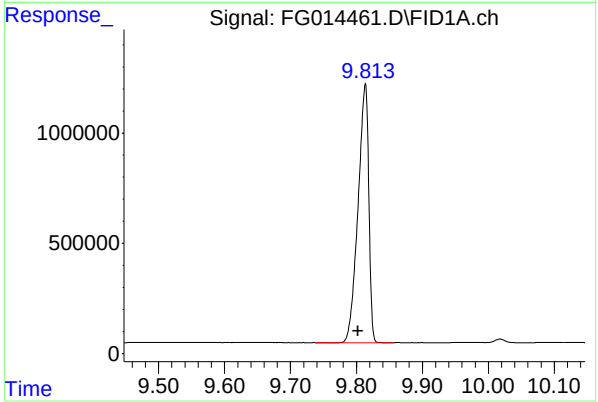
#6 2-Flurobiphenyl (SURR)

R.T.: 8.919 min
Delta R.T.: 0.007 min
Response: 7906331
Conc: 90.71 ug/ml



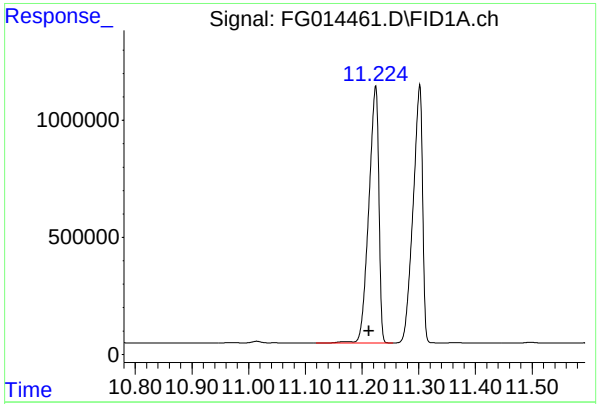
#7 Acenaphthene (C15.5)

R.T.: 9.022 min
Delta R.T.: 0.009 min
Response: 13272778
Conc: 90.66 ug/ml



#8 Flouorene (C16.55)

R.T.: 9.813 min
Delta R.T.: 0.010 min
Response: 13245341
Conc: 90.49 ug/ml



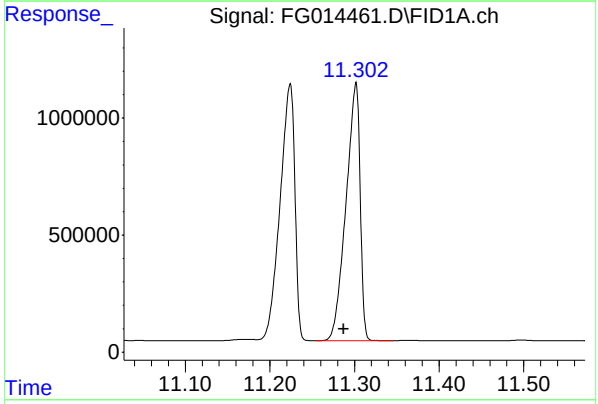
#9 Phenanthrene (C19.36)

R.T.: 11.223 min
Delta R.T.: 0.011 min
Response: 13458381
Conc: 90.58 ug/ml

Instrument :
FID_G
ClientSampleId :
100 PPM AROMATIC HC STD1

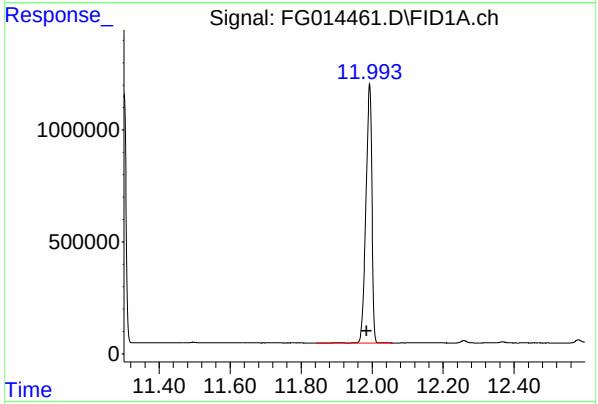
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/22/2024
Supervised By :Ankita Jodhani 10/22/2024



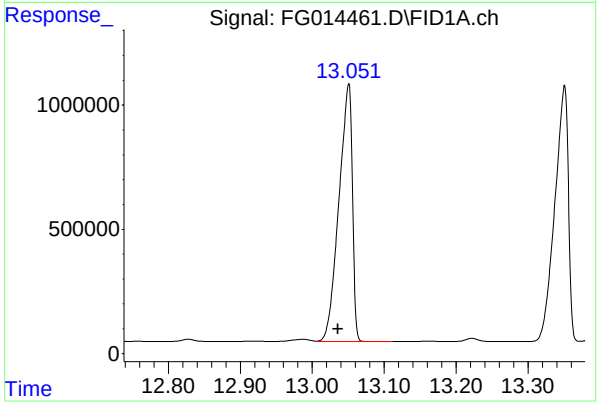
#10 Anthracene (C19.43)

R.T.: 11.301 min
Delta R.T.: 0.014 min
Response: 12748608
Conc: 89.99 ug/ml



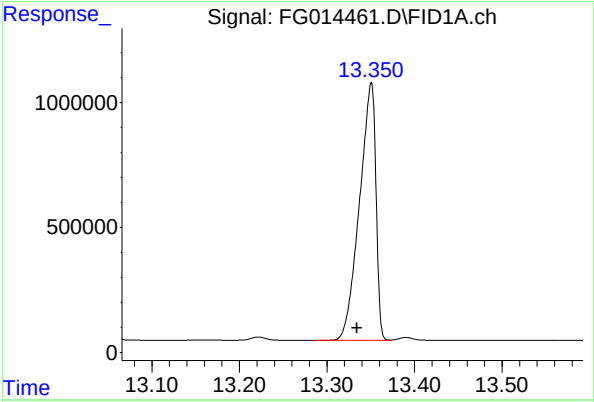
#11 ortho-Terphenyl (SURR)

R.T.: 11.993 min
Delta R.T.: 0.008 min
Response: 13392311
Conc: 89.62 ug/ml



#12 Fluoranthene (C21.85)

R.T.: 13.050 min
Delta R.T.: 0.014 min
Response: 13469156
Conc: 90.43 ug/ml



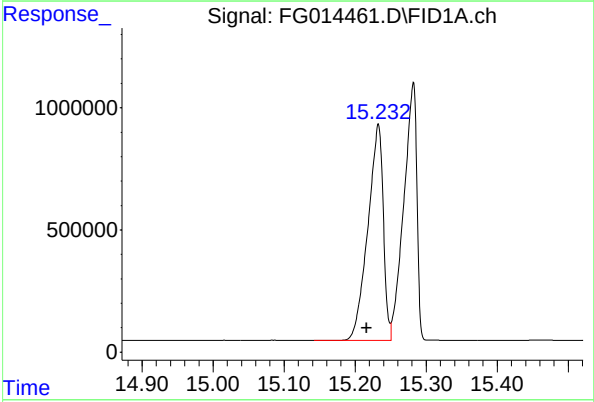
#13 Pyrene (C20.8)

R.T.: 13.350 min
Delta R.T.: 0.015 min
Response: 13415461
Conc: 90.63 ug/ml

Instrument :
FID_G
ClientSampleId :
100 PPM AROMATIC HC STD1

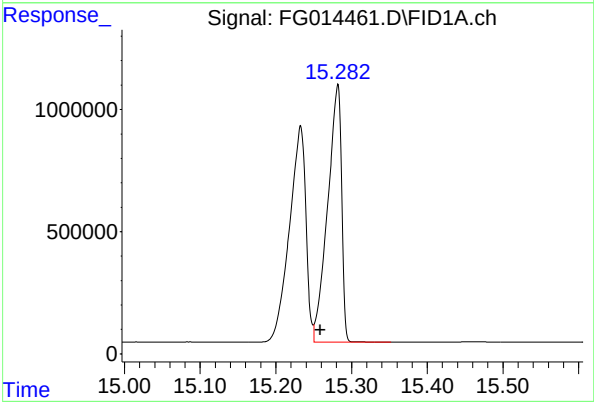
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/22/2024
Supervised By :Ankita Jodhani 10/22/2024



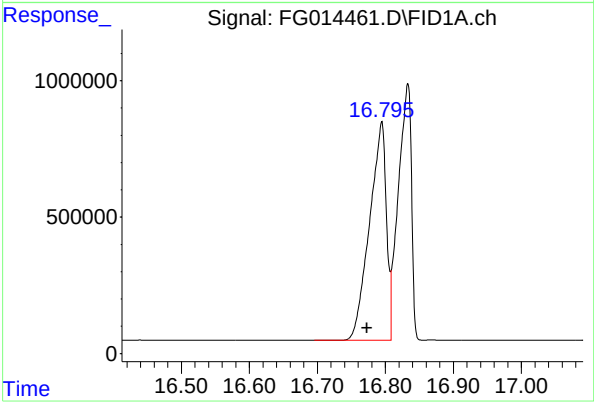
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.232 min
Delta R.T.: 0.016 min
Response: 13315853
Conc: 91.52 ug/ml



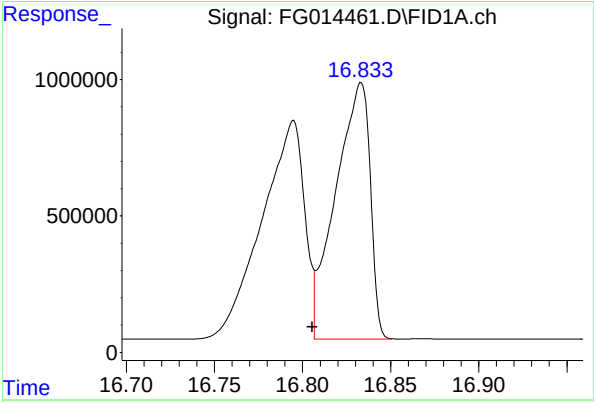
#15 Chrysene (C27.41)

R.T.: 15.281 min
Delta R.T.: 0.022 min
Response: 13441483
Conc: 91.19 ug/ml



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

R.T.: 16.794 min
Delta R.T.: 0.021 min
Response: 13784033
Conc: 93.93 ug/ml



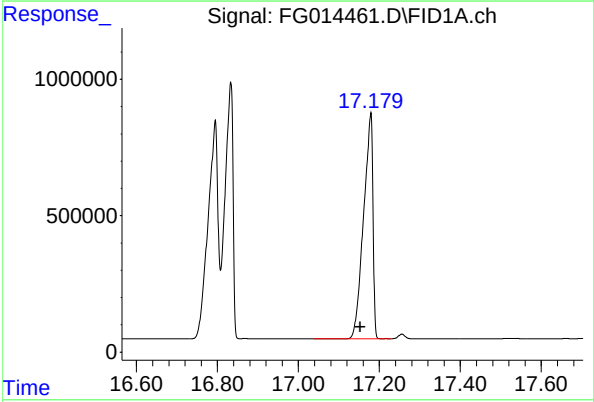
#17 Bnezo[k]fluoranthene (C30.14)

R.T.: 16.833 min
Delta R.T.: 0.027 min
Response: 12812088
Conc: 93.11 ug/ml

Instrument :
FID_G
ClientSampleId :
100 PPM AROMATIC HC STD1

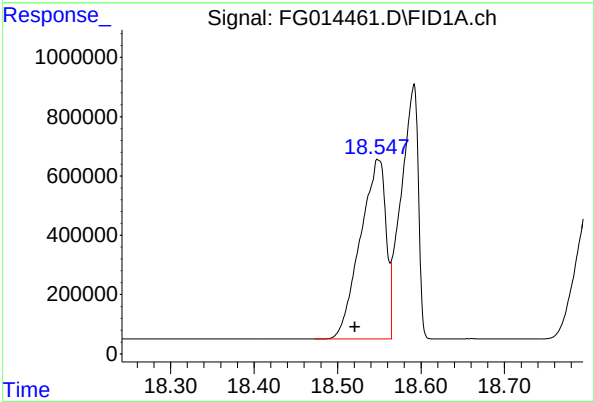
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 10/22/2024
Supervised By :Ankita Jodhani 10/22/2024



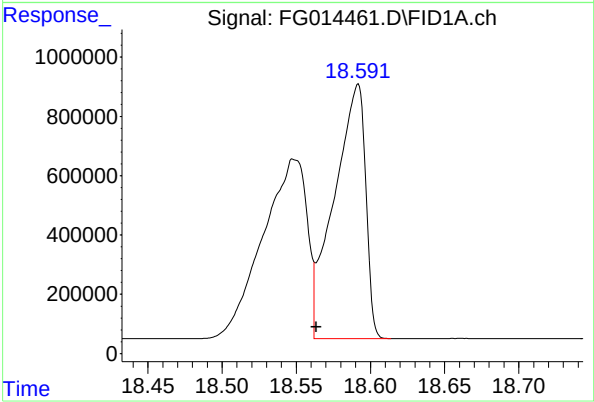
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.178 min
Delta R.T.: 0.025 min
Response: 13241162
Conc: 93.03 ug/ml



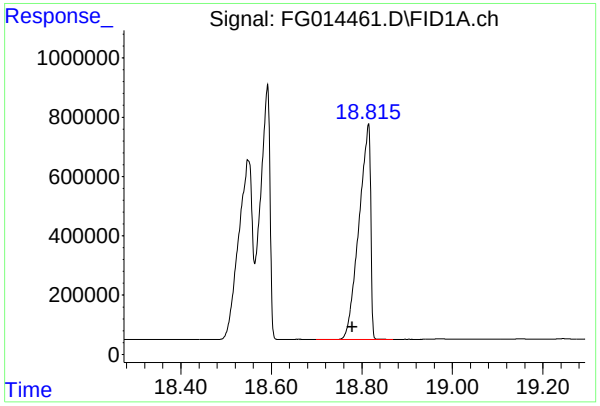
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.549 min
Delta R.T.: 0.028 min
Response: 12956528
Conc: 98.57 ug/ml



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

R.T.: 18.591 min
Delta R.T.: 0.028 min
Response: 12603686
Conc: 90.85 ug/ml m



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

R.T.: 18.813 min
Delta R.T.: 0.034 mi
Response: 12975069
Conc: 93.77 ug/m

Instrument :
FID_G
ClientSampleId :
100 PPM AROMATIC HC STD1

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/22/2024
Supervised By :Ankita Jodhani 10/22/2024

Instrument :
FID_G
LabSampleId :
100 PPM AROMATIC HC STD1

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/22/2024
Supervised By :Ankita Jodhani 10/22/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG10212
Data File : FG014461.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 19:11
Sample : 100 PPM AROMATIC HC STD1
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	4.640	4.572	4.695	BV	1239559	12446477	90.30%	4.622%
2	6.314	6.242	6.344	BV	1352327	13219656	95.91%	4.909%
3	7.414	7.335	7.442	VV	1312809	13436105	97.48%	4.989%
4	8.041	7.955	8.102	BB	1129896	11445142	83.03%	4.250%
5	8.720	8.672	8.789	BB	1236541	13296506	96.46%	4.938%
6	8.919	8.839	8.979	BV	761684	7906331	57.36%	2.936%
7	9.022	8.979	9.085	VB	1192540	13272778	96.29%	4.929%
8	9.813	9.739	9.855	BB	1157822	13245341	96.09%	4.919%
9	11.223	11.119	11.254	BV	1083829	13458381	97.64%	4.998%
10	11.301	11.254	11.345	PV	1125405	12748608	92.49%	4.734%
11	11.993	11.842	12.059	BB	1151063	13392311	97.16%	4.973%
12	13.050	13.005	13.112	VB	1019981	13469156	97.72%	5.002%
13	13.350	13.285	13.373	BV	1015028	13415461	97.33%	4.982%
14	15.232	15.142	15.250	BV	884552	13315853	96.60%	4.945%
15	15.281	15.250	15.352	VB	1072612	13441483	97.51%	4.991%
16	16.794	16.695	16.809	BV	814028	13784033	100.00%	5.119%
17	16.832	16.809	16.857	VV	936456	12533983	90.93%	4.654%
18	17.178	17.039	17.229	BV	833159	13241162	96.06%	4.917%
19	18.549	18.472	18.564	BV	606070	12956528	94.00%	4.811%
20	18.590	18.564	18.620	VV	880145	12293534	89.19%	4.565%
21	18.813	18.699	18.869	BB	706920	12975069	94.13%	4.818%
			Sum of corrected areas:			269293897		

Aromatic EPH 102124.M Tue Oct 22 04:43:13 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014462.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 19:40
Operator : YP\AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Oct 22 04:31:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:30:07 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...	8.038	6241660	49.187 ug/ml
Spiked Amount	50.000		Recovery =	98.37%
6) S	2-Flurobiphenyl (SURR)	8.914	4300888	49.347 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	98.69%
11) S	ortho-Terphenyl (SURR)	11.988	7341257	49.126 ug/ml
Spiked Amount	50.000		Recovery =	98.25%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.637	6771203	49.072 ug/ml
2) T	Naphthalene (C11.7)	6.311	7173438	49.215 ug/ml
3) T	2-Methylnaphthalene (...	7.410	7298760	49.211 ug/ml
5) T	Acenaphthylene (C15.06)	8.715	7231407	49.167 ug/ml
7) T	Acenaphthene (C15.5)	9.017	7215688	49.289 ug/ml
8) T	Flouorene (C16.55)	9.807	7204776	49.224 ug/ml
9) T	Phenanthrene (C19.36)	11.216	7299515	49.126 ug/ml
10) T	Anthracene (C19.43)	11.292	6933076	48.938 ug/ml
12) T	Fluoranthene (C21.85)	13.041	7271122	48.818 ug/ml
13) T	Pyrene (C20.8)	13.341	7222599	48.793 ug/ml
14) T	Benzo[a]anthracene (C...	15.223	7036941	48.363 ug/ml
15) T	Chrysene (C27.41)	15.269	7110199	48.238 ug/ml
16) T	benzo[b]fluoranthene ...	16.781	7087157	48.293 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.817	6568945	47.740 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.165	6826610	47.963 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.534	6400457	48.693 ug/ml
20) T	Dibenz[a,h]anthracene...	18.575	6558753	47.276 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.794	6651863	48.072 ug/ml

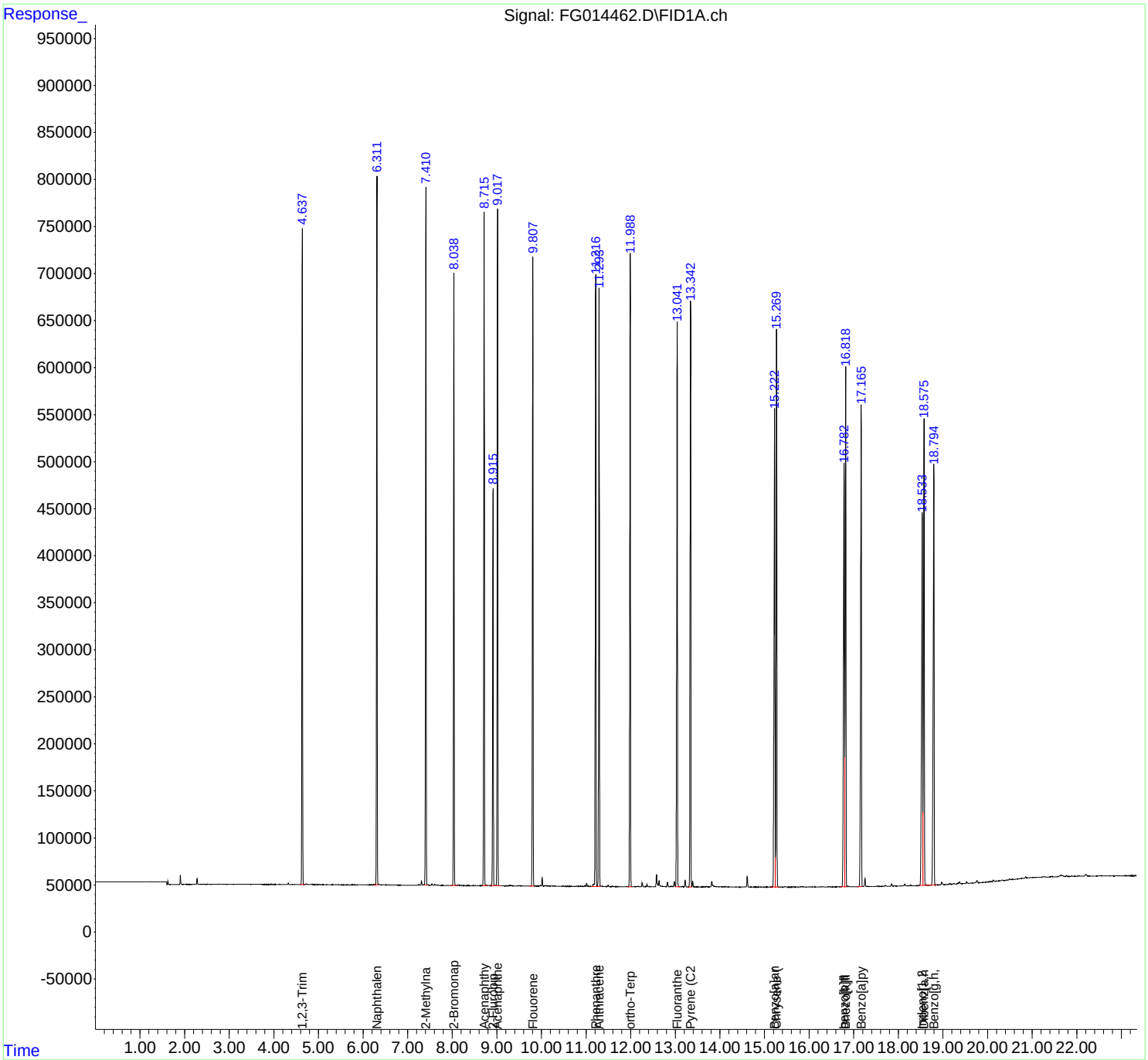
(f)=RT Delta > 1/2 Window (m)=manual int.

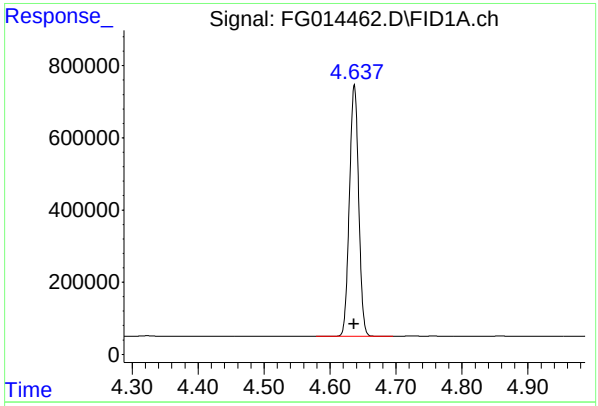
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014462.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 19:40
Operator : YP\AJ
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
50 PPM AROMATIC HC STD2

Integration File: autoint1.e
Quant Time: Oct 22 04:31:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:30:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

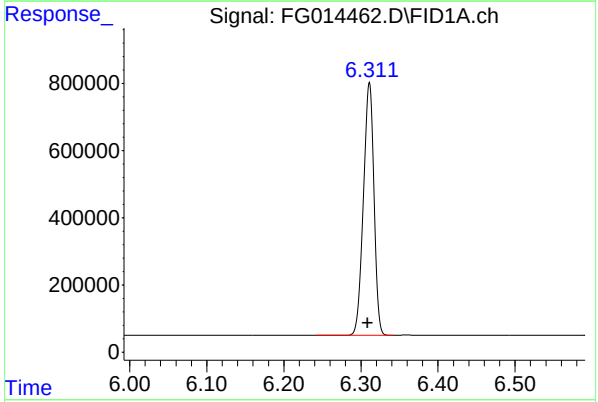




#1 1,2,3-Trimethylbenzene (C10.1)

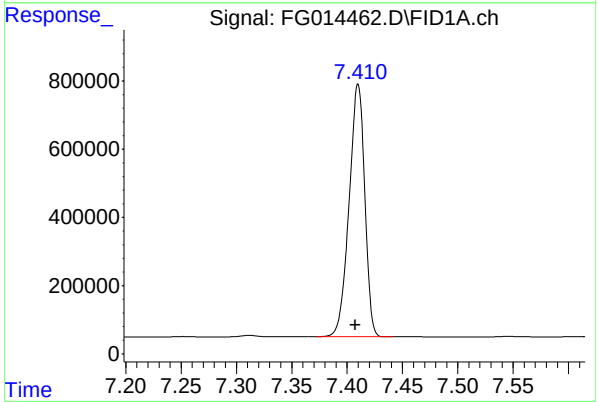
R.T.: 4.637 min
Delta R.T.: 0.000 min
Response: 6771203
Conc: 49.07 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM AROMATIC HC STD2



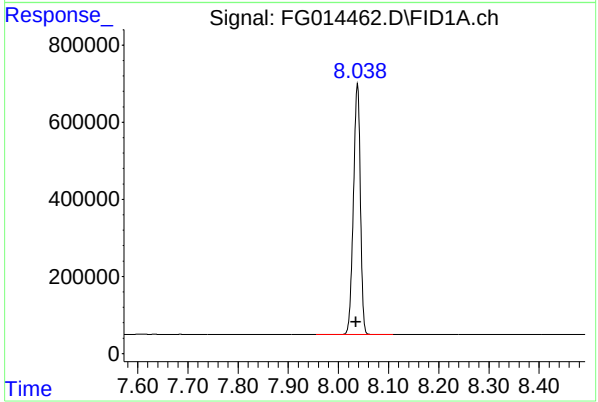
#2 Naphthalene (C11.7)

R.T.: 6.311 min
Delta R.T.: 0.002 min
Response: 7173438
Conc: 49.21 ug/ml



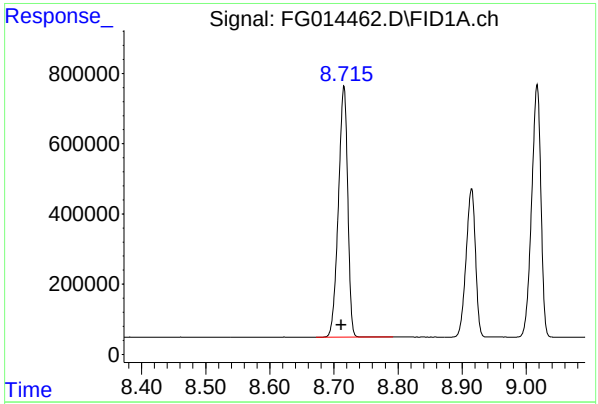
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.410 min
Delta R.T.: 0.002 min
Response: 7298760
Conc: 49.21 ug/ml



#4 2-Bromonaphthalene (SURR)

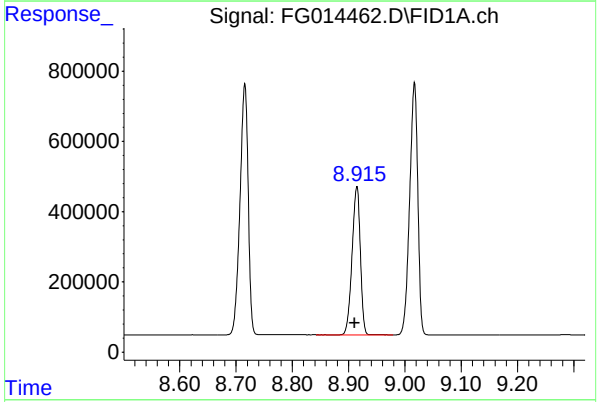
R.T.: 8.038 min
Delta R.T.: 0.002 min
Response: 6241660
Conc: 49.19 ug/ml



#5 Acenaphthylene (C15.06)

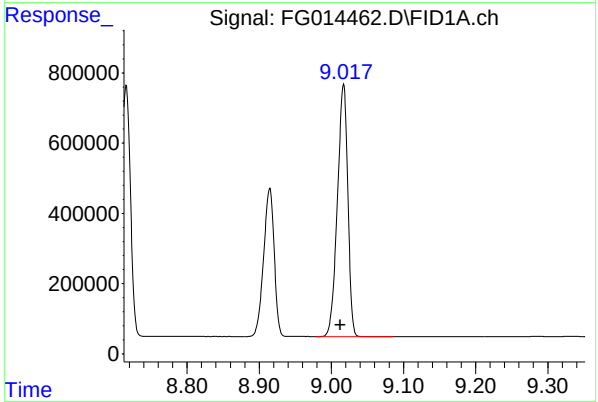
R.T.: 8.715 min
Delta R.T.: 0.004 min
Response: 7231407
Conc: 49.17 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM AROMATIC HC STD2



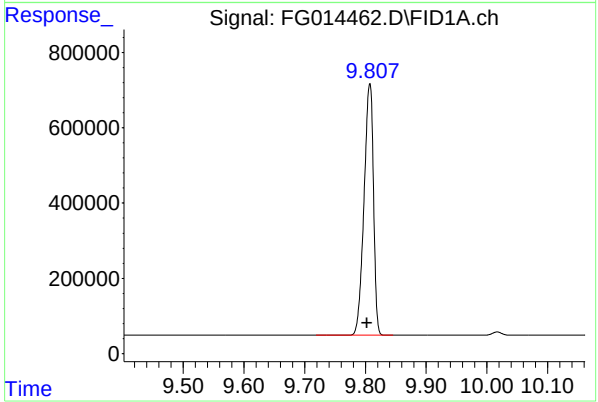
#6 2-Flurobiphenyl (SURR)

R.T.: 8.914 min
Delta R.T.: 0.003 min
Response: 4300888
Conc: 49.35 ug/ml



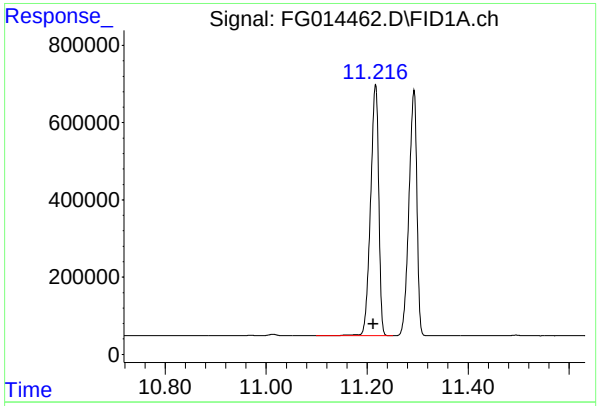
#7 Acenaphthene (C15.5)

R.T.: 9.017 min
Delta R.T.: 0.004 min
Response: 7215688
Conc: 49.29 ug/ml



#8 Flouorene (C16.55)

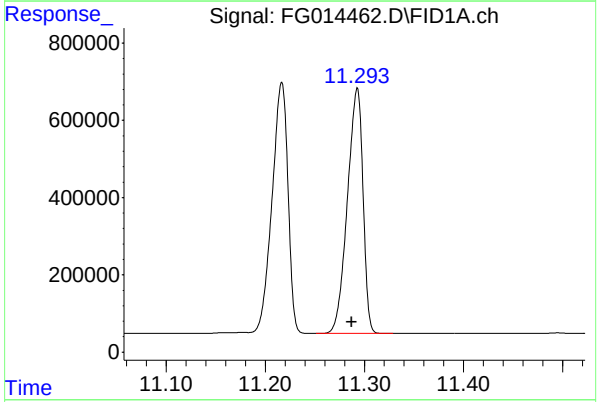
R.T.: 9.807 min
Delta R.T.: 0.004 min
Response: 7204776
Conc: 49.22 ug/ml



#9 Phenanthrene (C19.36)

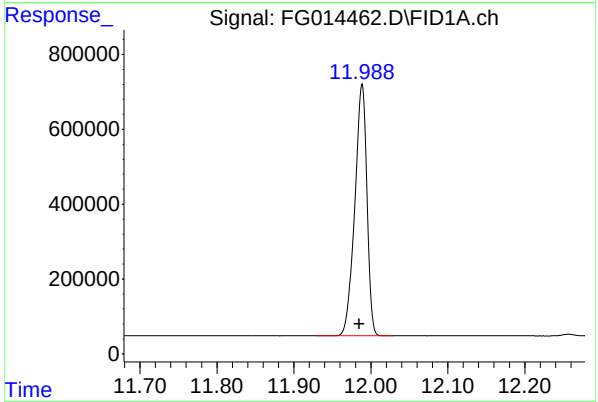
R.T.: 11.216 min
Delta R.T.: 0.004 min
Response: 7299515
Conc: 49.13 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM AROMATIC HC STD2



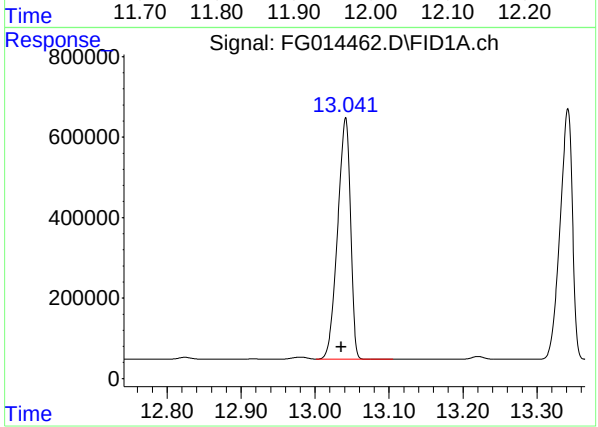
#10 Anthracene (C19.43)

R.T.: 11.292 min
Delta R.T.: 0.005 min
Response: 6933076
Conc: 48.94 ug/ml



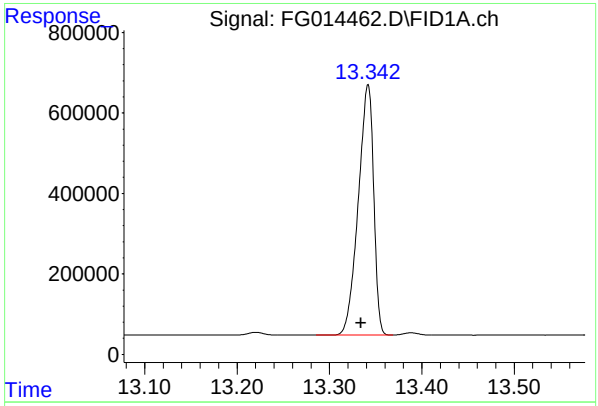
#11 ortho-Terphenyl (SURR)

R.T.: 11.988 min
Delta R.T.: 0.003 min
Response: 7341257
Conc: 49.13 ug/ml



#12 Fluoranthene (C21.85)

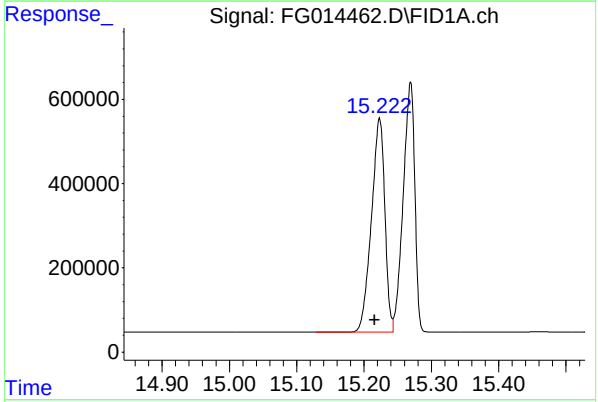
R.T.: 13.041 min
Delta R.T.: 0.005 min
Response: 7271122
Conc: 48.82 ug/ml



#13 Pyrene (C20.8)

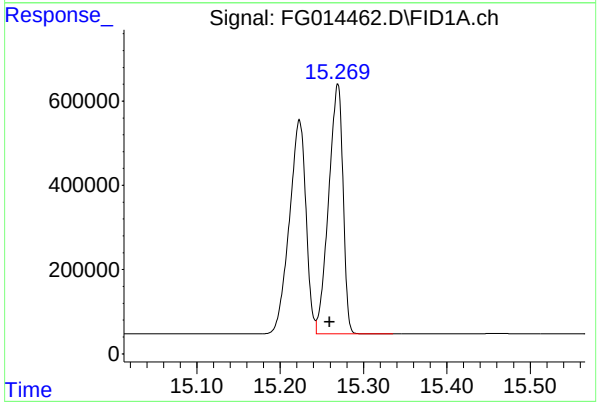
R.T.: 13.341 min
Delta R.T.: 0.007 min
Response: 7222599
Conc: 48.79 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM AROMATIC HC STD2



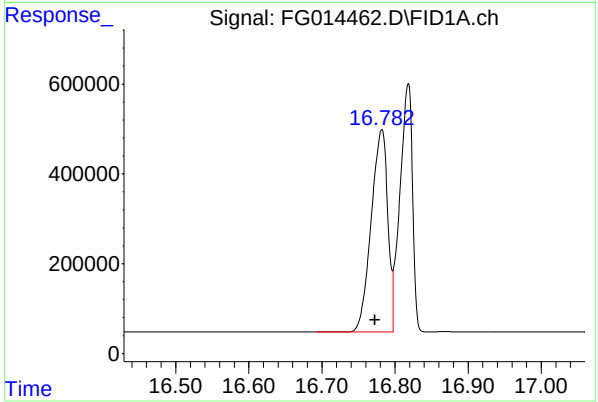
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.223 min
Delta R.T.: 0.007 min
Response: 7036941
Conc: 48.36 ug/ml



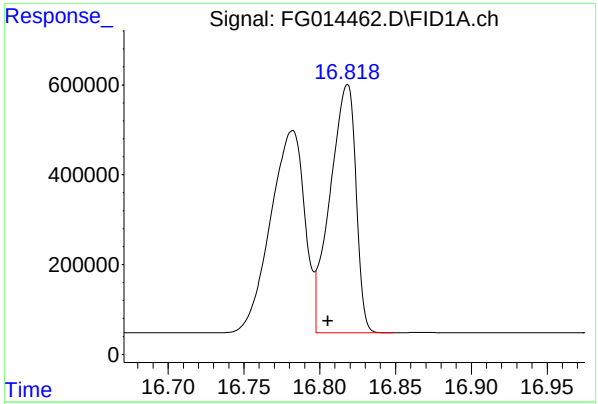
#15 Chrysene (C27.41)

R.T.: 15.269 min
Delta R.T.: 0.009 min
Response: 7110199
Conc: 48.24 ug/ml



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

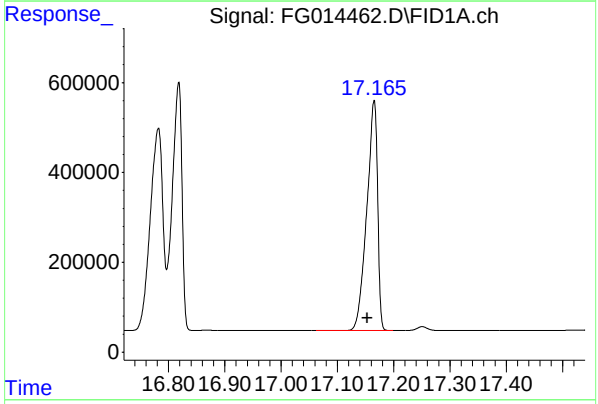
R.T.: 16.781 min
Delta R.T.: 0.009 min
Response: 7087157
Conc: 48.29 ug/ml



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

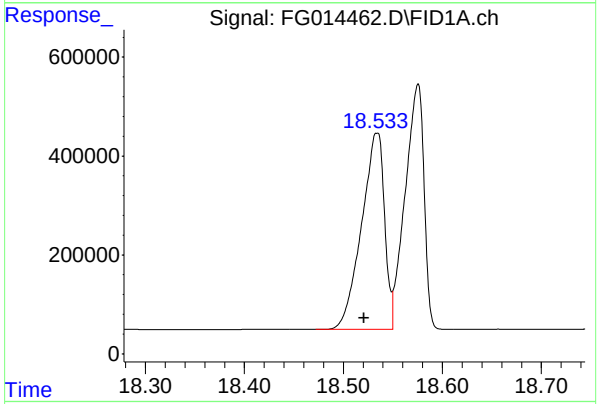
R.T.: 16.817 min
Delta R.T.: 0.012 min
Response: 6568945
Conc: 47.74 ug/ml

Instrument :
FID_G
ClientSampleId :
50 PPM AROMATIC HC STD2



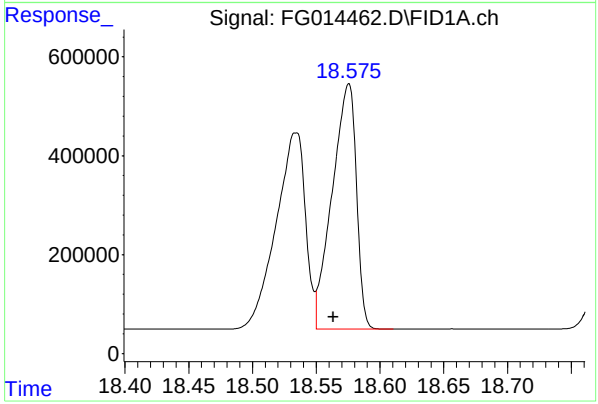
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.165 min
Delta R.T.: 0.012 min
Response: 6826610
Conc: 47.96 ug/ml



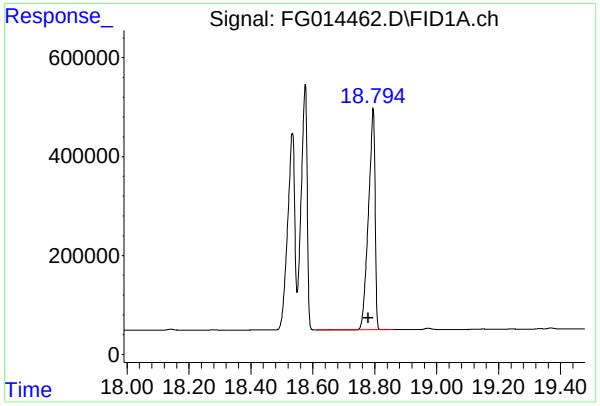
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.534 min
Delta R.T.: 0.013 min
Response: 6400457
Conc: 48.69 ug/ml



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

R.T.: 18.575 min
Delta R.T.: 0.011 min
Response: 6558753
Conc: 47.28 ug/ml



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

R.T.: 18.794 min
Delta R.T.: 0.016 mi
Response: 6651863
Conc: 48.07 ug/m

Instrument :
FID_G
ClientSampleId :
50 PPM AROMATIC HC STD2

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014462.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 19:40
Sample : 50 PPM AROMATIC HC STD2
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	4.637	4.579	4.695	BV	692327	6771203	92.23%	4.711%
2	6.311	6.242	6.342	BV	757354	7173438	97.71%	4.990%
3	7.410	7.372	7.442	BV	738772	7298760	99.42%	5.078%
4	8.038	7.955	8.109	BB	654474	6241660	85.02%	4.342%
5	8.715	8.672	8.792	BB	716072	7231407	98.50%	5.031%
6	8.914	8.842	8.979	BB	426575	4300888	58.59%	2.992%
7	9.017	8.979	9.085	BB	711791	7215688	98.29%	5.020%
8	9.807	9.719	9.845	BB	666681	7204776	98.14%	5.012%
9	11.216	11.099	11.251	BV	647943	7299515	99.43%	5.078%
10	11.292	11.251	11.329	PV	633483	6933076	94.44%	4.823%
11	11.988	11.929	12.029	BB	675595	7341257	100.00%	5.107%
12	13.041	13.001	13.105	VB	606453	7271122	99.04%	5.058%
13	13.341	13.285	13.369	BV	628144	7222599	98.38%	5.025%
14	15.223	15.129	15.243	BV	506987	7036941	95.85%	4.895%
15	15.269	15.243	15.335	VB	594852	7110199	96.85%	4.946%
16	16.781	16.692	16.797	BV	452330	7087157	96.54%	4.930%
17	16.817	16.797	16.848	VV	562743	6568945	89.48%	4.570%
18	17.165	17.062	17.199	BB	515584	6826610	92.99%	4.749%
19	18.534	18.472	18.550	BV	399735	6400457	87.18%	4.453%
20	18.575	18.550	18.610	VV	500343	6558753	89.34%	4.563%
21	18.794	18.610	18.859	VB	451249	6651863	90.61%	4.628%

Sum of corrected areas: 143746314

Aromatic EPH 102124.M Tue Oct 22 04:43:42 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014463.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 20:09
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Oct 22 04:31:24 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:30:07 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...	8.035	2537923	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
6) S	2-Flurobiphenyl (SURR)	8.911	1743127	20.000 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	40.00%
11) S	ortho-Terphenyl (SURR)	11.985	2988773	20.000 ug/ml
Spiked Amount	50.000		Recovery =	40.00%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.636	2759710	20.000 ug/ml
2) T	Naphthalene (C11.7)	6.309	2915158	20.000 ug/ml
3) T	2-Methylnaphthalene (...	7.407	2966297	20.000 ug/ml
5) T	Acenaphthylene (C15.06)	8.712	2941563	20.000 ug/ml
7) T	Acenaphthene (C15.5)	9.013	2927901	20.000 ug/ml
8) T	Flouorene (C16.55)	9.803	2927350	20.000 ug/ml
9) T	Phenanthrene (C19.36)	11.212	2971764	20.000 ug/ml
10) T	Anthracene (C19.43)	11.287	2833424	20.000 ug/ml
12) T	Fluoranthene (C21.85)	13.036	2978864	20.000 ug/ml
13) T	Pyrene (C20.8)	13.334	2960529	20.000 ug/ml
14) T	Benzo[a]anthracene (C...	15.216	2910060	20.000 ug/ml
15) T	Chrysene (C27.41)	15.259	2947985	20.000 ug/ml
16) T	benzo[b]fluoranthene ...	16.773	2935039	20.000 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.805	2751941	20.000 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.153	2846631	20.000 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.521	2628924	20.000 ug/ml
20) T	Dibenz[a,h]anthracene...	18.563	2774674	20.000 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.779	2767473	20.000 ug/ml

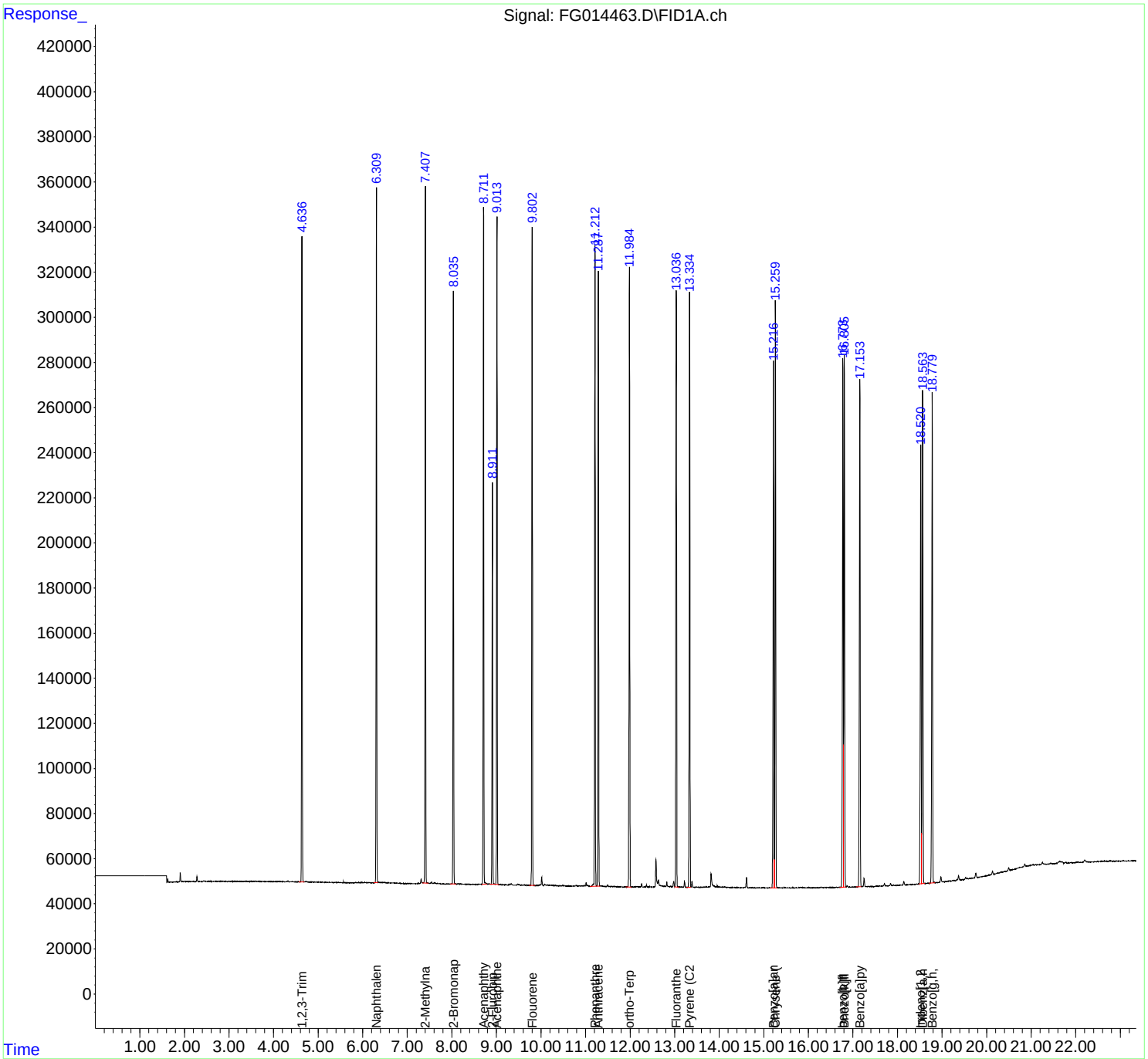
(f)=RT Delta > 1/2 Window (m)=manual int.

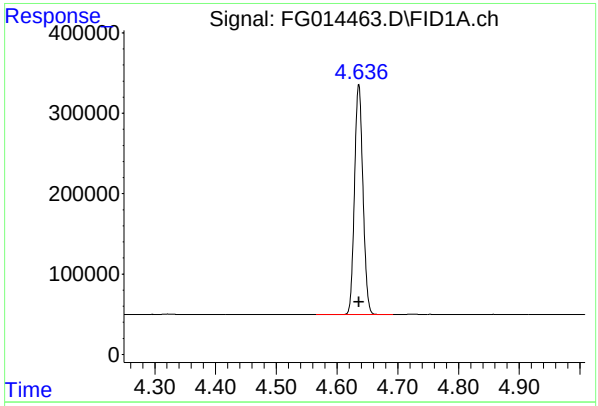
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014463.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 20:09
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD3

Integration File: autoint1.e
Quant Time: Oct 22 04:31:24 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:30:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

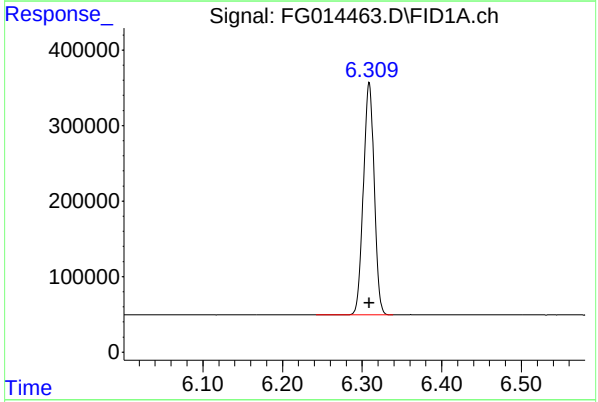




#1 1,2,3-Trimethylbenzene (C10.1)

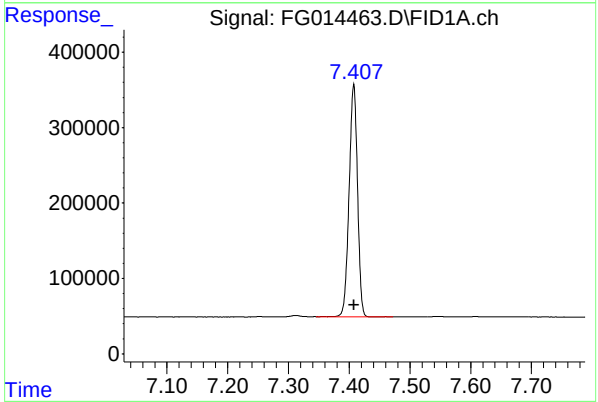
R.T.: 4.636 min
Delta R.T.: 0.000 min
Response: 2759710
Conc: 20.00 ug/ml

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD3



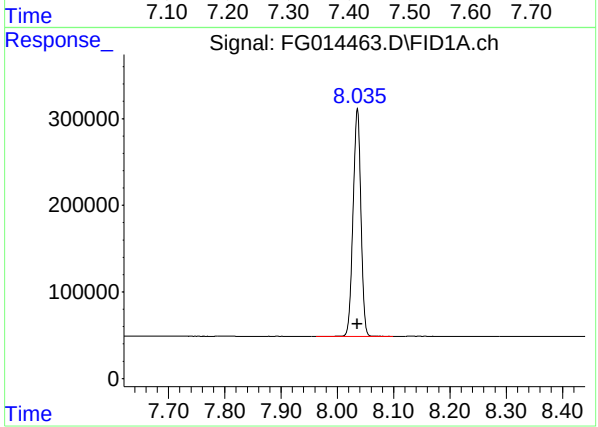
#2 Naphthalene (C11.7)

R.T.: 6.309 min
Delta R.T.: 0.000 min
Response: 2915158
Conc: 20.00 ug/ml



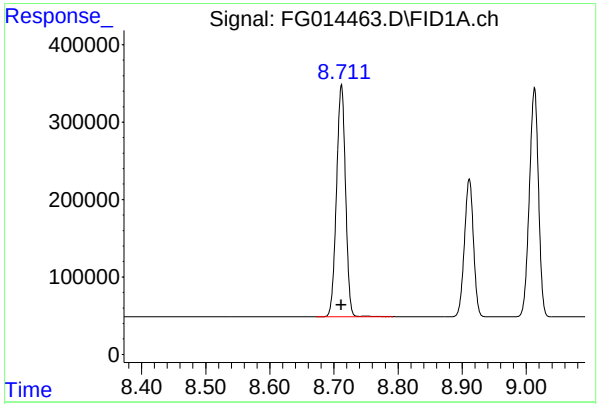
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.407 min
Delta R.T.: 0.000 min
Response: 2966297
Conc: 20.00 ug/ml



#4 2-Bromonaphthalene (SURR)

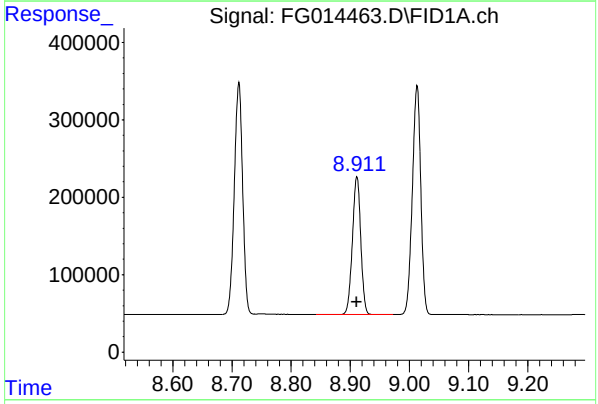
R.T.: 8.035 min
Delta R.T.: 0.000 min
Response: 2537923
Conc: 20.00 ug/ml



#5 Acenaphthylene (C15.06)

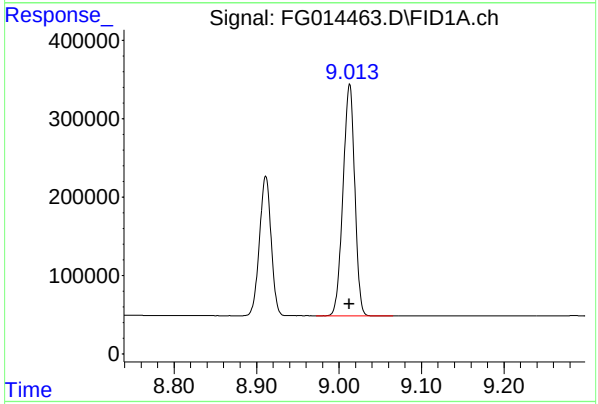
R.T.: 8.712 min
Delta R.T.: 0.000 min
Response: 2941563
Conc: 20.00 ug/ml

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD3



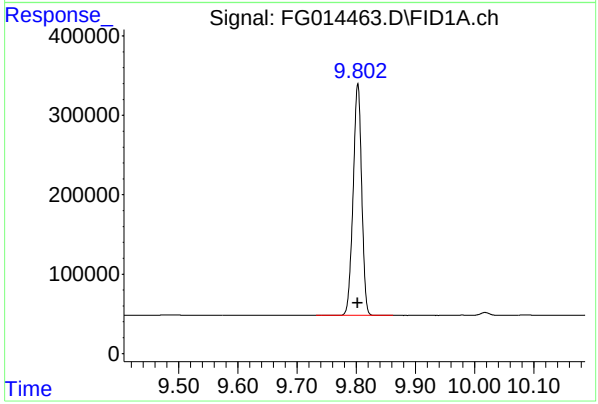
#6 2-Flurobiphenyl (SURR)

R.T.: 8.911 min
Delta R.T.: 0.000 min
Response: 1743127
Conc: 20.00 ug/ml



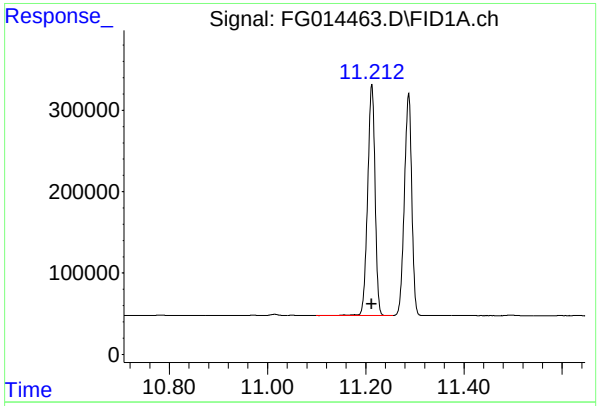
#7 Acenaphthene (C15.5)

R.T.: 9.013 min
Delta R.T.: 0.000 min
Response: 2927901
Conc: 20.00 ug/ml



#8 Flouorene (C16.55)

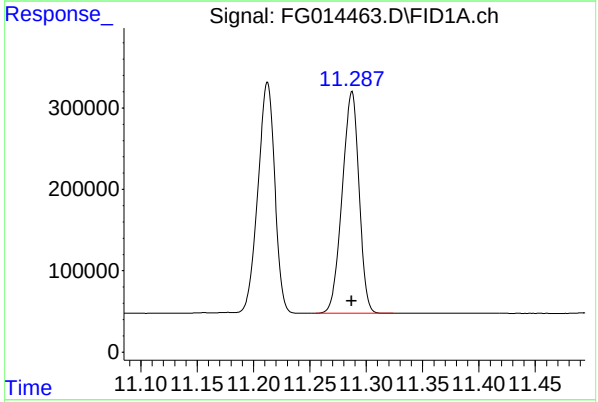
R.T.: 9.803 min
Delta R.T.: 0.000 min
Response: 2927350
Conc: 20.00 ug/ml



#9 Phenanthrene (C19.36)

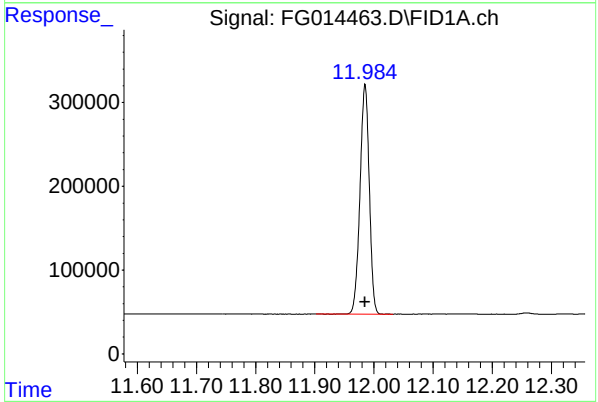
R.T.: 11.212 min
Delta R.T.: 0.000 min
Response: 2971764
Conc: 20.00 ug/ml

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD3



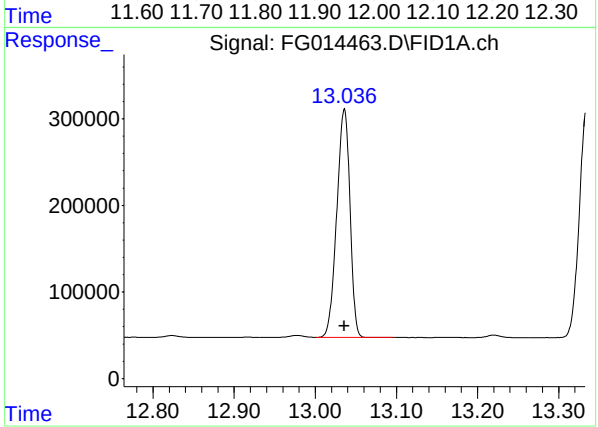
#10 Anthracene (C19.43)

R.T.: 11.287 min
Delta R.T.: 0.000 min
Response: 2833424
Conc: 20.00 ug/ml



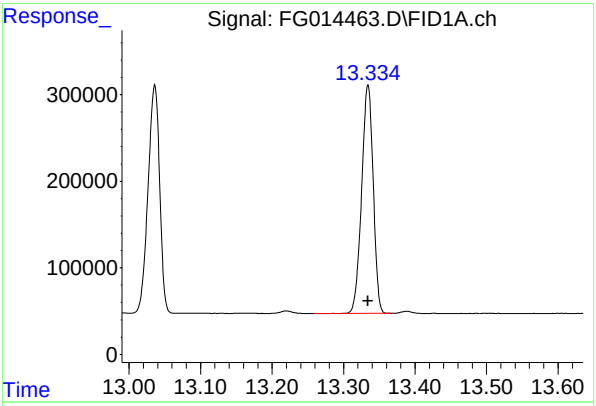
#11 ortho-Terphenyl (SURR)

R.T.: 11.985 min
Delta R.T.: 0.000 min
Response: 2988773
Conc: 20.00 ug/ml



#12 Fluoranthene (C21.85)

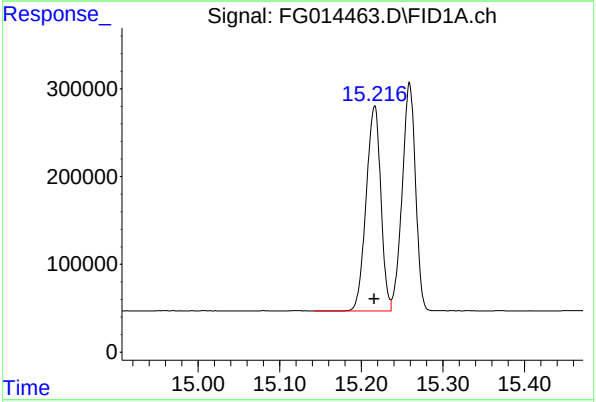
R.T.: 13.036 min
Delta R.T.: 0.000 min
Response: 2978864
Conc: 20.00 ug/ml



#13 Pyrene (C20.8)

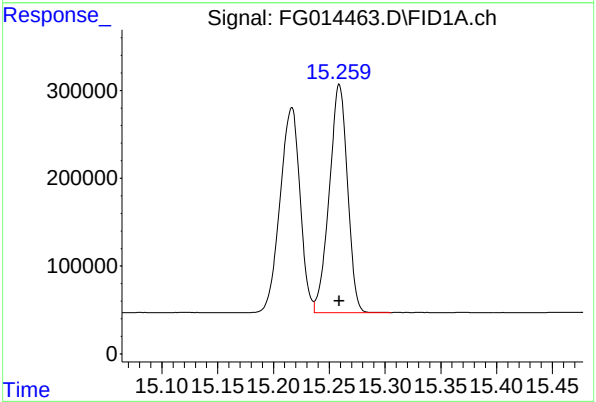
R.T.: 13.334 min
Delta R.T.: 0.000 min
Response: 2960529
Conc: 20.00 ug/ml

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD3



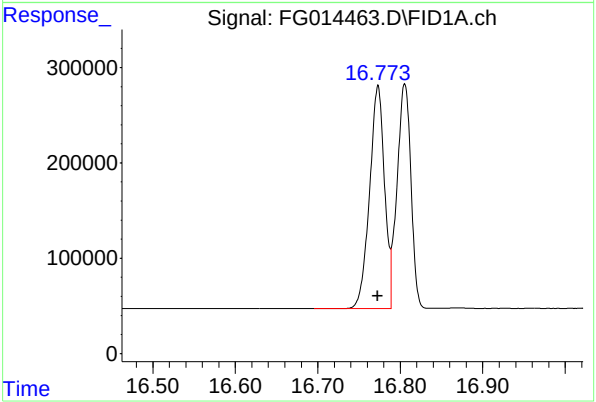
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.216 min
Delta R.T.: 0.000 min
Response: 2910060
Conc: 20.00 ug/ml



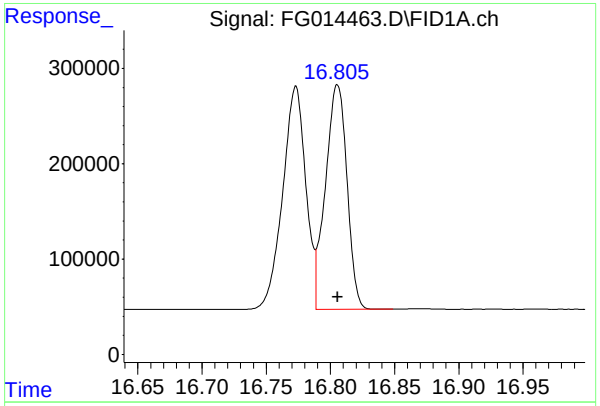
#15 Chrysene (C27.41)

R.T.: 15.259 min
Delta R.T.: 0.000 min
Response: 2947985
Conc: 20.00 ug/ml



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

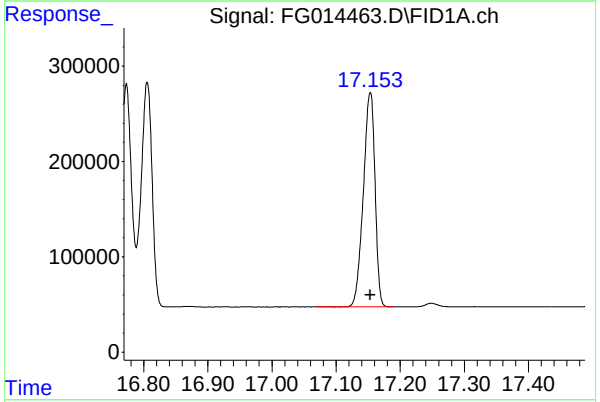
R.T.: 16.773 min
Delta R.T.: 0.000 min
Response: 2935039
Conc: 20.00 ug/ml



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

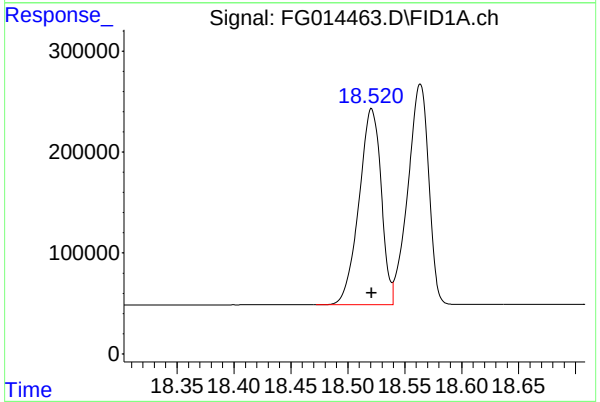
R.T.: 16.805 min
Delta R.T.: 0.000 min
Response: 2751941
Conc: 20.00 ug/ml

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD3



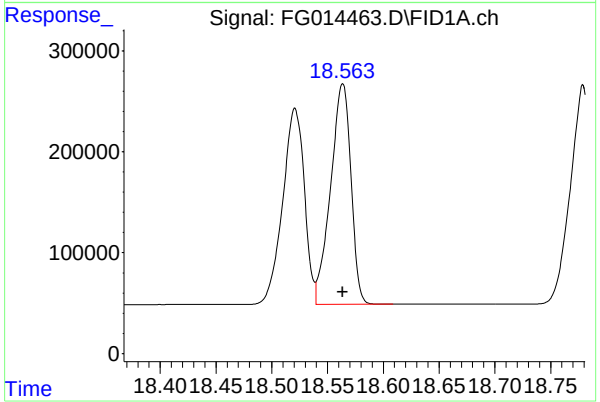
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.153 min
Delta R.T.: 0.000 min
Response: 2846631
Conc: 20.00 ug/ml



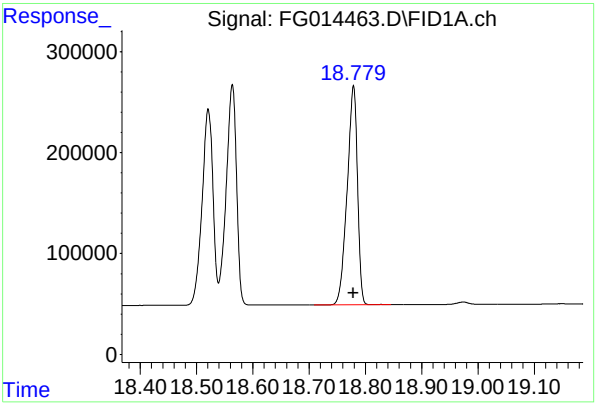
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.521 min
Delta R.T.: 0.000 min
Response: 2628924
Conc: 20.00 ug/ml



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

R.T.: 18.563 min
Delta R.T.: 0.000 min
Response: 2774674
Conc: 20.00 ug/ml



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

R.T.: 18.779 min
Delta R.T.: 0.000 mi
Response: 2767473
Conc: 20.00 ug/m

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD3

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014463.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 20:09
Sample : 20 PPM AROMATIC HC STD3
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	4.636	4.565	4.692	BB	285554	2759710	92.34%	4.676%
2	6.309	6.242	6.339	BV	307625	2915158	97.54%	4.940%
3	7.407	7.345	7.472	BB	308976	2966297	99.25%	5.026%
4	8.035	7.962	8.099	BB	262845	2537923	84.92%	4.300%
5	8.712	8.672	8.792	BB	300430	2941563	98.42%	4.984%
6	8.911	8.842	8.972	BB	178294	1743127	58.32%	2.954%
7	9.013	8.972	9.065	BB	293778	2927901	97.96%	4.961%
8	9.803	9.732	9.862	BB	290616	2927350	97.94%	4.960%
9	11.212	11.099	11.255	BV	284243	2971764	99.43%	5.036%
10	11.287	11.255	11.324	VB	267981	2833424	94.80%	4.801%
11	11.985	11.902	12.032	BB	274425	2988773	100.00%	5.064%
12	13.036	13.001	13.095	VB	264050	2978864	99.67%	5.048%
13	13.334	13.259	13.366	BV	264318	2960529	99.05%	5.017%
14	15.216	15.142	15.236	BV	232392	2910060	97.37%	4.931%
15	15.259	15.236	15.305	VB	260119	2947985	98.64%	4.995%
16	16.773	16.695	16.789	BV	232663	2935039	98.20%	4.973%
17	16.805	16.789	16.849	VV	236186	2751941	92.08%	4.663%
18	17.153	17.069	17.189	BB	224675	2846631	95.24%	4.824%
19	18.521	18.472	18.540	BV	193168	2628924	87.96%	4.455%
20	18.563	18.540	18.609	VB	218489	2774674	92.84%	4.702%
21	18.779	18.709	18.845	BB	217825	2767473	92.60%	4.689%
			Sum of corrected areas:			59015111		

Aromatic EPH 102124.M Tue Oct 22 04:44:05 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014464.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 20:38
Operator : YP\AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
10 PPM AROMATIC HC STD4

Integration File: autoint1.e
Quant Time: Oct 22 04:31:33 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:30:07 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...	8.035	1288399	10.153 ug/ml
Spiked Amount	50.000		Recovery =	20.31%
6) S	2-Flurobiphenyl (SURR)	8.910	883096	10.132 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	20.26%
11) S	ortho-Terphenyl (SURR)	11.984	1516598	10.149 ug/ml
Spiked Amount	50.000		Recovery =	20.30%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.637	1386579	10.049 ug/ml
2) T	Naphthalene (C11.7)	6.309	1468810	10.077 ug/ml
3) T	2-Methylnaphthalene (...	7.406	1497470	10.097 ug/ml
5) T	Acenaphthylene (C15.06)	8.711	1496000	10.171 ug/ml
7) T	Acenaphthene (C15.5)	9.011	1485183	10.145 ug/ml
8) T	Flouorene (C16.55)	9.801	1486301	10.155 ug/ml
9) T	Phenanthrene (C19.36)	11.210	1510285	10.164 ug/ml
10) T	Anthracene (C19.43)	11.285	1443473	10.189 ug/ml
12) T	Fluoranthene (C21.85)	13.033	1521234	10.214 ug/ml
13) T	Pyrene (C20.8)	13.332	1514851	10.234 ug/ml
14) T	Benzo[a]anthracene (C...	15.213	1497055	10.289 ug/ml
15) T	Chrysene (C27.41)	15.255	1519165	10.306 ug/ml
16) T	benzo[b]fluoranthene ...	16.769	1522637	10.376 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.801	1438990	10.458 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.148	1487369	10.450 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.516	1377258	10.478 ug/ml
20) T	Dibenz[a,h]anthracene...	18.559	1473248	10.619 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.772	1455003	10.515 ug/ml

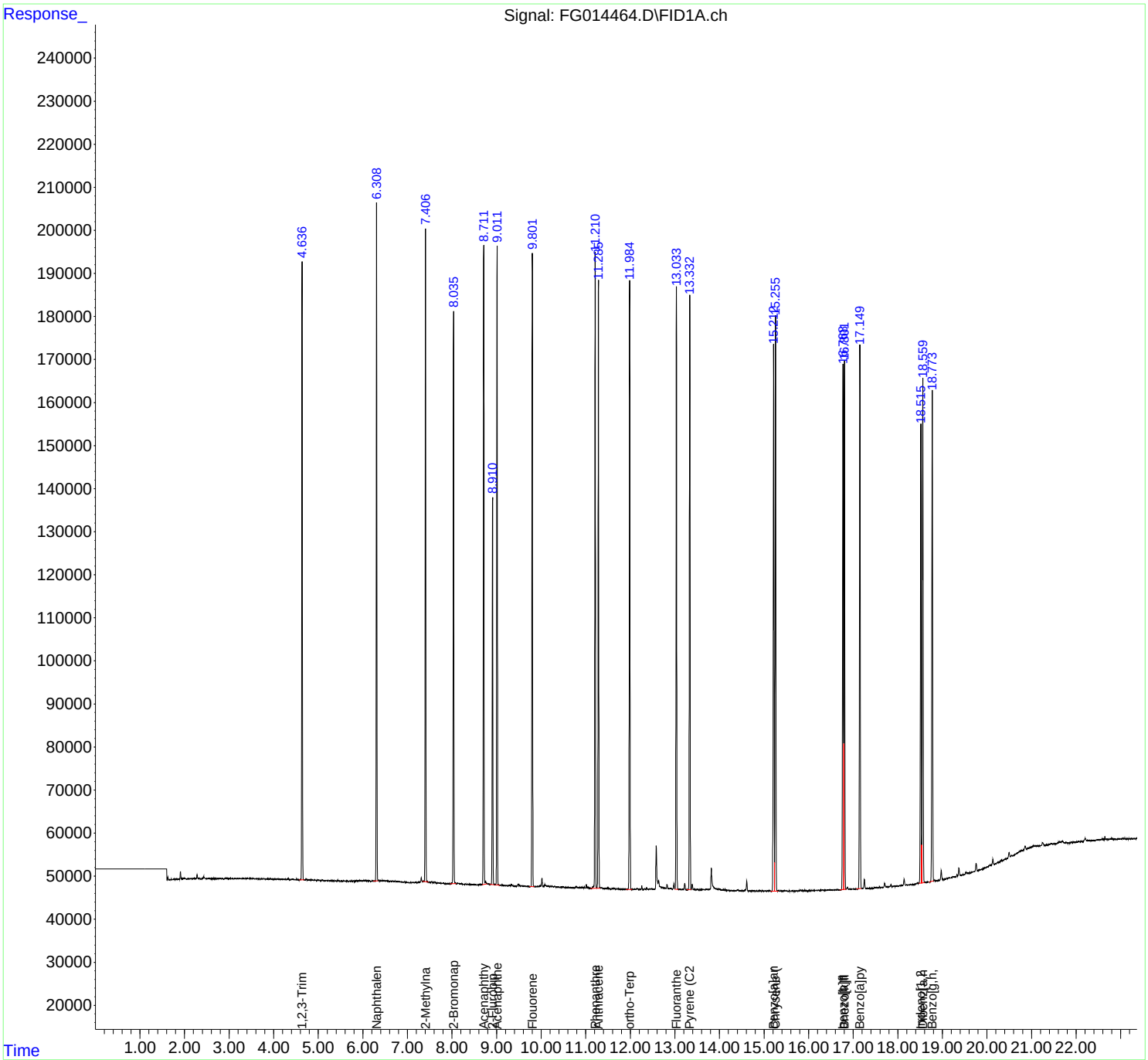
(f)=RT Delta > 1/2 Window (m)=manual int.

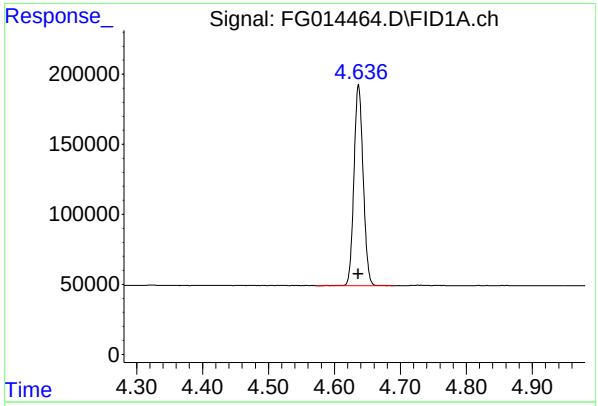
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014464.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 20:38
Operator : YP\AJ
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
10 PPM AROMATIC HC STD4

Integration File: autoint1.e
Quant Time: Oct 22 04:31:33 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:30:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

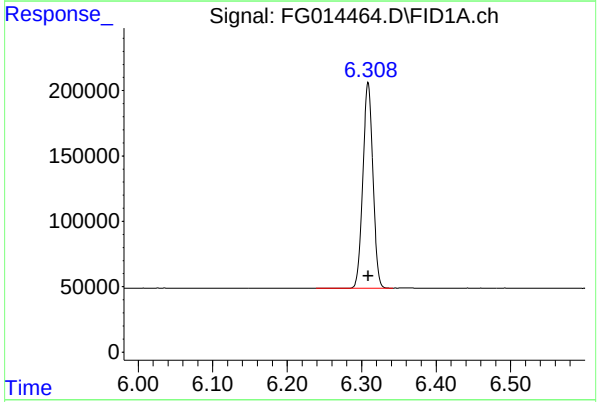




#1 1,2,3-Trimethylbenzene (C10.1)

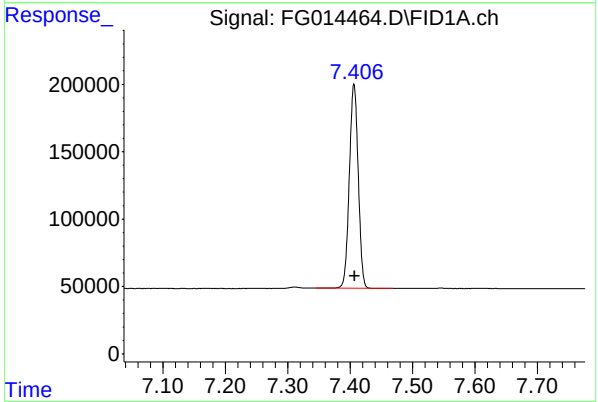
R.T.: 4.637 min
Delta R.T.: 0.000 min
Response: 1386579
Conc: 10.05 ug/ml

Instrument :
FID_G
ClientSampleId :
10 PPM AROMATIC HC STD4



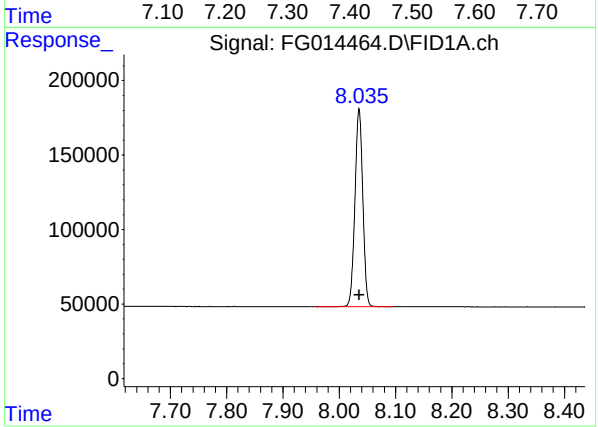
#2 Naphthalene (C11.7)

R.T.: 6.309 min
Delta R.T.: 0.000 min
Response: 1468810
Conc: 10.08 ug/ml



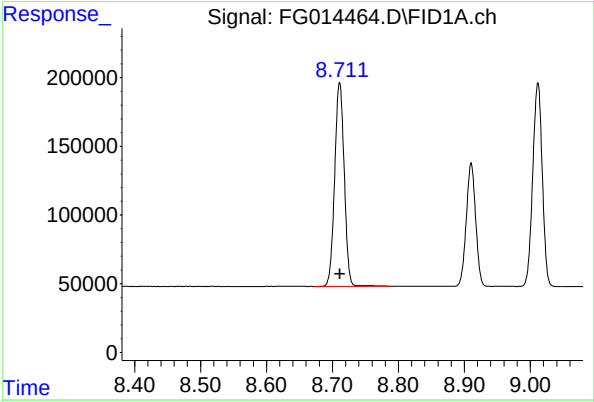
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.406 min
Delta R.T.: -0.001 min
Response: 1497470
Conc: 10.10 ug/ml



#4 2-Bromonaphthalene (SURR)

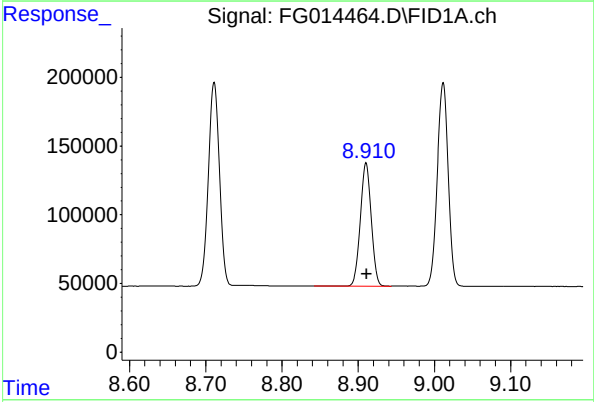
R.T.: 8.035 min
Delta R.T.: 0.000 min
Response: 1288399
Conc: 10.15 ug/ml



#5 Acenaphthylene (C15.06)

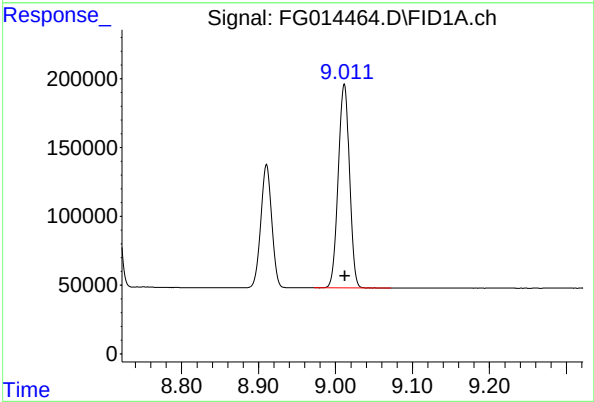
R.T.: 8.711 min
Delta R.T.: 0.000 min
Response: 1496000
Conc: 10.17 ug/ml

Instrument :
FID_G
ClientSampleId :
10 PPM AROMATIC HC STD4



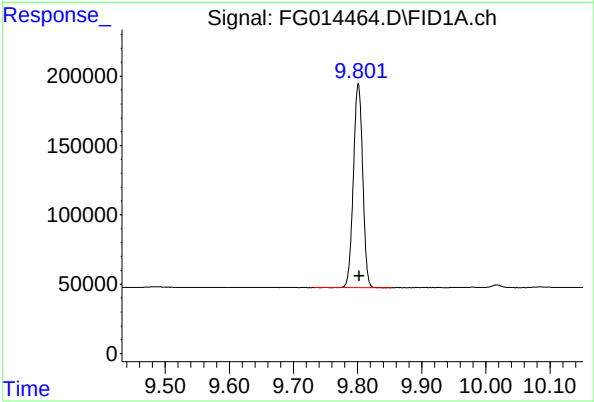
#6 2-Flurobiphenyl (SURR)

R.T.: 8.910 min
Delta R.T.: 0.000 min
Response: 883096
Conc: 10.13 ug/ml



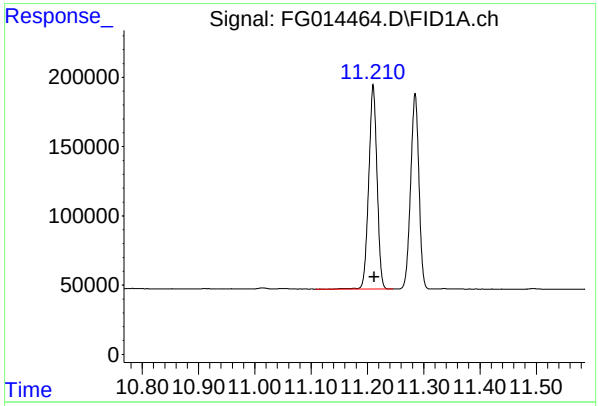
#7 Acenaphthene (C15.5)

R.T.: 9.011 min
Delta R.T.: -0.001 min
Response: 1485183
Conc: 10.15 ug/ml



#8 Flouorene (C16.55)

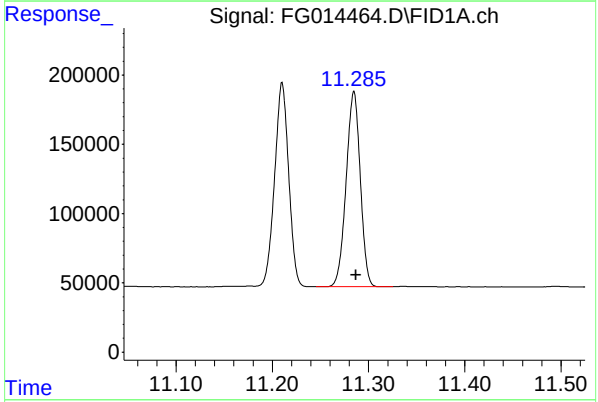
R.T.: 9.801 min
Delta R.T.: -0.001 min
Response: 1486301
Conc: 10.15 ug/ml



#9 Phenanthrene (C19.36)

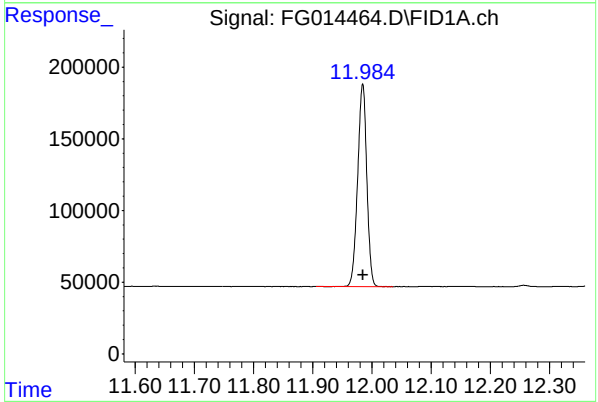
R.T.: 11.210 min
Delta R.T.: -0.002 min
Response: 1510285
Conc: 10.16 ug/ml

Instrument :
FID_G
ClientSampleId :
10 PPM AROMATIC HC STD4



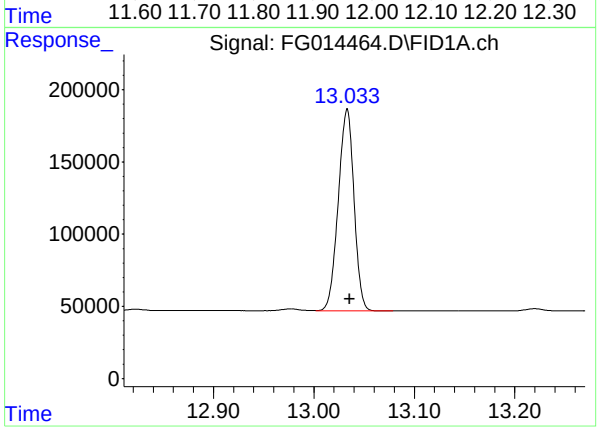
#10 Anthracene (C19.43)

R.T.: 11.285 min
Delta R.T.: -0.002 min
Response: 1443473
Conc: 10.19 ug/ml



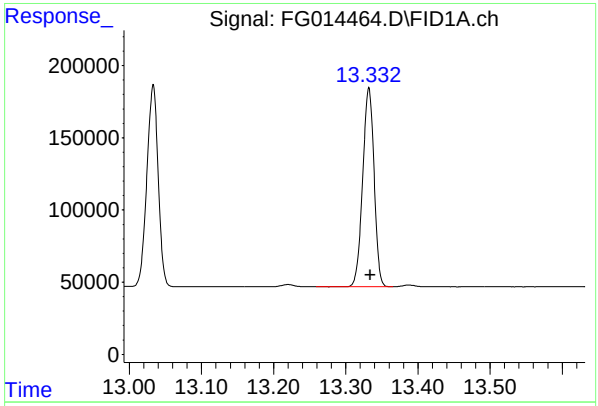
#11 ortho-Terphenyl (SURR)

R.T.: 11.984 min
Delta R.T.: 0.000 min
Response: 1516598
Conc: 10.15 ug/ml



#12 Fluoranthene (C21.85)

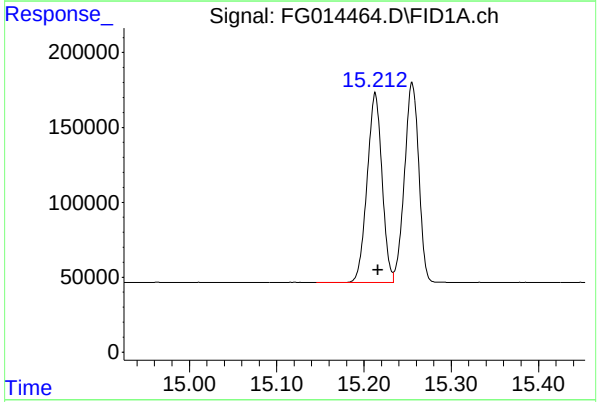
R.T.: 13.033 min
Delta R.T.: -0.003 min
Response: 1521234
Conc: 10.21 ug/ml



#13 Pyrene (C20.8)

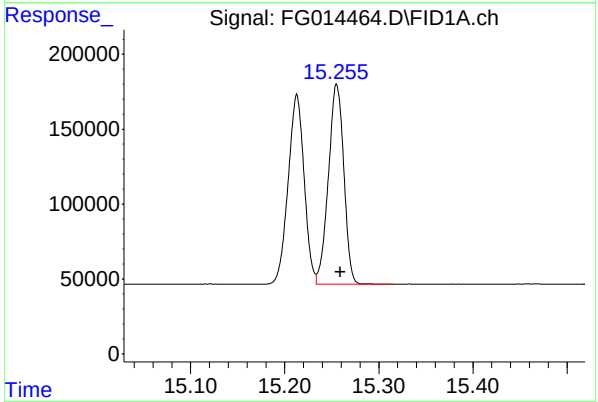
R.T.: 13.332 min
Delta R.T.: -0.002 min
Response: 1514851
Conc: 10.23 ug/ml

Instrument :
FID_G
ClientSampleId :
10 PPM AROMATIC HC STD4



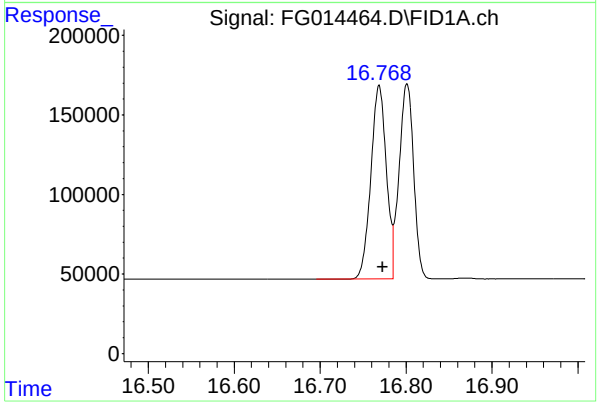
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.213 min
Delta R.T.: -0.003 min
Response: 1497055
Conc: 10.29 ug/ml



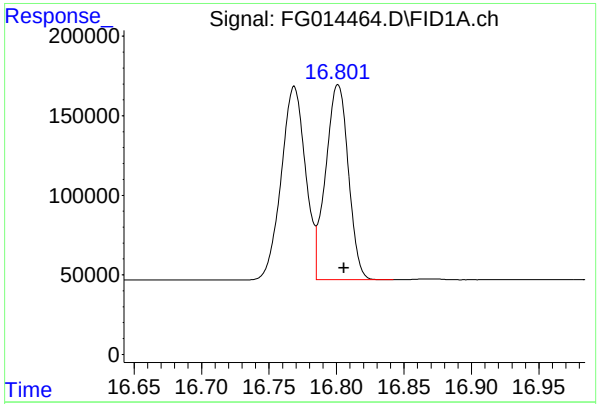
#15 Chrysene (C27.41)

R.T.: 15.255 min
Delta R.T.: -0.004 min
Response: 1519165
Conc: 10.31 ug/ml



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

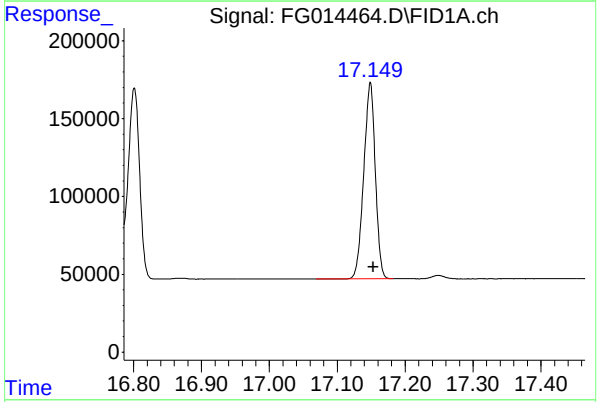
R.T.: 16.769 min
Delta R.T.: -0.004 min
Response: 1522637
Conc: 10.38 ug/ml



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

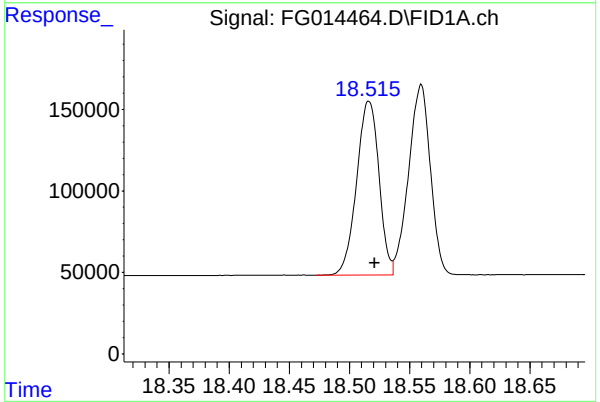
R.T.: 16.801 min
Delta R.T.: -0.004 min
Response: 1438990
Conc: 10.46 ug/ml

Instrument :
FID_G
ClientSampleId :
10 PPM AROMATIC HC STD4



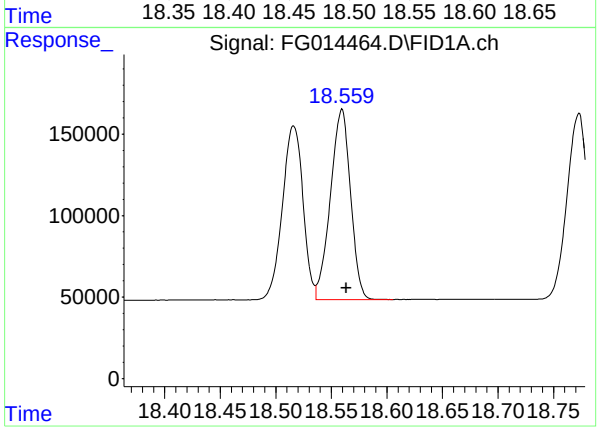
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.148 min
Delta R.T.: -0.005 min
Response: 1487369
Conc: 10.45 ug/ml



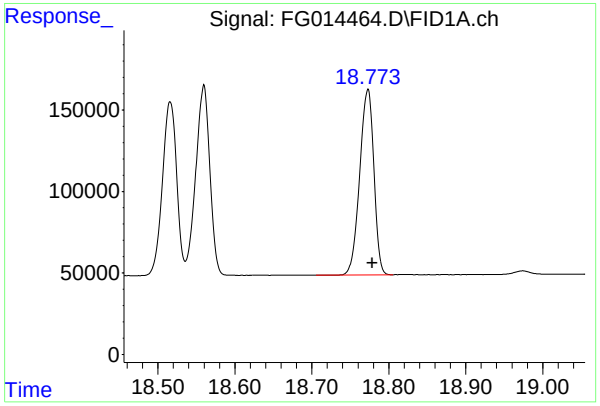
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.516 min
Delta R.T.: -0.005 min
Response: 1377258
Conc: 10.48 ug/ml



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

R.T.: 18.559 min
Delta R.T.: -0.004 min
Response: 1473248
Conc: 10.62 ug/ml



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

R.T.: 18.772 min
Delta R.T.: -0.006 mi
Response: 1455003
Conc: 10.52 ug/m

Instrument :
FID_G
ClientSampleId :
10 PPM AROMATIC HC STD4

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014464.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 20:38
Sample : 10 PPM AROMATIC HC STD4
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	4.637	4.572	4.689	BB	142815	1386579	91.06%	4.581%
2	6.309	6.239	6.342	BB	157089	1468810	96.46%	4.853%
3	7.406	7.345	7.469	BB	151041	1497470	98.35%	4.947%
4	8.035	7.959	8.095	BB	132699	1288399	84.62%	4.256%
5	8.711	8.672	8.789	BB	148018	1496000	98.25%	4.942%
6	8.910	8.842	8.943	BB	88921	883096	58.00%	2.917%
7	9.011	8.972	9.072	BB	148784	1485183	97.54%	4.907%
8	9.801	9.732	9.852	BB	146620	1486301	97.61%	4.910%
9	11.210	11.109	11.245	BV	145931	1510285	99.19%	4.990%
10	11.285	11.245	11.325	VV	141371	1443473	94.80%	4.769%
11	11.984	11.905	12.035	BB	142098	1516598	99.60%	5.010%
12	13.033	13.002	13.079	VB	138369	1521234	99.91%	5.026%
13	13.332	13.259	13.365	BV	137813	1514851	99.49%	5.005%
14	15.213	15.145	15.234	BV	125888	1497055	98.32%	4.946%
15	15.255	15.234	15.315	VB	133317	1519165	99.77%	5.019%
16	16.769	16.695	16.785	BV	121589	1522637	100.00%	5.030%
17	16.801	16.785	16.842	VV	122931	1438990	94.51%	4.754%
18	17.149	17.069	17.182	BB	126389	1487369	97.68%	4.914%
19	18.516	18.472	18.536	BV	106959	1377258	90.45%	4.550%
20	18.559	18.536	18.605	VB	116129	1473248	96.76%	4.867%
21	18.772	18.705	18.805	BB	113546	1455003	95.56%	4.807%

Sum of corrected areas: 30269006

Aromatic EPH 102124.M Tue Oct 22 04:44:20 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014465.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 21:06
Operator : YP\AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
5 PPM AROMATIC HC STD5

Integration File: autoint1.e
Quant Time: Oct 22 04:31:42 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:30:07 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...	8.035	663278	5.227 ug/ml
Spiked Amount	50.000		Recovery =	10.45%
6) S	2-Flurobiphenyl (SURR)	8.910	450642	5.170 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	10.34%
11) S	ortho-Terphenyl (SURR)	11.982	792217	5.301 ug/ml
Spiked Amount	50.000		Recovery =	10.60%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.637	704542	5.106 ug/ml
2) T	Naphthalene (C11.7)	6.309	746066	5.119 ug/ml
3) T	2-Methylnaphthalene (...	7.406	759174	5.119 ug/ml
5) T	Acenaphthylene (C15.06)	8.710	768511	5.225 ug/ml
7) T	Acenaphthene (C15.5)	9.010	758157	5.179 ug/ml
8) T	Flouorene (C16.55)	9.800	764083	5.220 ug/ml
9) T	Phenanthrene (C19.36)	11.209	778745	5.241 ug/ml
10) T	Anthracene (C19.43)	11.283	744946	5.258 ug/ml
12) T	Fluoranthene (C21.85)	13.032	791432	5.314 ug/ml
13) T	Pyrene (C20.8)	13.331	784846	5.302 ug/ml
14) T	Benzo[a]anthracene (C...	15.209	774953	5.326 ug/ml
15) T	Chrysene (C27.41)	15.252	787444	5.342 ug/ml
16) T	benzo[b]fluoranthene ...	16.766	783999	5.342 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.797	745122	5.415 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.145	765302	5.377 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.513	703096	5.349 ug/ml
20) T	Dibenz[a,h]anthracene...	18.555	772449	5.568 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.767	744897	5.383 ug/ml

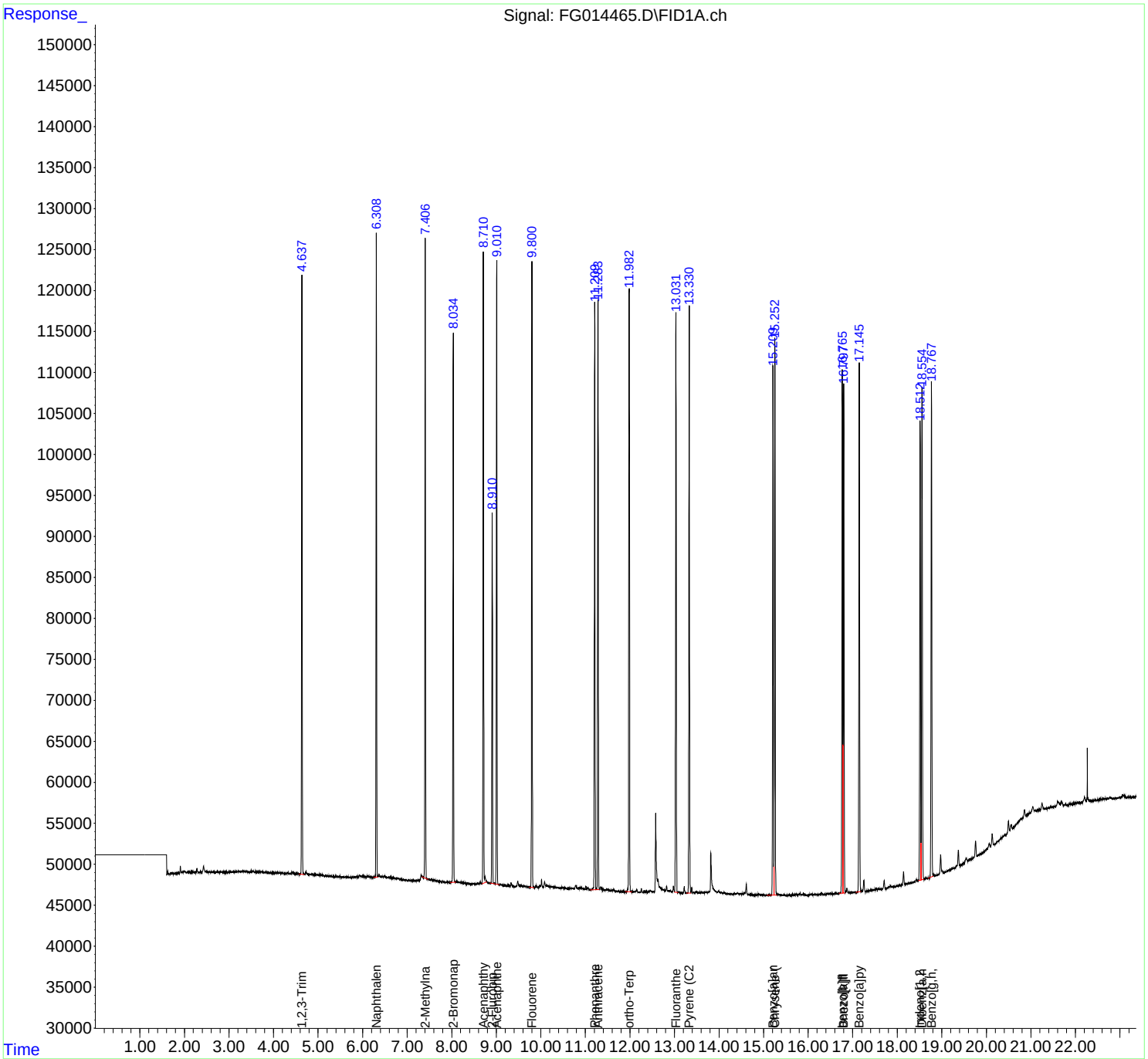
(f)=RT Delta > 1/2 Window (m)=manual int.

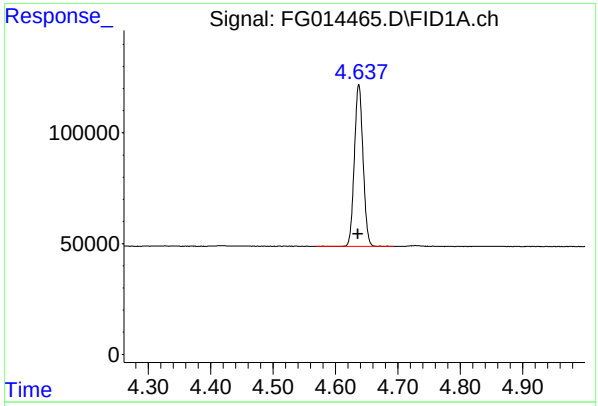
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014465.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 21:06
Operator : YP\AJ
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
5 PPM AROMATIC HC STD5

Integration File: autoint1.e
Quant Time: Oct 22 04:31:42 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:30:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

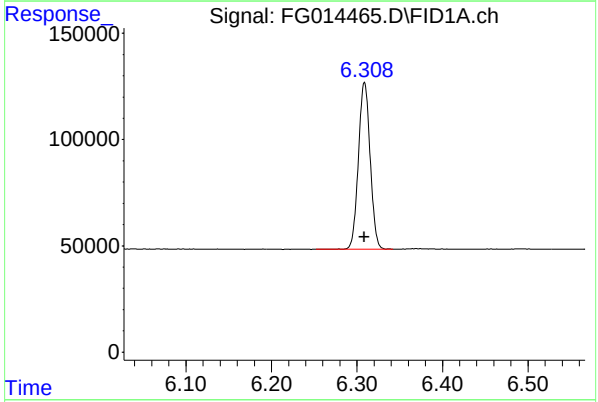




#1 1,2,3-Trimethylbenzene (C10.1)

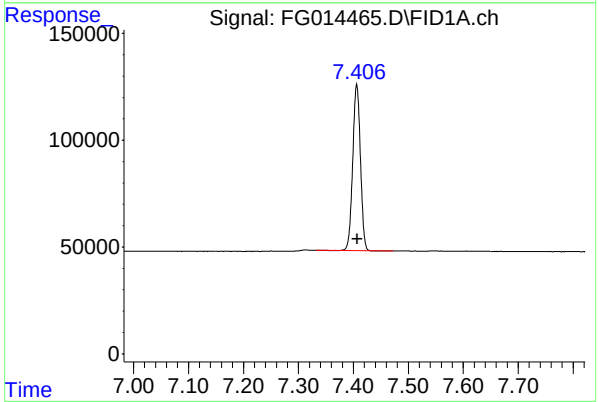
R.T.: 4.637 min
Delta R.T.: 0.001 min
Response: 704542
Conc: 5.11 ug/ml

Instrument :
FID_G
ClientSampleId :
5 PPM AROMATIC HC STD5



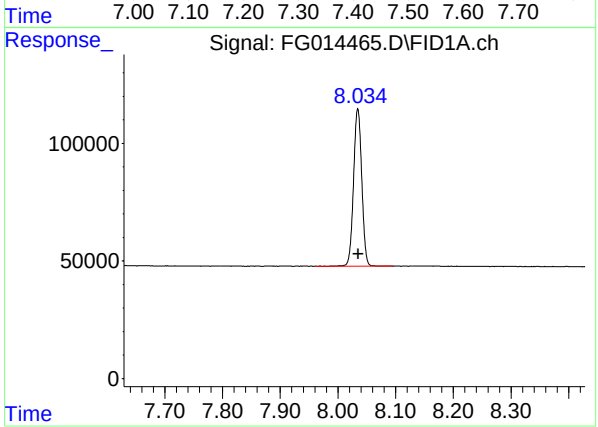
#2 Naphthalene (C11.7)

R.T.: 6.309 min
Delta R.T.: 0.000 min
Response: 746066
Conc: 5.12 ug/ml



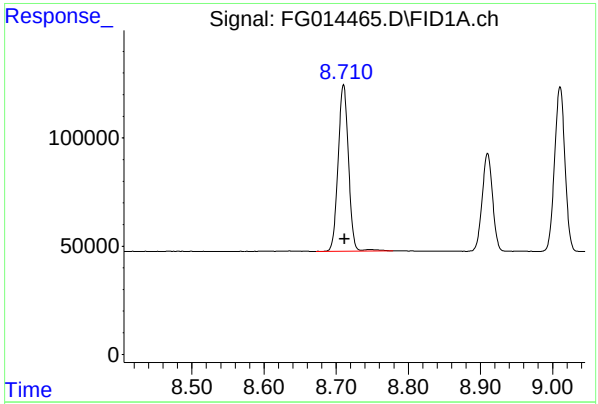
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.406 min
Delta R.T.: -0.001 min
Response: 759174
Conc: 5.12 ug/ml



#4 2-Bromonaphthalene (SURR)

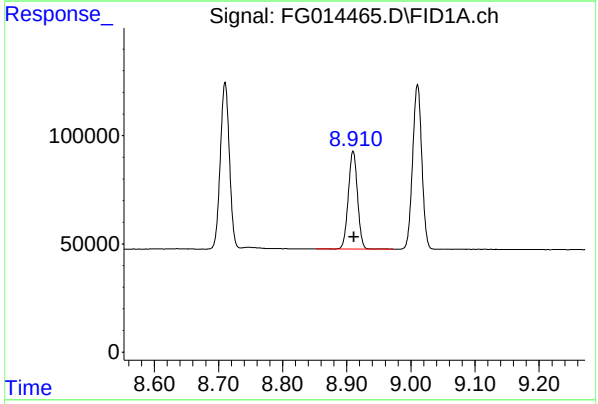
R.T.: 8.035 min
Delta R.T.: 0.000 min
Response: 663278
Conc: 5.23 ug/ml



#5 Acenaphthylene (C15.06)

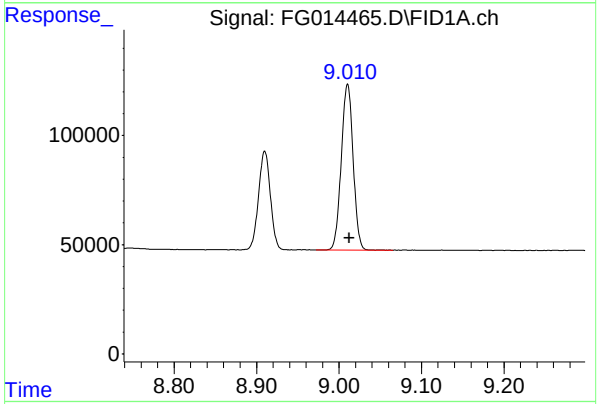
R.T.: 8.710 min
Delta R.T.: -0.001 min
Response: 768511
Conc: 5.23 ug/ml

Instrument :
FID_G
ClientSampleId :
5 PPM AROMATIC HC STD5



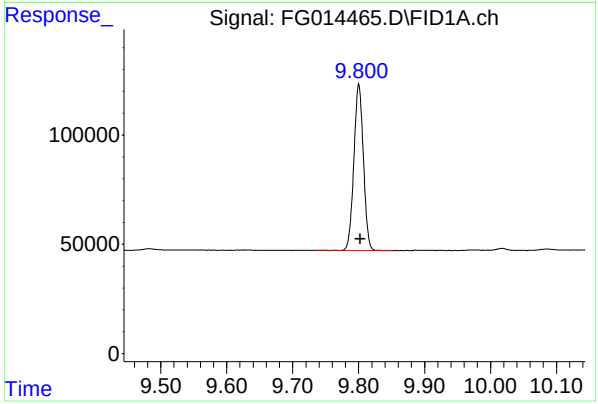
#6 2-Flurobiphenyl (SURR)

R.T.: 8.910 min
Delta R.T.: -0.001 min
Response: 450642
Conc: 5.17 ug/ml



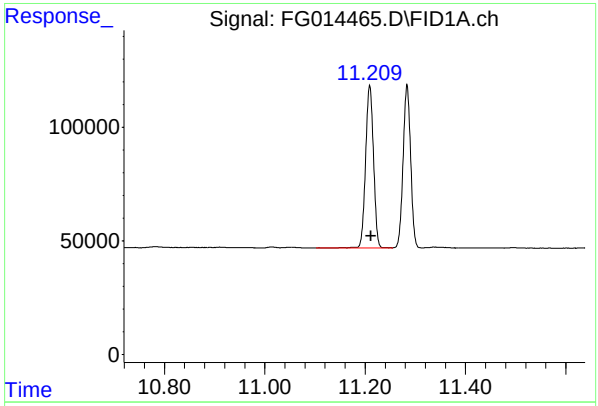
#7 Acenaphthene (C15.5)

R.T.: 9.010 min
Delta R.T.: -0.002 min
Response: 758157
Conc: 5.18 ug/ml



#8 Flouorene (C16.55)

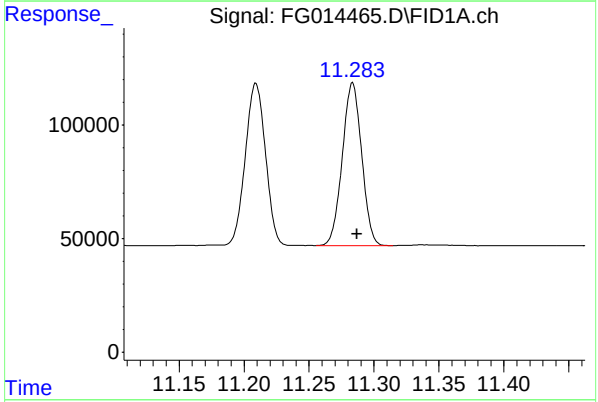
R.T.: 9.800 min
Delta R.T.: -0.002 min
Response: 764083
Conc: 5.22 ug/ml



#9 Phenanthrene (C19.36)

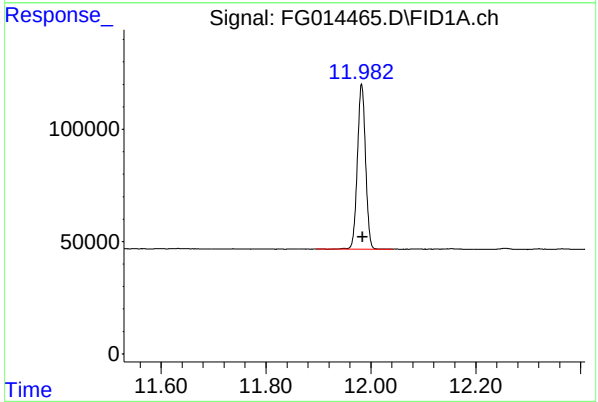
R.T.: 11.209 min
Delta R.T.: -0.003 min
Response: 778745
Conc: 5.24 ug/ml

Instrument :
FID_G
ClientSampleId :
5 PPM AROMATIC HC STD5



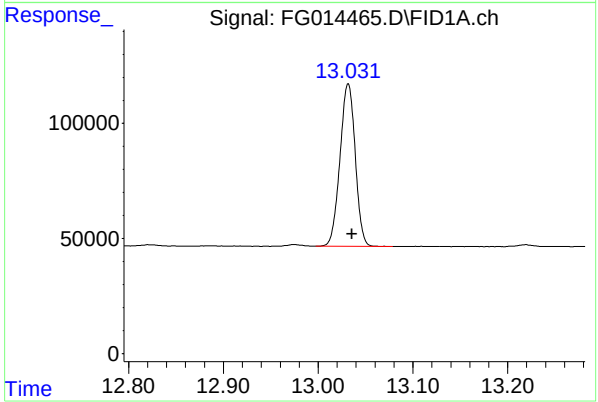
#10 Anthracene (C19.43)

R.T.: 11.283 min
Delta R.T.: -0.004 min
Response: 744946
Conc: 5.26 ug/ml



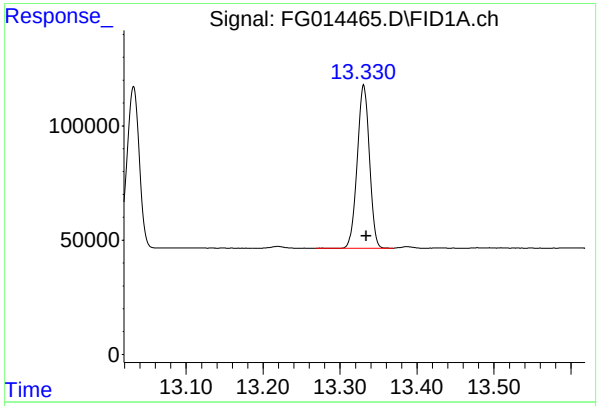
#11 ortho-Terphenyl (SURR)

R.T.: 11.982 min
Delta R.T.: -0.003 min
Response: 792217
Conc: 5.30 ug/ml



#12 Fluoranthene (C21.85)

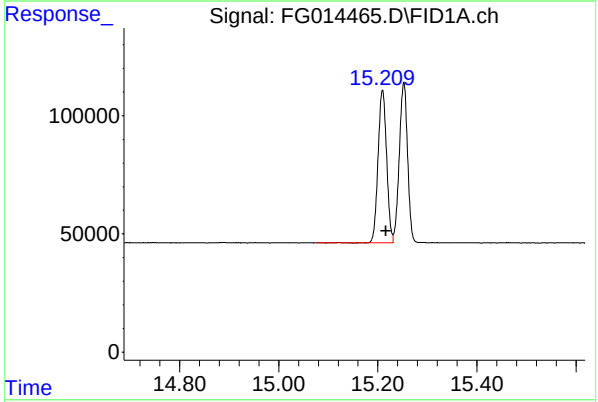
R.T.: 13.032 min
Delta R.T.: -0.004 min
Response: 791432
Conc: 5.31 ug/ml



#13 Pyrene (C20.8)

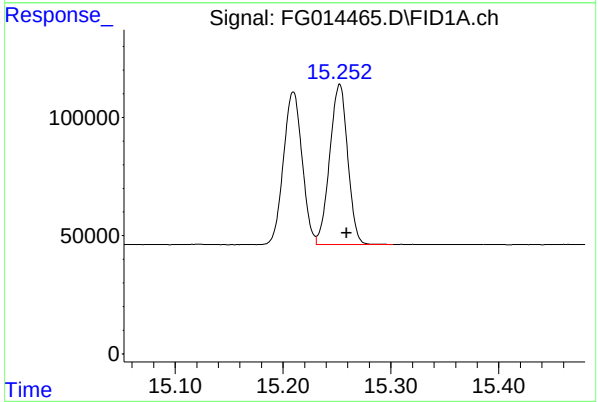
R.T.: 13.331 min
Delta R.T.: -0.004 min
Response: 784846
Conc: 5.30 ug/ml

Instrument :
FID_G
ClientSampleId :
5 PPM AROMATIC HC STD5



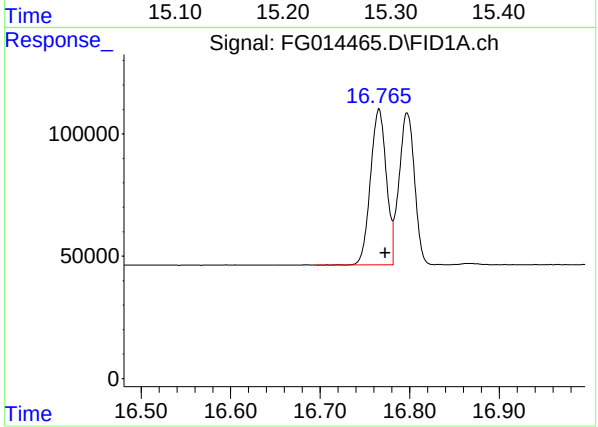
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.209 min
Delta R.T.: -0.007 min
Response: 774953
Conc: 5.33 ug/ml



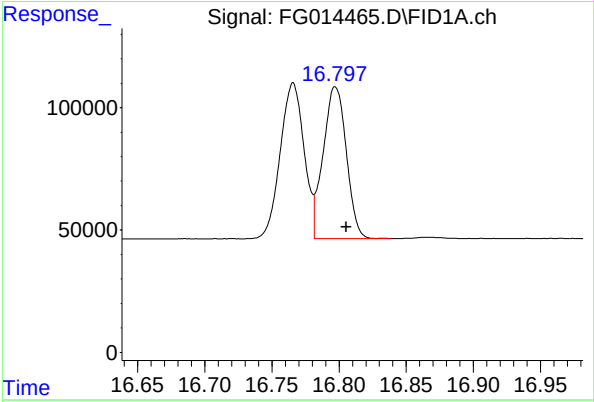
#15 Chrysene (C27.41)

R.T.: 15.252 min
Delta R.T.: -0.007 min
Response: 787444
Conc: 5.34 ug/ml



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

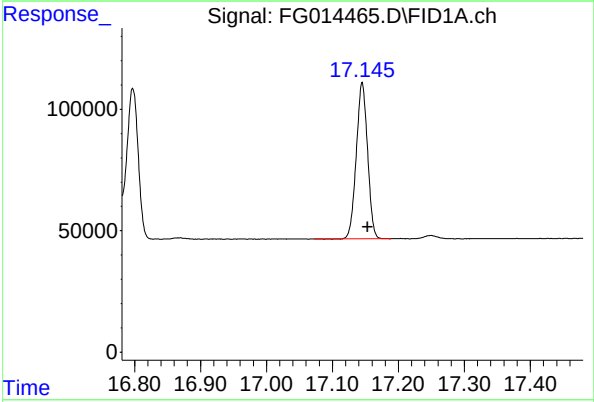
R.T.: 16.766 min
Delta R.T.: -0.007 min
Response: 783999
Conc: 5.34 ug/ml



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

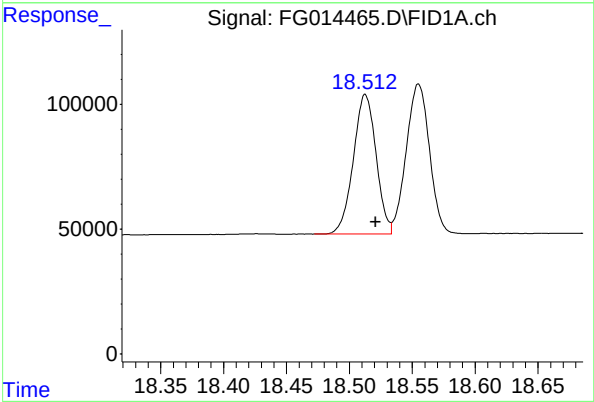
R.T.: 16.797 min
Delta R.T.: -0.008 min
Response: 745122
Conc: 5.42 ug/ml

Instrument :
FID_G
ClientSampleId :
5 PPM AROMATIC HC STD5



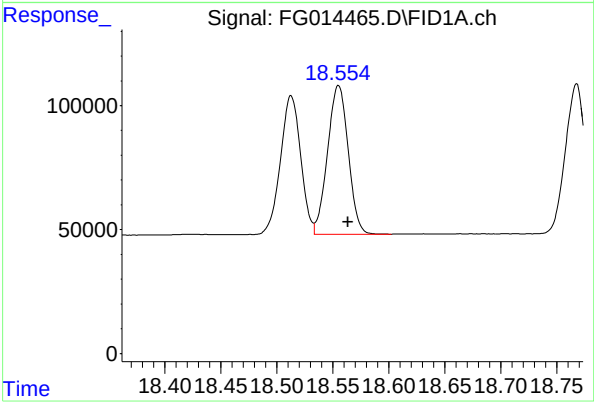
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.145 min
Delta R.T.: -0.008 min
Response: 765302
Conc: 5.38 ug/ml



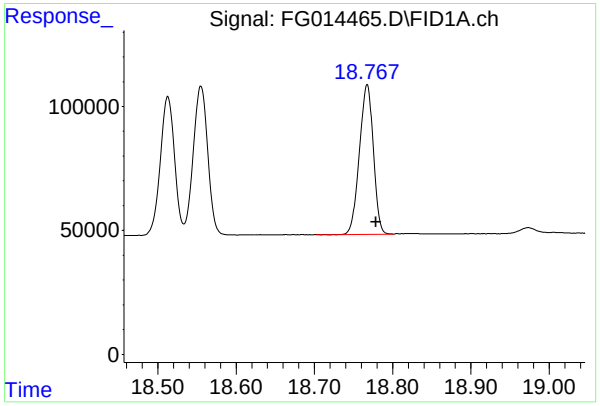
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.513 min
Delta R.T.: -0.008 min
Response: 703096
Conc: 5.35 ug/ml



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

R.T.: 18.555 min
Delta R.T.: -0.008 min
Response: 772449
Conc: 5.57 ug/ml



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

R.T.: 18.767 min
Delta R.T.: -0.011 mi
Response: 744897
Conc: 5.38 ug/m

Instrument :
FID_G
ClientSampleId :
5 PPM AROMATIC HC STD5

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014465.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 21:06
Sample : 5 PPM AROMATIC HC STD5
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	4.637	4.569	4.692	BB	72788	704542	88.93%	4.521%
2	6.309	6.252	6.342	BV	78481	746066	94.17%	4.787%
3	7.406	7.332	7.472	BB	77734	759174	95.83%	4.872%
4	8.035	7.962	8.095	BB	66873	663278	83.72%	4.256%
5	8.710	8.672	8.779	BB	76539	768511	97.01%	4.931%
6	8.910	8.852	8.972	BB	45171	450642	56.88%	2.892%
7	9.010	8.972	9.065	BB	75684	758157	95.70%	4.865%
8	9.800	9.735	9.852	BB	75361	764083	96.45%	4.903%
9	11.209	11.102	11.255	BV	71508	778745	98.30%	4.997%
10	11.283	11.255	11.315	VV	71107	744946	94.03%	4.780%
11	11.982	11.895	12.042	BB	73555	792217	100.00%	5.084%
12	13.032	12.997	13.079	VB	70801	791432	99.90%	5.079%
13	13.331	13.269	13.369	BV	70756	784846	99.07%	5.036%
14	15.209	15.075	15.231	BV	64598	774953	97.82%	4.973%
15	15.252	15.231	15.302	VB	67807	787444	99.40%	5.053%
16	16.766	16.695	16.781	BV	63664	783999	98.96%	5.031%
17	16.797	16.781	16.839	VV	61910	745122	94.06%	4.781%
18	17.145	17.072	17.189	BB	64356	765302	96.60%	4.911%
19	18.513	18.472	18.533	BV	56013	703096	88.75%	4.512%
20	18.555	18.533	18.602	VB	60139	772449	97.50%	4.957%
21	18.767	18.702	18.801	BB	60813	744897	94.03%	4.780%

Sum of corrected areas: 15583899

Aromatic EPH 102124.M Tue Oct 22 04:44:37 2024

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014466.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 21:36
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Oct 22 04:39:01 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 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...	8.035	2538034	20.218 ug/ml
Spiked Amount	50.000		Recovery =	40.44%
6) S	2-Flurobiphenyl (SURR)	8.911	1741970	20.224 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	40.45%
11) S	ortho-Terphenyl (SURR)	11.984	2986790	20.173 ug/ml
Spiked Amount	50.000		Recovery =	40.35%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.636	2776176	20.490 ug/ml
2) T	Naphthalene (C11.7)	6.309	2926259	20.392 ug/ml
3) T	2-Methylnaphthalene (...	7.407	2973403	20.359 ug/ml
5) T	Acenaphthylene (C15.06)	8.712	2938462	20.182 ug/ml
7) T	Acenaphthene (C15.5)	9.012	2927069	20.226 ug/ml
8) T	Flouorene (C16.55)	9.803	2923118	20.177 ug/ml
9) T	Phenanthrene (C19.36)	11.212	2963901	20.137 ug/ml
10) T	Anthracene (C19.43)	11.286	2825349	20.148 ug/ml
12) T	Fluoranthene (C21.85)	13.036	2979972	20.149 ug/ml
13) T	Pyrene (C20.8)	13.334	2959438	20.130 ug/ml
14) T	Benzo[a]anthracene (C...	15.215	2917267	20.144 ug/ml
15) T	Chrysene (C27.41)	15.259	2952428	20.128 ug/ml
16) T	benzo[b]fluoranthene ...	16.773	2934808	19.954 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.805	2758651	19.990 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.152	2845028	19.949 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.521	2607892	19.539 ug/ml
20) T	Dibenz[a,h]anthracene...	18.563	2764875	19.812 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.777	2743414	19.719 ug/ml

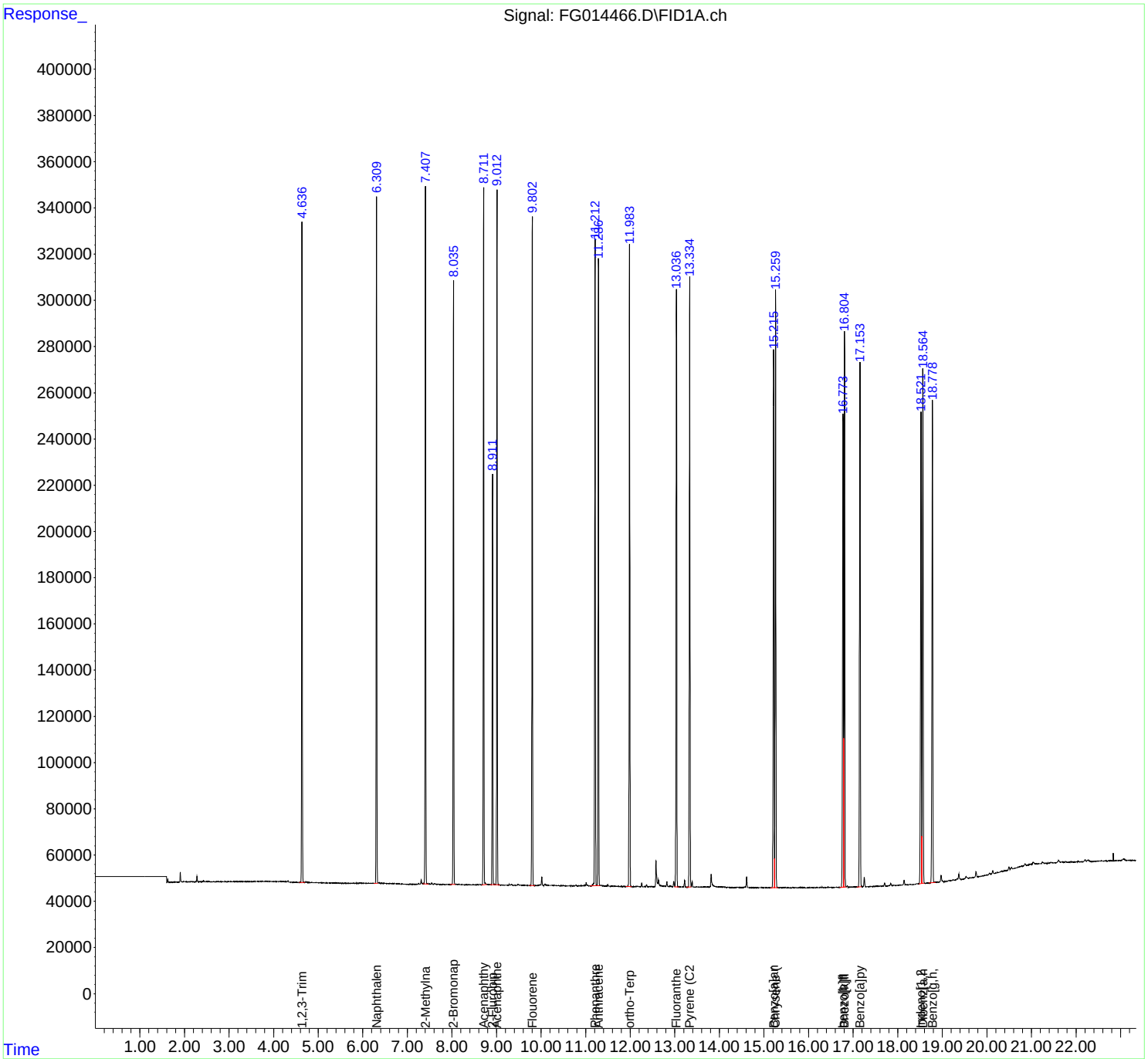
(f)=RT Delta > 1/2 Window (m)=manual int.

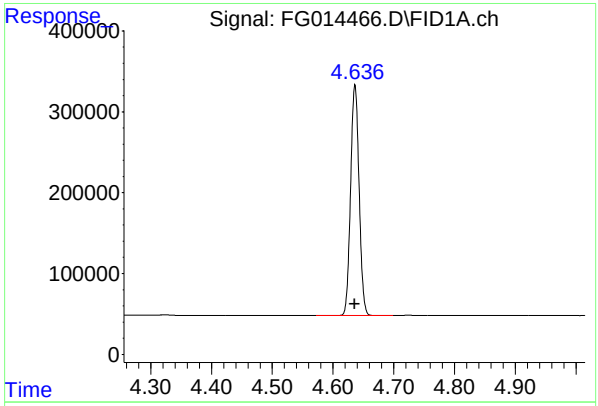
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014466.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 21:36
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Integration File: autoint1.e
Quant Time: Oct 22 04:39:01 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

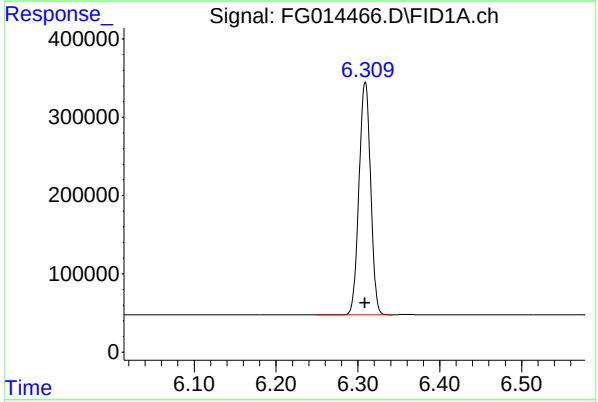




#1 1,2,3-Trimethylbenzene (C10.1)

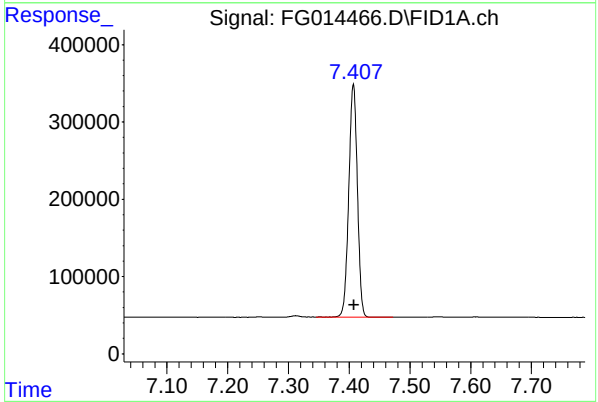
R.T.: 4.636 min
Delta R.T.: 0.000 min
Response: 2776176
Conc: 20.49 ug/ml

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD ICV



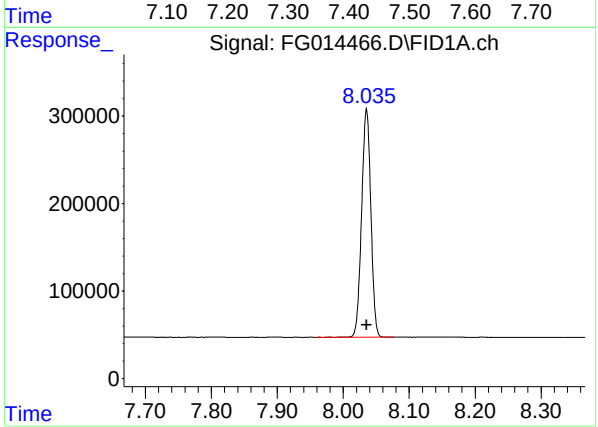
#2 Naphthalene (C11.7)

R.T.: 6.309 min
Delta R.T.: 0.000 min
Response: 2926259
Conc: 20.39 ug/ml



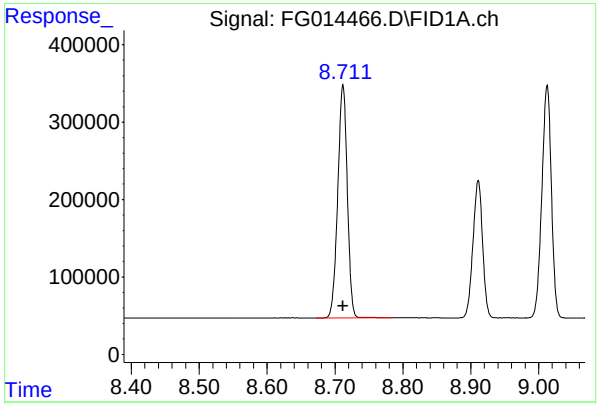
#3 2-Methylnaphthalene (C12.89)

R.T.: 7.407 min
Delta R.T.: 0.000 min
Response: 2973403
Conc: 20.36 ug/ml



#4 2-Bromonaphthalene (SURR)

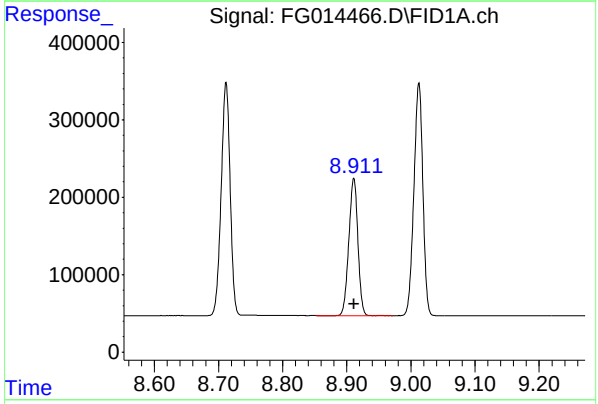
R.T.: 8.035 min
Delta R.T.: 0.000 min
Response: 2538034
Conc: 20.22 ug/ml



#5 Acenaphthylene (C15.06)

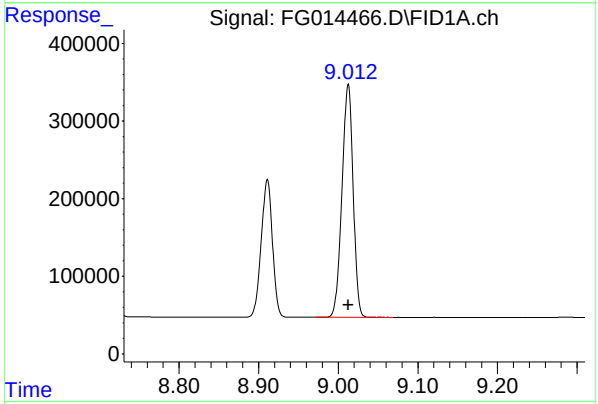
R.T.: 8.712 min
Delta R.T.: 0.000 min
Response: 2938462
Conc: 20.18 ug/ml

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD ICV



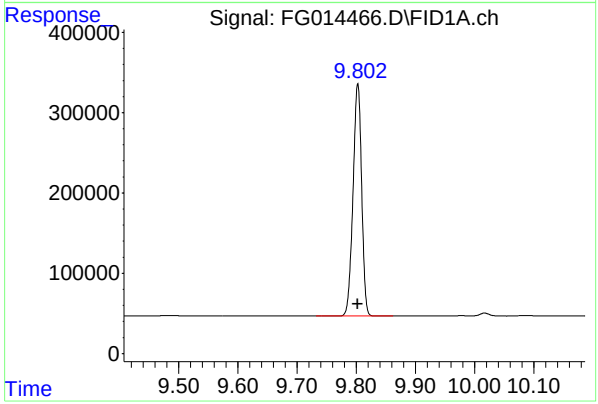
#6 2-Flurobiphenyl (SURR)

R.T.: 8.911 min
Delta R.T.: 0.000 min
Response: 1741970
Conc: 20.22 ug/ml



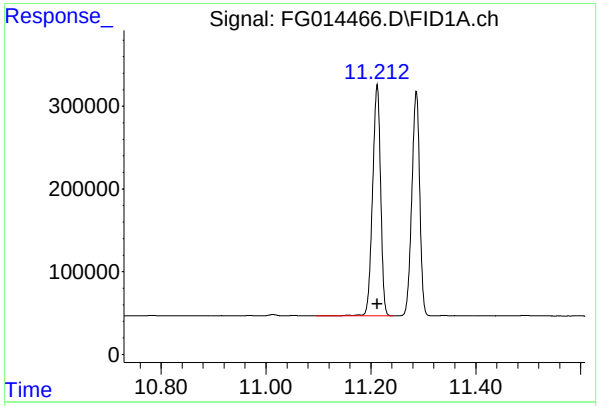
#7 Acenaphthene (C15.5)

R.T.: 9.012 min
Delta R.T.: 0.000 min
Response: 2927069
Conc: 20.23 ug/ml



#8 Flouorene (C16.55)

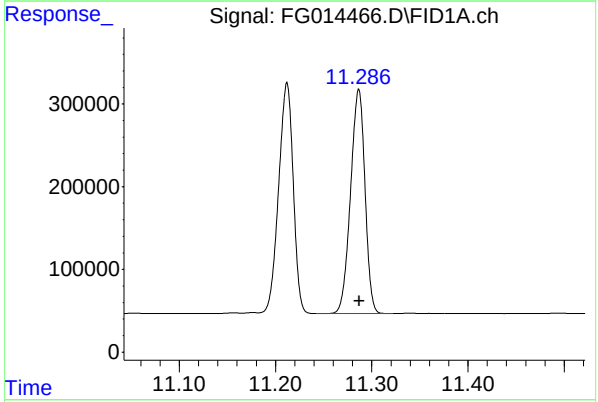
R.T.: 9.803 min
Delta R.T.: 0.000 min
Response: 2923118
Conc: 20.18 ug/ml



#9 Phenanthrene (C19.36)

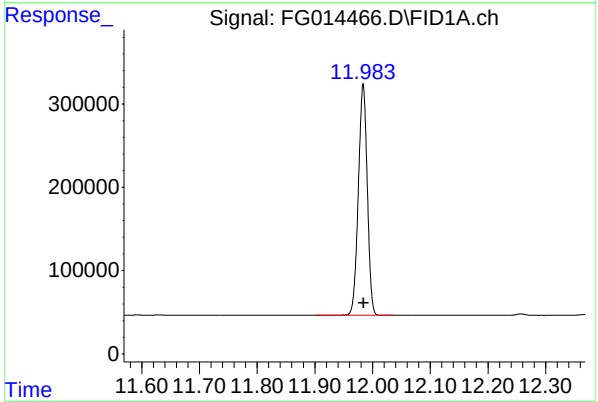
R.T.: 11.212 min
Delta R.T.: 0.000 min
Response: 2963901
Conc: 20.14 ug/ml

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD ICV



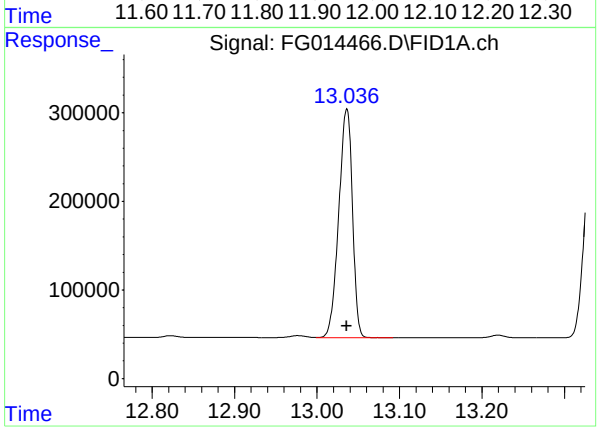
#10 Anthracene (C19.43)

R.T.: 11.286 min
Delta R.T.: 0.000 min
Response: 2825349
Conc: 20.15 ug/ml



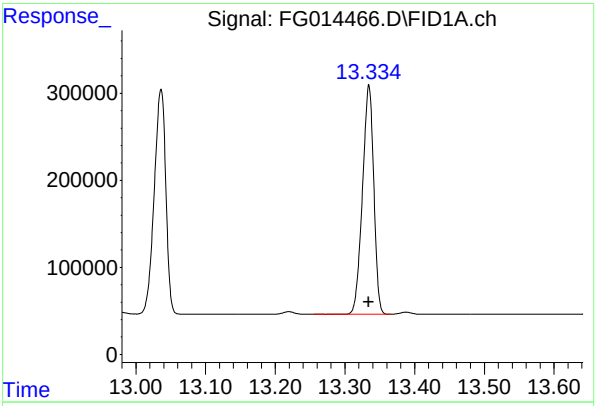
#11 ortho-Terphenyl (SURR)

R.T.: 11.984 min
Delta R.T.: -0.001 min
Response: 2986790
Conc: 20.17 ug/ml



#12 Fluoranthene (C21.85)

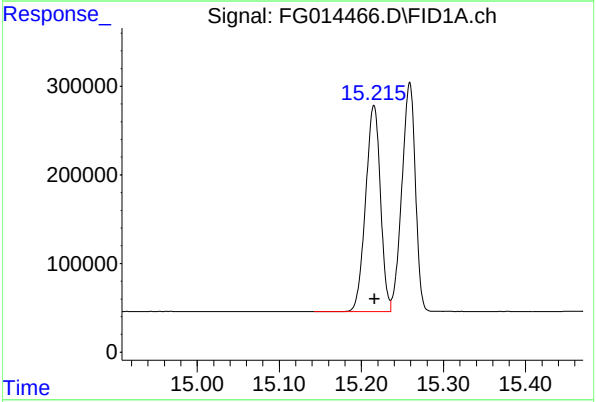
R.T.: 13.036 min
Delta R.T.: 0.000 min
Response: 2979972
Conc: 20.15 ug/ml



#13 Pyrene (C20.8)

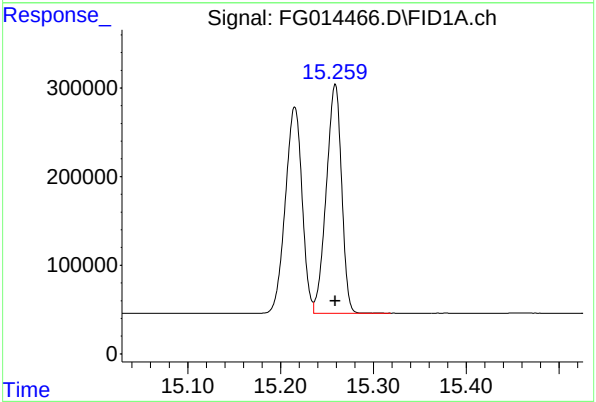
R.T.: 13.334 min
Delta R.T.: 0.000 min
Response: 2959438
Conc: 20.13 ug/ml

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD ICV



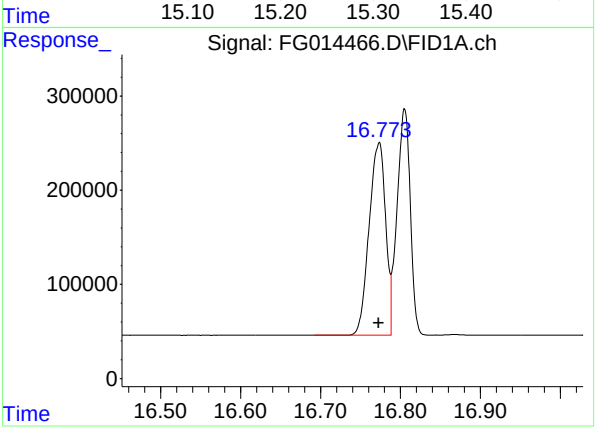
#14 Benzo[a]anthracene (C26.37)

R.T.: 15.215 min
Delta R.T.: 0.000 min
Response: 2917267
Conc: 20.14 ug/ml



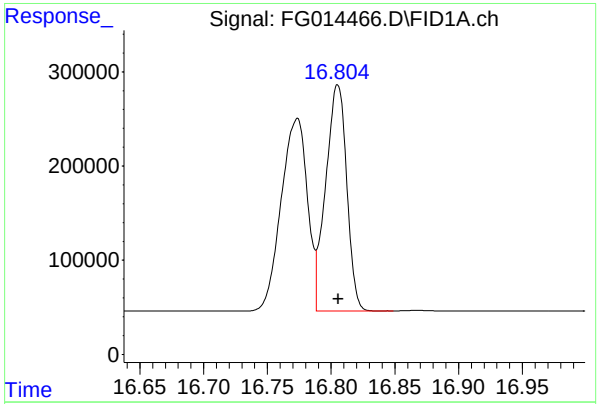
#15 Chrysene (C27.41)

R.T.: 15.259 min
Delta R.T.: 0.000 min
Response: 2952428
Conc: 20.13 ug/ml



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

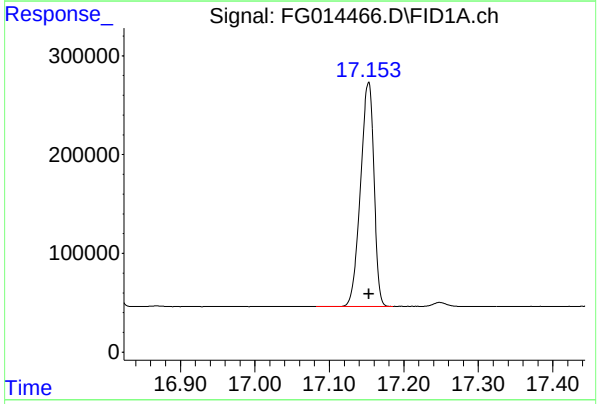
R.T.: 16.773 min
Delta R.T.: 0.000 min
Response: 2934808
Conc: 19.95 ug/ml



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

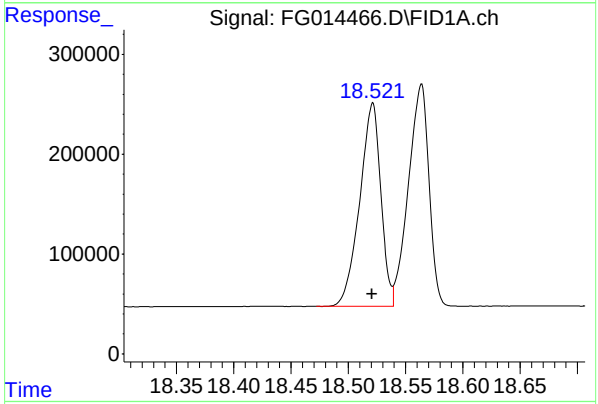
R.T.: 16.805 min
Delta R.T.: 0.000 min
Response: 2758651
Conc: 19.99 ug/ml

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD ICV



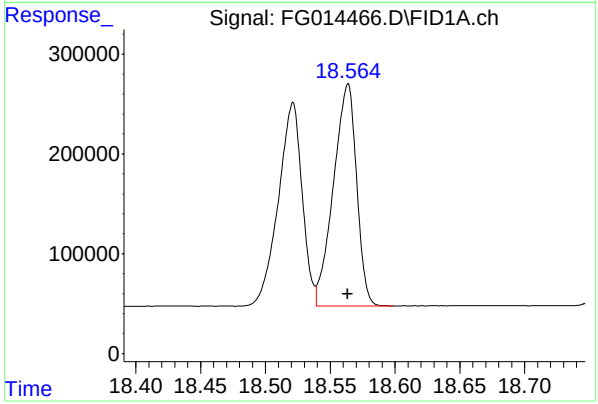
#18 Benzo[a]pyrene (C31.34)

R.T.: 17.152 min
Delta R.T.: 0.000 min
Response: 2845028
Conc: 19.95 ug/ml



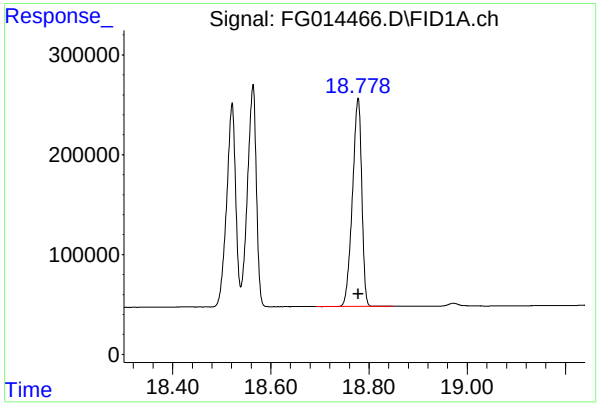
#19 Indeno[1,2,3-cd]pyrene (C35.01)

R.T.: 18.521 min
Delta R.T.: 0.000 min
Response: 2607892
Conc: 19.54 ug/ml



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

R.T.: 18.563 min
Delta R.T.: 0.000 min
Response: 2764875
Conc: 19.81 ug/ml



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

R.T.: 18.777 min
Delta R.T.: -0.001 mi
Response: 2743414
Conc: 19.72 ug/m

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD ICV

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG102124AR\
Data File : FG014466.D
Signal(s) : FID1A.ch
Acq On : 21 Oct 2024 21:36
Sample : 20 PPM AROMATIC HC STD ICV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	4.636	4.572	4.699	BB	284801	2776176	92.95%	4.707%
2	6.309	6.249	6.343	BV	297470	2926259	97.97%	4.961%
3	7.407	7.345	7.472	BB	299089	2973403	99.55%	5.041%
4	8.035	7.959	8.075	BB	260487	2538034	84.98%	4.303%
5	8.712	8.672	8.785	BB	301546	2938462	98.38%	4.982%
6	8.911	8.852	8.972	BB	178196	1741970	58.32%	2.953%
7	9.012	8.972	9.069	BB	300277	2927069	98.00%	4.962%
8	9.803	9.732	9.862	BB	289016	2923118	97.87%	4.956%
9	11.212	11.095	11.242	BV	279720	2963901	99.23%	5.025%
10	11.286	11.242	11.322	PV	269271	2825349	94.59%	4.790%
11	11.984	11.902	12.035	BB	276053	2986790	100.00%	5.064%
12	13.036	12.999	13.092	VB	258651	2979972	99.77%	5.052%
13	13.334	13.255	13.366	BV	263923	2959438	99.08%	5.017%
14	15.215	15.142	15.236	BV	233329	2917267	97.67%	4.946%
15	15.259	15.236	15.319	VB	259412	2952428	98.85%	5.005%
16	16.773	16.692	16.788	BV	203026	2934808	98.26%	4.976%
17	16.805	16.788	16.849	VV	241230	2758651	92.36%	4.677%
18	17.152	17.082	17.185	BB	226729	2845028	95.25%	4.823%
19	18.521	18.472	18.539	BV	206101	2607892	87.31%	4.421%
20	18.563	18.539	18.599	VB	219284	2764875	92.57%	4.687%
21	18.777	18.692	18.849	BB	210356	2743414	91.85%	4.651%
			Sum of corrected areas:			58984303		

Aromatic EPH 102124.M Tue Oct 22 04:45:09 2024

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

Continuing Calibration Report for SequenceID : FC103024AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FC067564.D**						
Aliphatic C9-C12	6772070.000	60.000	3.174	6.453	112867.833	135469.641	16.684
Aliphatic C12-C16	4527987.000	40.000	6.454	9.842	113199.675	131681.730	14.035
Aliphatic C16-C21	6666175.000	60.000	9.843	13.199	111102.917	127235.092	12.679
Aliphatic C21-C28	9423357.000	80.000	13.200	16.852	117791.963	120090.398	1.914
Aliphatic C28-C40	12453717.000	120.000	16.853	21.694	103780.975	101093.195	-2.659
Aliphatic EPH	39843306.000	360.000	3.174	21.694	110675.850	118799.912	6.838

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

Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	30 Oct 2024 14:26
Client Sample ID:		Operator:	YP/AJ
Data file:	FC067564.D	Misc:	
Instrument:	FID_C	ALS Vial:	3
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.174	6.453	6772070.000	60.000	ug/ml
Aliphatic C12-C16	6.454	9.842	4527987.000	40.000	ug/ml
Aliphatic C16-C21	9.843	13.199	6666175.000	60.000	ug/ml
Aliphatic C21-C28	13.200	16.852	9423357.000	80.000	ug/ml
Aliphatic C28-C40	16.853	21.694	12453717.000	120.000	ug/ml
Aliphatic EPH	3.174	21.694	39843306.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067564.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 14:26
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Nov 01 00:18:41 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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)	11.493	2500260	17.040 ug/ml
Spiked Amount	50.000		Recovery =	34.08%
12)	S 1-chlorooctadecane (S...	12.931	1867456	17.293 ug/ml
Spiked Amount	50.000		Recovery =	34.59%
	Target Compounds			
1)	T n-Nonane (C9)	3.274	2189723	16.254 ug/ml
2)	T n-Decane (C10)	4.338	2283987	16.764 ug/ml
3)	T A~Naphthalene (C11.7)	5.915	2475244	16.703 ug/ml
4)	T n-Dodecane (C12)	6.353	2298360	16.969 ug/ml
5)	T A~2-methylnaphthalene...	6.970	2365562	16.751 ug/ml
6)	T n-Tetradecane (C14)	8.145	2245414	17.107 ug/ml
7)	T n-Hexadecane (C16)	9.742	2282573	17.279 ug/ml
8)	T n-Octadecane (C18)	11.182	2303119	17.433 ug/ml
10)	T n-Eicosane (C20)	12.488	2209827	17.514 ug/ml
11)	T n-Heneicosane (C21)	13.099	2153229	17.447 ug/ml
13)	T n-Docosane (C22)	13.684	2200561	17.971 ug/ml
14)	T n-Tetracosane (C24)	14.785	2305202	19.018 ug/ml
15)	T n-Hexacosane (C26)	15.804	2403970	20.192 ug/ml
16)	T n-Octacosane (C28)	16.752	2513624	21.366 ug/ml
17)	T n-Tricontane (C30)	17.637	2654722	21.963 ug/ml
18)	T n-Dotriacontane (C32)	18.470	2624367	22.180 ug/ml
19)	T n-Tetratriacontane (C34)	19.251	2209314	21.096 ug/ml
20)	T n-Hexatriacontane (C36)	19.990	1791934	19.686 ug/ml
21)	T n-Octatriacontane (C38)	20.711	1632068	18.846 ug/ml
22)	T n-Tetracontane (C40)	21.594	1541312	18.131 ug/ml

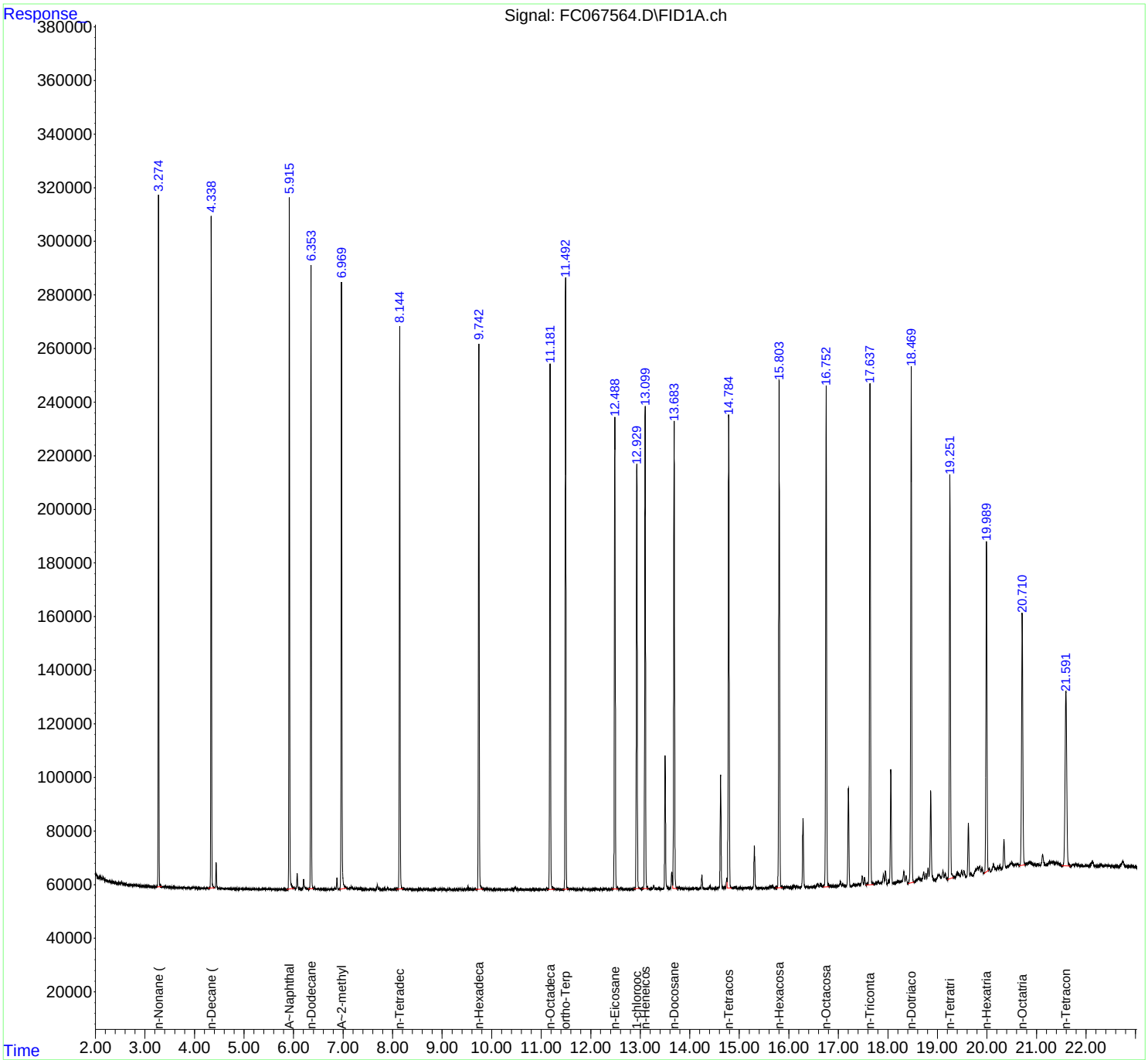
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067564.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 14:26
Operator : YP/AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Nov 01 00:18:41 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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\FC103024AL\
Data File : FC067564.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 14:26
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.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	257741	2189723	82.48%	4.464%
2	4.338	4.279	4.404	BB	249467	2283987	86.03%	4.656%
3	5.915	5.857	6.014	BB	258409	2475244	93.24%	5.046%
4	6.353	6.290	6.404	BB	232896	2298360	86.58%	4.686%
5	6.970	6.924	7.074	BB	225856	2365562	89.11%	4.823%
6	8.145	8.085	8.210	BB	209778	2245414	84.58%	4.578%
7	9.742	9.684	9.827	BB	202367	2282573	85.98%	4.653%
8	11.182	11.134	11.262	BB	195237	2303119	86.76%	4.695%
9	11.493	11.429	11.554	BB	227439	2500260	94.18%	5.097%
10	12.488	12.422	12.557	BB	175950	2209827	83.24%	4.505%
11	12.931	12.867	12.984	BB	156826	1867456	70.34%	3.807%
12	13.099	13.030	13.162	BB	178514	2153229	81.11%	4.390%
13	13.684	13.654	13.750	VB	173845	2200561	82.89%	4.486%
14	14.785	14.754	14.849	VB	176261	2305202	86.83%	4.700%
15	15.804	15.734	15.875	BB	189618	2403970	90.55%	4.901%
16	16.752	16.687	16.822	BB	186453	2513624	94.69%	5.124%
17	17.637	17.560	17.717	PB	186545	2654722	100.00%	5.412%
18	18.470	18.405	18.530	PB	190615	2624367	98.86%	5.350%
19	19.251	19.202	19.330	BB	150323	2209314	83.22%	4.504%
20	19.990	19.945	20.029	BV	122319	1791934	67.50%	3.653%
21	20.711	20.652	20.774	BB	93555	1632068	61.48%	3.327%
22	21.594	21.512	21.694	BB	64651	1541312	58.06%	3.142%
			Sum of corrected areas:			49051826		

Aliphatic EPH 102324.M Fri Nov 01 00:46:07 2024

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

Continuing Calibration Report for SequenceID : FC103024AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FC067576.D**						
Aliphatic C9-C12	7768270.000	60.000	3.174	6.453	129471.167	135469.641	4.428
Aliphatic C12-C16	5095387.000	40.000	6.454	9.842	127384.675	131681.730	3.263
Aliphatic C16-C21	7442275.000	60.000	9.843	13.199	124037.917	127235.092	2.513
Aliphatic C21-C28	9491203.000	80.000	13.200	16.852	118640.038	120090.398	1.208
Aliphatic C28-C40	12709973.000	120.000	16.853	21.694	105916.442	101093.195	-4.771
Aliphatic EPH	42507108.000	360.000	3.174	21.694	118075.300	118799.912	0.610

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

Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	30 Oct 2024 22:56
Client Sample ID:		Operator:	YP/AJ
Data file:	FC067576.D	Misc:	
Instrument:	FID_C	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.174	6.453	7768270.000	60.000	ug/ml
Aliphatic C12-C16	6.454	9.842	5095387.000	40.000	ug/ml
Aliphatic C16-C21	9.843	13.199	7442275.000	60.000	ug/ml
Aliphatic C21-C28	13.200	16.852	9491203.000	80.000	ug/ml
Aliphatic C28-C40	16.853	21.694	12709973.000	120.000	ug/ml
Aliphatic EPH	3.174	21.694	42507108.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067576.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 22:56
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: Nov 01 00:20:45 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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)	11.492	2814227	19.179 ug/ml
	Spiked Amount 50.000		Recovery = 38.36%	
12)	S 1-chlorooctadecane (S...	12.930	2094412	19.395 ug/ml
	Spiked Amount 50.000		Recovery = 38.79%	
	Target Compounds			
1)	T n-Nonane (C9)	3.273	2557917	18.987 ug/ml
2)	T n-Decane (C10)	4.338	2607529	19.138 ug/ml
3)	T A~Naphthalene (C11.7)	5.915	2811086	18.970 ug/ml
4)	T n-Dodecane (C12)	6.353	2602824	19.217 ug/ml
5)	T A~2-methylnaphthalene...	6.969	2688730	19.039 ug/ml
6)	T n-Tetradecane (C14)	8.144	2530499	19.278 ug/ml
7)	T n-Hexadecane (C16)	9.742	2564888	19.416 ug/ml
8)	T n-Octadecane (C18)	11.181	2577223	19.508 ug/ml
10)	T n-Eicosane (C20)	12.488	2455253	19.459 ug/ml
11)	T n-Heneicosane (C21)	13.099	2409799	19.526 ug/ml
13)	T n-Docosane (C22)	13.684	2388124	19.503 ug/ml
14)	T n-Tetracosane (C24)	14.785	2374063	19.586 ug/ml
15)	T n-Hexacosane (C26)	15.804	2353265	19.766 ug/ml
16)	T n-Octacosane (C28)	16.752	2375751	20.194 ug/ml
17)	T n-Tricontane (C30)	17.638	2538052	20.998 ug/ml
18)	T n-Dotriacontane (C32)	18.469	2541861	21.483 ug/ml
19)	T n-Tetratriacontane (C34)	19.251	2238259	21.372 ug/ml
20)	T n-Hexatriacontane (C36)	19.988	1903661	20.913 ug/ml
21)	T n-Octatriacontane (C38)	20.710	1779881	20.552 ug/ml
22)	T n-Tetracontane (C40)	21.593	1708259	20.095 ug/ml

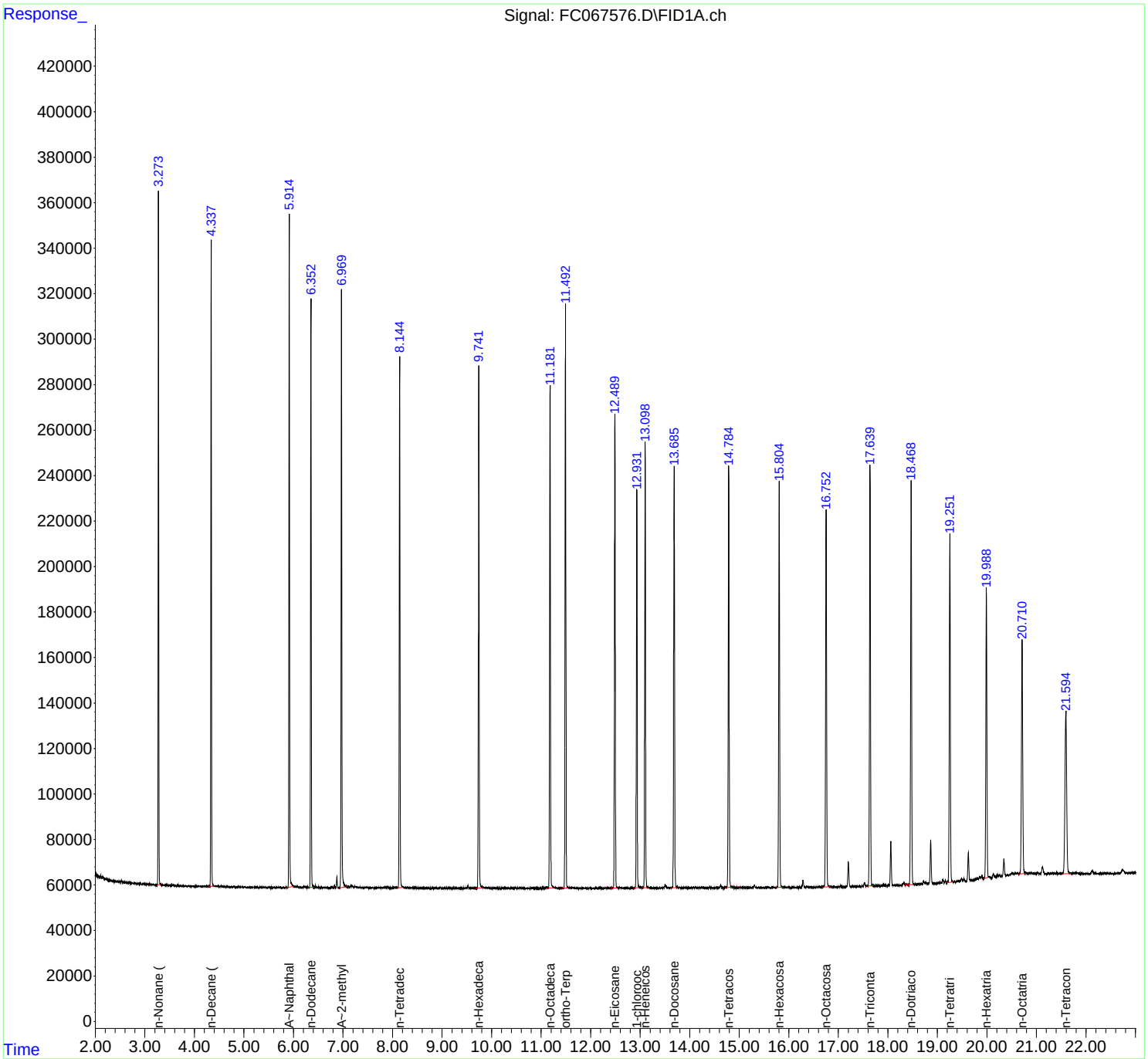
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067576.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 22:56
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: Nov 01 00:20:45 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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\FC103024AL\
Data File : FC067576.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 22:56
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 102324.M
Title : GC Extractables

Signal : FID1A.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.273	3.245	3.332	BB	304949	2557917	90.89%	4.834%
2	4.338	4.278	4.408	BB	284460	2607529	92.66%	4.928%
3	5.915	5.863	6.003	BB	293317	2811086	99.89%	5.312%
4	6.353	6.293	6.418	BB	258308	2602824	92.49%	4.919%
5	6.969	6.922	7.080	BB	262929	2688730	95.54%	5.081%
6	8.144	8.088	8.213	BB	233497	2530499	89.92%	4.782%
7	9.742	9.682	9.828	BB	229773	2564888	91.14%	4.847%
8	11.181	11.137	11.263	BB	219692	2577223	91.58%	4.870%
9	11.492	11.425	11.550	BB	257170	2814227	100.00%	5.318%
10	12.488	12.422	12.550	BB	207325	2455253	87.24%	4.640%
11	12.930	12.872	12.983	BB	174756	2094412	74.42%	3.958%
12	13.099	13.030	13.168	BB	196119	2409799	85.63%	4.554%
13	13.684	13.620	13.752	BB	185621	2388124	84.86%	4.513%
14	14.785	14.720	14.847	BB	184061	2374063	84.36%	4.487%
15	15.804	15.737	15.875	BB	177399	2353265	83.62%	4.447%
16	16.752	16.675	16.833	BB	165708	2375751	84.42%	4.490%
17	17.638	17.563	17.705	BB	184497	2538052	90.19%	4.796%
18	18.469	18.345	18.525	VB	177667	2541861	90.32%	4.804%
19	19.251	19.185	19.315	BB	153286	2238259	79.53%	4.230%
20	19.988	19.932	20.028	BB	127800	1903661	67.64%	3.598%
21	20.710	20.647	20.785	BB	102852	1779881	63.25%	3.364%
22	21.593	21.520	21.697	BB	70620	1708259	60.70%	3.228%
			Sum of corrected areas:			52915563		

Aliphatic EPH 102324.M Fri Nov 01 00:51:41 2024

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

Continuing Calibration Report for SequenceID : FC103024AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FC067588.D**						
Aliphatic C9-C12	7778450.000	60.000	3.174	6.453	129640.833	135469.641	4.303
Aliphatic C12-C16	5094446.000	40.000	6.454	9.842	127361.150	131681.730	3.281
Aliphatic C16-C21	7440285.000	60.000	9.843	13.199	124004.750	127235.092	2.539
Aliphatic C21-C28	9496949.000	80.000	13.200	16.852	118711.863	120090.398	1.148
Aliphatic C28-C40	12821520.000	120.000	16.853	21.694	106846.000	101093.195	-5.691
Aliphatic EPH	42631650.000	360.000	3.174	21.694	118421.250	118799.912	0.319

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

Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	31 Oct 2024 07:23
Client Sample ID:		Operator:	YP/AJ
Data file:	FC067588.D	Misc:	
Instrument:	FID_C	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.174	6.453	7778450.000	60.000	ug/ml
Aliphatic C12-C16	6.454	9.842	5094446.000	40.000	ug/ml
Aliphatic C16-C21	9.843	13.199	7440285.000	60.000	ug/ml
Aliphatic C21-C28	13.200	16.852	9496949.000	80.000	ug/ml
Aliphatic C28-C40	16.853	21.694	12821520.000	120.000	ug/ml
Aliphatic EPH	3.174	21.694	42631650.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067588.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 07:23
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: Nov 01 00:22:40 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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)	11.493	2817637	19.203 ug/ml
Spiked Amount	50.000		Recovery =	38.41%
12) S	1-chlorooctadecane (S...	12.930	2106666	19.508 ug/ml
Spiked Amount	50.000		Recovery =	39.02%
	Target Compounds			
1) T	n-Nonane (C9)	3.274	2562501	19.021 ug/ml
2) T	n-Decane (C10)	4.338	2611307	19.166 ug/ml
3) T	A~Naphthalene (C11.7)	5.915	2826595	19.074 ug/ml
4) T	n-Dodecane (C12)	6.353	2604642	19.231 ug/ml
5) T	A~2-methylnaphthalene...	6.969	2695981	19.090 ug/ml
6) T	n-Tetradecane (C14)	8.144	2532295	19.292 ug/ml
7) T	n-Hexadecane (C16)	9.742	2562151	19.395 ug/ml
8) T	n-Octadecane (C18)	11.181	2579000	19.521 ug/ml
10) T	n-Eicosane (C20)	12.489	2455785	19.463 ug/ml
11) T	n-Heneicosane (C21)	13.099	2405500	19.491 ug/ml
13) T	n-Docosane (C22)	13.684	2388418	19.505 ug/ml
14) T	n-Tetracosane (C24)	14.784	2378410	19.622 ug/ml
15) T	n-Hexacosane (C26)	15.803	2349366	19.733 ug/ml
16) T	n-Octacosane (C28)	16.752	2380755	20.236 ug/ml
17) T	n-Tricontane (C30)	17.638	2551686	21.111 ug/ml
18) T	n-Dotriacontane (C32)	18.469	2563153	21.663 ug/ml
19) T	n-Tetratriacontane (C34)	19.250	2255385	21.536 ug/ml
20) T	n-Hexatriacontane (C36)	19.988	1916156	21.050 ug/ml
21) T	n-Octatriacontane (C38)	20.711	1797274	20.753 ug/ml
22) T	n-Tetracontane (C40)	21.594	1737866	20.443 ug/ml

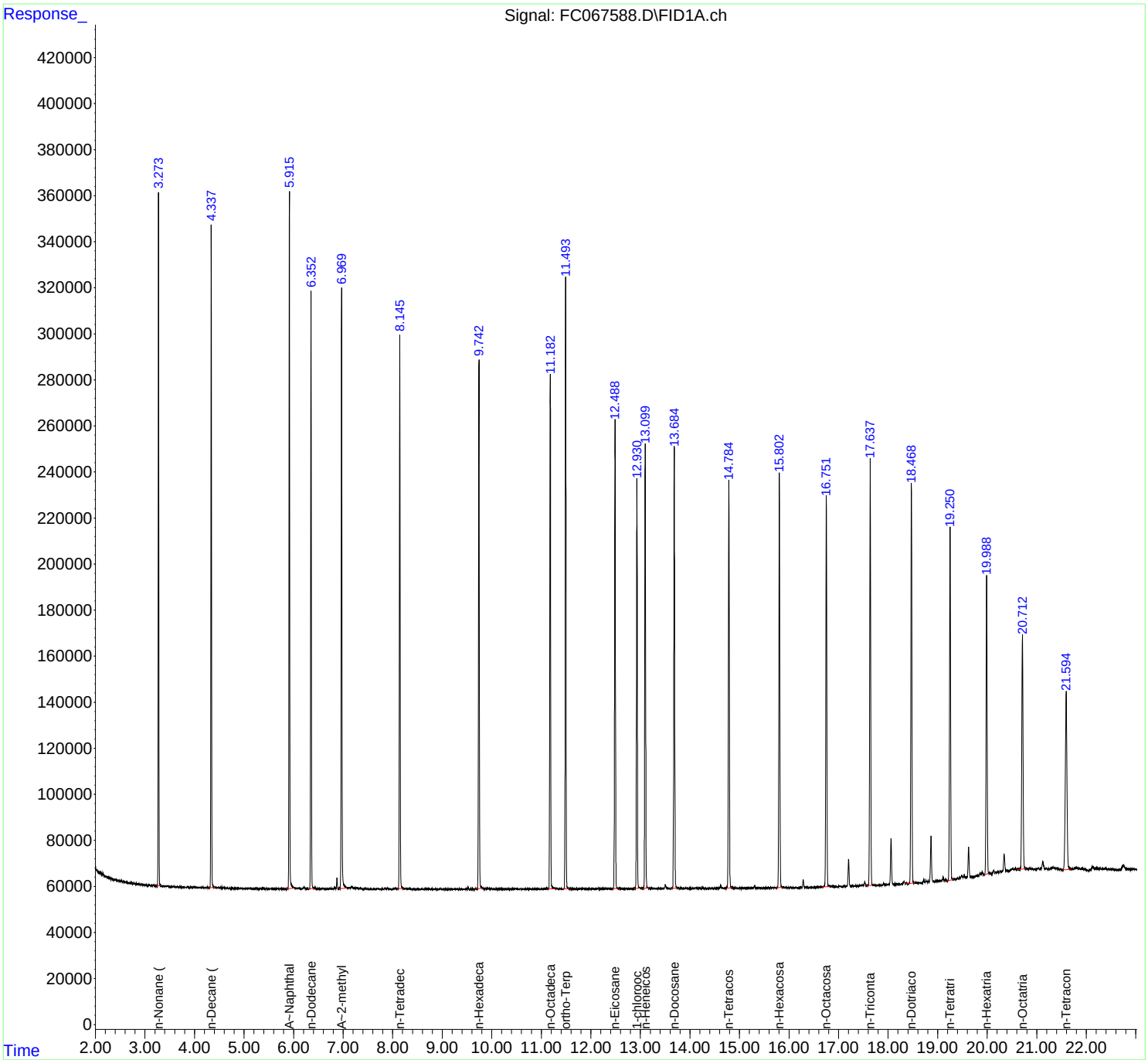
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067588.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 07:23
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: Nov 01 00:22:40 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067588.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 07:23
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 102324.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	3.324	BB	301271	2562501	90.66%	4.828%
2	4.338	4.287	4.405	BB	287485	2611307	92.38%	4.920%
3	5.915	5.862	6.012	BB	303181	2826595	100.00%	5.325%
4	6.353	6.297	6.417	BB	258604	2604642	92.15%	4.907%
5	6.969	6.922	7.075	BB	260717	2695981	95.38%	5.079%
6	8.144	8.089	8.215	BB	239477	2532295	89.59%	4.771%
7	9.742	9.684	9.817	BB	228875	2562151	90.64%	4.827%
8	11.181	11.132	11.269	BB	224173	2579000	91.24%	4.859%
9	11.493	11.429	11.555	BB	265518	2817637	99.68%	5.308%
10	12.489	12.427	12.552	BB	203698	2455785	86.88%	4.627%
11	12.930	12.874	12.984	BB	177281	2106666	74.53%	3.969%
12	13.099	13.032	13.155	BB	192787	2405500	85.10%	4.532%
13	13.684	13.617	13.747	BB	190500	2388418	84.50%	4.500%
14	14.784	14.725	14.854	BB	176856	2378410	84.14%	4.481%
15	15.803	15.737	15.864	BB	177272	2349366	83.12%	4.426%
16	16.752	16.665	16.819	BB	169643	2380755	84.23%	4.485%
17	17.638	17.577	17.699	BB	184158	2551686	90.27%	4.807%
18	18.469	18.347	18.530	VB	173158	2563153	90.68%	4.829%
19	19.250	19.185	19.322	BB	153062	2255385	79.79%	4.249%
20	19.988	19.932	20.029	BB	130065	1916156	67.79%	3.610%
21	20.711	20.600	20.780	BB	100316	1797274	63.58%	3.386%
22	21.594	21.524	21.689	BB	77163	1737866	61.48%	3.274%
			Sum of corrected areas:			53078529		

Aliphatic EPH 102324.M Fri Nov 01 00:56:07 2024

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

Continuing Calibration Report for SequenceID : FD103024AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FD048622.D**						
Aromatic C10-C12	7371341.000	40.000	4.094	5.812	184283.525	176202.694	-4.586
Aromatic C12-C16	11108842.000	60.000	5.813	8.417	185147.367	177273.493	-4.442
Aromatic C16-C21	13346732.000	80.000	8.418	12.679	166834.150	163832.550	-1.832
Aromatic C21-C36	30074963.000	180.000	12.680	18.085	167083.128	152713.153	-9.410
Aromatic EPH	61901878.000	360.000	4.094	18.085	171949.661	161887.469	-6.216

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

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	30 Oct 2024 14:26
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048622.D	Misc:	
Instrument:	FID_D	ALS Vial:	54
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.094	5.812	7371341.000	40.000	ug/ml
Aromatic C12-C16	5.813	8.417	11108842.000	60.000	ug/ml
Aromatic C16-C21	8.418	12.679	13346732.000	80.000	ug/ml
Aromatic C21-C36	12.680	18.085	30074963.000	180.000	ug/ml
Aromatic EPH	4.094	18.085	61901878.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048622.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 14:26
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 54 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Nov 01 01:02:22 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.371	3188187	21.005 ug/ml
Spiked Amount	50.000		Recovery =	42.01%
6) S	2-Flurobiphenyl (SURR)	8.221	2084345	21.227 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	42.45%
11) S	ortho-Terphenyl (SURR)	11.255	3598453	21.125 ug/ml
Spiked Amount	50.000		Recovery =	42.25%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.194	3634010	20.889 ug/ml
2) T	Naphthalene (C11.7)	5.712	3737331	20.945 ug/ml
3) T	2-Methylnaphthalene (...	6.759	3750826	20.970 ug/ml
5) T	Acenaphthylene (C15.06)	8.023	3645995	20.764 ug/ml
7) T	Acenaphthene (C15.5)	8.317	3712021	20.929 ug/ml
8) T	Flouorene (C16.55)	9.096	3546056	20.978 ug/ml
9) T	Phenanthrene (C19.36)	10.483	3485497	21.085 ug/ml
10) T	Anthracene (C19.43)	10.558	2868629	17.939 ug/ml
12) T	Fluoranthene (C21.85)	12.285	3485328	21.178 ug/ml
13) T	Pyrene (C20.8)	12.579	3446550	21.397 ug/ml
14) T	Benzo[a]anthracene (C...	14.448	3159794	21.611 ug/ml
15) T	Chrysene (C27.41)	14.489	3503664	21.300 ug/ml
16) T	benzo[b]fluoranthene ...	15.994	3350559	22.039 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.025	3253286	21.645 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.370	3338521	22.184 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.733	2888384	22.137 ug/ml
20) T	Dibenz[a,h]anthracene...	17.773	3671524	22.561 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.985	3423903	22.365 ug/ml

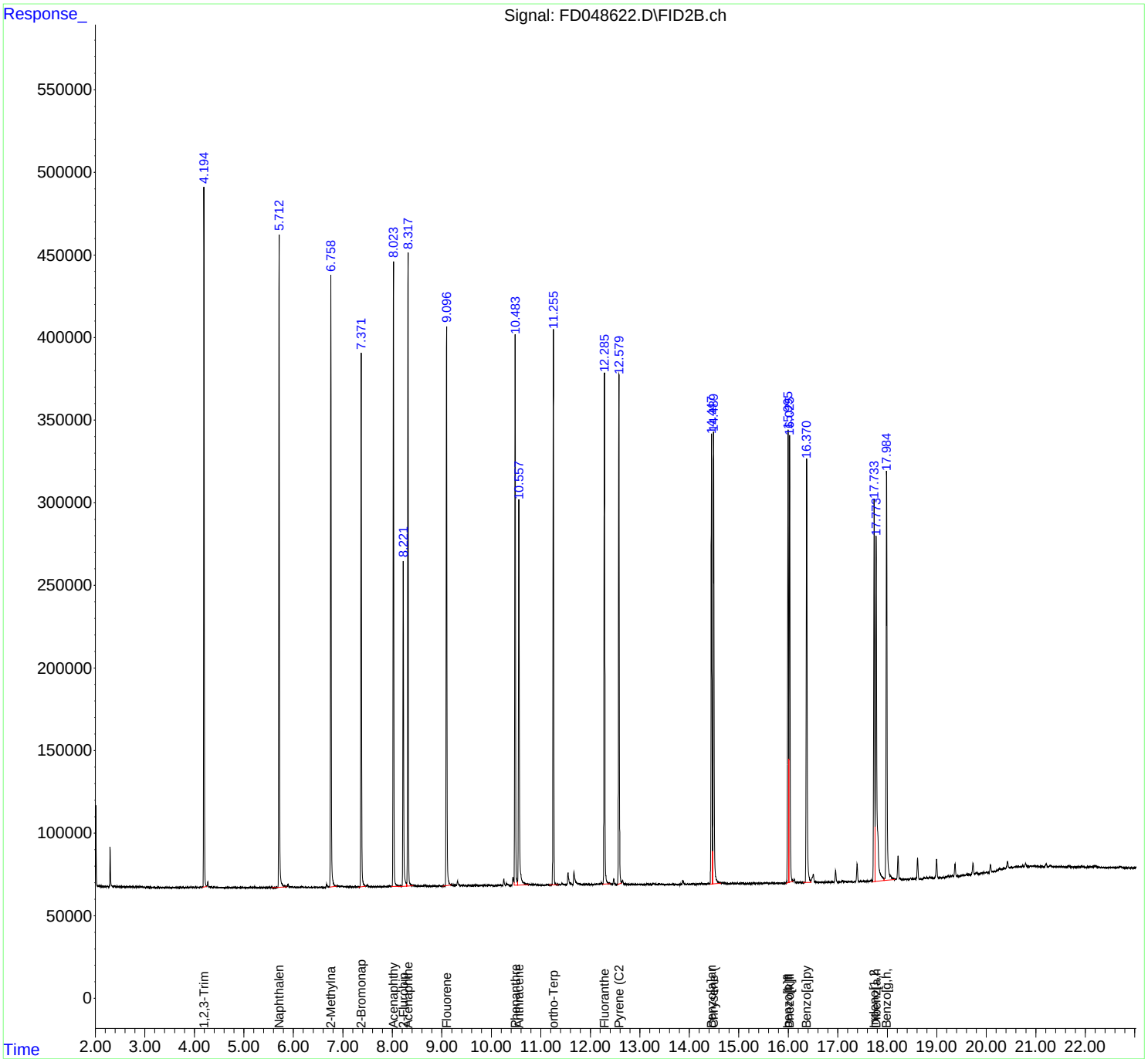
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048622.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 14:26
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 54 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Nov 01 01:02:22 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048622.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 14:26
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 54 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.194	4.161	4.251	BV	422255	3634010	96.89%	5.135%
2	5.712	5.561	5.868	BV	393189	3737331	99.64%	5.281%
3	6.759	6.728	6.878	BB	370498	3750826	100.00%	5.300%
4	7.371	7.318	7.468	BV	322158	3188187	85.00%	4.505%
5	8.023	7.974	8.168	BB	376707	3645995	97.21%	5.152%
6	8.221	8.168	8.291	BV	196733	2084345	55.57%	2.945%
7	8.317	8.291	8.418	VB	383784	3712021	98.97%	5.245%
8	9.096	9.021	9.194	BV	338793	3546056	94.54%	5.010%
9	10.483	10.458	10.530	VV	334177	3485497	92.93%	4.925%
10	10.558	10.530	10.761	VB	233022	2868629	76.48%	4.053%
11	11.255	11.168	11.351	BV	335154	3598453	95.94%	5.085%
12	12.285	12.251	12.404	BB	309037	3485328	92.92%	4.925%
13	12.579	12.544	12.633	BV	306722	3446550	91.89%	4.870%
14	14.448	14.411	14.467	PV	272406	3159794	84.24%	4.465%
15	14.489	14.467	14.644	VB	272331	3503664	93.41%	4.951%
16	15.994	15.961	16.009	BV	274261	3350559	89.33%	4.734%
17	16.025	16.009	16.097	VV	269757	3253286	86.74%	4.597%
18	16.370	16.294	16.456	BV	256655	3338521	89.01%	4.717%
19	17.733	17.701	17.752	BV	232440	2888384	77.01%	4.081%
20	17.773	17.752	17.938	VV	210872	3671524	97.89%	5.188%
21	17.985	17.938	18.158	VB	248463	3423903	91.28%	4.838%
			Sum of corrected areas:			70772863		

Aromatic EPH 102324.M Fri Nov 01 01:35:41 2024

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

Continuing Calibration Report for SequenceID : FD103024AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FD048634.D**						
Aromatic C10-C12	6567342.000	40.000	4.094	5.812	164183.550	176202.694	6.821
Aromatic C12-C16	9897067.000	60.000	5.813	8.417	164951.117	177273.493	6.951
Aromatic C16-C21	12114271.000	80.000	8.418	12.679	151428.388	163832.550	7.571
Aromatic C21-C36	26179901.000	180.000	12.680	18.085	145443.894	152713.153	4.760
Aromatic EPH	54758581.000	360.000	4.094	18.085	152107.169	161887.469	6.041

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

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	31 Oct 2024 00:45
Client Sample ID:		Operator:	YP/AJ
Data file:	FD048634.D	Misc:	
Instrument:	FID_D	ALS Vial:	52
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.094	5.812	6567342.000	40.000	ug/ml
Aromatic C12-C16	5.813	8.417	9897067.000	60.000	ug/ml
Aromatic C16-C21	8.418	12.679	12114271.000	80.000	ug/ml
Aromatic C21-C36	12.680	18.085	26179901.000	180.000	ug/ml
Aromatic EPH	4.094	18.085	54758581.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048634.D
Signal(s) : FID2B.ch
Acq On : 31 Oct 2024 00:45
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Nov 01 01:04:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.371	2812424	18.530 ug/ml
Spiked Amount	50.000		Recovery =	37.06%
6) S	2-Flurobiphenyl (SURR)	8.221	1824776	18.584 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	37.17%
11) S	ortho-Terphenyl (SURR)	11.255	3150290	18.494 ug/ml
Spiked Amount	50.000		Recovery =	36.99%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.194	3241453	18.632 ug/ml
2) T	Naphthalene (C11.7)	5.712	3325889	18.639 ug/ml
3) T	2-Methylnaphthalene (...	6.758	3330792	18.622 ug/ml
5) T	Acenaphthylene (C15.06)	8.023	3263156	18.584 ug/ml
7) T	Acenaphthene (C15.5)	8.317	3303119	18.623 ug/ml
8) T	Flouorene (C16.55)	9.095	3154409	18.661 ug/ml
9) T	Phenanthrene (C19.36)	10.482	3072079	18.584 ug/ml
10) T	Anthracene (C19.43)	10.558	2869110	17.942 ug/ml
12) T	Fluoranthene (C21.85)	12.285	3077096	18.697 ug/ml
13) T	Pyrene (C20.8)	12.578	3018673	18.741 ug/ml
14) T	Benzo[a]anthracene (C...	14.447	2753306	18.830 ug/ml
15) T	Chrysene (C27.41)	14.488	3092830	18.802 ug/ml
16) T	benzo[b]fluoranthene ...	15.994	2932318	19.288 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.025	2900277	19.296 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.369	2871431	19.080 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.732	2425410	18.589 ug/ml
20) T	Dibenz[a,h]anthracene...	17.773	3130272	19.235 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.983	2996961	19.576 ug/ml

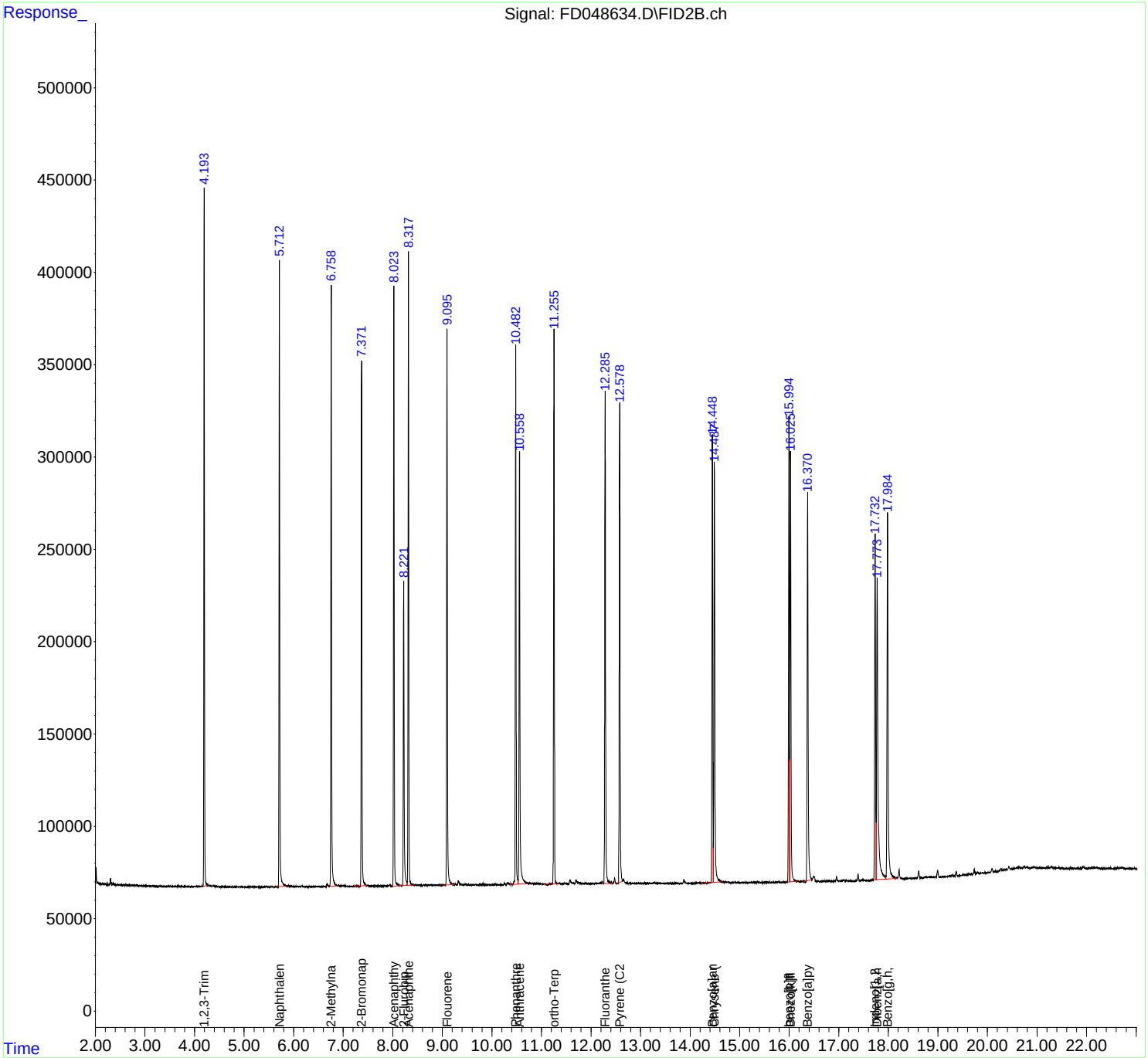
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048634.D
Signal(s) : FID2B.ch
Acq On : 31 Oct 2024 00:45
Operator : YP/AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
20 PPM AROMATIC HC STD

Integration File: autoint1.e
Quant Time: Nov 01 01:04:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048634.D
Signal(s) : FID2B.ch
Acq On : 31 Oct 2024 00:45
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 52 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Title : GC Extractables

Signal : FID2B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	4.194	4.161	4.261	BV	374831	3241453	97.32%	5.183%
2	5.712	5.651	5.858	BB	338180	3325889	99.85%	5.318%
3	6.758	6.718	6.888	BV	323983	3330792	100.00%	5.325%
4	7.371	7.218	7.480	BV	283703	2812424	84.44%	4.497%
5	8.023	7.994	8.144	PB	324515	3263156	97.97%	5.217%
6	8.221	8.144	8.289	BV	164620	1824776	54.79%	2.917%
7	8.317	8.289	8.438	VB	343815	3303119	99.17%	5.281%
8	9.095	9.018	9.248	BV	296808	3154409	94.70%	5.043%
9	10.482	10.368	10.530	BV	290139	3072079	92.23%	4.912%
10	10.558	10.530	10.731	VB	234280	2869110	86.14%	4.587%
11	11.255	11.074	11.338	BB	299635	3150290	94.58%	5.037%
12	12.285	12.249	12.444	PB	266795	3077096	92.38%	4.920%
13	12.578	12.521	12.637	BV	257411	3018673	90.63%	4.826%
14	14.447	14.241	14.467	BV	242650	2753306	82.66%	4.402%
15	14.488	14.467	14.651	VB	227666	3092830	92.86%	4.945%
16	15.994	15.961	16.009	BV	252416	2932318	88.04%	4.688%
17	16.025	16.009	16.158	VB	233380	2900277	87.07%	4.637%
18	16.369	16.284	16.461	BV	212654	2871431	86.21%	4.591%
19	17.732	17.701	17.752	BV	186947	2425410	72.82%	3.878%
20	17.773	17.752	17.947	VV	163586	3130272	93.98%	5.005%
21	17.983	17.947	18.178	VV	199703	2996961	89.98%	4.792%
			Sum of corrected areas:			62546071		

Aromatic EPH 102324.M Fri Nov 01 01:38:18 2024

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

Continuing Calibration Report for SequenceID : FE103024AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FE050899.D**						
Aliphatic C9-C12	8228867.000	60.000	3.144	6.762	137147.783	142899.930	4.025
Aliphatic C12-C16	5661189.000	40.000	6.763	10.194	141529.725	145118.273	2.473
Aliphatic C16-C21	8560176.000	60.000	10.195	13.554	142669.600	144401.245	1.199
Aliphatic C21-C28	11401123.000	80.000	13.555	17.208	142514.038	142154.874	-0.253
Aliphatic C28-C40	17311023.000	120.000	17.209	22.057	144258.525	138303.281	-4.306
Aliphatic EPH	51162378.000	360.000	3.144	22.057	142117.717	141698.847	-0.296

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

Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	30 Oct 2024 12:14
Client Sample ID:		Operator:	YP\AJ
Data file:	FE050899.D	Misc:	
Instrument:	FID_E	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.144	6.762	8228867.000	60.000	ug/ml
Aliphatic C12-C16	6.763	10.194	5661189.000	40.000	ug/ml
Aliphatic C16-C21	10.195	13.554	8560176.000	60.000	ug/ml
Aliphatic C21-C28	13.555	17.208	11401123.000	80.000	ug/ml
Aliphatic C28-C40	17.209	22.057	17311023.000	120.000	ug/ml
Aliphatic EPH	3.144	22.057	51162378.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050899.D
Signal(s) : FID1B.ch
Acq On : 30 Oct 2024 12:14
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Oct 31 05:17:11 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 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)	11.856	3068559	19.464 ug/ml
Spiked Amount	50.000		Recovery =	38.93%
12) S	1-chlorooctadecane (S...	13.289	2365291	19.995 ug/ml
Spiked Amount	50.000		Recovery =	39.99%
	Target Compounds			
1) T	n-Nonane (C9)	3.244	2674159	18.927 ug/ml
2) T	n-Decane (C10)	4.495	2764711	19.270 ug/ml
3) T	A~Naphthalene (C11.7)	6.207	2685172	18.779 ug/ml
4) T	n-Dodecane (C12)	6.662	2789997	19.384 ug/ml
5) T	A~2-methylnaphthalene...	7.303	2508422	18.934 ug/ml
6) T	n-Tetradecane (C14)	8.488	2772994	19.382 ug/ml
7) T	n-Hexadecane (C16)	10.094	2888195	19.625 ug/ml
8) T	n-Octadecane (C18)	11.535	2940492	19.686 ug/ml
10) T	n-Eicosane (C20)	12.843	2836200	19.778 ug/ml
11) T	n-Heneicosane (C21)	13.454	2783484	19.821 ug/ml
13) T	n-Docosane (C22)	14.039	2781192	19.824 ug/mlm
14) T	n-Tetracosane (C24)	15.140	2783671	19.704 ug/ml
15) T	n-Hexacosane (C26)	16.160	2820942	20.047 ug/ml
16) T	n-Octacosane (C28)	17.108	3015318	20.606 ug/ml
17) T	n-Tricontane (C30)	17.995	3420079	21.510 ug/ml
18) T	n-Dotriacontane (C32)	18.828	3566709	22.001 ug/ml
19) T	n-Tetratriacontane (C34)	19.610	3190698	21.721 ug/ml
20) T	n-Hexatriacontane (C36)	20.349	2686310	21.183 ug/mlm
21) T	n-Octatriacontane (C38)	21.074	2403425	19.438 ug/ml
22) T	n-Tetracontane (C40)	21.957	2043802	18.355 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050899.D
Signal(s) : FID1B.ch
Acq On : 30 Oct 2024 12:14
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

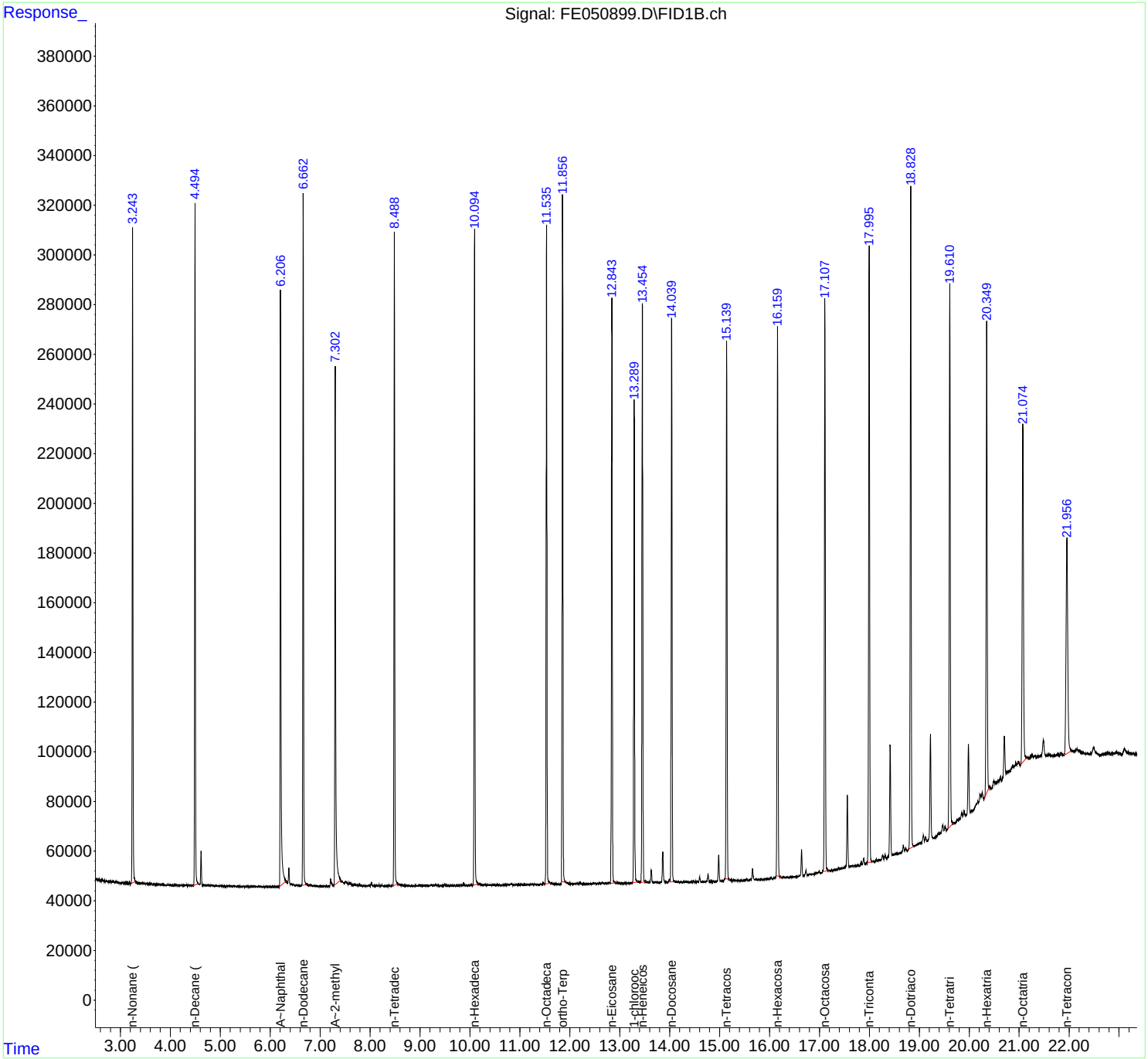
Integration File: autoint1.e
Quant Time: Oct 31 05:17:11 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024



Instrument :
FID_E
LabSampleId :
20 PPM ALIPHATIC HC STD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE10302
Data File : FE050899.D
Signal(s) : FID1B.ch
Acq On : 30 Oct 2024 12:14
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.244	3.211	3.304	BB	262730	2674159	74.98%	4.332%
2	4.495	4.461	4.558	BB	274541	2764711	77.51%	4.479%
3	6.207	6.178	6.318	BB	237002	2685172	75.28%	4.350%
4	6.662	6.631	6.731	BB	277793	2789997	78.22%	4.520%
5	7.303	7.271	7.411	BB	207341	2508422	70.33%	4.064%
6	8.488	8.448	8.561	BB	263408	2772994	77.75%	4.493%
7	10.094	10.058	10.168	BB	263920	2888195	80.98%	4.679%
8	11.535	11.494	11.611	BB	263651	2940492	82.44%	4.764%
9	11.856	11.831	11.928	BB	273820	3068559	86.03%	4.971%
10	12.843	12.804	12.918	BB	233928	2836200	79.52%	4.595%
11	13.289	13.251	13.364	BB	194666	2365291	66.32%	3.832%
12	13.454	13.418	13.528	BB	234290	2783484	78.04%	4.510%
13	14.039	13.964	14.114	BB	225187	2804046	78.62%	4.543%
14	15.140	15.111	15.199	BBA	215330	2783671	78.05%	4.510%
15	16.160	16.131	16.234	BB	221443	2820942	79.09%	4.570%
16	17.108	17.061	17.178	BB	230330	3015318	84.54%	4.885%
17	17.995	17.951	18.068	BB	246874	3420079	95.89%	5.541%
18	18.828	18.781	18.894	BB	265338	3566709	100.00%	5.778%
19	19.610	19.571	19.681	BB	217393	3190698	89.46%	5.169%
20	20.350	20.321	20.399	BBA	185325	2598100	72.84%	4.209%
21	21.074	21.031	21.148	BB	136074	2403425	67.38%	3.894%
22	21.957	21.901	22.044	BB	86615	2043802	57.30%	3.311%
			Sum of corrected areas:			61724466		

Aliphatic EPH 100824.M Thu Oct 31 05:39:00 2024

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

Continuing Calibration Report for SequenceID : FE103024AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FE050916.D**						
Aliphatic C9-C12	8444590.000	60.000	3.144	6.762	140743.167	142899.930	1.509
Aliphatic C12-C16	5773033.000	40.000	6.763	10.194	144325.825	145118.273	0.546
Aliphatic C16-C21	8667899.000	60.000	10.195	13.554	144464.983	144401.245	-0.044
Aliphatic C21-C28	11602016.000	80.000	13.555	17.208	145025.200	142154.874	-2.019
Aliphatic C28-C40	17419412.000	120.000	17.209	22.057	145161.767	138303.281	-4.959
Aliphatic EPH	51906950.000	360.000	3.144	22.057	144185.972	141698.847	-1.755

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

Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	31 Oct 2024 00:28
Client Sample ID:		Operator:	YP\AJ
Data file:	FE050916.D	Misc:	
Instrument:	FID_E	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.144	6.762	8444590.000	60.000	ug/ml
Aliphatic C12-C16	6.763	10.194	5773033.000	40.000	ug/ml
Aliphatic C16-C21	10.195	13.554	8667899.000	60.000	ug/ml
Aliphatic C21-C28	13.555	17.208	11602016.000	80.000	ug/ml
Aliphatic C28-C40	17.209	22.057	17419412.000	120.000	ug/ml
Aliphatic EPH	3.144	22.057	51906950.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050916.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 00:28
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Oct 31 05:19:36 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 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)	11.857	3106833	19.706 ug/ml
Spiked Amount	50.000		Recovery =	39.41%
12) S	1-chlorooctadecane (S...	13.290	2403883	20.321 ug/ml
Spiked Amount	50.000		Recovery =	40.64%
	Target Compounds			
1) T	n-Nonane (C9)	3.244	2750806	19.469 ug/ml
2) T	n-Decane (C10)	4.495	2836917	19.773 ug/ml
3) T	A~Naphthalene (C11.7)	6.208	2733098	19.114 ug/ml
4) T	n-Dodecane (C12)	6.663	2856867	19.848 ug/ml
5) T	A~2-methylnaphthalene...	7.304	2556776	19.299 ug/ml
6) T	n-Tetradecane (C14)	8.490	2831984	19.795 ug/ml
7) T	n-Hexadecane (C16)	10.095	2941049	19.984 ug/ml
8) T	n-Octadecane (C18)	11.537	2981018	19.957 ug/ml
10) T	n-Eicosane (C20)	12.844	2870047	20.014 ug/ml
11) T	n-Heneicosane (C21)	13.455	2816834	20.058 ug/ml
13) T	n-Docosane (C22)	14.041	2837761	20.227 ug/ml
14) T	n-Tetracosane (C24)	15.142	2826637	20.008 ug/ml
15) T	n-Hexacosane (C26)	16.162	2871360	20.405 ug/ml
16) T	n-Octacosane (C28)	17.111	3066258	20.954 ug/ml
17) T	n-Tricontane (C30)	17.998	3477829	21.873 ug/ml
18) T	n-Dotriacontane (C32)	18.829	3656827	22.557 ug/ml
19) T	n-Tetratriacontane (C34)	19.612	3249213	22.120 ug/ml
20) T	n-Hexatriacontane (C36)	20.351	2682431	21.152 ug/ml
21) T	n-Octatriacontane (C38)	21.076	2423409	19.599 ug/ml
22) T	n-Tetracontane (C40)	21.958	1929703	17.330 ug/ml

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

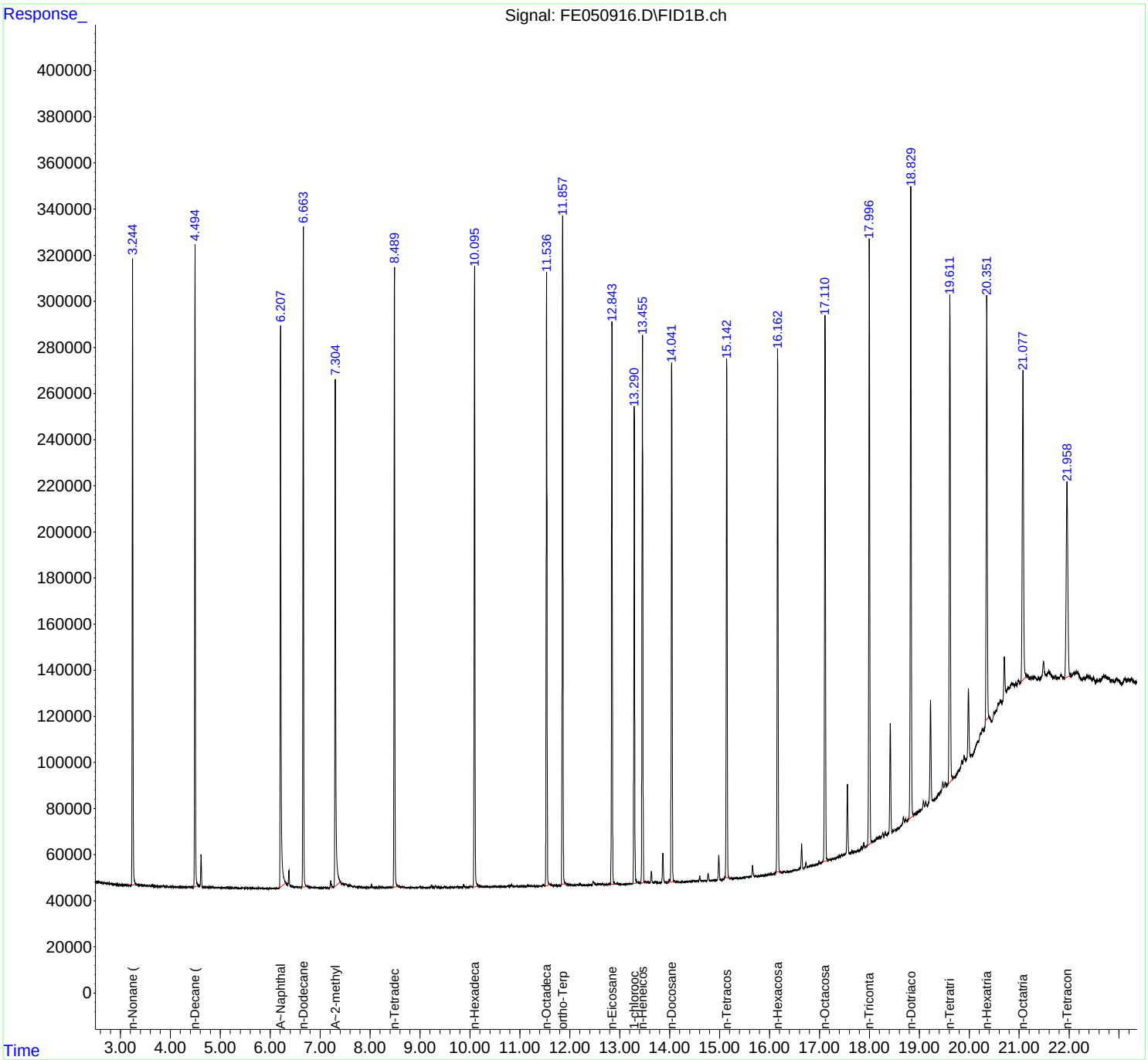
Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050916.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 00:28
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Integration File: autoint1.e
Quant Time: Oct 31 05:19:36 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050916.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 00:28
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.244	3.211	3.318	BB	271845	2750806	75.22%	4.387%
2	4.495	4.458	4.558	BB	278789	2836917	77.58%	4.524%
3	6.208	6.171	6.315	BB	242181	2733098	74.74%	4.358%
4	6.663	6.631	6.738	BB	286578	2856867	78.12%	4.556%
5	7.304	7.275	7.405	BB	218910	2556776	69.92%	4.077%
6	8.490	8.455	8.571	BB	265843	2831984	77.44%	4.516%
7	10.095	10.055	10.178	BB	267855	2941049	80.43%	4.690%
8	11.537	11.495	11.615	BB	264028	2981018	81.52%	4.754%
9	11.857	11.831	11.931	BB	290391	3106833	84.96%	4.954%
10	12.844	12.805	12.921	BB	245800	2870047	78.48%	4.577%
11	13.290	13.248	13.371	BB	205501	2403883	65.74%	3.833%
12	13.455	13.418	13.538	BB	236829	2816834	77.03%	4.492%
13	14.041	13.951	14.115	BB	225603	2837761	77.60%	4.525%
14	15.142	15.111	15.200	BBA	225571	2826637	77.30%	4.508%
15	16.162	16.131	16.245	BB	225295	2871360	78.52%	4.579%
16	17.111	17.061	17.175	BB	236570	3066258	83.85%	4.890%
17	17.998	17.951	18.048	BB	261941	3477829	95.11%	5.546%
18	18.829	18.781	18.891	BB	273320	3656827	100.00%	5.832%
19	19.612	19.571	19.678	BB	211706	3249213	88.85%	5.182%
20	20.351	20.321	20.400	BBA	183201	2682431	73.35%	4.278%
21	21.076	21.031	21.145	BB	135013	2423409	66.27%	3.865%
22	21.958	21.901	22.028	BB	84791	1929703	52.77%	3.077%
			Sum of corrected areas:			62707540		

Aliphatic EPH 100824.M Thu Oct 31 05:40:02 2024

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

Continuing Calibration Report for SequenceID : FE103024AL

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FE050932.D**						
Aliphatic C9-C12	8656010.000	60.000	3.144	6.762	144266.833	142899.930	-0.957
Aliphatic C12-C16	5967176.000	40.000	6.763	10.194	149179.400	145118.273	-2.798
Aliphatic C16-C21	8948412.000	60.000	10.195	13.554	149140.200	144401.245	-3.282
Aliphatic C21-C28	11864647.000	80.000	13.555	17.208	148308.088	142154.874	-4.329
Aliphatic C28-C40	18321940.000	120.000	17.209	22.057	152682.833	138303.281	-10.397
Aliphatic EPH	53758185.000	360.000	3.144	22.057	149328.292	141698.847	-5.384

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

Lab Sample ID:	20 PPM ALIPHATIC HC S	Acq On:	31 Oct 2024 09:00
Client Sample ID:		Operator:	YP\AJ
Data file:	FE050932.D	Misc:	
Instrument:	FID_E	ALS Vial:	2
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aliphatic C9-C12	3.144	6.762	8656010.000	60.000	ug/ml
Aliphatic C12-C16	6.763	10.194	5967176.000	40.000	ug/ml
Aliphatic C16-C21	10.195	13.554	8948412.000	60.000	ug/ml
Aliphatic C21-C28	13.555	17.208	11864647.000	80.000	ug/ml
Aliphatic C28-C40	17.209	22.057	18321940.000	120.000	ug/ml
Aliphatic EPH	3.144	22.057	53758185.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050932.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 09:00
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/01/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Oct 31 09:30:34 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 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)	11.856	3182246	20.185 ug/ml
Spiked Amount	50.000		Recovery =	40.37%
12) S	1-chlorooctadecane (S...	13.289	2463537	20.826 ug/ml
Spiked Amount	50.000		Recovery =	41.65%
	Target Compounds			
1) T	n-Nonane (C9)	3.245	2807276	19.869 ug/ml
2) T	n-Decane (C10)	4.495	2905239	20.249 ug/ml
3) T	A~Naphthalene (C11.7)	6.207	2848724	19.922 ug/ml
4) T	n-Dodecane (C12)	6.662	2943495	20.450 ug/ml
5) T	A~2-methylnaphthalene...	7.302	2621093	19.785 ug/ml
6) T	n-Tetradecane (C14)	8.489	2925001	20.445 ug/ml
7) T	n-Hexadecane (C16)	10.094	3042175	20.671 ug/ml
8) T	n-Octadecane (C18)	11.535	3081986	20.633 ug/ml
10) T	n-Eicosane (C20)	12.842	2962018	20.656 ug/ml
11) T	n-Heneicosane (C21)	13.453	2904408	20.682 ug/ml
13) T	n-Docosane (C22)	14.038	2899866	20.670 ug/mlm
14) T	n-Tetracosane (C24)	15.140	2885921	20.427 ug/ml
15) T	n-Hexacosane (C26)	16.159	2922801	20.771 ug/ml
16) T	n-Octacosane (C28)	17.108	3156059	21.568 ug/ml
17) T	n-Tricontane (C30)	17.995	3614427	22.732 ug/ml
18) T	n-Dotriacontane (C32)	18.826	3817650	23.549 ug/ml
19) T	n-Tetratriacontane (C34)	19.609	3411096	23.222 ug/ml
20) T	n-Hexatriacontane (C36)	20.347	2859936	22.552 ug/mlm
21) T	n-Octatriacontane (C38)	21.072	2518045	20.365 ug/ml
22) T	n-Tetracontane (C40)	21.955	2100786	18.866 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050932.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 09:00
Operator : YP\AJ
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

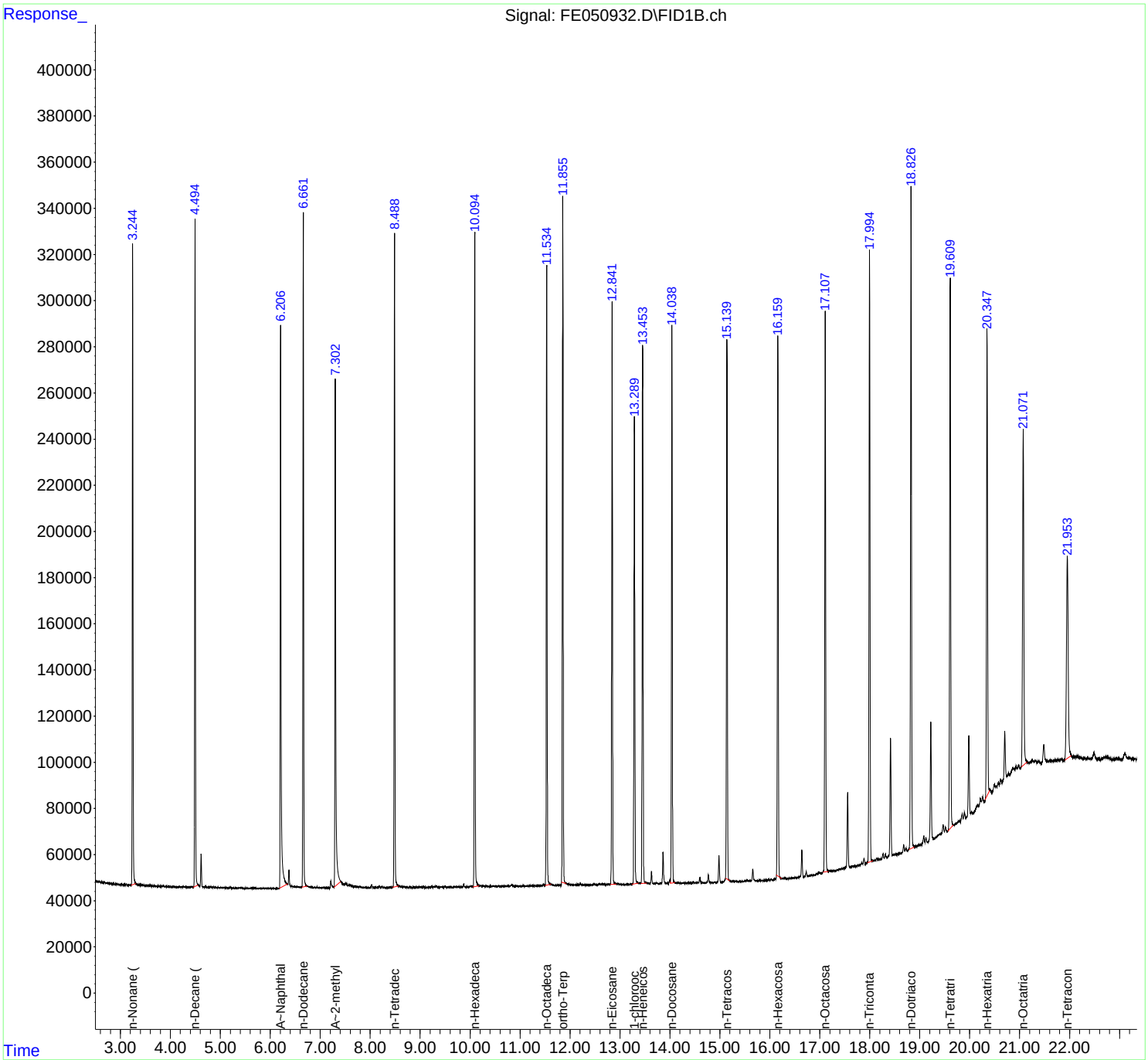
Integration File: autoint1.e
Quant Time: Oct 31 09:30:34 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_E
ClientSampleId :
20 PPM ALIPHATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/01/2024
Supervised By :Ankita Jodhani 11/04/2024



Instrument :
FID_E
LabSampleId :
20 PPM ALIPHATIC HC STD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/01/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE10302
Data File : FE050932.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 09:00
Sample : 20 PPM ALIPHATIC HC STD
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.245	3.211	3.308	BB	277157	2807276	73.53%	4.321%
2	4.495	4.461	4.555	BB	288657	2905239	76.10%	4.472%
3	6.207	6.178	6.338	BB	238789	2848724	74.62%	4.385%
4	6.662	6.631	6.741	BB	291093	2943495	77.10%	4.531%
5	7.302	7.271	7.411	BB	218662	2621093	68.66%	4.035%
6	8.489	8.451	8.568	BB	281198	2925001	76.62%	4.503%
7	10.094	10.058	10.181	BB	284785	3042175	79.69%	4.683%
8	11.535	11.498	11.615	BB	268852	3081986	80.73%	4.744%
9	11.856	11.831	11.928	BB	296694	3182246	83.36%	4.899%
10	12.842	12.801	12.921	BB	253240	2962018	77.59%	4.560%
11	13.289	13.245	13.371	BB	202589	2463537	64.53%	3.792%
12	13.453	13.415	13.535	BB	235945	2904408	76.08%	4.471%
13	14.038	13.965	14.118	BB	241110	2924879	76.61%	4.502%
14	15.140	15.111	15.200	BBA	233566	2885921	75.59%	4.442%
15	16.159	16.131	16.238	BB	232495	2922801	76.56%	4.499%
16	17.108	17.061	17.175	BB	242416	3156059	82.67%	4.858%
17	17.995	17.951	18.061	BB	265059	3614427	94.68%	5.564%
18	18.826	18.781	18.895	BB	286420	3817650	100.00%	5.877%
19	19.609	19.571	19.671	BB	238252	3411096	89.35%	5.251%
20	20.348	20.311	20.428	BB	201905	2923491	76.58%	4.500%
21	21.072	21.031	21.151	BB	145449	2518045	65.96%	3.876%
22	21.955	21.901	22.038	BB	87515	2100786	55.03%	3.234%
			Sum of corrected areas:			64962351		

Aliphatic EPH 100824.M Fri Nov 01 00:14:47 2024

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Fax : 908 789 8922

Continuing Calibration Report for SequenceID : FG103024AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FG014576.D**						
Aromatic C21-C36	22541240.000	180.000	13.409	18.851	125229.111	142138.795	11.897
Aromatic EPH	47450518.000	360.000	4.519	18.851	131806.994	142994.913	7.824
Aromatic C10-C12	5542782.000	40.000	4.519	6.389	138569.550	139495.805	0.664
Aromatic C12-C16	8489684.000	60.000	6.390	9.089	141494.733	145452.849	2.721
Aromatic C16-C21	10876812.000	80.000	9.090	13.408	135960.150	144827.279	6.123

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Fax : 908 789 8922

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	30 Oct 2024 12:21
Client Sample ID:		Operator:	YP\AJ
Data file:	FG014576.D	Misc:	
Instrument:	FID_G	ALS Vial:	31
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.519	6.389	5542782.000	40.000	ug/ml
Aromatic C12-C16	6.390	9.089	8489684.000	60.000	ug/ml
Aromatic C16-C21	9.090	13.408	10876812.000	80.000	ug/ml
Aromatic C21-C36	13.409	18.851	22541240.000	180.000	ug/ml
Aromatic EPH	4.519	18.851	47450518.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014576.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 12:21
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 31 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Oct 31 06:43:37 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 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...	8.014	2435627	19.402 ug/ml
Spiked Amount	50.000		Recovery =	38.80%
6) S	2-Flurobiphenyl (SURR)	8.888	1662250	19.298 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	38.60%
11) S	ortho-Terphenyl (SURR)	11.959	2785865	18.816 ug/ml
Spiked Amount	50.000		Recovery =	37.63%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.619	2702621	19.947 ug/ml
2) T	Naphthalene (C11.7)	6.289	2840161	19.792 ug/ml
3) T	2-Methylnaphthalene (...	7.386	2868660	19.642 ug/ml
5) T	Acenaphthylene (C15.06)	8.689	2814418	19.330 ug/ml
7) T	Acenaphthene (C15.5)	8.989	2806606	19.394 ug/ml
8) T	Flouorene (C16.55)	9.779	2770170	19.121 ug/ml
9) T	Phenanthrene (C19.36)	11.187	2774026	18.847 ug/ml
10) T	Anthracene (C19.43)	11.261	2627119	18.734 ug/ml
12) T	Fluoranthene (C21.85)	13.009	2731169	18.467 ug/ml
13) T	Pyrene (C20.8)	13.308	2705497	18.403 ug/ml
14) T	Benzo[a]anthracene (C...	15.188	2572906	17.766 ug/mlm
15) T	Chrysene (C27.41)	15.231	2601164	17.733 ug/ml
16) T	benzo[b]fluoranthene ...	16.744	2569205	17.468 ug/mlm
17) T	Bnezo[k]fluoranthene ...	16.777	2408948	17.456 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.125	2499126	17.524 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.493	2305040	17.270 ug/mlm
20) T	Dibenz[a,h]anthracene...	18.535	2412893	17.290 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.751	2440789	17.543 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014576.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 12:21
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 31 Sample Multiplier: 1

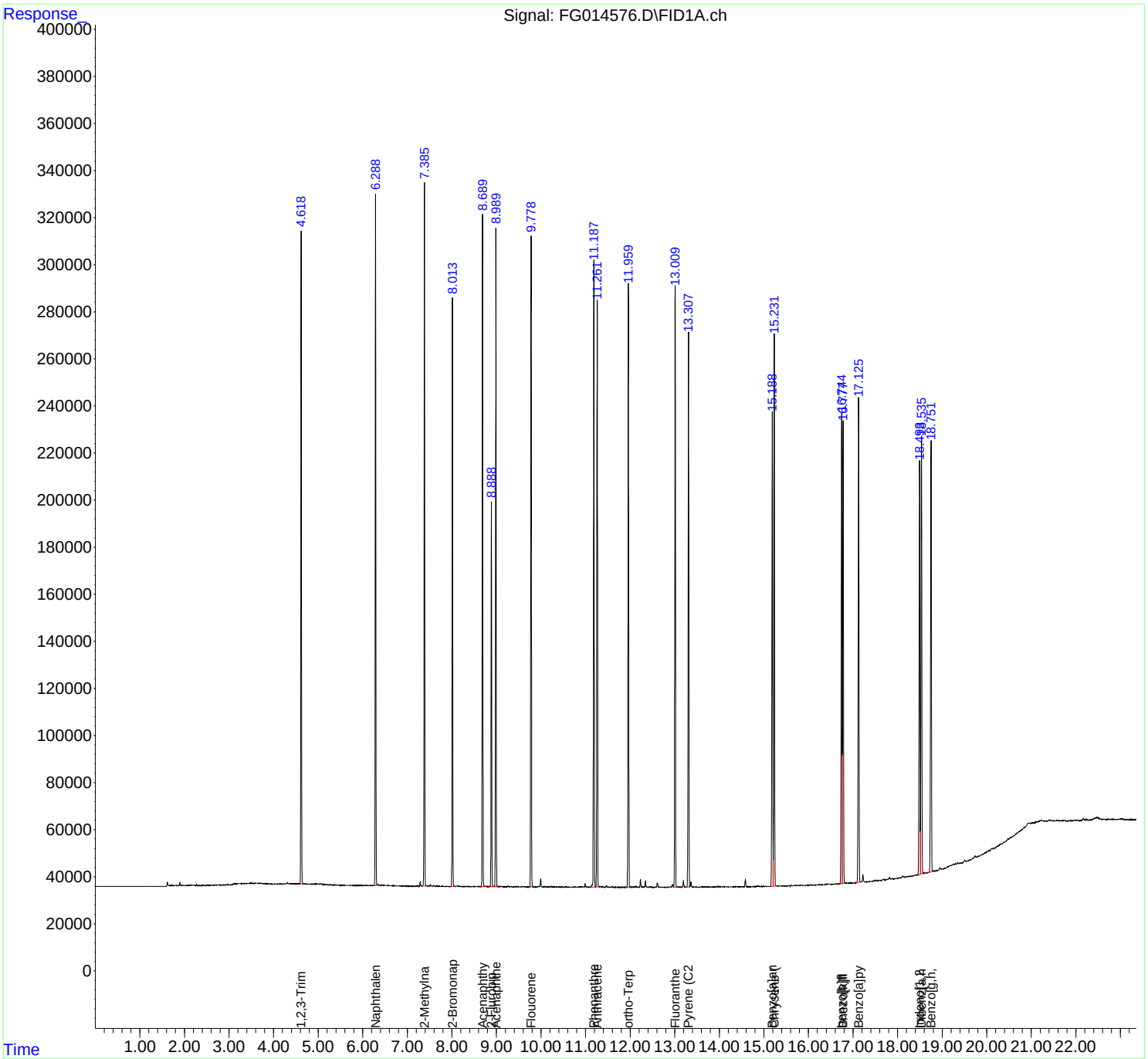
Integration File: autoint1.e
Quant Time: Oct 31 06:43:37 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024



Instrument :
FID_G
LabSampleId :
20 PPM AROMATIC HC STD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG10302
Data File : FG014576.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 12:21
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	4.619	4.589	4.679	BB	276905	2702621	94.21%	4.974%
2	6.289	6.255	6.325	BV	293467	2840161	99.01%	5.227%
3	7.386	7.325	7.449	BB	298755	2868660	100.00%	5.279%
4	8.014	7.972	8.072	BB	247337	2435627	84.90%	4.482%
5	8.689	8.652	8.765	BB	284984	2814418	98.11%	5.179%
6	8.888	8.855	8.955	BB	163191	1662250	57.95%	3.059%
7	8.989	8.955	9.052	BB	279854	2806606	97.84%	5.165%
8	9.779	9.739	9.832	BB	276586	2770170	96.57%	5.098%
9	11.187	11.102	11.219	BV	263015	2774026	96.70%	5.105%
10	11.261	11.219	11.304	VB	250810	2627119	91.58%	4.835%
11	11.959	11.902	12.022	BB	256625	2785865	97.11%	5.127%
12	13.009	12.972	13.045	VB	254252	2731169	95.21%	5.026%
13	13.308	13.262	13.340	BV	237172	2705497	94.31%	4.979%
14	15.188	15.145	15.209	BV	202695	2576249	89.81%	4.741%
15	15.231	15.209	15.295	VB	235260	2601164	90.68%	4.787%
16	16.744	16.692	16.760	BV	198712	2565656	89.44%	4.722%
17	16.777	16.760	16.825	VB	197217	2408948	83.97%	4.433%
18	17.125	17.075	17.165	BB	206428	2499126	87.12%	4.599%
19	18.493	18.452	18.512	BV	174378	2309517	80.51%	4.250%
20	18.535	18.512	18.582	VB	186598	2412893	84.11%	4.440%
21	18.751	18.665	18.784	BB	185089	2440789	85.08%	4.492%
			Sum of corrected areas:			54338529		

Aromatic EPH 102124.M Thu Oct 31 07:06:13 2024

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Fax : 908 789 8922

Continuing Calibration Report for SequenceID : FG103024AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FG014587.D**						
Aromatic C21-C36	22786776.000	180.000	13.409	18.851	126593.200	142138.795	10.937
Aromatic EPH	48299723.000	360.000	4.519	18.851	134165.897	142994.913	6.174
Aromatic C10-C12	5761257.000	40.000	4.519	6.389	144031.425	139495.805	-3.251
Aromatic C12-C16	8714847.000	60.000	6.390	9.089	145247.450	145452.849	0.141
Aromatic C16-C21	11036843.000	80.000	9.090	13.408	137960.538	144827.279	4.741

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

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	30 Oct 2024 22:21
Client Sample ID:		Operator:	YP\AJ
Data file:	FG014587.D	Misc:	
Instrument:	FID_G	ALS Vial:	31
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.519	6.389	5761257.000	40.000	ug/ml
Aromatic C12-C16	6.390	9.089	8714847.000	60.000	ug/ml
Aromatic C16-C21	9.090	13.408	11036843.000	80.000	ug/ml
Aromatic C21-C36	13.409	18.851	22786776.000	180.000	ug/ml
Aromatic EPH	4.519	18.851	48299723.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014587.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 22:21
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 31 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Oct 31 06:45:14 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 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...	8.012	2506078	19.963 ug/ml
Spiked Amount	50.000		Recovery =	39.93%
6) S	2-Flurobiphenyl (SURR)	8.887	1697637	19.709 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	39.42%
11) S	ortho-Terphenyl (SURR)	11.958	2836234	19.156 ug/ml
Spiked Amount	50.000		Recovery =	38.31%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.617	2820296	20.816 ug/ml
2) T	Naphthalene (C11.7)	6.287	2940961	20.494 ug/ml
3) T	2-Methylnaphthalene (...	7.384	2960419	20.270 ug/ml
5) T	Acenaphthylene (C15.06)	8.688	2878382	19.770 ug/ml
7) T	Acenaphthene (C15.5)	8.988	2876046	19.874 ug/ml
8) T	Flouorene (C16.55)	9.777	2828829	19.526 ug/ml
9) T	Phenanthrene (C19.36)	11.185	2812854	19.111 ug/ml
10) T	Anthracene (C19.43)	11.260	2649121	18.891 ug/ml
12) T	Fluoranthene (C21.85)	13.008	2770543	18.733 ug/ml
13) T	Pyrene (C20.8)	13.307	2746039	18.678 ug/ml
14) T	Benzo[a]anthracene (C...	15.187	2597166	17.934 ug/mlm
15) T	Chrysene (C27.41)	15.230	2639234	17.993 ug/ml
16) T	benzo[b]fluoranthene ...	16.743	2543322	17.292 ug/mlm
17) T	Bnezo[k]fluoranthene ...	16.776	2454722	17.787 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.123	2532737	17.759 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.492	2330479	17.460 ug/mlm
20) T	Dibenz[a,h]anthracene...	18.534	2448055	17.542 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.750	2470518	17.757 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014587.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 22:21
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 31 Sample Multiplier: 1

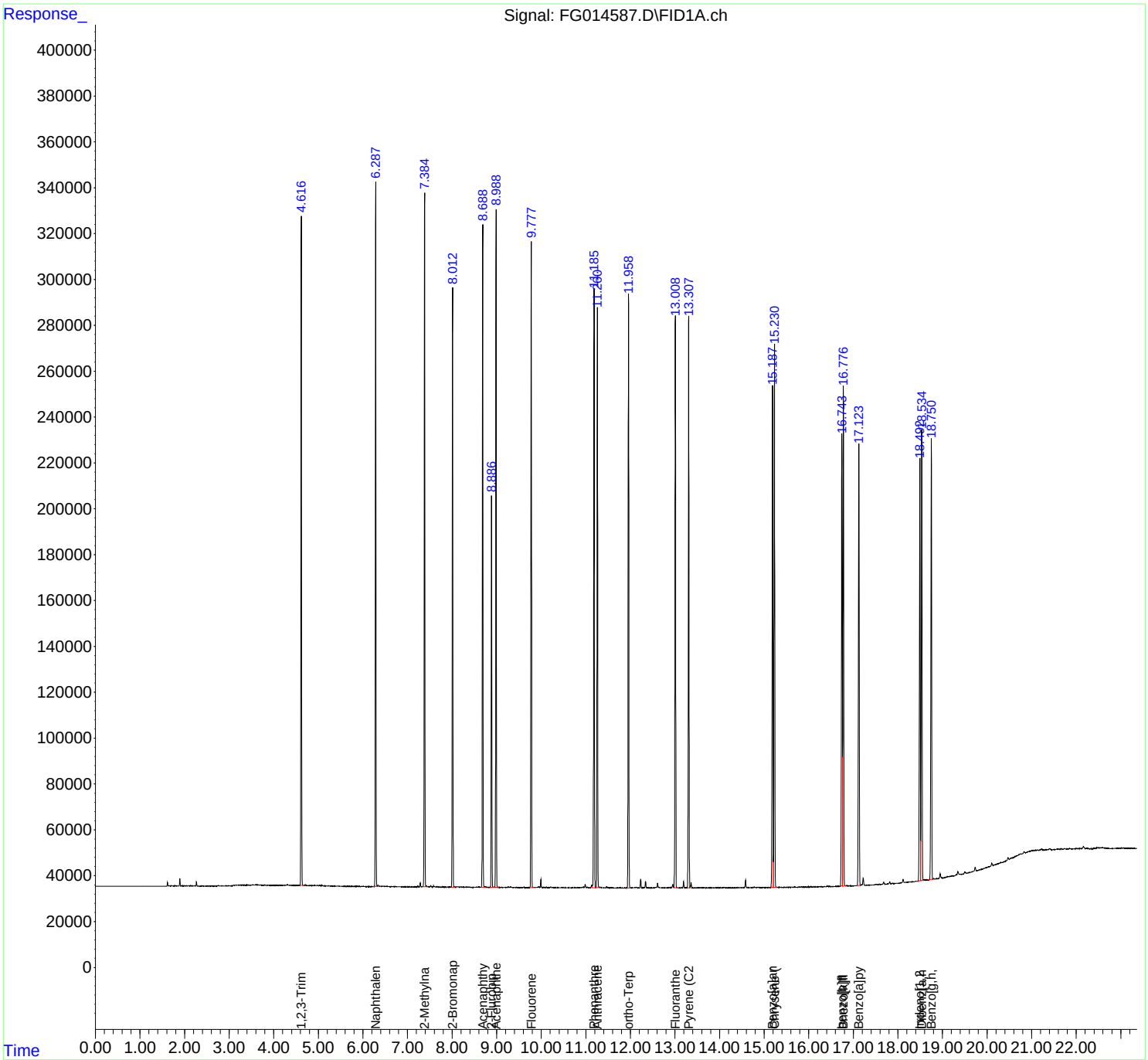
Integration File: autoint1.e
Quant Time: Oct 31 06:45:14 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024



Instrument :
FID_G
LabSampleId :
20 PPM AROMATIC HC STD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG10302
Data File : FG014587.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 22:21
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	4.617	4.588	4.678	BB	290626	2820296	95.27%	5.090%
2	6.287	6.235	6.322	BV	307679	2940961	99.34%	5.308%
3	7.384	7.341	7.448	BB	302917	2960419	100.00%	5.343%
4	8.012	7.981	8.065	BB	261022	2506078	84.65%	4.523%
5	8.688	8.651	8.755	BB	288286	2878382	97.23%	5.195%
6	8.887	8.855	8.948	BB	170003	1697637	57.34%	3.064%
7	8.988	8.951	9.048	BB	295769	2876046	97.15%	5.191%
8	9.777	9.738	9.828	BB	282827	2828829	95.56%	5.105%
9	11.185	11.141	11.221	VV	259850	2812854	95.02%	5.076%
10	11.260	11.221	11.306	VB	252754	2649121	89.48%	4.781%
11	11.958	11.898	12.008	BB	259290	2836234	95.81%	5.119%
12	13.008	12.971	13.061	VB	249243	2770543	93.59%	5.000%
13	13.307	13.268	13.338	BV	250972	2746039	92.76%	4.956%
14	15.187	15.138	15.207	BV	219311	2610859	88.19%	4.712%
15	15.230	15.207	15.291	VB	239227	2639234	89.15%	4.763%
16	16.743	16.691	16.759	BV	196057	2598719	87.78%	4.690%
17	16.776	16.759	16.828	VB	219887	2454722	82.92%	4.430%
18	17.123	17.078	17.159	BB	193750	2532737	85.55%	4.571%
19	18.492	18.451	18.511	BV	184535	2331466	78.75%	4.208%
20	18.534	18.511	18.601	VB	196524	2448055	82.69%	4.418%
21	18.750	18.661	18.815	BB	190511	2470518	83.45%	4.459%
			Sum of corrected areas:			55409748		

Aromatic EPH 102124.M Thu Oct 31 07:07:18 2024

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

Continuing Calibration Report for SequenceID : FG103024AR

Parameter	AreaCount	Conc.	RT_Min	RT_Max	Response Factor	AVGRF	%DEV
File ID :	**FG014594.D**						
Aromatic C21-C36	23321581.000	180.000	13.409	18.851	129564.339	142138.795	8.847
Aromatic EPH	48970714.000	360.000	4.519	18.851	136029.761	142994.913	4.871
Aromatic C10-C12	5688410.000	40.000	4.519	6.389	142210.250	139495.805	-1.946
Aromatic C12-C16	8735998.000	60.000	6.390	9.089	145599.967	145452.849	-0.101
Aromatic C16-C21	11224725.000	80.000	9.090	13.408	140309.063	144827.279	3.120

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

Lab Sample ID:	20 PPM AROMATIC HC S	Acq On:	31 Oct 2024 02:07
Client Sample ID:		Operator:	YP\AJ
Data file:	FG014594.D	Misc:	
Instrument:	FID_G	ALS Vial:	31
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	Units
Aromatic C10-C12	4.519	6.389	5688410.000	40.000	ug/ml
Aromatic C12-C16	6.390	9.089	8735998.000	60.000	ug/ml
Aromatic C16-C21	9.090	13.408	11224725.000	80.000	ug/ml
Aromatic C21-C36	13.409	18.851	23321581.000	180.000	ug/ml
Aromatic EPH	4.519	18.851	48970714.000	360.000	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014594.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 02:07
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 31 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Oct 31 06:46:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 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...	8.011	2505874	19.962 ug/ml
Spiked Amount	50.000		Recovery =	39.92%
6) S	2-Flurobiphenyl (SURR)	8.885	1710317	19.856 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	39.71%
11) S	ortho-Terphenyl (SURR)	11.957	2877954	19.438 ug/ml
Spiked Amount	50.000		Recovery =	38.88%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.617	2770005	20.445 ug/ml
2) T	Naphthalene (C11.7)	6.286	2918405	20.337 ug/ml
3) T	2-Methylnaphthalene (...	7.383	2952058	20.213 ug/ml
5) T	Acenaphthylene (C15.06)	8.687	2892325	19.866 ug/ml
7) T	Acenaphthene (C15.5)	8.987	2891615	19.981 ug/ml
8) T	Flouorene (C16.55)	9.776	2855125	19.708 ug/ml
9) T	Phenanthrene (C19.36)	11.184	2868731	19.490 ug/ml
10) T	Anthracene (C19.43)	11.259	2692178	19.198 ug/ml
12) T	Fluoranthene (C21.85)	13.006	2833075	19.156 ug/ml
13) T	Pyrene (C20.8)	13.306	2808691	19.104 ug/ml
14) T	Benzo[a]anthracene (C...	15.186	2672629	18.455 ug/mlm
15) T	Chrysene (C27.41)	15.228	2704509	18.438 ug/ml
16) T	benzo[b]fluoranthene ...	16.741	2649451	18.014 ug/mlm
17) T	Bnezo[k]fluoranthene ...	16.774	2505526	18.155 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.122	2587400	18.143 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.490	2364111	17.712 ug/mlm
20) T	Dibenz[a,h]anthracene...	18.532	2488476	17.832 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.748	2516404	18.087 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014594.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 02:07
Operator : YP\AJ
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 31 Sample Multiplier: 1

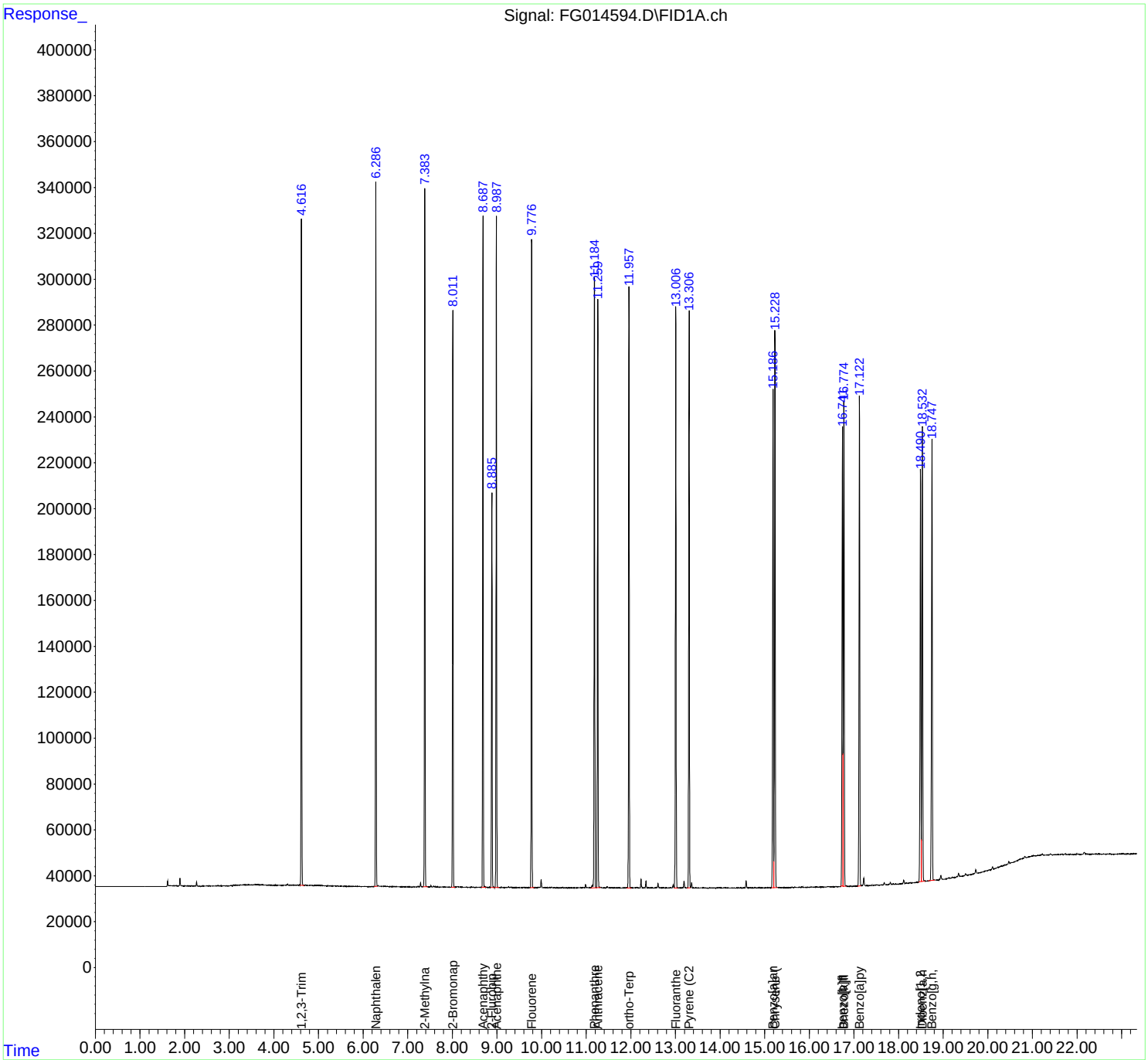
Integration File: autoint1.e
Quant Time: Oct 31 06:46:15 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_G
ClientSampleId :
20 PPM AROMATIC HC STD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024



Instrument :
FID_G
LabSampleId :
20 PPM AROMATIC HC STD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG10302
Data File : FG014594.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 02:07
Sample : 20 PPM AROMATIC HC STD
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	4.617	4.581	4.685	BB	285831	2770005	93.83%	4.939%
2	6.286	6.245	6.321	BV	304602	2918405	98.86%	5.203%
3	7.383	7.341	7.448	BB	303650	2952058	100.00%	5.263%
4	8.011	7.975	8.061	BB	251108	2505874	84.89%	4.468%
5	8.687	8.651	8.751	BB	292556	2892325	97.98%	5.157%
6	8.885	8.851	8.935	BB	171105	1710317	57.94%	3.049%
7	8.987	8.955	9.048	BB	293115	2891615	97.95%	5.156%
8	9.776	9.741	9.828	BB	279887	2855125	96.72%	5.091%
9	11.184	11.098	11.225	BV	266781	2868731	97.18%	5.115%
10	11.259	11.225	11.318	PB	255798	2692178	91.20%	4.800%
11	11.957	11.901	12.015	BB	262638	2877954	97.49%	5.131%
12	13.006	12.970	13.055	VB	251586	2833075	95.97%	5.051%
13	13.306	13.261	13.337	BV	249600	2808691	95.14%	5.008%
14	15.185	15.071	15.205	BV	215136	2675615	90.64%	4.771%
15	15.228	15.205	15.285	VB	242531	2704509	91.61%	4.822%
16	16.741	16.698	16.757	BV	200901	2664496	90.26%	4.751%
17	16.774	16.757	16.828	VB	212113	2505526	84.87%	4.467%
18	17.122	17.078	17.161	BB	213587	2587400	87.65%	4.613%
19	18.491	18.451	18.509	BV	180423	2367708	80.21%	4.222%
20	18.532	18.509	18.595	VB	197945	2488476	84.30%	4.437%
21	18.748	18.661	18.815	BB	192972	2516404	85.24%	4.487%
			Sum of corrected areas:			56086486		

Aromatic EPH 102124.M Thu Oct 31 07:09:58 2024

QC SAMPLE DATA

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164525BL	SDG No.:	P4578
Lab Sample ID:	PB164525BL	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
FD048623.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	0.30	U	0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	0.34	U	0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	0.96	U	0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	2.00	U	2.00	2.66	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	53.1		40 - 140	106%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	53.2		40 - 140	106%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	43.7		40 - 140	87%	SPK: 50

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

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB164525BL	Acq On:	30 Oct 2024 17:27
Client Sample ID:	PB164525BL	Operator:	YP/AJ
Data file:	FD048623.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	4.094	5.812	0	0	200	ug/ml
Aromatic C12-C16	5.813	8.417	0	0	300	ug/ml
Aromatic C16-C21	8.418	12.679	0	0	500	ug/ml
Aromatic C21-C36	12.680	18.085	0	0	800	ug/ml
Aromatic EPH	4.094	18.085	0	0		ug/ml
2-Bromonaphthalene (SURR)	7.372	7.372	8064149	53.13		ug/ml
2-Flurobiphenyl (SURR)	8.222	8.222	5221900	53.18		ug/ml
ortho-Terphenyl (SURR)	11.258	11.258	7445393	43.71		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048623.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 17:27
Operator : YP/AJ
Sample : PB164525BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB164525BL

Integration File: autoint1.e
Quant Time: Nov 01 01:02:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) S 2-Bromonaphthalene (S...	7.372	8064149	53.131 ug/ml
Spiked Amount 50.000		Recovery = 106.26%	
6) S 2-Flurobiphenyl (SURR)	8.222	5221900	53.181 ug/ml
Spiked Amount 50.000 Range 0 - 131		Recovery = 106.36%	
11) S ortho-Terphenyl (SURR)	11.258	7445393	43.709 ug/ml
Spiked Amount 50.000		Recovery = 87.42%	
Target Compounds			

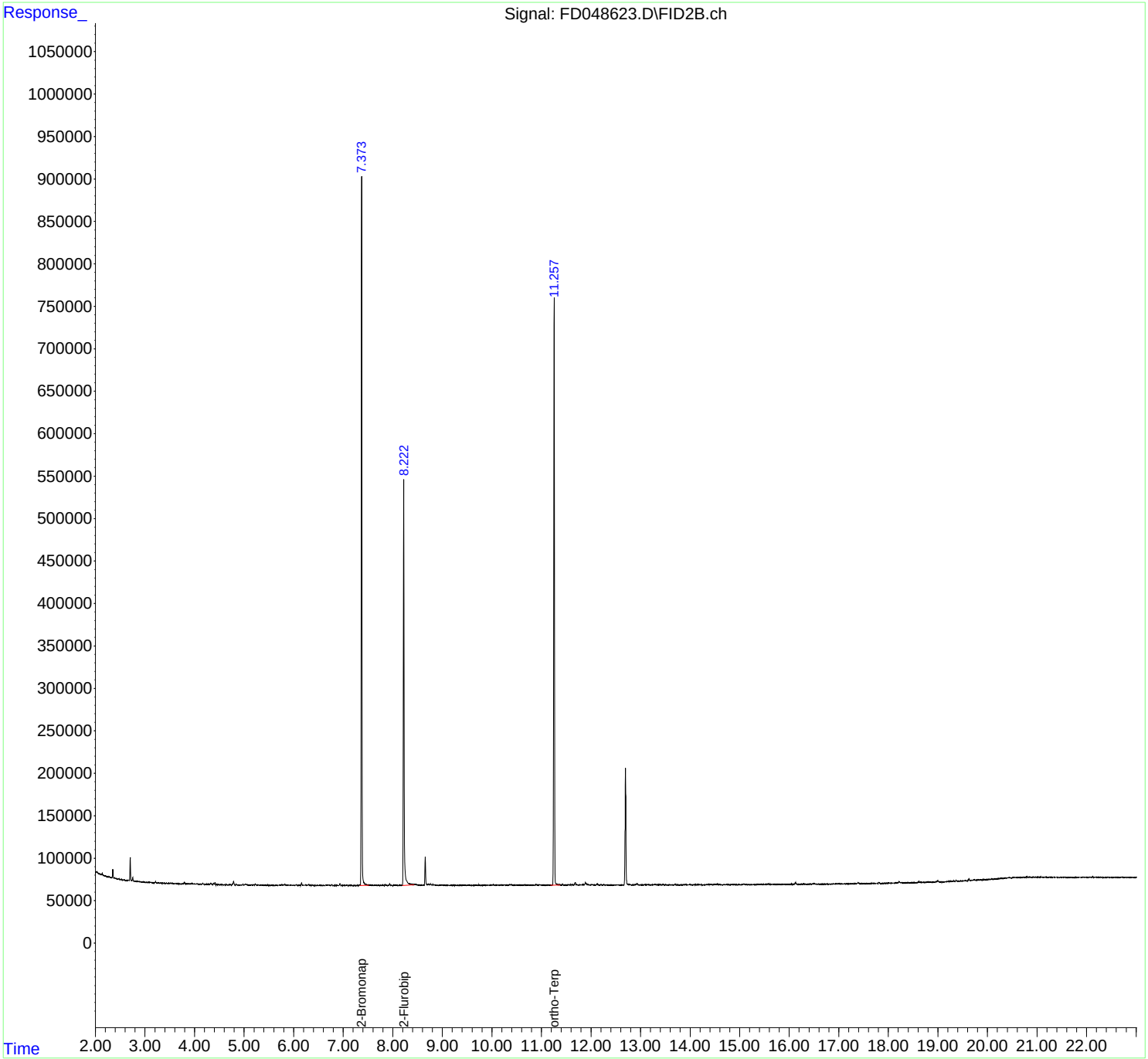
(f)=RT Delta > 1/2 Window (m)=manual int.

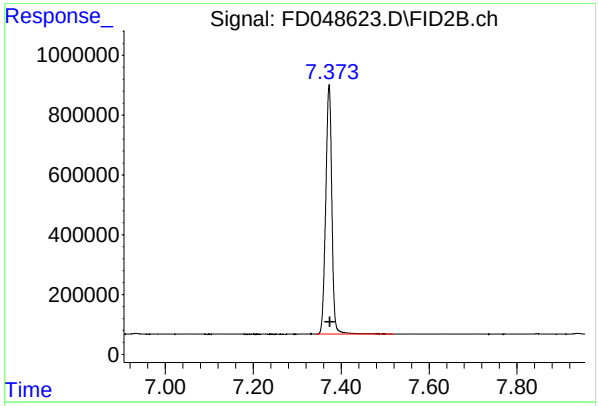
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048623.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 17:27
Operator : YP/AJ
Sample : PB164525BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB164525BL

Integration File: autoint1.e
Quant Time: Nov 01 01:02:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

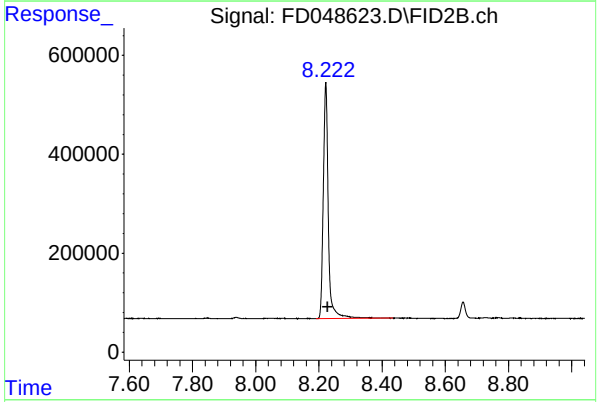




#4 2-Bromonaphthalene (SURR)

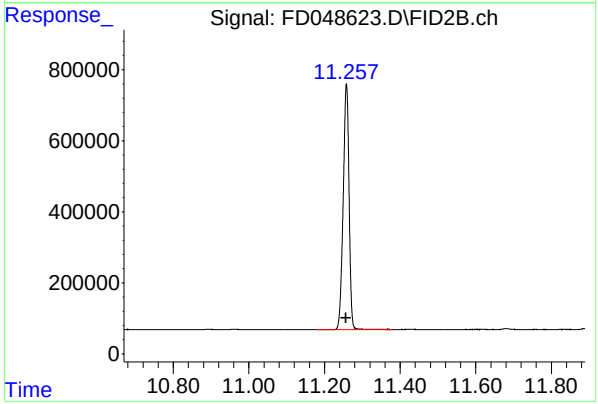
R.T.: 7.372 min
Delta R.T.: -0.002 min
Response: 8064149
Conc: 53.13 ug/ml

Instrument :
FID_D
ClientSampleId :
PB164525BL



#6 2-Flurobiphenyl (SURR)

R.T.: 8.222 min
Delta R.T.: -0.006 min
Response: 5221900
Conc: 53.18 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.258 min
Delta R.T.: 0.001 min
Response: 7445393
Conc: 43.71 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048623.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 17:27
Sample : PB164525BL
Misc :
ALS Vial : 61 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.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	7.518	VB	824320	8064149	100.00%	38.898%
2	8.222	8.191	8.434	BB	474682	5221900	64.75%	25.188%
3	11.258	11.178	11.381	BB	693503	7445393	92.33%	35.914%
			Sum of corrected areas:			20731442		

Aromatic EPH 102324.M Fri Nov 01 01:36:04 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164525BL	SDG No.:	P4578
Lab Sample ID:	PB164525BL	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
10/30/24 08:20	10/30/24 17:27	PB164525

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	0.38	U	1	0.38	1.00	mg/kg	FC067568.D
Aliphatic C12-C16	Aliphatic C12-C16	0.24	U	1	0.24	0.67	mg/kg	FC067568.D
Aliphatic C16-C21	Aliphatic C16-C21	0.30	U	1	0.30	1.00	mg/kg	FC067568.D
Aliphatic C21-C28	Aliphatic C21-C28	0.80	U	1	0.80	1.33	mg/kg	FC067568.D
Aliphatic C28-C40	Aliphatic C28-C40	1.80	U	1	1.80	2.00	mg/kg	FC067568.D
Aromatic C10-C12	Aromatic C10-C12	0.30	U	1	0.30	0.67	mg/kg	FD048623.D
Aromatic C12-C16	Aromatic C12-C16	0.34	U	1	0.34	1.00	mg/kg	FD048623.D
Aromatic C16-C21	Aromatic C16-C21	0.96	U	1	0.96	1.67	mg/kg	FD048623.D
Aromatic C21-C36	Aromatic C21-C36	2.00	U	1	2.00	2.66	mg/kg	FD048623.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

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164525BL	SDG No.:	P4578
Lab Sample ID:	PB164525BL	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
FC067568.D	1	10/30/24	10/30/24	PB164525

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)	35.4		40 - 140	71%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB164525BL	Acq On:	30 Oct 2024 17:27
Client Sample ID:	PB164525BL	Operator:	YP/AJ
Data file:	FC067568.D	Misc:	
Instrument:	FID_C	ALS Vial:	14
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.174	6.453	0	0	300	ug/ml
Aliphatic C12-C16	6.454	9.842	0	0	200	ug/ml
Aliphatic C16-C21	9.843	13.199	0	0	300	ug/ml
Aliphatic C21-C28	13.200	16.852	0	0	400	ug/ml
Aliphatic C28-C40	16.853	21.694	0	0	600	ug/ml
Aliphatic EPH	3.174	21.694	0	0		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.932	12.932	3824511	35.42		ug/ml
Aliphatic C9-C28	3.174	16.852	0	0	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067568.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 17:27
Operator : YP/AJ
Sample : PB164525BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB164525BL

Integration File: autoint1.e
Quant Time: Nov 01 00:19:24 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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...	12.932	3824511	35.416 ug/ml
Spiked Amount 50.000		Recovery = 70.83%	
Target Compounds			

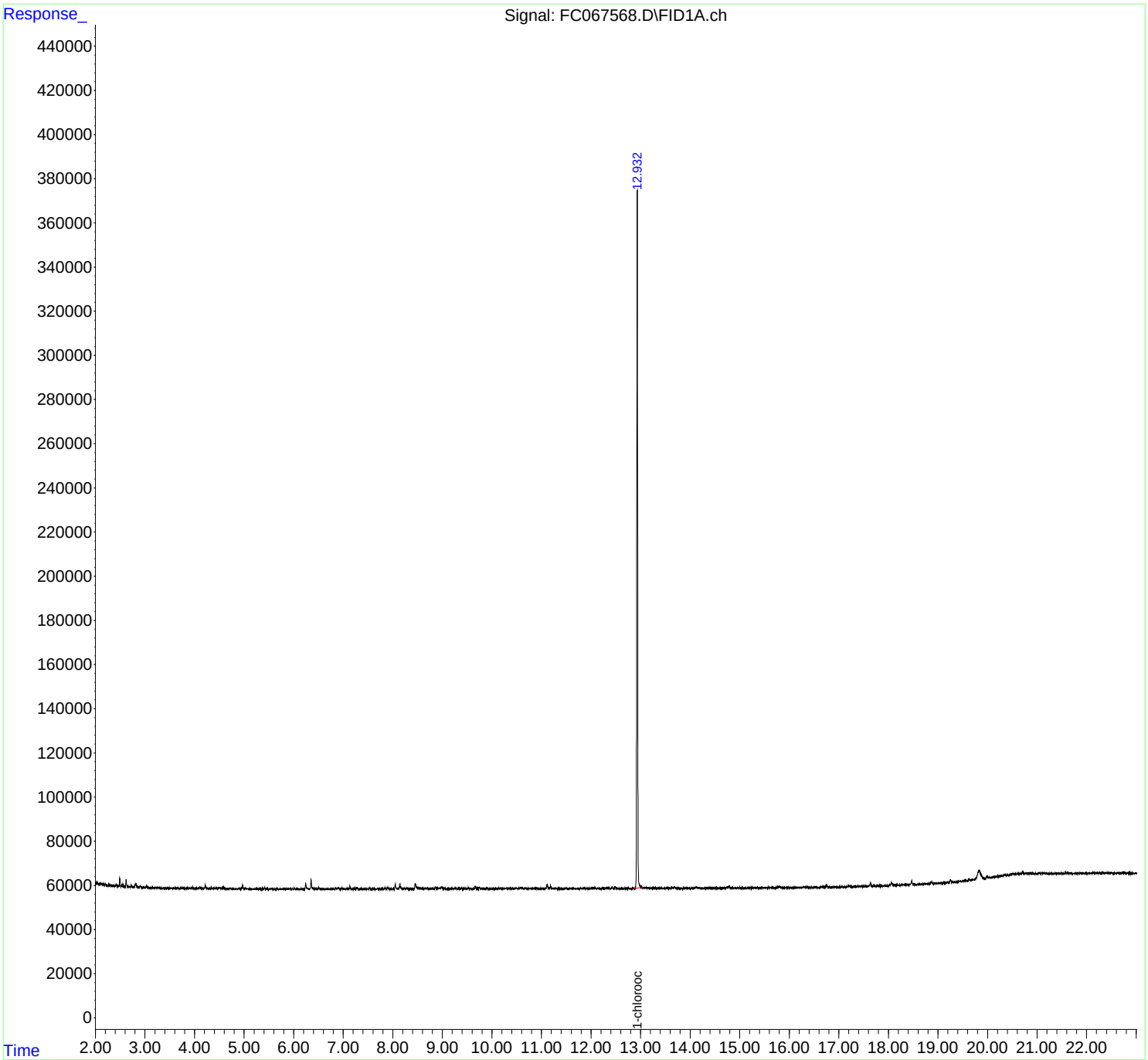
(f)=RT Delta > 1/2 Window (m)=manual int.

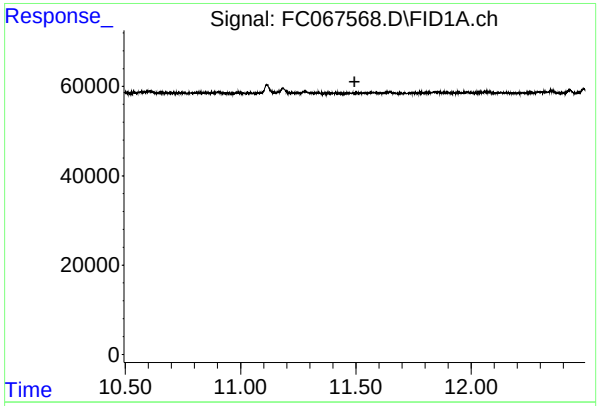
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067568.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 17:27
Operator : YP/AJ
Sample : PB164525BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB164525BL

Integration File: autoint1.e
Quant Time: Nov 01 00:19:24 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 2024
Response via : Initial Calibration
Integrator: ChemStation

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

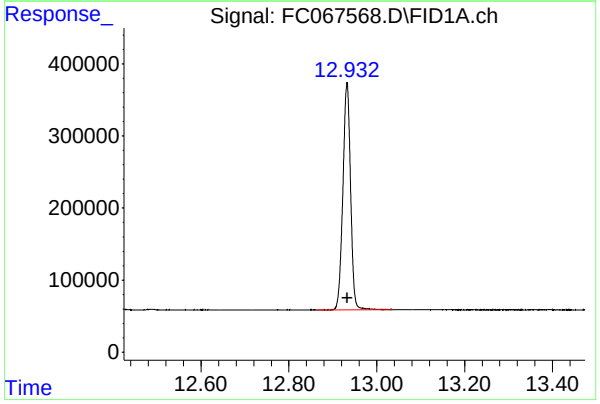




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.494 min
Response: 0
Conc: N.D.

Instrument :
FID_C
ClientSampleId :
PB164525BL



#12 1-chlorooctadecane (SURR)

R.T.: 12.932 min
Delta R.T.: 0.000 min
Response: 3824511
Conc: 35.42 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067568.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 17:27
Sample : PB164525BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.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	12.932	12.862	13.037	BB	314525	3824511	100.00%	100.000%

Sum of corrected areas: 3824511

Aliphatic EPH 102324.M Fri Nov 01 00:48:32 2024

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164532BL	SDG No.:	P4578
Lab Sample ID:	PB164532BL	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :	SW3510		

Prep Date :	Date Analyzed :	Prep Batch ID
10/30/24 08:50	10/31/24 1:29	PB164532

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	5.76	U	1	5.76	30.0	ug/l	FE050917.D
Aliphatic C12-C16	Aliphatic C12-C16	3.61	U	1	3.61	20.0	ug/l	FE050917.D
Aliphatic C16-C21	Aliphatic C16-C21	5.14	U	1	5.14	30.0	ug/l	FE050917.D
Aliphatic C21-C28	Aliphatic C21-C28	8.97	U	1	8.97	40.0	ug/l	FE050917.D
Aliphatic C28-C40	Aliphatic C28-C40	17.0	U	1	17.0	60.0	ug/l	FE050917.D
Aromatic C10-C12	Aromatic C10-C12	3.32	U	1	3.32	20.0	ug/l	FG014588.D
Aromatic C12-C16	Aromatic C12-C16	3.69	U	1	3.69	30.0	ug/l	FG014588.D
Aromatic C16-C21	Aromatic C16-C21	12.7	U	1	12.7	50.0	ug/l	FG014588.D
Aromatic C21-C36	Aromatic C21-C36	25.2	U	1	25.2	80.0	ug/l	FG014588.D
Total AliphaticEPH	Total AliphaticEPH	40.5	U		40.5	180	ug/l	
Total AromaticEPH	Total AromaticEPH	44.9	U		44.9	180	ug/l	
Total EPH	Total EPH	85.4	U		85.4	360	ug/l	

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

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

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Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:		
Project:	Amtrak Sawtooth Bridges 2024		Date Received:		
Client Sample ID:	PB164532BL		SDG No.:	P4578	
Lab Sample ID:	PB164532BL		Matrix:	Water	
Analytical Method:	NJEPH		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :	SW3510				

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE050917.D	1	10/30/24	10/31/24	PB164532

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.76	U	5.76	30.0	ug/l
Aliphatic C12-C16	Aliphatic C12-C16	3.61	U	3.61	20.0	ug/l
Aliphatic C16-C21	Aliphatic C16-C21	5.14	U	5.14	30.0	ug/l
Aliphatic C21-C28	Aliphatic C21-C28	8.97	U	8.97	40.0	ug/l
Aliphatic C28-C40	Aliphatic C28-C40	17.0	U	17.0	60.0	ug/l
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	31.3		40 - 140	63%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB164532BL	Acq On:	31 Oct 2024 01:29
Client Sample ID:	PB164532BL	Operator:	YP\AJ
Data file:	FE050917.D	Misc:	
Instrument:	FID_E	ALS Vial:	26
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.144	6.762	0	0	300	ug/ml
Aliphatic C12-C16	6.763	10.194	0	0	200	ug/ml
Aliphatic C16-C21	10.195	13.554	0	0	300	ug/ml
Aliphatic C21-C28	13.555	17.208	0	0	400	ug/ml
Aliphatic C28-C40	17.209	22.057	0	0	600	ug/ml
Aliphatic EPH	3.144	22.057	0	0		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.291	13.291	3702614	31.3		ug/ml
Aliphatic C9-C28	3.144	17.208	0	0	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050917.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 01:29
Operator : YP\AJ
Sample : PB164532BL
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB164532BL

Integration File: autoint1.e
Quant Time: Oct 31 05:19:46 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 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...	13.291	3702614	31.300 ug/ml
Spiked Amount 50.000		Recovery = 62.60%	
Target Compounds			

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

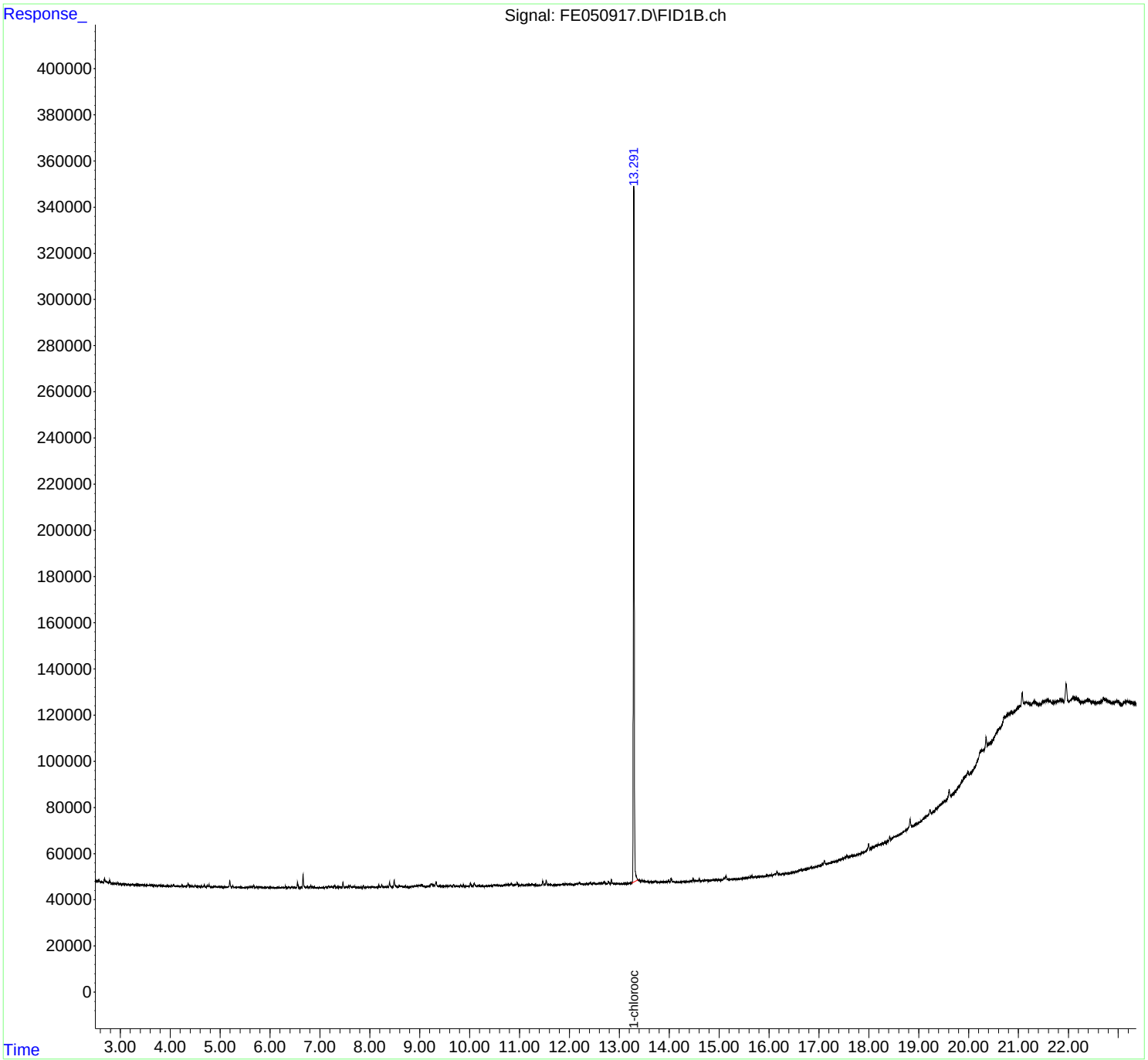
Quantitation Report (QT Reviewed)

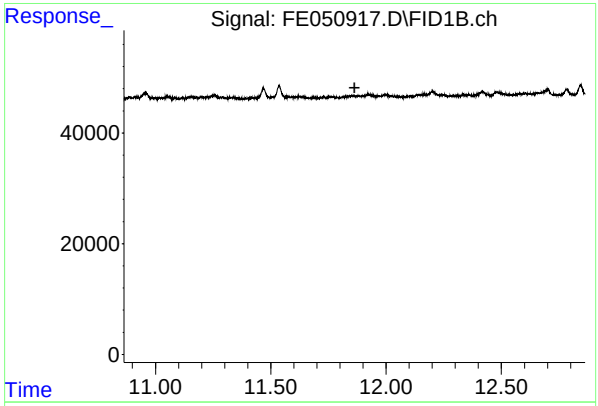
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050917.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 01:29
Operator : YP\AJ
Sample : PB164532BL
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB164532BL

Integration File: autoint1.e
Quant Time: Oct 31 05:19:46 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 2024
Response via : Initial Calibration
Integrator: ChemStation

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

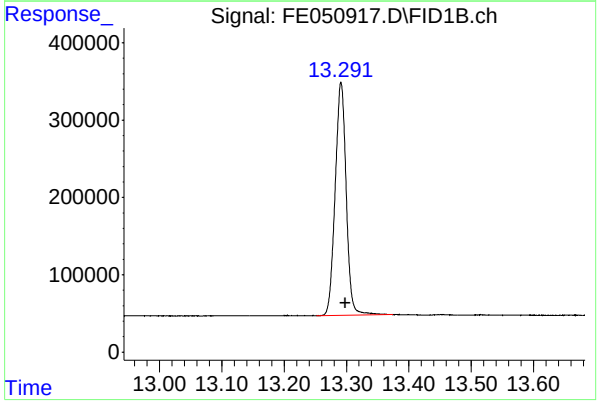




#9 ortho-Terphenyl (SURR)

R.T.: 0.000 min
Exp R.T. : 11.863 min
Response: 0
Conc: N.D.

Instrument :
FID_E
ClientSampleId :
PB164532BL



#12 1-chlorooctadecane (SURR)

R.T.: 13.291 min
Delta R.T.: -0.007 min
Response: 3702614
Conc: 31.30 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050917.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 01:29
Sample : PB164532BL
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	13.291	13.251	13.375	BB	301432	3702614	100.00%	100.000%

Sum of corrected areas: 3702614

Aliphatic EPH 100824.M Thu Oct 31 05:54:52 2024

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:		
Project:	Amtrak Sawtooth Bridges 2024		Date Received:		
Client Sample ID:	PB164532BL		SDG No.:	P4578	
Lab Sample ID:	PB164532BL		Matrix:	Water	
Analytical Method:	NJEPH		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :	SW3510				

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FG014588.D	1	10/30/24	10/30/24	PB164532

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	3.32	U	3.32	20.0	ug/l
Aromatic C12-C16	Aromatic C12-C16	3.69	U	3.69	30.0	ug/l
Aromatic C16-C21	Aromatic C16-C21	12.7	U	12.7	50.0	ug/l
Aromatic C21-C36	Aromatic C21-C36	25.2	U	25.2	80.0	ug/l
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	59.4		40 - 140	119%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	58.6		40 - 140	117%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	49.4		40 - 140	99%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB164532BL	Acq On:	30 Oct 2024 23:17
Client Sample ID:	PB164532BL	Operator:	YP\AJ
Data file:	FG014588.D	Misc:	
Instrument:	FID_G	ALS Vial:	30
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.519	6.389	0	0	200	ug/ml
Aromatic C12-C16	6.390	9.089	0	0	300	ug/ml
Aromatic C16-C21	9.090	13.408	0	0	500	ug/ml
Aromatic C21-C36	13.409	18.851	0	0	800	ug/ml
Aromatic EPH	4.519	18.851	0	0		ug/ml
ortho-Terphenyl (SURR)	11.962	11.962	7307946	49.36		ug/ml
2-Bromonaphthalene (SURR)	8.015	8.015	7460478	59.43		ug/ml
2-Flurobiphenyl (SURR)	8.889	8.889	5047590	58.6		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014588.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 23:17
Operator : YP\AJ
Sample : PB164532BL
Misc :
ALS Vial : 30 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB164532BL

Integration File: autoint1.e
Quant Time: Oct 31 06:45:23 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 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...	8.015	7460478	59.429 ug/ml
Spiked Amount 50.000		Recovery = 118.86%	
6) S 2-Flurobiphenyl (SURR)	8.889	5047590	58.601 ug/ml
Spiked Amount 50.000	Range 0 - 131	Recovery = 117.20%	
11) S ortho-Terphenyl (SURR)	11.962	7307946	49.359 ug/ml
Spiked Amount 50.000		Recovery = 98.72%	
Target Compounds			

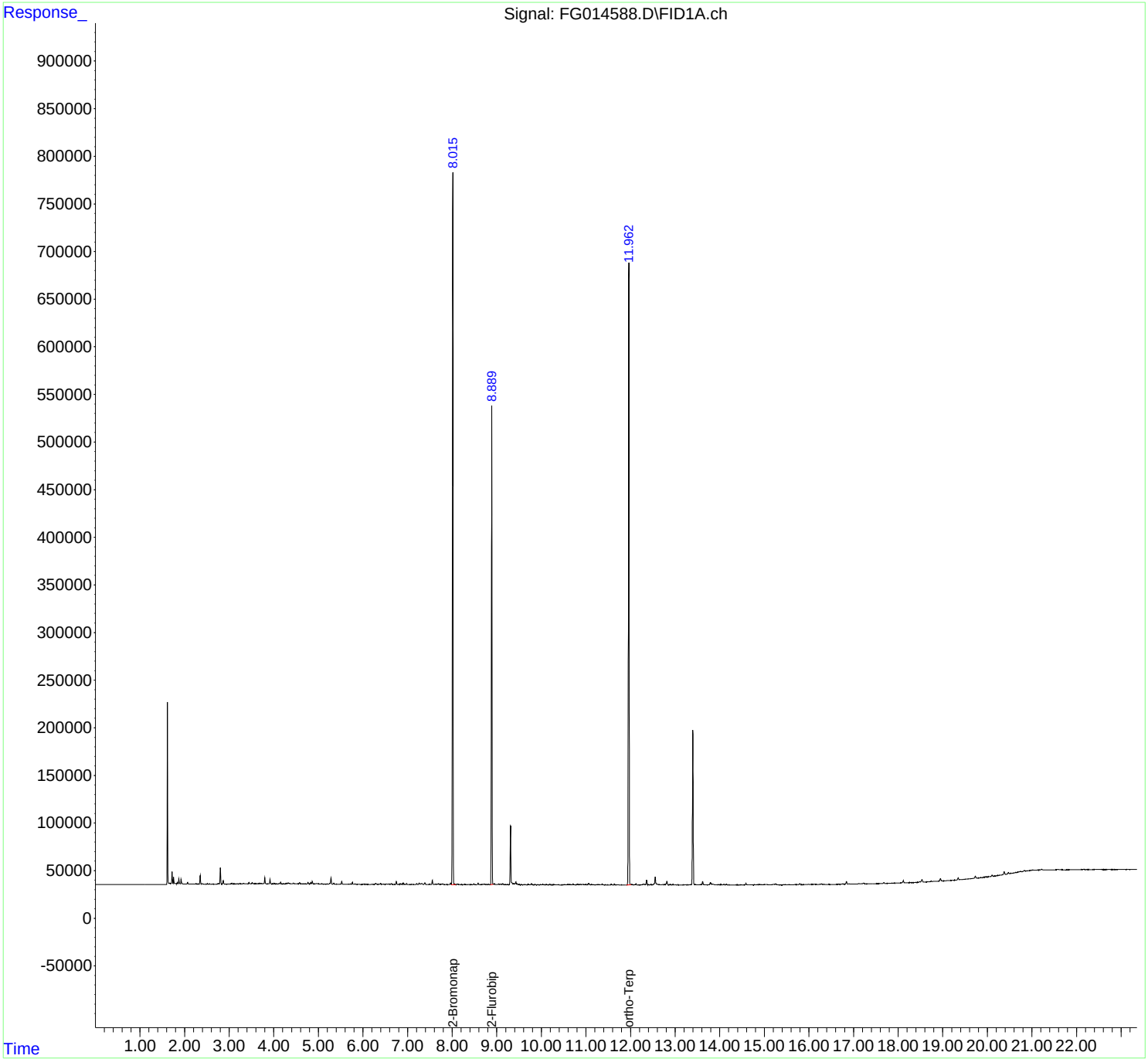
(f)=RT Delta > 1/2 Window (m)=manual int.

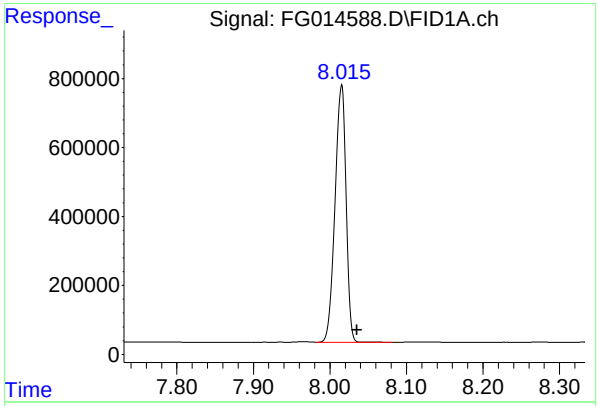
Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014588.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 23:17
Operator : YP\AJ
Sample : PB164532BL
Misc :
ALS Vial : 30 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB164532BL

Integration File: autoint1.e
Quant Time: Oct 31 06:45:23 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

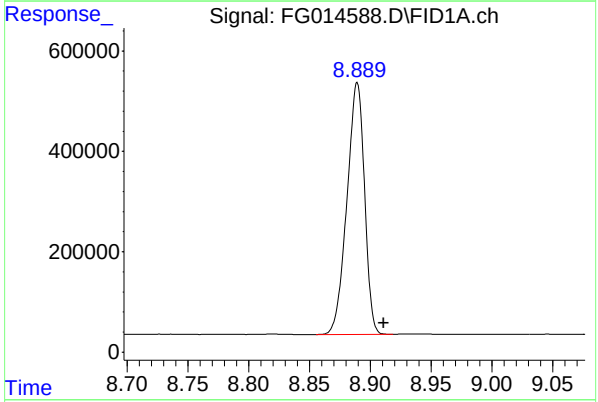




#4 2-Bromonaphthalene (SURR)

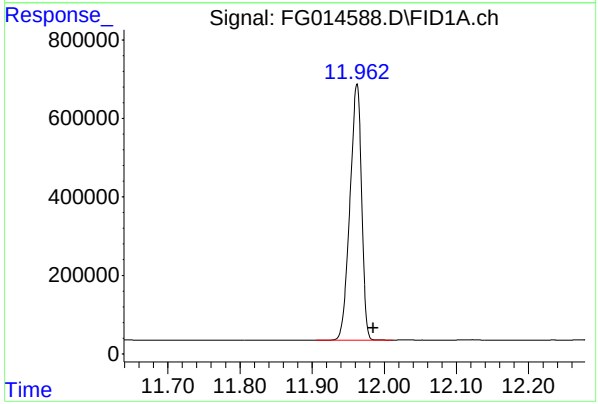
R.T.: 8.015 min
Delta R.T.: -0.021 min
Response: 7460478
Conc: 59.43 ug/ml

Instrument :
FID_G
ClientSampleId :
PB164532BL



#6 2-Flurobiphenyl (SURR)

R.T.: 8.889 min
Delta R.T.: -0.022 min
Response: 5047590
Conc: 58.60 ug/ml



#11 ortho-Terphenyl (SURR)

R.T.: 11.962 min
Delta R.T.: -0.023 min
Response: 7307946
Conc: 49.36 ug/ml

rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014588.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 23:17
Sample : PB164532BL
Misc :
ALS Vial : 30 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	8.015	7.982	8.082	VV	752803	7460478	100.00%	37.649%
2	8.889	8.855	8.919	BV	501744	5047590	67.66%	25.472%
3	11.962	11.905	12.012	BV	655356	7307946	97.96%	36.879%
			Sum of corrected areas:			19816014		

Aromatic EPH 102124.M Thu Oct 31 07:07:36 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164525BS	SDG No.:	P4578
Lab Sample ID:	PB164525BS	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
10/30/24 08:20	10/30/24 18:04	PB164525

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	5.21		1	0.38	1.00	mg/kg	FC067569.D
Aliphatic C12-C16	Aliphatic C12-C16	5.06		1	0.24	0.67	mg/kg	FC067569.D
Aliphatic C16-C21	Aliphatic C16-C21	8.68		1	0.30	1.00	mg/kg	FC067569.D
Aliphatic C21-C28	Aliphatic C21-C28	11.8		1	0.80	1.33	mg/kg	FC067569.D
Aliphatic C28-C40	Aliphatic C28-C40	18.9		1	1.80	2.00	mg/kg	FC067569.D
Aromatic C10-C12	Aromatic C10-C12	3.53		1	0.30	0.67	mg/kg	FD048624.D
Aromatic C12-C16	Aromatic C12-C16	7.16		1	0.34	1.00	mg/kg	FD048624.D
Aromatic C16-C21	Aromatic C16-C21	14.1		1	0.96	1.67	mg/kg	FD048624.D
Aromatic C21-C36	Aromatic C21-C36	22.2		1	2.00	2.67	mg/kg	FD048624.D
Total AliphaticEPH	Total AliphaticEPH	49.6			3.52	6.00	mg/kg	
Total AromaticEPH	Total AromaticEPH	47.0			3.60	6.01	mg/kg	
Total EPH	Total EPH	96.6			7.12	12.0	mg/kg	

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

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

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164525BS	SDG No.:	P4578
Lab Sample ID:	PB164525BS	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
FC067569.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.21		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	5.06		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	8.68		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	18.9		1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	45.0		40 - 140	90%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB164525BS	Acq On:	30 Oct 2024 18:04
Client Sample ID:	PB164525BS	Operator:	YP/AJ
Data file:	FC067569.D	Misc:	
Instrument:	FID_C	ALS Vial:	15
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.174	6.453	10594598	78.206	300	ug/ml
Aliphatic C12-C16	6.454	9.842	9999532	75.937	200	ug/ml
Aliphatic C16-C21	9.843	13.199	16567860	130.215	300	ug/ml
Aliphatic C21-C28	13.200	16.852	21290699	177.289	400	ug/ml
Aliphatic C28-C40	16.853	21.694	28633282	283.236	600	ug/ml
Aliphatic EPH	3.174	21.694	87085971	744.884		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.933	12.933	4860200	45.01		ug/ml
Aliphatic C9-C28	3.174	16.852	58452689	461.647	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067569.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 18:04
Operator : YP/AJ
Sample : PB164525BS
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB164525BS

Integration File: autoint1.e
Quant Time: Nov 01 00:19:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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...	12.933	4860200	45.007 ug/ml
Spiked Amount	50.000		Recovery =	90.01%
	Target Compounds			
1) T	n-Nonane (C9)	3.275	2735004	20.301 ug/ml
2) T	n-Decane (C10)	4.339	3538583	25.972 ug/ml
4) T	n-Dodecane (C12)	6.354	4321011	31.903 ug/ml
6) T	n-Tetradecane (C14)	8.146	4805296	36.609 ug/ml
7) T	n-Hexadecane (C16)	9.744	5194236	39.320 ug/ml
8) T	n-Octadecane (C18)	11.183	5502966	41.653 ug/ml
10) T	n-Eicosane (C20)	12.491	5625973	44.588 ug/ml
11) T	n-Heneicosane (C21)	13.102	5438921	44.070 ug/ml
13) T	n-Docosane (C22)	13.687	5421132	44.273 ug/ml
14) T	n-Tetracosane (C24)	14.787	5365345	44.265 ug/ml
15) T	n-Hexacosane (C26)	15.806	5281183	44.359 ug/ml
16) T	n-Octacosane (C28)	16.755	5223039	44.396 ug/ml
17) T	n-Tricontane (C30)	17.641	5248880	43.425 ug/ml
18) T	n-Dotriacontane (C32)	18.471	5154021	43.560 ug/ml
19) T	n-Tetratriacontane (C34)	19.254	4993617	47.682 ug/ml
20) T	n-Hexatriacontane (C36)	19.991	4663324	51.230 ug/ml
21) T	n-Octatriacontane (C38)	20.713	4422198	51.063 ug/ml
22) T	n-Tetracontane (C40)	21.597	4151242	48.832 ug/ml

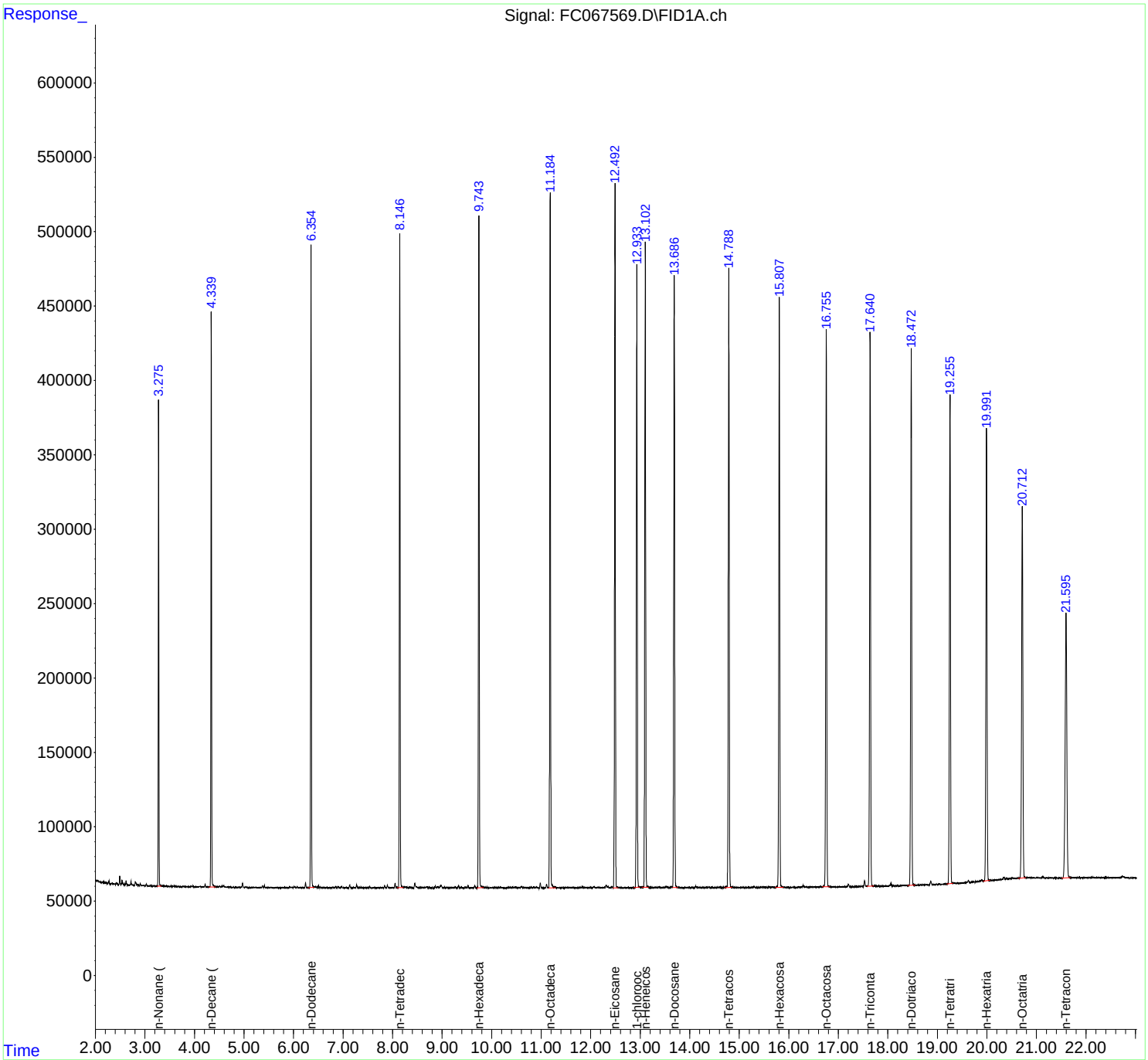
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067569.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 18:04
Operator : YP/AJ
Sample : PB164525BS
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB164525BS

Integration File: autoint1.e
Quant Time: Nov 01 00:19:32 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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\FC103024AL\
Data File : FC067569.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 18:04
Sample : PB164525BS
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.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	3.335	BB	326785	2735004	48.61%	2.975%
2	4.339	4.285	4.420	BB	385881	3538583	62.90%	3.849%
3	6.354	6.288	6.418	BV	430694	4321011	76.80%	4.700%
4	8.146	8.085	8.217	BV	439955	4805296	85.41%	5.226%
5	9.744	9.697	9.832	BB	450899	5194236	92.33%	5.649%
6	11.183	11.145	11.295	PB	469494	5502966	97.81%	5.985%
7	12.491	12.450	12.557	PB	472827	5625973	100.00%	6.119%
8	12.933	12.868	12.992	BB	421131	4860200	86.39%	5.286%
9	13.102	13.035	13.170	BB	431111	5438921	96.68%	5.915%
10	13.687	13.648	13.760	PB	411619	5421132	96.36%	5.896%
11	14.787	14.697	14.857	BB	411786	5365345	95.37%	5.835%
12	15.806	15.723	15.887	BB	397202	5281183	93.87%	5.744%
13	16.755	16.668	16.832	BB	375347	5223039	92.84%	5.681%
14	17.641	17.575	17.717	BB	371190	5248880	93.30%	5.709%
15	18.471	18.403	18.548	BB	362088	5154021	91.61%	5.605%
16	19.254	19.185	19.313	BB	321553	4993617	88.76%	5.431%
17	19.991	19.932	20.062	BB	302176	4663324	82.89%	5.072%
18	20.713	20.632	20.787	BB	248043	4422198	78.60%	4.810%
19	21.597	21.505	21.687	BB	176778	4151242	73.79%	4.515%

Sum of corrected areas: 91946172

Aliphatic EPH 102324.M Fri Nov 01 00:48:53 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164525BS	SDG No.:	P4578
Lab Sample ID:	PB164525BS	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
FD048624.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	3.53		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	7.16		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	14.1		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	22.2		2.00	2.67	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	51.1		40 - 140	102%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	52.6		40 - 140	105%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	43.9		40 - 140	88%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB164525BS	Acq On:	30 Oct 2024 18:04
Client Sample ID:	PB164525BS	Operator:	YP/AJ
Data file:	FD048624.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	4.094	5.812	9338395	52.998	200	ug/ml
Aromatic C12-C16	5.813	8.417	19033424	107.368	300	ug/ml
Aromatic C16-C21	8.418	12.679	34764103	212.193	500	ug/ml
Aromatic C21-C36	12.680	18.085	50891634	333.25	800	ug/ml
Aromatic EPH	4.094	18.085	114027556	705.808		ug/ml
ortho-Terphenyl (SURR)	11.258	11.258	7474933	43.88		ug/ml
2-Bromonaphthalene (SURR)	7.373	7.373	7755971	51.1		ug/ml
2-Flurobiphenyl (SURR)	8.223	8.223	5165623	52.61		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048624.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 18:04
Operator : YP/AJ
Sample : PB164525BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB164525BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:02:40 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.373	7755971	51.100 ug/ml
Spiked Amount	50.000		Recovery =	102.20%
6) S	2-Flurobiphenyl (SURR)	8.223	5165623	52.607 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	105.21%
11) S	ortho-Terphenyl (SURR)	11.258	7474933	43.882 ug/ml
Spiked Amount	50.000		Recovery =	87.76%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.194	4855489	27.910 ug/mlm
2) T	Naphthalene (C11.7)	5.712	5642483	31.622 ug/ml
3) T	2-Methylnaphthalene (...	6.759	5609712	31.363 ug/ml
5) T	Acenaphthylene (C15.06)	8.025	6501012	37.023 ug/ml
7) T	Acenaphthene (C15.5)	8.320	6922700	39.031 ug/ml
8) T	Flouorene (C16.55)	9.098	6866064	40.619 ug/ml
9) T	Phenanthrene (C19.36)	10.486	6808381	41.187 ug/ml
10) T	Anthracene (C19.43)	10.561	6756572	42.252 ug/ml
12) T	Fluoranthene (C21.85)	12.289	6999115	42.528 ug/mlm
13) T	Pyrene (C20.8)	12.582	6791594	42.164 ug/ml
14) T	Benzo[a]anthracene (C...	14.452	6411746	43.851 ug/ml
15) T	Chrysene (C27.41)	14.494	6458235	39.262 ug/ml
16) T	benzo[b]fluoranthene ...	15.999	6462850	42.511 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.034	6495480	43.216 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.375	6259856	41.595 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.742	6346582	48.641 ug/ml
20) T	Dibenz[a,h]anthracene...	17.778	6191231	38.045 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.994	6265654	40.927 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048624.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 18:04
Operator : YP/AJ
Sample : PB164525BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

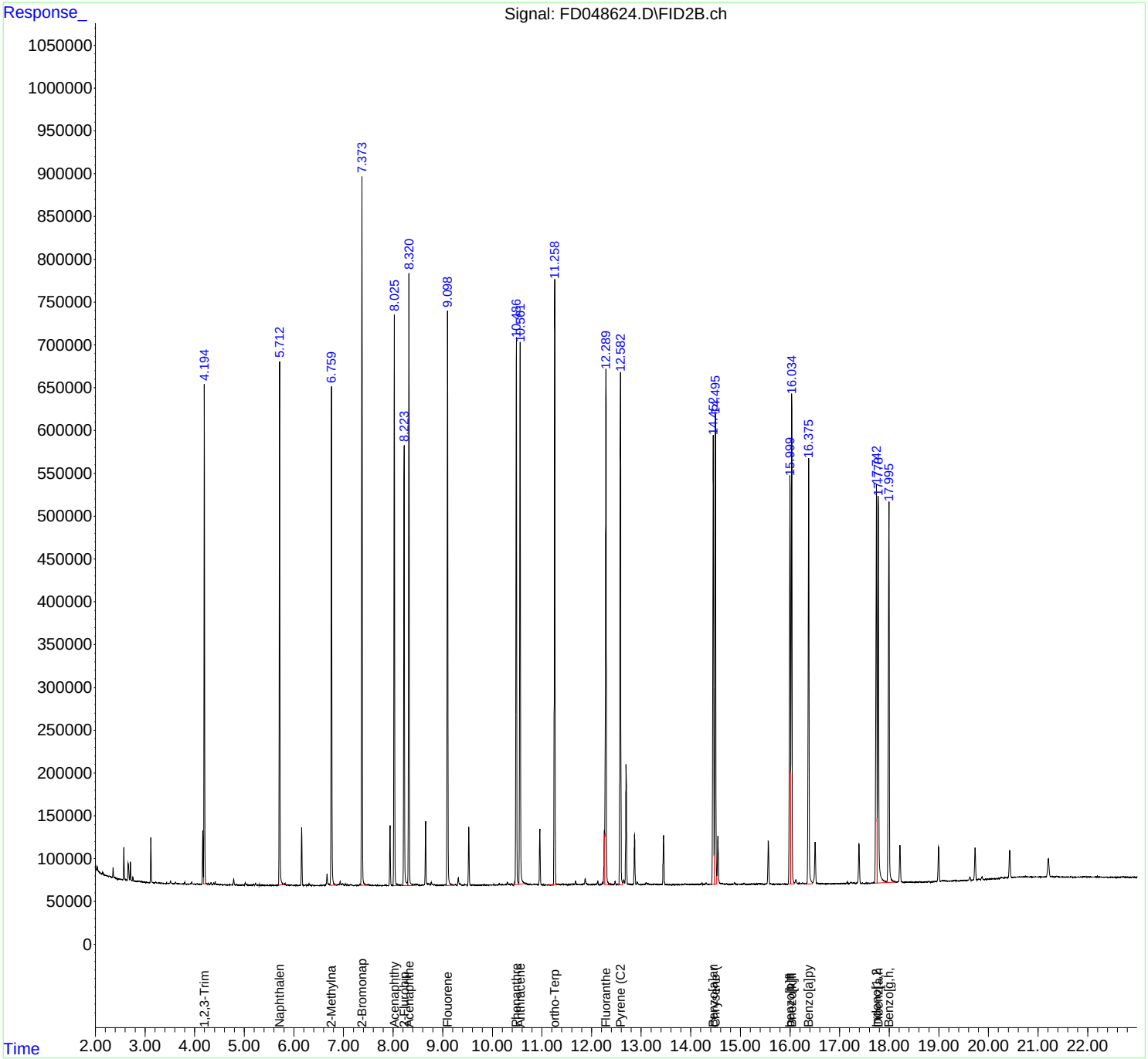
Instrument :
FID_D
ClientSampleId :
PB164525BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:02:40 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Instrument :
FID_D
ClientSampleId :
PB164525BS

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD10302
Data File : FD048624.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 18:04
Sample : PB164525BS
Misc :
ALS Vial : 62 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.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	4.195	4.161	4.259	BV	545576	3695912	47.65%	2.749%
2	5.712	5.684	5.808	PV	606576	5642483	72.75%	4.198%
3	6.759	6.724	6.864	VV	577207	5609712	72.33%	4.173%
4	7.373	7.344	7.464	VV	830563	7755971	100.00%	5.770%
5	8.025	7.998	8.111	VV	658789	6501012	83.82%	4.836%
6	8.223	8.190	8.291	PV	516644	5165623	66.60%	3.843%
7	8.320	8.291	8.411	VV	716906	6922700	89.26%	5.150%
8	9.098	9.066	9.238	VV	664491	6866064	88.53%	5.108%
9	10.486	10.409	10.531	PV	635383	6808381	87.78%	5.065%
10	10.561	10.531	10.664	VV	629388	6756572	87.11%	5.026%
11	11.258	11.124	11.324	BV	702511	7474933	96.38%	5.561%
12	12.289	12.234	12.414	VB	609686	7541492	97.23%	5.610%
13	12.582	12.518	12.628	PV	592652	6791594	87.57%	5.052%
14	14.452	14.405	14.471	PV	522564	6411746	82.67%	4.770%
15	14.494	14.471	14.524	VV	548364	6458235	83.27%	4.804%
16	15.999	15.961	16.014	BV	472234	6462850	83.33%	4.808%
17	16.034	16.014	16.092	VV	574714	6495480	83.75%	4.832%
18	16.375	16.301	16.452	BV	493675	6259856	80.71%	4.657%
19	17.742	17.701	17.757	BV	463093	6346582	81.83%	4.721%
20	17.778	17.757	17.951	VV	449896	6191231	79.83%	4.606%
21	17.994	17.951	18.144	VB	446403	6265654	80.78%	4.661%

Sum of corrected areas: 134424081

Aromatic EPH 102324.M Fri Nov 01 01:36:46 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164532BS	SDG No.:	P4578
Lab Sample ID:	PB164532BS	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :	SW3510		

Prep Date :	Date Analyzed :	Prep Batch ID
10/30/24 08:50	10/31/24 1:59	PB164532

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	167		1	5.76	30.0	ug/l	FE050918.D
Aliphatic C12-C16	Aliphatic C12-C16	155		1	3.61	20.0	ug/l	FE050918.D
Aliphatic C16-C21	Aliphatic C16-C21	267		1	5.14	30.0	ug/l	FE050918.D
Aliphatic C21-C28	Aliphatic C21-C28	363		1	8.97	40.0	ug/l	FE050918.D
Aliphatic C28-C40	Aliphatic C28-C40	607		1	17.0	60.0	ug/l	FE050918.D
Aromatic C10-C12	Aromatic C10-C12	182		1	3.32	20.0	ug/l	FG014589.D
Aromatic C12-C16	Aromatic C12-C16	300		1	3.69	30.0	ug/l	FG014589.D
Aromatic C16-C21	Aromatic C16-C21	589		1	12.7	50.0	ug/l	FG014589.D
Aromatic C21-C36	Aromatic C21-C36	889		1	25.2	80.0	ug/l	FG014589.D
Total AliphaticEPH	Total AliphaticEPH	1560			40.5	180	ug/l	
Total AromaticEPH	Total AromaticEPH	1960			44.9	180	ug/l	
Total EPH	Total EPH	3520			85.4	360	ug/l	

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

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:		
Project:	Amtrak Sawtooth Bridges 2024		Date Received:		
Client Sample ID:	PB164532BS		SDG No.:	P4578	
Lab Sample ID:	PB164532BS		Matrix:	Water	
Analytical Method:	NJEPH		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :	SW3510				

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE050918.D	1	10/30/24	10/31/24	PB164532

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	167		5.76	30.0	ug/l
Aliphatic C12-C16	Aliphatic C12-C16	155		3.61	20.0	ug/l
Aliphatic C16-C21	Aliphatic C16-C21	267		5.14	30.0	ug/l
Aliphatic C21-C28	Aliphatic C21-C28	363		8.97	40.0	ug/l
Aliphatic C28-C40	Aliphatic C28-C40	607		17.0	60.0	ug/l
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	33.3		40 - 140	66%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB164532BS	Acq On:	31 Oct 2024 01:59
Client Sample ID:	PB164532BS	Operator:	YP\AJ
Data file:	FE050918.D	Misc:	
Instrument:	FID_E	ALS Vial:	27
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.144	6.762	11996504	83.95	300	ug/ml
Aliphatic C12-C16	6.763	10.194	11265820	77.632	200	ug/ml
Aliphatic C16-C21	10.195	13.554	19330901	133.869	300	ug/ml
Aliphatic C21-C28	13.555	17.208	25843065	181.795	400	ug/ml
Aliphatic C28-C40	17.209	22.057	42033943	303.926	600	ug/ml
Aliphatic EPH	3.144	22.057	110470233	781.173		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.291	13.291	3932867	33.25		ug/ml
Aliphatic C9-C28	3.144	17.208	68436290	477.246	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050918.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 01:59
Operator : YP\AJ
Sample : PB164532BS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB164532BS

Integration File: autoint1.e
Quant Time: Oct 31 05:19:54 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 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...	13.291	3932867	33.247 ug/ml
Spiked Amount	50.000		Recovery =	66.49%
	Target Compounds			
1) T	n-Nonane (C9)	3.245	3299378	23.352 ug/ml
2) T	n-Decane (C10)	4.495	4006009	27.921 ug/ml
4) T	n-Dodecane (C12)	6.664	4691117	32.592 ug/ml
6) T	n-Tetradecane (C14)	8.491	5333237	37.278 ug/ml
7) T	n-Hexadecane (C16)	10.097	5932583	40.311 ug/ml
8) T	n-Octadecane (C18)	11.538	6279633	42.041 ug/ml
10) T	n-Eicosane (C20)	12.846	6621110	46.172 ug/ml
11) T	n-Heneicosane (C21)	13.458	6430158	45.788 ug/ml
13) T	n-Docosane (C22)	14.043	6467541	46.099 ug/ml
14) T	n-Tetracosane (C24)	15.144	6429058	45.507 ug/ml
15) T	n-Hexacosane (C26)	16.164	6417963	45.609 ug/ml
16) T	n-Octacosane (C28)	17.113	6528503	44.615 ug/ml
17) T	n-Tricontane (C30)	18.000	6767957	42.565 ug/ml
18) T	n-Dotriacontane (C32)	18.831	6988105	43.106 ug/ml
19) T	n-Tetratriacontane (C34)	19.615	7226775	49.198 ug/ml
20) T	n-Hexatriacontane (C36)	20.354	7143100	56.327 ug/ml
21) T	n-Octatriacontane (C38)	21.079	7302668	59.060 ug/ml
22) T	n-Tetracontane (C40)	21.964	6605338	59.320 ug/ml

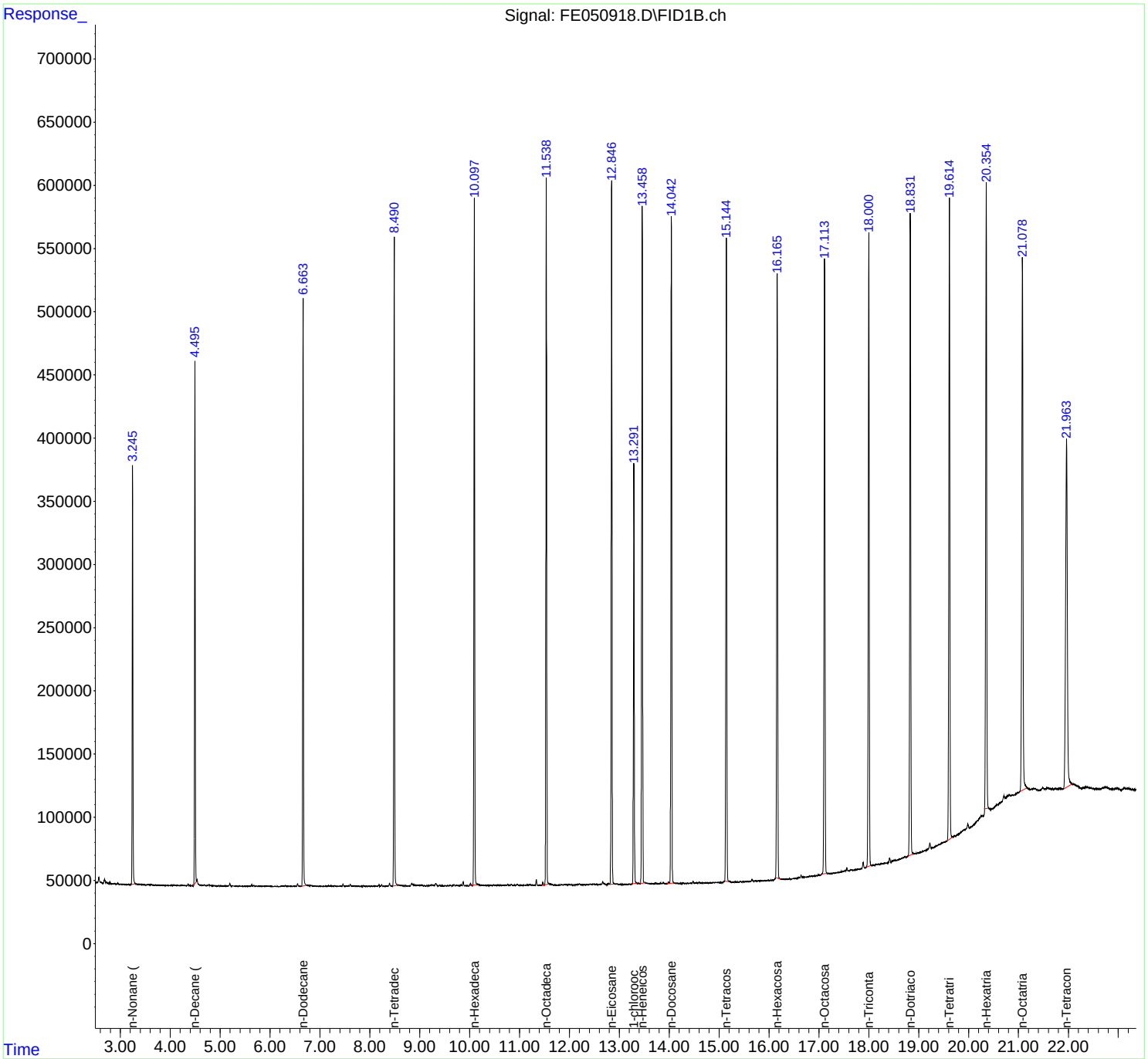
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050918.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 01:59
Operator : YP\AJ
Sample : PB164532BS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB164532BS

Integration File: autoint1.e
Quant Time: Oct 31 05:19:54 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 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_E\Data\FE103024AL\
Data File : FE050918.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 01:59
Sample : PB164532BS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.245	3.214	3.308	BB	330884	3299378	45.18%	2.884%
2	4.495	4.461	4.527	BV	409650	4006009	54.86%	3.502%
3	6.664	6.631	6.728	BB	465948	4691117	64.24%	4.101%
4	8.491	8.454	8.554	BB	514368	5333237	73.03%	4.662%
5	10.097	9.981	10.158	BB	547205	5932583	81.24%	5.186%
6	11.538	11.441	11.601	BB	559135	6279633	85.99%	5.489%
7	12.846	12.808	12.908	BB	562675	6621110	90.67%	5.788%
8	13.291	13.248	13.354	BB	332938	3932867	53.86%	3.438%
9	13.458	13.418	13.514	BB	534110	6430158	88.05%	5.621%
10	14.043	13.951	14.104	BB	527562	6467541	88.56%	5.653%
11	15.144	15.111	15.199	BBA	510170	6429058	88.04%	5.620%
12	16.164	16.131	16.224	BB	480437	6417963	87.89%	5.610%
13	17.113	17.061	17.171	BB	488803	6528503	89.40%	5.707%
14	18.000	17.951	18.058	BB	502747	6767957	92.68%	5.916%
15	18.831	18.781	18.898	BB	506198	6988105	95.69%	6.108%
16	19.615	19.571	19.678	BB	506653	7226775	98.96%	6.317%
17	20.354	20.321	20.399	BBA	496671	7143100	97.81%	6.244%
18	21.079	21.031	21.169	BBA	420195	7302668	100.00%	6.383%
19	21.964	21.901	22.078	BB	275911	6605338	90.45%	5.774%

Sum of corrected areas: 114403098

Aliphatic EPH 100824.M Thu Oct 31 05:55:02 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:		
Project:	Amtrak Sawtooth Bridges 2024		Date Received:		
Client Sample ID:	PB164532BS		SDG No.:	P4578	
Lab Sample ID:	PB164532BS		Matrix:	Water	
Analytical Method:	NJEPH		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :	SW3510				

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FG014589.D	1	10/30/24	10/30/24	PB164532

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	182		3.32	20.0	ug/l
Aromatic C12-C16	Aromatic C12-C16	300		3.69	30.0	ug/l
Aromatic C16-C21	Aromatic C16-C21	589		12.7	50.0	ug/l
Aromatic C21-C36	Aromatic C21-C36	889		25.2	80.0	ug/l
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	58.8		40 - 140	118%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	57.1		40 - 140	114%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	46.9		40 - 140	94%	SPK: 50

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

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB164532BS	Acq On:	30 Oct 2024 23:46
Client Sample ID:	PB164532BS	Operator:	YP\AJ
Data file:	FG014589.D	Misc:	
Instrument:	FID_G	ALS Vial:	41
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.519	6.389	12705740	91.083	200	ug/ml
Aromatic C12-C16	6.390	9.089	21837200	150.133	300	ug/ml
Aromatic C16-C21	9.090	13.408	42706694	294.88	500	ug/ml
Aromatic C21-C36	13.409	18.851	63200840	444.642	800	ug/ml
Aromatic EPH	4.519	18.851	140450474	980.738		ug/ml
ortho-Terphenyl (SURR)	11.961	11.961	6936011	46.85		ug/ml
2-Bromonaphthalene (SURR)	8.015	8.015	7379611	58.79		ug/ml
2-Flurobiphenyl (SURR)	8.890	8.890	4922210	57.15		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014589.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 23:46
Operator : YP\AJ
Sample : PB164532BS
Misc :
ALS Vial : 41 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB164532BS

Integration File: autoint1.e
Quant Time: Oct 31 06:45:31 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 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...	8.015	7379611	58.785 ug/ml
Spiked Amount	50.000		Recovery =	117.57%
6) S	2-Flurobiphenyl (SURR)	8.890	4922210	57.145 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	114.29%
11) S	ortho-Terphenyl (SURR)	11.961	6936011	46.847 ug/ml
Spiked Amount	50.000		Recovery =	93.69%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.618	5918950	43.686 ug/ml
2) T	Naphthalene (C11.7)	6.288	6786790	47.294 ug/ml
3) T	2-Methylnaphthalene (...	7.386	6752790	46.237 ug/ml
5) T	Acenaphthylene (C15.06)	8.690	7325970	50.318 ug/ml
7) T	Acenaphthene (C15.5)	8.992	7758440	53.611 ug/ml
8) T	Flouorene (C16.55)	9.782	8138315	56.176 ug/ml
9) T	Phenanthrene (C19.36)	11.191	8482476	57.630 ug/ml
10) T	Anthracene (C19.43)	11.268	8517863	60.742 ug/ml
12) T	Fluoranthene (C21.85)	13.016	8561842	57.892 ug/ml
13) T	Pyrene (C20.8)	13.316	9006198	61.259 ug/ml
14) T	Benzo[a]anthracene (C...	15.197	8204184	56.651 ug/ml
15) T	Chrysene (C27.41)	15.243	9311757	63.481 ug/ml
16) T	benzo[b]fluoranthene ...	16.756	8046677	54.710 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.792	7789437	56.444 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.137	7494013	52.547 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.510	8066546	60.436 ug/ml
20) T	Dibenz[a,h]anthracene...	18.550	7178390	51.439 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.768	7109836	51.103 ug/ml

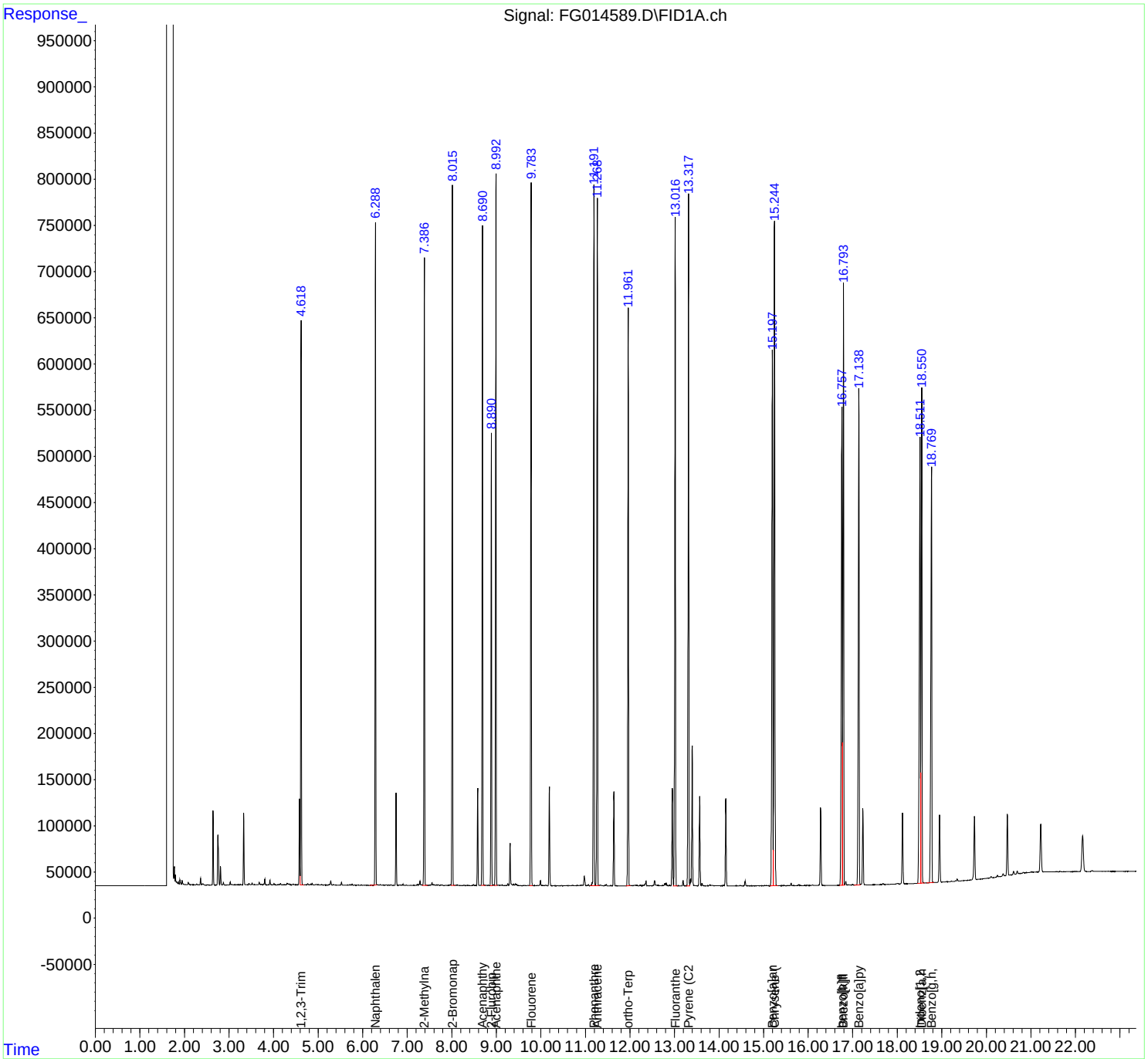
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014589.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 23:46
Operator : YP\AJ
Sample : PB164532BS
Misc :
ALS Vial : 41 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB164532BS

Integration File: autoint1.e
Quant Time: Oct 31 06:45:31 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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



rteres

Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014589.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 23:46
Sample : PB164532BS
Misc :
ALS Vial : 41 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	4.618	4.597	4.681	VB	610892	5918950	63.56%	3.707%
2	6.288	6.158	6.324	BV	717919	6786790	72.88%	4.250%
3	7.386	7.345	7.458	VB	685842	6752790	72.52%	4.229%
4	8.015	7.981	8.079	VV	759450	7379611	79.25%	4.621%
5	8.690	8.655	8.758	BV	718489	7325970	78.67%	4.588%
6	8.890	8.855	8.918	BV	494792	4922210	52.86%	3.082%
7	8.992	8.957	9.023	VV	763044	7758440	83.32%	4.858%
8	9.782	9.738	9.816	BB	750762	8138315	87.40%	5.096%
9	11.191	11.101	11.221	BV	760017	8482476	91.09%	5.312%
10	11.268	11.221	11.320	VV	744699	8517863	91.47%	5.334%
11	11.961	11.905	12.005	BV	626733	6936011	74.49%	4.343%
12	13.016	12.977	13.071	VB	717387	8561842	91.95%	5.362%
13	13.316	13.261	13.341	BV	762713	9006198	96.72%	5.640%
14	15.197	15.138	15.216	BV	585460	8204184	88.11%	5.138%
15	15.243	15.216	15.318	VB	730902	9311757	100.00%	5.831%
16	16.756	16.698	16.771	BV	509759	8046677	86.41%	5.039%
17	16.792	16.771	16.819	VV	635163	7789437	83.65%	4.878%
18	17.137	17.035	17.168	BV	542886	7494013	80.48%	4.693%
19	18.510	18.451	18.525	BV	488441	8066546	86.63%	5.051%
20	18.550	18.525	18.618	VB	525436	7178390	77.09%	4.495%
21	18.768	18.658	18.821	BB	449986	7109836	76.35%	4.452%

Sum of corrected areas: 159688306

Aromatic EPH 102124.M Thu Oct 31 07:08:21 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164525BSD	SDG No.:	P4578
Lab Sample ID:	PB164525BSD	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
FD048625.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	3.57		0.30	0.67	mg/kg
Aromatic C12-C16	Aromatic C12-C16	7.25		0.34	1.00	mg/kg
Aromatic C16-C21	Aromatic C16-C21	14.4		0.96	1.67	mg/kg
Aromatic C21-C36	Aromatic C21-C36	22.5		2.00	2.66	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	52.0		40 - 140	104%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	53.2		40 - 140	106%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	44.6		40 - 140	89%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB164525BSD	Acq On:	30 Oct 2024 18:41
Client Sample ID:	PB164525BSD	Operator:	YP/AJ
Data file:	FD048625.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	4.094	5.812	9440252	53.576	200	ug/ml
Aromatic C12-C16	5.813	8.417	19303427	108.891	300	ug/ml
Aromatic C16-C21	8.418	12.679	35308940	215.518	500	ug/ml
Aromatic C21-C36	12.680	18.085	51655732	338.253	800	ug/ml
Aromatic EPH	4.094	18.085	115708351	716.239		ug/ml
2-Bromonaphthalene (SURR)	7.373	7.373	7894586	52.01		ug/ml
2-Flurobiphenyl (SURR)	8.223	8.223	5226799	53.23		ug/ml
ortho-Terphenyl (SURR)	11.259	11.259	7598459	44.61		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048625.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 18:41
Operator : YP/AJ
Sample : PB164525BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
PB164525BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:02:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.373	7894586	52.014 ug/ml
Spiked Amount	50.000		Recovery =	104.03%
6) S	2-Flurobiphenyl (SURR)	8.223	5226799	53.230 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	106.46%
11) S	ortho-Terphenyl (SURR)	11.259	7598459	44.608 ug/ml
Spiked Amount	50.000		Recovery =	89.22%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.195	4949559	28.450 ug/mlm
2) T	Naphthalene (C11.7)	5.712	5726726	32.094 ug/ml
3) T	2-Methylnaphthalene (...	6.759	5704681	31.894 ug/ml
5) T	Acenaphthylene (C15.06)	8.025	6603103	37.605 ug/ml
7) T	Acenaphthene (C15.5)	8.321	6995643	39.442 ug/ml
8) T	Flouorene (C16.55)	9.099	6968023	41.222 ug/ml
9) T	Phenanthrene (C19.36)	10.486	6924252	41.888 ug/ml
10) T	Anthracene (C19.43)	10.561	6875067	42.993 ug/ml
12) T	Fluoranthene (C21.85)	12.290	7059650	42.896 ug/mlm
13) T	Pyrene (C20.8)	12.583	6875463	42.684 ug/ml
14) T	Benzo[a]anthracene (C...	14.452	6510948	44.530 ug/ml
15) T	Chrysene (C27.41)	14.494	6549044	39.814 ug/ml
16) T	benzo[b]fluoranthene ...	16.000	6560076	43.150 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.034	6590022	43.845 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.375	6353499	42.217 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.742	6435448	49.322 ug/ml
20) T	Dibenz[a,h]anthracene...	17.780	6296958	38.694 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.994	6359737	41.542 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048625.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 18:41
Operator : YP/AJ
Sample : PB164525BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

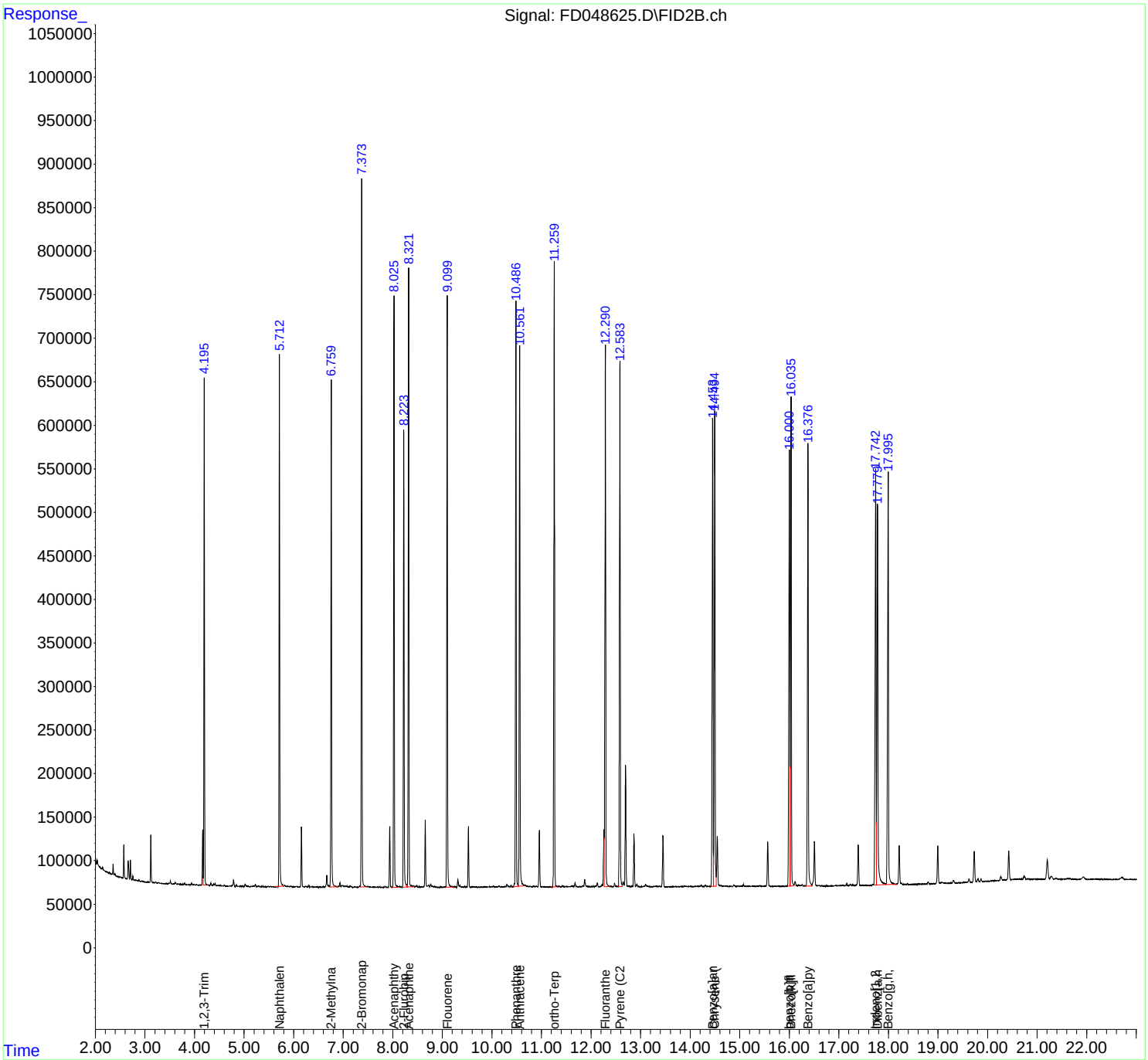
Instrument :
FID_D
ClientSampleId :
PB164525BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:02:50 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Instrument :
FID_D
ClientSampleId :
PB164525BSD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD10302
Data File : FD048625.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 18:41
Sample : PB164525BSD
Misc :
ALS Vial : 63 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.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	4.195	4.161	4.261	BV	544232	3713526	47.04%	2.722%
2	5.712	5.604	5.805	BV	603110	5726726	72.54%	4.198%
3	6.759	6.725	6.888	VV	573996	5704681	72.26%	4.181%
4	7.373	7.344	7.464	VV	821526	7894586	100.00%	5.787%
5	8.025	7.981	8.109	VV	675891	6603103	83.64%	4.840%
6	8.223	8.194	8.290	PV	519238	5226799	66.21%	3.831%
7	8.321	8.290	8.434	VB	714175	6995643	88.61%	5.128%
8	9.099	9.066	9.238	VV	670991	6968023	88.26%	5.107%
9	10.486	10.421	10.531	PV	680978	6924252	87.71%	5.075%
10	10.561	10.531	10.668	VV	623986	6875067	87.09%	5.039%
11	11.259	11.181	11.331	BV	709464	7598459	96.25%	5.570%
12	12.289	12.234	12.451	VV	632475	7666135	97.11%	5.619%
13	12.583	12.544	12.628	BV	593735	6875463	87.09%	5.040%
14	14.452	14.404	14.471	PV	529505	6510948	82.47%	4.772%
15	14.494	14.471	14.524	VV	546686	6549044	82.96%	4.800%
16	16.000	15.961	16.015	BV	503435	6560076	83.10%	4.808%
17	16.034	16.015	16.094	VV	561951	6590022	83.48%	4.830%
18	16.375	16.314	16.454	BV	496632	6353499	80.48%	4.657%
19	17.742	17.701	17.757	BV	471893	6435448	81.52%	4.717%
20	17.780	17.757	17.951	VV	444105	6296958	79.76%	4.616%
21	17.994	17.951	18.168	VV	472866	6359737	80.56%	4.662%

Sum of corrected areas: 136428196

Aromatic EPH 102324.M Fri Nov 01 01:37:40 2024

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Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164525BSD	SDG No.:	P4578
Lab Sample ID:	PB164525BSD	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
10/30/24 08:20	10/30/24 18:41	PB164525

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	5.29		1	0.38	1.00	mg/kg	FC067570.D
Aliphatic C12-C16	Aliphatic C12-C16	5.19		1	0.24	0.67	mg/kg	FC067570.D
Aliphatic C16-C21	Aliphatic C16-C21	8.92		1	0.30	1.00	mg/kg	FC067570.D
Aliphatic C21-C28	Aliphatic C21-C28	12.1		1	0.80	1.33	mg/kg	FC067570.D
Aliphatic C28-C40	Aliphatic C28-C40	19.2		1	1.80	2.00	mg/kg	FC067570.D
Aromatic C10-C12	Aromatic C10-C12	3.57		1	0.30	0.67	mg/kg	FD048625.D
Aromatic C12-C16	Aromatic C12-C16	7.25		1	0.34	1.00	mg/kg	FD048625.D
Aromatic C16-C21	Aromatic C16-C21	14.4		1	0.96	1.67	mg/kg	FD048625.D
Aromatic C21-C36	Aromatic C21-C36	22.5		1	2.00	2.66	mg/kg	FD048625.D
Total AliphaticEPH	Total AliphaticEPH	50.7			3.52	5.99	mg/kg	
Total AromaticEPH	Total AromaticEPH	47.7			3.60	6.00	mg/kg	
Total EPH	Total EPH	98.4			7.12	12.0	mg/kg	

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

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

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164525BSD	SDG No.:	P4578
Lab Sample ID:	PB164525BSD	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
FC067570.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	5.29		0.38	1.00	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	5.19		0.24	0.67	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	8.92		0.30	1.00	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	12.1		0.80	1.33	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	19.2		1.80	2.00	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	46.0		40 - 140	92%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB164525BSD	Acq On:	30 Oct 2024 18:41
Client Sample ID:	PB164525BSD	Operator:	YP/AJ
Data file:	FC067570.D	Misc:	
Instrument:	FID_C	ALS Vial:	16
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.174	6.453	10747913	79.338	300	ug/ml
Aliphatic C12-C16	6.454	9.842	10257303	77.895	200	ug/ml
Aliphatic C16-C21	9.843	13.199	17036966	133.901	300	ug/ml
Aliphatic C21-C28	13.200	16.852	21856330	181.999	400	ug/ml
Aliphatic C28-C40	16.853	21.694	29178995	288.635	600	ug/ml
Aliphatic EPH	3.174	21.694	89077507	761.768		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.932	12.932	4963532	45.96		ug/ml
Aliphatic C9-C28	3.174	16.852	59898512	473.133	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067570.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 18:41
Operator : YP/AJ
Sample : PB164525BSD
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB164525BSD

Integration File: autoint1.e
Quant Time: Nov 01 00:19:43 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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...	12.932	4963532	45.964 ug/ml
Spiked Amount	50.000		Recovery =	91.93%
	Target Compounds			
1) T	n-Nonane (C9)	3.275	2757170	20.466 ug/ml
2) T	n-Decane (C10)	4.339	3585124	26.314 ug/ml
4) T	n-Dodecane (C12)	6.354	4405619	32.528 ug/ml
6) T	n-Tetradecane (C14)	8.146	4922846	37.504 ug/ml
7) T	n-Hexadecane (C16)	9.745	5334457	40.381 ug/ml
8) T	n-Octadecane (C18)	11.183	5653413	42.792 ug/ml
10) T	n-Eicosane (C20)	12.491	5785633	45.853 ug/ml
11) T	n-Heneicosane (C21)	13.101	5597920	45.359 ug/ml
13) T	n-Docosane (C22)	13.686	5576352	45.540 ug/ml
14) T	n-Tetracosane (C24)	14.787	5514785	45.498 ug/ml
15) T	n-Hexacosane (C26)	15.806	5412755	45.464 ug/ml
16) T	n-Octacosane (C28)	16.755	5352438	45.496 ug/ml
17) T	n-Tricontane (C30)	17.641	5353618	44.292 ug/ml
18) T	n-Dotriacontane (C32)	18.471	5249970	44.371 ug/ml
19) T	n-Tetratriacontane (C34)	19.253	5081450	48.521 ug/ml
20) T	n-Hexatriacontane (C36)	19.991	4749536	52.177 ug/ml
21) T	n-Octatriacontane (C38)	20.712	4505880	52.030 ug/ml
22) T	n-Tetracontane (C40)	21.597	4238541	49.859 ug/ml

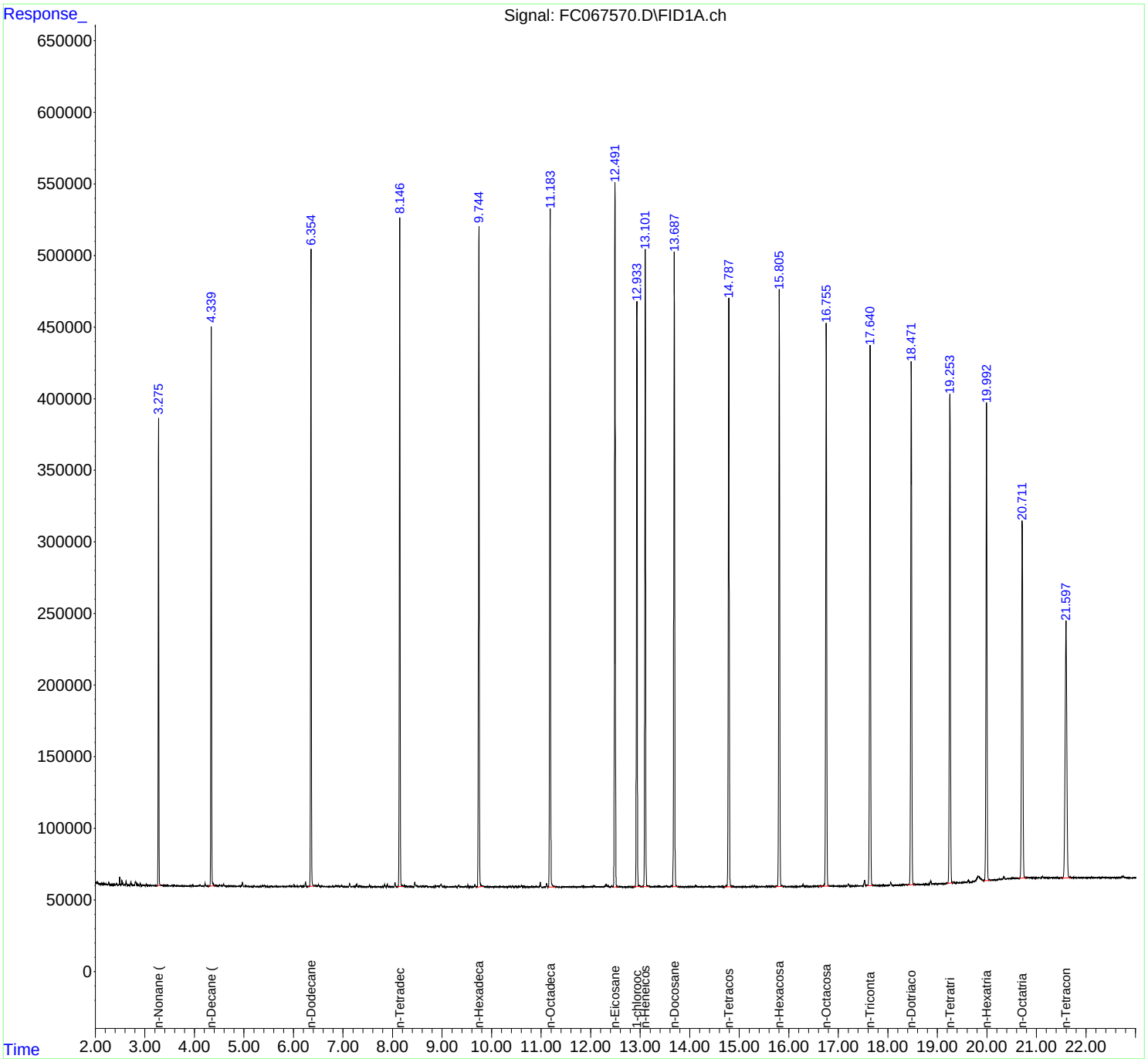
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067570.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 18:41
Operator : YP/AJ
Sample : PB164525BSD
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
PB164525BSD

Integration File: autoint1.e
Quant Time: Nov 01 00:19:43 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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\FC103024AL\
Data File : FC067570.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 18:41
Sample : PB164525BSD
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.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	3.329	BB	326204	2757170	47.66%	2.932%
2	4.339	4.287	4.412	BB	389832	3585124	61.97%	3.812%
3	6.354	6.294	6.420	BV	444821	4405619	76.15%	4.685%
4	8.146	8.089	8.220	BV	463899	4922846	85.09%	5.235%
5	9.745	9.699	9.834	BB	461962	5334457	92.20%	5.672%
6	11.183	11.144	11.295	PB	473275	5653413	97.71%	6.012%
7	12.491	12.450	12.557	PB	491363	5785633	100.00%	6.152%
8	12.932	12.864	13.004	BB	402552	4963532	85.79%	5.278%
9	13.101	13.034	13.177	BB	445473	5597920	96.76%	5.953%
10	13.686	13.650	13.762	VB	443589	5576352	96.38%	5.930%
11	14.787	14.697	14.864	BB	410064	5514785	95.32%	5.864%
12	15.806	15.722	15.880	BB	410981	5412755	93.56%	5.756%
13	16.755	16.599	16.829	BB	393301	5352438	92.51%	5.692%
14	17.641	17.574	17.709	BB	376862	5353618	92.53%	5.693%
15	18.471	18.395	18.550	BB	366033	5249970	90.74%	5.583%
16	19.253	19.199	19.324	BB	337567	5081450	87.83%	5.403%
17	19.991	19.937	20.064	BB	333426	4749536	82.09%	5.050%
18	20.712	20.635	20.794	BB	247646	4505880	77.88%	4.791%
19	21.597	21.505	21.700	BB	179492	4238541	73.26%	4.507%
			Sum of corrected areas:			94041039		

Aliphatic EPH 102324.M Fri Nov 01 00:49:23 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	PB164532BSD	SDG No.:	P4578
Lab Sample ID:	PB164532BSD	Matrix:	Water
Analytical Method:	NJEPH	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :	SW3510		

Prep Date :	Date Analyzed :	Prep Batch ID
10/30/24 08:50	10/31/24 2:29	PB164532

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	165		1	5.76	30.0	ug/l	FE050919.D
Aliphatic C12-C16	Aliphatic C12-C16	153		1	3.61	20.0	ug/l	FE050919.D
Aliphatic C16-C21	Aliphatic C16-C21	265		1	5.14	30.0	ug/l	FE050919.D
Aliphatic C21-C28	Aliphatic C21-C28	360		1	8.97	40.0	ug/l	FE050919.D
Aliphatic C28-C40	Aliphatic C28-C40	612		1	17.0	60.0	ug/l	FE050919.D
Aromatic C10-C12	Aromatic C10-C12	177		1	3.32	20.0	ug/l	FG014590.D
Aromatic C12-C16	Aromatic C12-C16	292		1	3.69	30.0	ug/l	FG014590.D
Aromatic C16-C21	Aromatic C16-C21	572		1	12.7	50.0	ug/l	FG014590.D
Aromatic C21-C36	Aromatic C21-C36	868		1	25.2	80.0	ug/l	FG014590.D
Total AliphaticEPH	Total AliphaticEPH	1560			40.5	180	ug/l	
Total AromaticEPH	Total AromaticEPH	1910			44.9	180	ug/l	
Total EPH	Total EPH	3460			85.4	360	ug/l	

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

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:		
Project:	Amtrak Sawtooth Bridges 2024		Date Received:		
Client Sample ID:	PB164532BSD		SDG No.:	P4578	
Lab Sample ID:	PB164532BSD		Matrix:	Water	
Analytical Method:	NJEPH		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :	SW3510				

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FE050919.D	1	10/30/24	10/31/24	PB164532

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	165		5.76	30.0	ug/l
Aliphatic C12-C16	Aliphatic C12-C16	153		3.61	20.0	ug/l
Aliphatic C16-C21	Aliphatic C16-C21	265		5.14	30.0	ug/l
Aliphatic C21-C28	Aliphatic C21-C28	360		8.97	40.0	ug/l
Aliphatic C28-C40	Aliphatic C28-C40	612		17.0	60.0	ug/l
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	32.7		40 - 140	65%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	PB164532BSD	Acq On:	31 Oct 2024 02:29
Client Sample ID:	PB164532BSD	Operator:	YP\AJ
Data file:	FE050919.D	Misc:	
Instrument:	FID_E	ALS Vial:	28
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aliphatic C9-C12	3.144	6.762	11812466	82.663	300	ug/ml
Aliphatic C12-C16	6.763	10.194	11124662	76.659	200	ug/ml
Aliphatic C16-C21	10.195	13.554	19185643	132.863	300	ug/ml
Aliphatic C21-C28	13.555	17.208	25621022	180.233	400	ug/ml
Aliphatic C28-C40	17.209	22.057	42357832	306.268	600	ug/ml
Aliphatic EPH	3.144	22.057	110101625	778.686		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	13.291	13.291	3868462	32.7		ug/ml
Aliphatic C9-C28	3.144	17.208	67743793	472.418	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050919.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 02:29
Operator : YP\AJ
Sample : PB164532BSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB164532BSD

Integration File: autoint1.e
Quant Time: Oct 31 05:20:04 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 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...	13.291	3868462	32.702 ug/ml
Spiked Amount	50.000		Recovery =	65.40%
	Target Compounds			
1) T	n-Nonane (C9)	3.246	3204881	22.683 ug/ml
2) T	n-Decane (C10)	4.496	4008419	27.938 ug/ml
4) T	n-Dodecane (C12)	6.664	4599166	31.953 ug/ml
6) T	n-Tetradecane (C14)	8.491	5253015	36.717 ug/ml
7) T	n-Hexadecane (C16)	10.097	5871647	39.897 ug/ml
8) T	n-Octadecane (C18)	11.538	6224019	41.669 ug/ml
10) T	n-Eicosane (C20)	12.845	6574543	45.847 ug/ml
11) T	n-Heneicosane (C21)	13.458	6387081	45.481 ug/ml
13) T	n-Docosane (C22)	14.042	6405992	45.661 ug/ml
14) T	n-Tetracosane (C24)	15.144	6374131	45.118 ug/ml
15) T	n-Hexacosane (C26)	16.164	6367685	45.252 ug/ml
16) T	n-Octacosane (C28)	17.113	6473214	44.237 ug/ml
17) T	n-Tricontane (C30)	17.999	6717706	42.249 ug/ml
18) T	n-Dotriacontane (C32)	18.831	6922038	42.699 ug/ml
19) T	n-Tetratriacontane (C34)	19.614	7177066	48.860 ug/ml
20) T	n-Hexatriacontane (C36)	20.355	7106140	56.036 ug/ml
21) T	n-Octatriacontane (C38)	21.080	7406331	59.899 ug/ml
22) T	n-Tetracontane (C40)	21.966	7028551	63.121 ug/ml

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

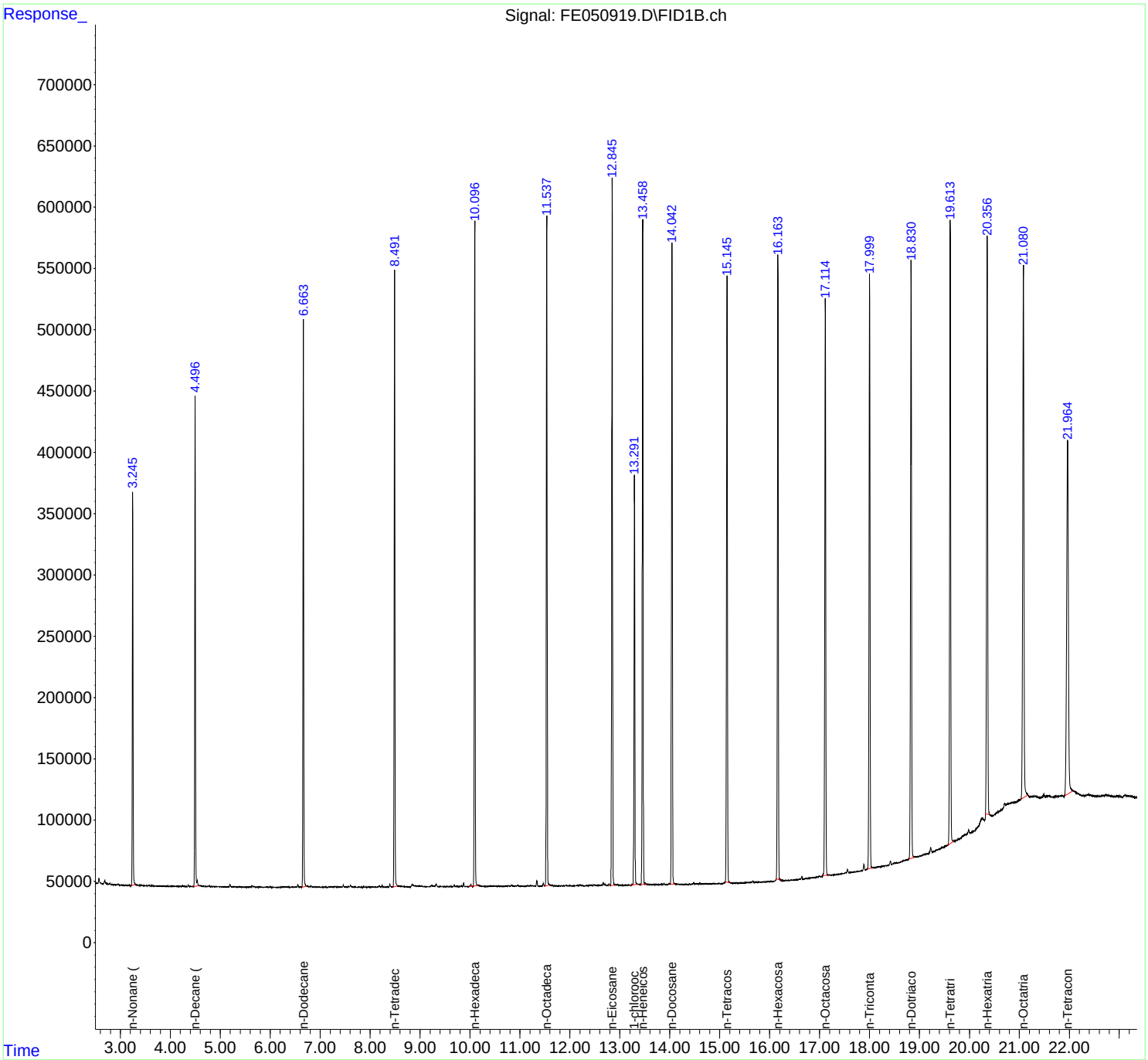
Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_E\Data\FE103024AL\
Data File : FE050919.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 02:29
Operator : YP\AJ
Sample : PB164532BSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Instrument :
FID_E
ClientSampleId :
PB164532BSD

Integration File: autoint1.e
Quant Time: Oct 31 05:20:04 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Quant Title : GC Extractables
QLast Update : Mon Oct 07 16:32:18 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_E\Data\FE103024AL\
Data File : FE050919.D
Signal(s) : FID1B.ch
Acq On : 31 Oct 2024 02:29
Sample : PB164532BSD
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_E\methods\Aliphatic EPH 100824.M
Title : GC Extractables

Signal : FID1B.ch

peak #	R.T. min	Start min	End min	PK TY	peak height	peak area	peak % max.	% of total
1	3.246	3.214	3.308	BB	319317	3204881	43.27%	2.812%
2	4.496	4.461	4.574	BB	394975	4008419	54.12%	3.517%
3	6.664	6.631	6.734	BB	462652	4599166	62.10%	4.035%
4	8.491	8.451	8.554	BB	502991	5253015	70.93%	4.609%
5	10.097	9.978	10.168	BB	543461	5871647	79.28%	5.152%
6	11.538	11.498	11.604	BB	546752	6224019	84.04%	5.461%
7	12.845	12.808	12.911	BB	574469	6574543	88.77%	5.769%
8	13.291	13.221	13.358	BB	334229	3868462	52.23%	3.394%
9	13.458	13.418	13.524	BB	540679	6387081	86.24%	5.604%
10	14.042	14.004	14.108	BB	519509	6405992	86.49%	5.621%
11	15.144	15.111	15.199	BBA	494085	6374131	86.06%	5.593%
12	16.164	16.131	16.231	BB	507967	6367685	85.98%	5.587%
13	17.113	17.061	17.174	BB	477763	6473214	87.40%	5.680%
14	17.999	17.951	18.064	BB	479823	6717706	90.70%	5.894%
15	18.831	18.781	18.898	BB	484513	6922038	93.46%	6.074%
16	19.614	19.571	19.681	BB	508301	7177066	96.90%	6.297%
17	20.355	20.321	20.399	BBA	469089	7106140	95.95%	6.235%
18	21.080	21.031	21.169	BBA	434262	7406331	100.00%	6.498%
19	21.966	21.901	22.071	BB	289092	7028551	94.90%	6.167%

Sum of corrected areas: 113970087

Aliphatic EPH 100824.M Thu Oct 31 05:55:15 2024

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:		
Project:	Amtrak Sawtooth Bridges 2024		Date Received:		
Client Sample ID:	PB164532BSD		SDG No.:	P4578	
Lab Sample ID:	PB164532BSD		Matrix:	Water	
Analytical Method:	NJEPH		% Solid:	0	
Sample Wt/Vol:	1000	Units: mL	Final Vol:	2000	uL
Soil Aliquot Vol:		uL	Test:	EPH	
Prep Method :	SW3510				

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FG014590.D	1	10/30/24	10/31/24	PB164532

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	177		3.32	20.0	ug/l
Aromatic C12-C16	Aromatic C12-C16	292		3.69	30.0	ug/l
Aromatic C16-C21	Aromatic C16-C21	572		12.7	50.0	ug/l
Aromatic C21-C36	Aromatic C21-C36	868		25.2	80.0	ug/l
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	57.3		40 - 140	115%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	55.6		40 - 140	111%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	45.4		40 - 140	91%	SPK: 50

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Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	PB164532BSD	Acq On:	31 Oct 2024 00:14
Client Sample ID:	PB164532BSD	Operator:	YP\AJ
Data file:	FG014590.D	Misc:	
Instrument:	FID_G	ALS Vial:	42
Dilution Factor:	1	Sample Multiplier:	1.00

Compound	R.T.		Response	Conc	highest_standard	Units
Aromatic C10-C12	4.519	6.389	12395063	88.856	200	ug/ml
Aromatic C12-C16	6.390	9.089	21263590	146.189	300	ug/ml
Aromatic C16-C21	9.090	13.408	41453378	286.226	500	ug/ml
Aromatic C21-C36	13.409	18.851	61744889	434.399	800	ug/ml
Aromatic EPH	4.519	18.851	136856920	955.67		ug/ml
ortho-Terphenyl (SURR)	11.961	11.961	6721823	45.4		ug/ml
2-Bromonaphthalene (SURR)	8.014	8.014	7189766	57.27		ug/ml
2-Flurobiphenyl (SURR)	8.890	8.890	4787719	55.58		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014590.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:14
Operator : YP\AJ
Sample : PB164532BSD
Misc :
ALS Vial : 42 Sample Multiplier: 1

Instrument :
FID_G
ClientSampleId :
PB164532BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Oct 31 06:45:41 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 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...	8.014	7189766	57.273 ug/ml
Spiked Amount	50.000		Recovery =	114.55%
6) S	2-Flurobiphenyl (SURR)	8.890	4787719	55.584 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	111.17%
11) S	ortho-Terphenyl (SURR)	11.961	6721823	45.400 ug/ml
Spiked Amount	50.000		Recovery =	90.80%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.617	5773614	42.613 ug/ml
2) T	Naphthalene (C11.7)	6.287	6621449	46.141 ug/ml
3) T	2-Methylnaphthalene (...	7.386	6583952	45.081 ug/ml
5) T	Acenaphthylene (C15.06)	8.690	7131290	48.980 ug/ml
7) T	Acenaphthene (C15.5)	8.992	7548348	52.159 ug/ml
8) T	Flouorene (C16.55)	9.782	7910958	54.606 ug/ml
9) T	Phenanthrene (C19.36)	11.191	8233263	55.937 ug/ml
10) T	Anthracene (C19.43)	11.267	8267723	58.958 ug/ml
12) T	Fluoranthene (C21.85)	13.015	8303698	56.147 ug/ml
13) T	Pyrene (C20.8)	13.315	8737736	59.433 ug/ml
14) T	Benzo[a]anthracene (C...	15.196	7988678	55.163 ug/ml
15) T	Chrysene (C27.41)	15.242	9048683	61.688 ug/ml
16) T	benzo[b]fluoranthene ...	16.753	7825133	53.203 ug/mlm
17) T	Bnezo[k]fluoranthene ...	16.791	7626120	55.260 ug/ml
18) T	Benzo[a]pyrene (C31.34)	17.136	7321177	51.335 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	18.510	7899298	59.183 ug/ml
20) T	Dibenz[a,h]anthracene...	18.548	7054338	50.550 ug/ml
21) T	Benzo[g,h,i]perylene ...	18.767	6975766	50.139 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG103024AR\
Data File : FG014590.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:14
Operator : YP\AJ
Sample : PB164532BSD
Misc :
ALS Vial : 42 Sample Multiplier: 1

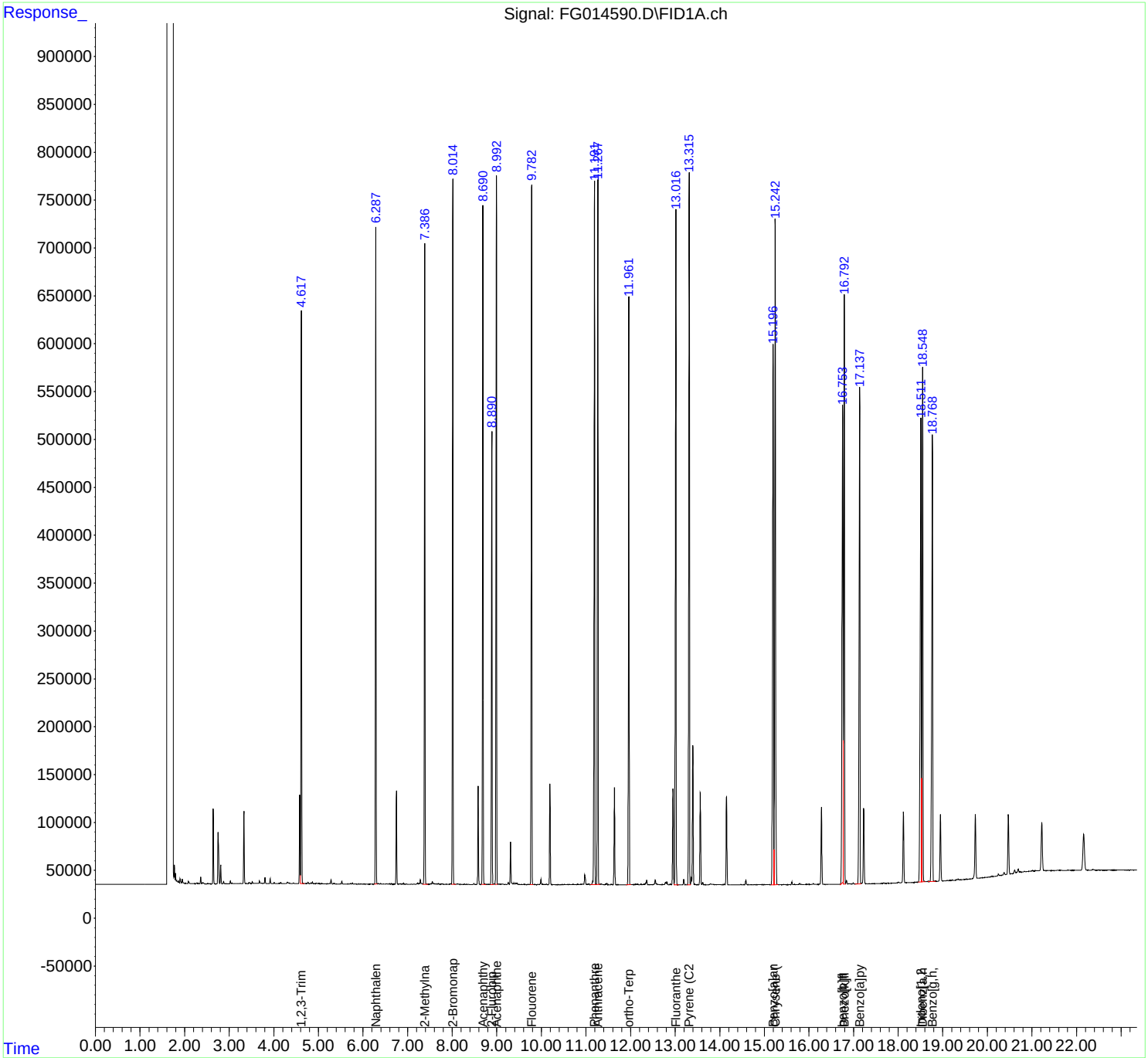
Integration File: autoint1.e
Quant Time: Oct 31 06:45:41 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.M
Quant Title : GC Extractables
QLast Update : Tue Oct 22 04:38:07 2024
Response via : Initial Calibration
Integrator: ChemStation

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

Instrument :
FID_G
ClientSampleId :
PB164532BSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024



Instrument :
FID_G
ClientSampleId :
PB164532BSD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 10/31/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_G\Data\FG10302
Data File : FG014590.D
Signal(s) : FID1A.ch
Acq On : 31 Oct 2024 00:14
Sample : PB164532BSD
Misc :
ALS Vial : 42 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_G\Method\Aromatic EPH 102124.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	4.617	4.597	4.688	VB	598830	5773614	63.81%	3.712%
2	6.287	6.255	6.323	BV	687468	6621449	73.18%	4.257%
3	7.386	7.345	7.461	VB	663940	6583952	72.76%	4.233%
4	8.014	7.981	8.081	VV	739173	7189766	79.46%	4.622%
5	8.690	8.655	8.758	BV	714437	7131290	78.81%	4.584%
6	8.890	8.851	8.918	BV	479397	4787719	52.91%	3.078%
7	8.992	8.957	9.021	VV	734052	7548348	83.42%	4.852%
8	9.782	9.738	9.818	BB	730572	7910958	87.43%	5.086%
9	11.191	11.098	11.228	BV	735250	8233263	90.99%	5.293%
10	11.267	11.228	11.318	PV	746292	8267723	91.37%	5.315%
11	11.961	11.895	12.011	BV	615617	6721823	74.29%	4.321%
12	13.015	12.977	13.081	VB	697920	8303698	91.77%	5.338%
13	13.315	13.268	13.341	BV	744965	8737736	96.56%	5.617%
14	15.196	15.145	15.215	BV	562127	7988678	88.29%	5.136%
15	15.242	15.215	15.311	VB	687695	9048683	100.00%	5.817%
16	16.753	16.685	16.770	BV	502299	7830829	86.54%	5.034%
17	16.791	16.770	16.819	VV	616097	7626120	84.28%	4.902%
18	17.136	17.031	17.166	BV	515980	7321177	80.91%	4.706%
19	18.510	18.451	18.525	BV	495400	7899298	87.30%	5.078%
20	18.548	18.525	18.608	VB	540093	7054338	77.96%	4.535%
21	18.767	18.665	18.841	BB	472421	6975766	77.09%	4.484%

Sum of corrected areas: 155556227

Aromatic EPH 102124.M Thu Oct 31 07:09:06 2024

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Fax : 908 789 8922

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-305-BOTMS	SDG No.:	P4578
Lab Sample ID:	P4578-05MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.1
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
10/30/24 08:20	10/30/24 20:30	PB164525

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	8.45		1	0.46	1.22	mg/kg	FC067573.D
Aliphatic C12-C16	Aliphatic C12-C16	8.05		1	0.29	0.81	mg/kg	FC067573.D
Aliphatic C16-C21	Aliphatic C16-C21	12.4		1	0.37	1.22	mg/kg	FC067573.D
Aliphatic C21-C28	Aliphatic C21-C28	16.8		1	0.97	1.62	mg/kg	FC067573.D
Aliphatic C28-C40	Aliphatic C28-C40	28.8		1	2.19	2.44	mg/kg	FC067573.D
Aromatic C10-C12	Aromatic C10-C12	4.38		1	0.37	0.81	mg/kg	FD048630.D
Aromatic C12-C16	Aromatic C12-C16	9.67		1	0.41	1.22	mg/kg	FD048630.D
Aromatic C16-C21	Aromatic C16-C21	18.9		1	1.17	2.03	mg/kg	FD048630.D
Aromatic C21-C36	Aromatic C21-C36	29.9		1	2.44	3.25	mg/kg	FD048630.D
Total AliphaticEPH	Total AliphaticEPH	74.5			4.28	7.31	mg/kg	
Total AromaticEPH	Total AromaticEPH	62.9			4.39	7.31	mg/kg	
Total EPH	Total EPH	137			8.67	14.6	mg/kg	

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

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-305-BOTMS	SDG No.:	P4578
Lab Sample ID:	P4578-05MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.1
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
FC067573.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	8.45		0.46	1.22	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	8.05		0.29	0.81	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	12.4		0.37	1.22	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	16.8		0.97	1.62	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	28.8		2.19	2.44	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	47.7		40 - 140	95%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4578-05MS	Acq On:	30 Oct 2024 20:30
Client Sample ID:	WB-305-BOTMS	Operator:	YP/AJ
Data file:	FC067573.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	3.174	6.453	14109603	104.153	300	ug/ml
Aliphatic C12-C16	6.454	9.842	13057818	99.162	200	ug/ml
Aliphatic C16-C21	9.843	13.199	19455440	152.909	300	ug/ml
Aliphatic C21-C28	13.200	16.852	24870492	207.098	400	ug/ml
Aliphatic C28-C40	16.853	21.694	35898622	355.104	600	ug/ml
Aliphatic EPH	3.174	21.694	107391975	918.427		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.933	12.933	5150146	47.69		ug/ml
Aliphatic C9-C28	3.174	16.852	71493353	563.322	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067573.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 20:30
Operator : YP/AJ
Sample : P4578-05MS
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-BOTMS

Integration File: autoint1.e
Quant Time: Nov 01 00:20:14 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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...	12.933	5150146	47.692 ug/ml
Spiked Amount	50.000		Recovery =	95.38%
	Target Compounds			
1) T	n-Nonane (C9)	3.275	3588458	26.636 ug/ml
2) T	n-Decane (C10)	4.339	4576776	33.592 ug/ml
4) T	n-Dodecane (C12)	6.354	5639381	41.637 ug/ml
6) T	n-Tetradecane (C14)	8.146	6161613	46.942 ug/ml
7) T	n-Hexadecane (C16)	9.745	6335580	47.959 ug/ml
8) T	n-Octadecane (C18)	11.185	6518627	49.341 ug/ml
10) T	n-Eicosane (C20)	12.492	6559385	51.985 ug/ml
11) T	n-Heneicosane (C21)	13.102	6325991	51.258 ug/ml
13) T	n-Docosane (C22)	13.687	6296848	51.424 ug/ml
14) T	n-Tetracosane (C24)	14.788	6241989	51.497 ug/ml
15) T	n-Hexacosane (C26)	15.807	6150040	51.657 ug/ml
16) T	n-Octacosane (C28)	16.755	6076136	51.647 ug/ml
17) T	n-Tricontane (C30)	17.641	6097535	50.447 ug/ml
18) T	n-Dotriacontane (C32)	18.473	6034110	50.998 ug/ml
19) T	n-Tetratriacontane (C34)	19.254	5996134	57.255 ug/ml
20) T	n-Hexatriacontane (C36)	19.992	5850157	64.268 ug/ml
21) T	n-Octatriacontane (C38)	20.715	5856774	67.628 ug/ml
22) T	n-Tetracontane (C40)	21.598	5803374	68.266 ug/ml

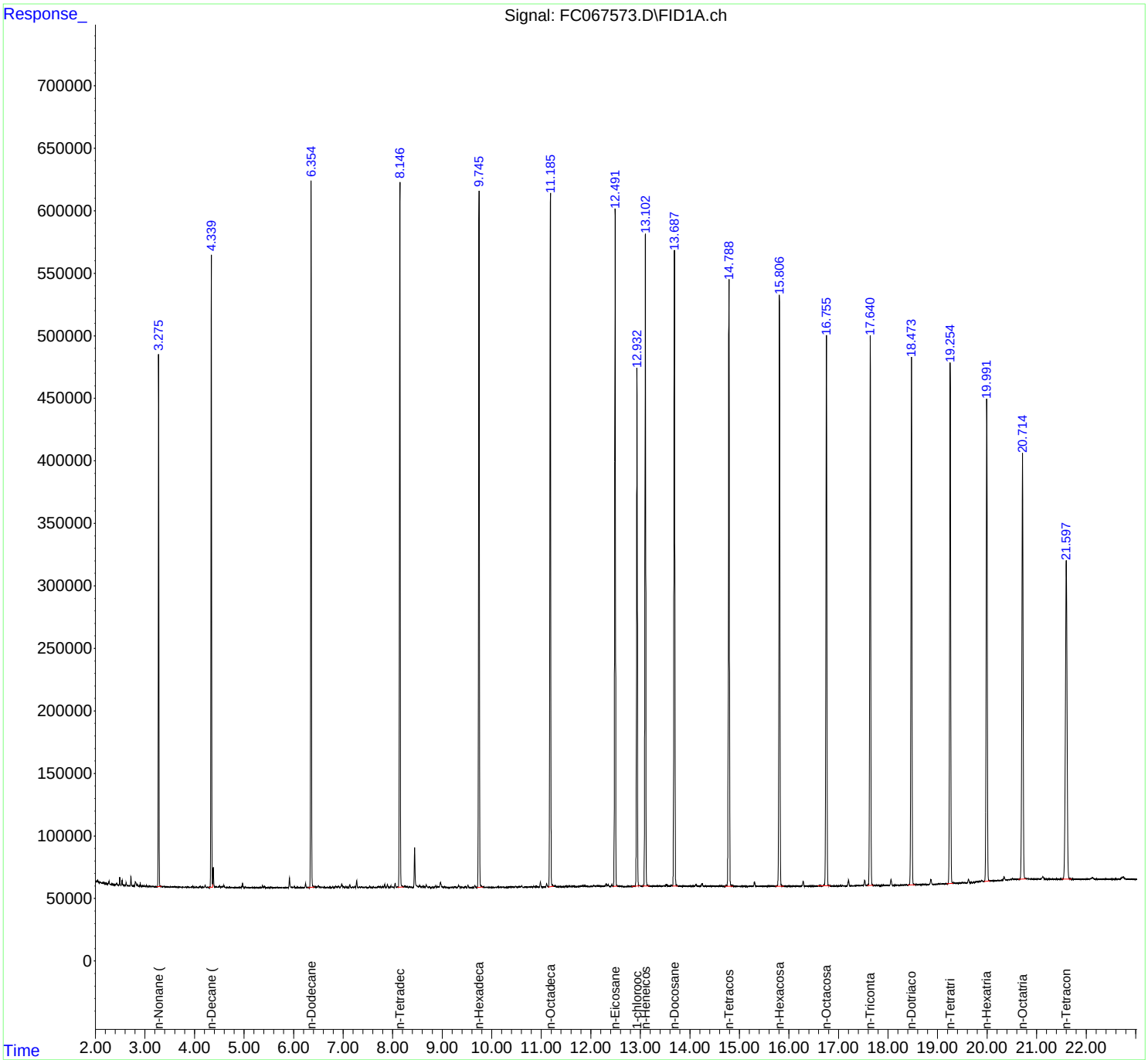
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067573.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 20:30
Operator : YP/AJ
Sample : P4578-05MS
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-BOTMS

Integration File: autoint1.e
Quant Time: Nov 01 00:20:14 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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\FC103024AL\
Data File : FC067573.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 20:30
Sample : P4578-05MS
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.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	3.328	BB	425498	3588458	54.71%	3.189%
2	4.339	4.283	4.364	BV	503771	4576776	69.77%	4.067%
3	4.379	4.364	4.425	VB	15947	154844	2.36%	0.138%
4	4.970	4.898	5.000	BV	3403	42055	0.64%	0.037%
5	5.918	5.873	5.952	BB	7709	75935	1.16%	0.067%
6	6.243	6.188	6.265	BB	3362	32154	0.49%	0.029%
7	6.354	6.288	6.418	BV	563417	5639381	85.97%	5.011%
8	7.275	7.198	7.300	BB	5478	62594	0.95%	0.056%
9	8.051	7.985	8.073	VB	3279	42095	0.64%	0.037%
10	8.146	8.097	8.222	BV	565169	6161613	93.94%	5.475%
11	8.445	8.402	8.520	BB	31961	368861	5.62%	0.328%
12	8.966	8.885	9.008	VB	3954	87075	1.33%	0.077%
13	9.745	9.698	9.827	BB	556233	6335580	96.59%	5.630%
14	10.985	10.873	11.018	BB	3927	51437	0.78%	0.046%
15	11.185	11.143	11.250	PV	551855	6518627	99.38%	5.792%
16	12.492	12.447	12.538	PB	542977	6559385	100.00%	5.828%
17	12.933	12.828	12.997	BB	412505	5150146	78.52%	4.576%
18	13.102	13.038	13.183	BB	521141	6325991	96.44%	5.621%
19	13.687	13.648	13.757	VB	507348	6296848	96.00%	5.595%
20	14.788	14.698	14.870	BB	487064	6241989	95.16%	5.546%
21	15.305	15.245	15.342	BB	3612	49875	0.76%	0.044%
22	15.807	15.723	15.897	BB	471356	6150040	93.76%	5.465%
23	16.286	16.230	16.313	BB	4120	55604	0.85%	0.049%
24	16.755	16.585	16.832	BB	440372	6076136	92.63%	5.399%
25	17.201	17.153	17.247	BB	4751	67381	1.03%	0.060%
26	17.529	17.473	17.567	BB	4280	58667	0.89%	0.052%
27	17.641	17.575	17.707	BB	438535	6097535	92.96%	5.418%
28	18.059	18.005	18.102	BB	4758	68887	1.05%	0.061%
29	18.473	18.398	18.550	BB	424008	6034110	91.99%	5.362%
30	18.865	18.810	18.913	BB	4166	65603	1.00%	0.058%
31	19.254	19.180	19.318	BV	415510	5996134	91.41%	5.328%
32	19.992	19.937	20.062	BB	382817	5850157	89.19%	5.198%
33	20.715	20.632	20.790	BB	341490	5856774	89.29%	5.204%
34	21.598	21.503	21.707	BB	253599	5803374	88.47%	5.157%

Sum of corrected areas: 112542121

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-305-BOTMS	SDG No.:	P4578
Lab Sample ID:	P4578-05MS	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.1
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
FD048630.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	4.38		0.37	0.81	mg/kg
Aromatic C12-C16	Aromatic C12-C16	9.67		0.41	1.22	mg/kg
Aromatic C16-C21	Aromatic C16-C21	18.9		1.17	2.03	mg/kg
Aromatic C21-C36	Aromatic C21-C36	29.9		2.44	3.25	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	49.2		40 - 140	98%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	47.0		40 - 140	94%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	34.4		40 - 140	69%	SPK: 50

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

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4578-05MS	Acq On:	30 Oct 2024 21:43
Client Sample ID:	WB-305-BOTMS	Operator:	YP/AJ
Data file:	FD048630.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	4.094	5.812	9516391	54.008	200	ug/ml
Aromatic C12-C16	5.813	8.417	21115953	119.115	300	ug/ml
Aromatic C16-C21	8.418	12.679	38106574	232.595	500	ug/ml
Aromatic C21-C36	12.680	18.085	56323449	368.819	800	ug/ml
Aromatic EPH	4.094	18.085	125062367	774.537		ug/ml
2-Bromonaphthalene (SURR)	7.373	7.373	7467714	49.2		ug/ml
2-Flurobiphenyl (SURR)	8.222	8.222	4620375	47.05		ug/ml
ortho-Terphenyl (SURR)	11.257	11.257	5863949	34.43		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048630.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 21:43
Operator : YP/AJ
Sample : P4578-05MS
Misc :
ALS Vial : 68 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
WB-305-BOTMS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:03:36 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4) S	2-Bromonaphthalene (S...	7.373	7467714	49.201 ug/ml
Spiked Amount	50.000		Recovery =	98.40%
6) S	2-Flurobiphenyl (SURR)	8.222	4620375	47.055 ug/ml
Spiked Amount	50.000 Range	0 - 131	Recovery =	94.11%
11) S	ortho-Terphenyl (SURR)	11.257	5863949	34.425 ug/ml
Spiked Amount	50.000		Recovery =	68.85%
	Target Compounds			
1) T	1,2,3-Trimethylbenzen...	4.194	4920301	28.282 ug/mlm
2) T	Naphthalene (C11.7)	5.713	5815643	32.593 ug/ml
3) T	2-Methylnaphthalene (...	6.759	5810207	32.484 ug/ml
5) T	Acenaphthylene (C15.06)	8.025	6665482	37.960 ug/ml
7) T	Acenaphthene (C15.5)	8.320	7005740	39.499 ug/ml
8) T	Flouorene (C16.55)	9.098	6908004	40.867 ug/ml
9) T	Phenanthrene (C19.36)	10.485	6804222	41.161 ug/ml
10) T	Anthracene (C19.43)	10.561	6798493	42.514 ug/ml
12) T	Fluoranthene (C21.85)	12.290	6834101	41.525 ug/mlm
13) T	Pyrene (C20.8)	12.583	6661281	41.355 ug/ml
14) T	Benzo[a]anthracene (C...	14.452	6331006	43.299 ug/ml
15) T	Chrysene (C27.41)	14.495	6394235	38.873 ug/ml
16) T	benzo[b]fluoranthene ...	16.000	6351512	41.778 ug/ml
17) T	Bnezo[k]fluoranthene ...	16.034	6387963	42.500 ug/ml
18) T	Benzo[a]pyrene (C31.34)	16.376	6146235	40.840 ug/ml
19) T	Indeno[1,2,3-cd]pyren...	17.742	6480771	49.669 ug/ml
20) T	Dibenz[a,h]anthracene...	17.779	6359196	39.077 ug/ml
21) T	Benzo[g,h,i]perylene ...	17.994	6256988	40.871 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048630.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 21:43
Operator : YP/AJ
Sample : P4578-05MS
Misc :
ALS Vial : 68 Sample Multiplier: 1

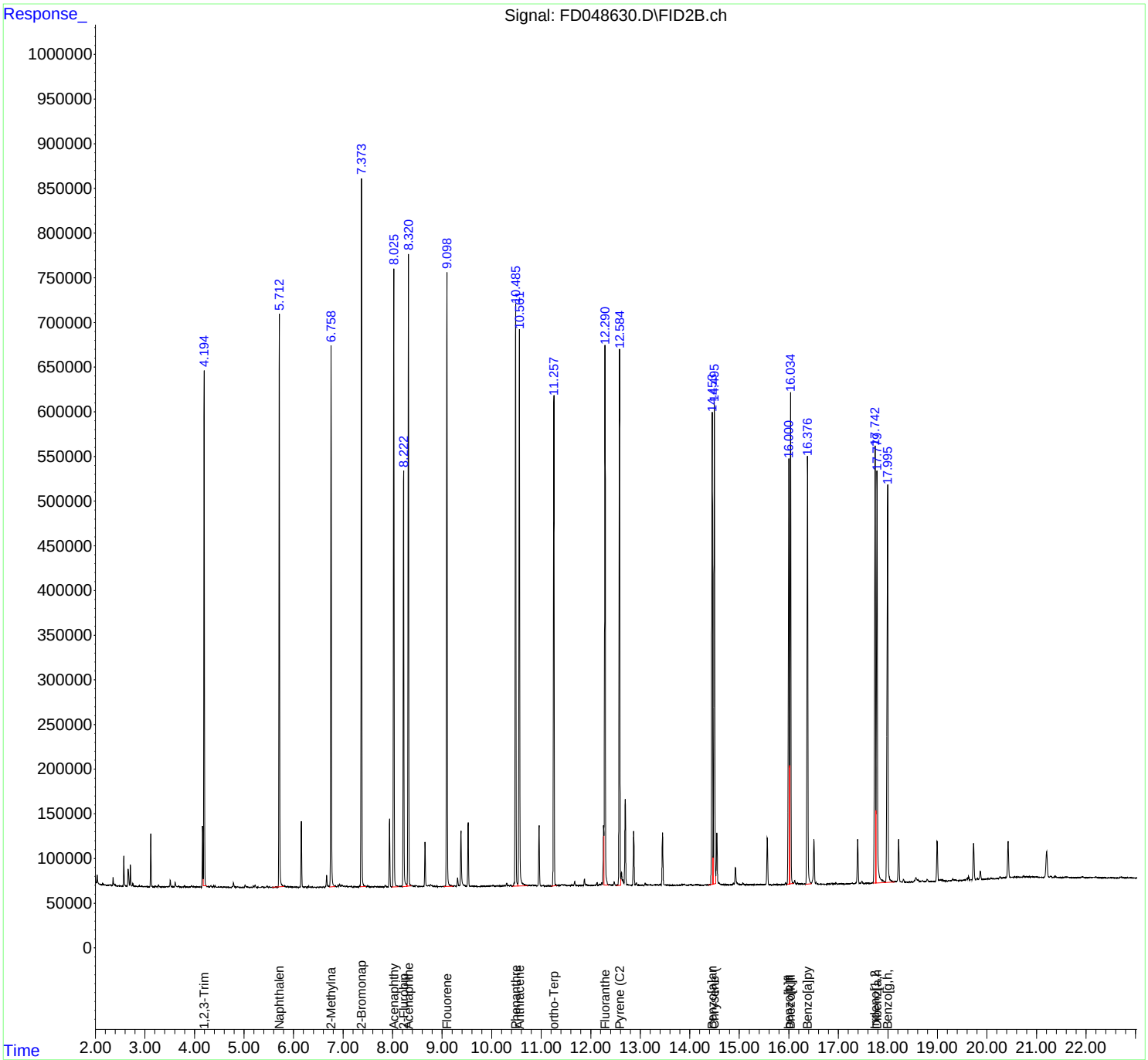
Instrument :
FID_D
ClientSampleId :
WB-305-BOTMS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:03:36 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Instrument :
FID_D
ClientSampleId :
WB-305-BOTMS

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD10302
Data File : FD048630.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 21:43
Sample : P4578-05MS
Misc :
ALS Vial : 68 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.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	4.195	4.161	4.259	BV	537845	3632930	48.30%	2.540%
2	4.788	4.738	4.826	PV	4980	67818	0.90%	0.047%
3	5.713	5.571	5.808	BV	634676	5815643	77.32%	4.066%
4	6.158	6.081	6.225	BB	73852	716035	9.52%	0.501%
5	6.669	6.621	6.725	BV	13499	163845	2.18%	0.115%
6	6.759	6.725	6.841	VV	603227	5810207	77.25%	4.063%
7	7.373	7.343	7.468	VV	779970	7467714	99.28%	5.222%
8	7.939	7.908	7.978	PV	76181	754644	10.03%	0.528%
9	8.025	7.978	8.115	VV	691711	6665482	88.62%	4.661%
10	8.222	8.195	8.290	PV	462456	4620375	61.43%	3.231%
11	8.320	8.290	8.381	VV	711098	7005740	93.14%	4.899%
12	8.656	8.598	8.708	PV	49406	502247	6.68%	0.351%
13	9.098	9.039	9.228	VB	684745	6908004	91.84%	4.830%
14	9.314	9.291	9.344	PV	9679	113990	1.52%	0.080%
15	9.381	9.344	9.487	VV	61950	781494	10.39%	0.546%
16	9.527	9.487	9.571	VV	70941	750633	9.98%	0.525%
17	10.485	10.421	10.528	BV	649811	6804222	90.46%	4.758%
18	10.561	10.528	10.728	VV	624476	6798493	90.39%	4.754%
19	10.959	10.925	11.005	BV	67627	745433	9.91%	0.521%
20	11.257	11.201	11.316	BV	549316	5863949	77.96%	4.100%
21	11.677	11.645	11.741	BV	4586	61906	0.82%	0.043%
22	11.874	11.741	11.938	PV	7264	110824	1.47%	0.077%
23	12.224	12.194	12.235	VV	3554	42932	0.57%	0.030%
24	12.290	12.235	12.415	VV	610082	7521534	100.00%	5.259%
25	12.474	12.454	12.511	VV	3886	45511	0.61%	0.032%
26	12.583	12.511	12.609	PV	606486	6661281	88.56%	4.658%
27	12.622	12.609	12.639	VV	14351	178298	2.37%	0.125%
28	12.647	12.639	12.671	VV	6038	79772	1.06%	0.056%
29	12.697	12.671	12.765	VB	95563	1124069	14.94%	0.786%
30	12.868	12.788	12.901	BV	60001	698857	9.29%	0.489%
31	13.450	13.420	13.518	PB	58722	717136	9.53%	0.501%
32	14.452	14.372	14.471	PV	525244	6331006	84.17%	4.427%
33	14.495	14.471	14.524	VV	537493	6394235	85.01%	4.471%
34	14.547	14.524	14.578	VV	56355	730318	9.71%	0.511%
35	14.920	14.895	15.041	VV	19268	308209	4.10%	0.216%
36	15.563	15.506	15.598	VV	52689	676240	8.99%	0.473%

Instrument :
FID_D
ClientSampleId :
WB-305-BOTMS

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

rteres

37	16.000	15.961	16.015	BV	481175	6351512	84.44%	4.441%
38	16.034	16.015	16.091	VV	554086	6387963	84	
39	16.376	16.334	16.450	PV	473295	6146235	81	
40	16.506	16.450	16.535	VV	49466	701607	9	
41	17.389	17.331	17.445	BV	49297	659107	8	
42	17.742	17.701	17.757	BV	483918	6480771	86	
43	17.779	17.757	17.948	VV	453108	6359196	84.55%	4.447%
44	17.994	17.948	18.131	VV	448767	6256988	83.19%	4.375%

Sum of corrected areas: 143014406

Aromatic EPH 102324.M Fri Nov 01 01:39:05 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-305-BOTMSD	SDG No.:	P4578
Lab Sample ID:	P4578-05MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.1
Sample Wt/Vol:	30.1 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FD048631.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aromatic C10-C12	Aromatic C10-C12	4.11		0.36	0.81	mg/kg
Aromatic C12-C16	Aromatic C12-C16	9.62		0.41	1.21	mg/kg
Aromatic C16-C21	Aromatic C16-C21	18.7		1.17	2.02	mg/kg
Aromatic C21-C36	Aromatic C21-C36	29.7		2.43	3.24	mg/kg
SURROGATES						
580-13-2	2-Bromonaphthalene (SURR)	48.9		40 - 140	98%	SPK: 50
321-60-8	2-Flurobiphenyl (SURR)	46.9		40 - 140	94%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	34.2		40 - 140	68%	SPK: 50

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

Quantitation Report For Aromatic EPH Range.

Lab Sample ID:	P4578-05MSD	Acq On:	30 Oct 2024 22:20
Client Sample ID:	WB-305-BOTMSD	Operator:	YP/AJ
Data file:	FD048631.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	4.094	5.812	8942128	50.749	200	ug/ml
Aromatic C12-C16	5.813	8.417	21080162	118.913	300	ug/ml
Aromatic C16-C21	8.418	12.679	37877596	231.197	500	ug/ml
Aromatic C21-C36	12.680	18.085	56012445	366.782	800	ug/ml
Aromatic EPH	4.094	18.085	123912331	767.641		ug/ml
2-Bromonaphthalene (SURR)	7.373	7.373	7428124	48.94		ug/ml
2-Flurobiphenyl (SURR)	8.222	8.222	4605008	46.9		ug/ml
ortho-Terphenyl (SURR)	11.258	11.258	5828387	34.22		ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048631.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 22:20
Operator : YP/AJ
Sample : P4578-05MSD
Misc :
ALS Vial : 69 Sample Multiplier: 1

Instrument :
FID_D
ClientSampleId :
WB-305-BOTMSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:03:46 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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

	Compound	R.T.	Response	Conc Units
	System Monitoring Compounds			
4)	S 2-Bromonaphthalene (S...	7.373	7428124	48.940 ug/ml
	Spiked Amount 50.000		Recovery =	97.88%
6)	S 2-Flurobiphenyl (SURR)	8.222	4605008	46.898 ug/ml
	Spiked Amount 50.000 Range 0 - 131		Recovery =	93.80%
11)	S ortho-Terphenyl (SURR)	11.258	5828387	34.216 ug/ml
	Spiked Amount 50.000		Recovery =	68.43%
	Target Compounds			
1)	T 1,2,3-Trimethylbenzen...	4.195	4951664	28.463 ug/mlm
2)	T Naphthalene (C11.7)	5.713	5802621	32.520 ug/ml
3)	T 2-Methylnaphthalene (...	6.759	5809667	32.481 ug/ml
5)	T Acenaphthylene (C15.06)	8.025	6631639	37.767 ug/ml
7)	T Acenaphthene (C15.5)	8.320	7008837	39.517 ug/ml
8)	T Flouorene (C16.55)	9.098	6889852	40.759 ug/ml
9)	T Phenanthrene (C19.36)	10.485	6768309	40.944 ug/ml
10)	T Anthracene (C19.43)	10.561	6759963	42.274 ug/ml
12)	T Fluoranthene (C21.85)	12.289	6805632	41.352 ug/mlm
13)	T Pyrene (C20.8)	12.582	6620367	41.101 ug/ml
14)	T Benzo[a]anthracene (C...	14.452	6296550	43.064 ug/ml
15)	T Chrysene (C27.41)	14.494	6356666	38.644 ug/ml
16)	T benzo[b]fluoranthene ...	16.000	6323648	41.595 ug/ml
17)	T Bnezo[k]fluoranthene ...	16.033	6345911	42.221 ug/ml
18)	T Benzo[a]pyrene (C31.34)	16.374	6123850	40.691 ug/ml
19)	T Indeno[1,2,3-cd]pyren...	17.742	6434736	49.317 ug/ml
20)	T Dibenz[a,h]anthracene...	17.779	6327753	38.884 ug/ml
21)	T Benzo[g,h,i]perylene ...	17.994	6206877	40.543 ug/ml

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

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD103024AR\
Data File : FD048631.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 22:20
Operator : YP/AJ
Sample : P4578-05MSD
Misc :
ALS Vial : 69 Sample Multiplier: 1

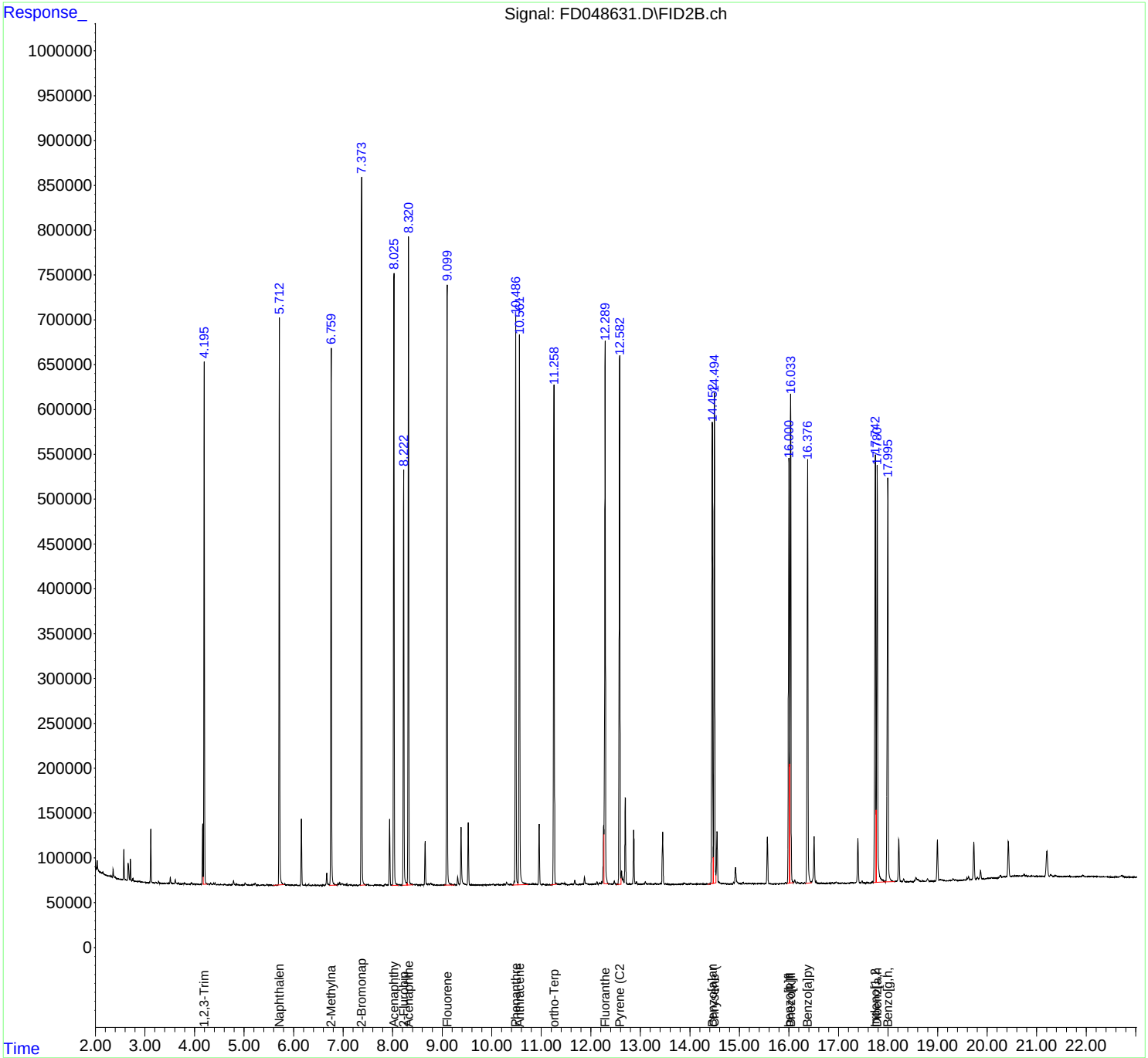
Instrument :
FID_D
ClientSampleId :
WB-305-BOTMSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Integration File: autoint1.e
Quant Time: Nov 01 01:03:46 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:14:59 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Instrument :
FID_D
ClientSampleId :
WB-305-BOTMSD

rteres

Area Percent Report

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_D\Data\FD10302
Data File : FD048631.D
Signal(s) : FID2B.ch
Acq On : 30 Oct 2024 22:20
Sample : P4578-05MSD
Misc :
ALS Vial : 69 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_D\methods\Aromatic EPH 102324.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	4.195	4.161	4.294	BB	537675	3077306	41.28%	2.171%
2	4.788	4.731	4.826	BV	4766	62201	0.83%	0.044%
3	5.713	5.588	5.808	BV	623821	5802621	77.83%	4.093%
4	6.158	6.094	6.194	BB	74241	709891	9.52%	0.501%
5	6.669	6.624	6.724	BV	13729	170690	2.29%	0.120%
6	6.759	6.724	6.881	VV	594112	5809667	77.93%	4.098%
7	7.373	7.343	7.458	VV	790602	7428124	99.63%	5.239%
8	7.939	7.914	7.978	BV	73146	749438	10.05%	0.529%
9	8.025	7.978	8.109	VV	675150	6631639	88.95%	4.678%
10	8.222	8.193	8.290	PV	459859	4605008	61.77%	3.248%
11	8.320	8.290	8.413	VV	727286	7008837	94.01%	4.944%
12	8.656	8.599	8.704	VV	48802	515529	6.91%	0.364%
13	9.098	9.037	9.241	VV	661138	6889852	92.41%	4.860%
14	9.314	9.277	9.342	PV	9390	114445	1.54%	0.081%
15	9.382	9.342	9.498	VV	64470	791606	10.62%	0.558%
16	9.527	9.498	9.581	VV	69893	746906	10.02%	0.527%
17	10.485	10.414	10.529	PV	628842	6768309	90.78%	4.774%
18	10.561	10.529	10.727	VV	614835	6759963	90.67%	4.768%
19	10.958	10.917	11.001	PV	66968	742651	9.96%	0.524%
20	11.258	11.183	11.318	PV	554093	5828387	78.18%	4.111%
21	11.677	11.648	11.731	BB	4705	59799	0.80%	0.042%
22	11.874	11.850	11.938	VV	8163	112608	1.51%	0.079%
23	12.289	12.234	12.381	VV	595700	7455411	100.00%	5.259%
24	12.475	12.453	12.513	VV	3813	45922	0.62%	0.032%
25	12.582	12.513	12.609	PV	586770	6620367	88.80%	4.670%
26	12.622	12.609	12.639	VV	14599	177934	2.39%	0.126%
27	12.647	12.639	12.669	VV	6011	76294	1.02%	0.054%
28	12.697	12.669	12.764	VB	96071	1116356	14.97%	0.787%
29	12.867	12.784	12.901	BV	60080	697699	9.36%	0.492%
30	13.450	13.420	13.524	VB	58053	711563	9.54%	0.502%
31	14.452	14.369	14.471	PV	511900	6296550	84.46%	4.441%
32	14.494	14.471	14.524	VV	548671	6356666	85.26%	4.484%
33	14.546	14.524	14.577	VV	56974	727327	9.76%	0.513%
34	14.920	14.894	15.044	VV	18407	309150	4.15%	0.218%
35	15.562	15.505	15.594	PB	52158	667257	8.95%	0.471%
36	16.000	15.961	16.014	BV	477402	6323648	84.82%	4.460%

Instrument :
FID_D
ClientSampleId :
WB-305-BOTMSD

Manual IntegrationsAPPROVED

Reviewed By :Yogesh Patel 11/04/2024
Supervised By :Ankita Jodhani 11/04/2024

rteres

37	16.033	16.014	16.094	VV	550488	6345911	85.12%	4.476%
38	16.374	16.333	16.453	PV	473230	6123850	82	
39	16.505	16.453	16.534	VV	51362	700075	9	
40	17.389	17.304	17.448	VV	49646	667027	8	
41	17.742	17.701	17.758	BV	470350	6434736	86	
42	17.779	17.758	17.951	VV	468457	6327753	84	
43	17.994	17.951	18.128	VV	449969	6206877	83.25%	4.378%

Sum of corrected areas: 141773850

Aromatic EPH 102324.M Fri Nov 01 01:39:17 2024

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-305-BOTMSD	SDG No.:	P4578
Lab Sample ID:	P4578-05MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.1
Sample Wt/Vol:	30.1 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

Prep Date :	Date Analyzed :	Prep Batch ID
10/30/24 08:20	10/30/24 21:06	PB164525

CAS Number	Parameter	Conc.	Qualifier	Dilution	MDL	LOQ / CRQL	Units(Dry Weight)	Datafile
TARGETS								
Aliphatic C9-C12	Aliphatic C9-C12	8.42		1	0.46	1.21	mg/kg	FC067574.D
Aliphatic C12-C16	Aliphatic C12-C16	8.04		1	0.29	0.81	mg/kg	FC067574.D
Aliphatic C16-C21	Aliphatic C16-C21	12.5		1	0.36	1.21	mg/kg	FC067574.D
Aliphatic C21-C28	Aliphatic C21-C28	16.8		1	0.97	1.62	mg/kg	FC067574.D
Aliphatic C28-C40	Aliphatic C28-C40	29.0		1	2.19	2.43	mg/kg	FC067574.D
Aromatic C10-C12	Aromatic C10-C12	4.11		1	0.36	0.81	mg/kg	FD048631.D
Aromatic C12-C16	Aromatic C12-C16	9.62		1	0.41	1.21	mg/kg	FD048631.D
Aromatic C16-C21	Aromatic C16-C21	18.7		1	1.17	2.02	mg/kg	FD048631.D
Aromatic C21-C36	Aromatic C21-C36	29.7		1	2.43	3.24	mg/kg	FD048631.D
Total AliphaticEPH	Total AliphaticEPH	74.8			4.28	7.28	mg/kg	
Total AromaticEPH	Total AromaticEPH	62.1			4.38	7.28	mg/kg	
Total EPH	Total EPH	137			8.65	14.6	mg/kg	

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

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

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

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2024	Date Received:	
Client Sample ID:	WB-305-BOTMSD	SDG No.:	P4578
Lab Sample ID:	P4578-05MSD	Matrix:	Solid
Analytical Method:	NJEPH	% Solid:	82.1
Sample Wt/Vol:	30.1 Units: g	Final Vol:	2000 uL
Soil Aliquot Vol:	uL	Test:	EPH
Prep Method :			

File ID :	Dilution:	Prep Date :	Date Analyzed :	Prep Batch ID
FC067574.D	1	10/30/24	10/30/24	PB164525

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
Aliphatic C9-C12	Aliphatic C9-C12	8.42		0.46	1.21	mg/kg
Aliphatic C12-C16	Aliphatic C12-C16	8.04		0.29	0.81	mg/kg
Aliphatic C16-C21	Aliphatic C16-C21	12.5		0.36	1.21	mg/kg
Aliphatic C21-C28	Aliphatic C21-C28	16.8		0.97	1.62	mg/kg
Aliphatic C28-C40	Aliphatic C28-C40	29.0		2.19	2.43	mg/kg
SURROGATES						
3383-33-2	1-chlorooctadecane (SURR)	46.2		40 - 140	92%	SPK: 50
84-15-1	ortho-Terphenyl (SURR)	0.00		40 - 140	0%	SPK: 50

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

Quantitation Report For Aliphatic EPH Range.

Lab Sample ID:	P4578-05MSD	Acq On:	30 Oct 2024 21:06
Client Sample ID:	WB-305-BOTMSD	Operator:	YP/AJ
Data file:	FC067574.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	3.174	6.453	14097141	104.061	300	ug/ml
Aliphatic C12-C16	6.454	9.842	13086719	99.381	200	ug/ml
Aliphatic C16-C21	9.843	13.199	19579545	153.885	300	ug/ml
Aliphatic C21-C28	13.200	16.852	24987811	208.075	400	ug/ml
Aliphatic C28-C40	16.853	21.694	36242219	358.503	600	ug/ml
Aliphatic EPH	3.174	21.694	107993435	923.906		ug/ml
ortho-Terphenyl (SURR)	0.000	0.000	0	0		ug/ml
1-chlorooctadecane (SURR)	12.933	12.933	4987072	46.18		ug/ml
Aliphatic C9-C28	3.174	16.852	71751216	565.402	1200	ug/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067574.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 21:06
Operator : YP/AJ
Sample : P4578-05MSD
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-BOTMSD

Integration File: autoint1.e
Quant Time: Nov 01 00:20:25 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 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...	12.933	4987072	46.182 ug/ml
Spiked Amount	50.000		Recovery =	92.36%
	Target Compounds			
1) T	n-Nonane (C9)	3.275	3583741	26.601 ug/ml
2) T	n-Decane (C10)	4.339	4576776	33.592 ug/ml
4) T	n-Dodecane (C12)	6.354	5664956	41.826 ug/ml
6) T	n-Tetradecane (C14)	8.147	6195924	47.203 ug/ml
7) T	n-Hexadecane (C16)	9.744	6381001	48.303 ug/ml
8) T	n-Octadecane (C18)	11.184	6570545	49.734 ug/ml
10) T	n-Eicosane (C20)	12.491	6603946	52.339 ug/ml
11) T	n-Heneicosane (C21)	13.102	6361095	51.542 ug/ml
13) T	n-Docosane (C22)	13.687	6331125	51.704 ug/ml
14) T	n-Tetracosane (C24)	14.789	6268169	51.713 ug/ml
15) T	n-Hexacosane (C26)	15.806	6179214	51.902 ug/ml
16) T	n-Octacosane (C28)	16.755	6106098	51.902 ug/ml
17) T	n-Tricontane (C30)	17.641	6126409	50.685 ug/ml
18) T	n-Dotriacontane (C32)	18.472	6057137	51.193 ug/ml
19) T	n-Tetratriacontane (C34)	19.254	6020511	57.487 ug/ml
20) T	n-Hexatriacontane (C36)	19.993	5879259	64.588 ug/ml
21) T	n-Octatriacontane (C38)	20.714	5889140	68.002 ug/ml
22) T	n-Tetracontane (C40)	21.597	5838613	68.681 ug/ml

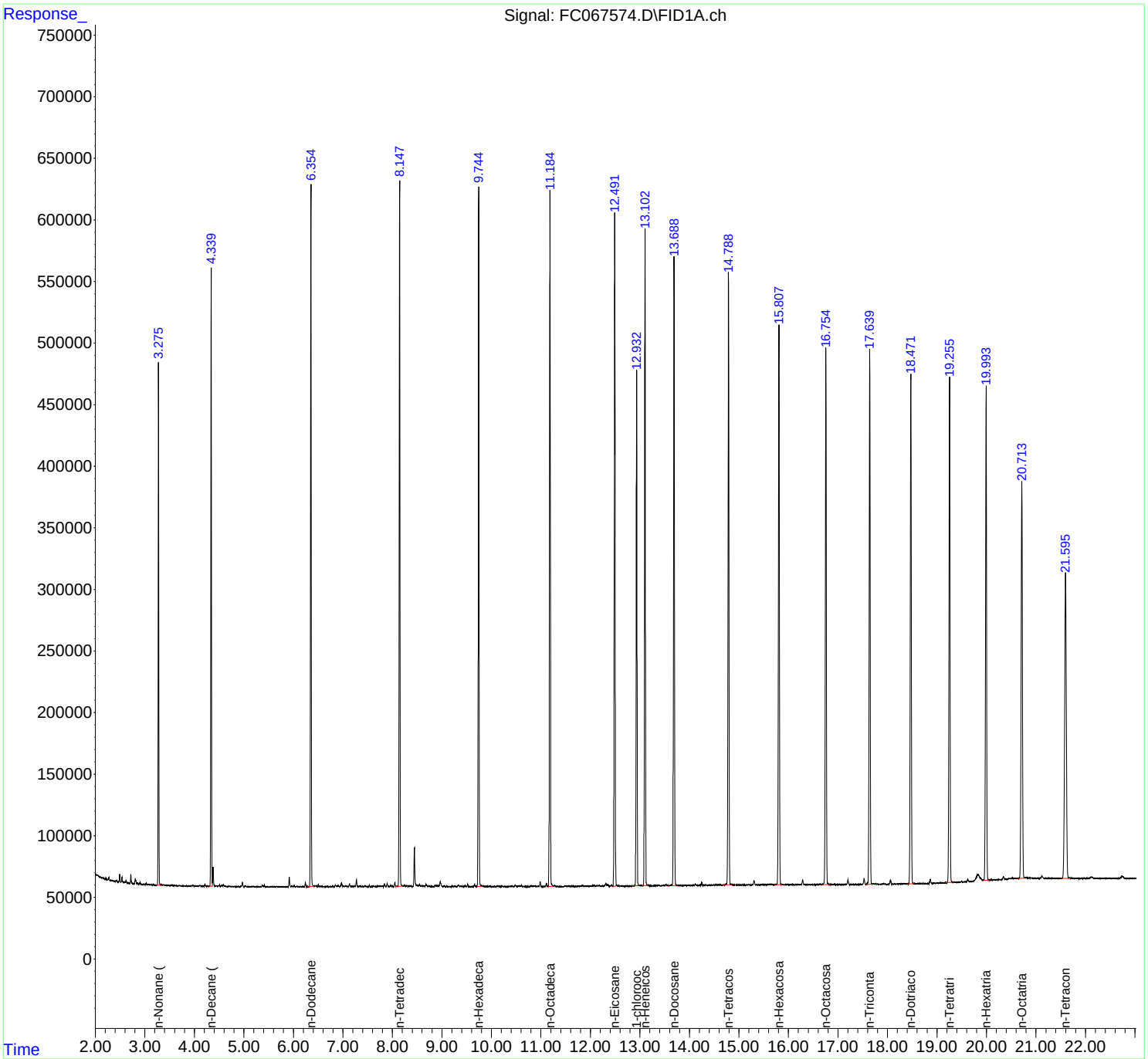
(f)=RT Delta > 1/2 Window (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067574.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 21:06
Operator : YP/AJ
Sample : P4578-05MSD
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
FID_C
ClientSampleId :
WB-305-BOTMSD

Integration File: autoint1.e
Quant Time: Nov 01 00:20:25 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.M
Quant Title : GC Extractables
QLast Update : Wed Oct 23 18:12:58 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Area Percent Report

Data Path : Z:\pestpcbsrv\HPCHEM1\FID_C\Data\FC103024AL\
Data File : FC067574.D
Signal(s) : FID1A.ch
Acq On : 30 Oct 2024 21:06
Sample : P4578-05MSD
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File: autoint1.e

Method : Z:\pestpcbsrv\HPCHEM1\FID_C\Method\Aliphatic EPH 102324.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	3.340	BB	424353	3583741	54.27%	3.172%
2	4.339	4.282	4.364	BV	500623	4576776	69.30%	4.051%
3	4.379	4.364	4.424	VB	15602	153387	2.32%	0.136%
4	4.970	4.914	5.005	BB	3372	42809	0.65%	0.038%
5	5.918	5.869	5.950	BB	7716	75472	1.14%	0.067%
6	6.354	6.292	6.424	BV	573219	5664956	85.78%	5.014%
7	7.275	7.225	7.302	BB	5453	59658	0.90%	0.053%
8	8.147	8.085	8.215	BV	572690	6195924	93.82%	5.484%
9	8.445	8.404	8.519	BB	31519	369876	5.60%	0.327%
10	8.966	8.890	9.019	BB	3834	80260	1.22%	0.071%
11	9.744	9.704	9.827	BB	567431	6381001	96.62%	5.648%
12	10.984	10.934	11.029	BB	3896	43959	0.67%	0.039%
13	11.184	11.142	11.257	PV	565124	6570545	99.49%	5.816%
14	12.491	12.450	12.540	PB	543923	6603946	100.00%	5.845%
15	12.933	12.837	12.985	BB	414719	4987072	75.52%	4.414%
16	13.102	13.042	13.177	BB	533216	6361095	96.32%	5.630%
17	13.687	13.648	13.760	VB	505812	6331125	95.87%	5.604%
18	14.789	14.689	14.860	BB	494107	6268169	94.92%	5.548%
19	15.304	15.247	15.335	BB	3616	49771	0.75%	0.044%
20	15.806	15.724	15.884	BB	449028	6179214	93.57%	5.469%
21	16.286	16.234	16.325	BB	4013	53434	0.81%	0.047%
22	16.755	16.672	16.839	BB	433458	6106098	92.46%	5.405%
23	17.201	17.147	17.242	BB	3618	57167	0.87%	0.051%
24	17.528	17.475	17.557	BB	4555	61323	0.93%	0.054%
25	17.641	17.574	17.709	BB	432109	6126409	92.77%	5.423%
26	18.059	18.000	18.100	BB	3510	54321	0.82%	0.048%
27	18.472	18.397	18.547	BB	412476	6057137	91.72%	5.361%
28	19.254	19.177	19.320	BB	401798	6020511	91.17%	5.329%
29	19.835	19.717	19.932	BB	5041	258339	3.91%	0.229%
30	19.993	19.934	20.072	BB	399395	5879259	89.03%	5.204%
31	20.714	20.630	20.787	BB	320124	5889140	89.18%	5.213%
32	21.597	21.500	21.705	BB	242299	5838613	88.41%	5.168%

Sum of corrected areas: 112980507

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

Manual Integration Report

Sequence:	FC102324AL	Instrument	FID_c

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

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

Manual Integration Report

Sequence:	FC103024AL	Instrument	FID_c

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB164528BS	FC067566.D	n-Tetracosane (C24)	Yogesh	11/4/2024 9:39:38 AM	Ankita	11/4/2024 9:47:53	Peak Integrated by Software
PB164528BSD	FC067567.D	n-Tetracosane (C24)	Yogesh	11/4/2024 9:39:39 AM	Ankita	11/4/2024 9:47:54	Peak Integrated by Software
P4598-01MS	FC067582.D	n-Tetracosane (C24)	Yogesh	11/4/2024 9:39:40 AM	Ankita	11/4/2024 9:47:56	Peak Integrated by Software
P4598-01MSD	FC067583.D	n-Tetracosane (C24)	Yogesh	11/4/2024 9:39:41 AM	Ankita	11/4/2024 9:47:57	Peak Integrated by Software

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Manual Integration Report

Sequence:	FD102324AR	Instrument	FID_d

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

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

Manual Integration Report

Sequence:	FD103024AR	Instrument	FID_d

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB164525BS	FD048624.D	1,2,3-Trimethylbenzene (C10.1)	Yogesh	11/4/2024 9:39:56 AM	Ankita	11/4/2024 9:48:23	Peak Integrated by Software
PB164525BS	FD048624.D	Fluoranthene (C21.85)	Yogesh	11/4/2024 9:39:56 AM	Ankita	11/4/2024 9:48:23	Peak Integrated by Software
PB164525BSD	FD048625.D	1,2,3-Trimethylbenzene (C10.1)	Yogesh	11/4/2024 9:39:57 AM	Ankita	11/4/2024 9:48:25	Peak Integrated by Software
PB164525BSD	FD048625.D	Fluoranthene (C21.85)	Yogesh	11/4/2024 9:39:57 AM	Ankita	11/4/2024 9:48:25	Peak Integrated by Software
P4578-03	FD048626.D	ortho-Terphenyl (SURR)	Yogesh	11/4/2024 9:39:59 AM	Ankita	11/4/2024 9:48:26	Peak Integrated by Software
P4578-05MS	FD048630.D	1,2,3-Trimethylbenzene (C10.1)	Yogesh	11/4/2024 9:40:00 AM	Ankita	11/4/2024 9:48:28	Peak Integrated by Software
P4578-05MS	FD048630.D	Fluoranthene (C21.85)	Yogesh	11/4/2024 9:40:00 AM	Ankita	11/4/2024 9:48:28	Peak Integrated by Software
P4578-05MSD	FD048631.D	1,2,3-Trimethylbenzene (C10.1)	Yogesh	11/4/2024 9:40:03 AM	Ankita	11/4/2024 9:48:29	Peak Integrated by Software
P4578-05MSD	FD048631.D	Fluoranthene (C21.85)	Yogesh	11/4/2024 9:40:03 AM	Ankita	11/4/2024 9:48:29	Peak Integrated by Software
P4578-07	FD048632.D	ortho-Terphenyl (SURR)	Yogesh	11/4/2024 9:40:05 AM	Ankita	11/4/2024 9:48:30	Peak Integrated by Software

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Manual Integration Report

Sequence:	FE100824AL	Instrument	FID_e

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
10 PPM ALIPHATIC HC	FE050538.D	n-Octatriacontane (C38)	yogesh	10/8/2024 8:01:13 AM	Ankita	10/8/2024 9:52:52	Peak Integrated by Software
5 PPM ALIPHATIC HC	FE050539.D	n-Tetracontane (C40)	yogesh	10/8/2024 8:01:15 AM	Ankita	10/8/2024 9:52:53	Peak Integrated by Software

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Manual Integration Report

Sequence:	FE103024AL	Instrument	FID_e

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM ALIPHATIC HC	FE050899.D	n-Docosane (C22)	yogesh	10/31/2024 12:13:48 PM	Ankita	11/4/2024 9:21:58	Peak Integrated by Software
20 PPM ALIPHATIC HC	FE050899.D	n-Hexatriacontane (C36)	yogesh	10/31/2024 12:13:48 PM	Ankita	11/4/2024 9:21:58	Peak Integrated by Software
P4598-09	FE050902.D	1-chlorooctadecane (SURR)	yogesh	10/31/2024 12:13:49 PM	Ankita	11/4/2024 9:22:01	Peak Integrated by Software
P4598-10	FE050903.D	1-chlorooctadecane (SURR)	yogesh	10/31/2024 12:13:51 PM	Ankita	11/4/2024 9:22:03	Peak Integrated by Software
P4612-05	FE050914.D	1-chlorooctadecane (SURR)	yogesh	10/31/2024 12:13:52 PM	Ankita	11/4/2024 9:22:05	Peak Integrated by Software
P4599-02	FE050923.D	1-chlorooctadecane (SURR)	yogesh	10/31/2024 12:13:54 PM	Ankita	11/4/2024 9:22:06	Peak Integrated by Software
20 PPM ALIPHATIC HC	FE050932.D	n-Docosane (C22)	yogesh	11/1/2024 10:05:36 AM	Ankita	11/4/2024 9:22:07	Peak Integrated by Software
20 PPM ALIPHATIC HC	FE050932.D	n-Hexatriacontane (C36)	yogesh	11/1/2024 10:05:36 AM	Ankita	11/4/2024 9:22:07	Peak Integrated by Software

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Manual Integration Report

Sequence:	FG102124AR	Instrument	FID_g

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
100 PPM AROMATIC HC	FG014461.D	Bnezo[k]fluoranthene (C30.14)	yogesh	10/22/2024 8:17:04 AM	Ankita	10/22/2024 8:59:15	Peak Integrated by Software
100 PPM AROMATIC HC	FG014461.D	Dibenz[a,h]anthracene (C30.36)	yogesh	10/22/2024 8:17:04 AM	Ankita	10/22/2024 8:59:15	Peak Integrated by Software

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Manual Integration Report

Sequence:	FG103024AR	Instrument	FID_g

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
20 PPM AROMATIC HC	FG014576.D	Benzo[a]anthracene (C26.37)	yogesh	10/31/2024 12:14:47 PM	Ankita	11/4/2024 9:22:51	Peak Integrated by Software
20 PPM AROMATIC HC	FG014576.D	benzo[b]fluoranthene (C30.41)	yogesh	10/31/2024 12:14:47 PM	Ankita	11/4/2024 9:22:51	Peak Integrated by Software
20 PPM AROMATIC HC	FG014576.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	10/31/2024 12:14:47 PM	Ankita	11/4/2024 9:22:51	Peak Integrated by Software
P4599-01	FG014577.D	2-Bromonaphthalene (SURR)	yogesh	10/31/2024 12:14:49 PM	Ankita	11/4/2024 9:22:52	Peak Integrated by Software
P4599-01	FG014577.D	ortho-Terphenyl (SURR)	yogesh	10/31/2024 12:14:49 PM	Ankita	11/4/2024 9:22:52	Peak Integrated by Software
P4599-02	FG014578.D	2-Bromonaphthalene (SURR)	yogesh	10/31/2024 12:14:50 PM	Ankita	11/4/2024 9:22:53	Peak Integrated by Software
P4599-02	FG014578.D	ortho-Terphenyl (SURR)	yogesh	10/31/2024 12:14:50 PM	Ankita	11/4/2024 9:22:53	Peak Integrated by Software
P4599-03	FG014579.D	2-Bromonaphthalene (SURR)	yogesh	10/31/2024 12:14:52 PM	Ankita	11/4/2024 9:22:55	Peak Integrated by Software
P4599-03	FG014579.D	2-Flurobiphenyl (SURR)	yogesh	10/31/2024 12:14:52 PM	Ankita	11/4/2024 9:22:55	Peak Integrated by Software
P4599-03	FG014579.D	ortho-Terphenyl (SURR)	yogesh	10/31/2024 12:14:52 PM	Ankita	11/4/2024 9:22:55	Peak Integrated by Software
P4599-04	FG014580.D	2-Bromonaphthalene (SURR)	yogesh	10/31/2024 12:14:54 PM	Ankita	11/4/2024 9:22:56	Peak Integrated by Software
P4599-04	FG014580.D	ortho-Terphenyl (SURR)	yogesh	10/31/2024 12:14:54 PM	Ankita	11/4/2024 9:22:56	Peak Integrated by Software
P4599-05	FG014581.D	2-Bromonaphthalene (SURR)	yogesh	10/31/2024 12:14:55 PM	Ankita	11/4/2024 9:22:58	Peak Integrated by Software

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Manual Integration Report

Sequence:	FG103024AR	Instrument	FID_g

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
P4599-05	FG014581.D	2-Flurobiphenyl (SURR)	yogesh	10/31/2024 12:14:55 PM	Ankita	11/4/2024 9:22:58	Peak Integrated by Software
P4599-05	FG014581.D	ortho-Terphenyl (SURR)	yogesh	10/31/2024 12:14:55 PM	Ankita	11/4/2024 9:22:58	Peak Integrated by Software
P4599-06	FG014582.D	ortho-Terphenyl (SURR)	yogesh	10/31/2024 12:14:57 PM	Ankita	11/4/2024 9:22:59	Peak Integrated by Software
P4599-08	FG014584.D	ortho-Terphenyl (SURR)	yogesh	10/31/2024 12:14:59 PM	Ankita	11/4/2024 9:23:00	Peak Integrated by Software
P4599-09	FG014585.D	ortho-Terphenyl (SURR)	yogesh	10/31/2024 12:15:00 PM	Ankita	11/4/2024 9:23:02	Peak Integrated by Software
20 PPM AROMATIC HC	FG014587.D	Benzo[a]anthracene (C26.37)	yogesh	10/31/2024 12:15:02 PM	Ankita	11/4/2024 9:23:03	Peak Integrated by Software
20 PPM AROMATIC HC	FG014587.D	benzo[b]fluoranthene (C30.41)	yogesh	10/31/2024 12:15:02 PM	Ankita	11/4/2024 9:23:03	Peak Integrated by Software
20 PPM AROMATIC HC	FG014587.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	10/31/2024 12:15:02 PM	Ankita	11/4/2024 9:23:03	Peak Integrated by Software
PB164532BSD	FG014590.D	benzo[b]fluoranthene (C30.41)	yogesh	10/31/2024 12:15:04 PM	Ankita	11/4/2024 9:23:05	Peak Integrated by Software
20 PPM AROMATIC HC	FG014594.D	Benzo[a]anthracene (C26.37)	yogesh	10/31/2024 12:15:05 PM	Ankita	11/4/2024 9:23:06	Peak Integrated by Software
20 PPM AROMATIC HC	FG014594.D	benzo[b]fluoranthene (C30.41)	yogesh	10/31/2024 12:15:05 PM	Ankita	11/4/2024 9:23:06	Peak Integrated by Software
20 PPM AROMATIC HC	FG014594.D	Indeno[1,2,3-cd]pyrene (C35.01)	yogesh	10/31/2024 12:15:05 PM	Ankita	11/4/2024 9:23:06	Peak Integrated by Software

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Manual Integration Report

Sequence:	FG103024AR	Instrument	FID_g

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

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Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC102324AL

Review By	yogesh	Review On	10/23/2024 4:03:24 PM		
Supervise By	Ankita	Supervise On	10/24/2024 9:29:51 AM		
SubDirectory	FC102324AL	HP Acquire Method		HP Processing Method	FC102324AL

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

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC067504.D	23 Oct 2024 13:59	YP/AJ	Ok
2	I.BLK	FC067505.D	23 Oct 2024 14:35	YP/AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FC067506.D	23 Oct 2024 15:12	YP/AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FC067507.D	23 Oct 2024 15:48	YP/AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FC067508.D	23 Oct 2024 16:25	YP/AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FC067509.D	23 Oct 2024 17:02	YP/AJ	Ok
7	5 PPM ALIPHATIC HC STD5	FC067510.D	23 Oct 2024 17:38	YP/AJ	Ok
8	20 PPM ALIPHATIC HC STD ICV	FC067511.D	23 Oct 2024 18:14	YP/AJ	Ok
9	I.BLK	FC067512.D	23 Oct 2024 19:27	YP/AJ	Ok
10	20 PPM ALIPHATIC HC STD	FC067513.D	23 Oct 2024 20:03	YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC103024AL

Review By	yogesh	Review On	10/30/2024 11:27:45 AM		
Supervise By	Ankita	Supervise On	11/4/2024 9:48:01 AM		
SubDirectory	FC103024AL	HP Acquire Method		HP Processing Method	FC102324AL

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

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FC067562.D	30 Oct 2024 10:47	YP/AJ	Ok
2	I.BLK	FC067563.D	30 Oct 2024 11:59	YP/AJ	Ok
3	20 PPM ALIPHATIC HC STD	FC067564.D	30 Oct 2024 14:26	YP/AJ	Ok
4	PB164528BL	FC067565.D	30 Oct 2024 15:36	YP/AJ	Ok
5	PB164528BS	FC067566.D	30 Oct 2024 16:13	YP/AJ	Ok,M
6	PB164528BSD	FC067567.D	30 Oct 2024 16:50	YP/AJ	Ok,M
7	PB164525BL	FC067568.D	30 Oct 2024 17:27	YP/AJ	Ok
8	PB164525BS	FC067569.D	30 Oct 2024 18:04	YP/AJ	Ok
9	PB164525BSD	FC067570.D	30 Oct 2024 18:41	YP/AJ	Ok
10	P4578-05	FC067571.D	30 Oct 2024 19:18	YP/AJ	Ok
11	P4578-05D	FC067572.D	30 Oct 2024 19:54	YP/AJ	Ok
12	P4578-05MS	FC067573.D	30 Oct 2024 20:30	YP/AJ	Ok
13	P4578-05MSD	FC067574.D	30 Oct 2024 21:06	YP/AJ	Ok
14	I.BLK	FC067575.D	30 Oct 2024 22:20	YP/AJ	Ok
15	20 PPM ALIPHATIC HC STD	FC067576.D	30 Oct 2024 22:56	YP/AJ	Ok
16	P4578-03	FC067577.D	31 Oct 2024 00:08	YP/AJ	Ok
17	P4578-04	FC067578.D	31 Oct 2024 00:45	YP/AJ	Ok
18	P4578-07	FC067579.D	31 Oct 2024 01:21	YP/AJ	Ok
19	P4598-01	FC067580.D	31 Oct 2024 01:57	YP/AJ	Ok
20	P4598-01D	FC067581.D	31 Oct 2024 02:33	YP/AJ	Ok
21	P4598-01MS	FC067582.D	31 Oct 2024 03:09	YP/AJ	Ok,M

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Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC103024AL

Review By	yogesh	Review On	10/30/2024 11:27:45 AM		
Supervise By	Ankita	Supervise On	11/4/2024 9:48:01 AM		
SubDirectory	FC103024AL	HP Acquire Method		HP Processing Method	FC102324AL

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

22	P4598-01MSD	FC067583.D	31 Oct 2024 03:45	YP/AJ	Ok,M
23	P4598-02	FC067584.D	31 Oct 2024 04:21	YP/AJ	Ok
24	P4598-05	FC067585.D	31 Oct 2024 04:58	YP/AJ	Ok
25	P4598-06	FC067586.D	31 Oct 2024 05:34	YP/AJ	Ok
26	I.BLK	FC067587.D	31 Oct 2024 06:46	YP/AJ	Ok
27	20 PPM ALIPHATIC HC STD	FC067588.D	31 Oct 2024 07:23	YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD102324AR

Review By	yogesh	Review On	10/23/2024 4:04:27 PM		
Supervise By	Ankita	Supervise On	10/24/2024 9:29:45 AM		
SubDirectory	FD102324AR	HP Acquire Method		HP Processing Method	FD102324AR

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	Data File Name	Date-Time	Operator	Status
1	MECL2	FD048566.D	23 Oct 2024 13:59	YP/AJ	Ok
2	I.BLK	FD048567.D	23 Oct 2024 14:35	YP/AJ	Ok
3	100 PPM AROMATIC HC STD1	FD048568.D	23 Oct 2024 15:12	YP/AJ	Ok
4	50 PPM AROMATIC HC STD2	FD048569.D	23 Oct 2024 15:48	YP/AJ	Ok
5	20 PPM AROMATIC HC STD3	FD048570.D	23 Oct 2024 16:25	YP/AJ	Ok
6	10 PPM AROMATIC HC STD4	FD048571.D	23 Oct 2024 17:02	YP/AJ	Ok
7	5 PPM AROMATIC HC STD5	FD048572.D	23 Oct 2024 17:38	YP/AJ	Ok
8	20 PPM AROMATIC HC STD ICV	FD048573.D	23 Oct 2024 18:14	YP/AJ	Ok
9	I.BLK	FD048574.D	23 Oct 2024 19:27	YP/AJ	Ok
10	20 PPM AROMATIC HC STD	FD048575.D	23 Oct 2024 20:03	YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD103024AR

Review By	yogesh	Review On	10/30/2024 11:28:50 AM		
Supervise By	Ankita	Supervise On	11/4/2024 9:48:34 AM		
SubDirectory	FD103024AR	HP Acquire Method		HP Processing Method	FD102324AR

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	Data File Name	Date-Time	Operator	Status
1	MECL2	FD048620.D	30 Oct 2024 10:47	YP/AJ	Ok
2	I.BLK	FD048621.D	30 Oct 2024 11:59	YP/AJ	Ok
3	20 PPM AROMATIC HC STD	FD048622.D	30 Oct 2024 14:26	YP/AJ	Ok
4	PB164525BL	FD048623.D	30 Oct 2024 17:27	YP/AJ	Ok
5	PB164525BS	FD048624.D	30 Oct 2024 18:04	YP/AJ	Ok,M
6	PB164525BSD	FD048625.D	30 Oct 2024 18:41	YP/AJ	Ok,M
7	P4578-03	FD048626.D	30 Oct 2024 19:18	YP/AJ	Ok,M
8	P4578-04	FD048627.D	30 Oct 2024 19:54	YP/AJ	Ok
9	P4578-05	FD048628.D	30 Oct 2024 20:30	YP/AJ	Ok
10	P4578-05D	FD048629.D	30 Oct 2024 21:06	YP/AJ	Ok
11	P4578-05MS	FD048630.D	30 Oct 2024 21:43	YP/AJ	Ok,M
12	P4578-05MSD	FD048631.D	30 Oct 2024 22:20	YP/AJ	Ok,M
13	P4578-07	FD048632.D	30 Oct 2024 22:56	YP/AJ	Ok,M
14	I.BLK	FD048633.D	31 Oct 2024 00:08	YP/AJ	Ok
15	20 PPM AROMATIC HC STD	FD048634.D	31 Oct 2024 00:45	YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE100824AL

Review By	yogesh	Review On	10/7/2024 4:16:27 PM		
Supervise By	Ankita	Supervise On	10/8/2024 9:52:58 AM		
SubDirectory	FE100824AL	HP Acquire Method		HP Processing Method	FE100824AL

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

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FE050533.D	07 Oct 2024 13:05	YP\AJ	Ok
2	I.BLK	FE050534.D	07 Oct 2024 13:36	YP\AJ	Ok
3	100 PPM ALIPHATIC HC STD1	FE050535.D	07 Oct 2024 14:06	YP\AJ	Ok
4	50 PPM ALIPHATIC HC STD2	FE050536.D	07 Oct 2024 14:36	YP\AJ	Ok
5	20 PPM ALIPHATIC HC STD3	FE050537.D	07 Oct 2024 15:06	YP\AJ	Ok
6	10 PPM ALIPHATIC HC STD4	FE050538.D	07 Oct 2024 15:37	YP\AJ	Ok,M
7	5 PPM ALIPHATIC HC STD5	FE050539.D	07 Oct 2024 16:07	YP\AJ	Ok,M
8	20 PPM ALIPHATIC HC STD ICV	FE050540.D	07 Oct 2024 16:37	YP\AJ	Ok
9	I.BLK	FE050541.D	07 Oct 2024 18:08	YP\AJ	Ok
10	20 PPM ALIPHATIC HC STD	FE050542.D	07 Oct 2024 18:39	YP\AJ	Ok

M : Manual Integration

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Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE103024AL

Review By	yogesh	Review On	10/30/2024 11:26:38 AM		
Supervise By	Ankita	Supervise On	11/4/2024 9:22:11 AM		
SubDirectory	FE103024AL	HP Acquire Method		HP Processing Method	FE100824AL

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

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	MECL2	FE050897.D	30 Oct 2024 09:00	YP\AJ	Ok
2	I.BLK	FE050898.D	30 Oct 2024 11:44	YP\AJ	Ok
3	20 PPM ALIPHATIC HC STD	FE050899.D	30 Oct 2024 12:14	YP\AJ	Ok,M
4	P4619-01	FE050900.D	30 Oct 2024 14:58	YP\AJ	Ok
5	P4619-02	FE050901.D	30 Oct 2024 15:28	YP\AJ	Ok
6	P4598-09	FE050902.D	30 Oct 2024 15:58	YP\AJ	Ok,M
7	P4598-10	FE050903.D	30 Oct 2024 16:28	YP\AJ	Dilution
8	P4613-01	FE050904.D	30 Oct 2024 16:59	YP\AJ	Dilution
9	P4614-01	FE050905.D	30 Oct 2024 18:26	YP\AJ	Ok
10	P4614-02	FE050906.D	30 Oct 2024 18:56	YP\AJ	Dilution
11	P4617-01	FE050907.D	30 Oct 2024 19:27	YP\AJ	Ok
12	P4617-02	FE050908.D	30 Oct 2024 19:57	YP\AJ	Ok
13	P4618-01	FE050909.D	30 Oct 2024 20:27	YP\AJ	Ok
14	P4618-02	FE050910.D	30 Oct 2024 20:57	YP\AJ	Ok
15	P4618-03	FE050911.D	30 Oct 2024 21:27	YP\AJ	Ok
16	P4618-04	FE050912.D	30 Oct 2024 21:57	YP\AJ	Ok
17	P4612-03	FE050913.D	30 Oct 2024 22:27	YP\AJ	Dilution
18	P4612-05	FE050914.D	30 Oct 2024 22:57	YP\AJ	Ok,M
19	I.BLK	FE050915.D	30 Oct 2024 23:58	YP\AJ	Ok
20	20 PPM ALIPHATIC HC STD	FE050916.D	31 Oct 2024 00:28	YP\AJ	Ok
21	PB164532BL	FE050917.D	31 Oct 2024 01:29	YP\AJ	Ok

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Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE103024AL

Review By	yogesh	Review On	10/30/2024 11:26:38 AM		
Supervise By	Ankita	Supervise On	11/4/2024 9:22:11 AM		
SubDirectory	FE103024AL	HP Acquire Method		HP Processing Method	FE100824AL

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

22	PB164532BS	FE050918.D	31 Oct 2024 01:59	YP\AJ	Ok
23	PB164532BSD	FE050919.D	31 Oct 2024 02:29	YP\AJ	Ok
24	P4578-01	FE050920.D	31 Oct 2024 02:59	YP\AJ	Ok
25	P4578-02	FE050921.D	31 Oct 2024 03:29	YP\AJ	Ok
26	P4599-01	FE050922.D	31 Oct 2024 04:00	YP\AJ	Dilution
27	P4599-02	FE050923.D	31 Oct 2024 04:30	YP\AJ	Dilution
28	P4599-03	FE050924.D	31 Oct 2024 05:00	YP\AJ	Dilution
29	P4599-04	FE050925.D	31 Oct 2024 05:30	YP\AJ	Dilution
30	P4599-05	FE050926.D	31 Oct 2024 05:59	YP\AJ	Dilution
31	P4599-06	FE050927.D	31 Oct 2024 06:29	YP\AJ	Dilution
32	P4599-07	FE050928.D	31 Oct 2024 07:00	YP\AJ	Ok
33	P4599-08	FE050929.D	31 Oct 2024 07:30	YP\AJ	Dilution
34	P4599-09	FE050930.D	31 Oct 2024 08:00	YP\AJ	Dilution
35	I.BLK	FE050931.D	31 Oct 2024 08:30	YP\AJ	Ok
36	20 PPM ALIPHATIC HC STD	FE050932.D	31 Oct 2024 09:00	YP\AJ	Ok,M

M : Manual Integration

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Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG102124AR

Review By	yogesh	Review On	10/21/2024 3:17:43 PM		
Supervise By	Ankita	Supervise On	10/22/2024 9:01:46 AM		
SubDirectory	FG102124AR	HP Acquire Method		HP Processing Method	FG102124AR

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	Data File Name	Date-Time	Operator	Status
1	MECL2	FG014459.D	21 Oct 2024 18:13	YP\AJ	Ok
2	I.BLK	FG014460.D	21 Oct 2024 18:42	YP\AJ	Ok
3	100 PPM AROMATIC HC STD1	FG014461.D	21 Oct 2024 19:11	YP\AJ	Ok,M
4	50 PPM AROMATIC HC STD2	FG014462.D	21 Oct 2024 19:40	YP\AJ	Ok
5	20 PPM AROMATIC HC STD3	FG014463.D	21 Oct 2024 20:09	YP\AJ	Ok
6	10 PPM AROMATIC HC STD4	FG014464.D	21 Oct 2024 20:38	YP\AJ	Ok
7	5 PPM AROMATIC HC STD5	FG014465.D	21 Oct 2024 21:06	YP\AJ	Ok
8	20 PPM AROMATIC HC STD ICV	FG014466.D	21 Oct 2024 21:36	YP\AJ	Ok
9	I.BLK	FG014467.D	21 Oct 2024 22:33	YP\AJ	Ok
10	20 PPM AROMATIC HC STD	FG014468.D	21 Oct 2024 23:03	YP\AJ	Ok

M : Manual Integration

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Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG103024AR

Review By	yogesh	Review On	10/30/2024 1:57:25 PM		
Supervise By	Ankita	Supervise On	11/4/2024 9:23:19 AM		
SubDirectory	FG103024AR	HP Acquire Method		HP Processing Method	FG102124AR

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	Data File Name	Date-Time	Operator	Status
1	MECL2	FG014574.D	30 Oct 2024 09:58	YP\AJ	Ok
2	I.BLK	FG014575.D	30 Oct 2024 11:53	YP\AJ	Ok
3	20 PPM AROMATIC HC STD	FG014576.D	30 Oct 2024 12:21	YP\AJ	Ok,M
4	P4599-01	FG014577.D	30 Oct 2024 17:09	YP\AJ	Dilution
5	P4599-02	FG014578.D	30 Oct 2024 17:37	YP\AJ	Dilution
6	P4599-03	FG014579.D	30 Oct 2024 18:06	YP\AJ	Dilution
7	P4599-04	FG014580.D	30 Oct 2024 18:34	YP\AJ	Dilution
8	P4599-05	FG014581.D	30 Oct 2024 19:02	YP\AJ	Dilution
9	P4599-06	FG014582.D	30 Oct 2024 19:31	YP\AJ	Dilution
10	P4599-07	FG014583.D	30 Oct 2024 19:59	YP\AJ	Ok
11	P4599-08	FG014584.D	30 Oct 2024 20:27	YP\AJ	Dilution
12	P4599-09	FG014585.D	30 Oct 2024 20:56	YP\AJ	Dilution
13	I.BLK	FG014586.D	30 Oct 2024 21:52	YP\AJ	Ok
14	20 PPM AROMATIC HC STD	FG014587.D	30 Oct 2024 22:21	YP\AJ	Ok,M
15	PB164532BL	FG014588.D	30 Oct 2024 23:17	YP\AJ	Ok
16	PB164532BS	FG014589.D	30 Oct 2024 23:46	YP\AJ	Ok
17	PB164532BSD	FG014590.D	31 Oct 2024 00:14	YP\AJ	Ok,M
18	P4578-01	FG014591.D	31 Oct 2024 00:42	YP\AJ	Ok
19	P4578-02	FG014592.D	31 Oct 2024 01:11	YP\AJ	Ok
20	I.BLK	FG014593.D	31 Oct 2024 01:39	YP\AJ	Ok
21	20 PPM AROMATIC HC STD	FG014594.D	31 Oct 2024 02:07	YP\AJ	Ok,M

M : Manual Integration

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Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC102324AL

Review By	yogesh	Review On	10/23/2024 4:03:24 PM		
Supervise By	Ankita	Supervise On	10/24/2024 9:29:51 AM		
SubDirectory	FC102324AL	HP Acquire Method		HP Processing Method	FC102324AL

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

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FC067504.D	23 Oct 2024 13:59		YP/AJ	Ok
2	I.BLK	I.BLK	FC067505.D	23 Oct 2024 14:35		YP/AJ	Ok
3	100 PPM ALIPHATIC H	100 PPM ALIPHATIC H	FC067506.D	23 Oct 2024 15:12		YP/AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FC067507.D	23 Oct 2024 15:48		YP/AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067508.D	23 Oct 2024 16:25		YP/AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FC067509.D	23 Oct 2024 17:02		YP/AJ	Ok
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FC067510.D	23 Oct 2024 17:38		YP/AJ	Ok
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067511.D	23 Oct 2024 18:14		YP/AJ	Ok
9	I.BLK	I.BLK	FC067512.D	23 Oct 2024 19:27		YP/AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067513.D	23 Oct 2024 20:03		YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC103024AL

Review By	yogesh	Review On	10/30/2024 11:27:45 AM		
Supervise By	Ankita	Supervise On	11/4/2024 9:48:01 AM		
SubDirectory	FC103024AL	HP Acquire Method		HP Processing Method	FC102324AL

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

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FC067562.D	30 Oct 2024 10:47		YP/AJ	Ok
2	I.BLK	I.BLK	FC067563.D	30 Oct 2024 11:59		YP/AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067564.D	30 Oct 2024 14:26		YP/AJ	Ok
4	PB164528BL	PB164528BL	FC067565.D	30 Oct 2024 15:36		YP/AJ	Ok
5	PB164528BS	PB164528BS	FC067566.D	30 Oct 2024 16:13		YP/AJ	Ok,M
6	PB164528BSD	PB164528BSD	FC067567.D	30 Oct 2024 16:50		YP/AJ	Ok,M
7	PB164525BL	PB164525BL	FC067568.D	30 Oct 2024 17:27		YP/AJ	Ok
8	PB164525BS	PB164525BS	FC067569.D	30 Oct 2024 18:04		YP/AJ	Ok
9	PB164525BSD	PB164525BSD	FC067570.D	30 Oct 2024 18:41		YP/AJ	Ok
10	P4578-05	WB-305-BOT	FC067571.D	30 Oct 2024 19:18		YP/AJ	Ok
11	P4578-05D	P4578-05D	FC067572.D	30 Oct 2024 19:54		YP/AJ	Ok
12	P4578-05MS	WB-305-BOTMS	FC067573.D	30 Oct 2024 20:30	FC067571.D	YP/AJ	Ok
13	P4578-05MSD	WB-305-BOTMSD	FC067574.D	30 Oct 2024 21:06	FC067571.D!FC067573.D	YP/AJ	Ok
14	I.BLK	I.BLK	FC067575.D	30 Oct 2024 22:20		YP/AJ	Ok
15	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067576.D	30 Oct 2024 22:56		YP/AJ	Ok
16	P4578-03	WB-305-TOP	FC067577.D	31 Oct 2024 00:08		YP/AJ	Ok
17	P4578-04	WB-305-TOP-1	FC067578.D	31 Oct 2024 00:45		YP/AJ	Ok
18	P4578-07	WB-305-BOT-1	FC067579.D	31 Oct 2024 01:21		YP/AJ	Ok

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Instrument ID: FID_C

Daily Analysis Runlog For Sequence/QCBatch ID # FC103024AL

Review By	yogesh	Review On	10/30/2024 11:27:45 AM		
Supervise By	Ankita	Supervise On	11/4/2024 9:48:01 AM		
SubDirectory	FC103024AL	HP Acquire Method		HP Processing Method	FC102324AL

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	P4598-01	BP-F12	FC067580.D	31 Oct 2024 01:57		YP/AJ	Ok
20	P4598-01D	P4598-01D	FC067581.D	31 Oct 2024 02:33		YP/AJ	Ok
21	P4598-01MS	BP-F12MS	FC067582.D	31 Oct 2024 03:09	FC067580.D	YP/AJ	Ok,M
22	P4598-01MSD	BP-F12MSD	FC067583.D	31 Oct 2024 03:45	FC067580.D!FC067582.D	YP/AJ	Ok,M
23	P4598-02	BP-F12-EPH	FC067584.D	31 Oct 2024 04:21		YP/AJ	Ok
24	P4598-05	BP-F11	FC067585.D	31 Oct 2024 04:58		YP/AJ	Ok
25	P4598-06	BP-F11-EPH	FC067586.D	31 Oct 2024 05:34		YP/AJ	Ok
26	I.BLK	I.BLK	FC067587.D	31 Oct 2024 06:46		YP/AJ	Ok
27	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FC067588.D	31 Oct 2024 07:23		YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD102324AR

Review By	yogesh	Review On	10/23/2024 4:04:27 PM		
Supervise By	Ankita	Supervise On	10/24/2024 9:29:45 AM		
SubDirectory	FD102324AR	HP Acquire Method		HP Processing Method	FD102324AR

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	FD048566.D	23 Oct 2024 13:59		YP/AJ	Ok
2	I.BLK	I.BLK	FD048567.D	23 Oct 2024 14:35		YP/AJ	Ok
3	100 PPM AROMATIC H	100 PPM AROMATIC H	FD048568.D	23 Oct 2024 15:12		YP/AJ	Ok
4	50 PPM AROMATIC HC	50 PPM AROMATIC HC	FD048569.D	23 Oct 2024 15:48		YP/AJ	Ok
5	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048570.D	23 Oct 2024 16:25		YP/AJ	Ok
6	10 PPM AROMATIC HC	10 PPM AROMATIC HC	FD048571.D	23 Oct 2024 17:02		YP/AJ	Ok
7	5 PPM AROMATIC HC	5 PPM AROMATIC HC	FD048572.D	23 Oct 2024 17:38		YP/AJ	Ok
8	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048573.D	23 Oct 2024 18:14		YP/AJ	Ok
9	I.BLK	I.BLK	FD048574.D	23 Oct 2024 19:27		YP/AJ	Ok
10	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048575.D	23 Oct 2024 20:03		YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_D

Daily Analysis Runlog For Sequence/QCBatch ID # FD103024AR

Review By	yogesh	Review On	10/30/2024 11:28:50 AM		
Supervise By	Ankita	Supervise On	11/4/2024 9:48:34 AM		
SubDirectory	FD103024AR	HP Acquire Method		HP Processing Method	FD102324AR

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	FD048620.D	30 Oct 2024 10:47		YP/AJ	Ok
2	I.BLK	I.BLK	FD048621.D	30 Oct 2024 11:59		YP/AJ	Ok
3	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048622.D	30 Oct 2024 14:26		YP/AJ	Ok
4	PB164525BL	PB164525BL	FD048623.D	30 Oct 2024 17:27		YP/AJ	Ok
5	PB164525BS	PB164525BS	FD048624.D	30 Oct 2024 18:04		YP/AJ	Ok,M
6	PB164525BSD	PB164525BSD	FD048625.D	30 Oct 2024 18:41		YP/AJ	Ok,M
7	P4578-03	WB-305-TOP	FD048626.D	30 Oct 2024 19:18		YP/AJ	Ok,M
8	P4578-04	WB-305-TOP-1	FD048627.D	30 Oct 2024 19:54		YP/AJ	Ok
9	P4578-05	WB-305-BOT	FD048628.D	30 Oct 2024 20:30		YP/AJ	Ok
10	P4578-05D	P4578-05D	FD048629.D	30 Oct 2024 21:06		YP/AJ	Ok
11	P4578-05MS	WB-305-BOTMS	FD048630.D	30 Oct 2024 21:43	FD048628.D	YP/AJ	Ok,M
12	P4578-05MSD	WB-305-BOTMSD	FD048631.D	30 Oct 2024 22:20	FD048628.D!FD048630.D	YP/AJ	Ok,M
13	P4578-07	WB-305-BOT-1	FD048632.D	30 Oct 2024 22:56		YP/AJ	Ok,M
14	I.BLK	I.BLK	FD048633.D	31 Oct 2024 00:08		YP/AJ	Ok
15	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FD048634.D	31 Oct 2024 00:45		YP/AJ	Ok

M : Manual Integration

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Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE100824AL

Review By	yogesh	Review On	10/7/2024 4:16:27 PM		
Supervise By	Ankita	Supervise On	10/8/2024 9:52:58 AM		
SubDirectory	FE100824AL	HP Acquire Method		HP Processing Method	FE100824AL

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

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FE050533.D	07 Oct 2024 13:05		YP\AJ	Ok
2	I.BLK	I.BLK	FE050534.D	07 Oct 2024 13:36		YP\AJ	Ok
3	100 PPM ALIPHATIC H	100 PPM ALIPHATIC H	FE050535.D	07 Oct 2024 14:06		YP\AJ	Ok
4	50 PPM ALIPHATIC HC	50 PPM ALIPHATIC HC	FE050536.D	07 Oct 2024 14:36		YP\AJ	Ok
5	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE050537.D	07 Oct 2024 15:06		YP\AJ	Ok
6	10 PPM ALIPHATIC HC	10 PPM ALIPHATIC HC	FE050538.D	07 Oct 2024 15:37		YP\AJ	Ok,M
7	5 PPM ALIPHATIC HC	5 PPM ALIPHATIC HC	FE050539.D	07 Oct 2024 16:07		YP\AJ	Ok,M
8	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE050540.D	07 Oct 2024 16:37		YP\AJ	Ok
9	I.BLK	I.BLK	FE050541.D	07 Oct 2024 18:08		YP\AJ	Ok
10	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE050542.D	07 Oct 2024 18:39		YP\AJ	Ok

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE103024AL

Review By	yogesh	Review On	10/30/2024 11:26:38 AM		
Supervise By	Ankita	Supervise On	11/4/2024 9:22:11 AM		
SubDirectory	FE103024AL	HP Acquire Method		HP Processing Method	FE100824AL

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

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	MECL2	MECL2	FE050897.D	30 Oct 2024 09:00		YP\AJ	Ok
2	I.BLK	I.BLK	FE050898.D	30 Oct 2024 11:44		YP\AJ	Ok
3	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE050899.D	30 Oct 2024 12:14		YP\AJ	Ok,M
4	P4619-01	SU-03-102924	FE050900.D	30 Oct 2024 14:58		YP\AJ	Ok
5	P4619-02	SU-03-102924-E2	FE050901.D	30 Oct 2024 15:28		YP\AJ	Ok
6	P4598-09	TP-8	FE050902.D	30 Oct 2024 15:58		YP\AJ	Ok,M
7	P4598-10	TP-8-EPH	FE050903.D	30 Oct 2024 16:28	need 5x dilution	YP\AJ	Dilution
8	P4613-01	ARS20-0001	FE050904.D	30 Oct 2024 16:59	need 10x & 200x dilution	YP\AJ	Dilution
9	P4614-01	NB-07-102924	FE050905.D	30 Oct 2024 18:26		YP\AJ	Ok
10	P4614-02	NB-07-102924-E2	FE050906.D	30 Oct 2024 18:56	need 10x ilution	YP\AJ	Dilution
11	P4617-01	RO-SOIL	FE050907.D	30 Oct 2024 19:27		YP\AJ	Ok
12	P4617-02	RO-SOIL-E2	FE050908.D	30 Oct 2024 19:57		YP\AJ	Ok
13	P4618-01	HR-01-102924	FE050909.D	30 Oct 2024 20:27		YP\AJ	Ok
14	P4618-02	HR-01-102924-E2	FE050910.D	30 Oct 2024 20:57		YP\AJ	Ok
15	P4618-03	HR-04-102924	FE050911.D	30 Oct 2024 21:27		YP\AJ	Ok
16	P4618-04	HR-04-102924-E2	FE050912.D	30 Oct 2024 21:57		YP\AJ	Ok
17	P4612-03	MOO-24-00335	FE050913.D	30 Oct 2024 22:27	need 10x & 250x dilution	YP\AJ	Dilution
18	P4612-05	CONCRETE-PAD	FE050914.D	30 Oct 2024 22:57		YP\AJ	Ok,M

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

Instrument ID: FID_E

Daily Analysis Runlog For Sequence/QCBatch ID # FE103024AL

Review By	yogesh	Review On	10/30/2024 11:26:38 AM		
Supervise By	Ankita	Supervise On	11/4/2024 9:22:11 AM		
SubDirectory	FE103024AL	HP Acquire Method		HP Processing Method	FE100824AL

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	I.BLK	I.BLK	FE050915.D	30 Oct 2024 23:58		YP\AJ	Ok
20	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE050916.D	31 Oct 2024 00:28		YP\AJ	Ok
21	PB164532BL	PB164532BL	FE050917.D	31 Oct 2024 01:29		YP\AJ	Ok
22	PB164532BS	PB164532BS	FE050918.D	31 Oct 2024 01:59		YP\AJ	Ok
23	PB164532BSD	PB164532BSD	FE050919.D	31 Oct 2024 02:29		YP\AJ	Ok
24	P4578-01	WB-305-SW	FE050920.D	31 Oct 2024 02:59		YP\AJ	Ok
25	P4578-02	WB-305-SW-1	FE050921.D	31 Oct 2024 03:29		YP\AJ	Ok
26	P4599-01	EX-1-TPH-1	FE050922.D	31 Oct 2024 04:00	need 50x dilution	YP\AJ	Dilution
27	P4599-02	EX-1-TPH-2	FE050923.D	31 Oct 2024 04:30	need 50x dilution	YP\AJ	Dilution
28	P4599-03	EX-1-TPH-3	FE050924.D	31 Oct 2024 05:00	Need 10X and 100X dilution	YP\AJ	Dilution
29	P4599-04	EX-1-TPH-4	FE050925.D	31 Oct 2024 05:30	need 10x & 50x dilution	YP\AJ	Dilution
30	P4599-05	EX-1-TPH-5	FE050926.D	31 Oct 2024 05:59	need 10x & 100x dilution	YP\AJ	Dilution
31	P4599-06	EX-1-TPH-6	FE050927.D	31 Oct 2024 06:29	need 25x dilution	YP\AJ	Dilution
32	P4599-07	EX-1-TPH-7	FE050928.D	31 Oct 2024 07:00		YP\AJ	Ok
33	P4599-08	EX-1-TPH-8	FE050929.D	31 Oct 2024 07:30	need 10x & 50x dilution	YP\AJ	Dilution
34	P4599-09	EX-1-TPH-9	FE050930.D	31 Oct 2024 08:00	need 10x & 50x dilution	YP\AJ	Dilution
35	I.BLK	I.BLK	FE050931.D	31 Oct 2024 08:30		YP\AJ	Ok
36	20 PPM ALIPHATIC HC	20 PPM ALIPHATIC HC	FE050932.D	31 Oct 2024 09:00		YP\AJ	Ok,M

M : Manual Integration

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG102124AR

Review By	yogesh	Review On	10/21/2024 3:17:43 PM		
Supervise By	Ankita	Supervise On	10/22/2024 9:01:46 AM		
SubDirectory	FG102124AR	HP Acquire Method		HP Processing Method	FG102124AR

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	FG014459.D	21 Oct 2024 18:13		YP\AJ	Ok
2	I.BLK	I.BLK	FG014460.D	21 Oct 2024 18:42		YP\AJ	Ok
3	100 PPM AROMATIC H	100 PPM AROMATIC H	FG014461.D	21 Oct 2024 19:11		YP\AJ	Ok,M
4	50 PPM AROMATIC HC	50 PPM AROMATIC HC	FG014462.D	21 Oct 2024 19:40		YP\AJ	Ok
5	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FG014463.D	21 Oct 2024 20:09		YP\AJ	Ok
6	10 PPM AROMATIC HC	10 PPM AROMATIC HC	FG014464.D	21 Oct 2024 20:38		YP\AJ	Ok
7	5 PPM AROMATIC HC	5 PPM AROMATIC HC	FG014465.D	21 Oct 2024 21:06		YP\AJ	Ok
8	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FG014466.D	21 Oct 2024 21:36		YP\AJ	Ok
9	I.BLK	I.BLK	FG014467.D	21 Oct 2024 22:33		YP\AJ	Ok
10	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FG014468.D	21 Oct 2024 23:03		YP\AJ	Ok

M : Manual Integration

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

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG103024AR

Review By	yogesh	Review On	10/30/2024 1:57:25 PM		
Supervise By	Ankita	Supervise On	11/4/2024 9:23:19 AM		
SubDirectory	FG103024AR	HP Acquire Method		HP Processing Method	FG102124AR

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	FG014574.D	30 Oct 2024 09:58		YP\AJ	Ok
2	I.BLK	I.BLK	FG014575.D	30 Oct 2024 11:53		YP\AJ	Ok
3	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FG014576.D	30 Oct 2024 12:21		YP\AJ	Ok,M
4	P4599-01	EX-1-TPH-1	FG014577.D	30 Oct 2024 17:09	need 5x & 20x dilution	YP\AJ	Dilution
5	P4599-02	EX-1-TPH-2	FG014578.D	30 Oct 2024 17:37	need 5x & 25x dilution	YP\AJ	Dilution
6	P4599-03	EX-1-TPH-3	FG014579.D	30 Oct 2024 18:06	need 5x & 50x dilution	YP\AJ	Dilution
7	P4599-04	EX-1-TPH-4	FG014580.D	30 Oct 2024 18:34	need 5x & 25x dilution	YP\AJ	Dilution
8	P4599-05	EX-1-TPH-5	FG014581.D	30 Oct 2024 19:02	need 5x & 25x dilution	YP\AJ	Dilution
9	P4599-06	EX-1-TPH-6	FG014582.D	30 Oct 2024 19:31	need 10x dilution	YP\AJ	Dilution
10	P4599-07	EX-1-TPH-7	FG014583.D	30 Oct 2024 19:59		YP\AJ	Ok
11	P4599-08	EX-1-TPH-8	FG014584.D	30 Oct 2024 20:27	need 20x dilution	YP\AJ	Dilution
12	P4599-09	EX-1-TPH-9	FG014585.D	30 Oct 2024 20:56	need 5x & 20x dilution	YP\AJ	Dilution
13	I.BLK	I.BLK	FG014586.D	30 Oct 2024 21:52		YP\AJ	Ok
14	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FG014587.D	30 Oct 2024 22:21		YP\AJ	Ok,M
15	PB164532BL	PB164532BL	FG014588.D	30 Oct 2024 23:17		YP\AJ	Ok
16	PB164532BS	PB164532BS	FG014589.D	30 Oct 2024 23:46		YP\AJ	Ok
17	PB164532BSD	PB164532BSD	FG014590.D	31 Oct 2024 00:14		YP\AJ	Ok,M
18	P4578-01	WB-305-SW	FG014591.D	31 Oct 2024 00:42		YP\AJ	Ok

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Fax : 908 789 8922

Instrument ID: FID_G

Daily Analysis Runlog For Sequence/QCBatch ID # FG103024AR

Review By	yogesh	Review On	10/30/2024 1:57:25 PM		
Supervise By	Ankita	Supervise On	11/4/2024 9:23:19 AM		
SubDirectory	FG103024AR	HP Acquire Method		HP Processing Method	FG102124AR

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	P4578-02	WB-305-SW-1	FG014592.D	31 Oct 2024 01:11		YP\AJ	Ok
20	I.BLK	I.BLK	FG014593.D	31 Oct 2024 01:39		YP\AJ	Ok
21	20 PPM AROMATIC HC	20 PPM AROMATIC HC	FG014594.D	31 Oct 2024 02:07		YP\AJ	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/28/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 18:15
In Date: 10/25/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:38
Out Date: 10/26/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133131

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
P4561-01	BP-F-19	1	1.16	8.48	9.64	8.73	89.3	
P4561-02	BP-F-19-EPH	2	1.16	8.50	9.66	8.77	89.5	
P4561-03	BP-F-19-VOC	3	1.15	8.80	9.95	9.16	91.0	
P4561-05	BP-F-18	4	1.15	8.40	9.55	8.36	85.8	
P4561-06	BP-F-18-EPH	5	1.13	8.44	9.57	8.29	84.8	
P4561-07	BP-F-18-VOC	6	1.12	8.71	9.83	8.52	85.0	
P4562-05	SVOC-GPC-BLANK	7	1.00	1.00	2.00	2.00	100.0	
P4562-06	PEST-GPC-BLANK	8	1.00	1.00	2.00	2.00	100.0	
P4562-07	PEST-GPC-BLANK-SPIKE	9	1.00	1.00	2.00	2.00	100.0	
P4562-08	PCB-GPC-BLANK	10	1.00	1.00	2.00	2.00	100.0	
P4562-09	PCB-GPC-BLANK-SPIKE	11	1.00	1.00	2.00	2.00	100.0	
P4562-10	SVOC-GPC2-BLANK	12	1.00	1.00	2.00	2.00	100.0	
P4562-11	PEST-GPC2-BLANK	13	1.00	1.00	2.00	2.00	100.0	
P4562-12	PEST-GPC2-BLANK-SPIKE	14	1.00	1.00	2.00	2.00	100.0	
P4562-13	PCB-GPC2-BLANK	15	1.00	1.00	2.00	2.00	100.0	
P4562-14	PCB-GPC2-BLANK-SPIKE	16	1.00	1.00	2.00	2.00	100.0	
P4563-01	100724-A	26	1.00	1.00	2.00	2.00	100.0	wipe sample
P4563-02	100724-B	27	1.00	1.00	2.00	2.00	100.0	wipe sample
P4563-03	100724-C	28	1.00	1.00	2.00	2.00	100.0	wipe sample
P4563-04	100724-D	29	1.00	1.00	2.00	2.00	100.0	wipe sample
P4563-05	100824-A	30	1.00	1.00	2.00	2.00	100.0	wipe sample
P4563-06	100924-A	31	1.00	1.00	2.00	2.00	100.0	wipe sample
P4563-07	100924-B	32	1.00	1.00	2.00	2.00	100.0	wipe sample
P4563-08	101424-A	33	1.00	1.00	2.00	2.00	100.0	wipe sample
P4563-09	102324-A	34	1.00	1.00	2.00	2.00	100.0	wipe sample
P4563-10	102524-A	35	1.00	1.00	2.00	2.00	100.0	wipe sample
P4563-11	FITTING-1	36	1.00	1.00	2.00	2.00	100.0	wipe sample
P4563-12	FITTING-2	37	1.00	1.00	2.00	2.00	100.0	wipe sample

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/28/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 18:15
In Date: 10/25/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:38
Out Date: 10/26/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133131

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
P4565-01	2054	38	1.00	1.00	2.00	2.00	100.0	wipe sample
P4565-02	2055	39	1.00	1.00	2.00	2.00	100.0	wipe sample
P4565-03	2056	40	1.00	1.00	2.00	2.00	100.0	wipe sample
P4565-04	2057	41	1.00	1.00	2.00	2.00	100.0	wipe sample
P4565-05	2058	42	1.00	1.00	2.00	2.00	100.0	wipe sample
P4565-06	2059	43	1.00	1.00	2.00	2.00	100.0	wipe sample
P4566-01	HD-01-102524	44	1.14	8.57	9.71	9.47	97.2	
P4566-02	HD-01-102524-E2	45	1.13	8.84	9.97	9.42	93.8	
P4567-01	WC-1	17	1.16	8.50	9.66	8.89	90.9	
P4567-02	WC-1-EPH	18	1.13	8.67	9.8	8.99	90.7	
P4567-03	WC-1-VOC	19	1.18	8.35	9.53	9.05	94.3	
P4567-05	WC-2	20	1.11	8.58	9.69	8.99	91.8	
P4567-06	WC-2-EPH	21	1.18	8.79	9.97	9.12	90.3	
P4567-07	WC-2-VOC	22	1.16	8.46	9.62	9.46	98.1	
P4567-09	WC-3	23	1.17	8.41	9.58	8.69	89.4	
P4567-10	WC-3-EPH	24	1.19	8.78	9.97	9.17	90.9	
P4567-11	WC-3-VOC	25	1.14	8.82	9.96	9.19	91.3	
P4574-01	GRAVEL-1	50	1.00	1.00	2.00	2.00	100.0	stone sample, 100 % solids
P4574-02	GRAVEL-1-E2	51	1.00	1.00	2.00	2.00	100.0	stone sample, 100 % solids
P4574-04	GRAVEL-2	52	1.00	1.00	2.00	2.00	100.0	stone sample, 100 % solids
P4574-05	GRAVEL-2-E2	53	1.00	1.00	2.00	2.00	100.0	stone sample, 100 % solids
P4574-07	CONCRETE-1	54	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4574-09	CONCRETE-2	55	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4574-11	CONCRETE-3	56	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4575-01	PL-02-102424	57	1.15	8.42	9.57	8.84	91.3	
P4575-02	PL-02-102424-E2	58	1.15	8.83	9.98	8.99	88.8	
P4576-01	1097	59	1.00	1.00	2.00	2.00	100.0	WIPE SAMPLE
P4576-02	1098	60	1.00	1.00	2.00	2.00	100.0	WIPE Sample

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/28/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 18:15
In Date: 10/25/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:38
Out Date: 10/26/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133131

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
P4577-01	TR-05-102524	61	1.18	8.40	9.58	9.03	93.5	
P4577-02	TR-05-102524-E2	62	1.17	8.53	9.7	9.03	92.1	
P4578-03	WB-305-TOP	46	1.15	8.81	9.96	5.89	53.8	
P4578-04	WB-305-TOP-1	47	1.12	8.82	9.94	6.3	58.7	
P4578-05	WB-305-BOT	48	1.15	8.81	9.96	8.38	82.1	
P4578-07	WB-305-BOT-1	49	1.13	8.86	9.99	9.49	94.4	

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

WORKLIST(Hardcopy Internal Chain)

VD 133131

WorkList Name : %1-102524 **WorkList ID :** 184773 **Department :** Wet-Chemistry **Date :** 10-25-2024 09:56:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4561-01	BP-F-19	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4561-02	BP-F-19-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4561-03	BP-F-19-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4561-05	BP-F-18	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4561-06	BP-F-18-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4561-07	BP-F-18-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4562-05	SVOC-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	K11	10/25/2024	Chemtech -SO
P4562-06	PEST-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	K11	10/25/2024	Chemtech -SO
P4562-07	PEST-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	K11	10/25/2024	Chemtech -SO
P4562-08	PCB-GPC-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	K11	10/25/2024	Chemtech -SO
P4562-09	PCB-GPC-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	K11	10/25/2024	Chemtech -SO
P4562-10	SVOC-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	K11	10/25/2024	Chemtech -SO
P4562-11	PEST-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	K11	10/25/2024	Chemtech -SO
P4562-12	PEST-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	K11	10/25/2024	Chemtech -SO
P4562-13	PCB-GPC2-BLANK	Solid	Percent Solids	Cool 4 deg C	CHEM02	K11	10/25/2024	Chemtech -SO
P4562-14	PCB-GPC2-BLANK-SPIKE	Solid	Percent Solids	Cool 4 deg C	CHEM02	K11	10/25/2024	Chemtech -SO
P4563-01	100724-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4563-02	100724-B	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4563-03	100724-C	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4563-04	100724-D	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4563-05	100824-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO

Date/Time 10/25/24 16:30

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

Date/Time 10/25/24 18:30

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

WORKLIST(Hardcopy Internal Chain)

LB13313)

WorkList Name : %1-102524 **WorkList ID :** 184773 **Department :** Wet-Chemistry **Date :** 10-25-2024 09:56:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4563-06	100924-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4563-07	100924-B	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4563-08	101424-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4563-09	102324-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4563-10	102524-A	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4563-11	FITTING-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4563-12	FITTING-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4565-01	2054	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4565-02	2055	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4565-03	2056	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4565-04	2057	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4565-05	2058	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4565-06	2059	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4566-01	HD-01-102524	Solid	Percent Solids	Cool 4 deg C	PSEG05	K63	10/25/2024	Chemtech -SO
P4566-02	HD-01-102524-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	K63	10/25/2024	Chemtech -SO
P4567-01	WC-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/25/2024	Chemtech -SO
P4567-02	WC-1-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/25/2024	Chemtech -SO
P4567-03	WC-1-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/25/2024	Chemtech -SO
P4567-05	WC-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/25/2024	Chemtech -SO
P4567-06	WC-2-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/25/2024	Chemtech -SO
P4567-07	WC-2-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/25/2024	Chemtech -SO

Date/Time 10/25/24 16:30

Raw Sample Received by: JD WC

Raw Sample Relinquished by: L.C

Date/Time 10/25/24 18:30

Raw Sample Received by: L.C JM

Raw Sample Relinquished by: JD WC

WORKLIST(Hardcopy Internal Chain)

UB133131

WorkList Name : %1-102524 **WorkList ID :** 184773 **Department :** Wet-Chemistry **Date :** 10-25-2024 09:56:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4567-09	WC-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/25/2024	Chemtech -SO
P4567-10	WC-3-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/25/2024	Chemtech -SO
P4567-11	WC-3-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/25/2024	Chemtech -SO
P4574-01	GRAVEL-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4574-02	GRAVEL-1-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4574-04	GRAVEL-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4574-05	GRAVEL-2-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4574-07	CONCRETE-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4574-09	CONCRETE-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4574-11	CONCRETE-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4575-01	PL-02-102424	Solid	Percent Solids	Cool 4 deg C	PSEG05	K63	10/25/2024	Chemtech -SO
P4575-02	PL-02-102424-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	K63	10/25/2024	Chemtech -SO
P4576-01	1097	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4576-02	1098	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/25/2024	Chemtech -SO
P4577-01	TR-05-102524	Solid	Percent Solids	Cool 4 deg C	PSEG05	K63	10/25/2024	Chemtech -SO
P4577-02	TR-05-102524-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	K63	10/25/2024	Chemtech -SO
P4578-03	WB-305-TOP	Solid	Percent Solids	Cool 4 deg C	PORT06	K63	10/25/2024	Chemtech -SO
P4578-04	WB-305-TOP-1	Solid	Percent Solids	Cool 4 deg C	PORT06	K63	10/25/2024	Chemtech -SO
P4578-05	WB-305-BOT	Solid	Percent Solids	Cool 4 deg C	PORT06	K63	10/25/2024	Chemtech -SO
P4578-07	WB-305-BOT-1	Solid	Percent Solids	Cool 4 deg C	PORT06	K63	10/25/2024	Chemtech -SO

Date/Time 10/25/24 16:30

Raw Sample Received by: JD WDC

Raw Sample Relinquished by: L.C. Sm

Date/Time 10/25/24 18:30

Raw Sample Received by: L.C. Sm

Raw Sample Relinquished by: JD WDC

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB164525

SOP ID: MNJDEP-EPH-7

Clean Up SOP #: N/A

Matrix : Solid

Weigh 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 : 10/30/2024

Extraction Start Time : 08:20

Extraction End Date : 10/30/2024

Extraction End Time : 16:40

Concentration By: EH

Supervisor By : rajesh

Extraction Method: [ ] Seperatory Funnel [ ] Continious Liquid/Liquid [ ] Sonication [ ] Waste Dilution [√] Soxhlet

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Surrogate	1.0ML	100 PPM	PP23706
Fractionation Surrogate	1.0ML	100 PPM	PP23892
Spike Sol 1	1.0ML	100 PPM	PP23916
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	EP2554
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

Extraction Conformance/Non-Conformance Comments:

1.5ML Vial Lot # 2210673.

KD Bath ID: Water bath -01

KD Bath Temperature: 60 °C

Envap ID: NE VAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/30/24	RP (Ept Tech)	Y. P. Pestipad.
16:45	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB164525

Analytical Method: MNJDEP-EPH-7

Concentration Date: 10/30/2024

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB164525BL	PB164525BL	EPH	30.03	N/A	ritesh	Evelyn	2	E		U1-1
PB164525BS	PB164525BS	EPH	30.01	N/A	ritesh	Evelyn	2			2
PB164525BSD	PB164525BSD	EPH	30.02	N/A	ritesh	Evelyn	2			3
P4578-03	WB-305-TOP	EPH	30.06	N/A	ritesh	Evelyn	2	E		4
P4578-04	WB-305-TOP-1	EPH	30.09	N/A	ritesh	Evelyn	2	E		5
P4578-05	WB-305-BOT	EPH	30.07	N/A	ritesh	Evelyn	2	E		6
P4578-05DUP	WB-305-BOTDUP	EPH	30.03	N/A	ritesh	Evelyn	2	E		U5-1
P4578-05MS	WB-305-BOTMS	EPH	30.01	N/A	ritesh	Evelyn	2	E		2
P4578-05MSD	WB-305-BOTMSD	EPH	30.10	N/A	ritesh	Evelyn	2	E		3
P4578-07	WB-305-BOT-1	EPH	30.08	N/A	ritesh	Evelyn	2	E		4
P4599-01	EX-1-TPH-1	EPH	30.06	N/A	ritesh	Evelyn	2	E		5
P4599-02	EX-1-TPH-2	EPH	30.03	N/A	ritesh	Evelyn	2	E		6
P4599-03	EX-1-TPH-3	EPH	30.07	N/A	ritesh	Evelyn	2	E		U6-1
P4599-04	EX-1-TPH-4	EPH	30.01	N/A	ritesh	Evelyn	2	E		2
P4599-05	EX-1-TPH-5	EPH	30.06	N/A	ritesh	Evelyn	2	E		3
P4599-06	EX-1-TPH-6	EPH	30.02	N/A	ritesh	Evelyn	2	E		4
P4599-07	EX-1-TPH-7	EPH	30.05	N/A	ritesh	Evelyn	2	E		5
P4599-08	EX-1-TPH-8	EPH	30.04	N/A	ritesh	Evelyn	2	E		6
P4599-09	EX-1-TPH-9	EPH	30.08	N/A	ritesh	Evelyn	2	E		U7-1

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

10/30/24

164925
8:20

WORKLIST(Hardcopy Internal Chain)

WorkList Name : p4599 **WorkList ID :** 184926 **Department :** Extraction **Date :** 10-30-2024 08:14:29

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4578-03	WB-305-TOP	Solid	EPH	Cool 4 deg C	PORT06	K63	10/25/2024	NJEPH
P4578-04	WB-305-TOP-1	Solid	EPH	Cool 4 deg C	PORT06	K63	10/25/2024	NJEPH
P4578-05	WB-305-BOT	Solid	EPH	Cool 4 deg C	PORT06	K63	10/25/2024	NJEPH
P4578-07	WB-305-BOT-1	Solid	EPH	Cool 4 deg C	PORT06	K63	10/25/2024	NJEPH
P4599-01	EX-1-TPH-1	Solid	EPH	Cool 4 deg C	ENTA05	K63	10/28/2024	NJEPH
P4599-02	EX-1-TPH-2	Solid	EPH	Cool 4 deg C	ENTA05	K63	10/28/2024	NJEPH
P4599-03	EX-1-TPH-3	Solid	EPH	Cool 4 deg C	ENTA05	K63	10/28/2024	NJEPH
P4599-04	EX-1-TPH-4	Solid	EPH	Cool 4 deg C	ENTA05	K63	10/28/2024	NJEPH
P4599-05	EX-1-TPH-5	Solid	EPH	Cool 4 deg C	ENTA05	K63	10/28/2024	NJEPH
P4599-06	EX-1-TPH-6	Solid	EPH	Cool 4 deg C	ENTA05	K63	10/28/2024	NJEPH
P4599-07	EX-1-TPH-7	Solid	EPH	Cool 4 deg C	ENTA05	K63	10/28/2024	NJEPH
P4599-08	EX-1-TPH-8	Solid	EPH	Cool 4 deg C	ENTA05	K63	10/28/2024	NJEPH
P4599-09	EX-1-TPH-9	Solid	EPH	Cool 4 deg C	ENTA05	K63	10/28/2024	NJEPH

Date/Time 10/30/24 8:17
Raw Sample Received by: RJ (Eat Labs)
Raw Sample Relinquished by: ITC(Sm)

Date/Time 10/30/24 8:45
Raw Sample Received by: ITC(Sm)
Raw Sample Relinquished by: RJ (Eat Labs)

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB164532

SOP ID: MNJDEP-EPH-7

Clean Up SOP #: N/A

Matrix : Water

Weigh By: N/A

Balance check: N/A

Balance ID: N/A

pH Strip Lot#: E3574

Extraction By: RS

Filter By: RS

pH Meter ID: N/A

Hood ID: 4,6,7

Extraction Start Date : 10/30/2024

Extraction Start Time : 08:50

Extraction End Date : 10/30/2024

Extraction End Time : 16:10

Concentration By: EH

Supervisor By : rajesh

Extraction Method: [√] Seperatory Funnel [ ] Continious Liquid/Liquid [ ] Sonication [ ] Waste Dilution [ ] Soxhlet

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	100 PPM	PP23712
Surrogate	1.0ML	100 PPM	PP23706
Fractionation Surrogate	1.0ML	100 PPM	PP23704
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Methylene Chloride	N/A	E3822
Baked Na2SO4	N/A	EP2546
Hexane	N/A	E3819
6N HCL	N/A	EP2517
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

Extraction Conformance/Non-Conformance Comments:

1.5ML Vial Lot # 2210673.

KD Bath ID: WATER BATH-1,2

KD Bath Temperature: 60 °C

Envap ID: NE VAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
10/30/24	2P (Ext Lab)	Y.P.Pestipo.
16:15	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB164532

Analytical Method: MNJDEP-EPH-7

Concentration Date: 10/30/2024

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB164532BL	PB164532BL	EPH	1000	<2	ritesh	rajesh	2			SEP-01
PB164532BS	PB164532BS	EPH	1000	<2	ritesh	rajesh	2			2
PB164532BSD	PB164532BSD	EPH	1000	<2	ritesh	rajesh	2			3
P4578-01	WB-305-SW	EPH	1000	<2	ritesh	rajesh	2	C		4
P4578-02	WB-305-SW-1	EPH	1000	<2	ritesh	rajesh	2	C		5

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

10/30/24

164532
S'30 EDD

WORKLIST(Hardcopy Internal Chain)

WorkList Name : P4578 **WorkList ID :** 184933 **Department :** Extraction **Date :** 10-30-2024 08:30:21

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4578-01	WB-305-SW	Water	EPH	1:1 HCl to pH < 2	PORT06	K63	10/25/2024	NJEPH
P4578-01	WB-305-SW	Water	SVOC-TCL BNA -20	Cool 4 deg C	PORT06	K63	10/25/2024	8270E
P4578-02	WB-305-SW-1	Water	EPH	1:1 HCl to pH < 2	PORT06	K63	10/25/2024	NJEPH
P4578-02	WB-305-SW-1	Water	SVOC-TCL BNA -20	Cool 4 deg C	PORT06	K63	10/25/2024	8270E

Date/Time 10/30/24 8:45
Raw Sample Received by: RJ (Set Log)
Raw Sample Relinquished by: JTC(SM)

Date/Time 10/30/24 9:05
Raw Sample Received by: JTC(SM)
Raw Sample Relinquished by: RJ (Set Log)

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

Prep Standard - Chemical Standard Summary

Order ID : P4578

Test : EPH

Prepbatch ID : PB164525,PB164532,

Sequence ID/Qc Batch ID: FC103024AL,FD103024AR,FE103024AL,FE103124AL,FE110124AL,FG103024AR,FG103124AR,

Standard ID :

EP2517,EP2538,EP2546,EP2554,PP23429,PP23430,PP23519,PP23520,PP23521,PP23522,PP23523,PP23534,PP23538,PP23644,PP23645,PP23646,PP23647,PP23648,PP23649,PP23650,PP23704,PP23706,PP23712,PP23892,PP23916,

Chemical ID :

E2865,E3551,E3743,E3757,E3768,E3788,E3789,E3793,E3794,E3819,E3822,M5929,P10259,P 11137,P12362,P12972,P13004,P13005,P13017,P13018,P13019,P13020,P13022,P13044,P13045,P13047,P13048,P13094,P13096,P13098,P13100,P13101,P13102,P13258,P13259,P13266,P13268,P13271,P13278,P13299,P13423,P13424,P13427,P13430,P13431,P13432,P13433,P13434,P13435,P13436,P13442,P13444,P13447,P13448,P13451,P13452,P13453,P13454,P13455,P13456,P13473,P13625,P13626,P13627,P13718,P13719,P13720,P13721,P13722,P13723,P13724,P13725,P13726,P13727,P9826,V11252,V14143,W3112,

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Fax : 908 789 8922

Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3319	6N HCL	EP2517	07/23/2024	12/08/2024	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 07/23/2024

FROM 219.00000ml of M5929 + 781.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2546	10/11/2024	01/03/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Rajesh Parikh 10/11/2024

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2554	10/26/2024	01/03/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Rajesh Parikh 10/26/2024

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

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Fax : 908 789 8922

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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Fax : 908 789 8922

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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

Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
781	100 PPM Aliphatic HC Working STD (Restek)	PP23644	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 09/10/2024

FROM 0.25000ml of P12972 + 0.25000ml of P13017 + 1.25000ml of P12362 + 23.25000ml of E3789 = Final Quantity: 25.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2900	100 PPM Aliphatic HC STD (Absolute)	PP23645	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 09/10/2024

FROM 0.25000ml of P12972 + 0.25000ml of P13017 + 2.50000ml of P13278 + 22.00000ml of E3789 = Final Quantity: 25.000 ml

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

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

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
784	20 PPM Aliphatic HC STD	PP23647	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 09/10/2024

FROM 0.80000ml of E3789 + 0.20000ml of PP23644 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
785	10 PPM Aliphatic HC STD	PP23648	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 09/10/2024

FROM 0.90000ml of E3789 + 0.10000ml of PP23644 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
786	5 PPM Aliphatic HC STD	PP23649	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 09/10/2024

FROM 0.90000ml of E3789 + 0.10000ml of PP23646 = Final Quantity: 1.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2901	20 PPM Aliphaitic HC STD ICV (Absolute)	PP23650	09/09/2024	02/13/2025	Yogesh Patel	None	None	Ankita Jodhani 09/10/2024

FROM 0.80000ml of E3789 + 0.20000ml of PP23645 = Final Quantity: 1.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1330	100 PPM NJEPH Spike Solution	PP23712	09/30/2024	03/30/2025	Yogesh Patel	None	None	Ankita Jodhani 10/01/2024

FROM

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1331	100 PPM NJEPH Fractionating Surrogate	PP23892	10/17/2024	04/15/2025	Yogesh Patel	None	None	Ankita Jodhani 10/18/2024

FROM

1.25000ml of P13266 + 1.25000ml of P13268 + 1.25000ml of P13271 + 1.25000ml of P13473 + 195.00000ml of E3819 = Final Quantity: 200.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1330	100 PPM NJEPH Spike Solution	PP23916	10/25/2024	04/25/2025	Yogesh Patel	None	None	Ankita Jodhani 10/28/2024

FROM 5.00000ml of P13098 + 5.00000ml of P13100 + 5.00000ml of P13101 + 5.00000ml of P13102 + 5.00000ml of P13299 + 5.00000ml of P13423 + 5.00000ml of P13427 + 5.00000ml of P13625 + 5.00000ml of P13626 + 5.00000ml of P13627 + 5.00000ml of P13718 + 5.00000ml of P13719 + 5.00000ml of P13720 + 5.00000ml of P13721 + 5.00000ml of P13722 + 5.00000ml of P13723 + 5.00000ml of P13724 + 5.00000ml of P13725 + 5.00000ml of P13726 + 5.00000ml of P13727 = Final Quantity: 100.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	12/31/2024	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	01/03/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-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

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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 #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24I2662006	04/23/2025	10/24/2024 / Rajesh	10/24/2024 / Rajesh	E3822

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	12/08/2024	06/24/2024 / Al-Terek	06/07/2024 / Al-Terek	M5929

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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

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

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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

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

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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

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	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0203911	04/25/2025	10/25/2024 / yogesh	01/12/2024 / Yogesh	P13098

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0200008	04/25/2025	10/25/2024 / yogesh	01/12/2024 / Yogesh	P13100

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0200008	04/25/2025	10/25/2024 / yogesh	01/12/2024 / Yogesh	P13101

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30542 / Custom NJEPH Aliphatics Matrix Spike Mix	A0200008	04/25/2025	10/25/2024 / yogesh	01/12/2024 / Yogesh	P13102

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 #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0206496	04/17/2025	10/17/2024 / yogesh	02/20/2024 / yogesh	P13266

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0206496	04/17/2025	10/17/2024 / yogesh	02/20/2024 / yogesh	P13268

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0206496	04/17/2025	10/17/2024 / yogesh	02/20/2024 / yogesh	P13271

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

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	04/25/2025	10/25/2024 / yogesh	04/23/2024 / yogesh	P13299

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	04/25/2025	10/25/2024 / yogesh	07/16/2024 / Yogesh	P13423

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

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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	04/25/2025	10/25/2024 / yogesh	07/16/2024 / Yogesh	P13427

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

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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

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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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31480 / MA Fractionation Surrogate Spike Mix	A0210831	04/17/2025	10/17/2024 / yogesh	07/23/2024 / yogesh	P13473

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	04/25/2025	10/25/2024 / yogesh	10/16/2024 / yogesh	P13625

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	04/25/2025	10/25/2024 / yogesh	10/16/2024 / yogesh	P13626

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	04/25/2025	10/25/2024 / yogesh	10/16/2024 / yogesh	P13627

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13718

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13719

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13720

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13721

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13722

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13723

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13724

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13725

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13726

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	30543 / Custom NJEPH Aromatics Matrix Spike Mix	A0217838	04/25/2025	10/25/2024 / yogesh	10/24/2024 / yogesh	P13727

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

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

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

DD
06/17/2021

Catalog No. : 30541 **Lot No.:** A0172403

Description : NJEPH Aromatics Calibration Standard

NJEPH Aromatics Calibration Standard 2,000µg/mL, Methylene Chloride, 1mL/ampul

P10758 to P10762 -(5)

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

Expiration Date : April 30, 2027 **Storage:** 10°C or colder

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,2,3-Trimethylbenzene **CAS #** 526-73-8 (Lot 8776.10-36) **Purity** 98%	2,010.0 µg/mL	+/- 11.7957 µg/mL +/- 90.5449 µg/mL +/- 100.4678 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene **CAS #** 91-20-3 (Lot MKBZ8680V) **Purity** 99%	2,006.0 µg/mL	+/- 11.7723 µg/mL +/- 90.3656 µg/mL +/- 100.2689 µg/mL	Gravimetric Unstressed Stressed
3	2-Methylnaphthalene **CAS #** 91-57-6 (Lot STBG8884) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 90.4557 µg/mL +/- 100.3688 µg/mL	Gravimetric Unstressed Stressed
4	Acenaphthylene **CAS #** 208-96-8 (Lot N19U) **Purity** 95%	2,002.6 µg/mL	+/- 11.7524 µg/mL +/- 90.2125 µg/mL +/- 100.0989 µg/mL	Gravimetric Unstressed Stressed
5	Acenaphthene **CAS #** 83-32-9 (Lot MKCN0610) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 90.0953 µg/mL +/- 99.9689 µg/mL	Gravimetric Unstressed Stressed
6	Fluorene **CAS #** 86-73-7 (Lot 10217947) **Purity** 99%	2,016.0 µg/mL	+/- 11.8310 µg/mL +/- 90.8161 µg/mL +/- 100.7687 µg/mL	Gravimetric Unstressed Stressed
7	Phenanthrene **CAS #** 85-01-8 (Lot MKCL7390) **Purity** 99%	2,012.0 µg/mL	+/- 11.8075 µg/mL +/- 90.6359 µg/mL +/- 100.5688 µg/mL	Gravimetric Unstressed Stressed

8	Anthracene		2,002.0	µg/mL	+/-	11.7489	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKCM0015)			+/-	90.1854	µg/mL	Unstressed
	Purity 99%				+/-	100.0689	µg/mL	Stressed
9	Fluoranthene		2,003.0	µg/mL	+/-	11.7547	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKCF7378)			+/-	90.2305	µg/mL	Unstressed
	Purity 99%				+/-	100.1189	µg/mL	Stressed
10	Pyrene		2,011.0	µg/mL	+/-	11.8017	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCCB9880)			+/-	90.5909	µg/mL	Unstressed
	Purity 99%				+/-	100.5188	µg/mL	Stressed
11	Benz(a)anthracene		2,011.0	µg/mL	+/-	11.8014	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot P0022018-0505)			+/-	90.5890	µg/mL	Unstressed
	Purity 98%				+/-	100.5168	µg/mL	Stressed
12	Chrysene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot STBJ8094)			+/-	90.0953	µg/mL	Unstressed
	Purity 99%				+/-	99.9689	µg/mL	Stressed
13	Benzo(b)fluoranthene		2,006.0	µg/mL	+/-	11.7721	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot 012012B)			+/-	90.3638	µg/mL	Unstressed
	Purity 97%				+/-	100.2669	µg/mL	Stressed
14	Benzo(k)fluoranthene		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012019K)			+/-	90.5458	µg/mL	Unstressed
	Purity 99%				+/-	100.4688	µg/mL	Stressed
15	Benzo(a)pyrene		2,004.0	µg/mL	+/-	11.7606	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot RP210113)			+/-	90.2755	µg/mL	Unstressed
	Purity 99%				+/-	100.1689	µg/mL	Stressed
16	Indeno(1,2,3-cd)pyrene		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot 1-RAK-33-4)			+/-	90.5458	µg/mL	Unstressed
	Purity 99%				+/-	100.4688	µg/mL	Stressed
17	Dibenz(a,h)anthracene		2,017.0	µg/mL	+/-	11.8369	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	90.8611	µg/mL	Unstressed
	Purity 99%				+/-	100.8187	µg/mL	Stressed
18	Benzo(g,h,i)perylene		2,003.0	µg/mL	+/-	11.7547	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot 8GFYJ)			+/-	90.2305	µg/mL	Unstressed
	Purity 99%				+/-	100.1189	µg/mL	Stressed

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

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

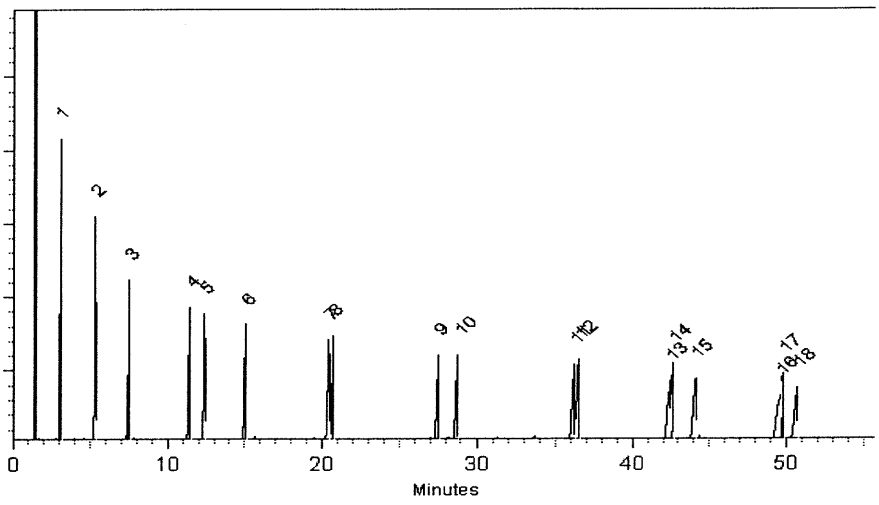
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 14-May-2021 **Balance:** B345965662

Alexis Shelow - Operations Tech I

Date Passed: 18-May-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Sand
Purified
Washed and Ignited

avantor™ | J.T.Baker®

Material No.: 3382-05
Batch No.: 0000243821
Manufactured Date: 2018/04/09
Retest Date: 2025/04/07
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	<= 0.16 %	0.01

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

E 2865

James T Ethier

Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

PRODUCTOS QUIMICOS MONTERREY, S.A. DE C.V.

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO_4)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by RB on 7/24/23 E3551

ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.B

Material No.: 926
Batch No.: 24C01E
Manufactured Date: 2024-C
Expiration Date: 2025-C
Revision I

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)	≥ 99.8 %	100.0 %
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	≤ 0.02 %	< 0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG24A04224

E 3743

Ken Koehnlein
Sr. Manager, Quality Assurance

Cleanert EPH
5g/25ml 15/pkg
固相萃取产品
LOT#:Z0513CK1
MFG#:F04005
Made in China
CAT# SI500025-30
Agela Technologies
E3757

PO: PO1-8886 PRODUCT CODE: SHIP DATE: 6/21/2024

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker

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)	≥ 99.8 %	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Titrable Acid (µeq/g)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	5 ppm
Water (by KF, coulometric)	≤ 0.02 %	< 0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG24D10725

E 3768

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
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™ | J.T.Baker®

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 ($(CH_3)_2CO$) (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
Titrable Acid (µeq/g)	≤ 0.3	0.1
Titrable Base (µeq/g)	≤ 0.6	< 0.1
Water (H_2O)	≤ 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

Hexanes (95% n-hexane)
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor | J.T.B

Material No.: 926
Batch No.: 24C186
Manufactured Date: 2024-0
Expiration Date: 2025-0
Revision N

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) – Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C_6 Isomers) (by GC, corrected for water)	≥ 99.5 %	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.4 ppm
Substances Darkened by H_2SO_4	Passes Test	Passes Test
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

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

Recd. by RP on 8/13/24

E3789

JCroak

Jamie Croak
Director Quality Operations, Bioscience Product

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Acetone
CMOS

avantor™ | J.T.Baker®

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 ($(CH_3)_2CO$) (by GC, corrected for water)	≥ 99.5 %	99.8 %
Color (APHA)	≤ 10	< 5
Residue after Evaporation	≤ 5 ppm	< 1 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.1
Titrable Base (µeq/g)	≤ 0.5	0.1
Water (H_2O)	≤ 0.5 %	0.1 %
Solubility in H_2O	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

avantor™ | J.T.Baker®

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

avantor™ | J.T.Baker®

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

PO: PO2-329 PRODUCT CODE: SHIP DATE: 9/30/2024

n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis

avantor™ | J.T.Baker®

Material No.: 9262-03
Batch No.: 24G1962003
Manufactured Date: 2024-05-23
Expiration Date: 2025-08-22
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C_6 Isomers) (by GC, corrected for water)	≥ 99.5 %	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H_2SO_4	Passes Test	Passes Test
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

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

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

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker

Material No.: 9266-A4
Batch No.: 24I2662006
Manufactured Date: 2024-08-29
Expiration Date:2025-11-28
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	3
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3822

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis

avantor™ | J.T.Baker®

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_3OH) (by GC, corrected for water)	≥ 99.9 %	100.0 %
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titrable Acid (µeq/g)	≤ 0.3	0.2
Titrable 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

James T Ethier
Jamie Ethier
Vice President Global Quality

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95709
Lot Number: 060420
Description: NJ EPH Aromatic Hydrocarbons
18 components
Expiration Date: 060425
Recommended Storage: Refrigerate (4 °C)
Nominal Concentration (µg/mL): 2000
NIST Test ID#: 23060

Solvent(s):	Lot#
Methylene chloride	104929

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 500.0 0.058 Flask Uncertainty

Formulated By: Benson Chan	060420 DATE
Reviewed By: Pedro L. Rentas	060420 DATE

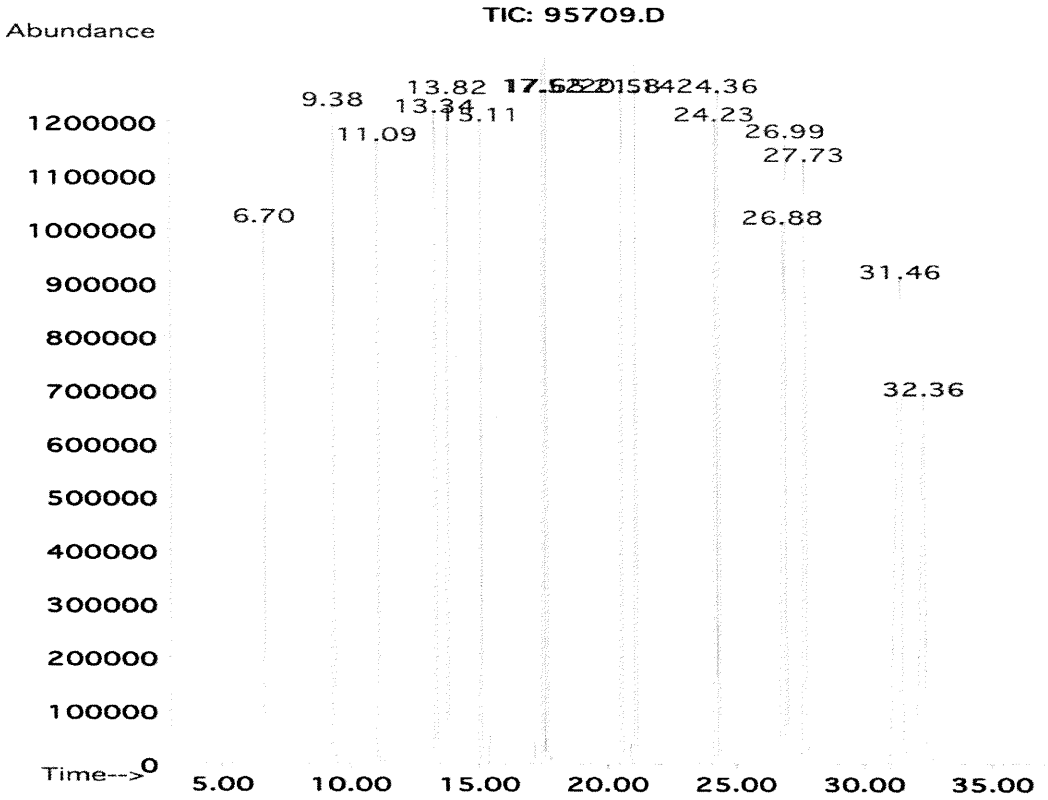
	Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity (%)	Uncertainty Purity	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Acenaphthene	1	MKBJ4871V	2000	99	0.2	1.01003	1.01010	2000.1	8.1	83-32-9	N/A	ipr-rat 600mg/kg
2.	Acenaphthylene	3	012014	2000	98	0.2	1.02033	1.02053	2000.4	8.2	208-96-8	N/A	N/A
3.	Anthracene	13	A0210580	2000	99	0.2	1.01003	1.01009	2000.1	8.1	120-12-7	0.2mg/m3 (8H)	ipr-mus 430mg/kg
4.	Benzo(a)anthracene	28	JY2TD-JT	2000	98	0.2	1.02033	1.02051	2000.3	8.2	56-55-3	N/A	N/A
5.	Benzo(a)pyrene	30	012012	2000	99.5	0.2	1.00495	1.00511	2000.3	8.1	50-32-8	0.2mg/m3 (8H)	scu-rat 50mg/kg
6.	Benzo(b)fluoranthene	31	012012b	2000	99	0.2	1.01003	1.01012	2000.2	8.1	205-99-2	N/A	N/A
7.	Benzo(k)fluoranthene	33	012012k	2000	99	0.2	1.01003	1.01018	2000.3	8.1	207-08-9	N/A	N/A
8.	Benzo(g,h,i)perylene	32	012018	2000	99	0.2	1.01003	1.01019	2000.3	8.1	191-24-2	N/A	N/A
9.	Chrysene	91	012015	2000	98	0.2	1.02033	1.02040	2000.1	8.2	218-01-9	0.2mg/m3	N/A
10.	Dibenzo(a,h)anthracene	112	012011	2000	98	0.2	1.02033	1.02050	2000.3	8.2	53-70-3	0.2mg/m3	N/A
11.	Fluoranthene	183	04221PV	2000	98	0.2	1.02033	1.02050	2000.3	8.2	206-44-0	N/A	orl-rat 2000mg/kg
12.	Fluorene	184	07211MV	2000	98	0.2	1.02033	1.02047	2000.3	8.2	86-73-7	N/A	ipr-mus 2 g/kg
13.	Indeno(1,2,3-cd)pyrene	202	012014	2000	99.9	0.2	1.00093	1.00119	2000.5	8.0	193-39-5	N/A	N/A
14.	2-Methylnaphthalene	214	MKBF3783V	2000	97	0.2	1.03085	1.03090	2000.1	8.3	91-57-6	N/A	orl-rat 1630mg/kg
15.	Naphthalene	222	MKBZ8680V	2000	100	0.2	0.99993	0.99999	2000.1	8.0	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
16.	Phenanthrene	248	03410PV	2000	99	0.2	1.01003	1.01030	2000.5	8.1	85-01-8	0.2mg/m3/8H	orl-mus 700mg/kg
17.	Pyrene	259	010197	2000	98	0.2	1.02033	1.02042	2000.2	8.2	129-00-0	0.2mg/m3/8H	orl-rat 2700mg/kg
18.	1,2,3-Trimethylbenzene	944	031097	2000	99	0.2	1.01003	1.01025	2000.4	8.1	526-73-8	N/A	N/A

P11137
&
P11141

AR 11/02/21

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

Method GC8MSD-2.M: Column:SPB-5 (30m X 0.25mm ID X 0.25μm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (14min.), Rate = 10°C/min., Injector B= 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Melissa Stonier.



Peak No.	Name	MSD RT (min.)
1	1,2,3-Trimethylbenzene	6.70
2	Naphthalene	9.38
3	2-Methylnaphthalene	11.09
4	Acenaphthylene	13.34
5	Acenaphthene	13.82
6	Fluorene	15.11
7	Phenanthrene	17.52
8	Anthracene	17.65
9	Fluoranthene	20.58
10	Pyrene	21.14
11	Chrysene	24.23
12	Benzo(a)anthracene	24.36
13	Benzo(b)fluoranthene/Benzo(k)fluoranthene	26.98
14	Benzo(a)pyrene	27.73
15	Indeno(1,2,3-cd)pyrene/Dibenzo(a,h)anthracene	31.46
16	Benzo(g,h,i)perylene	32.36

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

P12361 ↓ P12370 } Y.P. 03/16/23

Catalog No. : 30540 **Lot No.:** A0190424

Description : NJEPH Aliphatics Calibration Standard

Aliphatics Calibration Standard 2000µg/mL, Hexane/Carbon Disulfide (80:20), 1mL/ampul

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

Expiration Date : November 30, 2029 **Storage:** 25°C nominal

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Nonane (C9) **CAS #** 111-84-2 (Lot SHBN5361) **Purity** 99%	2,014.0 µg/mL	+/- 11.8193 µg/mL +/- 50.0027 µg/mL +/- 59.9491 µg/mL	Gravimetric Unstressed Stressed
2	n-Decane (C10) **CAS #** 124-18-5 (Lot SHBN8619) **Purity** 99%	2,014.7 µg/mL	+/- 11.8232 µg/mL +/- 50.0193 µg/mL +/- 59.9689 µg/mL	Gravimetric Unstressed Stressed
3	Naphthalene **CAS #** 91-20-3 (Lot MKCH0219) **Purity** 99%	2,015.3 µg/mL	+/- 11.8271 µg/mL +/- 50.0358 µg/mL +/- 59.9888 µg/mL	Gravimetric Unstressed Stressed
4	n-Dodecane (C12) **CAS #** 112-40-3 (Lot SHBN7174) **Purity** 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL +/- 49.8538 µg/mL +/- 59.7705 µg/mL	Gravimetric Unstressed Stressed
5	2-Methylnaphthalene **CAS #** 91-57-6 (Lot STBK0259) **Purity** 96%	2,007.0 µg/mL	+/- 11.7784 µg/mL +/- 49.8299 µg/mL +/- 59.7419 µg/mL	Gravimetric Unstressed Stressed
6	n-Tetradecane (C14) **CAS #** 629-59-4 (Lot STBK2282) **Purity** 99%	2,016.7 µg/mL	+/- 11.8349 µg/mL +/- 50.0689 µg/mL +/- 60.0284 µg/mL	Gravimetric Unstressed Stressed
7	n-Hexadecane (C16) **CAS #** 544-76-3 (Lot SHBM4146) **Purity** 98%	2,014.9 µg/mL	+/- 11.8244 µg/mL +/- 50.0246 µg/mL +/- 59.9753 µg/mL	Gravimetric Unstressed Stressed

8	n-Octadecane (C18) **CAS #** 593-45-3 **Purity** 97%	(Lot VZKOJ)	2,004.7	µg/mL	+/- 11.7645 +/- 49.7710 +/- 59.6712	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	n-Eicosane (C20) **CAS #** 112-95-8 **Purity** 99%	(Lot MKCF7888)	2,018.0	µg/mL	+/- 11.8428 +/- 50.1020 +/- 60.0681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	n-Heneicosane (C21) **CAS #** 629-94-7 **Purity** 99%	(Lot MKCL3226)	2,000.7	µg/mL	+/- 11.7410 +/- 49.6717 +/- 59.5522	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Docosane (C22) **CAS #** 629-97-0 **Purity** 99%	(Lot MKCL8918)	2,005.3	µg/mL	+/- 11.7684 +/- 49.7876 +/- 59.6911	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Tetracosane (C24) **CAS #** 646-31-1 **Purity** 99%	(Lot MKCN2863)	2,018.0	µg/mL	+/- 11.8428 +/- 50.1020 +/- 60.0681	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	n-Hexacosane (C26) **CAS #** 630-01-3 **Purity** 99%	(Lot MKCD4540)	2,014.0	µg/mL	+/- 11.8193 +/- 50.0027 +/- 59.9491	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	n-Octacosane (C28) **CAS #** 630-02-4 **Purity** 99%	(Lot BCCG0084)	2,002.0	µg/mL	+/- 11.7489 +/- 49.7048 +/- 59.5919	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	n-Triacontane (C30) **CAS #** 638-68-6 **Purity** 97%	(Lot MKCQ9436)	2,011.1	µg/mL	+/- 11.8025 +/- 49.9316 +/- 59.8637	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	n-Dotriacontane (C32) **CAS #** 544-85-4 **Purity** 99%	(Lot BCBW0661)	2,012.0	µg/mL	+/- 11.8075 +/- 49.9531 +/- 59.8895	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	n-Tetratriacontane (C34) **CAS #** 14167-59-0 **Purity** 99%	(Lot OML4N)	2,006.7	µg/mL	+/- 11.7762 +/- 49.8207 +/- 59.7308	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	n-Hexatriacontane (C36) **CAS #** 630-06-8 **Purity** 99%	(Lot Z27H018)	2,017.3	µg/mL	+/- 11.8388 +/- 50.0855 +/- 60.0483	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	n-Octatriacontane (C38) **CAS #** 7194-85-6 **Purity** 96%	(Lot 0000145137)	2,017.3	µg/mL	+/- 11.8385 +/- 50.0842 +/- 60.0467	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	n-Tetracontane (C40) **CAS #** 4181-95-7 **Purity** 99%	(Lot BSBME)	2,008.7	µg/mL	+/- 11.7880 +/- 49.8703 +/- 59.7903	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane/Carbon disulfide (80:20)
CAS # 110-54-3/75-15-0
Purity 99%

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

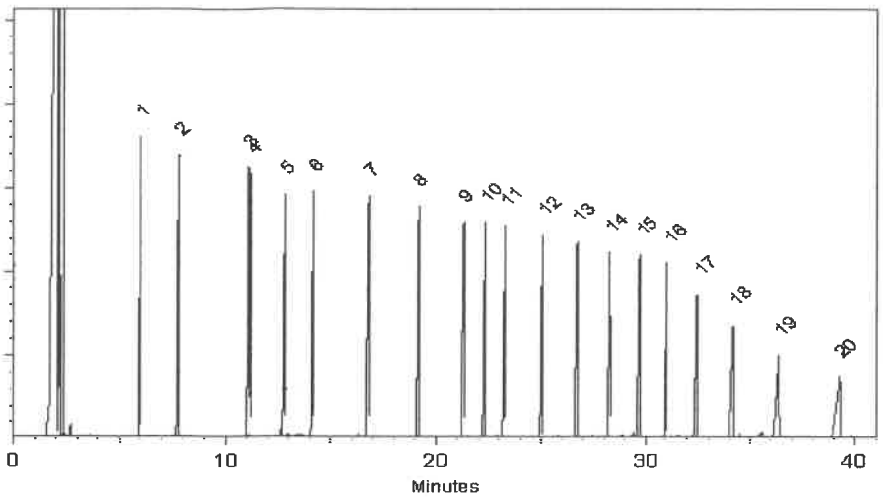
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 10-Oct-2022 **Balance:** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 20-Oct-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

P12960 & P12991 Y.P. 12/21/2023

Catalog No. : 31098 **Lot No.:** A0204989

Description : 1-Chlorooctadecane Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1-Chlorooctadecane	3386-33-2	14738400	99%	10,097.3 µg/mL	+/- 567.2675

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

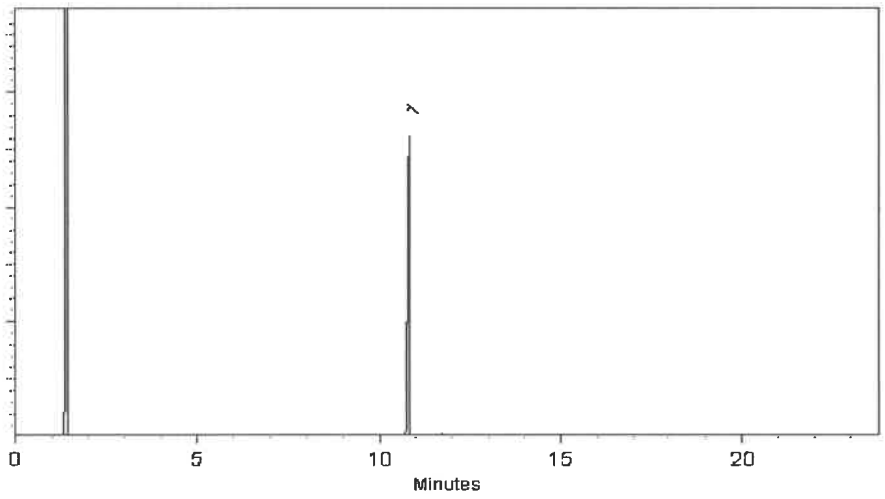
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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P12992 ↓ P13031 } Y.P. 12/21/2023

Catalog No. : 31097 **Lot No.:** A0204177

Description : o-Terphenyl Standard

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

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

Expiration Date : June 30, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

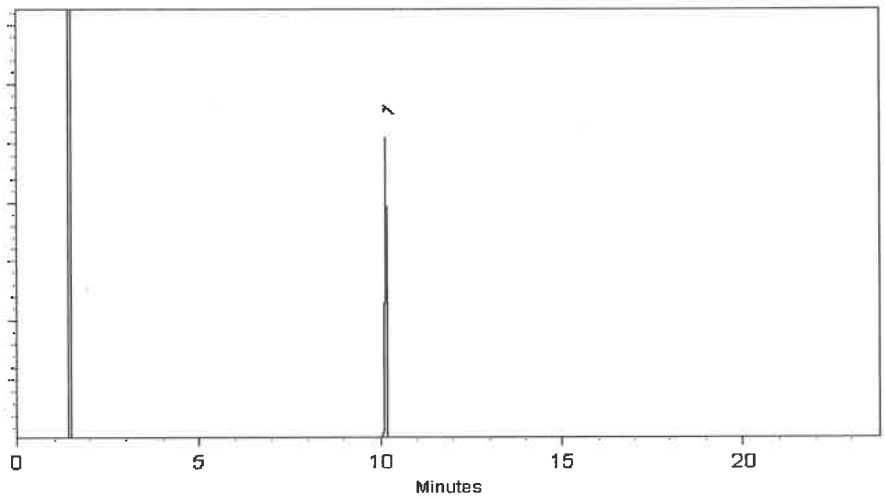
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905

Dillan Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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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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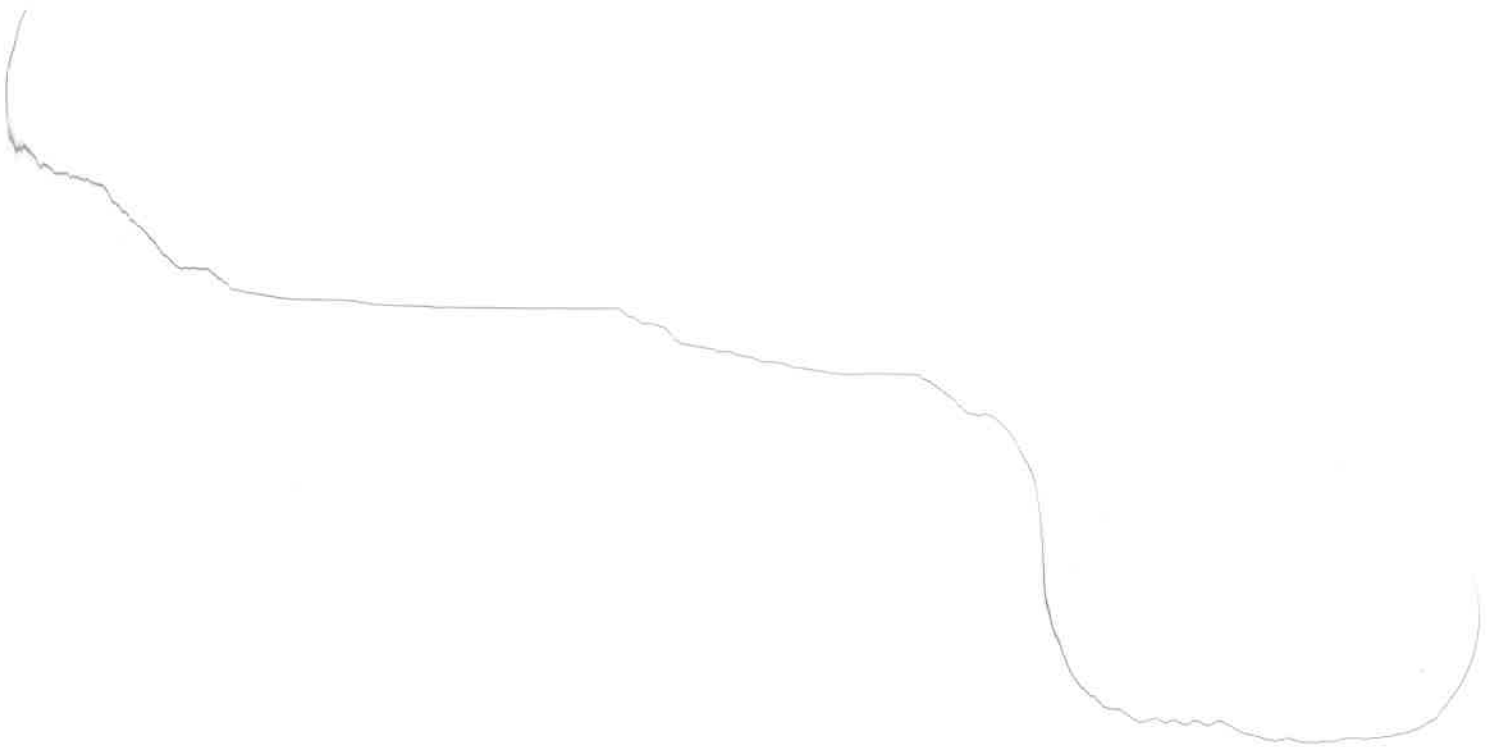

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P12992 ↓ P13031 } Y.P. 12/21/2023

Catalog No. : 31097 **Lot No.:** A0204177

Description : o-Terphenyl Standard

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

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

Expiration Date : June 30, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

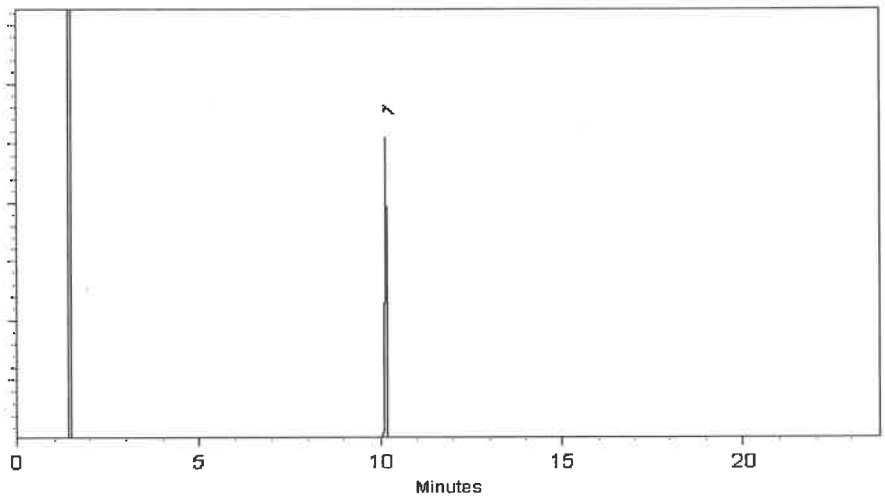
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905

Dillan Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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

Handling Notes:

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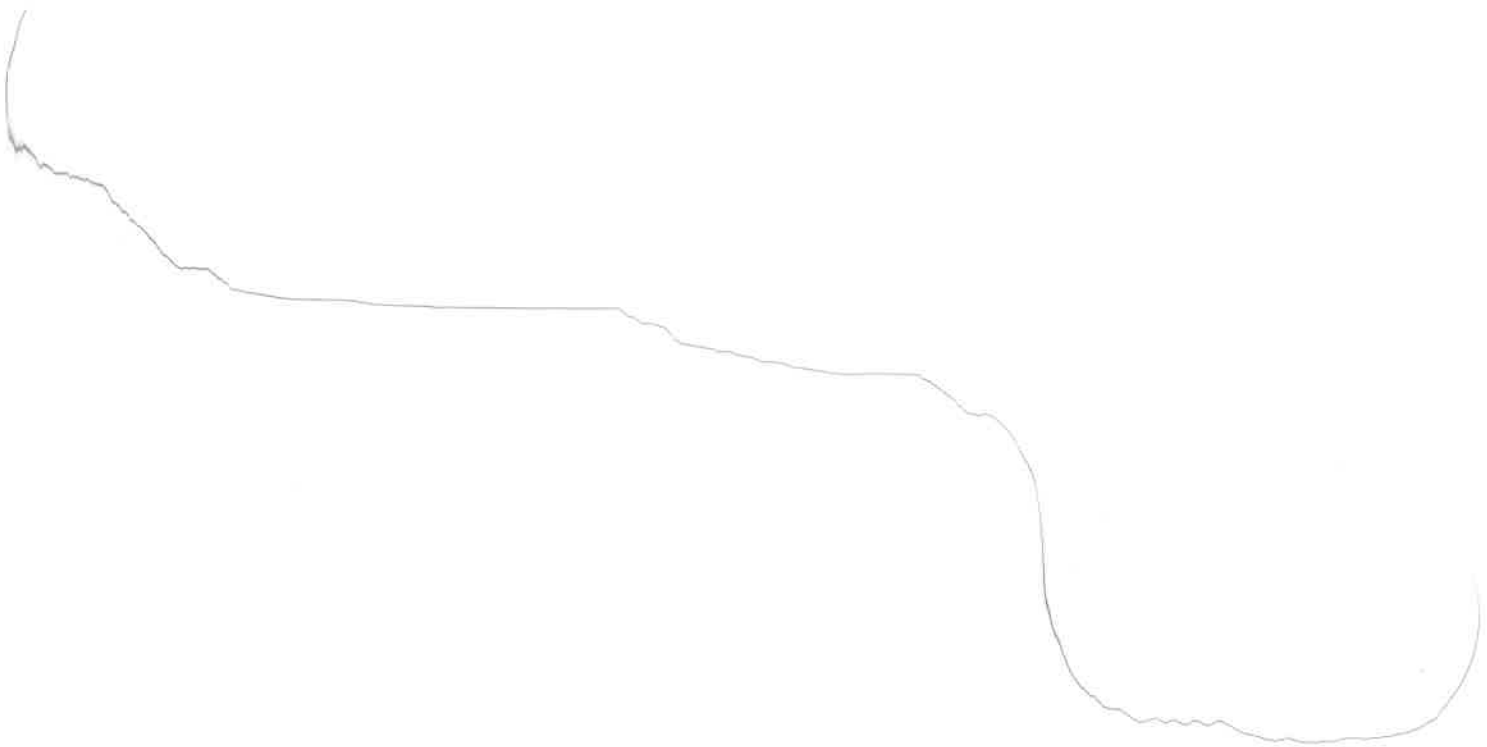

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P12992 ↓ P13031 } Y.P. 12/21/2023

Catalog No. : 31097 **Lot No.:** A0204177

Description : o-Terphenyl Standard

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

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

Expiration Date : June 30, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

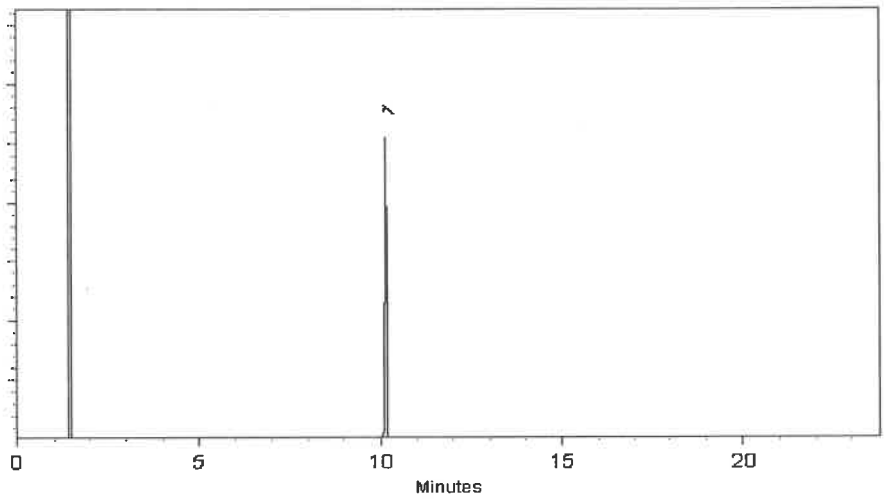
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905

Dillan Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

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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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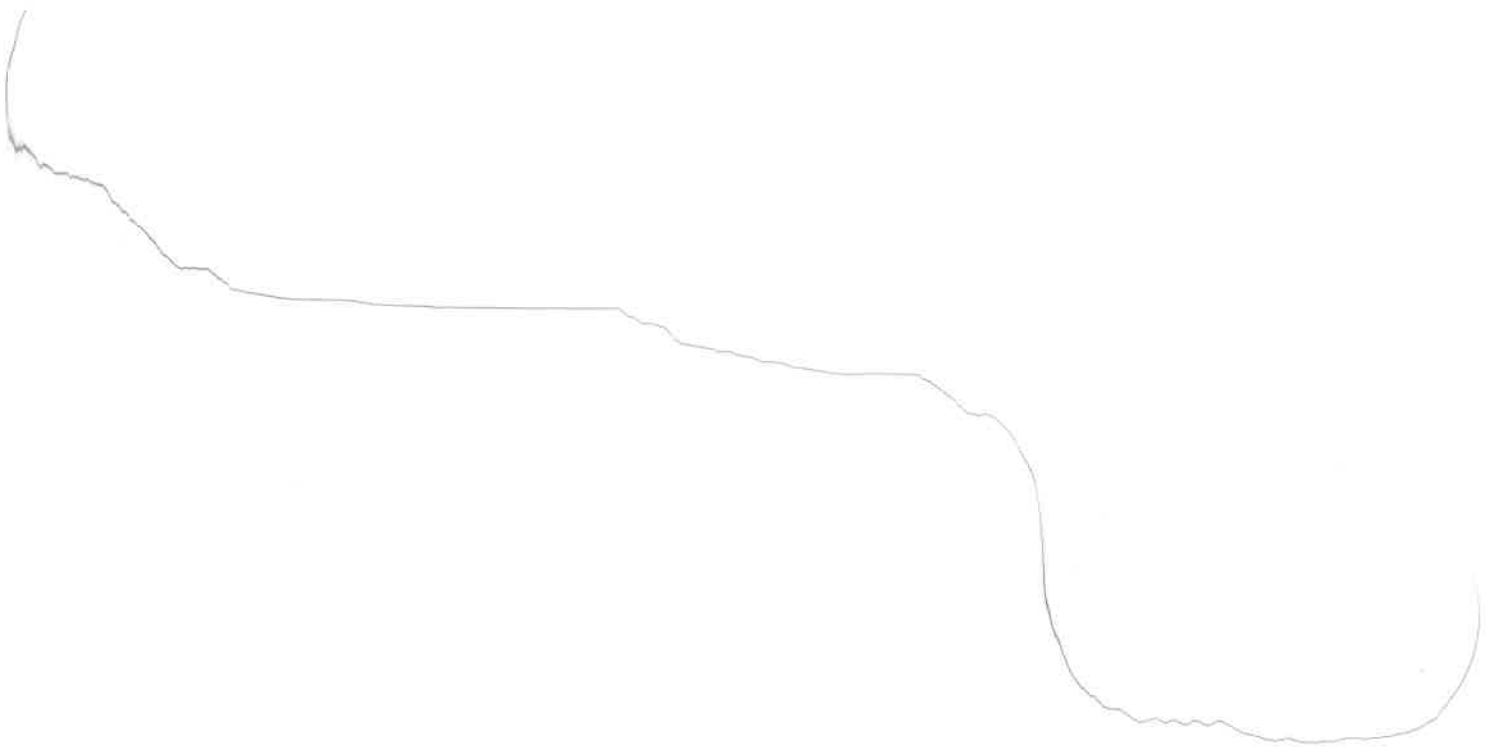

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P12992 ↓ P13031 } Y.P. 12/21/2023

Catalog No. : 31097 **Lot No.:** A0204177

Description : o-Terphenyl Standard

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

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

Expiration Date : June 30, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
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Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
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Inj. Temp:
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Det. Temp:
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Det. Type:
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Split Vent:
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Inj. Vol
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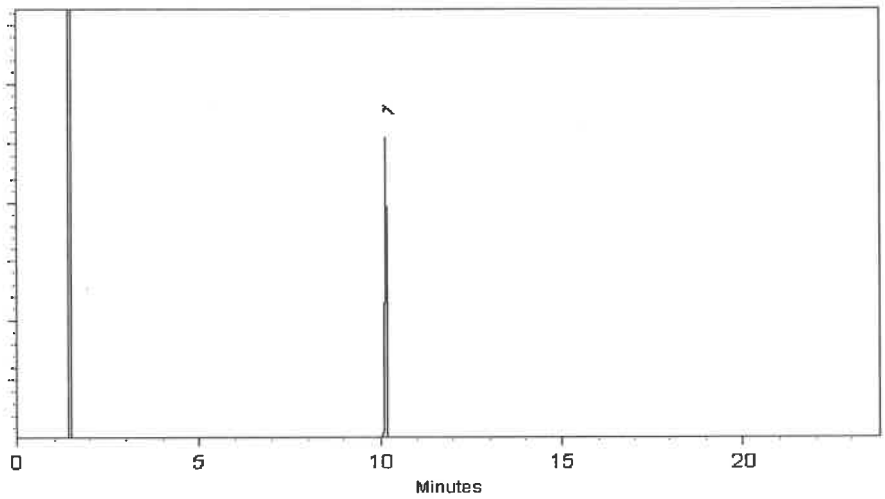

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Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905

Dillan Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

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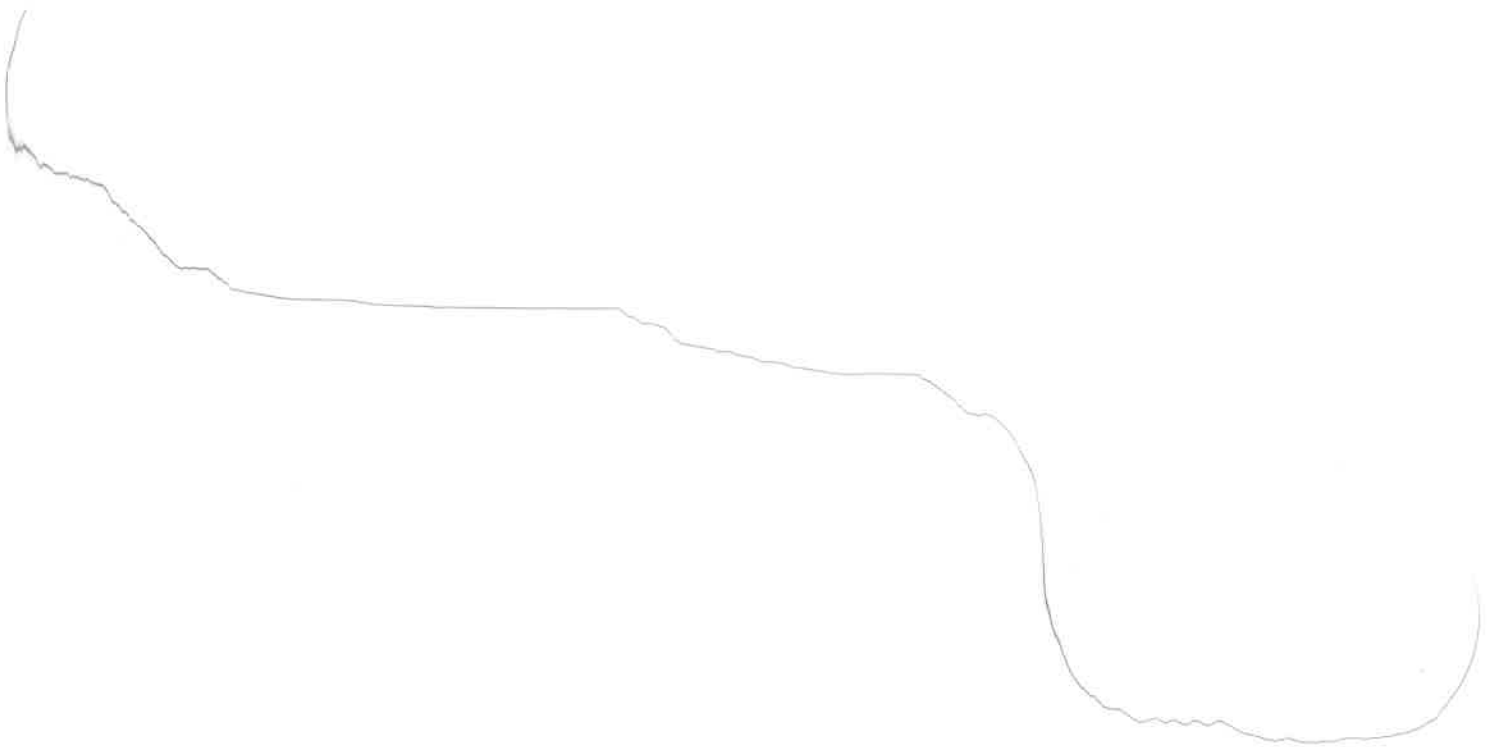

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P12992 ↓ P13031 } Y.P. 12/21/2023

Catalog No. : 31097 **Lot No.:** A0204177

Description : o-Terphenyl Standard

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

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

Expiration Date : June 30, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
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@ 20°C/min. (hold 10 min.)

Inj. Temp:
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Det. Temp:
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Det. Type:
FID

Split Vent:
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Inj. Vol
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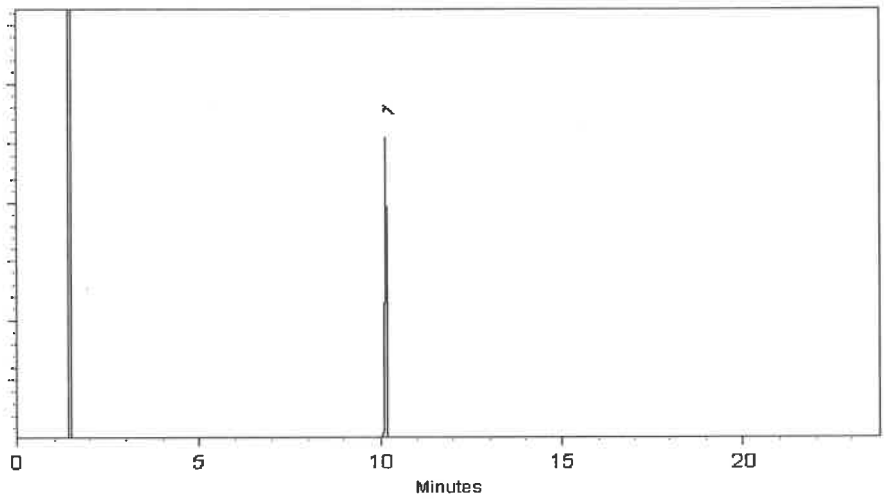

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Laith Clemente - Operations Technician I

Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905

Dillan Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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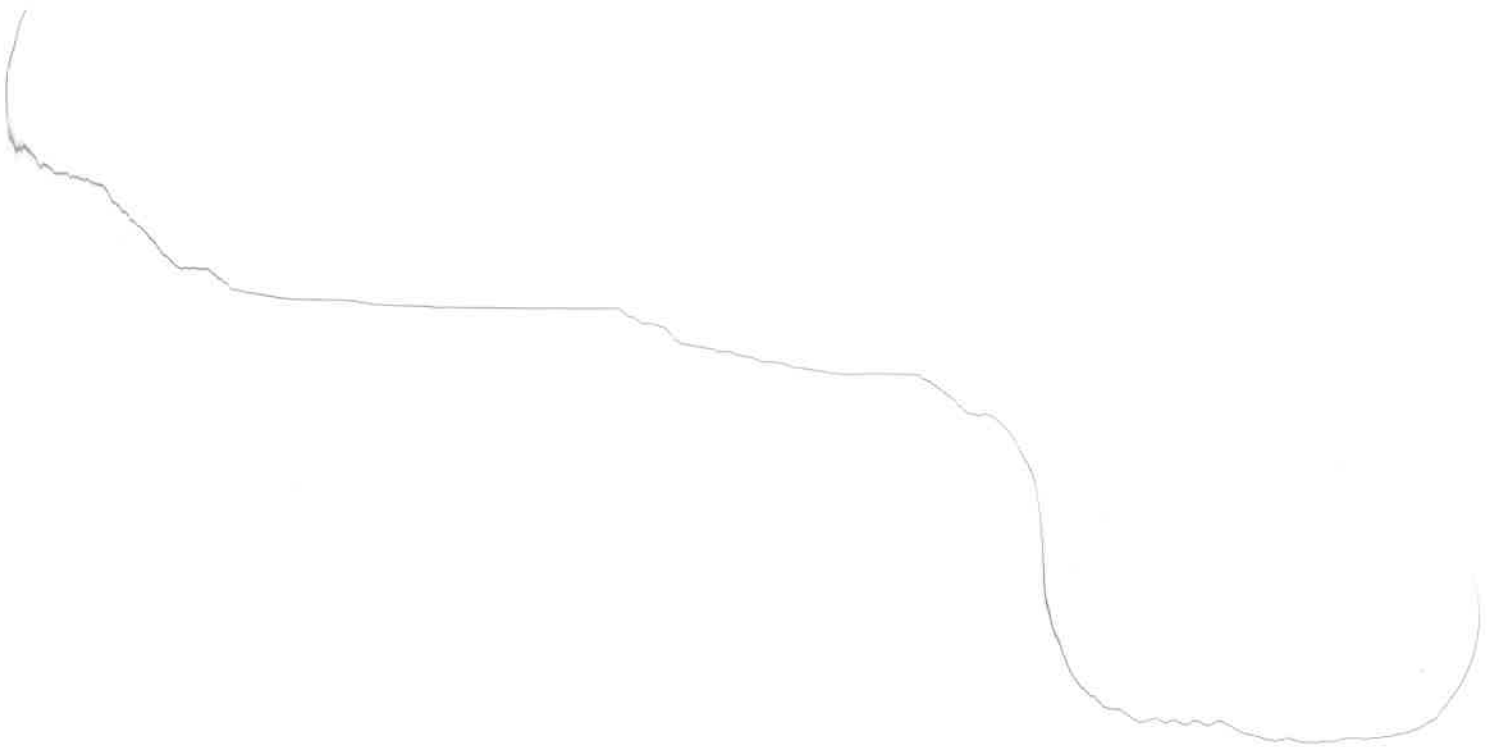

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P12992 ↓ P13031 } Y.P. 12/21/2023

Catalog No. : 31097 **Lot No.:** A0204177

Description : o-Terphenyl Standard

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

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

Expiration Date : June 30, 2027 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	o-Terphenyl	84-15-1	GKSSA	99%	10,000.5 µg/mL	+/- 450.4278

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

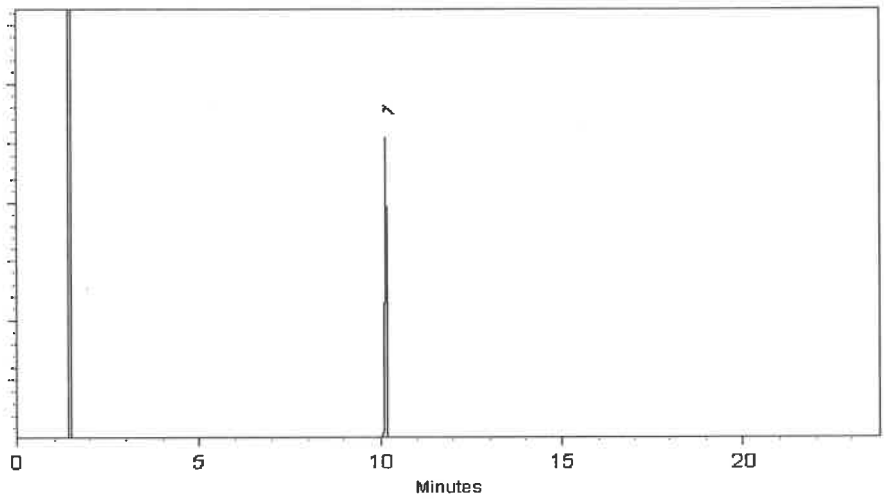
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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Date Mixed: 07-Nov-2023 **Balance Serial #** 1128360905

Dillan Murphy - Operations Technician I

Date Passed: 09-Nov-2023

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

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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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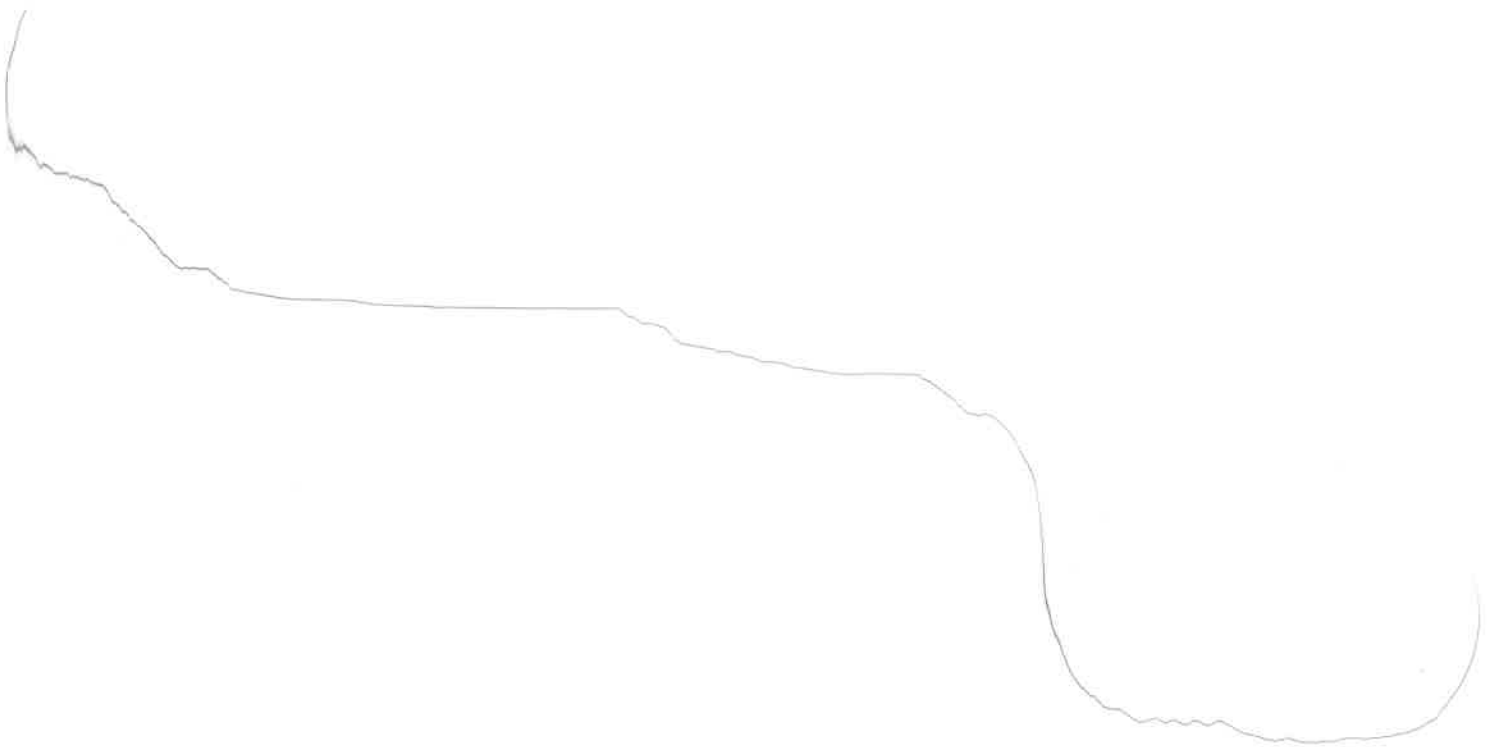

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P12992 ↓ P13031 } Y.P. 12/21/2023

Catalog No. : 31097 **Lot No.:** A0204177

Description : o-Terphenyl Standard

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

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CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
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* 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.)

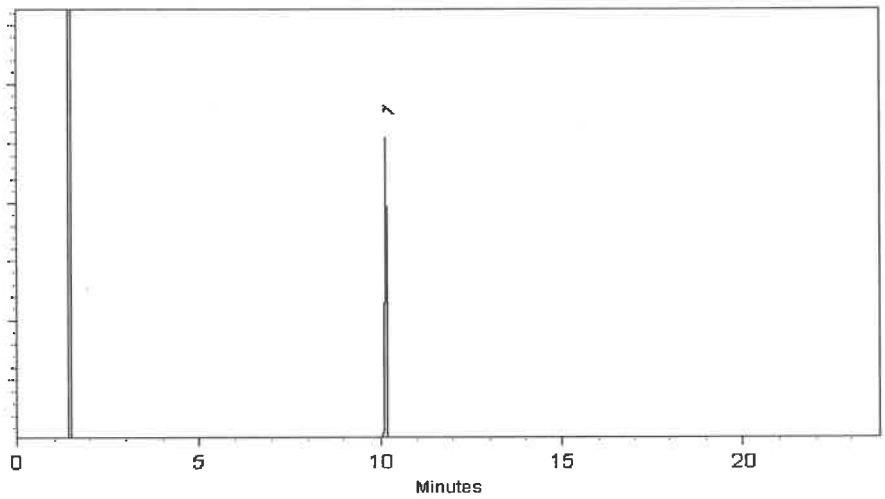
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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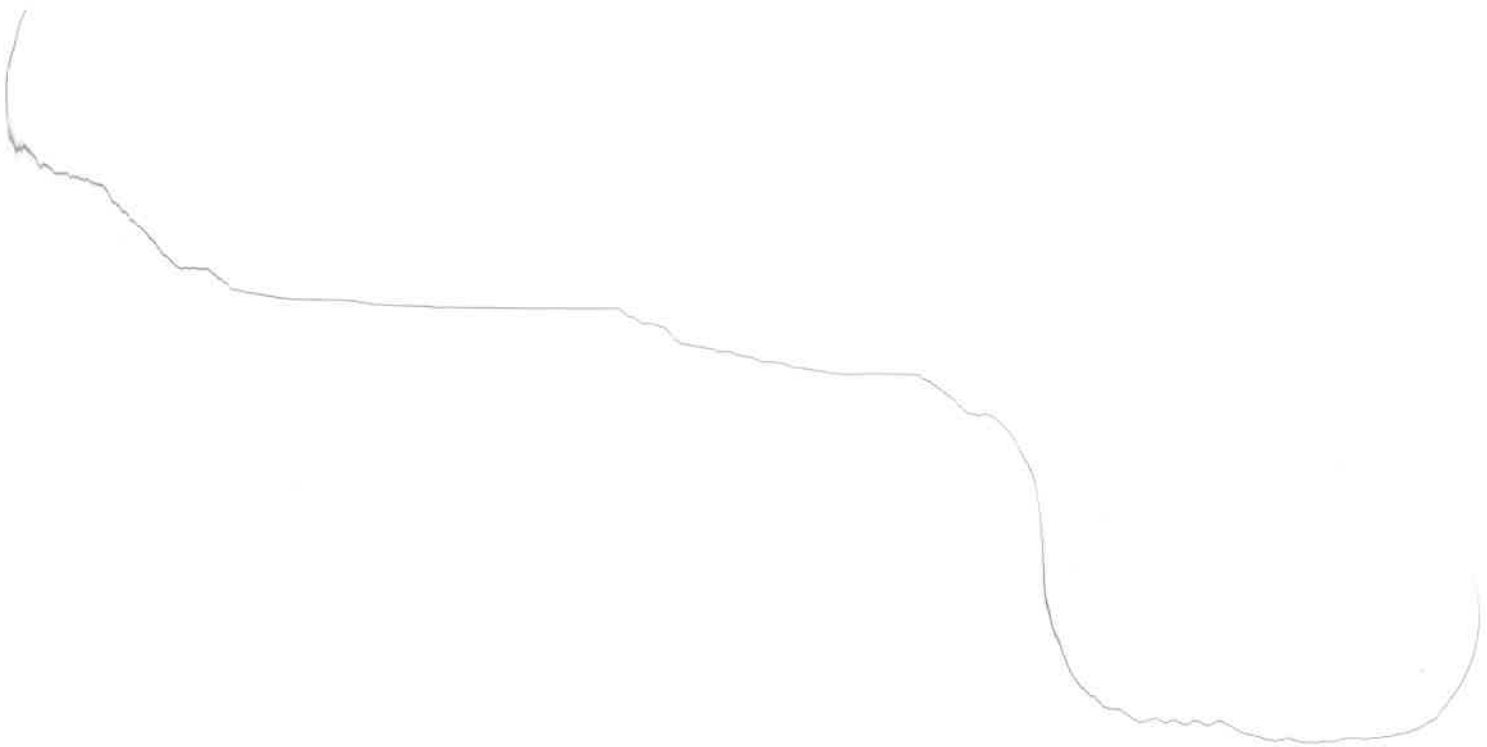

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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Catalog No. : 31098 **Lot No.:** A0200707

P13044 & P13051 Y.P. 12/26/23

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

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:
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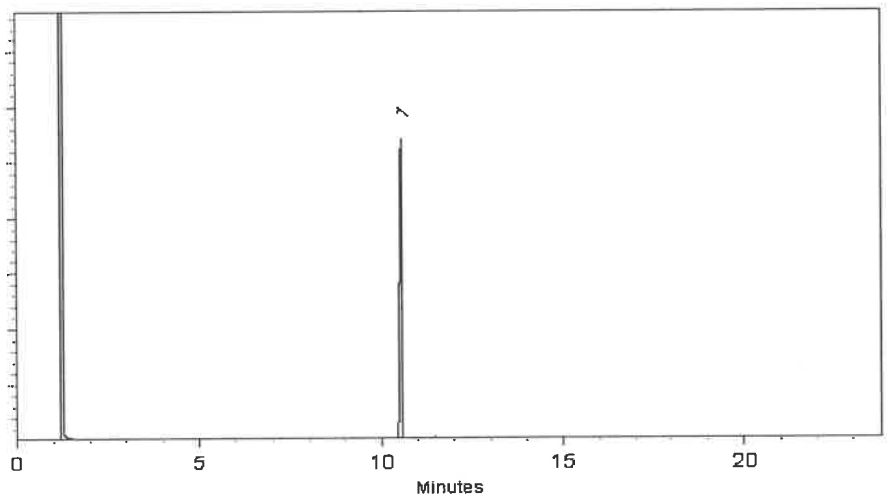
Split Vent:
10 ml/min.

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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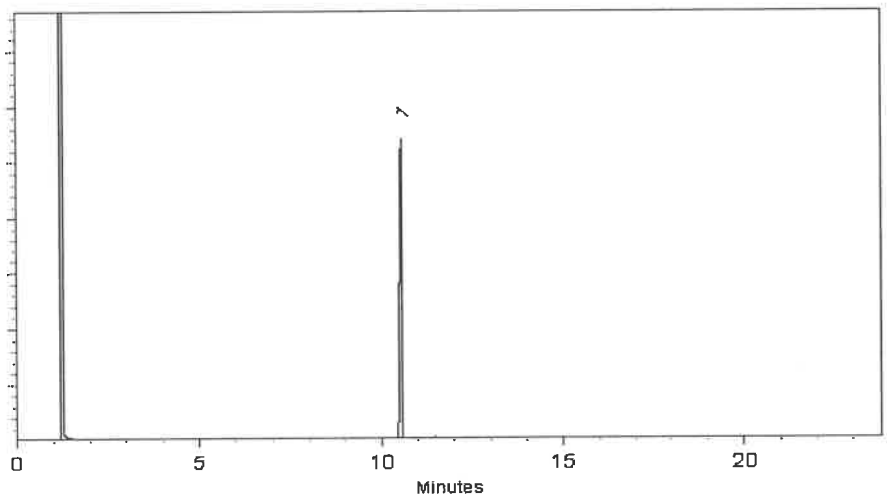

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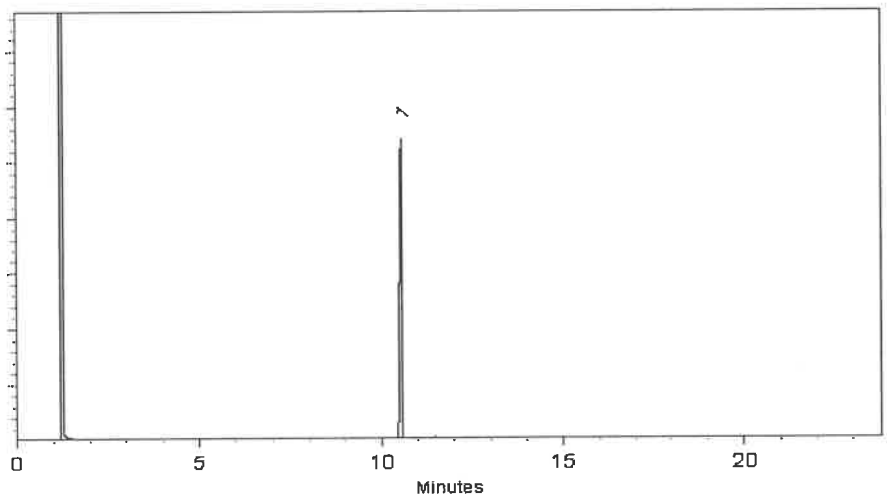

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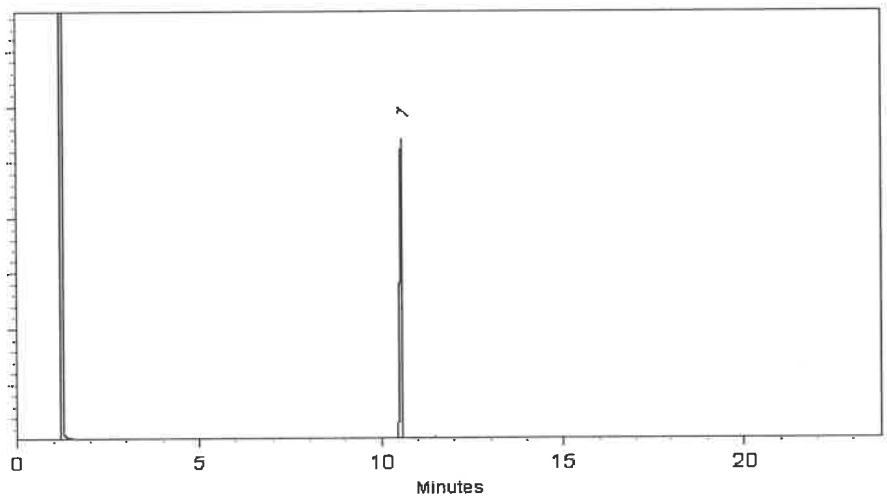
Split Vent:
10 ml/min.

Inj. Vol
1µl



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P13053 ↓ P13099 } Y.P. 01/12/24

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

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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	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.)

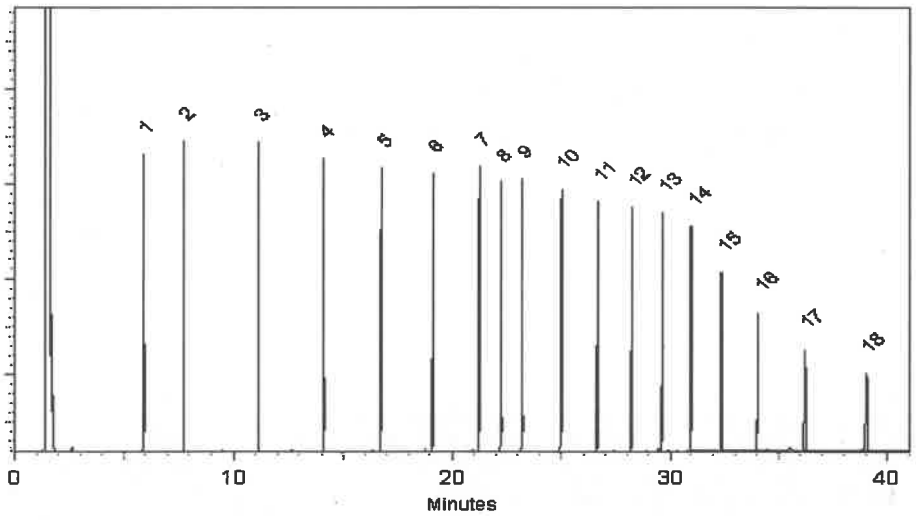
Inj. Temp:
250°C

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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

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.

P13053 ↓ P13099 } Y.P. 01/12/24

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

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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	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.)

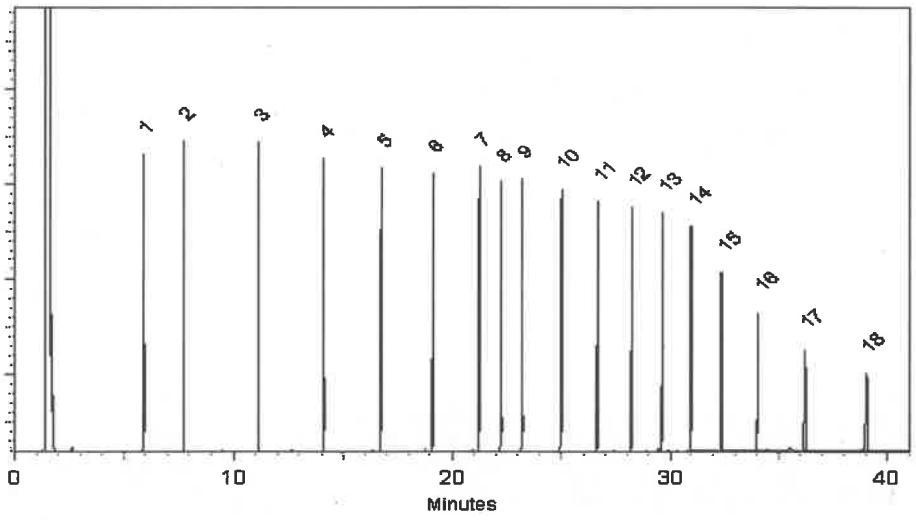
Inj. Temp:
250°C

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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

P13053 ↓ P13099 } Y.P. 01/12/24

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

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

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	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.)

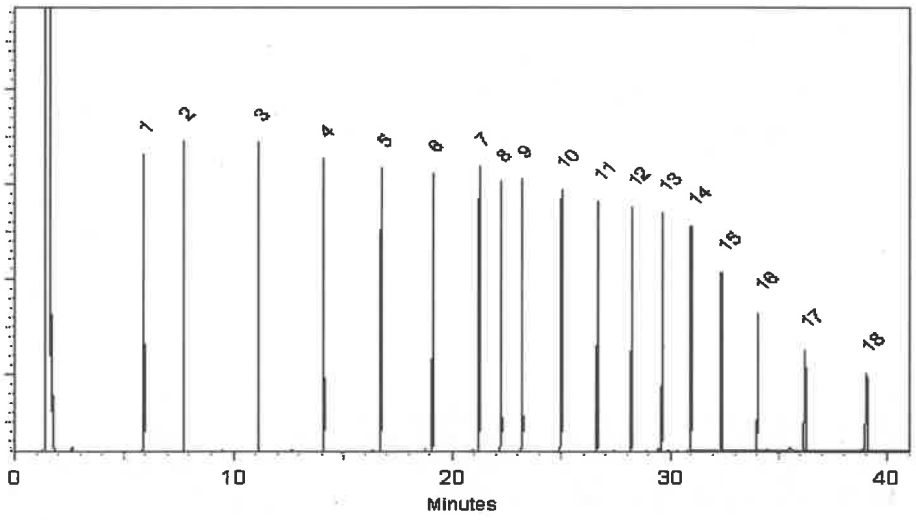
Inj. Temp:
250°C

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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0200008

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 : August 31, 2030 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13100 & P13102 Y.P. 01/02/24

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%	201.7 µg/mL	+/- 5.2098
2	n-Decane (C10)	124-18-5	SHBP4427	99%	201.3 µg/mL	+/- 5.2012
3	n-Dodecane (C12)	112-40-3	SHBN7174	99%	200.7 µg/mL	+/- 5.1839
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	201.0 µg/mL	+/- 5.1926
5	n-Hexadecane (C16)	544-76-3	SHBP8192	99%	201.7 µg/mL	+/- 5.2098
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	201.2 µg/mL	+/- 5.1984
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	201.4 µg/mL	+/- 5.2038
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	201.3 µg/mL	+/- 5.2012
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	201.3 µg/mL	+/- 5.2012
10	n-Tetracosane (C24)	646-31-1	MKCQ8345	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.7 µg/mL	+/- 5.2098
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	201.0 µg/mL	+/- 5.1926
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.5 µg/mL	+/- 5.1788
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.3 µg/mL	+/- 5.2012
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.7 µg/mL	+/- 5.1839
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.0 µg/mL	+/- 5.1926
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	201.3 µg/mL	+/- 5.1998

18	n-Tetracontane (C40)	4181-95-7	4LJYN	98%	200.6 µg/mL	+/- 5.1815

* 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.)

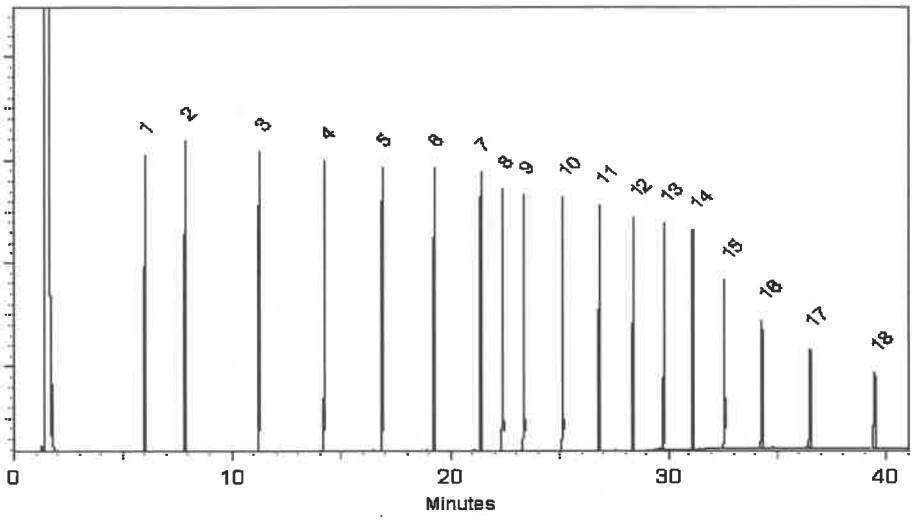
Inj. Temp:
250°C

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.

John Friedline - Operations Technician I

Date Mixed: 18-Jul-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 21-Jul-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0200008

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 : August 31, 2030 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13100 & P13102 Y.P. 01/02/24

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%	201.7 µg/mL	+/- 5.2098
2	n-Decane (C10)	124-18-5	SHBP4427	99%	201.3 µg/mL	+/- 5.2012
3	n-Dodecane (C12)	112-40-3	SHBN7174	99%	200.7 µg/mL	+/- 5.1839
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	201.0 µg/mL	+/- 5.1926
5	n-Hexadecane (C16)	544-76-3	SHBP8192	99%	201.7 µg/mL	+/- 5.2098
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	201.2 µg/mL	+/- 5.1984
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	201.4 µg/mL	+/- 5.2038
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	201.3 µg/mL	+/- 5.2012
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	201.3 µg/mL	+/- 5.2012
10	n-Tetracosane (C24)	646-31-1	MKCQ8345	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.7 µg/mL	+/- 5.2098
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	201.0 µg/mL	+/- 5.1926
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.5 µg/mL	+/- 5.1788
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.3 µg/mL	+/- 5.2012
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.7 µg/mL	+/- 5.1839
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.0 µg/mL	+/- 5.1926
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	201.3 µg/mL	+/- 5.1998

18	n-Tetracontane (C40)	4181-95-7	4LJYN	98%	200.6 µg/mL	+/- 5.1815

* 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.)

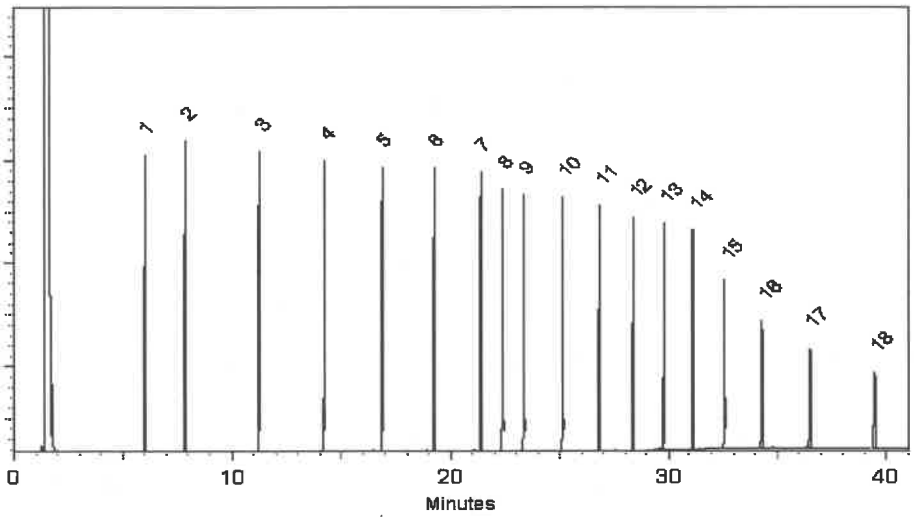
Inj. Temp:
250°C

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.

John Friedline - Operations Technician I

Date Mixed: 18-Jul-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 21-Jul-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate of Analysis

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ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0200008

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 : August 31, 2030 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13100 & P13102 Y.P. 01/02/24

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%	201.7 µg/mL	+/- 5.2098
2	n-Decane (C10)	124-18-5	SHBP4427	99%	201.3 µg/mL	+/- 5.2012
3	n-Dodecane (C12)	112-40-3	SHBN7174	99%	200.7 µg/mL	+/- 5.1839
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	201.0 µg/mL	+/- 5.1926
5	n-Hexadecane (C16)	544-76-3	SHBP8192	99%	201.7 µg/mL	+/- 5.2098
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	201.2 µg/mL	+/- 5.1984
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	201.4 µg/mL	+/- 5.2038
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	201.3 µg/mL	+/- 5.2012
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	201.3 µg/mL	+/- 5.2012
10	n-Tetracosane (C24)	646-31-1	MKCQ8345	99%	201.3 µg/mL	+/- 5.2012
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	201.7 µg/mL	+/- 5.2098
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	201.0 µg/mL	+/- 5.1926
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.5 µg/mL	+/- 5.1788
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	201.3 µg/mL	+/- 5.2012
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.7 µg/mL	+/- 5.1839
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	201.0 µg/mL	+/- 5.1926
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	201.3 µg/mL	+/- 5.1998

18	n-Tetracontane (C40)	4181-95-7	4LJYN	98%	200.6 µg/mL	+/- 5.1815

* 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.)

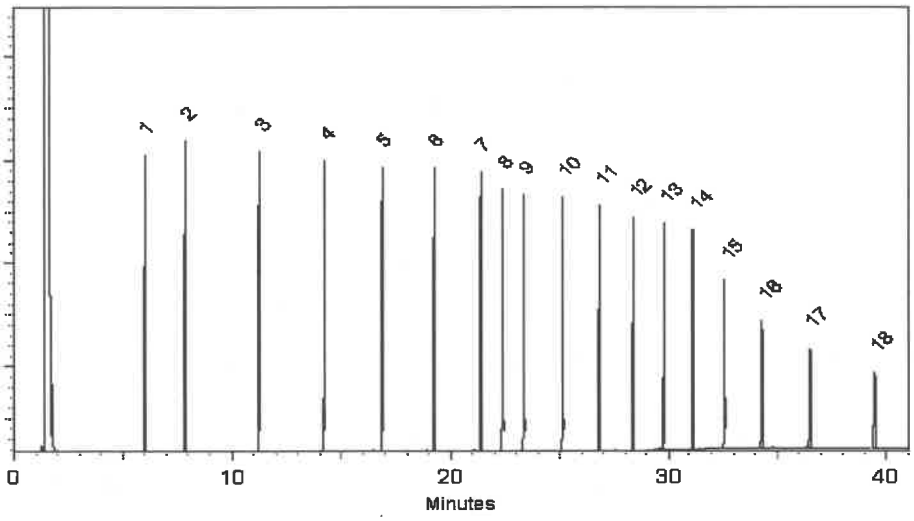
Inj. Temp:
250°C

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.

John Friedline - Operations Technician I

Date Mixed: 18-Jul-2023 **Balance Serial #** 1127510105

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 21-Jul-2023

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

P13258 ↓ P13277 } Y.P. 02/20/24

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

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.)

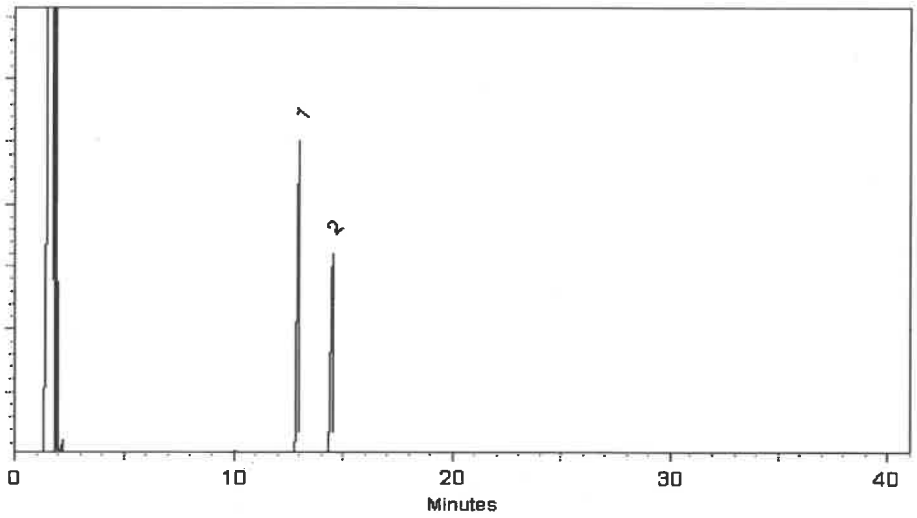
Inj. Temp:
250°C

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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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P13258 ↓ P13277 } Y.P. 02/20/24

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

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.)

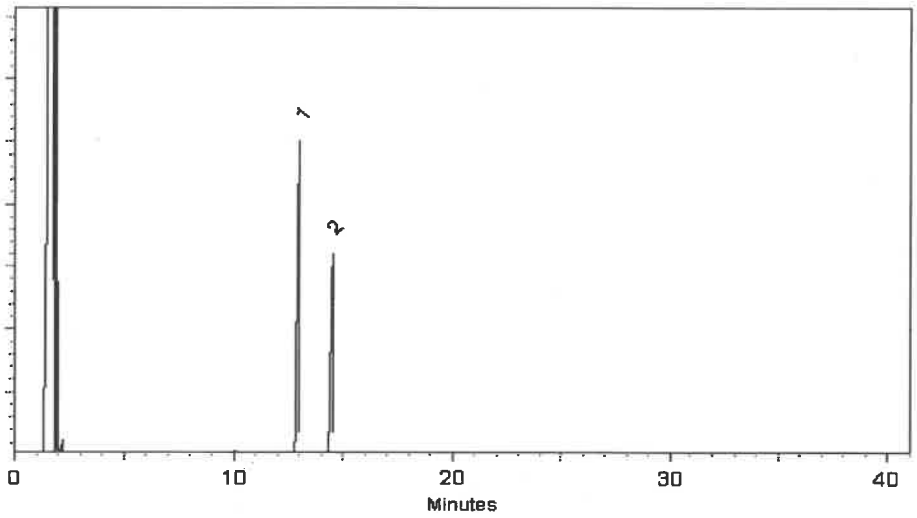
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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P13258 ↓ P13277 } Y.P. 02/20/24

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

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.)

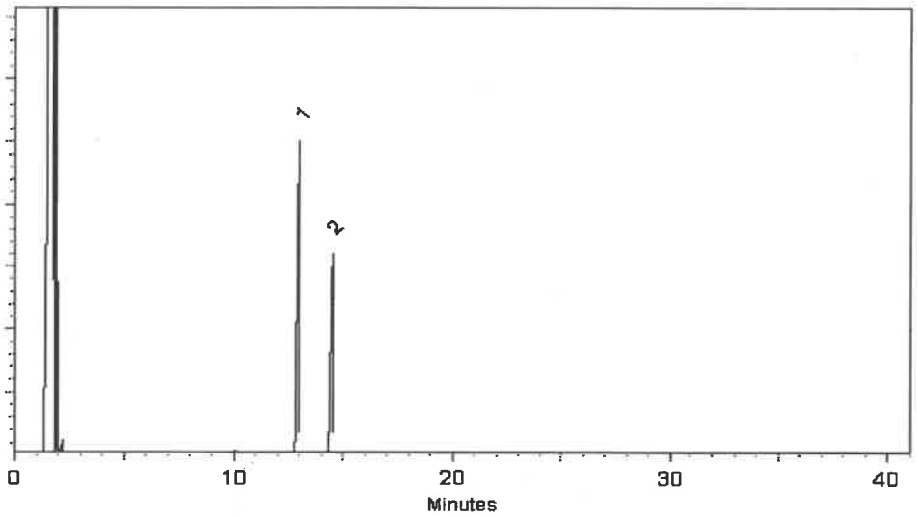
Inj. Temp:
250°C

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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK

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Certificate of Analysis

chromatographic plus

ACCREDITED
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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

P13258 ↓ P13277 } Y.P. 02/20/24

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

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.)

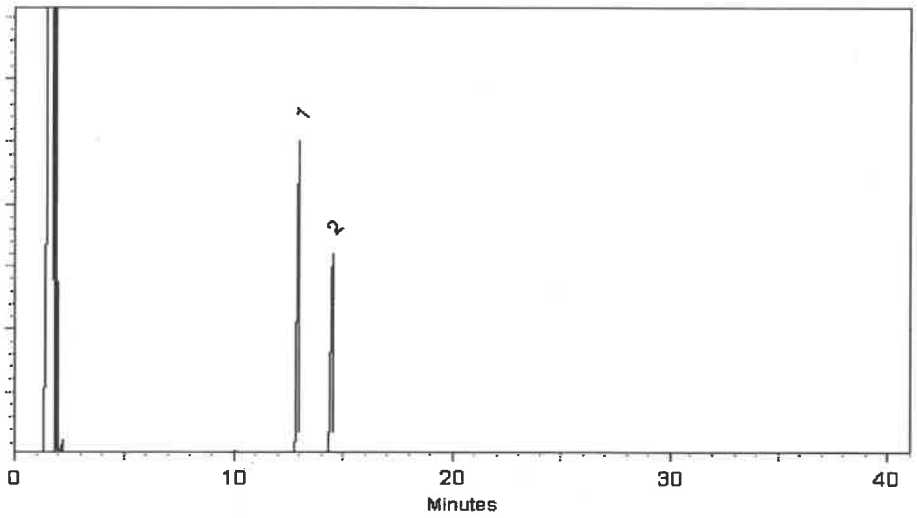
Inj. Temp:
250°C

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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

P13258 ↓ P13277 } Y.P. 02/20/24

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

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.)

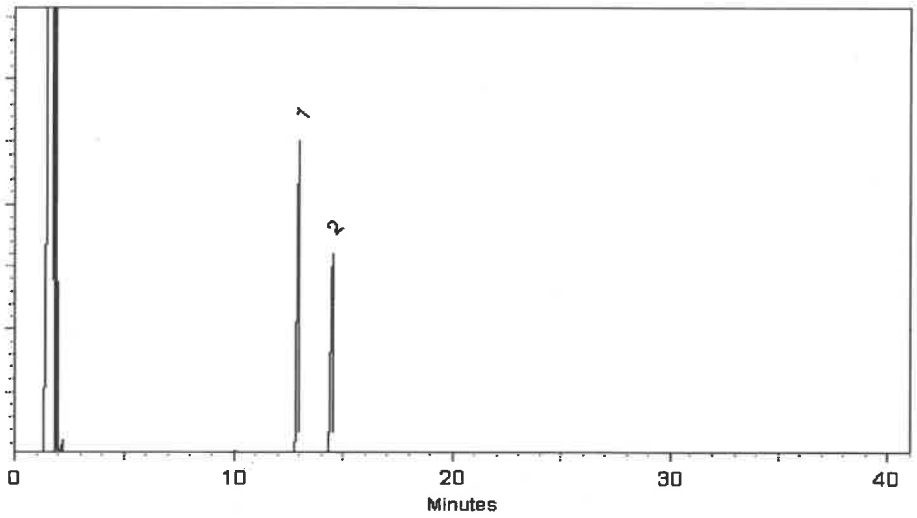
Inj. Temp:
250°C

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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Absolute Standards, Inc.
800-368-1131
www.absolutestandards.com

Certified Reference Material CRM

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT

Part Number: 95899
Lot Number: 040524
Description: NJ EPH Aliphatic n-Hydrocarbons - Revised
20 components
Expiration Date: 040534
Recommended Storage: Ambient (20 °C)
Nominal Concentration (µg/mL): 1000
NIST Test ID#: 6UTB

Solvent(s):	Lot#
Cyclohexane	28930

P13278 & P13287 } Y.P. 04111124

Formulated By:	Anthony Mahoney	040524 DATE
Reviewed By:	Pedro L. Rentas	040524 DATE

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL): 25.0 0.001 Flask Uncertainty
CAUTION: Sonicate Before Use

	Compound	(RM#) Part Number	Lot Number	Dil. Factor	Initial Vol. (mL)	Initial Conc.(ug/mL)	Nominal Conc (µg/mL)	Purity (%)	Purity Uncertainty	Uncertainty Pipette	Target Weight(g)	Actual Weight(g)	Actual Conc (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	2-Methylnaphthalene	(0214)	MKBF3783V	NA	NA	NA	1000	97	0.2	NA	0.02579	0.02594	1005.7	5.7	91-57-6	N/A	orl-rat 1630mg/kg
2.	Naphthalene	(0222)	MKBZ8680V	NA	NA	NA	1000	100	0.2	NA	0.02502	0.02511	1003.7	5.7	91-20-3	10 ppm (50mg/m3/8H)	orl-rat 490mg/kg
3.	n-Nonane	95708	120222	1.00	25.00	1000.7	1000	NA	NA	0.013	NA	NA	1000.0	4.2	111-84-2	200 ppm (1050mg/m3/8H)	ivn-mus 218mg/kg
4.	n-Decane	95708	**120222**	1.00	25.00	1000.9	1000	NA	NA	0.013	NA	NA	1000.2	4.2	124-18-5	N/A	N/A
5.	n-Dodecane	95708	120222	1.00	25.00	1000.7	1000	NA	NA	0.013	NA	NA	1000.0	4.2	112-40-3	N/A	ivn-mus 3494mg/kg
6.	n-Tetradecane	95708	120222	1.00	25.00	1002.1	1000	NA	NA	0.013	NA	NA	1001.3	4.2	629-59-4	N/A	N/A
7.	n-Hexadecane	95708	120222	1.00	25.00	1000.5	1000	NA	NA	0.013	NA	NA	999.7	4.2	544-76-3	N/A	N/A
8.	n-Octadecane	95708	120222	1.00	25.00	1001.0	1000	NA	NA	0.013	NA	NA	1000.3	4.1	593-45-3	N/A	N/A
9.	n-Eicosane	95708	120222	1.00	25.00	1001.0	1000	NA	NA	0.013	NA	NA	1000.3	4.2	112-95-8	N/A	N/A
10.	n-Heneicosane	95708	120222	1.00	25.00	1002.4	1000	NA	NA	0.013	NA	NA	1001.6	4.2	629-94-7	N/A	N/A
11.	n-Docosane	95708	120222	1.00	25.00	1001.9	1000	NA	NA	0.013	NA	NA	1001.2	4.2	629-97-0	N/A	N/A
12.	n-Tetracosane	95708	120222	1.00	25.00	1000.8	1000	NA	NA	0.013	NA	NA	1000.1	4.2	646-31-1	N/A	N/A
13.	n-Hexacosane	95708	120222	1.00	25.00	1001.2	1000	NA	NA	0.013	NA	NA	1000.4	4.2	630-01-3	N/A	N/A
14.	n-Octacosane	95708	120222	1.00	25.00	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.2	630-02-4	N/A	N/A
15.	n-Triacontane	95708	120222	1.00	25.00	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.2	638-68-6	N/A	N/A
16.	n-Dotriacontane	95708	120222	1.00	25.00	1000.5	1000	NA	NA	0.013	NA	NA	999.8	4.3	544-85-4	N/A	ivn-mus 100mg/kg
17.	n-Tetratriacontane	95708	120222	1.00	25.00	1000.4	1000	NA	NA	0.013	NA	NA	999.7	4.2	14167-59-0	N/A	N/A
18.	n-Hexatriacontane	95708	120222	1.00	25.00	1001.5	1000	NA	NA	0.013	NA	NA	1000.8	4.2	630-06-8	N/A	N/A
19.	n-Octatriacontane	95708	120222	1.00	25.00	1000.3	1000	NA	NA	0.013	NA	NA	999.6	4.3	7194-85-6	N/A	N/A
20.	n-Tetracontane	95708	120222	1.00	25.00	1000.6	1000	NA	NA	0.013	NA	NA	999.9	4.3	4181-95-7	N/A	N/A

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are certified (+/-) 0.5% of the stated value, unless otherwise stated.
- All Standards, after opening ampule, should be stored with caps tight and under appropriate laboratory conditions.
- Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, DC, (1994).

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Tel: 1-814-353-1300
Fax: 1-814-353-1309

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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** 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

P13288 ↓ P13317 } Y.P. 04/23/24

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	MKCQ3882	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	MKCQ4814	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	MKCQ9436	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-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.)

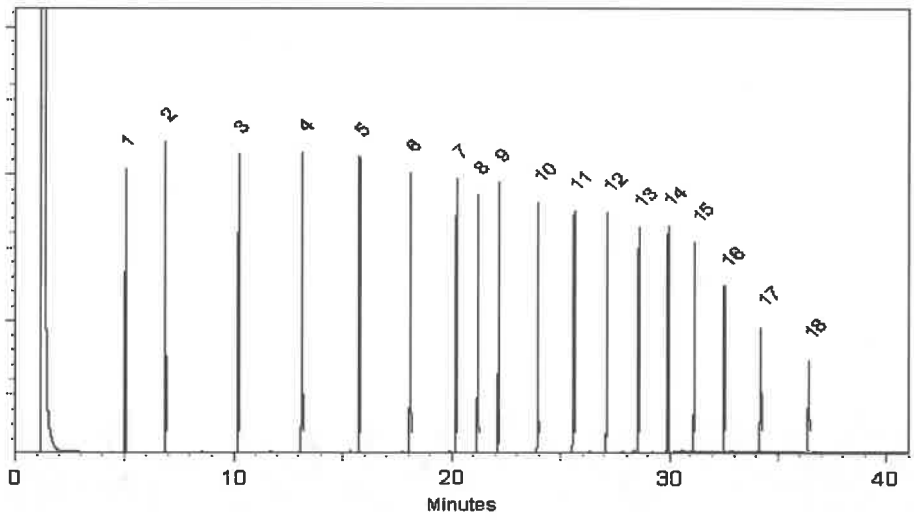
Inj. Temp:
250°C

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.

Matt Fragassi - Mix Technician

Date Mixed: 31-Jan-2024 **Balance Serial #** 1128353505

Dillan 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.
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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.

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

Catalog No. : 30542 **Lot No.:** 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 & P13h29 } Y.P. 07116124.

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	MKCQ3882	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	MKCQ4814	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	MKCQ9436	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-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.)

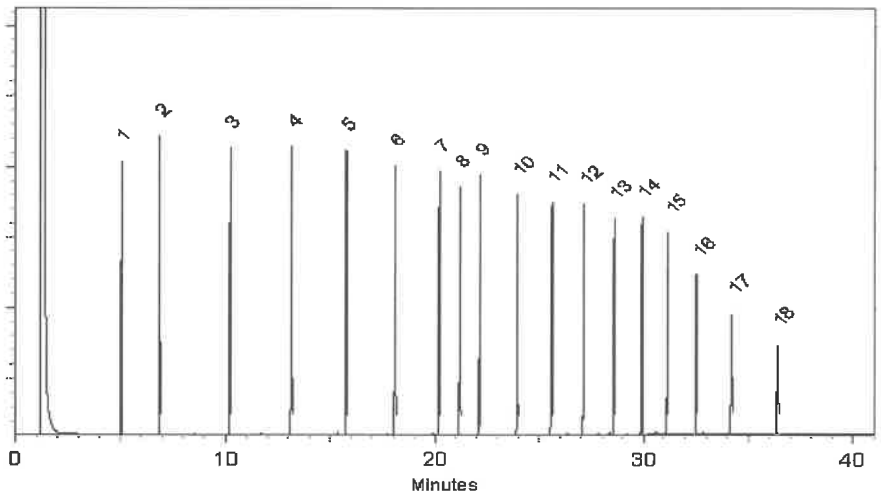
Inj. Temp:
250°C

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.

Matt Fragassi - Mix Technician

Date Mixed: 31-Jan-2024 **Balance Serial #** 1128353505

Dillan 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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 & P13h29 } Y.P. 07116124.

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	MKCQ3882	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	MKCQ4814	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	MKCQ9436	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-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.)

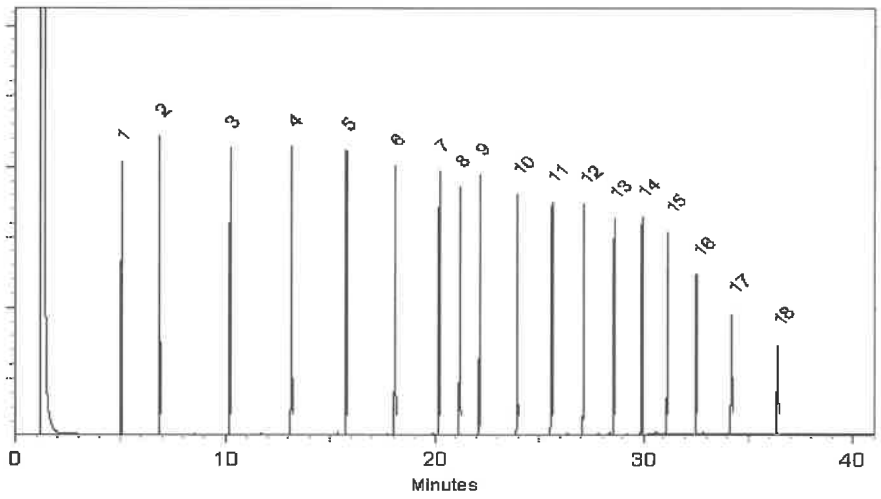
Inj. Temp:
250°C

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.

Matt Fragassi - Mix Technician

Date Mixed: 31-Jan-2024 **Balance Serial #** 1128353505

Dillan 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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 & P13h29 } Y.P. 07116124.

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	MKCQ3882	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	MKCQ4814	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	MKCQ9436	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-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.)

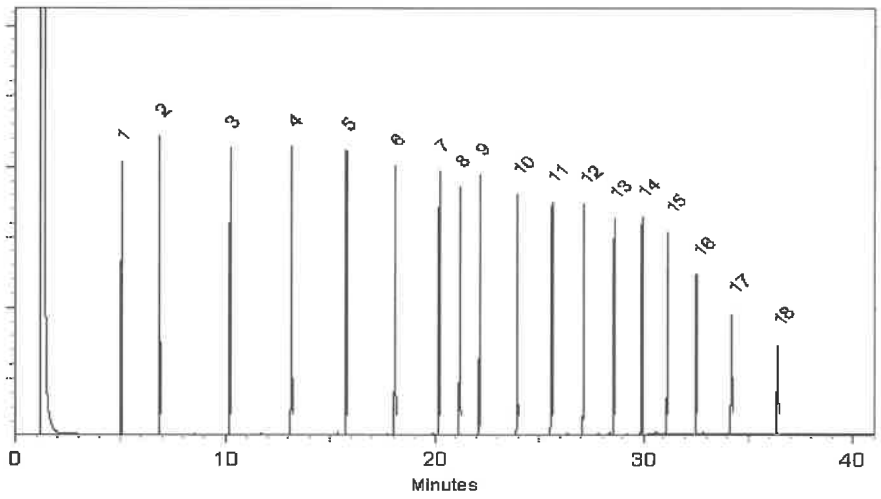
Inj. Temp:
250°C

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.

Matt Fragassi - Mix Technician

Date Mixed: 31-Jan-2024 **Balance Serial #** 1128353505

Dillan 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:

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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 ↓ P13436 Y.S. 6/7/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

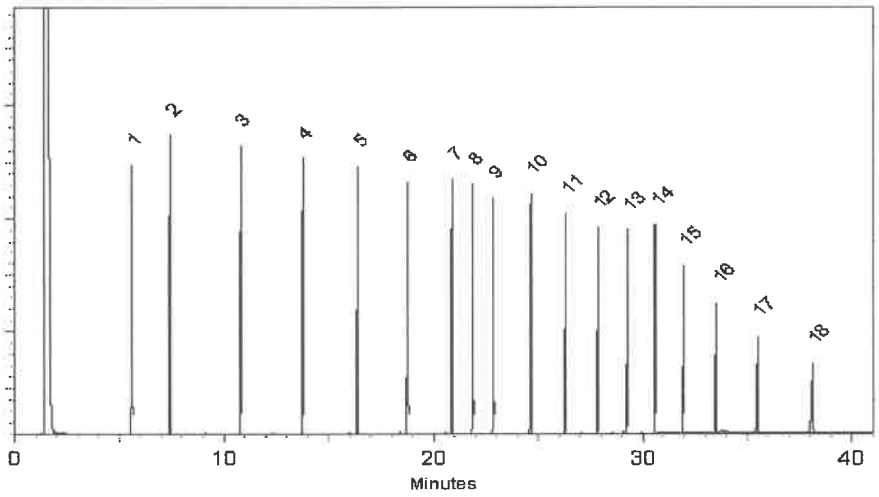
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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CERTIFIED REFERENCE MATERIAL

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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 ↓ P13436 Y.S. 6/7/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

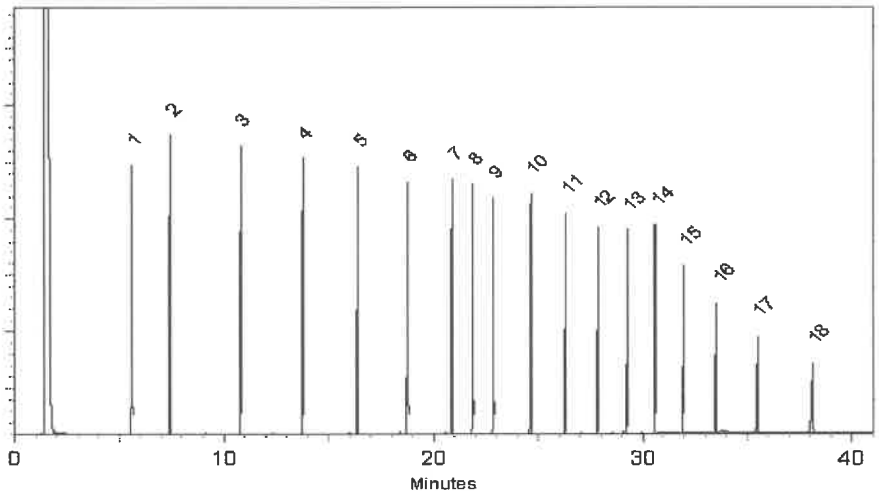
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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 ↓ P13436 Y.S. 6/7/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

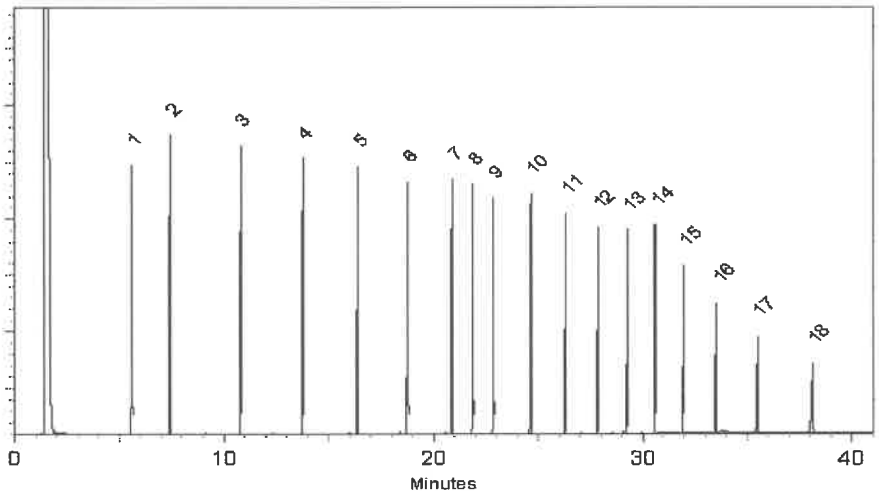
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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 ↓ P13436 Y.S. 6/7/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

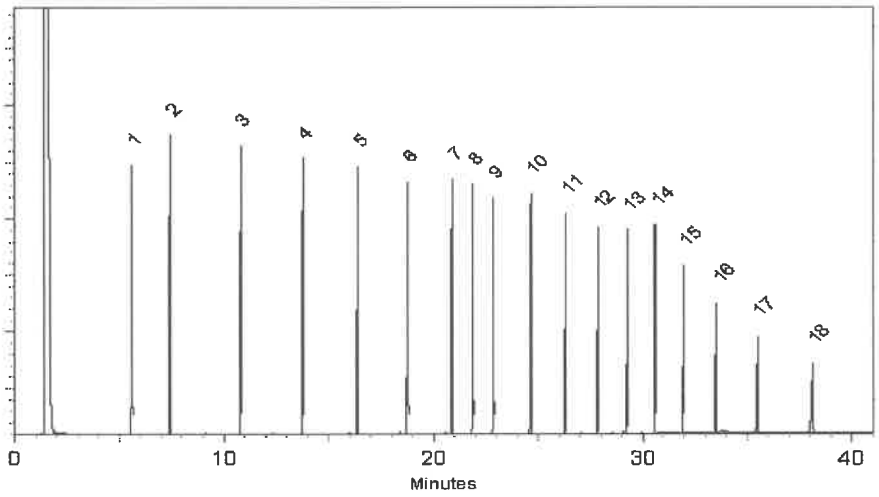
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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CERTIFIED REFERENCE MATERIAL

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic plus

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

Catalog No. : 30542 **Lot No.:** 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 ↓ P13436 Y.S. 6/7/2024

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
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16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

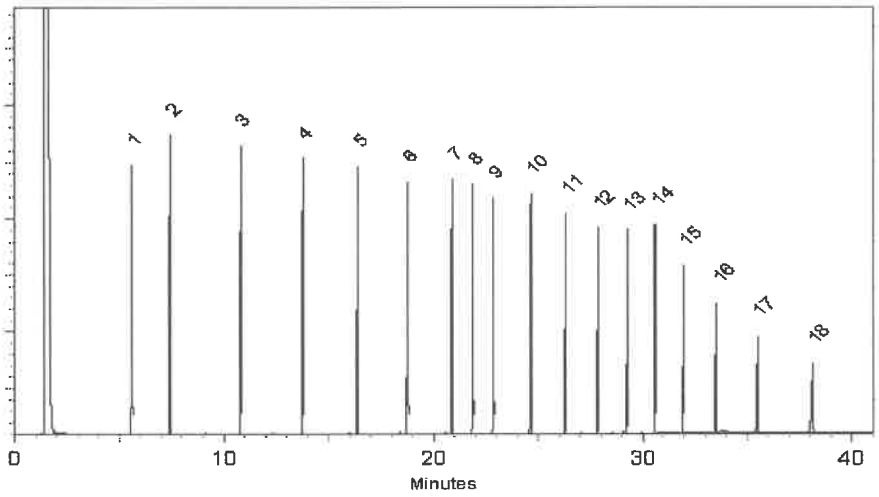
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13430 ↓ P13436 Y.S. 6/7/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

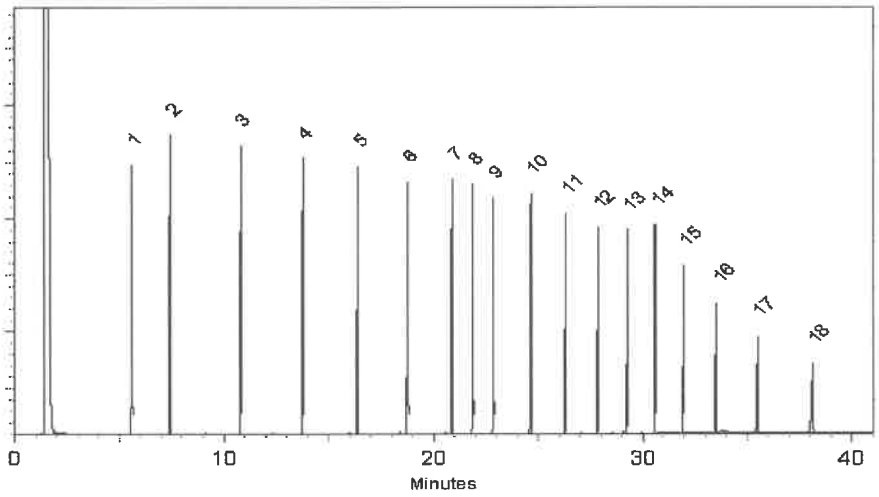
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13430 ↓ P13436 Y.S. 6/7/2024

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

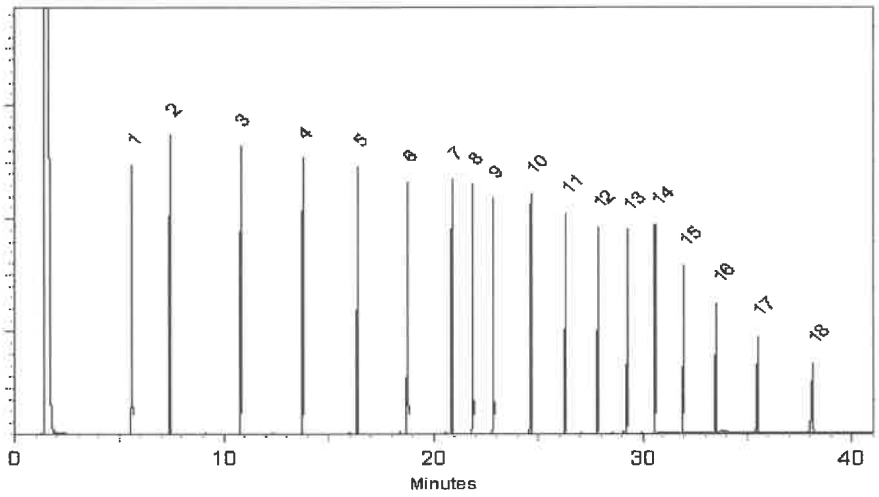
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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
2
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.)

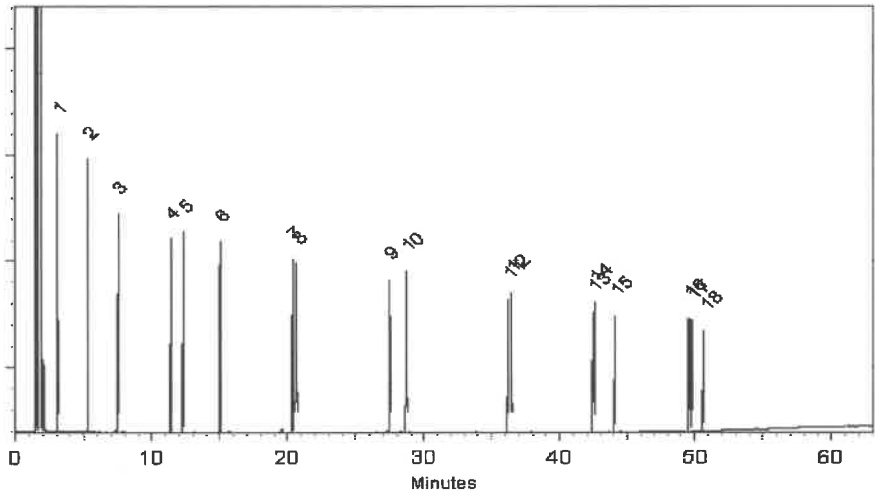
Inj. Temp:
250°C

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 - Operations Tech I **Date Mixed:** 09-May-2024 **Balance Serial #** 1128353505

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** 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
2
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.)

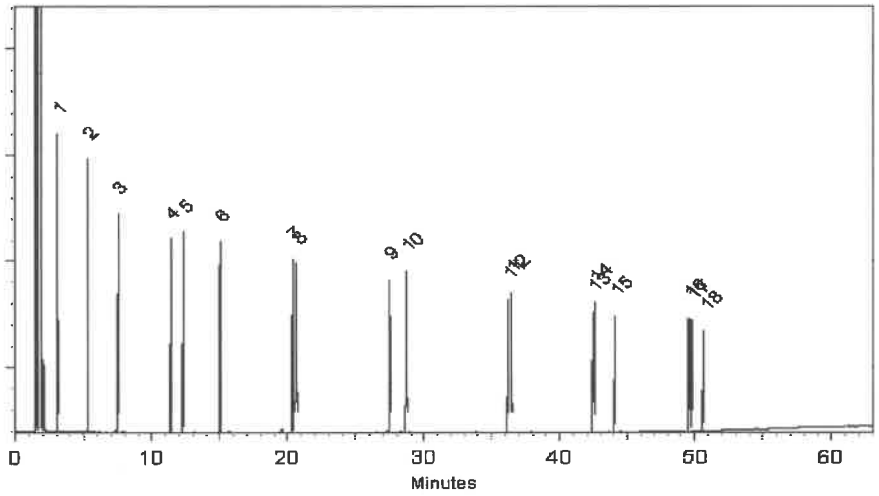
Inj. Temp:
250°C

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 - Operations Tech I **Date Mixed:** 09-May-2024 **Balance Serial #** 1128353505

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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
2
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.)

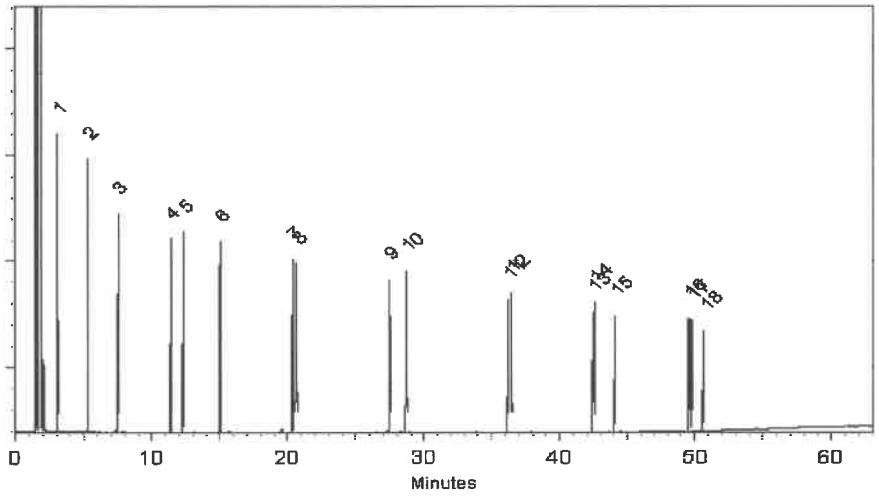
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Michael Maye - Operations Tech I **Date Mixed:** 09-May-2024 **Balance Serial #** 1128353505

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:

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Manufacturing Notes:

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Handling Notes:

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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
2
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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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.)

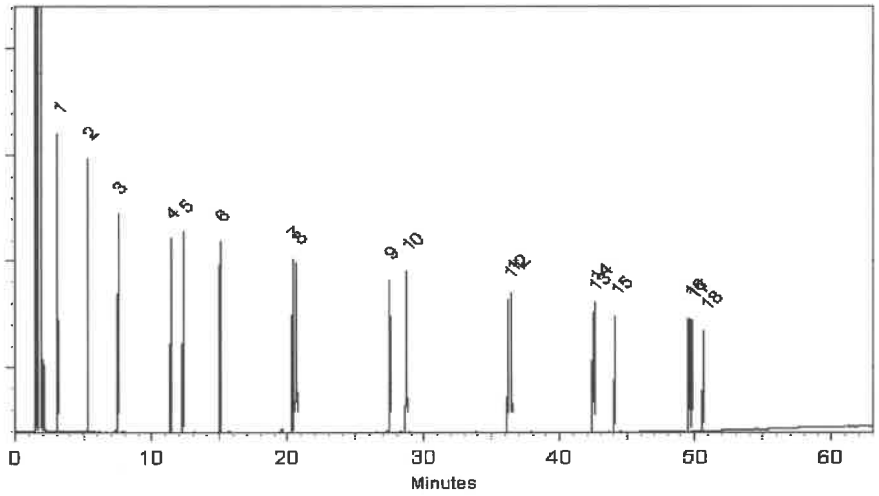
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Michael Maye - Operations Tech I **Date Mixed:** 09-May-2024 **Balance Serial #** 1128353505

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.
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Purity Notes:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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Catalog No. : 30543 **Lot No.:** 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
2
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
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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
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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.)

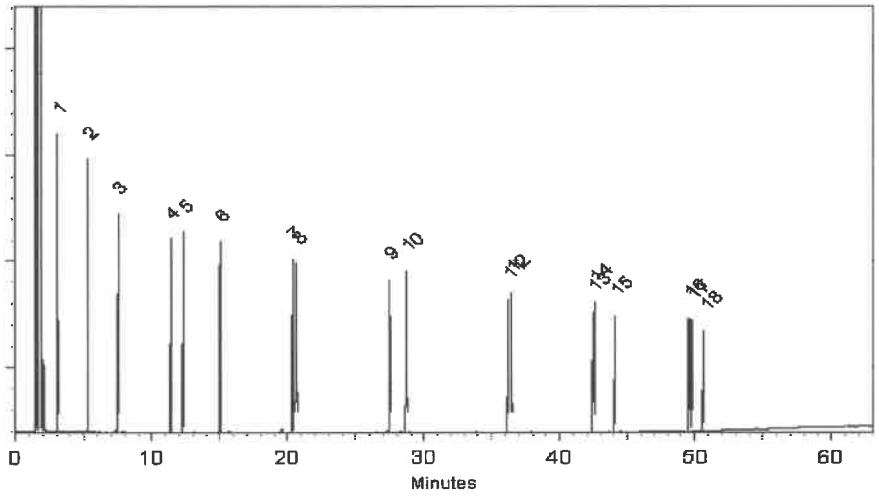
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Michael Maye - Operations Tech I **Date Mixed:** 09-May-2024 **Balance Serial #** 1128353505

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

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Expiration Date : April 30, 2030 **Storage:** 10°C or colder

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

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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.)

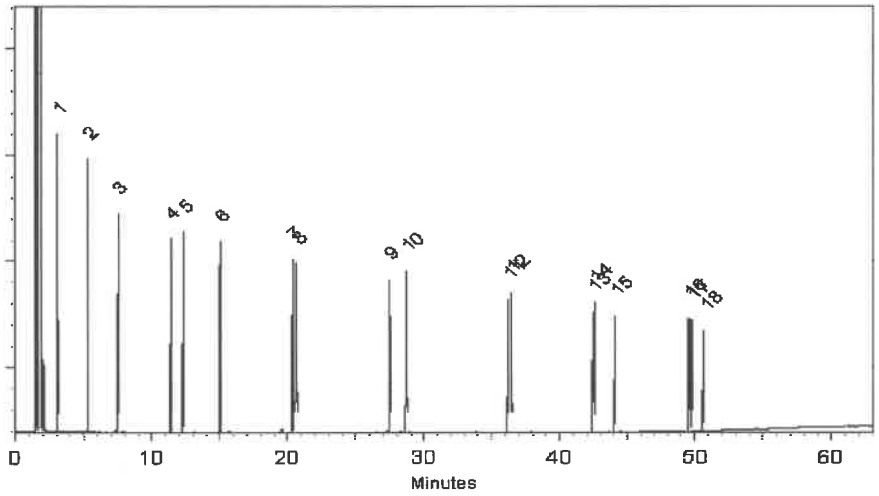
Inj. Temp:
250°C

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 - Operations Tech I **Date Mixed:** 09-May-2024 **Balance Serial #** 1128353505

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:

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

P13453 → P13456 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%	200.6 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	MKCQ2033	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	MKCQ4728	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.)

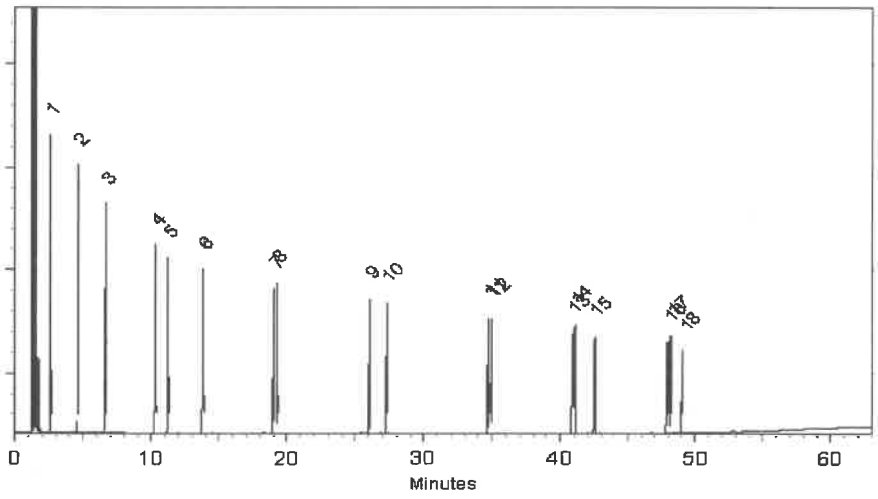
Inj. Temp:
250°C

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:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

P13453 → P13456 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%	200.6 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	MKCQ2033	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	MKCQ4728	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.)

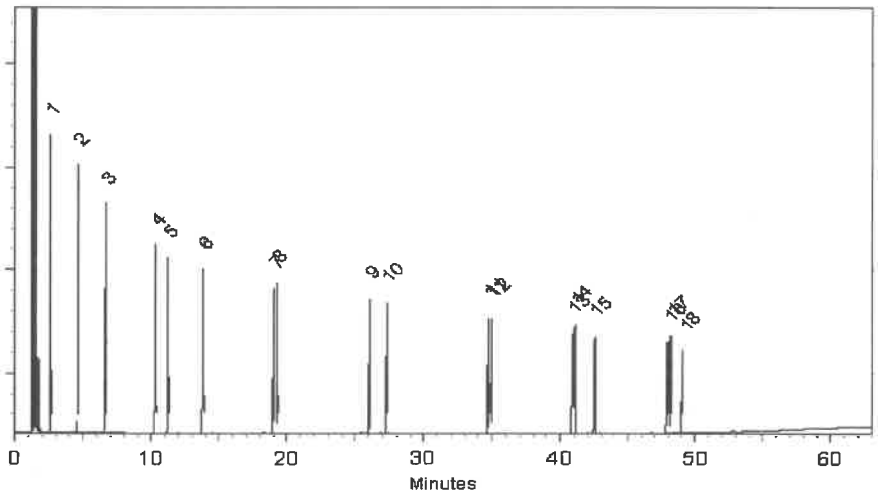
Inj. Temp:
250°C

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:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

P13453 → P13456 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%	200.6 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	MKCQ2033	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	MKCQ4728	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.)

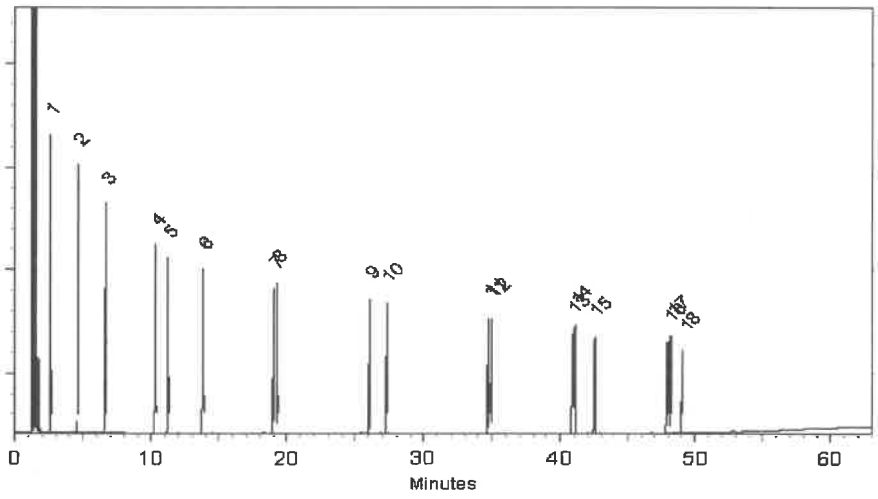
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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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:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Catalog No. : 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

P13453 → P13456 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%	200.6 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	MKCQ2033	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	MKCQ4728	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.)

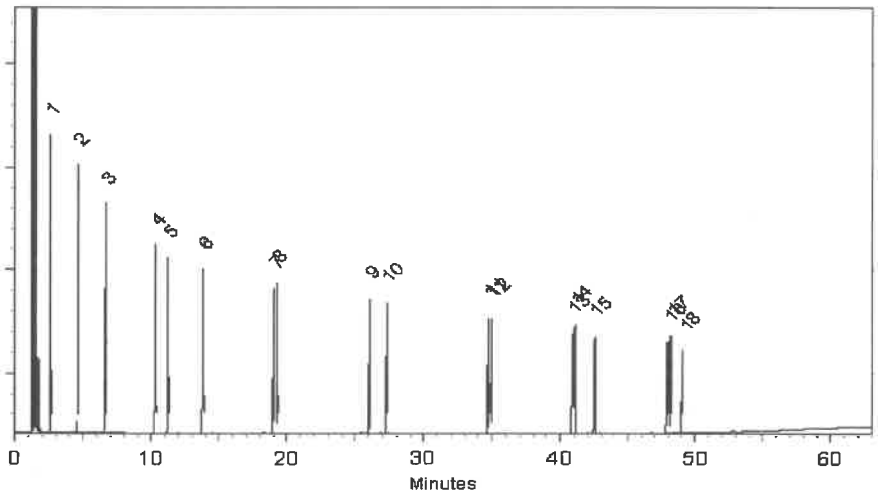
Inj. Temp:
250°C

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:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : MA Fractionation Surrogate Spike Mix

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

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

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

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

P13457 ↓ P13476 } Y.P. 07/23/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorobiphenyl	321-60-8	00021384	99%	4,031.0 µg/mL	+/- 181.5871
2	2-Bromonaphthalene	580-13-2	STBC5362V	99%	4,037.5 µg/mL	+/- 181.8799

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

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

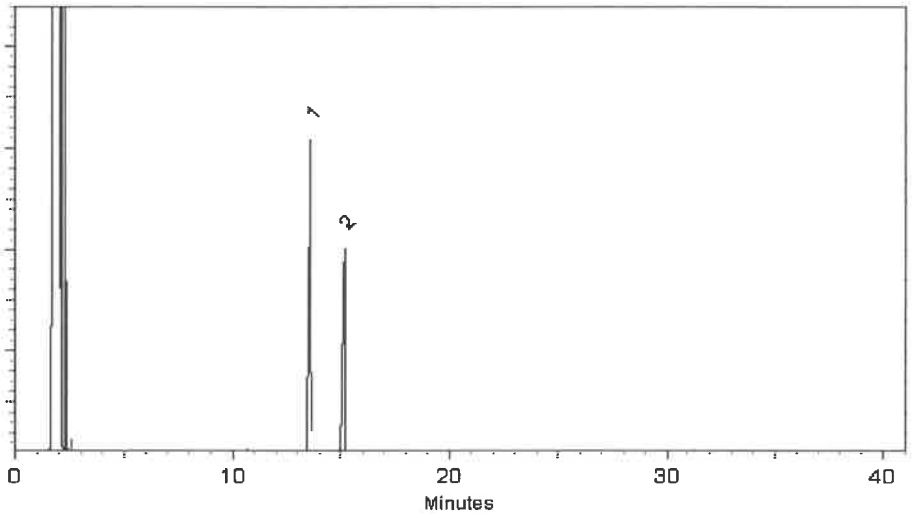
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Stacey Wanner - Operations Technician I

Date Mixed: 29-Apr-2024 **Balance Serial #** B345965662

Dillan Murphy - Operations Technician I

Date Passed: 30-Apr-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13625
↓
P13644
Y.P. 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

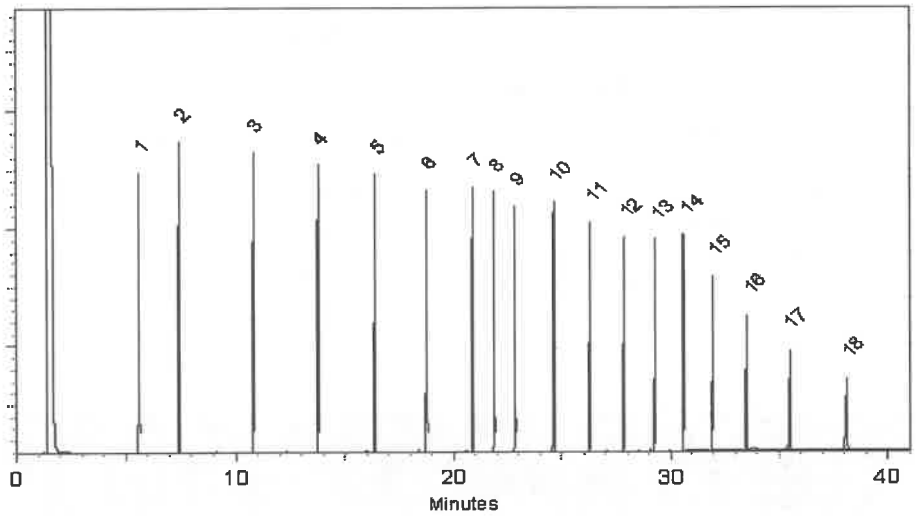
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13625
↓
P13644
Y.P. 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

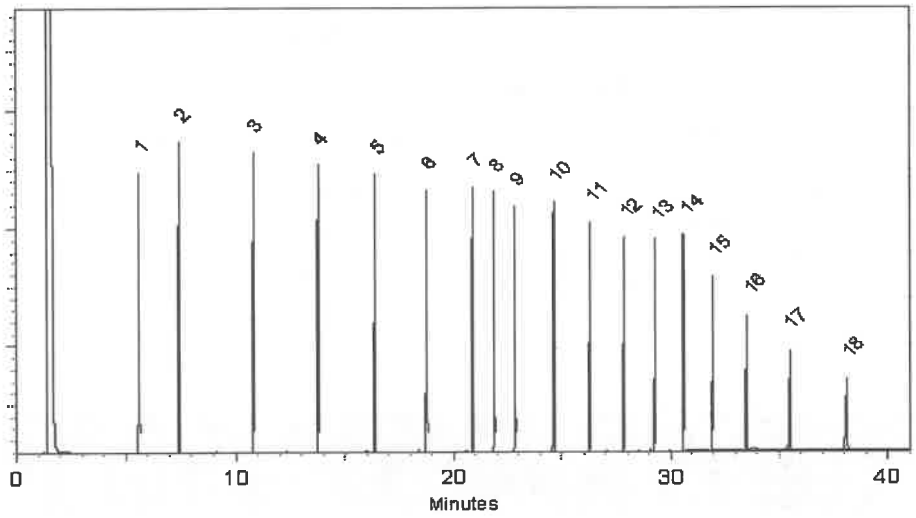
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30542 **Lot No.:** A0211112

Description : NJEPH Aliphatics Matrix Spike Mix

NJEPH Aliphatics Matrix Spike Mix 200 µg/mL, n-Pentane, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2031 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

P13625
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P13644
Y.P. 10/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	n-Nonane (C9)	111-84-2	SHBP9752	99%	200.9 µg/mL	+/- 5.1891
2	n-Decane (C10)	124-18-5	SHBQ1342	99%	200.7 µg/mL	+/- 5.1857
3	n-Dodecane (C12)	112-40-3	SHBP7054	99%	200.4 µg/mL	+/- 5.1771
4	n-Tetradecane (C14)	629-59-4	STBK5437	99%	200.7 µg/mL	+/- 5.1839
5	n-Hexadecane (C16)	544-76-3	SHBR0669	99%	200.6 µg/mL	+/- 5.1822
6	n-Octadecane (C18)	593-45-3	UE5NG	98%	200.4 µg/mL	+/- 5.1782
7	n-Eicosane (C20)	112-95-8	MKCN8767	97%	200.4 µg/mL	+/- 5.1771
8	n-Heneicosane (C21)	629-94-7	MKCL3226	99%	200.5 µg/mL	+/- 5.1796
9	n-Docosane (C22)	629-97-0	MKCQ3882	99%	200.6 µg/mL	+/- 5.1814
10	n-Tetracosane (C24)	646-31-1	MKCS9978	99%	200.5 µg/mL	+/- 5.1805
11	n-Hexacosane (C26)	630-01-3	MKCQ4814	99%	200.5 µg/mL	+/- 5.1796
12	n-Octacosane (C28)	630-02-4	BCCG0084	99%	200.5 µg/mL	+/- 5.1796
13	n-Triacontane (C30)	638-68-6	MKCQ9436	97%	200.4 µg/mL	+/- 5.1763
14	n-Dotriacontane (C32)	544-85-4	BCBW0661	99%	200.4 µg/mL	+/- 5.1779
15	n-Tetratriacontane (C34)	14167-59-0	D3MZN	99%	200.5 µg/mL	+/- 5.1805
16	n-Hexatriacontane (C36)	630-06-8	Z27H018	99%	200.6 µg/mL	+/- 5.1814
17	n-Octatriacontane (C38)	7194-85-6	0000145137	96%	200.5 µg/mL	+/- 5.1808

18	n-Tetracontane (C40)	4181-95-7	OKEGA	99%	200.5 µg/mL	+/- 5.1805

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

Solvent: n-Pentane
CAS # 109-66-0
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

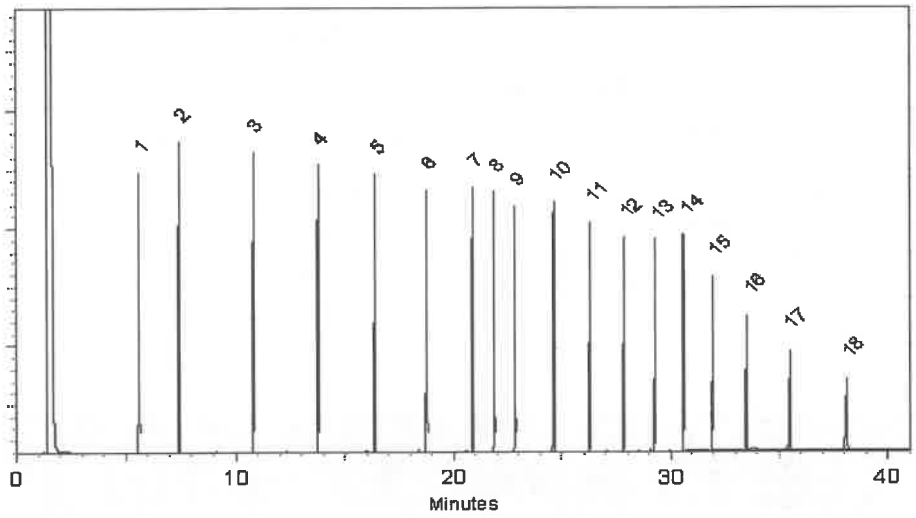
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Laith Clemente - Operations Technician I

Date Mixed: 07-May-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 09-May-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

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

P13717 ↓ P13727 Y.P 10/24/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

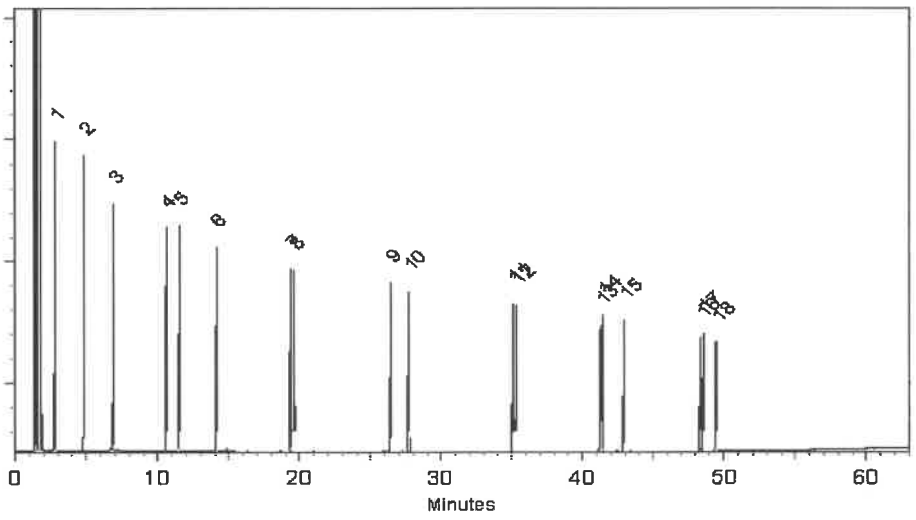
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

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

P13717 ↓ P13727 Y.P 10/24/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

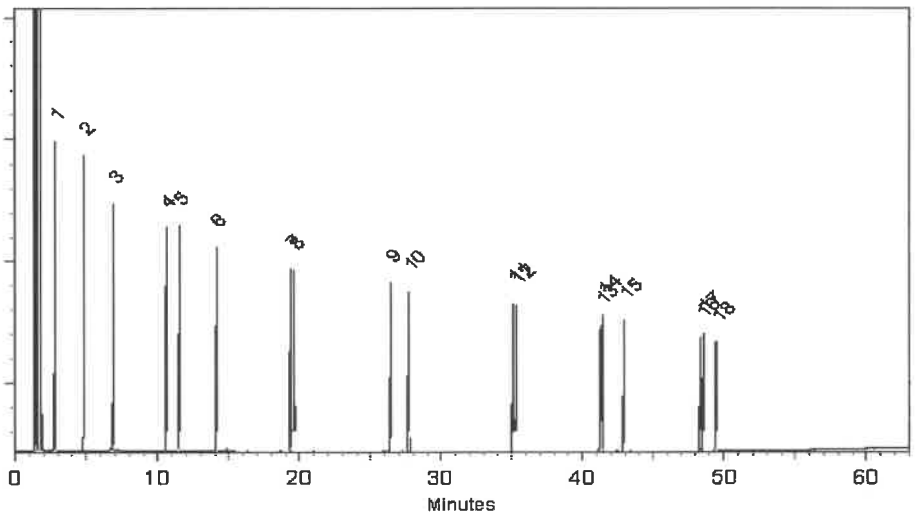
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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Certificate #3222.02

Certificate of Analysis

chromatographic plus

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

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

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

P13717 ↓ P13727 Y.P 10/24/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

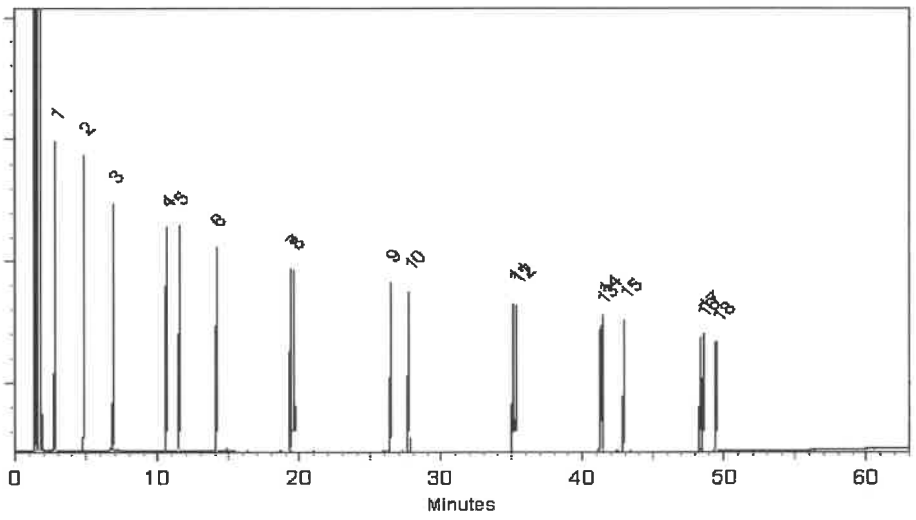
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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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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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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Certificate #3222.02

Certificate of Analysis

chromatographic plus

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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

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

P13717 ↓ P13727 Y.P 10/24/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

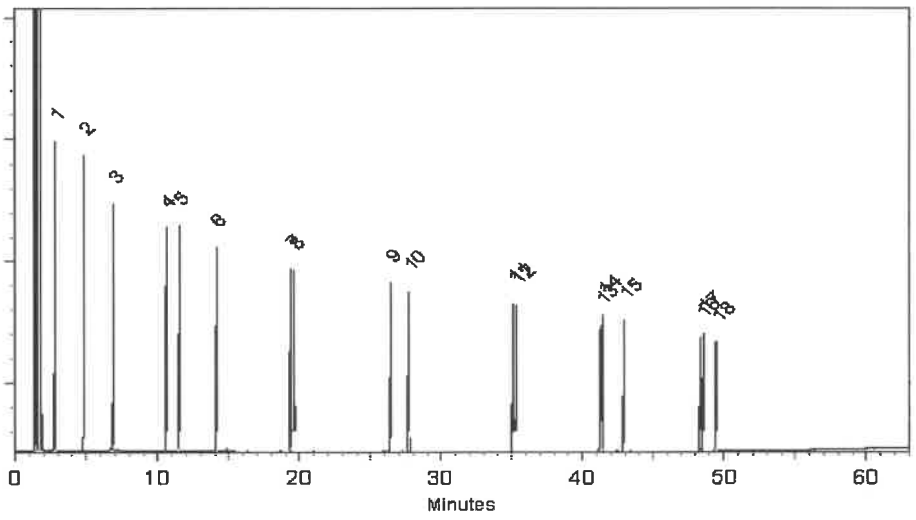
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

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

P13717 ↓ P13727 Y.P 10/24/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

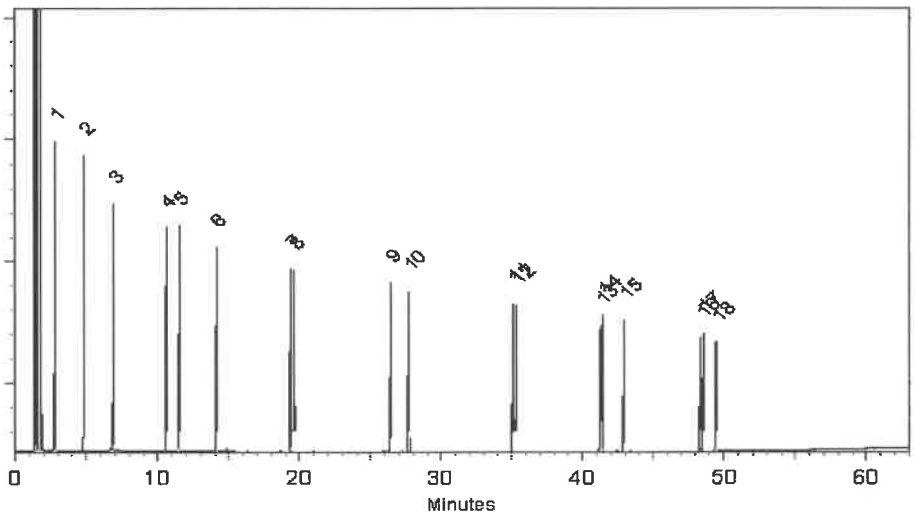
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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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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Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

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

P13717 ↓ P13727 Y.P 10/24/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

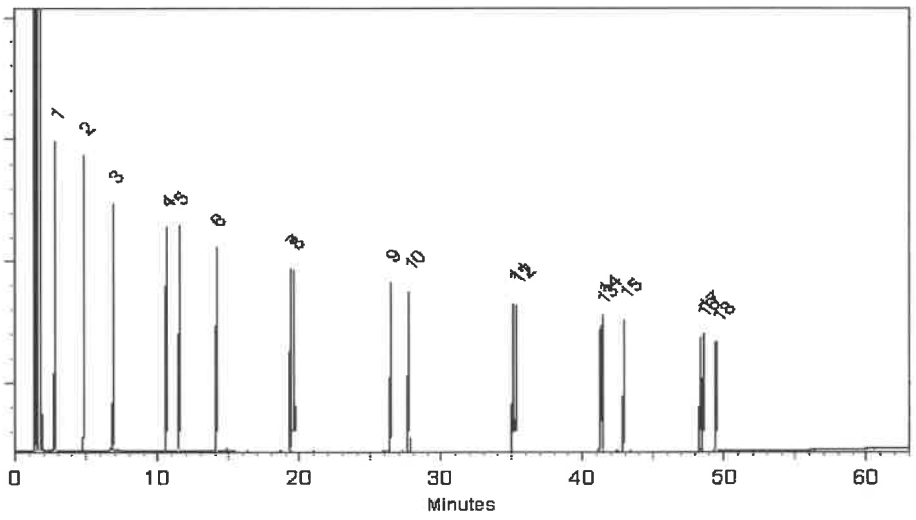
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
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Manufacturing Notes:

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

Handling Notes:

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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

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

P13717 ↓ P13727 Y.P 10/24/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
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9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
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16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

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18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

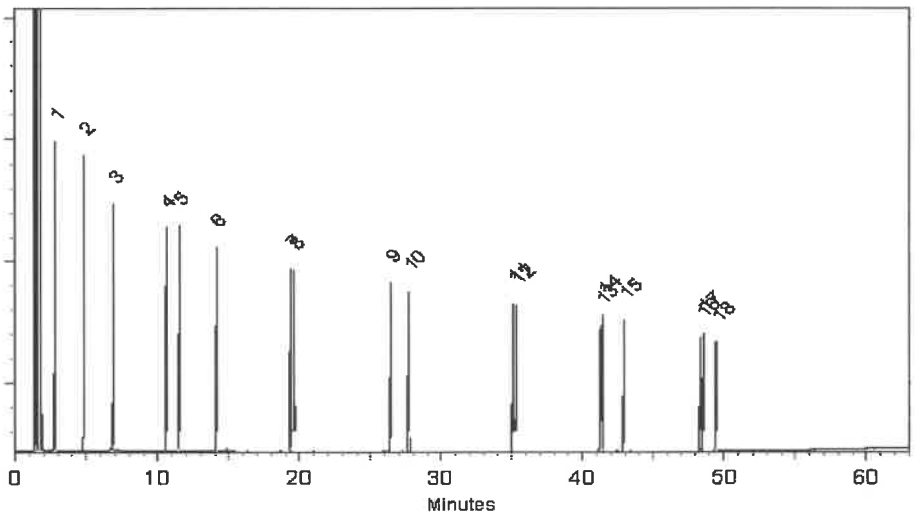
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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Manufacturing Notes:

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Handling Notes:

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CERTIFIED REFERENCE MATERIAL

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

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

P13717 ↓ P13727 Y.P 10/24/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,3-Trimethylbenzene	526-73-8	8776.10-38	99%	201.6 µg/mL	+/- 9.0835
2	Naphthalene	91-20-3	STBL1057	99%	200.0 µg/mL	+/- 9.0114
3	2-Methylnaphthalene	91-57-6	STBL3028	99%	200.4 µg/mL	+/- 9.0294
4	Acenaphthylene	208-96-8	214935V18H	95%	199.1 µg/mL	+/- 8.9717
5	Acenaphthene	83-32-9	MKCR7169	99%	200.4 µg/mL	+/- 9.0294
6	Fluorene	86-73-7	10246250	98%	201.5 µg/mL	+/- 9.0784
7	Phenanthrene	85-01-8	MKCT3391	99%	201.2 µg/mL	+/- 9.0655
8	Anthracene	120-12-7	101492T18R	99%	200.0 µg/mL	+/- 9.0114
9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
13	Benzo(b)fluoranthene	205-99-2	052013B	99%	201.2 µg/mL	+/- 9.0655
14	Benzo(k)fluoranthene	207-08-9	012022K	99%	201.6 µg/mL	+/- 9.0835
15	Benzo(a)pyrene	50-32-8	NQLXA	98%	199.9 µg/mL	+/- 9.0078
16	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	199.0 µg/mL	+/- 8.9683

17	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	200.0	µg/mL	+/- 9.0114
18	Benzo(g,h,i)perylene	191-24-2	RP240625RSR	97%	199.0	µg/mL	+/- 8.9683

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

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

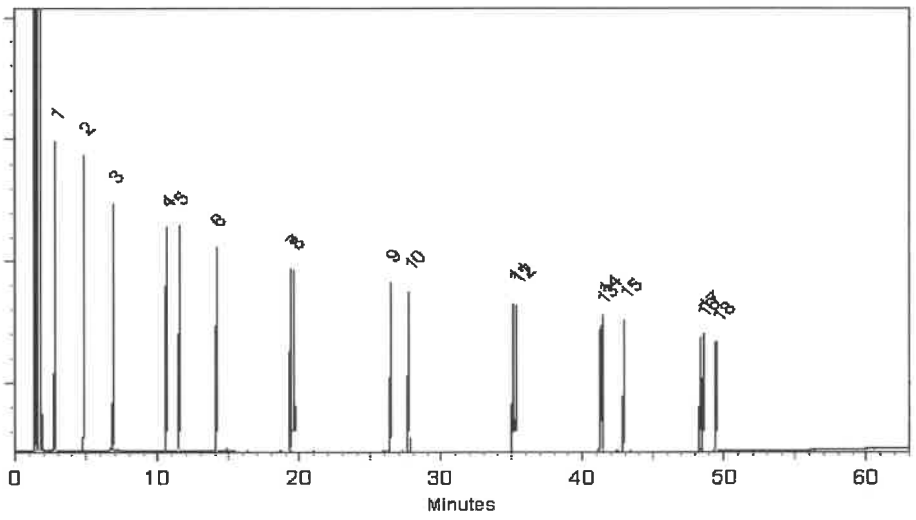
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

Manufacturing Notes:

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

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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Certificate #3222.02

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chromatographic plus

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Catalog No. : 30543 **Lot No.:** A0217838

Description : NJEPH Aromatics Matrix Spike Mix

NJEPH Aromatics Matrix Spike Mix 200µg/mL, Acetone/Toluene (50:50), 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2030 **Storage:** 10°C or colder

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

P13717 ↓ P13727 Y.P 10/24/24

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9	Fluoranthene	206-44-0	MKCQ4728	99%	200.4 µg/mL	+/- 9.0294
10	Pyrene	129-00-0	BCCK2592	99%	200.0 µg/mL	+/- 9.0114
11	Benz(a)anthracene	56-55-3	I60012022BAA	99%	200.0 µg/mL	+/- 9.0114
12	Chrysene	218-01-9	RP240627ECS	99%	200.4 µg/mL	+/- 9.0294
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* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Acetone/Toluene (50:50)
CAS # 67-64-1/108-88-3
Purity 99%

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

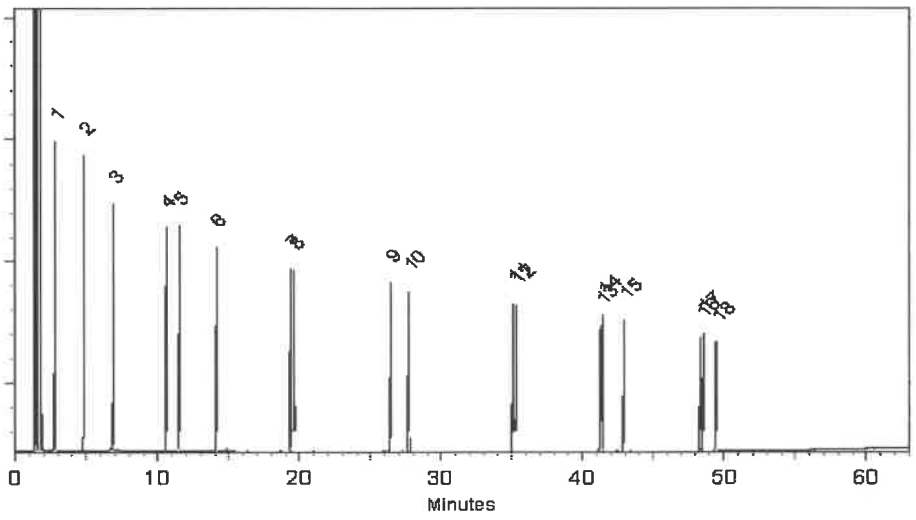
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
20 ml/min.

Inj. Vol
1µl



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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

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CAS # 67-64-1/108-88-3
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Inj. Temp:
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Det. Temp:
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Det. Type:
FID

Split Vent:
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Inj. Vol
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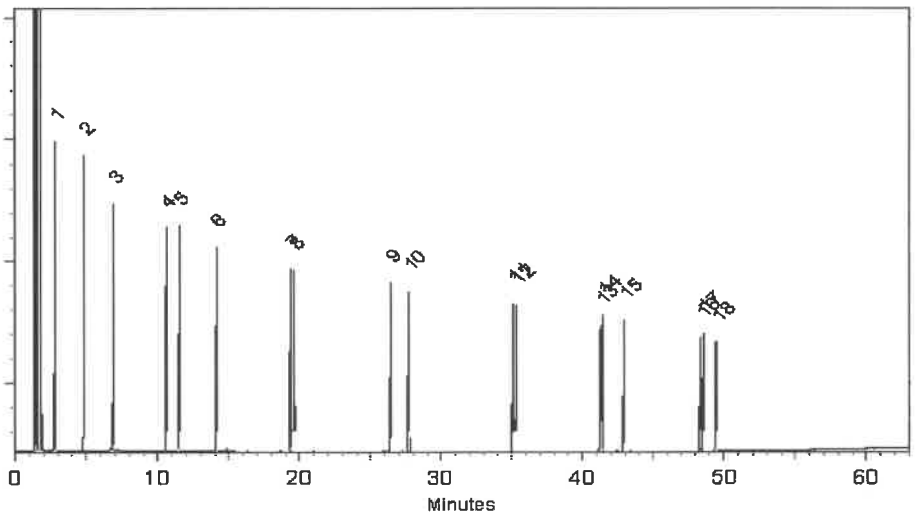

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Rebecca Gingerich - Operations Tech II

Date Mixed: 14-Oct-2024 **Balance Serial #** 1128360905

Brittany Federinko - Operations Tech I

Date Passed: 21-Oct-2024

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

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SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. P4578/79
QUOTE NO.
COC Number 2042038

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: GANNETT FLEMING
ADDRESS: 1010 Adams Avenue
CITY Audobon STATE: PA ZIP: 19403
ATTENTION: Joe Krupansky
PHONE: 610-301-8342 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Amtrak's Mop. of SB
PROJECT NO.: 95000005B LOCATION: Kearny, NJ
PROJECT MANAGER: Joe Krupansky
e-mail: aaac@bemgs.com
PHONE: 610-301-8342 FAX:

CLIENT BILLING INFORMATION

BILL TO: Chemtech PO#:
ADDRESS: 284 Sheffield St.
CITY Mountainside STATE: NJ ZIP: 07092
ATTENTION: Samantha PHONE: 908-788-398

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 10 DAYS*
EDD: 10 DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ Level 4 (QC + Full Raw Data)
- ☒ NJ Reduced
- ☐ US EPA CLP
- ☐ NYS ASP A
- ☐ NYS ASP B
- ☐ Other _____
- ☐ EDD FORMAT BEM EDD

ANALYSIS

1 TCL VOC +10 | 2 TCL PAH | 3 PCB's | 4 Cr(III), Cr(VI) | 5 TAL Metals | 6 EPH | 7 TCLP - Full | 8 RCRA Parameters | 9 TOX

PRESERVATIVES

A | | | F | B | | | | |

COMMENTS

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1	2	3	4	5	6	7	8	9
1.	WB-305-SW	GW	X		10/25	8:20	7	X	X	X	X	X	X			
2.	WB-305-SW-1	GW	X		10/25	8:30	7	X	X	X	X	X	X			
3.	WB-305-TOP	S	X		10/25	9:20	11	X	X	X	X	X	X			
4.	WB-305-TOP-1	S	X		10/25	9:30	11	X	X	X	X	X	X			
5.	WB-305-Bot	S	X		10/25	11:15	11	X	X	X	X	X	X	X	X	X
6.	WB-305-Bot-1	S	X		10/25	11:20	11	X	X	X	X	X	X	X	X	X
7.	TB-10252024	D.I.W.			10/25		2	X								
8.																
9.																
10.																

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. Vmunda Pujara	10/25/24-3:11	1.
2.		2.
3.	DATE/TIME: 1604 10.25.2024	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☒ COOLER TEMP 3.1 °C
Comments:

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other _____
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete ☐ YES ☐ NO

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WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P4578 PORT06
Client Name : Portal Partners Tri-Venture
Client Contact : Joseph Krupansky
Invoice Name : Portal Partners Tri-Venture
Invoice Contact : Joseph Krupansky

Order Date : 10/25/2024 3:58:00 PM
Project Name : Amtrak Sawtooth Bridges 2
Receive DateTime : 10/25/2024 4:04:00 PM
Purchase Order :

Project Mgr :
Report Type : NJ Reduced
EDD Type : EXCEL NJCLEANUP
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P4578-01	WB-305-SW	Water	10/25/2024	08:20					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
P4578-02	WB-305-SW-1	Water	10/25/2024	08:30					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days
P4578-03	WB-305-TOP	Solid	10/25/2024	09:20					
					VOC-TCLVOA-10		8260D		10 Bus. Days
P4578-04	WB-305-TOP-1	Solid	10/25/2024	09:30					
					VOC-TCLVOA-10		8260D		10 Bus. Days
P4578-05	WB-305-BOT	Solid	10/25/2024	11:15					
					VOC-TCLVOA-10		8260D		10 Bus. Days
P4578-07	WB-305-BOT-1	Solid	10/25/2024	11:20					
					VOC-TCLVOA-10		8260D		10 Bus. Days
P4578-09	TB-10252024	Water	10/25/2024	00:00					
					VOC-TCLVOA-10		8260-Low		10 Bus. Days

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID :	P4578 PORT06	**Order Date :**	10/25/2024 3:58:00 PM	**Project Mgr :**	
Client Name :	Portal Partners Tri-Venture	**Project Name :**	Amtrak Sawtooth Bridges 2	**Report Type :**	NJ Reduced
Client Contact :	Joseph Krupansky	**Receive DateTime :**	10/25/2024 4:04:00 PM	**EDD Type :**	EXCEL NJCLEANUP
Invoice Name :	Portal Partners Tri-Venture	**Purchase Order :**		**Hard Copy Date :**	
Invoice Contact :	Joseph Krupansky			**Date Signoff :**	

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES

* J.C samples are in SM Refrigerator *

Relinguished By : J. C
Date / Time : 10-25-2024 1710

Received By : Sam 10/25/2024 1710
Date / Time : Sam.

RJ 6 +2 2 RGH 5

Storage Area : VOA Refridgerator Room